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Agenda

Council Meeting

6.30pm, Tuesday 13 August 2024

Richmond Town Hall Wurundjeri Country

www.yarracity.vic.gov.au

Council Meetings

Council Meetings are public forums where Councillors come together to meet as a Council and make decisions about important, strategic and other matters. The Mayor presides over all Council Meetings, and they are conducted in accordance with the City of Yarra Governance Rules.

Council meetings are decision-making forums and only Councillors have a formal role. However, Council is committed to transparent governance and to ensuring that any person whose rights will be directly affected by a decision of Council is entitled to communicate their views and have their interests considered before the decision is made.

Question Time

Yarra City Council welcomes questions from members of the community.

Registration

To ask a question, you will need to register and provide your question by 6.30pm on the day before the meeting. Late registrations cannot be accepted, and you will be unable to address the meeting without registration.

Asking your question

During Question Time, the Mayor will invite everyone who has registered to ask their question. When your turn comes, come forward to the microphone and:

- state your name;
- direct your question to the Mayor;
- don't raise operational matters that have not been previously raised with the organisation;
- don't ask questions about matter listed on tonight's agenda
- don't engage in debate;
- if speaking on behalf of a group, explain the nature of the group and how you are able to speak on their behalf.

You will be provided a maximum of three minutes to ask your question, but do not need to use all of this time.

Comments not allowed

When you are addressing the meeting, don't ask a question or make comments which:

- relate to a matter that is being considered by Council at this meeting;
- relate to something outside the powers of the Council;
- are defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable;
- deal with a subject matter already answered;
- are aimed at embarrassing a Councillor or a member of Council staff;
- include or relate to confidential information; or
- relate to something that is subject to legal proceedings.

Addressing the Council

An opportunity exists to make your views known about a matter that is listed on the agenda for this meeting by addressing the Council directly before a decision is made.

Registration

To ask address Council, you will need to register by 6.30pm on the day before the meeting. Late registrations cannot be accepted, and you will be unable to address the meeting without registration.

Addressing the Council

Before each item is considered by the Council, the Mayor will invite everyone who has registered in relation to that item to address the Council. When your turn comes, come forward to the microphone and:

- state your name;
- direct your statement to the Mayor;
- confine your submission to the subject being considered;
- avoid repeating previous submitters;
- don't ask questions or seek comments from Councillors or others; and
- if speaking on behalf of a group, explain the nature of the group and how you are able to speak on their behalf.

You will be provided a maximum of three minutes to speak, but do not need to use all of this time.

Comments not allowed

When you are addressing the meeting, don't make any comments which:

- relate to something other than the matter being considered by the Council;
- are defamatory, indecent, abusive, offensive, irrelevant, trivial or objectionable;
- are aimed at embarrassing a Councillor or a member of Council staff;
- include or relate to confidential information; or
- relate to something that is subject to legal proceedings.

Arrangements to ensure our meetings are accessible to the public

Council meetings are held on the first floor at Richmond Town Hall. Access to the building is available either by the stairs, or via a ramp and lift. Seating is provided to watch the meeting, and the room is wheelchair accessible. Accessible toilet facilities are available. Speakers at the meeting are invited to stand at a lectern to address the Council, and all participants are amplified via an audio system. Meetings are conducted in English.

If you are unable to participate in this environment, we can make arrangements to accommodate you if sufficient notice is given. Some examples of adjustments are:

- a translator in your language
- the presence of an Auslan interpreter
- loan of a portable hearing loop
- reconfiguring the room to facilitate access
- modification of meeting rules to allow you to participate more easily.

Recording and Publication of Meetings

A recording is made of all public Council Meetings and then published on Council's website. By participating in proceedings (including during Question Time or in making a submission regarding an item before Council), you agree to this publication. You should be aware that any private information volunteered by you during your participation in a meeting is subject to recording and publication.

Order of business

- 1. Acknowledgement of Country
- 2. Attendance, apologies and requests for leave of absence
- 3. Announcements
- 4. Declarations of conflict of interest
- 5. Confirmation of minutes
- 6. Question time
- 7. Council business reports
- 8. Notices of motion
- 9. Petitions and joint letters
- 10. Questions without notice
- 11. Delegates' reports
- 12. General business
- 13. Urgent business
- 14. Confidential business reports

1. Acknowledgment of Country

"Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra.

We acknowledge their creator spirit Bunjil, their ancestors and their Elders.

We acknowledge the strength and resilience of the Wurundjeri Woi Wurrung, who have never ceded sovereignty and retain their strong connections to family, clan and country despite the impacts of European invasion.

We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra.

We pay our respects to Elders from all nations here today—and to their Elders past, present and future."

2. Attendance, apologies and requests for leave of absence

Attendance

Councillors

- Cr Edward Crossland Mayor
- **Deputy Mayor** Cr Anab Mohamud
- Cr Michael Glynatsis Councillor
- Cr Stephen Jolly
 - Councillor Cr Herschel Landes Councillor
- Cr Bridgid O'Brien
 - Councillor Cr Amanda Stone Councillor
- Cr Sophie Wade Councillor

Council staff

Chief Executive Officer

Sue Wilkinson

Chief Executive Officer

General Managers

- Brooke Colbert Governance, Communications and Customer Experience
 - Sam Hewett
- Kerry McGrath
- Mary Osman
- Sandra Sanderson

Governance

Phil De Losa

Mel Nikou

Patrick O'Gorman

Manager Governance and Integrity Senior Governance Coordinator Governance Officer

Infrastructure and Environment **Community Strengthening**

City Sustainability and Strategy

Corporate Services (Acting)

Apologies

 Cr Claudia Nguyen Councillor

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3. Announcements

An opportunity is provided for the Mayor to make any necessary announcements.

4. Declarations of conflict of interest

Any Councillor who has a conflict of interest in a matter being considered at this meeting is required to disclose that interest either by explaining the nature of the conflict of interest to those present or advising that they have disclosed the nature of the interest in writing to the Chief Executive Officer before the meeting commenced.

5. Confirmation of minutes

RECOMMENDATION

That the minutes of the Council Meeting held on Tuesday 9 July 2024 be confirmed.

That the minutes of the Extraordinary Council Meeting held on Tuesday 6 August 2024 be confirmed.

6. Question time

An opportunity is provided for questions from members of the public.

7. Council business reports

ltem		Page	Rec. Page	Report Presenter
7.1	Proposed Discontinuance of Road at Charlotte Street, Richmond	9	17	Fadi Fakhoury – Manager Property and Leisure
7.2	Plan for Victoria (including Draft Housing Targets) - Consideration of Draft Submission	297	307	Leonie Kirkwood – Project and Policy Coordinator Strategic Planning
7.3	Quarterly Community Report Quarter 4 2023/24	356	360	Matt Jarvis – Chief Financial Officer
7.4	Governance Report - August 2024	487	491	Phil De Losa - Manager Governance and Integrity
7.5	Building Maintenance Services and Minor Capital Works Tender C1673	518	525	Graham Davis – Manager Building and Asset Management

8. Notices of motion

Nil

9. Petitions and joint letters

An opportunity exists for any Councillor to table a petition or joint letter for Council's consideration.

10. Questions without notice

An opportunity is provided for Councillors to ask questions of the Mayor or Chief Executive Officer.

11. Delegate's reports

An opportunity is provided for Councillors to table or present a Delegate's Report.

12. General business

An opportunity is provided for Councillors to raise items of General Business for Council's consideration.

13. Urgent business

An opportunity is provided for the Chief Executive Officer to introduce items of Urgent Business.

14. Confidential business reports

The following items were deemed by the Chief Executive Officer to be suitable for consideration in closed session in accordance with section 66(2)(a) of the Local Government Act 2020. In accordance with that Act, Council may resolve to consider these issues in open or closed session.

RECOMMENDATION

1. That the meeting be closed to members of the public, in accordance with section 66(2)(a) of the Local Government Act 2020, to allow consideration of confidential information.

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14.1 **Open Space Network Opportunity**

This item is to be considered in closed session to allow consideration of land use planning information, being information that if prematurely released is likely to encourage speculation in land values; and private commercial information, being information provided by a business, commercial or financial undertaking that relates to trade secrets or if released, would unreasonably expose the business, commercial or financial undertaking to disadvantage.

These grounds are applicable because the report contains information that has been submitted on a commercial in confidence basis.

14.2 Chief Executive Officer KPI's 2024/2025 and Review

This item is to be considered in closed session to allow consideration of legal privileged information, being information to which legal professional privilege or client legal privilege applies and personal information, being information which if released would result in the unreasonable disclosure of information about any person or their personal affairs.

These grounds are applicable because this report contains information about the employment arrangements of an individual member of staff.

7.1 Proposed Discontinuance of Road at Charlotte Street, Richmond

Reference	D24/293631
Author	Fadi Fakhoury - Manager Property and Leisure
Authoriser	General Manager Infrastructure and Environment
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

- 1. For Council to consider whether the road shown as lot 1 on the title plan attached as Attachment 1 - Title Plan and known as part of Charlotte Street, Richmond, being part of the land remaining in Conveyance Book P No. 980 (road), should be:
 - (a) removed from Council's Register of Public Roads pursuant to section 17(4) of the Road Management Act 2004 (RMA); and
 - (b) discontinued pursuant to the *Local Government Act 1989* (Act) and retained by Council for public open space purposes.

Critical analysis

History and background

- 2. The road is located between Church Street and St Crispin Street and shown on the site plan attached as **Attachment 2 Site Plan**.
- 3. The road remains registered in the name of the original subdivider. A copy of the manual title search of the road is attached to this report as **Attachment 3 Title Search**.
- 4. Council proposes to discontinue the road and retain the land comprising the former road for public open space purposes, including the proposed construction of a pocket park (proposal).

Road Status

- 5. The road:
 - (a) is known to title as a 'road' and 'Charlotte Street';
 - (b) has been registered in the name of Henry Creswick since 30 June 1852;
 - (c) currently provides direct public vehicular and pedestrian access to Church Street from the balance of Charlotte Street as part of the public road network;
 - (d) is constructed as an asphalt road and adjoining pedestrian footpaths with concrete curbing;
 - (e) contains a number of street parking spaces;
 - (f) contains a number of improvements within those sections of the Road constructed as a footpath, including:
 - (i) kerbs;
 - (ii) street bench;
 - (iii) trees;
 - (iv) electricity pole;
 - (v) bicycle racks; and
 - (vi) street signage; and

- (g) is listed on Council's Register of Public Roads.
- 6. The road is a 'road' for the purposes of the Act. Council has statutory power to consider removing the road from the Register of Public Roads and discontinuing the road to remove the 'road' status from the land. If the road is discontinued, it will vest in Council.

Removal of Road from Council's Register of Public Roads

- 7. It is considered that Council can determine that the road is not reasonably required for public use under section 17(4) of the RMA as:
 - notwithstanding that the road is part of the public road network and currently provides direct vehicular access to Church Street, the general public has alternative vehicular access to Church Street from the balance of Charlotte Street via the surrounding public road network;
 - (b) the general public will retain pedestrian and bicycle access to Church Street from Charlotte Street through the new public park; and
 - (c) Council's proposed future use of the land as a public park accommodates continued access from Charlotte Street to the entrance of the adjoining property at 399 - 405 Church Street, Richmond, which is used by the Returned & Services League of Australia, Richmond Sub-Branch (RSL land).
- 8. At its meeting on 18 June 2024, Council resolved to commence the statutory procedures and give public notice under sections 207A and 223 of the Act of its intention to discontinue and retain the road.
- 9. At an Extraordinary Council meeting on 6 August 2024, Council heard from those submitters who requested the opportunity to address the Council in relation to their written submission regarding the Charlotte Street road discontinuance.

Discussion

Public Notice

- 10. The required public notice was published on 20 June 2024:
 - (a) in The Age;
 - (b) on Council's website; and
 - (c) on site signage including a QR code and instructions on how to participate.
- 11. Council provided a copy of the public notice directly to via email to:
 - (a) 244 people who participated in previous Charlotte Street pocket park consultations and have consented to being contacted with updates on the project; and
 - (b) The adjoining owners abutting the part of Charlotte Street proposed to be discontinued, being the owners of 401 Church Street, Richmond (the RSL), the developer appointed to redevelop the RSL site, being Avium Pty Ltd ACN 160 632 600.
- 12. During the public notice period, 233 submissions were received through all channels. Four submissions were hand delivered at the Richmond Town Hall, 227 submissions were submitted through Your Say Yarra and 2 submissions were submitted by email. All submissions are attached in **Confidential Attachment 7 Received Submissions**.

13. The below table provides a breakdown of the received submissions:

Support	86
Against	129
Duplicate or blank responses	13
Other – Request for additional information and coordination	5
Total	233

Adjoining Owners - RSL

- 14. The road directly abuts the following properties:
 - (a) the RSL land; and
 - (b) 415 417 Church Street, Richmond, which is owned by Council and operated as a municipal library, contained in certificates of title:
 - (i) volume 936 folio 038;
 - (ii) volume 3616 folio 127;
 - (iii) volume 3665 folio 940; and
 - (iv) volume 5904 folio 609,
- 15. The owners of the RSL land have obtained a planning permit for a residential development on the land. Avium has been appointed to redevelop the RSL land and has registered a caveat on the title to the land (no copy of the development agreement has been provided to Council).
- 16. The current planning permit has been extended on six occasions and is currently valid until March 2025.
- 17. Council's engagement with the representatives of the RSL regarding the future of Charlotte Street began at the very early stages of the pocket park project.
- 18. In a letter dated 10 February 2023, a representative of the RSL expressed support for the proposed temporary closure of Charlotte Street for a pocket park stating:

"We also wish to add that the RSL is supportive of the Charlotte Street and Crispin Street pocket park concept, and we can make adjustments to the ground floor parking entrance/exit design"

- 19. A copy of the RSL owner's letter dated 10 February 2023 is attached to this report as **Confidential Attachment 8 Adjoining Owner Letter**.
- 20. In response to the public notice, multiple submissions were made by the RSL, Avium, and the architect (WHA), and legal representatives of Avium (Velocity Legal) (together, RSL Stakeholders).
- 21. Although the RSL stakeholders, except for WHA, did not object to the proposal, they expressed the following concerns:
 - (a) The proposal may significantly impact the RSL development, prompting a request for genuine and meaningful coordination to mitigate any adverse effects;
 - (b) Concerns about the compatibility of park and development designs, particularly regarding access to the development;
 - (c) Concerns regarding uncertainty in park design and the timeframe for completion; and

- (d) The works required for the proposal may interfere with the development and cause delays to the redevelopment.
- 22. Officers provide the following response to the above concerns:
 - (a) Council officers considered the development approved for the RSL land when developing its proposal to discontinue the road and in its design of the proposed park;
 - (b) Council maintains its commitment to coordinate with the RSL to ensure that both projects are designed and constructed to deliver the best possible outcomes for the community. Council's commitment to this coordination is demonstrated by the many engagements (in excess of 15) with the RSL through emails, phone calls and on-site meetings with Council officers;
 - (c) The design provides for a clear unobstructed pedestrian path of movement alongside the former road and the RSL land and provides vehicular access to the entrance/exit of the RSL land;
 - (d) The proposal provides for land in the northeast corner to cater for vehicle movement into the entrance of the car park of the RSL land;
 - (e) The design of the park provides for sufficient space to cater for sweep paths for vehicles entering into the proposed basement car park;
 - (f) Should the RSL be in a position to commence construction works before 28 March 2025, Council is willing to consider negotiating the timing of the construction of the park on the former road; and
 - (g) The final design is completed and will be provided to the RSL stakeholders. The overall functional layout that was shared with the RSL stakeholders in the concept design phase is consistent with the final design.

Submissions in support of proposal

- 23. The key themes from the submissions received in support of the proposal can be summarised as follows:
 - (a) there is general support for the road discontinuance process for the creation of public open space;
 - (b) the proposed public park will benefit the local area, children and the community;
 - (c) the discontinuance and proposed new park will be a beneficial extension to the Council library; and
 - (d) the community requires more public open space in this part of the municipality.

Officer comments on submissions in support of proposal

- 24. The following comments are offered by officers in respect of the submissions made in support of the proposal:
 - (a) the Council library users have been very receptive of the proposal and library staff would introduce outdoor activities should the proposal proceed;
 - (b) the proposal will make the space safer for all visitors walking, cycling in or near the park or visiting the library; and
 - (c) the road has been completely or partially closed to vehicular traffic in the past.

Objections to the proposal

- 25. The most common themes from the objections received in response to the proposal during the public submission process can be summarised as follows:
 - (a) The proposal will reduce vehicular access and will increase traffic on Church Street and the surrounding road network (including nearby roads such as Elm Grove which may not be able to accommodate two way traffic);

- (b) Council has not sufficiently consulted with local residents in respect of the proposal;
- (c) The proposal is likely to attract antisocial and illegal activities;
- (d) There are safety concerns due to the park's close proximity to Church Street;
- (e) Funds for the park could be more effectively allocated to other projects;
- (f) The location for the proposed pocket park means it's unlikely to be used due to its location and the availability of other parks in the area; and
- (g) The proposal will reduce available parking and make it more difficult for local residents and other members of the public to find parking in the surrounding road network.

Officer comments on the key objection themes to the proposal

- 26. The following officer comments are offered in respect of the common themes from the submissions made in objection to the proposal:
 - (a) Council has undertaken a traffic impact assessment in 2022 and 2024 which determined that during the temporary road closure from 18 March 2024 to 24 March 2024 additional vehicular traffic impact to the surrounding roads in the immediate vicinity of the road constituted a moderate increase in traffic and could not be solely attributed to the temporary road closure;
 - (b) While some traffic is expected to be redirected to Elm Grove and the surrounding roads, the total level of traffic is well within the design capacity of those streets;
 - (c) The traffic impact assessment showed that the small parking loss associated with the trial did not significantly impact parking conditions in the area, with enough parking to adequately cater for peak parking demand during the periods of increased traffic. A copy of the traffic impact assessment reports are attached to this report as Attachment 4 Traffic Impact Assessment Reports;
 - (d) Pedestrian and bicycle access to Church Street (including any local businesses on Church Street) from the balance of Charlotte Street will not be affected by the proposal;
 - (e) Council has undertaken two rounds of community engagement prior to endorsing the concept design. Additionally, Council has completed a public consultation process specifically with respect to the proposed discontinuance and it has afforded the public an opportunity to make submissions on the proposal;
 - (f) The area already experiences some antisocial behaviours, which is typical for locations near nightlife activity centres. The park is not expected to exacerbate these issues. Nevertheless, the park's design will incorporate specialist lighting and visibility features to minimise such behaviours;
 - (g) To address safety concerns regarding the park's proximity to Church Street, several design features will be implemented. The park will be set back approximately 3 meters from Church Street, with seating positioned an additional 3 meters further back. Raised edges, garden beds, and seating elements will serve as visual and physical barriers to prevent children from running onto the street. Additionally, the footpaths along Charlotte Street will be retained to enhance safety measures;
 - (h) This proposal aligns with several community-supported strategies, such as the Open Space Strategy, Urban Forest Strategy, and Climate Emergency Plan. The funds proposed for construction are sourced from the Open Space Reserve, ensuring they will not impact the delivery of other projects. Additionally, the proposal includes design elements to enhance environmental benefits and prioritise accessibility features for and around the Richmond library; and
 - (i) The location of the proposal falls within a 'gap area' as identified in the Yarra Open Space Strategy 2020. The proximity and integration with the library, were considered and supported the selection of this location.

Petitions received from public

- 27. Council received a petition prepared before 15 November 2022 containing 53 signatures from people opposed to the closure of the road and construction of a park in Charlotte Street.
- 28. It has been established that the petition was referred to the City Strategy Department as part of the consultation process regarding the Charlotte Street pocket park proposal which was considered by Council in December 2023. However, the petition was not formally received or responded to by Council.
- 29. Council is now provided with the November 2022 petition at **Confidential Attachment 9 November 2022 Petition** for its consideration. The petition will also be formally presented to Council in this meeting.
- 30. At the 14 May 2024 Council meeting, a petition containing 206 signatures objecting to the closure of Charlotte Street was tabled and formally referred to the CEO by resolution.
- 31. The May 2024 petition is appended at **Confidential Attachment 10 May 2024 Petition** for Council's consideration.
- 32. The petitions are summarised as follows:
 - (a) Elm Grove, Richmond is too narrow for the projected increase of two-way traffic;
 - (b) there is an increased risk of damage to cars and potential for side-swiping incidents;
 - (c) there is added danger to elderly, residents, children and pets;
 - (d) restricted access and removal of parking puts pressure on the adjoining streets;
 - (e) erratic driving could worsen due to driver frustration at peak hours; and
 - (f) there are already 3 parks within 700 metres of the proposed new park.

Public authorities

- 33. The following statutory authorities have been advised of the proposal and have been asked to respond to the question of whether they have any existing assets in the road that should be saved under section 207C of the Act:
 - (a) Greater Western Water;
 - (b) Melbourne Water;
 - (c) CitiPower;
 - (d) United Energy;
 - (e) Multinet Gas;
 - (f) Telstra;
 - (g) Optus;
 - (h) APA Gas;
 - (i) AusNet Services; and
 - (j) Yarra City Council.
- 34. Ausnet Services, Melbourne Water, United Energy and Multinet Gas have advised that they have no assets in or above the road and no objection to the proposal.
- 35. Optus has advised that it has no assets in or above the road.
- 36. On 30 April 2024, Greater Western Water advised that it did not object to the proposal, subject to the following conditions:
 - (a) any proposed fences must be located a minimum distance of 800mm clear of the centreline of the existing sewer mains;

- (b) any proposed fence lines must be located a minimum of 1 metre from sewer manholes and/or inspection shafts; and
- (c) any proposal to build over Greater Western Water's assets requires Greater Western Water's prior written consent.
- 37. A copy of the correspondence received from Greater Western Water is attached to this report as **Attachment 5 Greater Western Water Correspondence**.
- 38. On 23 April 2024, Telstra responded that it had assets within the vicinity of the road, but did not object to the proposal, provided that Council:
 - (a) undertakes a Dial Before You Dig investigation prior to any construction activities in the vicinity of Telstra's communications plant;
 - (b) upon receipt of plans, obtains a Telstra accredited Asset Plant Locator to confirm the location of the assets; and
 - (c) does not build over any Telstra assets and engages Telstra's Asset Relocation team to obtain a quote to relocate any assets within the area of any construction activities.
- 39. A copy of the correspondence received from Telstra is attached to this report as **Attachment 6 – Telstra Correspondence.**
- 40. Council owns assets within the area proposed for discontinuance. Council drainage engineers were involved in the final design development and ensured that all of Council's requirements have been met.
- 41. CitiPower has advised that it has assets near the road. Council officers have coordinated with CitiPower and agreed on an amended design that includes the removal of one pole and eliminates the need for any easements.
- 42. APA has indicated that it has assets within the area proposed for discontinuance but has confirmed that these assets are not required and can be decommissioned.

Extraordinary meeting

- 43. On 6 August 2024, Council held an extraordinary meeting at which Council heard from those submitters who requested the opportunity to address the Council in relation to their written submission regarding the Charlotte Street road discontinuance.
- 44. A summary of the key themes highlighted by the speakers, and brief responses from officers, can be found at **Attachment 11 06 August Extraordinary Meeting**.
- 45. Some submissions requested additional information about any crime prevention through environmental design (CPTED) reviews undertaken for the proposed park at Charlotte Street. A Safer Charlotte Street Report: CPTED review for the proposed Charlotte Street park can be found in **Attachment 12 A Safer Charlotte Street Report.**

Options

46. Council has the option to discontinue the road or not to discontinue the road.

Community and stakeholder engagement

- 47. The project for the creation of Charlotte Street Park has included extensive community engagement throughout the process. The initial proposal for a pocket park in Charlotte Street was included in the adopted Swan Street Streetscape Masterplan (2022) which received high levels of support from the community, though some concern regarding traffic were raised.
- 48. Given the high level of community support, the project progressed in 2022/23 with further feasibility, consultation with the community and design work.
- 49. The Stage 1 consultation for the Charlotte Street project held in late 2022 was aimed at gauging the level of community support to create a park in this location.

- 50. Approximately 400 participants engaged with Council including surveys, face to face interaction at pop up events and targeted engagement with the RSL as an immediate neighbour to site with an active planning permit. 68% of respondents were in favour of the new park with a petition opposing the proposal submitted to Council. This petition was appended to the 6 August 2024 Extraordinary Council Meeting and is being formally presented to Council tonight.
- 51. The Stage 2 consultation on the draft concept plan was help in October 2023 and generated over 239 responses to the survey and approximately 100 conversations with the community. The results showed a high level of support for the creation of a pocket park and the proposed design was well received by the respondents.
- 52. At the 12 December 2023 meeting, Council unanimously endorsed the Charlotte Street park concept plan and approved the design progressing to a design development and documentation phase.
- 53. A petition was tabled at the 14 May 2024 Council meeting including 206 signatories expressing concern about the impact of the street closure on traffic. This was formally received by Council and referred to the Chief Executive Officer for response.
- 54. At its meeting of 18 June 2024, Council resolved to commence the statutory procedures and give public notice under sections 207A and 223 of the Act of its intention to discontinue and retain the road.

Policy analysis

Alignment to Community Vision and Council Plan

- 55. Discontinuing part of Charlotte Street and constructing a pocket park aligns with the overarching Council Plan (2021-25) that supports the following strategies and initiatives:
 - (a) Build a more resilient, inclusive, safe and connected community, which promotes social, physical and mental wellbeing;
 - (b) Manage access, safety and amenity to enhance people's experience when visiting Yarra;
 - (c) Improve our streetscapes, accessibility, safety, and amenity, including embedding outdoor dining, increase greenery and active transport infrastructure, to attract more people to visit, spend time and shop across our precincts; and
 - (d) Reduce urban heat island effect through the planting of trees and vegetation and an increase of green open space.
- 56. The proposal also supports the Urban Forest Strategy (2017), to increase tree canopy cover to mitigate the urban heat island effect and help to further enhance Yarra's liveability, and consistent with the Climate Emergency Plan 2024 2030.
- 57. Moreover, the proposal also strongly aligns with the first strategic direction in the Yarra's Transport Strategy 2022-32 allocate road space to preferred transport modes and other activities.
- 58. The Management Policy in relation to Laneways, Passageways and Rights of Way in Yarra adopted by Council on 17 December 2019 provides that a Council decision to discontinue a road may result in the retention of the land under Council's control and ownership where the land has a strategic or long-term municipal value.
- 59. It is considered that the discontinuance of the road will not materially affect traffic as alternative access is provided through the surrounding road network, and the proposal provides for the former road to be utilised for a future community function in the form of public open space.

Climate emergency and sustainability implications

60. The proposed road discontinuance will allow the construction of a pocket park that will increase tree canopy cover, assisting in mitigating the urban heat island effect. This will result in cooler streets, contribute to climate change mitigation, and create a more pleasant local environment.

Community and social implications

61. New and improved public spaces are crucial in a rapidly growing city. The proposed pocket park offers an opportunity to expand the open space available to the community.

Economic development implications

62. There are no economic development implications associated with this report.

Human rights and gender equality implications

- 63. No specific human rights and gender equality implications have been identified for the proposed park.
- 64. The statutory road discontinuance process ensured that submissions during the public submission process were heard and considered.

Operational analysis

Financial and resource impacts

65. Council has made a \$1.9 million provision in its 24/25 capital works program to construct a pocket park at Charlotte Street. These works are contingent upon the outcome of the road discontinuance process at Charlotte Street, meaning the works will only proceed if the road discontinuance is approved.

Legal Implications

- 66. Council is empowered under clause 3 of schedule 10 of the Act to discontinue a road, or part of a road, by a notice published in the Government Gazette.
- 67. The discontinuance of the road and the removal of the road reservation will create a new title for the former road and formalise Council's creation of a new park at Charlotte Street.

Conclusion

68. Council must now determine whether the road is reasonably required for public use, in order to decide whether the road should be discontinued and retained pursuant to clause 3 of schedule 10 of the Act.

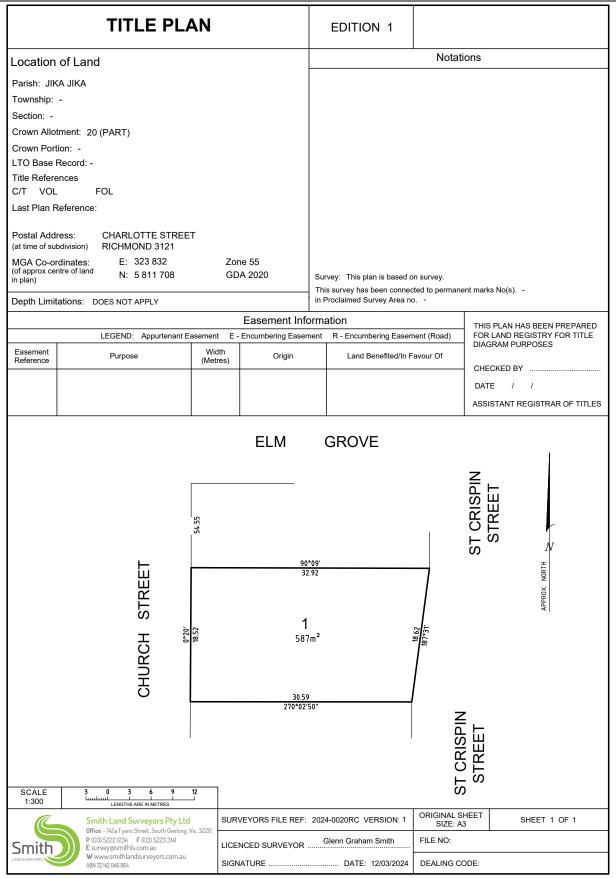
RECOMMENDATION

- That Council, acting under section 17(4) of the Road Management Act 2004, resolves that the road shown marked as Lot 1 on the title plan attached as Attachment 1 to this report (Road), being part of the land remaining in Conveyance Book P No. 980 be removed from Council's Register of Public Roads on the basis that the Road is no longer required for general public use.
- 2. That Council, acting under clause 3 of schedule 10 of the *Local Government Act 1989* (Act):
 - (a) resolves to discontinue the Road, having followed all the required statutory procedures pursuant to sections 207A and 233 of the Act pursuant to its power under clause 3 of Schedule 10 of the Act, and being of the opinion that the Road is not reasonably required for public use;
 - (b) directs that a notice pursuant to the provisions of clause 3(a) of Schedule 10 of the Act is to be published in the Victoria Government Gazette;

- (c) directs that, once discontinued, the Road shall be transferred to Council under section 207D of the Act;
- (d) authorises the Chief Executive Officer to sign any transfer(s) of the Road and any other documents required to be signed in connection with the discontinuance of the Road and its subsequent transfer to Council;
- (e) directs that any easements, rights or interests required to be created or saved over the Road by any authority and not be affected by the discontinuance of the Road; and
- (f) authorises the Chief Executive Officer to write to each person who made a submission under section 223 of the Act in response to the proposal, advising them of the of Council's decision.

Attachments

- 1. Attachment 1 Title Plan
- 2. Attachment 2 Site Plan
- 3. Attachment 3 Title Search
- 4. Attachment 4 Traffic Impact Assessment Reports
- 5. Attachment 5 Greater Western Water Correspondence
- 6. Attachment 6 Telstra Correspondence
- 7 Confidential Attachment 7 Received Submissions Confidential
- 8 Confidential Attachment 8 Adjoining Owner Letter Confidential
- 9 Confidential Attachment 9 November 2022 petition Confidential
- 10 Confidential Attachment 10 May 2024 petition Confidential
- **11**. Attachment 11 06 August Extraordinary Meeting
- **12** Attachment 12 A Safer Charlotte Street Report: CPTED Review for the Proposed Charlotte Street Park





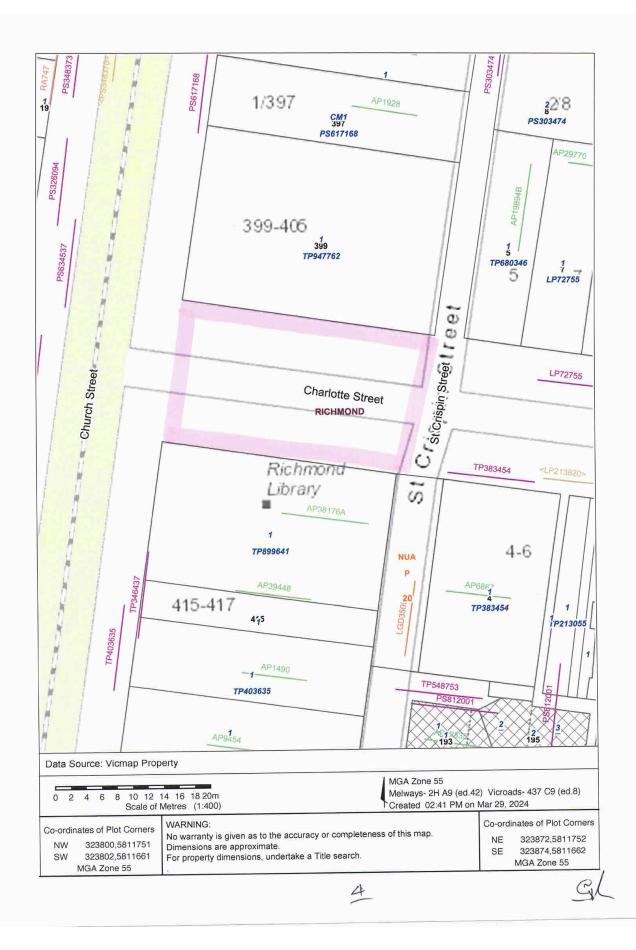
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	AP
LAN	ID SEARCHED
₩ho	le/Part Crown Allotment Section
₩ho	le/Part Portion 20, Section
Tow	nship of Parish of JIKA JIKA.
land	being the land sketched on page** 3 attached, and being * the whole of and/or part of the described in GROWN GRANT No. and/or Book P No. Starts.
1.	I certify that I have made searches against the names on the index sheet **(page) and that extracts of all memorials by my search which affect the above land are set out on pages(bi) attached.
2.	I also certify that I have searched in the Registers of Executions, Lis Pendens, Crown Debtors, as Settlements and Arrangements, against the names of all persons who appear from the memorials have had a beneficial interest in the land during the past thirty years, with the following RESULT:- $\sqrt{*}$ Nil or *See page of attached search.
ADI	DITIONAL SEARCHES
	-ADVERSE POSSESSION -
3. 4.	 * I certify that I have searched the names of the current owner and prior adverse possessors provided to me and the Municipality, Public Trustee and the Registrar of the County Court as se out on index sheet number(s)
	provided to me and the Municipality, Public Trustee and the Registrar of the County Court as se
	provided to me and the Municipality, Public Trustee and the Registrar of the County Court as se out on index sheet number(s)
4.	provided to me and the Municipality, Public Trustee and the Registrar of the County Court as see out on index sheet number(s)
4. 5. SIG	provided to me and the Municipality, Public Trustee and the Registrar of the County Court as see out on index sheet number(s)
5. SIG	provided to me and the Municipality, Public Trustee and the Registrar of the County Court as see out on index sheet number(s)

LIST OF DEALINGS AFFECTING LAND ON "SKETCH OF LAND" SEARCHED

BOOK	No.	LAND	DEP DEED No./OFFICE USE
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Town:			Encumbrances (oth <u>Mortgage Book</u>	er than easements)
	on: Whole / Part		-Mortgage Book Covenant Book Charge Book Notices Book	<u>No</u>
	Economic	(En averaba	ring or Appurtenant)	<u>No</u>
Easement Reference eg: E-1, A-1	Purpose / Authority	Width	Origin Book No.	 Land benefited / In favour o (If apparent from search)
NIL.				
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which forms par	hedule 5A Transfer of Land Act) W rt of a separate chain of title, a pho	otocopy of th	e deed, certified by the Lega	nce, abuttal, etc. justified in any d Il Practitioner making the certific een accepted by the Registrar und





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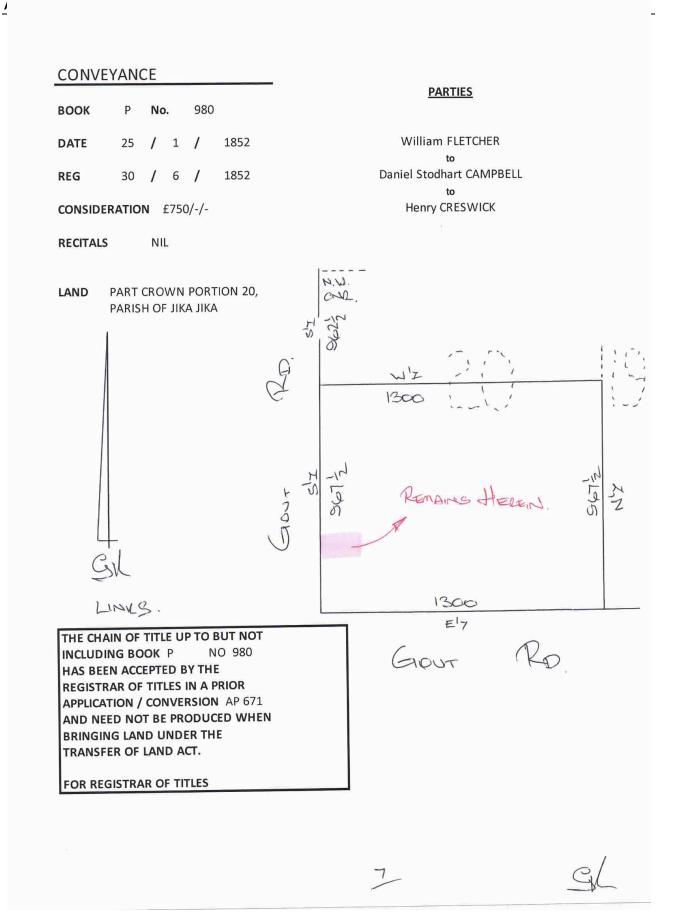
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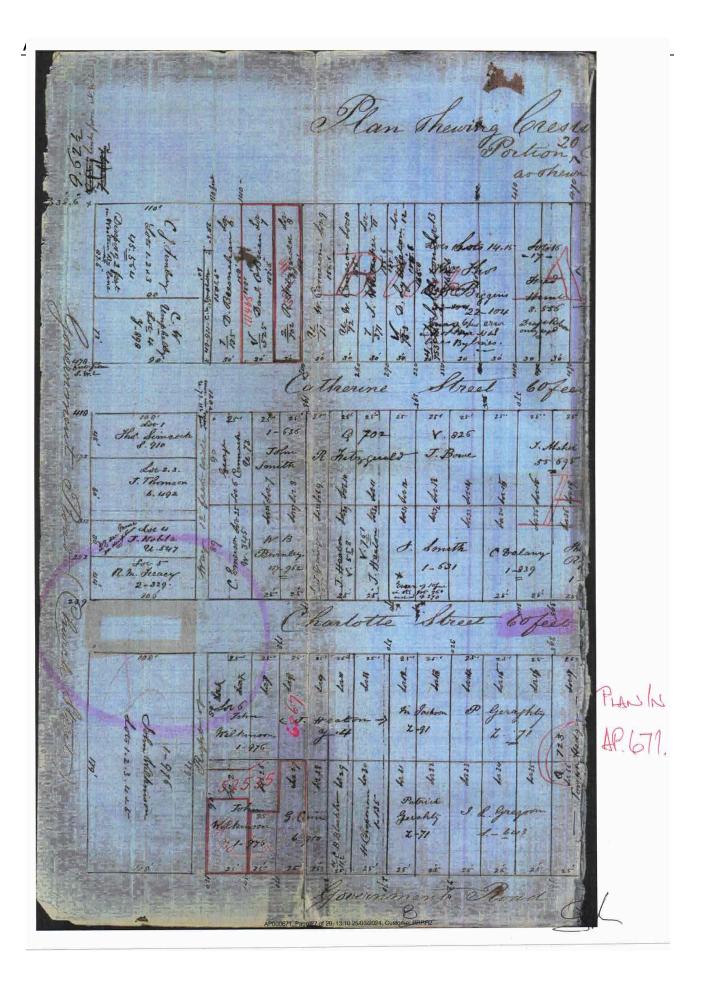
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INDEX SHEET

LAND SEARCHED	PART CROWN PORTION 20,					
	PARISH OF JIKA JIKA					

NAME	OLD SERIES	NEW SERIES	DEALINGS
PUBLIC TRUSTEE	58//88 🗸	P.T.I.	486-578 N.A.
REGISTRAR OF COUNTY COURT		185/189 🗸	NIL
CITY OF MELBOURNE		89/88√	NIL
CRESWICK. Henry,		71/117 🗸	285-888 N.A.
		PI	
		DK.	
Memorials extracted to be ticked Memorials not applicable to marked "N/A"			
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Traffix Group

Our Reference: G31387L-02B

14 May 2024

Yarra City Council PO Box 168 RICHMOND VIC 3121

Attention: Nina Collins

Dear Nina,

Charlotte Street, Richmond – Temporary Road Closure Assessment Traffic Engineering Assessment

Further to your instructions, please find following our assessment of the traffic and parking conditions during the temporary road closure on Charlotte Street, Richmond. The purpose of this assessment and temporary road closure is to validate the proposal to permanently close Charlotte Street between Church Street and St Crispin Street to construct a new public space.

Background

Traffix Group was engaged in 2022 to conduct a traffic engineering assessment of the proposed road closure of Charlotte Street between Church Street and St Crispin Street, Richmond. This closure was proposed to facilitate the construction of a new public space identified in the Swan Street Streetscape Master Plan as a new 'Civic Library'. The assessment largely concluded that there would be impacts associated with the loss of carparking and the redistribution of traffic (particularly Elm Grove and Charles Street), however these would generally occur within acceptable levels.

Following the above assessment, in February to April 2024, Yarra City Council implemented a temporary road closure to provide a 'Pop Up Park' in the location of the future permanent public space and trial the changes in traffic and parking conditions.

This assessment provides a comparison of traffic and parking conditions prior to the implementation of the Pop Up Park from the 2022 assessment, and data collected during the Pop Up Park trial in March 2024.

Charlotte Street Pop Up Park

The Charlotte Street Pop Up Park (and temporary road closure) commenced on Monday, 5th February, 2024 with the installation of temporary garden beds, benches and a painted pavement mural. An aerial photograph of the Pop Up Park is provided at Figure 1, with photographs of the park at Figure 2 and Figure 3.

Level 28, 459 Collins St Melbourne Victoria 3000 T: 03 9822 2888 admin@traffixgroup.com.au Traffix Group Pty Ltd ABN: 32 100 481 570 traffixgroup.com.au

G31387L-02B

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Figure 1: Charlotte Street Pop Up Park Aerial Photograph



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Figure 2: Charlotte St Pop Up Park - view west



Figure 3: Charlotte Street Pop Up Park – view west



Figure 4: Charlotte Street Pop Up Park - view east



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Traffic Engineering Assessment

Intersection Turning Movement Counts

Intersection Turning movement counts were conducted on Thursday, 21st March 2024 between the time periods of 7:30am to 9:30am and 4:30pm to 6:30pm for the following intersections:

- Church Street / Elm Grove,
- · Church Street / Swan Street,
- St Crispin Street / Elm Grove,
- St Crispin Street / Charlotte Street,
- St Crispin Street / Swan Street / Lt Lesney Street,
- · Charles Street / Elm Grove / McNamara Street,
- Charles Street / Charlotte Street, and
- Charles Street / Swan Street.

An analysis of the existing turning movements revealed that there are two distinct peak time periods for analysis, based on turning movements into / out of the local road network, being:

- 8:00am to 9:00am, and
- 5:30pm to 6:30pm.

Whilst these time periods do not necessarily reflect the peak times of the arterial road network, they are best suited for this assessment.

It is noted that these peak periods are consistent with the peak hours observed during corresponding surveys conducted in 2022.

The turning movement volumes for the two (2) peak periods identified above are summarised below with 2024 results provided at Figure 5 and Figure 7 and 2022 results provided at Figure 6 and Figure 8 for the AM and PM period respectively.

The full turning movement counts data is provided at Appendix A.



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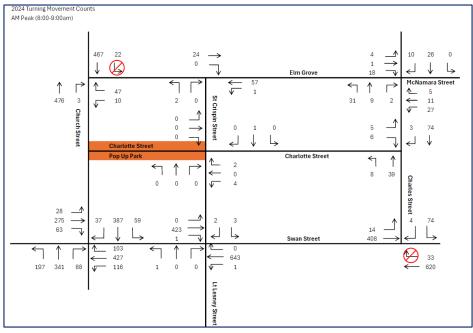


Figure 5: Turning Movement Counts - 2024 AM Peak

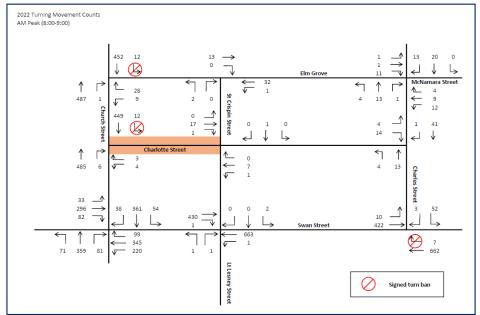


Figure 6: Turning Movement Counts - 2022 AM Peak



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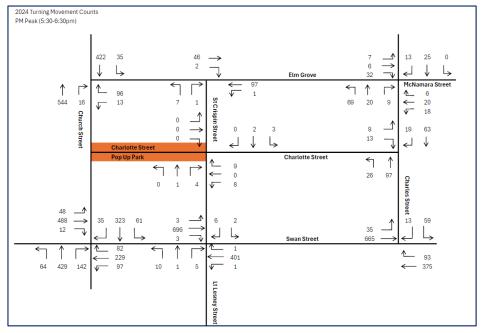


Figure 7: Turning Movement Counts - 2024 PM Peak

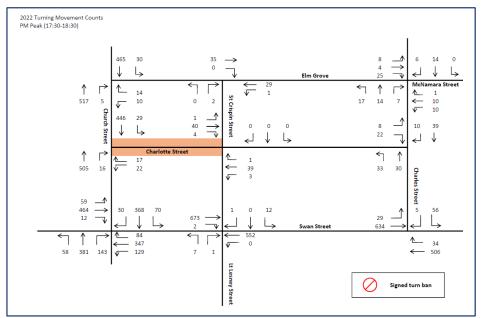


Figure 8: Turning Movement Counts - 2022 PM Peak



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Key differences observed between the 2024 and 2022 TMC counts are summarised below:

- AM Peak
 - Turning movements which contravened the signposted turn restrictions increased by 26 vehicles per hour at the Swan Street / Charles Street intersection and by 10 at the Church Street / Elm Grove intersection.

It is noted however that the 2022 conditions also included left turn movements in contravention of the left turn restriction at Charlotte Street, and when considering the Charlotte Street closure, two (2) fewer illegal left turns from Church Street into the study area occurred in this period,

- 12 additional vehicles were observed turning into Elm Grove from Church Street (1 movement every 5 minutes),
- 30 additional vehicles were observed turning into Charles Street from Swan Street (1 movement every 2 minutes),
- Through movements on Charles Street at the Charles St / Charlotte St intersection increased by 109%, (59 additional movements or approximately one (1) additional movement per minute),
- Negligible change to movements into/out of St Crispin Street, and
- Fewer turning movements into/out of Charles Street.

PM Peak

- 16 additional vehicles were observed turning into Elm Grove from Church Street (1 movement every 4 minutes),
- 65 additional vehicles were observed turning into Charles Street from Swan Street (1 movement every 55 seconds),
- Through movements on Charles Street at the Charles St / Charlotte St intersection increased by 132%, (91 additional movements or approximately one (1) additional movement per 40 seconds),
- A minute change to movements into/out of St Crispin Street, and
- Fewer turning movements into/out of Charlotte Street.

It is worth noting that the data presented above indicated an increase in traffic volumes at several intersections suggesting a number of vehicles turning right from Swan Street into Charles Street then exiting to Church Street at Elm Grove (through traffic). Further investigations were undertaken on Thursday, 2nd May 2024 when Charlotte Street had been reopened to evaluate the above.

Additional Turning Movement Count and Investigations - Thursday, 2nd May 2024

A turning movement count was conducted between 5:30pm and 6:30pm at the intersection of Charles Street and Swan Street on Thursday, 2nd May 2024 (after Charlotte



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Street had been reopened). The results of the turning movement count are summarised in Figure 9 below.

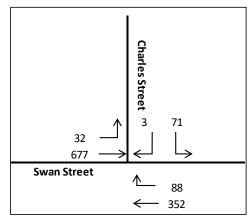


Figure 9: Turning Movement Counts - PM Peak, 02/05/2024

As shown in Figure 7 and Figure 9 above, the traffic volumes at the Charles St / Swan St are very similar between the 2024 Charlotte Street closed and open conditions, demonstrating that since 2022 traffic volumes have changed. Observations undertaken on site indicate that there is significant queuing for westbound traffic on Swan Street and motorists appeared to turn into Charles Street in an attempt to avoid these queues. A review of Google Maps driving directions undertaken at the time confirmed that mapping apps which adapt to live traffic were providing directions to citybound traffic to utilise Charles Street, Elm Grove and Gipps Street as an alternative to Swan Street.



Figure 10: Live Driving Directions - PM Peak, 02/05/2024



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Figure 11: Live Driving Directions – PM Peak, 02/05/2024

In view of the above, and considering the logical access and egress routes for Charlotte Street, the following additional traffic movements (compared to 2022) can be conclusively associated with through traffic avoiding westbound queues on Swan Street:

- Right turn movements from Swan Street (east) into Charles Street,
- · Left turn movements from Charles Street (south) to Elm Grove,
- Right turn movements from Elm Grove to Church Street (north),
- Westbound traffic on Elm Grove, and
- Northbound traffic on Charles Street.

We acknowledge that the closure of Charlotte Street will also contribute to the above movements (secondary to through traffic) with the exception of right turn movements from Swan Street (east) into to Charles Street, however to a significantly lesser extent.

Seven (7) Day Traffic Counts

Seven (7) day traffic counts were undertaken between Monday, $18^{\rm th}$ March 2024 – Sunday, $24^{\rm th}$ March 2024 (inclusive) at the same locations as the previous survey, with the addition of:

• St Crispin Street, between Elm Grove and Charlotte Street

A summary of traffic count results compared to results from the same locations in 2022 under existing conditions is presented in Table 1.



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Location	2	022 Survey	s	2	024 Survey	s
	NB / EB	SB / WB	Total	NB / EB	SB / WB	Total
		Daily Volu	mes			
Elm Grove – b/w St Crispin St and Charles St	337	378	715	568 (+231)	612 (+234)	1,180 (+465)
Charlotte Street – b/w St Crispin St and Charles St	312	275	587	191 (-121)	288 (+13)	479 (-108)
Charles Street – b/w Parker St and Elm Gr	323	318	641	363 (+40)	351 (+33)	714 (+73)
Charles Street – b/w Elm Gr and Charlotte St	418	523	941	617 (+199)	705 (+182)	1,322 (+381)
Charles Street – b/w Charlotte St and Swan St	567	674	1,241	749 (+182)	746 (+72)	1,495 (+254)
McNamara Street – b/w Charles St and Mary St	64	214	278	120 (+56)	256 (+42)	376 (+98)
St Crispin Street – b/w Elm Gr and Charlotte St	Surve	ey Not Cond	ucted	37	87	124
St Crispin Street – b/w Charlotte St and Swan St	41	66	107	56 (+15)	56 (-10)	112 (+5)
	AM	l Peak Hour	Volumes	•		
Elm Grove – b/w St Crispin St and Charles St	17	25	42	26 (+9)	39 (+14)	65 (+23)
Charlotte Street – b/w St Crispin St and Charles St	17	8	25	10 (-7)	13 (+5)	23 (-2)
Charles Street – b/w Parker St and Elm Gr	12	27	39	16 (+4)	31 (+4)	47 (+8)
Charles Street – b/w Elm Gr and Charlotte St	11	46	57	31 (+20)	71 (+25)	102 (+45)
Charles Street – b/w Charlotte St and Swan St	15	56	71	36 (+21)	75 (+19)	111 (+40)
McNamara Street – b/w Charles St and Mary St	0	20	20	7 (+7)	40 (+20)	47 (+27)
St Crispin Street – b/w Elm Gr and Charlotte St	Surve	ey Not Cond	ucted	1	3	4

Table 1: Average Daily Traffic Volumes



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Location	2	022 Survey	s	2	024 Survey	s
	NB / EB	SB / WB	Total	NB / EB	SB / WB	Total
St Crispin Street – b/w Charlotte St and Swan St	0	2	2	0 (+0)	3 (+1)	3 (+1)
	PM	l Peak Hour	Volumes		•	
Elm Grove – b/w St Crispin St and Charles St	36	29	65	55 (+19)	70 (+41)	125 (+60)
Charlotte Street – b/w St Crispin St and Charles St	26	28	54	16 (-10)	32 (+4)	48 (-6)
Charles Street – b/w Parker St and Elm Gr	28	22	50	33 (+5)	25 (+3)	58 (+8)
Charles Street – b/w Elm Gr and Charlotte St	36	41	77	78 (+42)	66 (+25)	144 (+67)
Charles Street – b/w Charlotte St and Swan St	57	57	114	96 (+39)	67 (+10)	163 (+49)
McNamara Street – b/w Charles St and Mary St	11	20	31	12 (+1)	26 (+6)	38 (+7)
St Crispin Street – b/w Elm Gr and Charlotte St	Surve	ey Not Cond	ucted	5	4	9
St Crispin Street – b/w Charlotte St and Swan St	3	4	7	2 (-1)	4 (+0)	6 (-1)

As part of the 2022 assessment, an estimated increase in traffic on Elm Grove and Charles Street was predicted as a result of the partial closure of Charlotte Street. A comparison of the predicted and observed post closure traffic volumes is presented at Table 2.

Table 2: Daily Traffic Volume - Predicted v Observed Increase

Road	Predicted Traffic Volume (Average Weekday)	Observed Traffic Volume (Average Weekday)
Elm Grove	1,150vpd	1,180vpd (+30)
Charles Street – Elm Gr to Charlotte St	1,450vpd	1,322vpd (-128)
Charles Street – Charlotte St to Swan St	1,335vpd	1,495vpd (+160)



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Based on the above, and as was predicted in our previous assessment, neither Elm Grove nor Charles Street have exceeded their environmental capacity as a result of the road closure.

The 'environmental capacity' of a road is the theoretical point in which increases in traffic volume begin to degrade its amenity and is typically much lower than the actual capacity of the road, or how much traffic it could physically accommodate. In this instance the environmental capacities of Elm Grove and Charles Street are in the order of 3,000 vehicles per day.

As noted above, part of the increased traffic volumes on Elm Grove and Charles Street can be attributed to external factors, and the increase in traffic volumes are not solely attributed to the closure of Charlotte Street. Furthermore, the increased traffic volumes recorded on Charles Street north of Elm Grove indicate that there has been a small increase in traffic volumes on the local road network (as this part of the network is effectively a 'closed' loop, and cannot be influenced by the arterial road network).

In view of the above, the actual traffic volumes redistributed as a result of the Charlotte Street closure is less than our previous conservative estimate. This validates our experience with local road closures in other areas (a previous example being The Esplanade in Altona) where the full quantum of traffic on the subject section of road is not fully redistributed (traffic increases on adjacent roads at a level lower than the full traffic volume on the subject road).

Parking Conditions

Spot parking surveys of the study area, as shown in Figure 12 below, were undertaken at the following times, and similar to the periods that were previously assessed:

- 2:00pm and 6:30pm on Saturday, 23 March, 2024, and
- 9:30am, 11:30am, 1:30pm, 4pm and 6:30pm on Tuesday, 26 March 2024.

With four (4) car parking spaces on the north side of Charlotte Street removed to facilitate the Pop Up Park, the available car parking spaces in the study area reduced from 229 to 227, noting that one (1) additional car parking space was identified in the Library car park and on Church Street, respectively, compared to the 2022 study.

Car parking restrictions generally remained consistent between the 2022 and 2024 parking surveys, with the following exceptions:

- Eight (8) spaces on the western side of Church Street changed from a '2P' restriction to a '2P Meter' restriction,
- Four (4) spaces in St Crispin Street changed from 'Permit Zone' to 'No Stopping Authorised Council Vehicles Authorised', and
- One (1) '1P Disabled Only' space on the south side of Elm Grove changed to a Works Zone restriction.

Despite this, the alterations to parking restrictions are not expected to have significance when comparing car parking occupancy from 2022 to 2024.



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Figure 12: Parking Survey Area

Table 3 below presents a comparison of the 2022 and 2024 parking survey results for the overall study area.

Survey Time		2022 Surv	/ey		2024 Surv	ey
	Vacant Spaces	Parked Cars	% Occupancy	Vacant Spaces	Parked Cars	% Occupancy
Weekday 9:30am	104	125	55%	92	133	59%
Weekday 11:30am	67	162	71%	68	159	70%
Weekday 1:30pm	60	169	74%	71	156	69%
Weekday 4pm	57	146	72%	56	146	72%
Weekday 6:30pm	18	211	92%	17	210	93%
Weekend 2pm	71	158	69%	35	192	85%
Weekend 6:30pm	7	222	97%	29	198	87%

Table 3: Car Parking Survey Results Summary

As can be seen above, the parking conditions between the 2022 and 2024 parking surveys in the area are generally similar, with variances generally less than 10%. The biggest change between the two survey periods was observed on the weekend periods with the Saturday afternoon recording a higher occupancy of around 16% in 2024, however a lower occupancy was recorded in 2024 for the Saturday evening.



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Overall, the peak occupancies were near similar between 2022 and 2022 despite occurring at different times. Thus we are of the view that the small loss of parking spaces in relation to the pop up pocket park has not had any significant impact on parking conditions in the study area.

Origin – Destination Surveys

Origin – destination surveys were conducted within the survey area on Thursday, 21st March 2024 between 7:30am-9:30am to assess the travel paths of vehicles turning into Elm Grove from Church Street. This includes a focus on left turn movements at the intersection which are in contravention to the posted turn restriction between the survey periods.

OD surveys capture the movement of individual vehicles between points to determine the volumes of vehicles along defined routes. This is typically done by 'matching' vehicle numberplates at each station, with up to a 30 minute allowance for the travel time between points. The location of the node points where vehicle movements were captured is shown in Figure 13.

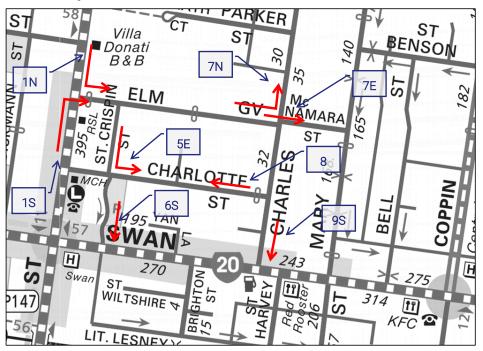


Figure 13: O-D Survey Nodes

An initial review of the origin destination surveys of the period of 8:00am to 9:00am indicates that of the 22 left turn movements and 3 right turn movements into Elm Grove from Church Street, 20 were matched at various nodes as shown in Figure 14 below. For the 5 vehicles that were not matched, it is possible that they parked on Elm Grove or equally were not matched for other reasons.



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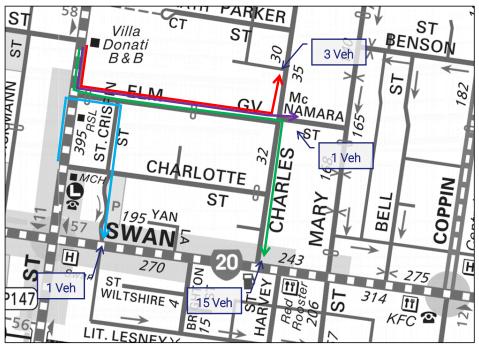


Figure 14: O-D Vehicle Travel Paths - 8:00am to 9:00am

As shown above, the principal travel route was vehicles turning left from Church Street then travelling through the local road network to exit to Swan Street via Charles Street. It is worth noting that this equates to 1 vehicle every four (4) minutes conducting this movement and is not of a significant level of concern.

Council could choose to refer the turn restriction to Victoria Police for enforcement, however in practice, there will always be some level of non compliance.

Assessment of One-Way on St Crispin Street

We understand that Council wish for us to consider the proposal for a one way traffic restriction on St Crispin Street between Charlotte Street and Elm Grove (noting the section between Charlotte Street and Swan Street is already limited to southbound only).

In consideration of the above, we note the following:

- St Crispin Street effectively operates as a laneway due to its narrow width and purpose in providing rear property access,
- The daily traffic volume recorded during the 2024 road closure was 124 vehicles per day, with a peak hour volume of 13 vehicles per hour,
- There is minimal likelihood of vehicles travelling in both directions conflicting based on the very low traffic volumes recorded (1 vehicle per 7 minutes),



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- The turning movement intersection counts at either end of St Crispin Street saw very minor differences between the 2022 and 2024 road closure conditions, and,
- Its context within the local road network.

In view of the above, we do not consider it necessary to provide a one way traffic restriction along the subject length of St Crispin Street and are of the opinion that Council could retain the existing arrangements. We note however that as St Crispin Street primarily provides local property access, Council could consult with relevant property owners on the traffic arrangements for further review. We consider that a southbound one way restriction would be more appropriate than a northbound restriction in order to provide access to the north end of Charlotte Street, noting that the southern section of St Crispin Street already provides a one way southbound restriction. This is also reflected in the existing direction split of traffic for the northern section of St Crispin Street which has a 30% northbound and 70% southbound split across the day.

Assessment of Swan St / Charles St Turn Ban

We understand that Council wish for us to review the right turn restriction at the intersection of Swan Street and Charles Street. This right turn restriction currently prohibits right turn movements from Swan Street into Charles Street between 7:30am and 9:30am, Monday to Friday and has historically been in place for at least 15 years.

We expect that the right turn movement principally serves to dissuade through traffic from utilising the local network as an alternative to the arterial road network during the morning peak period.

As noted previously, the 2024 surveys saw an increase in right turn movements at the Swan Street / Charles Street intersection both during the time of the right turn restriction and during the PM peak. As noted previously, live traffic driving directions are contributing to these increases, and not the closure of Charlotte Street.

Council may need to further investigate this matter with the responsible software developers and consider measures to reduce the local road network being used as an alternative to the arterial road network, however in reviewing the suitability of the existing turn ban we note the following:

- The increase in non-compliance may warrant a referral to Victoria Police to conduct enforcement and reduce the instances of non-compliance with the turn ban,
- The right turn movement in the PM peak period has also increased however:
- Some of these movements would comprise of residents returning to their dwellings within the local road network,
- A right turn restriction does not allow for exemptions based on residence, and
- If right turn movements were not permitted at this location in the PM peak, they would then occur at the Swan Street / Church Street intersection and may result in a further subsequent increase in queues and delays.
- Swan Street includes a shared tram lane and increased right turn movements at the Swan Street / Church Street intersection may result in increased delay to tram services. However, increased enforcement or extension of the existing right turn restrictions may



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result in additional delays to tram services instead occurring at the Swan Street and Church Street intersection.

We recommend that Council consult with Yarra Trams, DTP, the relevant software developers (Google Maps/Apple Maps) and residents regarding right turn movements at this location in view of the above, and further investigations/measures may be warranted to address issues associated with the increase in westbound right turn movements into Charles Street.

Other Impacts

Church St / Swan St Intersection

We note that turning movements at the intersection of Church Street and Swan Street have not varied significant between the two survey periods, with the exception of through movements for the arterial roads. It is noted that traffic volumes may vary day to day on the wider arterial road network and thus these variations are acceptable.

Critically, the right turn movements from Swan Street to Church Street (and vice versa) have not varied significantly, and thus the road closure on Charlotte Street has had little impact on this intersection.

We note that despite the limited change to traffic volumes, queues associated with westbound traffic have increased.

Conclusion

Having undertaken an assessment of the traffic and parking conditions during the Charlotte Street Pop Up Pocket Park (local road closure) at Charlotte Street, Richmond, we are of the opinion that:

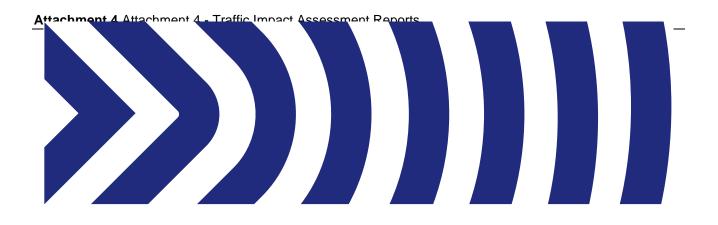
- a) the temporary road closure generally saw changes in traffic conditions consistent with our previous assessment conducted in 2022. The key exception being an increase in vehicles turning right onto Charles Street from Swan Street to then turn right into Church Street from Elm Street due to increased congestion in Swan Street and live traffic mapping apps advising motorists to detour via the local streets,
- b) the increased daily traffic volumes on Elm Grove and Charles Street are still within their environmental capacity,
- c) there were no significant changes to parking conditions,
- d) there was no significant changes to the intersection of Church Street and Swan Street as a result of the road closure,
- e) the Origin Destination surveys confirm that most of the left turn movements from Church Street into Elm Grove during the AM Peak (against the left turn ban) then utilise the local road network to access Swan Street via Charles Street,
- A one-way traffic restriction on the northern section of St Crispin Street is not required based on the very low traffic volumes along the road, which functionally operates as a laneway,



Traffix Group

- g) Council may wish to review in more detail the status of the Swan Street / Charles Street right turn restriction in consultation with Yarra Trams and local residents, and
- Further to our previous assessment, the temporary local road closure of Charlotte Street has demonstrated that traffic and parking conditions do not deteriorate to such a level that a permanent arrangement is not feasible.





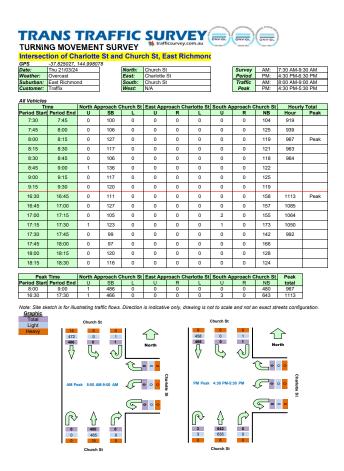
Appendix A

Intersection Turning Movement Counts

G31387L-02B

TURNI Intersec GPS Date: Weather: Suburban: Customer: All Vehicle T Period Star	NG MOV tion of Ell -37.824385, Thu 21/03/24 Overcast East Richmo Traffix	EMEN m Gr a 144.9981	T SUR	VEY	🚺 traff	licsurvey.		DNV-GL	ASNES HET	BO 1400	ŧ.	
Intersec GPS Date: Weather: Suburban: Customer: All Vehicle. T Period Stat	-37.824385, Thu 21/03/24 Overcast East Richmo	m Gr a	nd Chu		East R	l e le me e						
Date: Weather: Suburban: Customer: All Vehicle: T Period Star	Thu 21/03/24 Overcast East Richmo		73			acimo	nd					
Weather: Suburban: Customer: All Vehicle. T Period Star	Overcast East Richmo	1						_				
Suburban: Customer: All Vehicle T Period Star	East Richmo			North: East:	Church S Elm Gr	t			Survey Period	AM: PM:	7:30 AM-9 4:30 PM-6	
Customer: All Vehicle T Period Star		nd		South:	Church S	t			Traffic	AM:	4:30 PM-0. 8:15 AM-9:	
T Period Star			1	West:	N/A	-		1	Peak	PM:	4:30 PM-5	
Period Star												
	ime Design End	North Ap	oproach C SB	hurch St	East A	pproach R	Elm Gr	South A	pproach C R	hurch St NB	Hourl	/ Total Peak
7:30	7:45	0	105	3	0	3	1	0	0	106	985	Fedk
7:45	8:00	0	114	4	0	7	1	0	1	125	1006	
					-							
8:00	8:15	1	112	7	0	11	3	0	1	115	1026	<u> </u>
8:15	8:30	0	116	2	0	21	3	0	1	122	1031	Peak
8:30	8:45	0	109	5	0	6	1	0	1	117	1005	
8:45	9:00	0	130	8	0	9	3	0	0	122		
9:00	9:15	0	117	4	0	9	1	0	0	124		I
9:15	9:30	0	113	2	0	6	2	0	2	114		
16:30	16:45	0	108	10	0	13	1	0	1	153	1235	Peak
16:45	17:00	0	122	17	0	15	5	0	7	154	1227	
17:00	17:15	0	105	15	0	19	3	0	4	145	1192	
17:15	17:30	0	118	13	0	26	1	1	3	176	1184	
17:30	17:45	0	99	12	0	26	2	0	3	136	1127	
17:45	18:00	0	91	5	0	16	3	1	5	164	1127	
		-			-		-			104		I
18:00	18:15	0	120	8	0	25	2	0	4	124		I
18:15	18:30	0	112	10	0	29	6	0	4	120		I
	k Time		pproach C			pproach			pproach C		Peak	1
	t Period End	U	SB	L	U	R	L	U	R	NB	total	ł
8:15 16:30	9:15 17:30	0	472 453	19 55	0	45 73	8	0	2	485 628	1031 1235	1
Note: Site s Graphic Total	ketch is for illu		affic flows.				awing is n	•				uration.
Light Heavy	8 464	0	0	I -			9 444	0 55	0	1	\mathbf{r}	
	472	19	0		North		453	55	0	No	orth	
		رلا	, N.	Л			₽	L,	~J)			
	ľ	\neg		<u>ر</u>	* * -		Ň	~	1	د ۲۵	73	
	AM P	eak 8:15 A	M-9:15 AM	Ģ	20 74 <mark>-</mark> 4	Emar	PM Peak	4:30 PM-5	30 PM 🚽	• حر	Elm Gr	
		485 472 13 Church	2 2 0 81	S	• • •		1 1 0	628 620 8 Church St	(15 15 0	\$	0	

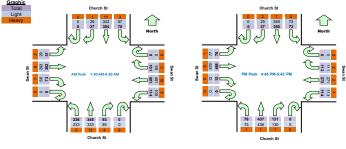
	es ne	North Ar	proach C	hurch St	East A	pproach	Elm Gr	South A	oproach C	Church St	
	Period End	U	SB	L	U	R	L	U	R	NB	
7:30	7:45	0	103	3	0	3	1	0	0	102	
7:45	8:00	0	108	4	0	7	1	0	1	122	
8:00	8:15	1	106	7	0	11	3	0	1	110	
8:15	8:30	0	114	2	0	20	3	0	1	117	
8:30	8:45	0	105	5	0	6	1	0	1	113	
8:45	9:00	0	130	8	0	9	2	0	0	120	
9:00	9:15	0	115	4	0	9	1	0	0	122	
9:15	9:30	0	110	2	0	6	2	0	2	109	
16:30	16:45	0	105	10	0	13	1	0	1	151	
16:45	17:00	0	121	17	0	15	5	0	7	152	
17:00	17:15	0	102	15	0	19	3	0	4	143	
17:15	17:30	0	116	13	0	26	1	1	3	174	
17:30	17:45	0	97	12	0	26	2	0	3	134	
17:45	18:00	0	89	5	0	16	3	1	5	161	
18:00	18:15	0	120	8	0	25	2	0	4	122	
18:15	18:30	0	106	10	0	29	6	0	4	118	
	-						-	0			
Peak Poriod Start		North Ap	proach C SB	hurch St	East A	pproach R	Elm Gr	South A	R R	NB	Peak total
8:15	Period End 9:15	0	SB 464	L 19	0	44	L 7	0	- R 2	NB 472	1008
16:30	9:15										
leavy Vehic	les	0	444	55	0	73	10	1	15	620	1218
Heavy Vehic Tii	les ne	North Ap	oproach C		East A	pproach		South A	pproach C	Church St	1218
Heavy Vehic Tir Period Start	les ne Period End	North Ap	oproach C SB	hurch St	East A U	pproach R	Elm Gr L	South A	pproach C R	NB	1218
Heavy Vehic Tir Period Start 7:30	les ne Period End 7:45	North Ap	proach C SB 2	hurch St L 0	East A U O	R 0	Elm Gr L 0	South A	pproach C R 0	Church St NB 4	1218
Heavy Vehic Tii Period Start 7:30 7:45	les ne Period End 7:45 8:00	North Ap U 0	proach C SB 2 6	hurch St L 0	East A U O	R D D	Elm Gr L 0	South A	pproach C R 0	Church St NB 4 3	1218
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Heavy Vehic Tin Period Start 7:30 7:45 8:00 8:15	les ne Period End 7:45 8:00 8:15 8:30	North Ap U 0 0 0	SB 2 6 6 2	hurch St L O O O	East A U 0 0 0	Approach R 0 0 0 1	Elm Gr L 0 0 0	South A U 0 0 0	Pproach C R 0 0 0	Church St NB 4 3 5 5 5	1218
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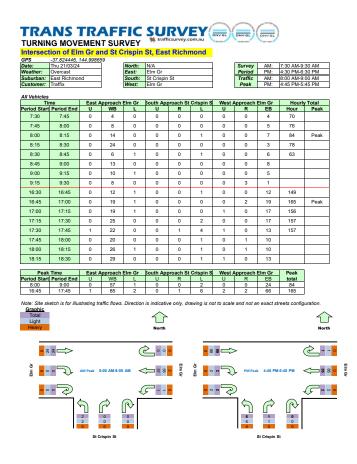
Light Vehicl Ti	me	North A	oproach C	hurch St	East Ann	roach Ch	arlotte St	South A	oproach C	hurch St	
	Period End	U	SB	L	U	R	L	U	R	NB	
7:30	7:45	0	98	0	0	0	0	0	0	100	
7:45	8:00	0	101	0	0	0	0	0	0	121	
8:00	8:15	0	120	0	0	0	0	0	0	115	
8:15	8:30	0	116	0	0	0	0	0	0	116	
8:30	8:45	0	101	0	0	0	0	0	0	114	
8:45	9:00	1	135	0	0	0	0	0	0	120	
9:00	9:15	0	115	0	0	0	0	0	0	123	
9:15	9:30	0	117	0	0	0	0	0	0	114	
16:30	16:45	0	108	0	0	0	0	0	0	156	
16:45	17:00	0	126	0	0	0	0	0	0	155	
17:00	17:15	0	103	0	0	0	0	2	0	153	
17:15	17:30	1	121	0	0	0	0	1	0	171	
17:30	17:45	0	96	0	0	0	0	0	0	140	
17:45	18:00	0	95	0	0	0	0	0	0	163	
18:00	18:15	0	120	0	0	0	0	0	0	126	
18:15	18:30	0	115	0	0	0	0	0	0	122	
Peak	Time	North A	oproach C	hurch St	East App	roach Ch	arlotte St	South A	oproach C	hurch St	Peak
	Period End	U	SB	L	U	R	L	U	R	NB	total
8:00	9:00	1	472	0	Ö	0	0	ő	0	465	938
	me						arlotte St				
Period Start	Period End	U	SB	L	U	R	L	U	R	NB	
7:30	7:45	0	2	0	0	0	0	0	0	4	
7:45	8:00	0	5	0	0	0	0	0	0	4	
8:00	8:15	0	7	0	0	0	0	0	0	4	
8:15	8:30	0	1	0	0	0	0	0	0	5	
8:30	8:45	0	5	0	0	0	0	0	0	4	
8:45	9:00	0	1	0	0	0	0	0	0	2	
9:00	9:15	0	2	0	0	0	0	0	0	2	
9:15	9:30	0	3	0	0	0	0	0	0	5	
16:30	16:45	0	3	0	0	0	0	0	0	2	
16:45	17:00	0	1	0	0	0	0	0	0	2	
17:00	17:15	0	2	0	0	0	0	0	0	2	
17:15	17:30	0		0	0	0	0	0	0	2	
47.00	47.45					0	0	0	0		
17:30	17:45	0	3				0				
17:45	18:00	0	2	0	0	0	0	0	0	3	
17:45 18:00	18:00 18:15	0	2	0	0	0	0	0	0	3 2	
17:45	18:00	0	2	0	0					3	
17:45 18:00 18:15 Peak	18:00 18:15 18:30 Time	0	2 0 1	0	0	0	0	0	0	3 2 2	Peak
17:45 18:00 18:15 Peak Period Start	18:00 18:15 18:30 Time Period End	0 0 0 North A	2 0 1 pproach C SB	0 0 0 hurch St	0 0 0 East App	0 0 roach Ch	0 0 arlotte St	0 0 South A	0 0 pproach C R	3 2 2 Church St	total
17:45 18:00 18:15 Peak	18:00 18:15 18:30 Time	0 0 0 North A	2 0 1 pproach C	0 0 0	0 0 0 East App	0 0 proach Ch	0 0 arlotte St	0 0 South A	0 0 oproach C	3 2 2 Church St	

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Intersect	tion of Swan Sta	and Ch	urch S	it, East Richmond				
GPS	-37.825677, 144.99792	22						
Date:	Thu 21/03/24		North:	Church St		Survey	AM:	7:30 AM-9:30 AM
Weather:	Overcast		East:	Swan St		Period	PM:	4:30 PM-6:30 PM
Suburban:	East Richmond		South:	Church St	1	Traffic	AM:	7:30 AM-8:30 AM
Customer:	Traffix		West:	Swan St		Peak	PM:	4:45 PM-5:45 PM

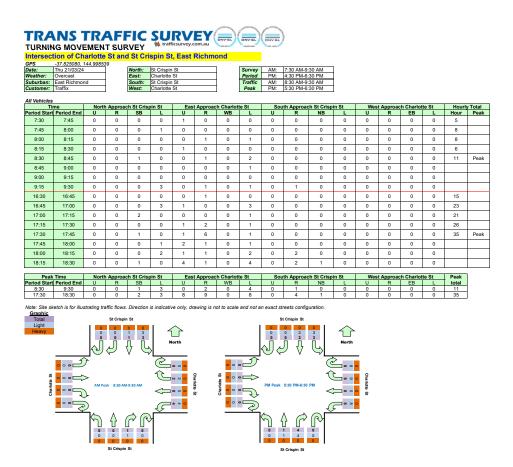
Tir				ach Churc				ach Swan				ach Church				ach Swar		Hourl	
eriod Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	Hour	Pea
7:30	7:45	0	5	85	13	0	27	131	29	0	20	90	63	0	24	79	10	2247	Pea
7:45	8:00	0	7	81	16	0	23	151	34	0	24	100	69	0	18	85	6	2216	
8:00	8:15	0	10	96	23	0	27	103	28	0	31	90	48	0	18	79	4	2121	
8:15	8:30	0	5	92	18	0	24	116	23	0	18	65	56	0	13	59	11	2073	
8:30	8:45	0	12	83	9	0	31	114	32	0	20	97	54	0	14	75	4	2062	
8:45	9:00	0	10	116	9	0	21	94	33	0	19	89	39	0	18	62	9		
9:00	9:15	0	16	85	13	0	24	87	37	0	23	83	54	0	24	50	13		
9:15	9:30	0	12	108	11	0	26	87	32	0	26	84	38	0	15	42	8		
16:30	16:45	0	7	91	13	0	32	54	23	0	35	107	13	0	1	99	19	2136	
16:45	17:00	0	6	103	10	0	22	78	38	0	27	110	22	0	4	118	21	2172	Pea
17:00	17:15	0	7	87	15	0	28	71	25	0	36	110	22	0	3	109	21	2123	
17:15	17:30	0	10	90	29	0	37	62	25	0	24	114	14	0	5	118	21	2089	
17:30	17:45	0	4	70	19	0	26	62	26	0	44	103	18	0	0	143	15	2010	
17:45	18:00	0	15	70	16	0	16	44	19	0	44	142	14	0	3	119	8		
18:00	18:15	0	7	100	13	0	22	66	28	0	25	103	18	0	3	109	6		
18:15	18:30	0	9	83	13	0	18	57	24	0	29	81	14	0	6	117	19		
Peak	Time	Nor	th Appro:	ach Churc	h St	E	ast Annro	ach Swan	St	So	uth Appro-	ach Church	n St	W	est Appro	ach Swar	St	Peak	1
	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	total	
7:30	8:30	0	27	354	70	0	101	501	114	0	93	345	236	0	73	302	31	2247	1
16:45	17:45	0	27	350	73	0	113	273	114	0	131	437	76	0	12	488	78	2172	



	me			ach Churc	h St		ast Appro		St		uth Approa	ach Church	St		est Appro		St	I
	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	1
7:30	7:45	0	5	83	13	0	26	130	27	0	19	87	62	0	20	76	9	
7:45	8:00	0	7	77	15	0	23	147	33	0	23	97	68	0	17	84	6	
8:00	8:15	0	9	93	21	0	27	100	27	0	30	86	48	0	17	76	4	
8:15	8:30	0	5	90	18	0	22	114	22	0	17	63	55	0	12	57	10	T
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8:45	9:00	0	10	115	9	0	21	94	33	0	19	88	39	0	18	60	8	T
9:00	9:15	0	14	85	13	0	23	87	37	0	23	82	54	0	23	44	13	Ť
9:15	9:30	0	12	105	11	0	23	84	31	0	23	82	37	0	12	38	8	Ť
16:30	16:45	0	6	91	13	0	32	54	21	0	35	107	13	0	1	98	19	
16:45	17:00	0	6	102	10	0	22	77	38	0	27	109	21	0	4	115	21	t
17:00	17:15	0	7	87	15	0	27	71	25	0	35	110	22	0	3	105	21	t
17:15	17:30	0	9	90	29	0	36	61	25	0	24	114	14	0	5	116	20	1
17:30	17:45	0	3	70	19	0	26	62	25	0	44	103	18	0	0	143	15	1
17:45	18:00	0	13	70	16	0	16	44	19	0	42	141	14	0	3	116	8	1
18:00	18:15	0	7	100	13	0	22	65	28	0	25	103	18	0	3	109	6	1
18:15	18:30	0	7	83	11	0	17	57	24	0	29	80	14	0	5	115	19	1
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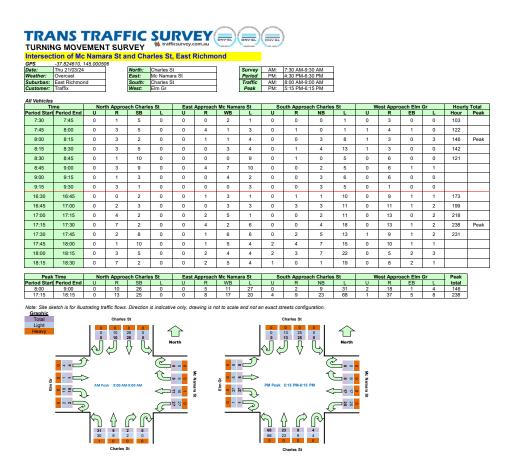
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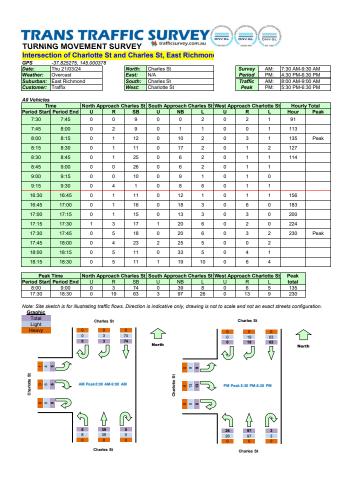
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17:00	17:15	0	1	0	2	0	0	131	1	0	0	0	0	1	0	158	1	1182	
17:15	17:30	0	2	0	1	0	0	115	0	0	1	0	2	2	0	167	0	1154	
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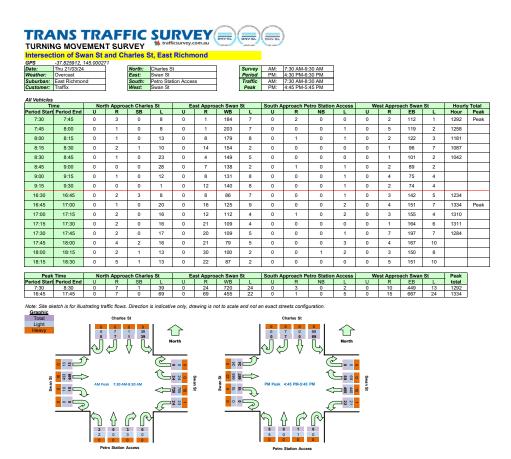
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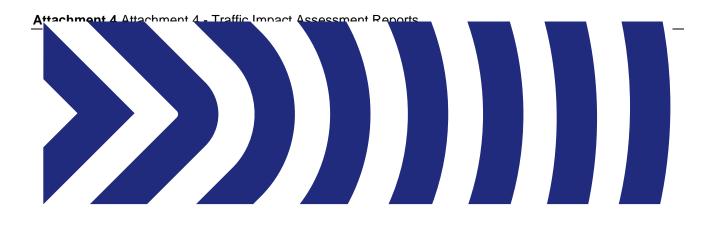
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Tir	es ne	North Ar	proach C	harles St	South Ar	pproach C	harles St	West App	proach Ch	arlotte St	
	Period End	U	R	SB	U	NB	L	U	R	1	
7:30	7:45	0	0	9	0	0	2	0	2	1	
7:45	8:00	0	1	9	0	1	1	0	0	1	
8:00	8:15	0	1	12	0	10	2	0	3	1	
8:15	8:30	0	1	11	0	17	2	0	1	1	
8:30	8:45	0	1	25	0	6	2	0	1	1	
8:45	9:00	0	0	26	0	6	2	0	1	1	
9:00	9:15	0	0	10	0	9	1	0	1	0	
9:15	9:30	0	4	1	0	8	6	0	1	1	
16:30	16:45	0	1	11	0	12	1	0	1	1	
16:45	17:00	0	1	16	0	18	3	0	6	0	
17:00	17:15	0	1	15	0	13	3	0	3	0	
17:15	17:30	1	3	17	1	20	6	0	2	0	
17:30	17:45	0	5	18	0	20	6	0	3	2	
17:45	18:00	0	4	23	2	25	5	0	0	2	
18:00	18:15	0	5	11	0	33	5	0	4	1	
18:15	18:30	0	5	11	1	19	10	0	6	4	
										1 1	
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Period Start 8:00	Period End 9:00	U 0	R 3	SB 74	U 0	NB 39	L 8	0	R 6	L 4	total 134
17:30	18:30	0	19	63	3	97	26	0	13	9	230
17:30 Heavy Vehic Tir	18:30 :les ne	0 North Ap	19 oproach C	63 harles St	3 South Ap	97 oproach C	26 harles St	0 West App	13 broach Ch	9 arlotte St	
17:30 Heavy Vehic Tir Period Start	18:30 Iles ne Period End	0 North Ap	19 proach C R	63 harles St SB	3 South Ap	97 proach C NB	26 harles St L	0 West App U	13 proach Ch R	9 arlotte St L	
17:30 Heavy Vehic Tir	18:30 :les ne	0 North Ap	19 oproach C	63 harles St	3 South Ap	97 oproach C	26 harles St	0 West App	13 broach Ch	9 arlotte St	
17:30 Heavy Vehic Tir Period Start	18:30 Iles ne Period End	0 North Ap	19 proach C R	63 harles St SB	3 South Ap	97 proach C NB	26 harles St L	0 West App U	13 proach Ch R	9 arlotte St L	
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17:30 Heavy Vehic Tii Period Start 7:30 7:45 8:00	18:30 ne Period End 7:45 8:00 8:15	0 North Ap U 0 0	19 pproach C R 0 1 0	63 harles St SB 0 0 0	3 South Ap U 0 0	97 pproach C NB 0 0 0	26 harles St 0 0	0 West App U 0 0	13 proach Ch R 0 0 0	9 arlotte St U 0 0 0	
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7:30	7:45	0	3	0	8	0	1	182	7	0	2	0	0	0	2	108	1
7:45	8:00	0	1	0	8	0	1	197	7	0	0	0	1	0	5	116	2
8:00	8:15	0	1	0	13	0	8	175	7	0	1	0	1	0	2	117	3
8:15	8:30	0	2	1	10	0	14	151	2	0	0	0	0	0	1	92	7
8:30	8:45	0	1	0	23	0	4	149	5	0	0	0	0	0	1	99	2
8:45	9:00	0	0	0	28	0	7	138	2	0	1	0	1	0	2	87	2
9:00	9:15	0	1	0	11	0	8	127	8	0	0	0	1	0	4	71	3
9:15	9:30	0	0	0	1	0	11	137	8	0	0	0	0	0	1	67	4
16:30	16:45	0	2	3	8	0	8	84	7	0	0	0	1	0	3	137	5
16:45	17:00	0	1	0	20	0	16	120	9	0	0	0	2	0	4	145	7
17:00	17:15	0	2	0	16	0	12	109	3	0	1	0	2	0	3	146	4
17:15	17:30	0	2	0	16	0	21	105	4	0	0	0	0	0	1	159	6
17:30	17:45	0	2	0	17	0	20	106	5	0	0	0	1	0	7	195	7
17:45	18:00	0	4	2	16	0	21	75	5	0	0	0	3	0	4	161	10
18:00	18:15	0	2	1	13	0	30	96	2	0	0	1	2	0	3	145	8
18:15	18:30	0	5	1	13	0	22	83	2	0	0	0	0	0	5	145	10
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8:15	8:30	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	
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		0	0		0	0	0	0	0	0	0	0	0	0	0	2	0
	8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
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Appendix B

Seven Day Traffic Counts

G31387L-02B

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMMA	ARY			
Street Name :	Char	les St	Location :	Outside Propert	side Property 81		
Suburb :	Rich	mond	Start Date :	tart Date : 00:00 Mon 18/March/2024			
Machine ID:	YH07	VHVH	Finish Date :	00:00 Mon 25/M	/larch/2024		
Site ID:	1887	7	Speed Zone :	40 km/h			
Prepared By :	Vo S	on Binh	Email:	binh@trafficsurve	ey.com.au		
GPS information	Lat	37° 49' 31.83 South		Direction of Tra	avel		
	Long	145° 0' 1.52 East	Both directions	Northbound	Southbound		
Traffic Volume :		Weekdays Average	1,495	749	746		
(Vehicles/Day)		7 Day Average	1,511	771	740		
Weekday	AM	08:00	110	36	75		
Peak hour starts	PM	17:00	163	96	67		
Speeds :		85th Percentile	34.4	35.1	33.6		
(Km/Hr)		Average	29.0	29.6	28.3		
Classification % :		Light Vehicles up to 5.5m	95.6%	95.4%	95.8%		





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

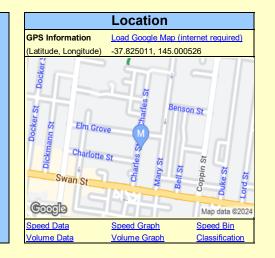
Status of movement – Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMMA	ARY	
Street Name :	Char	les St	Location :	Outside Proper	ty 61
Suburb :	Rich	mond	Start Date :	00:00 Mon 18/	March/2024
Machine ID:	RZ17	VYXC	Finish Date :	00:00 Mon 25/	March/2024
Site ID:	1887	8	Speed Zone :	40 km/h	
Prepared By :	Vo S	on Binh	Email:	binh@trafficsurve	ey.com.au
GPS information	Lat	37° 49' 30.04 South		Direction of Tr	avel
	Long	145° 0' 1.89 East	Both directions	Northbound	Southbound
Traffic Volume :		Weekdays Average	1,322	617	705
(Vehicles/Day)		7 Day Average	1,323	630	693
Weekday	AM	08:00	102	31	71
Peak hour starts	PM	17:00	144	78	66
Speeds :		85th Percentile	29.8	30.6	29.0
(Km/Hr)		Average	25.3	26.1	24.5
Classification % :		Light Vehicles up to 5.5m	97.7%	97.3%	98.0%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

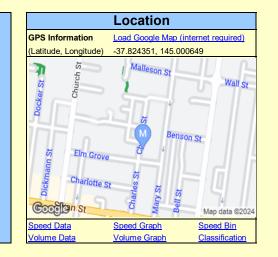
Status of movement – Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMMA	RY			
Street Name :	Char	les St	Location :	Outside Property 41			
Suburb :	Richr	mond	Start Date :	/larch/2024			
Machine ID:	YD29	YXP3	Finish Date :	00:00 Mon 25/M	/larch/2024		
Site ID:	1887	9	Speed Zone :	40 km/h			
Prepared By :	Vo S	on Binh	Email:	binh@trafficsurve	ey.com.au		
GPS information	Lat	37° 49' 27.66 South		Direction of Tra	avel		
	Long	145° 0' 2.34 East	Both directions	Northbound	Southbound		
Traffic Volume :		Weekdays Average	714	363	351		
(Vehicles/Day)		7 Day Average	737	374	363		
Weekday	AM	08:00	47	16	31		
Peak hour starts	PM	18:00	60	33	28		
Speeds :		85th Percentile	32.0	31.9	32.1		
(Km/Hr)		Average	26.9	26.7	27.1		
Classification % :		Light Vehicles up to 5.5m	97.3%	96.8%	97.8%		





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement – Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMM	ARY			
Street Name :	McNar	nara St	Location :	East of Charles St			
Suburb :	Richm	ond	Start Date :	00:00 Mon 18/March/2024			
Machine ID:	YC70F	C76	Finish Date :	00:00 Mon 25/March/2024			
Site ID:	18880		Speed Zone :	50 km/h			
Prepared By :	Vo So	ו Binh	Email:	binh@trafficsurvey.c	:om.au		
GPS information	Lat	37° 49' 28.52 South		Direction of Trave	el		
	Long	145° 0' 2.65 East	Both directions	Westbound	Eastbound		
Traffic Volume :		Weekdays Average	376	256	120		
(Vehicles/Day)		7 Day Average	367	244	123		
Weekday	AM	08:00	47	40	7		
Peak hour start	РМ	17:00	38	26	12		
Speeds :		85th Percentile	25.2	24.6	25.8		
(Km/Hr)		Average	22.2	21.6	22.7		
Classification % :		Light Vehicles up to 5.5m	98.6%	98.4%	99.2%		





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

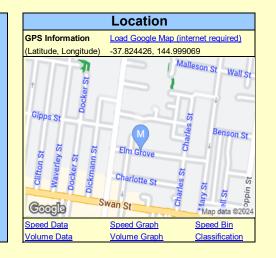
Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMM	ARY			
Street Name :	Elm G	ove	Location :	Outside Property 5	•		
Suburb :	Richm	ond	Start Date :	00:00 Mon 18/Mar	ch/2024		
Machine ID:	SA70E	31RC	Finish Date :	00:00 Mon 25/March/2024			
Site ID:	18881		Speed Zone :	40 km/h			
Prepared By :	Vo So	n Binh	Email:	binh@trafficsurvey.c	om.au		
GPS information	Lat	37° 49' 27.93 South		Direction of Trave	el		
	Long	144° 59' 56.65 East	Both directions	Westbound	Eastbound		
Traffic Volume :		Weekdays Average	1,180	612	568		
(Vehicles/Day)		7 Day Average	1,201	627	574		
Weekday	AM	11:00	68	32	35		
Peak hour start	РМ	17:00	125	70	55		
Speeds :		85th Percentile	33.9	34.1	33.7		
(Km/Hr)		Average	28.6	29.0	28.1		
Classification % :		Light Vehicles up to 5.5m	96.0%	95.5%	96.3%		





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

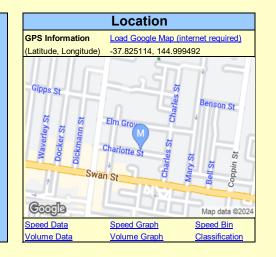
Status of movement - Covid 19

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TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMM	ARY			
Street Name :	Charlo	tte St	Location :	Outside Property 2	:0		
Suburb :	Richm	ond	Start Date :	00:00 Mon 18/Mar	ch/2024		
Machine ID:	XP805	МКТ	Finish Date :	00:00 Mon 25/March/2024			
Site ID:	18884		Speed Zone :	40 km/h			
Prepared By :	Vo So	ו Binh	Email:	binh@trafficsurvey.c	om.au		
GPS information	Lat	37° 49' 30.41 South		Direction of Trave	el		
	Long	144° 59' 58.17 East	Both directions	Westbound	Eastbound		
Traffic Volume :		Weekdays Average	479	288	191		
(Vehicles/Day)		7 Day Average	486	292	194		
Weekday	AM	11:00	28	17	11		
Peak hour start	РМ	18:00	71	46	26		
Speeds :		85th Percentile	34.0	34.9	33.6		
(Km/Hr)		Average	29.2	29.4	29.3		
Classification % :		Light Vehicles up to 5.5m	94.8%	94.5%	95.3%		





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Status of movement – Covid 19

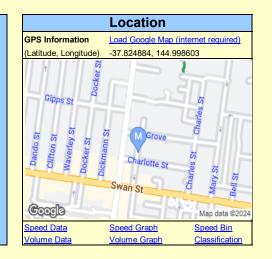
"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

AUTOMATIC COUNTER SUMMARY AND DATA SHEET

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY			
Street Name :	St Cr	ispin St	Location :	North of Charlotte St			
Suburb :	Rich	nond	Start Date :	00:00 Mon 18/M	/larch/2024		
Machine ID:	YD97	/JRVE	Finish Date :	00:00 Mon 25/	/larch/2024		
Site ID:	1888	2	Speed Zone :	50 km/h			
Prepared By :	Vo S	on Binh	Email:	binh@trafficsurve	ey.com.au		
GPS information	Lat	37° 49' 29.58 South		Direction of Travel			
	Long	144° 59' 54.97 East	Both directions	Northbound	Southbound		
Traffic Volume :		Weekdays Average	112	56	56		
(Vehicles/Day)		7 Day Average	109	55	54		
Weekday	AM	10:00	7	4	3		
Peak hour starts	PM	18:00	11	6	4		
Speeds :		85th Percentile	16.5	16.7	16.3		
(Km/Hr)		Average	15.1	15.4	14.9		
Classification % :		Light Vehicles up to 5.5m	98.2%	98.2%	98.2%		





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement – Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

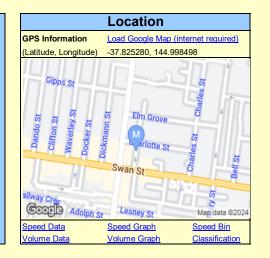
Page 1 of 1

AUTOMATIC COUNTER SUMMARY AND DATA SHEET

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COU	NT SUMMA	RY			
Street Name :	St Cr	ispin St	Location :	South of Charlotte St			
Suburb :	Rich	mond	Start Date :	00:00 Mon 18/M	/larch/2024		
Machine ID:	RZ64	1GM0P	Finish Date :	00:00 Mon 25/	/larch/2024		
Site ID:	1888	3	Speed Zone :	50 km/h			
Prepared By :	Vo S	on Binh	Email:	binh@trafficsurve	ey.com.au		
			ł				
GPS information	Lat	37° 49' 31.01 South		Direction of Travel			
	Long	144° 59' 54.59 East	Both directions	Northbound	Southbound		
Traffic Volume :		Weekdays Average	124	37	87		
(Vehicles/Day)		7 Day Average	128	39	89		
Weekday	AM	11:00	5	2	3		
Peak hour starts	PM	18:00	19	7	12		
Speeds :		85th Percentile	21.9	22.0	22.3		
(Km/Hr)		Average	19.0	19.6	18.8		
		Light Vehicles up to 5.5m	95.3%	95.0%	95.5%		



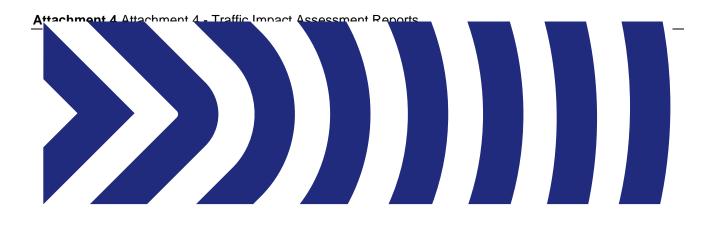


QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

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Page 1 of 1



Appendix C

Parking Surveys

G31387L-02B

Parking Occupancy Surveys

Traffix Group

		CAPACITY	Saturday, 23rd March, 2024		Tuedsay, 26th March, 2024				
LOCATION	RESTRICTION		2:00pm	6:30pm	9:30am	11:30am	1:30pm	4:00pm	6:30pm
OFF-STREET CARPARKING		•							
RICHMOND LIBRARY CARPARK AT 6 (CHARLOTTE STREET, RICHMOND								
	2P 7am-7pm	20	20	14	8	19	17	18	18
	No Stopping Council Library Vehicle Excepted	1	0	0	0	0	0	0	0
ON-STREET CARPARKING			-						
ST CRISPIN STREET									
East Stide									
Charlotte Street to Swan Street	No Stopping Authorised Council Vehicles Excepted	4	0	0	0	0	0	0	0
CHARLOTTE STREET									
North Side		•	-	•	-			-	•
Church Street to Charles Street	Permit Zone	19	16	21	13	15	15	16	20
South Side		-			-			-	-
	2P 7am-Midnight MON - SAT	20	18	17	16	14	12	16	19
Church Street to Charles Street	1/4P 8am-10pm	1	0	0	0	1	1	1	1
	2P Disabled only 8am-8pm	1	0	0	0	1	1	1	1

G31387 - Charlotte Street, Richmond Parking Surveys

Parking Occupancy Surveys

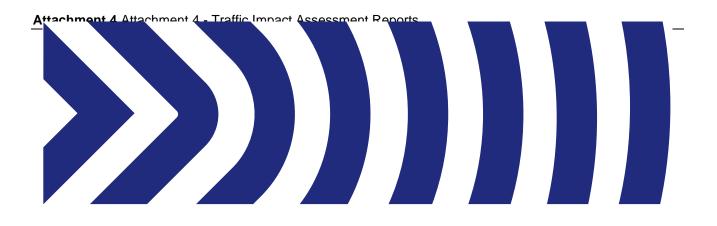
Traffix Group

		CAPACITY	Saturday, 23rd March, 2024		Tuedsay, 26th March, 2024				
LOCATION	RESTRICTION		2:00pm	6:30pm	9:30am	11:30am	1:30pm	4:00pm	6:30pm
CHARLES STREET									
East Side				-			-		
Swan Street to 73 Charles Street	Permit Zone	6	6	6	5	5	6	5	6
71 Charles Street to McNamara Street	Permit Zone	10	5	8	5	4	6	8	10
Elm Grove to 37 Charles Street	Permit Zone	5	5	5	2	3	3	3	5
West Side				•					
Elm Grove to laneway into Parker Street	2P 7am-Midnight MON - SAT	1	1	1	0	1	1	1	1
Charlotte Street to Elm Grove	2P 7am-Midnight MON - SAT	7	6	6	7	6	6	4	7
Charlotte Street to Elm Grove	P Disabled Parking	1	0	1	1	1	1	0	1
	2P 7am-Midnight MON - SAT	4	4	4	3	3	4	4	4
Swan Street to Charlotte Street	Loading Zone 15minutes 7am-6pm MON - SAT Permit Zone All Other Times	2	0	0	0	0	0	2	2
ELM GROVE									
North Side									
Charles Street to Church Street	2P 7am-Midnight MON - SAT	23	21	21	18	22	20	15	23
South Side					•				
	Permit Zone	20	18	17	9	14	10	10	17
Charles Street to Church Street	1P Disabled	1	1	0	1	1	1	0	0
	Works Zone 7am-6pm Mon-Fri, 9am-3pm Sat	1	0	1	0	1	1	1	1

Parking Occupancy Surveys

Traffix Group

		CAPACITY	Saturday, 23rd March, 2024		Tuedsay, 26th March, 2024				
LOCATION	RESTRICTION		2:00pm	6:30pm	9:30am	11:30am	1:30pm	4:00pm	6:30pm
CHURCH STREET									
East Side									
Property 381 to Charlotte Street	2P 8am-5pm MON - FRI, 8am-12:30pm Sat, Yarra City Council Area 7 Permit Excepted	11	11	11	9	11	11	8	10
Charlotte Street to Swan Street	No Stopping Zone	0	0	0	0	0	0	0	0
West Side									
	2P 8am-5pm MON - FRI (8:30am-5:30pm SAT)	12	12	12	12	12	12	12	12
	2P Meter 8am-5pm Mon-Fri, 8:30am-5:30pm Sat	8	8	7	3	4	6	6	8
Swan Street to Gipps Street	2P Meter 8am-5pm MON - FRI (8:30am-5:30pm SAT)	2	2	2	1	0	2	0	2
Swan Street to Sipps Street	Disabled only 7am - 5pm MON - FRI	1	1	1	0	0	1	0	1
	1/4P 7am - 9pm	1	1	0	0	0	0	0	0
	Authorised Car Share	1	0	1	1	1	1	1	1
SWAN STREET	·								
North Side									
Church Street to St Crispin	Clearway 4:30pm-6:30pm MON-FRI Loading Zone 15min All Other Times	2	1	0	1	0	0	0	0
St Crispin Street to Yan Lane	Clearway 4:30pm-6:30pm MON-FRI, 2P Meter 8:30am-4:30pm MON-FRI (8:30am-5:30pm SAT)	11	11	11	3	3	5	2	11
Yan Lane to Uchin Studio	Clearway 4:30pm-6:30pm MON-FRI, 2P Meter 8:30am-4:30pm (8:30am- 5:30pm SAT)	12	10	12	7	7	5	0	12
South Side									
Church Street to Yan Lane	Clearway 7:00am-9:15am MON-FRI 2P Meter 9:15am-5:30pm MON-FRI (8:30am-5:30pm SAT)	14	11	14	6	9	6	8	13
Yan Lane to Harvey Street	Clearway 7:00am-9:15am MON-FRI 2P Meter 9:15am-5:30pm MON-FRI (8:30am-5:30am SAT)	5	3	5	2	1	2	4	4
	Capacity	202 - 227	227	227	225	227	227	202	227
LOCATION	Total Number of Cars Parked		192	198	133	159	156	146	210
LUCATION	Total Number of Vacant Spaces		35	29	92	68	71	56	17
	Percentage Occupancy		85%	87%	59%	70%	69%	72%	93%



Appendix D

Origin – Destination Surveys

G31387L-02B

		#	trafficsurvey.com.au					
I	From	8:00	•					
	То	9:00	-		All Vehicles	•		
	1			1				
1	N	1S	5E	6S	7N	7E	8W	9S
1N (0	0	0	0	3	1	0	15
1S 0	0	0	0	1	0	0	0	0
5E (0	0	0	0	0	0	0	0
6S (0	0	0	0	0	0	0	0
7N (0	0	0	0	0	0	0	7
7E 0	0	0	0	0	0	0	0	0
8W 0	0	0	0	0	0	0	0	0
9S (0	0	0	0	3	0	0	0
	1N	55					7N 8W 95	7E

TRANS TRAFFIC SURVEY

		**	trafficsurvey.com.au					
	From	7:30	•					
	То	9:30	-		All Vehicles	•		
				1				
	1N	1S	5E	6S	7N	7E	8W	9S
1N	0	0	2	0	3	1	0	21
1S	0	0	1	1	0	0	0	0
5E	0	0	0	0	0	0	0	0
6S	0	0	0	0	0	0	0	0
7N	0	0	0	0	0	0	1	9
7E	0	0	0	0	0	0	0	1
8W	0	0	0	1	0	0	0	1
9 S	0	0	0	0	4	0	0	0
		55	Ster a				7N 8W 95	7E

TRANS TRAFFIC SURVEY

Traffix Group

Traffic Impact Assessment

Proposed Road Closure Assessment

Charlotte Street, Richmond

Prepared for Yarra City Council

Level 28, 459 Collins St Melbourne Victoria 3000 T: 03 9822 2888 admin@traffixgroup.com.au Traffix Group Pty Ltd ABN: 32 100 481 570

traffixgroup.com.au

Charlotte Street, Richmond

Document Control

Our Reference: G31387R-01B

Issue No.	Туре	Date	Prepared By	Approved By
А	Draft	11/04/22	A Montgomerie / S Nguyen	W de Waard
В	Final	24/05/22	A Montgomerie	W de Waard

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Charlotte Street, Richmond

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Charlotte Street, Richmond

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- Appendix E Crash Data Analysis
- Appendix F Parking Survey Results
- Appendix G Traffic Volume Redistribution Diagrams
- Appendix H SIDRA Modelling Results Post Public Space Intersection Performance

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Charlotte Street, Richmond

1. Introduction

Traffix Group has been engaged by Yarra City Council to undertake a traffic impact assessment for the proposed road closure of Charlotte Street between Church Street and St Crispin Street, Richmond. The proposed road closure is to facilitate the provision of a new public space, which will occupy the full width of Charlotte Street from Church Street to St Crispin Street.

This report provides a detailed traffic engineering assessment of the parking and traffic issues associated with the proposed road closure.

2. Charlotte Street Public Space

The proposal is for the construction of public space identified in the Swan Street Streetscape Master Plan as a new 'Civic Library', on Charlotte Street, Richmond. The project involves the permanent closure of Charlotte Street, between Church Street and St Crispin Street with the extents shown in the photographs below at Figure 1 and Figure 2.



Figure 1: Charlotte Street – View East from Church Street

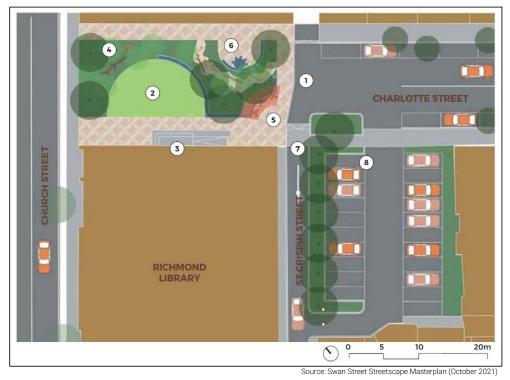
Figure 2: Charlotte Street – View West towards Church Street

The construction of the public spaces comprises the following components with a concept design shown at Figure 3 below.

- The construction of public space that provides landscaping and seating for users,
- Wide and open pedestrian thoroughfares,
- A new Richmond Library access,
- A pergola and seating space,
- Provision for cyclist access through the park,
- The removal of five (5) on-street parking spaces along the western end of Charlotte Street, and
- Retention of vehicle access to St Crispin Street (north and south).

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The closure site is

Figure 3: Concept Design – Charlotte Street Public Space

An extract from the Swan Street Streetscape Masterplan is provided at Appendix A.

3. Existing Conditions

3.1. Locality and Land Use

The subject section of Charlotte Street is located between Church Street and St Crispin Street in Richmond. A locality plan and aerial photograph is provided in Figure 4 and Figure 5 below.

Land use surrounding the site is predominately residential, with small retail/commercial properties along Church Street. Richmond Library is located adjacent the site to the south on the east side of Church Street.

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Charlotte Street, Richmond

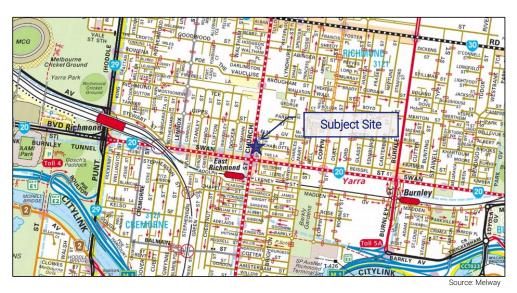


Figure 4: Locality Plan



Figure 5: Aerial Photograph

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Charlotte Street, Richmond

3.2. Study Area

For the purposes of this assessment, the study area has been defined as shown in Figure 6 below. This area has been chosen as the likely area of influence for the proposed road closure of Charlotte Street on the road network. Parking surveys and traffic studies undertaken as part of this assessment have been limited to this study area and are detailed in the following sections.

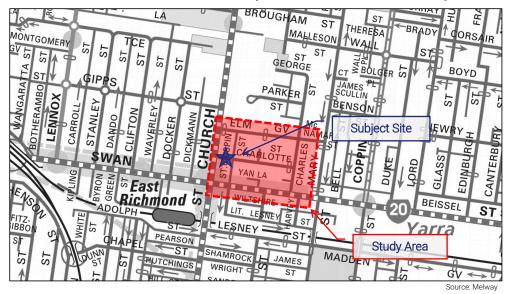


Figure 6: Study Area

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Charlotte Street, Richmond

3.3. Road Network

Charlotte Street is a Council local road that extends in an east-west orientation between Church Street and Charles Street.

Near the intersection with Church Street, Charlotte Street provides an 11.9m wide carriageway, that provides for a single traffic and bicycle lane in each direction with parallel parking on the north side. Between St Crispin Street and Charles Street, Charlotte Street provides a 13.2m wide carriageway, that provides for a single traffic lane, bicycle lane and on-street parallel parking in both directions.

Various parking restrictions and permit zones apply along Charlotte Street. A 'No Left Turn' restriction also applies to the intersection of Charlotte Street / Church Street between 7:30am - 9:30am on Monday to Friday, for left turns from Church Street into Charlotte Street.

Charlotte Street is subject to a posted speed limit of 40km/h (area wide restriction).



Figure 7: Charlotte Street – View West

Figure 8: Charlotte Street – View East

Elm Grove is a Council local road the extends in an east-west orientation between Church Street and Charles Street.

Between Church Street and Charles Street, Elm Grove provides a 9.5m wide carriageway, that provides for a single traffic lane with on-street parallel parking in both directions.

Various parking restrictions and permit zones apply along Elm Grove. A 'No Left Turn' restriction also applies to the intersection of Elm Grove / Church Street between 7:30am - 9:30am on Monday to Friday, for left turns from Church Street into Elm Grove.

Elm Grove is subject to a posted speed limit of 40km/h (area wide restriction).

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Charlotte Street, Richmond



Figure 9: Elm Grove – View West

Figure 10: Elm Grove – View East

Charles Street is a Council local road that extends in a north-south orientation between Swan Street and George Street.

Between Elm Grove and Swan Street, Charles Street provides a 11.1m carriageway that provides for a single traffic lane and on-street parallel parking in both directions.

Various parking restrictions and permit zones apply along Charles Street. A 'No Right Turn' restriction also applies to the intersection of Charles Street / Swan Street between 7:30am - 9:30am on Monday to Friday, for right turns from Swan Street into Charles Street.

Charles Street is subject to a posted speed limit of 40km/h (area wide restriction).



Figure 11: Charles Street - View North

Figure 12: Charles Street – View South

St Crispin Street is a Council local road that extends in a north-south orientation between Elm Grove and Swan Street.

Between Swan Street and Charlotte Street, St Crispin Street provides a 3.8m carriageway that accommodates one way traffic flow. South of Charlotte Street, St Crispin Street is restricted to southbound traffic only, whilst no traffic restrictions apply north of St Crispin Street. A small

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Charlotte Street, Richmond

number of indented parallel parking bays are provided on the east side of St Crispin Street to the south of Charlotte Street.



Figure 13: St Crispin Street – View North

Figure 14: St Crispin Street – View South

Church Street is a state arterial road that extends in a north-south orientation between the Yarra River and Alexandra Avenue.

Near the intersection with Charlotte Street, Church Street provides a 14m wide carriageway, that accommodates two traffic lanes in each direction. The kerbside lanes are shared with parking, whilst the inside lanes are shared with trams. An exclusive bicycle lane (southbound) commences immediately to the south of Charlotte Street and extends to Swan Street.

Various short term ticket parking restrictions apply along Church Street, with no Clearway restrictions in place.

Church Street is subject to a posted speed limit of 40km/h.



Figure 15: Church Street – View North



Figure 16: Church Street - View South

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Charlotte Street, Richmond

Swan Street is a state arterial road that extends in an east-west orientation between Punt Road and Madden Grove.

Near the intersection with Church Street to the north, Swan Street provides a 13.9m wide carriageway, that accommodates two traffic lanes in each direction. The kerbside lanes are shared with parking whilst the inside lanes are shared with trams sides.

Various short term ticket parking restrictions and clearway restrictions apply along Swan Street. This includes 'Clearway's in operation at 7:00am-9:15am on the south side and 4:30pm-6:30pm on the north side between Monday to Friday.

Swan Street is subject to a posted speed limit of 40km/h that applies between 7am – Midnight Monday to Sunday, with a 60km/h speed limit in effect outside those times.



Figure 17: Swan Street - View East

Figure 18: Swan Street - View West

3.4. Existing Traffic Volumes

3.4.1. Turning Movement Counts

Turning movement counts were conducted on Thursday, 3rd March, 2022 between the time periods of 7:30am to 9:30am and 4:30pm to 6:30pm for the following intersections:

- Church Street / Elm Grove,
- Church Street / Charlotte Street,
- Church Street / Swan Street,
- St Crispin Street / Elm Grove,
- St Crispin Street / Charlotte Street,
- St Crispin Street / Swan Street,
- · Charles Street / Elm Grove,
- Charles Street / Charlotte Street, and
- Charles Street / Swan Street.

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Charlotte Street, Richmond

An analysis of the existing turning movement results revealed that there are two (2) distinct peak time periods for analysis, based on turning movements into/out of the local road network:

- AM Peak: 8:00am to 9:00am on Thursday,
- PM Peak: 5:30pm to 6:30pm on Thursday.

Whilst these time periods do not necessarily reflect the peak times of the arterial road network, however, are best suited for this assessment.

The turning movement volumes for the two (2) peak periods identified above are summarised in Figure 19 and Figure 20 below. The full turning movement counts data are provided at Appendix B.

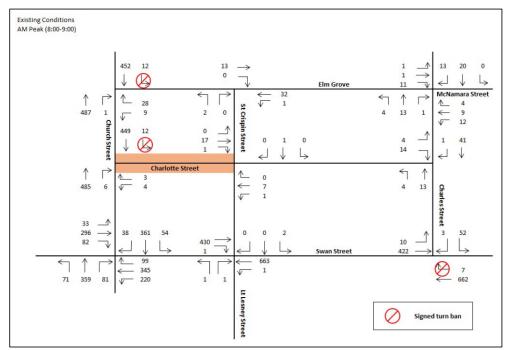


Figure 19: Existing AM Peak Turning Movement Volumes

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Charlotte Street, Richmond

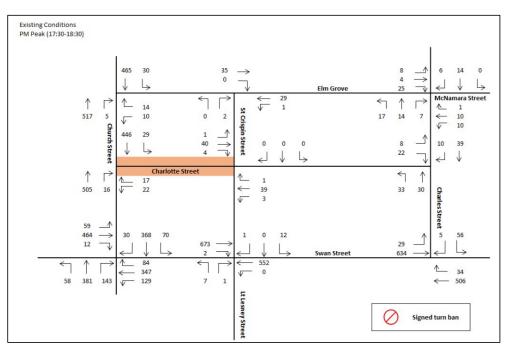


Figure 20: Existing PM Peak Turning Movement Volumes

3.4.2. Seven (7) day Traffic Counts

Seven (7) day traffic counts were undertaken for the following periods:

- Tuesday, 1st March 2022 Tuesday, 8th March 2022, and
- Saturday, 12th March 2022 Saturday, 19th March 2022.

The counts were undertaken are at the following locations:

- Elm Grove, between St Crispin Street and Charles Street,
- · Charlotte Street, between St Crispin Street and Charles Street,
- · Charles Street, between Parker Street and Elm Grove,
- · Charles Street, between Elm Grove and Charlotte Street,
- Charles Street, between Charlotte Street and Swan Street,
- McNamara Street, between Charles Street and Mary Street, and
- St Crispin Street, between Charlotte Street and Swan Street.

During the period of Tuesday, 1st March 2022 - Tuesday, 8th March 2022, it is noted that Mary Street (east of Charles Street) between McNamara Street and Swan Street was closed at times for drainage/roadworks. The roadworks closure was generally in place between 7am and 3pm.

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Charlotte Street, Richmond

It is our understanding that no drainage/roadworks were undertaken between Thursday, 10th March and Friday 17th March 2022 and Mary Street remained open during those times.

A review of the automatic traffic count data indicates that traffic volume data for the period Tuesday, 1st March 2022 to Thursday, 3rd March 2022 best represents typical road network conditions, having consideration for traffic conditions when Mary Street was open and when it was closed.

A summary of the traffic counts results are provided in Table 1 below, with the full data provided at Appendix C.

Table 1: Average Daily Traffic Volumes

Location	Daily Volumes			AM Peak (8am to 9am)			PM Peak (5pm to 6pm)		
	N/E	S/W	Total	N/E	s/w	Total	N/E	S/W	Total
Elm Grove – b/w St Crispin St and Charles St	337	378	715	17	25	42	36	29	65
Charlotte Street – b/w St Crispin St and Charles St	312	275	587	17	8	25	26	28	54
Charles Street – b/w Parker St and Elm Gr	323	318	641	12	27	39	28	22	50
Charles Street – b/w Elm Gr and Charlotte Str	418	523	941	11	46	57	36	41	77
Charles Street – b/w Charlotte St and Swan St	567	674	1,241	15	56	71	57	57	114
McNamara Street – b/w Charles St and Mary St	64	214	278	0	20	20	11	20	31

3.5. Existing Intersection Performance – Church Street / Swan Street

As outlined previously in Section 3.4, the two (2) key time periods for analysis are:

- AM Peak: 8:00am to 9:00am on the Thursday,
- PM Peak: 5:30pm to 6:30pm on the Thursday.

An analysis of the two (2) time periods above will provide an indication of the traffic impacts associated with the proposed road closure for the surrounding arterial road network.

The intersection of Church Street / Swan Street has been selected for intersection modelling, because of the high volume of traffic on each approach, the sensitivity of traffic signals to a change in traffic volume and their role in the road network as an intersection of two (2) arterial roads.

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Charlotte Street, Richmond

SIDRA Intersection 9.0 was used to model the baseline traffic conditions at the Church Street / Swan Street intersection.

The SIDRA Intersection 9.0 software package provides several key indicators to measure intersection performance. These include:

- Degree of Saturation (DOS),
- Average Delay (in seconds),
- Maximum Queue Length (in metres), and
- Level of Service (LOS).

The LOS Criteria for intersections found in the RMS Guide to Traffic Generating Developments is shown in Table 2 below.

Level of Service	Average Delay (seconds per vehicle)			
А	Less than 14			
В	15 to 28			
С	29 to 42			
D	43 to 56			
E	57 to 70			
F	Greater than 71			

Table 2: Level of Service Criteria (RMS)

A review of the approach and departure lanes for Church Street / Swan Street intersection determined that there are effectively two (2) different layouts depending on the time of day, because of the various time-based parking restrictions and clearway restrictions on the eastern and western legs.

Signal phase timing data and site operation sheets were obtained from the Department of Transport and used in the respective models to accurately model the existing traffic signals operation. Tram extension phases were simply added/subtracted from vehicle phases respectively.

The proportion of heavy vehicles to light vehicles for each movement was obtained from the turning movement counts outlined previously outlined in Section 3.4.1.

To accurately represent the performance characteristics of the Church Street / Swan Street intersection, the SIDRA model was calibrated based on the queueing observed during the peak periods.

Further calibration was required for the PM Peak model, with the 'end gain' parameter increased from 3s to 5s for the right turn on the south approach.

All other parameters were retained at SIDRA's default values.

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A summary of the baseline conditions intersection network performance is provided in the following sections.

3.5.1. Intersection Analysis (SIDRA) Results - Church Street / Swan Street

Table 3 provides a summary of the SIDRA intersection analysis results for the intersection, with the full results provided at Appendix D.

Approach	Degree of Saturation	Average Delays (s)	95 th %ile Queue (m)	Level of Service				
AM Peak – 8:00am to 9:00am								
North	0.678	36.5	97	LOS D				
East	0.435	18.1	90	LOS B				
South	0.708	30.7	142	LOS C				
West	0.464	22.1	88	LOS C				
Total	0.708	26.2	142	LOS C				
PM Peak – 5:30pm to 6:30pm								
North	0.637	39.8	112	LOS D				
East	0.670	25.8	117	LOS C				
South	0.720	31.3	177	LOS C				
West	0.331	29.5	76	LOS C				
Total	0.720	29.5	177	LOS C				

Table 3: Church Street and Swan Street – SIDRA Results

The Degree of Saturation (DOS) is a measure of traffic demand against the intersection's capacity. That is, a DOS of 1 indicates that the intersection is operating at capacity and any additional traffic demand will lead to a significant and unstable increase in delays and queues. Whilst a DOS below 1 is desirable, in reality many heavy congested intersections operate a DOS greater than 1.

The results show that the DOS for Church Street (south approach) operates in the upper reaches of capacity in both peaks, whilst Swan Street (east and west approach) operates with spare capacity in both peaks.

It is noted that the highest delays are experienced along Church Street (north approach) across both time periods. As these delays are less than the length of one (1) cycle at each traffic signal, they are not considered to be of significant detriment.

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Charlotte Street, Richmond

The results show that the 95th% percentile queue distances are generally moderate in length, however significant queues build up along Church Street (south approach) during the AM and PM peak.

The 95th Percentile Queue is the queue length experienced at an intersection which is only exceeded 5% of the time or, 95% of the time, queues are less than the 95th Percentile Queue length. The distance is expressed in metres.

3.6. Casualty Crash History

A review of the State Road Accident Records (Crash Stats) has been undertaken for the intersections within the study area for the last five (5) years of available data (01/01/2017 to 31/12/2021). The results of the assessment are summarised in Table 4 below.

A total of 20 crashes have been recorded at intersections within the study area, which include one (1) serious injury crash involving a cyclist. More broadly, a total of 13 of 20 crashes involved pedestrians and cyclists.

It is noted that the Church Street / Swan Street intersection recorded the majority of crashes with a total of 7 out of 20 crashes. The predominate crash pattern involves collisions with pedestrians and cyclists.

Recent safety improvements for pedestrians have been implemented on the Church Street / Swan Street intersection in 2021. The installation of flashing 'Give Way to Pedestrians' LED's affecting the east and west pedestrian crossings and 'No Right Turn' LED's affecting the western approach have been installed to reduce pedestrian involved collisions.

Church Street, between Elm Grove and Swan Street, experienced a concentration of cyclist crashes, with three (3) out of the four (4) crashes involving cyclists.

It is noted that all the crashes occurred on the arterial road network, i.e., Church Street and Swan Street. No crashes occurred within the local street network.

More detailed collision data is provided at Appendix E.

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Table 4: Casualty Crash Summary Table (1/01/2017 - 31/12/2021)

Location	Date	Time	Severity	DCA	Type of Crash
Church Street - b/w Gipps and Elm Grove	17/01/17	5:00 PM	Other	130	Rear End (Vehicles In Same Lane)
	3/10/17	10:25 AM	Other	163	Vehicle Strikes Door Of Parked/Stationary Vehicle - Bicycle
	28/02/19	12:40 PM	Serious	135	Lane Change Left - Bicycle
	11/03/20	8:15 AM	Other	163	Vehicle Strikes Door Of Parked/Stationary Vehicle - Bicycle
Church Street - b/w Elm Grove	21/02/20	11:00 PM	Other	140	U Turn - Bicycle
and Swan Street	7/11/20	2:00 PM	Other	121	Right Through - Bicycle
	14/04/18	6:00 PM	Other	160	Vehicle Collides With Vehicle Parked On Left Of Road - Motorcyclist
	4/08/17	4:13 PM	Other	133	Lane Side Swipe (Vehicles In Parallel Lanes)
	16/12/17	2:30 AM	Other	100	Ped Near Side. Ped Hit By Vehicle From The Right.
	1/04/18	5:12 PM	Other	108	Ped Struck Walking To/From Or Boarding/Alighting Vehicle.
Church Street / Swan Street intersection	8/05/19	3:45 PM	Other	133	Lane Side Swipe (Vehicles In Parallel Lanes) - Bicycle
	4/04/20	12:20 PM	Other	130	Rear End (Vehicles In Same Lane)
	22/06/20	8:40 AM	Other	110	Cross Traffic - Motorcyclist
	25/11/21	3:30 PM	Other	121	Right Through - Bicycle
	31/01/18	5:00 PM	Other	131	Left Rear
	8/11/19	11:15 PM	Other	100	Near Side - Pedestrian
	1/06/20	10:15 PM	Other	163	Vehicle Strikes Door Of Parked/Stationary Vehicle - Bicycle
Swan Street - b/w Bright Street	13/01/19	2:40 AM	Other	102	Far Side. Ped Hit By Vehicle From The Left
and Harvey Street	21/04/17	7:30 PM	Other	121	Right Through - Bicycle
	2/06/17	8:10 PM	Other	130	Rear End (Vehicles In Same Lane)

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Charlotte Street, Richmond

3.7. Parking Conditions

Spot parking surveys of the study area, as shown in Figure 21 below, were undertaken at the following times:

- 9:30am on Wednesday, 2 March 2022,
- 4:00pm and 6:30pm on Thursday, 3 March 2022,
- 11:30am and 1:30pm on Thursday, 17 March 2022,
- 2:00pm and 6:30pm on Saturday, 26 March 2022.

These times were chosen as they represent typical parking conditions for the following scenarios:

- Weekday 'morning' demand 9:30am on Wednesday,
- Weekday 'midday' demand 11:30am and 1:30pm on Thursday,
- Weekday 'evening' demands 4pm and 6:30pm on Thursday,
- Weekend 'afternoon' demands 1:45pm on Saturday,
- Weekend 'evening' demands 6:30pm on Saturday.

There is a total of 229 publicly available parking spaces within the survey area, which includes a mix of restrictions including 1/4P, 2P, metered parking, permit zones, and disabled parking restrictions.

The results of the parking surveys are summarised in Figure 22 below, with the full results provided at Appendix F.

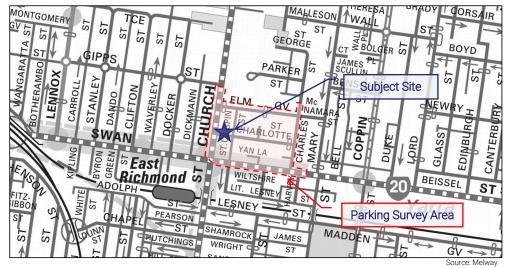


Figure 21: Parking Survey Area

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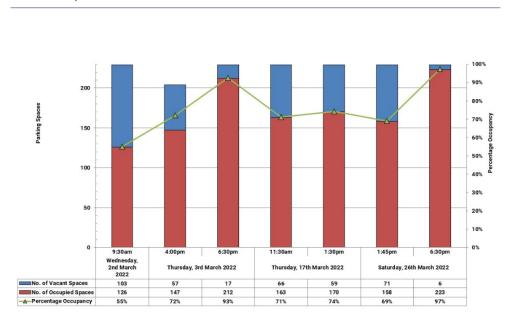


Figure 22: Parking Survey Results Summary

The results above show that the area averages a 68% occupancy rate during the typical morning and daytime periods but reaches above 90% occupancy in the evening. Vacant spaces are typically 2P/2P metered parking zones or Permit Zones. We note that the morning and daytime periods indicate further capacity to accommodate additional parking demands, however the evening period has limited opportunities to accommodate further demands, with occupancy at or near capacity.

The evening demands are likely jointly driven by residential demands and that of the surrounding commercial properties (such as restaurants or pubs).

It is noted that the City of Yarra's residential parking permit policy allows permit holders to be exempt from select restrictions, including those with restrictions longer than 1P (unless metered). This suggests that some parking demands recorded within the 2P areas along the local street network may be comprised of residential demands, and not solely that of short term visitor demands.

3.8. Public Transport

The City of Yarra Public Transport network is provided in Figure 23 below.

Public transport facilities in the vicinity of Charlotte Street includes a tram route 78 on Church Street / Gipps Street Tram Stop to the north, tram route 70 on Swan Street/Church Street Tram Stop to the south and the East Richmond Railway Station 300m to the southwest.

Tram Route 78 extends from Victoria Street/Church Street, North Richmond to Brighton Road/Chapel Street, Balaclava. Tram Route 70 extends from Waterfront City, Docklands to Eldgar Road/Riversdale Road, Burwood.

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Charlotte Street, Richmond

Charlotte Street, Richmond

- On weekdays, Tram Route 78 service operates at approximately 12-minute headways during 6:46am to 7:54pm, outside these times the service operates at a headway of approximately 20 minutes.
- On weekends, Tram Route 78 service operates at approximately 15-minute headways during 7:25am to 7:23pm, outside these times the service operates at a headway of approximately 20 minutes.
- On weekdays, Tram Route 70 service operates at approximately 10-minute headways during 6:15am to 7:14pm, outside these times the service operates at a headway of approximately 15 minutes.
- On weekends, Tram Route 70 service operates at approximately 12-minute headways during 7:10am to 7:29pm, outside these times the service operates at a headway of approximately 20 minutes.



Source: City of Yarra Public Transport Network (September 2021)

Figure 23: City of Yarra Public Transport Network

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Charlotte Street, Richmond

4. Traffic Impact Assessment

This assessment outlines the anticipated impacts of the proposed road closure on the surrounding road network, with comparison to the existing road network performance and the expected redistribution of traffic as a result of the proposal. The assessment also considers other post closure impacts such as public transport, pedestrians and cyclists, emergency vehicles and current crash patterns.

SIDRA intersection modelling was used to model the performance of the intersection of Church Street / Swan Street. The remaining intersections are local unsignalised intersections with much lower traffic volumes, and do not warrant detailed modelling, however, are still considered for assessment.

This assessment has been conducted with specific reference to Section 3 of VicRoads' Additional Network Standards and Guidelines Part 2.8: Changing traffic movements other than for events or works.

4.1. Post Road Closure Scenario Traffic Conditions

The broader road network was analysed to determine the different travel routes that contribute to the turning movements at the intersection of Church Street / Charlotte Street, in order to determine what traffic volumes would be redistributed as part of the road closure. The review identified five (5) broad travel routes in both peak periods as shown in Figure 24 and Figure 25 below, separated into three (3) routes **to** Charlotte Street and two (2) routes **from** Charlotte Street. The traffic volumes for each travel route are summarised in Table 5 below.

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Charlotte Street, Richmond

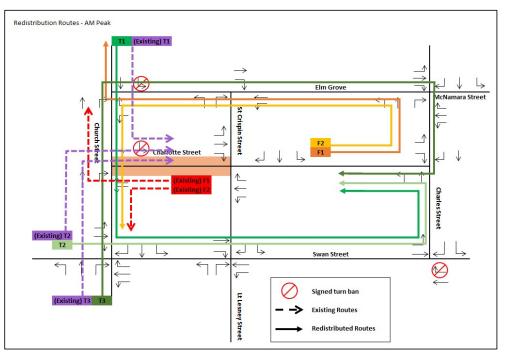


Figure 24: Redistributed Travel Routes To/From Charlotte Street - AM Peak

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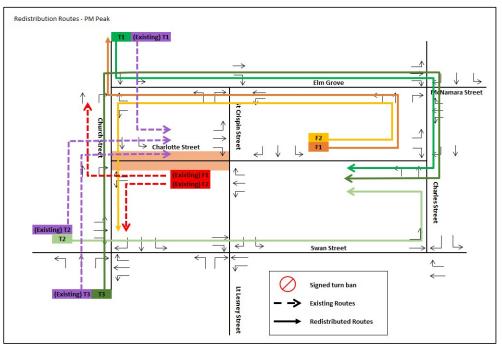


Figure 25: Redistributed Travel Routes To/From Charlotte Street – PM Peak

Table 5: Travel Route Volumes

Time Period	T1	Т2	ТЗ	F1	F2
AM Peak	12	3	3	3	4
PM Peak	29	8	8	17	22

These five (5) redistributed travel routes are assumed to consist of local traffic to/from Charlotte Street, with a local destination or origin on Charlotte Street.

The following assumptions have been made:

- Both T2 and T3 contribute equally to right turn movements into Charlotte Street from Church Street (50/50 split) for both peaks. Due to the proposed road closure, both routes have been split evenly to continue their original approaches at Church Street and Swan Street intersection to reach Charlotte Street.
- Both F1 and F2 routes will instead exit via Elm Grove to travel north, south or west rather than attempting a more difficult right turn from Charles Street onto Swan Street to travel south or west.

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Charlotte Street, Richmond

The traffic volumes were redistributed to suit the likely redistributed route in each peak period as a result of the proposed road closure. The traffic volumes were first removed from the corresponding movements in the existing movements, before being added to the respective detour routes as follows:

- For route T1, during the AM peak period, all traffic will travel along Church Street to turn left onto Swan Street and then access Charlotte Street via Charles Street to comply with existing turn bans. During the PM peak period, all traffic will, turn left into Elm Grove and access Charlotte Street via Charles Street.
- For route T2, all movements will continue along Swan Street and use Charles Street to access Charlotte Street.
- For route T3, all of these movements will continue along Church Street and access Charlotte Street via a right turn into Elm Grove, then via Charles Street.
- For routes F1 and F2, all of these movements will turn left onto Charles Street and then left into Elm Grove to access Church Street to reach northern, southern and western destinations. While noted that users could use the Charles Street / Swan Street intersection, it is unlikely as making a right turn movement at this intersection is difficult.

Summary figures of the respective decreases, increases and net change in each turning movement across the study area are provided at Appendix G.

In our experience with similar permanent road closures, there is typically a reduction in the affected traffic volumes in order of 10-20%. That is, 10-20% of redistributed traffic 'disappears' from the road network. For this assessment, we have not applied a 10-20% 'discount' of traffic volumes, noting that this results in a more conservative assessment.

4.2. Post Road Closure Scenario Intersection Performance

The redistributed traffic volumes were input into the SIDRA models for the intersection of Church Street / Swan Street to determine the impacts of the proposed road closure to the intersection for the two (2) periods of assessment. The existing signal phase timing allocations were retained, noting that these could change in reality as the signals are programmed to respond to changes in demand.

The modelling results show no measurable change to intersection performance, and hence no impacts are expected as a result of the road closure on Charlotte Street.

The full results are provided at Appendix H.

4.3. Review of Local Intersection Conditions

In order to determine the impacts on each local intersection within the study area, summaries of the net change of turning movement volumes at each intersection have been prepared for the two analysis periods, the weekday AM and PM peaks, as shown in Figure 26 and Figure 27.

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Charlotte Street, Richmond

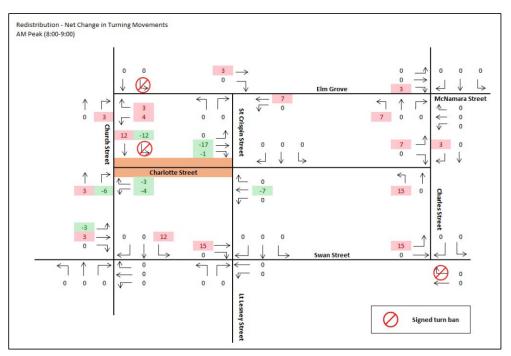


Figure 26: Net Change in Turning Movement Volumes - AM Peak

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Charlotte Street, Richmond

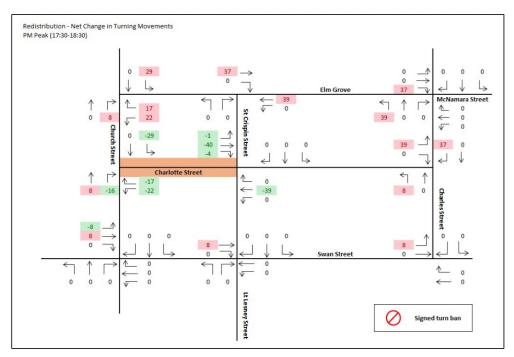


Figure 27: Net Change in Turning Movement Volumes - PM Peak

The traffic volumes along Charlotte Street will ultimately reduce, as vehicles will not be able to continue along Charlotte Street to Church Street. Traffic generated by properties along Charlotte Street will continue to utilise Charlotte Street, however they will no longer travel west past St Crispin Street. The additional traffic generated at the Charles Street / Charlotte Street intersection is expected to be minor, as the majority of additional movements are left turns. The additional right turns are not expected to create significant issues, as the opposing through movements are low.

There will be a number of additional right turn movements at the Church Street / Elm Grove intersection as a result of the closure, both left and right turns. A preliminary SIDRA model of the intersection indicates that the intersection will still perform similar to its existing operation with minor queues / delays on the east approach.

The additional traffic volume along Elm Grove is expected to peak at 76 vehicle movements during the weekday PM peak hour. At a rate of just over 1 vehicle per 1 minute, this impact will not be noticeable.

The increases to daily traffic volumes along Elm Grove and Charles Street are summarised in Table 6 below.

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Charlotte Street, Richmond

Table 6: Daily Traffic Volumes - Expected Increases

Road	Existing Daily Traffic Volume (Average Weekday)	Increase	Post Closure Daily Traffic Volume (Average Weekday)
Elm Grove	650vpd	+500vpd (75%) AM Peak - +1 veh per 6 minutes PM Peak - +1.25 veh per minute	1,150vpd
Charles Street – Elm Gr to Charlotte St	950vpd	+500vpd (50%) AM Peak - +1 veh per 6 minutes PM Peak - +1.25 veh per minute	1,450vpd
Charles Street – Charlotte St to Swan St	1,250vpd	+85vpd (10%) AM Peak - +1 veh per 4 minutes PM Peak - +1 veh per 8 minutes	1,335vpd

We note that the above estimates for the post closure daily traffic volumes are highly conservative, as it is unlikely that the full daily volumes recorded on Charlotte Street will be fully redistributed, for the following reasons:

- A number of traffic movements recorded on Charlotte Street would have already been
 recorded on Elm Grove or Charles Street, and hence a redistribution of these movements to
 Elm Grove and Charles Street is somewhat of a 'double count',
- The closure of Charlotte Street will result in a reduction of vehicles 'circulating' the local area to find carparking, which will reduce the overall traffic volumes, and
- Past experience with permanent road closures generally indicates a reduction in traffic volumes up to 20% can be expected, usually as a closure may stop drivers entering the local network all together, or drivers seek broader or simpler post closure routes.

Whilst there will be a noticeable increase in traffic along Elm Grove and Charles Street, neither are expected to exceed their environmental capacity, as a result of the proposed road closure.

The 'environmental capacity' of a road is the theoretical point in which increases in traffic volume begin to degrade its amenity and is typically much lower than the actual capacity of the road, or how much traffic it could physically accommodate. In this instance the environmental capacity of Elm Street and Charles Street is in the order of 3,000 vehicles per day.

We do not anticipate that any redistributed traffic would seek to utilise St Crispin Street for the following reasons:

 Because of the narrow carriageway, St Crispin Street is not conducive to traffic movements to Charlotte Street or Elm Grove, users may consider using an alternate route via Charles Street to reach Charlotte Street,

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Charlotte Street, Richmond

- Due to 'one way' restrictions applying on the southern end of St Crispin Street, the street is only conducive for movements to Swan Street from the North or circulation with the offstreet carpark to the east of Richmond Library,
- St Crispin does not provide the same intersection geometry with as good access to Swan Street as the Charles Street / Swan Street intersection does.

4.4. Post Road Closure – Parking Impacts

An assessment of the proposed public space concept design indicates that there are five (5) onstreet carparking spaces including an accessible carparking space requiring removal on Charlotte Street, as shown in Figure 28 below.

The inventory of parking spaces that are likely to be removed includes:

- 1x 2P 8am-8pm Disabled Only,
- 4x 2P 7am Midnight Mon Sat,

It is recommended that the 'P Disabled Only' space is replaced, by providing this space within the adjacent off-street carpark as shown in Figure 28 below. This will require the relocation of one (1) existing space signed as 'No Stopping – Council Library Vehicle Excepted' and the loss of two (2) '2P - 7am-7pm' space as an accessible space is required to provide an adjacent shared area under AS2890.6-2009.

Providing for the above results in a net loss of six (6) car spaces. This loss can be offset with the introduction of three (3) spaces on Church Street, adjacent to the proposed closure. On this basis the proposal results net loss of three (3).

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Charlotte Street, Richmond



Figure 28: Charlotte Street Public Space Parking Impacts

The parking surveys conducted in the study area were reviewed to determine if the proposed loss spaces can be accommodated in the study area across a range of times, including on a weekday and weekend.

As outlined previously in Section 3.7, spot parking surveys of Charlotte Street and the surrounding area were undertaken at select times to evaluate the loss of parking associated with the proposed road closure. A summary of the parking occupancies recorded along Charlotte Street is provided in Table 7 below.

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Charlotte Street, Richmond

Table 7: Charlotte Street Parking Occupancy Summary

Location		Wednesday, 02/03/2022	Thurs 17/03/			sday /2022		rday /2022
		9:30am	11:30am	1:30pm	4:00pm	6:30pm	1:45pm	6:30pm
Charlotte Street –	Capacity	5	5	5	5	5	5	5
West of St Crispin	No. Cars Parked	3	4	5	5	4	3	5
Street (Subject Section)	No. Vacant Spaces	2	1	0	0	1	2	0
Section	Occupancy	60%	80%	100%	100%	80%	60%	100%
	Capacity	40	40	40	40	40	40	40
Charlotte Street –	No. Cars Parked	24	30	30	24	35	23	37
East of St Crispin Street	No. Vacant Spaces	16	10	10	16	5	17	3
	Occupancy	60%	80%	80%	60%	85%	58%	93%
Richmond Library	Capacity	20	20	20	20	20	20	20
Carpark	No. Cars Parked	13	18	18	20	20	18	20
	No. Vacant Spaces	7	2	2	0	0	2	0
	Occupancy	65%	90%	90%	100%	100%	90%	100%
St Crispin	Capacity	4	4	4	4	4	4	4
Street - Charlotte	No. Cars Parked	1	3	3	3	1	2	4
Street to Swan Street	No. Vacant Spaces	3	1	1	1	3	2	0
0000	Occupancy	75%	75%	75%	75%	25%	50%	0%
	Capacity	69	69	69	69	69	69	69
Total	No. Cars Parked	41	55	56	52	60	46	66
	No. Vacant Spaces	28	14	13	17	9	23	3

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Charlotte Street, Richmond

As shown in Table 7 above, Charlotte Street generally has sufficient parking vacancies to accommodate the displaced parking demands (the spaces lost as a result of the closure) during the weekday morning, midday, afternoon and weekday midday periods. It is noted that some of the vacancies at these times are provided in Permit Zones, however given the City of Yarra's parking permit policy exempts residents from the 2P restrictions of the spaces being removed, it is likely that permit holders (residents) are a part of the demands being displaced.

The parking occupancies recorded on Charlotte Street for the weekday and weekend evenings indicate a near full occupancy along Charlotte Street. It is likely that the displaced demands cannot be fully accommodated on Charlotte Street and will need to be sought else where.

We expect that these could be found along Church Street and Swan Street, which despite having no vacant spaces recorded, would experience a high turnover of parking (i.e., resulting in vacancies appearing frequently). It is noted that there are vacancies for permit zones within the study area at this time, which can accommodate for residential demands that are displaced.

In view of the above, we expect the parking impacts of the proposal to be moderate, however we recommend that Council seeks to replace the 'P Disabled Only' space in the vicinity of the Richmond Library.

4.5. Post Road Closure – Other Traffic Impacts

4.5.1. Accidents

As outlined previously in Section 3.6, the principal crash patterns identified in the study area involved collisions with bicycles along Church Street, between Elm Grove / Swan Street, and pedestrian collisions at Church Street / Swan Street intersection. As previously discussed, the pedestrian collision pattern was addressed in 2021 when significant pedestrian safety improvements were made at the Church Street / Swan Street intersection, including flashing 'Give Way to Pedestrians' LED signs.

We do not expect minor increase in traffic volumes along Church Street, as a result of the proposal, to result in an increase in bicycle relate d collisions. Regardless, this crash pattern should be addressed.

4.5.2. Emergency Vehicles

A review of the study area indicates there are no police, fire or ambulance stations are located on Charlotte Street or within the study area, with the nearest stations located north of Bridge Road (police station), south of Victoria Street (police station) and north of Swan Street on Church Street (St. John Ambulance Australia Yarra Division).

We are confident that Emergency Vehicles needing to access Charlotte Street will employ broader routing choices to avoid the road closure and access Charlotte Street via Elm Grove or Charles Street. It is noted that smaller emergency vehicles could also access Charlotte Street via St Crispin Street as they are exempt from the one (1) way traffic restrictions.

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Charlotte Street, Richmond

4.5.3. Bus Routes

No public bus routes travel along Charlotte Street or Church Street.

4.5.4. Tram Routes

The intersection of Church Street / Swan Street accommodates both Tram Routes 70 and 78. As outlined previously in Section 3.8, there is no change to the performance of the intersection and hence no impacts on trams travelling through the intersection.

A review of the net change in turning volumes along Church Street (Tram Route 78), previously discussed in Section 4.3, indicates that most of the changes to turning movements along Church Street are decreases. Decreases in traffic volumes should marginally improve conditions for trams on Church Street, as there is less traffic that they must compete with for space. It is noted that there is a small increase in right turning vehicles into Elm Grove, however we feel there is still an overall benefit as there are now no longer any right turning vehicles at Charlotte Street that could obstruct trams.

A review of the net change in turning volumes along Swan Street (Tram Route 70), previously discussed in Section 4.5, indicates that the addition to turning movements along Swan Street into Charles Street are increases of left turns only. It is noted that the addition of left turning movements into Charles Street from Swan Street are unopposed, therefore, there are no real obstructions or impacts to trams.

4.5.5. Other Traffic Impacts

The proposed road closure of Charlotte Street at Church Street is anticipated to impact on vehicle access for waste collection services along Charlotte Street, as the waste vehicle will be required to turnaround.

Indicative swept path assessments have undertaken to demonstrate potential turnaround movements for the 10.5m long City of Yarra waste collection vehicle and are provided in Figure 29 below.

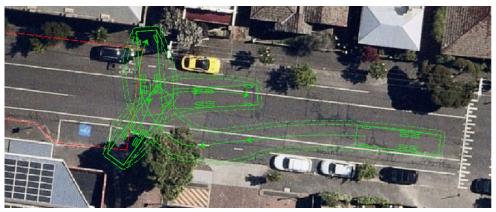


Figure 29: Preliminary Swept Path Assessment

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G31387R-01B

Charlotte Street, Richmond

The turnaround movements of circulating waste vehicles will need to be considered in the detailed design of the public space. There may be a requirement to amend parking restrictions to provide additional space during waste collection times. The implications to loading vehicles for the adjacent Richmond Library will also need to be considered.

4.5.6. Communication and Stakeholder Engagement Plans

We understand that the City of Yarra will develop a comprehensive plan for stakeholder engagement and communication of the proposal with the nearby Richmond Library, management authorities and local residents.

4.5.7. Bicycles

It is our understanding that bicycles will be permitted through the public space, and hence we anticipate little impact on their movements through the study area. Consideration will need to be given to how the passage of bicycles through the public space will tie into the existing bicycle lanes provided on Charlotte Street.

It is recommended that the public space retains the current eight (8) hoops for bicycle parking, as demand in the area appears to be high. It is also recommended that a bicycle repair station and additional bicycle parking is considered to improve cycling amenity in the area.

4.5.8. Pedestrians

The public space will improve the experience for pedestrians on Church Street, as it removes the need for pedestrians to cross the road at Charlotte Street to compete with vehicle traffic. The public space also provides direct access to the adjacent Richmond library and provides the library users and nearby residents with a park area to enjoy.

5. Conclusions

Having undertaken a detailed traffic impact assessment of the proposed road closure of Charlotte Street at Church Street, Richmond, associated with the public space proposal, we are of the opinion that:

- a) The proposed closure of Charlotte Street will redistribute traffic accessing Charlotte Street at Church Street to now access Charlotte Street via Elm Grove and Charles Street or via Swan Street and Charles Street,
- b) The changes to local intersection performance in the study area vary from minimal to moderate impacts, however, with the assistance of intersection modelling software, it has been demonstrated that all intersections will still operate at similar performance measures post closure to that of the existing conditions,
- c) The impacts to the nearby signalised intersection of Church Street / Swan Street were modelled in detail and were shown to be insignificant,
- d) There will be an expected increase in traffic along Elm Grove and Charles Street across the day as a result of the closure on Charlotte Street, however the increase in traffic volumes is

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Charlotte Street, Richmond

unlikely to significantly degrade the amenity of either road or exceed their respective environmental capacities,

- e) The public space will result in the loss of five (5) on-street carparking spaces, which we recommend are offset by additional spaces created on Church Street (adjacent to the closure). The parking impacts of the loss of spaces will be minimal during the day, given the surrounding occupancies, with a higher impact in the evening periods,
- f) We recommend the accessible space to be removed by the public space is directly replaced within the Richmond Library off-street carpark,
- g) There is not anticipated to be an increase in collisions as a result of the proposal, given the current crash patterns, and
- h) The proposal will provide a benefit for pedestrians and cyclists in the area.

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Attachment 4 Attachment 4 - Traffic Impact Assessment Reports



Appendix A

Swan Street Streetscape MP

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G31387R-01B

CITY OF YARRA

A NEW CIVIC LIBRARY GARDEN

A significant opportunity exists at Richmond Library. By closing Charlotte Street at the western end, a new space is created providing additional amenity for this important community facility.

CHARLOTTE STREET

600m² NEW PUBLIC SPACE



- (1) Close western end of Charlotte Street to create a new community open space adjacent to the Library
- (2) Open lawn area to provide informal play, meeting, and small events
- (3) New Library entry stair arrangement to incorporate

SWAN STREET STREETSCAPE MASTERPLAN Date: 26.08.2021

long steps to work with slope and create seating opportunities

- (4) Significant planted garden as native plant 'library' with integrated nature play elements
- (5) A new pergola and seating space

- $(\mathbf{6})$ Seating walls and tables with a variety of backs and heights to allow for lounging, playing and gathering
- $\overline{(7)}$ Upgrade St Crispin Street as a pedestrian priority zone for service, emergency vehicle and adjacent property access only accessibility.
- (8) Consider accessible parking



EXISTING CONDITIONS



OTHER IDEAS AND EXAMPLES



Small sunnny lawn area



A colourful community space for all ages

rush\wright associates 79

Attachment 4 Attachment 4 - Traffic Impact Assessment Reports



Appendix B

Turning Movement Count Data

Traffix Group

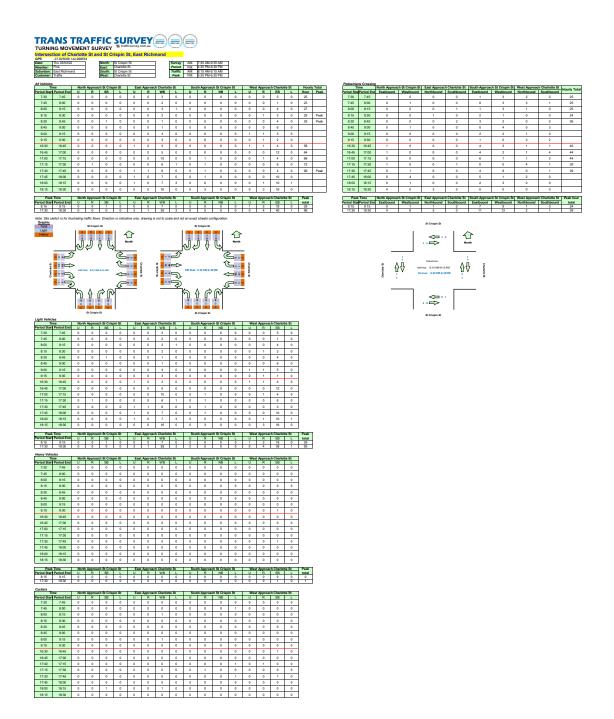
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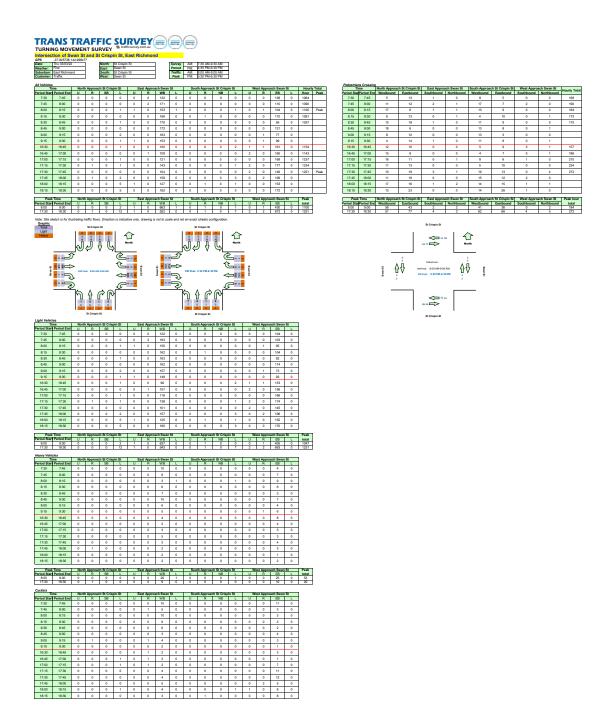
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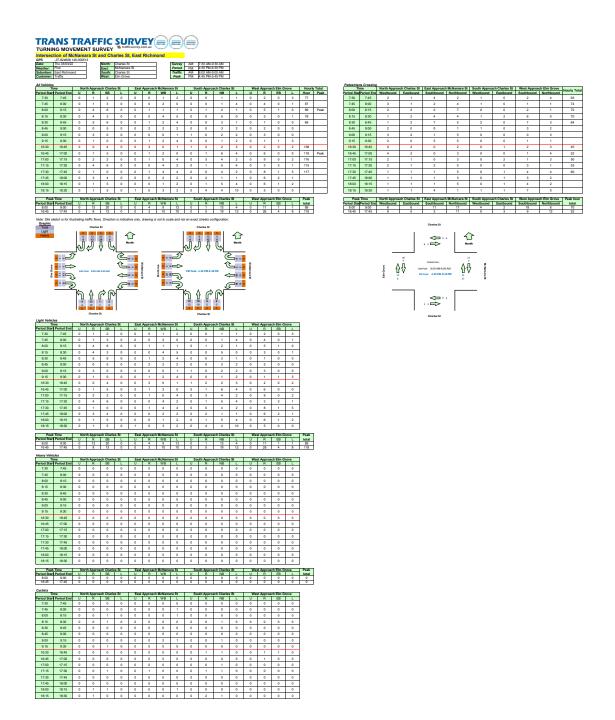
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North Approact Units Prade North M N N 7.30 7.45 8.00 0 1 4 7.30 7.45 8.00 0 1 4 8.00 8.15 8.00 0 1 1 8.00 8.15 8.00 0 1 1 9.00 9.15 9.00 1 1 1 9.00 9.15 9.00 1 0 1 1 9.15 9.20 0 0 1 1 1 1 17.60 17.16 0 1	B NB NB 0 0 1 0 0 4 0 0 0 3 1 1 0 3 1 0 0 4 0 0 0 4 1 0 0 4 1 0 0 4 0 5 0 7 2 11 0 4 0 2 12 1 9 5 1 14 0 9 2 1 15 0 3 1 1 14 0 9 2 1 15 0 4 1 1 16 0 3 1 1 17 0 3 1 1 16 1 1 1 1 17 1 1 1 <	Horyserb Unit Status Test Hory Test 0 4 0 63 - Hory Hory	Immediate Pendo Ban P 44 7.35 7.45 8.00 8.15 8.15 8.30 8.45 8.45 8.45 9.00 9.05 9.15 9.15 9.30 10.30 10.45 10.45 17.00 17.75 17.30 17.20 17.45 18.15 18.20 18.15 18.20	Arch Agerosch Charles 80 Vestbound Eatbound 0 0 1 0 North Agerosch Charles Statiound	South Approach Charles S1 Wettbound 0 0 0 0 3 1 0 2 2 3 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0	Northbound Southbound Southbound 2 5 1 1 1 5 0 3 2 9 0 6 2 1 1 1 1 1 1 1 1 1 2 4 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 4 1 5 3 6 2
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Weather: Fine Suburban: East Richmond	North: Charles St East: Swan St South: N/A Wort: Swan St	Period PM: 4:30 PM Traffic AM: 8:00 AM	-9:30 AM -6:30 PM -9:00 AM					
Period Start Period End U 7:30 7:45 0		Peak PM: 5:30 PM	Pedestrians C rty Total Peak Period Start 7:30	ime North App	oach Charles St East A Eastbound Northbor 12 1 2 0	pproach Swan St ind Southbound 1 2	West Approach Swan St Northbound Southboun 0 3 0 0	id Hos
8:00 8:15 0 8:15 8:30 0	2 13 0 2 1 1 10 1 2 1	58 0 105 1 1157 62 0 96 2 1110 62 0 102 4 1088	Peak 8:00 8:15	8:15 14 8:30 9 8:45 13	7 1 13 3 16 1	1 1 2	1 0 1 2 0 0	
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لي الم	S2 S2 North		North		← 55 43 Nor	} *		
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Attachment 4 Attachment 4 - Traffic Impact Assessment Reports



Appendix C

Traffic Count Data

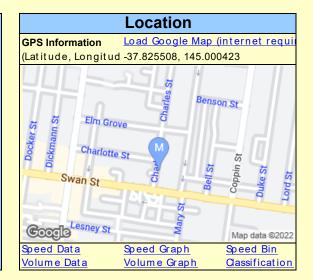
Traffix Group

G31387R-01B

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY	
Street Name :	Char	es St	Location :	Outside Proper	ty 79
Suburb :	Richr	nond	Start Date :	00:00 Tue 01/M	larch/2022
Machine ID:	ME3	7FVV	Finish Date :	00:00 Tue 08/M	larch/2022
Site ID:	1281)	Speed Zone :	50 km/h	
Prepared By :	Vo So	on Binh	Email:	binh@trafficsu	urvey.com.au
GPS information	Lat	37° 49' 31.83 South		Direction of Tra	avel
	Long	145° 0' 1.52 East	Both directions	Northbound	Southbound
Traffic Volume :		Weekdays Average	1,288	608	680
(Vehicles/Day)		7 Day Average	1,268	609	659
Weekday	AM	11:00	79	34	45
Peak hour starts	PM	18:00	138	86	52
Speeds :		85th Percentile	33.7	34.2	33.2
(Km/Hr)		Average	29.1	29.5	28.7
Classification % :		Light Vehicles up to 5.5m	97.0%	97.2%	96.7%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	10:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	17:00	18:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	5	3	0	9	4	18	21	60	8	21	5	39	21
01:00	7	3	3	4	3	10	19	49	7	20	4	29	15
02:00	5	2	0	0	3	17	21	48	7	10	2	38	20
03:00	4	0	0	1	1	17	18	41	6	6	2	35	18
04:00	4	1	2	1	2	14	16	40	5	10	2	30	15
05:00	11	10	12	13	8	16	17	87	12	54	11	33	17
06:00	38	33	28	34	36	17	17	203	29	169	33	34	17
07:00	52	42	54	42	32	20	19	261	36	222	44	39	20
08:00	62	67	70	77	68	30	23	397	55	344	68	53	27
09:00	49	50	64	44	52	68	26	353	50	259	51	94	48
10:00	55	62	74	60	66	77	38	432	61	317	62	115	58
11:00	78	72	71	86	88	98	83	576	82	395	79	181	92
12:00	87	65	88	97	104	121	79	641	91	441	88	200	101
13:00	83	78	71	86	98	133	99	648	92	416	83	232	118
14:00	72	68	62	84	79	122	102	589	83	365	72	224	114
15:00	94	100	101	92	93	87	90	657	93	480	97	177	90
16:00	80	72	90	73	97	84	90	586	84	412	84	174	89
17:00	113	118	111	115	116	92	82	747	106	573	114	174	88
18:00	138	92	168	151	146	97	52	844	120	695	138	149	76
19:00	104	66	114	109	139	108	42	682	97	532	106	150	76
20:00	56	35	71	52	72	62	37	385	55	286	56	99	51
21:00	41	21	52	33	63	44	28	282	40	210	42	72	36
22:00	28	11	22	27	54	49	19	210	30	142	28	68	34
23:00	16	11	19	6	33	34	10	129	19	85	17	44	22
Total	1282	1082	1347	1296	1457	1435	1048	8947	1268	6464	1288	2483	1263
% Heavy	2.96%	3.79%	4.31%	4.09%	3.09%	1.39%	1.43%	3.0	2%	3.6	64%	1.4	1%

Page 2 of 2

Site Charles St

Direction Northbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	10:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	17:00	18:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	14:00
00:00	5	2	0	3	3	8	8	29	4	13	3	16	9
01:00	2	1	1	2	1	1	10	18	3	7	1	11	6
02:00	3	1	0	0	1	9	8	22	3	5	1	17	9
03:00	1	0	0	1	1	9	9	21	3	3	1	18	9
04:00	1	0	1	0	1	7	7	17	2	3	1	14	7
05:00	3	2	2	5	2	8	8	30	4	14	3	16	8
06:00	13	10	7	12	10	9	9	70	10	52	10	18	9
07:00	14	11	15	11	11	10	8	80	11	62	13	18	9
08:00	20	16	12	17	20	12	8	105	14	85	17	20	10
09:00	27	23	26	17	25	29	13	160	23	118	23	42	22
10:00	23	30	38	24	37	31	16	199	28	152	30	47	24
11:00	33	34	30	29	43	41	42	252	36	169	34	83	42
12:00	39	33	37	42	47	61	42	301	42	198	39	103	52
13:00	40	37	32	38	53	71	50	321	45	200	40	121	61
14:00	29	25	23	30	41	64	61	273	38	148	29	125	64
15:00	38	42	36	39	41	39	48	283	40	196	40	87	44
16:00	44	32	55	36	59	44	54	324	46	226	46	98	50
17:00	61	58	57	56	76	47	48	403	57	308	61	95	48
18:00	86	58	112	80	94	62	23	515	74	430	86	85	43
19:00	57	40	68	60	66	64	25	380	54	291	58	89	45
20:00	29	15	47	27	30	37	19	204	29	148	29	56	29
21:00	20	13	22	16	32	20	10	133	19	103	21	30	15
22:00	13	6	10	14	24	24	6	97	14	67	13	30	15
23:00	9	7	12	5	14	17	3	67	10	47	9	20	10
Total	610	496	643	564	732	724	535	4304	609	3045	608	1259	640
% Heavy	2.30%	3.43%	3.73%	3.90%	2.87%	1.38%	1.68%	2.7	2%	3.2	2%	1.5	1%

Site Charles St

Direction Southbound

▼ Back to Site Summary Page

	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
	Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AN	/ Peak	11:00	08:00	08:00	08:00	08:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PN	I Peak	15:00	17:00	15:00	18:00	19:00	13:00	13:00	N/A	15:00	N/A	15:00	N/A	13:00
0	00:00	0	1	0	6	1	10	13	31	4	8	2	23	12
0	01:00	5	2	2	2	2	9	9	31	4	13	3	18	9
0	02:00	2	1	0	0	2	8	13	26	4	5	1	21	11
0	03:00	3	0	0	0	0	8	9	20	3	3	1	17	9
0	04:00	3	1	1	1	1	7	9	23	3	7	1	16	8
0	05:00	8	8	10	8	6	8	9	57	8	40	8	17	9
0	06:00	25	23	21	22	26	8	8	133	19	117	23	16	8
0	07:00	38	31	39	31	21	10	11	181	25	160	31	21	11
0	08:00	42	51	58	60	48	18	15	292	41	259	51	33	17
0	09:00	22	27	38	27	27	39	13	193	27	141	28	52	26
1	10:00	32	32	36	36	29	46	22	233	33	165	32	68	34
1	11:00	45	38	41	57	45	57	41	324	46	226	45	98	50
1	12:00	48	32	51	55	57	60	37	340	49	243	49	97	49
1	13:00	43	41	39	48	45	62	49	327	47	216	43	111	57
1	14:00	43	43	39	54	38	58	41	316	45	217	43	99	50
1	15:00	56	58	65	53	52	48	42	374	53	284	57	90	46
1	16:00	36	40	35	37	38	40	36	262	38	186	38	76	39
1	17:00	52	60	54	59	40	45	34	344	49	265	53	79	40
1	18:00	52	34	56	71	52	35	29	329	46	265	52	64	33
1	19:00	47	26	46	49	73	44	17	302	43	241	48	61	31
	20:00	27	20	24	25	42	25	18	181	26	138	27	43	22
2	21:00	21	8	30	17	31	24	18	149	21	107	21	42	21
2	22:00	15	5	12	13	30	25	13	113	16	75	15	38	19
2	23:00	7	4	7	1	19	17	7	62	9	38	8	24	12
T	Total	672	586	704	732	725	711	513	4643	659	3419	680	1224	623
%	Heavy	3.57%	4.10%	4.83%	4.23%	3.31%	1.41%	1.17%	3.3	0%	4.0	1%	1.3	1%

TRANS TRAFFIC SURVEY

trafficsurvey.com.au

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		AUTOMATIC COUI	NT SUMMA	RY					
Street Name :	Char	es St	Location :	Outside Proper	ty 79				
Suburb :	Richr	nond	Start Date :	00:00 Sat 12/M	arch/2022				
Machine ID:	L779	CFYS	Finish Date :	00:00 Sat 19/M	arch/2022				
Site ID:	1281	0	Speed Zone :	50 km/h					
Prepared By :	Vo So	on Binh	Email:	binh@trafficsu	irvey.com.au				
GPS information	Lat	37° 49' 31.83 South		Direction of Tra	avel				
	Long	145° 0' 1.52 East	Both directions	Northbound	Southbound				
Traffic Volume :		Weekdays Average	1,170	559	611				
(Vehicles/Day)		7 Day Average	1,128	541	587				
Weekday	AM	10:00	60	28	32				
Peak hour starts	PM	18:00	146	88	58				
Speeds :		85th Percentile	34.2	34.7	33.8				
(Km/Hr)		Average	29.6	30.0	29.2				
Classification % :		Light Vehicles up to 5.5m	96.4%	96.7%	96.1%				





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	10:00	10:00	10:00	11:00	11:00	N/A	11:00	N/A	10:00	N/A	11:00
PM Peak	16:00	18:00	18:00	18:00	18:00	19:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	12	4	2	8	13	25	29	93	13	39	8	54	27
01:00	12	3	0	3	7	23	19	67	9	25	5	42	22
02:00	6	1	0	0	6	21	21	55	8	13	2	42	22
03:00	3	0	6	3	2	23	20	57	9	14	3	43	22
04:00	2	2	4	5	4	24	22	63	9	17	3	46	24
05:00	4	9	8	14	4	20	25	84	12	39	7	45	23
06:00	9	18	23	22	20	21	26	139	19	92	19	47	24
07:00	11	55	49	40	38	24	20	237	35	193	39	44	23
08:00	19	45	73	60	65	28	22	312	45	262	52	50	26
09:00	33	51	57	54	63	60	30	348	49	258	51	90	46
10:00	35	54	75	69	74	61	31	399	57	307	60	92	46
11:00	41	56	64	45	64	82	59	411	59	270	53	141	72
12:00	66	56	86	74	89	71	97	539	76	371	74	168	85
13:00	61	90	76	70	79	62	54	492	71	376	75	116	59
14:00	61	63	71	74	75	69	57	470	67	344	68	126	63
15:00	45	72	68	103	110	72	68	538	77	398	80	140	71
16:00	68	76	94	115	96	49	62	560	80	449	90	111	56
17:00	55	85	129	175	120	59	65	688	98	564	113	124	62
18:00	57	106	186	193	189	68	60	859	123	731	146	128	65
19:00	51	57	120	151	127	83	47	636	91	506	102	130	66
20:00	34	52	37	52	36	62	32	305	45	211	43	94	48
21:00	24	36	23	36	22	36	31	208	29	141	28	67	35
22:00	13	16	46	78	45	33	24	255	36	198	40	57	30
23:00	7	8	8	18	6	20	17	84	11	47	9	37	19
Total	729	1015	1305	1462	1354	1096	938	7899	1128	5865	1170	2034	1036
% Heavy	3.16%	4.24%	5.29%	4.79%	4.14%	1.55%	1.49%	3.7	0%	4.4	15%	1.5	2%

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Site Charles St

Direction Northbound

Back to Site Summary Page

0	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday		kend
D	Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM	Peak	11:00	09:00	10:00	10:00	10:00	11:00	11:00	N/A	10:00	N/A	10:00	N/A	11:00
PM	Peak	16:00	18:00	18:00	18:00	18:00	19:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00	0:00	5	2	1	6	5	11	13	43	6	19	4	24	12
01	1:00	4	1	0	0	4	9	6	24	3	9	2	15	8
02	2:00	3	1	0	0	3	8	7	22	3	7	1	15	8
03	3:00	1	0	2	2	1	11	8	25	4	6	1	19	10
04	4:00	1	2	3	3	2	10	9	30	4	11	2	19	10
0	5:00	1	2	1	4	0	9	11	28	4	8	1	20	10
00	6:00	5	3	6	6	4	8	10	42	5	24	5	18	9
07	7:00	5	12	16	7	10	9	8	67	10	50	10	17	9
08	8:00	7	9	15	14	17	12	9	83	12	62	12	21	11
09	9:00	10	25	30	25	29	23	16	158	22	119	23	39	20
10	0:00	14	25	35	32	37	23	11	177	25	143	28	34	17
11	1:00	17	20	19	22	27	38	28	171	25	105	21	66	34
12	2:00	28	28	43	39	43	37	60	278	39	181	36	97	49
1:	3:00	35	44	33	33	30	32	27	234	34	175	35	59	30
14	4:00	25	26	33	36	28	33	29	210	30	148	29	62	31
1	5:00	25	27	31	48	41	33	34	239	34	172	35	67	34
10	6:00	40	38	54	66	52	25	37	312	45	250	50	62	31
17	7:00	29	38	77	108	70	30	36	388	55	322	65	66	33
18	8:00	28	63	114	126	111	40	34	516	74	442	88	74	37
19	9:00	28	32	72	105	76	56	26	395	56	313	63	82	42
20	0:00	22	23	16	28	17	30	13	149	22	106	22	43	22
2	1:00	11	14	9	11	8	17	16	86	12	53	10	33	17
22	2:00	8	11	11	14	10	18	12	84	12	54	11	30	16
23	3:00	3	5	5	8	4	9	6	40	5	25	5	15	8
T	otal	355	451	626	743	629	531	466	3801	541	2804	559	997	508
% H	Heavy	3.66%	4.43%	4.79%	3.63%	4.13%	1.88%	1.29%	3.4	7%	4.1	4%	1.6	0%

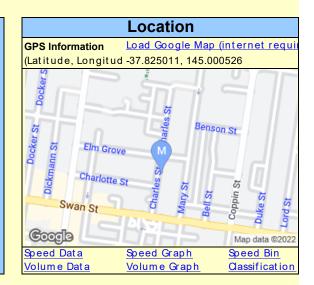
Site Charles St

Direction Southbound

Back to Site Summary Page

Da	iy Mo	onday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Da	te 14/0	03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM P	Peak 1	11:00	07:00	08:00	08:00	08:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PM P	Peak 1	12:00	17:00	18:00	17:00	18:00	15:00	12:00	N/A	18:00	N/A	18:00	N/A	15:00
00:	00	7	2	1	2	8	14	16	50	7	20	4	30	15
01:	00	8	2	0	3	3	14	13	43	6	16	3	27	14
02:	00	3	0	0	0	3	13	14	33	5	6	1	27	14
03:	00	2	0	4	1	1	12	12	32	5	8	2	24	12
04:	00	1	0	1	2	2	14	13	33	5	6	1	27	14
05:	00	3	7	7	10	4	11	14	56	8	31	6	25	13
06:	00	4	15	17	16	16	13	16	97	14	68	14	29	15
07:	00	6	43	33	33	28	15	12	170	25	143	29	27	14
08:	00	12	36	58	46	48	16	13	229	33	200	40	29	15
09:	00	23	26	27	29	34	37	14	190	27	139	28	51	26
10:	00	21	29	40	37	37	38	20	222	32	164	32	58	29
11:	00	24	36	45	23	37	44	31	240	34	165	32	75	38
12:	00	38	28	43	35	46	34	37	261	37	190	38	71	36
13:	00	26	46	43	37	49	30	27	258	37	201	40	57	29
14:	00	36	37	38	38	47	36	28	260	37	196	39	64	32
15:	00	20	45	37	55	69	39	34	299	43	226	45	73	37
16:	00	28	38	40	49	44	24	25	248	35	199	40	49	25
17:	00	26	47	52	67	50	29	29	300	43	242	48	58	29
18:	00	29	43	72	67	78	28	26	343	49	289	58	54	28
19:	00	23	25	48	46	51	27	21	241	35	193	39	48	24
20:	00	12	29	21	24	19	32	19	156	23	105	21	51	26
21:	00	13	22	14	25	14	19	15	122	17	88	18	34	18
22:	00	5	5	35	64	35	15	12	171	24	144	29	27	14
23:		4	3	3	10	2	11	11	44	6	22	4	22	11
Tot		374	564	679	719	725	565	472	4098	587	3061	611	1037	528
% He	avy 2	2.67%	4.08%	5.74%	5.98%	4.14%	1.24%	1.69%	3.9	0%	4.7	'4%	1.4	5%

TRANS TRAFFIC SURVEY trafficsurvey.com.au T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au AUTOMATIC COUNT SUMMARY											
Street Name :	Charl	es St	Location :	Outside Proper	ty 61						
Suburb :	Richr	nond	Start Date :	00:00 Tue 01/M	larch/2022						
Machine ID:	CX86	SFE2	Finish Date :	00:00 Tue 08/March/2022							
Site ID:	1281	1	Speed Zone :	50 km/h							
Prepared By :	Vo So	on Binh	Email:	binh@traffics	urvey.com.au						
GPS information		37° 49' 30.04 South 145° 0' 1.89 East	Both directions	Direction of Tr	avel Southbound						
Traffic Volume :		Weekdays Average	945	433	512						
(Vehicles/Day)		7 Day Average		446	489						
Weekday	AM	11:00	59	25	34						
Peak hour starts	PM	18:00	96	55	41						
Speeds :		85th Percentile	-	29.6	28.9						
(Km/Hr)		Average		25.4	24.5						
Classification % :		Light Vehicles up to 5.5m	97.7%	97.3%	98.0%						





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	08:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	15:00	18:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	5	3	0	8	4	11	16	47	6	20	4	27	14
01:00	8	4	2	5	4	8	13	44	6	23	4	21	11
02:00	5	2	1	0	3	11	7	29	4	11	2	18	10
03:00	1	0	1	2	1	18	11	34	5	5	1	29	15
04:00	3	2	3	1	2	14	8	33	5	11	2	22	11
05:00	4	6	8	7	5	12	9	51	7	30	6	21	11
06:00	32	26	20	31	26	15	8	158	22	135	26	23	12
07:00	35	36	49	35	30	19	17	221	31	185	37	36	19
08:00	45	50	63	60	39	27	27	311	43	257	50	54	28
09:00	40	35	47	43	21	43	24	253	36	186	37	67	35
10:00	42	44	57	46	41	55	32	317	45	230	46	87	44
11:00	58	56	47	72	65	73	71	442	63	298	59	144	73
12:00	66	59	64	78	72	83	60	482	69	339	68	143	72
13:00	60	56	52	63	80	105	83	499	71	311	62	188	95
14:00	57	51	55	70	57	99	85	474	67	290	57	184	93
15:00	74	84	80	69	68	61	67	503	72	375	75	128	65
16:00	62	58	69	59	68	61	58	435	63	316	63	119	61
17:00	75	77	76	79	73	64	62	506	72	380	75	126	64
18:00	94	63	108	118	97	58	41	579	82	480	96	99	50
19:00	67	32	90	76	78	63	44	450	64	343	69	107	54
20:00	40	27	52	31	54	39	31	274	39	204	40	70	35
21:00	29	17	41	24	37	24	24	196	27	148	29	48	25
22:00	20	12	11	21	41	32	15	152	22	105	21	47	24
23:00	14	11	15	4	32	12	10	98	14	76	16	22	12
Total	936	811	1011	1002	998	1007	823	6588	935	4758	945	1830	933
% Heavy	2.35%	2.47%	2.47%	2.50%	4.41%	1.29%	0.73%	2.3	5%	2.8	6%	1.0	4%

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Site Charles St

Direction Northbound

Back to Site Summary Page

	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
	Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
Α	M Peak	11:00	11:00	10:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
Р	M Peak	18:00	17:00	18:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
	00:00	5	2	0	3	2	6	4	22	3	12	2	10	5
	01:00	4	2	0	3	3	4	6	22	3	12	2	10	5
	02:00	3	1	1	0	1	8	1	15	2	6	1	9	5
	03:00	1	0	0	1	1	12	5	20	3	3	1	17	9
	04:00	1	1	2	0	1	9	5	19	3	5	1	14	7
	05:00	2	2	2	3	1	8	4	22	3	10	2	12	6
	06:00	13	8	4	8	9	10	4	56	8	42	8	14	7
	07:00	8	12	17	13	14	8	7	79	11	64	13	15	8
	08:00	11	10	8	15	10	11	10	75	10	54	10	21	11
	09:00	21	14	15	19	7	16	13	105	15	76	15	29	15
	10:00	18	20	27	18	20	21	13	137	20	103	20	34	17
	11:00	25	24	19	26	35	33	36	198	28	129	25	69	35
	12:00	31	29	30	34	34	40	28	226	33	158	31	68	34
	13:00	27	24	23	24	44	60	42	244	35	142	29	102	52
	14:00	23	21	19	29	27	50	51	220	31	119	23	101	51
	15:00	30	35	30	28	31	26	37	217	31	154	31	63	32
	16:00	31	24	41	28	33	28	35	220	32	157	31	63	32
	17:00	38	39	39	30	47	28	34	255	36	193	38	62	31
	18:00	54	39	66	62	55	40	16	332	47	276	55	56	28
	19:00	37	21	53	37	41	37	27	253	36	189	38	64	32
	20:00	22	11	32	19	29	24	16	153	22	113	22	40	20
	21:00	15	11	18	13	19	14	11	101	14	76	15	25	13
	22:00	11	6	7	13	20	20	6	83	12	57	11	26	13
	23:00	8	7	10	2	16	6	5	54	8	43	9	11	6
	Total	439	363	463	428	500	519	416	3128	446	2193	433	935	474
%	6 Heavy	2.96%	2.75%	3.46%	2.80%	5.20%	1.54%	0.48%	2.7	8%	3.5	51%	1.0	7%

Site Charles St

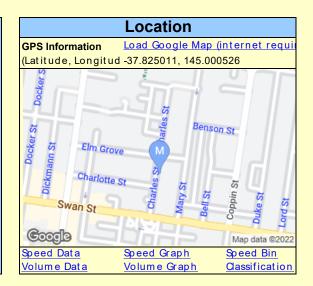
Direction Southbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	08:00	08:00	08:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PM Peak	15:00	15:00	15:00	18:00	18:00	14:00	13:00	N/A	15:00	N/A	15:00	N/A	13:00
00:00	0	1	0	5	2	5	12	25	3	8	2	17	9
01:00	4	2	2	2	1	4	7	22	3	11	2	11	6
02:00	2	1	0	0	2	3	6	14	2	5	1	9	5
03:00	0	0	1	1	0	6	6	14	2	2	0	12	6
04:00	2	1	1	1	1	5	3	14	2	6	1	8	4
05:00	2	4	6	4	4	4	5	29	4	20	4	9	5
06:00	19	18	16	23	17	5	4	102	14	93	18	9	5
07:00	27	24	32	22	16	11	10	142	20	121	24	21	11
08:00	34	40	55	45	29	16	17	236	33	203	40	33	17
09:00	19	21	32	24	14	27	11	148	21	110	22	38	20
10:00	24	24	30	28	21	34	19	180	25	127	26	53	27
11:00	33	32	28	46	30	40	35	244	35	169	34	75	38
12:00	35	30	34	44	38	43	32	256	36	181	37	75	38
13:00	33	32	29	39	36	45	41	255	36	169	33	86	43
14:00	34	30	36	41	30	49	34	254	36	171	34	83	42
15:00	44	49	50	41	37	35	30	286	41	221	44	65	33
16:00	31	34	28	31	35	33	23	215	31	159	32	56	29
17:00	37	38	37	49	26	36	28	251	36	187	37	64	33
18:00	40	24	42	56	42	18	25	247	35	204	41	43	22
19:00	30	11	37	39	37	26	17	197	28	154	31	43	22
20:00	18	16	20	12	25	15	15	121	17	91	18	30	15
21:00	14	6	23	11	18	10	13	95	13	72	14	23	12
22:00	9	6	4	8	21	12	9	69	10	48	10	21	11
23:00	6	4	5	2	16	6	5	44	6	33	7	11	6
Total	497	448	548	574	498	488	407	3460	489	2565	512	895	459
% Heavy	1.81%	2.23%	1.64%	2.26%	3.61%	1.02%	0.98%	1.9	7%	2.3	80%	1.0	1%

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY				
Street Name :	Charl	es St	Location :	Outside Proper	ty 61			
Suburb :	Richr	nond	Start Date :	00:00 Sat 12/M	arch/2022			
Machine ID:	K354	KXNE	Finish Date :	00:00 Sat 19/M	arch/2022			
Site ID:	1281	1	Speed Zone :	50 km/h				
Prepared By :	Vo So	on Binh	Email:	binh@traffics	irvey.com.au			
GPS information	Lat	37° 49' 30.04 South	Direction of Travel					
	Long	145° 0' 1.89 East	Both directions	Northbound	Southbound			
Traffic Volume :		Weekdays Average	847	419	428			
(Vehicles/Day)		7 Day Average	794	394	400			
Weekday	AM	10:00	44	21	23			
Peak hour starts	PM	18:00	99	61	38			
Speeds :		85th Percentile	30.1	30.6	29.6			
(Km/Hr)		Average	26.0	26.6	25.5			
Classification % :		Light Vehicles up to 5.5m	97.9%	97.5%	98.3%			





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	08:00	08:00	08:00	10:00	11:00	11:00	N/A	11:00	N/A	10:00	N/A	11:00
PM Peak	12:00	18:00	18:00	18:00	18:00	15:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	10	3	2	8	11	11	13	58	8	34	7	24	13
01:00	9	4	0	2	7	6	10	38	5	22	4	16	9
02:00	7	2	0	0	5	7	8	29	4	14	3	15	8
03:00	2	0	4	3	3	6	6	24	3	12	2	12	7
04:00	1	2	4	3	3	7	4	24	3	13	2	11	6
05:00	4	7	4	7	3	6	7	38	5	25	5	13	7
06:00	9	14	17	16	18	8	9	91	12	74	14	17	9
07:00	10	42	34	29	31	13	9	168	23	146	28	22	12
08:00	11	47	59	51	46	18	16	248	35	214	42	34	17
09:00	27	42	42	39	51	35	29	265	37	201	41	64	33
10:00	27	37	53	48	61	50	23	299	42	226	44	73	37
11:00	33	42	46	29	41	65	47	303	43	191	37	112	57
12:00	58	38	56	55	64	54	69	394	56	271	53	123	62
13:00	49	62	49	46	57	51	44	358	51	263	52	95	48
14:00	53	50	54	60	54	56	31	358	52	271	55	87	44
15:00	38	49	59	68	73	61	45	393	56	287	58	106	55
16:00	47	59	66	82	61	38	39	392	56	315	63	77	40
17:00	36	68	97	107	75	42	55	480	68	383	77	97	50
18:00	35	74	129	156	97	39	42	572	82	491	99	81	42
19:00	31	40	104	111	71	52	34	443	64	357	71	86	44
20:00	29	32	30	49	33	38	23	234	33	173	34	61	31
21:00	16	22	19	20	18	25	14	134	20	95	19	39	20
22:00	9	11	30	60	26	22	16	174	25	136	27	38	20
23:00	6	11	6	18	9	17	11	78	11	50	10	28	15
Total	557	758	964	1067	918	727	604	5595	794	4264	847	1331	686
% Heavy	2.69%	2.77%	2.80%	2.62%	1.96%	0.55%	1.49%	2.1	8%	2.5	6%	0.9	8%

Site Charles St

Direction Northbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	09:00	10:00	10:00	10:00	11:00	11:00	N/A	10:00	N/A	10:00	N/A	11:00
PM Peak	13:00	18:00	18:00	18:00	18:00	19:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	5	2	1	6	5	7	8	34	5	19	4	15	8
01:00	4	2	0	0	4	2	5	17	2	10	2	7	4
02:00	4	2	0	0	2	3	4	15	2	8	2	7	4
03:00	1	0	1	2	2	3	4	13	2	6	1	7	4
04:00	1	2	3	3	2	3	2	16	2	11	2	5	3
05:00	3	2	1	3	0	1	4	14	2	9	2	5	3
06:00	5	3	8	3	7	2	5	33	4	26	5	7	4
07:00	6	11	9	4	9	5	4	48	6	39	7	9	5
08:00	4	9	13	14	9	8	10	67	9	49	9	18	9
09:00	9	24	19	16	24	11	14	117	16	92	19	25	13
10:00	12	18	26	25	27	23	10	141	20	108	21	33	17
11:00	12	18	13	14	17	35	19	128	18	74	14	54	27
12:00	29	21	30	34	29	28	40	211	30	143	28	68	34
13:00	32	28	23	22	25	22	22	174	25	130	26	44	22
14:00	23	21	22	34	23	26	17	166	24	123	25	43	22
15:00	23	23	27	36	27	32	22	190	27	136	28	54	28
16:00	25	29	36	46	35	20	21	212	30	171	34	41	21
17:00	20	26	56	61	40	20	30	253	36	203	41	50	26
18:00	22	49	83	88	60	19	29	350	50	302	61	48	25
19:00	20	26	61	69	44	38	18	276	40	220	44	56	29
20:00	18	18	15	31	19	22	12	135	19	101	20	34	17
21:00	10	7	11	10	9	12	8	67	10	47	9	20	10
22:00	6	8	9	16	9	12	7	67	10	48	10	19	10
23:00	4	6	4	6	4	8	5	37	5	24	5	13	7
Total	298	355	471	543	432	362	320	2781	394	2099	419	682	352
% Heavy	3.02%	3.66%	3.18%	3.50%	2.55%	0.83%	1.25%	2.6	6%	3.1	9%	1.0	3%

Average

11:00

12:00

Site Charles St

%

Direction Southbound

Back to Site Summary Page

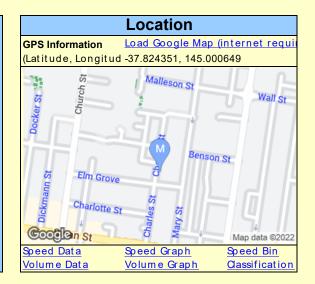
Monday Tuesday Wednesday Thursday Friday Saturday Sunday 7 days Weekday Weekend Day 14/03/2022 15/03/2022 16/03/2022 17/03/2022 18/03/2022 12/03/2022 13/03/2022 Total Average Total Average Total Date AM Peak N/A 11:00 08:00 08:00 08:00 08:00 11:00 11:00 08:00 N/A 08:00 N/A PM Peak 14:00 17:00 18:00 18:00 15:00 14:00 12:00 N/A 17:00 N/A 18:00 N/A 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 40.0

% Heavy	2.32%	1.99%	2.43%	1.72%	1.44%	0.27%	1.76%	1.7	1%	1.9	4%	0.9	2%
Total	259	403	493	524	486	365	284	2814	400	2165	428	649	334
23:00	2	5	2	12	5	9	6	41	6	26	5	15	8
22:00	3	3	21	44	17	10	9	107	15	88	17	19	10
21:00	6	15	8	10	9	13	6	67	10	48	10	19	10
20:00	11	14	15	18	14	16	11	99	14	72	14	27	14
19:00	11	14	43	42	27	14	16	167	24	137	27	30	15
18:00	13	25	46	68	37	20	13	222	32	189	38	33	17
17:00	16	42	41	46	35	22	25	227	32	180	36	47	24
16:00	22	30	30	36	26	18	18	180	26	144	29	36	19

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY				
Street Name :	Char	es St	Location :	Outside Proper	ty 41			
Suburb :	Richr	nond	Start Date :	00:00 Tue 01/M	larch/2022			
Machine ID:	MD00)QXA4	Finish Date :	00:00 Tue 08/M	larch/2022			
Site ID:	1281	2	Speed Zone :	50 km/h				
Prepared By :	Vo So	on Binh	Email:	binh@trafficsu	irvey.com.au			
GPS information	Lat	37° 49' 27.66 South	Direction of Travel					
	Long	145° 0' 2.34 East	Both directions	Northbound	Southbound			
Traffic Volume :		Weekdays Average	652	331	321			
(Vehicles/Day)		7 Day Average	669	337	332			
Weekday	AM	10:00	39	21	18			
Peak hour starts	PM	18:00	54	32	22			
Speeds :		85th Percentile	32.0	32.8	31.1			
(Km/Hr)		Average	27.0	27.5	26.4			
Classification % :		Light Vehicles up to 5.5m	96.7%	97.1%	96.4%			





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	10:00	09:00	11:00	11:00	09:00	11:00	N/A	11:00	N/A	10:00	N/A	11:00
PM Peak	18:00	17:00	15:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	5	3	0	5	4	5	13	35	5	17	3	18	10
01:00	10	4	2	5	3	5	20	49	7	24	5	25	13
02:00	5	2	3	2	2	9	13	36	5	14	3	22	12
03:00	1	1	1	3	1	17	16	40	5	7	1	33	17
04:00	4	1	3	1	2	10	6	27	4	11	2	16	8
05:00	6	8	13	12	6	4	5	54	7	45	8	9	5
06:00	27	23	20	26	23	7	5	131	19	119	23	12	6
07:00	26	26	30	23	33	18	8	164	22	138	27	26	14
08:00	35	36	36	46	37	23	21	234	33	190	37	44	22
09:00	29	30	37	33	25	59	35	248	36	154	31	94	48
10:00	43	38	37	37	40	54	40	289	40	195	39	94	48
11:00	39	27	34	48	50	54	59	311	44	198	39	113	58
12:00	43	40	42	55	43	51	40	314	45	223	45	91	47
13:00	37	39	37	44	32	69	58	316	46	189	38	127	65
14:00	42	35	31	57	48	61	60	334	47	213	43	121	62
15:00	39	40	51	30	42	33	36	271	39	202	41	69	36
16:00	36	30	42	40	36	60	41	285	40	184	36	101	52
17:00	45	51	45	56	35	44	48	324	46	232	45	92	47
18:00	53	46	48	58	66	36	48	355	50	271	54	84	44
19:00	41	38	40	46	49	39	44	297	42	214	42	83	42
20:00	27	15	33	25	36	22	35	193	27	136	27	57	29
21:00	26	15	29	30	33	15	26	174	25	133	26	41	21
22:00	18	12	14	18	31	26	22	141	20	93	19	48	24
23:00	18	12	17	7	38	8	10	110	15	92	18	18	10
Total	655	572	645	707	715	729	709	4732	669	3294	652	1438	740
% Heavy	3.66%	3.15%	3.88%	4.81%	4.90%	1.37%	1.55%	3.3	2%	4.1	13%	1.4	6%

-

Site Charles St

Direction Northbound

<u>Back to Site Summary Page</u>

	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 da	ays	Wee	kday	Wee	kend
	Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
Α	M Peak	10:00	10:00	10:00	11:00	11:00	10:00	11:00	N/A	11:00	N/A	10:00	N/A	11:00
Р	M Peak	18:00	17:00	18:00	18:00	18:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
	00:00	4	2	0	2	3	2	7	20	3	11	2	9	5
	01:00	5	2	1	3	2	4	12	29	4	13	3	16	8
	02:00	3	1	2	1	1	6	6	20	3	8	2	12	7
	03:00	1	1	0	2	1	10	9	24	3	5	1	19	10
	04:00	2	0	2	0	0	5	3	12	2	4	1	8	4
	05:00	2	2	3	5	1	2	3	18	2	13	2	5	3
	06:00	8	6	5	6	5	2	2	34	5	30	6	4	2
	07:00	6	9	12	9	13	6	5	60	8	49	9	11	6
	08:00	12	11	9	17	11	9	7	76	11	60	12	16	8
	09:00	15	15	19	19	11	26	14	119	17	79	16	40	21
	10:00	20	20	22	18	23	29	18	150	21	103	21	47	24
	11:00	20	16	20	21	25	23	32	157	22	102	20	55	28
	12:00	20	20	21	27	18	23	18	147	21	106	22	41	21
	13:00	21	20	19	25	23	37	28	173	25	108	22	65	33
	14:00	20	18	13	24	25	29	34	163	23	100	20	63	32
	15:00	20	25	20	17	21	16	18	137	20	103	21	34	18
	16:00	21	16	25	24	21	28	19	154	22	107	21	47	24
	17:00	24	29	26	29	16	23	29	176	24	124	24	52	27
	18:00	31	27	27	34	39	22	25	205	29	158	32	47	25
	19:00	23	23	22	24	27	22	24	165	23	119	23	46	23
	20:00	14	9	17	13	18	16	20	107	15	71	14	36	18
	21:00	15	11	14	19	18	8	13	98	14	77	15	21	11
	22:00	11	7	10	11	19	14	10	82	12	58	12	24	12
	23:00	10	7	9	4	20	4	5	59	8	50	10	9	5
	Total	328	297	318	354	361	366	361	2385	337	1658	331	727	375
%	6 Heavy	2.74%	2.36%	3.77%	4.52%	4.16%	1.37%	1.39%	2.8	9%	3.5	6%	1.3	8%

Site Charles St

Direction Southbound

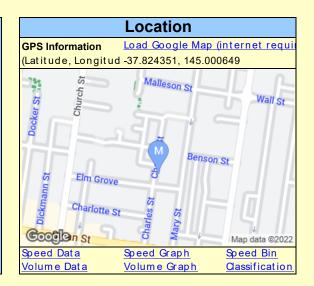
Back to Site Summary Page

Tuesday Wednesday Thursday Friday Saturday Sunday 7 days Weekday Weekend Day Monday 7/03/2022 1/03/2022 2/03/2022 3/03/2022 4/03/2022 5/03/2022 6/03/2022 Total Average Total Total Date Average Average AM Peak 08:00 08:00 08:00 08:00 08:00 09:00 11:00 N/A 08:00 N/A 08:00 N/A 11:00 PM Peak 12:00 17:00 15:00 14:00 18:00 13:00 13:00 N/A 12:00 N/A 12:00 N/A 13:00 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Total 4.59% 4.00% 3.98% 5.10% 5.65% 1.38% 1.72% % Heavy 3.75% 4.71% 1.55%

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY				
Street Name :	Char	es St	Location :	Outside Proper	ty 41			
Suburb :	Richr	nond	Start Date :	00:00 Sat 12/M	arch/2022			
Machine ID:	L790	N9JW	Finish Date :	00:00 Sat 19/M	arch/2022			
Site ID:	1281	2	Speed Zone :	50 km/h				
Prepared By :	Vo So	on Binh	Email:	binh@traffics	urvey.com.au			
GPS information	Lat	37° 49' 27.66 South	Direction of Travel					
	Long	145° 0' 2.34 East	Both directions	Northbound	Southbound			
Traffic Volume :		Weekdays Average	617	315	302			
(Vehicles/Day)		7 Day Average	579	298	281			
Weekday	AM	11:00	37	17	20			
Peak hour starts	PM	16:00	49	27	22			
Speeds :		85th Percentile	31.8	32.6	30.9			
(Km/Hr)		Average	27.1	27.7	26.4			
Classification % :		Light Vehicles up to 5.5m	96.7%	96.7%	96.8%			





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charles St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	11:00	11:00	10:00	11:00	10:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	12:00	18:00	16:00	18:00	18:00	13:00	12:00	N/A	16:00	N/A	16:00	N/A	13:00
00:00	15	4	2	7	13	15	16	72	10	41	8	31	16
01:00	5	3	0	3	5	2	4	22	3	16	3	6	4
02:00	8	1	0	0	5	7	8	29	4	14	2	15	8
03:00	3	0	6	3	3	4	5	24	3	15	3	9	5
04:00	0	4	4	5	3	2	2	20	3	16	3	4	2
05:00	3	11	6	11	7	0	1	39	5	38	7	1	1
06:00	10	17	21	21	24	4	5	102	14	93	20	9	5
07:00	12	30	28	24	22	6	6	128	17	116	23	12	6
08:00	16	41	37	32	34	16	8	184	27	160	32	24	13
09:00	20	44	38	37	34	37	22	232	32	173	35	59	30
10:00	22	37	36	37	46	32	28	238	35	178	36	60	32
11:00	28	47	47	38	25	45	27	257	37	185	37	72	37
12:00	51	38	34	45	30	43	47	288	41	198	39	90	46
13:00	26	43	42	44	44	53	41	293	41	199	40	94	47
14:00	36	35	32	47	37	36	30	253	35	187	38	66	33
15:00	31	38	44	38	39	40	40	270	38	190	37	80	41
16:00	40	45	57	52	48	26	41	309	45	242	49	67	35
17:00	34	38	50	52	42	24	41	281	39	216	43	65	35
18:00	29	49	51	68	49	28	28	302	44	246	49	56	29
19:00	24	25	50	60	38	25	28	250	35	197	39	53	27
20:00	26	26	31	44	31	30	15	203	28	158	31	45	23
21:00	21	13	12	25	17	21	7	116	16	88	18	28	15
22:00	12	14	18	16	14	15	21	110	15	74	15	36	19
23:00	10	9	5	15	9	20	13	81	12	48	10	33	17
Total	482	612	651	724	619	531	484	4103	579	3088	617	1015	526
% Heavy	3.73%	3.43%	5.22%	4.83%	3.39%	1.69%	1.24%	3.5	1%	4.1	8%	1.4	8%

Site Charles St

Direction Northbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	11:00	09:00	11:00	10:00	11:00	10:00	N/A	11:00	N/A	10:00	N/A	11:00
PM Peak	12:00	18:00	18:00	18:00	18:00	13:00	12:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	6	2	1	4	6	9	9	37	5	19	4	18	9
01:00	2	2	0	1	2	0	1	8	1	7	1	1	1
02:00	4	1	0	0	2	4	4	15	2	7	1	8	4
03:00	2	0	3	2	2	4	4	17	2	9	2	8	4
04:00	0	2	3	3	2	1	1	12	2	10	2	2	1
05:00	1	2	0	3	1	0	0	7	1	7	1	0	0
06:00	4	7	8	8	9	1	2	39	5	36	8	3	2
07:00	6	10	10	4	5	2	2	39	5	35	7	4	2
08:00	4	14	9	9	12	7	3	58	9	48	10	10	5
09:00	8	23	20	17	18	11	10	107	15	86	17	21	11
10:00	14	16	20	18	23	15	11	117	17	91	18	26	14
11:00	10	25	20	20	14	23	11	123	18	89	17	34	17
12:00	26	21	18	23	15	21	24	148	21	103	20	45	23
13:00	14	20	21	22	24	31	19	151	21	101	20	50	25
14:00	14	17	18	25	21	19	21	135	19	95	19	40	20
15:00	20	23	24	19	16	21	19	142	20	102	20	40	21
16:00	22	26	29	29	29	16	24	175	25	135	27	40	21
17:00	19	17	31	32	24	14	21	158	22	123	25	35	19
18:00	16	34	34	36	30	11	16	177	26	150	30	27	14
19:00	14	19	28	33	23	16	16	149	21	117	23	32	16
20:00	20	14	14	26	18	16	8	116	16	92	18	24	12
21:00	13	3	8	15	9	10	5	63	9	48	10	15	8
22:00	8	11	10	6	8	10	13	66	9	43	9	23	12
23:00	6	5	4	8	5	10	8	46	7	28	6	18	9
Total	253	314	333	363	318	272	252	2105	298	1581	315	524	270
% Heavy	2.77%	3.50%	5.11%	5.23%	4.09%	1.84%	1.19%	3.5	6%	4.2	24%	1.5	3%

-

Site Charles St

Direction Southbound

<u>Back to Site Summary Page</u>

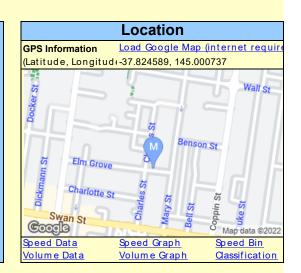
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	08:00	08:00	08:00	10:00	09:00	10:00	N/A	11:00	N/A	08:00	N/A	11:00
PM Peak	12:00	13:00	16:00	18:00	15:00	12:00	12:00	N/A	12:00	N/A	16:00	N/A	12:00
00:00	9	2	1	3	7	6	7	35	5	22	4	13	7
01:00	3	1	0	2	3	2	3	14	2	9	2	5	3
02:00	4	0	0	0	3	3	4	14	2	7	1	7	4
03:00	1	0	3	1	1	0	1	7	1	6	1	1	1
04:00	0	2	1	2	1	1	1	8	1	6	1	2	1
05:00	2	9	6	8	6	0	1	32	4	31	6	1	1
06:00	6	10	13	13	15	3	3	63	9	57	12	6	3
07:00	6	20	18	20	17	4	4	89	12	81	16	8	4
08:00	12	27	28	23	22	9	5	126	18	112	22	14	8
09:00	12	21	18	20	16	26	12	125	17	87	18	38	19
10:00	8	21	16	19	23	17	17	121	18	87	18	34	18
11:00	18	22	27	18	11	22	16	134	19	96	20	38	20
12:00	25	17	16	22	15	22	23	140	20	95	19	45	23
13:00	12	23	21	22	20	22	22	142	20	98	20	44	22
14:00	22	18	14	22	16	17	9	118	16	92	19	26	13
15:00	11	15	20	19	23	19	21	128	18	88	17	40	20
16:00	18	19	28	23	19	10	17	134	20	107	22	27	14
17:00	15	21	19	20	18	10	20	123	17	93	18	30	16
18:00	13	15	17	32	19	17	12	125	18	96	19	29	15
19:00	10	6	22	27	15	9	12	101	14	80	16	21	11
20:00	6	12	17	18	13	14	7	87	12	66	13	21	11
21:00	8	10	4	10	8	11	2	53	7	40	8	13	7
22:00	4	3	8	10	6	5	8	44	6	31	6	13	7
23:00	4	4	1	7	4	10	5	35	5	20	4	15	8
Total	229	298	318	361	301	259	232	1998	281	1507	302	491	256
% Heavy	4.80%	3.36%	5.35%	4.43%	2.66%	1.54%	1.29%	3.4	5%	4.1	1%	1.4	3%

TRANS TRAFFIC SURVEY

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		AUTOMATIC COU		ARY	
Street Name :	McNar	nara St	Location :	East of Charles St	
Suburb :	Richm	ond	Start Date :	00:00 Tue 01/Mar	ch/2022
Machine ID:	ME317	′FVV	Finish Date :	00:00 Tue 08/Mar	ch/2022
Site ID:	12813		Speed Zone :	50 km/h	
Prepared By :	Vo Sor	ו Binh	Email:	binh@trafficsurv	ey.com.au
GPS information	Lat	37° 49' 28.52 South		Direction of Trave	
	Long	145° 0' 2.65 East	Both directions	Westbound	Eastbound
Traffic Volume :		Weekdays Average	227	168	59
(Vehicles/Day)		7 Day Average	231	167	64
Weekday	AM	08:00	13	13	0
Peak hour start	PM	17:00	30	19	11
Speeds :		85th Percentile	22.1	21.8	23.1
(Km/Hr)		Average	19.8	19.3	20.6
Classification % :		Light Vehicles up to 5.5m	96.7%	97.1%	97.0%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site McNamara St

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	06:00	11:00	08:00	08:00	06:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PM Peak	17:00	17:00	18:00	17:00	17:00	14:00	13:00	N/A	17:00	N/A	17:00	N/A	13:00
00:00	1	2	0	1	1	3	5	13	1	5	1	8	5
01:00	0	1	0	1	1	3	2	8	1	3	1	5	3
02:00	0	1	1	1	1	4	5	13	2	4	1	9	6
03:00	1	0	2	1	2	3	1	10	1	6	1	4	3
04:00	0	1	1	0	0	2	0	4	0	2	0	2	2
05:00	0	3	1	1	1	4	0	10	1	6	1	4	2
06:00	8	5	6	11	7	3	1	41	5	37	7	4	2
07:00	5	6	15	12	4	4	1	47	6	42	8	5	4
08:00	2	3	31	26	2	6	7	77	11	64	13	13	7
09:00	4	1	15	20	2	9	5	56	8	42	8	14	7
10:00	2	5	18	17	5	15	11	73	10	47	9	26	14
11:00	2	16	17	18	5	31	19	108	15	58	11	50	26
12:00	2	14	20	17	1	24	18	96	13	54	10	42	22
13:00	1	16	10	15	4	25	31	102	15	46	9	56	29
14:00	2	14	12	21	1	26	22	98	13	50	10	48	25
15:00	10	20	24	27	15	20	18	134	19	96	19	38	20
16:00	16	14	14	19	25	13	12	113	16	88	17	25	14
17:00	28	28	29	36	30	23	22	196	28	151	30	45	24
18:00	27	23	31	30	23	15	16	165	23	134	27	31	16
19:00	16	18	21	20	29	16	7	127	18	104	21	23	12
20:00	7	13	18	7	9	11	5	70	9	54	10	16	9
21:00	7	7	6	13	3	3	13	52	8	36	7	16	9
22:00	4	1	6	6	7	14	2	40	6	24	4	16	9
23:00	3	1	2	2	6	4	1	19	2	14	2	5	3
Total	148	213	300	322	184	281	224	1672	231	1167	227	505	273
% Heavy	3.38%	2.82%	4.67%	2.17%	2.17%	2.49%	4.91%	3.2	3%	3.0	8%	3.5	6%

TRANS TRAFFIC SURVEY

Site McNamara St

-Direction Eastbound

Back to Site Summary Page Monday Tuesday Wednesday Thursday Friday Saturday Sunday 7 days Weekday Weekend Day 7/03/2022 1/03/2022 2/03/2022 3/03/2022 4/03/2022 5/03/2022 6/03/2022 Total Average Total Total Average Date Average 06:00 N/A AM Peak 00:00 07:00 07:00 06:00 11:00 11:00 10:00 N/A 06:00 N/A 11:00 PM Peak 17:00 17:00 18:00 18:00 19:00 12:00 13:00 N/A 17:00 N/A 17:00 N/A 13:00 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Total 4.29% 1.56% 0.00% 9.23% 3.51% 3.45% 2.99% 3.63% 3.82% % Heavy 3.25%

Site McNamara St

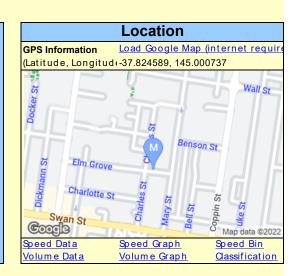
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	06:00	11:00	08:00	08:00	11:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PM Peak	17:00	15:00	17:00	17:00	17:00	14:00	17:00	N/A	17:00	N/A	17:00	N/A	17:00
00:00	0	1	0	1	1	2	4	9	1	3	1	6	3
01:00	0	1	0	1	1	3	1	7	1	3	1	4	2
02:00	0	1	1	1	1	3	4	11	2	4	1	7	4
03:00	1	0	2	1	2	2	1	9	1	6	1	3	2
04:00	0	1	1	0	0	1	0	3	0	2	0	1	1
05:00	0	3	1	1	1	2	0	8	1	6	1	2	1
06:00	5	4	5	10	3	3	1	31	4	27	5	4	2
07:00	4	5	12	10	3	3	1	38	5	34	7	4	3
08:00	2	3	31	25	2	6	7	76	11	63	13	13	7
09:00	2	1	15	19	2	7	5	51	7	39	8	12	6
10:00	1	5	16	16	3	11	10	62	8	41	8	21	11
11:00	0	15	17	17	5	25	14	93	13	54	10	39	20
12:00	2	14	19	15	1	14	8	73	10	51	10	22	12
13:00	1	14	9	15	3	19	16	77	11	42	8	35	18
14:00	1	13	12	17	1	20	16	80	11	44	9	36	18
15:00	5	18	16	23	11	10	11	94	14	73	15	21	11
16:00	10	8	8	12	19	10	10	77	11	57	11	20	11
17:00	16	15	20	25	22	20	18	136	19	98	19	38	20
18:00	16	10	19	18	17	10	13	103	14	80	16	23	12
19:00	6	12	11	12	12	9	3	65	9	53	11	12	6
20:00	5	5	11	4	7	4	3	39	5	32	6	7	4
21:00	4	4	5	7	2	3	8	33	5	22	4	11	6
22:00	2	1	4	1	4	5	2	19	3	12	2	7	4
23:00	1	1	0	1	4	2	1	10	1	7	1	3	2
Total	84	155	235	252	127	194	157	1204	167	853	168	351	186
% Heavy	4.76%	3.87%	3.40%	1.59%	1.57%	2.06%	5.73%	3.0	7%	2.8	81%	3.7	0%

TRANS TRAFFIC SURVEY

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		AUTOMATIC COU									
	Mahlau										
Street Name :	wicinar	nara St	Location :	East of Charles St							
Suburb :	Richm	ond	Start Date :	00:00 Sat 12/Marc	:h/2022						
Machine ID:	MD12	RWSA	Finish Date :	00:00 Sat 19/Marc	:h/2022						
Site ID:	12813		Speed Zone :	50 km/h							
Prepared By :	Vo So	ו Binh	Email:	binh@trafficsurv	h@trafficsurvey.com.au						
GPS information	Lat	37° 49' 28.52 South		Direction of Trave							
	Long	145° 0' 2.65 East	Both directions	Westbound	Eastbound						
Traffic Volume :		Weekdays Average	289	186	103						
(Vehicles/Day)		7 Day Average	264	169	95						
Weekday	AM	08:00	18	16	2						
Peak hour start	PM	18:00	33	20	13						
Speeds :		85th Percentile	23.5	22.4	25.4						
(Km/Hr)		Average	21.2	20.2	22.6						
Classification % :		Light Vehicles up to 5.5m	97.4%	97.1%	97.9%						





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site McNamara St

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 da	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	08:00	09:00	08:00	08:00	10:00	11:00	N/A	10:00	N/A	08:00	N/A	11:00
PM Peak	15:00	17:00	17:00	18:00	16:00	12:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	0	2	1	4	1	5	3	16	2	8	2	8	5
01:00	1	3	0	2	1	0	1	8	1	7	1	1	1
02:00	0	2	1	2	1	4	4	14	2	6	1	8	5
03:00	1	0	2	3	1	0	0	7	1	7	2	0	0
04:00	1	1	2	2	2	2	1	11	1	8	2	3	2
05:00	2	2	0	1	2	2	0	9	1	7	1	2	1
06:00	1	7	7	2	2	2	1	22	3	19	4	3	2
07:00	2	12	8	11	9	3	2	47	6	42	9	5	3
08:00	3	23	17	21	24	9	4	101	14	88	18	13	7
09:00	6	15	20	19	19	15	5	99	14	79	16	20	11
10:00	10	16	15	16	24	22	14	117	16	81	15	36	18
11:00	11	18	12	20	11	20	16	108	15	72	14	36	19
12:00	19	12	16	21	18	28	20	134	18	86	17	48	25
13:00	10	16	18	16	18	17	17	112	16	78	15	34	18
14:00	17	16	16	12	13	13	13	100	14	74	14	26	14
15:00	23	16	19	26	14	10	13	121	17	98	20	23	13
16:00	17	16	26	20	37	16	10	142	20	116	23	26	14
17:00	8	24	42	46	29	8	17	174	25	149	30	25	13
18:00	13	19	37	65	32	20	17	203	29	166	33	37	19
19:00	16	18	21	39	22	17	9	142	20	116	23	26	14
20:00	6	7	6	14	7	12	4	56	8	40	8	16	8
21:00	2	3	12	9	5	11	12	54	8	31	7	23	12
22:00	4	4	7	35	11	8	4	73	10	61	12	12	7
23:00	0	3	3	4	3	4	4	21	3	13	2	8	5
Total	173	255	308	410	306	248	191	1891	264	1452	289	439	236
% Heavy	0.58%	3.92%	1.95%	3.66%	2.94%	2.42%	2.09%	2.7	0%	2.8	32%	2.2	8%

Site McNamara St

Direction Eastbound

Eastbound

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Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	10:00	10:00	10:00	10:00	10:00	10:00	N/A	10:00	N/A	10:00	N/A	10:00
PM Peak	18:00	18:00	18:00	22:00	18:00	19:00	18:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	0	1	0	3	0	4	1	9	1	4	1	5	3
01:00	1	1	0	2	0	0	0	4	1	4	1	0	0
02:00	0	2	0	2	0	3	2	9	1	4	1	5	3
03:00	0	0	0	2	1	0	0	3	0	3	1	0	0
04:00	1	0	0	1	1	0	0	3	0	3	1	0	0
05:00	1	0	0	0	0	0	0	1	0	1	0	0	0
06:00	0	2	3	0	0	1	0	6	1	5	1	1	1
07:00	1	0	1	1	3	0	0	6	1	6	1	0	0
08:00	2	2	3	3	0	3	2	15	2	10	2	5	3
09:00	2	2	4	3	4	2	2	19	2	15	3	4	2
10:00	4	3	5	8	8	10	4	42	6	28	5	14	7
11:00	3	3	5	6	2	4	2	25	3	19	3	6	3
12:00	6	5	5	10	8	8	9	51	7	34	7	17	9
13:00	6	8	3	6	6	7	5	41	6	29	6	12	6
14:00	8	9	6	8	5	5	6	47	7	36	7	11	6
15:00	8	4	6	8	3	3	4	36	5	29	6	7	4
16:00	8	2	11	7	12	3	6	49	7	40	8	9	5
17:00	4	6	11	12	8	3	8	52	7	41	8	11	6
18:00	9	10	12	22	13	4	11	81	12	66	13	15	8
19:00	8	8	5	21	10	12	4	68	10	52	10	16	8
20:00	3	2	3	7	3	8	2	28	4	18	4	10	5
21:00	1	1	10	3	3	5	5	28	4	18	4	10	5
22:00	1	1	5	31	8	4	1	51	7	46	9	5	3
23:00	0	1	2	3	1	1	2	10	1	7	1	3	2
Total	77	73	100	169	99	90	76	684	95	518	103	166	89
% Heavy	0.00%	6.85%	1.00%	3.55%	3.03%	1.11%	1.32%	2.4	9%	2.9	0%	1.2	0%

Site McNamara St

Direction Westbound

Back to Site Summary Page

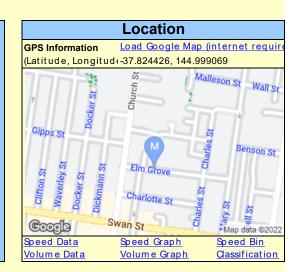
Monday Tuesday Wednesday Thursday Friday Saturday Sunday 7 days Weekday Weekend Day 14/03/2022 15/03/2022 16/03/2022 17/03/2022 18/03/2022 12/03/2022 13/03/2022 Total Average Total Total Average Date Average AM Peak N/A 11:00 08:00 09:00 08:00 08:00 11:00 11:00 08:00 N/A 08:00 N/A 11:00 PM Peak 15:00 17:00 17:00 18:00 16:00 12:00 13:00 N/A 17:00 N/A 17:00 N/A 12:00 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 Total 1.04% 2.75% 2.40% 3.73% 2.90% 3.16% 2.61% 2.82% 2.78% % Heavy 2.93%

TRANS TRAFFIC SURVEY

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	AUTOMATIC COU	NI SUMMA	ARY					
Elm G	rove	Location :	Outside Property 5	5				
Richm	ond	Start Date :	00:00 Tue 01/Mar	ch/2022				
MD000	QXA4	Finish Date :	00:00 Tue 08/Mar	ch/2022				
12814		Speed Zone :	40 km/h					
Vo Sor	ו Binh	Email:	binh@trafficsurv	ey.com.au				
Lat	37° 49' 27.93 South		Direction of Trave					
Long	144° 59' 56.65 East	Both directions	Westbound	Eastbound				
	Weekdays Average	691	363	328				
	7 Day Average	720	385	335				
AM	11:00	40	21	19				
РМ	18:00	71	40	31				
	85th Percentile	34.8	35.2	34.4				
	Average	29.8	30.2	29.5				
	Light Vehicles up to 5.5m	95.8%	5.8% 95.7% 95.3%					
	Richm MD000 12814 Vo Sor Lat Long	Elm Grove Richmond MD00QXA4 12814 Vo Son Binh Lat 37° 49' 27.93 South Long 144° 59' 56.65 East Weekdays Average 7 Day Average AM 11:00 PM 18:00 85th Percentile Average	Elm GroveLocation :RichmondStart Date :MD00QXA4Finish Date :12814Speed Zone :Vo Son BinhEmail:Lat37° 49' 27.93 SouthLong144° 59' 56.65 EastWeekdays Average6917 Day Average720AM11:0040PM18:007185th Percentile34.8Average29.8	Bit Direction of Trave MD00QXA4 Finish Date : 00:00 Tue 01/Marc 12814 Speed Zone : 40 km/h Vo Son Binh Email: binh@trafficsurve Lat 37° 49' 27.93 South Direction of Trave Long 144° 59' 56.65 East Both directions Westbound Weekdays Average 691 363 7 Day Average 720 385 AM 11:00 40 21 PM 18:00 71 40 Average 29.8 30.2				





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Elm Grove

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	11:00	10:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	17:00	17:00	18:00	18:00	19:00	12:00	13:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	6	2	0	4	1	7	15	35	4	13	2	22	12
01:00	4	2	2	2	2	9	13	34	5	12	2	22	12
02:00	0	1	1	2	2	9	20	35	5	6	1	29	15
03:00	1	1	0	1	0	7	13	23	3	3	0	20	10
04:00	1	0	1	0	1	3	10	16	2	3	0	13	7
05:00	2	4	6	7	5	1	9	34	5	24	4	10	6
06:00	15	23	14	13	11	10	10	96	13	76	15	20	11
07:00	26	36	23	40	32	18	10	185	27	157	32	28	14
08:00	28	37	47	44	32	25	11	224	31	188	37	36	19
09:00	26	36	29	40	21	54	23	229	31	152	30	77	40
10:00	41	23	54	37	36	55	30	276	39	191	38	85	43
11:00	33	41	39	51	37	68	41	310	43	201	40	109	57
12:00	33	35	53	44	56	109	58	388	55	221	44	167	85
13:00	37	38	41	47	53	105	78	399	55	216	42	183	93
14:00	28	39	36	52	54	94	61	364	51	209	43	155	79
15:00	41	60	50	58	58	64	66	397	57	267	54	130	67
16:00	39	50	49	45	53	56	46	338	47	236	46	102	52
17:00	53	64	61	71	77	39	63	428	61	326	66	102	53
18:00	53	59	78	93	75	55	52	465	66	358	71	107	55
19:00	17	27	56	51	78	66	23	318	45	229	45	89	46
20:00	20	27	45	26	41	31	21	211	30	159	31	52	28
21:00	16	17	20	27	35	11	16	142	20	115	23	27	15
22:00	13	10	17	19	22	23	11	115	16	81	16	34	18
23:00	8	6	6	7	21	15	6	69	9	48	9	21	11
Total	541	638	728	781	803	934	706	5131	720	3491	691	1640	848
% Heavy	4.62%	5.64%	4.67%	3.97%	3.86%	3.53%	4.53%	4.3	3%	4.5	50%	3.9	6%

Site Elm Grove

Direction Eastbound 🗸

<u>Back to Site Summary Page</u>

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	11:00	10:00	11:00	10:00	10:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	13:00	17:00	17:00	18:00	19:00	12:00	13:00	N/A	18:00	N/A	17:00	N/A	13:00
00:00	2	1	0	2	1	2	10	18	2	6	1	12	7
01:00	2	1	2	1	0	5	9	20	3	6	1	14	7
02:00	0	1	1	1	2	3	11	19	3	5	1	14	7
03:00	0	1	0	1	0	1	7	10	1	2	0	8	4
04:00	1	0	0	0	0	1	7	9	1	1	0	8	4
05:00	0	0	0	2	1	0	5	8	1	3	0	5	3
06:00	4	8	6	3	3	2	5	31	4	24	5	7	4
07:00	13	17	11	18	14	6	4	83	12	73	15	10	5
08:00	14	18	19	14	13	11	3	92	12	78	15	14	7
09:00	14	14	14	17	11	28	5	103	14	70	14	33	17
10:00	21	10	24	15	20	31	9	130	19	90	18	40	20
11:00	16	22	19	26	16	25	20	144	20	99	19	45	24
12:00	17	13	19	21	26	50	30	176	25	96	19	80	41
13:00	25	18	19	26	30	45	40	203	28	118	23	85	43
14:00	14	17	20	23	29	39	22	164	23	103	21	61	31
15:00	21	31	28	29	27	35	29	200	28	136	27	64	33
16:00	22	32	24	27	23	23	15	166	23	128	25	38	19
17:00	24	34	31	42	22	17	25	195	28	153	31	42	22
18:00	23	29	28	44	33	21	24	202	29	157	31	45	23
19:00	9	10	22	23	42	31	9	146	21	106	21	40	21
20:00	12	17	16	10	16	15	12	98	14	71	14	27	15
21:00	9	9	9	15	18	3	7	70	10	60	12	10	6
22:00	6	6	10	12	15	10	5	64	9	49	10	15	8
23:00	6	3	3	4	11	6	4	37	5	27	5	10	5
Total	275	312	325	376	373	410	317	2388	335	1661	328	727	376
% Heavy	4.73%	5.77%	5.23%	4.52%	4.29%	3.90%	3.79%	4.5	6%	4.8	8%	3.8	5%

Site Elm Grove

Direction Westbound

<u>Back to Site Summary Page</u>

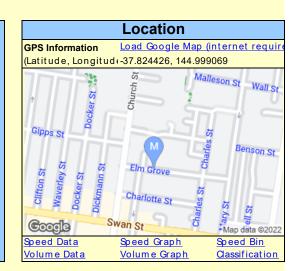
	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
_	Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
	AM Peak	10:00	09:00	10:00	08:00	11:00	11:00	10:00	N/A	11:00	N/A	08:00	N/A	11:00
	PM Peak	18:00	17:00	18:00	18:00	17:00	13:00	14:00	N/A	18:00	N/A	18:00	N/A	13:00
	00:00	4	1	0	2	0	5	5	17	2	7	1	10	5
	01:00	2	1	0	1	2	4	4	14	2	6	1	8	5
	02:00	0	0	0	1	0	6	9	16	2	1	0	15	8
	03:00	1	0	0	0	0	6	6	13	2	1	0	12	6
	04:00	0	0	1	0	1	2	3	7	1	2	0	5	3
	05:00	2	4	6	5	4	1	4	26	4	21	4	5	3
	06:00	11	15	8	10	8	8	5	65	9	52	10	13	7
	07:00	13	19	12	22	18	12	6	102	15	84	17	18	9
	08:00	14	19	28	30	19	14	8	132	19	110	22	22	12
	09:00	12	22	15	23	10	26	18	126	17	82	16	44	23
	10:00	20	13	30	22	16	24	21	146	20	101	20	45	23
	11:00	17	19	20	25	21	43	21	166	23	102	21	64	33
	12:00	16	22	34	23	30	59	28	212	30	125	25	87	44
	13:00	12	20	22	21	23	60	38	196	27	98	19	98	50
	14:00	14	22	16	29	25	55	39	200	28	106	22	94	48
	15:00	20	29	22	29	31	29	37	197	29	131	27	66	34
	16:00	17	18	25	18	30	33	31	172	24	108	21	64	33
	17:00	29	30	30	29	55	22	38	233	33	173	35	60	31
	18:00	30	30	50	49	42	34	28	263	37	201	40	62	32
	19:00	8	17	34	28	36	35	14	172	24	123	24	49	25
	20:00	8	10	29	16	25	16	9	113	16	88	17	25	13
	21:00	7	8	11	12	17	8	9	72	10	55	11	17	9
	22:00	7	4	7	7	7	13	6	51	7	32	6	19	10
	23:00	2	3	3	3	10	9	2	32	4	21	4	11	6
	Total	266	326	403	405	430	524	389	2743	385	1830	363	913	472
	% Heavy	4.51%	5.52%	4.22%	3.46%	3.49%	3.24%	5.14%	4.1	2%	4.1	15%	4.0	5%

TRANS TRAFFIC SURVEY

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		AUTOMATIC COU			
Street Name :	Elm G	rove	Location :	Outside Property 8	5
Suburb :	Richm	ond	Start Date :	00:00 Sat 12/Marc	:h/2022
Machine ID:	22669	AYR	Finish Date :	00:00 Sat 19/Marc	h/2022
Site ID:	12814		Speed Zone :	40 km/h	
Prepared By :	Vo Sor	ו Binh	Email:	binh@trafficsurv	ey.com.au
GPS information	Lat	37° 49' 27.93 South		Direction of Trave	
	Long	144° 59' 56.65 East	Both directions	Westbound	Eastbound
Traffic Volume :		Weekdays Average	717	393	324
(Vehicles/Day)		7 Day Average	675	370	305
Weekday	AM	11:00	37	19	18
Peak hour start	PM	18:00	83	50	33
Speeds :		85th Percentile	34.7	35.0	34.4
(Km/Hr)		Average	29.9	30.3	29.4
Classification % :		Light Vehicles up to 5.5m	96.8%	96.8%	96.8%
elacomodilon /01		Eight volitored up to 0.011	00.070	00.070	00.070





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Elm Grove

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	11:00	11:00	09:00	10:00	11:00	10:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	16:00	18:00	18:00	18:00	18:00	15:00	12:00	N/A	18:00	N/A	18:00	N/A	15:00
00:00	11	2	1	5	6	15	11	51	7	25	5	26	14
01:00	4	0	0	1	5	3	4	17	2	10	2	7	4
02:00	4	1	0	0	0	8	2	15	2	5	1	10	6
03:00	2	0	2	0	1	6	5	16	2	5	1	11	6
04:00	0	3	0	2	2	1	0	8	1	7	1	1	1
05:00	1	7	7	7	3	8	1	34	5	25	5	9	6
06:00	6	14	18	14	15	4	4	75	10	67	13	8	5
07:00	4	23	28	38	25	10	5	133	18	118	23	15	9
08:00	9	39	42	39	42	21	11	203	28	171	34	32	17
09:00	12	32	33	45	39	37	17	215	29	161	32	54	28
10:00	20	31	38	32	53	46	37	257	36	174	35	83	43
11:00	25	42	47	44	33	54	35	280	40	191	37	89	45
12:00	28	42	48	40	57	42	59	316	45	215	43	101	51
13:00	38	49	50	55	51	64	38	345	49	243	48	102	52
14:00	40	40	45	44	43	46	38	296	42	212	43	84	43
15:00	37	42	54	65	57	68	40	363	52	255	51	108	55
16:00	45	50	61	90	56	38	31	371	52	302	60	69	35
17:00	19	58	72	101	60	39	37	386	55	310	62	76	40
18:00	25	75	100	132	82	44	34	492	70	414	83	78	40
19:00	27	34	73	99	58	35	23	349	51	291	58	58	30
20:00	14	32	32	47	30	32	22	209	30	155	31	54	28
21:00	11	15	14	22	14	28	15	119	17	76	15	43	22
22:00	5	10	30	61	25	18	15	164	23	131	26	33	19
23:00	4	8	6	18	8	11	12	67	9	44	8	23	12
Total	391	649	801	1001	765	678	496	4781	675	3607	717	1174	611
% Heavy	1.53%	4.01%	3.25%	2.90%	4.05%	3.39%	2.82%	3.2	4%	3.2	27%	3.1	5%

Site Elm Grove

Direction Eastbound

Back to Site Summary Page

	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
	Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
	AM Peak	10:00	11:00	11:00	11:00	10:00	10:00	11:00	N/A	11:00	N/A	11:00	N/A	10:00
	PM Peak	16:00	18:00	18:00	18:00	12:00	13:00	12:00	N/A	18:00	N/A	18:00	N/A	13:00
	00:00	3	1	0	2	3	8	5	22	3	9	2	13	7
	01:00	2	0	0	1	1	2	2	8	1	4	1	4	2
	02:00	1	1	0	0	0	5	2	9	1	2	0	7	4
	03:00	1	0	2	0	1	4	3	11	1	4	1	7	4
	04:00	0	0	0	0	1	1	0	2	0	1	0	1	1
	05:00	0	1	1	1	1	3	0	7	1	4	1	3	2
_	06:00	1	8	6	8	4	1	1	29	4	27	5	2	1
	07:00	1	8	12	12	9	1	2	45	6	42	8	3	2
	08:00	3	15	20	11	11	8	5	73	10	60	12	13	7
	09:00	8	8	12	17	20	12	7	84	11	65	13	19	10
	10:00	11	11	16	14	24	21	11	108	15	76	15	32	17
	11:00	8	19	31	21	15	18	16	128	19	94	18	34	17
	12:00	11	20	21	13	35	16	22	138	20	100	20	38	19
	13:00	17	27	21	26	27	36	15	169	24	118	23	51	26
	14:00	16	23	26	21	24	23	22	155	22	110	22	45	23
	15:00	16	23	29	29	33	32	18	180	26	130	26	50	26
	16:00	20	26	26	39	27	14	17	169	24	138	27	31	16
	17:00	10	29	26	40	25	21	19	170	24	130	26	40	21
	18:00	11	35	34	51	32	16	13	192	27	163	33	29	15
	19:00	10	16	23	40	22	13	10	134	20	111	22	23	12
	20:00	10	17	14	22	15	13	12	103	15	78	16	25	13
	21:00	7	5	11	11	8	15	8	65	9	42	8	23	12
	22:00	4	5	24	50	20	8	10	121	17	103	20	18	10
	23:00	2	5	4	11	5	5	8	40	5	27	5	13	7
	Total	173	303	359	440	363	296	228	2162	305	1638	324	524	274
	% Heavy	2.31%	2.64%	3.62%	3.41%	5.51%	2.36%	2.19%	3.3	3%	3.6	6%	2.2	9%

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Site Elm Grove

Direction Westbound

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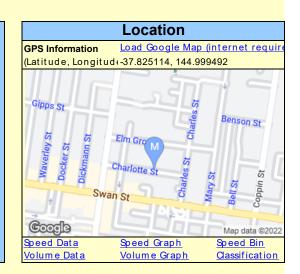
	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 da	ays	Wee	kday	Wee	kend
	Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
1	AM Peak	11:00	08:00	08:00	08:00	08:00	11:00	10:00	N/A	10:00	N/A	08:00	N/A	11:00
F	PM Peak	16:00	18:00	18:00	18:00	18:00	15:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
	00:00	8	1	1	3	3	7	6	29	4	16	3	13	7
	01:00	2	0	0	0	4	1	2	9	1	6	1	3	2
	02:00	3	0	0	0	0	3	0	6	1	3	1	3	2
	03:00	1	0	0	0	0	2	2	5	1	1	0	4	2
	04:00	0	3	0	2	1	0	0	6	1	6	1	0	0
	05:00	1	6	6	6	2	5	1	27	4	21	4	6	4
	06:00	5	6	12	6	11	3	3	46	6	40	8	6	4
	07:00	3	15	16	26	16	9	3	88	12	76	15	12	7
	08:00	6	24	22	28	31	13	6	130	18	111	22	19	10
	09:00	4	24	21	28	19	25	10	131	18	96	19	35	18
	10:00	9	20	22	18	29	25	26	149	21	98	20	51	26
	11:00	17	23	16	23	18	36	19	152	21	97	19	55	28
	12:00	17	22	27	27	22	26	37	178	25	115	23	63	32
	13:00	21	22	29	29	24	28	23	176	25	125	25	51	26
	14:00	24	17	19	23	19	23	16	141	20	102	21	39	20
	15:00	21	19	25	36	24	36	22	183	26	125	25	58	29
	16:00	25	24	35	51	29	24	14	202	28	164	33	38	19
	17:00	9	29	46	61	35	18	18	216	31	180	36	36	19
	18:00	14	40	66	81	50	28	21	300	43	251	50	49	25
	19:00	17	18	50	59	36	22	13	215	31	180	36	35	18
	20:00	4	15	18	25	15	19	10	106	15	77	15	29	15
	21:00	4	10	3	11	6	13	7	54	8	34	7	20	10
	22:00	1	5	6	11	5	10	5	43	6	28	6	15	9
	23:00	2	3	2	7	3	6	4	27	4	17	3	10	5
	Total	218	346	442	561	402	382	268	2619	370	1969	393	650	337
0	% Heavy	0.92%	5.20%	2.94%	2.50%	2.74%	4.19%	3.36%	3.1	7%	2.9	5%	3.8	5%

TRANS TRAFFIC SURVEY

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		AUTOMATIC COU	NT SUMMA	ARY	
Street Name :	Charlo	tte St	Location :	Outside Property 2	23
Suburb :	Richm	ond	Start Date :	00:00 Tue 01/Mar	ch/2022
Machine ID:	MD000	QXA4	Finish Date :	00:00 Tue 08/Mar	ch/2022
Site ID:	12815		Speed Zone :	40 km/h	
Prepared By :	Vo Sor	ו Binh	Email:	binh@trafficsurv	ey.com.au
GPS information	Lat	37° 49' 30.41 South		Direction of Trave	el
	Long	144° 59' 58.17 East	Both directions	Westbound	Eastbound
Traffic Volume :		Weekdays Average	615	287	328
(Vehicles/Day)		7 Day Average	610	291	319
Weekday	AM	11:00	32	14	18
Peak hour start	PM	18:00	82	44	38
Speeds :		85th Percentile	36.3	35.4	37.5
(Km/Hr)		Average	30.3	29.5	31.2
Classification % :		Light Vehicles up to 5.5m	97.9%	98.3%	97.8%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement – Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charlotte St

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	08:00	11:00	11:00	08:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	17:00	18:00	18:00	19:00	19:00	16:00	N/A	18:00	N/A	18:00	N/A	13:00
00:00	0	0	0	3	1	12	15	31	4	4	0	27	14
01:00	4	2	1	1	4	10	6	28	4	12	2	16	8
02:00	0	0	1	0	0	8	13	22	3	1	0	21	11
03:00	3	0	1	0	0	6	3	13	1	4	1	9	5
04:00	0	0	1	0	0	2	3	6	0	1	0	5	3
05:00	5	6	10	11	4	3	5	44	6	36	7	8	5
06:00	19	14	19	12	12	5	1	82	11	76	16	6	3
07:00	21	21	29	30	16	7	7	131	18	117	22	14	8
08:00	28	26	26	24	37	10	8	159	22	141	28	18	9
09:00	16	22	24	31	26	37	9	165	24	119	23	46	24
10:00	18	24	29	34	23	51	12	191	27	128	26	63	33
11:00	31	19	36	45	31	66	29	257	36	162	32	95	49
12:00	34	29	40	33	44	59	31	270	38	180	36	90	45
13:00	34	34	32	38	40	68	38	284	40	178	35	106	54
14:00	26	19	34	25	35	50	38	227	32	139	27	88	44
15:00	40	40	42	33	53	40	39	287	41	208	42	79	41
16:00	35	33	39	24	50	43	50	274	38	181	36	93	47
17:00	55	66	51	47	62	51	35	367	52	281	56	86	44
18:00	82	56	90	100	87	63	18	496	71	415	82	81	41
19:00	68	47	78	63	92	78	21	447	64	348	69	99	50
20:00	33	19	41	32	46	49	13	233	33	171	33	62	32
21:00	22	12	10	19	54	30	8	155	22	117	24	38	19
22:00	12	4	9	11	25	26	7	94	14	61	12	33	17
23:00	6	1	5	4	18	24	3	61	9	34	6	27	14
Total	592	494	648	620	760	798	412	4324	610	3114	615	1210	620
% Heavy	1.69%	2.43%	3.24%	2.26%	2.50%	1.50%	0.24%	2.0	6%	2.4	4%	1.0	7%

Site Charlotte St

Direction Eastbound

<u>Back to Site Summary Page</u>

	Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
	Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
A	M Peak	11:00	08:00	11:00	11:00	08:00	11:00	11:00	N/A	11:00	N/A	08:00	N/A	11:00
PN	M Peak	18:00	17:00	18:00	18:00	19:00	13:00	13:00	N/A	18:00	N/A	18:00	N/A	13:00
0	00:00	0	0	0	2	0	8	5	15	2	2	0	13	7
0	01:00	4	2	0	1	3	7	3	20	3	10	2	10	5
0	02:00	0	0	1	0	0	5	8	14	2	1	0	13	7
0	03:00	3	0	0	0	0	4	3	10	1	3	1	7	4
0	04:00	0	0	1	0	0	0	2	3	0	1	0	2	1
0	05:00	4	4	7	6	2	2	2	27	4	23	5	4	3
C	06:00	13	8	9	5	8	1	1	45	6	43	9	2	1
0	07:00	12	12	17	18	10	4	5	78	11	69	13	9	5
0	08:00	16	17	16	18	23	3	3	96	13	90	18	6	3
0	09:00	5	10	11	18	11	15	5	75	11	55	11	20	11
1	10:00	12	13	15	21	10	21	6	98	14	71	15	27	14
1	11:00	18	6	20	28	20	29	15	136	19	92	18	44	23
1	12:00	20	14	26	21	24	32	12	149	21	105	21	44	22
1	13:00	19	19	16	22	22	39	24	161	23	98	19	63	32
1	14:00	15	12	20	17	16	20	20	120	17	80	16	40	20
1	15:00	24	24	27	16	32	21	19	163	23	123	25	40	21
1	16:00	15	18	17	14	15	21	23	123	17	79	16	44	22
1	17:00	26	38	24	18	27	22	15	170	24	133	27	37	19
1	18:00	38	31	36	52	34	30	9	230	33	191	38	39	20
1	19:00	33	23	35	29	50	33	13	216	31	170	34	46	23
2	20:00	18	9	15	19	32	23	8	124	18	93	18	31	16
2	21:00	11	6	4	10	28	18	6	83	12	59	12	24	12
2	22:00	7	1	7	8	13	18	6	60	9	36	7	24	12
2	23:00	3	1	2	0	11	12	3	32	5	17	3	15	8
	Total	316	268	326	343	391	388	216	2248	319	1644	328	604	311
%	Heavy	2.53%	1.87%	3.99%	1.46%	2.56%	2.32%	0.46%	2.2	7%	2.4	9%	1.6	6%

Site Charlotte St

Direction Westbound

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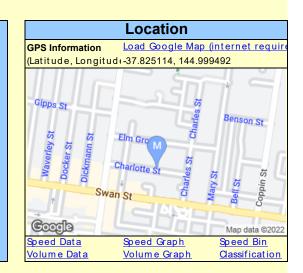
Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Dat	e 7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM P	ak 11:00	11:00	11:00	11:00	09:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM P	ak 18:00	17:00	18:00	18:00	18:00	19:00	16:00	N/A	18:00	N/A	18:00	N/A	19:00
00:0	0 0	0	0	1	1	4	10	16	2	2	0	14	7
01:0	0 0	0	1	0	1	3	3	8	1	2	0	6	3
02:0	0 0	0	0	0	0	3	5	8	1	0	0	8	4
03:0	0 0	0	1	0	0	2	0	3	0	1	0	2	1
04:0	0 0	0	0	0	0	2	1	3	0	0	0	3	2
05:0	0 1	2	3	5	2	1	3	17	2	13	2	4	2
06:0	0 6	6	10	7	4	4	0	37	5	33	7	4	2
07:0	0 9	9	12	12	6	3	2	53	7	48	9	5	3
08:0	0 12	9	10	6	14	7	5	63	9	51	10	12	6
09:0	0 11	12	13	13	15	22	4	90	13	64	12	26	13
10:0	0 6	11	14	13	13	30	6	93	13	57	11	36	19
11:0	0 13	13	16	17	11	37	14	121	17	70	14	51	26
12:0	0 14	15	14	12	20	27	19	121	17	75	15	46	23
13:0	0 15	15	16	16	18	29	14	123	17	80	16	43	22
14:0	0 11	7	14	8	19	30	18	107	15	59	11	48	24
15:0	0 16	16	15	17	21	19	20	124	18	85	17	39	20
16:0		15	22	10	35	22	27	151	21	102	20	49	25
17:0		28	27	29	35	29	20	197	28	148	29	49	25
18:0		25	54	48	53	33	9	266	38	224	44	42	21
19:0		24	43	34	42	45	8	231	33	178	35	53	27
20:0		10	26	13	14	26	5	109	15	78	15	31	16
21:0		6	6	9	26	12	2	72	10	58	12	14	7
22:0		3	2	3	12	8	1	34	5	25	5	9	5
23:0	0 3	0	3	4	7	12	0	29	4	17	3	12	6
Tota	-	226	322	277	369	410	196	2076	291	1470	287	606	309
% He	avy 0.72%	3.10%	2.48%	3.25%	2.44%	0.73%	0.00%	1.8	3%	2.3	88%	0.5	0%

TRANS TRAFFIC SURVEY

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		AUTOMATIC COU	NI SUMMA						
Street Name :	Charlo	tte St	Location :	Outside Property 23					
Suburb :	Richm	ond	Start Date :	00:00 Sat 12/Marc	00:00 Sat 12/March/2022				
Machine ID:	MD722	2R32	Finish Date :	00:00 Sat 19/Marc	:h/2022				
Site ID:	12815		Speed Zone :	40 km/h					
Prepared By :	Vo Sor	ו Binh	Email:	binh@trafficsurv	<u>ey.com.au</u>				
GPS information	Lat	37° 49' 30.41 South		Direction of Travel					
	Long	144° 59' 58.17 East	Both directions	Westbound	Eastbound				
Traffic Volume :		Weekdays Average	563	254	309				
(Vehicles/Day)		7 Day Average	540	245	295				
Weekday	AM	11:00	30	12	18				
Peak hour start	PM	18:00	82	43	39				
Speeds :		85th Percentile	36.3	35.3	37.2				
(Km/Hr)		Average	31.0	30.2	31.3				
Classification % :		Light Vehicles up to 5.5m	97.2%	97.6%	96.9%				





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site Charlotte St

Direction Both directions

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	09:00	11:00	10:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	18:00	18:00	19:00	18:00	19:00	12:00	N/A	18:00	N/A	18:00	N/A	18:00
00:00	3	1	0	0	2	11	11	28	4	6	1	22	12
01:00	6	1	1	1	4	10	9	32	4	13	3	19	10
02:00	1	0	0	0	4	11	8	24	4	5	1	19	10
03:00	1	0	0	0	1	6	7	15	3	2	0	13	7
04:00	1	0	0	1	1	6	3	12	2	3	0	9	5
05:00	4	4	4	7	2	5	5	31	4	21	4	10	5
06:00	0	6	12	9	8	6	3	44	7	35	7	9	5
07:00	4	26	25	18	20	9	6	108	15	93	18	15	8
08:00	8	16	26	26	19	14	8	117	16	95	18	22	12
09:00	12	23	23	31	24	31	18	162	23	113	22	49	25
10:00	11	23	44	30	31	27	20	186	27	139	27	47	24
11:00	11	33	40	37	35	34	25	215	31	156	30	59	30
12:00	31	27	40	36	43	36	43	256	37	177	35	79	40
13:00	29	53	49	40	29	31	25	256	37	200	40	56	29
14:00	28	19	33	35	31	28	24	198	28	146	29	52	26
15:00	19	33	39	41	32	28	34	226	31	164	32	62	32
16:00	26	31	41	46	52	21	35	252	36	196	39	56	29
17:00	24	39	64	105	56	23	19	330	46	288	57	42	22
18:00	32	68	117	112	80	44	35	488	69	409	82	79	41
19:00	25	30	78	115	59	54	23	384	54	307	61	77	40
20:00	13	31	18	31	22	35	26	176	24	115	22	61	32
21:00	13	12	18	22	16	22	16	119	17	81	16	38	21
22:00	3	7	22	31	15	19	9	106	16	78	16	28	15
23:00	5	2	1	6	3	12	6	35	5	17	3	18	10
Total	310	485	695	780	589	523	418	3800	540	2859	563	941	490
% Heavy	3.23%	3.71%	3.60%	2.95%	1.70%	0.76%	3.35%	2.7	4%	3.0	1%	1.9	1%

Site Charlotte St

Direction Eastbound

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	10:00	11:00	11:00	11:00	11:00	11:00	11:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	18:00	18:00	19:00	18:00	19:00	18:00	N/A	18:00	N/A	18:00	N/A	18:00
00:00	2	1	0	0	2	8	7	20	3	5	1	15	8
01:00	5	1	0	1	2	7	6	22	3	9	2	13	7
02:00	1	0	0	0	1	7	4	13	2	2	0	11	6
03:00	1	0	0	0	1	4	5	11	2	2	0	9	5
04:00	1	0	0	1	1	4	1	8	1	3	0	5	3
05:00	3	3	3	5	1	3	3	21	3	15	3	6	3
06:00	0	5	10	3	7	3	2	30	5	25	5	5	3
07:00	3	16	13	11	12	5	3	63	9	55	11	8	4
08:00	5	10	18	20	12	8	3	76	10	65	12	11	6
09:00	6	13	9	15	12	17	8	80	12	55	11	25	13
10:00	8	13	24	17	14	19	10	105	15	76	15	29	15
11:00	6	22	25	22	20	25	13	133	19	95	18	38	19
12:00	20	16	24	21	22	17	17	137	20	103	21	34	17
13:00	14	29	28	20	20	15	14	140	20	111	22	29	15
14:00	15	12	13	22	22	15	11	110	16	84	17	26	13
15:00	12	23	23	25	20	16	15	134	18	103	20	31	16
16:00	12	16	21	20	29	12	15	125	18	98	20	27	14
17:00	13	17	29	39	24	11	11	144	20	122	24	22	12
18:00	22	38	58	41	39	17	23	238	34	198	39	40	21
19:00	15	18	43	45	29	29	12	191	27	150	30	41	21
20:00	5	20	10	19	13	18	17	102	14	67	13	35	18
21:00	9	6	10	16	10	12	9	72	10	51	10	21	12
22:00	1	4	19	27	12	9	2	74	11	63	13	11	6
23:00	4	1	1	2	2	6	5	21	3	10	2	11	6
Total	183	284	381	392	327	287	216	2070	295	1567	309	503	263
% Heavy	3.83%	3.17%	3.67%	4.34%	1.83%	0.70%	3.24%	3.0	0%	3.3	88%	1.7	9%

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Site Charlotte St

Direction Westbound

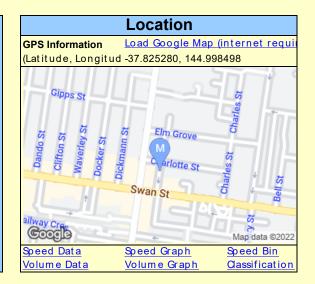
<u>Back to Site Summary Page</u>

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 da	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	09:00	11:00	10:00	09:00	10:00	09:00	11:00	N/A	10:00	N/A	10:00	N/A	09:00
PM Peak	13:00	18:00	18:00	18:00	18:00	18:00	12:00	N/A	18:00	N/A	18:00	N/A	12:00
00:00	1	0	0	0	0	3	4	8	1	1	0	7	4
01:00	1	0	1	0	2	3	3	10	1	4	1	6	3
02:00	0	0	0	0	3	4	4	11	2	3	1	8	4
03:00	0	0	0	0	0	2	2	4	1	0	0	4	2
04:00	0	0	0	0	0	2	2	4	1	0	0	4	2
05:00	1	1	1	2	1	2	2	10	1	6	1	4	2
06:00	0	1	2	6	1	3	1	14	2	10	2	4	2
07:00	1	10	12	7	8	4	3	45	6	38	7	7	4
08:00	3	6	8	6	7	6	5	41	6	30	6	11	6
09:00	6	10	14	16	12	14	10	82	11	58	11	24	12
10:00	3	10	20	13	17	8	10	81	12	63	12	18	9
11:00	5	11	15	15	15	9	12	82	12	61	12	21	11
12:00	11	11	16	15	21	19	26	119	17	74	14	45	23
13:00	15	24	21	20	9	16	11	116	17	89	18	27	14
14:00	13	7	20	13	9	13	13	88	12	62	12	26	13
15:00	7	10	16	16	12	12	19	92	13	61	12	31	16
16:00	14	15	20	26	23	9	20	127	18	98	19	29	15
17:00	11	22	35	66	32	12	8	186	26	166	33	20	10
18:00	10	30	59	71	41	27	12	250	35	211	43	39	20
19:00	10	12	35	70	30	25	11	193	27	157	31	36	19
20:00	8	11	8	12	9	17	9	74	10	48	9	26	14
21:00	4	6	8	6	6	10	7	47	7	30	6	17	9
22:00	2	3	3	4	3	10	7	32	5	15	3	17	9
23:00	1	1	0	4	1	6	1	14	2	7	1	7	4
Total	127	201	314	388	262	236	202	1730	245	1292	254	438	227
% Heavy	2.36%	4.48%	3.50%	1.55%	1.53%	0.85%	3.47%	2.4	3%	2.5	5%	2.0	5%

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY	
Street Name :	St Cr	ispin St	Location :	South of Charlo	otte St
Suburb :	Richr	nond	Start Date :	00:00 Tue 01/M	larch/2022
Machine ID:	ME14	IFXYE	Finish Date :	00:00 Tue 08/M	larch/2022
Site ID:	1281	6	Speed Zone :	50 km/h	
Prepared By :	Vo So	on Binh	Email:	binh@trafficsu	irvey.com.au
GPS information	Lat	37° 49' 31.01 South		Direction of Tra	avel
	Long	144° 59' 54.59 East	Both directions	Northbound	Southbound
Traffic Volume :		Weekdays Average	107	41	66
(Vehicles/Day)		7 Day Average	104	39	65
Weekday	AM	11:00	7	3	4
Peak hour starts	PM	18:00	18	8	10
Speeds :		85th Percentile	21.3	20.1	22.4
(Km/Hr)		Average	18.9	17.8	19.7
Classification % :		Light Vehicles up to 5.5m	97.2%	97.6%	97.0%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site St Crispin St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	08:00	06:00	10:00	11:00	11:00	10:00	00:00	N/A	11:00	N/A	11:00	N/A	00:00
PM Peak	18:00	18:00	19:00	18:00	18:00	19:00	12:00	N/A	18:00	N/A	18:00	N/A	19:00
00:00	0	0	0	0	0	3	4	7	1	0	0	7	4
01:00	0	0	0	0	0	0	2	2	0	0	0	2	2
02:00	1	0	0	0	1	2	0	4	0	2	0	2	2
03:00	0	0	0	1	0	0	0	1	0	1	0	0	0
04:00	0	0	1	0	1	1	0	3	0	2	0	1	1
05:00	1	1	2	1	0	0	0	5	1	5	1	0	0
06:00	4	3	0	0	1	0	0	8	1	8	1	0	0
07:00	3	2	3	2	2	2	0	14	2	12	2	2	2
08:00	6	2	3	3	6	2	2	24	4	20	4	4	3
09:00	3	2	1	5	2	4	1	18	2	13	2	5	3
10:00	2	1	6	8	8	6	0	31	4	25	5	6	3
11:00	6	3	3	10	12	5	2	41	6	34	7	7	4
12:00	3	5	5	4	10	4	8	39	5	27	6	12	6
13:00	1	3	6	5	8	5	2	30	3	23	4	7	4
14:00	6	2	6	6	6	7	8	41	6	26	5	15	8
15:00	4	7	2	11	13	9	7	53	7	37	7	16	8
16:00	6	7	2	6	7	8	7	43	6	28	5	15	8
17:00	5	3	4	14	9	4	4	43	6	35	7	8	4
18:00	18	8	18	21	27	19	4	115	16	92	18	23	12
19:00	15	8	23	18	25	24	7	120	16	89	16	31	16
20:00	5	6	8	4	17	13	3	56	8	40	8	16	9
21:00	2	3	2	2	7	8	3	27	4	16	3	11	6
22:00	0	3	2	1	7	7	2	22	3	13	3	9	5
23:00	1	1	1	5	6	7	0	21	3	14	3	7	4
Total	92	70	98	127	175	140	66	768	104	562	107	206	114
% Heavy	5.43%	1.43%	5.10%	5.51%	8.00%	0.00%	1.52%	4.3	0%	5.6	69%	0.4	9%

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Site St Crispin St

Direction Northbound

<u>Back to Site Summary Page</u>

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	06:00	11:00	10:00	11:00	11:00	10:00	00:00	N/A	11:00	N/A	11:00	N/A	11:00
PM Peak	18:00	18:00	19:00	17:00	18:00	19:00	12:00	N/A	19:00	N/A	18:00	N/A	19:00
00:00	0	0	0	0	0	0	1	1	0	0	0	1	1
01:00	0	0	0	0	0	0	1	1	0	0	0	1	1
02:00	0	0	0	0	0	1	0	1	0	0	0	1	1
03:00	0	0	0	1	0	0	0	1	0	1	0	0	0
04:00	0	0	1	0	1	1	0	3	0	2	0	1	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	0	0	0	0	0	0	2	0	2	0	0	0
07:00	0	0	0	1	0	1	0	2	0	1	0	1	1
08:00	2	1	0	0	1	0	1	5	1	4	1	1	1
09:00	0	0	0	0	1	1	0	2	0	1	0	1	1
10:00	0	0	4	2	3	2	0	11	1	9	2	2	1
11:00	2	2	1	6	5	2	1	19	3	16	3	3	2
12:00	0	3	2	0	4	1	5	15	2	9	2	6	3
13:00	0	0	2	3	3	3	1	12	1	8	1	4	2
14:00	4	0	0	3	2	1	2	12	2	9	2	3	2
15:00	2	2	0	4	2	3	3	16	2	10	2	6	3
16:00	4	1	1	3	1	1	3	14	2	10	2	4	2
17:00	0	1	1	8	3	1	1	15	2	13	3	2	1
18:00	12	4	6	5	13	11	0	51	7	40	8	11	6
19:00	11	2	14	7	13	14	4	65	9	47	8	18	9
20:00	0	1	4	3	11	7	0	26	4	19	4	7	4
21:00	0	1	1	0	5	2	0	9	1	7	1	2	1
22:00	0	0	1	1	3	2	1	8	1	5	1	3	2
23:00	0	0	0	0	4	3	0	7	1	4	1	3	2
Total	39	18	38	47	75	57	24	298	39	217	41	81	47
% Heavy	5.13%	0.00%	10.53%	10.64%	4.00%	0.00%	0.00%	4.7	0%	6.4	15%	0.0	0%

Site St Crispin St

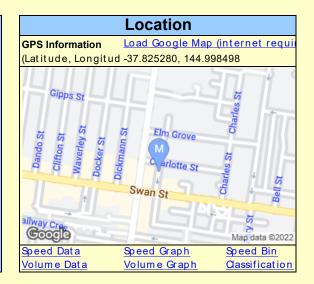
Direction Southbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	7/03/2022	1/03/2022	2/03/2022	3/03/2022	4/03/2022	5/03/2022	6/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	08:00	06:00	07:00	10:00	11:00	10:00	00:00	N/A	08:00	N/A	11:00	N/A	00:00
PM Peak	18:00	16:00	18:00	18:00	18:00	19:00	14:00	N/A	18:00	N/A	18:00	N/A	19:00
00:00	0	0	0	0	0	3	3	6	1	0	0	6	3
01:00	0	0	0	0	0	0	1	1	0	0	0	1	1
02:00	1	0	0	0	1	1	0	3	0	2	0	1	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	1	2	1	0	0	0	5	1	5	1	0	0
06:00	2	3	0	0	1	0	0	6	1	6	1	0	0
07:00	3	2	3	1	2	1	0	12	2	11	2	1	1
08:00	4	1	3	3	5	2	1	19	3	16	3	3	2
09:00	3	2	1	5	1	3	1	16	2	12	2	4	2
10:00	2	1	2	6	5	4	0	20	3	16	3	4	2
11:00	4	1	2	4	7	3	1	22	3	18	4	4	2
12:00	3	2	3	4	6	3	3	24	3	18	4	6	3
13:00	1	3	4	2	5	2	1	18	2	15	3	3	2
14:00	2	2	6	3	4	6	6	29	4	17	3	12	6
15:00	2	5	2	7	11	6	4	37	5	27	5	10	5
16:00	2	6	1	3	6	7	4	29	4	18	3	11	6
17:00	5	2	3	6	6	3	3	28	4	22	4	6	3
18:00	6	4	12	16	14	8	4	64	9	52	10	12	6
19:00	4	6	9	11	12	10	3	55	7	42	8	13	7
20:00	5	5	4	1	6	6	3	30	4	21	4	9	5
21:00	2	2	1	2	2	6	3	18	3	9	2	9	5
22:00	0	3	1	0	4	5	1	14	2	8	2	6	3
23:00	1	1	1	5	2	4	0	14	2	10	2	4	2
Total	53	52	60	80	100	83	42	470	65	345	66	125	67
% Heavy	5.66%	1.92%	1.67%	2.50%	11.00%	0.00%	2.38%	4.0	4%	5.2	22%	0.8	0%

TRANS TRAFFIC SURVEY

T. 1300 82 88 82 - F. 1300 83 88 83 - E. traffic@trafficsurvey.com.au - W. www.trafficsurvey.com.au

		AUTOMATIC COUI	NT SUMMA	RY	
Street Name :	St Cr	ispin St	Location :	South of Charlo	otte St
Suburb :	Richr	nond	Start Date :	00:00 Sat 12/M	arch/2022
Machine ID:	ME14	IFXYE	Finish Date :	00:00 Sat 19/M	arch/2022
Site ID:	1281	6	Speed Zone :	50 km/h	
Prepared By :	Vo So	on Binh	Email:	binh@traffics	urvey.com.au
GPS information	Lat	37° 49' 31.01 South		Direction of Tra	avel
	Long	144° 59' 54.59 East	Both directions	Northbound	Southbound
Traffic Volume :		Weekdays Average	122	80	42
(Vehicles/Day)		7 Day Average	131	89	42
Weekday	AM	10:00	4	2	2
Peak hour starts	PM	18:00	21	14	7
Speeds :		85th Percentile	22.4	22.0	23.9
(Km/Hr)		Average	20.0	20.0	20.8
Classification % :		Light Vehicles up to 5.5m	94.7%	94.4%	95.3%





QUALITY ASSURED COMPANY BY ISO 9001:2015 OH&S SYSTEM CERTIFIED TO ISO 4801:2001 ENVIRONMENT MANAGEMENT SYSTEM CERTIFIED TO ISO14001:2015

Status of movement - Covid 19

"Traffic behaviour is not the same as pre-pandemic (traditional morning/afternoon peak is much less pronounced and school start/finish times are much more pronounced), the current patterns are close enough to what probably is going to be a 'COVID normal' situation for at least the next year or two. Workplaces are currently not all yet open. These results should be used for indicative assessment only."

Site St Crispin St

Direction Both directions

Back to Site Summary Page

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	00:00	10:00	11:00	03:00	11:00	10:00	00:00	N/A	11:00	N/A	10:00	N/A	00:00
PM Peak	20:00	18:00	18:00	19:00	18:00	19:00	15:00	N/A	19:00	N/A	18:00	N/A	19:00
00:00	3	0	0	0	0	3	12	18	3	3	0	15	8
01:00	1	0	0	0	0	0	0	1	0	1	0	0	0
02:00	1	0	0	0	0	0	0	1	0	1	0	0	0
03:00	0	0	0	3	3	0	0	6	1	6	1	0	0
04:00	0	0	0	0	0	2	0	2	0	0	0	2	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	1	0	0	0	2	0	2	0	0	0
07:00	0	3	0	2	3	0	0	8	1	8	2	0	0
08:00	2	5	1	3	2	2	0	15	3	13	2	2	1
09:00	1	0	1	3	5	2	0	12	2	10	2	2	1
10:00	1	6	6	0	9	9	1	32	4	22	4	10	6
11:00	3	0	8	1	10	9	6	37	5	22	4	15	8
12:00	1	6	4	12	12	8	6	49	7	35	6	14	7
13:00	4	15	9	6	12	3	4	53	7	46	9	7	4
14:00	6	6	11	10	10	7	8	58	8	43	8	15	8
15:00	6	9	7	4	10	7	19	62	9	36	7	26	13
16:00	6	11	10	14	11	5	3	60	8	52	11	8	5
17:00	8	10	6	14	9	16	7	70	10	47	9	23	13
18:00	6	25	30	23	19	6	14	123	17	103	21	20	11
19:00	5	9	21	29	14	38	18	134	19	78	15	56	28
20:00	10	0	7	23	9	28	9	86	12	49	10	37	19
21:00	5	8	5	7	6	16	14	61	9	31	6	30	16
22:00	0	9	2	10	2	5	5	33	5	23	5	10	5
23:00	0	2	0	1	0	7	0	10	1	3	0	7	4
Total	69	124	129	166	146	173	126	933	131	634	122	299	158
% Heavy	2.90%	2.42%	5.43%	6.02%	11.64%	5.78%	0.79%	5.3	6%	6.1	5%	3.6	8%

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Site St Crispin St

Direction Northbound

<u>Back to Site Summary Page</u>

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	00:00	08:00	11:00	03:00	11:00	11:00	00:00	N/A	11:00	N/A	10:00	N/A	00:00
PM Peak	20:00	18:00	18:00	19:00	18:00	19:00	15:00	N/A	19:00	N/A	18:00	N/A	19:00
00:00	2	0	0	0	0	2	10	14	2	2	0	12	6
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	3	3	0	0	6	1	6	1	0	0
04:00	0	0	0	0	0	2	0	2	0	0	0	2	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	2	2	0	0	4	1	4	1	0	0
08:00	0	2	0	0	0	2	0	4	1	2	0	2	1
09:00	0	0	0	2	2	0	0	4	1	4	1	0	0
10:00	0	2	2	0	5	5	0	14	2	9	2	5	3
11:00	0	0	5	0	7	7	2	21	3	12	2	9	5
12:00	0	2	2	5	7	5	5	26	4	16	3	10	5
13:00	4	13	7	5	7	2	2	40	5	36	7	4	2
14:00	2	5	8	5	8	7	5	40	6	28	5	12	6
15:00	2	5	5	2	8	7	13	42	6	22	5	20	10
16:00	0	7	7	10	8	5	2	39	5	32	7	7	4
17:00	4	5	5	7	5	13	5	44	6	26	5	18	10
18:00	2	16	23	15	13	2	10	81	11	69	14	12	6
19:00	4	7	13	23	10	31	13	101	14	57	11	44	22
20:00	8	0	2	18	7	21	7	63	9	35	7	28	14
21:00	2	7	5	5	5	13	10	47	7	24	5	23	12
22:00	0	7	2	8	2	5	5	29	4	19	4	10	5
23:00	0	2	0	0	0	5	0	7	1	2	0	5	3
Total	30	80	86	110	99	134	89	628	89	405	80	223	115
% Heavy	6.67%	3.75%	3.49%	5.45%	12.12%	4.48%	0.00%	5.1	0%	6.4	2%	2.6	9%

Site St Crispin St

Direction Southbound

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	7 d	ays	Wee	kday	Wee	kend
Date	14/03/2022	15/03/2022	16/03/2022	17/03/2022	18/03/2022	12/03/2022	13/03/2022	Total	Average	Total	Average	Total	Average
AM Peak	11:00	10:00	10:00	08:00	10:00	10:00	11:00	N/A	08:00	N/A	08:00	N/A	10:00
PM Peak	16:00	18:00	19:00	18:00	18:00	19:00	15:00	N/A	18:00	N/A	18:00	N/A	19:00
00:00	1	0	0	0	0	1	2	4	1	1	0	3	2
01:00	1	0	0	0	0	0	0	1	0	1	0	0	0
02:00	1	0	0	0	0	0	0	1	0	1	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	1	0	0	0	2	0	2	0	0	0
07:00	0	3	0	0	1	0	0	4	0	4	1	0	0
08:00	2	3	1	3	2	0	0	11	2	11	2	0	0
09:00	1	0	1	1	3	2	0	8	1	6	1	2	1
10:00	1	4	4	0	4	4	1	18	2	13	2	5	3
11:00	3	0	3	1	3	2	4	16	2	10	2	6	3
12:00	1	4	2	7	5	3	1	23	3	19	3	4	2
13:00	0	2	2	1	5	1	2	13	2	10	2	3	2
14:00	4	1	3	5	2	0	3	18	2	15	3	3	2
15:00	4	4	2	2	2	0	6	20	3	14	2	6	3
16:00	6	4	3	4	3	0	1	21	3	20	4	1	1
17:00	4	5	1	7	4	3	2	26	4	21	4	5	3
18:00	4	9	7	8	6	4	4	42	6	34	7	8	5
19:00	1	2	8	6	4	7	5	33	5	21	4	12	6
20:00	2	0	5	5	2	7	2	23	3	14	3	9	5
21:00	3	1	0	2	1	3	4	14	2	7	1	7	4
22:00	0	2	0	2	0	0	0	4	1	4	1	0	0
23:00	0	0	0	1	0	2	0	3	0	1	0	2	1
Total	39	44	43	56	47	39	37	305	42	229	42	76	43
% Heavy	0.00%	0.00%	9.30%	7.14%	10.64%	10.26%	2.70%	5.9	0%	5.6	8%	6.5	8%

Attachment 4 Attachment 4 - Traffic Impact Assessment Reports

Appendix D

SIDRA Modelling Results – Existing Intersection Performance

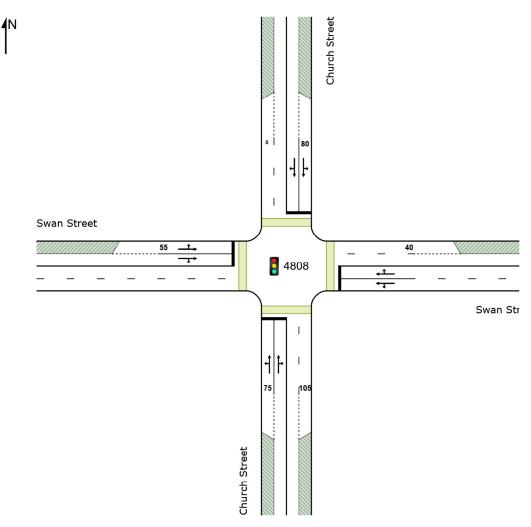
Traffix Group

G31387R-01B

SITE LAYOUT Site: 4808 [Church Street / Swan Street - 8AM - 9AM (Site Folder: General)]

New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 4808 [Church Street / Swan Street - 8AM - 9AM (Site Folder: General)]

New Site

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

Move	Turn	INP	ПТ	DEM		Deg.	Avor	Level of	05% P	ACK OF	Pron_E	ffective	Aver.	Aver
ID	Turri	VOLU		FLO		Satn		Service		EUE	Que	Stop		Speed
		[Total	HV]	[Total		Caur	Dolay	0011100	[Veh.	Dist]	6,40	Rate	Cycles	opeo
		- veh/h	veh/h	- veh/h	%	v/c	sec		veh	m				km/
Sout	h: Chu	rch Stree	t											
1	L2	71	2	75	2.8	0.142	28.6	LOS C	3.1	22.0	0.71	0.70	0.71	30.
2	T1	364	20	383	5.5	* 0.708	29.9	LOS C	19.0	142.3	0.91	0.81	0.91	35.
3	R2	81	5	85	6.2	0.708	35.8	LOS D	19.0	142.3	0.92	0.81	0.92	34.
Appr	oach	516	27	543	5.2	0.708	30.7	LOS C	19.0	142.3	0.88	0.80	0.88	35.
East:	Swan	Street												
4	L2	220	9	232	4.1	0.435	20.6	LOS C	12.5	90.0	0.63	0.67	0.63	42.
5	T1	350	17	368	4.9	0.435	15.3	LOS B	12.5	90.0	0.67	0.68	0.67	39.
6	R2	99	6	104	6.1	*0.435	22.4	LOS C	7.9	60.8	0.72	0.68	0.72	42.
Appr	oach	669	32	704	4.8	0.435	18.1	LOS B	12.5	90.0	0.67	0.68	0.67	40.
North	n: Chur	rch Street	t											
7	L2	54	1	57	1.9	0.394	37.8	LOS D	8.2	58.7	0.86	0.74	0.86	35.
8	T1	367	17	386	4.6	0.678	35.6	LOS D	12.6	96.6	0.92	0.80	0.93	33.
9	R2	38	3	40	7.9	0.678	43.3	LOS D	12.6	96.6	0.96	0.83	0.98	27.
Appr	oach	459	21	483	4.6	0.678	36.5	LOS D	12.6	96.6	0.92	0.79	0.93	33.
West	: Swar	n Street												
10	L2	33	4	35	12.1	0.133	24.4	LOS C	3.0	22.8	0.63	0.58	0.63	37.
11	T1	302	25	318	8.3	0.464	20.6	LOS C	11.4	88.4	0.72	0.67	0.72	36.
12	R2	82	4	86	4.9	*0.464	26.8	LOS C	11.4	88.4	0.75	0.69	0.75	32.
Appr	oach	417	33	439	7.9	0.464	22.1	LOS C	11.4	88.4	0.72	0.66	0.72	35.
All Vehio	cles	2061	113	2169	5.5	0.708	26.2	LOS C	19.0	142.3	0.79	0.73	0.79	36.

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Novem	ent Per	forman	се							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Church	n Street										
P1 Full	117	123	44.4	LOS E	0.3	0.3	0.94	0.94	209.9	215.2	1.03
East: Swan St	reet										
P2 Full	126	133	44.4	LOS E	0.4	0.4	0.95	0.95	210.0	215.2	1.02
North: Church	Street										

P3 Full	132	139	44.4	LOS E	0.4	0.4	0.95	0.95	210.0	215.2	1.02
West: Swan	Street										
P4 Full	361	380	44.9	LOS E	1.0	1.0	0.96	0.96	210.4	215.2	1.02
All Pedestrians	736	775	44.7	LOS E	1.0	1.0	0.95	0.95	210.2	215.2	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: 4808 [Church Street / Swan Street - 8AM - 9AM (Site Folder: General)]

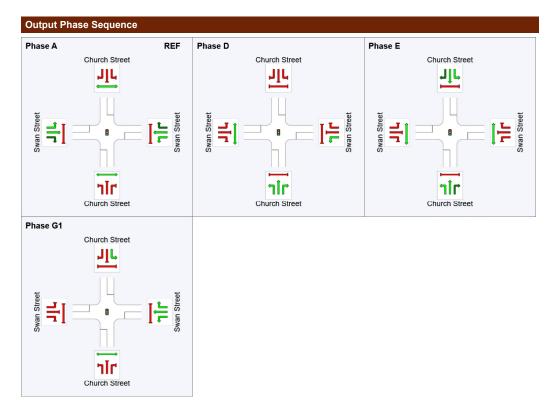
New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: AM Phasing Reference Phase: Phase A Input Phase Sequence: A, D, E, G1 Output Phase Sequence: A, D, E, G1

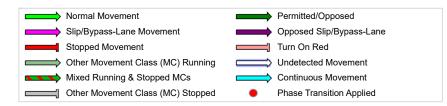
Phase Timing Summary

Phase	Α	D	E	G1
Phase Change Time (sec)	0	47	61	89
Green Time (sec)	44	8	27	5
Phase Time (sec)	50	9	33	8
Phase Split	50%	9%	33%	8%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase VAR: Variable Phase

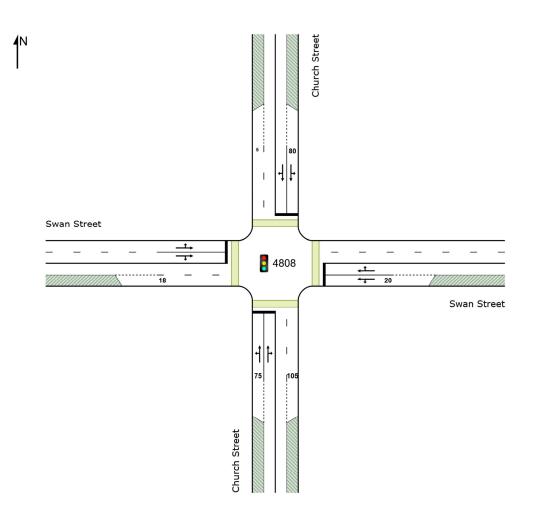


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SITE LAYOUT Site: 4808 [Church Street / Swan Street - 5:30PM - 6:30PM (Site Folder: General)]

New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 4808 [Church Street / Swan Street - 5:30PM - 6:30PM (Site Folder: General)]

New Site

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 119 seconds (Site User-Given Phase Times)

Mov	Turn	INP	UT	DEM	AND	Deg.	Aver.	Level of	95% B	ACK OF	Prop_E	ffective	Aver.	Aver
ID		VOLU	MES	FLO	WS	Satn		Service		EUE	Que	Stop		Speed
		[Total	HV]	[Total	HV]				[Veh.	Dist]		Rate	Cycles	
Caut		veh/h rch Stree	veh/h	veh/h	%	v/c	sec	_	veh	m	_	_	_	km/l
1	L2	58	0	61	0.0	0.144	28.0		4.0	28.0	0.67	0.63	0.67	26.4
2	T1	386	12	406	3.1	*0.720	30.5	LOS C	24.1	176.7	0.86	0.78	0.86	27.5
3	R2	143	3	151	2.1	0.720	34.7	LOS C	24.1	176.7	0.88	0.80	0.88	30.1
Appr	oach	587	15	618	2.6	0.720	31.3	LOS C	24.1	176.7	0.85	0.77	0.85	28.0
East:	Swan	Street												
4	L2	129	3	136	2.3	0.141	17.7	LOS B	3.9	27.5	0.48	0.67	0.48	42.
5	T1	351	10	369	2.8	*0.670	27.0	LOS C	16.0	116.7	0.82	0.86	0.82	32.
6	R2	84	1	88	1.2	0.670	33.2	LOS C	16.0	116.7	0.84	0.87	0.84	37.3
Appr	oach	564	14	594	2.5	0.670	25.8	LOS C	16.0	116.7	0.74	0.82	0.74	35.8
North	n: Chur	rch Street	t											
7	L2	70	1	74	1.4	0.370	39.2	LOS D	9.2	65.4	0.84	0.73	0.84	29.5
8	T1	372	9	392	2.4	0.637	39.5	LOS D	15.2	111.9	0.90	0.78	0.90	25.3
9	R2	30	0	32	0.0	0.637	44.4	LOS D	15.2	111.9	0.93	0.80	0.93	23.1
Appr	oach	472	10	497	2.1	0.637	39.8	LOS D	15.2	111.9	0.90	0.77	0.90	25.8
West	: Swar	n Street												
10	L2	59	0	62	0.0	0.331	27.4	LOS C	10.7	75.8	0.67	0.62	0.67	35.8
11	T1	470	12	495	2.6	0.331	21.6	LOS C	10.7	75.8	0.68	0.61	0.68	36.2
12	R2	12	1	13	8.3	0.331	27.9	LOS C	10.0	75.5	0.69	0.60	0.69	32.8
Appr	oach	541	13	569	2.4	0.331	22.4	LOS C	10.7	75.8	0.68	0.61	0.68	36.
All Vehio		2164	52	2278	2.4	0.720	29.5	LOS C	24.1	176.7	0.79	0.74	0.79	30.

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Novem	ent Per	forman	се							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	UE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Church	n Street										
P1 Full	110	116	53.9	LOS E	0.4	0.4	0.95	0.95	219.4	215.2	0.98
East: Swan St	reet										
P2 Full	116	122	53.9	LOS E	0.4	0.4	0.95	0.95	219.5	215.2	0.98
North: Church	Street										

P3 Full	129	136	54.0	LOS E	0.4	0.4	0.95	0.95	219.5	215.2	0.98
West: Swan	Street										
P4 Full	337	355	54.5	LOS E	1.2	1.2	0.96	0.96	220.0	215.2	0.98
All Pedestrians	692	728	54.2	LOS E	1.2	1.2	0.96	0.96	219.7	215.2	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: 4808 [Church Street / Swan Street - 5:30PM - 6:30PM

(Site Folder: General)]

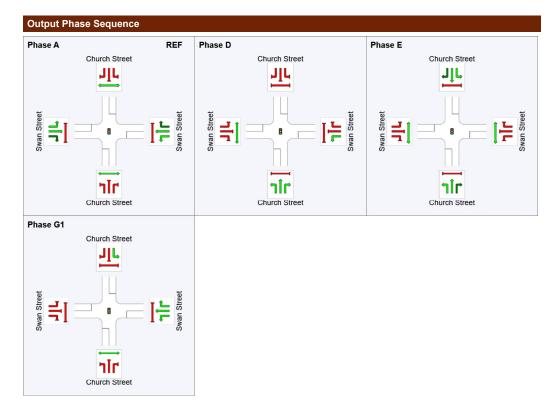
New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 119 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: PM Phasing Reference Phase: Phase A Input Phase Sequence: A, D, E, G1 Output Phase Sequence: A, D, E, G1

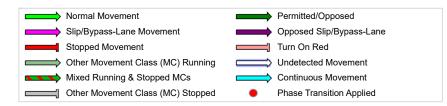
Phase Timing Summary

Phase	Α	D	E	G1
Phase Change Time (sec)	0	57	75	111
Green Time (sec)	56	12	33	2
Phase Time (sec)	62	15	39	3
Phase Split	52%	13%	33%	3%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase VAR: Variable Phase



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Appendix E

Crash Data Analysis

Traffix Group

G31387R-01B

							Cras	h Incidents								
Accident No.		Location	Date (dd/mm/yyyy)	Day	Time	Severity	Type (DCA Code)	DCA Descriptions	Light	Weather	Surface	Pedestrian	Vehicle 1	Vehicle 2	Vehicle 3	Vehicle
T20170001108	Church Street	Church Street 23m N Of Elm Grove	17/01/2017	Tuesday	5:00 PM	Other(V)	130	Rear End (Vehicles In Same Lane)	Unknown	Not known	Dry	-	S	S		
T20170018984	(b/Gipps and	Church Street 2m N Of Elm Grove	3/10/2017	Tuesday	10:25 AM	Other(B)	163	Vehicle Strikes Door Of Parked/Stationary Vehicle	Day	Clear	Dry	-	N	N (B)		
T20190003902	Elm Grove)	Church Street at Elm Grove Intersection	28/02/2019	Thursday	12:40 PM	Serious(B)	135	Lane Change Left	Day	Not known	Dry	-	s	S (B)		
T20200005862		Church Street 7m S Of Elm Grove	11/03/2020	Wednesday	8:15 AM	Other(B)	163	Vehicle Strikes Door Of Parked/Stationary Vehicle	Day	Clear	Dry	-	S	S (B)		
T20200004262	Church Street	Church Street 13m S Of Elm Grove	21/02/2020	Friday	11:00 PM	Other(B)	140	U Turn	Dark Street lights on	Clear	Dry	-	NE	SW (B)		
T20200019671	b/w Elm Grove and Swan Street)	Church Street at Charlotte Street Intersection	7/11/2020	Saturday	2:00 PM	Other(B)	121	Right Through	Day	Not known	Dry	-	S	N		
T20180007091	,	Church Street 19m S Of Charlotte Street	14/04/2018	Saturday	6:00 PM	Other(M)	160	Vehicle Collides With Vehicle Parked On Left Of Road	Dusk/Dawn	Raining	Wet	-	N (M)	N		
T20170015928			4/08/2017	Friday	4:13 PM	Other(V)	133	Lane Side Swipe (Vehicles In Parallel Lanes)	Day	Clear	Dry	-	NW	NW		
T20170024050			16/12/2017	Saturday	2:30 AM	Other(P)	100	Ped Near Side. Ped Hit By Vehicle From The Right.	Dark Street lights on	Clear	Dry	Pedestrian	E			
T20180006207	Church Street		1/04/2018	Sunday	5:12 PM	Other(P)	108	Ped Struck Walking To/From Or Boarding/Alighting Vehicle.	Day	Clear	Dry	Pedestrian	NW			
T20190008790	and Swan Street		8/05/2019	Wednesday	3:45 PM	Other(B)	133	Lane Side Swipe (Vehicles In Parallel Lanes)	Day	Clear	Unknown	-	S	S (B)		
T20200009754	Intersection		4/04/2020	Saturday	12:20 PM	Other(V)	130	Rear End (Vehicles In Same Lane)	Day	Not known	Unknown	-	S	S		
T20200012043			22/06/2020	Monday	8:40 AM	Other(M)	110	Cross Traffic	Day	Not known	Dry	-	NW	SW (M)		
T20210024263			25/11/2021	Thursday	3:30 PM	Other(B)	121	Right Through	Day	Not known	Dry	-	E	W (B)		
T20180001917	Swan Street	Swan Street 9m E Of Church Street	31/01/2018	Wednesday	5:00 PM	Other(V)	131	Left Rear	Day	Clear	Dry	-	W	W		
T20190022170	(b/w Church Street and Yan	Swan Street 36m W of Yan Lane	8/11/2019	Friday	11:15 PM	Other(P)	100	Ped Near Side. Ped Hit By Vehicle From The Right.	Dark		Wet	Pedestrian	w			
T20200010668	Swan Street	Swan Street 26m E Of Brighton Street	1/06/2020	Monday	10:15 PM	Other(B)	163	Vehicle Strikes Door Of Parked/Stationary Vehicle	Dark Street lights on	Raining	Wet	-	SE	SE (B)		
T20190000710	(b/w Bright	Swan Street 18m W Of Charles Street	13/01/2019	Sunday	2:40 AM	Other(P)	102	Far Side. Ped Hit By Vehicle From The Left	Dark Street lights on	Clear	Dry	Pedestrian	E			
T20170008001	Street and		21/04/2017	Friday	7:30 PM	Other(B)	121	Right Through	Dark Street lights on	Raining	Wet	-	SE	NW (B)		
T20170010824	Harvey Street)	Swan Street At Harvey Street	2/06/2017	Friday	8:10 PM	Other(V)	130	Rear End(Vehicles In Same Lane)	Dark Street lights unknown	Clear	Unknown	-	Е	E	E	



*Period of data is from 1/7/2017 to 23/2/2022



Attachment 4 Attachment 4 - Traffic Impact Assessment Reports



Appendix F

Parking Survey Results

Traffix Group

G31387R-01B

G31387 - Charlotte Street, Richmond Parking Surveys

Traffix Group

Supervised By: Surveyed By:	Survey Dates & Times: See below								
Location	Restriction	Capacity	Wednesday, 2 March 2022	Thursday, 3 I	March 2022	Thursday, 17	March 2022	Saturday, 26	March 2022
Location	Restriction	Min - Max	9:30am	4:00pm	6:30pm	11:30am	1:30pm	1:45pm	6:30pm
OFF-STREET CARPARKING									
RICHMOND LIBRARY CARPARK AT 6 CHA	RLOTTE STREET, RICHMOND								
	2P 7am-7pm	19	12	19	19	17	17	18	19
	No Stopping Council Library Vehicle Excepted	1	1	1	1	1	1	0	1
ON-STREET CARPARKING									
ST CRISPIN STREET									
East Side									
Charlotte Street to Swan Street	Permit Zone (Area 20)	4	1	3	1	3	3	2	4
CHARLOTTE STREET									
North Side									
	2P 7am-Midnight MON - SAT	4	3	4	4	4	4	3	4
Church Street to Charles Street	Permit Zone	19	14	11	17	14	14	13	17
South Side		1					I	l	
	2P 7am-Midnight MON - SAT	20	10	12	18	15	15	12	20
Church Street to Charles Street	1/4P 8am-10pm	1	0	1	0	1	1	0	0
	2P Disabled only 8am-8pm	1	0	1	0	0	1	0	1

G31387 - Charlotte Street, Richmond Parking Surveys

Traffix Group

Supervised By: Surveyed By:	Survey Dates & Times: See below								
Location	Restriction	Capacity	Wednesday, 2 March 2022	Thursday, 3 I	March 2022	Thursday, 17	March 2022	Saturday, 26	March 2022
Location	Restriction	Min - Max	9:30am	4:00pm	6:30pm	11:30am	1:30pm	1:45pm	6:30pm
CHARLES STREET									
East Side									
Swan Street to 73 Charles Street	Permit Zone	6	5	6	6	4	5	6	6
71 Charles Street to McNamara Street	Permit Zone	10	6	10	8	6	8	10	10
Elm Grove to 37 Charles Street	Permit Zone	5	3	5	4	3	3	3	5
West Side									
Elm Grove to laneway into Parker Street	2P 7am-Midnight MON - SAT	1	0	1	1	1	1	1	1
Charlotte Street to Elm Grove	2P 7am-Midnight MON - SAT	7	6	7	6	6	5	6	7
Chanotte Street to Ein Grove	P Disabled Parking	1	0	0	1	0	0	1	1
	2P 7am-Midnight MON - SAT	4	4	2	4	4	3	4	4
Swan Street to Charlotte Street	Loading Zone 15mins 7am-6pm MON - SAT Permit Zone All Other Times	2	1	0	1	0	0	0	2
ELM GROVE									
North Side									
Charles Street to Church Street	2P 7am-Midnight MON - SAT	23	14	19	23	21	21	21	23
South Side									
Charles Street to Church Street	Permit Zone	20	13	12	20	9	13	17	18
	1P Disabled	2	2	1	2	1	1	0	0

G31387 - Charlotte Street, Richmond Parking Surveys

Traffix Group

Supervised By: Surveyed By:	Survey Dates & Times: See below								
Location	Restriction	Capacity	Wednesday, 2 March 2022	Thursday, 3	March 2022	Thursday, 17	March 2022	Saturday, 26	March 2022
Location	Restiction	Min - Max	9:30am	4:00pm	6:30pm	11:30am	1:30pm	1:45pm	6:30pm
CHURCH STREET									
East Side									
Property 381 to Charlotte Street	2P 8am-5pm MON - FRI (8am- 12:30pm)	11	7	9	11	11	11	10	11
Charlotte Street to Swan Street	No Stopping Zone	0	0	0	0	0	0	0	0
West Side									
	2P Meter 8am-5pm MON - FRI (8:30am-5:30pm SAT) 1/4P 5:30pm - 11:30pm	2	2	2	2	2	2	2	2
	Authorised Car Share	1	1	1	1	1	1	1	1
Swan Street to Gipp Street	2P 8am-5pm MON - FRI (8:30am-5:30pm SAT)	19	9	13	19	15	12	14	19
	P Disabled only 7am-5pm MON - FRI	1	0	1	1	0	0	1	1
	1/4P 7am - 9pm	1	0	1	1	1	1	1	1
SWAN STREET									
North Side									
Church Street to St Crispin	Clearway 4:30pm-6:30pm MON-FRI Loading Zone 15min All Other Times	2	0	0	0	0	0	0	0
St Crispin Street to Yan Lane	Clearway 4:30pm-6:30pm MON-FRI 2P Meter 8:30am-4:30pm MON-FRI (8:30am-5:30pm SAT)	11	3	0	12	5	10	*7	14
Yan Lane to opposite Harvey Street	Clearway 4:30pm-6:30pm MON-FRI 2P Meter 8:30am-4:30pm(8:30am- 5:30pm SAT)	12	4	1	12	8	6	*2	13
South Side									
Church Street to Yan Lane	Clearway 7:00am-9:15am MON-FRI 2P Meter 9:15am-5:30pm MON-FRI (8:30am-5:30pm SAT)	14	5	2	12	9	9	8	13
Yan Lane to Harvey Street	Clearway 7:00am-9:15am MON-FRI 2P Meter 9:15am-5:30pm MON-FRI (8:30am-5:30am SAT)	5	0	2	5	1	2	4	5

Prepared by Traffix Group Pty Ltd

Attachment 4 Attachment 4 - Traffic Impact Assessment Reports

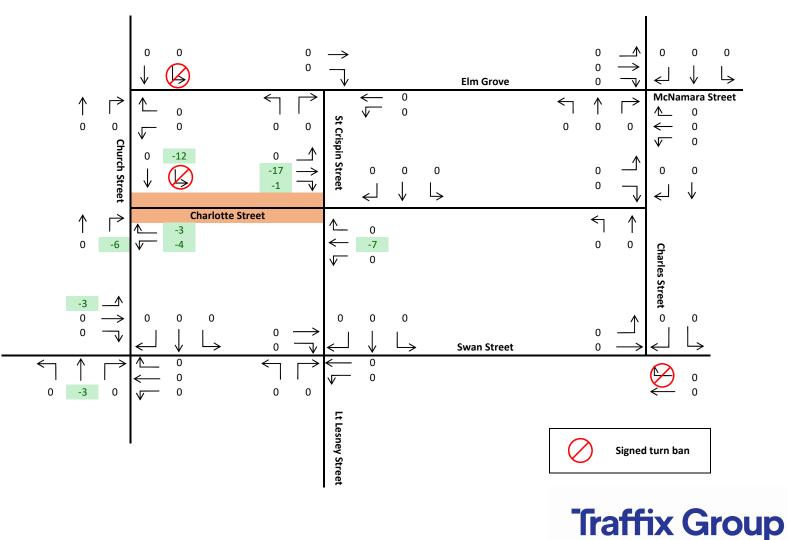


Appendix G

Traffic Volume Redistribution Diagrams

Traffix Group

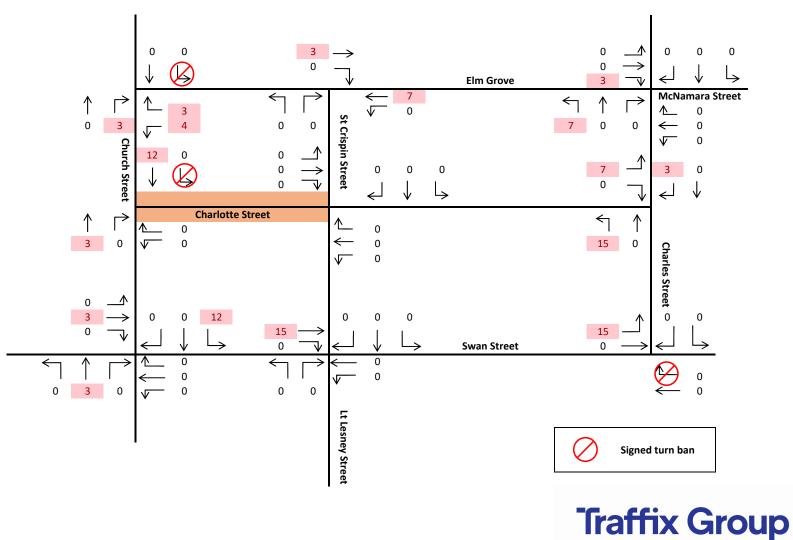
G31387R-01B



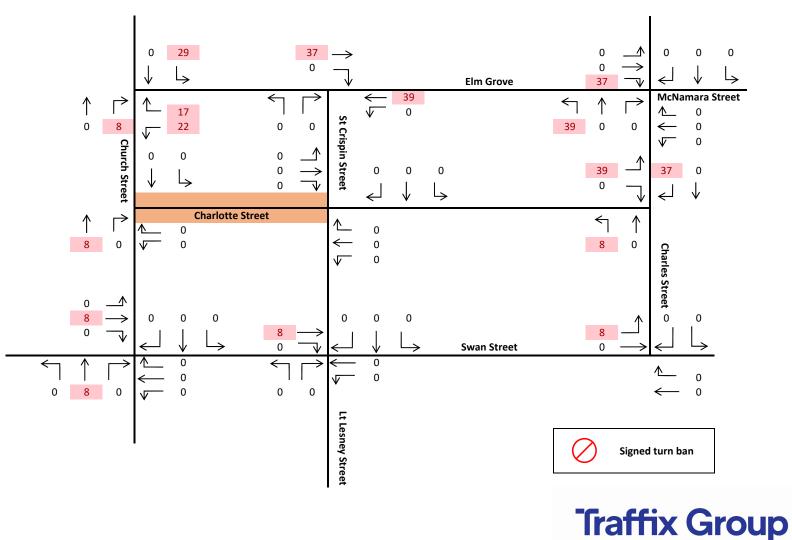
Redistribution - Decreases in Turning Movements AM Peak (8:00-9:00)



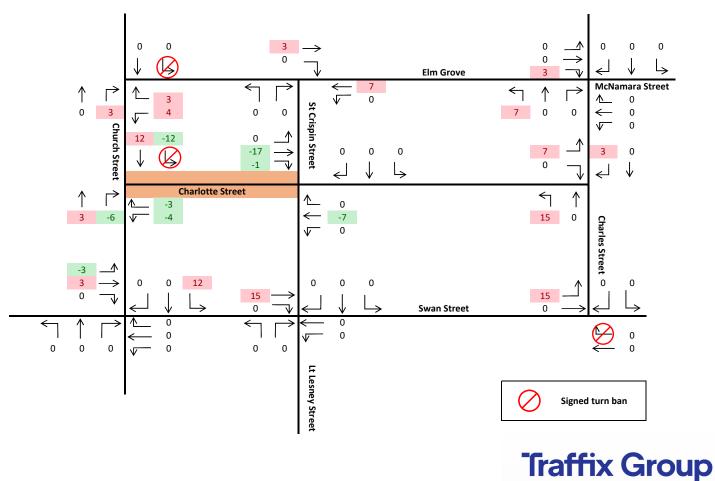
Redistribution - Decreases in Turning Movements PM Peak (17:30-18:30)



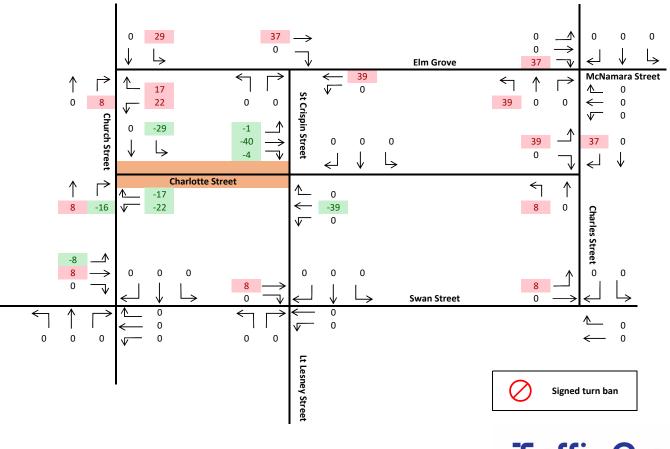
Redistribution - Increases in Turning Movements AM Peak (8:00-9:00)



Redistribution - Increases in Turning Movements PM Peak (17:30-18:30)



Redistribution - Net Change in Turning Movements AM Peak (8:00-9:00)



Redistribution - Net Change in Turning Movements PM Peak (17:30-18:30)

Traffix Group

Attachment 4 Attachment 4 - Traffic Impact Assessment Reports

Appendix H

SIDRA Modelling Results – Post Public Space Intersection Performance

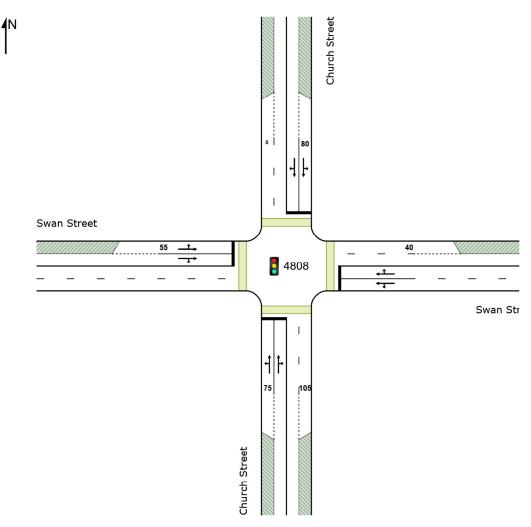
Traffix Group

G31387R-01B



New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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MOVEMENT SUMMARY

Site: 4808 [Church Street / Swan Street - 8AM - 9AM -Redistribution (Site Folder: General)]

New Site

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

	Turn	INP		DEM		Deg.		Level of		ACK OF		ffective	Aver.	Aver
ID		VOLU [Total	IMES HV 1	FLO [Total	WS HV 1	Satn	Delay	Service	QUI [Veh.	EUE Dist]	Que	Stop Rate	No. Cycles	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m		rtato	Oyoloo	km/ł
Sout	h: Chu	rch Stree	t											
1	L2	71	2	75	2.8	0.142	28.6	LOS C	3.1	22.0	0.71	0.70	0.71	30.
2	T1	364	20	383	5.5	*0.708	29.9	LOS C	19.0	142.3	0.91	0.81	0.91	35.
3	R2	81	5	85	6.2	0.708	35.8	LOS D	19.0	142.3	0.92	0.81	0.92	34.4
Appr	oach	516	27	543	5.2	0.708	30.7	LOS C	19.0	142.3	0.88	0.80	0.88	35.0
East	Swan	Street												
4	L2	220	9	232	4.1	0.435	20.6	LOS C	12.5	90.0	0.63	0.67	0.63	42.
5	T1	350	17	368	4.9	0.435	15.3	LOS B	12.5	90.0	0.67	0.68	0.67	39.
6	R2	99	6	104	6.1	*0.435	22.4	LOS C	7.9	60.9	0.72	0.68	0.72	42.
Appr	oach	669	32	704	4.8	0.435	18.1	LOS B	12.5	90.0	0.67	0.68	0.67	40.8
North	n: Chur	rch Street	t											
7	L2	54	1	57	1.9	0.394	37.8	LOS D	8.2	58.7	0.86	0.74	0.86	35.4
8	T1	367	17	386	4.6	0.678	35.6	LOS D	12.6	96.6	0.92	0.80	0.93	33.
9	R2	38	3	40	7.9	0.678	43.3	LOS D	12.6	96.6	0.96	0.83	0.98	27.
Appr	oach	459	21	483	4.6	0.678	36.5	LOS D	12.6	96.6	0.92	0.79	0.93	33.3
West	: Swar	n Street												
10	L2	30	4	32	13.3	0.133	24.4	LOS C	3.0	22.8	0.63	0.57	0.63	37.
11	T1	305	25	321	8.2	0.463	20.5	LOS C	11.4	88.4	0.72	0.66	0.72	36.
12	R2	82	4	86	4.9	*0.463	26.8	LOS C	11.4	88.4	0.75	0.69	0.75	32.
Appr	oach	417	33	439	7.9	0.463	22.1	LOS C	11.4	88.4	0.72	0.66	0.72	35.
All Vehio		2061	113	2169	5.5	0.708	26.1	LOS C	19.0	142.3	0.79	0.73	0.79	36.

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Novem	ent Per	forman	се							
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Et	ffective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Church	n Street										
P1 Full	117	123	44.4	LOS E	0.3	0.3	0.94	0.94	209.9	215.2	1.03
East: Swan St	treet										
P2 Full	126	133	44.4	LOS E	0.4	0.4	0.95	0.95	210.0	215.2	1.02
North: Church	Street										

P3 Full	132	139	44.4	LOS E	0.4	0.4	0.95	0.95	210.0	215.2	1.02
West: Swan	Street										
P4 Full	361	380	44.9	LOS E	1.0	1.0	0.96	0.96	210.4	215.2	1.02
All Pedestrians	736	775	44.7	LOS E	1.0	1.0	0.95	0.95	210.2	215.2	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: 4808 [Church Street / Swan Street - 8AM - 9AM -Redistribution (Site Folder: General)]

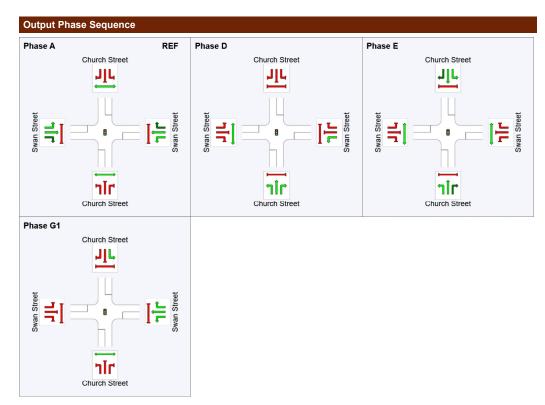
New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: AM Phasing Reference Phase: Phase A Input Phase Sequence: A, D, E, G1 Output Phase Sequence: A, D, E, G1

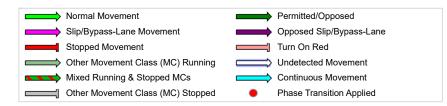
Phase Timing Summary

Phase	Α	D	E	G1
Phase Change Time (sec)	0	47	61	89
Green Time (sec)	44	8	27	5
Phase Time (sec)	50	9	33	8
Phase Split	50%	9%	33%	8%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



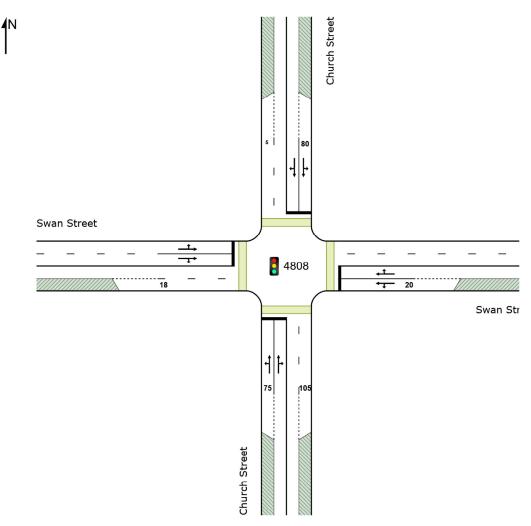
REF: Reference Phase VAR: Variable Phase



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New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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MOVEMENT SUMMARY

Site: 4808 [Church Street / Swan Street - 5:30PM - 6:30PM - Redistribution (Site Folder: General)]

New Site

Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 119 seconds (Site User-Given Phase Times)

	Turn	INP		DEM		Deg.		Level of		ACK OF		Effective	Aver.	Aver
ID		VOLU [Total	HV1	FLO [Total	WS HV 1	Satn	Delay	Service	[Veh.	EUE Dist]	Que	Stop Rate	NO. Cycles	Speed
		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/ł
Sout	h: Chu	rch Stree	t											
1	L2	58	0	61	0.0	0.144	28.0	LOS C	4.0	28.0	0.67	0.63	0.67	26.4
2	T1	386	12	406	3.1	*0.720	30.5	LOS C	24.1	176.7	0.86	0.78	0.86	27.5
3	R2	143	3	151	2.1	0.720	34.7	LOS C	24.1	176.7	0.88	0.80	0.88	30.1
Appr	oach	587	15	618	2.6	0.720	31.3	LOS C	24.1	176.7	0.85	0.77	0.85	28.0
East:	Swan	Street												
4	L2	129	3	136	2.3	0.141	17.7	LOS B	3.9	27.5	0.48	0.67	0.48	42.5
5	T1	351	10	369	2.8	*0.670	27.0	LOS C	16.0	116.7	0.82	0.86	0.82	32.
6	R2	84	1	88	1.2	0.670	33.2	LOS C	16.0	116.7	0.84	0.87	0.84	37.3
Appr	oach	564	14	594	2.5	0.670	25.8	LOS C	16.0	116.7	0.74	0.82	0.74	35.8
North	n: Chur	ch Street	t											
7	L2	70	1	74	1.4	0.370	39.2	LOS D	9.2	65.4	0.84	0.73	0.84	29.5
8	T1	372	9	392	2.4	0.637	39.5	LOS D	15.2	111.9	0.90	0.78	0.90	25.3
9	R2	30	0	32	0.0	0.637	44.4	LOS D	15.2	111.9	0.93	0.80	0.93	23.
Appr	oach	472	10	497	2.1	0.637	39.8	LOS D	15.2	111.9	0.90	0.77	0.90	25.8
West	: Swar	n Street												
10	L2	51	0	54	0.0	0.331	27.4	LOS C	10.7	75.8	0.67	0.61	0.67	35.9
11	T1	478	12	503	2.5	0.331	21.6	LOS C	10.7	75.8	0.68	0.60	0.68	36.3
12	R2	12	1	13	8.3	0.331	27.9	LOS C	10.0	75.4	0.69	0.60	0.69	32.8
Appr	oach	541	13	569	2.4	0.331	22.3	LOS C	10.7	75.8	0.68	0.61	0.68	36.2
All		2164	52	2278	2.4	0.720	29.4	LOS C	24.1	176.7	0.79	0.74	0.79	30.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian I	Pedestrian Movement Performance										
Mov	Input	Dem.	Aver.	Level of <i>i</i>	AVERAGE	BACK OF	Prop. Ef	fective	Travel	Travel	Aver.
ID Crossing	Vol.	Flow	Delay	Service	QUE	EUE	Que	Stop	Time	Dist.	Speed
					[Ped	Dist]		Rate			
	ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Church	n Street										
P1 Full	110	116	53.9	LOS E	0.4	0.4	0.95	0.95	219.4	215.2	0.98
East: Swan St	reet										
P2 Full	116	122	53.9	LOS E	0.4	0.4	0.95	0.95	219.5	215.2	0.98
North: Church	Street										

P3 Full	129	136	54.0	LOS E	0.4	0.4	0.95	0.95	219.5	215.2	0.98
West: Swan	Street										
P4 Full	337	355	54.5	LOS E	1.2	1.2	0.96	0.96	220.0	215.2	0.98
All Pedestrians	692	728	54.2	LOS E	1.2	1.2	0.96	0.96	219.7	215.2	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: 4808 [Church Street / Swan Street - 5:30PM - 6:30PM - Redistribution (Site Folder: General)]

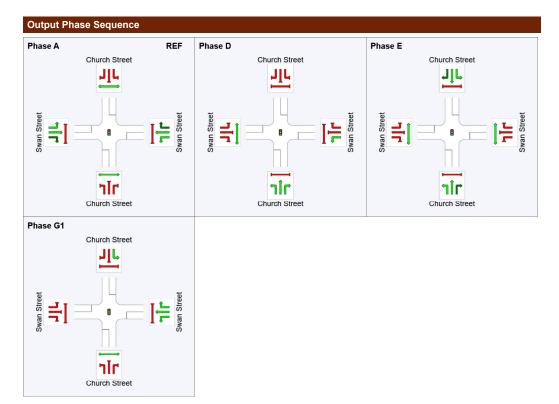
New Site Site Category: (None) Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 119 seconds (Site User-Given Phase Times)

Timings based on settings in the Site Phasing & Timing dialog Phase Times specified by the user Phase Sequence: PM Phasing Reference Phase: Phase A Input Phase Sequence: A, D, E, G1 Output Phase Sequence: A, D, E, G1

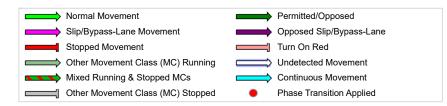
Phase Timing Summary

Phase	Α	D	E	G1
Phase Change Time (sec)	0	57	75	111
Green Time (sec)	56	12	33	2
Phase Time (sec)	62	15	39	3
Phase Split	52%	13%	33%	3%

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.



REF: Reference Phase VAR: Variable Phase



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ASSESSING THE ENVIRONMENTAL CAPACITY OF LOCAL RESIDENTIAL STREETS

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ABSTRACT

The inherent conflict between the residential amenity and traffic access functions of local streets causes debate on what constitutes a true "local" road. The concept of 'environmental capacity' was developed to identify a suitable maximum traffic volume on such local streets. It was first introduced by Buchanan and Appleyard in separate research in the 1960's. Both authors settled on broad-brush traffic thresholds of 2,000-3,000 vehicles per day. Since then, other research has relied heavily on the original Buchanan and Appleyard findings; this paper investigates that presumption in the present day.

A residents' survey was applied to four "local" streets with varying traffic volumes in Christchurch, New Zealand. Residents living on those streets with higher volumes felt that their streets were busier, noisier and less safe. There was also an increasing trend for residents along higher volume streets to have their houses turned away from the street and they tended to have less personal involvement and/or knowledge of their neighbours. In the Christchurch context, a more appropriate environmental capacity would appear to be around 1,500-2,000 vehicles per day. This has implications for local town planning and street network design guidance if true local roads are to be achieved.

Keywords: town planning, local streets, environmental capacity, traffic volumes, liveability, amenity

12th WCTR, July 11-15, 2010 – Lisbon, Portugal

1

INTRODUCTION

Non-residential activities locating in residential zones are not new; however there appears to be an increasing trend for these types of developments to establish along local residential streets, which some people would argue are to the detriment of residential amenity. Many of these non-residential activities – such as educational facilities and health facilities for example – require relevant planning permission. Often these non-residential activities develop in a piecemeal fashion and in a manner that appears to disregard actual or potential cumulative effects that might result from increasing traffic. While it is generally true that the geometric capacity of these streets can cater for these additional traffic volumes, the actual and potential effects on residential amenity are frequently concluded to have effects that are "less than minor". This often appears to be determined without any real justification – whether quantitatively or qualitatively.

While it is accepted that residential amenity effects are rather qualitative and subjective (as one person's perception and opinion often differs from another), there is likely to be some correlation between increasing traffic volumes and the degradation of residential amenity. This suggests that it might be possible to take an existing street and, after examination of some key elements, to define the volume and character of the traffic permissible in the street so that it is consistent with good environmental conditions. This issue was first raised by Buchanan (1963) in his seminal thesis *Traffic in Towns* where he introduced the concept of "environmental capacity." Buchanan suggested that, as traffic increased, it was inevitable that the assessment of environmental capacity would become more significant. Since then, there has been debate on environmental capacity, particularly in reference to the acceptable upper limits of tolerable traffic on local streets. These differences are probably explained by many varying factors – perhaps volumes themselves, street widths, speeds, building setbacks, etc. These issues may of course also be perceived differently from one resident to another. In any instance the answer is still not clear.

A widely used rule of thumb in the traffic planning and engineering profession is that a local residential street has an environmental capacity of 2,000-3,000 vehicles per day. This paper sheds some light on this presumption; it is based on research undertaken in the New Zealand city of Christchurch (Chesterman 2009). The overall objective of this research was to determine the environmental capacity of selected local residential streets in a Christchurch context, although this method is likely to provide a useful contribution to the international discussion of this topic.

BACKGROUND LITERATURE

The idea of increasing residential amenity and liveability along local residential streets is not new; it goes back to the turn of last century when the "garden city" concept was first introduced in the United Kingdom (Howard 1902). This has since led to a continual desire to

balance amenity needs and traffic effects – especially with increasing traffic volumes. The idea of the garden city was particularly influential in the United States, where a number of settlements were planned during the first half of the 20th century using this format, as well as in a number of other countries worldwide (Hardy, 1999).

As the motor car became more widespread and traffic volumes grew, the inherent conflict between the amenity and access functions of local streets created the debate on what constitutes a true "local" road and what functions should take precedence. Such issues also found their way into discussion about urban planning and redevelopment (Jacobs 1961).

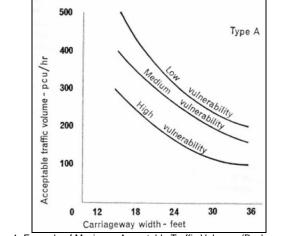
The Buchanan Report

This concept of environmental capacity appears to have been first raised by Buchanan (an architect, civil engineer and planner) in his London-based thesis *Traffic in Towns* (Buchanan 1963). This was an influential report and popular book on urban and transport planning policy for the United Kingdom's Department of Transport. Although Buchanan never intended to write about environmental capacity, it was an issue that did arise and he consequently made an attempt to define some possible methods of calculating it.

Buchanan firstly recognised that traffic on residential streets affects the environment in many ways, including noise, fumes, vibration and the danger for people wishing to cross the street. He then explored the possibility that the environmental capacity could be assessed, for practical purposes, by the ease in which the street can be crossed by pedestrians; if this critical condition could be satisfied, then it is likely that needs relating to noise, fumes and so on would also be satisfied.

Buchanan suggested that the level of risk might be measured by the delay to which a pedestrian is subjected when they desire to cross the road. The average delay for pedestrians will depend upon the volume of traffic and the width of the road. Buchanan assumed an average delay of two seconds as a rough guide to the border-line between acceptable and unacceptable conditions. Any greater delay would imply that most people would have to adapt their movements to give way to motor vehicles, a situation not compatible with the idea of an "environmental area".

Buchanan further refined his method to consider the proportion of "vulnerable" pedestrians (i.e. children, elderly, parents with prams, etc) and the level of "protection" afforded by the street (i.e. parked cars, vehicle speeds, footpath continuity, etc). In order to explore the practical effect of these variables, Buchanan studied some 50 examples of residential streets with traffic flows ranging from 10 to 1500 vehicles per hour. From all this work, Buchanan was able to derive a series of graphs that enabled the environmental capacity to be determined for any carriageway width and for any levels of 'vulnerability' and 'protection.' Figure 1 shows an example of one such graph, for streets with a high level of pedestrian protection ("Type A").



Assessing the Environmental Capacity of Local Residential Streets KOOREY, G.; CHESTERMAN, R.

Figure 1: Example of Maximum Acceptable Traffic Volumes (Buchanan 1963)

In the New Zealand context, where residential streets are typically at least 10 m (33 ft) wide, Buchanan's work suggests that maximum daily traffic volumes of 2,000-3,000 vehicles/day are acceptable, although that figure will be less where there are low levels of pedestrian protection or high proportions of vulnerable pedestrians.

Appleyard's Livable Streets

In the late 1960s, Donald Appleyard (a Professor of Urban Design at the University of California, Berkeley) conducted a renowned study on liveable streets, comparing three residential streets in San Francisco that (on the surface) did not differ on much else but their levels of traffic (Appleyard *et al* 1981). One of these streets carried 2,000 vehicles per day (which he termed as a "Light Street"), one carried 8,000 vehicles/day (termed a "Medium Street"), and the final street carried 16,000 vehicles/day (termed a "Heavy Street"). In simple terms, Appleyard's research showed that residents on the Light Street had three more friends and twice as many acquaintances on the street than the people on the Heavy Street. Further, as traffic volume increased, he found that the space people considered to be their "territory" shrank.

Appleyard suggested that the Light Street was a "closely knit community." For example, front steps of the residential houses were used for sitting and chatting, sidewalks were used by children to play and the carriageway was even used by others to play more active games like football. Moreover, the street was seen as a whole and no part was out of bounds. The Heavy Street, on the other hand, had little or no sidewalk activity and was used solely as a corridor between the sanctuary of individual homes and the outside world. Residents kept very much to themselves, and there was virtually no feeling of community. The difference in the perceptions and experience of children and the elderly across the two streets was especially striking.

Appleyard clearly identified the connection between residential amenity and traffic volume. Although he settled on a maximum reasonable environmental capacity for a residential street of around 3,000 vehicles per day, he made the point that the 2,000 vehicles per day level was a threshold point above which increasing numbers of residents would become concerned about traffic levels on their street. There was however no real rationale as to why he reduced the 'desirable' threshold from 3,000 to 2,000, although it was interesting to note that his lower threshold level aligned with Buchanan's research. Thus, any street with greater than 200-300 vehicles per hour (or 2,000-3,000 per day) was seen as an indicator of exceeding environmental capacity.

Appleyard's work, despite being based on perceptions that could be construed as being location-specific and somewhat subjective, appeared to be simple, yet credible and logical at the same time. It was subsequently used as the basis for other work mentioned below, including the TIRE index (City of Palo Alto 2002) and the Australian Model Code for Residential Development (Commonwealth of Australia 1997).

Other Environmental Capacity Methods

More recently, a variety of techniques have been identified, particularly in North America and Australia, which aim to determine the relative effect of new developments on existing local streets. These include:

- 1. The RTA *Guide to Traffic Generating Developments* (RTA 2002), commonly used by traffic planners and engineers in Australia and New Zealand. The Guide sets out a desirable maximum peak volume (the "environmental goal") of 200 vehicles/hour and an absolute maximum of 300 vehicles/hour for local 40 km/h streets. The Guide suggests that there may be situations where alterations to these levels might be appropriate, e.g. if a street has a central median.
- 2. The "Traffic Infusion on Residential Environment" (TIRE) index (City of Palo Alto 2002), used in a number of North American cities, is an alternative approach to evaluating impacts on local streets to evaluate the change in average vehicles per day along a street segment. Originally developed by engineering practitioner Donald Goodrich, the TIRE index provides a numerical representation of residents' perceptions of the effect of traffic on residential activities and has values that range from 0.0 to 5.0. In simple terms a change of 0.1 or more indicates that traffic would be noticeable to residents in an affected neighbourhood. This equates to approximately a 25% increase in traffic volumes, irrespective of the initial volume. The TIRE Index however stops short of defining a threshold at which a volume change should be considered unacceptable or a significant impact.
- 3. The Australian Model Code for Residential Development (AMCORD, Commonwealth of Australia 1997) is a national resource document for integrated residential development containing up-to-date information on the latest urban research material. AMCORD refers to four key performance areas for new developments; namely noise, air pollution, crossing delay, and pedestrian safety (the latter regarded as the most

important criterion). AMCORD proposes different environmental capacity values for each performance criterion. The AMCORD methods provide some insight into the issue of environmental capacity, and, while they do not provide any definitive rule-ofthumb figures (as each situation and local area should be considered on its individual merits), reference is often made to 2,000 vehicles per day in many instances. This is perhaps an indirect admission that a typical daily threshold limit for a local residential street is around 2,000 vehicles.

4. The City of Portland has developed an "Impact Threshold Curve" (City of Portland 2008), which has a purpose of determining whether the secondary or unintentional impacts of Neighbourhood Traffic Management Program projects are acceptable (typically in the form of increased traffic on local roads). The standard impact curve provides for an increase of between 150-400 vehicles/day on local streets, but with the resulting traffic volumes not to exceed 3,000 vehicles/day. Because of the margin of error inherent in the collection of traffic volume data due to daily volume fluctuation, the curve is presented as a wide band of values rather than a single curve. The standard impact curve may also be modified to account for factors such as the proportion of non-local or re-routed traffic, peak hour volumes, and truck traffic.

Although some of the methods mentioned above have incorporated other research (e.g. Sharpe *et al* 1972, Holdsworth & Singleton 1979, Coady & Associates 1982, Song *et al* 1993), most of it still has some basis in the work of Buchanan and/or Appleyard. Of interest in all these different methods is the fact that they all settle on a maximum traffic figure of 2,000-3,000 vehicles per day for local residential streets. While each organisation is commended for their novel approaches in an attempt to simplify and quantify the concept of environmental capacity, it appears that none of these organisations have challenged Buchanan's or Appleyard's findings with their own research to confirm (or otherwise) whether 2,000-3,000 vehicles/day is still acceptable. Given that some of this work was almost 50 years ago it is highly possible that attitudes have changed during this time.

In summary, the idea of environmental thresholds or environmental capacity with regard to traffic volumes has been bandied around for some time, yet there appears to be little modern guidance or research on the topic – either because it is not well understood or too complex. Both Buchanan (1963) and Appleyard *et al* (1981) settled on broad-brush traffic thresholds of 2,000-3,000 vehicles per day, which were based on their own observations, surveys, other findings and assumptions. A literature review on the environmental capacity concept reveals that all other research since then heavily relies on the original Buchanan and Appleyard findings and that there has been little questioning of the validity of the original information in the present day. Perhaps one reason lies with the fact that issues involving traffic volumes have traditionally fallen within the domain of traffic engineers and other environmental considerations (such as amenity) have been in the domain of town planners.

CASE STUDY - CHRISTCHURCH

To explore these issues further, a residents' survey (using similar techniques and questions to those used by Appleyard) has been applied to four "local" streets with varying traffic volumes in the New Zealand city of Christchurch. Four Christchurch streets in the same suburb were selected because they were similar in appearance, yet quite different in their volumes of traffic. Table 1 summarises their key characteristics. The intention was to include streets with varying traffic around 500, 1000, 2000 and >3000 vehicles per day; these were labelled LIGHT, LOW, MEDIUM and HIGH accordingly.

	Murdoch	Jennifer	Aorangi Street	Aorangi Street
	Street	Street	(northeast)	(southwest)
Daily Traffic	564	1096	2124	3537
Volume (veh/day)	(LIGHT)	(LOW)	(MEDIUM)	(HIGH)
Length of street (m)	170	580	630	300
Number of households	14	67	99	42
Carriageway width (m)	8.0	11.0	14.0	14.0
Mean / 85 th % ^{ile} speeds (km/h)	37 / 42	46 / 53	50 / 56	51 / 57

Other characteristics that are worthy of mention include:

- All four streets are generally characterised by stand-alone suburban residential houses rather than commercial activity, and are located within the same "Suburban Residential" planning zone.
- All four streets are classified as local roads in the City Plan, and provide through-access to other local streets (i.e. they are not cul-de-sac streets).
- All streets appear to share a similar socio-economic status by virtue of their proximity to each other and with housing stock generally displaying similar characteristics.
- All street are within a 500 m radius of each other, directly linking with Wairakei Road, the main arterial road in the area providing access to and from the inner City.
- All streets generally run in a northeast-southwest direction.
- All streets have a posted speed limit of 50 km/h.
- All streets have no dedicated bus routes running along their length.
- All streets have footpaths along both sides, with no pedestrian crossing facilities.

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• All streets display typical residential "tidal flow" characteristics during the peak hour periods (i.e. predominantly one-way flow), which represent around 10% of the total daily volume.

It is acknowledged that there are some differences in street width and length, and this may also be affecting traffic speeds and resulting survey outcomes.

The study generally drew on resident perceptions by means of a letterbox questionnaire, which asked several broad questions in relation to issues of residential amenity such as:

- whether they know their neighbours
- whether the road is noisy
- whether they are delayed in crossing the street
- whether they consider the volume of traffic as high
- whether they would let their children play on the street

Given that the traffic volumes of each street were known, the responses to each question could be compared to the overall traffic volumes. This information could then be used to examine the impact of traffic on street life. Essentially it was a simple, yet structured way to analyse the variables that might take part in the complicated interaction between traffic and residents' liveability.

The choice to use a reply-post questionnaire was largely governed by limited resources (i.e. time and costs), which ruled out formal interviewing and/or direct observation. The use of a questionnaire would also protect the privacy of the participants, as the confidentiality can help ensure that people respond honestly. It is acknowledged that this method may limit response rate and also that there may be a bias in responses received. A \$50 lucky respondent prize provided an incentive to respond and the overall response rate for all four streets was 37%. Attempts were also made to word the questionnaire in such a way that no particular answer would be favoured over others, but no random ordering of questions or possible responses was employed. For the purposes of this study any biases mentioned above were largely ignored, but further investigations may be valuable to research this aspect further. It is important to remember that a key aim was to mimic as much as possible the questions posed by Appleyard in his study.

Results

The number of individual survey responses for each street ranged from just five on the LIGHT street to 36 on the MEDIUM street (response rates between 34% - 43%). It is acknowledged that the limited number of respondents on some streets might be susceptible to random variation, although the resulting trends proved to be remarkably consistent. Over 90% of respondents owned their homes (i.e. not renting it), which is high even by New Zealand standards and may also reflect a response bias.

Table 2 summarises results from the key survey questions. Note that some of the questions had multiple-choice options and only the proportion of answers in the worst one or two response options have been presented. Almost consistently, there is a clear trend in responses from the LIGHT street through to the HIGH street.

Survey Question	Murdoch	Jennifer	Aorangi Street	-
-	Street	Street	(northeast)	(southwest)
Traffic Volume	(LIGHT)	(LOW)	(MEDIUM)	(HIGH)
Number of responses	5	23	36	18
Rear-section Property?	0%	9%	39%	53%
Main living area in your house generally faces away from the street?	0%	43%	61%	83%
Front sections: do you have a fence in the front yard that blocks street views?	60%	65%	72%	89%
Would you feel comfortable with children playing unsupervised on or near the street? <i>No</i>	60%	70%	86%	89%
Do you know any of your neighbours personally? <i>No</i>	20%	32%	33%	58%
Do traffic volumes along this road create a barrier to social connection with neighbours?	0%	9%	11%	14%
How would you rate the amount of traffic on this street? Heavy / Very Heavy	0%	26%	48%	57%
Do you think that the overall speed of traffic on this street is: Too fast?	0%	35%	28%	28%
Do you think that the overall speed of traffic on this street is: <i>a bit fast</i> ?	80%	52%	44%	39%
Has traffic on this street got worse over past few years?	0%	41%	61%	70%
Looking ahead five years from now, do you think traffic on this street will get worse?	20%	39%	58%	68%
Do you consider this road to be: Noisy / A little bit noisy	40%	49%	60%	84%
Does traffic in your street bother you during some activities? Yes	20%	28%	33%	40%
Do you usually have to wait for traffic before crossing the street? Yes	20%	49%	67%	89%

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Discussion

The dominance of traffic as a problem on all street types is the most salient finding of this study. Based on the survey results, residents on the lighter and lower volume streets were the most contented; however they were not without their traffic problems. More than half (60%) of the residents along the LIGHT street still have a fence in their front yard that blocks views to and from the street and they would not let their children play on or near the street. While more residents along the LIGHT street personally know their neighbours, 80% of them believe the overall speed is "a little bit fast", yet the same proportion suggest they do not have to wait at all to cross the road. In addition, 40% believe it is "noisy" or a "little bit noisy." This however is further confused by a response that suggests that only 20% of the residents are bothered by traffic during some activities. The conflicting and contrasting verbatim comments on these topics also confirms the subjective nature and the variability of opinions in relation to traffic issues along their streets.

Overall, the perception held by residents living on the streets with higher traffic volumes is that their streets are busier, noisier and less safe. The outlook is also not positive with an increasing trend for residents along higher volume streets believing the traffic will continue to get worse. This is coupled with an increasing trend for the same houses to turn away from the street through the construction of high fences in their front yards. This in turn could be limiting passive surveillance and the exposure to passers-by, and might explain why residents along busier roads tend to have less personal involvement and/or knowledge of their neighbours.

One interesting item to emerge was that residents on streets with lower daily traffic volumes perceived traffic as being "a little bit fast." Again, this could be a reflection of people on the higher volume streets becoming accustomed to the overall speeds. This may account for the slightly higher proportion of residents on the higher volumes streets suggesting that the overall traffic speed was "about right."

What was clear and obvious through the survey responses was the amount of verbatim comments that referred to the Christchurch streets being used as a short-cut route. This was a finding that Appleyard also found on his surveyed San Francisco streets back in the late 1960's. The issue of extraneous traffic was also referred to heavily in Buchanan's research whereby he suggested that areas containing only local streets should have all through-traffic removed. This is perhaps an overstatement as it would imply that all local streets should be culs-de-sac only and should not have any linkage with other local streets. In the context of the surveyed Christchurch streets, all were classified as local roads and therefore had a function of providing property access to residential properties. The traffic volumes on all four surveyed streets however carried well in excess of the expected traffic that would be generated solely by the houses located along them. On the basis that a standard residential house generates around ten vehicle trips per day, analysis implies that the four surveyed streets carry extraneous traffic between 1.6 and 8.4 times more than the level of traffic expected based on actual dwelling numbers.

This raises questions as to whether the road classification is correct, or whether the street layout and overall housing pattern is correct. This is highlighted by the fact that many classified local roads in Christchurch carry more than 2,000 vehicles per day (such as Aorangi Road), which is at odds with the local Infrastructure Design Standard's stated threshold that implies a maximum upper limit of 2,000 vehicles per day (Christchurch City Council, 2007). Roads that carry more than this are clearly carrying extraneous traffic and appear to have a dual function of traffic distribution and property access. A closer look at the deeply entrenched view of the inverse relationship between movement and access functions reveals that some local road classifications could be in error. The widespread acceptance of the roading classification system could therefore be a reason why there are apparently some insoluble traffic/environment conflicts. On all four surveyed streets there appears to be some overlapping functions (whether intended or not) and this clouds the issue further of what a true local road is.

In order to progress and validate the idea that the environmental threshold is around 2,000 vehicles per day, it is perhaps appropriate to compare and contrast some of Appleyard's survey results with the Christchurch survey results. As discussed above, Appleyard surveyed a variety of streets in San Francisco in the late 1960's and this included what he called a LIGHT street where the traffic volumes were around 2,000 vehicles/day. This level of traffic coincides with that of Aorangi Road (northeast). Given that some of the same questions were used for both studies it is useful to compare some of the resident responses from the two streets. Note that both streets served stand-alone residential houses.

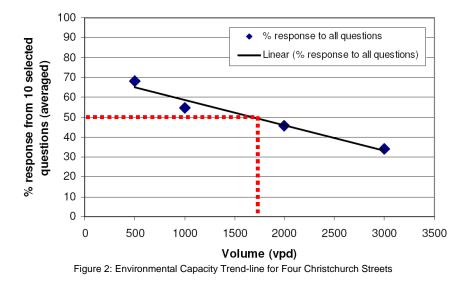
In nearly every single aspect the overall response rate for the San Francisco street was noticeably more positive than the equivalent Christchurch street. Nearly twice as many of the Christchurch residents suggested that the traffic would get worse in the future, and although the streets carried the same amount of traffic, nearly twice as many of the Christchurch residents had to wait longer to cross the road. A greater proportion of Christchurch residents also implied that the traffic along their street was heavier and faster than the San Francisco equivalent. While all of this suggests that the Christchurch residents express more dissatisfaction in terms of the environmental components that contribute to the liveability of their street, it is interesting to note that the San Francisco street had a greater proportion of residents who were affected by traffic when doing other tasks around their home (i.e. watching television, working in the house and eating). In any instance, the differences between both sets of results emphasises the point that there are many factors that influence environmental quality, both in absolute terms and as perceived by different communities. Given the time difference between the two surveys (over 40 years), it is also highly possible that attitudes have changed in this time with regard to technology, the environment, and traffic in general.

Determining Environmental Capacity

The findings of the Appleyard *et al* (1981) study and the Christchurch surveys clearly show trends that imply a linkage between traffic volumes and other variables. This is perhaps not surprising as common sense would normally suggest that as traffic volumes increase there

would be a reduction in other 'environmental' values. Although the overall trend is clear, there is a difficultly in determining what the actual environmental capacity is.

In order to make a quantitative judgement on a qualitative issue, a simple scoring system has been derived from the Christchurch survey information for each of the four streets. This has been derived from responses to ten of the main survey questions. The score allocated to each question is a reflection of the percentage of *positive* responses to that question. This reflects the proportion of responses that are considered to enhance the overall residential amenity and satisfaction of the area, e.g. the percentage of respondents who said "yes" when asked if they would be comfortable with their children playing unsupervised on or near the street. The overall street score is the percentage of positive responses across all ten questions (i.e. the average percentage). For the purposes of this exercise, 50% is considered to be the threshold (or environmental capacity). This aligns with Buchanan's rough theory that simply separates acceptable with unacceptable, i.e. the majority (>50%) of people will find it acceptable or unacceptable. The results of the scoring system in comparison with the street traffic volumes are shown in Figure 2.



This is by no means considered to be an all-encompassing model for determining environmental capacity; however it may provide some insights into the issue, especially in relation to the four surveyed Christchurch streets. If an environmental capacity/threshold limit is set at the "50% acceptable" mark, Figure 2 would imply that the environmental capacity is somewhere between 1,500-2,000 vehicles per day. This is clearly less than the 2,000-3,000 vehicles/day often quoted elsewhere. While this research is not suggesting that the environmental capacity of *all* residential streets is 1,500-2,000 vehicles per day, the Christchurch surveys imply that the typical environmental capacity is perhaps not as high as what previous literature has suggested.

CONCLUSIONS

A review of the literature on environmental capacity reveals that the concept was first introduced by Buchanan in his London-based research, followed by Appleyard's research in San Francisco. Both authors settled on broad-brush traffic thresholds of 2,000-3,000 vehicles per day. Further literature review however reveals that other environmental capacity research heavily relies on the original Buchanan and Appleyard findings and that there have been few questions on the validity of the original information. While this is not a criticism of the original findings, this all occurred nearly 50 years ago when resident perceptions in relation to environmental and amenity values may have been different. Changes in the way we live, technological improvements and a greater (or lesser) acceptance of the motor vehicle maybe partly responsible for any changes.

There are clear and obvious trends that show that environmental amenity decreases as traffic volumes increase. Although it is accepted that the issue is highly subjective and varies from area to area, the traditional rule of thumb that a residential local road could acceptably carry 2,000-3,000 vehicles per day is perhaps set too high. In the Christchurch context, surveys of four local streets suggest that a more appropriate environmental capacity would realistically appear to be around 1,500-2,000 vehicles per day. This has implications for local town planning and street network design guidance if true local roads are to be achieved.

Recommended Further Research

The Christchurch surveys undertaken for this research included only four streets. These of course do not represent all Christchurch streets and caution should be applied if using this information in relation to other local residential roads. Also, although the response rate to the questionnaires was better than anticipated, the sample sizes were not particularly large, ranging from 5-36 responses along each street. The trends however between low and high volume streets were clear and obvious. Further research using the same questionnaire for a number of other streets would be beneficial and, if successful, it might reinforce the current conclusions further.

The four streets also had some differences in road attributes such as carriageway width and traffic speeds. The study focused on the relative effects of traffic volume alone but, like the previous work of Buchanan, it is acknowledged that other road features are likely to allow base environmental capacity values to be adjusted. It would therefore be useful to be able to compare streets with similar volumes but with different attributes in terms of road width, provision for non-motorised modes, traffic calming, and landscaping, to assess their relative effect on residential amenity. For example it may be that, on a well landscaped and traffic calmed street, the residents are able to tolerate a higher traffic volume before it is considered unacceptable. This may provide some useful guidance on physical measures to improve the environmental capacity of existing local streets.

REFERENCES

- Appleyard D., Gerson M.S., Lintell M. (1981) *Livable Streets*. University of California Press, Berkeley, USA.
- Buchanan, C. (1963). *Traffic in Towns: A Study of the Long Term Problems of Traffic in Urban Areas*. Her Majesty's Stationary Office, London, England.
- Chesterman, R. (2009) Traffic Volumes and Residential Amenity: Is the Environmental Capacity of a Local Residential Street Really 2,000-3,000 Vehicles Per Day? *Master of Engineering in Transportation (MET) Research Report*, University of Canterbury, Christchurch, New Zealand.
- Christchurch City Council (2007). *Infrastructure Design Standard*, Christchurch, New Zealand.

www.ccc.govt.nz/business/constructiondevelopment/infrastructuredesignstandard.aspx

- City of Palo Alto (2002). Transportation Significance Thresholds Study Session and New Interim Standards, Staff Report to the Planning & Transport Commission, Sep 19 2002. http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=7360
- City of Portland (2008). Impact Threshold Curve. Office of Transportation, Portland, OR. http://www.portlandonline.com/transportation/index.cfm?a=85375&c=35934
- Coady & Associates (1982). *Environmental Capacity of Residential Streets*, New South Wales, Australia.
- Commonwealth of Australia (1997). Australian Model Code for Residential Development (AMCORD), Local Government & Planning Ministers' Council. http://www.lgpmcouncil.gov.au/publications/reference.aspx
- Hardy, D. (1999) *Tomorrow and Tomorrow: The TCPA's First Hundred Years and the Next…* Town & Country Planning Association, London, England. *http://www.tcpa.org.uk/data/files/18991999.pdf*
- Holdsworth, J & Singleton, D.J. (1997). Environmental Traffic Capacity of Roads, *Fifth Australasian Transport Research Forum*, Sydney, pp.219-238.
- Howard, E. (1902). Garden Cities of To-Morrow, S. Sonnenschein & Co. Ltd, London.
- Jacobs, J. (1961). The Death and Life of Great American Cities. Random House, New York, USA.
- Roads and Traffic Authority (RTA) (2002) *Guide to Traffic Generating Developments*. Roads and Traffic Authority, NSW, Australia.
- Sharpe, C.P., Maxman, R.J., Voorhees, A.M. (1972). A Methodology for the Compilation of the Environmental Capacity of Roadway Networks. *Highway Research Record*, No. 394, Highway Research Board, US, pp.33-40.
- Song, L, Black, J A. & Dunne, M. (1993). Environmental Capacity Based on Pedestrian Delay and Accident Risk. *Road and Transport Research Journal*, Vol. 2, No.3. pp.40-49, Australia.

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30 April 2024

CORNELIUS LIM MADDOCKS COLLINS SQUARE, TOWER TWO, LEVEL 25 727 COLLINS STREET, MELBOURNE VIC 3008

Dear Cornelius,

Re:PROPOSED DISCONTINUANCE OF ROADLocation:CHARLOTTE STREET, RICHMOND

I refer to your email received by Greater Western Water (GWW) regarding the proposed Discontinuance of Road at the above location and request for comment from GWW. Please find **attached** plans of the general area and click on <u>https://www.gww.com.au/works-other-authorities</u> to access a copy of GWW's Asset Protection Guidelines. This document includes tables of minimum clearances and the section titled, "**Duty of Care**" which outlines responsibilities regarding asset proving.

As you will see on the plan provided, the parcel of land proposed for Discontinuance contains existing GWW water and sewer mains. With respect to these assets, GWW will not object to this proposal subject to the following:

- 1. Any proposed fences must be located a minimum distance of 800mm clear of the centreline of existing GWW sewer mains.
- 2. Any proposed fence lines must be located a minimum distance of 1.0m from sewer manholes and/or sewer inspection shafts.
- 3. The area over the water main for a distance of 2.0m either side of the centreline of the water main must not be built over or be enclosed by any structure. It must remain public land/reserve which provides GWW clear access to the asset for emergency maintenance and operational purposes.
- 4. Any GWW assets that may require relocation or alteration will require a separate application to carry out such work. Application can be made via email <u>oaw@gww.com.au</u>
- Any plumbing works and/or proposal to build over GWW assets will require GWW's written consent via the appropriate application. GWW applications can be located at <u>https://www.citywestwater.com.au/pplus/</u>

Naturally, extreme care must be taken when working in the vicinity of GWW assets and GWW will seek cost recovery for any damage caused to its assets that can be attributed to this proposal.

Telephone 13 44 99 Email contact@gww.com.au

Teletypewriter 13 36 77

gww.com.au



If you have any questions, please do not hesitate to contact me on 0407 528 605.

Yours faithfully,

Mark Abraham Senior Technical Officer, Other Authorities Works

4



Date : 23/04/2024

Your Ref: CCB:CORL:9400915 Our Ref: **MF542917-1**

Cornelius Lim Cornelius.Lim@maddocks.com.au

Telstra Plan Services

Level 1, 275 George Street Brisbane, QLD 4000

Postal Address: 275 George Street Brisbane, QLD 4000

Email: F0501488@team.telstra.com

Dear Cornelius,

Re: Proposed discontinuance of road at Charlotte Street, Richmond [MADD-M.FID3848305]

Thank you for your original communication dated **02/04/2024** in relation to the location specified above.

Telstra's plant records indicate that there are **Telstra assets in the vicinity.** Subject to your compliance with the below conditions, **Telstra have NO OBJECTIONS** to the road closure.

We note that our plant records merely indicate the approximate location of the Telstra assets and should not be relied upon as depicting a true and accurate reflection of the exact location of the assets. Accordingly, if you haven't already done so please contact Before You Dig Australia for a detailed site plan and a list of Certified Locating Organisations (CLO) to establish the exact location of Telstra assets (visit www.BYDA.com.au).

The network located by a Certified Locating Organisation (CLO) may ensure the network is located within the proposed closure.

In the event Telstra's assets require relocation, please engage **Telstra's Asset Relocation** team to obtain a quote to relocate the assets from the location in question. The relocation of the assets would be carried out at your cost, however the relocation would ensure that the land/s and its projected use would not be hindered or restricted by easements. **The existing network on this road cannot be built over.**

Please phone 1800 810 443 (opt 1) or email <u>F1102490@team.telstra.com</u> to arrange for asset relocation at the property.

As these assets comprise an essential component of the Telstra network, we take this opportunity to highlight Telstra's rights and requirements to ensure that they are understood. The following is stated for your information:

(1) Telstra's existing facilities are grandfathered under the 1997 Telecommunications Act. This enables such facilities to legally occupy land in perpetuity for the duration of that facilities use.

(2) Part 1 of Schedule 3 of the Telecommunications Act 1997 authorises a carrier to enter land and exercise any of the following powers:

- inspect the land
- install a facility
- maintain a facility

In the case of installation and planned maintenance a notification will be afforded and such work will generally proceed during business hours. However, from time to time,

certain activities need to be carried out without delay in order to protect the integrity of the network. Such activities may require vehicular access without notice and at any time of the day or night. 24/7 access for maintenance must be maintained.

(3) If at any time in the future it becomes necessary, in the opinion of the carrier because of a subdivision of any land to remove, or alter the position of a facility, the carrier may enter the land and do anything necessary or desirable for that purpose. The person who proposes to subdivide the land is liable to pay the carrier the reasonable cost of anything reasonably done by the carrier in this regard.

(4) If at any time in the future it becomes necessary, in the opinion of the carrier or the land owner to remove, or alter the position of any Telstra assets, the carrier may enter the land and do anything necessary or desirable for that purpose. If the land owner is contemplating carrier relocation of these assets, then the land owner is liable to pay the carrier the reasonable cost of anything done in this regard.

(5) All individuals have a legal "Duty of Care" that must be observed when working in the vicinity of Telstra's communication plant. It is the constructors/land owner's responsibility to anticipate and request the nominal location of Telstra plant in advance of any construction activities in the vicinity of Telstra's assets. All enquires for plant locations should be made through Before You Dig Australia (visit www.BYDA.com.au). On receipt of plans, notwithstanding the recorded location of Telstra's plant, the constructor/land owner is responsible for potholing and physical exposure to confirm the actual plant location before site civil work begins. Telstra reserves all rights to recover compensation for loss or damage caused by interference to its cable network or other property.

Telstra would also appreciate due confirmation when this proposed acquisition proceeds so as to update its **Cadastre** records. Information regarding acquisition of the land would be of benefit to us and should be directed to the following location:

Telstra - Cadastre Updates PO Box 102 Toormina NSW 2452 Attention: - Matt Stuart F1103453@team.telstra.com

Please pass all information contained in this communication to all parties involved in this proposed process. Any difficulties in meeting the above conditions, or questions relating to them, please do not hesitate to contact Telstra Plan Services; email <u>F0501488@team.telstra.com</u>

Yours sincerely,

thonytobeser

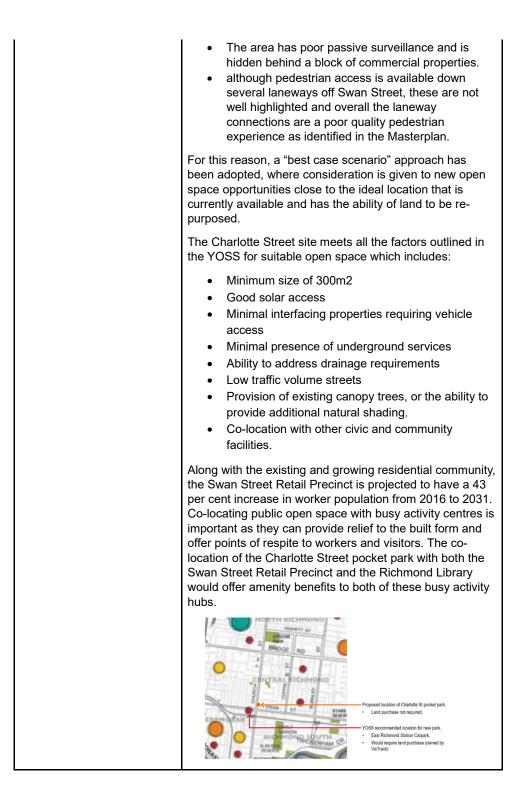
Anthony Lebessis

For Manager – Peter Anestopoulos Telstra Plan Services F0501488@team.telstra.com

Issue raised	Officer response
Council's funds are better spent on repairing the Richmond Library or building a new one.	The investments in the proposed pocket park and the Richmond Library are not linked as the pocket park is proposed to be built using Council's Open Space reserve. Richmond Library is maintained through Council's building maintenance program, with renewals managed through the building renewals program.
	In 2024/25, Council will activate the Richmond Library Hub spaces by refreshing the carpet and conducting a fit- out to create additional community spaces, including portable booths, a wellness space for parents and prayer room, and a creative studio. Additional roof repair works have been commissioned and are expected to be completed soon. The proposed park will include improvements of the library entrance to enhance accessibility.
The pop- up park created a hub for illegal and undesirable behaviours	Richmond Police attended the nighttime walk to review safety in the area as part of the Crime Prevention Through Environmental Design (CPTED) study that was undertaken for the project. As the park is outside a Civic building, in a roadway that lends itself to passive surveillance, and will be designed to ensure sightlines are maintained and lighting is designed specifically for the area, Council feels that the area is as safe as any other park in Yarra.
	Council commissioned an independent CPTED review by Fooks Landscape Architects. The review was referenced in the 12 December 2023 Council report and has been attached to the 13 August 2024 Council Report.
	It is noted that Richmond Police were one of the stakeholders who participated in the review.
There are drainage issues with the new park	An external consultant (Engeny) has prepared the drainage design with input from Yarra drainage team. All drainage issues have been addressed in the final design.
RSL have concerns that the	See drawing below.
current design doesn't align or accommodate their approved development. Most notably, access to the RSL development may be	During the consultation period, officers discussed the design of the Charlotte Street Park and its interface with the RSL existing and proposed.
compromised.	The park design has been designed with the proposed vehicular access to the RSL site in mind and has included a landscaped corner that can be converted at any stage

	<text><text><complex-block><complex-block></complex-block></complex-block></text></text>
The RSL is seeking a commitment from Council to be open for collaboration on the final design.	Council officers will meet with the RSL again on 12 August 2024 to discuss the design of the park and its' interface with the RSL site.
Uni of NSW has research on pocket parks	Council officers have reviewed the University of NSW research into pocket parks and notes the findings from this research include: "Unlike one large-scale park, several smaller pocket parks can be inserted strategically throughout a neighbourhood to help increase accessibility and usage of public space. Having more open and accessible public spaces for residents plays an essential role in building a sense of community While pocket parks alone may not be the silver bullet for liveability, more public space for the community is beneficial, even on a small scale. We must consider public spaces as social infrastructure and value them in terms of their wellbeing benefits, If we want a healthy and happy society, we need a diversity of quality public spaces for the public to enjoy, and more pocket parks will certainly contribute to that."
There is a need for a masterplan at this location	The proposed Charlotte Street park is consistent with the Swan Street Streetscape Masterplan that was endorsed by Council in 2022.

Traffic safety improvements are required on Elm Grove	The Traffic studies didn't identify any required amendments. However, the traffic condition in Elm Grove will be monitored and if required, further treatments will be considered.
St Crispin Street should be converted to a one-way street	There were no indications during the pocket park trial that there were safety or movement issues in this section of the laneway that would warrant this change.
Traffic controls to limit rat running are required	There are currently traffic controls in place but require enforcement. The Victorian Police have been advised of the issues of non-compliance when the turn ban is in effect.
Why can't the pocket park be built on the library car park instead of Charlotte Street?	The Library Car Park was fully investigated alongside the road closure option. The library car park was not chosen for the following reasons:
	 the library car park is not directly adjacent to the library and therefore the benefits of co-locating civic spaces will not be achieved, lack of passive surveillance from surrounding streets and properties, resulting in potential safety issues, loss of a significant number of public car parking spaces slope of the land coupled with DDA accessibility and Infrastructure issues
Why can't the pocket park be built on the East Richmond car park instead of Charlotte Street?	The Yarra Open Space Strategy (YOSS) identified this part of Richmond as falling within a gap area. The gap areas are locations where the community lacks easy walkable access to open space.
There is enough open space around Charlotte Street?	The Yarra Open Space Strategy outlines recommended locations for new parks across the municipality. Preferred locations for new open spaces identified in the YOSS may never be realised, due to the dependency on land availability, cost of acquisition, and/or sub-division of an appropriate scale to provide the required amount of land.
	The nearest recommended location in this area is the East Richmond Train Station carpark. The Swan Street Masterplan recommends changing this car park area into a 3,725m2 public space to be used as a town square. The Masterplan sets the timeframe for project to be medium term and will require significant investment for it to be delivered. In addition, it is a two staged project. Providing an open space in this area in immediate short term is not supported for the following reasons:



Council cannot afford the project. There are other priorities that could be addressed using the funds allocated to this project.	The project will be funded through the Open Space Reserve fund and not through general revenue. This Reserve can only be used for specific types of open space projects in identified locations. Charlotte Street meets the criteria for funding from this Reserve.
Council did not respond to emails sent by community members in February in response to the pop-up park	Council installed a temporary pop-up park in Charlotte Street in early 2024 for the purpose of simulating the traffic and parking conditions of the proposed permanent park.
	Whilst community consultation was not conducted during this time Council officers received direct correspondence from the community which was responded to in a timely manner.
Council isn't exercising it power to discontinue this road lawfully	It is considered that Council can determine that the road is not reasonably required for public use under section 17(4) of the RMA because, although the road is part of the public road network and currently provides direct vehicular access to Church Street, the general public has alternative vehicular access to Church Street from the balance of Charlotte Street via the surrounding public road network. Additionally, the general public will retain pedestrian and bicycle access to Church Street from Charlotte Street through the new public park.
	Furthermore, Council published a public notice under section 223 of the Local Government Act 1989, ensuring that no decisions are made prior to considering all submissions and hearing all submitters who requested to be heard by Council.
The park was not used during trial	The park usage varied depending on the time of day and weather. Regular site visits by Council Officers and observations from the library staff confirmed that the park was consistently used by a range of users. It is acknowledged that temporary parks have been proven to not have the same level of patronage as a permanent park when numbers exponentially increase from the less amenity value of a temporary installation. Refer to item re: Uni of NSW

Attachment 12 Attachment 12 - A Safer Charlotte Street Report: CPTED Review for the Proposed Charlotte Street Park



DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, RICHMOND FOR THE CITY OF YARRA.

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Appendix

A1. A night time site walk.

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References:

Public Toilet Strategy, City of Yarra. 2017-2027 Yarra Economic Development Strategy, City of Yarra. 2020 – 2025 Retail audits – precinct pulse, City of Yarra. Council Plan 2021-2025, City of Yarra. Safer Design Guidelines for Victoria, Department of Sustainability and Environment.

Meeting log:

Night time site walk. Presentation to Council team. Night time site walk 02. 8th March 2023. 22nd March 2023. 27th April 2023.

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Acknowledgment of country.

We acknowledge that this project takes place on the lands of the Wurundjeri Woi Wurrung people of the Kulin Nation.

We pay our respect to Elders past and present and emerging. We recognise their importance in maintaining knowledge, traditions and culture in our community.

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DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, PREPARED FOR THE CITY OF YARRA.

1.0 Introduction.

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DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, RICHMOND FOR THE CITY OF YARRA.

Introduction.

City of Yarra is currently developing the design for the Charlotte Street Pocket Park. The possibility of creating a park in this location was first noted as part of the Swan Street Streetscape Masterplan in 2021. During the community consultation for the masterplan, the idea of reclaiming the roadway to create a pocket park in Charlotte Street was wellsupported.

This Safer by Design review seeks to support Councils design team to ensure the built outcome responds to current risks and mitigates perceived future risks.

Safer by Design investigations draw upon Crime Prevention through Environmental Design (CPTED) principles. They are natural surveillance, access control, territorial re-enforcement and space and activity management. Our safer by design process results in the development of project specific design principles to reduce the risk of harm occurring. These design principles should be understood by the multidisciplinary team delivering the project.

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2.0 Strategic documents review.



Surrounding context.

Night time activity.

This diagram highlights the venues that are open after 11pm. There is a high number of late night operators within 5 minutes walking distance of the study area.



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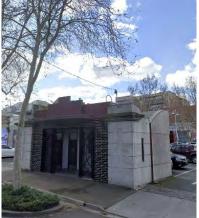
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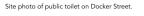
Surrounding context.

Open space and Public Toilets.

This diagram highlights show th public toilet is nearby to the proposed park, only a minutes walk. The site, is within reasonable walking distance of the MCG for able bodied person.









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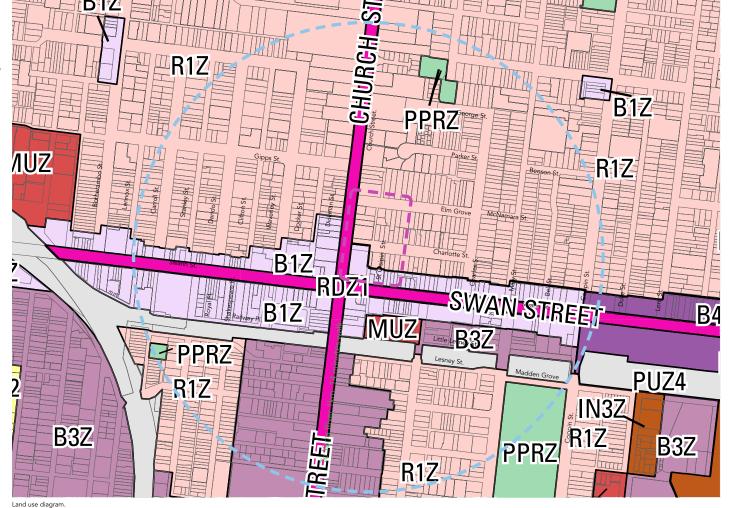
Strategic Context

This diagram of land uses demonstrates the site is close by to the Swan Street retail precinct and with fine gran residential in the north and mixed business and residential on the south.





CDZ2 COMPREHENSIVE DEVELOPMENT ZONE SCHE CDZ3 COMPREHENSIVE DEVELOPMENT ZONE SCHE



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Anti-social behaviour and crime risk.

Crime Statistics Agency.

- Occurrence of crime overall in Richmond has reduced in the past 8 years.
- Richmond has the highest rate of crimes in
- the City of Yarra.
- Most common reported crime is theft and criminal damage.

Your Ground.

The coloured markers on the map indicate the level of stress (1-5 scale) experienced by participants as part of their YourGround Safe or Unsafe Spot submission.

YourGround is a collaboration between CrowdSpot and Monash University's XYX Lab to crowdsource women and gender-diverse people safety related experiences of public and recreational space.

Swan Street, towards the train station appears to be a hotspot of negative experiences.

(1) 120 Swan Street, Victoria

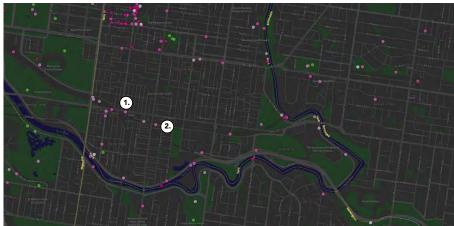
I have been verbally harrassed/catcalled on Swan street more than any other part of the city. Mostly pre-covid but the most distinct thing that happened was when a man drunkenly put his arms over me and I yelled at him. So many groups of drunk white ecom men letching. - 30-34 years old, Female

(2.) Lesney Street, Victoria

This is a very narrow, clandestine walkway, located behind busy Richmond entertainment precintcs, It is prone to unnation/inebriation/drug use. Lighting has been installed, this has made a big difference, but I still quite unsafe walking back to my house. It would help to clean the area up, properly pave and fence it, improve line of sight. + 40-44 years old, Female



Richmond Extract from Your Ground map.



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3.0 Night time site observations.



3.1 Street presentation.

Positives.

- Library is clear of graffiti and building features appear in good working order.
- CoY Cleaning and Open Space team noted that the library is not a hotpot and they have a rapid response for all Council Buildings.
- RSL has future development planned which will improve frontage to street and maintenance.

Challenges/Risks.

- The Richmond RSL building has large inactive facade without any windows facing Charlotte Street. i.e. not providing any passive surveillance.
- RSL has broken windows, graffiti and appears poorly and abandoned.



Site photo 01.





Site photo U2.



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LEGEND.

Challenges/Risks.

Positive.

Neutral.

3.2 Active / inactive frontages at night.

Positives.

- Library facade lighting contributes positive night time ambiance.
- Library after hours access contributes to more diversity of people on the street at night. It acts as a community destination.
- Swan Street has lots of active facades.

Challenges/Risks.

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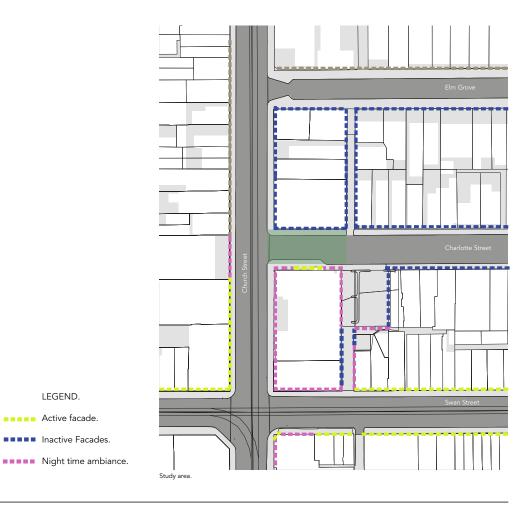
- The Richmond RSL building has large inactive facade
- St Crispin Laneway and rear of car park has inactive facades.
- Charlotte Street has all inactive facades in the evening.



Site photo 01



Site photo 02.



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LEGEND. Active facade. Inactive Facades.

3.3 Movement and access.

Positives.

• Bicycle paths provided and there are racks for both standard and oversized bicycles.

Challenges/Risks.

- Laneway often used by pedestrian however is not pedestrian friendly.
- Pedestrian crossing at Charlotte Street does not prioritise pedestrian movements.



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3.4 Built form setbacks and laneways.

Positives.

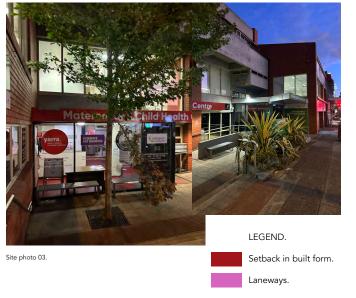
- Light spill from buildings and tenants assists to deter unwanted activities in building set backs. For example, at the former Maternal Health Centre.
- Setback for car park has sensor lights.
- Between Swan Street and Charlotte Street the St Crispin Laneway has light spill from multiple tenancies and carpark lighting. This section of the St Crispin Lane has positive ambient lighting.

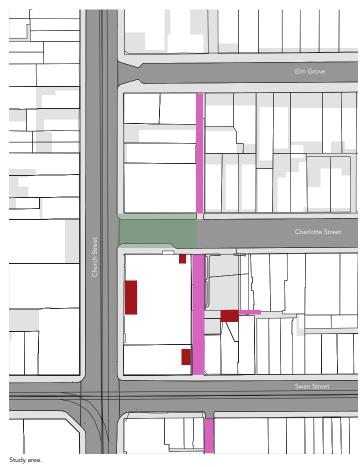


Challenges/Risks.

- Lower level and set back could create risk of concealment or a hot spot for unwanted activities (urination, graffiti or littering).
- St Crispin Laneway between Elm Grove and Charlotte Street is a dark spot, resulting from the Bright street lights.









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Site photo 01

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3.5 Signage and wayfinding.

Positives.

• The Library is well signed with green signage that is legible and clear.

Challenges/Risks.

- No sign at the corner of Swan and Church
- directing people to the public toilets. There is poor Council wayfinding to connects to other destinations such as tram stops or the public toilets.





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3.6 Lighting.

Positives.

• The Library Building provides significant positive lighting onto the public realm. With light spill from windows and feature facade lighting.

Challenges/Risks.

The facade lighting on the Library on Church Street is too bright and results in a sharp contrast with Charlotte Street. Adjusting the luminaires may be a cost effective solution.
Street lighting on Charlotte Street is too bright, casting dark shadows into the neighbouring lane way.



Site photo 01.

Site photo 02.







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4.0 Select stakeholder engagement.



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4.0 Select stakeholders engagement.

The stakeholder engagement for this review was a focused process seeking input only from selected individual or groups. We also have reviewed the existing data made available by the City of Yarra. The three aspects of our Select Stakeholder engagement is:

- 3.1 Council staff investigations.
- 3.2 Existing available data
- 3.3 Stakeholders calls

• 3.4 Night time site walk with council staff and select stakeholders.

These selected discussions do not indicate that these peoples voices are the most important. These are stakeholders have been selected based on their work jurisdiction, knowledge or specific relationship to the site. Some stakeholders require delicate engagements; such as private, one on one discussions.

All voices are important and it's recommended that as part of the next open community consultation regarding this project safety and perceive risks are invited topics.

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4.1 Council staff.

Council staff comments received in meeting 01.

Council's cleansing staff have made reports of people urinating behind the Library. Further investigations.

Library:

The lights in the staff room are on a sensor so they remain on until they stop sensing motion. I think they stay on for about 20mins and then switch off if no movement is made. (So they will not be on all night).

The library itself is also on motion sensors as above - this is for our Open Library schedule.

Lighting was installed along the outside of the building at St Crispin Street, but I'm not sure what the schedule for those are. Council conducted a survey in 2022, to the people who have Out of Hours access to both the Richmond and North Fitzroy libraries.

4.2 Existing available data.

Q. How do you travel to the library (when visiting during un-serviced hours)?

Walk.
Public
Transport.
Drive.
Cycle.
Other.

Q. When visiting the library during un-serviced hours, is safety when approaching/leaving the library a concern for you?

Not at all.	
Rarely.	
Sometimes.	
Regularly.	•
Not sure.	
Comments:	
No incidents	and no personal concerns, but am warv of

No incidents and no personal concerns, but am wary of people outside the Library when I enter or exit and will never let anyone else in - will shoo them off with a stick if I had one.

Yes - I am conscious of my surroundings and wait for the doors to close before I go in and/or leave!

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4.3 Stakeholder calls.

Select representatives from:

- Restaurants
- Late night venue (Swan Hotel) Unable to organise an interview.
- Community group who use the Library facilities
- Library
- Place mangers:
- Council Cleansing and Open Space Unit
- Local Police

Q. Do you feel safe at night around here on a Saturday?/Sunday?

Respondent 1.		
Respondent 2.		
Respondent 3.		
Respondent 4.		
Respondent 5.		
Respondent 6.		
	Unsafe.	Very safe.

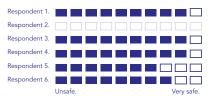
Select comments:

• Saturday and Sunday there are always drunken nomads in the car park.

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• Couple of occasions people sitting on bench near the entry. Homeless people, they're not threatening.

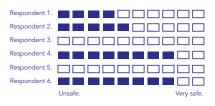
Q. Do you feel safe at night around here on a weekday, say Tuesday?



Select comments:

- Yeah, I do. But others that are no as confident as me perhaps don't.
- Yeah I feel ok, no problems. I have worked here for 30 years! Just one job.
- Sometimes in the parking area there are people smoking in the dark corner or sitting.

Q. Do you believe that the precinct is safe for others at night?



Select comments:

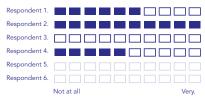
• Don't believe it is. Staff don't leave by themselves, especially if they are alone. Even if they are taking the bins out.

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• Depends, not sure.

Q. Do you think that the precinct is vibrant at night?



Select comments:

- Swan Street is vibrant. Especially on weekends. Can be a good vibe, but mostly it's drunk.
- Yes, there's lots happening around. You can hear a lot of activity.
- Swan Street is.
- More shops at Swan street not on Church Street.

Place managers comments:

On the corner Swan Street and Church Street there are few late nights take away shops. They take the pizza and the make a mess.

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Q. How often to you observe situations occurring that are undesirable or unsafe?

Respondent 1.		
Respondent 2.		
Respondent 3.		
Respondent 4.		
Respondent 5.		
Respondent 6.		
	Never.	Very

Select comments:

- Every Friday and Saturday night there are people in the carpark urinating. There has been no break ins, no damage to property, no graffiti, no stories of attack on persons.
- Few drunk people walking past. Only seen a couple of times
- 2-3 times a month.
- No, I haven't seen any. Sometimes bit of noise.

Place managers comments:

People get a pizza and to go the back of the Library and drink and eat and leave the litter. That's a hotspot for our team. At the back of the Library and especially at the maternal health.

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Q. Do you have any safety concerns about the precinct?

Select comments:

- Walking to train after football game can feel volatile.... And confronting. Although there are suburbs that I would feel less safe in. When there's so many people during a football game than also that makes is safer?! It's complex.
- Not sure is there's camera at the back?
- Just in terms of the pocket park good in summer but not many people in winter will use it.

Place managers comments:

Faeces or vomit, not that often but if does happen time to time. Pretty good last few months. Over summer it worsens. Library is definitely not a hot spot for tagging.

Q. What do you like about the precinct? What's working well?

Select comments:

- Lot's of hospitality venues make it really vibrant. More people around means there are more people to watch over others. Street comes alive so that it's not quite and dark.
- Wheelchair access is good. It's good that is on the main street and close the restaurants. People go to the restaurants and 7/11 afterwards. Surrounded by carparks spots, but they are often full which is a downside. Often, we go for Pizza afterwards.
- The park will be good for the library because we can have (library) activity in the summer. Our concern is the parking. Especially for night shift staff. We used to have 3 parking space for library staff. Since, two weeks ago these are no longer available. A lot of time we must park a long way away and then walk.

Place managers comments:

NIL

Q. Is there anything else you might like to share about the precinct?

Select comments:

- Want it to be more well-lit. Want to stop people from urinating.
- I would like to some small storage for groups hiring the venue. So, we don't need to carry the stuff to our meetings.

Place managers comments:

You should anticipate an increase in litter... Currently there is no place for people to sit in so you might attract more people. And there will be more litter. The pop-up park will increase our work...

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4.4 Site walk with select stakeholders.

On Thursday 27th of April a group of key stakeholder met to undertake a night time site walk together. Representatives were present from the Local Police, Richmond Council Staff and the DDA reference group.

A key note from the police was in the last 6 months this precinct has improved and there are less reports of incidents. Prior to this there was a peak any alcohol related incidents. The police worked with the local licensed venues to ensure they are operating within the terms of their liquor licensing and have since seen an improvement. The police are managing the issues all the time and indicated that often hot spots are related to venues and their operation.

Please note, the comments here are not direct quotes, rather paraphrasing items that were raised on the site walk.

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Site walk photo 01.

Comments from Richmond Police:

Need to keep sightlines clear. This is really important. Low ground covers then minimum 2m to underside of canopy.

Consider hostiles vehicle management. Providing a raised edge facing Church Street that stop car movements.

Locate bins, on Church Street, rather than in park. to Encourage waste to be put outside the park rather than dumped in the park.

Seating arrangement should be considered deter people from sleeping on the benches.



Site walk photo 02.

Government houses are close by so there will be a flow of people walking how after a big night and might go to sleep in the new park.

Set backs in built form are generally a concern but not specifically an issue here. Good that there are sensors in the carport on St Crispin Lane.

It actually feels ok here (referring to car park area) Lighting is reasonable and there are not too many places for concealment.

The rear courtyards and fences of the back of house are looking quite good. Well defined and lit. Rubbish isn't visible and they have used the space well.



Site walk photo 03.

DDA Reference group:

Want to see sensory plants.

Need to listen to all people around the site.

Concerned about the changes in State laws on drinking and don't want people to be allowed to drink in the park.

Surface of St Crispin is not good for wheelchairs.

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5.0 Benchmarks.

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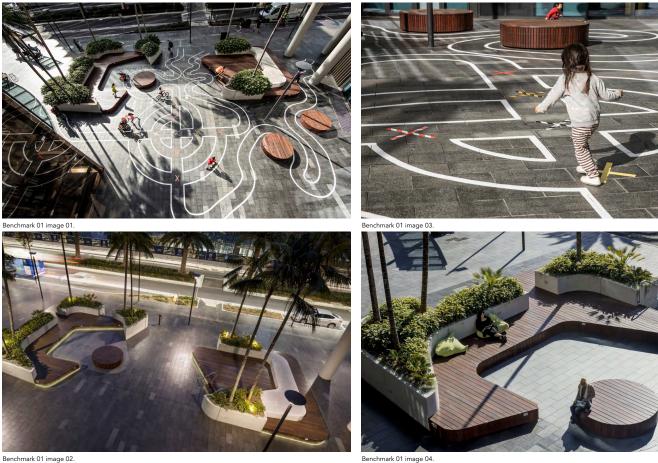
4.1 Benchmark 01: Library Forecourt, Wentworth Point.

Location: Wentworth Point, NSW Year: 2017 Client: Parramatta City Council Budget: \$ 500 000

Project bio:

Wentworth Point is a fast growing and thriving residential community in Homebush Bay on the banks of the Parramatta River. Umbaco was engaged to design the external forecourt of the Library located on the ground floor of 2 large residential towers. Our intention was for the area to be inclusive, multifunctional and multifaceted; to respond to the internal layout of the Library and work as an external "extension" to the Library.

On completion, this forecourt activates the entry into the new Library. The overall design is simple yet carefully detailed and snugly fits into the void created by the high-rise residential towers above. The generous seating terraces provide platforms for reading and define flexible spaces for small community events. Kentia palms fill the void above the forecourt magnificently. This simple design has complex detailing as well as a yin-yang energy to it. This is seen in the contrast between the spaces, forms and materials of the two main seating pods. People can now relax against the planters, under the striking Kentia palms, in a contained and yet public space.



Benchmark 01 image 02.



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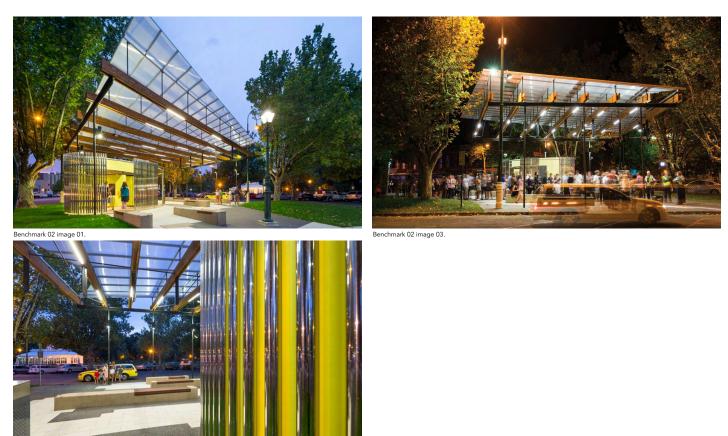
4.2 Benchmark 02: Howard Place, Bendigo.

Design: Williams Boag Architects, Melbourne, Vic, Australia Location: Bendigo, Vic, Australia Year: 2012 Client: City of Greater Bendigo

Project bio:

In the regional Victorian city of Bendigo, a small civic project by Williams Boag Architects goes beyond its initial brief of creating a safe waiting area for people after dark, to become a community hub, day and night.

Relevance the Richmond Library Precinct: Precinct planning for safety at night. Toilet block used to anchor safe meeting.



Benchmark 02 image 02.



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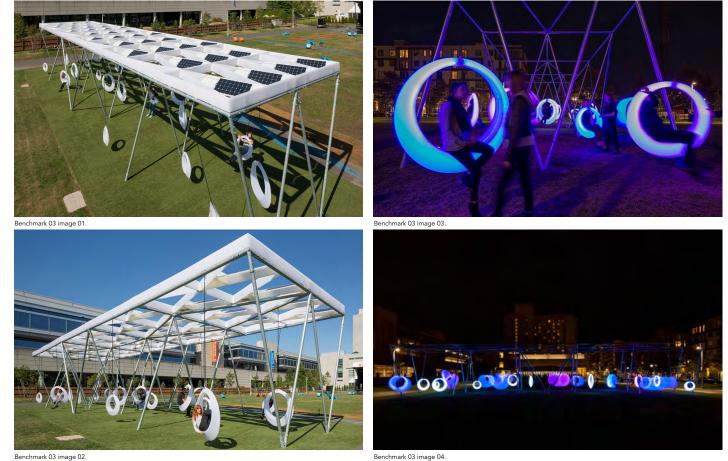
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4.3 Benchmark 03: Swing Time, Boston USA.

Design: Höweler + Yoon Architecture Location: Boston. Year: 2014

Design bio:

Swing Time is an interactive playscape in Boston, USA composed of 20 illuminated ringshaped swings. The swings are designed in three different sizes so that the community can engage, exercise, and play as individuals or in groups. Credit: Swing Time, Boston | Höweler + Yoon Architecture | Photographer: John Horner







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4.4 Benchmark 04: The Cloud Gate, Sydney.

Design: Jane Irwin Landscape Architecture Location: Sydney Year: NA.

Design bio:

The Čloud Gate is part of a City of Sydney project for Thomas Street aiming to recognise the past and present cultural identity of Haymarket through architecture, place design and public art. It does this while maintaining the teeming, informal and open street life that makes Chinatown such a lively and cherished urban place.



Benchmark 04 image 02.



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Benchmark	04	image	04.	
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4.5 Benchmark 05: More lighting alone does not create safer cities. XYX Lab, Monash University.

Design: ARUP and Monash University Location: NA Year: Ongoing.

Design bio: ARUP and Monash University have been undertaking extensive research into the affect of lighting on perceptions of safety.

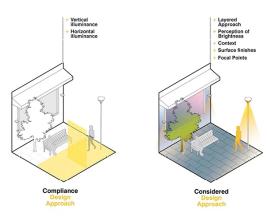
'We need to understand the patterns that exclude women from areas of cities and not defer to the usual responses – brighter lighting, more CCTV cameras and more authority figures. In fact, our research into unsafe "hotspots" has found young women's perceptions of urban safety do not correlate with the most brightly lit spaces.'

ARUP's research shows the human visual spectrum reacts better to warm light, and the data from young women showed how sensitive they are to cool white light with regard to feeling safe in cities. Spaces with warmer colour temperatures are perceived as safer places.

Looking deeper into the quality of light in our cities, the majority of bad areas had a very large range of colour rendering. The lowest colour rendering came from sodium luminaires that make everything look overly yellow. Women preferred a high-quality LED light that enabled them to distinguish shapes and colour, helping to create a sense of safety.

Source: https://www.architectureanddesign. com.au/features/features-articles/more-lightingalone-does-not-create-safer-cities

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Benchmark 05 image 01.



Benchmark 05 image 03.

Bright light does not necessarily make a space feel safer, as seen here where there's a sharp drop-off into dark shadows at the edge of the path. Nicole Kalms, Monash University

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6.0 Conclusion.

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6.1 Conclusion.

Acknowledging that no urban precinct can be labelled as explicitly safe, the precinct around the Richmond Library for the most part is perceived as reasonable however with ongoing management of the risks associated with the close proximity with several late-night venues.

Many of the current issues facing this precinct are synonymous with urban areas and the analysis has highlighted that there are many positive attributes that contribute to the sense of safety here. The library as a civic building contributes in a sense of care, family and community. The lighting for the most part comes from a range of sources (windows, sensors, signs, downlights) and creates a pedestrian inclusive experience. The boundaries between properties are well defined and high quality. There are reports of some unwanted activities occurring in the carpark, however sightlines here are considered reasonable. The delay with the development of the RSL represents one the biggest challenges for the pocket park. In it's current form the RSL is in poor condition and inactive.

Co-locating the pocket park with the Library creates opportunity for cross pollination of activation, sightlines, passive surveillance, increased management processes and community led sense of connectedness.

The park must be well lit using a range of light sources and colours. Feature lighting or integrated artwork could contribute to safety as well as connect to the local character. The lighting should ensure that there are no places to conceal unwanted activities.

The proposed pocket park will also create new challenges for the precinct. Council

should consider the following perceived risk as highlighted by the stakeholders:Risk of people sleeping in the new park.

- Risk of people sleeping in the new park.
 Damage to property (public furniture, fixtures)
- Increase in waste dumping and littering.
- being enjoyed by the community.
- Risk of people drinking excessively in the park and behavior threatening to others
- Risk of people being affected by drugs in and around the park.
- Lack of community ownership or care.

The four design principles and recommendations have been developed in response to these risks. Council should consider these as part of their design process and ongoing place activation and management.

Additionally, we must plan for the unforeseeable. Hence, Council must establish a post completion review to monitor how the pocket park settles into the urban fabric.



Site photo 01.

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6.2 Safer Design Principles.



Vibrant diverse community and a sense of connectedness.

Nurture a vibrant, diverse community to feel a sense of ownership and connection public space.

Waintain a high-quality public appearance: People are more likely to feel a sense of ownership and care for place if it is well maintenance and managed. Place should be well managed, clean and an in good working order.

Place activation: Public events and place activation strategies can strengthen communities and create new ways for diverse peoples to interact. People feel safer in the company of other people.

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Comfortable & confident at night.

The design of the public realm should support safe public movement at nightime. The public realm should encourage people to make confident decisions about their movements through the public realm. **Sight lines** - Provide clear sight lines between along main pedestrian movements. **Signage and wayfinding** - Use signage and

wayfinding to support pedestrian movements and access to key locations; public transport, central retail area.

Ambient lighting design:

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- Warm tones of light, not bright white light.
 Deliberate layering of different types of light, Facade, down lights, inground lights, light spill, colours, timers.
- Avoid high contrast between bright light and shadows.
- Engage a specialist lighting designer.



Accessibility.

When asked, what the number one factor that is that makes people feel safe - many say accessibility.

Access & movement - Provide safe, clear paths of travel. DDA compliant movement Interfaces & Built form - Avoid set backs in built form that are dark (or overly lit). Ensure clarity of public and private property.

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Education/Health/Housing.

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Safer, more inclusive communities requires the collaboration between multiple sectors. Such as housing, health and sports. Some of the outcomes of these collaborations may result in outcomes in the public realm. For example: **Public awareness** - Public awareness campaigns resulting in signage elements.

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6.3 Recommendations

No.	Recommendation.	Short term. / Pre-project Design Phase.	Medium Term 2-5 years.	Long term 5 years +
1.00	Vibrant diverse community and a sense of connectedness.			
1.01	Maintain a high-quality public appearance:			
1.02	1.02 Remove the graffiti/tagging from the RSL.			
1.03	Broken windows on the RSL appear poorly and should be repaired/concealed.	•		
1.04	.04 Reflect the local community in the built outcome; feature paving patterns, artwork colourful tiles.			
1.05	Ensure the Council cleaning and maintenance team (and/or head contractors through the defects liability phase) are resourced and equipped suitably for a rapid response to vandalism, litter or graffiti in the initial stage of opening the park.			
1.06	06 Place activation:			
1.07	Facilitate a launch event for the opening of the pocket park.			
1.08	08 Establish a program of events in the Charlotte Street Pocket Park. Events should be at both day and nighttime. Co-ordinate events with adjacent operators/ groups (Library, Bars).		•	
1.09	Engage an artist to create a light sculpture or artwork that includes significant light spill. Should reflect local character.	•		
2.00	Comfortable & confident at night.			
	Sight lines:			
2.02	Tree canopies to be minimum 1.8m height to underside of canopy.			
2.03	Low level planting to be maximum 700mm height. Planting should not be dense, rather allow for light and visibility through.	•		
2.04	Lighting.			
2.05	Reduce brightness of lights to the Church Street facade of the Library.	•		
2.06	Ensure future development lighting does not negatively impact the public realm; i.e. avoid sharp contrast with Elm Grove and Charlotte Street Lighting.			
2.07	Provide pedestrian scale, warm light on Charlotte Street in front of the library; on poles (at pedestrian level), in ground luminaires, artworks.			
2.08	Provide pedestrian scale lighting on Charlotte Street north, in front of the RSL/future development light.			
2.09	Consider low level lighting in laneways, sensors could be considered.			
2.10	Signage and wayfinding.			
2.11	Provide improved signage and wayfinding directing people to the public toilet on Docker Street.			
2.12	Upgrade the toilet block to provide people with a safe place to access bathrooms as well as other amenities such as help button and or Uber Drop off.			•
3.00	Accessibility.			
3.01	Movement and access.			
3.02	Provide DDA compliant pedestrian amenity along St Crispin Laneways	•		
3.03	Consider sensory species in the planting design.	•		
3.04	Public seats to have back rests and arm rests. (consider deterring people from sleeping in the park)			
3.05	Interfaces and built form.		•	
3.06	Monitor activities in setback. Ensure lighting is provided after the internal lights are switched off. Sensor lights could be considered.			
4.00	Education/Health/Housing.			
4.01	Liaise with professionals in Education/Health/Housing sectors to align initiatives, such as signage content and events.			
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Appendix.

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A2. A night time site walk.



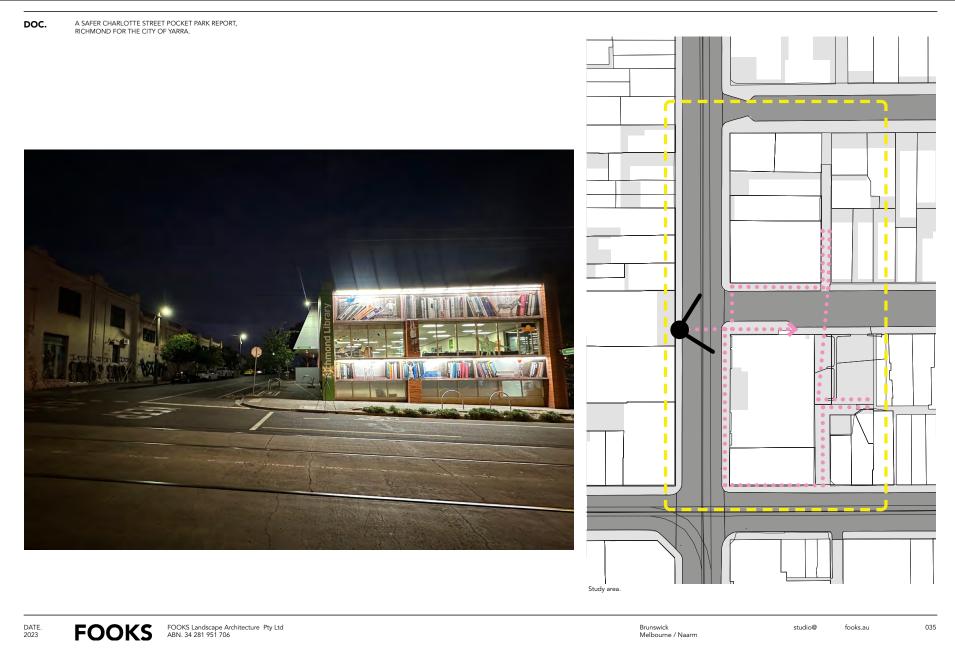
A night time site visit was undertaken on the on Wednesday 8th March 2022. 5-9pm.

Study area.

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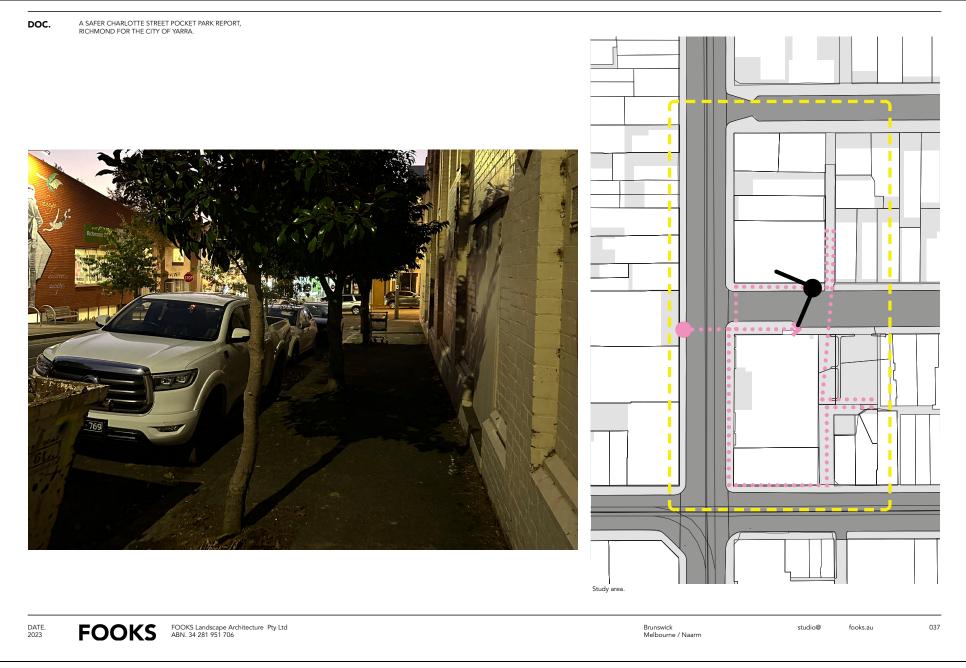
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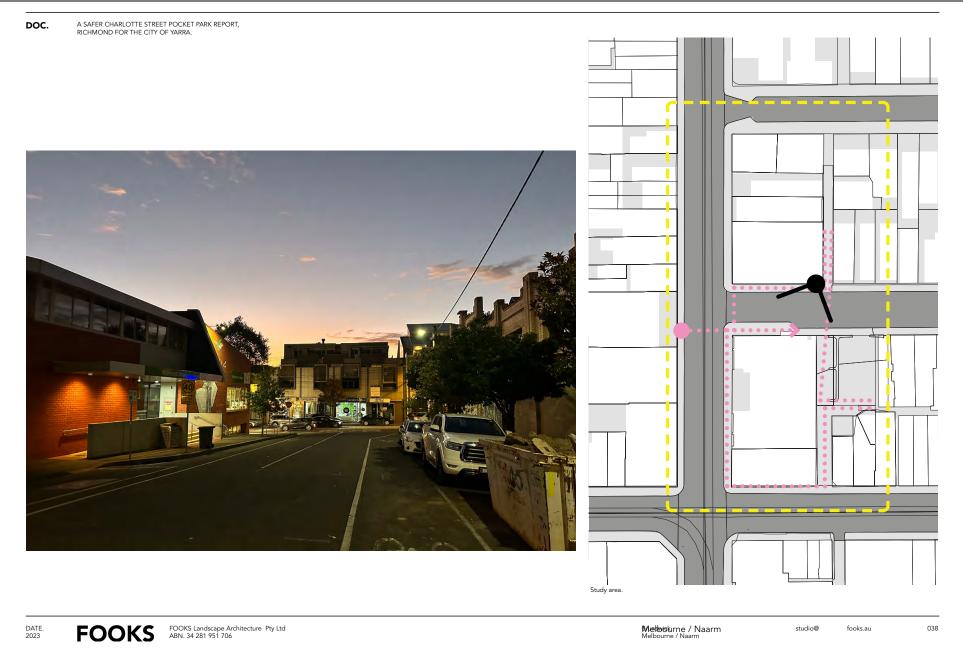
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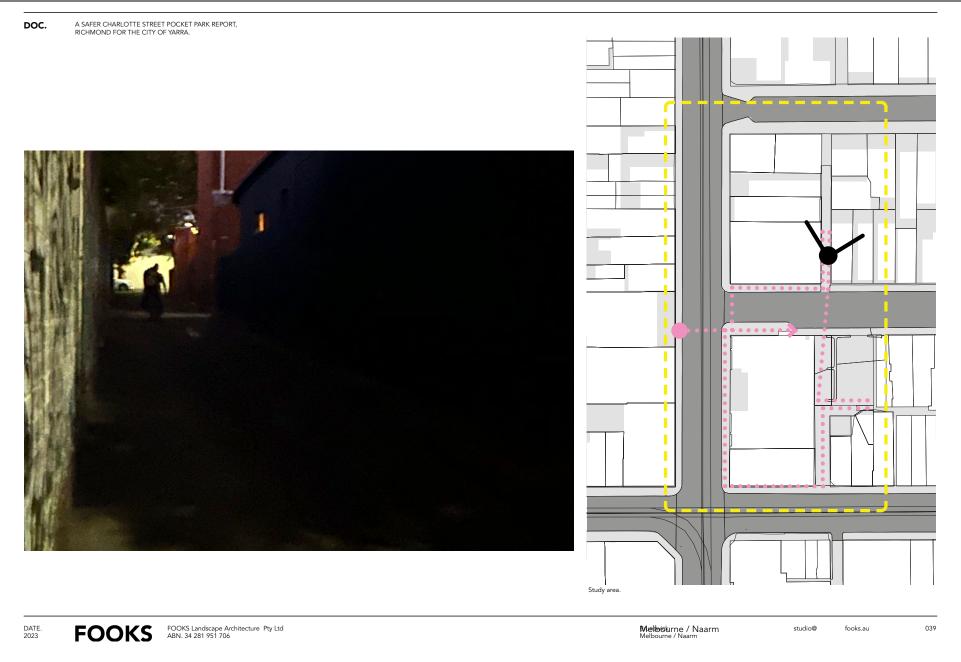


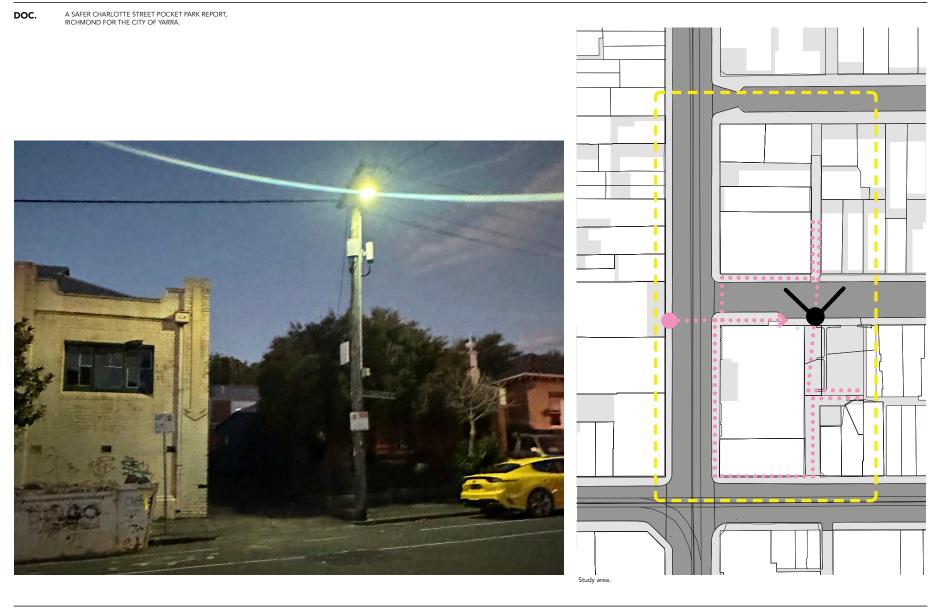












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DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, RICHMOND FOR THE CITY OF YARRA.

Site photo 01.

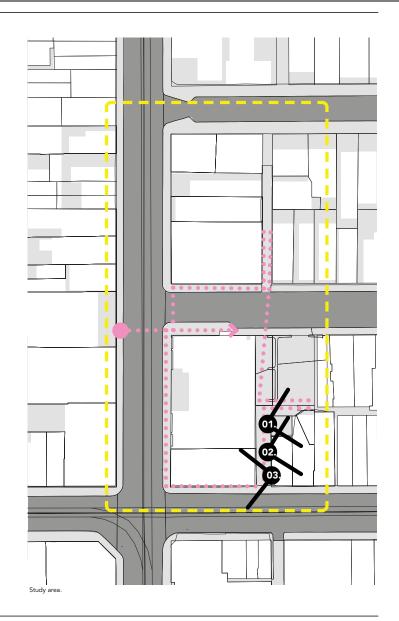
Site photo 02.



Site photo 03.



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DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, RICHMOND FOR THE CITY OF YARRA.

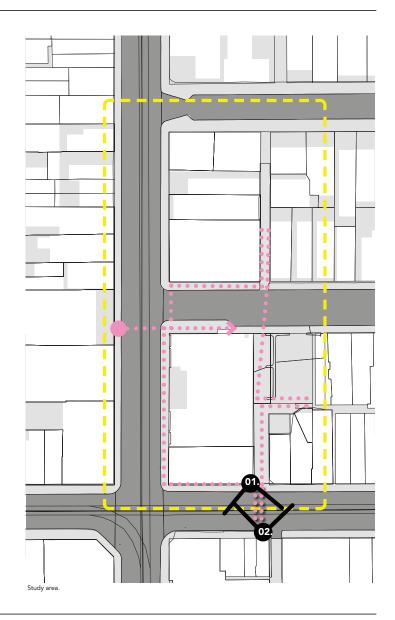
Site photo 01.



Site photo 02.



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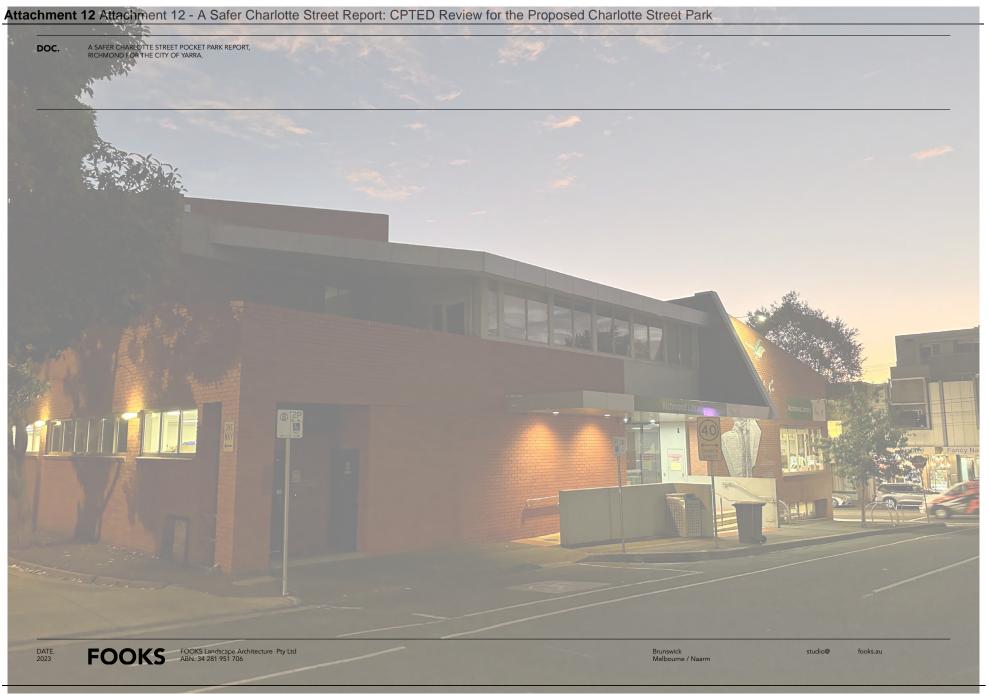
DOC. A SAFER CHARLOTTE STREET POCKET PARK REPORT, PREPARED FOR THE CITY OF YARRA.

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Thank-you.



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7.2 Plan for Victoria (including Draft Housing Targets) - Consideration of Draft Submission

Reference	D24/292128
Author	Leonie Kirkwood - Project and Planning Coordinator
Authoriser	Manager City Strategy
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

- 1. To provide a summary of the Government's recently released Draft Housing Targets and engagement material for *Plan for Victoria.*
- 2. To outline the contents of a proposed submission to the Department of Transport and Planning (DTP) on the proposed *Plan for Victoria*.

Critical analysis

History and background

What is the *Plan for Victoria*?

- 3. The Victorian Government is undertaking engagement to inform the development of a Plan for Victoria. The Plan will provide 'a blueprint to guide how Victoria grows and develops as a whole state.'
- 4. Council can make a submission to inform the Plan and its direction.
- 5. The Plan will replace *Plan Melbourne 2017-2050* and includes both metropolitan and regional Victoria.
- 6. The final plan, which is focused on actions, is anticipated to be released in late 2024.
- 7. The intent is that the development of the Plan will be community led.
- 8. The Plan will be underpinned by the following principles:
 - (a) <u>Inclusive</u> where access to an affordable home, close to infrastructure is a fundamental human right and where people are respected and appreciated for who they are;
 - (b) <u>Liveable</u> because people can get around easily and can connect with nature and open space in your local neighbourhood;
 - (c) <u>Sustainable</u> at all levels to support natural resources for the future and plan for energy, water, agriculture, coastal and marine environments;
 - (d) <u>Prosperous</u> with access to good education and good jobs, having the resources to live your best life; and
 - (e) <u>Enriching</u> where the community enjoys good health and well-being, are empowered, safe and happy.
- 9. An initial phase of engagement (Round 1) began in late 2023. The engagement, undertaken by the Department of Transport and Planning (DTP), included roundtables with industry, councils and other interest/stakeholder groups, an online survey, an interactive map, pop-ups and ideas board (see Community and Stakeholder Engagement for further information).

- 10. The next engagement phase, Round 2 the submissions period, opened in early July and will close on 30 August 2024.
- 11. This will be Council's <u>only opportunity</u> to make a submission and influence the Plan's direction. A final Plan and Housing Targets will be released at the end of 2024.
- 12. Some high level engagement outcomes and 'big ideas' for consultation have been released. See **Attachment 2**. No draft plan or specific actions have been released to comment on.

Five pillars

13. Five pillars will guide the plan:

and choice



neighbourhoods

and climate

action

and caring for

Country

- 14. Consultation with the key stakeholders and the wider community is focussed on the first four pillars.
- 15. Consultation on the Self Determination and Caring for Country Pillar is being undertaken by DTP solely with traditional owner groups and first peoples and is a separate process from the consultation on the other four pillars.

Discussion

Housing targets

- 16. Draft housing targets for each municipality were released on 16 June 2024 as part of the engagement on the *Plan for Victoria*.
- 17. The purpose of the targets is to:
 - (a) Implement *Victoria's Housing Statement 2024-2034* and seek to accommodate 2.24 million dwellings by 2051; and
 - (b) Direct growth to locations with good access to shops, jobs and other amenities and achieve a 70/30 per cent split between established areas and greenfield development.
- 18. The housing target for Yarra is 48,000 additional dwellings. This means Yarra's Planning Scheme needs to demonstrate it is theoretically able to provide for the 48,000 additional dwellings by 2051. This is a 91 per cent increase on the existing 52,600 dwellings (2023).
- 19. Councillor officers were briefed on the targets by the *Plan for Victoria* team on 26 June 2024. Officers understand from this briefing:
 - (a) The draft Housing Targets are not based on planning applications received, permits issued or constructed dwellings;
 - (b) They seek to build capacity in planning schemes and in the planning system. The target for Yarra's Planning Scheme and strategies is to ensure there is capacity for 48,000 additional dwellings;
 - (c) The draft Housing Targets released in June 2024 are preliminary. More refined targets will be issued when the *Plan for Victoria* is released at the end of the year. DTP is undertaking more detailed modelling of local conditions and may adjust them in response to Council feedback; and

- (d) Modelling for the housing targets does not anticipate rezoning of employment land.
- 20. The draft targets are not population / dwelling forecasts. Forecasts estimate growth based on assumptions about births, deaths and migration. The Draft Targets are partially aspirational to support the supply of residential land/dwellings in the long term. The methodology to develop the draft Housing Targets, as outlined by Department of Transport and Planning officers, included a buffer i.e. additional capacity.
- 21. Expert evidence provided to the Standing Advisory Committee Hearing for Amendment C291yara (Bridge Road and Victoria Street built form provisions) in March 2022, estimated Yarra's activity centres have a potential capacity of approximately 36,000 dwellings. This assumes the development of all sites.
- 22. Policy in the Yarra Planning Scheme directs housing growth to appropriate locations including major regeneration areas (such as the Alphington Paper Mill and the former Gasworks site in Fitzroy North) and within activity centres with good access to public transport, jobs, open space and other services.
- 23. 72 per cent of residential developments occurred in Yarra's activity centres or larger sites (e.g. the former AMCOR site) (*Yarra Housing Strategy 2018*). The remaining 28 per cent of the residential developments were located in 'infill' areas outside of these centres.
- 24. The draft Housing Target for Yarra is significantly higher when compared to recent forecasts and trends, including the State Government's *Victoria in the Future 2023* forecast.
- 25. Table 1 provides an analysis of the theoretical capacity of Yarra's activity centres based on various dwelling forecasts for Yarra (the table does not include the capacity of infill areas).
- 26. The figures show that even if all future development is assumed to occur in activity centres and if the much higher Housing Targets (which include a buffer) are used, Yarra's activity centres could provide sufficient dwelling capacity until at least 2044 (i.e. 20 years).

Forecast and average dwellings per year	Year capacity in ACs would be reached
Target - 1,714 dwellings/year	2044
Constructed dwellings in Yarra - 1,428/year (based on trends from 2016-2023)	2048
Victoria in the Future 2023 - 1,290/year	2051
Yarra Housing Strategy assumptions - 895/year	2063

Table 1: Capacity in Yarra's activity centres

- 27. The conclusions that can be drawn from the information available to date are:
 - Yarra is well-placed as a good example for increasing density in a balanced way. The Yarra Planning Scheme (including updated policy introduced by Amendment C269) and planning scheme amendments provides adequate capacity in Yarra's activity centres, at least in the medium-term;
 - (b) Yarra's Spatial Economic and Employment Strategy (SEES) 2018 and Yarra Planning Scheme seeks to retain all employment land in Yarra. Rezoning of employment land at this point in time is not required. Rezoning of employment precincts would encourage development in less desirable locations and is not likely to lead to an overall increase in total dwellings;

- (c) An update to the *Spatial Economic and Employment Strategy 2018* (SEES 2018) is currently underway and will be presented to Council later this year. The consultants undertaking the review indicate the directions from the SEES 2018 in relation to the need to retain employment land are unlikely to change substantially; and
- (d) The draft Housing Targets do not address key issues such as providing housing diversity, dwelling sizes or the provision of social and affordable housing.
- 28. Officers do not recommend Council changes its current policy approach in response to the Draft Housing Targets at present for the following reasons:
 - (a) Council undertakes constant monitoring and adjustment of the city's capacity;
 - (b) Through its recent policy updates introduced through Planning Scheme Amendment C269yara, Yarra has substantial capacity in its planning scheme, both in activity centres and infill areas;
 - (c) Council's current policy is sound and has generally been supported by the community (through the deliberative Liveable Yarra engagement process and various planning scheme amendments);
 - (d) Rezoning of employment precincts (or parts thereof) is not required at this point in time and would encourage residential development in less desirable locations, lead to an irretrievable loss of employment land and is not likely to lead to an overall increase in total dwellings in a given year;
 - (e) Housing Targets and how they are implemented are not yet finalised. There is a need to understand the implications of the housing targets on current and future strategic work being undertaken by Council. The resource burden of revising strategic work is significant; and
 - (f) There is an opportunity to review the Planning Scheme every five years. Key strategies such as the SEES and Housing Strategy are reviewed as needed.

Final Housing Targets

- 29. Final targets will be released at the end of 2024.
- 30. It is unclear how much of a difference there might be between the draft and final housing targets. The development of the draft targets used a different methodology than the methodology proposed for the final targets.
- 31. The calculation of the final targets will include:
 - Determining capacity Calculating the maximum capacity that can be built under existing land use and development settings and calculating how the maximum capacity will change if changes are made to create additional capacity;
 - (b) Distributing growth The use of two models will be used to consider:
 - (i) How areas might develop based on capacity and location choice decisions; and
 - (ii) Transport accessibility and transport capacity; and
 - (c) Assessing Feasibility Assessments of market viability to deliver required housing growth based on profitability. This will include estimating costs associated with development, required minimum profitability and likely built form, based on potential sale price.
- 32. The draft submission provides feedback on the assumptions that are proposed to be used in the calculation of the final targets.
- 33. Officers consider capacity of each municipality needs to inform the targets, taking into account all constraints and opportunities. The model should be nuanced to take the different conditions in the inner city into account i.e. higher land, development and holding costs, fragmented landownership, etc.

34. The addition of feasibility into the modelling strongly supported, however this needs to consider local differences.

Submission from Council

- 35. A draft submission for Council's consideration is at Attachment 1.
- 36. The draft submission consists of three parts:
 - (a) <u>Part 1</u> identifies Council's priorities and suggested actions to inform the development of the *Plan for Victoria*. It also provide examples of Yarra's projects that could be showcased for use across the State or Metropolitan Melbourne (projects could include the Room to Create and Roads to Parks programs);
 - (b) Part 2 provides feedback on the draft Housing Targets; and
 - (c) Part 3 discusses implementation and the critical need to fund infrastructure.
- 37. Strategic Planning officers have met with relevant teams within Council (see Community and Stakeholder Engagement for details) and have reviewed key Council documents to inform priorities for Council's draft submission.
- 38. The pillars and material made public to date align with high level directions in Yarra's strategies and policies. In particular:
 - (a) Providing more affordable homes and housing choice;
 - (b) Creating and supporting well designed, well serviced neighbourhoods;
 - (c) Directing growth to the right locations in established areas;
 - (d) The focus on transport infrastructure, including walking and cycling;
 - (e) The importance of retaining employment and providing better access and connections to jobs; and
 - (f) Addressing climate change and seeking more sustainable outcomes.
- 39. However, the 'devil is in the detail'. How the Plan will be implemented is unclear.
- 40. Officers recommend Council's submission highlights the following overarching issues:
 - (a) The Plan must ensure the demands for housing growth are balanced with retaining employment land;
 - (b) Infrastructure (such as increased public open space, public transport, walking and cycling infrastructure and community services) must be funded and provided to support the anticipated high levels of growth;
 - (c) To implement real change, a comprehensive approach is required across the three levels of government: local, State, and Federal;
 - (d) The State Government must make a strong financial commitment to funding any actions in the Plan; and
 - (e) Actions around sustainability must be expedited in light of the climate emergency.

Proposed priorities and actions in the draft submission

41. The following provides a summary of the Council priorities and proposed actions outlined in draft submission:

Table 2: Potential Council priorities and actions

Potential priorities based on current Council strategies

Affordable housing and choice

Priorities

- Ensure a genuine mix of dwelling types and sizes, including providing larger dwellings suitable for families and shared households in apartment developments, to accommodate the current and future needs.
- Support high quality well designed dwellings, including small dwellings such as studio apartments, that achieve good amenity outcomes for residents.
- Retain and build public housing for the most vulnerable socio-demographic groups.
- Increase the supply of social and affordable housing i.e. a significant net gain in social (public and community) housing stock.

Housing affordability is a key issue for Yarra. Maintaining the diversity of the municipality is critical and Council is committed to pursuing strategies that increase social and affordable housing in the municipality.

The outcomes of *Plan for Victoria* engagement released to date recognise there is an insufficient supply of affordable housing across Victoria.

The submission includes support for the introduction of planning mechanisms such as inclusionary zoning into the Victoria Planning Provisions. Inclusionary zoning would require developers to supply a proportion of new developments as affordable housing. A mandatory inclusionary zoning mechanism across the State is required to ensure that an adequate amount of social (i.e. community) and affordable housing stock is being delivered, in addition to public housing stock.

It also reflects Council's position urging the Victorian Government to maintain and upgrade existing public housing and substantially increase in the number of public housing dwellings to address the housing affordability crisis for the lowest income households - an integral part of the Yarra community.

Additionally, the *Plan for Victoria* should include targets to ensure a diverse mix of housing options and tenures for all residents (including people with disabilities, older persons and families), support social inclusion and maintain Yarra's vibrant community into the future.

The city will continue to play an important role in accommodating future housing growth, but that this must be balanced with maintaining Yarra's neighbourhood and heritage character, and important employment areas.

Equity and jobs

Priorities

- Support and strengthen the vibrancy and local identity of activity centres.
- Retain employment-only precincts/zones to retain a variety of businesses and job opportunities and as an attractive place for new business.
- Grow and protect local creative industries, arts and culture and live music.
- Foster more inclusive employment and reduce barriers to work.
- Enhance active transport infrastructure by increasing the capacity and frequency of public transport and deliver a network of all ages and abilities bicycle and walking infrastructure.

The submission strongly supports creating and retaining more jobs and opportunities in areas close to where people live. This should include fostering more inclusive employment and reducing barriers to work.

Opportunities exist for state and local government to ensure that Victoria remains accessible and affordable for start-ups and creative industries.

A key challenge for the inner city is the ongoing need to balance housing development with employment uses. Conversations around the *Plan for Victoria*, notably the draft Housing Targets, focus on housing growth.

Potential priorities based on current Council strategies

The Plan must recognise and protect employment land from encroachment by other uses that would cause fragmentation and may compromise the development and efficient operation of existing businesses.

The *Plan for Victoria* needs to be clear that where dwelling capacity in a scheme exists, employment land should not be rezoned to allow residential development unless a comprehensive, municipal analysis identifies it as surplus and it is in a suitable location.

Yarra is home to a series of vibrant and evolving activity centres. Each centre in Yarra is unique and dynamic, with a business and land use mix that is continually changing. They play a key role in employment and housing, providing important community spaces and focuses for the community and transport interchanges.

The growing resident and worker population will also place further importance on changing the way people move around, with growing congestion challenges around inner metropolitan areas. It will be critical to provide for a mix of transport modes (e.g. public transport, cycling, walking and motor vehicle) for workers to enable them to efficiently access jobs and for residents and visitors to access activity centres.

The State Government must invest in new public transport services and improve existing services. Improving cycling and pedestrian infrastructure is vital to achieving a sustainable, liveable and efficient city for people. These projects should be given a much higher priority.

Thriving and Liveable Suburbs and Towns

Priorities

- As population and urban development continues to intensify, provide a high-quality public realm and expanded and denser public open space network to ensure current liveability is at least maintained or improved.
- Ensure community infrastructure (such as libraries, recreation facilities, cultural centres or community hubs) meets the needs of residents, workers and visitors.
- Retain heritage and local character while encouraging sensitive and sustainable development.
- Protect and enhance the biodiversity values, connectivity and resilience of the natural environment.
- Retain and support Yarra's vibrant and diverse community.

To accommodate the 48,000 additional houses proposed for Yarra and over two million across Victoria, a substantial increase in supporting infrastructure will be required.

Macroplan Pty Ltd has estimated that if the 2.45 million additional dwellings across Victoria were to eventuate, Victoria would require:

- 300 additional full line supermarkets
- 3,500 additional GP clinics
- 3,570 additional childcare centres
- 5,000 14,000 hectares of additional open space (depending on quantum per capita)
- Large amounts of additional commercially zoned land in existing and new activity centres.
- Large new employment precincts
- Significant additional public transport and roads.

The combination of replacing or upgrading ageing infrastructure and investing in new infrastructure, alongside the demands of rapid population growth, will require significant investment in Council's asset portfolio. It is vital Councils are adequately supported to meet the community's infrastructure needs.

The diversity and distinctiveness of neighbourhoods and places across Yarra are an inherent part of its character and attraction. Importantly this creates a strong sense of place for local communities. Enhancing our great places and precincts whilst expecting significant growth is fundamental to its liveability.

The diversity and distinctiveness of neighbourhoods and places across Yarra are an inherent part of its character and attraction. Importantly this creates a strong sense of place for local communities and this diversity of place must be retained.

Potential priorities based on current Council strategies

Public open space is another element that is experiencing pressure through growth of the city. There are areas of the city where the community does not have open space within adequate walking distance of where they live or work.

The Plan must also recognise that as urban development intensifies, a high quality public realm, and expanded and better connected public open spaces will be crucial to ensure liveability is maintained. The Plan must include strategies to support public open space provision.

Given the value of land in Yarra and its historic, fine grain subdivision pattern, upgrading and expanding existing open space is one practical and economical approach to providing better quality, multi-purpose open spaces. Another necessary approach is to identify opportunities to repurpose existing public land, such as easements and roads as part of the open space network are critical.

The Plan must also protect landscapes, waterways and biodiversity and provide mechanisms for increased tree canopy cover.

Sustainable Environments and Climate Action

Priorities

- Accelerate Victoria's ambition to reach net zero emissions by 2035, rather than 2045.
- Manage climate risks and build climate resilient communities by actively planning for and investing in public infrastructure, housing stock and economic assets.
- Support communities most at-risk of climate impacts to prepare for and cope with those impacts Transition to a circular economy by consuming less, repairing, sharing, and repurposing more, and sending less waste to landfill.
- Create a healthy water-wise environment.

To better manage increasing pressures on natural resources, higher levels of population growth, and the effects of climate change, there is a need to improve how sustainability is incorporated into how the urban environment is designed and planned.

Yarra City Council was one of the first councils to declare a climate emergency. Change is needed to rapidly reduce carbon emissions across the community and ensure homes, business and community infrastructure are sustainable and resilient to a changing climate.

Yarra has long advocated for stronger environmentally sustainable design controls in the planning and building process and adopted a *Climate Emergency Plan* as a call to action.

The Plan should contain a strong commitment to zero emissions.

The State Government's net zero target was brought forward to 2045, along with a 95% renewable energy target for 2035. However, Council considers far more urgent action is required. This should be reflected in all aspects of the *Plan for Victoria* including housing, transport, jobs, circular economy, biodiversity, and community resilience.

It must also ensure communities most at-risk of climate impacts are prepared for and can cope with those impacts.

Strong policy leadership and significant financial investment is urgently needed from both the State and Federal Government to accelerate the transition to a net zero emissions economy and strengthen community resilience to climate change. The major transition ahead needs to occur in a fair and socially equitable way. The most vulnerable people have typically made the least contribution to the problem and often have less capacity to respond and cope with the impacts.

In addition, it is suggested the *Plan for Victoria* address other sustainability issues such as the circular economy and integrated water management.

Options

- 42. Council has two options when formally considering a draft Council submission:
 - Option 1 Provide feedback outlining Council's priorities and ideas for the Plan for Victoria; or
 - (b) Option 2 Not provide feedback.

43. Option 1 is recommended. This is Council's only opportunity to identify priorities and actions for Yarra and contribute to the Plan.

Community and stakeholder engagement

- 44. Strategic Planning has met with relevant teams in Council to compile the draft priorities, including; Statutory Planning, Strategic Transport and Traffic Engineering, Economic Development, Community Infrastructure Planning, Community Development, Social Strategy, Biodiversity, Open Space and Urban Design.
- 45. Officers have not had the opportunity to engage with the wider community on the Plan. The engagement is being conducted by DTP. DTP is aiming to ensure the Plan '*reflects the voices, ideas and diversity of all Victorians*' (*Plan for Victoria* webpage).
- 46. At a *Plan for Victoria* workshop with industry leaders, on 25 June 2024, DTP provided the following information on the engagement taken to date throughout Victoria to inform the plan:
 - (a) They have heard from more than 65,000 Victorians;
 - (b) Received 2,000 responses to an online survey;
 - (c) 2,500 contributions on the interactive map and 230 project ideas;
 - (d) Held 62 pop-ups throughout the State with 2,500 interactions; and
 - (e) Engaged with CALD ambassadors and youth ambassadors and with a partner organisation, held eight workshops with primary and high school children.
- 47. Pop-ups were held throughout Victoria, including at Victoria Gardens from 10am to 2pm on Monday 4 March and Wednesday 10 April 2024.

Policy analysis

Alignment to Community Vision and Council Plan

- 48. The five pillars that will guide the *Plan for Victoria* align with Council's Community Vision and five strategic objectives in Council Plan 2021-25:
 - (a) Strategic Objective one: Climate and environment;
 - (b) Strategic Objective two: Social equity and health;
 - (c) Strategic Objective three: Local economy;
 - (d) Strategic Objective four: Place and nature; and
 - (e) Strategic Objective five: Transport and movement.

Climate emergency and sustainability implications

- 49. The draft submission focusses strongly on reducing and mitigating the impacts of climate change.
- 50. The submission reflects the objectives of the *Yarra Climate Emergency Plan 2024-2030*, Council's recently adopted updated Climate Emergency Plan.

Community and social implications

- 51. The submission would also reflect the directions of the Yarra Planning Scheme to direct residential growth to Activity Centres and major regeneration areas and retain employment major employment areas.
- 52. The implementation of Council's *Housing Strategy,* including promoting more diverse housing to support a range of household sizes and forms and mandating increases to affordable housing, would also be outlined in the submission.
- 53. The submission also seeks to ensure that Yarra's diverse communities that contribute to our social mix and vibrancy are considered in all aspects of the Plan's development.

Economic development implications

- 54. Council's submission aligns with the Economic Development Strategy 2020 2025 in particular: Strategy 2: Retaining and growing Yarra's employment precincts and unlock economic development opportunities through strategic planning process, Strategy 5: Strengthen Yarra's retail and services precincts through improved streetscapes and amenity, to attract more people to visit, spend time and shop and Strategy 8: Grow and protect local creative industries and strengthen Yarra as a destination for arts and culture.
- 55. The submission also reflects Yarra's *Arts and Culture Strategy* 2022 2026 by highlighting the importance of the arts to Yarra.
- 56. The submission reflects the directions of the Yarra Planning Scheme to maintain and grow employment in Yarra's major employment precincts, support commercial activity and make employment areas attractive to existing and future businesses by encouraging public realm improvements and pedestrian movement.

Human rights and gender equality implications

57. There are no known human rights implications anticipated from the engagement on the *Plan for Victoria* or Council making a submission.

Operational analysis

Financial and resource impacts

- 58. There are no costs associated with making a submission to the Plan for Victoria.
- 59. Council's submission raises the issue of the need for additional funding of infrastructure (such as public transport, community facilities and open space) to support increased development.

Legal Implications

60. There are no known legal implications anticipated.

Conclusion

- 61. The Victorian Government is undertaking engagement to inform the development of the *Plan for Victoria*. The Plan will provide '*a blueprint to guide how Victoria grows and develops as a whole state.*'
- 62. The submissions period opened in early July and will close on 30 August 2024.
- 63. This will be Council's <u>only opportunity</u> to make a submission and influence the directions of the Plan.
- 64. Strategic Planning officers have met with relevant expert teams within Council and have reviewed key Council documents to help inform priorities for a draft submission.
- 65. As a detailed draft of the plan has not been released, priorities and actions have been collated from Council's various strategies and plans to form the basis of the submission.
- 66. Draft Housing Targets have been released as part of the *Plan for Victoria* engagement. Officers consider Yarra is well-placed to accommodate this growth. The Yarra Planning Scheme and planning scheme amendments provide adequate capacity in Yarra's activity centres, at least in the medium-term.
- 67. However, draft Housing Targets are silent on dwelling size, mix and affordable housing requirements and do not consider the need for integrated transport infrastructure, public open space and community infrastructure to support this growth.
- 68. Infrastructure (such as increased public open space, public transport, walking and cycling infrastructure and community services) <u>must</u> be funded and provided to support the high levels of development proposed by the Draft Housing Targets.
- 69. The draft submission highlights these overarching issues.

RECOMMENDATION

- 1. That:
 - (a) Council notes the officer report on the *Plan for Victoria* and Draft Housing Targets currently on exhibition by the State Government;
 - (b) Council endorses the submission in Attachment 1 to be submitted to the Department of Transport and Planning in response to the *Plan for Victoria* and Draft Housing Targets; and
 - (c) Senior officers continue to advocate on Councils behalf regarding the specific areas identified in the submission to reflect Council policies and strategic directions.

Attachments

- **1**. Attachment 1 City of Yarra Draft Submission to the Plan for Victoria (including Housing Targets)
- **2**. Attachment 2 Plan for Victoria Big Ideas

Attachment 1 Attachment 1 - City of Yarra - Draft Submission to the Plan for Victoria (including Housing Ta

Plan for Victoria (including draft Housing Targets) _{City of Yarra}

Submission August 2024



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Executive summary

The City of Yarra welcomes the opportunity to comment on the *Plan for Victoria* (the Plan). The development of a comprehensive, long-term plan for the State is crucial in maintaining and enhancing the sustainability and liveability of Victoria.

Key Considerations for Yarra

The pillars and material made public to date align with high level directions in Yarra's strategies and policies. In particular:

- Providing more affordable homes and housing choices
- Creating and supporting well designed, well serviced neighbourhoods
- Directing growth to the right locations in established areas
- The focus on transport infrastructure, particularly walking, cycling and public transport
- The importance of retaining employment land and providing better access and connections to jobs
- Addressing climate change and seeking more sustainable outcomes.
- However, the 'devil is in the detail'. How the Plan will be implemented is unclear.

Council's submission highlights the following overarching issues:

- The Plan must ensure the demands for housing growth are balanced with retaining employment land.
- Infrastructure (such as increased public open space, public transport, walking and cycling infrastructure and community services) must be funded and provided to support the anticipated levels of change.
- To implement real change, a comprehensive approach is required across the three levels of government: local, State, and Federal.
- The State Government must make a strong financial commitment to funding any actions in the Plan.
- Actions around sustainability must be expedited in light of the climate emergency.

Part 1 - Potential Council priorities and actions

Council's submission focusses on four of the five pillars:

- Housing affordability and choice
- Equity and jobs
- Liveable and thriving neighbourhoods
- Sustainable environments and climate action

Consultation on the Self Determination and Caring for Country Pillar is being undertaken by DTP solely with traditional owner groups and first peoples and is a separate process from the consultation on the other four pillars.

The following are priorities for Council and are critical for the successful delivery of the Plan for Victoria.

Affordable housing and choice

Priorities for Council

- Ensure a genuine mix of dwelling types and sizes, including providing larger dwellings suitable for families and shared households in apartment developments, to accommodate the current and future needs.
- Support high quality well designed dwellings, including small dwellings such as studio apartments, that achieve good amenity outcomes for residents.
- 01 DRAFT Plan for Victoria submission

- Retain and build public housing for the most vulnerable socio-demographic groups.
- Increase the supply of social and affordable housing i.e. a significant net gain in social (public and community) housing stock.

Housing affordability is a key issue for Yarra. Maintaining the diversity of the municipality is critical and Council is committed to pursuing strategies that increase social and affordable housing in the municipality.

The outcomes of *Plan for Victoria* engagement released to date recognise there is an insufficient supply of affordable housing across Victoria.

Council continues to support the introduction of planning mechanisms such as inclusionary zoning into the Victoria Planning Provisions. Inclusionary zoning would require developers to supply a proportion of new developments as affordable housing. A mandatory inclusionary zoning mechanism across the State is required to ensure that an adequate amount of social (i.e. community) and affordable housing stock is being delivered, in addition to public housing stock.

Council also calls on the Victorian Government to maintain and upgrade existing public housing and substantially increase in the number of public housing dwellings to address the housing affordability crisis for the lowest income households - an integral part of the Yarra community.

Additionally, the *Plan for Victoria* should include targets to ensure a diverse mix of housing options and tenures for all residents (including people with disabilities, older persons and families), support social inclusion and maintain Yarra's vibrant community into the future.

Yarra acknowledges that the city will continue to play an important role in accommodating future housing growth, but that this must be balanced with maintaining Yarra's neighbourhood and heritage character, and important employment areas.

Equity and jobs

Priorities for Council

- Support and strengthen the vibrancy and local identity of activity centres.
- Retain employment-only precincts/zones to retain a variety of businesses and job opportunities and as an attractive place for new business.
- Grow and protect local creative industries, arts and culture and live music.
- Foster more inclusive employment and reduce barriers to work.
- Enhance active transport infrastructure by increasing the capacity and frequency of public transport and deliver a network of all ages and abilities bicycle and walking infrastructure.

Yarra strongly supports creating and retaining more jobs and opportunities in areas close to where people live. This should include fostering more inclusive employment and reducing barriers to work.

Opportunities exist for state and local government to ensure that Victoria remains accessible and affordable for start-ups and creative industries.

A key challenge for the inner city is the ongoing need to balance housing development with employment uses. Conversations around the *Plan for Victoria*, notably the draft Housing Targets, focus on housing growth.

The Plan must recognise and protect employment land from encroachment by other uses that would cause fragmentation and may compromise the development and efficient operation of existing businesses.

The *Plan for Victoria* needs to be clear that where dwelling capacity in a scheme exists, employment land should not be rezoned to allow residential development unless a comprehensive, municipal analysis identifies it as surplus and it is in a suitable location.

Yarra is home to a series of vibrant and evolving activity centres. Each centre in Yarra is unique and dynamic, with a business and land use mix that is continually changing. They play a key role in employment and housing, providing important community spaces and focuses for the community and transport interchanges.

The growing resident and worker population will also place further importance on changing the way people move around, with growing congestion challenges around inner metropolitan areas. It will be critical to provide for a mix of transport modes (e.g. public transport, cycling, walking and motor vehicle) for workers to enable them to efficiently access jobs and for residents and visitors to access activity centres.

The State Government must invest in new public transport services and improve existing services.

Improving cycling and pedestrian infrastructure is vital to achieving a sustainable, liveable and efficient city for people. These projects should be given a much higher priority.

Thriving and Liveable Suburbs and Towns

Priorities for Council

- As population and urban development continues to intensify, provide a high-quality public realm and expanded and denser public open space network to ensure current liveability is at least maintained or improved.
- Ensure community infrastructure (such as libraries, recreation facilities, cultural centres or community hubs) meets the needs of residents, workers and visitors.
- Retain heritage and local character while encouraging sensitive and sustainable development.
- Protect and enhance the biodiversity values, connectivity and resilience of the natural environment.
- Retain and support Yarra's vibrant and diverse community.

To accommodate the 48,000 additional houses proposed for Yarra and over two million across Victoria, a substantial increase in supporting infrastructure will be required.

Macroplan Pty Ltd has estimated that if the 2.45 million additional dwellings across Victoria were to eventuate, Victoria would require:

- 300 additional full line supermarkets
- 3,500 additional GP clinics
- 3,570 additional childcare centres
- 5,000 14,000 hectares of additional open space (depending on quantum per capita)
- Large amounts of additional commercially zoned land in existing and new activity centres.
- Large new employment precincts
- Significant additional public transport and roads.

The combination of replacing or upgrading ageing infrastructure and investing in new infrastructure, alongside the demands of rapid population growth, will require significant investment in Council's asset portfolio. It is vital Councils are adequately supported to meet the community's infrastructure needs.

Council also notes the diversity and distinctiveness of neighbourhoods and places across Yarra are an inherent part of its character and attraction. Importantly this creates a strong sense of place for local communities. Enhancing our great places and precincts whilst expecting significant growth is fundamental to its liveability.

Public open space is another element that is experiencing pressure through growth of the city. There are areas of the city where the community does not have open space within adequate walking distance of where they live or work.

The Plan must also recognise that as urban development intensifies, a high quality public realm, and expanded and better connected public open spaces will be crucial to ensure liveability is maintained. The Plan should include strategies that support public open space provision.

Given the value of land in Yarra and its historic, fine grain subdivision pattern, upgrading and expanding existing open space is one practical and economical approach to providing better quality, multi-purpose open spaces. Another necessary approach is to identify opportunities to repurpose existing public land, such as easements and roads as part of the open space network are critical.

The diversity and distinctiveness of neighbourhoods and places across Yarra are an inherent part of its character and attraction. Importantly this creates a strong sense of place for local communities and this diversity of place must be retained.

Council also considers the Plan must also protect landscapes, waterways and biodiversity and provide mechanisms for increased tree canopy cover.

Sustainable Environments and Climate Action

Priorities for Council

- Accelerate Victoria's ambition to reach net zero emissions by 2035, rather than 2045.
- Manage climate risks and build climate resilient communities by actively planning for and investing in public infrastructure, housing stock and economic assets.
- Support communities most at-risk of climate impacts to prepare for and cope with those impacts Transition to a circular economy by consuming less, repairing, sharing, and repurposing more, and sending less waste to landfill.
- Create a healthy water-wise environment.

To better manage increasing pressures on natural resources, higher levels of population growth, and the effects of climate change, there is a need to improve how sustainability is incorporated into how the urban environment is designed and planned.

Yarra City Council was one of the first councils to declare a climate emergency. Change is needed to rapidly reduce carbon emissions across the community and ensure homes, business and community infrastructure are sustainable and resilient to a changing climate.

Yarra has long advocated for stronger environmentally sustainable design controls in the planning and building process and adopted a *Climate Emergency Plan* as a call to action.

Council considers the Plan should contain a strong commitment to zero emissions.

The State Government's net zero target was brought forward to 2045, along with a 95% renewable energy target for 2035. However, Council considers far more urgent action is required. This should be reflected in all aspects of the *Plan for Victoria* including housing, transport, jobs, circular economy, biodiversity, and community resilience.

Council is also seeking to ensure communities most at-risk of climate impacts are prepared for and can cope with those impacts.

Strong policy leadership and significant financial investment is urgently needed from both the State and Federal Government to accelerate the transition to a net zero emissions economy and strengthen community resilience to climate change. The major transition ahead needs to occur in a fair and socially equitable way. The most vulnerable people have typically made the least contribution to the problem and often have less capacity to respond and cope with the impacts.

In addition, it is suggested the *Plan for Victoria* address other sustainability issues such as the circular economy and integrated water management.

Part 2 – Housing Targets

The Draft Housing Target identified for Yarra is to provide planning scheme capacity for an additional 48,000 dwellings from 2023 to 2051. This would represent an increase of 91 per cent above the current number of dwellings in Yarra - 52,600 (in 2023).

The Draft Targets are understood to be partially aspirational to support the supply of residential land/dwellings in the long term.

The target for Yarra is considerably higher than any other forecasts or rates of actual development, such as the official forecast data in Victoria in Future (VIF) 2023.

Yarra's activity centres have a potential capacity of approximately 36,000 dwellings. This assumes the development of all sites. Yarra's activity centres and major sites could provide sufficient dwelling capacity until at least 2044. Combining this with the capacity of residential areas outside of these activity centres, Yarra's planning scheme and its strategic frameworks are well-placed to achieve the Draft Housing Target.

While Yarra can accommodate significant housing growth, it is unclear how the draft Housing Targets will be applied and implemented.

Council also notes in its submission that there are significant barriers to housing growth. However, the planning system and local government does not deliver housing. Approving homes does not necessarily translate to homes being built, especially given current economic conditions. Council has approved significant residential developments, however significant numbers of developments are not being constructed. A comprehensive, multi-faceted approach is needed that tackles the issue from all angles.

Council also notes the Housing Targets need to be more than just numbers – housing diversity targets are also needed in the planning system. Diversity targets are needed to reflect the different types and size of housing needed, including its affordability.

Council understands that one of the drivers of the housing targets is the premise that more homes will mean they are more affordable. Capacity in the planning scheme alone is not the answer to affordability. Yarra, together with the other M9 Councils, is seeking the introduction of mandatory affordable housing controls in the Victorian Planning System to deliver social and affordable housing. Social and affordable housing is essential infrastructure that needs to be planned for and provided in a similar way to transport infrastructure, parks and open space, drainage works are provided via contributions from development as cities grow and densify.

Quality housing is critical too. Councils should not be pressured to approve poor quality development proposals because targets are not being met. Councils should be supported to ensure the market provides high-quality, liveable, sustainable development.

Part 3 – Implementation

Implementation of the *Plan for Victoria* and Housing Targets has not been outlined in the engagement material.

There must be strong emphasis on implementation and promotion of infrastructure investment.

A 'whole of government' commitment to the implementation of the plan is essential.

1.0 Introduction

The City of Yarra welcomes the opportunity to comment on the *Plan for Victoria*. The development of a comprehensive, long term plan for the State is crucial in maintaining and enhancing the sustainability and liveability of Victoria.

1.1 Approach of Council's submission

This submission provides both high-level and detailed comments, important in progressing the plan. Yarra has only commented on parts of the plan relevant to the LGA. For example, few comments are provided on directions or strategies which address Victoria's rural and regional areas.

Part 1 of Yarra's submission focusses on the four of the five pillars:

- Housing affordability and choice
- Equity and jobs
- Liveable and thriving neighbourhoods
- Sustainable environments and climate action.

Council has not provided comment on the fifth pillar - Self Determination and Caring for Country as it is understood consultation is being undertaken by DTP solely with traditional owner groups and first peoples and is a separate process from the consultation on the other four pillars.

Under each these pillars, this submission outlines:

- Priorities for Yarra and suggested actions to inform the development of the Plan for Victoria
- Examples of Yarra's projects that could be showcased for use across the State or Metropolitan Melbourne.

Part 2 focusses on the draft Housing Targets.

Part 3 discusses implementation of the Plan and funding.

2.0 Affordable housing and choice

As more people choose to call Yarra home, housing growth will need to be planned and managed in a way that maintains its liveability. There is an urgent need for increased supply of affordable housing as well as greater choice and diversity of housing.

Yarra will continue to play an important role in accommodating future housing growth, but this must be balanced with maintaining Yarra's neighbourhood and heritage character and important employment areas.

Council priorities

- Ensure a genuine mix of dwelling types and sizes, including providing larger dwellings suitable for families and shared households in apartment developments, to accommodate the current and future needs
- Support high quality well designed dwellings, including small dwellings such as studio apartments, that achieve good amenity outcomes for residents.
- Retain and build public housing for the most vulnerable socio-demographic groups.
- Increase the supply of social and affordable housing i.e. a significant net gain in social (public and community) housing stock.
- Support medium and higher-density housing in activity centres and urban renewal precincts i.e. locations with good access to jobs, services and public transport.

2.1 Housing choice and diversity

Different housing formats

The current housing market in Yarra is predominantly providing housing options for small households, including single occupants. In the long-term, providing a diverse mix of housing options and tenures for all residents (including people with disabilities, older persons and families) is important to help support social inclusion and maintain Yarra's vibrant community into the future.

The draft Housing Targets do not address key issues such as providing housing diversity, dwelling sizes or the provision of social (including public) and affordable housing.

It is important to ensure new housing is designed to meet the changing needs of the population over their lifetimes. As most of the new housing being delivered in Yarra is in the form of apartments, there is a need to ensure high density development can accommodate different housing needs, including design considerations to make higher-density living more attractive with high quality internal amenity outcomes for single as well as larger household groups, students, and people with disabilities and older people in Yarra.

It is important to ensure that they are designed and built to meet the changing needs of occupants across their lifetime and enhance the liveability of the dwellings for the longer term.

Specific needs for larger household groups include providing sufficient internal and outdoor space, sufficient and convenient storage and also a diversity of apartment types and sizes. Larger apartments, for families in particular, are best located together, over-looking communal open space.

The specific needs of older people and people living with a disability include dwellings that have adequate storage space, are close to shops, transport and other services, have an accessible layout and are also easy and cost-effective to adapt. These issues are best dealt with at the design and planning stage.

Currently most of Yarra's workers (86 per cent), including key workers, live outside the municipality. Key workers, including teachers, fire/emergency workers, nurses, paramedics and police, provide essential services for the community and, due to the nature of their work, often need to live close to their workplace. Research has shown that key workers are increasingly being priced out of inner city areas, such as Yarra, as they typically earn moderate rather than high incomes.

It is important that a mix of housing options for multiple demographics that are more affordable is being delivered in the medium to longer term. This includes accommodation that is affordable to key workers.

Climate resilient housing

Council's recently updated and adopted Climate Emergency Plan 2024-2030 (CEP) seeks to ensure '*In* Yarra, everyone lives and works in comfortable and climate-safe homes and buildings, supported by climate resilient public spaces and infrastructure.'

The CEP notes community members in social housing, older adults, children, and young people, people with health conditions and the homeless can be at greater risk from climate impacts, particularly extreme heat or cold, due to the lack of investment in climate resilient and thermally comfortable infrastructure. Substantial investment in increasing the climate readiness and thermal comfort of housing is urgently needed to give people option to remain safely in their homes during extreme events. (See Sections 5.1 – Zero Carbon and 5.2 Climate resilience of this submission)

Higher quality dwellings

Council's submission to the Better Apartments Design Standards (BADS) in October 2021 identified a number of areas where apartment standards could be improved to provide better housing diversity, better amenity and sustainability outcomes. These changed included:

- requiring external shading devices or energy efficient glazing to be provided to all north, east and west facing habitable room windows.
- updating standards to ensure buildings are sited to ensure adequate daylight is retained for existing habitable room windows (as well as proposed)
- requiring daylight modelling to be provided when certain specified separation distances are not achieved for both existing and proposed habitable room windows
- including more prescriptive measures for assessing overlooking
- revisiting the threshold for road noise to include sites abutting main roads of a lower order
- requiring a minimum consolidated area of storage

Suggested actions for inclusion

- 2.1.1. Improve the Better Apartment Design Standards (BADS) as per Yarra's submission on the issue to provide for housing diversity, better amenity and sustainability outcomes.
- 2.1.2. Develop mechanisms to facilitate greater diversity of housing within new development including family-friendly housing, affordable and social housing, including for key workers.
- 2.1.3. Develop targets for housing diversity as part of the *Plan for Victoria*.
- 2.1.4. Increase standards for new housing and renovations (including social housing) to create climate-safe, resilient and thermally comfortable housing.
- 2.1.5. Work with State Government to support the transition of community members experiencing homelessness into stable housing.

2.2 Social and affordable housing

Yarra has long supported diverse models of housing suitable for households on low incomes within its municipality and has been a leader in advocating for the State Government to improve housing conditions for existing tenants and to further increase the local supply of social housing.

Sustaining a socio-economically diverse population in Yarra requires a range of affordable housing needs and ensure accessible options across various income levels. This includes supporting the most vulnerable members of our community and through to the key workers essential to the economy and vital mix of a city.

Offering affordable housing options for very low, low, and low-to-moderate-income households exerts downward pressure on market forces, alleviating the current housing market's polarisation. In this market, public and social housing is limited, and most available housing is often only accessible to higher-income earners.

The Plan for Victoria must recognise there is an insufficient supply of social (including public) and affordable housing and the housing prices are exceptionally higher than other metro regions.

It should include clear directions and strategies to increase the supply of social and affordable housing and provide greater choice and diversity of housing in the Inner Metro Region.

Affordable housing in locations with good access to jobs, services and public transport

Yarra recognises that geographic locations have different levels of access to employment, education, retail, recreation and services and lower income households may find themselves having to sacrifice better access to services for a more affordable home.

Social and economic disadvantages can only be addressed when people have access to choices of transport, wraparound support services (social, health and financial) and employment options.

Yarra is well-placed to continue to play a role in providing these options, but significant involvement from State Government is required to address disadvantages in the current housing market.

Public housing renewal and retaining existing social housing development

Council is strongly in support of the model of public housing and calls on the Victorian Government to maintain and upgrade existing public housing (unless building or engineering advice states otherwise); and substantially increase in the number of public housing dwellings to address the housing affordability crisis for the lowest income households, which are an integral part of the vibrant Yarra community.

Council strongly opposes the Victorian Government's plans to demolish 44 public housing towers across the State, including 12 towers in the City of Yarra, being in Fitzroy, Collingwood, and Richmond.

On 9 July 2024, Council resolved to advocate for the following considerations concerning any large-scale relocation of public housing residents, including from potential redevelopment of public housing estates or other groupings of public housing initiated by the Victorian Government:

- no net loss in the number and size (including number of bedrooms) of public housing dwellings within redevelopment sites.
- delivery of quality open space within a site and/or the surrounding neighbourhood to offset the loss of any open space resulting from the redevelopment and densification of public housing estates.
- community services and infrastructure are equitably distributed across Yarra's public housing estates, tailored to the needs of the diverse tenant population.
- redevelopments should offer a variety of housing options suitable for singles, couples, and families, ensuring that people at different life stages can reside within the same neighbourhood. This approach fosters social diversity, enhances community stability, and supports aging in place.
- in cases where public housing redevelopment includes mixed tenure, it should be impossible to distinguish public and community housing dwellings from affordable and private housing stock.
- all new dwellings resulting from public housing redevelopments should meet a minimum silver rating as outlined in the Liveable Design Guidelines, ensuring ease of accessibility upgrades for lifelong tenure. These new dwellings should also comply with a seven-star rating as defined under the National Construction Code 2022.

To increase public housing stock, Council considers there is an opportunity to leverage various stateowned sites in the municipality for this purpose, including the former sites of Fitzroy Gasworks in North Fitzroy, the Provan's warehouse in Clifton Hill, and the police warehouse in Collingwood.

Inclusionary zoning

Yarra continues to support the introduction of inclusionary zoning into the *Victorian Planning Provisions*, to be employed either at specific precincts and/or regions.

Policy in the Yarra Planning Scheme enables the provision of at least 10% affordable housing for all rezonings to allow residential use, and in significant developments of 50 or more dwellings.

Without social and affordable housing mandates, Council continues negotiating with developers for long-term social and affordable housing stock to be included in private developments. Various percentages of affordable housing are achieved through these negotiations and there is little certainty around the different tenures and offerings are made.

A mandatory inclusionary zoning mechanism across the State is required to ensure that an adequate amount of social (i.e. community) and affordable housing stock is being delivered, in addition to public housing stock.

Quality of affordable housing

Council also recognises the importance of ensuring that affordable dwellings and all dwellings are built to a high standard in terms of quality, accessibility, durability and energy-efficiency to decrease ongoing maintenance costs.

Affordable housing should:

- be tenure blind and integrated with market housing, meaning that subsidised and private dwellings should not be able to be readily differentiated through either their appearance, quality or amenity and should have equal access to all communal indoor and outdoor spaces.
- promote high accessibility standards by being in accordance with *Liveable Housing Design Guidelines*' Silver level or higher.
- be built to a high standard in terms of durability and energy-efficiency to decrease ongoing maintenance and operating costs.

Homelessness

The rate of homelessness in Yarra is 95 per 10,000 people, the fourth highest rate for any Victorian municipality, and more than double that of the state average (*Yarra Homelessness Strategy*, 2020).

Council engages with homelessness through a range of actions, all of which focus on human rights and our duty of care to people, wellbeing, public health and community safety.

Council's ultimate goal is to prevent homelessness by supporting an increase of social and affordable housing and appropriate support services. A fundamental barrier to overcoming homelessness is the lack of affordable housing options, supported by appropriate services to assist people to maintain tenancies and improve their wellbeing. The only real solution is promoting long-term secure, appropriate and affordable housing options.

Suggested actions for inclusion

- 2.2.1. Retain the public housing towers and estates and ensure the community benefit from any renewal of public housing is maximised.
- 2.2.2. Identify underutilised and surplus government land that has the potential to deliver additional social housing.
- 2.2.3. Convert the currently voluntary social and affordable housing mechanism into a mandatory inclusionary zoning mechanism to deliver social and affordable housing with certainty and at scale.
- 2.2.4. Implement affordable rental housing targets.
- 2.2.5. Apply a mandated minimum social and affordable requirement for build-to-rent developments with binding agreements with registered housing agencies to retain social and affordable housing stock into the future.
- 2.2.6. Implement targets for transitional housing to address homelessness.

2.3 Location of new housing

Council supports the intent of the *Plan for Victoria* to increase the supply of housing in established residential areas of Metropolitan Melbourne. However, this growth must be supported by adequate infrastructure, including open space, public transport, community facilities, shops and other services (see 4.1 – A strong vibrant community of this submission).

Yarra supports the continuation of a defined urban growth boundary that is locked to ensure urban growth will not sprawl out to fertile agricultural land as it has in the past.

It would also be pertinent to ensure there are growth boundaries around the regional centres and clear delineations of where development will not go to ensure problems of sprawl are not transferred to these areas when they take on the pressures of future growth.

Growth in Yarra

The strategic directions set out in the Yarra Planning Scheme identify activity centres as primary locations for economic activity, housing, leisure and recreation, tourism, the arts and culture.

Activity centres are a focus of growth in Yarra and will continue to accommodate most of the city's growth because of their proximity to transport infrastructure, shops and services making them the most suitable locations for development (see Housing targets vs current development rates in Part 2 of this submission).

Draft Housing Targets seek to ensure Yarra can accommodate 48,000 additional dwellings by 2051. Recent Yarra capacity work shows that a large proportion of this capacity can be met in Yarra's activity centres and identified urban renewal sites in the medium term (up to 2044 at minimum).

Yarra also seeks to protect, conserve and enhance the municipality's highly valued heritage places; to retain and promote Yarra's distinctive character and sense of history; and to protect and enhance the built form, character and function of streets and laneways as a feature of Yarra's urban structure and character.

Importantly for the inner region, heritage commercial streetscapes and abutting low rise residential areas means that the scale, intensity and form of additional housing supply in activity centres needs to protect highly intact heritage streetscapes and buildings; be appropriate to its role and capacity; and provide a mix of uses. The supply of housing should not come at the expense of creating, enhancing or protecting the identity, character and amenity of a place.

Further, Councils undertake important strategic work to identify the need for infrastructure and services as the population is changing. Without support from State Government to quickly assess and decide planning scheme amendments, the planning system is reactive at best and sometimes opportunities are missed or unintended outcomes are achieved. This particularly relates to public open space contributions, development contributions and local overlays. Also see Section 4.2 of this submission – Public Open Space.

Suggested actions for inclusion

- 2.3.1. Fund Councils to undertake further strategic work to address the draft Housing Targets and the need for infrastructure.
- 2.3.2. Adopt the Yarra model and consider both heritage and growth outcomes when developing built form controls (Design and Development Overlays).
- 2.3.3. Support Councils in managing growth by faster assessments and decision making of planning scheme amendments.

3.0 Equity and jobs

Yarra's employment precincts and activity centres are critical economic areas that support a broad range of business and employment uses. The availability of areas of employment land in Yarra is a strength and competitive advantage and will be important in accommodating future business and employment growth.

Yarra's competitive strength as a knowledge economy is based on a clear clustering of areas where research institutions, health and education facilities, high-tech, innovative and creative firms combine to attract leading businesses, entrepreneurs and professionals.

In addition, Yarra's activity centres, major employment precincts and areas zoned for industrial purposes present further opportunities for additional capacity for commercial development and employment. Yarra also has an established and leading role within Victoria's creative arts industry.

While Yarra is well positioned to facilitate the use of sustainable modes of transport, increasing car use and parking demand continues to create pressure and congestion in Yarra's streets, not just for cars but for other transport modes using the road system. The competition for the limited physical space within streets is an ongoing issue. Facilitating sustainable journeys on all transport modes will support the productivity, wellbeing and environmental values of the community. Yarra needs to reduce car dependence by promoting walking, cycling and public transport as the preferred forms of transport.

Council priorities

- Support and strengthen the vibrancy and local identity of activity centres.
- Retain employment-only precincts/zones to retain a variety of businesses and job opportunities and as an attractive place for new business.
- Grow and protect local creative industries, arts and culture and live music.
- Foster more inclusive employment and reduce barriers to work.
- Enhance active transport infrastructure by increasing the capacity and frequency of public transport and deliver a network of all ages and abilities bicycle and walking infrastructure.

3.1 Employment and jobs

Yarra is strongly supportive of creating and retaining more jobs and opportunities in areas close to where people live.

Yarra has a thriving local economy with over 81,000 jobs (with approximately 2,700 jobs added annually) and more than 16,600 businesses, making Yarra home to one of the largest economies in metropolitan Melbourne. The proximity to CBD business activity, cultural and sporting centres, road, rail and tram links makes Yarra an attractive place to do business and work.

Yarra's economy is driven by four key areas: knowledge industries, creative industries, population-driven activities and the health, education and public sectors.

Pre-Covid just over 70 per cent of working residents of the City of Yarra travelled outside the area to work. (Noting 37 per cent of Yarra's residents work in the central city.) The job containment rate has increased slightly, meaning that more residents are living and working locally. Whilst a large proportion of jobs are located outside of Yarra, it indicates that more suitable jobs may be available for residents and the proportion of wages and salaries value escaping the municipality is decreasing.

State direction on employment

While the State Government has developed sector specific strategies such as the Creative State 2025 (Victoria's Creative Industries Strategy), it lacks an overall direction and guidance on employment and jobs.

The strategy could guide for sustainable economic development and jobs growth and identify land use and transport planning actions required to meet projected growth and provide for future local jobs. For example, the role and focus of various key employment precincts around Melbourne is not defined.

A State-wide employment strategy should inform the development of the Plan for Victoria. It is critical to ensure jobs are available to complement the high degree of housing growth sought by the Plan. The strategy could focus on:

- Attracting new businesses and supporting existing businesses
- Improving the training and skills development opportunities
- Increasing research, knowledge and innovation
- Ensuring appropriate planning processes and land supplies
- Planning for precincts
- Providing infrastructure to meet the changing needs of employment and industrial areas
- Marketing the State, regions or precincts as an attractive business locations.

Affordable work spaces / places

Yarra recognises that affordability is an important factor in maintaining diversity, vibrancy and creativity in employment precincts. Affordability can have an impact on the mix of businesses (types and size) in Yarra's employment precincts.

Yarra has an established network of co-working and co-sharing facilities that are responding to the demand for diverse work preferences. In addition, they are helping to address the wider issue of work space affordability for some types of businesses and for start-ups.

Opportunities exist for state and local government to ensure that Victoria remains accessible and affordable for start-ups and creative industries. There is an opportunity for Yarra City Council to work with the Victorian Government on programs that address the issue of retaining affordable workspaces.

Initiatives to retain, create, and support affordable workspaces need to be underpinned by robust stateled planning policies and guidelines.

The State should support councils in investigating the opportunity for uplift mechanisms to provide affordable workspaces for start-up and creative enterprises, ensuring employment precincts remain vibrant and foster innovation.

More inclusive employment

Whilst the overall socio-economic profile is high relative to the metropolitan Melbourne and Victorian average, pockets of disadvantage still remain within Yarra comprising higher levels of unemployment, underemployment and low income households.

There is also an opportunity to further facilitate local partnerships which create and promote a range of learning, employment and other pathway opportunities for businesses, workers and residents.

An example of a partnership in action, is one based out of The Learning Bank venue (funded by the Victorian Government). Yarra's Economic Development team works closely with employment agencies, neighbourhood houses and the Department of Families, Fairness and Housing, to provide both practical hands-on retail experience as well as a theory based certificate in retail for local residents, including those from CALD backgrounds.

Following the completion of the program, Council's Economic Development Team has brokered a pathway to paid employment with Victoria Gardens Shopping Centre and their retailers which include KMart, Ikea, JB Hi-FI and the major supermarkets.

The Plan must support employment pathways and career development opportunities for younger people, First Peoples, people with English as a second language, older people and people who are disadvantaged.

Zero carbon businesses

Encouraging a sustainable business community will involve strengthening existing renewable energy initiatives, climate resilient buildings and promoting sustainable business practices.

For both public and private sector organisations, implementing environmentally sustainable initiatives may include switching to renewable sources of energy (e.g. solar panels), implications for building design (i.e. energy efficiency), supporting workers to choose sustainable transport options (e.g. active and public transport, ride share) and emphasis on waste reduction. These initiatives will yield benefits to business in the form of improved employee wellbeing, meeting environmental targets and, most importantly, cost savings particularly in energy and transport.

Suggested actions for inclusion

- 2.1.6. Develop a State-wide economic strategy that defines the jobs of the future to enable LGAs to respond with appropriate strategies and policies.
- 2.1.7. Support and create businesses and employment opportunities for young people, people from culturally diverse backgrounds, First Nations peoples and people with a disability through innovative, creative and practical initiatives.
- 2.1.8. Support Councils in investigating the opportunity to implement uplift mechanisms and other provisions in employment areas to support affordable workspaces for start-up and creative enterprises.

3.2 Local creative industries, arts and culture and live music

The arts and culture sector is vital to Yarra's local economy and community. Yarra is known for its live music, galleries and visual arts studios, theatres, performance and literature venues, and public art. Council is committed to supporting local arts and culture. Yarra aspires to be a global hub for the small to medium arts sector, that showcase our diverse cultures and communities.

Yarra's liveability and vibrancy are seen as the key strengths in attracting creative businesses. The importance of a vibrant and diverse street life; compact, distinctive and authentic neighbourhoods with a diversity of buildings; and pedestrian-friendly public spaces cannot be underestimated.

Yarra provides grants supporting artist development and programming (Annual Grants, Small Project Grants) and creative infrastructure (Room to Create Grant) and the Celebrate Yarra Multi-Year Grants Program.

However, unaffordability in Yarra through rising property prices and rents is impacting the costs of working artists, creatives and makers spaces and studios and housing.

Mechanisms to help provide affordable spaces for production but also for start-up tech and other creative industries, are strongly supported.

Council is also seeking to grow the night-time economy and proactively manage safety and amenity challenges to enhance people's experience when visiting Yarra's night-time precincts. Yarra's appeal as a destination is linked to the municipality's product strengths in the arts, hospitality, shopping, music, night-life and events.

The City of Yarra is recognised as a destination for live music. The Victorian Live Music Census Report 2020-2021 outlines that Yarra had 19,980 gigs, 2,473,805 attendees at shows and revenue/spending equivalent of \$163,065,978 over this period. This is second to the City of Melbourne and above all other surrounding municipalities and regional Victoria.

Live music venues have experienced the closure of several iconic venues. Venues are facing increasing rents, cost of living pressures, and are finding it difficult to obtain public liability insurance, with those able to secure insurance facing significant rises to their existing premiums – as much as 800%. At its 12 March 2024 Council Meeting, Council resolved to work collaboratively with Music Victoria and the Australian Live Music Business Council to find solutions to the issue of insurance and its impact on the live music industry.

Council supports live music venues and industry. The most significant support is through the Council produced annual Leaps and Bounds Music Festival. Leaps and Bounds Festival was established in 2013 to foster local audience engagement with venues in Yarra when trade slows in mid-winter.

Council notes the Victorian Government's *The Live Music Festivals and 10,000 Gigs: The Victorian Gig Fund* that will provide \$10 million to deliver gigs at live music venues and support local music festivals and artists.

Whilst the introduction of new provisions in the Planning Scheme - Clause 53.06 (Live music and entertainment noise) to enable the designation of live music precincts was important, it should go further in supporting and future-proofing live music and entertainment precincts.

These popular areas of Yarra (such as Johnston Street and Smith Street, Fitzroy/Collingwood and Swan Street, Richmond) are identified for areas for residential growth and development. Clause 53.06 helps to protect existing venues from nearby new residential developments but is unlikely to support the longevity of live music precincts or the night-time economy.

As these areas intensify over time, it will become increasingly harder to mitigate conflicts if new developments with sensitive uses are not built to avoid noise conflicts.

A change to the head provision of Clause 53.06 is needed to ensure that development containing noise sensitive uses (such as residential uses) within a designated live music precinct (not just if within 50 metres of an existing venue) include a basic level of noise attenuation. This will help avoid future conflicts and future proof the precinct providing flexibility for uses to move within the precinct.

Suggested actions for inclusion

- 3.2.1. Create local government and State Government partnerships to research and support the Night-Time Economy, including Live Music, to leverage activities and programs that boost community engagement.
- 3.2.2. Continue funding the Victorian Gig Program.
- 3.2.3. Review planning mechanisms to require new sensitive uses within live music precincts, such as dwellings (whether they are within 50 metres of an existing venue or not), to provide for a minimum level of noise attenuation measures to avoid future conflicts with live music venues.
- 3.2.4. State to support Councils creating a live data base of where live music venues are located.

3.3 Activity Centres

Yarra considers Melbourne's network of vibrant and diverse activity centres a key feature of the metropolitan area. Yarra is home to a series of vibrant and evolving activity centres.

Each of Yarra's retail strips and adjoining mixed-use precincts has a distinct economic role, land use and business mix. Whilst some of Yarra's retail and services precincts are experiencing high vacancy rates of up to 30 per cent, this is common across comparable inner metropolitan areas.

The Plan must recognise the value of and variety of activity centres across Melbourne and especially in the inner city – including their role in employment and housing, providing important spaces for social interactions and transport interchanges.

However, a key challenge is the ongoing need to balance housing development with employment uses. Yarra's *Housing Strategy* (2018) and *Spatial Economic and Employment Strategy* (SEES, 2018) and strategies in the *Yarra Planning Scheme* identify Yarra's activity centres as appropriate locations for new housing <u>and</u> employment.

The Plan should recognise that activity centres provide for housing opportunities. Their role in housing is a key feature and something Yarra relies upon.

The SEES highlights the importance of identifying locations for housing that compliment (rather than disrupt) employment activity (e.g. activity centres, mixed use areas and dispersed infill in residential areas). It also recognises that accommodating housing demand in these locations will reduce pressures for ad-hoc conversion of employment-only land to allow residential uses.

Vacant shops and buildings

The changing retail sector and emerging retail vacancies are key issues in activity centres across Victoria. Generally, lower vacancy rates in Yarra and inner Melbourne are found in tightly held retail strips that include a diverse mix of uses including retail services, food and beverage, health and fitness related services, fashion and professional services.

The Plan offers an opportunity to do more at the regional level to address this issue. One example is the consideration of nimble planning controls that support change of uses in activity centres to bring creative industries, local businesses and other industries back to activity centres to bring life to the precincts.

This could include facilitative planning controls or other financial incentives/disincentives e.g. a vacancy tax or differential rating for vacant properties.

Suggested actions for inclusion

- 3.3.1. Revitalise activity centres through more nimble planning controls to support change of uses in activity centres to bring creative industries and other industries back to activity centres.
- 3.3.2. Explore mechanisms to encourage temporary uses in vacant buildings.
- 3.3.3. The State Government to commit to funding capital projects within Yarra City Council's Brunswick Street, Victoria Street, Swan Street and Bridge Road streetscape masterplans. (See also Section 4.3 – Sense of Place)

3.4 Employment Precincts

There is a clear clustering of employment areas in Yarra, with the majority of jobs concentrated to dedicated employment precincts and activity centres.

The Plan must retain existing and support emerging employment areas, including industrial and enterprise precincts as well as smaller employment precincts.

The Gipps Street and Cremorne Employment (Enterprise) Precincts include a diverse mix of offices, creative industries and specialised manufacturing businesses. Their proximity to the CBD, other parts of inner Melbourne and good access to Melbourne's transport network makes them attractive for businesses seeking a location close to workers, customers, clients and other firms.

The Yarra Planning Scheme, underpinned by the *Spatial Economic and Employment Strategy 2018* (SEES 2018) seeks to retain these areas. This land is critical to maintain an adequate supply of employment land to accommodate projected economic and employment growth that meets the diversity of business needs.

An update to the *Spatial Economic and Employment Strategy 2018* (SEES 2018) is currently underway and will be presented to Council most likely later this year. The consultants undertaking the review indicate the directions from the SEES 2018 in relation to the need to retain employment land are unlikely to change substantially.

Given this ongoing priority to protect employment land, Yarra is well-placed to accommodate future employment growth.

It is also critical the Plan support sustainable growth of these precincts not only by protecting and enhancing the competitive strengths but also the attractive physical and amenity attributes that are unique to these precincts.

For example, the Victorian Government and Yarra City Council developed the Cremorne Place Implementation Plan (CPIP) in December 2020. The CPIP provides a vision for the future of Cremorne and includes an action plan. This document has been supported by a Council-led Urban Design Framework for the area which guides the growth, development, and character of Cremorne to ensure the area meets the need of Cremorne's growing population while remaining an attractive and vibrant area to live and work.

Suggested actions for inclusion

- 3.4.1. Ensure the *Plan for Victoria* recognises and protects employment land from encroachment by other uses that would cause fragmentation and may compromise the development and efficient operation of existing businesses.
- 3.4.2. Support Councils in developing local area plans for key employment and enterprise precincts to guide their growth, development, and character and ensure their continuing functioning.
- 3.4.3. Reinvigorate the Cremorne Place Implementation Plan working group and reaffirm the State Government's commitment to making Cremorne a centre for innovation, technology and high-skilled jobs.

3.5 Prioritising walking, cycling and using public transport over car use

The growing resident and worker population will also place further importance on changing the way people move around, with growing congestion challenges around inner metropolitan areas. It will be critical to provide for a mix of transport modes (e.g. public transport, cycling, walking and motor vehicle) for workers to enable them to efficiently access jobs and for residents and visitors to access activity centres.

86 per cent of people in Yarra want to see "*a lot more active and sustainable transport options*", rather than "*a lot more cars and parking spaces*" (Yarra's Community vision survey, 2021).

Council strongly supports the integration of land use and development planning with public and active transport infrastructure and services to create compact, walkable, pedestrian-oriented, mixed-use communities centred around train stations and other key public transport nodes.

Investing in new public transport services and improving existing services

Yarra has some of the best public transport access of any municipality in Victoria. However, there are still significant challenges and issues to be addressed to meet current and future needs.

Transport demands are expected to greatly increase, particularly public transport, due to the anticipated increase in residents and workers.

It is also important to note that public transport trips translate into walking trips once residents and workers alight from public transport.

Increasing public transport capacity, priority and stop/station access can require road space reallocation away from cars and traffic. It can also be expensive and relies on sustained State Government planning and funding as the responsible authority.

Council is seeking to work with the State Government, neighbouring councils and operators as key stakeholders on public transport and ancillary projects in Yarra to encourage investment in new public transport services and improvements to existing services:

- increase the frequency and reliability of trains, trams and buses
- improve public transport options for the community in off-peak periods and on weekends
- increase accessibility and reduce door-to-door journey times
- provide new and improved interchange opportunities in Yarra
- reduce pressure on the central city for interchange particularly during peak times
- increase capacity generally and redistribute demand to relieve pressure on the Hoddle Grid
- improve network resilience (in the event of planned system maintenance, an upgrade, incident or an extreme weather event)
- support public transport improvements to existing and potential urban strategic renewal precincts
- assist with public transport operations, cleaning and maintenance
- facilitate transition to electric on-road public transport fleets
- facilitate the provision of larger and DDA-compliant low floor trams
- make all public transport vehicle, stop and station infrastructure fully DDA-compliant and accessible to all.

<u>Moving Forward - Yarra's Transport Strategy 2022-32</u> and <u>Yarra's Transport Action Plan 2024-34</u> include a list of public transport infrastructure projects Council considers critical to Yarra.

Prioritising walking and cycling

Improving cycling and pedestrian infrastructure is vital to achieving a sustainable, liveable and efficient city for people and therefore the completion of these projects should be given a much higher priority.

Council is aiming to make Yarra a place where everyone can ride, walk or cycle to their destination, through an integrated network of best practice bike lanes, improved footpaths and support for level access tram stops. This must be translated across Melbourne and Victoria via a comprehensive increase and upgraded walking infrastructure (i.e. footpaths, crossings) and the implementation of strategic cycling corridors, both to and within Yarra.

Local, national and international experience and research show that a connected 'grid' of direct and safe cycling routes is essential to increasing bicycle mode share. This will be important to help relieve public transport and road congestion for shorter to mid-range trips as the population (worker and resident) is set to increase significantly.

While Yarra does have some high-quality routes, safe connections between them are limited. This means that the benefits of our cycling investment cannot be fully realised as people are unable to safely get to them. To be a true alternative, routes must be connected and fit for all ages and abilities.

The implementation of many of the actions will require strong commitment from the Department of Transport, public transport providers and other government agencies. To accommodate the predicted growth, investment that prioritises completing missing public transport, cycling and walking links and upgrading existing infrastructure should focus on areas within municipalities designated for growth.

Roads, footpaths and public transport must also achieve universal access and cater for all abilities. Micro-mobility modes like as electric scooters and electric bikes are very convenient, easy to use and space-efficient modes of transport and provide new travel options for a broad range of people.

Allocating road space to preferred transport modes and other activities

Streets are important shared public spaces. However, there are many competing needs and wants for limited space. These include space for car parking, vegetation, seating, public art and outdoor trading areas.

While street space is limited and it is not possible to accommodate all needs, Yarra's streets provide an opportunity to reallocate some of the large amounts of space given to car movement and storage on Yarra's streets to significantly improve conditions for walking, cycling and outdoor trading.

However, it is still important to retain essential vehicle access where it is needed by existing residents and businesses operating in Yarra.

Managing car parking in developments

Over the coming years, thousands of additional car parking spaces will be built because of new developments. Despite this, if the current trajectory continues, perceptions that there is not enough car parking will persist, unless changes are made to how parking is managed and how alternative modes of transport to the car are prioritised in terms of funding and space allocation.

Council is also seeking to manage car parking in a way that supports the use of active and public transport and the role of cars in an urban environment. The planning scheme controls the location and amount of parking spaces. Changes to the parking rates in areas well served by public transport, cycling routes, shops and other services are needed to reduce reliance on vehicle use, reduce development and maintenance costs, reduce road congestion and to help support active transport modes. The over-provision and design of parking also has impacts on affordability and the adaptability of buildings for future uses.

Suggested actions for inclusion

- 3.5.1. Prioritise funding and implementation of adopted policies in partnership with local government, for example Strategic Cycling Corridors, walking infrastructure and public transport service and accessibility improvements.
- 3.5.2. Deliver the Strategic Cycling Corridors in a timely and prioritised approach to support cycling and mode share targets.
- 3.5.3. Prioritise and fund the upgrade and roll-out of walking, cycling and public transport infrastructure in areas identified for growth (i.e. activity centres) to make them fit-for-purpose, remove conflicts between cars and trams and buses and ensure active transport is a convenient and safe alternative to the car for all ages and abilities.
- 3.5.4. Review the public transport network and identify improvements for orbital movement across the metro Melbourne area and in locations without tram or train connections.
- 3.5.5. Increase requirements for bike parking and end of trip facilities at workplaces and ensure they are easily accessible.
- 3.5.6. Remove approvals required by State Government for minor infrastructure on local roads, including pedestrian crossings, cycling infrastructure, shared zones and traffic signals that are mid-block or solely on local roads.

- 3.5.7. Apply the Movement and Place Framework to the arterial road network and allocate priorities for transport connector improvements such as improving road space allocation for public and active transport, identify priority streets for walking and cycling, and road management and use arrangements.
- 3.5.8. Remove minimum car parking requirements from the planning scheme in areas with a short walking distance (e.g. 400 metres) from public transport, including buses.
- 3.5.9. Develop new processes to make the application of maximum car parking rates in the planning scheme easier to implement.

3.6 Reducing barriers to movement for all members of the community

Transport disadvantage

Yarra is a very diverse community when it comes to household income and other socio-economic factors. Averages suggest that Yarra is relatively affluent in the metropolitan context, however the reality is that large numbers of people live on lower incomes or do not have any significant asset wealth (for example, they don't own property). Transport disadvantage stems from people being limited in their ability to access jobs, education and other services in the way they want to, when they want to.

Council's Transport Strategy is focused on giving everyone an increased number of better transport options particularly by non-car modes. This is of particular benefit to lower income households which are far less likely to own a car.

Road safety

Lower speed limits and lower actual vehicle speeds improve safety and amenity for all, particularly for vulnerable road users. Lower speeds also allow roads to be designed in a more compact way creating opportunities for more shared space, trees, trading space for businesses and bike infrastructure. Reduced traffic speeds are supported, including reduced speed limits.

Yarra has led the implementation of 40km/h speed limits in all areas and supports the introduction of safer 30km/h speed limits and lower speed shared zones in line with best practice around the world.

Council is trialling 30km/h in Collingwood and Fitzroy. The support from experts and the community, coupled with evidence-backed safety improvements, reinforces the need to progress this initiative and expand its coverage. The formalisation of the current trial is contingent upon a review of the Speed Zoning Policy, aiming to establish a standard 30 km/h limit on Victorian streets.

Suggested actions for inclusion

- 3.6.1. Develop guidelines and policy for vulnerable road users, with these guidelines being prioritised over competing local and state directions when reviewing road network upgrades.
- 3.6.2. Prioritise projects that will have the most benefit for vulnerable road users.
- 3.6.3. Review of the current Speed Zoning Policy to allow the introduction of 30 km/h speed limit on permanent basis.

4.0 Thriving and liveable suburbs and towns

The diversity and distinctiveness of neighbourhoods and places across Yarra are an inherent part of its character and attraction. Importantly this creates a strong sense of place for local communities. Enhancing our great places and precincts whilst expecting significant growth is fundamental to its liveability.

Open spaces within Yarra, and across the State, make a significant contribution to the distinctive character and amenity of neighbourhoods. They provide passive and active recreation, contribute to the city's tree canopy, and possess cultural values in places of European and indigenous heritage.

Yarra's population is growing and the needs and preferences for services is changing. Flexible, welllocated and maintained community infrastructure is a priority for Council. Social infrastructure includes the places, spaces, physical assets, services, programs and activities that are accessed by the community for social interaction, recreation and physical activity.

Yarra is known as a place where its rich natural, First Peoples, built and other cultural history is protected and celebrated. It helps to define the city's identity and support its diverse living culture.

Council priorities

- As population and urban development continues to intensify, provide a high-quality public realm and expanded and denser public open space network to ensure current liveability is at least maintained or improved.
- Ensure community infrastructure (such as libraries, recreation facilities, cultural centres or community hubs) meets the needs of residents, workers and visitors.
- Retain heritage and local character while encouraging sensitive and sustainable development.
- Protect and enhance the biodiversity values, connectivity and resilience of the natural environment.
- Retain and support Yarra's vibrant and diverse community.

4.1 A strong and vibrant community

Services and infrastructure meet communities' changing needs

To accommodate the 48,000 additional houses proposed for Yarra and over two million across Victoria, a substantial increase in supporting infrastructure will be required.

Macroplan Pty Ltd has estimated that if the 2.45 million additional dwellings across Victoria were to eventuate, Victoria would require:

- 300 additional full line supermarkets
- 3,500 additional GP clinics
- 3,570 additional childcare centres
- 5,000 14,000 hectares of additional open space (depending on quantum per capita)
- Large amounts of additional commercially zoned land in existing and new activity centres.
- Large new employment precincts
- Significant additional public transport and roads.

Other infrastructure and services to create socially connected communities will include open spaces, playgrounds, libraries, community gardens, creative arts centres, gyms, sportsgrounds, aquatic centres, and other community spaces.

Alongside housing, Council will need to ensure it has the capacity and resources to accommodate and maintain this important infrastructure.

As outlined in the *Yarra Asset Plan 2022-23*, Council currently manages a portfolio of assets that have a combined replacement value of over \$2.3 billion dollars. \$1.3 billion (55 per cent) is the replacement value of infrastructure assets and \$1.0 billion (42 per cent) of land assets. Council's current asset renewal upgrade expenditure is at a rate higher than depreciation (107.26 per cent).

The combination of replacing or upgrading ageing infrastructure and investing in new infrastructure, alongside the demands of rapid population growth, will require significant investment in Council's asset portfolio. Council has begun work on its new Community Infrastructure Plan. The potential impact of the housing targets on population growth, age structure and location make this process more complex.

Community infrastructure will need to respond to the changing nature of the inner city by providing flexible, accessible, innovative and adaptable facilities that reflect universal design and meet multiple service needs.

As reported in Yarra's 2022/23 Annual Report, projects that attracted funding via Yarra's Development Contribution Plan accounted for \$5.76 million of investment, of which \$1.03 million (17.8 per cent) was funded through development contributions. This mechanism to fund vital community infrastructure projects must ensure that Councils are adequately supported to meet the community's infrastructure needs.

Social equity and cohesion

The Plan for Victoria must include programs and actions that promote community building and community cohesion and create inclusive and welcoming spaces.

Yarra's community is a mix of ages, genders, sexualities, abilities and cultures. Cultural diversity and our social and public housing residents, people experiencing or at risk of homelessness are fundamental to Yarra's unique social fabric.

Feeling connected to the community, having social networks and being able to participate and contribute to community life are important factors that promote physical health, mental well-being and social inclusion.

Yarra's neighbourhood houses and learning centres provide this support for the community – providing recreational, educational, and social programs that strengthen capacity and improve wellbeing. They provide ongoing food relief, digital access, and social support to minimise isolation and its impacts on mental wellbeing in the community. Their impact on people experiencing vulnerability and disadvantage is profound.

Suggested actions for inclusion

- 2.1.9. Calculate land requirements and costs of the infrastructure needs potentially generated by forecast population growth and the Housing Targets, including additional schools, childcare centres, hospitals and other health services, open space and active transport needs.
- 2.1.10. Develop a simpler system to fund State and local infrastructure, including community facilities and public open space.
- 2.1.11. Where Council is expected to deliver local infrastructure needs, ensure:
 - funding is adequately supplied to ensure Council financial viability;
 - funding is provided in a timely manner to enable Council to meet demand as it emerges; and
 - indexation reflects all impacts that affect infrastructure investment to ensure Council is not unfairly wearing additional costs.
- 2.1.12. Increase funding support for community-led community building initiatives.
- 2.1.13. Ensure adequate and sustainable funding for the neighbourhood house sector from the state government.

4.2 Public open space

Providing open space within easy walking distance of everyone

As an established inner urban municipality, the City of Yarra is experiencing significant change and growth. Yet there are areas of the city where the community does not have open space within adequate walking distance of where they live or work.

85 per cent of Yarra's population live in medium and high-density dwellings compared to 33 per cent in Greater Melbourne (*Yarra Open Space Strategy*, 2020). This means that residents have less private open space available to them, increasing their reliance on public open space.

Yarra's worker population is also growing. Surveys undertaken for the Open Space Strategy found that more than 80 per cent of workers visit public open spaces during the day. Former industrial areas such as fast-growing Cremorne and parts of Collingwood historically have little public open space. With increased numbers of people working and living in or near these former industrial precincts there is a need to provide new areas of public open space.

Open space is also needed to offset the impacts of increased urban heat, which is exacerbated by higher density development.

Filling the gaps in trails and networks

There is a need to connect the gaps in trails / network such as along the Yarra River to support outdoor life, active recreation and connection to nature.

New ways of creating open space

Yarra's high density environment means that the quality of its places and spaces are critical to demonstrating that balancing growth with community needs can be achieved successfully. Given the value of land in Yarra and its historic, fine grain subdivision pattern, upgrading and expanding existing open space is one practical and economical approach to providing better quality, multi-purpose open spaces. Another necessary approach is to identify opportunities to repurpose existing public land, such as easements and roads as part of the open space network are critical.

Yarra is investigating how existing public land can be repurposed into open space. This includes road closures to create or expand open space. Council's Roads to Parks program has recently created new open spaces in Collingwood such as Otter Street Pock Park and the expansion of Cambridge Reserve. Council is also reliant on the use or acquisition of State Government land.

Increase public open space contributions

Council has undertaken a critical planning scheme amendment to increase its public open space contribution from 4.5 per cent for residential subdivisions to a rate of 8.65 per cent for residential, commercial and industrial subdivisions. Amendment C286yara has taken substantial time and resources to progress and is currently with the Minister for Planning awaiting approval.

Build to rent is becoming an increasingly popular form of residential development. These developments have been incentivised by the State Government (through a 50 per cent reduction in land tax) to create new affordable housing complexes. However, this form of residential development does not involve subdivision and is therefore not subject to public open space contributions, even though these developments lead to an increased residential population.

Open space contributions form a vital income source that enable Council to improve and expand public open space as the population grows.

There have been a growing number of recent build to rent developments in Yarra that have not been required to provide open space contributions. These are significant multi-unit development and have resulted in Council missing out on millions of dollars in open space contributions.

Allowing this to continue as more growth is expected will increase the already existing shortage of open space and shortage of funding to expand existing and create new spaces where intensification takes place.

Suggested actions for inclusion

- 4.2.1. Approve Yarra's public open space contribution amendment C286yara to apply a higher contribution rate to residential, commercial and industrial subdivisions.
- 4.2.2. Update legislation and planning provisions to require build to rent developments to provide public open space contributions.
- 4.2.3. Support Council to fund and provide additional public open space in locations identified for growth. State to buy open space and gift to Council.
- 4.2.4. Work with the Department of Education to ensure schools allow and are enabled to allow public access to their facilities out of hours.

4.3 Sense of place

Creating great streets and spaces

Improving liveability involves the creation and renewal of great places, neighbourhoods and centres. This requires place-based planning and design excellence that builds on local characteristics.

Great places where people want to visit and stay are dependent upon quality design outcomes – both for private development and in the public realm. Great public spaces reflect diversity, encourage interaction and invite people to be on the street. They not only benefit the community by offering spaces to move through comfortably and safely or relax and meet, but they also have the potential to boost the local economy.

The Plan for Victoria must help create a legacy of great streets and public spaces that serve the needs of visitors, residents and businesses are created.

Council has a key role in planning and designing precincts, activity centres and urban renewal areas in a way that enhances and celebrates their distinctive assets, heritage and local character and allows spontaneous social interaction and community cultural life.

A key role for the *Plan for Victoria* is to support road space allocation to prioritise pedestrian movement and spaces within key streets in activity centres and employment precincts. The redesign of major roads will require significant resources and is needed to ensure streets in inner urban areas like Yarra can accommodate the forecasted growth in population activity to maintain liveability for its people and attractiveness for businesses.

The *Plan for Victoria* needs to give further importance to public space design in terms of gender-aware design outcomes and safety for women, in particular.

Place making also needs to take place at smaller scales. Yarra has delivered spaces such as a new seating space on the corner of Kerr and Brunswick Streets and much needed new public spaces in Cremorne on Stephenson Street.

Heritage

Heritage is an important feature of Yarra's identity, which comprises historic buildings, landscapes, landmarks, streetscapes, subdivision pattern (made up of its streets, lanes, and boulevards) and indigenous heritage.

The Plan should draw on the State's culture and heritage to create a rich and layered urban environment and distinctive places. There is an opportunity to reflect on the different eras, layers, and aspects of the Victoria's history in the design of contemporary buildings, public spaces, infrastructure and public artwork.

Council does not consider heritage is a barrier to development. Yarra's recent Design and Development Overlays as part of its activity centre program successfully balance development opportunities and heritage. Council continues to support the ongoing identification and protection of heritage places, precincts and streetscapes and their adaptive re-use where appropriate.

Council notes the opportunity to engage with First Nations to incorporate cultural heritage, design and stories into built and natural environment. Yarra understands the Department of Transport and Planning will consult directly with First Nations people but draws DTP's attention to Yarra's Yana Ngargna Plan 2020–2023.

Suggested actions for inclusion

- 4.3.1. Support and fund the upgrade of key pedestrian streets and public spaces within activity centres to foster their community and economic role and to ensure they are accessible and inclusive for all ages and abilities as the population grows (see also Section 3.3 Activity Centres).
- 4.3.2. Fund public lighting to support safety after hours.
- 4.3.3. Continue to support the adaptive reuse of heritage places to create a rich layered urban environment and distinctive places while encouraging sensitive and sustainable development.

4.4 Biodiversity

The Plan must protect Victoria's landscapes and biodiversity.

A key direction for Yarra is the restoration of Yarra's urban ecosystems and preserving our unique urban biodiversity. Yarra's adopted Nature Strategy – Protecting Yarra's Unique Biodiversity 2020 - 2024 aims to 'increase the diversity, connectivity and resilience of Yarra's natural environment' and 'encourage people to further appreciate and actively enhance Yarra's natural landscape.'

Yarra's biodiversity is also a key them of Yarra's *Climate Emergency Plan 2024-2030* (CEP). The CEP recognises the importance of the natural environment not only for biodiversity and providing cool shaded environments in heat events but also for mental health.

Yarra has large areas of natural bushland, wetland habitats, wildlife corridors and a high diversity of plants and animals and significant habitat trees, however protecting and enhancing biodiversity is a challenge in urban areas.

There is significant opportunity to improve habitat and reinstate local plant species in Yarra which can in turn support further wildlife, including consolidating and growing areas of high quality, diverse habitat and increasing habitat connectivity.

Council's *Nature Strategy* also acknowledges that the Wurundjeri Council are key partners in the management and appreciation of natural values in the City of Yarra. Council supports opportunities to work with the Wurundjeri in recognition of their heritage and custodianship of the land.

Protecting and enhancing our waterways

Over the past eight years, the State Government, together with Melbourne Water, Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation and local Councils has undertaken substantial work to progress *Burndap Birrarung burndap umarkoo*, Yarra Strategic Plan to protect and enhance Birrarung (the Yarra River), and its parklands. (See also Section 5.4 – Integrated Water Management.)

Significant funding and continued cross government collaboration is required to implement the plan.

Work should also be undertaken to reinvigorate and restore urban waterways, such as Merri and Darebin Creeks recognising their key role in providing biodiversity, open space, water management and movement corridors. The Department of Transport and Planning are undertaking a project to investigate planning controls for the 14 waterways in Melbourne.

Increasing the tree canopy and greening

A key message from the Plan for Victoria engagement was the value the community places on trees and greening. The Plan for Victoria presents the opportunity to utilise the region's open space network to strengthen its tree canopy and urban greening.

This aligns with Yarra's *Urban Forest Strategy 2017* (UFS) and *Climate Emergency Plan 2024* which seeks to increase canopy cover despite significant development growth.

The target for canopy cover in the UFS states: "*Canopy cover in Yarra will increase by 25 per cent (from 2014 levels) by 2040*". This represents an increase from 17 per cent to 21.25 per cent total canopy cover across the municipality. In 2021, Yarra achieved a canopy cover of approximately 17.7% across the municipality, with 60 per cent on Council land (incl. streets and roads) and 40 per cent on private property. The largest gains in canopy coverage have been made in Yarra's streetscapes.

Greening private property is also challenging in a dense urban environment. On 9 July 2024, a report to Council on the issue found developments of varying sizes have mostly resulted in a loss of tree canopy cover across Yarra with trees typically cleared to facilitate development on the site. While some developments may include tree planting on site, it still results in a short-term loss of canopy cover.

The Department of Transport and Planning (DTP) is working on a cooling and greening initiative (Action 91 of *Plan Melbourne*) aimed at increasing sustainability and resilience through green infrastructure and supporting Councils with their urban forest strategies. Council strongly urges the State Government to either finalise and implement its cooling and greening planning provisions or to allow Councils to progress their own work to implement targets for canopy tree coverage to ensure municipalities are climate resilient.

Suggested actions for inclusion

- 4.4.1. Fund and progress the actions in the *Burndap Birrarung burndap umarkoo*, Yarra Strategic Plan.
- 4.4.2. Continue work with the Department of Transport and Planning to develop planning controls and other programs to protect and enhance Victoria's waterways, including the Merri and Darebin Creeks.
- 4.4.3. Create more incentives and requirements for vegetation in private land, including exploring mechanisms in ResCode for lower density forms of housing such as townhouses to accommodate a minmum number of canopy trees per lot and improving green wall and roof requirements for apartments to address the heat island effect in activity centres.
- 4.4.4. Develop State-wide targets for tree canopy cover and State-wide monitoring.

5.0 Sustainable Environments and Climate Action

To better manage increasing pressures on natural resources, higher levels of population growth, and the effects of climate change, there is a need to improve how sustainability is incorporated into how the urban environment is designed and planned.

Yarra City Council was one of the first councils to declare a climate emergency. Council's declaration recognised the planet's climate is already too hot and that transformational change is needed across all levels of government, businesses, and communities to address the crisis.

Change is needed to rapidly reduce carbon emissions across the community and ensure homes, business and community infrastructure are sustainable and resilient to a changing climate.

Yarra has long advocated for stronger environmentally sustainable design controls in the planning and building process and adopted a *Climate Emergency Plan* as a call to action.

Strong policy leadership and significant financial investment is urgently needed from both the State and Federal Government to accelerate the transition to a net zero emissions economy and strengthen community resilience to climate change. The major transition ahead needs to occur in a fair and socially equitable way. The most vulnerable people have typically made the least contribution to the problem and often have less capacity to respond and cope with the impacts.

Council priorities

- Accelerate Victoria's ambition to reach net zero emissions by 2035, rather than 2045.
- Manage climate risks and build climate resilient communities by actively planning for and investing in public infrastructure, housing stock and economic assets.
- Support communities most at-risk of climate impacts to prepare for and cope with those impacts Transition to a circular economy by consuming less, repairing, sharing, and repurposing more, and sending less waste to landfill.
- Create a healthy water-wise environment.

5.1 Zero emissions

Stronger commitment to zero emissions

Council considers the Plan should contain a strong commitment to zero emissions.

The State Government's net zero target was brought forward to 2045, along with a 95% renewable energy target for 2035.

However, Council considers far more urgent action is required. Council's *Climate Emergency Plan 2024-2030* (CEP) includes a net zero target of 2035. This should be reflected in all aspects of the *Plan for Victoria* including housing, transport, jobs, circular economy, biodiversity, and community resilience.

While this transition has an upfront cost, efforts to transition towards a zero emissions society provide a range of benefits, including improvements to health and wellbeing, economic opportunities, and the potential to minimise existing inequities and disadvantages.

Council is seeking to develop, deliver, and lead on programs, policies, and support to:

- enable Yarra homes to become all-electric, energy efficient and powered by renewable energy by 2035. Additional support and investment will be directed towards those most at risk from climate impacts and with reduced ability to adapt.
- assist Yarra's businesses and workforce to participate in decarbonisation, reduce energy costs, and become employers of choice. The CEP identifies Yarra could enhance its reputation as the municipality where sustainable businesses are supported.

work towards ensuring electric and other zero emissions vehicles are commonplace, with a
network of publicly and privately available chargers throughout Yarra. Walking, cycling, eBikes
and public transport are also increased as a mechanism to further reduce car trips and car
ownership. The transition to electric vehicles and zero emissions transport must be accessible
to all community members.

Shift to electrification

The Plan should support decarbonisation and the move to electrification.

Council notes earlier this year the State Government made changes to planning schemes across Victoria, requiring that planning permits for new homes and residential subdivisions can only connect to all electric networks, with houses taking advantage of more efficient, cheaper and cleaner electric appliances. The State Government also announced all new public buildings that have not reached design stage will be all electric.

Smart, innovative community-scale energy solutions

Council would also encourage the inclusion of strategies and actions on distributed and integrated energy systems (such as local renewable energy generation, networks, storage and integration of electric vehicle charging). The Plan should support new and innovative systems and opportunities such as virtual powerplants, solar farms and neighbourhood batteries.

Elevating ESD standards

Substantial ESD work has been undertaken by local councils. Yarra City Council is pursuing a joint Planning Scheme Amendment with 24 other Victorian Council to introduce new elevated environmentally sustainable development (ESD) standards in the planning scheme. The Elevating ESD Targets project is led by the Council Alliance for Sustainable Built Environment (CASBE). The amendment builds on existing ESD standards in the scheme and will encourage a move towards net zero carbon developments.

The amendment was submitted to the Department of Transport and Planning for authorisation to publicly exhibit in July 2022 and still remains under consideration. It is understood the Victoria Government is also progressing the ESD Roadmap which will make further State-wide changes to the planning provisions.

Suggested actions for inclusion

- 3.2.5. Heavily invest in rapid transition to 100% renewable energy by 2035.
- 3.2.6. Shift to local power generation and distributed micro-grids to spread risk and reduce transmission costs.
- 3.2.7. Amend Victoria's planning schemes by progressing the Elevating Targets Planning Scheme Amendment proposed by the Council Alliance for a Sustainable Built Environment (CASBE) to allow local governments greater control over the sustainability of future developments.
- 3.2.8. Increase EV charging infrastructure and incentives (funding, support, and policies) to increase the affordability of electric vehicles, especially for low-income residents.
- 3.2.9. Review ways to unlock barriers to EV charging in apartment buildings.

5.2 Building climate resilience

Building a climate resilient city is a key focus of the CEP. It is aiming to ensure everyone in Yarra lives and works in comfortable and climate-safe homes and buildings, supported by climate resilient public spaces and infrastructure.

The CEP recognises that while the climate emergency affects everyone in the community, it is having a disproportionate impact on some. This includes those who do not have access to adequate housing or income, have accessibility needs or chronic health conditions, work in unsafe conditions or are marginalised due to culture, language or gender identity.

Suggested actions for inclusion

- 5.2.1. Directly invest in and incentivise upgrades to housing stock (including social, public and affordable housing) to improve thermal and physical safety and reduce risk from extreme heat events, flash flooding, storm surge etc.
- 27 DRAFT Plan for Victoria submission

- 5.2.2. Fast track increased minimum standards for energy efficiency for renters to address the current cost-of-living crisis and prepare residents for predicted heatwaves in the summer.
- 5.2.3. Upgrade/build critical public infrastructure to mitigate the impacts of climate hazards on vital health and human services assets during extreme events.
- 5.2.4. Create and promote a network of cool spaces and informal places of refuge from extreme weather events.
- 5.2.5. Introduce climate hazard layers in planning schemes.

5.3 Circular Economy

Council's CEP seeks to transition Yarra to a circular economy by consuming less, reusing, repairing, sharing and recycling more and sending less waste to landfill.

A circular economy model employs three core principles; design out waste and pollution, keep products and materials in use, and regenerate natural systems.

A more circular and sustainable system is required that works with manufacturers to rethink how products are made and reduce the waste that is created during production, supports our local recycling industry, reduces excess consumption and reuses items wherever possible.

This strategy requires state, federal and international work to ensure a more circular and sustainable system. Significant policy and regulatory systemic change are required to achieve an economic system that views generation of waste as a design flaw and ensures our production and consumption habits support, rather than challenge, the transition to a net zero emissions economy.

The Victorian Government's plan for a circular economy has a strong focus on recycling, but misses opportunities presented by a fully circular approach.

The Plan should include strategies or actions to enable the development of a complete circular economy.

Given the *Plan for Victoria* has a 2051 time horizon, it should include the circular economy as they relate to land use planning, such as a desire to design out waste, recirculate finite resources at local/regional scales and support land use planning for local/regional waste facilities, and avoiding the transportation of waste vast distances.

There are also cultural changes that need to be employed. For example, Council is seeking to develop, support and promote Yarra as a Circular Economy hub for businesses. Opportunities also need to be provided for the community to recycle, repair and reuse products. Changes to packaging requirements and increased product stewardship are also identified in Council's CEP.

Suggested actions for inclusion

- 5.3.1. Investigate and support opportunities to support Councils to transition Council Recycling Centres to 'circular centres' which reuse, re-purpose, repair, and recycle materials.
- 5.3.2. Promote Victoria and its businesses as a Circular Economy hub.
- 5.3.3. Work with the building industry to facilitate circularity, including better design, understanding of embedded carbon, low carbon building products and de-construction techniques.
- 5.3.4. Advocate to the Federal and State Government for stronger National Packaging Targets, stricter product durability standards and product stewardship schemes.

5.4 Integrated Water Management

Council considers the *Plan for Victoria* must take a whole of water cycle approach that will improve water quality, reduce the impacts of stormwater inundation, utilise stormwater and protect key water assets. Council adopted its *Integrated Water Management Plan 2020-2030* in 2020. Its vision is to create 'A water wise city in a healthy urban environment'.

The Plan should clearly articulate future risks to flood and waterway health, particularly due to climate change.

Flooding

Additional investigation and investment will be needed in infrastructure to understand the impacts of the proposed increase in dwelling numbers flagged by the draft Housing Targets.

Yarra is investing \$4 million in drainage renewal and upgrade program is included in Council's 2024-25 budget (along with a further \$10.8 million in other operating and civil projects which include stormwater asset renewal and upgrade). This significant investment in Council's stormwater network in addition to asset management also responds to climate change and increased urban runoff, but more investment will be needed. There is a need for State Government to fund flood mitigation schemes and associated infrastructure upgrade works.

Council has prepared updated flood mapping with Melbourne Water based on current best practice standards and will be looking to commence a planning scheme amendment process in the future.

Where planning deals with climate adaptation, and data which is frequently updated (for instance for flooding and inundation, bushfire risk and sea level rise), there needs to be an abbreviated pathway for regulatory bodies to regularly and quickly update the data which is relied on for decision making. The current standard planning scheme amendment process does not enable this.

Therefore, the State Government should step in to lead a coordinated and regular updating of flood controls across the State. This would address the issue of flooding being a bigger issue that crosses municipal boundaries and authority responsibilities. Alternatively, the State Government could support councils and water authorities such as Melbourne Water by considering introducing alternative regulatory mechanisms outside the planning regime, for the consideration of latest climate data in decisions.

A concern for Council is to ensure Yarra's public realm, heritage buildings, streetscapes and buildings (including universal access) are designed to reduce the impacts of change in flood levels. Council notes the poor design outcomes arising from some more conventional flood management practices, such as blank walls, lack of building activation, and poor accessibility.

Council strongly supports the development of a good design guide for buildings and public realm in flood affected areas in metropolitan Melbourne. The detailed evidence-based work undertaken by City of Melbourne, City of Port Phillip and Melbourne Water - *Fishermans Bend, Arden and Macaulay Flood Design Guidelines* could provide a basis.

There is also a clear need for policy guidance about how to balance heritage and flood resilience (and other climate adaptation) outcomes on individual sites. The State Government is well placed to provide this guidance.

Water sensitive urban design

Yarra strongly supports the inclusion of strategies to address urban heat and water sensitive urban design, as these are key issues already affecting Yarra. This is also supported by Council's Urban Forest Strategy (see 4.4 of this submission).

The inclusion of both vegetation and water in this Plan is vital and this should be followed by appropriate planning scheme directions to assist Councils to encourage urban cooling in both the public and private realm and also reduce and improve the quality of stormwater.

Swimmable Birrarung

An aim of the Burndap Birrarung Burndap Umarkoo (Yarra Strategic Plan 2022-2032) and Council's Climate Emergency Plan is to create 'a healthy, swimmable Birrarung for all and recognition of the river as a living and integrated natural entity.'

The City of Yarra has recently signed onto the Swimmable Cities Charter as a sign of its commitment to restore the health of the Yarra. The international charter outlines common principles to empower decision-makers, advocates, and community leaders in their work with local natural waterways. The City of Yarra is the first city in Australia to sign on to the charter.

The Swimmable Birrarung initiative aims to make Birrarung swimmable from Dights Falls to Port Phillip Bay. (See also 4.4 Biodiversity of this submission)

Suggested actions for inclusion

- 5.4.1. Work with State Government, and Melbourne Water, Wurundjeri Council, and other stakeholders, to support and better implement *Burndap Birrarung Burndap Umarkoo* (Yarra Strategic Plan 2022-2032) to improve water quality in the river.
- 5.4.2. Develop a good design guide for buildings and public realm in flood affected areas in metropolitan Melbourne.
- 5.4.3. Increase water sensitive urban design measures to both improve groundwater for vegetation and manage increasing stormwater.
- 5.4.4. Support Councils and Melbourne Water to work with the community to become resilient to the effects of flooding and rising water levels.
- 5.4.5. Provide additional funding to support infrastructure upgrades to minimise / reduce the extent of flooding.
- 5.4.6. The State Government to lead the updating and implementation of flood related building and planning mechanisms based on latest and best climate adaptation data (i.e. flooding, inundation, bushfire, sea level rise).

Part 2 – Housing Targets

7.0 Draft Housing Targets

Council welcomes the opportunity to comment on the draft Housing Targets and notes final targets will be released with the Plan for Victoria at the end of year.

Council has not had the opportunity to comprehensively consider the changes to the Planning Scheme that would be required to achieve the proposed targets in the long-term, nor has the State proposed specific mechanisms or tools to potentially achieve them.

It is unclear how much of a difference there might be between the draft and final housing targets. The development of the draft targets used a different methodology than the methodology proposed for the final targets.

7.1 Draft Housing Target vs current development rates

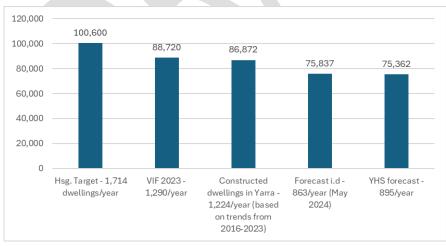
The Draft Housing Target identified for Yarra is to provide planning scheme capacity for an additional 48,000 dwellings from 2023 to 2051. This would represent an increase of 91 per cent above the current number of dwellings in Yarra - 52,600 (in 2023).

The draft Housing Targets for Yarra are considerably higher than any other forecasts or rates of actual development, such as the official forecast data in Victoria in Future (VIF) 2023.

The Draft Targets are understood to be partially aspirational to support the supply of residential land/dwellings in the long term. The methodology to develop the draft Housing Targets, as outlined by Department of Transport and Planning officers, included a buffer. It is unclear how much of a buffer has been included or how this is meant to be delivered to help ease the pressure on the housing crisis.

Figure 1 below shows a comparison of forecast data from different sources against the Draft Housing Target, extrapolated over 28 years from 2023 to 2051 for ease of comparison.

It shows that the Draft Housing Target is significantly higher than any other forecast. Most importantly, the target is an average of almost 500 dwellings per year higher than dwellings that have been constructed in Yarra over the recent years (trend between 2016 to 2023).





The graph shows the development and construction sector is delivering less dwellings than the Draft Housing Target is aspiring to achieve.

Councils are not able to control the delivery of housing stock. Wider reforms are needed to help ease the current housing crisis.

Further complexity occurs where Council issued planning permits for the development of dwellings are not being acted upon.

Without further reforms to the planning and development system, a Housing Target will not be able to address this issue.

7.2 Can Yarra meet the draft target?

Yarra tracks demand and capacity as it progresses its activity centre built form work to ensure sufficient capacity is continued to be provided.

Expert evidence provided to the Standing Advisory Committee Hearing for Amendment C291yara (Bridge Road and Victoria Street built form provisions) in March 2022, estimated Yarra's activity centres have a potential capacity of approximately 36,000 dwellings (assuming an average dwelling size of 80 square metres). This assumes the development of all sites and does not include capacity for infill in residential areas outside of activity centres, where development is also occurring.

Policy in the Yarra Planning Scheme directs housing growth to appropriate locations including major regeneration areas (such as the Alphington Paper Mill and the former Gasworks site in Fitzroy North) and within activity centres with good access to public transport, jobs, open space and other services.

72 per cent of residential developments occurred in Yarra's activity centres or larger sites (e.g. the former AMCOR site) (Yarra Housing Strategy 2018). The remaining 28 per cent of residential developments were located in residential areas outside of these centres and larger sites.

Table 1 provides an analysis of the theoretical capacity of Yarra's activity centres based on various dwelling forecasts for Yarra (the table does not include the capacity of infill areas).

The figures show that if all future development is assumed to occur in activity centres, Yarra's activity centres and major sites could provide sufficient dwelling capacity until at least 2044 (i.e. 20 years – based on the Draft Housing Targets and an average 1,714 dwellings per year).

Combining this with the capacity of residential areas outside of these activity centres, Yarra's planning scheme and its strategic frameworks are well-placed to achieve the Draft Housing Target.

Based on the Victoria in Future 2023 forecast (1,290 dwellings per year), Yarra's activity centres alone would hold sufficient dwelling capacity up to 2051.

Table 1: Capacity in Yarra's activity centres

Forecast and average dwellings per year	Year capacity in Yarra's activity centres would be reached
Housing Target - 1,714 dwellings/year	2044
Victoria in the Future 2023 - 1,290/year	2051
Constructed dwellings in Yarra - 1,224/year (based on trends from 2016-2023)	2052
Yarra Housing Strategy assumptions - 895/year	2063

7.3 Pressures on employment land

A key challenge for inner urban areas like Yarra is the ongoing need to balance housing development with employment uses. The retention of employment land is critical to ensure employment opportunities are retained close to where people live and close to multiple transport options. It ensures the basic functioning of a city and makes it attractive for people and businesses.

Council's initial review of the draft Housing Targets demonstrate that rezoning of employment land at this point in time is not required. Yarra's Spatial Economic and Employment Strategy (SEES) 2018 and Yarra Planning Scheme seeks to retain all employment land in Yarra. Yarra's current capacity analysis shows that Yarra's planning scheme provides sufficient capacity for dwellings.

An update to the SEES 2018 is due for completion later this year and is unlikely to lead to a change in direction for employment land in Yarra.

Rezoning of employment precincts (or parts thereof) would encourage residential development in less desirable locations, lead to an irretrievable loss of employment land and is not likely to lead to an overall increase in total dwellings.

The *Plan for Victoria* needs to be clear that where dwelling capacity in a scheme exists, employment land should not be rezoned to allow residential development unless a comprehensive, municipal analysis identifies it as surplus and it is in a suitable location.

7.4 Further strategic work

Council wishes to understand the implication of the housing targets of current and future strategic work being undertaken by councils. The resource burden of revising strategic work is significant.

7.5 Urban modelling process to finalise Housing Targets

The capacity of each municipality needs to inform the targets, taking into account all constraints and opportunities. The model should be nuanced to take the different conditions in the inner city into account i.e. higher land, development and holding costs, fragmented landownership, etc.

Council strongly supports the addition of feasibility into the modelling. The feasibility modelling must consider the differences in the economic feasibility between building homes in different local government areas. This will help identify whether something that is feasible in one municipality is not in another.

However, market testing may only be useful up to a certain level, given the long timeframes the targets anticipate and the increasing level of uncertainty that come with this timeframe.

Housing Targets need to be grounded in reality and capable of adjustment in the future, where needed. The Targets also need to consider external forces and/or regulation and be informed by market testing.

The following comments are offered on the proposed approach to modelling that will inform the final targets:

- Existing and proposed built form controls (Design and Development Overlays DDOs) should be considered in determining capacity. Councils should be consulted to obtain the most accurate information.
- The application of discounts (reductions in development potential) in specific overlays are generally supported. However:
 - A 50 per cent discount may be appropriate for lower-order residential zones but not for land in Mixed Use Zone or Commercial 1 Zone. In Yarra, significant development occurs in these areas, including on sites where Heritage Overlays apply.
 - It is noted 'highest' flood risk areas (Melbourne Water) are identified as 'not developable', a 50 per cent discount is proposed for 'medium' flood risk areas (Melbourne Water) and 20 per cent discount for land in the Special Building Overlay (SBO). The latest flood mapping must be taken into consideration.

The proposed discounts may be appropriate for areas of riverine flood plains, but appear as too high for the majority of areas subject to overland flows in Yarra. Responding to overland flooding to avoid damage effects building design rather than capacity.

The northern end of Smith Street (Fitzroy/Collingwood), a 'high change' area in the Housing Change Framework of the Yarra Planning Scheme, is a good example of delivered dwelling capacity in an SBO.

The modelling needs to take local differences into account to be informative.

 It is unclear why a 50 per cent discount is applied to land in an Environmental Audit Overlay (EAO). Council has not found this overlay reduces development potential by 50 per cent - noting the impacts of this overlay on sites would depend on the level of potential contamination, the additional costs of remediation combined with the dwelling potential a development could create.

See comments on the SBO and the northern end of Smith Street above. The EAO does not appear to have impacted on the delivery of capacity in this location.

- The approach of excluding sites of smaller sites (i.e. under 300 square metres) as 'not developable' is generally supported. Experience in Yarra shows that unless these sites (the traditional subdivision pattern in large areas of Yarra) are consolidated, larger yield multiunit development does not occur.
- However, it is noted that in Yarra townhouse developments in residential areas with smaller lots (approximately 300 square metres) does occur. This will differ across municipalities. Again, the modelling needs to take local differences into account to be informative. A lower threshold may be required.
- Industrial land is identified as 'not developable'. Council assumes Commercial 2 land is also included in this category as residential uses are prohibited in the zone.

7.6 Implementation and monitoring of the targets

Council has been provided with little detail about how the housing targets will implemented:

- The proposed timing of their application is unclear. Will they apply from Day 1 when the final Housing Targets are released? Most councils in Victoria, Yarra included, cannot meet these targets from Day 1.
- Councils will require support to undertake strategic work over time to examine capacity and look for opportunities.
- It is unclear how the targets will be used in practice. Will penalties be applied if councils fail to demonstrate they have capacity in their planning scheme? What if councils can demonstrate they can achieve the capacity?
- It is unclear whether changes to the suite of residential zones are being contemplated as part of the implementation of the housing targets.

Monitoring the rate and nature of housing supply, and the role of planning controls in achieving the desired housing and community outcomes, is critical. This monitoring needs to be undertaken at the State level, on an annual basis. This work can inform the review of targets.

Council also recommends that monitoring should be considered in rolling five-year blocks. This recognises that housing completions are not linear or steady on an annual basis.

Progress against targets also needs to be monitored, including:

- Theoretical capacity (via the planning system)
- Diversity of housing achieved, including affordability (i.e. approved and constructed)
- Delivery of homes (i.e. approved and constructed).

Council strongly recommends that the State Government takes a lead role in monitoring and the provision of data. Council would support the reinstatement of the Housing Development Data (HDD) program, a State Government program which monitored housing outcomes from 2005 to 2016.

Housing development data provided additional data to building approvals data, including the number of dwellings in a location, the specific location of new development, demolitions, and the type and scale of new development projects. It was an invaluable resource to Councils in providing 'snapshot' of the housing stock.

Quality housing is critical too. Councils should not be pressured to approve poor quality development proposals because targets are not being met. Councils should be supported to ensure the market provides high-quality, liveable, sustainable development.

7.7 Addressing barriers to the delivery of housing

Yarra City Council approves significant numbers of dwellings each year. During the recent financial years of 2021-22 and 2022-2023, Yarra approved 1,220 and 1,159 dwellings respectively.

However, the planning system and local government does not deliver housing. Approving homes does not necessarily translate to homes being built, especially given current economic conditions. For details, see comments on the *Housing targets vs current development rates* above.

Councils cannot force developers to make planning applications for new development and build housing that has been approved. This is clearly evidenced by the thousands of dwellings which have approval across the state but are not being built.

Since the release of Victoria's Housing Statement in September 2023, criticisms have been levelled at delays in decision making by Councils. Yarra has strongly defended its record in approving applications, noting Council is not stalling housing approvals.

In terms of the planning system, there are large numbers of live planning permits that are not being acted on, some of which contribute to housing supply. For example, Council notes in the three quarters since July 2023, nearly 130 extensions of time have been sought. These developments would provide for over 400 dwellings.

Council is also aware a number of permits that expire without being acted on. This data is not currently captured by Yarra or any council to Yarra's knowledge. It is also acknowledged this data is difficult to collect without substantial funding.

While the targets may ensure adequate theoretical capacity in the system, much more is required to ensure housing is constructed.

There are significant barriers to development and the delivery of housing supply beyond the planning system, such as:

- cost of borrowing for both developers and purchasers
- speculative land banking
- the cost and shortages of building materials
- shortage of skilled labour due to government projects
- the cost of government taxes.

This is not a task for one level of government or one department - it requires a holistic, cross-government approach. A comprehensive, multi-faceted approach is needed that tackles the issue from all angles.

Council considers the following should be investigated to potentially increase housing supply in Victoria:

- Gain clearer insights why some sites with permits are left undeveloped or numerous extensions of time are requested and explore mechanisms to encourage acting on inactive permits e.g consider penalties where development is not acted on.
- Review taxes and charges that impact on investment, development, and purchasing. e.g. introduce tax incentives to develop land and reduce land banking (both incentive and disincentive).
- Increase the ability of the construction industry to deliver housing.

- Explore mechanisms to facilitate site consolidation to enable development of smaller sites. Fragmented ownership and the fine grain subdivision pattern can be a reason why development has not occurred in some locations. There is no mechanism in the Victorian planning system to assist with this.
- State Government assistance to package up sites and support developments, pilot projects or partnerships to facilitate development in areas where the development industry lacks confidence. For example, the western end of the Victoria Street Major Activity Centre is an opportunity area located close to the North Richmond Station, few heritage overlays apply, however little development is occurring.
- In some locations, the Environmental Audit Overly may be an impediment to development. Assistance may be needed for groups of small sites to fund the environment audit required for the potentially contaminated land. This would allow for the issue to be dealt with 'once and for all' and providing certainty for new developments.
- Consider federal and state funding and planning levers to help offset the costs of delivering affordable housing.

7.8 Creating housing diversity

The draft Housing Targets do not address key issues such as providing housing diversity, dwelling sizes or the provision of social (including public) and affordable housing.

Housing affordability and diversity are key issues in ensuring a diverse community and liveable Yarra and should:

- Provide for diverse housing types including shared, sole person, couple and family households.
- Include housing for people with disabilities, older persons, students and those in need of crisis accommodation.
- Provide for a range of affordable housing types appropriate to the needs of very low, low and moderate-income households.
- Include greater housing choice for key workers.
- Encourage the supply of additional social housing and improvements to existing social housing.
- Retain public housing as a form of social housing in addition to community housing, not replacing public with community/other social housing

The Housing Targets need to be more than just numbers – housing diversity targets are also needed in the planning system.

Diversity targets are needed to reflect the different types and size of housing needed, including its affordability.

(See Part 1 of this submission).

7.9 Ensuring housing affordability

Council understands that one of the drivers of the housing targets is the premise that more homes will mean they are more affordable. Capacity in the planning scheme alone is not the answer to affordability.

The strong demand to live in Yarra has resulted in rapid house price growth and high land values in the past decade. The high purchase prices in Yarra (the median house price in 2024 was approximately \$1.37 million with units at \$567,000) mean that many households are unable to purchase property in Yarra, especially lower income households. While renting for many households is more viable than purchasing a home, the cost of renting in Yarra is still cost prohibitive for many households.

The planning system plays a proactive role on the 'supply' side however the planning system is ultimately a lesser influence on prices.

The Victorian Government's series of social and affordable housing legislative reforms, policy initiatives and new investments are still not addressing the social (including public) and affordable housing deficit.

Similarly, Federal Government initiatives and other State Government programs, such as home buyer assistance and shared equity schemes, assist but will not provide a comprehensive solution.

Yarra, together with the other M9 Councils, are seeking the introduction of mandatory affordable housing controls in the Victorian Planning System to deliver social and affordable housing with certainty and at scale to ensure long-term socio-demographic mix and complement the public housing program. (See Part 1 of this submission).

Social and affordable housing is essential infrastructure that needs to be planned for and provided in a similar way to roads, parks and open space, drainage works are provided via contributions from development as cities grow and densify.

7.10 Ensuring housing is supported by appropriate infrastructure

Council supports the focus of more homes near transport, jobs, and essential services, however significant new housing must be supported by infrastructure. This will require significant investment in:

- Public open space and other public spaces
- Community infrastructure
- Public transport
- Walking and cycling infrastructure
- Climate resilience.

The forecast population growth according to VIF 2023 is significant. The proposed capacity figure of the Draft Housing Target is even higher. This poses significant pressure on community infrastructure delivery and other services. For detailed comments on the infrastructure needs, see Section 4.1 of this submission.

Part 3 - Implementation

8.0 Implementation

Implementation of the *Plan for Victoria* and Housing Targets has not been outlined in the engagement material.

There must be strong emphasis on implementation and promotion of infrastructure investment.

A 'whole of government' commitment to the implementation of the plan is essential.

8.1 Funding

A comprehensive long-term framework for infrastructure supported by a short-term funding program is critical to ensure there is an integrated and aligned infrastructure delivery. This funding would:

- Ensure the State Government delivers infrastructure to support growth (including public transport, housing affordability, community service support); and
- Support councils in doing their work in relation to built form, good design outcomes, public spaces, greening and climate resilience.

It will be important that the development industry contributes to the provision of infrastructure. In this regard Council supports proposals for a new development contribution system. Other funding options towards state infrastructure will need to be considered.

8.2 New provisions in the planning scheme

It is unclear how / whether the *Plan for Victoria* will be implemented through the planning scheme.

The plan should examine the planning tools currently available, and consider other tools, such as inclusionary zoning and other changes identified in this submission that would assist in the Plan's implementation.

Careful consideration is required as to how the Plan's directions and strategies will translate into planning policy and inform decision making.

Council officers would value the opportunity to help develop and review any proposed planning provisions before they are approved.

8.3 Action oriented

Council strongly supports the proposal by the State Government, the Plan will be a living document and action oriented.

Yarra strongly supports an on-going collaborative approach in delivering the Plan. Local councils in the M9 are already working together and with the State Government to address priority issues for our region.

This submission highlights that there is a need for further detail on the implementation and actions, alongside appropriate monitoring and updating.

Successful implementation of the Plan will be dependent upon improved cross-government commitment and co-ordination. The Plan must be clear on how its strategies will be implemented – at local, regional or State levels. There needs to be more clarity around funding, timing and responsibility.



We've collected over 9,000 pieces of feedback, and had more than 850 hours of conversation with community, councils and stakeholders. This document provides you with a summary of the ideas shared by Victorians that we need your feedback on.

We've heard that Victorians want a future that is inclusive and vibrant - where everyone can have a place to call home with good connections to jobs, schools and services. These things will help us to create vibrant and safe communities where everyone can thrive.

Your feedback has helped to identify eight Big Ideas to transform Victoria. These Big Ideas will create a future that is liveable, sustainable and enriching – a future where Victorians feel healthy, empowered, safe and happy.



Victorians have suggested the following Big Ideas and we need your feedback on the best way to deliver them. Let's create our future together.





Providing all Victorians with a choice of a well-designed home, at an affordable price and close to daily needs.



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Access to public transport

Access to employment

Access to green spaces

How attractive the area is

Being close to family and

Access to hospitals and

other health facilities

Affordability

What we've heard so far You've told us that we need more homes across Victoria. Many people have also told us that housing and renting Top seven factors when choosing choices are being significantly impacted by the cost of living a place to live and that more social and affordable homes are needed. In regional Victoria, we heard that there is a need for more new homes in a range of different styles to suit people's needs across all stages of life. ननम्हि "We need more diverse housing - no more sprawling, neighbourhoods full of the same homes! We need a mix of homes that are

walkable to shops, playground, schools." "Protect renters against rapidly rising rents and housing

instability."

"We need to build a lot more houses, especially affordable and social housing."

49% Spread across our cities, suburbs, towns, regions and rural areas

Where you want to see new homes built

20% Within Melbourne

16% **Regional cities** or towns

friends

11% 3% Unknown Rural or not sure areas





BIG IDEAS

More homes in locations with great public transport access

<u>88</u> 88

We will need 2.24 million more homes by 2051 – 1.8 million in metropolitan Melbourne and 425,600 across regional Victoria. Making sure that new homes are built across the state and are well-located will allow us to maximise use of existing infrastructure and transport. When a new plan for Victoria is finalised, housing targets will show where new homes will be built across Victoria. What do you think we should do to prioritise homes close to public transport, services and shops?

TORIA

Where would you like to see more homes in your local area?

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More housing options for all Victorians including social and affordable homes

We need to build more social and affordable homes so that more Victorians have access to housing that is safe, secure and suits their needs across all life stages.

There are many ways to provide more social and affordable homes for Victorians – everyone has a role to play.

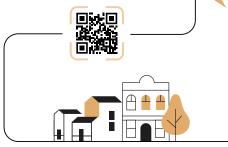
How do you think a plan for Victoria could help to increase the amount of social and affordable homes?

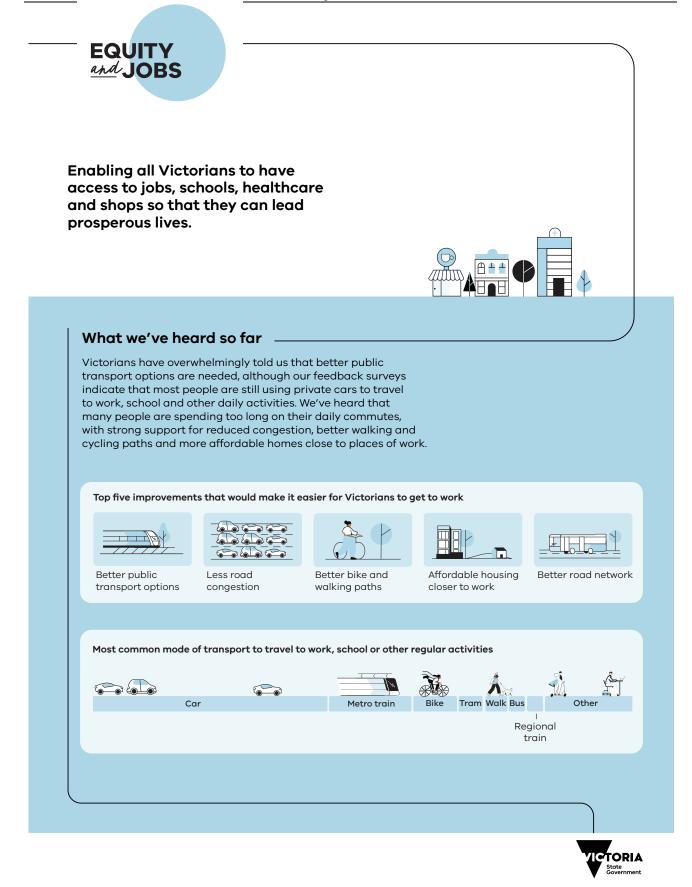
What could the plan for Victoria do?

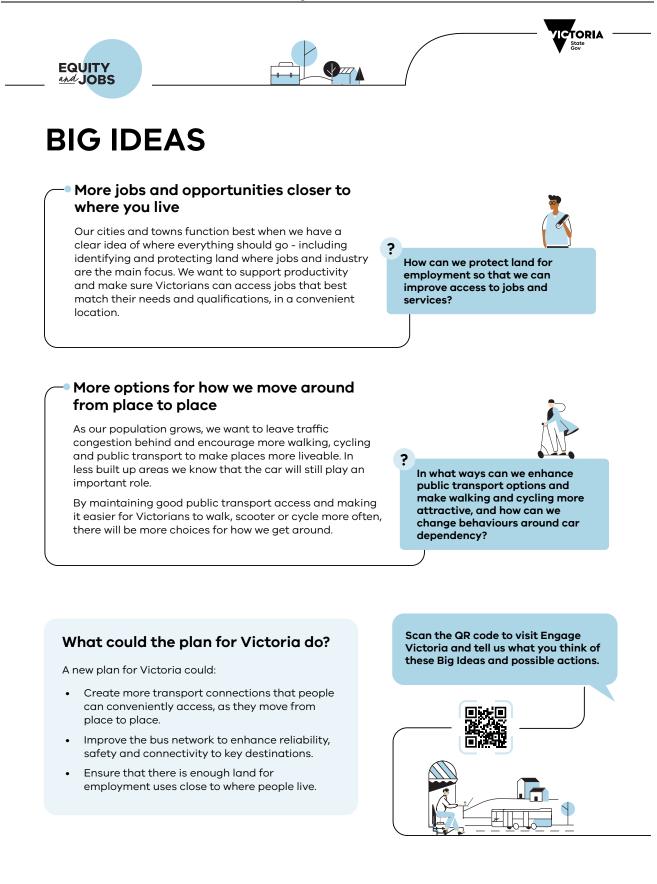
A new plan for Victoria could:

- Provide clear guidance about where more homes will go, including around transport hubs and closer to regional towns.
- Implement a minimum amount of social and affordable housing in new developments.
- Update regulations to improve the design quality of apartments, including consideration for climate resilient design.
- Make it easier and faster to assess permits for residential development that meet good design code.
- Require fewer car spaces for developments close to public transport to reduce costs and make homes more affordable.

Learn more about housing targets and tell us what you think of these Big Ideas and possible actions by scanning the QR code below.









Creating connected, well-designed, vibrant and inclusive communities for everyone to call home.



What we've heard so far _

Communities across Victoria want to maintain their local sense of place and identity. Vibrant places with green parks, diverse shops and local community facilities are important to most Victorians. When planning for new development, sustainability, planting of trees, and high-quality public parks and play spaces are amongst the most important priorities.

Your ideas for thriving and liveable places

Transport

- Faster and more frequent bus and train services
- Better connections between public transport modes or different kinds of transport

Active transport

- Ability to walk to local places
- Bike paths and safety updates
- Better connections between cycling and public transport

Reduce congestion

- Better active and public transport to reduce car reliance
- Changes to traffic management
- Road maintenance

Open and green spaces

- More recreation spaces
- More street trees for cooling and inviting places
- Improvements to parks and open space facilities

Healthcare

- Better support healthcare workers
- Improve access to healthcare
- Adequate mental health services







BIG IDEAS

More certainty and guidance on how places will change over time

Victoria is a diverse network of communities and neighbourhoods. A 'one size fits all approach' to planning does not reflect the distinctiveness and local characteristics that make places unique such as public spaces and parks. If we carefully plan now, we can strike the right balance between maintaining local identity while providing more certainty and consistency about how change is managed.

More trees and urban greening in our parks and community spaces

Our places are getting hotter and drier, and this makes them less enjoyable and affects our health and wellbeing. More urban greening and tree planting in our parks and community spaces is key to ensuring places remain cool and green, particularly in locations that are less leafy. By introducing targets for tree canopy coverage, we can make our streets cooler and greener.



CTORIA

How do you think we can give communities more certainty for how places will change over time?



What are your thoughts on setting targets to increase tree canopy in our public spaces? What considerations do we need to take into account?

What could the plan for Victoria do?

A new plan for Victoria could:

- Create a map that shows how places will grow or change over time.
- Ensure developers provide local community infrastructure alongside new housing.
- Better coordinate new development with the delivery of infrastructure.
- Introduce a minimum standard to guide the delivery of quality public open and community spaces for everyone to enjoy.
- Set targets to increase tree canopy coverage.

Scan the QR code to visit Engage Victoria and tell us what you think of these Big Ideas and possible actions.





Protecting our environment, agricultural land and natural resources for a sustainable and healthy future.



Top five factors to help live a

What we've heard so far

Living more sustainably, reducing our carbon emissions, and protecting our agricultural land and natural environment are key priorities for many Victorians. To help create more sustainable places in the future, improving access to public transport, planting more trees and preserving our natural habitats are amongst the most important factors for Victorians.

Top factors that would help households to contribute to a more sustainable environment











BIG IDEAS

More protections from flooding, bushfire and climate hazards

We need to develop a clear understanding of the impacts of flooding and bushfire in order to plan for a more sustainable future. This will mean in some locations we need to adjust our expectations around what level of development is appropriate to ensure the right balance between community safety, mitigation of hazard impacts and protection of our natural environments.

How can we balance development needs with the protection of areas prone to flooding and bushfire hazards?

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Greater protection of our agricultural land

Victoria has some of the best quality agricultural areas in Australia and grows a diverse range of food for ourselves and for export. We need to protect our agricultural land from urban expansion, climate change, natural disasters and resource scarcity. We can do this by establishing township boundaries to create a clear edge between housing and agricultural land. This will ensure we can live sustainably.

How can township boundaries protect agricultural land? What considerations should be taken into account?

What could the plan for Victoria do?

A new plan for Victoria could:

- Consider how we ensure communities have the best available information, mapping and data, to inform decision-making around flooding, coastal hazards and bushfires.
- Adopt a state-wide approach to improve the design and environmental sustainability of all residential development.
- Develop a map to show and better define land uses in regional areas, including agricultural land.
- Establish township boundaries to protect agricultural land.

Scan the QR code to visit Engage Victoria and tell us what you think of these Big Ideas and possible actions.



7.3 Quarterly Community Report Quarter 4 2023/24

Reference	D24/285611
Author	Emily Woodin - Coordinator Business Planning and Performance
Authoriser	Chief Financial Officer
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

 To present the 2023/24 Quarterly Community Report Quarter 4 (Community Report) (Attachment 1) that includes an integrated report of work towards delivery of the Council Plan, financial performance, capital works program and the 2023/24 Annual Plan actions for Quarter 4 (April, May, June 2024).

Critical analysis

History and background

- The Council Plan 2021-25 incorporating the Municipal Public Health and Wellbeing Plan was adopted by Council on 19 October 2021 in accordance with the Local Government Act 2020 (the Act).
- 3. Supporting the Council Plan is an Annual Plan, funded by the Budget that outlines the principal activities that are to be undertaken over the course of the financial year.
- 4. The Local Government Act 2020 requires that Council publish a quarterly statement comparing the budgeted revenue and expenditure for the financial year with the actual revenue and expenditure to date.
- 5. The Community Report provides a comprehensive, integrated report of progress against the delivery of the Council Plan, financial performance and capital works program, as well as updates on key strategies and activities for Quarter 4 of the 2023/24 financial year.
- 6. Over the last year, significant focus has been directed to strengthening the format and content of the Community Report to Council.
- 7. The 2023/24 Annual Plan included 57 actions that are Year 3 actions that contribute to the delivery of 4-year Initiatives in the Council Plan 2021-25.

Discussion

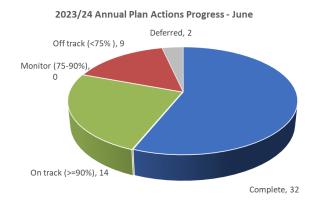
Community Report

8. The Community Report (Attachment 1) provides an integrated overview of the organisation's activities each quarter. It provides a central place to report on Council's progress in delivering the Council Plan through the Annual Plan, financial performance, the delivery of the Capital Works Program, implementation of key strategies and plans and significant achievements.

2023/24 Annual Plan Progress Quarter 4

9. The 2023/24 Annual Plan had 57 actions to be delivered and 2 Actions were deferred by Council leaving 55 Actions to be delivered. The Annual Plan including the final action progress report is contained in Attachment 1.

 The Annual Plan progress at the end of June has 55 actions completed or in progress, 46 of these actions (84%) reached a status of completed (32) or in-progress ≥ 90% (14) against our performance target of 75%.



Strategic Objective	Complete	On track (>=90%)	Monitor (75- 90%)	Off track (<75%)	Deferred	Total
Climate and environment	5	2	0	1	0	8
Social equity and health	10	5	0	2	0	17
Local economy	2	1	0	1	1	5
Place and nature	9	1	0	4	1	15
Transport and movement	2	2	0	1	0	5
Democracy and governance	4	3	0	0	0	7
	32	14	0	9	2	57

30 June 2023/24 – Budget update

- 11. Like all other councils across Victoria, Yarra is facing financial challenges with rising cost pressures, rate capping and cost shifting, coupled with unprecedented growth and increasing pressure and demand on its services. Constant changes to the economic landscape have compounded these challenges with persistent high levels of inflation and significant increases to the cost of services and labour.
- 12. As part of our commitment to improving Council's financial health, our first Financial Sustainability Strategy was adopted by Council on 12 December 2023.
- 13. Over the last year Council has strengthened its financial position, achieved through holding costs, prudent resource management and real time assessment of operating and capital works programs.
- 14. As a result of Council's improved financial position during 2023/24, Council has reported a \$24.7m operating surplus for the financial year, \$9.5m higher than the adopted budget.
- 15. In addition, significantly lower actual total outstanding borrowings at 30 June 2024 have been achieved \$30.5m compared to forward projections from June 2022 of \$48.8m for the same ending period.
- 16. Unrestricted cash (the ability to repay borrowings) has increased from \$4.7m in June 2022 to \$20.1m in June 2024.
- 17. Capital works carryovers have decreased from \$15.2m in the 2022/23 adopted budget to \$0.751m in the 2024/25 adopted budget, which demonstrates improved planning, better monitoring and improved delivery of projects for the benefit of the community.
- 18. In accordance with the FSS, \$5.0m has been transferred to reserves.
- 19. Please note, the financial results communicated in this document are, at the time of writing, draft and subject to audit by the Victorian Auditor-General's Office (VAGO) and require certification by Council and VAGO. The final certified result will be subject to any changes, recommended or agreed to by Council's auditors.

Quarter Four - 2023/2024 June 2024 YTD net result

- 20. The YTD actual net result is \$24.7m, \$9.5m favourable to the YTD budget, mainly derived by a combination of permanent changes and timing of transactions driven by:
 - (a) increase in Statutory Fees and Fines (\$3m);
 - (b) improved management of cash levels and returns on investments (\$3.5m);
 - (c) better than expected income from developer contributions (\$1.1m);
 - (d) holding costs in materials and services (\$9.2m);
 - (e) reduced bad and doubtful debts (\$2.8m);

Offset by:

- (f) decrease (timing) in grants (\$6.2m), and
- (g) decrease in user fees (\$3m).
- 21. The financial position as at 30 June 2024 shows a cash and investment balance of \$96.8m (June 2023 \$81.1m) which is partially funded by \$30.5m of borrowings.
- 22. Cash and investment balances are adjusted for restricted cash obligation, providing Council with an unrestricted cash balance of \$20.11m compared to a forecast of \$34.87m (\$5.39m on 30 June 2023).

Quarter Four - Capital Works

- 23. Victorian Auditor General Office (VAGO) audits on local government have repeatedly noted the issue of underspend in Councils' capital works program and Yarra was no exception with significant capital works unplanned monies historically carried forward year on year. In 2022/23 the carry forward from 2021/22 was \$15.2m.
- 24. Over the last two years Council has worked hard to achieve our goal of substantially reducing/limiting the impact and value of unplanned carry over. This has been achieved through careful oversight and a strengthened approach to project management. The adopted 2023/24 budget included a more realistic capital works program whilst meeting asset renewal requirements and a significantly reduced planned carry over (\$7.2m) from the 2022/23 financial year.
- 25. The 2024/25 adopted budget demonstrates further significant improvement with a planned carry over of just \$0.75m from 2023/24.
- 26. Full-year capital expenditure as of 30 June 2024 was \$26.8m, representing 93% of the forecast (\$28.9m) or 79% of the adopted budget (\$34.01m) with \$750,784 planned carry-forward and \$0 unplanned carry-forward.
- 27. A total of 48 budget adjustments took place throughout the FY2023/24 delivery year, which saw a reduction of the adopted budget from \$34.01m to an adjusted budget of \$28.9m.
- 28. It is important to note that a series of other projects and programs (street and park trees, bike lanes, street furniture and signage) delivered to the community through the capital works program were expensed as per Council's non-current asset policy and therefore not included in the final total capital works expenditure. Adding this expenditure to the actual capital investment of \$26.7m would deliver close to 97.5% the forecast capital works program, the difference offset by savings.
- 29. The most significant contributors to the forecast budget to \$28.9m was from:
 - (a) Brunswick St Oval Redevelopment \$3.1m (tenders over budget);
 - (b) Atherton Gardens Kindergarten \$0.63m (DFFH delivering the project instead of Council);
 - (c) Collingwood College Childcare \$0.52m (transferred to VSBA delivering the project instead of Council);

- (d) Passenger Fleet Renewal \$0.5m (savings achieved through reduction in the size of Council's fleet); and
- (e) IT Renewals \$0.4m (savings identified in the program).
- 30. All adjustments were communicated to the community through quarterly community reports. Further, the introduction of a mid-year review ensured that at-risk projects were identified early, which enabled funding to be directed to a number of alternative projects.
- 31. The Capital Works program's performance has improved considerably when compared to previous years, as evidenced by the significant reduction in carry forwards and deliverability against the adjusted budget.

Options

32. There are no options for consideration.

Community and stakeholder engagement

- 33. The Annual Plan is informed by initiatives in the Council Plan 2021-25. Extensive community engagement was undertaken during the development of the Council Plan 2021-25.
- 34. Council's Community Engagement Policy guides the approaches taken for community engagement for the individual projects contained in the Annual Plan.
- 35. The Community Report will be published on Council's website after 13 August 2024.

Policy analysis

Alignment to Community Vision and Council Plan

- 36. The structure of the Community Report and Annual Plan is aligned to the six Strategic Objectives of the Council Plan 2021-25 that respond to Yarra 2036 Community Vision.
- 37. Actions in the Annual Plan are closely aligned to Initiatives in the Council Plan.

Climate emergency and sustainability implications

38. The Council Plan 2021-25 includes a Strategic Objective 'Climate and Environment' that addresses climate emergency and sustainability implications. The Annual Plan includes seven actions that respond to Initiatives in this Strategic Objective.

Community and social implications

39. The Council Plan 2021-25 includes a Strategic Objective 'Social equity and health' that addresses community and social implications. The Annual Plan includes seventeen actions that respond to Initiatives in this Strategic Objective.

Economic development implications

40. The Council Plan 2021-25 includes a Strategic Objective 'Local economy' that addresses economic development implications. The Annual Plan includes five actions that respond to Initiatives in this Strategic Objective.

Human rights and gender equality implications

41. The Council Plan 2021-25 includes a Strategic Objective 'Social equity and health' that addresses equity, inclusion, wellbeing and human rights considerations. The Annual Plan includes seventeen actions that respond to Initiatives in this Strategic Objective.

Operational analysis

Financial and resource impacts

42. This report provides an analysis of progress against the Council Plan and budget for Quarter 4 of the 2023/2024 financial year.

43. The financial results communicated in the community report are, at the time of writing, draft and subject to audit by the Victorian Auditor-General's Office (VAGO) and require certification by Council and VAGO. The final certified result will be subject to any changes, recommended or agreed to by Council's auditors.

Legal Implications

44. There are no identified legal and risk implications.

Conclusion

45. The 2023/24 Community Report Quarter 4 including the final Annual Plan Progress Report for June 2024 is presented for noting.

RECOMMENDATION

- 1. That:
 - (a) Council note the 2023/24 Quarterly Community Report Quarter 4.

Attachments

1. Attachment 1 - City of Yarra Quarterly Community Report - Quarter 4 2023/24



Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra. We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra. We pay our respects to Elders from all nations and to their Elders past, present and future.

This publication is available in alternative accessible formats on request.

Electronic copy PDF versions of this report can be downloaded from yarracity.vic.gov.au

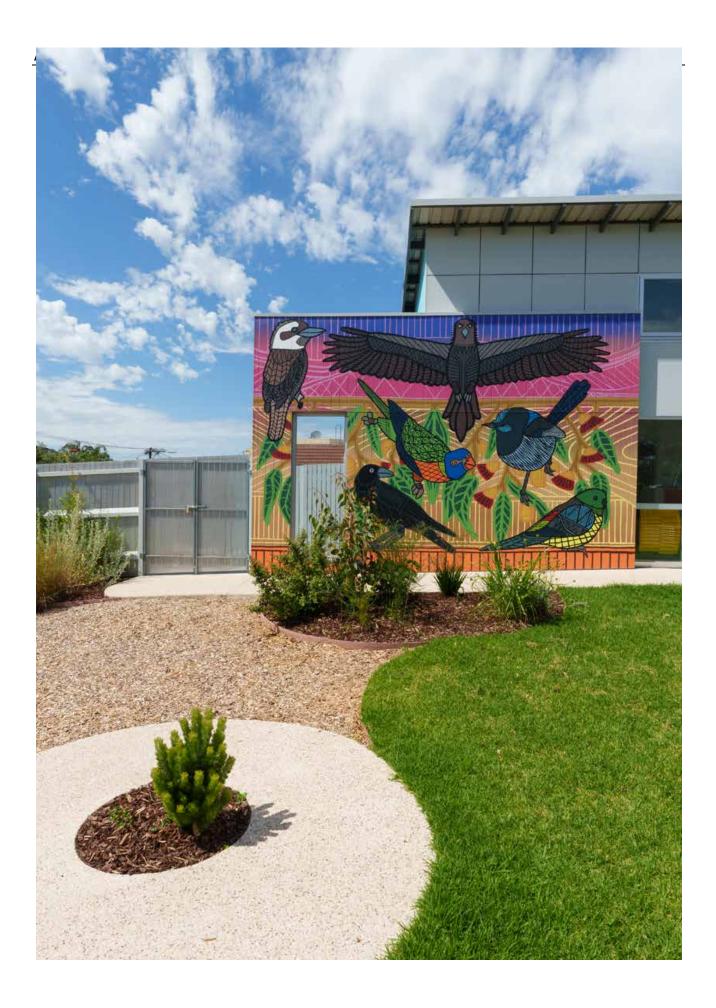
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I am pleased to present the Quarterly Community Report for quarter 4 along with highlights from the financial year. Over the course of the year we have worked hard to strengthen the Quarterly Community Report to provide up to date information on key Council projects, services and financial indicators. The new format provides an integrated overview of how we are tracking against key performance measures and provides transparency on the progress made in delivering our commitments to the community in the Council Plan.

It has been a busy and rewarding quarter and a fantastic year for Yarra. I am extremely proud of the depth and breadth of work we are doing across a diverse range of areas and grateful to all of the City of Yarra staff who work tirelessly to support our community to thrive. This quarter I'm particularly proud of the work to address environmental and social justice issues. Our community has continued to tell us that these issues are a priority for them. Local councils have a vital role to play as the level of government closest to community and with our ability to shape the natural, physical and social environment in our municipalities.

Yarra's national leadership efforts on climate were another highlight this quarter, with the new Climate Emergency Plan unanimously adopted by Council.

Right now, the climate crisis is accelerating. If we want to create a safe and just future where people and nature thrive, all levels of government must do more, and faster, to address it.

Yarra is proud to continue to be a leader on climate action in the local government sector and we are committed to embedding climate action in everything we do. The new Plan recognises that the scale of ambition must match the scale of the problem to realise our vision of a climate safe, sustainable and just society.

It was a privilege to meet with distinguished Aboriginal leaders in May and to have the opportunity to discuss the process of Treaty in Victoria and Yarra's role going forward. This marked an important milestone on Yarra's journey to reconciliation.

Our ongoing efforts to advocate on behalf of our community continued this quarter.

We made our support for Yarra's vibrant live music scene heard including making a formal submission to the Australian Government inquiry into challenges and opportunities within the Australian live music industry and delivering our 12-year-strong Leaps and Bounds Music Festival. Our extensive efforts to support our local businesses and help Yarra's business precincts thrive saw excellent results with the overall vacancy rate dropping to 13.9 percent and a significant step towards recovery for Richmond's Bridge Road.

To cap off a year that took great strides towards financial sustainability, in June Council adopted a responsible and balanced Budget for 2024/25 that will deliver essential services and infrastructure, fund our community's priority projects and future proof the city.

Sue Wilkinson CEO, Yarra City Council



Executive summary

We are pleased to present the Quarterly Community Report for quarter 4. This report provides a timely and open overview of the organisation's activities from April to June 2024 inclusive.

As the last quarterly report of the year, this report also includes some additional information across the whole financial year from 1 July 2023 to 30 June 2024.

The Quarterly Report provides an integrated report of progress against strategic indicators for the 6 objectives in the Council Plan 2021-25, Council's Annual Budget 2023/24 and the capital works program.

Progress made in delivering the Council Plan 2021-25

There were 57 actions planned for delivery this financial year. As of 30 June 2024, 2 actions had been deferred by Council due to changes in funding or Council's priorities. The Annual Plan progress at the end of June had 55 actions completed or in progress, 46 of these actions (84%) reached a status of completed (32) or in-progress > 90% (14) against our performance target of 75%.

Financial update

The quarter four financial position builds on the outcomes of prudent financial management achieved through the careful delivery of the 2023/24 Annual Budget and alignment of the objectives of the Financial Sustainability Strategy (FSS).

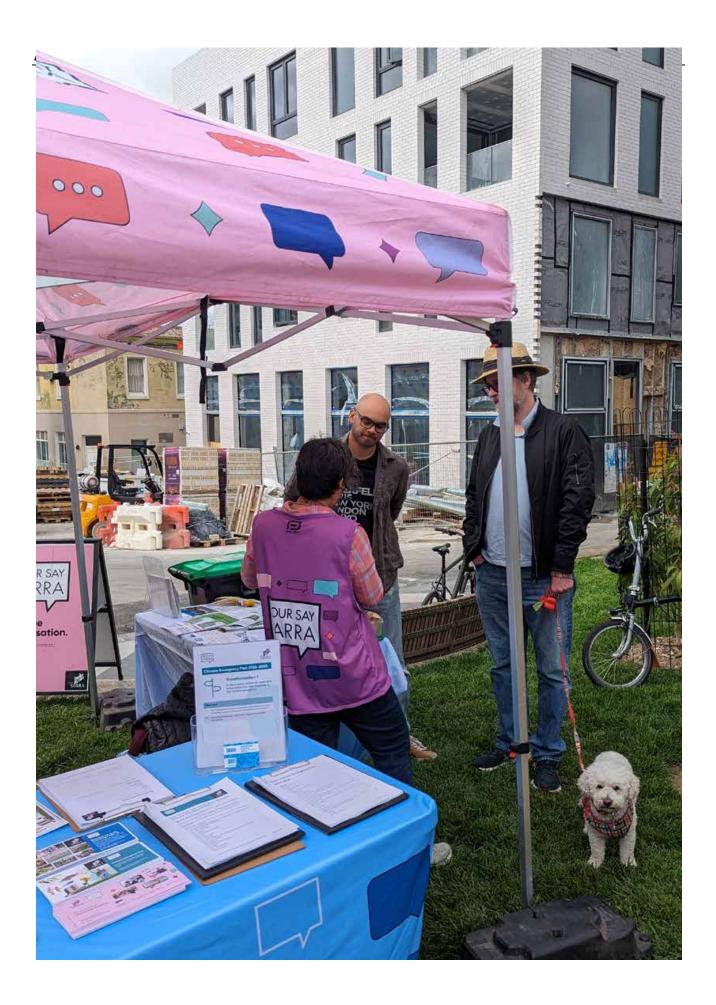
In the first six months, post inception of the FSS, Council has already enacted strategies to strengthen its financial position, achieved through holding costs, prudent human resource management and real time assessment of operating and capital works programs.

As a result of Council's improved financial position during 2023/24, Council has:

- reported a \$24.7m operating surplus for the financial year, \$9.5m higher than the adopted budget
- improved management of materials and services and employee costs
- achieved a 37.5% reduction of outstanding borrowings to \$30.5m at 30 June 2024, compared to forward projections from June 2022 of \$48.8m for the same ending period
- increased unrestricted cash levels (the ability to repay borrowings) from \$4.7m in 2022/23 to \$20.1m in 2023/24
- decreased planned Capital Works carryovers from \$15.2m in 2023/2024 to \$0.751m in 2024/25.

As a result of the strengthened financial position, \$5m can now be transferred to the new Risk Mitigation and Strategic Growth reserves to align with the requirements of Council's Financial Sustainability Strategy.

This significant positive outcome demonstrates our ability to prudentially manage our limited resources. It enables the organisation to effectively plan and prepare for the future on behalf of our growing and diverse community, with less reliance on borrowings, to improve community outcomes and prepare for the next Council Plan.



Year in review

Community engagement

This year marks the final year of Council's Community Engagement Action Plan 2020-2024.

In the 2023/24 financial year, we ran a total of 27 engagements on Council's Your Say Yarra engagement platform.

All engagements and consultations aligned with our Community Engagement Policy 2020 and our updated engagement toolkit to ensure best practice is at the forefront of our engagement planning, delivery, reporting and evaluation.

Throughout the year we saw an increase in views and visitors to our Your Say Yarra online engagement platform with more than 110,000 views from 55,000 visitors. This is an increase from the 86,500 views and the 42,000 visitors in the previous financial year.

We also achieved additional engagement through our enhanced Councillor engagement program. We successfully held 7 well-attended Talking Yarra community events and 8 Talking Yarra stakeholder events including on the issues of LGBTIQA+ pride, Treaty, health and climate change and homelessness. All events were well attended.

Our engagement efforts also focussed on supporting groups at risk of underrepresentation to participate. A comprehensive stakeholder analysis was included in planning for all engagements and accessibility and inclusivity tools were improved on the Your Say Yarra online engagement platform.

We also implemented new and creative ways of engaging with our community to make it easier and more accessible to participate in our consultations. Through the introduction of these innovative methods, we have seen engagement participation increase to almost 5000 responses over the past 12 months. This is an increase from 3,200 responses in the previous year.

Some of the methods that achieved the most success included:

 Using icons and other visual aids to present engagement information where the focus is on simple and easy-tounderstand communications.

- Creating a public-facing ideas wall to allow community members to assign categories to ideas and upload photos in support of their feedback making the page feel full, vibrant and community driven.
- Incorporating custom survey questions into the social mapping tool allowing for in-depth data to be gathered in a visual and transparent manner.
- Using translated messages on corflute signage and other printed collateral.
- Using footpath decals to show proposed concept designs.
- Using the hotspot tool on Your Say Yarra to create maps and visual representations of work.
- Creating an Easy English version of project pages.
- Incorporating photos and icons in engagement designs.
- Creating translated social media advertisements to promote engagements.

We have also worked hard this year to "close the loop" on our engaements and have been reporting back to the community on projects and initiatives through the introduction of project updates, news items and email updates for all participants who have asked to be kept informed on projects and activities they have contributed to.

Financial sustainability

One of Council's key responsibilities is to ensure that it is financially sustainable for both current and future communities. In addition, it is important that decisions are future focussed and have regard to the emerging and future needs of the city. Council is deeply committed to serving the best interests of the community and recognises that consistent effort will be required to ensure that we remain financially sustainable and make the most effective use of public funds.

Financial sustainability and the ability to plan and provide for community in the years to come remains a key strategic risk for all Victorian councils. For Yarra the population is predicted to grow by almost 42% by 2046 which will put increasing pressure on Council's services and infrastructure.

Like all councils in Victoria, Yarra is facing serious financial challenges including rising cost pressures, rate capping, costshifting from other levels of government and the impact of unprecedented growth on our services and infrastructure.

Whilst work to meet these challenges will need to be ongoing, over the last two years significant effort has been directed to strengthening Council's financial position and in turn, Council's long-term financial sustainability.

This has had substantial benefits – including addressing known future financial risks, reducing borrowings and improving Council's overall cash position.

Following community engagement, Council's adoption of the Financial Sustainability Strategy (FSS) on 12 December 2023 marked a major milestone demonstrating Yarra's commitment to achieving long-term financial sustainability.

Yarra's Financial Sustainability Strategy is a Victorian sector first.



The FSS provides an assessment of macro-economic trends, the current financial landscape, long-term financial goals and outlines a roadmap to achieve these objectives. Importantly, the FSS is a forward-thinking financial strategy that extends beyond short-term budgeting cycles.

The FSS identifies seven levers for change. The strategic levers include plans to build reserve funds, responsible borrowing, and optimisation of revenue, a focus on well-planned assets, ongoing reviews of the service landscape, digital transformation, robust financial management and a strengthening of advocacy and strategic partnerships.

Planning and review principles to support future service delivery

Over the next decade and beyond, the City of Yarra community will grow substantially and change, meaning that Council's service mix and delivery levels will need to change and adapt to address the current and future needs of the Yarra community. Strategic Lever 4 of Yarra City Council's Financial Sustainability Strategy, Review the Service Landscape, commits Yarra to a robust service planning and review framework to ensure all services are relevant, financially sustainable and can meet future community needs.

In late 2023, Council undertook a deliberative engagement process to develop a set of community-supported service planning and review principles. Stage 1 used social research and community consultation to provide a baseline of community sentiment on service provisioning from a representative sample of the community. 44 community members who reflect the attitudinal, social and demographic diversity of the community then produced the principles and review prioritisation triggers which were adopted by Council on 9 April 2024.

These Service Planning and Review Principles will be vital to ensuring all services are relevant, financially sustainable and can meet future community needs.

Working for you highlights



3 hectares

of parkland returned to local indigenous bushland





1200 hectares of parklands maintained

7,415 tonnes

of waste diverted from landfill for recycling





major road and footpath works undertaken

and **30** major stormwater drainage works undertaken



864

families attended playgroups

365 grants delivered to community



49

organisations and individuals

497,982 books, ebooks and audiobooks loaned through

our libraries

122,102



swimming lessons provided

850,000 visits to our leisure centres





20,551

meals delivered to older residents and residents living with a disability



Working for you highlights

New Artisan Park

A new public park at the former Amcor site at Yarra Band, Artisan Park, was completed. The project was a collaborative effort by teams across Council, after a long time in the making and the results are fantastic. Council teams had significant input into the design and construction of the project and will begin maintenance efforts shortly.

Yambla soccer pitch design

A design to renew and upgrade the existing soccer pitch at Yambla Reserve was completed. The upgrade will include new fencing, spoon drains around the perimeter, sub-surface drainage under the pitch, a new grass playing surface and a new irrigation system.

Street tree planting in Paterson Street, Princes Hill

Paterson St in Princes Hill was transformed with new street tree plantings. This is a high priority street with low canopy coverage, close to Princes Hill Secondary School and Princes Park. There will be 17 centre road trees (Angophora costata), 22 roadside trees (Eucalyptus robusta 'Matong') and 23 footpath trees (Acer negundo 'Sensation') planted along the street.

Mary Street pedestrian improvements

Our thanks to a resident who highlighted concerns regarding poor visibility when using a pedestrian crossing in Mary Street, Richmond. In response we have installed a low-cost solution that improves visibility and safety for pedestrians, while retaining both car spaces.

Fitzroy Swimming Pool – new 50m pool blankets and under seat rollers

The Fitzroy Swimming Pool 50m pool blankets and under seat rollers were replaced. A total of five blankets covering 1,000m² were procured and will help keep the pool warm overnight and reduce energy costs. The under-seat rollers assist with the smooth and efficient roll out of the blankets and storage during the day.

Drainage relining works in Fitzroy

Works were recently completed on the renewal of drainage at the corner of Gore and Webb Streets, Fitzroy. These works included extensive relining of Council's pipes situated at the intersection ensuring its structural integrity and longevity.

Relining of drains prolongs the pipe's life and is a cost-effective way to deliver drainage renewal works. Comprehensive CCTV inspections were carried out both before and after the relining works to monitor the project's progress and the condition of the pipes.

Pram crossing realignment on Nelson Street, Abbotsford

Officers worked with developers of a site on Nelson Street, Abbotsford to undertake realignment works of the adjacent pram crossing to improve safety.

Working for you highlights



Updates to Scotchmer Street, Fitzroy North

Renewal works continued at Scotchmer Street Fitzroy North including renewal of footpaths, kerbs and channel, drainage, and place-making improvement works for the footpath trading area next to The Empress Hotel.

Moor Street, Fitzroy bike station

Works were recently completed on construction of the Moor Street bike corral. The works included the construction of the kerb extension, asphalt outstand, drainage grate along the channel, 6 new bike hoops and a bike repair station to assist cyclists.

New contraflow bike lane in Adolph Street, Richmond

A new contraflow bike lane in Adolph Street was delivered and has proven to be a great asset to cyclists. The works were completed within 4 days and coordinated smoothly with local businesses and stakeholders.

Brunswick Street bike lane surface treatments

Brunswick Street, Fitzroy (between Alexandra Parade to Gertrude Street) was identified as an area that needed new green surface treatment and bike symbols. As the condition was poor, and as well as being a highly used thoroughfare for cyclists, we had all green surface treatment and bike symbols refreshed. The works were conducted through the night to minimise impact on traders.

Improved accessibility at Council facilities

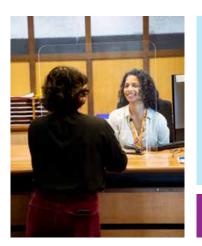
We improved accessibility at Council facilities including installing fully accessible automatic door openers at the Collingwood Leisure Centre and the Bargoonga Nganjin Library toilets and change rooms and purchasing shower furniture and new exercise equipment for the Empower+ classes.

Main Yarra Trail shared path renewal

We renewed sections of the Crown Street access path to the Yarra Trail. The pathway was damaged by tree roots and the asphalt had failed, making it treacherous for users. It has been rectified to ensure ongoing safe use of the path.

Community feedback

This year we have received lots of great feedback from our community. Thank you to everyone who contacted us to say thank you and recognise the efforts of Council staff. Here is a snapshot:



For our Early Childhood educators at Collingwood Kinder

"Looks great! We're really surprised by Yarra's quality of kinder services!"

– Yarra resident via Facebook

For staff across our customer service, compliance and construction management teams

"I'd like to thank a few ladies that have helped me get the correct permit for some work I'm having done. I've spoken to (staff members) from permits and on reception at the Collingwood Town Hall today. (The staff member I spoke to) was so helpful and understanding, as I was confused on which permits were correct. She went above and beyond to help me understand. It's given me some faith in humanity, everyone is stressed and nasty these days.

I'm glad we have such warm and understanding staff that work at Yarra Council. Thank you and warmest regards. Most people like to complain about every little thing, I'm the opposite, I prefer to praise people for being kind and helpful."

- Yarra resident

For the Yarra Libraries Cool Sanctuary

"What a thoughtful support for people who need to escape the heat to extend the library's opening hours! I am not a Yarra resident but congratulate whoever came up with this idea to look after the vulnerable members of the community. You are very kind."

Darebin resident



For our Community Awards

"It was an amazing event to see the initiatives being conducted in the Yarra community...The talent, energy and enthusiasm are an indication of the collaboration, engagement, and connections across the Yarra Community.

Thank you and the team for making this possible and making the event a memorable occasion. I am grateful for the work that has gone into the organising and hosting to engage so many people."

- Richmond, Burnley and Cremorne Historical Society

For our compliance team

"I would like to express sincere thanks to the officer for his care, concern and consideration during our phone conversation regarding our objection to the proposed car share parking bay".

– Yarra resident



Fantastic feedback for our Customer Service

"I am grateful and impressed with the responsiveness and professionalism of the City of Yarra customer service and maintenance team. They follow up and follow through to proactively resolve issues. Well done for their great service and support. Your efforts and commitment to great service is very much appreciated."

- resident submission via online feedback form

For the team at the Clifton Hill Recycling Centre

"The workers at this facility are fabulous. Always helping and smiling!"

– Yarra resident

For our Aged and Disability Services team

"How much I appreciate the support from the Aged and Disability Team ... the home handyman seems to have an answer to any house problem."

- client



For our Event Permits team

"Thank you so much for all your help and support on getting the road closure sorted for this year's fete. You've been an absolute pleasure to work with."

– N.M., Fitzroy North Primary School

For our bicycle infrastructure

"I would like to express my sincere appreciation for the recent improvements to cycle infrastructure in the city, like the pop-up bike lanes. These efforts have not gone unnoticed, and as a keen cycle commuter, I am pleased to see steps being taken to promote alternative and eco-friendly modes of transportation within our community."



resident

For our parking management team

"Can I thank you immensely for placing car-parking divisions in this section of Lygon Street. They have been an instant success.

Not only have they allowed the optimal number of cars to be parked, but they have given confidence when lining up for a parallel park.

When unmarked, there was often the occasion that one had misjudged the space, which meant that one was struggling to park efficiently and thereby creating a traffic hazard in this busy road."

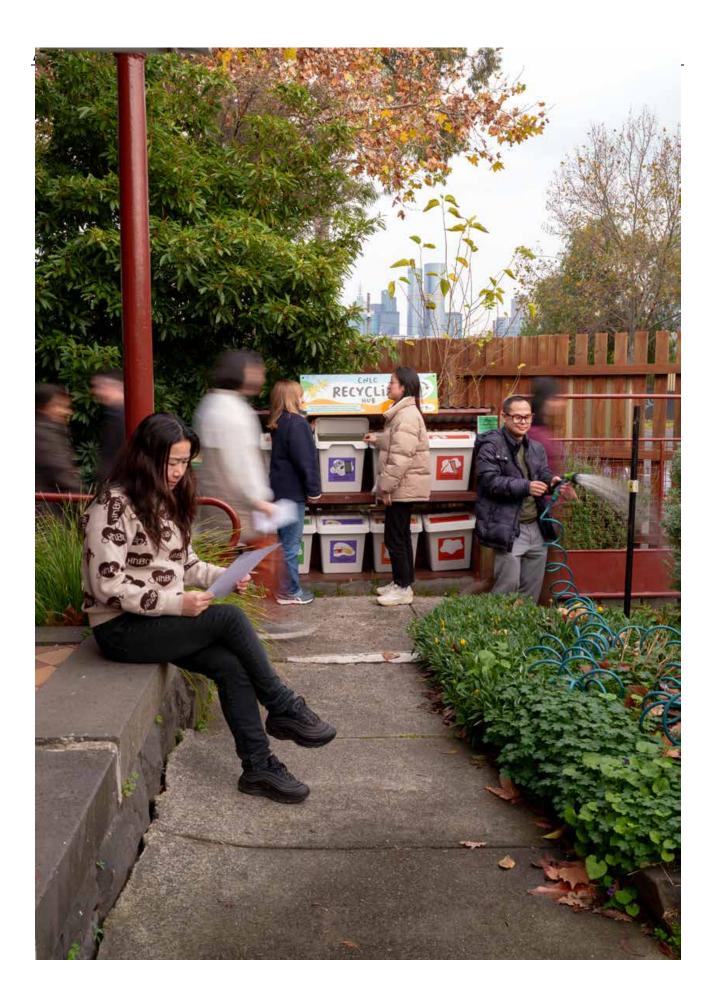
For our stormwater and drainage team

"Once again, I had a blocked stormwater drain because the roots of the street tree had invaded the pipe under the footpath. (A Council staff member) came a few times firstly to assess the situation then with other staff to find out the reason behind the blockage and then while I did not see them at work the new bitumen on the footpath indicated that the pipe had been replaced.

I do not have a problem with the stormwater now. I really appreciate that (staff were) prompt in attending to this and had fixed it within a reasonable time. (The staff member) was always pleasant, calm and helpful in explaining the situation."



– resident



Quarter 4 report

Strategic objective 1: Climate and environment

Climate Emergency Plan

Council is committed to action on the climate emergency and has developed a new Climate Emergency Plan (CEP) 2024-2030 and Climate Emergency Action Plan 2024-2027 to guide this work. Adopted by Council in July 2024, the new CEP establishes Council's strategic approach to delivering on the 2036 Community Vision Future Priority 4.2 to lead the way in climate change mitigation and resilience within Yarra and extend our impact through advocacy and innovative partnerships.

The CEP also gives effect to the Council Plan 2021-25 Strategic Objective 1: Yarra urgently mitigates climate change while also adapting to its impacts and developing resilience in everything we do. The community, business and industry are supported and encouraged to do the same. Strategies under this objective include:

- 1. Take urgent action to respond to the climate emergency and extend our impact through advocacy and partnerships.
- 2. Lead and support the community, business, and industry to take urgent climate action and transition towards net zero emissions and a circular economy.
- 3. Enhance the resilience of our community to prepare for the health-related and other impacts of climate change.
- 4. Lead, embed and promote the transition towards net zero carbon and a circular economy and extend our impact through advocacy and partnerships.

The CEP 2024-2030 is the result of extensive consultation with community, expert groups, key stakeholders, and delivery partners. The Wurrundjeri Woi Wurrung were invited to contribute, recognising their ongoing connection to and custodianship of the lands called Yarra. Consultation was undertaken in two stages: one to inform the drafting of the CEP, and a second to test that the draft CEP met community expectations. Both rounds of consultation included targeted engagements with marginalised, at-risk, and underrepresented groups to ensure their voices were heard in the process.

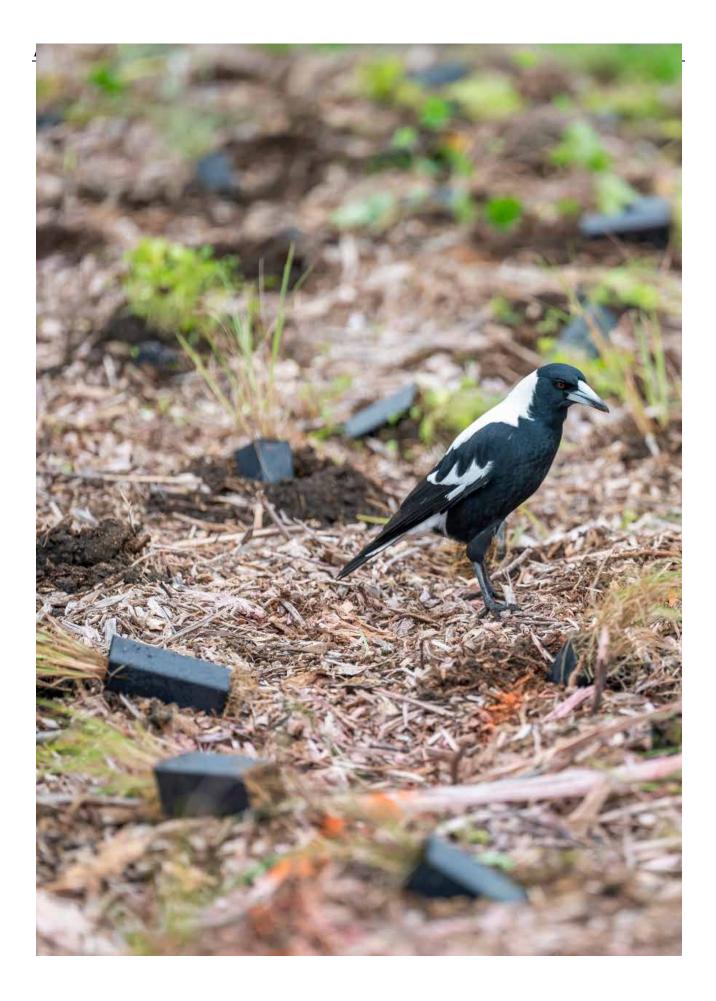
The Plan responds to what our community has asked for through 5 key perspectives and 7 transformations that commit Council to an ambitious and comprehensive climate emergency response. The 5 key perspectives integrated throughout the CEP are:

- 1. Centering Aboriginal and Torres Strait Islander experiences and knowledges
- 2. Fostering social justice and equity
- 3. The rights of young people and future generations
- 4. The rights of nature
- 5. A commensurate climate emergency response

The new CEP recognises the scale of ambition required to appropriately respond to the climate emergency and outlines 7 transformations across society to bring forth the vision of a climate-safe, sustainable and just society. These are that:

- 1. In Yarra every choice we make and every action we take responds to the climate emergency.
- 2. In Yarra, community members at greater risk from climate impacts are connected, supported, and empowered to build resilience.
- 3. Yarra is active, empowered and raising our voice together for a stronger climate emergency response.
- 4. Yarra is a leading and prosperous zero-emissions city.
- 5. Yarra is caring for Country. Our landscapes and waterways are healthier, greener, and more biodiverse, and our communities feel at one with nature.
- In Yarra, everyone lives and works in comfortable and climate-safe homes and buildings, supported by climate resilient public spaces and infrastructure.
- 7. In Yarra, we are transitioning to a circular economy by consuming less, reusing, repairing, sharing, and recycling more and sending less waste to landfill.

Actions and progress towards targets will be reported through the Quarterly Community Report.



Strategic objective 2: Social equity and health

Idahobit Day celebrations

Every year on 17 May 2024, millions of people around the world came together to tackle LGBTIQA+ discrimination for IDAHOBIT (International Day against Homophobia, Biphobia, Transphobia and Intersex Discrimination).

This day is an opportunity to celebrate the advancements we've made in LGBTIQA+ equality while acknowledging that there's still more work to do to ensure LGBTIQA+ people feel safe, supported, and welcomed.

In Yarra, our community, staff and Councillors came together for a live Queerways walking tour to acknowledge Yarra's LGBTIQA+ historical places of significance.

The tour was led by community elder, Tex McKenzie, an engaging storyteller who shared firsthand accounts and anecdotes of what life was like at those times and in those spaces. Tex is a health educator and broadcaster who has spent his career dedicated to raising awareness around HIV and AIDS.

After the tour, we observed the Mayoral Pride flag raising and were treated to a vibrant performance by drag performer D-Flowers.

The Rainbow Advisory Committee (RAC) continues to enable the local LGBTIQA+ community to influence Council's programs, policies, projects, and



2

advocacy. Following an expression of interest program, the RAC now has greater representation of LGBTIQA+ community members from culturally and linguistically diverse backgrounds.

Notably, the Rainbow Yarra Program was shortlisted for the 2024 LG Pro Award for Excellence. This program promotes access, inclusion, and visibility for Yarra's LGBTIQA+ community. The multiyear visibility campaign used physical and digital media to amplify LGBTIQA+ voices and celebrate diversity. The campaign concluded with the "Queer Is" phase, with posters of RAC members installed across the city and a Yarra Talks event where members shared their experiences.

The community can learn about how Yarra is celebrating diversity and promoting LGBTQIA+ inclusivity on our dedicated online platform, Rainbow Yarra.

Treaty event

In May 2024, Council was privileged to have an audience with distinguished Aboriginal leaders to discuss the process of Treaty in Victoria.

The panel included Uncle Andrew Gardner, Wurundjeri Elder; Ngarra Murray, Co-Chair of the First Peoples Assembly of Victoria; Terry Garwood, Deputy Secretary First Peoples – State Relations at the Department of Premier and Cabinet; and Travis Lovett, Commissioner of the Yoorrook Justice Commission. The event was emceed by the renowned Aboriginal broadcaster Charles Pakana.

The place we now call Victoria has been home to the First Peoples for over 60,000 years. The Wurundjeri Woi Wurrung people are the Traditional Owners of what is now the City of Yarra and 30 other Council jurisdictions. Their lands stretch over 12,500 square kilometres, encompassing the Yarra River Valley and beyond. The Victorian Government began the path to Treaty discussions to address historic wrongs. The Treaty Advancement Commissioner was appointed in 2017, and in 2018, the Aboriginal Victorians Act enabled the First Peoples' Assembly of Victoria to develop the Treaty framework and negotiate Treaties with the Victorian Government and local Treaties. The Assembly spans Victoria's 5 regions, with 21 general and 11 reserved seats for Recognised Aboriginal Parties (RAP).

The panel covered the Treaty process and the roles of key players, including the Treaty Assembly, Wurundjeri Woi Wurrung Peoples, the Yoorrook Justice Commission, the Treaty Authority, the Victorian Government, and various authorities who may be brought into the process by Traditional Owners. Beyond understanding roles and processes, the panellists discussed the historic and ongoing injustices faced by Aboriginal and Torres Strait Islander peoples and how Treaty offers a brighter future for both First Peoples and non-Indigenous Victorians.



Looking forward, we will consider how best to support all First Peoples of Victoria, as they negotiate the statewide Treaty with the Victorian Government and be guided by the Wurundjeri Woi Wurrung, as they establish their path to Treaty with Yarra and 30 other councils, statutory authorities, and others on their traditional lands.

Volunteering

Volunteering plays a crucial role in supporting the cultural, social and economic fabric of local communities. According to the Australian Institute of Health and Welfare in 2020, just over an estimated 5 million people participated in voluntary work through an organisation across Australia.

To encourage and promote community participation, Council has opportunities for community members to volunteer, recognising their unique skills, strengths, experiences, and passion.

Over the past year, approximately 80 volunteers have supported the delivery of various programs and services. These include:

- social support through the Home Libraries Service, Chatty Cafe, and Thread Together Store
- digital literacy through Learning Bank's Digital Help service
- aged and disability support through the Companion Animal Support program
- intergenerational programs through Seniors and Sprouts
- nature conservation through the Gardens for Wildlife program

We also improved the promotion of volunteer opportunities through Council's dedicated Volunteering in Yarra webpage, a monthly e-newsletter, an online noticeboard, social media posts, printed materials, and community events.

The Yarra Volunteer Leaders Network has grown, with quarterly meetings fostering partnerships across organisations. We hosted 12 free capacity-building workshops, attended by 180 participants, on topics like finances, governance, inclusion, grant writing, project management, and more. Additionally, we created linkages between residents wanting to volunteer and agencies needing volunteers, such as Yarra's Neighbourhood Houses. We encouraged pathways to employment through volunteering with community information sessions facilitated by Volunteering Victoria.

Recognising and celebrating our volunteers has been a significant focus. During National Volunteer Week in May 2024, Council hosted a morning tea where volunteers received certificates of appreciation.

In November 2023, a special networking event at Collingwood Children's Farm acknowledged volunteer program managers for International Volunteer Manager's Day. Various Council volunteers and programs were profiled throughout the year through marketing campaigns. The annual Yarra Community Awards in November 2023 celebrated outstanding volunteers, with 72 nominations received.

The awards process was reviewed for 2024, including allowing community members to join the panel of judges. We continued to advocate for the value of volunteering through State and Federal engagement opportunities.



Community grants program

The Yarra Community Grants Program is a significant investment by Council and aims to support partnerships between Council and community groups to achieve shared outcomes. The grants provide funding for small-to medium-sized projects that respond to Yarra residents' social, cultural, recreational, economic, and sustainability needs.

By May 2024, \$155,000 in small grants had been allocated, with 107 grants awarded across several categories, including the Youth Led Grants, Sustainability Arts Grants, Climate Action & Sustainability, Community Projects and Arts and Culture.

This quarter through the 2024 Annual Grants, 180 grants amounting to \$1.5 million were awarded to community groups and individual artists. The annual grant streams include Arts and Culture, Climate Change and Environment, Community Development, Community Housing, Family, Children and Youth, and Sports and Recreation.

Among the funded projects are notable initiatives from the Community Grocer, Friends of the Earth Melbourne and the Ilbijerri Ensemble Theatre Company. The Community Grocer will run a weekly fresh food market at the Atherton Gardens Public Housing Estate, fostering food security and social connections for residents from 17 nationalities. Friends of the Earth Melbourne will celebrate its 50th anniversary with a mural by visual artist TextaQueen at Perry and Smith Street. The Ilbijerri Ensemble Theatre Company will create career pathways for young Aboriginal and Torres Strait Islander people through a professional development program, offering workshops and opportunities to work alongside established First Peoples artists.

The Town Hall Subsidy Grant program saw the awarding of 54 grants. This grant provides discounted Town Hall use for community events, offering eligible groups a reduced hall hire rate. A total of \$85,000 in subsidies was provided.

The Celebrate Yarra grants continued to fund three major festivals held in Yarra – the Victoria Street Lunar New Year Festival, Johnston Street Hispanic Fiesta and the Gertrude Street Projection Festival.

In the third year of a four-year program, a total of \$425,000 was provided to leading Yarra community organisations including cohealth, Fitzroy Legal Service, Collingwood Children's Farm, and Launch Housing. These funds support various programs, including children's programs, pro bono legal services, interagency collaboration, and community engagement for local alcohol and other drug issues, as well as improving health and housing service access and experience for Aboriginal and Torres Strait Islander peoples.

Homelessness strategy (including Yarra Zero) and Social and Affordable Housing Strategy

Yarra's Homelessness Strategy aims to ensure the city remains a welcoming and compassionate place for everyone by guiding actions to address the impacts of homelessness. In the past year, the Strategy focused on advancing Yarra Zero, a key initiative. The Yarra Zero Project, officially launched in October 2023, operates with crucial service partners such as Launch Housing and cohealth.

Yarra Zero uses a 'by name list' to understand the needs of each person experiencing homelessness, enabling a focused service response. Local partners from housing, health, and legal sectors collaborate to get to know each person sleeping rough by name, understand their needs, and support them in finding and sustaining housing. This approach facilitates early intervention by identifying what services people access and where they are located. Yarra Zero aims to reach Functional Zero homelessness in the city, where homelessness is rare, and the service response is swift and holistic, ensuring that homelessness is brief and singular.

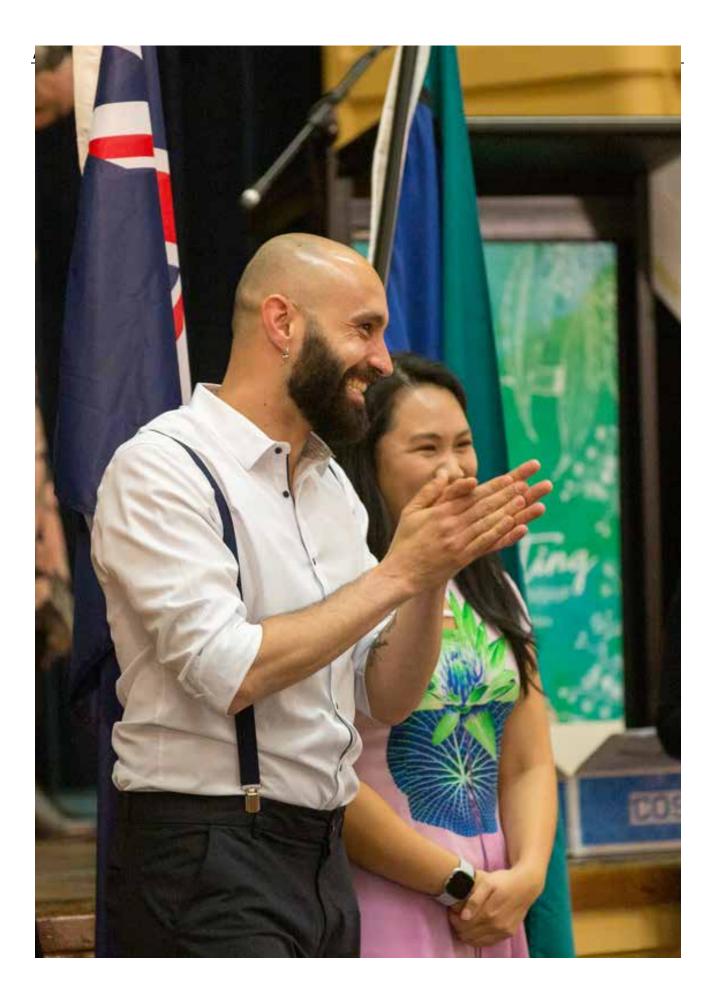
The project has several benefits, including data capture and reporting capacity to direct resources effectively, practical efforts towards reducing and preventing homelessness, and strong networks through partnerships with service providers. Until the end of April 2024, Yarra Zero partners identified 77 individuals who were rough sleeping in Yarra and supported 27 people to move into permanent housing. 11 partner agencies regularly participate in service coordination meetings for the project.

Additionally, on 6 March, Yarra ran its first 'Walk in My Shoes' tour in partnership with the Council to Homeless Persons, aiming to educate about the experiences of homelessness. The future priorities for Yarra Zero include setting a target date for reaching Functional Zero, coordinating continuous improvements for the project, and scheduling more community awareness educational activities in the coming months.

Yarra's Social and Affordable Housing Strategy outlines how the Council seeks to support an increased supply of social and affordable housing and address inequities in the local housing market. The announcement of Victoria's Housing Statement has highlighted the focus on public housing towers across Melbourne, including the 12 towers in Yarra within the estates of Collingwood, Fitzroy, and Richmond.

On 12 December 2023, the Council resolved to oppose the Victorian Government's planned demolition of public housing towers. The Mayor wrote to the Premier of Victoria, urging the government to consider renovation instead of demolition and reiterated Yarra's commitment to using Stateowned sites for public, community, and affordable housing.

Council's current use of Section 173 agreements is considered best practice, leveraging opportunities under current legislation to negotiate social and affordable housing stock contributions in large-scale private developments. These negotiations have achieved significant outcomes, such as at the former AMCOR site in Alphington (Yarra Bend) and the former Gasworks site in Fitzroy North. Yarra continues to advocate for the introduction of mandatory inclusionary zoning legislation in Victoria. A key priority for Council is understanding the risks arising from the Victorian Government housing reforms and planned redevelopments and influencing policy through strategic advocacy and partnerships. The proposed demolition of high-rise towers and privatisation of public housing in Yarra represent a significant challenge to the quality of life for thousands of residents. Council will leverage its programs and remit to prevent or moderate negative impacts.





Citizenship ceremonies

Yarra is a proud culturally diverse community and citizenship ceremonies celebrate the value and vibrancy this level of diversity brings to our local community.

In Yarra, 1 in 5 residents speak a language other than English at home with almost 30 per cent of our residents born overseas. It is our strong belief that our multiculturalism is central to what makes our city a vibrant place to live, work and visit. At Yarra we work hard to make sure that our city is a place where all people feel welcome regardless of their race, culture, religion or language.

We acknowledge the City of Yarra stands on the traditional lands of the Wurundjeri, and a place of special significance for the broader Aboriginal community. In April 2023, Yarra City Council held its first citizenship ceremony in 5 years following a decision by the Federal Government to reinstate Council's right to do so.

During the April to June quarter, we welcomed 145 new citizens at our June ceremony.

In the last financial year, Council held 7 citizenship ceremonies and a total of 1129 people from across Yarra became Australian citizens.



Strategic objective 3: Local economy



Music sector support

We are proud of our work to support Yarra's music sector. Successes and achievements include:

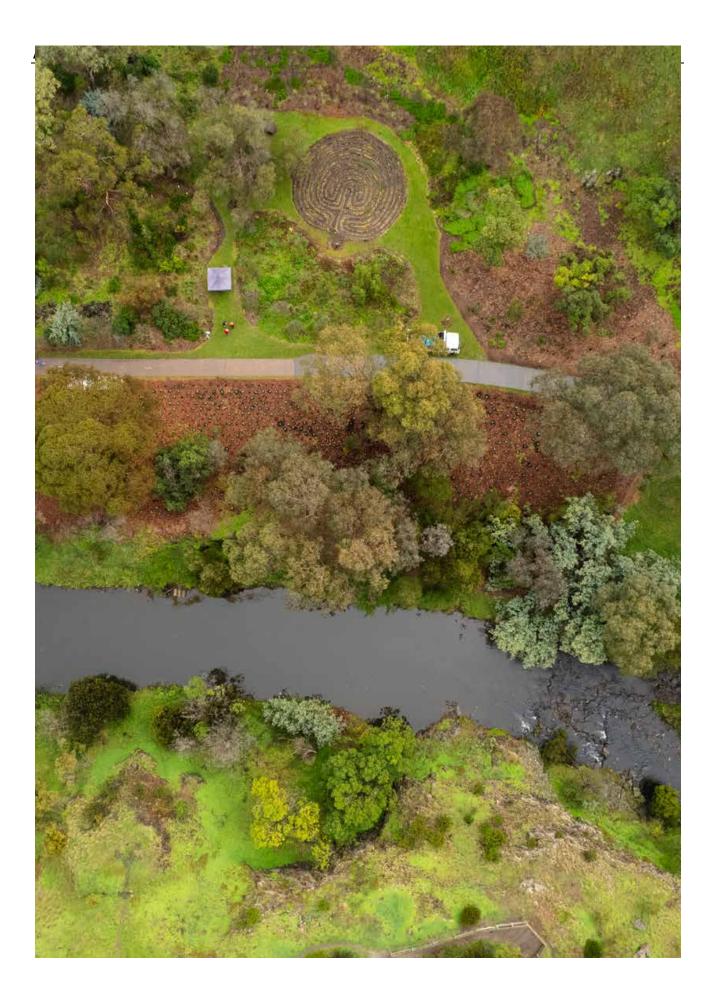
- Delivered a formal submission to the Australian Government inquiry into challenges and opportunities within the Australian live music industry. This inquiry is driven by the current financial viability problems faced by many live music venues in every state and territory.
- Requested M9 to prepare a joint submission around specific issues within the urban music scene with a focus on the ongoing viability of small and medium sized venues. The nine inner Melbourne councils that form M9 share a connection as the hub of live music venues in Victoria, which are a core part of the music ecology for Victoria and the wider nation. These venues contribute to the culture and vibrancy of our cities, the night-time economy and the creative arts industry in Victoria.

- Contributed to peak body Music Victoria's community engagement process to feed into the Creative State 2029 state government policy. Music Victoria facilitated a number of Victorian Music Industry forums including a local government focussed session (16 April), to discuss the challenges and opportunities for the music industry in a local government context.
- Delivered amplification initiatives such as Council's own 12-year strong Leaps and Bounds Music Festival. Leaps and Bounds is designed to support Live Music Venues in Yarra in the colder months of the year when patronage is lower by providing direct funding to venues, music workers and artists for the presentation of unique gigs and events. The festival highlights the incredible venues across Yarra and aims to foster new audiences and

diverse artists. Expressions of Interest for the 2024 festival have closed and more than 15 venues have direct financial support for the festival in July 2024.

- Planning for the Venue Round Table in partnership with Music Victoria as part of Leaps and Bounds to provide a forum with local venues to understand Council's role in supporting venues and the music sector. The event will also include presentations from the Australian Live Music Business Council and Environmental Protection Authority offering key information for venues spanning policy and advocacy.
- Contributed funds to the Live Music Locator pilot, free, geolocated and accessible app which will promote every gig in every venue in Yarra and Melbourne between July – September 2024.





4

Place and nature

Fiona Richardson Pavilion and Netball Courts

Strategic objective 4:

Council recently commenced management of the new \$8m regional Netball facility including Fiona Richardson Pavilion, delivered by the Victoria Government as part of the Inner-City Netball Program for use by the community.

The facility in Yarra Bend Park comprises of 7 dedicated netball courts, 1 multipurpose court, sports lights, carparking and a pavilion that services both the netball community and local sports clubs through multi-purpose design. Upon taking management of the facility, staff working with Netball Victoria locked in a new local Netball Association who will make the facility its base for its administration, training and competition needs. The venue will provide a new home to the Red Tag Fly Fishing Club and has commenced social sports bookings. Council staff are working with a number of schools and partners to promote the facility as a place for both small and large netball competitions and will continue to showcase all the venue has to offer to the Yarra and local community.

Nature strategy

We're Bringing Nature Back to Yarra! During 2023/24, we planted more than 89,000 local native shrubs and ground covers and 800 new advanced local and Victorian native trees across parks and reserves. The Bringing Nature Back to Yarra Program creates accessible, healthy, resilient and diverse ecosystems in urban areas that reinforce Yarra's commitment to managing and protecting the Birrarung and its parkland and tributaries as 'one living and integrated natural entity'. Burndap Birrarung burndap umarkoo – what's good for the Birrarung, is good for all!

The Bringing Nature Back to Yarra program will result in the expansion of land maintenance for biodiversity by 30,000m² (3 hectares), help to mitigate the biodiversity crisis and the impacts of climate change and heal Country by reducing habitat fragmentation and improving habitat connectivity to the Merri Merri and Birrarung Green Corridors of Life.

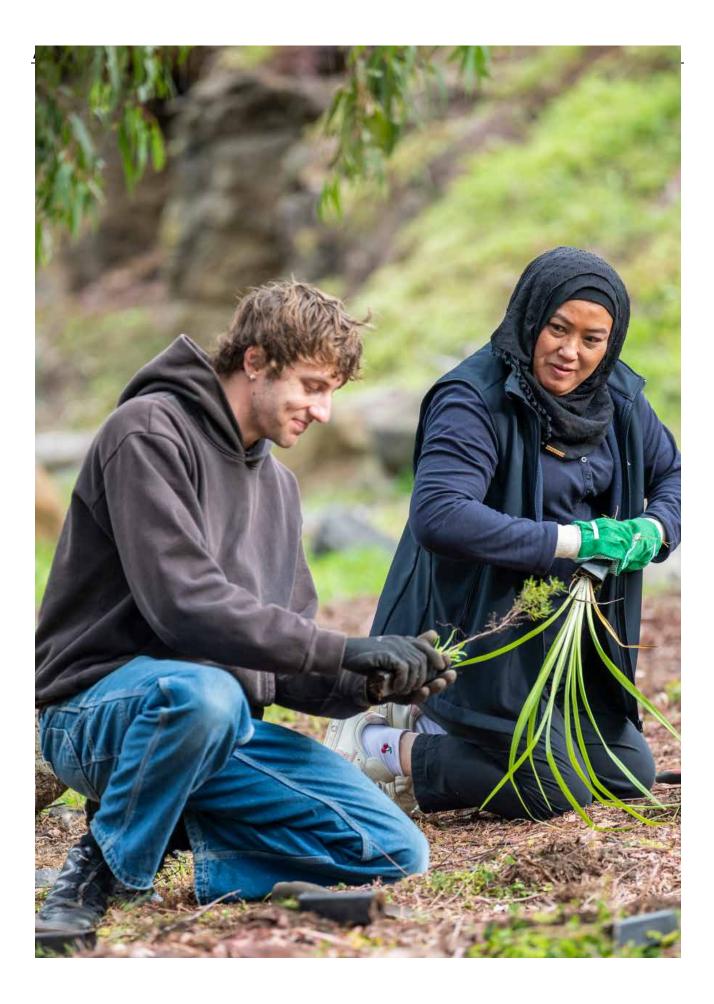
Year 3 of the Narrap Female Ranger Trainee Initiative, a partnership between Council, Collingwood Children's Farm and Wurrundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation, has provided 6 Narrap trainee rangers, including 5 female trainees with the opportunity to be trained on Country at Collingwood Children's Farm. The initiative delivers 200 hours of healing Country work focusing on First Nations' garden maintenance and harvesting, revegetation preparation and planting, and manual weed control in Birrarung riparian restoration areas. Yarra's team of 15 Gardens for Wildlife Garden Guide volunteers has provided the owners of 25 Yarra households with a garden specific report that assists residents to create habitat gardens for local wildlife, connect people with nature and each other and increase the abundance and appreciation of biodiversity. A further 19 Yarra households are in the process of having their gardens assessed by our dedicated Garden Guides.

Yarra teamed up with over 25 councils across metropolitan Melbourne to represent Greater Melbourne on the global stage in the 'City Nature Challenge'. Yarra's community contributed 131 observations of 78 species on iNaturalist. Greater Melbourne came 17th on a world stage.

Celebrating World Environment Day

Council celebrated World Environment Day 2024 by encouraging Council staff to connect with nature and heal Country through involvement in a Staff Planting day. Staff representating all divisions participated in planting 5,800 local native tube stock on the Merri Merri Creek escarpment at Ramsdens Reserve, Clifton Hill.

The planting is a part of 'Bringing Nature Back' to Yarra (BNB) program that aims to assist in mitigating the impacts of climate change and healing country by reducing bushland fragmentation and improving habitat connectivity. BNB is critical to delivering Yarra's commitment to managing and protecting the Birrarung, its parkland and tributaries as one living and integrated natural entity.



Strategic objective 5: Transport and movement

30km speed trial

From May 2024, the existing 30km/hr speed limit trial in parts of Fitzroy and Collingwood has been expanded to cover all remaining streets in these suburbs, except the major roads - Johnston Street, Nicholson Street, Hoddle Street, Alexandra Parade and Victoria Parade, which are managed by the State Government.

Fitzroy and Collingwood are some of the busiest areas for vulnerable road users like people who walk or cycle. The expanded 30km/hr speed limit is intended to make the streets safer and more liveable for everyone, whether walking, driving, or cycling.

Our initial 30km trial in the northern parts of Fitzroy and Collingwood has shown positive road safety outcomes. Our research has shown that there has been a much lower number of crashes, including those resulting in a serious injury, in the 5 years since the trial has been in place in comparison to the 5 years leading up to the trial. During that 5-year period, there has also been a reduction in the percentage of total and serious injury crashes in the areas with 30km speed limits in Fitzroy and Collingwood compared with the rest of Fitzroy and Collingwood when it had 40km speed limits.



The trial is supported by the Department of Transport and Planning (DTP) and will run for up to 2 years. Council will work closely with DTP and other road safety partners to evaluate the trial and the key findings will be presented to the community at the end of the trial. This evaluation will help inform future rollouts of 30km speed limits and any potential review of the Victorian Government's Speed Zoning policies and guidelines.

Implementing 30km/hr trials to improve road safety is a commitment in the Council Plan 2021-25. We will continue to advocate for further trials and for lower speeds on major State Government roads in Yarra.



Strategic objective 6: Democracy and governance



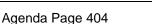
Advocacy is a core function of Yarra City Council. A lot of our advocacy is focused on local issues, such as the need for better amenity in our neighbourhoods, much needed services for our youth, or even just fair funding from other levels of Government for the services we provide on their behalf. We also join with partners to advocate for better outcomes for communities and places in and beyond our municipal boundaries, always using the social justice and climate emergency lens that our community expects.

Yarra City Council adopted its first ever Advocacy Action Plan in November 2023. Nine key themes and 56 actions now guide our advocacy efforts.

This year we directly approached the Premier and Treasurer to successfully secure over \$300,000 to ensure the Richmond Youth Hub could continue to support at-risk youth in 2024-2025. Our requests to the Victorian Government that it fund the Charlotte Street Pocket Park and reimburse Council for amenity cleanup costs associated with the Medically Safe Injecting Room were unsuccessful, but we are continuing to present our case to the State Government that these initiatives should be supported. Yarra secured \$600,000 through the Victorian Government's New and Upgraded Dog Parks Program. The funding will enhance facilities in Smith Reserve in Fitzroy and Quarries Park in Clifton Hill to provide safe, engaging, and accessible green spaces for residents.

Reductions in accidents and injuries during our 30km per hour speed zone trial in a section of Collingwood enabled us to convince state government to extend the trial to the whole of Collingwood and Fitzroy. Yarra was successful in receiving a grant of \$304,000 from the Transport Accident Commission and the trial began on 9 May during Road Safety Week. We are now advocating to the state government to empower councils to set their own speed zones on local roads and to lower speeds on state roads within the City of Yarra.

Road safety is incredibly important to Yarra – we have some of the highest active transport rates and public transport usage in Victoria. Over the past several months we have been advocating to the Minister for Roads and Road Safety, and the Minister for Public and Active Transport to address local safety issues such as pedestrian crossings on Alexandra Parade and the need to upgrade tram stops in Richmond.



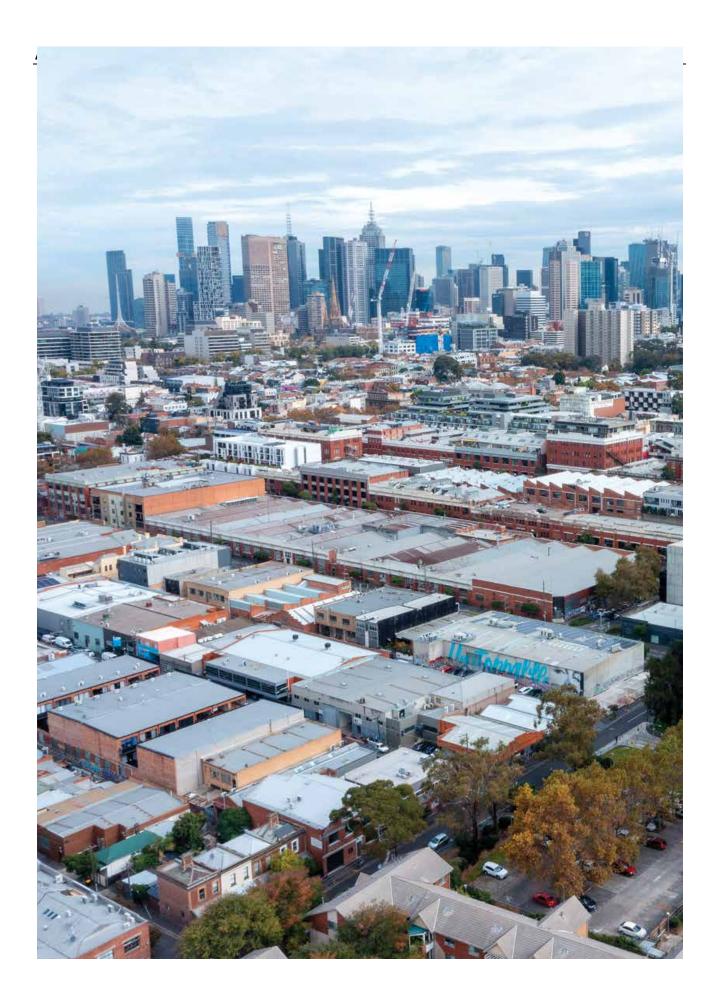


We have been working with the M9 group of inner Melbourne Councils and Inner Metro Partnership, advocating to the State and Federal Governments to show more leadership on the uptake and development of all types of electric vehicles. Victoria's Zero Emissions Vehicle Roadmap is designed to see 50 per cent of light vehicles sold in Victoria with zero emissions technology by 2030. Yarra welcomes the announcement that the State Government is accelerating the rollout of electric vehicle charging infrastructure across Victoria.

The more financially constrained Councils are, the less they can do for and with their communities. Yarra made this point in its submission to the Federal Government's Inquiry into local government sustainability. Yarra's submission backs in the views expressed by peak bodies and professional associations that local government has a financial sustainability problem. It also explores what the impact will be on diverse inner-city communities with large pockets of disadvantage like Yarra, if councils lose the ability to invest in social supports and community strengthening.

Two further submissions to Government Inquiries were lodged in May. The first was to the Federal Inquiry into the challenges and opportunities within the Australian live music industry. The second to the Victorian Upper House Inquiry into Climate Resilience, advocating for state and federal government strategic investment in climate change adaption and mitigation.

Council has committed to preparing a submission to the Upper House Inquiry into the redevelopment of Melbourne's public housing towers. We have already written to the Chair of the Legal and Social Issues Committee to express our strong support for the Inquiry. It is an important opportunity to understand the impacts of the demolitions on our community, particularly on the public housing residents who are directly affected.



In May, the Mayor wrote to the Premier, expressing disappointment that a second Medically Supervised Injecting Room (MSIR) has not been approved, despite the North Richmond facility achieving beneficial health outcomes, reducing overdoses and deaths. Yarra has called on the Victoria Government to establish multiple MSIRs across Victoria to facilitate better health outcomes in areas with higher levels of injecting drug use.

Yarra City Council has made multiple representations to the Minister for Planning expressing the community's frustration that so many of Council's proposed amendments have not been actioned by the State Government in a timely way, with some sitting with the Department and Minister for almost two years. Council has also joined with its partners across the inner metropolitan area to call for these concerns to be addressed.

On 17 May Council put forward two motions to the Municipal Association of Victoria's (MAV) State Council. Colleagues from across the State voted overwhelmingly:

- ► For State Government to amend the Electrical Line Clearance Regulations 2020 so as to retain trees and tree canopy in low bush fire areas; and
- For MAV to host a series of forums at which councils can discuss and share strategies for LGBTQIA+ inclusion and community safety.

- ► The Mayor was pleased to join with other councils to advocate for:
 - the First Peoples Treaty process;
 - the Victorian Government's Landfill Levy charges be used to develop and implement new waste technologies and environmental initiatives; and
 - the Victorian Government to work with the local government sector to ensure an equitable supply of social and affordable housing and homelessness services across the state.

Quarterly meetings with the local members of parliament are proving to be mutually beneficial. Local issues are being advanced and resolved, and community advocacy pursued in areas such as planning scheme amendment delays, public housing policy, live music venue challenges, climate resilience, community safety and amenity, open space and the financial sustainability of the local government sector.

Capital Works update

Council's 2023/24 Capital Works Program features an investment of \$34.01 million, consisting of a new budget allocation of \$26.76m and carry over projects with a budget of \$7.25m from the previous financial year.

All projects

Council continues to deliver capital works projects to:

- improve community safety and usability of our assets
- ensure longevity and reliability of our assets
- ▶ increase usability and availability, and
- address our community's current and future needs.

This financial year (2023/24), Yarra City Council successfully completed 147 projects with 7 projects planned for carry-forward into next financial year.

Highlights from this year's program include:

- 22 building projects completed this year with 16 projects completed in quarter 4 including:
 - Clifton Hill depot power upgrade
 to enable Council's transition to electric work vehicles
 - Collingwood Leisure Centre preliminary design for the electrification of plant
 - Alphington Bowls Club planning and design works for facility improvements
 - Panther Pavilion redevelopment
 design works associated with boat storage/ clubhouse redesign

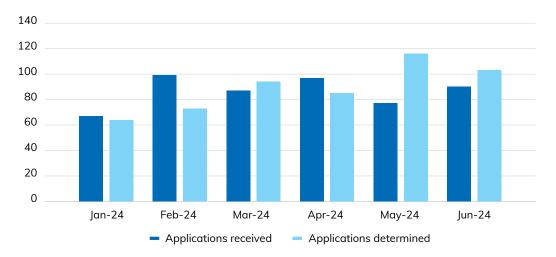
- Collingwood Leisure Centre roof renewal investigations to ensure service continuity
- ► 57 transport infrastructure projects were completed with 12 projects completed in quarter 4.
 - All footpaths and cycleways projects were successfully completed as part of this program, with 10 projects completed in quarter 4 including:
 - Clifton Hill Interchange Pedestrian Safety Upgrade
 - Lennox St, Richmond footpath renewal
 - Clifton St, Clifton Hill footpath and kerb renewal
- 23 of 26 parks and open space projects were completed this year, with 20 projects completed in quarter 4 including:
 - Kevin Bartlett Reserve, Loughnan
 Oval Renewal of fencing together
 with improvements to drainage and
 access onto the oval
 - Yambla Street Reserve Grading of surface and laying of new turf
 - Charles Evans Reserve (Cremorne)
 Consultation/detailed design of the park and renewal of the playground, plantings and paths
 - Cambridge Street Reserve,
 Collingwood expansion of the existing park to accommodate increased demand



Budget adjustments to the overall 2023/24 Capital Works Program resulted in a net budget decrease of \$4.8m, leading to an adjusted budget of \$29.22m. The closing position for capital projects performance has improved considerably when compared to previous years, as evidenced by the significant reduction in carry-forwards and the positive outcomes expected for our community. It is important to note that a series of other projects and programs (street and park trees, bike lines, street furniture and signage) delivered to the community were expensed as per Council's noncurrent asset policy and therefore not included in the final total capital works expenditure. Adding this expenditure to the actual capital investment of \$26.7m would deliver close to 97.5% of the forecast capital works program.

Statutory planning activity

During Q4, Council received 263 applications and determined 304.



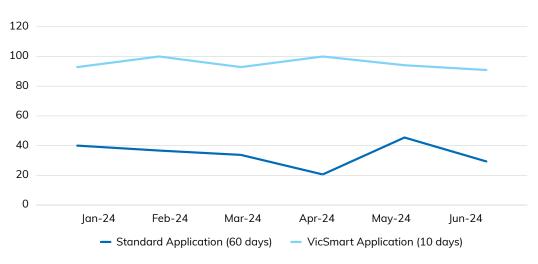
Q3 & Q4 Number of applications received and determined per month

Timeframes

Council has two types of applications:

- Standard applications 60 day statutory timeframe
- VicSmart applications 10 business day timeframe

During Q4, Council determined 33.20% of its Standard applications within the 60-day timeframe and 95.56% of its VicSmart applications within the 10 business day timeframe.

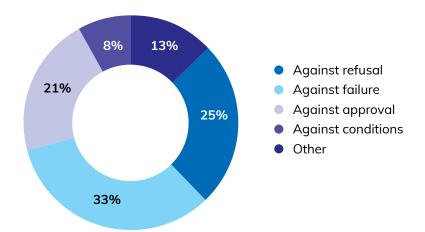


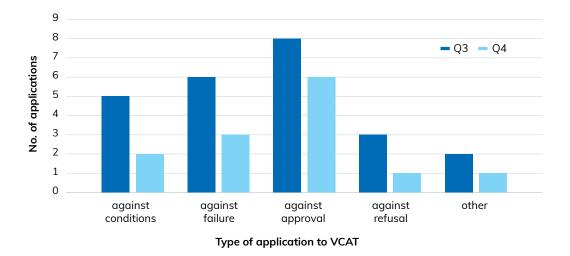
Q2 & Q3 Determination timeframes as a percentage

VCAT Activity Report

There were 13 applications that were reviewed to the Victorian Civil and Administrative Tribunal (VCAT) in the fourth quarter of 2023-2024, 11 less applications than the third quarter of 2023-2024.

Type of application to VCAT in Fourth Quarter of 2023-2024



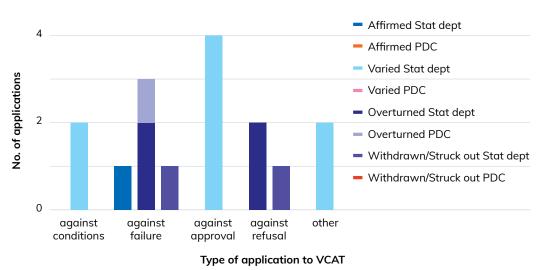


Comparison of applications lodged with VCAT in Quarter 3 and Quarter 4 of 2023-2024

When comparing the type of applications reviewed with VCAT in the fourth quarter of 2023-2024 with the previous quarter, in the fourth quarter of 2023-2024 there were:

- ► 3 less applications 'against conditions';
- ► 3 less applications 'against failure';
- 2 less applications 'against approval';
- 2 less applications 'against refusal'; and
- ▶ 1 less application 'against Other' (Amendments, Extensions of Time, Declarations).

The graph below shows the type of applications determined by VCAT in the fourth quarter of 2023-2024 and whether Council's decision was affirmed, varied or overturned. A total of 16 decisions were made by the Tribunal, including 2 applications that were withdrawn / struck out.



VCAT Decisions in Quarter 4 of 2023-2024

Of the 16 VCAT Decisions in quarter 4 of 2023-2024 there were:

- ► 1x Statutory Department and 0x PDC decisions affirmed;
- ► 8x Statutory Department and 0x PDC decisions varied;
- ► 4x Statutory Department and 1x PDC decisions overturned; and
- ► 2x applications against Statutory Department decisions were withdrawn / struck out.

The number of applications for review against Council's failure to determine the application within the prescribed time in the fourth quarter equates to 23% of all applications lodged in the quarter (total 3 applications), which is 3 less applications compared to the previous quarter.

Planning scheme amendments status

The responsible authority for Planning Schemes in Victoria is the Victorian Minister for Planning, All Planning Scheme proposals and amendments must be submitted to the Minister for approval. Ministerial approval is required through all aspects and stages of the process including approval to place the proposed amendment on public exhibition and referral to advisory committees. In Yarra, the Minister appointed the Yarra Activity Standing Advisory Committee to provide advice to the Minister and Council on referred planning matters and draft planning scheme provisions. Final adoption/ rejection of all planning scheme amendments rests with the Minister, this process can take months and even years.

The following provides an outline of the status of Yarra's current proposed planning scheme amendments.

The amendments include:

- Amendments being progressed via the standard amendment process;
- Amendments being considered via the Yarra Activity Centres Standing Activity Committee; and
- Requests for interim planning controls via a Ministerial amendment. These amendments are applied for while permanent planning controls are being pursued.

The amendments are at various stages of the process, including:

- Awaiting authorisation / consent from the Minister for Planning to publicly exhibit the amendment;
- Have been publicly exhibited;

- Are being considered by an independent planning panel or the standing advisory committee or
- Have been adopted by Council and are with the Department of Transport and Planning (DTP) awaiting a decision by the Minister for Planning.

City-wide amendments

Amendments C286yara and C306yara – Public Open Space Contribution Rate

- C286 seeks to introduce an updated permanent public open space contribution rate to the scheme;
- C306 sought to introduce an interim rate to the scheme at 7.4%;
- Amendment C306 (implementing a recommendation of the C286 interim panel report) was submitted to DTP for approval in June 2022;
- Council was advised in December 2023 the Minister for Planning had rejected Amendment C306);
- Council considered a report in December 2023 on C306 and resolved to write to the Minister for Planning, Secretary and Deputy Secretary of DTP requesting reasons for the decision. (A letter providing reasons for the decision was received on 28 February 2024);
- The reconvened Panel Hearing for C286 (permanent POS contribution) commenced on 5 February 2024 and concluded on 9 February (3 hearing days);
- Council received the Final Panel Report on 4 March and publicly released it. The Panel recommended adoption of a public open space contribution rate of 8.65% (amongst other things);
- Council adopted the amendment (with changes) on 9 April 2023;
- 54 Quarterly Community Report Quarter Four 2023/24



 The amendment has been forwarded to the Minister for Planning for approval.

C309yara – Elevating environmental standards (amendment is with 24 other Councils and CASBE)

- C309 seeks to introduce zero carbon standards for new apartment buildings into the scheme;
- Submitted to DTP for approval in July 2022;
- The amendment is under consideration by DTP;
- The Victoria Government is also progressing the ESD Roadmap which will make further State-wide changes to the Particular Provisions.

Local area amendments

Amendment C291yara – Bridge Road and Victoria Street Permanent Built Form Provisions

- Submitted to DTP for approval in August 2022;
- The amendment is under consideration by DTP;
- On 7 March 2023, the expiry date for the interim DDOs extended to 30 June 2025 (via a Ministerial Amendment -Amendment C323yara).

Amendment C293yara – Collingwood South Mixed-Use Precinct Permanent Built Form Provisions

- Submitted to DTP for approval in June 2022;
- The amendment is under consideration by DTP;

 On 7 March 2023, the expiry date for the interim DDO extended to 30 June 2025 (via a Ministerial Amendment – Amendment C323yara).

Amendment C271yara – Fitzroy-Collingwood Permanent Planning Provisions

- Submitted to DTP to seek consent to exhibit in December 2022;
- The request for consent to exhibit permanent DDOs is under consideration by DTP officers;
- On 7 March 2023, the expiry date for the interim DDOs extended to 30 June 2025 (via a Ministerial Amendment -Amendment C323yara).

Amendment C317yara – Cremorne Precinct Interim Built Form Provisions

- Considered by Council in September 2023;
- A request for a Ministerial amendment (i.e. an amendment without exhibition) was submitted to DTP for approval in October 2023;
- The request is under consideration by DTP.

Draft Amendment C318yara – Cremorne Precinct Permanent Planning Provisions

- Considered by Council in September 2023;
- Submitted to DTP to seek consent to exhibit in October 2023;
- The request is under consideration by DTP.

Amendment C273yara – Heidelberg Road Permanent Planning Provisions

- Exhibited in July-August 2023;
- ▶ 118 submissions were received;
- Council considered submissions, proposed responses to submissions and a request to refer the amendment and submissions to the Standing Advisory Committee at its meeting on 12 December 2023;
- Request to refer the amendment to SAC was lodged in December and is being considered by DTP;
- Due to delays with referral, the hearing scheduled for April 2024 (as part of the amendment process, Council must pre-set hearing dates) has been rescheduled. Date to be confirmed;
- On 7 March 2023, the expiry date for the interim DDO extended to 30 June 2025 (via a Ministerial Amendment -Amendment C323yara).

Financial Update

The quarter four financial position builds on the outcomes of prudent financial management achieved through the careful delivery of the 2023/24 Annual Budget and alignment of the objectives of the Financial Sustainability Strategy.

Like all councils across Victoria, Yarra is facing financial challenges with rising cost pressures, unprecedented growth and increasing demand for our services. This has been compounded by high levels of inflation and significant increases to the costs of services, labour, energy and construction materials. Council has been working diligently to overcome industry challenges and will continue to implement improved strategies and policies to operate in a financially sustainable communityfocussed manner. During 2023/24, Council implemented contemporary approaches to project management, strengthened organisational culture, improved financial accountabilities and applied prudent financial management aimed at holding or reducing costs and strengthening its financial position.

Table 1 provides the positive impact of the actions taken which can be clearly demonstrated with a comparison against Council's financial position of two financial years ago.

Income Statement Item	22/23 Budget projection for 30 June 2024 \$000s	30 June 2024 Actuals \$000s	Variance Favourable/ (Unfavourable) \$000s	Variance Favourable/ (Unfavourable) %
Employee Costs	106,047	100,774	5,273	5.0%
Materials & Services	85,308	79,676	5,632	6.6%
Operating Surplus	10,825	24,692	13,867	128.1%

Table 1. Financial position

The above table demonstrates that actual employee costs are 5% lower than what was projected for 2023/24 and materials and services are 6.6% lower than projected for 2023/24. As a result, the actual operating surplus for 30 June 2024 is over two times better than what was projected two financial years ago.

Further evidence of the benefits from action taken by Council regarding financial management can be shown in a comparison of total outstanding borrowings for 2023/24 projected in June 2022 versus actual total outstanding balances at 30 June 2024.

Table 2. Improvements in borrowings

Item	22/23 Budget projection for 30 June 2024 \$000s	30 June 2024 Actuals	(Unfavourable)	Favourable/
Borrowings	48,834	30,500	18,334	37.5%

By managing its finances prudently, Council has seen outstanding total borrowings over a third (\$18.3m) less than what was projected two financial years ago.

Table 3. Unrestricted Cash

Income Statement Item	FY22 Actuals \$000s	FY24 Actuals \$000s
Unrestricted Cash	4,723	20,110
Gap to Outstanding Loan Balance	(34,448)	(10,390)

Unrestricted cash has also improved significantly with the amount increasing by over four (4) times in the last two financial years. This is after accounting for \$5 million transferred to the newly created Strategic Growth and Risk Mitigation reserves as per Council's Financial Sustainability Strategy.

Furthermore, factoring borrowings in, the gap of unrestricted cash to outstanding loan balance has reduced substantially, with the gap three (3) and a half times smaller than two financial years ago.

Planned carryovers of Capital Works have also reduced considerably over the last two financial years as shown in the below table.

Table 4. Reduced carryovers

Item	22/23 Budget \$000s	23/24 Budget \$000s	Budget
Planned Carryovers	15,246	7,248	751

This comparison shows that efforts to date by Council in managing its finances and implementing the actions of the Financial Sustainability Strategy are having a positive impact. While projections in the adopted 2024/2025 to 2033/2034 Long Term Financial Plan show that further work is required, the improvements to date provide a strong foundation for Yarra City Council going forward.

*Please note, the financial results communicated in this document are, at the time of writing, draft and subject to audit by the Victorian Auditor-General's Office (VAGO) and require certification by Council and VAGO. The final certified result will be subject to any changes, recommended for agreed to by Council's auditors.

Comprehensive Income Statement	YTD Budget \$'000	YTD Actuals \$'000	YTD Variance \$'000	Annual Budget \$'000	Annual Forecast \$'000	Annual Variance \$'000
Income						
Rates and charges	132,118	132,089	(29)	132,118	132,121	3
Statutory fees and fines	35,592	38,641	3,049	35,592	38,135	2,543
User Fees	35,216	32,031	(3,185)	35,216	32,208	(3,009)
Grants – Operating	18,739	15,870	(2,869)	18,739	18,159	(580)
Grants – Capital	7,263	3,822	(3,441)	7,263	3,542	(3,721)
Contributions – OSR	5,000	4,776	(224)	5,000	4,800	(200)
Contributions – Other monetary	1,351	2,522	1,171	1,351	2,520	1,170
Reimbursements	761	643	(118)	761	1,199	438
Other Income	2,154	5,653	3,499	2,154	5,225	3,070
Net gain/(loss) on disposal	134	692	558	134	584	450
Total income	238,329	236,741	(1,588)	238,329	238,493	164
Expenses						
Employee Costs	101,505	100,774	731	101,505	102,443	(938)
Materials and services	88,963	79,676	9,287	88,963	82,006	6,958
Depreciation & Amortisation	25,697	26,328	(632)	25,697	25,578	119
Amortisation – right of use assets	234	1,236	(1,002)	234	1,215	(981)
Bad and doubtful debts	5,095	2,279	2,816	5,095	2,949	2,146
Borrowing costs	894	909	(15)	894	894	_
Interest Exp – Leases	8	195	(187)	8	160	(153)
Other expenses	753	652	101	753	730	23
Total expenses	223,149	212,049	11,100	223,149	215,974	7,174
Surplus/(Deficit) for the year	15,180	24,692	9,512	15,180	22,518	7,338

Comprehensive Income Statement

*Draft financial results, subject to audit by the Victorian Auditor-General's Office (VAGO) and require certification by Council and VAGO. The final certified result will be subject to any changes, recommended for agreed to by Council's auditors.

The full year surplus of \$24.7m, an increase of \$9.5m to budget, is primarily driven by improved operational application of human resources, holding costs in materials and services and improved management of funding requirements.

We previously reported that that some sector-wide staff shortages and planned human resource allocations would result in savings offset with overspend in agency labour costs however, careful management of human resources has resulted in savings in employee costs.

The significant operating result for our community has occurred, despite decreases in the utilisation of Childcare and Leisure Centres consistent with the results in quarter one and quarter two as previously reported.

There is no change to the overall financial sustainability risk rating as budgeted. Council has previously reported its challenges in generating enough cash to fund future capital works without borrowing.

Variance analysis is prepared based on a comparison of Year To Date (YTD) actuals, YTD budget and/or forecast. YTD actual results to YTD budget is favourable by \$9.5m. This result is driven by the following:

Revenue

- a) Rates and Charges are generally in line with budget and forecast YTD.
- b) Statutory Fees are favourable YTD due to increases in the number of parking infringement notices issued, parking meter fees collected and parking permits issued (\$3.049m) to budget.
- c) User Fees are unfavourable YTD for Childcare fees (-\$1.051m), Town

Planning fees (-\$0.660m), Infrastructure permits (-\$0.394m), and Burnley Golf Course (-\$0.969m).

- d) Grants Operating are unfavourable YTD mainly due to the budgeted early payment of the 24/25 VLGGC grant not being received in 2023/24 (-\$2.760m). The payment has been received in July 2024.
- e) Grants Capital variation mainly due to the timing difference for Brunswick Street Oval Precinct Redevelopment between the receipt of grant funding and delivery of the project (-\$4.677m) and Collingwood College Early Childhood Centre (-\$0.416m), offset by favourable variances from unbudgeted grant income for Otter and Smith Street Park (\$0.596m), and grant income carried forward from 2022/23 (\$0.784m). Revenue is recognised progressively throughout the year as the projects are delivered. Associated expenses are captured in the capital works program.
- f) Contributions Other Monetary are favourable YTD largely due to increased Development Contributions Plan (DCP) income (\$0.711m), compared to the adopted budget.
- g) Reimbursements unfavourable variance mainly due to the deferral of Construction and Development Reinstatement income (-\$0.205m).
- h) Other Income is favourable YTD, driven by higher interest rates and deposit balances than budgeted (\$2.756m), as well as Fitzroy town hall insurance claim proceeds (\$0.392m
- i) Net gain on disposal of assets are favourable YTD due to higher than budgeted sales of motor vehicles (\$0.727m), as a result of the outcomes of the Council Fleet Policy review.

Expenses

- j) Employee Costs: Savings largely from employee leave taken (\$0.900m) and some vacancies of salaried staff (\$4.705m), partly offset by agency and casual staff to backfill vacancies (-\$4.126m).
- k) Materials & Services: YTD favourable variance influenced by savings across City Works (\$2.368m) including waste contract payments and tipping fees due to reduced tonnage, FOGO (Food Organics, Garden Organics), and Fleet management costs due to reduced number of vehicles, as well as savings from legal fees (\$1.334m), consultant costs (\$0.720m) and delays in budget utilisation for IT (\$1.883m). In addition, there are savings across the whole organisation as a result of continuous focus on finding saving opportunities and operational efficiencies.
- Amortisation Right of Use Assets: YTD unfavourable variance is due to unbudgeted Lease amortisation for Parking Meters (-\$1.002m).

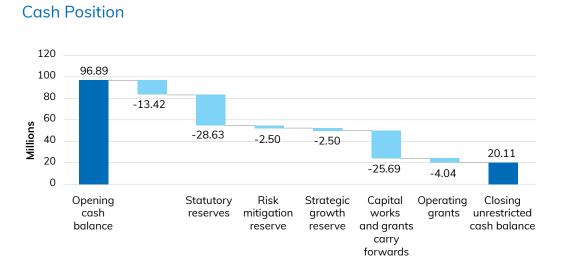
 m) Bad and doubtful debts are favourable to budget, primarily due to higher collection rates for 2023/24 parking infringements issued, compared to previous years collection rates.

Capital Works

At 30 June 2024, YTD actuals \$26.638m are lower than YTD forecast of \$28.96m and includes spend of \$6.959m from carryovers. It is important to note that a series of other projects and programs (street and park trees, bike lines, street furniture and signage) delivered to the community were expensed as per Council's non-current asset policy and therefore not included in the final total capital works expenditure. Planned carry-forward is \$750,784, a substantial improvement on the prior two financial years of \$15.246m in 2022/23 and \$7.428m in 2023/24, with \$0 unplanned carry-forward.

Financial Results Summary	YTD Budget \$'000	YTD Actuals \$'000	YTD Variance \$'000	Annual Budget \$'000	Current Final Projection \$'000	Annual Variance \$'000
New asset expenditure	12,424	7,715	4,709	12,424	8,261	4,163
Asset renewal expenditure	20,043	18,272	1,771	20,043	19,322	721
Asset upgrade expenditure	1,541	650	891	1,541	1,374	167
Total capital works expenditure	34,008	26,638	7,371	34,008	28,957	5,051

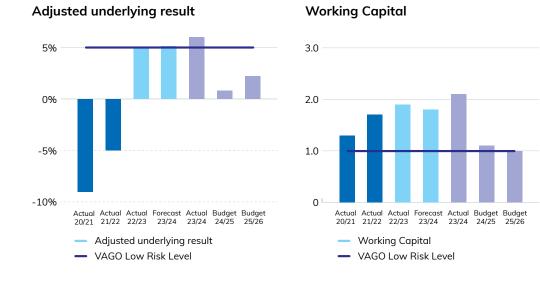
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At 30 June 2024, Council has total cash and investments of \$96.89m, of which \$30.50m is funded by borrowings. Unrestricted and unallocated cash position is \$20.11m, an improvement from \$5.39m at 30 June 2023.

Financial Sustainability Ratios



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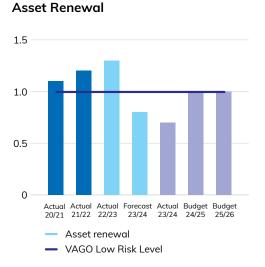
**VAGO targets were last published in 2019-20.

Adjusted underlying surplus (deficit) / adjusted underlying revenue

This ratio measures an entity's ability to generate its own cash. A positive result indicates a surplus, and the larger the percentage, the stronger the result. The result highlights Council's challenges in generating enough cash to fund future capital works without borrowing during 2024/25 and 2025/26.

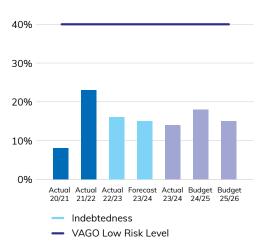
Current assets / current liabilities

Compares current assets to current liabilities, which provides a measure of the ability to pay existing liabilities in the next 12 months. This year's result places Council in the low-risk range, with further work required to improve results for 2024/25 and 2025/26.



Renewal & upgrade spend / depreciation

Ratios higher than 1.0 indicate that spending on existing assets is faster than the depreciation rate. Council has achieved ratios higher than 1.0 in the past, actual results of less than 1.0 is still sustainable as planning has ensured that assets are not deteriorating faster than they are renewed.



Non-current liabilities / own-source revenue

Measures Council's ability to pay the principal and interest on its borrowings when they are due from the funds it generates. This year's result has provided a positive outcome, with Council staying in the low-risk range.

Treasury Corporation of Victoria (TCV) Loan financial covenants

TCV loan requirements		Target	Current Month
Interest Cover	EBITDA/Interest Expense	> 2.0	52 🔺
Interest Bearing Loans	Interest Bearing Liabilities/ Own Source Revenue	< 60%	14.54% 🔺

TCV financing is conditional upon Council maintaining a sustainable financial position when measured by the interest cover and interest-bearing loans ratios. YTD results indicate that Council is meeting the minimum requirements. TCV loan requirements are well within target given limited borrowing compared to own source revenue and liability obligations.

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Indebtedness

Statement of Financial Position

Statement of Financial Position	YTD Actuals \$'000	30/6/2023 Actuals \$'000	Movement Inc/(Dec) \$'000
Current assets			
Cash and cash equivalents	32,885	31,124	1,762
Trade and other receivables	32,466	25,721	6,745
Other financial assets	64,000	50,000	14,000
Inventories	217	147	70
Other assets	3,818	2,148	1,671
Total current assets	133,386	109,139	24,247
Non-current assets	_	F	
Investments in joint arrangements	5	5	-
Property, infrastructure, plant and equipment	1,970,172	1,926,440	43,732
Right-of-use assets	2,371	279	2,092
Total non-current assets	1,972,547	1,926,724	45,824
Total assets	2,105,934	2,035,863	70,071
Current liabilities			
Trade and other payables	12,418	7,188	5,230
Trust funds and deposits	15,354	15,797	(442)
Unearned income/revenue	13,276	13,413	(137)
Provisions	16,834	17,759	(925)
Interest-bearing liabilities	4,532	4,399	133
Lease liabilities	943	249	695
Total current liabilities	63,358	58,804	4,553
Non-current liabilities			
Other Liabilities	399	386	13
Provisions	1,222	1,227	(5)
Interest-bearing liabilities	25,968	30,501	(4,532)
Lease liabilities	1,543	50	1,493
Total non-current liabilities	29,133	32,165	(3,032)
Total liabilities	92,491	90,969	1,522
Net assets	2,013,443	1,944,894	68,549

Statement of Financial Position	YTD Actuals \$'000	30/6/2023 Actuals \$'000	Movement Inc/(Dec) \$'000
Equity			
Accumulated surplus	666,372	651,149	15,223
Asset revaluation reserves	1,288,751	1,244,894	43,858
Other reserves	33,627	25,575	8,053
Surplus for the year	24,692	23,276	1,416
Total equity	2,013,443	1,944,894	68,549

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Statement of Cashflows

Statement of Cash Flows	YTD Actuals \$'000 Inflows (Outflows)	Annual Budget \$'000 Inflows (Outflows)	Annual Forecast \$'000 Inflows (Outflows)	Annual Variance \$'000 Inflows (Outflows)
Cash flows from operating activities				
Rates and charges	129,138	132,797	133,176	379
Statutory fees and fines	36,025	32,033	35,186	3,153
User fees	30,843	35,136	32,208	(2,928)
Grants – operating	15,733	18,739	17,372	(1,367)
Grants – capital	3,822	7,263	2,755	(4,508)
' Contributions – monetary	7,298	6,351	7,320	970
Interest received	4,556	1,800	4,300	2,500
Trust funds and deposits taken/(repaid)	(472)	-	-	-
Other receipts	500	1,196	2,124	928
Net GST refund/(payment)	355	-	_	_
Payments to Employees	(101,704)	(101,505)	(102,443)	(938)
Payments to Suppliers	(78,180)	(90,117)	(73,948)	16,169
Net cash (used in) / provided by operating activities	47,915	43,692	58,050	14,358
Cash flows from investing activities				
Payments for property, infrastructure, plant and equipment	(26,203)	(34,008)	(28,957)	5,051
Proceeds from sale of property, infrastructure, plant and equipment	692	350	770	420
Payments for investments	(14,000)	_	_	_
Net cash used in investing activities	(39,511)	(33,658)	(28,187)	5,471

Statement of Cash Flows	YTD Actuals \$'000 Inflows (Outflows)	Annual Budget \$'000 Inflows (Outflows)	Annual Forecast \$'000 Inflows (Outflows)	Annual Variance \$'000 Inflows (Outflows)
Cash flows from financing activities				
Finance costs	(909)	(894)	(894)	0
Proceeds from Borrowings	-		-	-
Repayment of borrowings	(4,399)	(4,399)	(4,399)	0
Interest paid – lease liability	(195)	(8)	(160)	(153)
Repayment of lease liabilities	(1,140)	(249)	(1,124)	(875)
Net cash used in financing activities	(6,642)	(5,549)	(6,577)	(1,027)
Net increase in cash held	1,762	4,485	23,286	18,802
Cash at beginning of period	31,124	82,566	96,885	14,319
Cash at end of period	32,885	87,051	120,172	33,121

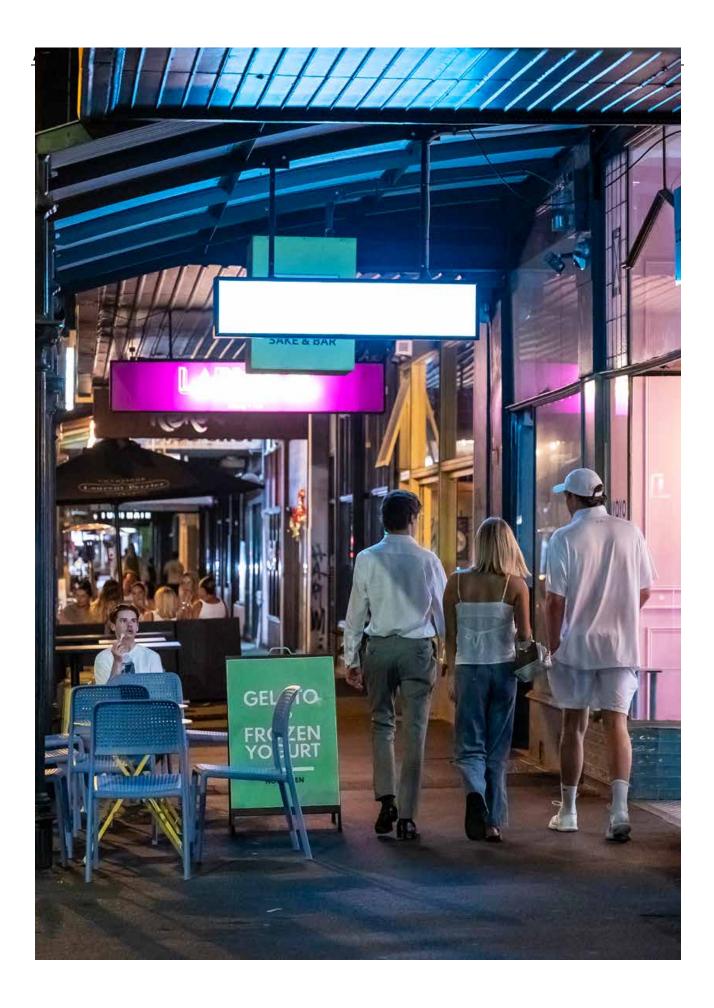
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Statement of Capital Works

Statement of Capital Works	YTD Budget \$'000	YTD Actuals \$'000	YTD Variance \$'000	Adopted Budget \$'000	Current Final Projection \$000	Annual Variance \$000
Property						
Buildings	8,347	4,566	3,781	8,347	4,564	3,783
Total property	8,347	4,566	3,781	8,347	4,564	3,783
Plant and equipment						
Plant, machinery and equipment	912	192	720	912	412	500
Fixtures, Fittings and Furniture	211	177	34	211	191	20
Computers and telecommunications	723	207	516	723	323	400
Library books	630	597	33	630	600	30
Total plant and equipment	2,476	1,174	1,303	2,476	1,526	950
Infrastructure						
Roads	7,102	6,702	400	7,102	6,856	245
Bridges	_	-	-	-	-	-
Footpaths and cycleways	1,538	1,434	104	1,538	1,511	27
Drainage	2,510	2,184	326	2,510	2,495	15
Waste management	1,880	1,673	207	1,880	1,702	178
Parks, open space and streetscapes	7,646	7,174	472	7,646	7,465	181
Other infrastructure	2,509	1,731	778	2,509	2,836	(327)
Total infrastructure	23,185	20,898	2,288	23,185	22,867	319
Total capital works expenditure	34,008	26,638	7,371	34,008	28,957	5,051

Statement of Capital Works	YTD Budget \$'000	YTD Actuals \$'000	YTD Variance \$'000	Adopted Budget \$'000		Annual Variance \$000
Represented by:						
New asset expenditure	12,424	7,715	4,709		12,424	8,261
Asset renewal expenditure	20,043	18,272	1,771		20,043	19,322
Asset expansion expenditure	_	-	-		-	_
Asset upgrade expenditure	1,541	650	891		1,541	1,374
Total capital works expenditure	34,008	26,638	7,371		34,008	28,957

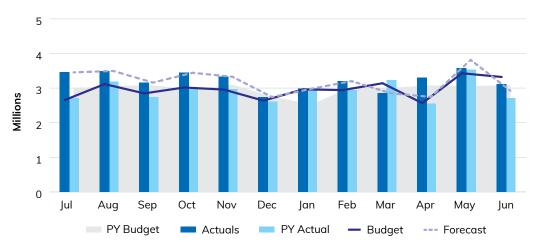
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Operating performance

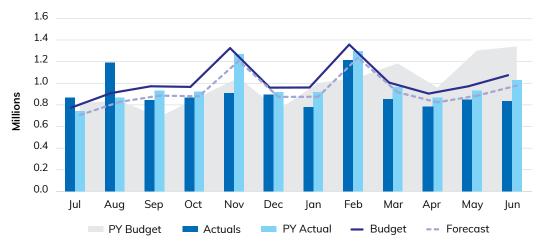
Statutory fees

The collection of Statutory fees has increased compared to the previous years.



Parking Fees and Infringements

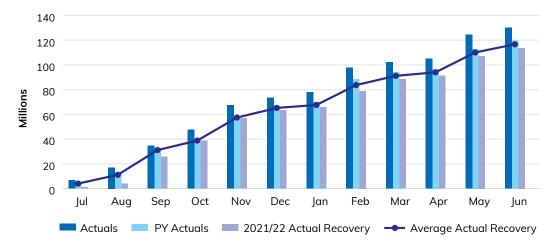
Recreation and Leisure Fees



Recreation and Leisure Income

Rates Collection





Rates Collection

The cash collections from rates are currently aligning with the average collections achieved in the last three years.

Parking revenue

This report presents parking revenue data for the fourth quarter of financial year 2023/24. It is intended to provide stakeholders with an overview of parking revenue and identify any trends or patterns.

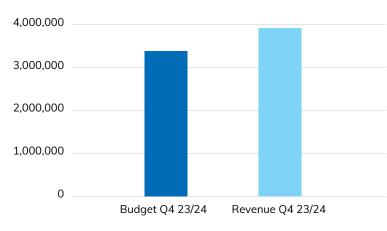
Parking revenue is broken down into two categories: paid parking and parking infringements.

Paid parking revenue includes income generated from both pay-by-phone (PayStay) and meter payments made by drivers.

Q4 Overall Paid Parking Revenue

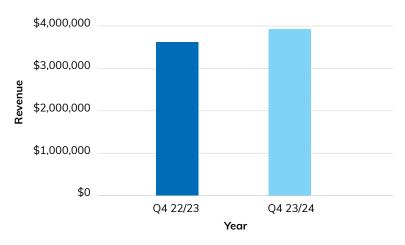
Paid parking revenue includes both pay-by-phone (PayStay) and meter payments. Total revenue received for Q4 23/24 increased by 8.48% compared to Q4 22/23. The graph below shows that the forecast revenue for Q4 was exceeded by 16.02%. Comparison of Q4 figures for 22/23 and 23/24 are shown below detailing total paid parking revenue for this Q4 increased by \$306,849.62 compared to Q4 2022/23:

- ▶ Q4 2022/2023: \$3,615,223.34
- ▶ Q4 2023/2024: \$3,922,072.96



Paid Parking Budget v Revenue

Overall Paid Parking Revenue



City of Yarra 75

Q4 Paid Parking Meters

The table below shows the parking meter data including revenue and time paid. A total of 357,750 transactions occurred during Q4:

- ► Q4 2022/23 Meter Revenue: \$1,880,262.00
- ► Q4 2023/24 Meter Revenue: \$2,105,743.00



Sum of Paid Account

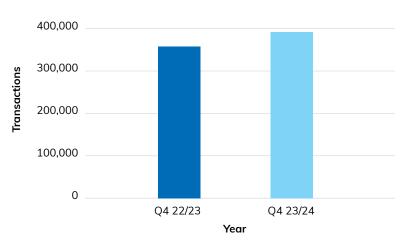




Q4 Paid Parking Pay by Phone

Pay by phone remains an active option for customers and the data continues to show an increase in the number of transactions when comparing Q4 22/23 to 23/24:

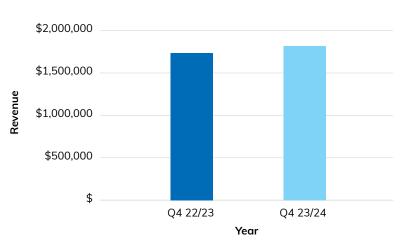
- ► Q4 2022/23 Pay by Phone Transactions: 324,912
- ► Q4 2023/24 Pay by Phone Transactions: 357,750



Pay By Phone Transactions

Revenue generated by pay by phone also shows a modest increase when comparing Q4 22/23 to 23/24:

- ▶ Q4 2022/23 Pay by Phone Revenue: \$1,734,961.34
- ► Q4 2023/24 Pay by Phone Revenue: \$1,816,329.96



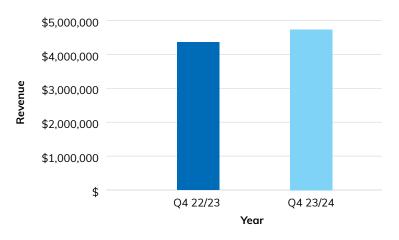
Pay By Phone Revenue

Q4 Parking Infringement Revenue

Revenue from infringements issued during Q4 shows an increase when comparing Q4 22/23 to 23/24:

- ► Q4 Infringement Revenue 2022/2023: \$4,352,550.00
- ► Q4 Infringement Revenue 2023/2024: \$4,733,067.00

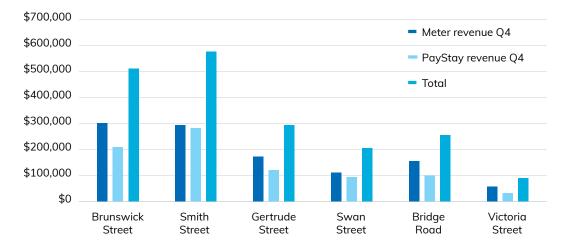
Revenue from Infringements Issued



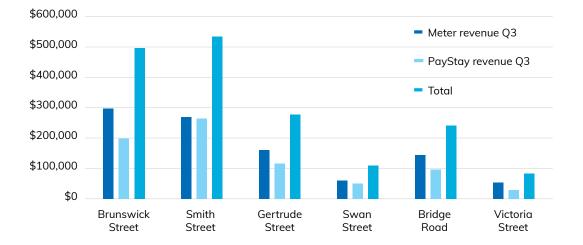
Activity Centre Paid Parking

Each shopping strip in Yarra is unique, influenced by a variety of factors such as the types of attractions and businesses located on the street. As a result, it is not possible to directly compare paid parking revenue across the business centres.

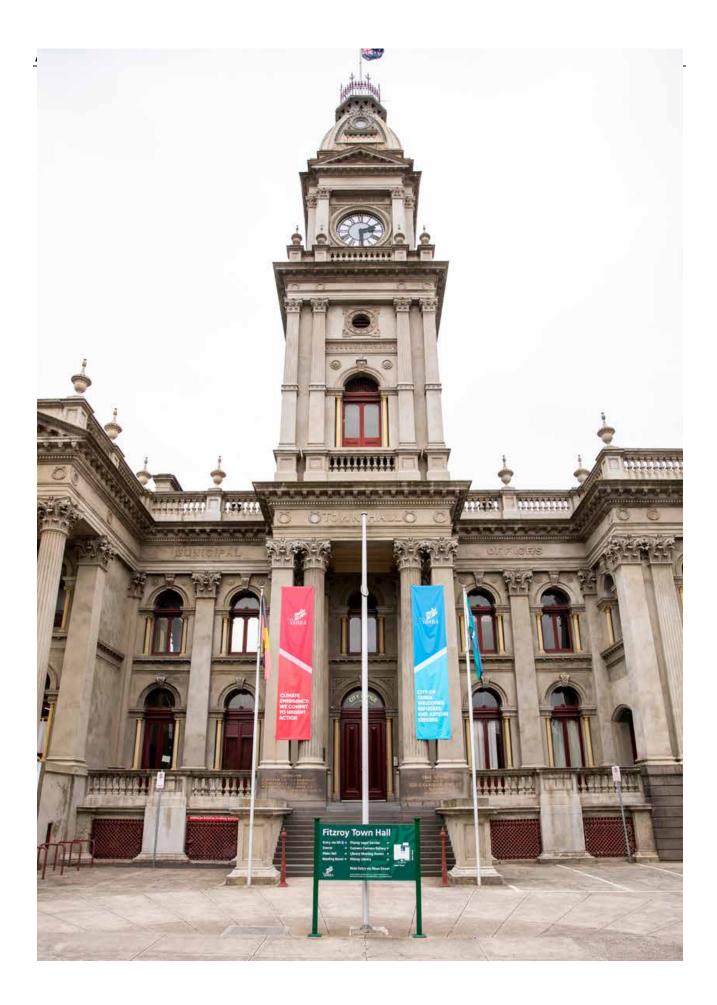
Several important variables to consider when looking at the various centres include different tariffs (hourly fee) applied across the centres, amount paid for on-street parking, and breadth of hours that paid parking is in effect.



Q4 Activity Centres



Q3 Activity Centres



Annual Plan performance

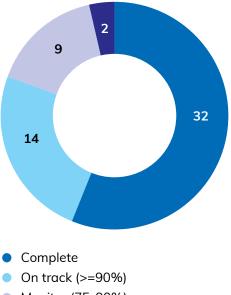
Council adopted its Council Plan 2021-25 on 19 October 2021. The Council Plan, incorporating the Municipal Health and Wellbeing Plan, sets out the mediumterm direction of Council and the outcomes sought by Councillors for their term. This financial year 2023/24, is year three of the Council Plan 2021-25.

The Council Plan 2021-25 has six Strategic Objectives that respond to the Community Vision, which represent the Strategic Direction of Council for their four-year term.

The Annual Plan and Budget operationalise the Council Plan. The Annual Plan identifies several initiatives under each Strategic Objective which are significant projects that Council will undertake towards achieving the Strategic Objectives. The Annual Plan includes actions that link to some, but not all initiatives from the Council Plan.

The Annual Plan commenced with 57 actions, during the course of the Annual Plan Council deferred 2 actions due to circumstances outside of its control. As at the end of June 46 of the remaining 55 actions, 84% reached a status of completed (32) or in-progress > 90%.

2023/24 Annual Plan Actions – June



- Monitor (75-90%)
- Off Track (<75%)</p>
- Deferred

Council's progress in delivering the 2023/24 Annual Plan actions for quarter 4 (April, May, June 2024), is detailed in the next section under our six Strategic Objectives.

Annual Plan 2023/24 June progress

- **Green** At least 90% of action target achieved
- **Amber** Between 75% and 90% of action target achieved
- **Red** Less than 75% of action target achieved
- No target set

1 Climate and environment

1.1.1 Take urgent action to respond to the climate emergency and extend our impact through advocacy and partnerships

Action Title: 1.1.1.1 Development of the new Climate Emergency Plan

Develop a new climate emergency plan that builds on the success of the last plan, incorporates current best practice, and builds from a foundation of community engagement. Look to broaden the focus and reach of the Plan as needed and include the strong links to community well-being and strengthening.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Sustainability	In Progress	01-Jul-2023	30-Jun-2024	99%	100.00%	Green

Action Progress Comments: Council is committed to action on the climate emergency and has developed a new Climate Emergency Plan (CEP) 2024-2030 and Climate Emergency Action Plan 2024-2027 to guide this work. These will be considered by Council for adoption in July 2024, and will replace the existing CEP, which expired in June 2024.

The new CEP will establish Council's strategic approach to delivering on the 2036 Community Vision Future Priority 4.2 to lead the way in climate change mitigation and resilience within Yarra and extend our impact through advocacy and innovative partnerships. It will also give effect to the Council Plan 2021-25 Strategic Objective 1: Yarra urgently mitigates climate change while also adapting to its impacts and developing resilience in everything we do. The community, business and industry are supported and encouraged to do the same.

The new CEP has been developed and refined based on extensive consultation with our community and organisation, including consultation with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation. The new CEP significantly increases the scope of Council's climate emergency response and outlines a response which centres justice and equity, ensuring that our entire community – particularly those at greatest risk of climate impacts – are resilient, connected, empowered, and share in the benefits of our investments.

Action Title: 1.1.1.2 Community engagement and mobilisation on climate emergency

Deliver targeted programs and activities to key sectors in our community to take climate action. This includes supporting our community to reduce individual and household carbon emissions; bringing people together to be active citizens pushing for change; and helping our community prepare for and cope with worsening climate impacts.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Sustainability	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council actively promoted the Climate Action Grants to our community via the Yarra Environment News, other corporate channels, and through direct engagement with key groups and individuals. A strong and diverse mix of community-led climate projects were received and are expected to be presented to Council for endorsement next quarter.

The Neighbourhood House Climate Resilience project, completed with the launch of the joint Climate Action and Resilience Plan, as well as individual plans for each Neighbourhood House, in October 2023.

Councils annual Climate Active submission was completed and lodged in November 2023. The submission is a requirement for Council to remain a certified Carbon Neutral organisation.

Council reviewed the outcomes of recent sustainable apartments and electrify everything programs and have launched a new SunSPOT solar calculator tool for households to map where solar can go on their roofs and have commenced planning with partner councils for a High Life Expo in mid-2024, to support apartments to improve sustainability and electrify. Council also commenced the 'Wired for Tomorrow' project with the Yarra Energy Foundation investigating the potential of an all-electric precinct,

Council continues to deliver programs which support our community to take climate action – this includes action to reduce individual and household carbon emissions; bring people together to be active citizens pushing for change; and prepare for and cope with worsening climate impacts.

In this quarter, examples of this work includes:

Continuing to deliver the Five Big Ways to Take Climate Action campaign. This campaign incorporates a series of events and resources designed to share accessible and easy to understand climate solutions with the local community. Whilst there are many different ways to take climate action, Five Big Ways focuses on some of the most impactful and practical actions that the Yarra community can take.

Action Title: 1.1.1.2 Community engagement and mobilisation on climate emergency

Deliver targeted programs and activities to key sectors in our community to take climate action. This includes supporting our community to reduce individual and household carbon emissions; bringing people together to be active citizens pushing for change; and helping our community prepare for and cope with worsening climate impacts.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Sustainability	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

The Hi-Life Expo which was partly sponsored by Council, aimed to provide information, resources and supplier information to people who live in or own apartments and units in order to assist them undertake sustainability retrofits. We know that 85% of housing stock in Yarra is medium to high density, and we also know that the barriers to undertaking climate-friendly retrofits in these contexts are significant. This event drew an audience of nearly 1000 people demonstrating the appetite for information and assistance.

Action Title: 1.1.1.3 Community batteries

Support opportunities to accelerate uptake of renewable energy in Yarra through community battery installations.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Sustainability	In Progress	01-Jul-2023	30-Jun-2024	98%	100.00%	Green

Action Progress Comments: A roadmap to accelerate community batteries is due to be presented to Councillors in July 2024. This roadmap highlights the significant work undertaken through Council and beyond in 2023/24, as well as further work progressing in 2024/25. Significant progress is being made in support of community batteries, with further research and trials continuing to be needed through 2024/25 in order to present a clear pathway.

Action Title: 1.1.1.4 Zero Carbon Business

Engage businesses and partners to transition towards zero-net carbon and develop circular economy approaches

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Sustainability	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council has promoted the CitySwitch program, a national program supporting office tenants to improve energy and waste efficiency, to Yarra office-based businesses for their consideration to participate. This includes via the Sustainable Business e-Newsletter, our Yarra Website, and direct engagement with our existing sustainable business contacts and through the CitySwitch program manager.

Officers worked with YEF to review the Better Energy Better Business (BEBB) program through the process of developing the new Funding Agreement with YEF for 2023/24. YEF has recently provided Officers with a first draft BEBB Solar Guide. This Guide is designed to present potential solutions for larger businesses and include case studies for businesses with different usage scenarios.

The second phase of the Business Renewables Buying Gorup (BRBG) has been completed. Led by Yarra, the BRBG has been expanded Victoria wide, with 32 councils currently signed on and the program has been promoted to Yarra businesses with more promotions coming.

Council continues to support businesses of all sizes on their zero emissions journey. In this quarter, focused on SME's specifically Council:

- Ran a circularity and energy efficiency in the building industry event at Provans Timber and Hardware in Clifton Hill in April 2024.
 The event had over 120 registrations from small and medium sized businesses with over 100 attending on the day. We also had more than 15 expo style exhibitors at the event to promote their sustainability focused products.
- Ran a 'Reducing Food Waste in your Business' event at local SME IntoCoffee, with more than 20 hospitality businesses attending.
- Continued to promote and expand Yarra's Circular Economy Map, focused strongly on SME's in Yarra.
- Recently joined and has been promoting the Solar Savers program, which is open to SME and is expanding to include electrification opportunities as well as solar energy for local SME businesses.
- Continued to promote CitySwitch to our business community, which is open to our smaller office based businesses.
- Continued to grow the Sustainable Business Yarra e-newsletter which grown to 330 subscribers including many SME's.

1.1.2 Lead and support the community, business and industry to take urgent climate action and transition to a circular economy

Action Title: 1.1.2.1 Collingwood Leisure Centre facility design to support the transition off gas

Council will undertake design for the renewal of building services at Collingwood Leisure Centre. A major component of this is Heating, Ventilation and Airconditioning (HVAC), which will include full electrification to enable retirement of the use of gas at the facility.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Building and Asset Management	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: An engineering consultancy specialising in zero-emissions transformations of the built environment were engaged to undertake a study of various options for electrification of Collingwood Leisure Centre, with further due diligence undertaken to have a second consultancy with significant experience in electrified aquatic centres in New Zealand undertake a peer review of the options identified. From this, a recommended approach has been identified that will provide excellent sustainability outcomes whilst keeping the capital investment as low as possible and minimising the implementation risk.

Action Title: 1.1.2.1 Circular Economy

Circular economy is a new way of seeing products and materials, viewing them as valuable resources instead of 'waste'. Instead of dealing with waste materials when we throw things away, Yarra City Council continue to be a leader in this space and drive change through our services and initiatives.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Officers continue to work with the State Government to influence what is included in the bin content service standards. The draft service standard, corresponding draft regulations, and associated Regulatory Impact Statement (RIS) have not been released for formal public consultation. The final service standards and regulations are expected to be made late 2024.

Officers have been working closely with State Government, Visy (our network provider) and other councils to ensure the CDS program is delivered to meet Yarra's objectives of litter reduction, resources recovery and equal community participation. We currently have 1 RVM in place and expect the remaining 2 to be installed in the coming weeks.

Officers have completed the rollout of the new FOGO service ready for the first collection from 1 July 2024.

Action Title: 1.1.2.1 Zero carbon development planning scheme amendment

A key action in the Climate Emergency Plan, Council is pursuing a 'zero carbon development' planning scheme amendment and developing further environmentally sustainable development guidelines.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Statutory Planning	In Progress	01-Jul-2023	30-Jun-2024	66%	100.00%	Red

Action Progress Comments: Council continues to advocate and engage with Department of Transport and Planning and the Minister for Planning to support the progression of the amendment. Officers are also meeting with members of CASBE on an on-going basis.

Authorisation has not been received to enable the proposed amendment to be placed on public exhibition.

Action Title: 1.1.2.2 Reduce the use of single use plastics

Engage with businesses and the community to reduce the use of single use plastics and phase out single use plastics across Council's operations.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Single Use Plastic Free Yarra (SUPFY) working group was reformed consisting of 12 staff members from across the organisation. A number of audits have been undertaken, decisions have been made about reducing single use plastics for internal operations and education sessions with staff undertaken. Further consideration on how to impact changes in the community is underway.

The Circular Economy aims to demonstrate what circularity can look like in various industries and businesses and celebrate those Yarra business who have already embedded circular principals.

Aspects of the 'Join the Circular Economy' campaign include:

- Increasing subscribers to the Sustainable Business Yarra e-newsletter Increased by 41 since August 2023,
- Delivery of Circular Economy Map and increasing businesses adding themselves increased by 22 since launch in October,
- Sustainable business events series run in partnership with the sustainability team 6 events planned across 2024 with first even booked for April 24th in partnership with Provans Timber and Hardware.

2 Social equity and health

2.1.1 Celebrate, respect and embrace Wurundjeri Woi Wurrung, Aboriginal and Torres Strait Islander people and heritage, and reflect this in our decision-making, services and activities

Action Title: 2.1.1.1 Yana Ngargna – Reflection and future directions

Work with Yana Ngargna Advisory Group, Aboriginal and Torres Strait Islander community and key stakeholders to reflect on the Yana Ngargna 2020-23 plan and its implementation and development of the next multi-year partnership plan.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	In Progress	01-Jul-2023	30-Jun-2024	68%	100.00%	Red

Action Progress Comments: The Aboriginal Partnerships team has been renewed with the appointment of a Principal Advisor in November and a Community Development Officer in April, bringing significant expertise and cultural depth to our organisation.

In November, Organisational Cultural Protocols were updated to include historical context, outline Council policies, and articulate why and how we recognise the Wurundjeri Woi Wurrung as the Traditional Owners. Adhering to these protocols supports our commitment to creating an inclusive and responsive Yarra that uplifts First Peoples' voices. Additionally, we've centralised systems for managing all enquiries relating to Aboriginal and Torres Strait Islander partnerships to ensure requests are managed in accordance with policies and promote culturally safe and impactful partnerships.

Senior Council officers met with the Birrarung Council to discuss the health and life of the Birrarung/Yarra River. The meeting included Wurundjeri Elders and key staff from the Birrarung Council. Elders and Birrarung representatives sought an update from the Council on our actions regarding obligations under the Yarra River Protection (Wilip-gin Birrarung murron) Act (2017), as well as our commitments to engaging with Traditional Owners.

The Reconciliation Action Plan (RAP) group was re-established with the goal of enhancing our organisation's reconciliation commitments and actions. Council has registered with Reconciliation Australia and will submit a new RAP next financial year.

The past 12 months have been especially challenging for many First People community members, emphasising the importance of marking January 26 at the Collingwood Town Hall. The Yarra service, which was sombre, honoured the resilience, culture, and achievements of First Peoples in Yarra and beyond. National Sorry Day on 26 May was marked with a Smoking Ceremony and Community BBQ at the Stolen Generations Marker, Atherton Gardens, paid tribute to the Stolen Generations and their families, to those that made it home, to those who are still searching, to those who didn't make it home, and to those who now rest with their family and

Action Title: 2.1.1.1 Yana Ngargna – Reflection and future directions

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Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	In Progress	01-Jul-2023	30-Jun-2024	68%	100.00%	🛑 Red

ancestors. Council is grateful for the work of Blak Pearl Studios in organising the food, music, and yarns, and Uncle Ringo Terrick for Welcoming us to Country. The theme for the 2024 National Reconciliation Week 27 May to 3 June was "Now More Than Ever". Council's events aimed to deepen understanding of the historic and ongoing injustices experienced by Aboriginal and Torres Strait Islanders peoples, highlighted the culture and connection of the Wurundjeri Woi Wurrung to their lands, and underscored the hopes for self-determination through the Treaty process in Victoria. Bargoonga Nganjin Library hosted Reconciliation on the Rooftop, led by Aboriginal Housing Victoria. To celebrate the 25-year partnership between the Council and the First Peoples connected to Yarra, the Richmond Town Hall became an immersive experience on Aboriginal Yarra, raising awareness of the significance of the Acknowledgement of Country. Staff also attended a Wild Weaving Workshop with Jenine Godwin, a Yaggerah Aboriginal woman from Southeast Queensland and founder of Blak Artz From The Heart.

The Victorian Government began treaty discussions in 2017, appointing a Treaty Advancement Commissioner and passing the Aboriginal Victorians Act in 2018 to form the First Peoples' Assembly of Victoria. In 2022, the Treaty Authority, the Treaty Negotiation Framework, and the Self-Determination Fund were established.

On 21 May 2024, Council's Yarra Talks: Treaty Process explored the Treaty process in Victoria. Moderated by Aboriginal broadcaster Charles Pakana, the panel included Uncle Andrew Gardner, Wurundjeri Elder; Ngarra Murray, Co-Chair of the First Peoples' Assembly of Victoria; Terry Garwood, Deputy Secretary First Peoples – State Relations at the Department of Premier and Cabinet; and Travis Lovett, Commissioner of the Yoorrook Justice Commission. Councillors and senior leaders listened to the panel's wisdom and began to understand how Yarra can work towards Treaty with the Wurundjeri Woi Wurrung and First Peoples across Victoria. The discussion was wide-ranging and set the direction for Yarra's path to Treaty.

The negotiations for Treaty are a pivotal moment for addressing historic and ongoing wrongs, offering hope for a brighter future for both First Peoples and non-Indigenous Victorians. Informed by this external context of Treaty, work on developing a successor to the four-year Yana Ngargna plan, to define Council's partnership with the Wurundjeri Woi Wurrung and all First Peoples connected to Yarra and considers our role as a service provider, regulator, leader, advocate and joint custodian of place making, has recommenced. Efforts on cultural awareness, capability, and competence, including the Reconciliation Action Plan (RAP), will take place concurrently.

2.1.2 Build a more resilient, inclusive, safe and connected community, which promotes social, physical and mental wellbeing (MPHWP)

Action Title: 2.1.2.1 0-25 Plan

Implement initiatives within the 0-25 Plan to enhance the health and wellbeing of children, young people and families.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Family, Youth and Children's Services	In Progress	01-Jul-2023	30-Jun-2024	90%	100.00%	Green

Action Progress Comments: The voice of the child project supports increased engagement and empowerment of children in our Family Services programs, it is included in the operations manual for family support caseworkers and sets out how we engage with children in our work with their parents and caregivers.

The key areas of strategic plan for children, youth and their families are addressed within other strategic and advocacy work including Council Plan and Municipal Health and Wellbeing Plan. Operationalisation of the 0-25 Plan has moved into internal framework to guide service planning, development, quality and practice.

Consideration of the preferred model for parental engagement at the precinct and municipal level in early years planning is progressing. Implementation planning includes Council's adopted Notice of Motion, approved on 12 December 2023, to establish a Child and Family Advisory Committee and for officers to provide a report to the July 2024 Council meeting.

The Best Start Best Life early years reforms including infrastructure opportunities for kindergarten expansion at Collingwood College and Atherton Gardens Estate have been implemented and included:

- Project Control Group is established. Working groups in the areas of Workforce, Infrastructure and Participation are established.
- Kindergarten at Collingwood College Yallabirrang Kindergarten, opened Feb 2024 and is offering kindergarten and playgroups.
- Atherton Gardens kindergarten construction has commenced. Project is on track for completion in November 2024 for operation in Feb 2025.
- The Workforce Strategy has been completed and the final version submitted to Department of Education.
- ► The Kindergarten Infrastructure Planning Pipeline Project is 75% complete.
- The Kindergarten Infrastructure and Service Plan has to recommence as due to changes is the Best Start Best Life reform budget announcements in May 2024.
- ► Central Registration System business efficiency project underway.
- 90 Quarterly Community Report Quarter Four 2023/24

Action Title: 2.1.2.1 Access and Inclusion Strategy and Action Plan

Implement the Access and Inclusion Strategy's strategic actions to ensure that Yarra is an inclusive and accessible community and is a place where everyone can live well. In addition to implementing the 2023-24 action plan, a new strategy (2024 – 2030) will be developed, to align with new and emerging priorities and needs.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aged and Disability Services	In Progress	01-Jul-2023	30-Jun-2024	99%	100.00%	Green

Action Progress Comments: Council's Disability Advisory Committee and the Active Ageing Advisory Committee continue to provide advice on key issues including accessibility initiatives, e-scooters and disability parking, to increase access to local businesses and promote safe use of public spaces.

Community engagement for the development of the 2024-2030 Strategy has been completed using a range of engagement methodologies including Your Say Yarra (635 views resulting in 52 contributions); paid social media reached 11,286 people. Other promotions included digital screens in Customer Service and Leisure Centres.

A draft Access and Inclusion Policy and Plan is being developed to seek Council's approval for public exhibition.

Action Title: 2.1.2.1 Promote access and inclusion for Culturally and Linguistically Diverse (CALD) communities

Address discrimination and tackle systemic barriers to participation in social and economic life for CALD communities and promote access and inclusion to the policies and services of the Council, other levels of government, and relevant agencies.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: A new Draft Multicultural Partnerships Policy has been adopted by Council in May 2024 to succeed the Multicultural Partnerships Plan 2019-2023. The new policy outlines Yarra's commitment to its multicultural community, and have been developed through review, research, and extensive stakeholder engagement from October to November 2023. The Policy focusses on five thematic priorities, including standing against racism, effective communication, cultivating connections, building inclusive spaces, and fostering community capacity.

Cultural diversity week events were celebrated around Yarra, with particular support provided to Bridges to Harmony and Harvest Festival, while promoting all other events to the broader community via Council's website and social media.

Yarra SOAR (Speak Out Against Racism) was formed between Council, cohealth, Neighbourhood Justice Centre and Victoria University, a project aiming to address issues around reporting racism, supporting communities who experience racism, and with the goal of eradicating racism. This group is using evidence from research conducted by Victoria University which reflects the experiences of communities in Yarra around reporting racism and highlighting the barriers to reporting and support. There are a series of forums planned for the remainder of the year, and a co-design approach with community is underpinning future actions.

Action Title: 2.1.2.2 Active and Healthy Ageing Strategy and Action Plan

Implement the Active and Healthy Ageing Strategy, action plan to ensure our residents aged 50+ remain engaged, active, and independent. Living well means feeling included and active in the community, being able to connect to other people and being able to participate in everyday life. In addition to implementing the 2023-24 action plan, a new strategy (2024–2030) will be developed, to align with new and emerging priorities and needs.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aged and Disability Services	In Progress	01-Jul-2023	30-Jun-2024	99%	100.00%	Green

Action Progress Comments: The Active Ageing Advisory Committee continued providing valuable guidance and advice regarding the Aged Care Reforms, which informed advice to Council regarding the Aged Care Reforms report approved by Council in March 2024.

The intergenerational initiative "Seniors and Sprouts" commenced at Richmond Kindergarten with local older adults participating each week within the term. The Companion Animal Support Program continues to be supported by Council, and well received by participants and volunteers.

Community engagement has been completed on the Draft Ageing Well in Yarra Policy. The Draft policy is pending Council endorsement for public exhibition.

Action Title: 2.1.2.2 Youth led engagement

Empower young people aged 12–25 to have a greater voice on the issues that affect them through Council's Youth Advocacy Group. With the support of a project steering committee, and Council, young people will co-design a series of youth-led activities, which build young people's skills and confidence and help them establish networks and opportunities to amplify their voices in local decision-making and inform advocacy priorities.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Family Youth and Childrens Services	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: A pilot traineeship program commenced in October 2023, involving preparation of the position description, an evaluation template and identification of internal support requirements for business units and participants. 2 trainees participated in this program and were hosted for a Customer Experience and Venues business units. Council has contributed an additional \$50,000 in 2024/25 for the traineeship program to continue next year.

The Youth Advocacy Group identified concerns about the government announcements of the redevelopment of the housing towers. The group facilitated Housing Justice workshops for other young people and invited along representatives from Vic Pol and Homes Victoria. The initiative offered young people the opportunity to learn how to facilitate workshops and have a community voice.

Two Accredited Youth Mental Health First Aid (YMHFA) sessions have been arranged which will include 24 young people undertaking an accredited YMHFA course. These will be completed in Q1 2024/25.

Action Title: 2.1.2.3 National aged care reforms

Ensuring residents and clients are supported across the transitional period of the National Aged Care reforms, expected to commence in full by 1 July 2025. Across 2023-2024, Council will continue to review and assess its role in the new program and existing State based Home & Community Care program for Young People. This will include the range of services Council provides directly and areas of potential re-investment.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aged and Disability Services	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Officers are actioning Council's position with careful transition planning underway with clients and their families and partner organisations. Information has been provided to all clients receiving services advising of Council's decision and providing information on the new Support at Home program developments.

Council has implemented the changes required to support the national aged care reforms to date, and noting the full implementation of the Support at Home program has now been delayed to 1 July 2027 by the Commonwealth.

Council has continued to support residents and clients to navigate the My Aged Care system and provided linking support to other programs and agencies.

Council determined its future directions in supporting older people through the new national program and through local initiatives at its meeting on 12 March 2024. This included determining specific services it would transition out of; services it would strengthen and develop; its commitment to support at risk and vulnerable older people; and a focus on ageing well and inclusion in Yarra.

2.1.3 Support vulnerable communities and residents of public housing to thrive in our community

Action Title: 2.1.3.1 Sustainable food systems

Promote sustainable local food systems and building community resilience in the Yarra community.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: My Smart Garden Workshops have been delivered, they inform a holistic approach to 'smarter' and more sustainable home gardening across five elements, including food, shelter, waste, water, and habitat.

Action Title: 2.1.3.1 Celebrate LGBTIQA+ community, enhance visibility and promote inclusion

Support the LGBTIQA+ community through inclusive Council policy and programs, strategic advocacy, local visibility campaigns and cultural events

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	In Progress	01-Jul-2023	30-Jun-2024	97%	100.00%	Green

Action Progress Comments: The Rainbow Advisory Committee have provided guidance on the following topics:

- Completing the update of the rainbow footpaths on Smith/Gertrude streets and Smith/Peel streets to have the pride progress flag, which represents our trans, gender diverse, intersectional and intersex communities.
- Phase 3 of the Rainbow Yarra Visibility Campaign has been launched which included the creation of a Rainbow Yarra webpage, where community can source all things LGBTIQA+ in Yarra, including safe spaces.
- Phase 4 of the Rainbow Yarra Visibility campaign involving a street rock poster campaign running in Yarra during Pride season from 22 Jan-12 Feb. The photographic campaign profiles LGBTIQA+ people who work, live and play in Yarra including RAC members with intersecting identities. The posters have been displayed around the streets and council facilities celebrating Yarra being the well-known LGBTIQA+ home-ground.
- Participated in and guided the LGBTIQA+ places of historical and cultural significance study, undertaken by GML and Yarra Heritage.

Council's Rainbow Visibility campaign was a finalist in the 2024 LGPro Diversity and Inclusion awards.

Planning for an inclusive gym and swim event at a Yarra Leisure venue to support diversity and inclusion officers identified issues with the initial timeline. As a result, the event will be promoted to coincide with the next Midsumma activities.

An IDAHOBIT event was held for community and staff on 17 May 2024, involving a live and interactive Queerways walking tour. The walking tour acknowledged Yarra's LGBTIQA+ historical places of significance, led by community elder, Tex McKenzie, an engaging storyteller sharing firsthand anecdotes and accounts of what life was like at those times and those spaces. The walking tour finished at Collingwood Town Hall followed by the Mayoral Pride Flag Raising, and a drag performance to celebrate IDAHOBIT (combatting homophobia, transphobia, biphobia, and intersex discrimination). Total number of attendees on the walking tour and flag raising was 60 people.

Following the success of the walking tour, collaborators Thorne Harbour Health would like to run more walking tours, especially as part of the next Midsumma Festival.

Action Title: 2.1.3.1 Supporting the community

Engage with community, local organisations and other key stakeholders to identify, develop and leverage the strengths and passions of the community in responding to identified support needs, including for harder to reach/vulnerable people in the community.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Aged and Disability Services	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Djerring Centre reopened in July 2023 after a refurbishment was completed that included improved accessibility, storage and technology. This work was done to increase utilisation of the facility, with a number of activities booked as part of the Victorian Seniors Festival, in addition to regular programs. Support continues to be provided to the CALD senior groups and the Bent Twig Alliance.

Utilisation of the centre is increasing, current activities include regular group bookings, sessional activities, such as Comedy Connect for older people, piano sessions, drumming sessions, tai chi and intergenerational activities. The focus of changes at the Djerring Centre has resulted in greater diversity of use by the community, including with residents from Collingwood and Richmond estates being supported to use the centre.

Council has continued to support existing local senior clubs with regular contact, through workshops and advice to strengthen their governance and sustainability. 15 carers, from at risk cohorts, have been supported with free digital equipment or aids and equipment, with linking support and referrals to the Carer's Gateway as needed.

2.1.4 Work to reduce the harms associated with the use of alcohol, illicit drugs, gambling and tobacco (MPHWP)

Action Title: 2.1.4.1 Alcohol and other drugs harm minimisation

Through a program of action research, investigate and develop strategies to reduce alcohol-related and other drug harm in the community through a multi-faceted approach (e.g., education, enforcement, support, harm reduction, and responsible drinking promotion).

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Engagement with event management as part of Yarra Liquor Forum was undertaken, promoting community health safety and local law measures. Cross-organisational coordination is underway to ensure open communication channels regarding any further information for licensees over summer.

Additional funding has been received from VicHealth to undertake community training and education around alcohol harm prevention. The next Council Plan inclusive of the Municipal Public Health and Wellbeing Plan will investigate this in further detail and align with the release of additional relevant population health data.

Action Title: 2.1.4.2 Supporting the National Alliance for Gambling Reform (MPHWP)

Minimise the social and economic harms caused by gambling via the Yarra Gambling Policy, which outlines how Council works to reduce gambling through i.e., advocacy, planning controls, community education and supporting gambling-free initiatives). Our membership of the Alliance is a critical means to advance Council objectives to reduce gambling-related harm.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council continues to support education campaigns for Gambling Harm Awareness Week through a mix of partnerships, social marketing and in-person events within the municipality. Council membership was renewed with the Alliance for Gambling Reform, officers attended forums and other Alliance events.

2.1.5 Create and facilitate opportunities for culturally vibrant and socially diverse community expression

Action Title: 2.1.5.1 Promote initiatives to celebrate Yarra's cultural diversity

Host events that bring Yarra's artists, communities and generations together, provide skills- and resource-sharing opportunities, and build connections between artists and representatives from other sectors.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Libraries Arts and Events	In Progress	01-Jul-2023	30-Jun-2024	90%	100.00%	Green

Action Progress Comments: Council's Public Art Policy is currently under review to increase public and private art opportunities within public spaces and private developments/spaces.

Council's New Year's Eve family friendly event took place at Edinburgh Gardens with strong support and attendance form our local community.

Featured throughout February 2024 is Yarra's Major Festivals Program that includes Victoria's Pride, Lunar Festival and Johnston Street Fiesta. These events were successfully delivered and staged to celebrate Yarra's diverse community and vibrant precincts. Council worked closely with event organisers, local businesses and service agencies to ensure events were welcoming and safe, promoting significant visitation while balancing the impacts on each precinct.

Council's 2024 Civic Events Calendar has been finalised. It details important key events and initiatives, to ensure that Council proactively acknowledges and commemorates important events throughout the year including International Women's Day, IDAHOBIT, Remembrance Day, Reconciliation Week, NAIDOC Week and new events for upcoming anniversary dates such as the Victoria Street Gateway in 2024 and the 50th anniversary of Vietnamese migration in 2025.

During FY24, planning has been underway for the 2024 Leaps and Bounds Music Festival to be in July 2024, featuring 21 events in 18 live music venues across Yarra's live music venues and a cross section of local artists including First Nations showcases, all ages & Yarra Youth DJs shows for families and young people, seniors show and multicultural and gender diverse musicians across numerous genres. The festival supports live music venues with direct funding to develop and produce gigs, as part of the program and offers marketing to also connect and build with local audiences. The festival also features the Leaps Record Fair and outdoor broadcast with PBS at The Corner, and the annual Venue Round Table with Music Victoria to provide industry talks and enable communication with the sector to inform advocacy and support.

Action Title: 2.1.5.1 Richmond Youth Hub

Undertake a project evaluation of the Richmond Youth Hub and advocate to the State government for appropriate funding to continue activities to vulnerable young people living on the North Richmond Estate.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Family, Youth and Children's Services	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Richmond Youth Hub Evaluation Report was endorsed by Council in September 2023. The Report highlighted its short and medium-term success in creating a safe space for young people, which fosters social connection, encourages community involvement, and supports youth leadership.

Since the Richmond Youth Hub opened in March 2021, almost 170 young people have registered through Yarra Youth Services and accessed the service. In total, over 10,000 contacts have been made with Yarra Youth Services programs, activities, and individual support.

The report formed a key part of strategic advocacy for Council to secure further funding for the Richmond Youth Hub from the State Government beyond the current agreement which ends in June 2024. In May 2024, Council was advised that the State Government would fund the Hub for a further 12 months, with \$314,000 provided for FY25.

The evaluation report included 5 recommendations for the State to consider in future funding agreements. Recommendation 5, namely for Council and DFFH work collaboratively to develop a rolling formative evaluation framework which integrates into quarterly/annual reporting, is underway.

One recommendation outlined that the State review the Hub's facilities and determine the viability of relocating to a larger space. DFFH is planning to redevelop some office/community spaces on the Richmond Housing Estate and committed to providing the Hub dedicated office space and meeting room access in this new facility.

Action Title: 2.1.5.1 Sport Club development workshop

Develop and host three club development workshops across the 2023/24 financial year, specifically designed for Yarra's community sports clubs. The workshops aim to support local sports clubs to develop and improve the sustainability and capacity of their organisation, the capability of their people/volunteers and connect them with specific tools and resources to inform the direction and priority of activities and investment, as well as deliver quality, inclusive and accessible sport and recreation programs that are aligned with Yarra's Sports Ground and Facilities Allocations Policy 2022.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Property and Leisure	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The first workshop was successfully undertaken with Yarra Club. The aim of the development workshops is to assist clubs to upskill club volunteers in key focus areas, as well as satisfying the essential Sportsfields and Facilities Allocation Policy criteria.

The workshop focused on recent changes made to the Fair Play Code (an update of the 2018 blueprint) that sets out the standards of behaviour expected of everyone involved in sport and active recreation. These changes to the Fair Play Code have been made to support greater national consistency, reflecting the National Principles for a Child Safe Organisation developed following the Royal Commission into Institutional Responses to Child Sexual Abuse.

The workshops were well attending by Yarra's Sporting Clubs. In addition to attending the grant writing workshops, we have had a large number of clubs apply for Yarra Community Grant Funding with 18 being awarded funding.

Feedback from the workshops has ascertained that workshops were beneficial to club committee members.

Action Title: 2.1.5.1 Access for all and community connections

Access for all, Council's Library Strategic Plan 2022-2026 outlines the direction for library services over 4 years. Library services will support our community to access spaces and services, build skills and knowledge, connect and discover learning opportunities that enables our community to thrive. Our goal is to ensure access for all by reducing barriers for our community.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Libraries Arts and Events	In Progress	01-Jul-2023	30-Jun-2024	62%	100.00%	Red

Action Progress Comments: The Learning Bank is a new community space located in Victoria Street, Richmond, for residents and businesses to connect, create and learn. Development meetings are occurring between Council teams to scope new initiatives and opportunities for the libraries outreach program to deliver workshops that benefit the local neighbourhood in and around the Learning Bank, following from the library outreach stall at this year's Lunar Festival in Victoria Street, a community workshop was held in June 2024 at the Learning Bank with a focus on financial literacy and taxation. The libraries outreach program provides a pop-up library with LOTE material available for borrowing, and staff engaged to speak with community and encourage new memberships. Further opportunities to deliver outreach programs in North Richmond are currently being scoped.

The Yarra Library Policy, which directs service access, usage and memberships to ensure at risk community members are accessing our libraries has been updated.

Work for Council Libraries to achieve SCOPE accreditation, which improves accessible communication for people with disabilities, has been rescheduled for FY25 to allow library staff to receive the training required for accreditation.

2.1.6 Leverage significant developments and advocate for increased access to public, social and affordable housing stock

Action Title: 2.1.6.1 Strategic activities to advance the Yarra Homelessness Strategy

Work to deliver an enhanced coordinated and compassionate crisis response to people experiencing homelessness and connecting with secure housing working with local partners, particularly Launch and cohealth.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Yarra Zero is a collective impact initiative with key partner agencies that is part of the Melbourne Zero project. It addresses issues of homelessness in Yarra. Backbone project governance was established in June 2023 and the project is now well underway, having been publicly launched on 11 October 2023. Ongoing data collection enables monitoring and analysis of progress in reducing homelessness and its impacts in the municipality, monthly progress reports are incorporated in the Yarra Zero initiative reporting and through the Melbourne Zero website.

By the end of June 2024, the Yarra Zero partners had identified a total of 90 individuals rough sleeping in Yarra. There are 50 people currently active on the by name list (of which 19 are in various forms of temporary accommodation and 31 are sleeping rough). Since the project commenced, 10 people have been made inactive through a loss of contact, and 30 people have been placed in permanent housing, which is a third of the people experiencing homelessness who have come through the project.

3 Local economy

3.1.1 Support Yarra's employment precincts and drive economic development opportunities

Action Title: 3.1.1.1 Precinct Activation Program

The Economic Development unit will work with trader groups and associations to co-design and deliver 4 projects/campaigns within Yarra's retail and services precincts. The purpose is to create awareness, drive visitation, increase spend and revitalise our main streets.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	In Progress	01-Jul-2023	30-Jun-2024	91%	100.00%	Green

Action Progress Comments: Funding for the 'Vic St East' trader's activation program has been provided to the Head On agency, they are currently developing a new brand for the local area.

Officers are currently identifying which businesses in Brunswick Street are keen to participate in an activation program, to date traders have expressed a range of wants and needs. A trader meeting with police is planned for early 2024 address local concerns and provide ideas for at least one Brunswick Street activation.

The Everyday Nicholson campaign on Nicholson Street North Fitzroy was a huge success, with 8 new business being added. The installation of a 30m banner on the fence of the Kinetic bus shelter has elevated the look of the precinct and the Trick or Treat trail attracted over 1000 people to it. Council continues to work with our partner agency to ensure the ongoing promotion of the precinct.

The 'Greening Gertrude St' project, funded via Department of Jobs Skills Industry and Regions and business contributions, has seen the roll out of planter boxes, hanging baskets and upgrading of some planter beds.

Action Title: 3.1.1.2 Night Time Economy Action Plan

The economic benefit of Night Time Economy to the city is largely unknown, so a gap analysis is required to be carried out, which can then lead to a short term action plan, followed by a draft Night Time Economy strategy.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Deferred	01-Jul-2023	30-Jun-2024			

Action Progress Comments: Night Time Economy Action Plan is now proposed to be developed in collaboration with members of the M9. An initial background research piece is being delivered in late July 24 and scope of the joint project will be delivered and agreed in Q1 of 24/25. This will form a new action in the 2024/25 Annual Plan.

3.1.2 Revitalise local retail, arts and culture and night-time economy to enhance Yarra as an economic destination and extend our reach through partnerships and advocacy

Action Title: 3.1.2.1 Promote arts and culture within Yarra

Ensure the integration of Arts and Culture into Yarra's built form and public realm design.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Libraries Arts and Events	In Progress	01-Jul-2023	30-Jun-2024	66%	100.00%	Red

Action Progress Comments: Installation of artwork at the Chas Farquhar Complex by Rebecca Atkinson was completed. The new works are called Queep Queep ('birds' in Woi-Wurrung language), and include a mural artwork and powder coated aluminium wall sculptures.

Close Knit by William Eicholtz was installed at the Cambridge Street Reserve in 2023.

Kamilaroi/Gamilaraay/Gummaroi artist Reko Rennie was engaged to install patterned paving the text "Wurundjeri Bik. Always was, always will be" into the new Otter Street Reserve in February 2024.

The delivery of the integrated public art works as part of the Edinburgh Gardens Sports facility upgrade (Brunswick Street Oval) and Alphington Bowls Club, Yambla Pavilion have been delayed due to delays in the capital works program. The artworks will be delivered in line with the project developments across 2024/25 and 2025/26 budgets.

Action Title: 3.1.2.2 Enable opportunities in the planning development process for spaces for artists to work to enhance the arts sector and everyday creative experiences

Facilitate and encourage landowners and planning permit applicants to provide affordable spaces for creatives in support of Council's Room to Create scheme.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Libraries Arts and Events	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Building works for the Wellington and Vine Arts and Craft space have been complete and the space activated. An Expression of Interest on occupants for the space was undertaken. Delays were experienced in finalising the tenancy due to legal matters relating to licensing which are being worked through.

3.1.5 Manage access, safety and amenity to enhance people's experience when visiting Yarra (MPHWP)

Action Title: 3.1.5.1 Joined-up response to promote local safety and wellbeing

Promote community safety through interagency partnerships including the Local Safety Reference Group, Yarra Liquor Forum, and supporting initiatives with VicPol, Department of Justice and Community Safety, Department of Families, Fairness and Housing, Department of Housing and agencies commissioned locally to promote health and wellbeing.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Policy and Partnerships team undertakes ongoing meetings with the Alcohol and Other Drugs (AOD) Outreach and Community Engagement Service at North Richmond Community Health, a specialised outreach team for the North Richmond area. Informational materials are being updated to promote the outreach team's contact details to the community. This outreach team also participates in Yarra Zero and is linked in through the project with other local health and safety community service providers.

Post-Medical Safe Injecting Room recommissioning (i.e., the ongoing licensing of the facility to the consortia of NRCH, St Vincent's and Your Health), the service and the Alcohol and Other Drugs (AOD) Outreach and Community Engagement Service are being restructured, with the initial pilot of the trauma-informed outreach concluding its first 12 months of funding. Regular meetings between officers and the team continue, and outreach team representatives have continued to participate in Yarra Zero throughout this process.

Action Title: 3.1.5.1 Joined-up response to promote local safety and wellbeing

Promote community safety through interagency partnerships including the Local Safety Reference Group, Yarra Liquor Forum, and supporting initiatives with VicPol, Department of Justice and Community Safety, Department of Families, Fairness and Housing, Department of Housing and agencies commissioned locally to promote health and wellbeing.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Equity and Community Development	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Since the outreach team was established, oracles regarding issues in the precinct have noticeably declined, indicating the importance of this work. The outreach team continues to be a critical partner in addressing safety and amenity issues in North Richmond and providing a pathway through Yarra Zero for outreach clients to secure appropriate housing outcomes and access to other support services.

Through the IDC, the CEO requested that the Victorian Government resource holistic community safety investigations beyond the estates and into the broader public realm. This advocacy has resulted in Victoria Police committing to undertaking a CPTED in the North Richmond Precinct in the new financial year. This will complement existing work by DFFH, VicPol, and consultants, who have already completed a robust Crime Prevention Through Environmental Design (CPTED) of the estate common areas and delivered multiple remediations. This work was thorough, logical, and defensible, leading to direct investment in numerous practical safety interventions by DFFH.

Officers from the Policy and Partnerships and Waste Management teams have also been collaborating closely with DFFH, Homes Victoria and NRCH to manage waste management and rubbish dumping issues across multiple estates in Yarra, including the North Richmond estate and Solly Avenue in North Carlton. With improved amenity, safety will also improve. Success has already been realised at sites in North Richmond near the estate through collective impact measures.

In addition to the above, the Local Safety Reference Group continues to meet quarterly, bringing together stakeholders from various areas of the organisation, including DFFH, the NJC, NRCH, and Victoria Police. The Yarra Liquor Forum also meets quarterly and includes licensed premises operators, Victoria Police, Liquor Control Victoria, and representatives of Council (e.g., Policy and Partnerships, Local Laws, Economic Development, Festivals and Events, etc.), who come together to discuss matters of policy, regulation, enforcement and consider strategies to promote safe and inclusive venues locally. The December meeting included a discussion on New Year's Eve (i.e., regulated trading, the local law and blanket ban on public liquor consumption, and police operations) and a presentation from Midsumma Festival Inc. on the event planning for 2024 and licensing conditions.

In the first half of 2024, Yarra Zero also established a Hot Spots group, comprising Launch Housing, Yarra Council (Compliance and Policy and Partnerships representatives) and Victoria Police, to address safety and amenity issues associated with rough sleeping sites in the municipality. The Hot Spots group meets monthly and as needed.

4 Place and nature

4.1.1 Create safe, accessible active spaces that provide diverse physical activity opportunities for the whole community (MPHWP)

Action Title: 4.1.1.1 Opportunities for new and expanded open space in Yarra

Construction of Otter Street new pocket park and expansion of Cambridge Street Park by converting road space into park to increase open space provision in Collingwood.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Cambridge Street Park extension works were completed, and the park reopened in November 2023.

Construction of the new Otter Street Park commenced in July 2023 and was completed in December, the new park was officially opened in February 2024.

Action Title: 4.1.1.2 Opportunities for new open space in Yarra

Roads to Parks programme to increase open space in areas identified as deficient in the Open Space Strategy.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: A range of sites have been identified and feasibility studies well underway. 3 sites identified for way forward for further studies and draft functional design.

Feasibility studies completed and new opportunities to convert road space into open space identified including the temporary closure of Charlotte Street with a pop-up park to undertake a genuine traffic diversion experiment.

Action Title: 4.1.1.3 Gipps Street Employment Precinct Local Area Plan

Preliminary investigation into the Gipps Street Employment Area.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Deferred	01-Jul-2023	30-Jun-2024	100%	100.00%	

Action Progress Comments: Officers have commenced preliminary work and planning to move these actions into 2024/25 Annual plan.

Action Title: 4.1.1.4 LGBTIQA+ Cultural Heritage

Preliminary investigation into the Gipps Street Employment Area.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	In Progress	01-Jul-2023	30-Jun-2024	95%	100.00%	

Action Progress Comments: The LGBTIQA+ Heritage Study reports (for Part 1 and Part 2 of the study) have been completed. Detailed assessments were carried out for 13 individual places and 5 precincts to incorporate LGBTIQA+ heritage values. Citations/statements of significance for these places and precincts have been prepared based on the assessments.

A Council report on the LGBTIQA+ study is scheduled to be presented to Council Briefing in August 2024. Subsequently it will be presented at the Council Meeting in September 2024 for adoption.

Action Title: 4.1.1.5 Charlotte Street New Public Space

Continue to consult and prepare designs to convert road space in Charlotte Street into public open space.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	

Action Progress Comments: The draft concept design for the Charlotte Street new public space was placed on public exhibition on Council's website. A report on the consultation findings, and revised concept design works were completed and posted on Council's web site in November 2023. A final design has been approved by Council.

A temporary trial of a road closure in Charlotte Street Richmond for a permanent park and traffic study commenced.

4.1.2 Plan and manage community infrastructure that responds to growth and changing needs

Action Title: 4.1.2.1 Permeable pavement study

Commence a study into the optimised use of permeable pavement in partnership with the University of Melbourne and the Australian Research Council.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Infrastructure Traffic and Civil Engineering	In Progress	01-Jul-2023	30-Jun-2024	100%	100.00%	

Action Progress Comments: Council and memorandum of understanding representatives conducted a workshop to define the key deliverables of this research project.

Following on from the workshop the MOU was signed by all involved. The MOU will ensure that Council receives high quality deliverables.

Locations assessment and identification process is completed and works undertaken in Rutland and Ramsden Streets in Clifton Hill with further site scheduled for next financial year.

Action Title: 4.1.2.1 Brunswick Street Oval precinct redevelopment

This project will redevelop the sporting and community facilities in the immediate vicinity of the Brunswick Street Oval (WT Peterson Community Oval) within Edinburgh Gardens, North Fitzroy, along with improvements to the landscaping and civil infrastructure in the area.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Building and Asset Management	In Progress	01-Jul-2023	30-Jun-2024	66%	100.00%	Red

Action Progress Comments: Tenders for the project were received and evaluated. Unfortunately, the prices tendered significantly exceeded the budget available for the project, meaning a construction contract was unable to be awarded.

An architectural consultancy was appointed to explore options for rescoping the project and has developed a revised concept plan that can be delivered within the available budget whilst meeting the key project objectives.

Three different options have been developed in draft form and shared at a design workshop with sporting club stakeholders and the funding partner. Feedback received from this workshop is being used to finalise the design options and a recommended design.

Action Title: 4.1.2.1 Cremorne implementation

Continue work to implement built form controls for Cremorne and implement the Cremorne Implementation Plan.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	In Progress	01-Jul-2023	30-Jun-2024	50%	100.00%	Red

Action Progress Comments: A Council report on the revised Cremorne Urban Design Framework; and interim and permanent Design and Development Overlays. was presented to Council in September 2023. Council's request to apply interim built form provisions and exhibit permanent planning provisions has been lodged with the Department of Transport and Planning, Council is awaiting authorisation from the Department to proceed. In the interim consultation material to support the public exhibition of the amendment is being prepared.

Officers contacted the Department of Jobs, Skills, Industry and Regions to clarify the status of the Cremorne Place implementation Plan group and encourage the State Government to reconvene the group.

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Action Title: 4.1.2.2 C286 Open Space Contribution Rate

Continue to pursue Open Space Contribution Rate changes.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: A workshop on the Open Space Contribution Rate peer review was held with Councillors. Two Council reports to progress the amendment and request the Planning Panel Review process be reconvened were presented to Council in August and September 2023.

Final Panel Report received by Council in March and was presented to Council and adopted in April 2024. The adopted amendment was sent to the Minister for Planning for approval.

Officers have regularly liaised with Department of Transport and Planning officers on the status of the amendment. The Mayor has written to the Minister for Planning to urge progress on all Yarra's planning scheme amendments, including Amendment C286.

Action Title: 4.1.2.3 Permanent built form provisions

Continue work to implement permanent Built form controls.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	In Progress	01-Jul-2023	30-Jun-2024	35%	100.00%	Red

Action Progress Comments: The following Planning Scheme Amendments are with the Minister for Planning to action:

The C273 Heidelberg Road amendment exhibition period closed with 119 submissions received. Officers have analysed submissions and reported to Council in December 2023 with a recommendation to progress the amendment to the Yarra Activity Centre Standing Committee. Awaiting response from the Minister for Planning and Planning Panels Victoria on Council's requests to refer the amendment to the Standing Advisory Committee. Preparations for the hearings has commenced with preliminary dates set for April.

Council submitted Amendment C271 Fitzroy-Collingwood to the Minister seeking permission to place it on exhibition in December 2023. Council is waiting on consent from State Government to place amendment on public exhibition. All the preparatory work for the exhibition has been completed.

Amendments C291 and C293 which propose to apply permanent built form provisions to Bridge Road and Victoria Street, Richmond and the Collingwood South Mixed-Use Precinct are awaiting approval by the Minister for Planning.

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4.1.3 Protect and enhance the biodiversity values, connectivity and resilience of Yarra's natural environment

Action Title: 4.1.3.1 Direct Seeding and Cultural Burning

Adopt innovative integrated bushland management approaches to achieve cost effective and efficient bushland management and site-specific targets in partnership with Yarra's Bushland Contractor and Wurrundjeri Woi Wurrung Narrap Team.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council's liaison with Narrap Fire lead has commenced and site preparation is underway to deliver an ecological cultural burn in the endangered Plains Grassy Woodland EVC in Burnley Park. A pre-burn habitat hectare assessment has been undertaken by ecological consultant.

Site preparation completed for the 1000m² direct seeding of parkland adjacent to the Merri Creek, to reinstate endangered Plain Grassy Woodland and Escarpment Shrubland.

Action Title: 4.1.3.2 Education and awareness program

Deliver Yarra's community based education, awareness, and nature engagement program as outlined in the Yarra Nature Strategy Action Plan 2020-2024.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: As part of the 2024 National Tree Day staff from across the organisation planted 5000 local indigenous species.

Action Title: 4.1.3.3 Yarra citizen's science program

Encourage Yarra's community to further appreciate and actively enhance Yarra's natural landscape by offering engagement and education opportunities.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The 2023/24 Bringing Nature Back (BNB) to Yarra Initiative is complete. BNB Initiative aims to restoring ecosystems to help mitigate the impacts of climate and to heal country by reducing bushland fragmentation and improving habitat connectivity, BNB is critical to delivering Yarra's commitment to managing and protecting the Birrarung, its parkland and tributaries as one living and integrated natural entity. Burndap Birrarung burndap umarkoo – What's good for the Yarra, is good for all!

Action Title: 4.1.3.4 Greening Yarra

Reduce the urban heat island effect, enhance amenity, improve wildlife corridor connections and overall biodiversity values across the community through the planting of trees, shrubs and grasses, and increasing canopy cover.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Works	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Planning for additional street tree locations to accelerate the annual street tree planting programme commenced in July 2023.

Winter/Spring planting in progress to date 89,900 local indigenous tube stock have been planted as part of the program to aiming at planting a minimum of 10,000 locally indigenous plant species to improve habitat hectare condition score and reinstate endangered Ecological Vegetation Classes (EVC) including Swan street Reserve, Quarries Park, Merri Merri wildlife corridor, BGC, Hall Reserve, Merri Creek Labyrinth, Mark Reserve and Rushall Reserve within Yarra's bushland areas and consolidate and reinstate areas of strategic biodiversity value by increasing indigenous vegetation extent within Open Space by 5000m².

825 advanced local native trees will be planted in June 2024 as a part of Bringing Nature Back to Yarra Initiative.

A feasibility study of street tree locations and species selection has been completed as part of our accelerated tree planting program and infill planting program, confirmation of locations is currently in progress.

4.1.4 Protect, promote and maintain our unique heritage and ensure development is sustainable

Action Title: 4.1.4.1 Special Building Overlay update

Review provisions within the Yarra Planning Scheme as they relate the Special Building Overlay in Yarra.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
City Strategy	In Progress	01-Jul-2023	30-Jun-2024	34%	100.00%	🛑 Red

Action Progress Comments: 'Keeping Yarra Flood Resilient' community engagement was conducted from July to August 2023 to understand the community's lived experiences of flooding and to promote flood resilience. The program aimed to inform the community of the Council's current actions and objectives, as well as the terminology and issues related to flooding events. The City of Yarra faces higher risks of flooding due to its inner-city location, which limits the ground absorption of water and the overland flow of stormwater.

5 Transport and movement

5.1.1 Lead, promote and facilitate the transition to sustainable and active transport modes for people living and working in Yarra, as well as people moving through Yarra (MPHWP)

Action Title: 5.1.1.1 Transport Action Plan

Continue to develop actions that support the implementation of the Yarra Transport Strategy, including, finalise the Transport Action Plan, commence development of a parking strategy and design and construct new and upgraded walking and cycling infrastructure on key transport corridors.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Strategic Transport	In Progress	01-Jul-2023	30-Jun-2024	98%	100.00%	Green

Action Progress Comments: Community engagement was undertaken for both the Draft Transport Action Plan, the engagement also provided input to inform the scope for the Parking Strategy.

The Transport Action Plan was adopted by Council on March 2024.

An RFQ has been developed and issued to commence development of the new Parking Strategy.

Action Title: 5.1.1.2 Transport New Deal implementation

Council will implement the three New Deal programs outlined in the Yarra Transport Strategy, New Deal for Cycling: design and construct new and upgraded cycling infrastructure in priority locations, New Deal for Walking: develop clear processes for implementing the outcomes of the Yarra Transport Strategy and continue to deliver safer walking infrastructure, such as pedestrian improvements in Cremorne and New Deal for Schools: commence the first round of the New Deal for Schools program to encourage and enable active travel.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Strategic Transport	In Progress	01-Jul-2023	30-Jun-2024	70%	100.00%	Red

Action Progress Comments: A detailed New Deal for Walking operational process will be informed by strategic study work scheduled in the Transport Action Plan for next financial year that will tie in with the parking management and kerbside strategy. Several walking projects have been delivered or are underway, these include the 30km/h speed limit trial expansion, shared zones an upgraded crossing at Clifton Hill Interchange and the delivered raised Cremorne Street crossing with flashing lights.

A number of walking projects are underway and at different stages of the delivery process. Formal commencement of a New Deal Walking process which is a significant undertaking is not scheduled for delivery this year in the Transport Action Plan (TAP) or detailed team plan and cannot be resourced noting other projects have been given priority status such as e-scooters, Wellington Street bike lanes, parking strategy, tram stop corridor study and the TAP. Recent changes to capital delivery processes and streets typology work lead by urban design and currently underway would also need to be considered. In summary a number of projects are underway regarding walking, and more are scheduled.

A list of 'shovel ready' projects have been prepared and discussed with the relevant delivery teams. This has formed the basis of inputs into the 2024-25 Council Budget.

It will not be possible to deliver the full New Deal for Schools program in year 1, instead a 'light' rollout will commence at Alphington School in partnership with the Road Safety Study done by the traffic team using a contractor as an interim measure.

5.1.2 Foster strategic partnerships and advocate to improve sustainable and active transport options, integration and accessibility

Action Title: 5.1.2.1 Transport advocacy

Advocate to other stakeholders, including the State Government, for priority transport needs identified in the Yarra Transport Strategy by raising awareness of these and being proactive in identifying solutions, including:

- Accessible tram stop upgrades across all of Yarra's network, including Smith Street, Gertrude Street, Swan Street and Bridge Road
- Increased bus, tram and rail services and reliability to support current and future needs
- Funding and/or delivery of active transport infrastructure in priority locations, such as strategic cycling corridors and areas with high pedestrian activity

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Strategic Transport	In Progress	01-Jul-2023	30-Jun-2024	92%	100.00%	Green

Action Progress Comments: Notifications have been issued to internal and external stakeholders of the Transport Action Plan.

Council continues to assess and apply for relevant external grant funding to assist with delivering active transport projects. Conversations have taken place with State Government to encourage them to fund the new deal for cycling and walking projects. These are continuing.

Council has lodged bids for multiple grants under the federal blackspot program as part of our road safety studies.

Multiple meetings have occurred with the State Government to discuss priority tram stops and promote tram stop upgrades on route 86.

Advocacy on the Transport Action Plan is continuing.

Action Title: 5.1.2.2 Transition to Zero-Emission Transport

Encourage, facilitate and advocate for policies and projects that result in an increased use of electric and other zero-emission modes of transport in Yarra, including:

- Accelerated use of electric and other zero-emission vehicles on bus routes.
- Increased replacement of internal combustion engines with electric and other zero-emission means of propulsion in cars.
- Increased adoption and use of electric bicycles, including for 'last kilometre' freight and local business use.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Strategic Transport	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Officers have provided inputs to the M9 group of Council's and Inner Metro Partnership, advocating for State and Federal Government to show leadership on the uptake and development of all types of electric vehicles. Recent announcements by State Government suggest that action on e-vehicles is now ramping up.

A consultant brief has been prepared to look at the role of Yarra in accelerating the rollout of electric vehicle charging points in Yarra and to forecast e-car charger demand over the next 10 years. The Transport Action Plan also covers e-car chargers and feedback from that consultation will be an input and agreement on next steps. The work done to date has shown that finding sites for chargers on public land at least in Yarra is not easy when all practical factors are considered.

5.1.3 Create a safe, well-connected and accessible local transport network including pedestrian and bike routes through Yarra (MPHWP)

Action Title: 5.1.3.1 Fitzroy and Collingwood 30km/hr pre-trial study

Undertake a pre-trial study to investigate the feasibility of expanding the current 30km/hr speed limit trial to cover the entire suburbs of Fitzroy and Collingwood.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Infrastructure Traffic and Civil Engineering	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: 30km/hr pre-trial study was completed, and a report brought to Council in November 2023 that recommended implementing the 30km/hr Trial Extension which was unanimously supported by Council subject to DTP approval.

In April 2024 we received formal approval from Department of Transport and Planning approving the 30km/hr Trial Extension, which is scheduled to be implemented in May 2024.

Officers have agreed with stakeholders that the 30km/hr trial should initially begin with a soft touch approach with existing signs and line marking to be replaced with 30km/hr signs and line marking. An infrastructure plan based on this has been completed and submitted to the Department of Transport and Planning for review.

There has been ongoing engagement with stakeholders since mid-2022. A community sentiment survey of 6000 randomly selected properties (including households and businesses) took place in August and September 2023. The surveys show between 59%-68% support for 30km/hr speeds. on the street the respondents live on. The results of the survey and the findings of the wider pre-trial study were presented to Council in November 2023. The report can be viewed on Council's website.

6 Democracy and governance

6.1.1 Provide opportunities for meaningful, informed and representative community engagement to inform Council's decision-making

Action Title: 6.1.1.1 Councillor engagement program

Develop and promote Council's enhanced engagement program to provide more opportunities for the community to engage with Councillors.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Strategic Communications and Engagement	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: The Councillor Engagement Program was launched in February 2023 and activities have been scheduled every month until November. The program responds to requests for more in-person community engagement activities.

In the last quarter we have held the following in person engagement activities for councillors

- Dinner event with health agencies which brought together Councillors, Community Health Organisations, local GPs, the local Public Health Unit and the local Primary Health Network to discuss what is happening locally regarding primary health care, what actions are being taken to address issues and what is needed for future advocacy
- Yarra Conversations: 'Zeroing in on homelessness' Dinner for Homelessness Week, including local stakeholders and guest speakers was held in August
- ► Ward listening posts were held across the three wards in September
- ► Four Meet the Mayor sessions will held in Carlton, Alphington, North Fitzroy and Fitzroy this quarter
- Three Councillor Conversations with Community events were held this quarter in Abbotsford, Fitzroy North and Alphington.

An evaluation of the program from February to July this year was also undertaken this quarter which provided important insights into what is working and also identified some areas for improvement. This report was presented to a Councillor Briefing in September.

6.1.2 Manage our finances responsibly and improve long-term financial management planning

Action Title: 6.1.2.1 Financial Sustainability Strategy

Develop and begin implementation of the Financial Sustainability Strategy.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Chief Financial Officer	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council adopted the Financial Sustainability Strategy in December 2023 after extensive internal and community consultation. It includes strategic levers on revenue generation and cost efficiencies. Implementation of the Financial Sustainability Strategy has started and the budget guidelines for 2024/25 were developed and assisted staff in the development of the budget towards the key objectives of the Financial Sustainability Strategy.

6.1.3 Maximise value for our community through efficient service delivery, innovation, strategic partnerships and advocacy

Action Title: 6.1.3.1 Service Review Program

Develop and implement the service review and improvement program for identified Council services.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Business Transformation	In Progress	01-Jul-2023	30-Jun-2024	98%	100.00%	Green

Action Progress Comments: Council has endorsed the engagement plan which includes a two-stage community engagement process. Stage one of engagement which included social research and Your Say Yarra is complete. Stage two Deliberative Engagement was completed in March 2024.

Support is being provided to a number of existing service review projects. Aged Care Service Review is now completed, and recommendation adopted at the March Council Meeting. A number of internal service reviews are completed, and more are underway.

Analysis and planning for a council wide service review framework and service catalogue has been completed and will be used to plan services and identify opportunities for review. Benchmarking and analysing all services to identify best 4 for service review is currently underway.

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Action Title: 6.1.3.1 Digital Agenda

Deliver a series of digital projects to transition Yarra technology into a contemporary future state and enhance employee and customer experience.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Chief Information Officer	In Progress	01-Jul-2023	30-Jun-2024	98%	100.00%	Green

Action Progress Comments: Alignment with ERP Program: Ensuring the alignment of our data governance development with the ERP program remains a key focus. This alignment ensures the accurate assignment of roles and responsibilities for individuals involved in data collection and management. Furthermore, it guarantees the attainment of high data quality as we transition the council's critical data from legacy systems to the new ERP system.

Due Diligence Checklist: As part of our data and information governance procedure, we have successfully developed a comprehensive due diligence checklist. This checklist serves to verify the data sovereignty of applications and third-party systems that hold the council's data. Its implementation enhances our ability to safeguard sensitive information and maintain compliance with data regulations. It is actively using when any third-party system is going to be procured for the council to ensure it's aligned with data security and privacy compliance. livery has been appointed to drive the implementation of the strategy and action plan through well-defined project briefs. Organisational changes to support the plan are set to be delivered in the 2024/25 financial year.

The ERP procurement process has progressed to the final approval stage of the tender approach, with a presentation scheduled for the August 2024 council meeting. Implementation of the ERP is scheduled to commence in the 2024/25 financial year.

6.1.4 Practice good governance, transparency and accountable planning and decision-making

Action Title: 6.1.4.1 Website strategy and redevelopment of the Council website.

Develop and implement a website strategy and redevelop the Council website, with a focus on accessibility and ease of finding information, to increase community awareness and encourage broader participation in decision making.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Digital Communications and Marketing	In Progress	01-Jul-2023	30-Jun-2024	94%	100.00%	Green

Action Progress Comments: Development of the website strategy to guide the development of the new website and future improvements has been completed.

Website content rewrite is in progress and will be completed in May. Launch of new site is currently on-track for June.

Action Title: 6.1.4.1 Electoral representation review

The City of Yarra will actively engage in the Electoral Representation Review to be conducted by the Victorian Electoral Commission in preparation for the 2024 Council election. We will make a submission to the process on behalf of the Council and advocate for a system that provides for representation that reflects Yarra's diverse community. We will encourage and support the community to make their own direct submissions to the review.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Governance and Integrity	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Council undertook a publicity campaign to encourage members of the community to make submissions to the Victorian Electoral Commission in relation to the electoral representation review. The campaign included social media, newspaper advertisements and SMS messages to approximately 40,000 voters in Yarra.

A formal submission was endorsed by Council on 18 July 2023 and submitted to the Minister on 20 July 2023. The final report was released, and a determination gazetted by the Minister for Local Government on 15 February 2024. From the next election, Council will consist of nine Councillors in nine wards, with boundaries varying only slightly from the Panel's preliminary report. The Panel and Minister agreed to Council's request not to name the wards according to suburb boundaries and determined a new set of ward names.

6.1.5 Progress and embed our culture of organisational continuous improvement and build resilience to adapt to changing requirements in the future

Action Title: 6.1.5.1 CX Program 2022-2024

Implement the CX Strategy's program of initiatives to realise and deliver the best service value for Yarra's customers, community, and internal teams. This is delivered through four strategic objectives Mindset | Systems Discipline | Collaboration | Empathy. This year Council will deliver service experience improvements with the official launch of additional digital channels, a relaunch of the CX program internally, establishment of a CX Centre of Excellence and creation of a Customer Service Charter.

Responsible Person	Status	Start Date	End Date	% Complete	Target	On Target %
Customer Experience	Completed	01-Jul-2023	30-Jun-2024	100%	100.00%	Green

Action Progress Comments: Promotion of digital customer service options and channels is progressing with engagement of the Communications Team. The online promotion will be completed by end of year.

The CX working group has been re-established, research and benchmarking have been completed and a draft Customer Service Charter developed, Ongoing work is taking place with the working group to implement the program organisation wide.



Yarra City Council

PO Box 168, Richmond, VIC 3121 9205 5555 info@yarracity.vic.gov.au yarracity.vic.gov.au

Customer service centres

Richmond Town Hall 333 Bridge Road, Richmond

Collingwood Town Hall 140 Hoddle Street, Abbotsford

7.4 Governance Report - August 2024

Reference	D24/147862
Author	Phil De Losa - Manager Governance and Integrity
Authoriser	General Manager Governance, Communications and Customer Experience
Disclosure	The authoriser, having made enquiries with members of staff involved in the preparation of this report, asserts that they are not aware of any general or material conflicts of interest in relation to the matters presented.

Purpose

1. The Governance Report is prepared as a periodic report to Council which provides a single reporting platform for a range of statutory compliance, transparency and governance related matters.

Critical analysis

History and background

- 2. To ensure compliance with the Local Government Act 2020 and in accordance with best practice and good governance principles, transparency and accountability, this standing report consolidates a range of governance and administrative matters.
- 3. Matters covered in this report are:
 - (a) Outcomes of the 2024 Australian Local Governance Association National General Assembly; and
 - (b) Outcomes of the independent operational review of the Burnley Golf Course project conducted by KPMG;
 - (c) Determination of Mayor, Deputy Mayor & Councillor allowances;
 - (d) Legislative Changes Stage Two Consultation Model Councillor Code of Conduct and Councillor Training; and
 - (e) Planning Decisions Committee Meeting scheduling.

Discussion

Outcomes of the 2024 Australian Local Governance Association National General Assembly

- 4. The Australian Local Governance Association held its annual National General Assembly from 2 to 4 July 2024. The National General Assembly is an opportunity for all Australian Councils to come together to meet collectively and provides an opportunity for the furtherance of Council's interests at the national level.
- 5. Yarra submitted three motions to the National General Assembly for consideration. The outcome of the vote on these matters was:
 - (a) Carried that the Australian Government support the development of material product standards across the supply chain to improve Australia's circular economy;
 - (b) Carried that the Australian Government act on its pledge under the Coalition for High Ambition Multilevel Partnerships (CHAMP) to consult, collaborate and provide the investment for local governments to maximise climate action and increase adaptation and resilience; and
 - (c) Not considered to meet the ALGA motions criteria that the Australian Government introduce national anti-vilification laws.
- 6. The next National General Assembly will be held in June/July 2025.

Independent operational review of the Burnley Golf Course project

- 7. The CEO initiated an independent operational review of the BGC project to review the internal referral processes, quality controls for Statutory Planning and project management practices to inform improvements to future projects. The review was conducted by KPMG.
- 8. The KPMG report and management responses are provided at **Attachments 1 and 2**.
- 9. In summary, the KPMG report notes:

The following key findings have been identified throughout this report as contributing factors to the breaches noted:

- A lack of comprehensive planning due diligence undertaken throughout the project, particularly in the early phases.
- The internal referral processes used during the BGC project between the Project team and the Statutory Planning team did not follow any defined formal notification protocols such as the formalised Planning Property Enquiry report prepared for planning queries received by external parties.
- Gaps in overall project management execution and oversight, including lack of robust risk management practices.

Given the passage of time since project inception, there has been a significant change in the Council officers involved with the project, which has also contributed to inconsistent approaches in the face of a lack of documentation to evidence key decisions and processes.

10. The report further states:

Recent process and policy improvements

In the last 12 months, Council has placed a focus on improving and uplifting the approach to projects through strengthening of the project management framework applied to projects across Council.

We understand that the following key improvements to processes have been made since that time:

- Project management due diligence checklists are completed throughout the lifecycle of projects.
- Implementation of a robust tree removal practice requiring General Manager approval and reporting through to Council.
- Improvements to the internal referral processes to the Statutory Planning team. However we consider that these could be further strengthened as outlined in our findings and recommendations.
- 11. The KPMG report also makes a number of positive observations.
- 12. Media reports in relation procurement were erroneous. KPMG confirmed there were no procurement breaches in their report stating:

"...the BGC project complied with the Council's procurement policies and procedures for individual procurements. This included procurement for a number of preliminary works and the BGC redesign project procurement activities, including utilisation of relevant documentation for procurement processes such as the evaluation form utilised for assessment of applicants."

- 13. The KPMG report and management responses were reported to the Audit and Risk Committee in June. It is noted that the majority of the recommendations had already been actioned prior to the investigation as part of ongoing improvements to operational processes.
- 14. The CEO will oversee the implementation of the outcomes of the operational review.

Determination of Mayor, Deputy Mayor & Councillor allowances

- 15. On Wednesday July 3, Local Government Victoria (LGV) informed Council that the Victorian Independent Remuneration Tribunal (the Tribunal) made a Determination providing for an annual adjustment to the values of the allowances payable to Mayors, Deputy Mayors and Councillors, effective from 1 July 2024.
- 16. Mayors, Deputy Mayors and Councillors are entitled to receive an allowance in accordance with their respective positions in accordance with a Determination of the Tribunal under the Victorian Independent Remuneration Tribunal and Improving Parliamentary Standards Act 2019. The Determination applies to every Mayor, Deputy Mayor and Councillor (Council member) in all 79 Councils in Victoria.
- 17. When making a new Determination, the Tribunal must: -
 - (a) include a comprehensive review of the existing allowance categories and Councillor allowances and Mayoral allowances under the existing Determination taking into account similar allowances for elected members of local government bodies in other States and allowances for persons elected to other voluntary part-time community bodies;
 - (b) provide for the annual indexation of allowances; and
 - (c) provide for any other relevant matter that the Tribunal considers relevant.
- 18. The Tribunal has determined to increase the value of base allowances by 3.5 per cent and each Council is divided into 3 categories which determine their base allowances. These values are inclusive of the Superannuation Guarantee Contribution. The allowances for Yarra City Council as a category 3 Council is:
 - (a) Mayors: \$134,954;
 - (b) Deputy Mayors: \$67,477; and
 - (c) Councillors: \$40,769.

Legislative Changes - Stage Two Consultation - Model Councillor Code of Conduct and Councillor Training;

- 19. The new Model Councillor Code of Conduct and requirements to complete annual professional development training and mayoral training will come into operation following the council elections in October.
- 20. During the first stage of consultation there were two surveys posted on Engage Vic seeking feedback on what should and shouldn't be included in the Model Code and councillor professional development and mayoral training.
- 21. The second stage of consultation is now open. Local Government Victoria is calling on councils and individuals to provide detailed feedback on:
 - (a) the draft Model Councillor Code of Conduct;
 - (b) the draft Internal Resolution Procedure; and
 - (c) the draft training outline for Mandatory Induction Training, Mayoral Training and Professional Development Training.
- 22. Feedback is also sought on whether any additional matters should be included and whether any content should be removed or revised.
- 23. Submissions can be lodged via email at <u>lgv@ecodev.vic.gov.au</u> or online via the following site <u>Local Government Reforms 2024 | Engage Victoria</u>
- 24. The Stage Two consultation is open 6 August 4 September 2024.

Planning Committee Meeting Scheduling

- 25. There is currently one Planning Decision Committee Meeting scheduled during the Election period on 23 September. This date was adopted by Council before the election period was extended to commence at 12 noon on 17 September.
- 26. Council has previously held Planning Decisions Committee Meetings during the election period because planning decisions need to continue to be made to meet the time constraints and statutory obligations imposed on Council by the Planning & Environment Act 1987.
- 27. Failure to make these decisions would leave Council exposed to failure and costs appeals, and to not having a position on an application at an appeal.
- 28. It is therefore recommended that an additional Planning Decision Committee Meeting be scheduled in October (and the September meeting be retained), to enable Council to continue to exercise its decision-making functions under the Planning and Environment Act. It is proposed to schedule the Planning Decision Committee meeting at 7.30pm on 22 October after the Extraordinary meeting at 6.30pm.
- 29. Council's Governance rules (s 11) set out Conduct of Council meetings during the election period, which must be adhered to. These would not limit the normal agenda of a Planning Decisions Committee Meeting.
- 30. These meetings will be actively monitored by Council Governance staff to ensure they comply with Council's Governance rules, to ensure that they do not interfere with the probity of the election process and to safeguard the authority of the incoming council.

Options

31. There are no options presented in this report.

Community and stakeholder engagement

32. No community or stakeholder engagement has been undertaken in the development of this report, save the engagement with internal stakeholders necessary to compile the report content.

Policy analysis

Alignment to Community Vision and Council Plan

- 33. In its Yarra 2036 Community Vision, Council articulated an objective for a community that is *"informed and empowered to contribute to the shared governance of Yarra, (where) decision-making is through access, inclusion, consultations and advocacy."*
- 34. City of Yarra Council Plan 2021-2025 includes Strategic Objective six: 'Democracy and governance', which states that good governance is at the heart of our processes and decision-making. The plan commits Council to *"practice good governance, transparency and accountable planning and decision-making."*
- 35. The presentation of a Governance Report provides an opportunity to provide updates on key organisational matters both to the Council and the community.

Climate emergency and sustainability implications

36. There are no climate emergency or sustainability implications considered in this report.

Community and social implications

37. There are no community or social implications considered in this report.

Economic development implications

38. There are no economic development implications considered in this report.

Human rights and gender equality implications

39. There are no human rights or gender equality implications considered in this report.

Operational analysis

Financial and resource impacts

40. There are no financial or resource impacts considered in this report.

Legal Implications

41. There are no legal implications considered in this report.

Conclusion

42. This Governance Report aims to provide information for a range of statutory compliance, transparency and governance related matters.

RECOMMENDATION

- 1. That Council note the outcomes of the 2024 Australian Local Governance Association National General Assembly.
- 2. That Council note the KPMG report for Burnley Golf Course.
- 3. That Council note the Determination made by the Victorian Independent Remuneration Tribunal to adjustments to the allowances for Councillors, Mayors and Deputy Mayors.
- 4. That Council note the update regarding the Local Government Victoria Stage Two Consultation Model Councillor Code of Conduct and Councillor Training.
- 5. That Council retain the Planning Decision Committee Meeting on 23 September 2024 and schedule a Planning Decision Committee Meeting at 7.30 pm on 22 October 2024.

Attachments

- 1. Attachment 1 KPMG Report
- **2**. Attachment 2 Management Responses

КРМС

Yarra City Council

Independent External Review – Burnley Golf Course

June 2024

Final Internal Audit Report

Acknowledgement of Country

KPMG acknowledges Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia. We pay our respects to Elders past, present, and future as the Traditional Custodians of the land, water and skies of where we work.

At KPMG, our future is one where all Australians are united by a shared, honest, and complete understanding of our past, present, and future. We are committed to making this future a reality. Our story celebrates and acknowledges that the cultures, histories, rights, and voices of Aboriginal and Torres Strait Islander People are heard, understood, respected, and celebrated.

Australia's First Peoples continue to hold distinctive cultural, spiritual, physical and economical relationships with their land, water and skies. We take our obligations to the land and environments in which we operate seriously.

Guided by our purpose to 'Inspire Confidence. Empower Change', we are committed to placing truth-telling, self-determination and cultural safety at the centre of our approach. Driven by our commitment to achieving this, KPMG has implemented mandatory cultural awareness training for all staff as well as our Indigenous Peoples Policy. This sincere and sustained commitment has led to our 2021-2025 Reconciliation Action Plan being acknowledged by Reconciliation Australia as 'Elevate' – our third RAP to receive this highest level of recognition. We continually push ourselves to be more courageous in our actions particularly in advocating for the Uluru Statement from the Heart.

We look forward to making our contribution towards a new future for Aboriginal and Torres Strait Islander peoples so that they can chart a strong future for themselves, their families and communities. We believe we can achieve much more together than we can apart.



In 2013, we commissioned Gilimbaa, a certified Indigenous creative agency, to design an artwork that reflects the diversity of Aboriginal and Torres Strait Islander cultures and KPMG's commitment to reconciliation.



Important Notice

KPMG Australia (KPMG) has been engaged by the Yarra City Council (the Council) to assist with preparing an independent external review on the Burney Golf Course risk mitigation works (the Report), which has been prepared in accordance with the terms of the agreed engagement contract between KPMG and the Council dated 9 July 2024.

KPMG's engagement comprises an advisory engagement, which is not subject to any auditing, review or assurance standards issued by the Australian Auditing and Assurance Standards and consequently, any reference to 'audit' and 'review' throughout the Report is not intended to convey that the services have been conducted in accordance with any assurance standards. Accordingly, our work will not necessarily disclose all significant matters about the Council, or reveal errors, irregularities or illegal acts, if any, in the underlying information. The scope of the engagement specifically excluded the provision of legal advice and no legal advice has been provided, nor should it be inferred, within this Report.

Due to the inherent limitations of any internal control structure, it is possible that fraud, error or non-compliance with laws and regulations may occur and not be detected. Further, the internal control structure, within which the control procedures that have been subject to the procedures we performed operate, has not been reviewed in its entirety and, therefore, no opinion or view is expressed as to its effectiveness of the greater internal control structure. The procedures performed were not designed to detect all weaknesses in control procedures as they are not performed continuously throughout the period and the tests performed on the control procedures are on sample basis. Any projection of the evaluation of control procedures to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

Data and Information

The findings in this Report are based on consultations with key stakeholders, data, representations and disclosures as provided by the Council, and as available at the time of preparing this Report (collectively, **the Information**). KPMG has not sought to independently verify the accuracy of the Information in preparing the Report. Accordingly, KPMG does not make any representation or warranty as to the completeness, accuracy, reasonableness or reliability of the Information and the Council will remain solely responsible for the Information provided to KPMG in connection with the preparation of the Report. KPMG is under no obligation in any circumstance to update the Report, in either oral or written form, for events occurring after the Report has been issued in final form. Where KPMG has indicated within the Report the sources of the information provided, we have not sought to independently verify those sources unless otherwise noted within the Report. No KPMG person has assumed any responsibility for the management or direction of the Council's affairs, the sole responsibility for which remains with management of the Council.

Third Party Reliance

The Report and its contents may not, without the prior written consent of KPMG, be:

- relied on by any other person; or.
- disclosed, reproduced or made available to any other person or filed with a government or other agency or quoted or referred to in a public document, except as required by law.

Other than our responsibility to the Council, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on the Report. Accordingly, KPMG:

- owes you no duty (whether in contract or in tort or under statute or otherwise) with respect to or in connection with the Report or any part thereof; and.
- will have no liability to you for any loss or damage suffered or costs incurred by you or any other person arising out of or in connection with the provision to you of the Report or any part thereof, however the loss or damage is caused, including, but not limited to, as a result of negligence.

Any reliance placed is at that third party's sole discretion and responsibility.

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6

The purpose of this project was to conduct an independent review on the Burnley Golf Course – Risk Mitigation Works for the Yarra City Council Chief Executive Officer (CEO) which included review of internal referral processes, quality controls for Statutory Planning, and review of project management practices.

Our scope included the following areas:



Internal referral processes used to inform the approvals required for the project.

Management and quality control mechanisms used in relation to Statutory Planning advice/referrals.

-<u>2</u>

Responsiveness in relation to internal referral processes including a review of time taken by Statutory Planning to provide the secondary planning advice which indicated that a planning permit was required (February 2024 to April 2024).



Consideration of retrospective planning application process being implemented as best practice and is appropriateness for this instance.

Overall project management and oversight, including a review of any relevant documentation and briefings provided to the CEO and Council as part of the decisionmaking process, including the procurement processes for tender



Confirmation on the requirement of an Environmental Impact Assessment and Aboriginal Cultural Heritage Management Plan required for the works including compliance with the requirements of the Council's Procurement Policy and financial delegations. Background of the BGC Project

Burnley Golf Course (BGC) is a significant community asset for Yarra City Council, providing recreational services and attracting approximately 40,000 annual visits. The site contains various tree species with different maturity and conditions, with trees located throughout the golf course.

The original design of the golf course creates challenges due to the length of the course and significant boundary encroachment issues, with almost 80 separate issues identified between 2007 to 2023, including issues of golf balls being hit outside of the course boundaries and onto bordering roadways. In February 2020, these issues were escalated for resolution to Council. Community consultation and options analysis followed closely thereafter.



A detailed timeline of the events related this project can be found on page 9 of this report.

In mid 2022, Council determined that the most appropriate resolution to the issues raised was a redesign of the Burnley Golf Course. A project team was established in July 2022 which comprised members from the Recreation and Leisure Services team, including external consultants engaged. Council approved the scope of works for the BGC Risk Mitigation project in February 2023.

A number of phases of pre-work were completed and procured separately by the project team prior to the major redesign tender being put to market in June 2023. These pre-works included tree removal, demolition works, fencing, arboriculture services and irrigation works.

In the early stages of the project, advice was provided by the Statutory Planning team to the Project team that a planning permit was not required for the removal of trees on the site. In addition, no evidence has been sighted to confirm that consideration was given at the time to the requirement for an Aboriginal Cultural Heritage Management Plan, Environmental Impact Assessment/Biodiversity Impact Assessment or the provisions of the Yarra Planning Scheme.

Subsequent advice provided by the Statutory Planning team has confirmed that a planning permit was in fact required for the tree removal activity. Through undertaking works without a planning permit, Council has breached the requirements of the Yarra Planning Scheme and the *Planning and Environment Act* 1987.

Council is currently in the process of preparing a planning permit application, including the preparation of multiple specialist assessments including heritage requirements.

The BGC Risk Mitigation works are currently nearing completion, with a staged re-opening of the course anticipated from June 2024.



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ability limited by a scheme approved under Professional Standards Legislation.



Key findings

Council's delivery to date of the BGC Risk Mitigation works and undertaking tree removal works without a planning permit has resulted in a breach of the requirements of the Yarra Planning Scheme and the *Planning and Environment Act 1987*.

The following key findings have been identified throughout this report as contributing factors to the breaches noted:

- A lack of comprehensive planning due diligence undertaken throughout the project, particularly in the early phases.
- The internal referral processes used during the BGC project between the Project team and the Statutory Planning team did not follow any defined formal notification protocols such as the formalised Planning Property Enquiry report prepared for planning queries received by external parties.
- Gaps in overall project management execution and oversight, including lack of robust risk management practices.

Given the passage of time since project inception, there has been a significant change in the Council officers involved with the project, which has also contributed to inconsistent approaches in the face of a lack of documentation to evidence key decisions and processes. In addition, we note that a focus on the monetary value of the overall project (i.e. not a 'major' capital project at Council) may have resulted in a lack of appreciation of the significance of the project to the community and the risk profile of works noting the Heritage Overlays on the site.

Based on our high-level review across the BGC project, procurement policies and processes have been complied with through each individual procurement activity associated with the project. However, the individual sourcing of elements of pre-work related to the project warrants consideration as to whether a more holistic project procurement approach would have been beneficial in reviewing the project elements, risks and any internal referrals required in totality.

Council have determined that a Cultural Heritage Management Plan (CHMP) is not required in line with the results provided by the online 'Aboriginal Heritage Regulations Planning Tool', verbal advice from Department of Premier and Cabinet – First People State Relations and a report received from the external heritage consultant. We consider the steps taken by Council in relation to determining the need for a CHMP to be reasonable, however we note that these have been undertaken subsequent to the works occurring. As set out in this report, for absolute certainty, Council may wish to consider undertaking a Preliminary Aboriginal Heritage Test for this and future similar projects.

Council have also determined that an Environment (Biodiversity) Impact Assessment is not required based on internal advice that the relevant sections of the Yarra Planning Scheme do not apply. We consider this a reasonable conclusion.

Recent process and policy improvements

In the last 12 months, Council has placed a focus on improving and uplifting the approach to projects through strengthening of the project management framework applied to projects across Council. We understand that the following key improvements to processes have been made since that time:

- · Project management due diligence checklists are completed throughout the lifecycle of projects.
- Implementation of a robust tree removal practice requiring General Manager approval and reporting through to Council.
- Improvements to the internal referral processes to the Statutory Planning team. However we
 consider that these could be further strengthened as outlined in our findings and
 recommendations.

Ongoing work to obtain planning approvals

For Council to comply with the Yarra Planning Scheme and ensure compliance with the Planning and Environment Act 1987, approval of the proposed works remains a requirement. We understand that Council is currently in the process of preparing a planning permit application, including the preparation of multiple specialist assessments including heritage. The Statutory Planning team was responsive in the provision of this secondary planning advice in February 2024 to April 2024.

The full suite of documents and specialist assessments supporting the ongoing planning application have not been subject to review during this project at the time of issuing this report.



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Findings against key scope points

Internal referral processes.	As noted in our key findings, the internal referral processes used throughout the project did not follow formal protocols and were primarily conducted verbally and via email. The lack of a formalised process enabled advice to be provided that had not been peer reviewed or confirmed by a senior member of the Statutory Planning team and ultimately resulted in the incorrect advice being provided in May 2023. These findings are outlined in Finding 2 of this report.
Management and quality control in relation to Statutory Planning advice/referrals.	Consistent with the findings above and Finding 2 , the management and quality control over Statutory Planning advice and referrals was informal at the time and occurred without peer review or senior oversight of the advice being provided. In addition, and as outlined in Finding 1 , no comprehensive planning due diligence process was undertaken based on our review of project information provided including consideration of applicable policies and permit applications requirements associated with the proposed works and tree removal.
Responsiveness in relation to internal referral processes in early 2024.	The Statutory Planning team provided timely advice in February 2024 in relation to questions raised at the February 2024 Council Meeting and subsequently by the project team related to tree removal during the project. Final advice regarding both the tree removal and the full project was provided and finalised in April 2024 by the Statutory Planning team. Whilst this advice was timely, it did not follow a comprehensive planning due diligence assessment process as outlined in Finding 1 of this report.
Retrospective planning application process.	We understand that Council is currently in the process of preparing a planning permit application, including the preparation of multiple specialist assessments including heritage. This planning application process should have been undertaken at the appropriate time at the commencement of the project and prior to any works occurring, however we note that remedial steps are now being taken.
Overall project management and oversight.	Our findings highlight various gaps in overall project management and oversight, which have been further exacerbated by the changes in Council officers working on the project throughout its duration. These are outlined in full in Finding 3 .
Requirement for a CHMP and Environmental Impact Assessment. Procurement compliance.	In relation to the requirement for a CHMP, Council have recently sought advice through various channels including the online 'Aboriginal Heritage Regulations Planning Tool', verbal advice from Department of Premier and Cabinet – First People State Relations and a written report from an external heritage consultant. These sources have concluded that there is no requirement for a mandatory CHMP in relation to the works. We consider the steps taken by Council in relation to determining the need for a CHMP to be reasonable, however we note that these have been undertaken subsequent to the works occurring. Council have also determined that an Environment (Biodiversity) Impact Assessment is not required based on internal advice that the relevant sections of the Yarra Planning Scheme do not apply. We consider this a reasonable conclusion.
	Based on our high-level review, Council's procurement guidelines, policies and processes were complied with throughout the project.
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Community Engagement	Communication with the community was planned prior to the commencement of Risk Mitigation Works. This included community consultation conducted at the onset of risk identification. Ongoing efforts have been made to communicate with the community throughout the tenure of the project. The Council's website prominently displays information regarding the upcoming changes throughout the project.
Vision and Commitment	The identification of risks associated with the BGC and consideration of a mitigation approach by the Council demonstrates the Council's commitment to enhancing the infrastructure. This also reflects a proactive approach to addressing evolving needs and improving facilities for members and visitors.
Continuous improvement	The identification of challenges by Council staff and subsequent changes to the process reflects a commitment to continuous improvement within the Council. This has also been reflected through the subsequent changes in planning process and project management practices within the Council.
Procurement Practices	Based on a high-level review of the procurement practices at Yarra City Council, the BGC project complied with the Council's procurement policies and procedures for individual procurements. This included procurement for a number of preliminary works and the BGC redesign project procurement activities, including utilisation of relevant documentation for procurement processes such as the evaluation form utilised for assessment of applicants.
Established Project Management Practices	The Project Delivery Team conducts monthly check-ins to discuss the progress to the BGC project including timeline of works and operating budget. Additionally, weekly meetings are conducted to track progress on project schedule, communications to stakeholders, and updates to project management plan including issues.



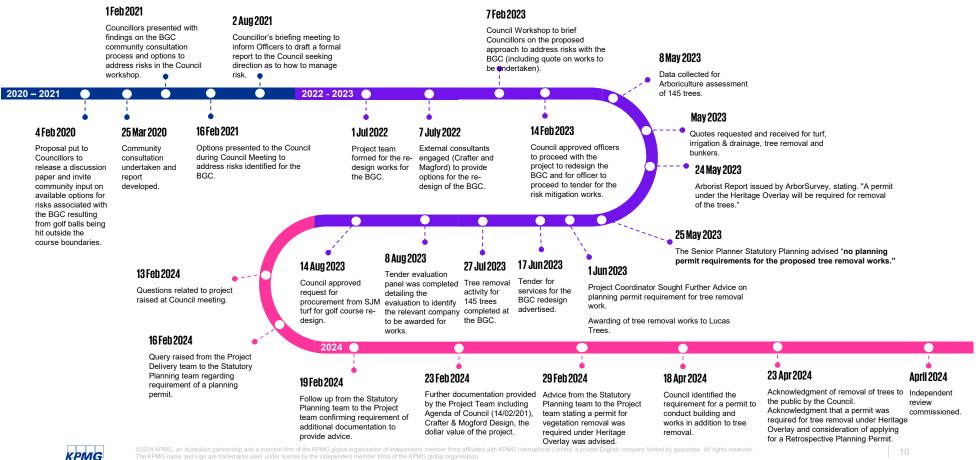
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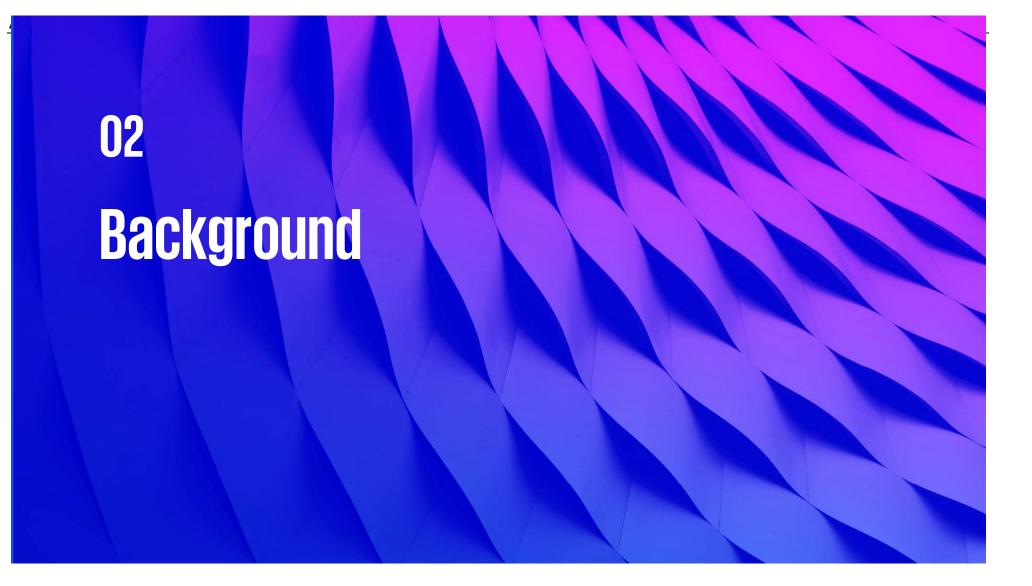
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Timeline – Burnley Golf Course Risk Mitigation Works



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Planning Considerations

The subject site is located on the southern side of Madden Grove, Burnley and is recognised as 102 Madden Grove Burnley.

Site Context

The subject site is currently developed and utilised as a golf course recognised as the Burnley Golf Club (BGC). The BGC comprises a nine-hole golf course, clubhouse and associated car parking. The site contains a number of trees of varying species, maturity and condition.

Image 1: Aerial photo of subject site Source: Google Maps

Trees are located across the site along fairways and site boundaries.

The site has a street frontage to Madden Grove, Loyola Grove, Yarra Boulevard, and City Link. The northeastern boundary of the site fronts the Glen Waverly rail line.

The site is highly visible from surrounding development and adjoining streets.

Proposed Project

The project comprises carrying out works to the existing golf course. This comprises of the following as included in the redesign of golf course configuration:

- Removal of existing turf and laying of new turf, earthworks (including reshaping of fairways and creation
 of new bunkers)
- Installation of irrigation
- · Drainage works
- Construction of new pathways and parking bays
- · Removal of vegetation including 145 trees

Yarra Planning Scheme

Under the Yarra Planning Scheme, the site is located within the Public Parks and Recreation Zone (PPRZ) with a small portion of the southern edge of the property located within the Transport Zone 1 - State Transport Infrastructure, and the western edge of the site located within Transport Zone 2 Principle Road Network.

The subject site is affected by a number of overlays, these include:

- City Link Project Overlay (CLPO)
- Development Contributions Plan Overlay Schedule 1 (DCPO1)
- Heritage Overlay Schedule HO299 (HO299)
- Land Subject to Inundation Overlay (LSIO)
- Significant Landscape Overlay Schedule 1 (SLO1)

Zoning

In accordance with the Yarra Planning Scheme the use of the site as a golf course is recognised as a



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Section 2 Use within the Public Parks and Recreation Zone. As the golf course is an existing use, no planning permit is required for use. In accordance with Clause 36.02-2 a planning permit is not required for the carrying out of works as these are to be undertaken on behalf of the public land manager.

Overlay

Heritage Overlay – Schedule HO299

Under Clause 43.01-1 a planning permit is required to carrying out works. A planning permit is also required to remove trees under these clause as tree controls apply to the site as set out in HO299.

Particular Provisions

Clause 52.17 Native Vegetation

This clause is exempt from consideration in relation to the removal of native vegetation. Council has advised that while the planting of the trees was undertaken utilising public funds, the trees were planted purely as a landscaping activity and not for the purposes of land protection or to enhance biodiversity. This advice is supported by the information set out in the arborist report (prepared for Yarra City Council by Arbor Survey, May 2023) which states that the trees are 'Victorian natives that have been considered to be planted (not for conservation purposes)'.

As this clause is exempt the requirements of this policy are not required including consideration of 'Guidelines for the Removal, Destruction or Lopping of Native Vegetation December 2017', including an Environmental (Biodiversity) Assessment.

Planning Policy Framework

There are a number of State and Local Planning Policies that should be considered when determining the carrying out of the works and the removal of vegetation at the site. These include, but not limited to, the following:

- Clause 15.03-1S Heritage Conservation
- Clause 15.03-1L Heritage
- Clause 15.03-2S Aboriginal Cultural Heritage

In accordance with the Yarra Planning Scheme the project should be designed to support and meet the applicable objectives and strategies of these policies, recognising that only the policies relevant to a planning permit application should be considered (Refer to Finding 1).

Cultural Heritage Management Plan



Part of the subject site is recognised as an 'area of cultural heritage sensitivity'. This is demonstrated in the map on the next page, extracted from the Aboriginal Cultural Heritage Register and Information System (ACHRIS).

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form and soil types that are generally regarded as more likely to contain Aboriginal cultural heritage. These include land within 200 metres of named waterways and land within 50 metres of registered Aboriginal cultural heritage places.

The subject site is partially recognised as 'an area of cultural heritage sensitivity' given its proximity to the Yarra River.

Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed. If a significant land use change is proposed a Cultural Heritage Management Plan (CHMP) may be triggered.

Under the Aboriginal Heritage Act 2006, where a CHMP is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity. The proposed project does not seek to change the existing use of the land as a golf course. It is recognised that this land use commenced prior to 2007.

It is however noted that the proposed works do include works that constitute as significant ground disturbance. In accordance with Regulation 4 of the Aboriginal Heritage Regulations Act 2018 'significant ground disturbance' includes the disturbance of:

- · the topsoil or surface rock layer of the ground; or
- a waterway by machinery in the course of grading, excavating, digging, dredging or deep ripping, but does not
 include ploughing other than deep ripping

The words 'disturbance', 'topsoil', 'surface rock layer', 'machinery', 'grading', 'excavating', 'digging', 'dredging', 'ploughing' (other than deep ripping) are not defined in the regulations and therefore have their ordinary meanings.

As the site has been previously utilised as a golf course it likely that significant ground disturbance across the site has previously occurred.

We recognise that Council has utilised the 'Aboriginal Heritage Regulation Tool' associated with determining if a CHMP is required for the proposed works. This preliminary review has stated that a CHMP is not required, however, also states 'this process list is for information purposes only; the result must not be relied upon by a statutory authority in deciding whether a cultural heritage management plan is required for a proposed activity'.

Further, Council has engaged a heritage consultant, who has provided a report to assist the planning process which states 'a mandatory CHMP is not required for the redesign of the Burnley Golf Couse, because the works were for or associated with a purpose for which the land was being lawfully used prior to 28 May 2007'.

The consultant has also advised 'that a Cultural Heritage Permit, or a voluntary CHMP, must be carried out for any activity that may harm previously registered Aboriginal cultural heritage places [on the subject site].'

Council may wish to consider undertaking a Preliminary Aboriginal Heritage Test (PAHT) to provide further certainty that a CHMP is not required and to ensure Council conforms with statutory requirements associated with both the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018. (Refer to finding 1).

A PAHT is submitted to the Secretary to the Department of Premier and Cabinet who certifies whether a CHMP is required for a proposed activity. Council can then proceed with works and carry out any activities on the site with certainty.

The Secretary must decide whether to certify the PAHT as correct within a 21-day evaluation period.

There are no appeal provisions as an application for certification of a PAHT is voluntary. Compliance with the certified PAHT decision is mandatory if it requires an approved CHMP for the proposed activity.

A PAHT must include the information necessary to establish whether a CHMP is required for a proposed activity and will need to include the following:

- a brief background assessment of the proposed activity area, including a search of the Victoria Aboriginal Heritage
 Register
- · details of the ground inspection or survey (if undertaken)
- · details of any Aboriginal cultural heritage located in the proposed activity area
- details of any consultation undertaken with a Registered
- Aboriginal Party or Traditional Owner
- · a conclusion of whether a Cultural Heritage Management Plan is required
- any other actions recommended to protect or preserve Aboriginal cultural heritage

There is no evidence to suggest that Council has previously sought a PAHT to be undertaken for the project. It is however recognised that Council Officers have engaged a heritage consultant who has now provided a report indicating a mandatory CHMP is not required.

Council Officers have also met with representatives from Department of Premier and Cabinet – First People State Relations who provided verbal commentary that a CHMP is not required. No written documentation has been provided from the Department of Premier and Cabinet confirming this advice.

For capital projects that involve the carrying out of works, tree removal or similar activities to be undertaken by (or on behalf of) the Council on areas of cultural heritage sensitivity, it would be prudent for the Council to consider obtaining a PAHT as a part of the due diligence process.



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Cultural Heritage Management Plan

Supporting Council Policy

It is recognised that Council has adopted the Yarra City Council Yana Ngargna Plan 2020– 2023. The Plan comprises a number of priorities including; *Priority* 1 –Relationships— Supporting community connections, promoting culture and protecting important places.

In recognition of this plan, Council should consider adopting an Aboriginal Cultural Heritage Land Management Agreement (ACHLMA).

An ACHLMA is a voluntary agreement and would be made between the Registered Aboriginal Party (RAP) and Council, as it is the 'public land manager' (PLM) for the site.

An ACHLMA provides a mutually agreed framework for protecting and managing Aboriginal cultural heritage during ongoing, routine land management activities within a RAP area.

ACHLMAs document the approach taken to manage Aboriginal cultural heritage by setting out the results of a cultural heritage assessment and mutually agreed measures on how Aboriginal cultural heritage will be protected and managed during land management activities within a specified Agreement Area, over a specified period of time.

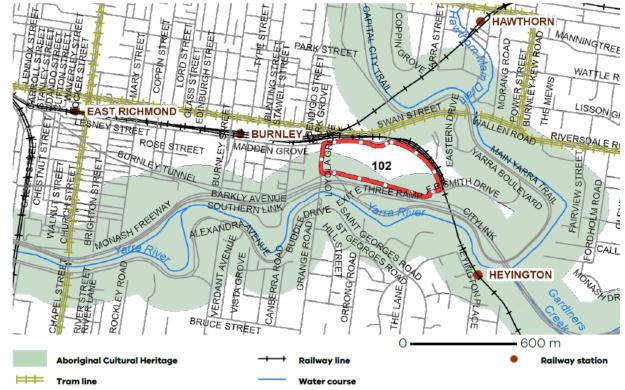


Image 2: Subject site showing areas of Cultural Heritage Sensitivity Source: <u>Aboriginal Victoria</u> | Aboriginal Cultural Heritage Register and Information System (ACHRIS)



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1. Planning Due Diligence

Observations

The Statutory Planning team received notification of the proposed BGC project via email on 25 May 2023, sent from the project coordinator to a Senior Planning Officer. There is no evidence to suggest that prior information from the Statutory Planning team had been sought. The information contained within the email was limited to details regarding tree removal, and the request sought confirmation as to whether a planning permit was required for the removal of trees. The prepared arborist report associated with the project was attached to the email. The full breadth of works associated with the project was attached to the senior planning officer. It is however noted that the project coordinator made reference to the redesign of the golf course within the arborist report, however specific details of the works to be undertaken were not included. It is also noted reference to a conversation between the senior planning officer and project coordinator is included in the email, as such details of the project could have been provided verbally, however there is no written evidence that this occurred. There is also no evidence to suggest that the Statutory Planning team sought any further details about the project on receipt of receiving the email.

The Senior Planning Officer replied to the email request from the Project Coordinator on the same day stating that a planning permit was not required for the removal of trees from the site, as the trees to be removed were not located within the area affected by Significant Landscape Overlay, no further details were provided. It is evident that the project coordinator required further information to be satisfied with the advice that a planning permit was not required and sent a subsequent email to the planning officer on 1 June 2023, seeking confirmation that a planning permit was not required in accordance with various planning controls including the Heritage Overlay, Significant Landscape Overlay, Environmental Significance Overlay, Vegetation Protection Overlay, Clause 52.17 or Local Laws. No evidence has been provided to this review as to the response to this request.

There is no evidence to suggest that on receiving notification of the project, both at the time of the initial email and the subsequent request, that the Senior Planning Officer prepared planning due diligence (Note: planning due diligence typically includes details regarding the environment context of the site and surrounds, the planning and environmental controls of the site, policy and legislation that may be considered relevant to the context of the site and/or the proposed development of a site, details of any permits or approvals that maybe required to enable the development of the site including works and tree removal).

As identified within the <u>background section</u> of this review there are a number of applicable policies and permit applications requirements associated with the proposed works and tree removal. It is likely that these requirements would have been identified through undertaking a due diligence assessment including determining if Clause 52.17 applies, and as such the need for an Environment (Biodiversity) Impact Assessment to be prepared in accordance with the 'Guidelines for the Removal, Destruction or Lopping of Native Vegetation December 2017'.

There is also no evidence to demonstrate that a Planning Property Enquiry report was prepared through the current channels that apply to property enquiries from the public. It is recommended that planning due diligence be prepared as part of any referral enquiry to the project team for projects to be undertaken by, or on behalf of, the Council. The due diligence may form part of the Planning Property Enquiry.

Evidence suggests that during a recent review of the project by the Statutory Planning team (29 February 2024) a more fulsome response was provided to the project coordinator and team in relation to planning requirements associated with the projects, however there is no evidence of written due diligence and/or that a planning property enquiry report was prepared, or that the advice and information provided was peer reviewed. Failure to prepare a due diligence assessment and/or a planning property enquiry as part of both the initial advice in 2023, and subsequent advice in 2024 has resulted in inadequate information being provided to the project team, and a misunderstanding that the proposed works were compliant with the statutory regulations applicable to the site.

There is no documentation to confirm that relevant policies and legislation, including the Aboriginal Heritage Act 2006, Environment Protection and Biodiversity Conservation Act 1999, and the Yarra Planning Scheme have been considered for the site or the project by the planning team.

The consideration of this information could have reduced the risk of misinformation being provided as well as identify key items of information that should have been prepared to support the project including confirmation regarding the preparation of a Cultural Heritage Management Plan and an Environmental Impact Assessment (also recognised as a Biodiversity Impact Assessment).

Recommendations

1.1. Consider undertaking a Preliminary Aboriginal Heritage Test (PAHT) to provide further certainty that a CHMP is not required and to ensure Council conforms with statutory requirements associated with both the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018.

1.2. In recognition of the Yarra City Council Yana Ngargna Plan 2020–2023, it is recommended that the Council consider adopting an Aboriginal Cultural Heritage Land Management Agreement (ACHLMA) for Council managed properties located within recognised areas of cultural heritage sensitivity.



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2. Internal Referral Process & Planning Property Enquiry

Observations

At the time of referral of the project to the Senior Planning Officer on 25 May 2023, no documented or adopted formal mechanism was in place for referring Council led projects to the Statutory Planning team for review and assessment, including the preparation of a Planning Property Enquiry. There was also no adopted centralised system for documenting and tracking progress of referrals.

The Project Coordinator utilised informal communication channels with the Statutory Planning team resulting in gaps in communication, record-keeping and inadequate information being shared (and requested) between the project and Statutory Planning team. The Senior Planning Officer advised the Project Coordinator via email that 'no proposed tree removal is to be undertaken in the portion of land affected by the Significant Landscape Overlay. As such there are no planning permit requirements for the proposed tree removal works. There is no evidence to suggest that the Senior Planning Officer sought a peer review of this advice.

It is considered that the lack of a formalised referral process enabled advice to be provided that had not been peer reviewed or confirmed by a senior member of the Statutory Planning team. The informal process resulted in the mismanagement of referrals and hindered accountability within the Statutory Planning team. This review noted that it was normal practice for internal referrals to occur in this manner.

This informal internal process also resulted in the following:

- No formal requirement for the senior planning officer to consider the subject site context and its surrounds.
- No formal requirement for the project coordinator to provide the full details of the proposed projects, and for the Senior Statutory Planning officer to request this information.
- No formal requirements for the planning department to methodically review and identify all relevant and applicable planning, environment and heritage controls including the Yarra Planning Scheme, title information and the requirements of the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations Act 2018.
- No formal assessment required to be undertaken to determine if a planning permit was needed for the removal of trees, vegetation and/or the carrying out of works at the site.
- No peer review of the Senior Statutory Planning Officer's advice being required to be undertaken by another member of the Statutory Planning team including by a Coordinator and/or Manager as this is an existing requirement of the planning property enquiry process.

It is understood that the Statutory Planning team have by way of email, 20 March 2024, informed other Council departments of a 'new' referral process to be undertaken when '[they] require planning advice of a Council project.



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The process set out in the email is reflective of the process undertaken by members of the public seeking a Planning Property Enquiry report. It is considered the key risk to this approach is that the Council teams and/or individuals may not consider that planning advice is required for a project, as the email does not state for 'all projects', and as such will not refer the project for consideration by the planning team.

Recommendations

2.1. A Planning Property Enquiry report should be prepared for all capital projects that involve development of buildings, tree removal or similar activities to be undertaken by (or on behalf of) the Council. This will ensure due diligence is undertaken on all projects, ensuring any approval requirements are identified. This approach will also assist in streamlining the preparation of advice ensuring it can be delivered in a timely manner.

Preparation of a Planning Property Enquiry report will also require advice provided to be peer reviewed reducing the risk of incorrect information being provided.



3. Project Management

Observations

The capital works program at Yarra City Council is a comprehensive asset renewal, upgrade and new works program with an allocated budget of \$33.9 Million in FY24.

In relation to overall budget, size and complexity, the BGC project was not considered by Officers to fit into the major capital works project category. We understand from consultations that officers generally consider capital works projects over \$10.0 million to be a major capital works project. It is noted that a Project Management Framework (PMF) is available to provide guidance and a structured and consistent approach to project management. This Framework was uplifted and updated in 2023.

The BGC project encountered some challenges related to project management linked to project staffing, storage and access to project documentation, risk management and communication practices.

Project Staffing

At the commencement of the project, project management for capital works projects at Council was undertaken using a decentralised approach. Officers appointed to manage the BGC project were members of the Property and Leisure team. Consultations identified that staff members tasked with management of this project were not engaged by Council in a project management role. The project team had limited if any experience in planning and other due diligence matters.

The project was impacted by a number of key officers leaving the Council during the project with at least three key officers resigning throughout the project. This has contributed to inconsistent approaches in the face of a lack of documentation of key decisions and processes.

Project Artefacts

Key project artefacts such as a project plan with embedded communications approach, project financials, indicative project schedule and risk register were evidenced at the initiation of the project. Although these key artefacts were sighted, the below limitations were noted:

- Project plan: Whilst a project plan was developed at the commencement of the project, the version
 sighted during the review indicated the plan did not include all activities required to be undertaken
 as a part of project e.g. due diligence. Progress has not been comprehensively captured with
 multiple completed items with an 'in progress' status.
- **Due diligence checklist:** No due diligence checklist was evidenced as a part of project artefacts. An Arborist Report was commissioned in May 2023 which flagged the need for a planning permit, which triggered the BGC project team to consult the Statutory Planning team.
- **Risk register**: A risk register was developed at the initiation of the project, however there was no evidence of risk being considered and updated in an ongoing basis throughout the project.

A number of additional risks could have been included in the register to ensure a more complete risk consideration, and capture risk throughout the life of the project as the risk environment shifted.

Project documentation and advice was stored in multiple locations including email, team collaboration sites and Content Manager (records management system) which likely resulted in team member access to key documentation being limited or duplicated. This was evidenced by the effort and time required to find and collate the necessary documentation for this review.

Project Communication

A number of positive communication practices were observed in relation to the project including the use of a Microsoft Teams collaboration channel, the establishment of a Project Control Group which met weekly and the creation of content manager folders. It was noted that the project had a reliance on informal communication methods, emails and phone calls for interdepartmental communication, with planning advice being provided and stored in email. There was an opportunity for key project decisions to be more clearly documented and stored in a central location.

Recommendations

3.1. In line with the refreshed YCC Project Management Framework, ensure the required project documentation including project management plan, budget, due diligence checklist, etc., are created, maintained throughout the life of the project and stored in a central location that is accessible to all project team members.

3.2. Ensure that risk registers are completed at the outset of the project and that risk registers are referred to and updated as part of project team meetings with revisions and refinement occurring throughout the project. This should be a valuable document for tracking and monitoring risks and reporting to senior leadership on risks and mitigation strategies.

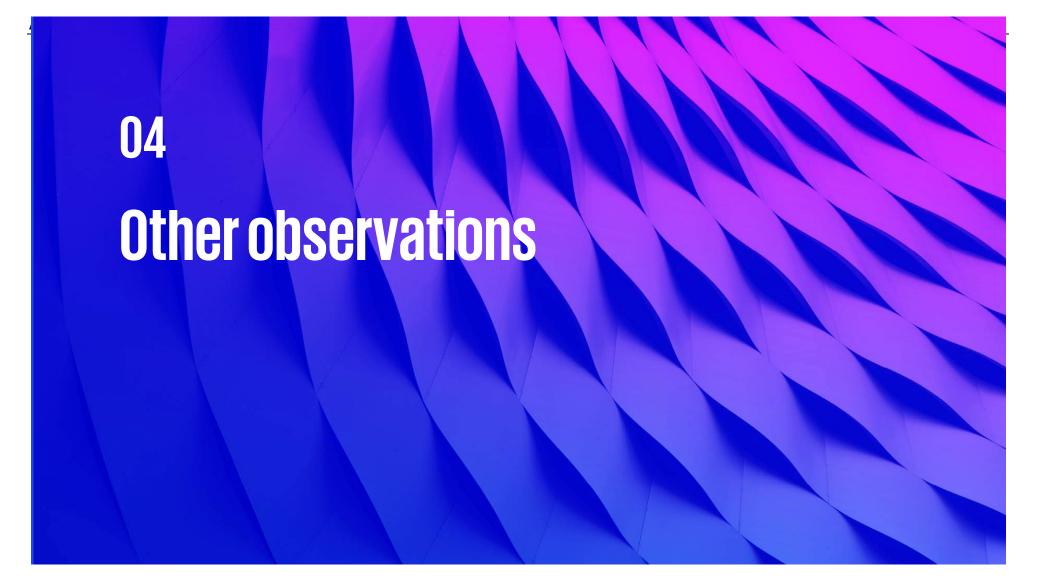
3.3. Ensure that consideration is given to the Project Manager role prior to commencement of projects, including that the Project Manager appointed has sufficient seniority and expertise to allow them to direct and drive the project. This ensures that their project management expertise and knowledge is most effectively utilised to ensure successful project planning, execution and completion. Consideration should also be given to the expertise required in the Project Control Group, where established. e.g. consideration of technical skill or expertise for part or all of the project e.g. planning expertise.



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Other Observations

1. Planning Conformance

Observation(s):

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The planning team provided a confirmation via email on 15 April 2024 to the CEO, that a planning permit was required for the removal of trees to the site. A subsequent email was then sent on 18 April 2024 specifying that a planning permit was also required for the carrying out of works on the subject site in accordance with the Yarra Planning Scheme. It is understood through interviews with Council Officers that work at the site has continued to be carried out during this time.

Through undertaking works without a planning permit, Council has breached the requirements of the Yarra Planning Scheme. As set out in *A Guide to Victoria's Planning System Chapter 7.1.2* where breaching of a scheme occurs 'adopting a conciliatory approach through a process of education, communication and negotiation will more often provide a positive outcome'.

For Council to comply with the Yarra Planning Scheme and ensure compliance with the *Planning and Environment Act 1987* approval of the proposed works will be required.

Through consultation with Council Officers, it is understood that Council are in the process of preparing a planning permit application, including the preparation of multiple specialist assessments including heritage.

It is also understood that an independent planning consultant is to be appointed to provide an independent planning assessment of the proposed application once prepared. We strongly support this approach and recommend that for future projects where Council is the applicant this approach be undertaken.

2. Timing to provide planning advice

Observation(s):

At the February 2024 Council meeting, officers took a question on notice in relation to the planning obligations at the BGC. The matter was raised with the Statutory Planning team via email from the BGC Project team on 16 February 2024.

In response the planning team requested project details from the project team on 20 February 2024. The project team provided additional requested information to the planning officer on 23 February 2024.

The Planning Manager advised the project team that a planning permit is required for vegetation removal and works on 29 February, referencing the planning permit triggers and information required to support a planning permit application.

The Planning Manager responded to the CEO on 17 April 2024, confirming that a planning permit was required to remove tress under the applicable heritage overlay. A subsequent email was sent to the CEO with further planning permit requirements on 18 April 2024.

Based on the information provided it has been determined that the Statutory Planning team provided advice to the project team within a week, however took a total of 10 weeks to confirm that a planning permit is required for both the tree removal and the carrying out of works at the subject site.

It is noted that in seeking the planning advice from the Planning Manager, informal communication channels were utilised. As set out on Council's website a Planning Property Enquiry can be provided to a member of the public within five – seven business days. As such utilisation of a formalised referral processes could have assisted in reducing the timeframe to provide advice.

There is an opportunity to implement a more formalised approach to obtaining planning advice, which could enable the timeframe for preparing and delivering of planning advice to be reduced.

3. Procurement Compliance

Observation(s):

As part of this review a high-level review of the procurement activities was undertaken to identify if the procurement for the BGC project was in compliance with the Council procurement policies and procedures and included procurement for a number of preliminary works and the BGC redesign procurement.

It was noted that the procurement was undertaken for components of the overall project, as required, from a number of providers. This included separate procurements for:

- Irrigation and Drainage
- Tree removal
- Bunkers (exemption Q3592)
- Turf
- BGC redesign works

Based on our high-level review, it appears that Council procurement process and guidelines were followed for the BGC project. It was noted that these procurement activities were considered on an individual basis.

The individual sourcing of elements of pre-work related to the project warrants consideration as to whether a more holistic project procurement approach would have been beneficial in reviewing the project elements, risks and any internal referrals required in totality.

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Appendix 1: Stakeholders Consulted



Listed below is the list of stakeholders consulted as part of this review:

#	Name	Position
1	Sue Wilkinson	Chief Executive Officer
2	Mary Osman	General Manager City Sustainability and Strategy
3	Sam Hewett	General Manager Infrastructure and Environment
4	Brooke Colbert	General Manager Governance, Communications and Customer Experience
5	Steven Jackson	Acting Manager Leisure Services
6	Frankie Hocking	Current Project Manager/Coordinator for the BGC Project
7	Phil De Losa	Manager Governance and Integrity
8	Kathryn Pound	Manager Statutory Planning





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Recommendations – KPMG Report	Management Response
1. Planning Due Diligence	
Consider undertaking a Preliminary Aboriginal Heritage Test (PAHT) to provide further certainty that a CHMP is not required and to ensure Council confirms with statutory requirements associated with both the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018.	Agree- support (for future projects). Undertaking a Preliminary Aboriginal Heritage Test (PAHT) or similar is a sensible suggestion for future projects where land will be disturbed and where a cultural heritage management plan may be required. In the case of the Burnley Golf Course, Council has undertaken a more advanced due diligence step by engaging an experienced cultural heritage consultant who has confirmed, with absolute certainty, that a CHMP was not required.
In recognition of the Yarra City Council Yana Ngargna Plan 2020 – 2023, it is recommended that the Council consider adopting an Aboriginal Culture Heritage Land Management Agreement (ACHLMA) for Council managed properties	Agree- support subject to consultation with, and it being the priority of the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation. Assuming it is, Council will begin this work in 24/25 and this work will complement Wurundjeri's
located within recognised areas of cultural heritage sensitivity.	other priorities like Treaty.

Recommendations – KPMG Report	Management Response
2. Internal Referral Process and Planning Property Enquiry	
A Planning Property Enquiry report should be prepared for all capital projects that involve development of buildings, tree removal or similar activities to be undertaken by (or on behalf of) the Council. This will ensure due diligence is undertaken on all projects, ensuring any approval requirements are identified. This approach will also assist in streamlining the preparation of advice ensuring it can be delivered in a timely manner.	Agree- support A new process already in place with communication sent to staff advising of the new process related to planning property enquiries.
Preparation of a Planning Property Enquiry report will also require advice provided to be peer reviewed reducing the risk of incorrect information being provided.	Agree- support A new process and template for responding to Planning Property Enquiries (PPE) now in place. All PPE'S will be reviewed by Coordinator and Manager. Planning department have been advised of this new process.

Recommendations – KPMG Report	Management Response
3. Project Management	
In line with the refreshed YCC Project Management Framework, ensure the required project documentation	Agree- support
including project management plan, budget, due diligence checklist, etc. are created, maintained throughout the life	Compliance to the Project Management Framework and associated documentation will deliver better project management outcomes and ensure project steps are not missed in future.
of the project and stored in a central location that is accessible to all project team members.	Compliance to the requirements in the Project Management Framework can be assured through the monthly project board meeting.
Ensure that risk registers are completed at the outset of the project and that risk registers are referred to and	Agree- support
updated as part of project team meetings with revisions and refinement occurring throughout the project. This should be a valuable document for tracking and monitoring risks and reporting to senior leadership on risks and mitigation strategies.	Risk registers are not static, and risks should regularly be reviewed once mitigation activities are applied. These can also be checked through the monthly project board meetings.
Ensure that consideration is given to the Project Manager role prior to commencement of projects, including that the	Agree- support
Project Manager appointed has sufficient seniority and expertise to allow them to direct and drive the project. This ensure that the project management expertise and knowledge is most effectively utilised to ensure successful	The relevant General Manager will oversee the appointment of all capital works project managers at the start of the financial year and where a project requires the appointment of a project manager with specialised or particular skills, that resource be recruited for separately.
project planning, executive and completion. Consideration should also be given to the expertise required in the Project Control Group, where established eg.	Agree- support
consideration of technical skill or expertise for part or all of the project eg. planning expertise.	The role of a PCG can deliver great benefits to a project's delivery. Where a PCG is established, an officer (or consultant if the context is appropriate) with planning expertise could be appointed to manage risks for the project (even in the initial stages of the project).
	Additional Council action:
	All Executive, senior management and project managers to undertake mandatory Cultural Awareness Training within the next 12 months.

7.5 Building Maintenance Services and Minor Capital Works Tender C1673

Reference	D24/270615	
Author	David Laidlaw - Coordinator Building and Property Services Contracts	
Authoriser	Chief Executive Officer	
Disclosure	The authoriser, having made enquiries with members of staff involved in preparation of this report, asserts that they are not aware of any general material conflicts of interest in relation to the matters presented.	

Purpose

- 1. To consider and recommend the awarding of a contract panel C1673 Building Maintenance Services and Minor Capital Works for the delivery of a broad range of reactive, programmed and routine building maintenance services and building minor capital works projects for an initial term of three years, with options for Council to extend by two further three-year periods.
- 2. The purpose of the contract panel is to pre-qualify competent and experienced building maintenance and minor works contractors to undertake repairs, renewals and upgrades to Council's building assets, in line with the building maintenance and capital works programs.

Background

- 3. There are two packages under this contract:
 - (a) Package A: is for building maintenance services. The scope includes a wide range of trade services required to maintain Council's buildings. Under this contract, officers will ask the appointed contractors to perform maintenance services based on their respective tendered pricing rates. Examples of works include repairs, troubleshooting issues and preventative maintenance. These works may be reactive or proactive in nature; and
 - (b) Package B: is for building minor capital works where contractors will be asked to quote and undertake project-based works that are included in the annual capital works program. Examples include renewals of building components and upgrades to improve building assets.
- 4. The contract panel proposed consists of two separate sub-panels of contractors as follows:
 - (a) Panel A: will be appointed for both packages. This panel will undertake maintenance services on Council building assets through package A, and contribute to the lifecycle renewal and upgrade of those assets as part of Council's annual capital works program through package B; and
 - (b) Panel B: will be appointed for package B (minor capital works) only. The purpose of panel B is to provide Council with additional capacity to deliver its annual capital works program through package B.
- 5. This contract panel will replace these existing contract panels:
 - (a) T01019 *Building Maintenance Services* panel (10 contractors for various building trades services) expiring September 2024; and
 - (b) C1422 Building Contractors for various Yarra City Council Capital Projects (5 contractors) expired March 2024.
- 6. Establishing a contract panel of pre-qualified contractors has multiple benefits to Council including:

- (a) All contractors appointed have been subjected to a rigorous evaluation process, giving confidence that they are experienced and qualified to undertake the service and works required;
- (b) Prices for services and works are transparent, as tenderers nominate a schedule of rates Council will be charged for different services;
- Having multiple contractors on the panel to perform similar types of work helps to ensure good availability of contractors and gives scope to secure competitive pricing;
- (d) Limiting the panel to a small number of contractors helps to incentivise contractors by giving them good opportunity to win work and provides opportunity to build strong working relationships; and
- (e) Officers can be responsive to attend to maintenance issues and reactive works, as the panel is on notice to assist when requested by officers.
- 7. A key objective of this contract panel is to maintain Council's buildings in a manner that ensures they are well presented, safe for use and maintained in accordance with all relevant standards and legislation.
- 8. Another objective of the contract panel is to ensure the efficient delivery of minor capital works for renewals and upgrades to those buildings as part of Council's annual capital works program and contributing to the lifecycle asset management of Council's buildings.
- 9. A thorough review of the specification and scope of services and works required was undertaken as part of the tender preparation. It was identified that it would provide benefits to Council to work with a small pool of contractors able to provide maintenance services across multiple trades who also have the capability to deliver minor building capital works projects for Council, rather than the previous model of individual trade contractors and a separate panel for builders.
- 10. This contract includes the common trades needed for building maintenance including electrical, plumbing, carpentry, painting, glazing and floor coverings trades as well as general handyperson and labouring services. It also covers the additional functions needed for delivery of minor capital works including design and project management.

Tender process

Pre-tender evaluation panel meeting

11. The evaluation criteria and weightings were discussed and agreed upon at the pre-tender evaluation panel meeting.

Tender evaluation panel

- 12. The tender evaluation panel consisted of the following officers:
 - (a) Senior Procurement Officer (non-scoring chairperson);
 - (b) Manager Building and Asset Management;
 - (c) Coordinator Building & Property Services Contracts;
 - (d) Coordinator Building Maintenance; and
 - (e) Senior Coordinator Project Delivery.
- 13. A probity advisor was appointed to oversee the evaluation process.
- 14. All members of the evaluation panel completed conflict of interest and confidentiality declarations in relation to the tenderers and their tender responses respectively. No direct conflicts of interest were declared however some panel members did declare that they had business-as-usual working relationships and/or professional encounters with some of the tenderers over the course of their careers. Examples of this include officer interactions with current or previous contractors to Council, where the contractor has tendered for this contract panel.

- 15. These business-as-usual relationships and previous associations were documented, and the probity advisor was informed. The probity advisor provided protocols that the evaluation panel members adhered to throughout the evaluation to maintain probity. An example of a protocol was to ensure that evaluation panel members only base their evaluation on the information included in the tender submission and that they do not give any weight to their subjective opinion of the tenderer based on their experience working with them.
- 16. Having been made aware of the list of tenderers, the General Manager Infrastructure and Environment declared a conflict of interest and removed themselves from all aspects of the tender process. The General Manager Infrastructure and Environment took no part in the evaluation of the tenders or the authorisation of any report pertaining to the tender.

Invitation to tender

17. A tender for Building Maintenance Services and Minor Capital Works inviting suitably qualified contractors to submit a tender response was advertised on Saturday 18 May 2024 in 'The Age' newspaper and on Council's eProcure tendering portal, which is accessible from Council's website. The closing date for tenders was Friday 14 June 2024.

Tenders received

18. Nineteen tender submissions were received as outlined in **Confidential Attachment 1**.

Tender evaluation criteria

Conformance

- 19. Tender submissions were assessed for conformance, with the tender conditions allowing Council to exclude non-conforming tenders where the non-conformance poses a significant risk to service delivery.
- 20. Further information on the conformance assessment is in **Confidential Attachment 1**.

Non-Scored Criteria

- 21. The following non-scored evaluation criteria were assessed, with the ability to exclude tenders from further consideration where the assessment of non-scored criteria indicates a significant risk to service delivery:
 - (a) Financial viability;
 - (b) Insurances and registrations;
 - (c) Conflict of interest;
 - (d) Child safe standards;
 - (e) Worker identification and background checks;
 - (f) Statutory declaration; and
 - (g) Occupational health & safety.
- 22. No tenders were excluded based on the assessment of non-scored criteria.

Scored criteria

- 23. The following scored evaluation criteria were assessed by the evaluation panel to determine qualitative scores for each tender:
 - (a) Provision of services;
 - (b) Experience and capability;
 - (c) Capacity and resources;
 - (d) Industrial relations;
 - (e) Quality management system;
 - (f) Environmental sustainability;

- (g) Social sustainability;
- (h) Corporate social responsibility; and
- (i) Equal opportunity.
- 24. An overall qualitative score was assessed for each tender for panel A (both packages) and panel B (minor capital works package only) representing the assessed value provided by that tender.
- 25. Further information on the scoring process is in **Confidential Attachment 1**.

Qualitative assessment of value

26. The consensus qualitative scores are outlined in **Confidential Attachment 1**.

Quantitative assessment of price

- 27. This contract is a schedule of rates contract, with tenderers submitting proposed rates for a range of trade and project management activities, along with proposed mark-ups for materials and other input costs as part of the tender submissions.
- 28. The tendered rates were used to assess each tender for an overall standard rate for panel A (both packages) and panel B (minor capital works package only).
- 29. The standard rates are based on a weighted sum of trades and other labour charges and material costs in ratios reflecting the expected typical mix of costs for services/works under each contract panel. The formulae for determining the standard rates for panels A and B were defined in the tender evaluation plan prior to tender being advertised.

Value for money

- 30. The value for money (VFM) formula was applied to measure the ratio of value to price for each tender, to determine value for money rankings. A VFM metric for each tender was calculated for panel A (both packages) and panel B (minor capital works package only).
- 31. The VFM analysis combining the qualitative scores and quantitative scores for each panel is shown in **Confidential Attachment 1**.

Shortlisted tenders

- 32. The evaluation panel agreed to shortlist all tenderers that were in the top eight for VFM for either panel A or panel B for interviews and further consideration.
- 33. The shortlisted tenderers are shown in **Confidential Attachment 1**.

Interviews and Clarifications

- 34. In-person interviews were undertaken with each of the shortlisted tenderers. A standard interview agenda was sent prior to the interviews taking place, and a one-hour timeslot provided for each interview.
- 35. Separately, based on the evaluation panel's assessment of the tendered submissions, clarification requests were sent to each of the shortlisted tenderers seeking various clarifications. Responses were provided in relation to all clarification requests.
- 36. Based on the interviews and clarification responses, the evaluation panel met to assign final scores for the shortlisted tenders, with the ability to amend the initial preliminary score assessments, based on the information provided at interview and through tender clarifications. This process was overseen by the probity advisor.
- 37. The final qualitative scores and VFM analysis of each panel for the shortlisted tenderers are shown in **Confidential Attachment 1**.

Preferred tenderers

38. Based on the VFM analysis, the evaluation panel agreed on preferred tenderers for panels A and B for recommendation to Council as representing the best value for money, subject to satisfactory reference checks and tenderer financial capacity assessments.

39. The preferred tenderers for panels A and B are shown in **Confidential Attachment 1**.

Referee checks

- 40. Referee checks were carried out for all preferred tenderers by the evaluation panel in accordance with the documented evaluation plan, with a standard referee check questionnaire including performance, responsiveness, approach to working safely, standard of reporting/invoicing and cost effectiveness.
- 41. All preferred tenderers received satisfactory referee checks that attested to the tenderer's experience in delivery of the required services for similar local government and public sector organisations. No unacceptable risks were discovered through the referee checks.

Financial assessment

- 42. Corporate Scorecard Pty Ltd was commissioned to perform independent standard financial assessments on each of the preferred tenderers regarding their capacity to undertake the proposed contract.
- 43. The summary results of the standard financial assessments are outlined in **Confidential Attachment 1**.

Probity

- 44. As the expected total expenditure over the life of the contract panel will exceed \$10 million, a probity plan and the appointment of a probity advisor was required in accordance with Council's procurement policy.
- 45. Baron Consulting was appointed as the probity advisor for this tender.
- 46. A probity plan and tender evaluation plan were prepared and endorsed by the probity advisor before the tender was advertised.
- 47. The probity advisor attended all meetings of the evaluation panel, including interviews with tenderers.
- 48. The probity advisor has reviewed evaluation materials and the content of this tender report and endorses that the evaluation has complied with probity requirements.

Occupational health and safety

- 49. The recommended tenderers have occupational health and safety management systems that comply with the requirements of the Occupational Health and Safety Act 2004 and the Occupational Health and Safety Regulations 2017 and have been implemented throughout the organisation. All recommended tenderers provided evidence of their organisational occupational health and safety management plans, and all either have, or are currently seeking, third-party certification of these plans.
- 50. The evaluation panel is satisfied with the tender submissions from all the recommended tenderers previous history in respect of occupational health and safety claims or incidents.
- 51. The tender document contained occupational health and safety conditions which require the following prior to commencement:
 - (a) A risk assessment, including requirement for a job safety analysis (JSA);
 - (b) A health and safety plan (includes induction and safety training, safe work practices and procedures, occupational health and safety consultation, emergency procedures, incident reporting and investigation and occupational health and safety performance monitoring); and
 - (c) Compliance with all Victorian occupational health and safety legislation (includes acts, regulations and codes of practice).
- 52. The contract will be managed by a Council officer who will ensure compliance with the health and safety plan monitoring of monthly performance, and JSA reports.

Financial and resource implications

- 53. All amounts quoted in this section are exclusive of GST.
- 54. The expected expenditure under the proposed contract panel is up to \$2 million per annum for package A (building maintenance services) and up to \$4 million per annum for package B (building minor capital works). In aggregate, the total contract expenditure will be up to \$6 million per annum (in 2024/45 dollars).
- 55. Minor capital works projects are asset renewal and upgrade projects usually having a budget of \$300K or less (with typical average value around \$120K) in 2024/25 dollars.
- 56. The contracts will include an annual price adjustment for tendered hourly rates linked to the Wage Price Index, applied on each anniversary of the contract commencement.
- 57. The maximum total expenditure under the proposed contract panel, over the maximum contract duration of nine years if Council exercises all its extension options and including a high price escalation scenario allowance of 8% p.a. compound, is \$75 million.
- 58. The proposed contract panel does not commit Council to any minimum level of expenditure with any contactor or in aggregate. Council's only commitments will arise as specific maintenance orders and capital works orders are issued to contractors under the panel contracts.
- 59. Officers will manage all expenditure under the proposed contract panel within the building maintenance operating budget and building capital works budget adopted by Council each budget year.
- 60. The panel contracts are schedule of rates contracts, and payments to panel contractors will be managed in line with the rates tendered by the contractors.
- 61. The annual estimate is based on previous annual expenditure for programmed and reactive building maintenance and expected future capital works programs.

Economic development implications

- 62. Council's facilities that will be maintained, renewed and upgraded under this contract support a range of Council services and encourage visitation to the municipality, contributing to a thriving local economy.
- 63. Tenderers have committed to the use of local suppliers as part of the delivery of services and works which will provide local economic benefits.

Stakeholder consultation

64. Council officers from the Building and Asset Management branch developed the tender documents, consulting with other internal branches as required to ensure that the specification met the organisation's needs.

Sustainability implications

- 65. The recommended tenderers all provided positive environmental sustainability responses in their tender submissions. Ongoing monitoring of sustainability practices will occur during the life of the contract.
- 66. Some examples of good environmental practices listed by the recommended tenderers include:
 - (a) product selection that provides less impact on the environment;
 - (b) an extensive recycling and waste minimising program; and
 - (c) all recommended tenderers have third party accreditation in environmental management or an environmental management plan in place.

Social procurement implications

- 67. Tenderers were required to demonstrate any socially responsible practices they currently apply or can implement while providing the services.
- 68. The recommended tenderers all provided positive social sustainability responses in their respective tender submissions including having diverse and inclusive workforces, employing people from disadvantaged backgrounds and using social and environmentally responsible suppliers.

Human rights and disability – access and inclusion implications

- 69. A gender impact assessment has been undertaken in relation to this contract to work toward eliminating gender inequality in relation on the services and works delivered under the contract, and has identified these gender impact actions:
 - to be gender sensitive to specific locations and stakeholders, ensuring an understanding of the need to assign tradespersons of a specific gender to attend sites in some instances;
 - (b) be forthright in the use of gender-neutral language when referencing trades and avoid gender stereotyping of industry roles; and
 - (c) analyse and track the gender breakdown of the respective contractor workforces.
- 70. The equal opportunity approach of each tenderer was assessed as part of the evaluation criteria. All the recommended tenderers have equal opportunity polices in place.

Community Vision and Council Plan implications

- 71. The Council Plan 2021 -25 includes the following strategic objectives which apply to this contract:
 - (a) climate and environment;
 - (b) social equity and health; and
 - (c) place and nature.

Legal implications

- 72. The form of agreement is a deed of standing offer for building maintenance services and minor capital works, which was prepared by Maddocks to suit this tender. A deed will be executed with each successful tenderer, which will incorporate Council's specification for the services and works, and the pricing rates tendered by that tenderer.
- 73. It is a requirement for all contractors to maintain the specified amount of public liability insurance for the contract period. WorkCover insurance must also be in place for the duration of the contract.
- 74. The contract specification includes key performance indicators that will be used to assess and manage the performance of each panel contractor.

Options

- 75. Options available to Council in relation to this report include:
 - (a) Award the panel contracts as per officer recommendations.

This is recommended.

(b) Not award the panel contracts as recommended by officers and either re-tender and/or take a different approach to the provision of these services and works.

Conclusion

- 76. A tender and evaluation for contract panel C1673 Building Maintenance Services and Minor Capital Works has been undertaken in a manner that is compliant with Council's procurement policy.
- 77. The tender evaluation panel recommends two sub-panels of contractors to be appointed under this contact panel:
 - (a) Panel A for building maintenance services and minor capital works packages; and
 - (b) Panel B for building minor capital works package only.
- 78. This contract panel will provide value for money and support the maintenance, renewal and upgrade of Council's building assets that underpin many of Council's services to the community.

RECOMMENDATION

- 1. That Council:
 - (a) Awards contracts for C1673 for Building Maintenance Services and Minor Capital Works to the following contractors for an initial term of 3 years commencing on 1 October 2024, with options at Council's discretion to extend for an additional two x three-year periods, for a maximum possible contract duration of nine years:

for Panel A (packages A maintenance services and B minor capital works)

(i)	(ABN)
(ii)	(ABN)
<u>for Pa</u>	nel B (package B minor capital works only)
(iii)	(ABN)
(iv)	(ABN)
(v)	(ABN)

- (b) Notes that the maximum expenditure under the contract panel is expected to be \$6 million ex-GST per annum (2024/24 dollars) and that the maximum total expenditure under the proposed contract panel, over the maximum contract duration of nine years if Council exercises all its extension options and including a high price escalation scenario allowance of 8% p.a. compound, is \$75 million ex-GST;
- (c) Authorises the General Manager Infrastructure and Environment to sign the contract documentation and exercise options (as needed and subject to satisfactory performance) on behalf of Council; and
- (d) Authorises Council officers to communicate this information to the extent necessary to give effect to the recommendation.

Attachments

1 Building Maintenance Services and Minor Capital Works Tender C1673 - Confidential