

# AGENDA



Meeting of Council

To be held at the

Civic Centre

511 Burwood Highway

Wantirna South

On

Monday 22 May 2023 at 7:00 PM

This meeting will be conducted as a hybrid meeting

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Bruce Dobson  
Chief Executive Officer

1 Apologies and Requests for Leave of Absence

2 Declarations of Conflict of Interest

3 Confirmation of Minutes

Confirmation of Minutes of Meeting of Council held on Wednesday 26 April 2023

4 Presentations, Petitions and Memorials

5 Reports by Councillors



## 6 Planning Matters

### 6.1 Report of Planning Applications Decided Under Delegation 1 April 2023 to 30 April 2023

**SUMMARY: Manager, City Planning & Building, Paul Dickie**

**Details of planning applications considered under delegation are referred for information. It is recommended that the items be noted.**

#### **RECOMMENDATION**

**That the planning applications decided under delegation reports (between 1 April 2023 to 30 April 2023) be noted.**

#### **1.REPORT**

Details of planning applications decided under delegation from 1 April 2023 to 30 April 2023 are attached. The applications are summarised as follows:

<b>Application Type</b>	<b>No.</b>
Building & Works: Residential	2
Other	2
Subdivision	19
Units	14
Tree Removal / Pruning	5
Single Dwelling	3
Change of Use	2
Signage	2
Variation to Restrictive Covenant	1
Boundary realignment	1
Liquor licence	2
<b>TOTAL</b>	<b>53</b>

#### **2.CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By: Manager, City Planning & Building, Paul Dickie**

**Report Authorised By: Director, City Liveability, Matt Kelleher**

#### **Attachments**

Nil

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## Knox City Council

### Report of Planning Applications Decided Under Delegation

1 April 2023 and 30 April 2023

<b>Ward</b>	<b>No/ Type</b>	<b>Address</b>	<b>Description</b>	<b>Decision</b>
Baird	2022/6084	34 Hazelwood Road BORONIA VIC 3155	Development of the land for four (4) double storey dwellings	17/04/2023 Approved
Baird	2023/6032	47 Western Road BORONIA VIC 3155	Three lot subdivision (approved development site)	14/04/2023 Approved
Baird	2023/9036	28 Park Boulevard FERNTREE GULLY VIC 3156	Two (2) lot subdivision (approved development site)	6/04/2023 Approved
Baird	2023/6127	14/163 Boronia Road BORONIA VIC 3155	Internally illuminated business identification signage	4/04/2023 Approved
Baird	2023/6191	57 Piperita Road FERNTREE GULLY VIC 3156	Two (2) lot subdivision (approved development site)	26/04/2023 Approved
Baird	2022/6516	2 Piper Road FERNTREE GULLY VIC 3156	Development of the land for two (2) double storey dwellings	14/04/2023 Approved
Baird	2022/6535	5 Cindy Court FERNTREE GULLY VIC 3156	The construction of two (2) double-storey dwellings on the land	26/04/2023 Notice of Decision
Baird	2022/6491	2 Murene Court BORONIA VIC 3155	The construction of a single storey dwelling to the rear of the existing dwelling and tree removal	24/04/2023 Approved
Baird	2023/9037	125 Boronia Road BORONIA VIC 3155	Buildings and works (doorway)	24/04/2023 Refused
Baird	2022/6506	9 Woodvale Road BORONIA VIC 3155	Development of the land for seven (7) double storey townhouses	5/04/2023 Notice of Decision
Baird	2022/6547	247 Dorset Road BORONIA VIC 3155	Sale and supply of liquor (restaurant and café licence) associated with food and drink premises and business identification signage	5/04/2023 Approved
Baird	2022/6572	12 Stirling Street FERNTREE GULLY VIC 3156	Development of a double storey dwelling to the rear of the existing dwelling	28/04/2023 Approved

Ward	No/ Type	Address	Description	Decision
Chandler	2022/6482	12 Camelia Crescent THE BASIN VIC 3154	Two (2) lot subdivision, development of two (2) single storey dwellings and variation to an existing easement	17/04/2023 Notice of Decision
Chandler	2022/6660	2/6 Augusta Road THE BASIN VIC 3154	Buildings and works for the construction of a double storey dwelling	4/04/2023 Approved
Chandler	2023/6076	10 Fern Street THE BASIN VIC 3154	Buildings and Works (Construction of a shed)	4/04/2023 Approved
Chandler	2023/6090	9 Montana Avenue BORONIA VIC 3155	Removal of one (1) Hesperocyparis lusitanica (Mexican Cypress) and the Pruning of one (1) Liquidambar styraciflua (Sweetgum)	5/04/2023 Approved
Chandler	2021/6488	4 Lucas Close BORONIA VIC 3155	Variation to restrictive Covenant (Instrument N723368X within Title Volume 09739 Folio no. 528), to remove reference to 'one single dwelling house' from point (a)	28/04/2023 Refused
Chandler	2022/6697	32 Helene Court BORONIA VIC 3155	Construction of a double storey dwelling and associated vegetation removal	20/04/2023 Approved
Chandler	2023/6035	1-3 /25 Girdwood Road BORONIA VIC 3155	Three lot subdivision (existing dwellings)	24/04/2023 Approved
Chandler	2023/6088	12 Hayles Street BORONIA VIC 3155	Removal of two (2) dead Eucalyptus obliqua (Messmate) and one (1) Cedrus deodara (Himalayan Cedar)	11/04/2023 Approved
Chandler	2023/6060	2-4 Rosella Avenue BORONIA VIC 3155	16 Lot Subdivision (approved development site)	6/04/2023 Approved
Chandler	2023/9040	4/35 Timewell Crescent BORONIA VIC 3155	Pruning of one (1) Eucalyptus botryoides (Southern Mahogany)	28/04/2023 Approved
Chandler	2023/6139	33 Democrat Drive THE BASIN VIC 3154	Removal of one (1) Betula pendula (Silver Birch)	28/04/2023 Approved

<b>Ward</b>	<b>No/ Type</b>	<b>Address</b>	<b>Description</b>	<b>Decision</b>
Collier	2022/6655	39 Alderford Drive WANTIRNA VIC 3152	The construction of two (2) double storey dwellings on the land	3/04/2023 Notice of Decision
Collier	2023/6162	1&2 /57 Kingloch Parade WANTIRNA VIC 3152	Two lot subdivision (approved development site)	20/04/2023 Approved
Collier	2023/6176	56A Templeton Street WANTIRNA VIC 3152	2 lot subdivision (approved development site)	20/04/2023 Approved
Dinsdale	2023/6034	31 Kumala Road BAYSWATER VIC 3153	Three lot subdivision (approved development site)	21/04/2023
Dinsdale	2022/6417	35 Armstrong Road BAYSWATER VIC 3153	Development of the land for two (2) double storey dwellings and two lot subdivision	17/04/2023 Approved
Dinsdale	2021/6724	21 Queenstown Road BORONIA VIC 3155	The construction of a double storey dwelling to the rear of the existing dwelling	17/04/2023 Approved
Dinsdale	2022/6650	36 Dixon Court BORONIA VIC 3155	Eight lot subdivision (approved development site)	11/04/2023 Approved
Dinsdale	2021/6795	2 Highmoor Avenue BAYSWATER VIC 3153	Development of the land for twelve (12) attached dwellings	17/04/2023 Notice of Decision
Dinsdale	2023/6014	18 Maple Street BAYSWATER VIC 3153	Three lot subdivision (approved development site)	13/04/2023 Approved
Dinsdale	2023/6005	1,2&3 /307 Boronia Road BORONIA VIC 3155	3 lot subdivision (approved development site)	13/04/2023 Approved
Dinsdale	2023/6036	10 Roy Court BORONIA VIC 3155	3 Lot Subdivision (Approved Development Site)	28/04/2023 Approved
Dinsdale	2023/6039	42 Allanfield Crescent BORONIA VIC 3155	3 Lot Subdivision (Approved Development Site)	28/04/2023 Approved
Dinsdale	2023/9043	14/111 Lewis Road KNOXFIELD VIC 3180	Buildings and Works (Storage Mezzanine)	27/04/2023 Approved
Dobson	2022/6667	47 Doysal Avenue FERNTREE GULLY VIC 3156	Development of the land for two (2) single storey dwellings on the lot	19/04/2023 Approved

<b>Ward</b>	<b>No/ Type</b>	<b>Address</b>	<b>Description</b>	<b>Decision</b>
Dobson	2023/9041	11 Mount View Road UPPER FERNTREE GULLY VIC 3156	Proposed shed to rear of property	20/04/2023 Approved
Dobson	2022/6631	5 Grand Valley Terrace LYSTERFIELD VIC 3156	Two (2) lot subdivision	5/04/2023 Approved
Friberg	2023/6132	1st Floor Sh 1/1880 Ferntree Gully Road FERNTREE GULLY VIC 3156	The display of business identification signage	4/04/2023 Approved
Friberg	2023/6086	1/31 Rushdale Street KNOXFIELD VIC 3180	Sale and consumption of liquor in associated with existing ancillary sales (Producers License)	6/04/2023 Approved
Friberg	2023/9023	9 Laura Road & 48 Rickards Avenue KNOXFIELD VIC 3180	Re-realign the common boundary between 48 Rickards Ave, Knoxfield and 9 Laura Avenue, Knoxfield	5/04/2023 Approved
Friberg	2023/6101	1&2 /23 Fitzgerald Street FERNTREE GULLY VIC 3156	Two (2) lot subdivision (Existing Buildings)	20/04/2023 Approved
Friberg	2022/6630	24 Thomas Street FERNTREE GULLY VIC 3156	Use of land for the purpose of a Bar associated with a Brewery, Buildings and Works, Reduction in Car Parking, Signage and Liquor License	5/04/2023 Approved
Scott	2023/6169	95 Rickards Avenue North KNOXFIELD VIC 3180	Two Lot Subdivision (approved development site)	26/04/2023 Approved
Scott	2023/6019	2 Hugh Street KNOXFIELD VIC 3180	3 Lot Subdivision (Approved Development Site)	13/04/2023 Approved
Taylor	2023/6017	10 Sandford Close ROWVILLE VIC 3178	The construction of a single dwelling within a Bushfire Management Overlay area	2/04/2023 Approved
Taylor	2022/6404	89 Major Crescent LYSTERFIELD VIC 3156	3 lot subdivision, removal of easement and native vegetation	12/04/2023 Notice of Decision
Tirhatuan	2022/6015	3/14 Corporate Avenue ROWVILLE VIC 3178	Development of 35 dwellings and waiver to car parking	3/04/2023 Approved

<b>Ward</b>	<b>No/ Type</b>	<b>Address</b>	<b>Description</b>	<b>Decision</b>
Tirhatuan	2023/6025	1&2 /1350 Ferntree Gully Road SCORESBY VIC 3179	The use of the site for an indoor recreation facility (24 hour gym) and the creation an alterations to the access in a Road Zone 2	19/04/2023 Approved
Tirhatuan	2023/9039	1/1A Denver Crescent ROWVILLE VIC 3178	Two lot subdivision (approved development site)	20/04/2023 Approved
Tirhatuan	2023/6073	10 Rupicola Court ROWVILLE VIC 3178	Pruning of one (1) Eucalyptus radiata (Narrow Leaved Peppermint)	20/04/2023 Approved
Tirhatuan	2021/6785	72 Arnold Drive SCORESBY VIC 3179	Development of the land for three (3) double storey dwellings	28/04/2023 Approved

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## 6.2 Adoption of Amendment C189knox - Transition Buffer to Rowville Low Density Residential Zone

**SUMMARY:** Strategic Planner, David Cameron

This report advises that a hearing by Planning Panels Victoria has been held in relation to Amendment C189knox to the Knox Planning Scheme, outlines the key findings of the Panel Report and recommends that Council adopt the Amendment with minor changes consistent with the Panel recommendations.

Amendment C189knox seeks to apply new planning scheme controls, to better reflect the unique character of properties along Taylors Lane, Murray Crescent, Vista Crescent and Fordham Court through the application of the Neighbourhood Residential Zone – Schedule 9 (NRZ9), along with associated changes to local policy with the Knox Planning Scheme. The Amendment seeks to provide a transition between nearby smaller residential lots, and the larger residential lots within the Low Density Residential Zone (LDRZ) by creating a ‘backyard spine’ with an open garden setting.

The Amendment was exhibited between 7 July and 9 August 2022. A total of six submissions were received during the exhibition, three of which opposed the Amendment.

The key issues raised in the submissions relate to:

- Inconsistency with existing neighbourhood character, including:
  - Existing planning permit approvals.
  - Existing outbuildings.
- The proposed extent of the NRZ9.
- The proposed provisions of the NRZ9 including:
  - The proposed setbacks.
  - Application of the proposed controls to single dwellings.
  - The construction of outbuildings.

A Panel Hearing was held on 14 March 2023 which considered the submissions received. The Panel Report was published subsequently and notes that the Amendment is supported by robust strategic work and establishes a strong rationale for the content of the Amendment. The Panel Report recommends that:

1. *Knox Planning Scheme Amendment C189knox be adopted as exhibited subject to amending Neighbourhood Residential Zone Schedule 9 to:*
  - a) *Delete the following decision guideline:*

*“The provision of a single level crossover for driveways.”*
  - b) *Review and clarify the intent of the following decision guideline:*

*“Whether the upper levels are setback to allow views between dwellings.”*

The Panel’s recommendation is supported by officers and the minor changes are considered to have a limited impact on the overall intent of the Amendment. Consequently, the following changes have been made to the Amendment in line with the Panel recommendations:

1. A decision guideline related to the provision of a single crossover for driveways has been deleted.
2. A decision guideline pertaining to the upper level setbacks has been slightly reworded to refer to allowing “separation” in lieu of “views” between dwellings, to more clearly outline the intent of the associated planning objectives.

**The Amendment is recommended to be adopted with the above changes and be forwarded to the Minister for Planning for final approval. Once approved by the Minister, the amended planning provisions will be introduced into the Knox Planning Scheme.**

## **RECOMMENDATION**

**That Council:**

- 1. Notes the Planning Panel Report titled “Knox Planning Scheme Amendment C189knox – Neighbourhood Residential Zone – Schedule 9, Rowville, 20 March 2023” as provided in Attachment 1.**
- 2. Adopts the changes to Amendment C189knox in accordance with the Panel’s recommendations, as indicated in Attachment 3, pursuant to Section 27(1) of the *Planning and Environment Act 1987*.**
- 3. Adopts Amendment C189knox to the Knox Planning Scheme with changes, as shown in Attachment 2, pursuant to Section 29(1) of the *Planning and Environment Act 1987*.**
- 4. Submits the adopted Amendment C189knox to the Minister for Planning for approval in accordance with Section 31(1) of the *Planning and Environment Act 1987*.**
- 5. Authorises the Chief Executive Officer (or such person nominated by the Chief Executive Officer) to undertake minor administrative changes to the Amendment documentation that do not change the purpose or intent of the Amendment, prior to submitting to the Minister for Planning.**

### **1. INTRODUCTION**

On 26 April 2021, Council resolved to seek authorisation from the Minister for Planning to prepare and exhibit Amendment C189knox to the Knox Planning Scheme (the Amendment). The Amendment sought to rezone specific properties along Murray Crescent, Vista Crescent, Fordham Court and Silkwood Way in Rowville from the Neighbourhood Residential Zone – Schedule 4 (NRZ4) to the proposed Neighbourhood Residential Zone – Schedule 9 (NRZ9). It was also resolved to include a new strategy under clause 21.06-3 (Design and Character) of the Knox Planning Scheme.

Specifically, the Amendment applies to:

- 24-26 Taylors Lane, Rowville.
- 26-58 Murray Crescent, Rowville (even numbers only)
- 42-70 Vista Crescent, Rowville (even numbers only)
- 5, 6A, 6B and 7 Fordham Court, Rowville.

The Amendment commenced with a strategic review of the current planning scheme provisions prepared for Council by Glossop Town Planning, which recommended creating a ‘buffer area’ between small lot residential subdivision and larger Low Density Residential Zone (LDRZ) lots by applying the proposed NRZ9. The objectives of the NRZ9 are to support low scale, detached development and generous sized rear yards. The NRZ9 includes modified ResCode requirements for landscaping, side and rear setbacks, and private open space to reinforce the existing backyard orientated ‘buffer’ to the LDRZ, along with associated neighbourhood character objectives and decision guidelines.

Amendment C189knox was exhibited from 7 July 2022 to 9 August 2022. A total of 6 submissions were received during the exhibition.



At Council's meeting held on 28 November 2022, Council resolved to request the Minister for Planning to appoint a Planning Panel under Section 153 of the *Planning and Environment Act 1987*.

Subsequently, a Directions Hearing was held on 13 February 2023, followed by a Panel Hearing on 14 March 2023, to consider submissions received during public exhibition. All submitters were invited by the Panel to participate in the hearing. One submitter requested to be heard at the hearing but was ultimately unavailable on the day of the panel hearing. All written submissions were considered by the Panel. Council officers and Glossop Town Planning participated in the Panel Hearing process, and presented Council's submission.

The Panel Report, which outlines the Panel's recommendations in relation to C189knox was received on 20 March 2023 (Attachment 1) and publicly released on Council's website on 3 April 2023.

## **2. DISCUSSION**

The Panel Report, in consideration of the background strategic documentation, broadly supports the strategic grounds for the Amendment. The Panel has not questioned the identified character of the Amendment area or Council's approach, and has considered the background strategic review to be robust. The Panel report goes on to note that the Amendment:

- Is supported by, and implements, the relevant sections of the Planning Policy Framework and Local Planning Policy Framework.
- Is consistent with the relevant Ministerial Directions and Practice Notes.
- Is well founded and strategically justified.
- Should proceed subject to addressing some specific issues.

The Panel Report summarises the issues raised within the submissions as:

- Inconsistency with existing neighbourhood character, including:
  - o Existing planning permit approvals
  - o Existing outbuildings
- Proposed extent of the NRZ9.
- Proposed provisions of the NRZ9 including:
  - o Setbacks
  - o Application to single dwellings
  - o The construction of outbuildings
- Impacts on biodiversity.

### **2.1. Key matters from the Panel Report**

With regard to the issues raised within submissions, the panel report (Attachment 1) includes the following discussions:

#### **Neighbourhood character**

In relation to submissions that referred to neighbourhood character, the Panel considered the identified character of a 'backyard spine' within the Amendment properties to be largely intact. The backyard spine was noted as having an existing level of depth that could allow for future canopy tree planting, and an appropriate transition from the proposed NRZ9 properties to the neighbouring Low Density Residential Zone (LDRZ) properties.

The Panel did acknowledge the existing intrusions within the 'backyard spine' area. However, they were seen to be small and not visually dominant, and not impacting the identified character. It was also noted that there is an absence of observable dwellings near to the rear boundaries of lots.

While the Panel generally saw the drafting of the NRZ9 as appropriate to support the Neighbourhood Character Objectives within the zone schedule, a recommendation was made that the following decision guideline be redrafted as its intent was unclear:

- 'Whether the upper levels are setback to allow views between dwellings'

The background to his decision guideline is the planning review 'Review of Rowville LDRZ and adjoining GRZ2 land, 2021'. On page 51 within the report, it is noted that this decision guideline is to '... address views from the street, recognising that there are some comparatively deep lots (up to 65 metres) within the buffer area, and insufficient landscaping alongside boundaries could have an impact on the streetscape'.

The Panel report correctly notes that the decision guideline was originally intended to address spaciousness between dwellings, rather than views/vistas within the area. It is therefore appropriate to modify the Amendment (Attachment 2) and reword the decision guideline to read:

- 'Whether the upper levels are setback to allow for **separation** between dwellings'.

The Panel also recognised the following decision guideline has been insufficiently justified for application within the NRZ9:

- 'The provision of a single level crossover for driveways'

The intent of this decision guideline was clarified during the hearing, as being useful for the ongoing provision of space for street trees within the road reserve. The Panel disagreed that this was part of the 'existing' character to be retained, with existing residential properties having two crossovers, and considered part of the established character. The Panel member noted there are current opportunities to continue street tree planting within the area, even with the current encumbrance of multiple crossovers. It is therefore considered appropriate to remove the decision guideline in line with the Panel recommendation.

Overall, in relation to neighbourhood character, the Panel supported the character as identified by Council and viewed it as being substantially intact. The Panel considered the Amendment to be facilitating the identified character, and the neighbourhood character objectives, application and decision guidelines of the NRZ9 being appropriate (subject to the above recommended changes).

### **Proposed extent of the NRZ9**

The Panel considered the request of landowners to be removed from the NRZ9, on various grounds. With regard to subdivided lots that do not directly abut the LDRZ area, the Panel considered, amongst other matters, that the same neighbourhood character objectives still apply, and that there are some variations to planning requirements e.g. reduced setback requirements, for lots that do not directly abutting the LDRZ. The Panel concluded that exclusion of the properties would result in an undesirable planning outcome and is unnecessary.

Additionally, the Panel considered the removal of lots adjacent to LDRZ lots with reticulated sewerage, where the possibility exists to subdivide LDRZ lots into 2 separate lots in the future

(with a 0.2 hectare minimum lot size). The Panel viewed this to be unlikely to impact the character of the area should it occur, and the proposed buffer area of the C189knox would continue to be beneficial in this circumstance given the siting and size of the lots. The Panel concluded that the extent of the proposed NRZ9, in relation to LDRZ lots with potential to be subdivided into 2 lots, is acceptable.

### **Setback requirements**

The Panel noted that the proposed side setbacks to dwellings were uncontested in submissions, and that they have been appropriately applied within the NRZ9. The rear 9m setback proposed by the Amendment was also considered reasonable by the Panel, as it allows for landscaping, outdoor space, and a sense of building separation, that reinforces the transitional area proposed between the NRZ9 lots and the neighbouring LDRZ lots. It was noted that the proposed setbacks would unlikely limit the lots achieving their strategic housing role.

The Panel supported the proposed ResCode setback variations to Clauses 54 and 55, as detailed in the NRZ9.

### **Single dwellings and outbuildings**

The Panel recommended the Amendment should continue to apply to single dwellings (as opposed to only multi dwelling development), as the purpose of the Amendment is to manage neighbourhood character outcomes through the scale of built form. The Panel report notes that single dwellings could modify this character to the detriment of the area and result in undesirable planning outcomes, were they to be left out of the NRZ9 requirements.

In relation to outbuildings, the NRZ9 provisions do not apply to the construction of outbuildings, and current exemption will continue to apply within the Knox Planning Scheme. The NRZ9 does not alter this. Construction of outbuildings within the rear setback was not seen by the Panel as having the potential to erode the desired neighbourhood character outcome.

The Panel considered that the Amendment should apply to single dwellings (as well as multiple dwellings), and it will not impact the ability of property owners to construct outbuildings, sheds, carports and garages.

### **Biodiversity**

The Panel acknowledged Council's existing work regarding biodiversity, and Sites of Biological Significance. While one submission put forward that the Amendment will impact biodiversity, it did not indicate how this would occur, or request any change to the Amendment. The Panel noted the Amendment contains no sites of biological significance, and no evidence has been provided to suggest that the Amendment will impact the surrounding biodiversity.

## **2.2. Conclusion**

Under Section 27 of the *Planning and Environment Act 1987*, Council must consider the Panel's report before deciding whether or not to adopt the amendment.

The Panel report recommends that the Amendment be adopted as exhibited subject to two changes to the NRZ9. These recommendations, and the officer's response, are as follows:

- A) Delete the following decision guideline: ‘The provision of a single level crossover for driveways’.

As detailed earlier, the officer recommendation is to remove this decision guideline in line with the Panel recommendation. There will continue to be adequate opportunities for street tree planting.

- B) Review and clarify the intent of the following decision guideline: ‘Whether the upper levels are setback to allow views between dwellings’.

It is recommended to modify the decision guideline to read ‘Whether the upper levels are setback to allow “separation” between dwellings’. This change is guided by the Panel report and the background studies to the Amendment, which clarify the intent is providing openness between dwellings, rather than protection of views and vistas.

The changes made to NRZ9 decision guidelines, compared to the exhibition version of the NRZ9, are indicated in Attachment 3.

Amendment C189knox is recommended to be adopted as exhibited, with the minor changes discussed above (updated Amendment documentation provided in Attachment 2). Once adopted, the Amendment will be required to be submitted to the Minister for Planning for final approval.

### **3. CONSULTATION**

Amendment C189knox was exhibited between 7 July and 9 August 2022. During the exhibition period six submissions were received.

Following the appointment of a Panel to consider Amendment C189knox on 14 March 2023, further opportunity was provided by Planning Panels Victoria for submitters to participate and speak at the main Panel Hearing. One of the six submitters requested to be heard at the hearing, but ultimately did not appear at the hearing. However, all written submissions were considered by the Panel.

### **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council’s Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

### **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

The Amendment is considered to have limited environmental impact, or associated amenity issues. Any future residential (or other permissible) development proposals under the proposed NRZ9 that require permit approval, would need to demonstrate an appropriate design response with respect to character, environmental and amenity issues, contained within the zone schedule.

### **6. FINANCIAL & ECONOMIC IMPLICATIONS**

The Amendment is funded through the City Futures operational budget for the 2022/23 financial year. The rezoning is not considered to create further significant financial implications.

## **7. SOCIAL IMPLICATIONS**

The Amendment has limited social implications as it changes the planning provisions for a limited number of residential properties. As the existing residential properties are being rezoned from an existing residential zone schedule to an alternate residential schedule, it is not considered that the Amendment will cause substantial social change to the area.

## **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

### **Neighbourhoods, Housing & Infrastructure**

Strategy 2.1 - Plan for and support diverse housing to meet changing community needs.

Strategy 2.2 - Create, enhance and maintain places and spaces for people to live, work, play and connect.

### **Civic Engagement & Integrity**

Strategy 5.1 - Provide opportunities for all people in Knox to have their say.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By:** Strategic Planner, David Cameron  
**Report Authorised By:** Director City Liveability, Matt Kelleher

### **Attachments**

1. Attachment 1 - Amendment C189knox - Panel Report [6.2.1 - 38 pages]
2. Attachment 2 - Amendment Documentation - C189knox [6.2.2 - 9 pages]
3. Attachment 3 - Changes to ordinance post exhibition (changed tracked) - C189knox [6.2.3 - 4 pages]

**Planning  
Panels  
Victoria**

**Knox Planning Scheme Amendment C189knox  
Neighbourhood Residential Zone – Schedule 9, Rowville**

**Panel Report**

*Planning and Environment Act 1987*

**20 March 2023**



**How will this report be used?**

This is a brief description of how this report will be used for the benefit of people unfamiliar with the planning system. If you have concerns about a specific issue you should seek independent advice.

The planning authority must consider this report before deciding whether or not to adopt the Amendment.  
[section 27(1) of the *Planning and Environment Act 1987* (the PE Act)]

For the Amendment to proceed, it must be adopted by the planning authority and then sent to the Minister for Planning for approval.

The planning authority is not obliged to follow the recommendations of the Panel, but it must give its reasons if it does not follow the recommendations. [section 31 (1) of the PE Act, and section 9 of the *Planning and Environment Regulations 2015*]

If approved by the Minister for Planning a formal change will be made to the planning scheme. Notice of approval of the Amendment will be published in the Government Gazette. [section 37 of the PE Act]

Planning Panels Victoria acknowledges the Wurundjeri Woi Wurrung People as the traditional custodians of the land on which our office is located. We pay our respects to their Elders past and present.

*Planning and Environment Act 1987*

Panel Report pursuant to section 25 of the PE Act

Knox Planning Scheme Amendment C189knox

Neighbourhood Residential Zone – Schedule 9, Rowville

**20 March 2023**



Tim Hellsten, Chair

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## Glossary and abbreviations

Council	Knox City Council
DELWP	Department of Environment, Land, Water and Planning (now Department of Transport and Planning)
LDRZ	Low Density Residential Zone
NRZ4	Neighbourhood Residential Zone Schedule 4
NRZ9	Neighbourhood Residential Zone Schedule 9
PE Act	<i>Planning and Environment Act 1987</i>
Planning Review	<i>Review of Rowville LDRZ and adjoining GRZ2 land (March 2021), Glossop Town Planning</i>
VCAT	Victorian Civil and Administrative Tribunal

## Overview

Amendment summary	
The Amendment	Knox Planning Scheme Amendment C189knox
Common name	Neighbourhood Residential Zone – Schedule 9, Rowville
Brief description	Rezone the Subject land to the Neighbourhood Residential Zone – Schedule 9 and amend Clause 21.06-3 (Design and Character) to insert a new strategy
Subject land	The following Rowville properties: <ul style="list-style-type: none"> <li>- 24-26 Taylors Lane</li> <li>- 26-58 Murray Crescent (even numbers only)</li> <li>- 42-70 Vista Crescent (even numbers only)</li> <li>- 5, 6A, 6B and 7 Fordham Court</li> </ul>
Planning Authority	Knox City Council
Authorisation	3 December 2021 - conditional
Exhibition	7 July– 9 August 2022
Submissions	Number of Submissions: 6 Opposed: 3 <ol style="list-style-type: none"> <li>1. Wenqi Zuo</li> <li>2. Ray Stevens</li> <li>3. Bob Morris</li> <li>4. Alex Nianqiao</li> <li>5. Joe Cassera</li> <li>6. Andrew Sawyer</li> </ol>
Panel process	
The Panel	Tim Hellsten
Directions Hearing	13 February 2023 by video conference
Panel Hearing	14 March 2023 by video conference
Site inspections	Unaccompanied, 21 February 2023
Parties to the Hearing	Knox City Council represented by Matthew Gilbertson of Glossop Town Planning Bob Morris
Citation	Knox PSA C189knox [2023] PPV
Date of this report	20 March 2023

## Executive summary

Knox Planning Scheme Amendment C189knox (the Amendment) proposes to apply a new Schedule to the Neighbourhood Residential Zone to properties located along Taylors Lane, Murray Cres, Vista Crescent and Fordham Court, Rowville. These properties have been characterised by Knox City Council (Council) as large lots which contribute to a backyard spine with an open garden setting and that provides a transition between nearby smaller residential lots, and the larger residential lots within the adjoining Twin Views Estate.

Council has prepared the Amendment following a recent strategic review of the area's planning controls and planning history.

The Amendment seeks to retain and enhance the identified neighbourhood character by:

- applying Neighbourhood Residential Zone Schedule 9 – Transition Area (NRZ9) providing character objectives and requirements that support increased side and rear dwelling setbacks
- amending Clause 21.06-3 (Design and Character) by inserting a new supporting strategy.

Six submissions were received to the Amendment. Two submissions supported the Amendment.

The key issues raised in submissions related to:

- inconsistency with existing neighbourhood character, including:
  - existing planning permit approvals
  - existing outbuildings
- the proposed extent of NRZ9
- proposed provisions of NRZ9 including:
  - setbacks
  - application to single dwellings
  - the construction of outbuildings.

The identified neighbourhood character of the subject land including the backyard spine is readily appreciable, unique and provides for a built form and landscape transition between the Twin Views Estate and conventional housing development opposite the subject land. This character is substantially intact and has not been eroded or diminished through development activity.

The strategic work undertaken by Council in support of the Amendment was robust in describing the existing neighbourhood character and the issues and challenges associated with managing change in this area in the context of current planning controls and policy. It establishes a strong rationale for preparing the Amendment and informing the content of the NRZ9.

The proposed rear and side setback provisions are appropriate and adequately justified, and should apply to single and multiple dwellings alike. There is no strategic basis for excluding any properties from the Amendment.

The Amendment is well founded and strategically justified and is supported by, and implements, the relevant sections of the Planning Policy Framework and Local Planning Policy Framework. The Amendment should proceed subject to addressing the Panel's recommendations regarding the draft NRZ9 decision guidelines.

### Recommendations

Based on the reasons set out in this Report, the Panel recommends:

1. Knox Planning Scheme Amendment C189knox be adopted as exhibited subject to amending Neighbourhood Residential Zone Schedule 9 to:
  - a) delete the following decision guideline:  
*'The provision of a single level crossover for driveways.'*
  - b) review and clarify the intent of the following decision guideline:  
*'Whether the upper levels are setback to allow views between dwellings.'*

# 1 Introduction

## 1.1 The Amendment

Knox Planning Scheme Amendment C189knox (the Amendment) proposes to apply a new planning scheme control to over 30 properties located along Taylors Lane, Murray Crescent, Vista Crescent and Fordham Court, Rowville. These properties have been characterised by Knox City Council (Council) as large lots which contribute to a backyard spine with an open garden setting and which provides a transition between adjacent smaller residential lots, and larger residential lots within the adjoining Low Density Residential Zone (LDRZ) which extends across the Twin Views Estate.

The Amendment seeks to retain and enhance this character by:

- retaining the existing Neighbourhood Residential Zone on the subject land, but replacing the existing Zone Schedule with a new Schedule 9 – Transition Area (NRZ9) to provide character objectives and requirements that support increased side and rear dwelling setbacks
- amending Clause 21.06-3 (Design and Character) by inserting a new strategy under ‘Objective 4’ to read:
  - 4.5 In Rowville support residential development that provides an appropriate transition to dwellings in the LDRZ through the provision of large backyards for landscaping, tree planting and open space.

The Amendment follows a planning review by Glossop Town Planning in March 2021 (Planning Review) prepared for Council to assist in determining the appropriateness of controls in the residential area to the north and east of the Twin Views Estate, and in the context of Victorian and Civil Administrative Tribunal (VCAT) decisions.

## 1.2 The subject land

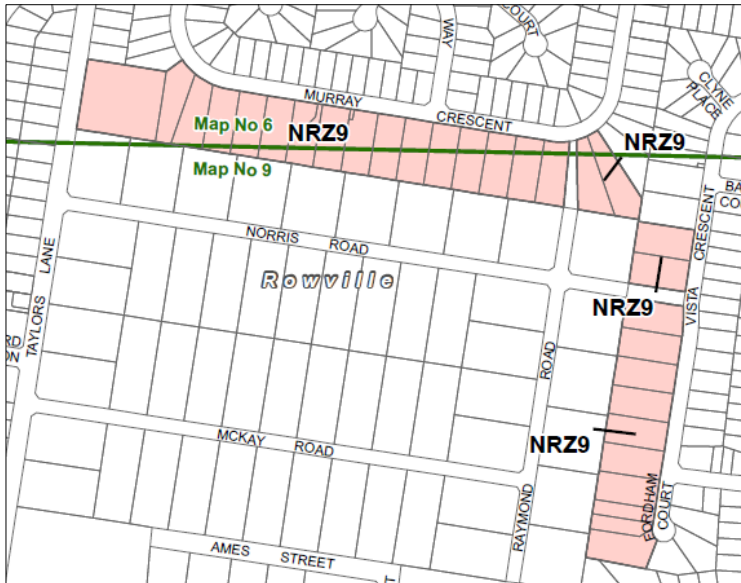
The Amendment applies to land at the following properties within Rowville (Figure 1):

- 24-26 Taylors Lane
- 26-58 Murray Crescent (even numbers only)
- 42-70 Vista Crescent (even numbers only)
- 5, 6A, 6B and 7 Fordham Court.

The subject land (Figure 2) is within the City of Knox, 28 kilometres from Melbourne’s CBD, and:

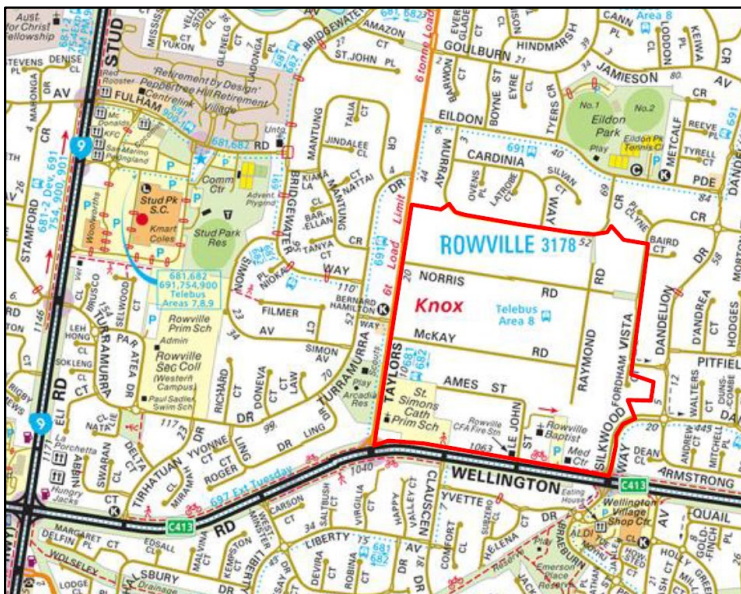
- located near:
  - Wellington and Stud Roads (arterial roads) and 3 kilometres east of Eastlink
  - Wellington Village Shopping Centre (a ‘Neighbourhood Activity Centre’ to the south) and Stud Park Shopping Centre (an ‘Activity Centre’ to the west)
  - primary and secondary schools and areas of passive and active open spaces
- comprises larger residential lots of approximately 2,000 square metres (and over 60 metres in depth from street frontage) containing predominantly one and two storey single storey detached dwellings and varied side and front setbacks within a garden setting and spacious backyards (refer aerial views in Figures 3 and 4)
- adjoins Twin Views Estate (within the LDRZ) comprising mostly unsewered lots of around 4,000 square metres generally featuring large low scale single storey dwellings within landscaped gardens with generous side and front setbacks and developed in the 1970s.

Figure 1 Subject land



Source: Exhibited composite Knox Planning Scheme Map Nos, 06ZN and 09ZN

Figure 2 Subject land context



Source: Figure 1 Planning Review – Study area outlined in red (which includes the subject land)



**Figure 3** Interface of subject land in Murray Crescent with Twin Views Estate (Norris Road)



Source: Document 4

**Figure 4** Vista Crescent, Murray Crescent and Fordham Court interface with Twin Views Estate (Raymond Road)

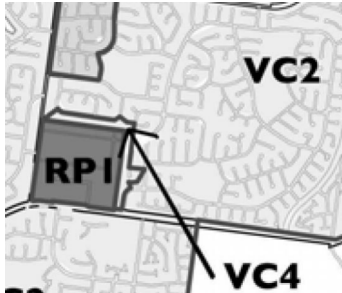


Source: Document 4

### 1.3 Chronology of events

Table 1 sets out the chronology of the Amendment's preparation based on Council's Part A submission and Planning Review.

**Table 1** Chronology of events

Date	Event
1970s	Twin Views Estate developed under the <i>Rowville/Lysterfield Master Development Plan</i> which recognised the larger lots needed to have an appropriate buffer
March 1981	Land along the northern and eastern boundaries of the Twin Views Estate rezoned to a depth of 65 metres to the 'Knox Residential Medium Zone' with a minimum lot size of 2000sq metres
Nov 1999	Knox New Format Planning Scheme comes into operation. Subject land included in the 'Residential 1 Zone' and the Twin Views Estate in the LDRZ
21 Oct 2004	Amendment C05 approved introducing a new Neighbourhood Character Policy in the Local Planning Policy Framework based on the <i>Knox Neighbourhood Character Study 1999</i> and which identified: <ul style="list-style-type: none"> <li>- the Twin Views Estate within the 'Rural Parkland 1' (RP1) precinct, noted for its spacious park like setting including wide side and substantial front setbacks and trees</li> <li>- the subject land within the 'Villa Court 4' (VC4) precinct (as distinct from other adjacent residential areas), which identifies large block size, treed backdrop, large rear yards, regular spaced edge to the street characteristics and buffer role</li> </ul>
	
Nov 2006	Amendment C46 approved implementing the 2005 <i>Knox Housing Statement</i> and which rezoned the subject and adjacent Residential 1 Zone land to Residential 3 Zone
2016	Amendment C131 approved implementing the <i>Knox Housing Strategy (2015)</i> replacing the Neighbourhood Character Policy and precincts with new housing policy and four housing change areas (refer to discussion in Appendix B). The subject land was rezoned to General Residential Zone Schedule 2 – Knox Neighbourhood (second lowest level of housing change). The Twin Views Estate is included in the 'Bush Suburban' housing change area (lowest level of change)
2001 - 2022	Various permit applications for multiple dwellings and subdivision within subject land including VCAT reviews – refer Chapter 2
Jul - Oct 2019	Planning Review study commissioned after Council resolves on 8 July 2019 to undertake a review of the Rowville LDRZ interface



Date	Event
23 Dec 2020	Amendment GC172 gazetted, rezoning land adjoining the LDRZ (including subject land) to the Neighbourhood Residential Zone – Schedule 4 (NRZ4)
26 Apr 2021	Council adopted Planning Review and resolved to seek authorisation to prepare the Amendment
3 Dec 2021	Amendment conditionally authorised
7 Jul – 8 Aug 2021	Amendment exhibited
28 Nov 2022	Council considered submissions and resolved to request a Panel
14 Mar 2022	Panel Hearing

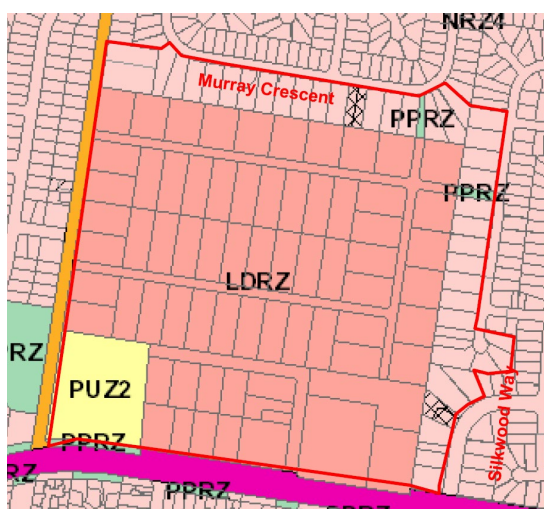
## 1.4 Planning Review

The Planning Review study area (Figure 5) is generally bounded by Murray Crescent (to the north), Vista Crescent and Silkwood Way (to the east), Wellington Road (to the south) and Taylors Lane (to the west). There are 115 properties in the study area.

The Planning Review includes:

- an analysis of built form and landscape character of properties in the LDRZ and subject land
- planning policy context and current zoning of the Study area and subject land (Figure 5) including a chronology of changes to the Knox Planning Scheme and the application of different residential zones and identification of character precincts
- an analysis of seven recent VCAT decisions between 2001 and 2018 (six of which upheld Council refusal for medium density development generally based on built form response to existing character)
- an analysis of the appropriate Residential Zone and schedule provisions in the context of PPN91 and the *Practitioner's Guide to Victorian Planning Schemes* Version 1.5, April 2022 (Practitioner's Guide).

Figure 5 Current zoning



Source: Figure 3 Study Area: Zoning Map Planning Review

Relevant to the Amendment, the Planning Review recommends:

- retaining the NRZ as the most appropriate zone but providing further guidance in a new, tailored schedule to acknowledge the unique spacious setting and substantial backyards (a draft 'Character Transition Area' schedule was included)
- applying the new NRZ schedule to properties that directly abut the LDRZ or contribute to the 'backyard spine' character
- the new NRZ schedule contain ResCode variations to side and rear setbacks including a rear setback of 9 metres and additional application requirements
- amend Clause 21.06 to include a new strategy under objective 4 to require consideration of the unique character of the interface area to the LDRZ (same wording adopted in Amendment).

### 1.5 Key changes proposed by the Amendment

Table 2 summarises the key differences between the existing NRZ4 and proposed NRZ9.

**Table 2 Key differences between the existing NRZ4 provisions and proposed NRZ9**

NRZ4	NRZ9
<b>Clause 1.0 Neighbourhood character objectives</b>	
None specified	Include: <ul style="list-style-type: none"> <li>- To ensure development provides an appropriate transition to the adjoining Low Density Residential Zone.</li> <li>- To support development that respects the low scale built form character of the area.</li> <li>- To maintain the generous sized rear yards that provide for a strong landscape spine.</li> <li>- To maintain the rhythm of detached dwellings with generous side and rear setbacks set among an open garden setting.</li> </ul>
<b>Clause 4.0 Requirements of Clauses 54 and 55</b>	
Setbacks (A10, B17)	None specified Include: <i>A new building not on or within 200mm of a boundary should be set back 1 metre from one side boundary, 3 metres on the other side boundary plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres.</i> <i>The setback from the rear boundary should be at least 9 metres.</i>

	NR24	NR29
Open space (B28)	<p>Private open space consisting of:</p> <ul style="list-style-type: none"> <li>- An area of 80 square metres with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with minimum area of 60 square metres with a minimum dimension of 5 metres of secluded private open space with convenient access from a living room, or</li> <li>- A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room, or</li> <li>- A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</li> </ul>	<p>Delete:</p> <p>, or</p> <ul style="list-style-type: none"> <li>- A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room, or</li> <li>- A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room.</li> </ul>
<b>Clause 6.0 Application requirements</b>		
	Existing requirements to be retained	<p>Add:</p> <p><i>An application must be accompanied by a landscape concept plan. The plan must be drawn to scale and include the location of all buildings and works to be constructed on the land and details of all proposed landscaping, including species selection.</i></p>
<b>Clause 7.0 Decision guidelines</b>		
	None specified	<p>Add:</p> <ul style="list-style-type: none"> <li>- Whether the development provides for an appropriate transition to the Low Density Residential Zone, where it adjoins the site.</li> <li>- The provision of a single crossover for driveways.</li> <li>- Whether upper levels are setback to allow views between dwellings.</li> <li>- The provision of appropriate landscaping along side boundaries and driveways when viewed from the street.</li> </ul>

Source: Panel

## 1.6 The Panel's approach

Six submissions were received following the exhibition of the Amendment.

Key issues raised in Submissions 3, 5 and 6 were:

- inconsistency with existing neighbourhood character, including:
  - existing planning permit approvals
  - existing outbuildings

- proposed extent of NRZ9
- proposed provisions of NRZ9 including:
  - setbacks
  - application to single dwellings
  - the construction of outbuildings
- impacts on biodiversity.

Submissions 1 and 4 supported the Amendment.

The Panel has assessed the Amendment against the principles of net community benefit and sustainable development, as set out in Clause 71.02-3.

The Panel considered all written submissions made in response to the exhibition of the Amendment, observations from site visits, and submissions, evidence and other material presented to it during the Hearing. All submissions and materials have been considered by the Panel in reaching its conclusions, regardless of whether they are specifically mentioned in the Report.

At the commencement of the Hearing, the matter was briefly adjourned to enable Planning Panels Victoria to contact Mr Morris (the other party) by telephone to establish if he still intended to make a presentation as he was not in attendance and a submission had not been circulated before the Hearing consistent with the Panel's directions. Before it recommenced the Hearing the Panel was advised that the submitter was no longer able to attend. Council was asked to specifically address the concerns identified in the original submission of Mr Morris. The Panel has considered that submission.

This Report deals with the issues under the following headings:

- Planning context
- Strategic justification
- Neighbourhood Residential Zone Schedule 9.

## 2 Strategic issues

### 2.1 Planning context

This chapter identifies planning context relevant to the Amendment. Appendix A highlights key imperatives of relevant provisions and policies.

**Table 3** Planning context

	Relevant references
<b>Victorian planning objectives</b>	- section 4 of the PE Act
<b>Planning Policy Framework</b>	- Clause 11.01-1R (Settlement - Metropolitan Melbourne) - Clause 11.02-1S (Supply of urban land) - Clause 15.01-5S (Neighbourhood character) - Clause 16.01-1S (Housing supply) - Clause 16.01-1R (Housing supply - Metropolitan Melbourne) - Clause 16.01-2S (Housing affordability)
<b>Local Planning Policy Framework</b>	- Clause 21.02 (Strategic Framework Plan) - Clause 21.06-1 (Scaled approach to residential development) - Clause 21.06-2 (Diversity of housing choice) - Clause 21.06-3 (Design and character) - Clause 22.07 (Development in Residential Areas and Neighbourhood Character)
<b>Other planning strategies and policies</b>	- Plan Melbourne, Direction 2 - Knox Housing Strategy 2015
<b>Planning scheme provisions</b>	- Neighbourhood Residential Zone - Particular provisions: - Clause 54 (One dwelling on a lot) - Clause 55 (Two or more dwellings on a lot and Residential Buildings)
<b>Ministerial directions</b>	- Ministerial Direction on the Form and Content of Planning Scheme under section 7(5) of the Act - Ministerial Direction No.9 (Metropolitan Strategy) - Ministerial Direction 11 (Strategic Assessment of Amendments)
<b>Planning practice notes</b>	- Planning Practice Note 43: Understanding Neighbourhood Character (January 2018)(PPN43) - Planning Practice Note 46: Strategic Assessment Guidelines, January 2023(PPN46) - Planning Practice Note 90: Planning for housing (December 2019)(PPN90) - Planning Practice Note 91: Using the residential zones (December 2019)(PPN91)

## 2.2 Authorisation

The Amendment was authorised subject to three conditions requiring changes to the NRZ9 that were satisfied by Council prior to the exhibition of the Amendment. The authorisation letter however identified:

In addition to these conditions, it is suggested that council consider:

1. Incorporation of more specific neighbourhood character objectives in Section 1.0 of the NRZ9 to better outline the unique and well-established transitional and low-scale character of these properties with large backyards, generous side and rear setbacks and established vegetation.

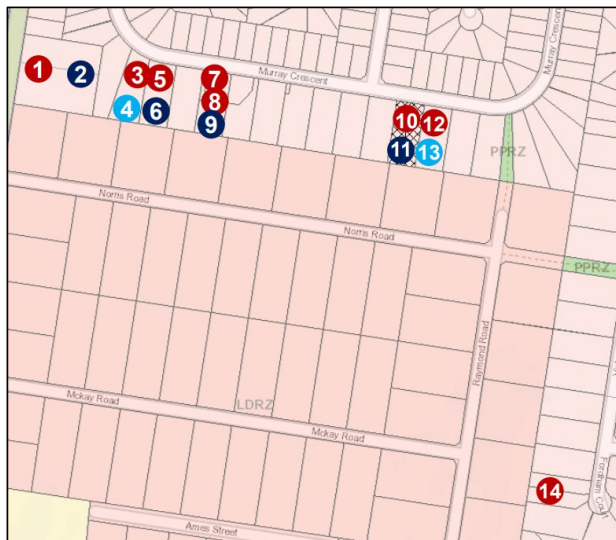
Planning Practice Note 91: Using the Residential Zones provides guidance and examples of writing objectives in the schedule to the NRZ which specify the relevant neighbourhood character or landscape characteristics of the area.

2. While the amendment refers to the City of Knox Neighbourhood Character Study 1999, these findings were not incorporated into council's current Knox Housing Strategy 2015. DELWP discourages reliance on outdated strategic work to support new planning scheme amendment requests. It is recommended that council review outdated studies and translate this work into current local strategies.
3. DELWP is generally not supportive of spot rezonings. A more co-ordinated approach should be undertaken if council wishes to implement other changes to residential zones. Planning Practice Note 90: Planning for Housing provides guidance on the preferred approach of combining housing strategy with neighbourhood character strategy work to determine appropriate application of zones.

## 2.3 Planning applications

The Planning Review and Council's Part A submission includes a summary of permit applications made within the subject land and associated VCAT reviews and the basis of those decisions (Figures 6 and 7).

Figure 6 2017 – 2022 Planning Permit application sites within subject land



Source: Council Part A submission. Red indicates an application that was refused, dark blue indicates an application that was approved, light blue indicates an application currently under assessment

**Figure 7 2017 – 2022 Planning Permit applications status and decision outcomes**

1	24-26 Taylors Lane	22 dwellings (2017)	Refused by Council Refused by VCAT
2	24-26 Taylors Lane	18 dwellings (2020)	Refused by Council Approved by VCAT
3	28 Murray Crescent	6 dwellings (2017)	Refused by Council Refused by VCAT
4	28 Murray Crescent	6 dwellings (2022)	Under assessment by Council
5	30 Murray Crescent	6 dwellings (2017)	Refused by Council Refused by VCAT
6	30 Murray Crescent	6 dwellings (2021)	Refused by Council Approved by VCAT
7	34 Murray Crescent	3 new dwellings (2020)	Refused by Council
8	34 Murray Crescent	3 lot subdivision (2021)	Refused by Council
9	34 Murray Crescent	2 lot subdivision (2022)	Approved by Council
10	48 Murray Crescent	6 dwellings (2018)	Refused by Council Refused by VCAT
11	48 Murray Crescent	2 lot subdivision (2019)	Approved by Council
12	50 Murray Crescent	6 dwellings (2018)	Refused by Council Refused by VCAT
13	50 Murray Crescent	6 dwellings (current)	Failure to determine Currently before VCAT
14	6 Fordham Court	6 dwellings (2017)	Refused by Council Refused by VCAT.

Source: Council Part A submission

At the Hearing Council advised that there were current live permit applications for 6 dwelling proposals at 28, 30 and 50 Murray Crescent.

## 2.4 Strategic justification

### (i) Submissions

While a number of submissions considered the changes to the NRZ4 unnecessary they did not challenge the strategic justification for the Amendment as identified by Council.

Council submitted that the Amendment was strategically justified, and:

- supported or was generally consistent with the Planning Policy Framework and Local Planning Policy Framework relating to neighbourhood character and housing
- was consistent with the scaled approach identified in the Knox Housing Strategy
- made appropriate use of the tools available within the Victorian Planning Provisions was supported by its analysis of planning policy, Ministerial Directions, PPN91 and the Practitioner's Guide
- reflected the buffer intent of previous character studies and zoning provisions

- responded to an identified gap and deficiency in the Knox Planning Scheme to respond to unique neighbourhood characteristics identified in the Planning Review and observations made in a number of VCAT decisions
- would allow for future housing development of the land for housing, but which would be tempered to respond to the unique character of the subject land, and provided certainty rather than the issue being resolved on a site-by-site basis.

Council drew the Panel's attention to a number of VCAT decisions<sup>1</sup> which commented on the challenges of balancing the identified character of the area and its LDRZ interface with the planning policy aspirations for growth including, in *V Developers Pty Ltd v Knox CC [2018] VCAT 1541*, where the Tribunal remarked:

Including the 2001 decision, this is the sixth time the Tribunal has refused an application for medium density development within this section of Rowville. I would encourage Knox City Council to consider whether further controls, such as the Design and Development Overlay should be implemented on this part of Rowville to protect its unique character.

Similar observations about the existing neighbourhood character and policy tensions were made by the Tribunal in *Connors v Knox City Council [2001] VCAT 557* (the 2001 decision referred to above):

Mr Pitt reiterated his point that the Responsible Authority believed that Res Code would adequately address this area and that was the reason that DDO had not been placed over it. However, I am not convinced about that and believe that, if this is to be retained in the long term as a low density buffer area, then the Responsible Authority should take steps either by a schedule or a DDO to protect it. That is not to say some medium density could not occur as admitted by Mr Pitt.

*Unik Constructions v Knox CC [2018] VCAT 407*:

[T]here is no DDO or local policy relating to this transitional or buffer area to give some statutory emphasis or guidance about the role these large lots should play in policy or character terms. [...] If the land is to serve that role, then the planning authority should take steps to amend the scheme to recognise it and guide decisions about multi-unit applications.

Conversely in *Saravanapavan v Knox CC [2022] VCAT 78* the Tribunal supported a 9 metre rear setback for a six dwelling proposal for 30 Murray Crescent. Council submitted that this pointed to the capacity to accommodate a substantial rear setback while still providing for an appropriate scale of development.

At the Hearing Council submitted that the consistency of VCAT commentary was a situation where the decision maker was telling the plan makers that more guidance was required and that a more responsive approach was required.

In the context of comments in DELWP's Authorisation regarding outdated strategic work and spot rezonings Council submitted that:

- the Amendment did not rely on the Knox Neighbourhood Character Study 1999
- while PPN90 and PPN91 had been introduced post the development of the Knox Housing Strategy, the Amendment was consistent with the scaled approach identified in the strategy and Clauses 21.06 and 22.07
- while consideration had been given to applying a Design and Development Overlay (DDO) instead of varying the schedule, this option was unnecessary given the guidance of PPN91 which identified that a DDO be used:

<sup>1</sup> VCAT decisions referred to by Council were included as appendices to its Part A submission (Documents 6e – 6m)



- when specific built form outcomes cannot be achieved through varying the standards of Clauses 54 and 55
- to achieve a built form different from the existing neighbourhood character sought (Panel's emphasis)
- the proposed NRZ9 and issues it was addressing were specific to the subject land and not applicable to the other two LDRZ areas in the municipality (The Basin and Ferntree Gully area and Ferndale Road Upper Ferntree Gully area) given the provisions of:
  - Clause 21.10-1 (Dandenong Foothills)
  - NRZ Schedule 1 (Bush Suburban – Dandenong Foothills) which apply to adjacent residential areas
  - the application of Design and Development Overlay, Significant Landscape Overlay and Environmental Significance Overlay schedules
  - review of controls relating to protection of the unique character and significance of the Foothills.

## (ii) Discussion

The Panel is satisfied that the characteristics of the subject land including lot size, built form and dwelling siting set it apart from the prevailing pattern of subdivision and dwelling scale to the north of Murray Crescent, west of Taylors Lane and east of Vista Crescent and Fordham Court. The prevailing subject land lot size is 2,000 square metres which provides a more spatial setting for the generally larger detached dwelling forms which have generous street setbacks and generally larger side setbacks than those dwellings opposite on more conventional sized lots.

The subject lands spatial relationship with an LDRZ area is unique within the municipality. The adjoining Twin Views Estate features a consistent subdivision pattern, with a significant portion of the lots to the rear of dwellings largely free of other structures free and with established trees and open landscaping treatments. From some sites there are filtered views to the Dandenong's. The consistently large rear dwelling setbacks of the subject land contribute to this character of spaciousness, separation and transition to more conventional residential lots. This relationship is not found in the two other LDRZ areas to the eastern edge of the municipality which have a different spatial arrangement with adjoining NRZ properties or a range of other planning tools to manage neighbourhood and landscape character.

The question that arises for the Panel is not whether the subject land has the character attributes identified, but whether such a small area within Rowville and Knox requires its own unique planning provision and risks other policy considerations not being achieved. This is particularly the case when applications can be assessed on their merits under the current planning framework (with review opportunities), and a broader objective of keeping planning schemes free of unnecessary provisions or complexity.

The Panel considers that the Planning Review that underpins the Amendment is sufficiently robust. It establishes that there is an issue to be managed and that the existing provisions are not adequate. It supports the need for an alternative planning tool that provides greater certainty and avoids applicants, the community and Council regularly responding to the same issues through the permit application and review process.

While the proposed Schedule only applies to a relatively isolated and small area of the municipality impacting on about 30 lots the Panel considers that there is a strategic basis for it. The unique characteristics are clearly set out in the Planning Review which underpins the Amendment and

have been consistently observed and commented upon by VCAT. While many of the VCAT were determined when the subject land was within a General Residential Zone. The Panel considers these characteristics are clearly observable and distinctive, and warrant a specific planning control.

The Panel does not consider Council's approach in this instance is reasonably comparable to a spot rezoning which changes the underlying land use outcomes. While the proposed change to the NRZ4 for the subject land is not identified in the Knox Housing Strategy, the Panel does not consider this particularly relevant given the localised nature of this Amendment and the municipal wide scale of the Housing Strategy. While the Panel observes Council is currently scoping a review of the Housing Strategy (including consistency with PPN90 and PPN91) the Amendment is consistent with its scaled approach and does not seek to revisit the basis for applying the Residential Zones.

Similarly, while Council has not relied on the *City of Knox Neighbourhood Character Study 1999*, there is a historical consistency in Council's approach to recognise and plan for a buffer to the Twin Views Estate LDRZ area as set out in the Planning Review and Council's submissions.

The Panel agrees with Council that there are particularly unique neighbourhood and site characteristics to manage in this instance. As such it considers:

- the current local policy settings are not sufficient to respond to the unique characteristics of the area
- providing for an area specific NRZ Schedule is the appropriate planning tool, and is supported by:
  - the Knox Housing Strategy
  - the scale of change and preferred character sought for the Knox Neighbourhood areas as identified in Clauses 21.06 and 22.05
  - PPN91
- applying a new schedule provides a more consistent and transparent planning tool and avoids the unnecessary use of additional overlays such as a DDO
- the subject land is an area identified for incremental growth. The Amendment provides for a nuancing of existing controls that reflect unique neighbourhood character attributes. The proposed controls will not appreciably diminish the opportunity for the subject land parcels to contribute to Council's housing objectives or accommodate appropriately designed medium density housing outcomes consistent with the scale of change anticipated in the Local Planning Policy Framework
- the Amendment appropriately follows a process of review and analysis of decisions made under the current provisions of the Knox Planning Scheme
- the Amendment achieves an appropriate policy balance by preserving neighbourhood character and providing opportunities for additional housing supply and choice and accordingly will deliver a net community benefit and sustainable development as required by Clause 71.02-3.

The Panel considers the content and format of the NRZ9 are generally consistent with PPN91, the *Ministerial Direction on the Form and Content of Planning Scheme under section 7(5) of the Act* and *A Practitioner's Guide to Victorian Planning Schemes* Version 1.5, April 2022. The Panel considers that the Schedule's objectives, variations to ResCode standards, requirement for a landscape plan and decision guidelines (in the main) can be readily linked to the findings of the Planning Review and identified character elements.

The consequential change to Clause 21.06-3 is considered appropriate and logical.

**(iii) Conclusions**

For the reasons set out in this report, the Panel concludes that the Amendment:

- is supported by, and implements, the relevant sections of the Planning Policy Framework and Local Planning Policy Framework
- is consistent with the relevant Ministerial Directions and Practice Notes
- is well founded and strategically justified
- should proceed subject to addressing the more specific issues discussed in the following chapter.

## 3 Neighbourhood Residential Zone Schedule 9

### 3.1 Neighbourhood character

#### (i) The issues

The issues are whether:

- the identified neighbourhood character of the subject land is appreciable, or has been diminished or eroded through development
- the neighbourhood character objectives and related application and decision guidelines of the NRZ9 are appropriate.

#### (ii) Submissions

Submission 3 considered that the Amendment was not warranted because the character of large backyards, tree planting and open space had been changed irrevocably as a result of recent development approvals, subdivision and activity. It submitted that these character elements were not visible from the street. It was submitted that the Amendment would affect the ability to subdivide their property.

Submission 5 identified that the large backyard character quality was diminished with the existence of large sheds and garages, some more than 3 metres in height and with negligible rear setbacks. The submission (along with Submission 6) noted that there was no setback limitation for large sheds within the adjoining LDRZ and that this created an unfair outcome.

Council submitted that it was necessary to observe that planning permit applications should not be conflated with permits that had been approved. It identified that:

- the character elements of the area had been identified in the Planning Review and in VCAT commentary
- there have been seven planning permit applications for six dwellings along Murray Crescent. All but one of these have been refused on the basis that they have failed to respond to the unique character of the area (among other considerations)
- the six dwelling development approved at 30 Murray Crescent adopted a 9 metre setback consistent with the outcomes sought by the Amendment (*Saravanapavan v Knox CC*). This demonstrated that development of an intensity previously contemplated within the interface area can appropriately meet the objectives and outcomes sought by the Amendment, without a significant impact on yield or the achievement of broader housing diversity goals
- the character of this area has not been eroded and is generally intact. The Amendment seeks to retain the backyard spine.

Council advised that in relation to DELWP's comments about the neighbourhood character objectives, it had sought Glossop Town Planning's advice on drafting to ensure they were consistent with PPN91. The Panel questioned Council during the Hearing relating to the drafting of the following:

- character objective (Panel's emphasis):
  - To support development that respects the low scale form character of the area.

- decision guidelines:
  - The provision of a single level crossover for driveways.
  - Whether the upper levels are setback to allow views between dwellings.

In relation to the character objective Council advised that the 'low scale form' had a twofold purpose – firstly to recognise scaled approach to housing recognised in its Housing Strategy and local planning policies and secondly, the low scale transition of the backyard spine to the LDRZ area.

In relation to the decision guidelines, it advised:

- the focus of single driveways was to avoid the removal of street trees
- the reference to 'views between dwellings' related more to the spaciousness created by dwelling separation rather than protecting a vista.

### **(iii) Discussion and conclusions**

The Panel is satisfied that the neighbourhood character identified in the Planning Review and proposed to be recognised through the NRZ9 is readily appreciable. While the full extent and spine of open backyard areas are not always apparent from the street frontage, there are filtered views between dwellings. These enable their characteristics, including lack of larger building structures to the rear and canopy trees where they exist, and the backdrop of larger trees within the Twin Views Estate to be viewed.

The aerial images provided by Council demonstrate that this large 'backyard scape' is largely intact and will be highly visible for residents of these properties and could accommodate future canopy tree planting that would further reinforce a sense of landscaping and transition. The depth of rear dwelling setback is also appreciable from the two public open space laneway links (off Murray and Vista Crescent) and from properties within the Twin Views Estate along Norris Road (looking north towards the rear yards of Murray Crescent properties) and looking east from Raymond Road towards properties that front Vista Crescent and Fordham Court.

While there are some intrusions into this backyard scape characteristic from outbuildings, these structures generally have a relatively small footprints and are not as high or visually dominant as dwelling walls and roofs. Their existence does not impact on the prevailing large open backyard character that extends across the length of the two rear yard spines. There is also a clear absence of dwellings extending close to rear boundaries.

The Panel notes that large outbuildings, carports and garages are unlikely to become significant features in rear yards given most of the existing dwellings within the subject land have double garages and large driveways. Many of the rear yards are already used for amenity purposes including landscaped areas and swimming pools.

The Panel considers that the neighbourhood character objectives, landscape concept plan application requirement and decision guidelines generally reflect the analysis undertaken by the Planning Review and the observable neighbourhood characteristics sought to be preserved, and the guidance in PPN91. It agrees these characteristics are unique within Rowville and clearly provide for a landscape and built form transition to more conventional residential development.

While it considers the neighbourhood character objectives are generally clear in their intent, the Panel considers that Council should review the drafting of:

- Whether the upper levels are setback to allow views between dwellings.

The current drafting is unclear as to whether this relates to a particular viewpoint to be achieved or preserved (for example to backyards or the LDRZ, from the street frontage, between individual dwellings within the NRZ9 and LDRZ) or simply a sense of building separation. The final drafting is best determined by Council based on a considered analysis rather than the Panel nominating the language.

The decision guideline relating to provision of a single crossover for driveways is not adequately justified or explored in any detail by the Planning Review. A significant number of existing dwellings within the subject land already have two crossovers. This element is part of the established character. If the issue is around impact on street trees, the Panel observes that the street tree pattern is irregular on both sides of Murray Crescent and Vista Crescent and not a strong or consistent characteristic. There is no similar provision provided for in the NRZ4. The Panel acknowledges that the ability to retain or plant street trees within the road reserve in front of the subject land would contribute to establishing a landscape transition. The width of existing lots however would still accommodate tree planting even with multiple crossing points. The Panel recommends removing this decision guideline or alternatively replacing it with one that relates to existing street trees or opportunities to provide for street tree planting.

In relation to Submission 3, NRZ9 does not propose a minimum lot size so it does not change the subdivision provisions that currently apply. This enables applications to be considered on their merits.

The Panel concludes:

- The identified neighbourhood character of the subject land including the backyard spine is appreciable, unique and provides for a built form and landscape transition between the Twin Views Estate and conventional housing development opposite the subject land.
- The identified neighbourhood character is substantially intact and has not been eroded or diminished through development activity.
- The neighbourhood character objectives and related application and decision guidelines of the NRZ9 are appropriate subject to changes.

#### **(iv) Recommendation**

The Panel recommends:

##### **1. Amend Schedule 9 to Clause 32.09 Neighbourhood Residential Zone to:**

##### **a) delete the following decision guideline:**

*'The provision of a single level crossover for driveways.'*

##### **b) review and clarify the intent of the following decision guideline:**

*'Whether the upper levels are setback to allow views between dwellings.'*

## **3.2 Setback requirements**

### **(i) The issue**

The issue is whether the proposed variations to Clauses 54 and 55 setback standards are appropriate.

**(ii) Submissions**

Submission 5 considered a 9 metre setback excessive and larger than what was required to accommodate a canopy tree, and should be reduced to 5 metres. Submission 6 shared similar concerns and considered that the rear setback was arbitrary and would limit the ability to utilise the rear yard area for outbuildings that were otherwise unrestricted within the adjoining LDRZ land.

Council identified that submissions on setback broadly related to the rear setback only and that the appropriateness of the side setback variation to Standards A10 and B17 was not contested.

Council’s Part B submission included mapping that showed the 9 metre setback line from rear boundaries in red (Figures 8 and 9).

**Figure 8 Rear boundary setback – Murray Crescent properties**



**Figure 9 Rear boundary setback – Vista Crescent and Fordham Court properties**



Council submitted that the Planning Review identified that all properties along the interface with the LDRZ possess a unique existing physical context of very large and spacious backyards that is quite distinct from the broader Knox Neighbourhood area that it is located within. It considered this substantial backyard spine worthy of protection from extensive development.

Council referred to VCAT decisions which identified that LDRZ interface setbacks ranging from 1.4 to 6.9 metres did not provide an appropriate transition. It submitted that a 9 metre rear setback would achieve the sensitive response to the rear yard spine and character of the transition area, including providing for the planting of canopy trees, sought by local planning policy apposition. This position it said, was supported by the robust analysis included in the Planning Review. The 9 metre setback provided a meaningful setback which:

- acknowledged VCAT decisions which pointed to setbacks up to 6.9 metres were inadequate
- provided for canopy tree planting and larger rear yards
- still provided substantial area for policy consistent, appropriately scaled dwelling development
- struck 'the right balance'.

Council noted that the proposed setback variation is not mandatory and can be varied, provided the corresponding objective is met. In exercising discretion about whether the setback could be varied, the decision guidelines of Clause 55.04-1 required decision-makers to consider:

- Any relevant neighbourhood character objective, policy or statement set out in this scheme.
- The design response.
- The impact on the amenity of the habitable room windows and secluded private open space of existing dwellings.
- Whether the wall is opposite an existing or simultaneously constructed wall built to the boundary.
- Whether the wall abuts a side or rear lane.

Council submitted that the additional policy guidance to be provided by the Amendment would assist this decision making framework.

### **(iii) Discussion and conclusion**

The Panel considers that a 9 metre rear setback is a reasonable one in the circumstances. It is an area that is currently largely free of outbuilding structures and will provide room for meaningful landscaping (including multiple canopy trees) and outdoor space. This will reinforce a sense of building separation and assist in providing the visual dwelling scale transition sought. While a larger setback could arguably be applied given the current siting of dwellings within the subject land, the proposed setback is a balanced one. It pragmatically acknowledges the role of the NRZ and local policy in providing for housing. The Amendment does not substantially impact on the ability for these lots to play their strategic housing role.

While the setback provision is not mandatory and does not apply to most outbuildings, the Panel considers that this will not significantly impact on the ability to achieve the landscaped spine or building transition outcome sought.

While no submissions raised concerns with the proposed side setbacks, the Panel observes that the Amendment proposes that the additional side setback need only be achieved to one side boundary. This reflects the prevailing side set back characteristic of existing development within



the subject land and provides for a landscaped separation between dwellings and filtered views between dwellings from the public realm to the landscaped within those lots and beyond. It provides a reasonable balance between the neighbourhood character sought without significantly impacting appropriately scaled housing development.

Council has not sought to apply front setback requirements. The Panel considers this an appropriate response to the existing substantial but irregular setback pattern and the ability for front setbacks to be considered through the provisions of Clauses 54 and 55 of the Knox Planning Scheme.

The Panel concludes the proposed variations to Clauses 54 and 55 setback standards are appropriate.

### 3.3 Single dwellings and outbuildings

#### (i) The issues

The issues are whether the Amendment:

- should apply to single dwellings
- impacts the capacity to construct outbuildings including sheds, carports and garages.

#### (ii) Submissions

##### Single dwellings

Submissions 5 and 6 considered that the Amendment should not apply to single dwellings.

Council considered that it was appropriate for the setback variation to apply to single dwellings, given that any dwelling development along the backyard spine had the potential to affect the unique character of the area.

Council submitted that introducing the proposed setback requirement as a variation to Standards A10 and B17, would apply to all dwellings, irrespective of whether a planning permit is required, in the following circumstances:

- When a planning permit is triggered under Clause 32.09-5 for the construction of a single dwelling on a lot of less than 300 square metres.
- When a building permit is required for the construction of a Class 1 building (a dwelling) and an assessment is required against Part 5 of the Building Regulations 2018.
- When a planning permit is triggered under Clause 32.09-6 for the construction of two or more dwellings on a lot.

In relation to single dwellings, this only applies to the construction and extension of a dwelling on a lot of less than 300 square metres. Council observed that none of the lots within the subject land Amendment area were below 300 square metres and triggered the need for a planning permit for a single dwelling within the Amendment area, based on the current lot configuration. Any building permit issued under the *Building Regulations 2018* however, would need to meet the identified setback provisions of the Planning Scheme. The report and consent of Council is required where a proposed single dwelling does not comply with the setback requirements.

It referred to PPN91 notes that not applying ResCode variations to single dwellings was strategically undesirable because it:

- undermines the strategic intent that all dwellings are developed to achieve the preferred neighbourhood character outcomes for an area.

- adds complexity and confusion to the application of the standards between the two approval systems.

Council concluded that it would be:

strategically undesirable to exempt single dwellings from the requirement, as it would have the potential to undermine the outcome and preferred character that Council seeks to achieve in this location.

### Outbuildings

Submissions 5 and 6 were concerned that the Amendment would apply setback requirements to sheds, carports, garages or outbuildings and sought clarification on this. It was submitted that the Amendment should not impact on the ability to construct outbuildings.

Council submitted that while the Amendment included variations to Clause 54 standards for single dwellings, the *Building Regulations 2018*, sheds, carports and garages were Class 10a buildings which were generally exempt from the need for a building permit and in most cases would not require a planning permit. Council acknowledged this limitation within the regulatory environment, and that while there are outbuildings within the rear yard spine, these are generally low scale.

### **(iii) Discussion and conclusions**

The Panel agrees with Council that the Amendment should apply to single dwellings. This Amendment is about managing the scale of built form to achieve identified neighbourhood character outcomes. It is not about managing the number of dwellings on a lot. A single dwelling can still be bulky and possess a large footprint and therefore be capable of impacting this unique character. Excluding single dwellings (the prevailing housing typology) from the setback standard variations would potentially erode this character and result in a poor planning outcome.

The proposed rear setback variation does not apply to the construction of outbuildings, in the same manner that outbuildings are currently exempt from planning and building permission in certain circumstances. NRZ9 does not change this existing provision. While there is an ability for outbuildings to be constructed within the side or rear setback the Panel, as already discussed, does not think this will result in the erosion of the neighbourhood character sought to be protected. The Panel considers there is also a benefit in applying the side boundary setback to only one boundary to accommodate the construction of garages or carports.

The Panel concludes:

- NRZ9 should apply to single dwellings.
- The Amendment does not impact the capacity to construct outbuildings including sheds, carports and garages.

## **3.4 Extent of NRZ9**

### **(i) The issue**

The issue is whether it is appropriate and justified to apply NRZ9 to 36a and 38 Murray Crescent, Rowville.

**(ii) Submissions**

The landowner of 36a Murray Crescent sought to exclude that site from the Amendment because it did not abut LDRZ land.

The landowner of 38 Murray Crescent sought to exclude that site from the Amendment on the basis that the adjoining LDRZ property was sewered unlike the other lots in the Twin Views Estate.

Regarding 36a Murray Crescent, Council submitted:

- it would be undesirable for only one lot within an area to have a different zone provision
- the land parcel could be consolidated in the future
- the side and rear setback was not mandatory and could be varied if appropriately justified.

Regarding 38 Murray Crescent, Council submitted:

- there was no need to apply setback provisions in the LDRZ given only on dwelling per lot was permitted (two dwellings for sites with reticulated sewerage)
- dwelling effluent disposal fields were generally located to the rear of dwellings
- the issue could be revisited if all residential lots in the Twin Views Estate were sewered although there was no indication that this was anticipated in the short to medium term.

**(iii) Discussion and conclusion**

While 36a Murray Crescent does not abut the Twin Views Estate, it is set within the prevailing neighbourhood character that applies to the south side of Murray Crescent and possesses several the built form characteristics identified in the NRZ9 neighbourhood character objectives. The setback provisions are not mandatory requirements, and the Knox Planning Scheme allows their variation to be considered based on a range of considerations. While the 9 metre setback could not readily be accommodated within the lot as it is currently configured the 3 metre setback provision could have utility. The exclusion of the property would result in an undesirable planning outcome and is unnecessary. Its retention within the subject land remains logical and appropriate.

While the Planning Review identifies that two residential lots within the Twin Views Estate are unsewered (to the rear of 32-38 Murray Crescent) they are occupied by substantial dwellings and feature siting and landscaping characteristics consistent with the prevailing character of the estate. While subdivision of sewered lots down to a minimum of 0.2 hectares is permitted subject to a permit it is not apparent whether such a lot configuration could be achieved based on the siting of the existing dwellings or the other relevant zone and policy considerations. There is no reason to suggest that even if subdivision were permitted that it would significantly impact on the area's overall low density character or diminish the benefit of transition setback provisions.

The Panel concludes that it is appropriate and justified to apply NRZ9 to 36a and 38 Murray Crescent, Rowville.

**3.5 Biodiversity****(i) The issue**

The issue is whether the Amendment will have a material impact on biodiversity.

**(ii) Submissions**

Submission 2 identified concerns regarding wider issues associated with societal impacts on biodiversity and habitat.

Council submitted that the loss of habitat and biodiversity was a key issue for its land use planning framework and that it had undertaken significant strategic work to understand the risk of habitat and biodiversity loss and effectively plan to protect important habitat. This included mapping and applying overlays to and establishing planning policy for sites of biological significance.

Council submitted the sites of biological significance were predominantly located within the Dandenong Foothills and Bush Suburban areas of the municipality. There were no sites of biological significance within or adjacent to the land affected by the Amendment.

Notwithstanding this, it is observed that the policy and statutory settings for the subject land would continue to place a strong emphasis on the need to protect biodiversity and habitat. Council advised that it regularly monitors the impact of planning permit activity and dwelling approvals on biodiversity. The *Knox Housing Monitoring Program* annual report series provided an overview of tree canopy cover and the impact of approvals on the extent of indigenous vegetation within the municipality.

**(iii) Discussion and conclusion**

The submission did not clarify how diversity related to the Amendment. The submitter did not seek any change to the Amendment or request to be heard at the Hearing.

There is no evidence the Amendment will material impact biodiversity and habitat in the municipality. The Planning Scheme provides an appropriate framework to consider the impacts of development on biodiversity and the environment generally.

The Panel concludes that the Amendment will not have a material impact on biodiversity.

## Appendix A Document list

No.	Date	Description	Provided by
1	7 Feb 23	Copy of original submission of Mr Cassera and request for copies of submissions and documents	J Cassera
2	13 Feb 23	Maps showing location of submitters by number	Council
3	14 Feb 23	Aerial photograph of Amendment area	Council
4	14 Feb 23	Panel Directions and Timetable (version 1)	Planning Panels Victoria
5	20 Feb 23	Email to Council and Mr Cassera confirming receipt of written submission and requesting Council to provide Mr Cassera with access to submissions and Amendment documents	Planning Panels Victoria
6	6 Mar 23	Council Part A submission and Attachments: <ol style="list-style-type: none"> <li>a. Chronology of the Amendment</li> <li>b. Knox Planning Scheme Clause 21.02</li> <li>c. GRZ2 Schedule and Zone Map prior to GC172</li> <li>d. Map of Planning Permit Applications</li> <li>e. <i>Z H Management Pty Ltd v Knox CC [2018] VCAT 912</i></li> <li>f. <i>Z H Management Pty Ltd v Knox CC [2020] VCAT 279</i></li> <li>g. <i>V Developers Pty Ltd v Knox CC [2018] VCAT 1541</i></li> <li>h. <i>Unik Constructions Pty Ltd v Knox CC [2018] VCAT 407</i></li> <li>i. <i>Saravanapavan v Knox CC [2022] VCAT 78</i></li> <li>j. <i>Management Pty Ltd v Knox CC [2018] VCAT 912</i></li> <li>k. <i>Resources Action Developers Pty Ltd v Knox CC [2018] VCAT 365</i></li> <li>l. <i>Murray Crescent Projects Pty Ltd v Knox CC [2018] VCAT 412</i></li> <li>m. <i>Connors v Knox CC [2001] VCAT 557</i></li> </ol>	Council
7	6 Mar 23	Email to Council seeking copies of Part A submission attachments	J Cassera
8	6 Mar 23	Mail to J Cassera providing link to Part A attachments and copy of <i>Saravanapavan v Knox CC [2022] VCAT 78</i>	Council
9	10 Mar 23	Council Part B submission and Attachments: <ol style="list-style-type: none"> <li>a. DELWP letter to Council regarding further review prior to Authorisation</li> <li>b. Council response letter to DELWP</li> <li>c. Aerial images showing 9 metre setback</li> <li>d. Knox Planning Scheme Clause 21.03</li> </ol>	Council

## Appendix B Planning context

### B:1 Planning policy framework

Council submitted that the Amendment is supported by various clauses in the Planning Policy Framework, which the Panel has summarised below.

#### Victorian planning objectives

The Amendment will assist in implementing State policy objectives set out in section 4 of the PE Act by providing for the orderly development of land and balancing the present and future interests of all Victorians.

#### Clause 11 (Settlement)

The Amendment supports Clause 11 by:

- limiting urban sprawl and directing growth into existing settlements - Clause 11.01-1R (Settlement – Metropolitan Melbourne)
- providing sufficient residential land supply and consider neighbourhood character and landscape considerations - Clause 11.02-1S (Supply of urban land).

#### Clause 15 (Built environment and Heritage)

The Amendment supports Clause 15 by recognising, supporting and protecting neighbourhood character, cultural identity, and sense of place. This includes by ensuring the preferred neighbourhood character is consistent with medium and higher density outcomes for increased housing area and development responds to the sense of place and valued features and characteristics - Clause 15.01-5S (Neighbourhood character).

#### Clause 16 (Housing)

The Amendment supports Clause 16 by increasing the supply of housing in existing urban areas by facilitating increased housing yield in appropriate designated locations and a range of minimal, incremental and high change areas that balance protecting valued areas with ensuring housing growth and choice, and by providing certainty about scale of growth in terms of height and site coverage provisions - Clause 16.01-1S (Housing supply) and Clause 16.01-1R (Housing supply – Metropolitan Melbourne).

#### Clause 21 (the Municipal Strategic Statement)

The Amendment supports the MSS and Strategic Framework Plan (Clause 21.02) by directing growth away from Bush Suburban and Knox Neighbourhood areas, and to support a 'green and leafy' landscape character. The subject land is within the Knox Neighbourhood area - Clause 21.06-3 (Design and Character). The Clause identifies the following desired future character:

Knox Neighbourhood Areas represent the majority of Knox's residential areas and have a sense of spaciousness within the public and private realm. These areas will continue to be low-scale neighbourhoods, characterised by detached dwellings with large backyards which contribute to the area's green and leafy character.

Clause 21.06-3 identifies the following objective and associated strategies:

Objective 4

To support high quality housing design that responds to the City's 'green and leafy' character, local character and creates a strong sense of place.

Strategies

- 4.1 Support residential development which enhances the City's 'green and leafy' landscape character.
- 4.2 Support residential development that makes a positive contribution to the preferred future character of the local area consistent with the local policy at Clause 22.07 (Development in Residential Areas and Neighbourhood Character).
- 4.3 Support residential development that is innovative, accessible and site responsive.
- 4.4 Support environmentally sustainable residential development consistent with the local policy at Clause 22.04 (Environmentally Sustainable Development).

### Clause 22 (local planning policies)

The Amendment supports local planning policies by supporting sustainable urban growth and by directing housing to appropriate locations, and support a range of housing types and forms to meet the needs of the existing and future community - Clause 22.07 (Development in Residential Areas and Neighbourhood Character).

The subject land is located within the Knox Neighbourhood Area which has the following:

- preferred urban character:
  - Continue to be low-scale neighbourhoods, characterised by detached houses and dual occupancies; with some villa unit developments on larger blocks.
  - Retain their green and leafy identity and character through the retention of front and back yards, and the establishment of a garden setting that includes canopy trees.
- preferred dwelling typology:
  - In Knox Neighbourhood areas, it is policy to support detached dwellings, dual occupancies and villa unit developments (more than two dwellings) on lots greater than 1,000 square metres.
- design objectives:
  - To retain and enhance the streetscape by the planting of appropriate trees on private land.
  - To avoid the dominance of buildings from the street.
  - To avoid the loss of front and rear garden space.
  - To avoid the dominance of car storage facilities from the street.
  - To retain large backyards for landscaping and open space.
  - To require buildings to reflect the prevailing scale of buildings in the street.
- design guidelines, including:
  - Design buildings to accommodate landscaping including canopy trees in front and rear gardens.
  - Retain existing canopy trees and understorey planting, wherever possible.
  - Provide a landscaped front and rear yard and plant indigenous canopy trees in accordance with the requirements of the applicable zone schedule.
  - In developments of three or more dwellings, require the rear dwelling to be single storey in height.
  - Locate carports and garages behind the line of the dwelling or in the rear yard.
  - Significantly set back first floor levels from the ground floor level.

## B:2 Other relevant planning strategies and policies

### i) Plan Melbourne

*Plan Melbourne 2017-2050* sets out strategic directions to guide Melbourne's development to 2050, to ensure it becomes more sustainable, productive and liveable as its population approaches

8 million. It is accompanied by a separate implementation plan that is regularly updated and refreshed every five years.

Plan Melbourne is structured around seven Outcomes, which set out the aims of the plan. The Outcomes are supported by Directions and Policies, which outline how the Outcomes will be achieved.

**Table 4** Relevant parts of Plan Melbourne

Outcome	Directions	Policies
2. Melbourne provides housing choice in locations close to jobs and services	<p>2.1 Manage the supply of new housing in the right locations to meet population growth and create a sustainable city</p> <p>2.2 Deliver more housing closer to jobs and public transport</p> <p>2.5 Provide greater choice and diversity of housing</p>	<p>2.1.2 Facilitate an increased percentage of new housing in established areas to create a city of 20-minute neighbourhoods close to existing services, jobs and public transport</p> <p>2.1.3 Plan for and define expected housing needs across Melbourne's regions</p> <p>2.1.4 Provide certainty about the scale of growth in the suburbs</p> <p>2.2.3 Support new housing in activity centres and other places that offer good access to jobs, services and public transport</p> <p>2.5.1 Facilitate housing that offers choice and meets changing household needs</p>

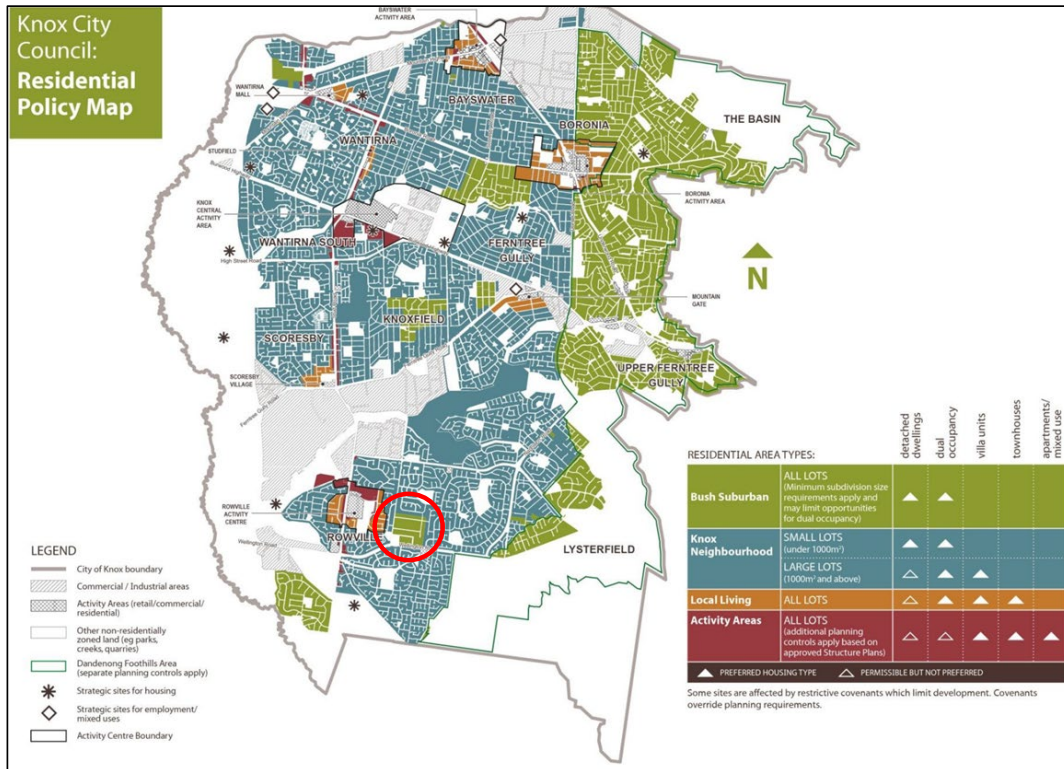
## ii) Knox Housing Study

The *Knox Housing Strategy 2015* sets out Council's plan for managing residential development to respond to the current and future needs of the Knox community. It aims to balance changing housing needs with the important aspects character, landscape and environment to be retained and enhanced. The Strategy applies a 'scaled approach' to housing development across the different areas of Knox and the preferred types of housing (detached dwellings, dual occupancies, villa units, townhouses and/or apartments) for each different area. The Strategy (refer Figure 8) identifies:

- Bush Suburban areas – where preferred housing types are detached dwellings and some dual occupancies on larger sites. The LDRZ area adjoining the subject land is designated a Bush Suburban area
- Knox Neighbourhood areas – comprising low scaled neighbourhoods where preferred housing types are detached houses and dual occupancies and the 'green leafy' character is to be retained through retention of front and backyards and retention/planting of trees. The subject land and other nearby NRZ4 (and much of Knox) is designated Knox Neighbourhood areas
- Local living areas – areas which are located around larger local villages where areas where the preferred housing types are dual occupancies, villa units and townhouses
- Activity areas located on a SmartBus route or close to train stations, bus interchanges, universities and larger shopping centres, and where greatest housing change is proposed and where the preferred housing types are villa units, townhouses and apartments.



Figure 10 Knox Housing Strategy Residential Policy Map



### B:3 Planning scheme provisions

A common zone and overlay purpose is to implement the Municipal Planning Strategy and the Planning Policy Framework.

#### i) Zones

The land is in the Neighbourhood Residential Zone. The purposes of the Zone are:

- To recognise areas of predominantly single and double storey residential development.
- To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

The schedule to the NRZ can include:

- neighbourhood character objectives
- minimum subdivision area
- vary the requirements of:
  - Clause 54 Standards A3, A5, A6, A10, A11, A17 and A20
  - Clause 55 Standards B6, B8, B9, B13, B17, B18, B28 and B32.
- nominate a maximum building height
- identify additional application requirements and decision guidelines.

The NR4 current does not specify:

- neighbourhood character objectives
- minimum subdivision area
- nominate a maximum building height
- identify additional application requirements and decision guidelines
- vary the requirements of:
  - Clause 54 Standards A3, A10, A17 and A20
  - Clause 55 Standards B6, B13, B18, B28 and B32.

There are no overlays applying over the Amendment land.

**(iv) Other provisions**

Relevant particular provisions include:

- Clause 54 (One dwelling on a lot)
- Clause 55 (Two or more dwellings on a lot and Residential Buildings).

These provisions provide objectives, standards and requirements for single or multi dwelling development relating to matters such as neighbourhood character, site layout and building massing, amenity and detailed design for consideration at the planning permit stage.

## **B:4 Ministerial Directions, Planning Practice Notes and guides**

### **Ministerial Directions**

Council identified that the Amendment complies or is consistent with:

- *Ministerial Direction on the Form and Content of Planning Scheme under section 7(5) of the Act*
- *Ministerial Direction No.9 – Metropolitan Strategy* (as amended 10 February 2020) requiring regard to be had to the Metropolitan Planning Strategy (Plan Melbourne: Metropolitan Planning Strategy).

That discussion is not repeated here.

### **Planning Practice Notes**

Relevant Planning practice Notes include:

- *Planning Practice Note 43: Understanding Neighbourhood Character* (January 2018) which explains what is meant by neighbourhood character and provides guidance on preparing or assessing a proposed residential development so that it meets the neighbourhood character requirements of the residential development provisions in planning schemes
- *Planning Practice Note 46: Strategic Assessment Guidelines* (January 2023)
- *Planning Practice Note 90: Planning for housing* (December 2019) provides information and guidance about how to plan for housing growth and protect neighbourhood character to ensure a balanced approach to managing residential development in planning schemes. It supports the development of a Housing Strategy and other strategic work to underpin the Municipal Planning Strategy, areas of housing change and the application of residential zones.
- *Planning Practice Note 91: Using the residential zones* (December 2019) provides guidance on the role and application of use of the suite of residential zones identifying for the NRZ:

Applied to areas where there is no anticipated change to the predominantly single and double storey character. Also to areas that have been identified as having specific neighbourhood, heritage, environmental or landscape character values that distinguish the land from other parts of the municipality or surrounding area.

**Practitioner's Guide**

*A Practitioner's Guide to Victorian Planning Schemes Version 1.5*, April 2022 (Practitioner's Guide) sets out key guidance to assist practitioners when preparing planning scheme provisions. The guidance seeks to ensure:

- the intended outcome is within scope of the objectives and power of the PE Act and has a sound basis in strategic planning policy
- a provision is necessary and proportional to the intended outcome and applies the VPP in a proper manner
- a provision is clear, unambiguous and effective in achieving the intended outcome.

*Planning and Environment Act 1987*

## **KNOX PLANNING SCHEME AMENDMENT C189KNOX EXPLANATORY REPORT**

### **Who is the planning authority?**

This Amendment has been prepared by the Knox City Council who is the planning authority for this amendment.

The Amendment has been made at the request of Knox City Council.

### **Land affected by the amendment**

The Amendment applies to land at the following properties within Rowville:

- 24-26 Taylors Lane;
- 26-58 Murray Crescent (even numbers only);
- 42-70 Vista Crescent (even numbers only);
- 5, 6A, 6B, 7 Fordham Court;

A mapping reference table is attached at Attachment 1 to this Explanatory Report.

### **What the amendment does**

The Amendment proposes to:

- Amend Clause 21.06-3 (Design and Character) by inserting a new strategy under Objective 4 to read:
 

*4.5 In Rowville support residential development that provides an appropriate transition to dwellings in the LDRZ through the provision of large backyards for landscaping, tree planting and open space (new).*
- Rezone the affected land from the Neighbourhood Residential Zone Schedule 4 (NRZ4), to the Neighbourhood Residential Zone – Schedule 9 (NRZ9).

### **Strategic assessment of the amendment**

#### **Why is the amendment required?**

Amendment C189Knox seeks to apply new planning scheme controls to the affected properties in Rowville. The intention of the controls is to better reflect the unique character of the properties along Taylors Lane, Murray Cres, Vista Crescent and Fordham Court. These properties have large lot sizes and a backyard spine within an open garden setting. The affected properties within the amendment also represent a transitional area, between smaller residential lots, and larger residential lots within the Low Density Residential Zone (LDRZ).

It is the intention of the Amendment to:

- reflect the role of the affected properties in providing an appropriate transition to adjacent properties within the LDRZ and to provide clarity in policy direction by amending the local policy at Clause 21.06-3 (Design and Character).
- recognise the character of these properties through a rezoning that maintains the neighbourhood residential zone but applies a new schedule to temper future development,

respect the streetscape, provide for a distinct level of open space and landscaping to protect the uniqueness of this area.

These outcomes are supported by recommendations of the *Review of Rowville LDRZ and adjoining GRZ2 land (March 2021)*, prepared by Glossop Town Planning. Modified planning controls are seen as the most appropriate mechanism to clarify and protect the character of the area, and have previously been recommended by VCAT appeals within the area.

**How does the amendment implement the objectives of planning in Victoria?**

The Amendment implements the objectives of planning in Victoria in providing for the fair, orderly, economic, sustainable use, and development of land.

**How does the amendment address any environmental, social and economic effects?**

The application of the NRZ9 will address environmental, social and economic effects by ensuring that development within the affected area is appropriate and responsive to the established character and anticipated needs of the area.

**Does the amendment address relevant bushfire risk?**

The affected sites are not in a Bushfire Management Overlay, and are not located in a Bushfire Prone Area.

**Does the amendment comply with the requirements of any Minister's Direction applicable to the amendment?**

The Amendment complies with the Ministerial Direction on the Form and Content of Planning Scheme under section 7(5) of the Act.

The Amendment is consistent with Minister's Direction No.9 – Metropolitan Strategy (as amended 10 February 2020) pursuant to Section 12 of the Planning and Environment Act 1987 – that requires planning authorities to have regard to the Metropolitan Planning Strategy (Plan Melbourne: Metropolitan Planning Strategy).

**How does the amendment support or implement the Planning Policy Framework and any adopted State policy?**

The Amendment is consistent with the following State planning policies:

- Clause 11.01-1S (Settlement) which seeks to limit urban sprawl and direct growth into existing settlements.
- Clause 15.01-5S (Neighbourhood character) which seeks to recognise, support and protect neighbourhood character, cultural identity, and sense of place.
- Clause 16.01-1S (Housing supply) which seeks to increase the supply of housing in existing urban areas by facilitating increased housing yield in appropriate locations, including under-utilised urban land.

**How does the Amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?**

The Amendment is consistent with, and is supported by, the following clauses within the Municipal Strategic Statement and local planning policies:

- Clause 21.06-3 (Design and Character) which seeks to direct growth away from Bush Suburban and Knox Neighbourhood areas, and to support a 'green and leafy' landscape character. The Amendment area currently lies within the Knox Neighbourhood area.
- Clause 22.07 (Development in Residential Areas and Neighbourhood Character) which seeks to support sustainable urban growth by directing housing to appropriate locations, and support a range of housing types and forms to meet the needs of the existing and future community.

#### **Does the amendment make proper use of the Victoria Planning Provisions?**

The Amendment makes proper use of the Victorian Planning Provisions by ensuring the unique character of the amendment properties are recognised within a new NRZ schedule. This meets the purpose of the Neighbourhood Residential Zone, *'To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics'*.

#### **How does the amendment address the views of any relevant agency?**

The views of relevant external agencies will be sought through the exhibition process of the Amendment.

#### **Does the amendment address relevant requirements of the Transport Integration Act 2010?**

The relevant requirements of the Transport Integration Act 2010 were considered as part of the preparation of this Amendment, and the Amendment will not have a significant impact on the transport system.

#### **Resource and administrative costs**

The proposed planning provisions will have minimal impact on the resource and administrative costs of the responsible authority.

#### **Where you may inspect this amendment**

The Amendment can be inspected free of charge at the Department of Environment, Land, Water and Planning website at [www.delwp.vic.gov.au/public-inspection](http://www.delwp.vic.gov.au/public-inspection).

Subject to COVID-19 restrictions, the Amendment may be available for public inspection, free of charge, during office hours at:

- Knox City Council Civic Centre (Customer Service Building and Planning counter) 511 Burwood Highway, Wantirna South, on weekdays from 8.30am to 5.00pm.

#### **ATTACHMENT 1 - Mapping reference table**

<b>Location</b>	<b>Land /Area Affected</b>	<b>Mapping Reference</b>
Rowville	Properties within Rowville including: 24-26 Taylors Lane; 26, 28, 30, 32, 34, 36a, 36b, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 and 58 Murray Crescent; 42, 46, 50, 54, 58, 62, 66 and 70 Vista Crescent; and 5, 6A, 6B and 7 Fordham Court	Knox C189knox 001znMaps06_09 Exhibition

*Planning and Environment Act 1987*

**KNOX PLANNING SCHEME**

**AMENDMENT C189knox**

**INSTRUCTION SHEET**

The planning authority for this amendment is the Knox City Council.

The Knox Planning Scheme is amended as follows:

**Planning Scheme Maps**

The Planning Scheme Maps are amended by a total of 1 attached map sheet.

**Zoning Maps**

1. Amend Planning Scheme Map Nos. 06ZN and 09ZN in the manner shown on the one attached map marked "Knox Planning Scheme, Amendment C189knox".

**Planning Scheme Ordinance**

The Planning Scheme Ordinance is amended as follows:

2. In **Local Planning Policy Framework** – replace Clause 21.06 with a new Clause 21.06 in the form of the attached document.
3. In **Zones** – Clause 32.09, insert a new Schedule 9 in the form of the attached document.

End of document

**AMENDMENT C189KNOX****System Note: The following ordinance will be modified in Clause:21 MUNICIPAL STRATEGIC STATEMENT, Sub-Clause:21.06 HOUSING****21.06-3**

C189knox

**Design and character**

The strong 'green and leafy' landscape character is the unifying element of the neighbourhood character of Knox. The scaled approach to residential development adopted in each of the four residential areas will contribute to this "Knox" character and develop a distinct neighbourhood character. This character will contribute to the liveability, high amenity and environmental values of the municipality.

Development in residential areas will need to respond positively to the desired future character of the local area and take account of the particular built form and natural environmental elements that make up the neighbourhood character of Knox. The desired future character or 'vision' for each of these areas is:

**Bush Suburban**

Bush Suburban Areas include two distinct areas: the Dandenong Foothills and the Sites of Biological Significance. These areas have distinctive and significant biological values. Limited and low scale residential development is anticipated in these areas in order to protect the environmental and biological qualities that make these areas distinct.

**Knox Neighbourhood Areas**

Knox Neighbourhood Areas represent the majority of Knox's residential areas and have a sense of spaciousness within the public and private realm. These areas will continue to be low-scale neighbourhoods, characterised by detached dwellings with large backyards which contribute to the area's green and leafy character.

**Local Living Areas**

Local Living Areas are focused around the larger local villages of Wantirna Mall, Studfield, Scoresby Village and Mountain Gate. These areas are within walking distance of local shops and public transport. Medium scale residential development that contributes to the green and leafy character of the area is encouraged within these areas.

The Orchards in Wantirna South is also included in Local Living Areas, with its future character represented in Schedule 10 to the Development Plan Overlay.

**Activity Areas**

Knox's Activity Centres contain a range of shops, services and employment and have good access to a range of public transport options. A greater range and increased densities of residential development are encouraged within these areas.

**Key Issues**

- Strengthening the unifying 'green and leafy' character of Knox across all residential areas.
- Strengthening the neighbourhood character of each of the four residential areas.
- Improving the quality of residential design.

**Objective 4**

To support high quality housing design that responds to the City's 'green and leafy' character, local character and creates a strong sense of place.

**Strategies**

- 4.1 Support residential development which enhances the City's 'green and leafy' landscape character.



**AMENDMENT C189KNOX**

- 4.2 Support residential development that makes a positive contribution to the preferred future character of the local area consistent with the local policy at Clause 22.07 (Development in Residential Areas and Neighbourhood Character).
- 4.3 Support residential development that is innovative, accessible and site responsive.
- 4.4 Support environmentally sustainable residential development consistent with the local policy at Clause 22.04 (Environmentally Sustainable Development).
- 4.5 In Rowville support residential development that provides an appropriate transition to dwellings in the LDRZ through the provision of large backyards for landscaping, tree planting and open space.

**System Note: The following schedule will be inserted before Clause:33 INDUSTRIAL ZONES**

**AMENDMENT C189KNOX**

C189knox

**SCHEDULE 9 TO CLAUSE 32.09 NEIGHBOURHOOD RESIDENTIAL ZONE**

Shown on the planning scheme map as **NRZ9**.

**TRANSITION AREA**

**1.0**

**Neighbourhood character objectives**

C189knox

To ensure development provides an appropriate transition to the adjoining Low Density Residential Zone.

To support development that respects the low scale built form character of the area.

To maintain the generous sized rear yards that provide for a strong landscape spine.

To maintain the rhythm of detached dwellings with generous side and rear setbacks set among an open garden setting.

**2.0**

**Minimum subdivision area**

C189knox

None specified.

**3.0**

**Permit requirement for the construction or extension of one dwelling or a fence associated with a dwelling on a lot**

C189knox

	Requirement
Permit requirement for the construction or extension of one dwelling on a lot	None specified
Permit requirement to construct or extend a front fence within 3 metres of a street associated with a dwelling on a lot	None specified

**4.0**

**Requirements of Clause 54 and Clause 55**

C189knox

	Standard	Requirement
<b>Minimum street setback</b>	A3 and B6	Context: The site is on a corner. Minimum setback from side streets: Front walls of new development fronting the side street of a corner site should be setback at least the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 4.5m, whichever is the lesser. All other minimum setbacks from front streets and side streets as specified in the Table to Standard A3 and B6 continue to apply.
<b>Site coverage</b>	A5 and B8	None specified
<b>Permeability</b>	A6 and B9	None specified
<b>Landscaping</b>	B13	Provision of a minimum of one canopy tree per 175 square metres of the site area including: <ul style="list-style-type: none"> <li>▪ a minimum of one canopy tree within each area of secluded open space; and</li> <li>▪ a minimum of one canopy tree within the front setback per 5 metres of width of the site (excluding the width of one driveway).</li> </ul> Each tree should be surrounded by 20 square metres permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.
<b>Side and rear setbacks</b>	A10 and B17	A new building not on or within 200mm of a boundary should be set back 1 metre from one side boundary, 3 metres on the other side boundary plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres. The setback from the rear boundary should be at least 9 metres.

**AMENDMENT C189KNOX**

	<b>Standard</b>	<b>Requirement</b>
<b>Walls on boundaries</b>	A11 and B18	None specified
<b>Private open space</b>	A17	Private open space consisting of an area of 80 square metres or 20 per cent of the area of the lot, whichever is the lesser, but not less than 60 square metres. At least one part of the private open space should consist of secluded private open space with a minimum area of 40 square metres and a minimum dimension of 5 metres at the side or rear of the dwelling with convenient access from a living room.
	B28	Private open space consisting of: An area of 80 square metres with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 60 square metres with a minimum dimension of 5 metres of secluded private open space with convenient access from a living room.
<b>Front fence height</b>	A20 and B32	Streets in a Road Zone, Category 1: 2 metres Other streets: 1.2 metres

**5.0**

C189knox

**Maximum building height requirement for a dwelling or residential building**

None specified.

**6.0**

C189knox

**Application requirements**

The following application requirements apply to an application for a permit under Clause 32.09, in addition to those specified in Clause 32.09 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- For developments of five or more dwellings and for residential buildings, a report which demonstrates how the proposal will be accessible to people with limited mobility.
- For developments of three or more dwellings and for residential buildings, an application must be accompanied by a Sustainable Design Assessment.
- An application must be accompanied by a landscape concept plan. The plan must be drawn to scale and include the location of all buildings and works to be constructed on the land and details of all proposed landscaping, including species selection.

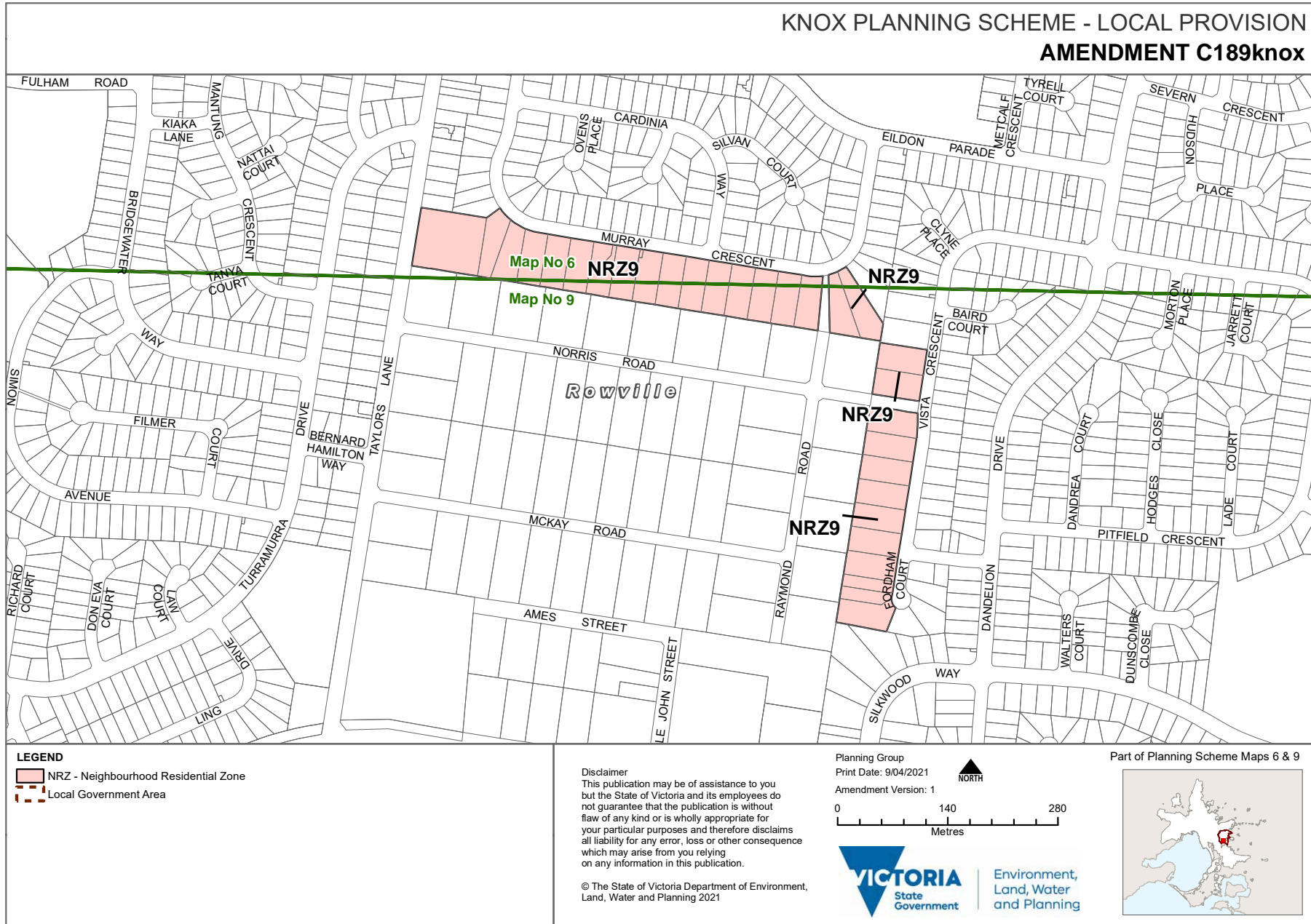
**7.0**

C189knox

**Decision guidelines**

The following decision guidelines apply to an application for a permit under Clause 32.09, in addition to those specified in Clause 32.09 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the development provides for an appropriate transition to the Low Density Residential Zone, where it adjoins the site.
- Whether upper levels are setback to allow separation between dwellings.
- The provision of appropriate landscaping along side boundaries and driveways when viewed from the street.



**AMENDMENT C189KNOX****System Note: The following ordinance will be modified in Clause:21 MUNICIPAL STRATEGIC STATEMENT, Sub-Clause:21.06 HOUSING****21.06-3**

C189knox

**Design and character**

The strong ‘green and leafy’ landscape character is the unifying element of the neighbourhood character of Knox. The scaled approach to residential development adopted in each of the four residential areas will contribute to this "Knox" character and develop a distinct neighbourhood character. This character will contribute to the liveability, high amenity and environmental values of the municipality.

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**Activity Areas**

Knox’s Activity Centres contain a range of shops, services and employment and have good access to a range of public transport options. A greater range and increased densities of residential development are encouraged within these areas.

**Key Issues**

- Strengthening the unifying ‘green and leafy’ character of Knox across all residential areas.
- Strengthening the neighbourhood character of each of the four residential areas.
- Improving the quality of residential design.

**Objective 4**

To support high quality housing design that responds to the City’s ‘green and leafy’ character, local character and creates a strong sense of place.

**Strategies**

- 4.1 Support residential development which enhances the City’s ‘green and leafy’ landscape character.

**AMENDMENT C189KNOX**

- 4.2 Support residential development that makes a positive contribution to the preferred future character of the local area consistent with the local policy at Clause 22.07 (Development in Residential Areas and Neighbourhood Character).
- 4.3 Support residential development that is innovative, accessible and site responsive.
- 4.4 Support environmentally sustainable residential development consistent with the local policy at Clause 22.04 (Environmentally Sustainable Development).
- 4.5 In Rowville support residential development that provides an appropriate transition to dwellings in the LDRZ through the provision of large backyards for landscaping, tree planting and open space.

**System Note: The following schedule will be inserted before Clause:33 INDUSTRIAL ZONES**

## AMENDMENT C189KNOX

C189knox

**SCHEDULE 9 TO CLAUSE 32.09 NEIGHBOURHOOD RESIDENTIAL ZONE**

Shown on the planning scheme map as **NRZ9**.

**TRANSITION AREA****1.0****Neighbourhood character objectives**

C189knox

To ensure development provides an appropriate transition to the adjoining Low Density Residential Zone.

To support development that respects the low scale built form character of the area.

To maintain the generous sized rear yards that provide for a strong landscape spine.

To maintain the rhythm of detached dwellings with generous side and rear setbacks set among an open garden setting.

**2.0****Minimum subdivision area**

C189knox

None specified.

**3.0****Permit requirement for the construction or extension of one dwelling or a fence associated with a dwelling on a lot**

C189knox

	Requirement
Permit requirement for the construction or extension of one dwelling on a lot	None specified
Permit requirement to construct or extend a front fence within 3 metres of a street associated with a dwelling on a lot	None specified

**4.0****Requirements of Clause 54 and Clause 55**

C189knox

	Standard	Requirement
<b>Minimum street setback</b>	A3 and B6	Context: The site is on a corner. Minimum setback from side streets: Front walls of new development fronting the side street of a corner site should be setback at least the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 4.5m, whichever is the lesser. All other minimum setbacks from front streets and side streets as specified in the Table to Standard A3 and B6 continue to apply.
<b>Site coverage</b>	A5 and B8	None specified
<b>Permeability</b>	A6 and B9	None specified
<b>Landscaping</b>	B13	Provision of a minimum of one canopy tree per 175 square metres of the site area including: <ul style="list-style-type: none"> <li>▪ a minimum of one canopy tree within each area of secluded open space; and</li> <li>▪ a minimum of one canopy tree within the front setback per 5 metres of width of the site (excluding the width of one driveway).</li> </ul> Each tree should be surrounded by 20 square metres permeable surface with a minimum radius of 3 metres. Up to 50 per cent of the permeable surface may be shared with another tree.
<b>Side and rear setbacks</b>	A10 and B17	A new building not on or within 200mm of a boundary should be set back 1 metre from one side boundary, 3 metres on the other side boundary plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres. The setback from the rear boundary should be at least 9 metres.

**AMENDMENT C189KNOX**

	Standard	Requirement
<b>Walls on boundaries</b>	A11 and B18	None specified
<b>Private open space</b>	A17	Private open space consisting of an area of 80 square metres or 20 per cent of the area of the lot, whichever is the lesser, but not less than 60 square metres. At least one part of the private open space should consist of secluded private open space with a minimum area of 40 square metres and a minimum dimension of 5 metres at the side or rear of the dwelling with convenient access from a living room.
	B28	Private open space consisting of: An area of 80 square metres with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 60 square metres with a minimum dimension of 5 metres of secluded private open space with convenient access from a living room.
<b>Front fence height</b>	A20 and B32	Streets in a Road Zone, Category 1: 2 metres Other streets: 1.2 metres

**5.0**

C189knox

**Maximum building height requirement for a dwelling or residential building**

None specified.

**6.0**

C189knox

**Application requirements**

The following application requirements apply to an application for a permit under Clause 32.09, in addition to those specified in Clause 32.09 and elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- For developments of five or more dwellings and for residential buildings, a report which demonstrates how the proposal will be accessible to people with limited mobility.
- For developments of three or more dwellings and for residential buildings, an application must be accompanied by a Sustainable Design Assessment.
- An application must be accompanied by a landscape concept plan. The plan must be drawn to scale and include the location of all buildings and works to be constructed on the land and details of all proposed landscaping, including species selection.

**7.0**

C189knox

**Decision guidelines**

The following decision guidelines apply to an application for a permit under Clause 32.09, in addition to those specified in Clause 32.09 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- Whether the development provides for an appropriate transition to the Low Density Residential Zone, where it adjoins the site.
- ~~The provision of a single crossover for driveways:~~
- Whether upper levels are setback to allow views separation between dwellings.
- The provision of appropriate landscaping along side boundaries and driveways when viewed from the street.



7 Public Question Time

## 8 Officer Reports

### 8.1 Proposal for lease for telecommunications pole at Templeton Reserve

**SUMMARY: Manager Strategic Procurement and Property, Shelley Starrenburg**

**This report informs Council of the community consultation undertaken from 13 February to 26 March on the proposed lease with Telstra for upgraded telecommunications infrastructure at Templeton Reserve (51 Templeton Street, Wantirna South).**

The site has been proposed by Telstra to host upgraded telecommunications infrastructure to improve low data speed and unacceptable call performance; this change requires incorporating a larger telecommunications pole. The proposal triggers a lease requirement, consisting of a total area of approximately 36m<sup>2</sup>, including the existing equipment shelter. There is already an 18m telecommunications pole owned by Telstra on site. Telstra's proposal is to install a 35m pole, through replacing a current 25m light pole, and removing the existing 18m telecommunications pole. The proposed lease amount has been determined by a market rental valuation on a commercial basis, in accordance with the provisions of Council's Leasing and Licencing Policy.

This report includes details of the proposal, along with outcomes of the community consultation and officer responses to the questions and comments raised through that process. The statutory processes required for the lease of the land in accordance with Section 115 of the Local Government Act 2020 are now complete and this report seeks a Council decision on the proposed lease.

#### **RECOMMENDATION**

**That Council authorise the Chief Executive Officer (or such person as the Chief Executive Officer nominates) to negotiate and execute:**

- 1. a lease with Telstra for approximately 36m<sup>2</sup> at 51 Templeton Street, Wantirna South, for a mobile phone base station inclusive of a 35m pole and an equipment shelter for an initial term of 10 years, with terms in accordance with this report and otherwise satisfactory to the Chief Executive Officer; and**
- 2. any further extension options, up to a total term of 20 years, subject to satisfactory review.**

#### **1. INTRODUCTION**

Telstra currently uses a small area of land at Templeton Reserve for an 18 metre high telecommunications pole and equipment shelter. Telstra have approached Council with a request to:

- Replace an existing 25 metre floodlight tower with a 35 metre telecommunications pole, install replacement floodlights onto the 35m telecommunications pole; and
- Remove the existing 18 metre telecommunication pole.

The changes proposed by Telstra require landowner consent, which is managed through a lease agreement with Council.

A report regarding the proposed lease was presented to the Strategic Planning Committee Meeting on 10 October 2022. The Committee agreed to:

1. Commence the community engagement process regarding the proposal to lease the land in accordance with the Local Government Act 2020; and
2. Note a further report will be presented to a future Council or Strategic Planning Committee meeting to determine the lease.

Officers have completed the statutory process and now present this report which includes community feedback and an officer recommendation regarding the proposed lease.

## **2. DISCUSSION**

There are currently two mobile phone base stations located at the Council owned property at 51 Templeton Street, Wantirna, known as Templeton Reserve. Each mobile phone base station consists of an 18 metre high telecommunications pole and equipment shelter which are owned by two separate Telecommunication companies (Carriers). This report relates to the Telstra pole, shown in Figure 1.

The current mobile phone base stations at Templeton Reserve were installed under a Land Access and Activity Notice, (LAAN). Provided they have notified the owner, a LAAN enables a Carrier to access property to inspect land, install low-impact facilities or maintain facilities without the need to obtain approvals from the local, state or territory governments.

Telstra has approached Council regarding its existing pole, requesting to upgrade the facility. Upgrading the infrastructure requires Council permission and establishing a lease. The proposed lease is for two small areas consisting of the proposed 35 metre pole and an equipment shelter. Refer to Figures 1 and 2.

Sports ground floodlight towers were installed by Council in late 2022 and are used by sporting groups. The four floodlight towers are 25 metres tall.

Figure 1 – Existing mobile phone base stations at Templeton Reserve



Figure 2 – Overhead view of existing and proposed poles



Telstra has informed Council that the area around Templeton Reserve is well known for low in-building coverage, leading to significant numbers of customer complaints, particularly from local schools and residents. The complaints relate to low data speed and unacceptable call performance.

To improve the level of service for Telstra customers in this area, Telstra propose to:

- replace an existing 25 metre floodlight tower with a 35 metre high telecommunications pole equipped with 4Gx and 5G technology; and
- remove the existing 18 metre Telstra telecommunication pole equipped with 3G technology.

Under the proposal, the lights on the existing floodlight tower would be transferred to the new telecommunications pole, which would replace the 25 metre floodlight tower in the same location as it currently stands. Overall, there would be one 35 metre pole at the reserve, rather than the two poles (1 x 25m and 1 x 18m) that currently exist. Refer to Figure 3.



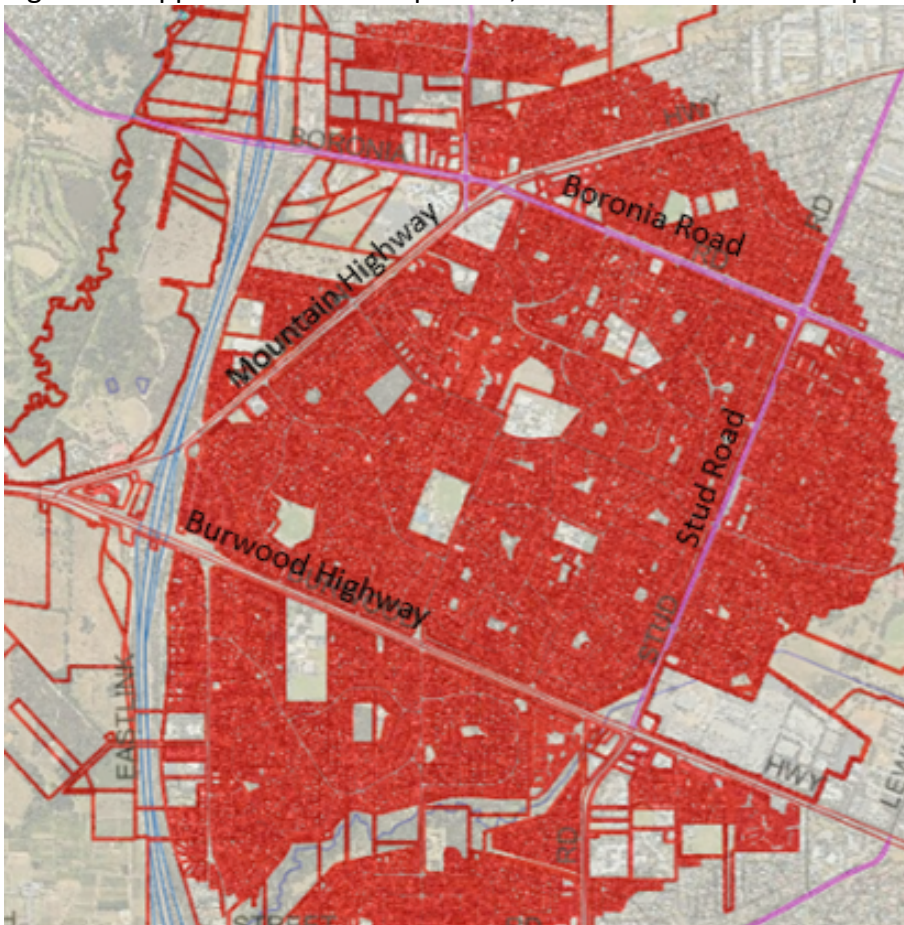
Figure 3 – Proposed changes



### 2.1 Proposed Pole Height

Telstra advise that the height of the existing pole, 18 metres, is insufficient to provide reliable services to the local community within an approximate 2km radius. Refer to Figure 4 for a view of this radius.

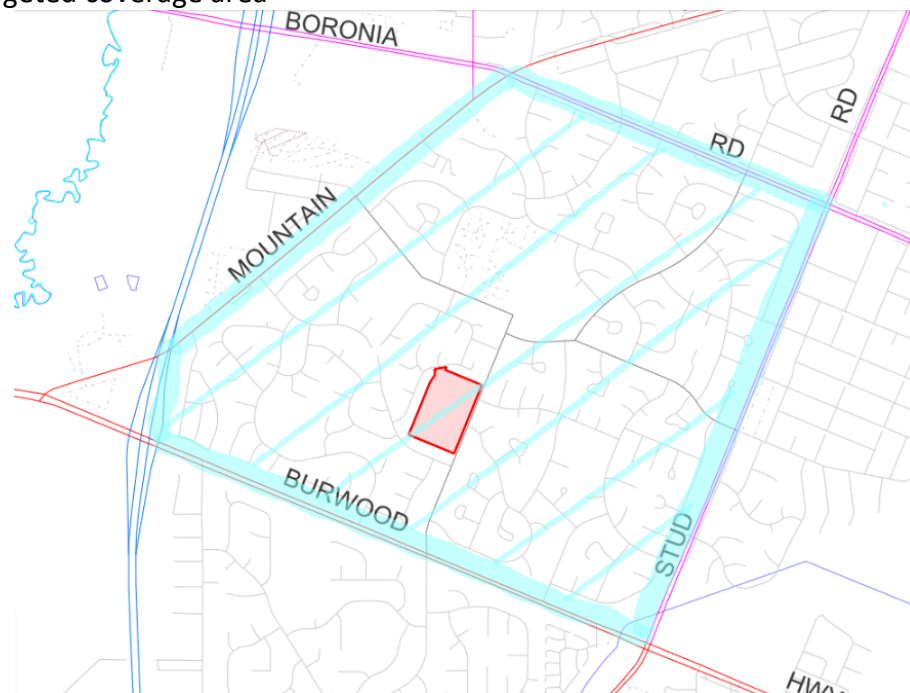
Figure 4 – Approximate area impacted , i.e. 2km radius from Templeton Reserve



A taller pole at Templeton Reserve with upgraded technology is proposed by Telstra to provide improved network services for the immediate local community (targeted coverage area) - refer to Figure 5. There are 3,544 properties and 9,168 residents in the targeted coverage area. It is estimated 1,525 of rateable properties and 4,575 residents are existing Telstra customers within the coverage area who will be impacted by Council's decision regarding the proposed lease. (market share source Statista).

The new pole will address capacity issues at neighbouring sites caused by the coverage issues around Templeton Reserve and the surrounding area. Improved facilities will alleviate pressure on neighbouring telecommunications sites by providing capacity relief and improve the telecommunications connectivity experience for neighbouring areas as well.

Figure 5 – Targeted coverage area



After commencing the community engagement process, Council received preliminary feedback expressing concerns around the proposed pole height. Telstra advised a 30 metre pole (rather than a 35 metre pole) could be considered, however they indicate a 35m pole would be preferable to meet the needs of the community. Telstra state the most appropriate way to address the connectivity issues experienced by customers relating to low data speed and unacceptable call performance remains the current request to Council of installing a 35 metre pole.

There are different processes applicable to the installation of a 30 metre and a 35 metre pole. The two scenarios are shown in Tables 1 and 2.

If Council resolve to delegate authority for the CEO to enter into a lease with Telstra as per the officers' recommendation in this report for the 35 meter pole, Telstra is then required to seek approval of a planning permit through Council. If a planning permit were not subsequently approved, the lease would not be finalised.

Table 1: Current lease request submitted by Telstra

<p><b>Current request submitted by Telstra to Council</b></p> <p>Install a 35 metre tall telecommunications pole on the site of the existing floodlight tower.</p> <p>Provides the greatest benefits to enhanced service levels for Telstra customers.</p> <p>This option requires Council approval through a lease and a development planning permit, triggered by the height of the proposed pole.</p> <p>A development planning permit application provides Council with an opportunity to review and approve the infrastructure in accordance with the Knox Planning Scheme. The application is likely to undergo Public Notification. The Notice of Application can consist of</p> <ul style="list-style-type: none"> <li>• a mailout to surrounding owners and occupiers;</li> <li>• a notice on site;</li> <li>• notice in the newspaper; or</li> <li>• a combination of these.</li> </ul>
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Table 2: Alternate scenario Telstra considered after community feedback

<p><b>Based on community engagement feedback regarding the height of the pole, Telstra advise they could install a shorter, 30 metre pole</b></p> <p>Install a 30 metre tall telecommunications pole on the site of the existing floodlight tower in lieu of a 35 metre pole.</p> <p>The shorter pole provides less coverage and network performance benefits to Telstra customers.</p> <p>This option requires Council approval through a lease and a ‘Deployment Code 6’ process. No development planning permit would be required.</p> <p>A “Deployment Code 6” process would apply in line with the <a href="#">Victorian Planning Provisions – Telecommunications Facility (Clause 52.19)</a>, and in accordance with Section 6 of the <a href="#">Communications Alliance Ltd Industry Code C564:2020 Mobile Phone Base Station Deployment</a> (C564:2020).</p> <p>Clause 52.19 states “A permit is required to construct a building or construct or carry out works for a telecommunications facility. <u>This does not apply</u> to the construction of a building or the construction or carrying out of works for any of the following:</p> <ul style="list-style-type: none"> <li>• <i>A telecommunications tower that replaces an existing light pole on public land if the following requirements are met:</i> <ul style="list-style-type: none"> <li>• <i>The public land manager must be a municipal council.</i></li> <li>• <i>The tower must not be more than 8 metres higher than the light pole.</i></li> </ul> </li> </ul> <p>The “Deployment Code 6” requires Telstra (Carrier) to carry out a Precautionary Approach Checklist and specific consultation process, involving Council and interested and affected parties.</p> <p>The Carrier must:</p> <ul style="list-style-type: none"> <li>• engage with and respond to Interested and Affected Parties during the consultation process;</li> <li>• assess all comments and decide how to proceed; and</li> <li>• respond to interested and affected parties who provided it with individual comments</li> </ul>
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**Based on community engagement feedback regarding the height of the pole, Telstra advise they could install a shorter, 30 metre pole**

Install a 30 metre tall telecommunications pole on the site of the existing floodlight tower in lieu of a 35 metre pole.

in the consultation process.

The consultation required under the Code is not as rigorous as the legislative process required through a planning permit application.

Note: Changes to the telecommunications planning provisions introduced by [Amendment VC226 to the Victoria Planning Provisions](#) and all planning schemes came into operation on 4 November 2022. The Deployment Code 6 process was impacted by amendment VC226.

## 2.2 Location

For each site proposal a Carrier must prepare a Precautionary Approach Checklist which addresses each of the nineteen points raised by section 4.1 of the C564:2020. Telstra has completed the Precautionary Approach Checklist regarding the targeted coverage area and identified Templeton Reserve as the most suitable location to achieve the outcome of remedying the community's difficulties relating to low data speed and unacceptable call performance.

The topography of the targeted area is a key driver in Telstra's request for the new pole to be installed at Templeton Reserve, replacing the existing pole. Subsequent to the commencement of Council's community engagement process, a number of alternative sites were suggested by the community. Telstra has reviewed the suggested alternative sites as shown in Table 3. None of these options were deemed suitable based on the outcome sought relating to data speed and coverage.

Table 3 – Telstra response to community's suggested alternate locations to Templeton Reserve

Alternate Location	Distance from Templeton Reserve	Telstra's Comment
<b>Industrial area</b>	2.25km	The nearest industrial zoned land, 33 Stud Road, Bayswater, is too far away from targeted coverage area.
<b>A tower on top of Westfield Knox</b>	1.2km	Site is too far away from targeted coverage area. Elevation is 30 metres lower than that of Templeton Reserve.
<b>Knox Private Hospital</b>	1.2km	Site is too far away from targeted coverage area.
<b>Burwood Highway</b>	650m	Sites along Burwood Highway are either too close to existing Telstra sites and will result in interference of signal and unnecessary overlapping coverage, or their elevation is too low comparatively to Templeton Reserve, resulting in the need for a very high lattice tower structure which would not be viable in the Burwood Hwy

Alternate Location	Distance from Templeton Reserve	Telstra's Comment
		median strip.
<b>Milpera Reserve</b>	550m	Milpera Reserve location is further from the targeted coverage area to provide optimal service improvements to the area surrounding Templeton Reserve. It is also near another Telstra site approximately 1.6km to the West, meaning there would be unnecessary overlapping coverage from a site in this location. Technical investigations of Milpera Reserve have also shown terrain issues. Due to undulating local terrain in the immediate vicinity, there would be significant coverage losses due to obstructions. Accordingly, Milpera Reserve, whilst located at a higher elevation, is impacted too severely by interference and obstructions to represent a viable alternate.
<b>Studfield Shops</b>	1.3km	Site is too far away from intended coverage area.
<b>Wantirna College</b>	400m	Site is too close to an existing Telstra macro site; the intended coverage footprint is different.

#### Telecommunications Infrastructure within the Municipality

Telecommunications infrastructure cell sites within the Knox municipality are as follows, as taken from the Australian Mobile Telecommunications Association – Radio Frequency National Site Archive:

Technology at site	Number of sites
3G	108
4G, 4G+, 4Gx	129
5G	69

*Note: a 'site' can have shared infrastructure e.g. 3G and 4G at the one site.*

Suburb	Number of sites
Bayswater	7
Boronia	11
Ferntree Gully	6
Upper Ferntree Gully	2
Knoxfield	3
Wantirna	7
Wantirna South	10
Rowville	7
Scoresby	7
Lysterfield	7
The Basin	1

There are three monopoles on Council owned land: two monopoles at Templeton Reserve and one monopole at Scoresby Reserve

### **2.3 Proposed Lease Agreement**

Table 4 outlines the key principles of the proposed lease agreement between Council and Telstra should the lease be approved to proceed by Council.

Table 4 – Key principles of proposed lease

<b>Item</b>	<b>Detail</b>
<b>Premises and facility:</b>	Two separate lease areas totalling 36.1m <sup>2</sup> , consisting of: Area 1 - 18.48 square metres (4.4m x 4.2m) for the proposed telecommunication pole; and Area 2 - 17.68 square metres (5.2m x 3.4m) for the existing equipment shelter; within Templeton Reserve, 51 Templeton Road, Wantirna.
<b>Term:</b>	Ten (10) years
<b>Further term:</b>	Two (2) further options of five (5) years each
<b>Lease fee:</b>	\$24,000 (ex GST) per annum, increased by 3.5% per annum on the anniversary during the lease. This lease amount has been determined by a market rental valuation on a commercial basis, in accordance with the provisions of Council's Leasing and Licencing Policy.
<b>Permitted use:</b>	Mobile phone base station consisting of equipment shelter and telecommunications pole
<b>Assignment and sub-letting</b>	Telstra are not allowed to assign the Lease to anyone else, or sub-lease or license any part of the area without prior approval from Council.
<b>Legal costs:</b>	Telstra agrees to pay legal costs for the negotiation and execution of the Lease and reasonable disbursements up to \$1,500.
<b>Special conditions:</b>	The lease is subject to: <ul style="list-style-type: none"> <li>• Telstra's final approval; and</li> <li>• Telstra obtaining approval from any statutory authority or other relevant authority to enter the Lease and construct its Facility.</li> </ul>
<b>Sunset Clause</b>	If the Responsible Authority refuses to issue a planning permit required for a 35m telecommunication pole, the lease can be terminated. Please note this would only be relevant if the current request for a 35m pole applies, as the alternate scenario for a 30m pole does not require planning permission.

### **2.4 Community Engagement**

In response to feedback received during initial community engagement, the original four-week consultation period was extended for a further two weeks and included a second drop-in

consultation session. The resulting six-week period of community consultation between 13 February and 26 March saw 112 community members provide written feedback on the proposed lease and approximately 45 people attended the two drop-in sessions.

Detailed information about the outcome of the community engagement activities is in Attachment 1 - Community Consultation Report - Proposed lease for telecommunications pole at Templeton Reserve. Anyone interested in providing input was encouraged to submit their feedback in writing, including those attending the drop-in sessions.

Of the written feedback:

- 20 people supported the proposed lease;
- 91 people opposed the proposed lease; and
- 1 person was unsure.

During the consultation period two Public Questions were presented to Council Meetings relating to the proposed lease. The questions and responses are included in Attachment 1.

A petition which states “We the undersigned hereby petition Knox City Council to oppose the increase in height and installation of 5G telecommunications pole at Templeton Reserve in Wantirna.” was presented to Council on 27 March 2023. The original petition had a claimed 130 signatures. At the 26 April 2023 Council meeting a claimed additional 94 signatures were submitted to Council – see Appendix 4 of Attachment 1. The Petition contained 176 valid signatures:

- 99 from Wantirna;
- 27 from other suburbs within Knox; and
- 50 from outside Knox.

Those supporting the proposed lease articulated a desire for improved phone and internet connectivity, and speed in the area. Feedback supporting the lease is summarised as follows:

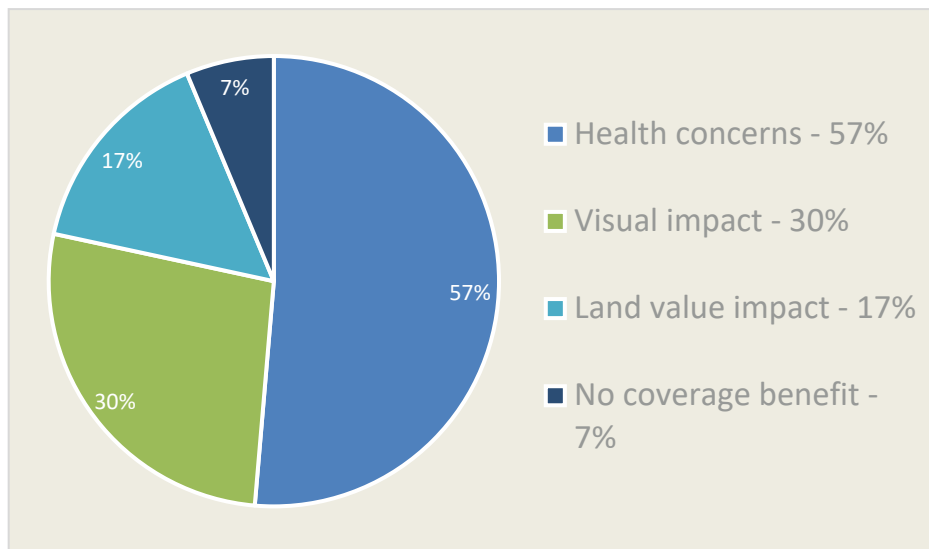
- problematic reception and poor coverage in the Wantirna area;
- poor reception for devices such as bluetooth hearing aids;
- Business owners indicated difficulties with reception and performance at the Studfield Shops; and
- poor reception at Wantirna College.

The main topics raised by those who do not support the proposed lease were:

- Health concerns regarding 5G technology;
- Detriment to the visual amenity of the area;
- Devaluation of property due to presence of 5G technology and loss of visual amenity; and
- No perceived coverage benefit provided.

Some contributors provided more than one reason in their submission for consideration.

Figure 6 – Reasons given by contributors objecting to the proposed lease



The percentages above add to more than 100% as some contributors indicated multiple reasons for their objection to the proposed lease in their written feedback. It is not possible to analyse the reasons for concern from those who signed the petition as reasons for the opposition were not provided.

The main concerns raised by those opposing the lease are summarised below, together with officer responses.

**Visual impact of a 35 metre pole with antenna array**

Overall, the proposed lease will result in one less pole at Templeton Reserve by:

- Entirely removing an 18 metre high telecommunications pole with redundant floodlights and an antenna; and
- Replacing the existing 25 metre high floodlight tower with one 35m telecommunication pole with an antenna array at the top.

The proposed pole would have floodlights mounted at 25 metres high, consistent with the current floodlight height.

The pole would be approximately 1,200mm diameter at the base, narrowing to 620mm at the top. A headframe mounted at the top would contain 9 antennas;

- six antennas approximately 2,533mm high, 350mm wide and 208mm deep; and
- three antennas approximately 827mm high, 415mm wide and 263mm deep.

Figures 7, 8, 9 and 10 are images of existing infrastructure to be removed, a comparison between the height of existing and proposed poles, and an indicative image of what the 35 metre pole with headframe and antenna would look like.

Should Council agree to a lease, officers recommend addressing the community concerns of the visual impact of the proposed pole through investigating additional canopy tree planting in the reserve.

**Visual impact of the pole at 35 metres**

Figure 7 – 18m, 25m and 35m pole scale and comparison

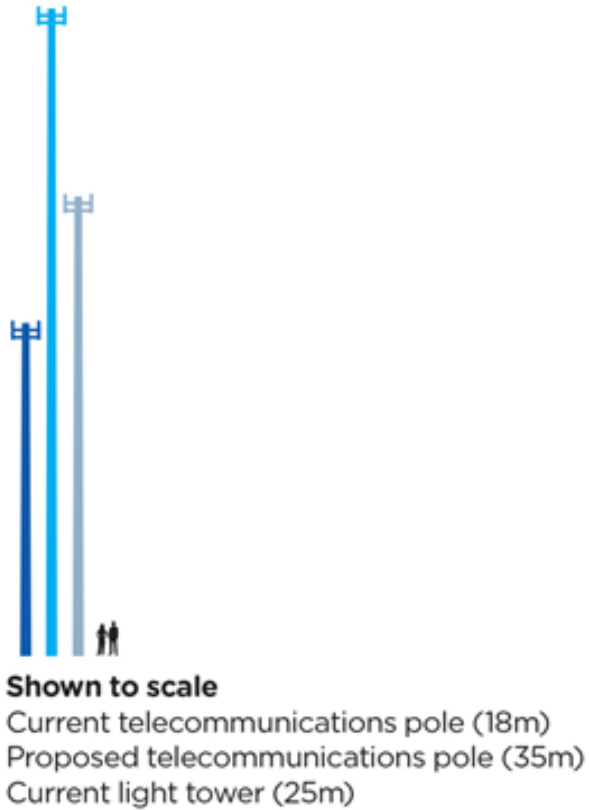


Figure 8 – Existing 25m floodlight tower and 18m Telstra telecommunications pole





**Visual impact of the pole at 35 metres (continued)**

Figure 9 – Indicative image of proposed 35m pole from west of Templeton Reserve



Figure 10 – Indicative image of proposed 35m pole (on right) from East of Templeton Reserve



### Health Concerns

In February 2020, a report was presented to Councillors in response to a call up item, addressing electromagnetic radiation and the roll out of 5G technology.

The report requested information on four points:

- a) How the new 5G mobile network technology will be rolled out;
- b) The role of the Australian Communications and Media Authority (ACMA) will be in guiding the roll out and regulating the technology under legislation, including any risks of Electromagnetic Radiation;
- c) Any scientific research or studies that have been undertaken to determine any detrimental impacts to human health as a result of the new 5G technology, including the potential impacts of Electromagnetic Radiation; and
- d) The location of existing phone towers across the municipal district of Knox shown spatially, with towers within 100 metres of residential areas and schools specifically identified.

A copy of this report is attached (Refer Attachment 3 - 'Council Report – Electromagnetic Radiation and 5G Technology – 2020-02-24')

The report concluded that *'It is the cumulative opinion of the ACMA, ACEBR and ARPANSA that existing ARPANSA standards are positioned to sufficiently protect against any adverse health impacts from the 5G telecommunications rollout, and that 5G is safe'*

Australian Federal agencies involved in regulating and researching the effects of telecommunications technology include:

- DITRDC – Department of Infrastructure, Transport, Regional Development, Communications and the Arts;
- ACEBR - Australian Centre for Electromagnetic Bioeffects Research;
- ACMA – Australian Communications and Media Authority; and
- ARPANSA – Australian Radiation Protection and Nuclear Safety Agency.

Licensing conditions by ACMA require transmitters to not exceed the ARPANSA standard at any publicly accessible location. ARPANSA specifically notes in its submission to the Inquiry into the Deployment, Adoption and Application of 5G in Australia that exposure to radio waves would need to be 50 times higher than the RPS S-1 standard to have any recognised health effects. (Noting the proposed tower at Templeton Reserve is, in turn, 45 times lower than the Australian Standard.)

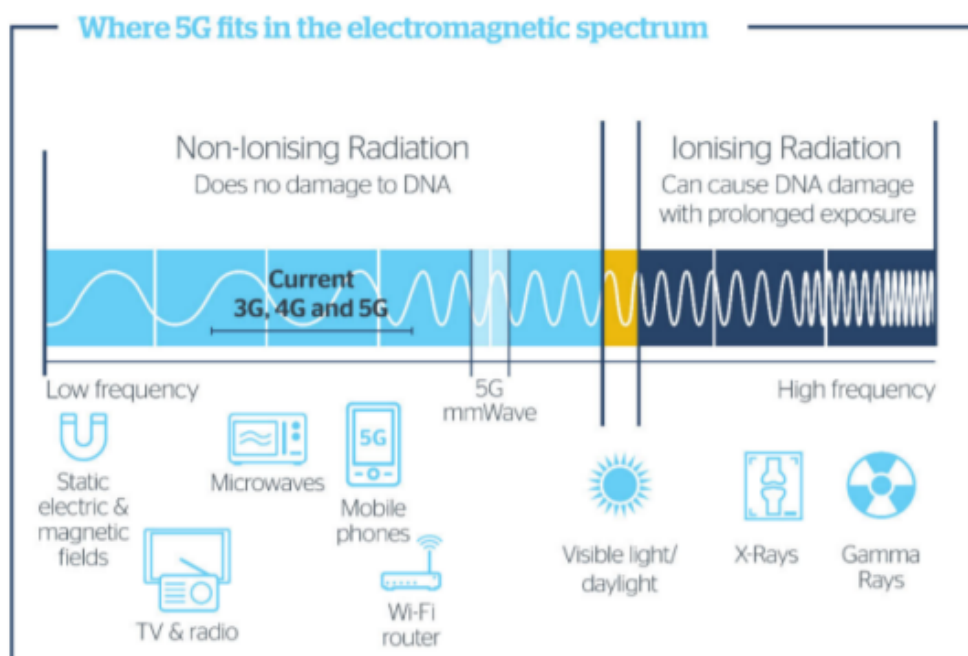


**Health Concerns (continued)**

ARPANSA distinguishes between the radio frequencies utilised in telecommunications, and ionising radiation (not utilised within 5G) which is associated more broadly with nuclear energy or for medical uses. ARPANSA notes that radio waves are capable of causing tissue damage through thermal effects when used at high power (which is not applicable to 5G), and which is managed by appropriate safety measures. The public are exposed to levels of RF-EMF which ARPANSA considers too low to cause significant increases in temperature, and that ‘the evidence for production of harmful biological effects is ambiguous and unsubstantiated’.

In its submission to the Inquiry into the Deployment, Adoption and Application of 5G in Australia, The Australian Mobile Telecommunications Association (AMTA) included in figure 11 to demonstrate where 3G, 4G and 5G sit on the Non-Ionising Radiation spectrum

Figure 11 - 5G in the Electromagnetic Spectrum



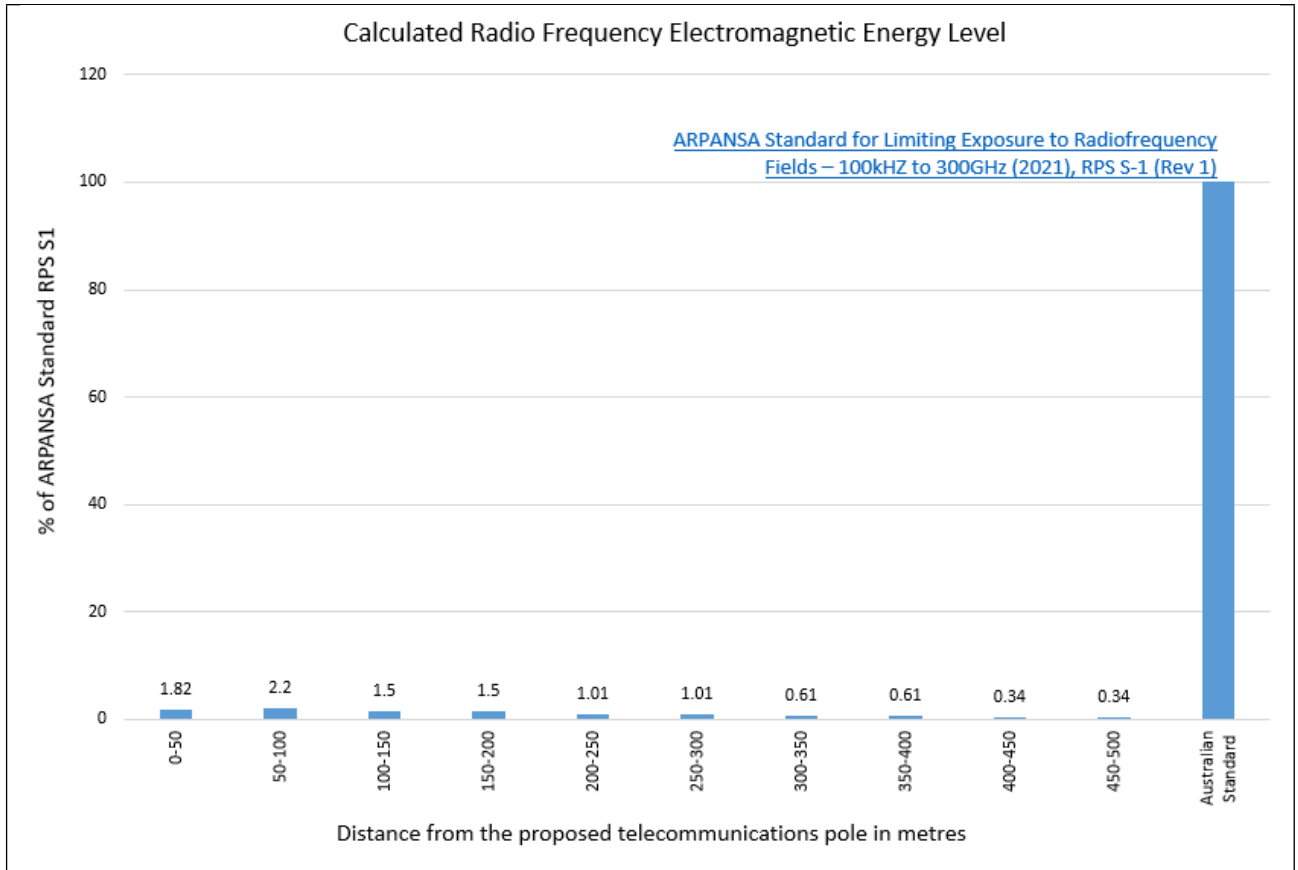
**Health Concerns (continued)**

**Templeton Reserve EME compared to the RPS-S1 ARPANSA Standard**

At 2.2%, the maximum EME level of the proposed new telecommunications pole at Templeton Reserve is calculated to be 97.8% below the RPS- S1 standard, refer Figure 12 below. Conversely, to reach the limit set by ARPANSA, the EME would need to be 45 times higher.

Figure 12 shows a comparison of the maximum EME level for the existing 18 metre Telstra (3G) telecommunications pole and the proposed 35 metre telecommunications pole (4G & 5G). (source [RFNSA](#)).

Figure 12 – Percentage of calculated electromagnetic energy level for the proposed site:



**Health Concerns (continued)**

Figure 13 – Comparison of the maximum EME level for the existing 18 metre Telstra pole and the proposed 35 metre pole. Note ‘public exposure limit’ refers to ARPANSA RPS SI standard.

The maximum EME level calculated for the **existing** systems at this site is

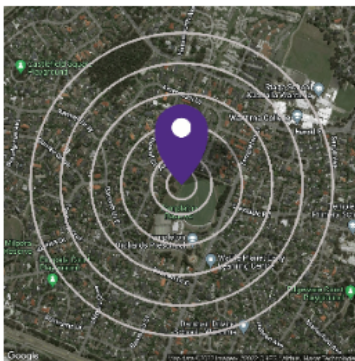
**0.03%**

out of 100% of the public exposure limit, 33 m from the location.

The maximum EME level calculated for the **proposed** changes at this site is

**2.20%**

out of 100% of the public exposure limit, 61 m from the location.



EME levels with the proposed changes	
Distance from the site	Percentage of the public exposure limit
0-50 m	1.82%
50-100 m	2.20%
100-200 m	1.50%
200-300 m	1.01%
300-400 m	0.61%
400-500 m	0.34%

**Summary**

It is the cumulative advice from the ARPANSA, ACMA and the Australian Centre for Electromagnetic Bio-effects Research that 5G will not impact Human health, that it is safe, and

that appropriate standards are in place to protect against harm to humans. The EME levels in the proposal before Council are 2.2% out of 100% of the allowable levels.

Officers consider it appropriate that Council rely upon the information and position of these federal agencies with regards to the health impacts of 5G technology.

#### **Property Value Impacts due to the increased height of the pole**

There is no empirical evidence provided to Council to demonstrate property value impacts regarding this proposed lease. Council's independent valuers advise that, in their experience, the existence of telecommunications facilities does not have a discernible detrimental impact on property values in residential locations, provided there is a reasonable separation distance. In most instances, telecommunication facilities located on Council owned land are at least 30 metres from the nearest privately owned land and are well screened. In such circumstances, it is unlikely that there will be any valuation impact.

Officers conclude that property valuation is a complex issue, with fluctuations in price being subject to several factors. Many of these are subjective, and may be as diverse as aspect, views, condition of the property, local amenity and access to services, including high quality communications.

#### **No coverage benefits**

The three main providers of phone and internet in Australia, Telstra, Optus and Vodaphone, are scheduled to shut down their 3G networks between December 2023 and September 2024. The current Telstra pole is 3G.

5G will initially operate in conjunction with existing 4G networks before evolving to fully standalone networks in subsequent releases and coverage expansions. In addition to delivering faster connections and greater capacity, an advantage of 5G is the fast response time, referred to as latency. Latency is the time taken for devices to respond to each other over the wireless network. 3G networks had a typical response time of 100 milliseconds, 4G is around 30 milliseconds and 5G is as low as 1 millisecond.

Given the undulating local terrain in the area surrounding Templeton Reserve, the installation of a 35 metre telecommunications pole with 4G and 5G technology will be effective in providing service improvements for Telstra customers, such as:

- Improved mobile reception at Wantirna College.
- Improved mobile reception at Salford Park Retirement Village.
- Improved mobile reception in a number of residential areas (off Sandhurst Road, Amesbury Avenue, Harold Street, Alvaston Av).
- Improved mobile reception along Stud Road.

The main issues raised by those supporting the lease are summarised below, together with officer responses.

- **problematic reception and poor coverage in the Wantirna area;**
- **poor reception for devices such as bluetooth hearing aids;**
- **Business owners indicated difficulties with reception and performance at the Studfield Shops; and**
- **poor reception at Wantirna College.**

A taller pole at Templeton Reserve with upgraded technology is proposed by Telstra to provide improved network services for the immediate local community (targeted coverage area) - refer to Figure 5. There are 3,544 properties and 9,168 residents in the targeted coverage area. It is estimated 1,525 of rateable properties and 4,575 residents are existing Telstra customers within the coverage area who will be impacted by Council's decision regarding the proposed lease. (market share source [Statista](#))

The new pole will address capacity issues at neighbouring sites caused by the coverage issues around Templeton Reserve and the surrounding area. Improved facilities will alleviate pressure on neighbouring telecommunications sites by providing capacity relief and improve the telecommunications connectivity experience for neighbouring areas as well.

## **2.5 Summary**

There are several matters to be considered in the lease proposal sought by Telstra, including concerns raised by some community members, and the benefits to the community through improved network coverage.

The majority of feedback from residents concerned about the proposal indicated they are concerned about the health impacts of 5G technology. Information on the levels of EME under the proposal are included in section 2.4 above. As noted, officers consider Council can appropriately rely on the expertise of the Australian Communications and Media Authority and the Australian Radiation Protection and Nuclear Safety Agency in assessing any health impacts from the proposal. The EME levels from the proposal are significantly under the public exposure limit determined by the relevant Commonwealth authorities.

The other key concern raised relates to the height of the proposed pole and its associated infrastructure, being 35m. While this represents an increase in height, it is also relevant that the new single pole would replace two existing poles of 18m and 25m in height respectively, as Council's floodlights can be installed on the new pole.

In considering the lease proposal from Telstra and the proposed improvement to network coverage and telecommunication functionality for the area, Council officers consider the proposal for a 35 metre telecommunications pole in place of the two existing poles is reasonable.

This option requires landowner consent (lease) and a development planning permit.

Should Council agree to a lease, officers propose investigating additional canopy tree planting in the reserve to minimise visual impact for the future.

## **3. CONSULTATION**

The following community engagement activities, summarised in Table 5, were carried out during the 6-week consultation period between 13 February to 26 March 2023:

Table 5 – Summary of Engagement Activities

Date	Activity
9 Feb	DL Flyer drop to homes within 200m radius and bordering reserve (approx. 100) promoting Have Your Say and drop in session
9 Feb	Signage placed around Reserve (4 signs) promoting Have Your Say and drop in session
13 Feb – 26 Mar	Have Your Say webpage - online survey. Direct email sent to 1,270 people registered with Have Your Say.
15 Feb	Direct email to Reserve users (Cricket club, Tennis club and Football club)
18 Feb	90 minute advertised drop in session to collect feedback
10 Mar	Mail-out of DL Flyer and 3-page A4 information sheet to addresses within 500m radius (approx. 945) promoting Have Your Say and drop in session
20 Mar	Updated Signage placed around Reserve (4 signs) promoting Have Your Say and drop in session
21 Mar	90 minute advertised drop in session to collect feedback

Council received comments from 100 people via the Have Your Say webpage and received 18 direct emails in relation to the proposal. Some people contributed written feedback multiple times through multiple survey responses and emails. Approximately 45 people attended the two drop in sessions.

A petition (Appendix 4 of Attachment 1) was presented to Council on 27 March 2023, with a claimed 130 signatures and at the 26 April 2023 Council meeting a claimed additional 94 signatures were submitted to Council; the Petition contained 176 valid signatures:

- 99 from Wantirna;
- 27 from other suburbs within Knox; and
- 50 from outside Knox.

The petition states “We the undersigned hereby petition Knox City Council to oppose the increase in height and installation of 5G telecommunications pole at Templeton Reserve in Wantirna.” Most petitioners that signed the original petition submitted on 26 March 2023 are from the Wantirna suburb, the balance being petitioners from Bayswater, Ferntree Gully, Rowville, Knoxfield and other suburbs. The majority of additional signatures submitted on 26 April 2023 are from people outside of Knox. There are a small number of duplicate signatures.

Detailed information about the outcome of the community engagement activities is in Attachment 1 Community Consultation Report - Proposed lease for telecommunications pole at Templeton Reserve. Detailed information about the outcome of the community engagement activities is in ‘Attachment 1 - Community Consultation Report - Proposed lease for telecommunications pole at Templeton Reserve’.

Attachment 2– Response to Community Consultation on Proposed lease for telecommunications pole at Templeton Reserve, contains collated questions from the engagement process together with the Council response.

#### **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council’s Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

#### **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

##### **Environmental Considerations**

The ARPASNA RPS S1 is intended for protecting humans against the known harmful effects of exposure to RF EME and does not specifically consider protection of flora and fauna in its underlying principles. It is established that animals and plants have natural responses to electromagnetic fields including migratory patterns and pollination. The biomechanisms of these responses have not been firmly established and there are competing theories that continue to be investigated. Impacts of RF EME from artificial sources on plant and animal life have not been established. However, existing studies on the effects of low-level RF EME exposure on plants and animals indicate that the exposure limits set within the Standard are adequate in providing protection to the environment (source [ARPANSA](#)).

##### **Amenity Considerations**

Officers have considered amenity here both in physical and social terms.

As noted above, the proposal would see a single 35 metre pole replace two current poles which are 25 metres and 18 metres high respectively. The characteristics of the proposal as it relates to physical amenity are included in section 2.4 of this report, including visual representation of the existing and proposed landscape in figures 7, 8, 9 and 10.

From a social perspective, mobile phone network and internet access is an amenity that has become an essential part of modern life and reducing barriers to access to create equitable access to good quality network and internet access is important. Ensuring adequate and reliable access is one way of reducing access barriers. Mobile phone network and internet access provides opportunities for social connection, healthcare, banking, online shopping, entertainment, flexibility in options for remote work and equity in access to education.

There are 5 schools located within the targeted coverage area which may be impacted by poor mobile network and internet services:

- Wantirna Primary School
- Regency Park Primary School
- St Luke’s Primary School
- Wantirna College
- Templeton Primary School

When assessing the requirement for readily accessible fast and reliable internet in the Wantirna area, the volume of internet users in Census data from 2016 show that in the Wantirna area, 85.9% of residents had household internet access, which is an increase from 82% in 2011 (2021 data not available). The 2021 census showed that 25% of residents in the Wantirna area worked from home, and 13.5% of people in Wantirna are studying.

Some safety devices like medical alarms, fire alarms, and lift emergency phones may not be compatible with the NBN access network at all times, including during a power blackout. All types of landline phones (cordless phones, as well as older style un-powered corded phones) will not work in a power outage because the NBN network requires power at both the exchange and within the home or business to operate. NBN recommends homes and businesses are always prepared to be without landline phone and internet services for a period of time. (source [NBN Co](#))

Fewer Australians now have both a mobile and a landline at home. 38% had both a mobile phone and a landline in June 2020, falling to 34% in March 2022. There has been no real change in the very small proportion of adults who still have a landline at home but do not have a mobile phone (1.6% in March 2022 vs 1.4% in June 2020). This indicates that the increase in those who are mobile-only for voice calls has not come from those with a landline obtaining a mobile phone but those who have a mobile phone abandoning their landlines. (source [ACMA](#))

Updating local networks increases resident amenity for mobile network, internet service, improving quality of service and reliability, network speeds and latency (how quickly data moves from its origin to its destination).

## **6. FINANCIAL & ECONOMIC IMPLICATIONS**

The proposed lease is for a period of 10 years with the option of two further terms of 5 years with an annual rent of \$24,000 per annum increasing annually by 3.5%, plus electricity.

In accordance with Council's Leasing and Licensing Policy, the annual rent has been determined on a commercial basis by an independent, Council appointed certified practising valuer.

Revenue from the lease will be managed through annual budget processes.

Council does not currently receive rent for the Telstra 18 metre pole and equipment shelter at Templeton Reserve as this was installed under a Land Access and Activity Notice, (LAAN). Provided they have notified the owner, a LAAN enables a Carrier to access property to inspect land, install low-impact facilities or maintain facilities without the need to obtain approvals from the local, state or territory governments. Installations under a LAAN does not require a lease with Council.

## **7. SOCIAL IMPLICATIONS**

The 2021 Census indicated approximately 25% of employed persons over the age of 15 years living in Wantirna work from home ([source ABS 2021 Census](#)). Whilst the Census took place during a period of lockdown in Melbourne, current trends indicate that a significant number of people will continue to work from home now and into the future. Home-based workers typically rely on telecommunications technology to engage with co-workers and clients. Further, 13.5% of people in Wantirna are attending a secondary or tertiary educational institution ([source ABS 2021 Census](#)). Good internet access enables students to access online lectures, research, and the latest information.

## **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

### **Opportunity & Innovation**

Strategy 1.1 - Maximise the local economy by supporting existing businesses and attracting new investment.

### **Civic Engagement & Integrity**

Strategy 5.3 - Ensure our processes are transparent and decisions are accountable.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By: Manager Strategic Procurement and Property, Shelley Starrenburg**

**Report Authorised By: Chief Financial Officer, Navec Lorkin**

### **Attachments**

1. Attachment 1 - Community Consultation Report Proposed lease for telecommunications pole Templeton Reserve [**8.1.1** - 45 pages]
2. Attachment 2 - Response to Community Consultation Proposed lease for telecommunications pole Templeton Reserve [**8.1.2** - 11 pages]
3. Attachment 3 - Council Report - Electromagnetic Radiation & 5G Mobile Technology - 2020-02-24 [**8.1.3** - 124 pages]



# Community Consultation Report

15 April 2023

## Proposed Lease for Telecommunications Pole at Templeton Reserve

### Contents

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### 1. INTRODUCTION

Telstra currently uses a small area of land at Templeton Reserve for a mobile phone base station. The station consists of an 18m telecommunications pole and equipment shelter. Telstra has informed Council the area around Templeton Reserve is well known for low in-building coverage, leading to lots of customer complaints- particularly from local schools and residents. The complaints relate to low data speed and unacceptable call performance. To address these matters Telstra would like to:

- Replace the existing 25 metre light tower with a 35 metre telecommunications pole, and
- Remove the existing 18 metre telecommunication pole.

To do this Telstra requires a lease agreement with Council for the use of the land. Prior to entering a lease Council must carry out community engagement as per the Local Government Act 2020.

### 2. SUMMARY

In response to feedback received during initial community engagement, the original four-week consultation period was extended for a further two weeks and included a second drop-in consultation session. The resulting six-week period of community consultation between 13 February and 26 March saw 112 community members provide written feedback on the proposed lease and approximately 45 people attended the two drop-in sessions.

Anyone interested in providing input was encouraged to submit their feedback in writing, including those attending the drop-in sessions.

Of the written feedback:

- 20 people supported the proposed lease;
- 91 people opposed the proposed lease;
- 1 person was unsure.

Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

During the consultation period two Public Questions were presented to Council Meetings relating to the proposed lease. The questions and responses are included in Appendix 3.

A petition which states “We the undersigned hereby petition Knox City Council to oppose the increase in height and installation of 5G telecommunications pole at Templeton Reserve in Wantirna.” was presented to Council on 27 March 2023. The original petition had a claimed 130 signatures. At the 26 April 2023 Council meeting a claimed additional 94 signatures were submitted to Council – see Appendix 4. The Petition contained 176 valid signatures;

- 99 from Wantirna,
- 27 from other suburbs within Knox, and
- 50 from outside Knox.

Those supporting the proposed lease articulated a desire for improved phone and internet connectivity, and speed in the area. Summarised feedback supporting the lease includes:

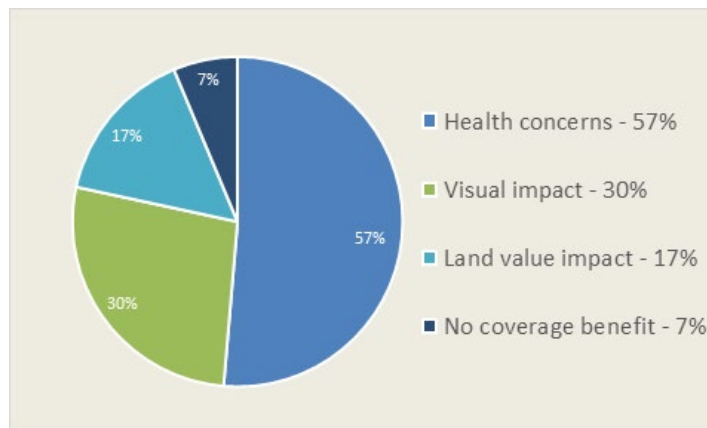
- problematic reception and poor coverage in the Wantirna area;
- poor reception for devices such as bluetooth hearing aids;
- Business owners indicated difficulties with reception and performance at the Studfield Shops; and
- poor reception at Wantirna College.

The main topics raised by those who do not support the proposed lease were:

- Health concerns regarding 5G technology;
- Detriment to the visual amenity of the area;
- Devaluation of property due to presence of 5G technology and loss of visual amenity; and
- No perceived coverage benefit provided.

Some contributors provided more than one reason in their submission for consideration.

Figure 6 – Reasons given by contributors objecting to the proposed lease



The percentages above add to more than 100% as some contributors indicated multiple reasons for their objection to the proposed lease in their written feedback. It is not possible to analyse the reasons for concern from those who signed the petition as reasons for the opposition were not provided.

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

The themes raised by the approximate 45 people who attended the drop-in sessions was

- Poor existing mobile network service
- Visual impact of new pole
- Devaluation of property due to presence of 5G technology and loss of visual amenity
- Health concerns regarding 5G technology

### 3. ENGAGEMENT DESCRIPTION

#### 2.1 Purpose

To explain proposed changes to the mobile phone base station and provide opportunity for neighbouring residents and reserve users to give feedback on the proposed lease.

#### 2.2 Consultation period

6 weeks in total.

Monday 13 February to Sunday 13 March, 2023 (4 weeks). Following requests by the community for another drop-in session the consultation was extended by two weeks to 26 March. The extension of time allowed time for promotion of the session through a mail out and new signage prior to the event.

#### 2.3 Key Message

The initial key message was:

**Have your say on the proposed lease for a new telecommunications pole at Templeton Reserve.**

We are seeking feedback on a proposed lease for Telstra to install a new telecommunications pole. The proposal will allow them to increase the existing pole height from 25m to 35m. The new pole will support better telecommunication services in the area, and accommodate upgraded lighting.

Following the first drop in session on 21 February, it became apparent that information provided on the Have Your Say webpage required further clarification to avoid misinterpretation. Content was revised and the new key message from 7 March was changed to:

**Have your say on the proposed lease for a new telecommunications pole at Templeton Reserve.**

Knox Council is proposing a lease with Telstra that will allow the following changes:  
 Replace the existing 25 metre light tower with a 35 metre telecommunications pole  
 Remove the existing 18 metre telecommunication pole.  
 The lights on the existing light tower will be transferred to the new telecommunications pole to maintain safe night time use of the sportsground.

#### 2.4 Engagement Activities

Date	Activity
9 Feb	DL Flyer drop to homes within 200m radius and bordering reserve (approx. 100) promoting Have Your Say and drop in session
9 Feb	Signage placed around Reserve (4 signs) promoting Have Your Say and drop in sessions
13 Feb – 26 Mar	Have Your Say webpage - on line survey. Direct email sent to 1,270 people registered with Have Your Say.

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

Date	Activity
15 Feb	Direct email to Reserve users
18 Feb	90 minute advertised drop-in session to collect feedback
7 Mar	Update to Have Your Say webpage – inclusion of Frequently Asked Questions flyer and new key messaging
10 Mar	Mail-out of DL Flyer and 3-page A4 information sheet to addresses within 500m radius (approx. 945) promoting Have Your Say and drop in session
20 Mar	Updated Signage placed around Reserve (4 signs) promoting Have Your Say and drop in session.
21 Mar	90-minute advertised drop in session to collect feedback
26 Mar	Have Your Say concluded (emails are still being received) Signage removed at close of consultation period.

## 4. RESULTS

### 4.1 Direct emails and petition

Eighteen community members were received, all of which opposed the proposed lease. Five of these people also responded to the Have Your Say webpage. The three main themes of concern within the emails are;

- Visual impact of new pole
- Devaluation of property due to presence of 5G technology and loss of visual amenity
- Health concerns regarding 5G technology

A petition was presented to Council on 27 March 2023, with a claimed 130 signatures, at the 26 April 2023 Council meeting a claimed additional 94 signatures were submitted to Council – see Appendix 4. Many of the undersigned also have responses included in the written feedback. The petition states “We the undersigned hereby petition Knox City Council to oppose the increase in height and installation of 5G telecommunications pole at Templeton Reserve in Wantirna.” The majority of petitioners that signed the original petition submitted on 26 March 2023 are from Wantirna, whilst other petitioners who are from Bayswater, Ferntree Gully, Rowville, Knoxfield and other suburbs. The additional signatures submitted on 26 April 2023 the majority are from outside of Knox. There are a small number of duplicate signatures.

### 4.2 DL Flyers and Signage

- Signs were displayed in four locations at Templeton Reserve during the consultation period. 2 people scanned the QR code on the signage to access the Have Your Say webpage.
- Approximately 1,000 flyers were distributed. 47 people scanned the QR code on the DL flyer to access the Have Your Say webpage.

### 4.3 Drop-in sessions

The purpose of the drop-in sessions was to collect feedback from the community. They were informal opportunities for community members to verbally express their views to Council. Notes were taken at each session and specific queries from the community have been addressed in section 5 of this report – Direct Queries from the Community. Attendee names were not recorded at the sessions.

#### **Session 1 - Saturday 18 February, 2023**

This session was held at 10:30am to 12pm under the verandah of the cricket and football pavilion at Templeton Reserve. The session was timed to coincide with the cricket club and tennis club use of the Reserve. There was a cricket game happening when the session started which finished at 11am. People started to arrive to set up for the next game at around 11:40am.

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

Present were

- 4 Telstra representatives
- 1 Downer representative
- 1 Council officer

6 community members provided feedback

- 2 support the proposed lease
- 2 are ambiguous about the proposed lease
- 2 are opposed to the proposed lease

The themes of the topics discussed were

- Poor existing mobile network service
- Visual impact of new pole
- Devaluation of property due to presence of 5G technology and loss of visual amenity
- Health concerns regarding 5G technology

### **Session 2 – Tuesday 21 March, 2023**

This session was held at 6:30pm to 8pm under the verandah of the cricket and football pavilion at Templeton Reserve. Present were 3 Council representatives, a Director, Manager and Officer.

Approximately 40 community members attended. A number of community members took the opportunity to address the group assembled. All those who spoke were opposed to the proposed lease. No-one approached Council representatives to express support for the proposed lease.

The main theme discussed was Health concerns regarding Radiofrequency Electromagnetic Energy, (RF EME), including millimeter waves (mmWaves). Other themes raised were

- Visual impact of new pole
- Devaluation of property due to presence of 5G technology and loss of visual amenity

#### **4.4 [Have Your Say webpage – online survey](#)**

The Have Your Say (HYS) webpage was initially published on 13 February, 2023. In response to community queries it was updated with further information on 7 March, 2023. Overall, the page was viewed 798 times by 540 visitors.

When the HYS webpage was published, an email about the consultation was sent to 1,270 people who have registered with Council to be notified of updates and consultations. 71 of the email recipients clicked on the link to view the webpage. During the 6 week consultation period the webpage was viewed 898 times by 499 visitors, and gained 62 project followers.

Visitors to the HYS webpage were asked:

Do you support our lease proposal for Telstra to increase the height of the telecommunications pole at Templeton Reserve?

Yes                       No                       Unsure

Please tell us why

We received 103 responses from 100 people, i.e. some people provided multiple responses.

- 20 support the proposed lease
- 1 are unsure about the proposed lease
- 79 are opposed to the proposed lease

Only 5 people did not provide a comment.

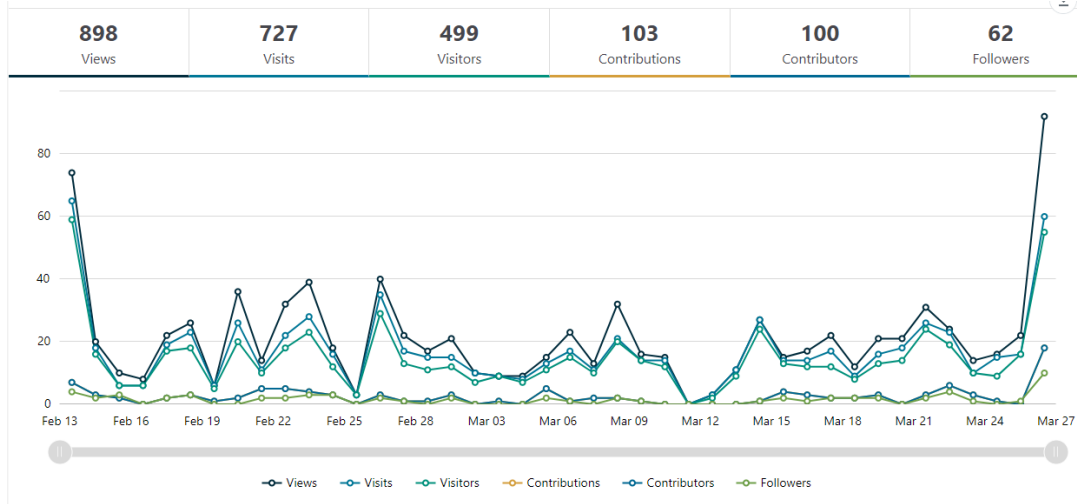
HYS respondents who supported the proposed lease indicated a desire for improved phone and internet connectivity and speed in the area.

Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

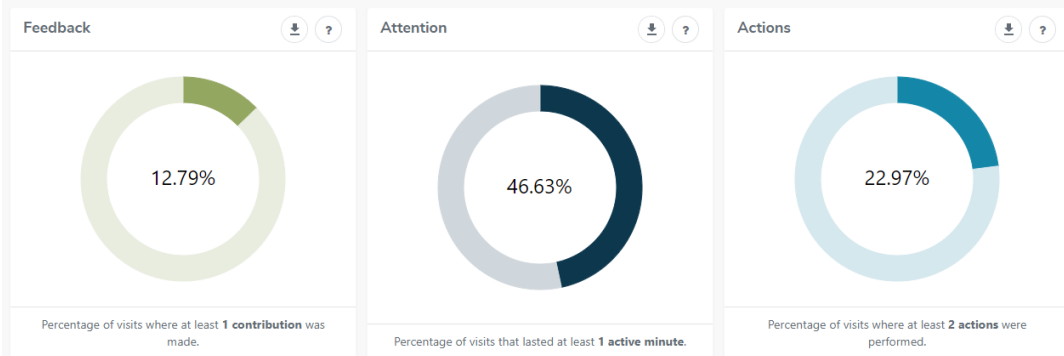
The four main themes of concern for the HYS respondents who opposed the proposed lease are;

- No requirement for improved mobile network service
- Visual impact of new pole
- Devaluation of property due to presence of 5G technology and loss of visual amenity
- Health concerns regarding 5G technology

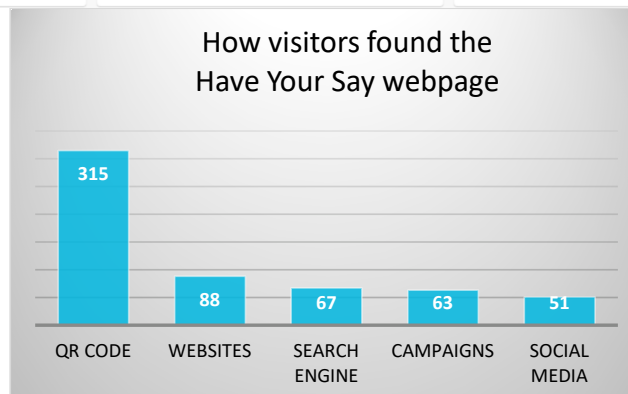
Performance Summary for Have Your Say consultation:



Conversions



How visitors found the Have Your Say webpage



Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

APPENDIX 1 COLLATERAL

**DL Flyer – delivered 9 February 2023**



**Telecommunications pole at Templeton Reserve**

We are proposing a lease for Telstra to make the following changes on a small area of land they currently occupy:

- replace the existing 25m light tower with a new 35m telecommunication pole
- remove the existing 18m telecommunication pole

Have your say on this proposal to help guide our decision.

Feedback has been extended. Have your say by 26 March 2023. [knox.vic.gov.au/haveyoursay](https://knox.vic.gov.au/haveyoursay)



Telstra currently uses land at Templeton Reserve for a telecommunications pole and equipment. We are proposing a lease that will allow Telstra to install a 35m telecommunications pole to provide better service (5G) to support residents. The new telecommunications pole will include lighting to maintain safe night-time use of the sportsground.



**Current telecommunication pole (18m)**      **Example of proposed telecommunication pole (35m)**

**Drop-in session**  
 Templeton Reserve  
 Tuesday 21 February  
 6.30pm to 8pm

**HAVE YOUR SAY**

Share your feedback by 26 March 2023.

**View more at**  
[knox.vic.gov.au/haveyoursay](https://knox.vic.gov.au/haveyoursay)


**For queries, please contact**  
 9298 8291  
[propertymanagement@knox.vic.gov.au](mailto:propertymanagement@knox.vic.gov.au)

**Shown to scale**  
 Current telecommunication pole (18m)  
 Proposed telecommunication pole (35m)  
 Current light tower (25m)






**Signage – mounted 9 February 2023**






**Telecommunications pole at Templeton Reserve**

We are proposing a lease for Telstra to increase the height of the telecommunications pole at Templeton Reserve. Have your say on this proposal to help guide our decision. Feedback is open between 13 February to 13 March 2023.

**Drop-in session**  
 Saturday 18 February  
 10am–12pm  
 Templeton Reserve

**HAVE YOUR SAY**

**For more information**  
[knox.vic.gov.au/HaveYourSay](https://knox.vic.gov.au/HaveYourSay)



Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

Frequently Asked Questions, 3 Pages – delivered 10 March 2023



## Proposed lease for telecommunications pole at Templeton Reserve

### What are the changes proposed?

Telstra currently uses a small area of land at Templeton Reserve for a telecommunications pole and equipment shelter. Telstra would like to install a new telecommunications pole to provide the local community access to 5G technology, which is currently not available in the local area. This will enable Telstra to provide better service to support residents working from home, local schools, and industries.

- Knox Council is proposing a lease with Telstra that will allow the following changes:
- Replace the existing 25 metre light tower with a 35 metre telecommunications pole
  - Remove the existing 18 metre telecommunication pole.

The lights on the existing light tower will be transferred to the new telecommunications pole to maintain safe night time use of the sportsground.

The proposed lease is for an initial 10-year period, and it includes the option to extend the lease for a further 10 years.

If the lease proposal is approved, Telstra will be required to apply for a Planning Permit for installation and removal of the poles at Templeton Reserve.

Image 1. Proposed changes at Templeton Reserve



There are a number of other light towers and one other telecommunications pole (shown here). There is no change proposed to these poles.

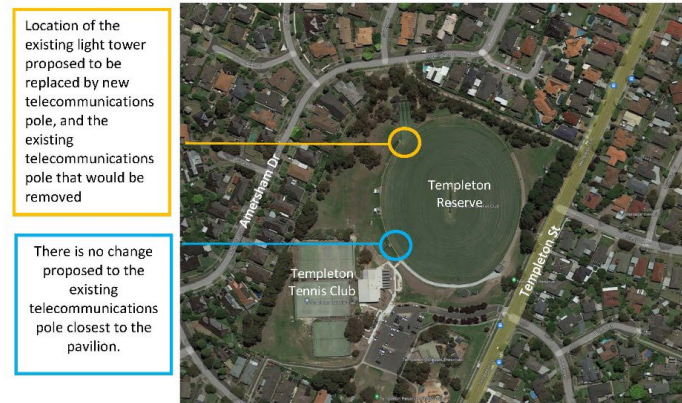
Existing 25m light tower that would be replaced by a 35m telecommunications pole with lights

Existing 18m telecommunications pole that would be removed



### Frequently Asked Questions

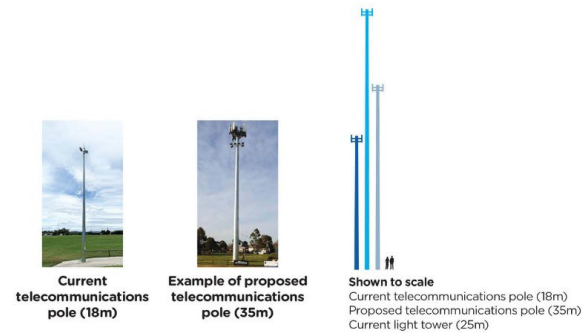
Image 2. Aerial view of Templeton Reserve and the location of the existing and proposed telecommunication poles



Location of the existing light tower proposed to be replaced by new telecommunications pole, and the existing telecommunications pole that would be removed

There is no change proposed to the existing telecommunications pole closest to the pavilion.

Image 3. Existing and proposed telecommunications pole, and current light tower



Current telecommunications pole (18m)

Example of proposed telecommunications pole (35m)

Shown to scale  
Current telecommunications pole (18m)  
Proposed telecommunications pole (35m)  
Current light tower (25m)



Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

Frequently Asked Questions, 3 Pages cont'd

DL Flyer– delivered 10 March 2023



Frequently Asked Questions

**Why does the telecommunications pole need to increase to 35 metres?**

The telecommunications pole consists of macro cells that are required to deliver 5G technology. The height of the telecommunications pole allows for the macro cells to emit frequency signals over a large area.

You can read more at the Department of Infrastructure, Transport, Regional Development, Communication and the Arts website [www.infrastructure.gov.au/media-communications-arts/spectrum/5g-and-eme](http://www.infrastructure.gov.au/media-communications-arts/spectrum/5g-and-eme)

**Can the new telecommunications pole be installed at another location?**

To ensure everyone across Knox has good access to technology, telecommunications towers need to be spread across the municipality. There are many things taken into consideration when selecting locations including nearby obstructions such as buildings and hills. Parks and sportsgrounds are commonly selected as locations.

**Will Knox Council earn income from the proposed lease?**

If the proposed lease goes ahead, Council will receive an income of \$24,000 per annum increasing annually by 3.5%. Income earned from the lease will be managed through the annual budget process, which is informed by the Council Plan 2021-2025.

**Is 5G technology harmful to human health?**

There is no evidence to suggest 5G is harmful to human health. You can read more at [www.infrastructure.gov.au/media-centre/fact-or-fiction-truth-about-5g](http://www.infrastructure.gov.au/media-centre/fact-or-fiction-truth-about-5g) [www.arpansa.gov.au](http://www.arpansa.gov.au) – search 'general questions on electromagnetic fields'

Further information about 5G technology, RF EME and mobile base stations can be sourced from the following websites

- Australian Communications and Media Authority, [www.acma.gov.au](http://www.acma.gov.au)
- Australian Radiation Protection and Nuclear Safety Agency, [www.arpansa.gov.au](http://www.arpansa.gov.au)
- Department of Infrastructure, Transport, Regional Development, Communications and the Arts, [www.infrastructure.gov.au](http://www.infrastructure.gov.au)
- Radio Frequency National Archive Site, [www.rfnsa.com.au](http://www.rfnsa.com.au)

**What are the next steps?**

Knox Council is inviting community feedback on the lease proposal until 26 March. After the community engagement closes, Council will review all submissions. The report will be presented at the Council meeting on 22 May for a decision on the proposed lease.

If the lease proposal is approved by Council, Telstra is required to apply for a Planning Permit. Their Planning Permit application will be assessed, and if required, publicly advertised. If the Planning Permit is approved, the works to install and remove the poles can commence.



**Telecommunications pole at Templeton Reserve**

We are proposing a lease for Telstra to make the following changes on a small area of land they currently occupy:

- replace the existing 25m light tower with a new 35m telecommunication pole
- remove the existing 18m telecommunication pole

Have your say on this proposal to help guide our decision.



Feedback has been extended. Have your say by 26 March 2023. [knox.vic.gov.au/haveyoursay](http://knox.vic.gov.au/haveyoursay)



Telstra currently uses land at Templeton Reserve for a telecommunications pole and equipment.

We are proposing a lease that will allow Telstra to install a 35m telecommunications pole to provide better service (5G) to support residents.

The new telecommunications pole will include lighting to maintain safe night-time use of the sportsground.



Current telecommunications pole (18m)



Example of proposed telecommunications pole (35m)

**Drop-in session**  
Templeton Reserve  
Tuesday 21 February  
6:30pm to 8pm

Share your feedback by 26 March 2023.

**View more at**  
[knox.vic.gov.au/haveyoursay](http://knox.vic.gov.au/haveyoursay)

**For queries, please contact**  
9298 8291  
[propertymanagement@knox.vic.gov.au](mailto:propertymanagement@knox.vic.gov.au)

**Shown to scale**  
Current telecommunications pole (18m)  
Proposed telecommunications pole (35m)  
Current light tower (25m)



Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

Signage – mounted 20 March 2023

**knox** Knox City Council

## Telecommunications pole at Templeton Reserve

**HAVE YOUR SAY**

We are proposing a lease for Telstra to replace an existing 25m light tower with a new 35m telecommunications pole, and remove the existing 19m telecommunications pole. Have your say on this proposal to help guide our decision.

**Drop-in session**  
Tuesday 21 March  
6:30pm – 8pm  
Templeton Reserve

Feedback closes on 26 March 2023.

**For more information**  
[knox.vic.gov.au/haveyoursay](https://knox.vic.gov.au/haveyoursay)

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

## APPENDIX 2 - COMMENTS FROM COMMUNITY

The following tables contain all written comments received through the Have Your Say webpage and direct emails throughout the consultation period and are included for transparency. They have had names and addresses removed for privacy reasons.

## 1 Comments from people who support the proposed lease

#	Method	Date	Please tell us why
1	HYS	13-02-2023	Improved telecommunications in the area. It is away from housing
2	HYS	13-02-2023	
3	HYS	13-02-2023	Telecommunications are vital in today's society. It's important that telecommunications companies are able to maximise the range and speed of data to enable more users and greater speeds. It's only replacing a pole with a pole. Most sporting ovals have tall poles for lighting anyway and it places the aerials further from the ground and therefore people. Please approve it.
4	HYS	13-02-2023	
5	HYS	13-02-2023	Enables better 5G.
6	HYS	13-02-2023	Need better mobile on line services in area. Increasing height of existing tower will have little additional impact. I expect Council will be getting additional payments which will help with finances.
7	HYS	13-02-2023	Better 5G is essential for Wantirna...and an upgrade of lighting would be welcome.
8	HYS	14-02-2023	If the new higher telecommunications pole will support better 5G and include upgrading lighting then I see no need to disagree with the proposal.
9	HYS	14-02-2023	I do not see why there should be any reason to be against it. sometimes progress just should be accepted. The only problem I could see is maybe it might cast a shadow on a person's ice cream as they are out for a walk!!!!!! go for it!!
10	HYS	17-02-2023	Residing on the western side of William Morris reserve we often encounter poor coverage of 4G. Difficult to communicate with family and friends. The beauty of the rolling hills is the main reason we live in Wantirna but it also presents a problem with coverage. All in favour of increasing the height of the tower.
11	HYS	05-03-2023	5G is the obvious next step in mobile data, and good to see it coming into the area
12	HYS	14-03-2023	I support this 5g installation as I think it would be great to finally have access to 5g internet. I hear so much about it for years and I have devices capable of handling it but all I ever get is 4g at most. I do currently have Optus as my provider though so I'm not sure if this installation by Telstra will still prevent me from accessing 5g as I'm not a current customer of theirs.
13	HYS	15-03-2023	Better reception for all locals which is needed big time

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

#	Method	Date	Please tell us why
14	HYS	15-03-2023	For better Telstra coverage in our local area.
15	HYS	16-03-2023	To ensure the 5G coverage of this part of Knox on the proviso that there is an undertaking by council that the annual Telstra rental is used as part of the reserve development and upkeep.
16	HYS	17-03-2023	The better mobile coverage, the less power handsets use to get to network and radiate us on the way
17	HYS	18-03-2023	We need improve telecommunications infrastructure include 5G in our area. The minimal increase in the height of the pole is insignificant.
18	HYS	18-03-2023	Looking forward to better phone service as the current Telstra phone service in Wantirna is horrible. Especially on Stud Road near the Studfield Shops. Makes running a business very difficult.
19	HYS	19-03-2023	The service in Wantirna is awful and has always been bad so I'm all for it if this fixes the problem. I think the council in conjunction with Telstra actually need to re-educate their residence in the area about the benefits this will bring. Residents are too quick to judge without the proper education this came to light when I had a resident come to my door asking me to sign a petition against it. When questioned he had very little knowledge and understanding of the technology and what is actually happening and the benefits he was all about the 5G radiation and it looks ugly (no different to one of the current light towers that overlooks the ground) I'm disappointed your residents are telling incorrect information to other people who may have no knowledge and are easily persuaded. This is why the community needs to be properly educated.
20	HYS	22-03-2023	I would like to see council achieve promises to upgrade/repair other 5G sites as a condition to the lease, such as the one on Boronia Mall which has been broken since 2021.

## 2 Comments from people who are unsure about the proposed lease

#	Method	Date	Please tell us why
1	HYS	22-03-2023	I am concerned about the height of the Tower. I have no concern regarding the placement of the tower just feel the height is not suitable in either look or practical application.  I feel the extension so far above the tree line has not been justified. In looking at the landscape there appears no need to have the structure far above the tree line.  The Council needs to provide an explanation for this height requirement or provide an alternative height for consideration.

## 3 Comments from people who are opposed to the proposed lease

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

#	Method	Date	Please tell us why
1	HYS	14-02-2023	Such a large communication tower (35m high) does NOT belong in close vicinity (within 50m) directly behind our established homes, playgrounds, and Templeton preschool.
2	HYS	15-02-2023	EMP, Electromagnetic Pulse is extremely harmful to human and wildlife! Search "Prof. Olle Johansson" on YouTube to find out.
3	HYS	15-02-2023	Any telecommunications pole that operates in areas near children's services should not be granted given the health risks associated with these poles. 5G Would you like your grandchild to attend the Kindergarten next door or the childcare across the road or train on the football underneath? It will be 'out of character ' to the area - this site is on a hill. There is no need for a Transmission Line height in residential areas!!
4	HYS	17-02-2023	Absolutely do not support this project. There is not enough scientific evidence that this type of technology is safe for residents and users of Templeton reserve. Also, a 35m tower is not appropriate for a residential housing estate and will obscure the view of many houses.
5	HYS	18-02-2023	Unsightly (I would see it through my windows and front garden) and I believe it will affect property values as many people see them as an eyesore and a health risk. I can't see why they cannot be placed along Burwood highway
6	HYS	18-02-2023	It is a residential area and the 5g tower is bound to have some health implications for everyone living in this area. It will deface the lush surroundings and likely to impact on real estate value locally.
7	HYS	18-02-2023	I'm a local resident residing on the fence line of Templeton reserve. Don't want an eye sore towering over the trees when looking out the rear windows of my house! I would have resided in the city if that's what I wanted. That and don't want further radiation in the area. Current height is good enough! As this is proposed to be directly behind my property, I vote a STRONG NO!! My kids subjected to more radiation, many kids use this reserve, it's way out of proportion to anything in the area. This would also impact its desirability and value of my property considerably being directly behind me. This should be somewhere closer to an industrial area, perhaps a taller tower at Knox shopping centre or even Knox hospital. NO NO NO NO! As I said on previous feedback, I still oppose as will have adverse health concerns and don't won't to find out in 10-20 yrs time that it's harmful. investigating on Facebook I've read within 400 mtrs, emf's are at its strongest and should be located at least 400 mtrs away from residential dwellings. Please find a couple of write ups about it. <a href="https://www.forbes.com/health/body/is-5g-safe/">https://www.forbes.com/health/body/is-5g-safe/</a> And another link with effects to humans with rowers so close to residential <a href="https://radiasmart.com/radia-smart-blog-emf-shield-awareness/what-is-the-safe-distance-from-cell-towers/">https://radiasmart.com/radia-smart-blog-emf-shield-awareness/what-is-the-safe-distance-from-cell-towers/</a> My house is 40 meters away from this proposed tower, why would you subject people to this? Ask yourself, Would you want it in your backyard?
8	HYS	19-02-2023	It's an eyesore, Increased health risk. never seen any birds on them .

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#	Method	Date	Please tell us why
9	HYS	20-02-2023	I walk my dogs and my children around the park every evening, and live nearby. I am not comfortable with this extension, especially the increased 5G output.
10	HYS	20-02-2023	Obstructing of view and radiation not wanted in our back yard. There is not enough information about long term effects of radiation for 5G towers
11	HYS	21-02-2023	Radiation and 5G is absolutely not safe and we as a community will not allow such radiation so close to people's homes as this can cause many health issues. Screw off gov The radiation is unsafe for health reasons, the radiation makes people sick, kids play in that area there's houses right next to there, overall is not good for safety reasons. The whole of the local street don't want the tower there either.
12	HYS	21-02-2023	This poses as a health and safety risk to residents and park users. Exposure to Increased radiation causes many different illnesses. A taller tower will ruin the aesthetics of the park as well as obstruct residents view of the park. It is the last thing we want to see when we look outside the window. The park is utilised by many locals and for many different sporting activities. Would you want a 5 G tower in your backyard? If so put it in your backyard not at Templeton reserve. It needs to go in an industrial area and not a residential area.
13	HYS	21-02-2023	If it's built it will be right behind me and my family's house, we do not want such a thing in our backyard.
14	HYS	22-02-2023	Another eyesore in Knox. We don't need 5G. Just go with what we have.
15	HYS	22-02-2023	Concerns about safety, impact on property values and the tower being an eyesore.
16	HYS	22-02-2023	It will be an obstruction of the view,
17	HYS	22-02-2023	Absolutely not, this will impact visually, loss of property value together with other associated health risks i.e. radiation exposure just to name a few, especially it being proposed to being behind my residency.
18	HYS	22-02-2023	Raising the height of this tower increases health risks due to radiation, it will also decrease the resale value of our homes and such an ugly structure will be seen more prominently from a further distance. Our mobile signal is good enough and we do not need it strengthened.
19	HYS	23-02-2023	1. Radiation emitted by mobile towers. Studies suggest both short-term and long-term health risks within 300-400 metres of a cell tower. 2. Proximity to Cell Phone Towers negatively affects house values.
20	HYS	23-02-2023	I am livid that they propose installing a 35-metre-tall tower. I am more than livid that they propose moving the site closer to our homes. The current 3G pole exposes us to less than 0.01%, their proposal increases our exposure by 220 times that amount. There is no research on the effects of exposure long term. Council need to locate it elsewhere and not near residential houses.

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#	Method	Date	Please tell us why
21	HYS	23-02-2023	The current towers remain unseen buy most homes around as they are not greater than the current tree line. Also the current towers are none eye catching at the top and blend as a natural extension of the tower. The proposed tower is none of the above it will tower the tree line and have a large gantry which will draw attention from miles away, something you would expect to see on top of a high rise building not in a built up residential area
22	HYS	23-02-2023	35m is ridiculously high. Put it somewhere away from kids/people playing sport to ensure their safety.
23	HYS	24-02-2023	<p>-The tower is too close to residents causing increased radiation levels for all.</p> <p>-being so high there would be a signal on top to warn planes etc. of its presence and would be very distracting and offensive for residents to have a light flashing all night.</p> <p>-After Council spending so much on improving Templeton reserve it would be an ugly eye saw and ruin the ascetic of the reserve.</p> <p>-Securing such a high tower could create potential law suits if people fall over the wires etc. securing it.</p> <p>-Extremely high wind risk.</p> <p>-Completely object to the project, this can easily be moved to open space away from residential living. There is much land and open space on High Street Road and there are no residents being put at risk.</p> <p>-Completely idiotic location for such a monstrosity. Can do without 5g. This is a family area not Telstra oval. Can't believe this is being considered, is the money from Telstra really worth it?</p>
24	HYS	24-02-2023	Increase health risks. Property value loss.
25	HYS	24-02-2023	Health risk and ugly for our environment.
26	HYS	26-02-2023	<p>More than 2,000 scientific studies conducted by independent researchers from around the world show the negative biological effects of wireless radiation</p> <p>4G releases 3.2 gigahertz tests show this kills insects, bees and has caused symptoms in people as well. I believe the rollout of 5G is not safe for humanity, animals insects and the atmosphere. 5G has changed the nature of telecommunications</p> <p>5G is capable of radiating 3-300gigahertz. 300gigahertz releases high levels of radiation. Why have these companies been allowed to manufacture machines that radiate 300 gigahertz of radio waves into the atmosphere? In residential area??</p> <p>As time goes by there will need to be a tower every 100 to 300 metres apart?</p> <p>These towers are modern day factories... Would you put a factory that emits toxic smoke in a residential area - NO</p> <p>Radio waves are modern day toxic smoke. The companies who want these towers must build them away from residential areas, away from places where people work away from farms</p>
27	HYS	26-02-2023	It will decrease my house value with no benefit. Excessive light pollution. Increase risk of property damage in an extreme weather situation.
28	HYS	27-02-2023	

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#	Method	Date	Please tell us why
29	HYS	28-02-2023	I don't believe 5G is safe. Not enough research has been done and advertised.
30	HYS	01-03-2023	I am concerned about the EMF exposure for residents and have found many reports to indicate that there are potential health risks. I am also appalled by the Fact or Fiction misinformation that is put out on this website regarding the safety of 5G.
31	HYS	01-03-2023	Disruption to property if installed, lighting shines into property. Risk to property resell value. Sets a precedent for other telco vendors to install additional towers.
32	HYS	01-03-2023	Too close to homes. This should be in an industrial area.
33	HYS	03-03-2023	No benefits for locals and will decrease the value of properties. Dangerous to the properties and people in extreme weather. Light pollution.
34	HYS	05-03-2023	I am concerned about the potential health issues in my immediate environment for my own family and that of the young people who use the reserve for sporting activities and also the potential loss of property value. I cannot understand why an industrial environment would not be more appropriate.
35	HYS	05-03-2023	The pole is too high to affect the park view and devalued the area houses.
36	HYS	05-03-2023	35m It's too high for the area, the pole is not iconic like Sydney tower.
37	HYS	05-03-2023	Out of place to have such an eye sore near so many homes. Not safe due to EMR emissions. No safety data provided to confirm the safety of such towers. I live in Wantirna because it is a safe suburb and introducing such towers only attracts protests. I will in the future vote for council candidates that are against such so called progress .
38	HYS	06-03-2023	<p>My concerns:</p> <ol style="list-style-type: none"> <li>1. According to the data provided by Telstra there will be a 2000% increase to radiation exposure to both residents and visitors of the park.</li> <li>2. Not enough research has been done on the long term radiation exposure on 5G (it is not old enough).</li> <li>3. In some countries across the UK, there has to be a minimum of 500m between residential housing and the installation of a 5G tower. The closest back yard fence is only 44m away to the proposed new site.</li> <li>6. Once Telstra have installed the new tower they will not be required to gain further approval to install other potential harming technology on the pole.</li> <li>7. A 35-meter tower is not appropriate within a residential park and will overshadow and block many peoples view. It will also be seen from varying point across the estate and will affect not only the people who live direct on the park, but most people in the estate.</li> <li>8. A 35m pole such as this is not in keeping with our beautiful park where many people and families are regular visitors.</li> </ol>



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			9. We are not against an upgrade to the mobile service in the area, we want the council to look at a more appropriate site that is away from a residential area. Most towers this size are place in industrial sites where people DO NOT live.
39	HYS	07-03-2023	I do not support this. No way. No how. ❤️🙏
40	HYS	07-03-2023	not needed, wrecks views, harms health, detrimental to birds. Grow up and stop profiting from stupid unnecessary things
41	HYS	08-03-2023	I firmly believe that these massive telecommunications towers should never be placed on a public oval such as the Templeton reserve where so many sports are played in this sporting precinct and right next to housing. Surely a more appropriate place could be located for the safety of all residents and visitors to this oval.
42	HYS	08-03-2023	I don't believe that the telecommunications industry has ever tested or proven safety on millimetre waves at 26,000 MHz which is what the 5G network runs at. The 3G & 4G towers will still be running alongside the 5G tower, there have been more than 2,000 scientific studies conducted by independent researches from around the world concerning the biological effects of wireless radiation.
43	HYS	09-03-2023	
44	HYS	15-03-2023	
45	HYS	15-03-2023	potential health concern
46	HYS	16-03-2023	5G is not necessary for residential use, and Templeton park is for kids, better keep all the surrounding more natural.
47	HYS	16-03-2023	Health and safety concerns due to being very close to houses and kids playing at the park.
48	HYS	17-03-2023	
49	HYS	19-03-2023	It is located too close to our home and increases radiation exposure to residents and visitors. It also obstructs our view and causes potential loss of our property value.
50	HYS	19-03-2023	I would like to represent myself and my family members to express our strongly disagree with the proposal for the 5G telecommunications pole at Templeton Reserve which is just opposite my backyard. We feel really worried about the proposal will have negative impacts on different aspects and we are pretty sure it will have happened as we are the people who do not want to buy a property next to the telecommunication pole. We choose to stay in this beautiful Amersham Drive because of the Golden mile location in Wantirna and the safe and beautiful environment of the Templeton Reserve for us and our next generation. If you tell us before the auction that the council would like to have this proposal, we would definitely reconsider looking for another location.  There are still a lot of question marks regarding the negative impacts of 5G technology on human health when living close to the pole. It is very easy to access the controversial information which the experts raise their concerns on the 5G technology.

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			<p>They indicated that "the cell towers should be distanced from homes, day-care centres, schools and places frequented by pregnant women, men who wish to father healthy children and the young." As a result, we strongly disagree with this proposal and wish that the council can rethink the proposal and consider the telecommunications pole be relocated to a place that can keep a distance from the residential area and schools.</p> <p>Furthermore, this proposal will definitely have a negative impact on the property value of the surrounding areas of the Templeton Reserve. For my understanding, most of the new residents move to this area for their children to study either in the Templeton Primary school or the Knox School. As a parent, we would like to provide the best to our children. If the potential buyers know that there is a potential risk that is bad for their children's health and their own health, they definitely will ignore this area. And for the existing residents, we may have no choice and we may need to think about a backup plan to avoid living close to the pole for protecting our health.</p> <p>We wish the council committees can listen to our deeply worries and locate the pole away from our lovely Templeton Reserve.</p>
51	HYS	21-03-2023	Health issues; Devalue property area; Eye sore
52	HYS	21-03-2023	<p>Because the safety of these 5g (6/7/8gs) is unsafe no matter what height. The scientist know this and if the general public had the truth of the health implications due to dangerous untested frequencies...NO ONE would comply.</p> <p>The GOV clearly no longer care. It is all about money and half the MPS who support this either don't care or don't understand. Until people say NO you just continue to take advantage of trusting humans. It is all horrific but you and your AI henchmen just keep going. You won't stop until the people wake up and THEY ARE. It is only a matter of time now. You know it. The henchmen know it. The people will overcome the corrupt. It is happening and nothing can stop it.</p>
53	HYS	21-03-2023	Unightly and it will lower the cost of my property. I also do not think it healthy so close to my residence
54	HYS	22-03-2023	<p>I believe 5g is not good for the human body and would like to see more information on the safety of this technology.</p> <p>I have just read this Check this link out <a href="https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/">https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/</a></p>
55	HYS	22-03-2023	The height of the poles will look terrible, and I do not trust the information given that 5G is not harmful. There is insufficient research and data about possible harmful effects and I don't appreciate the information you've provided labelling any concern as only myths.
56	HYS	22-03-2023	Very close to houses and a park used by many kids and families every day
57	HYS	22-03-2023	<p>There are no environmental long or short term reviews on studies on 5g. All we know is that it causes serious illnesses including cancers, headaches, blurred vision, eye problems and even reproduction problems to name a few.</p> <p>It can also affect the health of pets and kills plants. They compare it to having your head in a microwave oven for 19 minutes a day. People who have had radiation towers installed near their homes have found frequencies affect emotions causing</p>

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			depression in some and anger in others. If I lived under a tower emitting this frequency over my house I would have to move and as far as my children playing sport on Templeton Reserve or Tennis there I would be changing clubs as I believe the risk is far too great. If you wants links to some videos on this I am happy to forward them to you if it would help you to hear from some experts in the field.
58	HYS	23-03-2023	It has NEVER been tested or PROVEN safety on millimetre waves at 26,000MHZ that's why there is NO evidence as you have suggested. Even before 5G, over 2,000 peer-reviewed reports shows biological harm from 3G and 4G wireless technology so why do you want to push this onto Australians. This affects you too. Plus, it comes to my attention that NO INSURANCE COMPANY will cover this technology ever. Bio effects on the human body are horrendous.
59	HYS	23-03-2023	I am against the use of land so close to houses to build a tall telecommunication pole.
60	HYS	23-03-2023	Too high, too much radiation. Knox Council stop being so greedy for money and sacrificing health and killing native birds.
61	HYS	24-03-2023	Very close to homes and family's and the park. Should be in and industrial area, not so close to houses and kids.
62	HYS & Email	26-03-2023 18-04-2023	<p>The height of the proposed telecommunications pole will be the highest structure in the surrounding area. It will also be about 3 stories taller (10m higher) than the existing light poles and almost twice as high as the existing telecommunications pole. Given this it will stand out like a sore thumb - and be visually unappealing to the residents in the surrounding area and unattractive to people visiting the area.</p> <p><b>Email sent 18 April 2023 with 2 attachments</b></p> <p>I would like to make the following additional comments to my previous submission. I would like to make further comment on the proposed Telstra 5G tower, I understand the impact any potential health impacts has been downplayed significantly and it has been communicated that the tower will emit the same level as existing towers.</p> <p>Quite near the location of there is an existing Optus/Vodaphone tower. However, I think that the proposed tower and impacts regarding the level of EME have been understated, given that the two towers located in close proximity will have a combined impact on the level of electromagnetic emissions in the area. I feel concerned that this combination will have a negative impact on residents in the area, much of whom are children.</p> <p>So, while the tower measured as a standalone tower may be within in normal acceptable limits there is a potential risk that I feel is being overlooked – in that the combination of the emissions from the existing tower with the proposed tower may not be within normal limits have detrimental impact on the health of local residents.</p> <p>Given the different maximum levels of EME based on the distance from the towers (Optus tower – 125.84m and Telstra Tower – range between 50-100m) there is an additional risk that this concentration of EME will be in one particular area, given the location of the towers from each other (of about 100m). it is estimated that this would occur within the 0-100m range (Reports attached).</p>

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			<p>So, while I note there limited research available as to the adverse health impacts, there is no research to suggest it doesn't. I also note that the studies did identify negative impacts – but this is often downplayed – they did identify health impacts, and it baffles me why that is often overlooked and dismissed so easily.</p> <p>Given the above I don't think the risk should be taken, given the existing tower and emissions in area that residents are already being exposed to. An additional tower with additional emissions is unacceptable, and presents a potential unnecessary risk the heath of the residents in the area.</p> <p>In final closing I would like to also state that, it is unacceptable to expect that residents in the area should have to accept having two towers in the area, and if it has to be placed on an oval then it does not seem unreasonable to locate the proposed 5g tower on another location/oval.</p> <p>Thank-you for the additional consideration.</p>
63	HYS	26-03-2023	<p>Concern with health of myself and my family. Tower will overlook my house and will be visible from the front and rear of my property. It will cause anxiety and loss of property value. I can now see the new light towers clearly above all the tree lines, and I was never given a chance to object to having any telecommunications fixed to the towers, let alone a new tower (potentially taller) with telecommunications panels or the like fixed to it. It is a high impact to the neighbouring area, and I objective!</p>
64	HYS	26-03-2023	<p>Knox Council is getting \$25,000 per year from Telstra and would like to know what benefits rate payers are getting from this? Are rate payers getting a reduction to the rates by at least by one cent? It's better for council to do the garbage handling work rather than going to do the telecommunication work.</p>
65	HYS	26-03-2023	<p>I strongly disagree with construction of this tower. Its height will affect the houses close by with light or noise pollution. It is not reasonable to erect it so close to houses where people will be exposed to EME from such towers leading to potential cancer clusters in our area.</p>
66	HYS	26-03-2023	<p>No this is not a safe place for the residents in that area, I highly oppose this location. Find a non-residential area.</p>
67	HYS	26-03-2023	<p>Health and safety reasons</p>
68	HYS	26-03-2023	<p>High risk of cancer; Microwaves area after tower goes up; No science behind safety</p>
69	HYS	26-03-2023	<p>I live directly behind Templeton Reserve and I object to have more cell towers behind my house. The new proposed cell tower will be visible from the front of my house and I am concerned about addition emf exposure to myself and my family. The new light towers already overlook my house, and installation of telecommunication panels to the new light tower or even higher as proposed light towers will devalue my home. I have lived in the area for nearly 20 years, and over the last 7 years I have noticed the Telstra antenna sneakily sneak in with an additional housing infrastructure. I am aware the Telecommunications towers are required, although they shall be evenly spread across the Knox community. We already have cell towers at Templeton Reserve that service the area, we don't need towers from multiple suppliers overlooking our homes</p>

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#	Method	Date	Please tell us why
			to service long distances. Thank you in advance for acknowledging my concerns, and I do hope that the Knox council does not allow the proposed high impact cell towers in our backyard.
70	HYS	26-03-2023	I do not support 5g towers as it's full of radiation .
71	HYS	26-03-2023	Concerned about impact on community.
72	HYS	26-03-2023	Too risky for health
73	HYS	26-03-2023	If you can show the safety data, then we can talk. It is a firm NO
74	HYS	26-03-2023	There are many concerns about the health issues surrounding these structures and I disagree with these monstrosities being placed
75	HYS	26-03-2023	Too close to the residential area
76	HYS	26-03-2023	Residents with growing families nearby concerned for their children's health.
77	HYS	26-03-2023	Too close to kids and families at the park. Homes are very close too.
78	HYS and Email	26-03-2023	<p>I DO NOT support your lease proposal for Telstra to increase the height of the telecommunications pole at Templeton Reserve because in summary –</p> <ul style="list-style-type: none"> <li>• I am electrically sensitive to Electromagnetic Energy EME, EMR, RF from phone towers, Wi-Fi and blue-tooth and Magnetic and electric fields and harmonics from power line and building wiring. I have been sensitive to all these since 2007. I essentially acquired the sensitivity from a 10 year period of heavy mobile phone use close to up to the head.</li> <li>• My symptoms range from deep internal head pain when in the near field and or in close proximity to operating a mobile phone in call mode and when in close proximity to Wi-Fi antenna and blue tooth devices. Once affected, it usually takes at least 4 to 6 hours to recover from the deep internal head pain. If I remain for more than 5 to 10 minutes in an environment and in particular indoors where the EME power density in the environment is greater than 20uW/m2, however in particular anywhere from say 100uW/m2, the skin on my arms and legs in particular commences to present with a burning sensation that resembles the after-effects of sunburn. The longer situated in the location, the greater the pain and reddening of the skin and the longer to recover.</li> <li>• General cordless and wireless devices such as cordless phones, Wi-Fi and blue-tooth devices emit passive EME in the home in the order of 5000uW/m2 to 500,000uW/m2. The SBM 2015 Building Biology Evaluation Guidelines for Sleeping Areas lists that 0.1 to 10uW/m2 is a slight anomaly and that 10 to 1000uW/m2 is a severe anomaly and that greater then 1000uW/m2 is an extreme anomaly. Many people have their Wi-Fi modems in their bedroom passively emitting 60,000uW/m2. Scientific studies and anecdotal evidence show that it generally takes 5 to 8 years for passive exposure to cause electro sensitivity. The Australian Telecommunications adopted standards allow EME level to be well in excess of 6,000,000uW/m2.</li> </ul>

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			<ul style="list-style-type: none"> <li>● Why do many people not experience the sensitivity compared to many that do? Everybody is effected by EME, however not all people experience the symptoms until it's too late or even correlate their symptoms to EME as EME attributes to most illnesses, diseases and ailments. GP are not trained to examine the living and working environment of a patient, they are only trained to dispense pharmaceuticals after listening to the patient's symptoms. It is all about the attributes of the person life; diet, sleeping quality, pattern and conditions etc., general and pre-existing health conditions, type of and quality and quantity of exercise and intensity and quantity of EME exposure to name a few attributes to keep it simple here. Just like smoking; it grossly effects many people who acquire cancer however other can live their lives as chain smokers and live extremely healthy and then all of a sudden die in a car accident in their mid-70's just as in the case of my late father in law.</li> <li>● As a result, I have had to completely change the way I work and live my life. For example; my home has no wireless devices or technology - only cabled technology so I can survive. I do not put a mobile phone to my head. I have a mobile phone and majority use it for SMS and MMS at a distance. If I have to make a mobile call when I am out on the road, I use a radiation shielded corded earpiece. When I am at home or in the office, all my inbound mobile calls are diverted to a landline. All outgoing calls are made from a land line. My Telstra Business Centre Manager and Technical support staff are well aware of my electro sensitivity. As a result, Telstra charges me \$14,000.00 to connect my NBN as they installed a custom modem and router system and replaced my phone system for my home office that is completely non wireless and cabled. They were very helpful in this area. Due to my sensitivity to power line and building wiring electric and magnetic fields, when I build my home in 2008 to 2010, as part of the project I paid AusNet \$6,500.00 to rewire the lines directly outside of my home in a configuration that reduces the emissions of magnetic fields. I also wired my home using a method that reduces magnetic fields and shields electric field and also employed shielding techniques using shielding paints and window tints in certain areas of the home to shield EME from wireless devices and towers etc. which has cost me in excess of \$30,000.00. All of my employers which range from educational institutions, power companies and the electrical regulator respect and accept my electro sensitivity and have made adjustments in facilities and systems to keep me employed. Adjustment range from allowing the switching off of Wi-Fi in the local area for the duration of my stay, installed facility so I can switch off the Wi-Fi though to creating systems that are compatible for my safe use.</li> <li>● During all of this time, my employers which include power companies and the electrical regulator have referred me to clients or consulted my services to help others and offer solutions in reported electro sensitivity cases. Most of which have been derived from electric shock investigations from airborne EME present in living environments that were proven and documented and reported as being intense enough to cause electrical shock sensations to the home occupiers when situated in the EME filled home environments that had attained levels by the occupiers own devices and or nearby phone towers depending upon the case. In all and every single case attended and many that were successfully remedies, all the tested at EME levels not exceeding 250,000uW/m2 which is well below the telecommunications adopted standards that are historically nothing other than created to allow such infrastructure to exist. I say this with working experience in</li> </ul>

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			<p>Australian/New Zealand Standards as I am a committee member of one of them and have working knowledge and experience how standards are created and amended. I have even been referred by the electrical ombudsman, GPs and even Harvey Norman and Telstra Shop sales personnel. I have been very successful in being able to assist others to survive the debilitating condition of electro sensitivity. As time moved on, I began to lecture in the topic and became a tutor in the area of EMF testing at the Australian College of Building Biology where EMF testing is only one component of the overall 2 year Building Biology Diploma to become a Building Biologist.</p> <ul style="list-style-type: none"> <li>• In conclusion and at the home front I cannot longer live upstairs in my double story home because the EME from the mobile phone tower close to the hospital has been upgraded in the last few years and the existing tower on Templeton Reserve has been upgraded and improved since I have built my home. These upgrades have caused the EME exposure present in the upstairs area of my home to now reach levels of nearly 500uW/m2 which inflames my debilitating condition. I am struggling to afford any additional remedy techniques. I have made adjustments to the way I live in my home which includes the wearing of an undergarment similar to a long-john garment that contains pure silver thread that acts as a faraday cage to shield the body. This works, and has been successful enabling me to exist upstairs in the hotspot locations for a few hours at a time. I also wear the garment to work when I know I will need to be present in locations where there is Wi-Fi etc. and when I go out for leisure all when required. However, the garment is very expensive and should not be washed and does not last long. At \$800 per garment, I am finding that I need to replace it on an annual basis before shielding quality is dramatically reduced after about 7 to 10 washes.</li> <li>• I am severely concerned that the erection of the proposed 35m tall telecommunications pole at Templeton Reserve which will be situated only about 350 metres from my double story home will increase the EME levels in my home to a level and type of frequency patter that will be devastating to my body. While the 5G technology that is proposed to be placed at the top of the tower may be set at a low level initially, the Telco’s plans are to increase the frequency in the future to optimize the full package of 5G.</li> </ul> <p>To the Mayor of Knox City Council - Marcia Timmers-Leitch, please do not allow the erection of the proposed 35m tall telecommunications pole at Templeton Reserve as I may not survive the event given my electro sensitivity all as explained above in summary. The city of Knox is set to earn a proposed income of \$24,000 derived from the lease agreement with Telstra. I will need that \$24,000 and the rest to complete and make good the shielding job at my home to I can survive. I am also severely concerned for my wife who health is also not 100%</p> <p><b>Email sent 26-03-2023 - 3 attachments</b></p> <p>I DO NOT support your lease proposal for Telstra to increase the height of the telecommunications pole at Templeton Reserve because in summary -</p> <p>I am electrically sensitive to Electromagnetic Energy EME, EMR, RF from phone towers, Wi-Fi and blue-tooth and Magnetic and electric fields and harmonics from power line and building wiring. I have been sensitive to all these since 2007. I essentially acquired the sensitivity from a 10 year period of heavy mobile phone use close to up to the head.</p>

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			<p>My symptoms range from deep internal head pain when in the near field and or in close proximity to operating a mobile phone in call mode and when in close proximity to Wi-Fi antenna and blue tooth devices. Once affected, it usually takes at least 4 to 6 hours to recover from the deep internal head pain. If I remain for more than 5 to 10 minutes in an environment and in particular indoors where the EME power density in the environment is greater than 20uW/m2, however in particular anywhere from say 100uW/m2, the skin on my arms and legs in particular commences to present with a burning sensation that resembles the after-effects of sunburn. The longer situated in the location, the greater the pain and reddening of the skin and the longer to recover.</p> <p>General cordless and wireless devices such as cordless phones, Wi-Fi and blue-tooth devices emit passive EME in the home in the order of 5000uW/m2 to 500,000uW/m2. The SBM 2015 Building Biology Evaluation Guidelines for Sleeping Areas lists that 0.1 to 10uW/m2 is a slight anomaly and that 10 to 1000uW/m2 is a severe anomaly and that greater then 1000uW/m2 is an extreme anomaly. Many people have their Wi-Fi modems in their bedroom passively emitting 60,000uW/m2. Scientific studies and anecdotal evidence show that it generally takes 5 to 8 years for passive exposure to cause electro sensitivity. The Australian Telecommunications adopted standards allow EME level to be well in excess of 6,000,000uW/m2.</p> <p>Why do many people not experience the sensitivity compared to many that do? Everybody is effected by EME, however not all people experience the symptoms until it's too late or even correlate their symptoms to EME as EME attributes to most illnesses, diseases and ailments. GP are not trained to examine the living and working environment of a patient, they are only trained to dispense pharmaceuticals after listening to the patient's symptoms. It is all about the attributes of the person life; diet, sleeping quality, pattern and conditions etc., general and pre-existing health conditions, type of and quality and quantity of exercise and intensity and quantity of EME exposure to name a few attributes to keep it simple here. Just like smoking; it grossly effects many people who acquire cancer however other can live their lives as chain smokers and live extremely healthy and then all of a sudden die in a car accident in their mid-70's just as in the case of my late father in law.</p> <p>As a result, I have had to completely change the way I work and live my life. For example; my home has no wireless devices or technology - only cabled technology so I can survive. I do not put a mobile phone to my head. I have a mobile phone and majority use it for SMS and MMS at a distance. If I have to make a mobile call when I am out on the road, I use a radiation shielded corded earpiece. When I am at home or in the office, all my inbound mobile calls are diverted to a landline. All outgoing calls are made from a land line. My Telstra Business Centre Manager and Technical support staff are well aware of my electro sensitivity. As a result, Telstra charges me \$14,000.00 to connect my NBN as they installed a custom modem and router system and replaced my phone system for my home office that is completely non wireless and cabled. They were very helpful in this area. Due to my sensitivity to power line and building wiring electric and magnetic fields, when I build my home in 2008 to 2010, as part of the project I paid AusNet \$6,500.00 to rewire the lines directly outside of my home in a configuration that reduces the emissions of magnetic fields. I also wired my home using a method that reduces magnetic fields and shields electric field and also employed shielding techniques using shielding paints and window tints in certain areas of the home to shield EME from wireless devises and towers etc. which has cost me in excess of \$30,000.00. All of my employers which range from educational institutions, power companies and the electrical regulator respect and accept my</p>



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			<p>electro sensitivity and have made adjustments in facilities and systems to keep me employed. Adjustment range from allowing the switching off of Wi-Fi in the local area for the duration of my stay, installed facility so I can switch off the Wi-Fi though to creating systems that are compatible for my safe use.</p> <p>During all of this time, my employers which include power companies and the electrical regulator have referred me to clients or consulted my services to help others and offer solutions in reported electro sensitivity cases. Most of which have been derived from electric shock investigations from airborne EME present in living environments that were proven and documented and reported as being intense enough to cause electrical shock sensations to the home occupiers when situated in the EME filled home environments that had attained levels by the occupiers own devices and or nearby phone towers depending upon the case. In all and every single case attended and many that were successfully remedies, all the tested at EME levels not exceeding 250,000uW/m2 which is well below the telecommunications adopted standards that are historically nothing other than created to allow such infrastructure to exist. I say this with working experience in Australian/New Zealand Standards as I am a committee member of one of them and have working knowledge and experience how standards are created and amended. I have even been referred by the electrical ombudsman, GPs and even Harvey Norman and Telstra Shop sales personnel. I have been very successful in being able to assist others to survive the debilitating condition of electro sensitivity. As time moved on, I began to lecture in the topic and became a tutor in the area of EMF testing at the Australian College of Building Biology where EMF testing is only one component of the overall 2 year Building Biology Diploma to become a Building Biologist.</p> <p>In conclusion and at the home front I can no longer live upstairs in my double story home because the EME from the mobile phone tower close to the hospital has been upgraded in the last few years and the existing tower on Templeton Reserve has been upgraded and improved since I have built my home. These upgrades have caused the EME exposure present in the upstairs area of my home to now reach levels of nearly 500uW/m2 which inflames my debilitating condition. I am struggling to afford any additional remedy techniques. I have made adjustments to the way I live in my home which includes the wearing of an undergarment similar to a long-john garment that contains pure silver thread that acts as a faraday cage to shield the body. This works, and has been successful enabling me to exist upstairs in the hotspot locations for a few hours at a time. I also wear the garment to work when I know I will need to be present in locations where there is Wi-Fi etc. and when I go out for leisure all when required. However, the garment is very expensive and should not be washed and does not last long. At \$800 per garment, I am finding that I need to replace it on an annual basis before shielding quality is dramatically reduced after about 7 to 10 washes.</p> <p>I am severely concerned that the erection of the proposed 35m tall telecommunications pole at Templeton Reserve which will be situated only about 350 metres from my double story home will increase the EME levels in my home to a level and type of frequency patter that will be devastating to my body. While the 5G technology that is proposed to be placed at the top of the tower may be set at a low level initially, the Telco's plans are to increase the frequency in the future to optimize the full package of 5G.</p> <p><b>Email sent 26-03-2023</b></p>

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			<p>To the Mayor of Knox City Council - Marcia Timmers-Leitch, please do not allow the erection of the proposed 35m tall telecommunications pole at Templeton Reserve as I may not survive the event given my electro sensitivity all as explained above in summary. The city of Knox is set to earn a proposed income of \$24,000 derived from the lease agreement with Telstra. I will need that \$24,000 and the rest to complete and make good the shielding job at my home to I can survive. I am also severely concerned for my wife who health is also not 100%</p> <p>Two Case studies - Here is just a couple of case studies from overseas:</p> <p>5G harms workers. How safe is it to live or work under a 5G transmitter? Two Swedish researchers have reported severe effects in two men, both IT workers living and working near a 5G transmitter operating at 3.5GHz, in a paper published last month.</p> <p>Case study 1</p> <p>The first man, aged 57, worked in an office directly below a base station transmitting 3G and 4G signals from May 2019 until November 2021 without experiencing any problems. In November 2021 a 5G transmitter was installed on the roof. The man didn't spend much time in his office until April 2022 when he began working and sleeping below the transmitter. By May he had developed headaches that only occurred when he was in the building and disappeared when he left it. He also developed a range of other uncomfortable symptoms, some of which he rated as severe or 'unbearable'. '(T)he most severe symptoms were headache, arthralgia [joint pain], tinnitus, concentration and attention deficiency, fatigue, early wake-up, and skin burning.'</p> <p>The man moved out of the office to a location away from 5G antennas and his symptoms disappeared within a month. However, he now experiences headaches and arthralgia when he visits high-radiation locations.</p> <p>Case study 2</p> <p>The second man, aged 42, worked and slept in the same building on the floor below the base station. After the 5G antenna was installed, he developed symptoms, too. 'He experienced worsened insomnia, tendency of depression, anxiety/panic, emotivity, headache, concentration/attention deficiency and to a lesser extent irritability, tinnitus, dizziness, balance disorder, confusion, and hair loss.' He also experienced toothache, even though his teeth had previously been healthy and problem-free.</p> <p>The man moved away from the office to a rural location without 5G and his symptoms disappeared rapidly.</p> <p>Microwave illness</p> <p>The symptoms the men developed are typical of microwave syndrome/illness, sometimes known as electromagnetic hypersensitivity. They include insomnia, heart palpitations, tinnitus, skin problems, headaches and neurological effects and often disappear when exposure ceases.</p> <p>The authors say, 'The presented symptoms in this case study after the deployment of 5G are typical for the microwave syndrome. They appeared after the deployment of a 5G base station on the roof right above the office and disappeared after the reduction of microwave exposure when the men left the office.'</p> <p>Radiation levels</p>

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			<p>The researchers measured the levels of radiation in the offices of both men. The peak maximum levels they measured for the 57-year-old man (case study 1) were 1,180,000 <math>\mu\text{W}/\text{m}^2</math> (office) and 501,000 <math>\mu\text{W}/\text{m}^2</math> (sleeping area). For the 42-year-old man, they were 613,000 <math>\mu\text{W}/\text{m}^2</math>.</p> <p>These levels are within the range allowed by the Australian standard and the Guidelines of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) on which it is based.</p> <p>However, these protect only against the heating effects of radiation. 'Thus, humans are completely unprotected against all non-thermal effects of real-life exposure to microwaves/RFR from modern technology such as 3G, 4G, 5G. The harmful effects include cancer, DNA damage, oxidative stress, neurological, and other biological effects that may impair health,' the authors say.</p> <p>The authors believe that their study is one of the first to examine health problems in people exposed to real-world 5G signals. They say that it 'adds to previously available studies that show that the microwave syndrome or illness appears at levels much below the current guidelines recommended by the ICNIRP.'</p> <p>Nilsson M, Hardell L. Development of the Microwave Syndrome in Two Men Shortly after Installation of 5G on the Roof above their Office. <i>Ann Clin Case Rep.</i> 2023; 8: 2378. ISSN: 2474-1655;</p> <p>Information source of these two case studies are from EMR Australia</p>
79	HYS and Email	26-03-2023	<p>We have just noticed that the council is going to propose an upgrade plan for the existing 18m telecommunication pole to a 35m 5G telecommunication pole. We are quite surprised by the proposal as there is a lot of noise from the public regarding long-term radiation exposure to human beings and especially for the next generations.</p> <p>We support the development of technology BUT we are totally against the cell tower to be installed very close to Residential Area and in an area of Environmental Significance. Templeton reserve is a beautiful and high-usage park in Wantirna, everyone loves it, especially parents and kids to play around. Besides, the 5G cell tower would definitely have a detrimental impact on the visual amenity of the landscape as the 35 metres tall telecommunication poles will look inharmonious in the reserve. In addition, the Templeton Orchards Preschool is located at the reserve which is just around 100 metres away from the 5G pole. This poses our children with a greater risk of exposure to any carcinogen. Also, the closest neighbours to the pole will be approximately 40 metres away from the pole which is way too close to the telecommunication facility compared to the guidance from any state government.</p> <ol style="list-style-type: none"> <li>1. No sufficient study to prove that people who live 24/7 next to the 5G cell tower within 400 metres or even closer to just 40 metres like our neighbours will have no negative effect on their health or risk of having cancers in the long run. They do not have any choice but to live under the potential risk of health issues and just being lab rats because of the compromise of the council on this proposal.</li> <li>2. As a council, we believe it is for people and to take care of their needs. we know that some people urge to need the 5G service. However, why can't we have both? 5G telecommunication pole should be located in a non-residential area and provides coverage for those who needed. Why can't the council negotiate with Telstra for the good sake of the health of its</li> </ol>

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			<p>residents? Why do the council have to compromise with the request by Telstra? Why can't the council stand for their residents and the next generation to ask Telstra not to build these controversial poles in non-residential areas? We give the council the power, to act good things for us.</p> <p>3. As 5G is still a new technology and there are not many studies that can be done on the long-term impact on our health. Therefore, state governments have their preferences on the distance between a telecommunication facility and a school/ TAFE at least 500 metres from the boundary of the property to protect the children from exposure to the potential risk of health issues. However, why do the council still consider the proposal for a 5G telecommunication pole which is located just within 200 metres of the preschool centre located in the Templeton Reserve? Why do the council ignore the potential risk of health issues for the children and their families who live within 200 metres or even closer to merely 40 metres from the cell tower? Are the children or family members living there not worth getting the equal right to live without any potential threat from long-term exposure to radiation? When the state governments and schools also care about their people, why do the council ignore this? Will the council take any responsibility for our health issues when the potential risks become true? As parents, will you put your children at potential risk of health issues among the uncertainties? We do raise our deep concerns to object to this proposal and we do not have any choice because of the council's decision which insists to upgrade the 5G pole in the reserve rather than installing it in a non-residential area. Will you take the responsibility for our loss? It is different with people who choose to smoke and get cancer afterwards. It is because it is his/her choice but we do not have a choice and will be put at potential risk if the council pass this proposal disregarding our concerns.</p> <p>References:  <a href="https://amta.org.au/wp-content/uploads/2021/06/AMTA-5G-Readiness-Report-Digital.pdf">https://amta.org.au/wp-content/uploads/2021/06/AMTA-5G-Readiness-Report-Digital.pdf</a>  <a href="https://ppr.qed.qld.gov.au/pp/mobile-telecommunications-facilities-procedure">https://ppr.qed.qld.gov.au/pp/mobile-telecommunications-facilities-procedure</a>  <a href="https://www.ewg.org/news-insights/news/2022/11/protecting-kids-wireless-radiation-school-and-home">https://www.ewg.org/news-insights/news/2022/11/protecting-kids-wireless-radiation-school-and-home</a></p> <p>4. Even the industry and regulators constantly state that EMF exposure from a cell tower isn't associated with any risk to public health. ACMA applies limits set by ARPANSA and even the ARPANSA stated "they will continue to review the research into potential health effects of RF EME emissions from mobile phone base stations and other sources in order to provide accurate and up-to-date advice" on their website. That means this technology still has uncertainty and needs more research and study on it. And the ARPANSA's protection standard is scientifically outdated as it only recognises thermal (heating/burns) biological effects and ignores the non-thermal biological negative effects such as oxidative stress, DNA damage or reproductive impairment that has been shown to occur at a much lower level than the ARPANSA maximum exposure limits. These negative impacts also affect animals, insects and plants. Please see a summary of the studies that identified these health effects at the Environmental Health Trust and the BioInitiative Report website.</p> <p>*Please have a look at this document written by an Information and Communication Technology professional with a background in Electrical Engineering including mobile communication technologies:  <a href="https://www.aph.gov.au/DocumentStore.ashx?id=2ca6801d-e960-48c0-ac1e-c4947cdb6a27&amp;subId=672458">https://www.aph.gov.au/DocumentStore.ashx?id=2ca6801d-e960-48c0-ac1e-c4947cdb6a27&amp;subId=672458</a></p> <p>Also, according to a 10-year research study conducted in Belo Horizonte which is the third-largest metropolitan area of Brazil.</p>

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			<p>The study has clearly stated that radiation from cell towers can contribute to the increased risk of cancer development along with other health problems. Even if the radiation emission level is lower than the limits of current guidelines in this regard. Also, this research study also showed that EMF exposure led to health issues such as headaches, insomnia, discomfort, and problems in concentration was higher at locations with higher power density, within the range of 150 meters. Will the council put its people’s health and safety as a priority? Or something else?                      Reference: <a href="https://radiasmart.com/blog-cell-tower-emf-exposure-and-cancer-in-brazil/">https://radiasmart.com/blog-cell-tower-emf-exposure-and-cancer-in-brazil/</a></p> <p>5. When the potential risk of health issues is yet to exist, the potential impact on the community’s mental health has already deteriorated. We feel that our destiny and health cannot be controlled by our own. We also realise that our properties will be immediately devalued by on average 7.6% after the installation of the new 5G telecommunication pole and the money we hardly earned will be gone in a second. As we know that many buyers do not want to live close to the cell tower because they have the same concerns as us.                      Reference:  <a href="https://www.researchgate.net/publication/235317103">https://www.researchgate.net/publication/235317103</a> <u>The impact of proximity to cell phone towers on residential property values#</u></p> <p>6. As stated by the FCC (The Federal Communications Commission is an independent agency of the United States federal government that regulates communications by radio, television, wire, satellite, and cable across the United States.), there are no federally developed safety standards about radiofrequency exposure. After years of a robust research efforts by US agencies, the US EPA was tasked to develop proper safety standards and was developing two-tiered guidelines on both thermal and biological effects. Then in 1996, it was defunded. Instead of proper safety limits, the US government adopted “guidelines” developed by industry based on decades-old research. Guidelines have a much lower certainty than a “standard” as proper long-term safety testing was not done to ensure the public was protected from all possible harm. In fact, no “safe” level has been scientifically determined for children or pregnant women. Therefore, the claim that a device “meets government standards” or that radiation levels are “FCC compliant” gives a false impression of safety.                      Dr. Devra Davis (An American epidemiologist, toxicologist, and author of three books about environmental hazards.) explains really well the truth/impact of mobile phones and wireless radiation. There is going to be greater exposure absorption into a younger head versus an older head. *Please watch this lecture Dr. Devra Davis done in the University of Melbourne:  <a href="https://www.youtube.com/watch?v=BwyDChf5iCY">https://www.youtube.com/watch?v=BwyDChf5iCY</a></p> <p>Please object to the lease proposal and force Telstra to choose a non-residential area for the new installation of the 5G telecommunication pole. We hope the councillors not only care about how good the signal coverage is for its people but also take serious care of the potential risk of health and mental issues for its people. Our destiny is in your hand and we believe you can make the right decision.                      We have to assume that given you are installing these towers on mass that you have done no scientific research as to the dangers of the EMF radiation that these emit and the harm that it causes to our human and animal health. We do hope that the council does its due diligence.</p>

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80	Email	27-03-2023 22-02-2023	<p>Yes I support the lease proposal for Telstra to increase the height of the telecommunications pole at Templeton Reserve. Reasons, My house backs onto the Templeton Reserve and probably the closest house to the existing antenna. My family's mobile phone reception is terrible the existing structure is too low for the properties on the west side of the reserve. The other carriers at the reserve have panel antennas with stronger signals, Telstra has an omni antenna with weak signal. We need better reception (What happens if we are unable to call 000 )</p> <p><b>Email sent 22 February 2023</b></p> <p>We oppose the installation of a New Telstra Telecommunications Pole. We are living in a residential area with a residential park (Templeton Reserve). We do not require a Telstra 5G Mega Structure, we do not need the 5G network. The residential properties have access to the NBN fibre network. Telstra needs to submit a number of site options for the council to make an assessment on the right location.</p> <p>Please note this is a change to our original email.</p>
81	Email	24-03-2023	<p>As a Knox resident I am writing to express my concern at Telstra's proposal to erect a 35-metre 5G tower on Templeton Reserve. As a former Telstra employee (1989-2009) as well as several assignments as a contractor since, I possess a level of expertise in telecommunications technologies and how certain aspects of the technologies which provide convenience in our lives can also have detrimental consequences for our physical health.</p> <p>There is absolutely no doubt that Electro-Magnetic Frequencies (EMF) are harmful to humans, and 5G technology takes this to another level by introducing a whole new frequency spectrum – shorter waves = increased energy. Also, based on my telecommunications knowledge, as a “line-of-sight” tower, Telstra must be planning on pumping some significant power through this 35-metre-high installation in order to achieve signal reach as far as possible.</p> <p>The following link provides some useful information on the health risks of 5G technology, including the fact that the World Health Organisation's International Agency for Research on Cancer (IARC) has designated 5G as a Class 2B carcinogen. Other research has demonstrated that EMF is genotoxic, which means it can destroy your DNA. Unfortunately, we live in a world where some “experts” will parrot the desired narrative for the right price, hence the numerous “studies” and articles which peddle the idea that 5G technology is “safe”. IT IS NOT. All EMF exposure is harmful to humans, even 3G, 4G and Wi-Fi networks – we are exposed to EMF radiation practically everywhere we go in this world.</p> <p><a href="https://www.shieldyourbody.com/5g-health-risks">https://www.shieldyourbody.com/5g-health-risks</a></p> <p>I note that every source of information in the FAQ on the ‘have your say’ website regarding the effects of 5G on human health comes from Government websites. This does not pass the sniff test sorry. You need to provide the public with various forms of independent information for this to appear as authentic. Believe it or not, many people these days have a healthy distrust of information provided by government organisations.</p> <p>I also question the “facts” contained in the ‘Further Information – Fact or Fiction &amp; Common Myths’ section of the same website. It would appear that these “facts” have been provided by Telstra and I suggest that you have them independently</p>

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			<p>checked and verified. I can assure you that many of them are blatantly false – can I call them lies? I also note that a lot of the "facts" focus on EME (energy) specifically and avoid talking about the dangerous frequencies (EMF) used in 5G technology. This is misleading - is it deliberate?</p> <p>In summary, as this will be the first of many such submissions from Telstra (I know how these things work), I expect this and all of Telstra’s future proposed 5G installation proposals to be rejected by Knox Council.</p>
82	Email	27-03-2023	<p>Thank you for the opportunity to provide feedback in relation to the new Telecommunications pole at Templeton Reserve. I am opposed to the installation of this pole. I have strong concerns about the levels of radiofrequency electromagnetic energy it will emit at both the site (where my children and many other children in our community play sport), immediate neighbouring areas (including our Kindergarten, tennis club and local playground), and to the 500m radius around the pole which has residential houses, our school, etc. - including our house. While it is suggested that the technology does not have evidence for causing harm, there is no long term research into the effects of this level of EME exposure. I am gravely concerned about the impact on our family's health and the health of our community, and request that this be given careful consideration.</p>
84	Email	26-03-2023	<p>I am writing to express my concern about your proposed upgrade to the telecommunication pole at Templeton Reserve. I am opposed to the installation because of my strong concerns about the level of radiofrequency electromagnetic energy this will emit.</p> <p>I appreciate that there is already a pole there but the upgrade will bring with it further risks to the citizens that frequent the oval and the surroundings. My home is within 500 metres of the oval and my 3 children, husband and I spend quite a bit of time at the park and oval. This site is not only used for sports and frequented by children, it is also surrounded by a kindergarten, a childcare, high school and primary school where children are walking around constantly. There is no long term research or safety data into the effects of exposure and I fail to understand why such a risk would be taken when children are concerned.</p> <p>Thank you for your consideration of this email.</p>
85	Email	26-03-2023	<p>Note: 3 attachments to email VOTE NO to the 5G tower proposal!!</p> <p>I moved into the area 13 years ago in 2010 with my wife and 4 young children, newborn - 4.5 years old at the time. My wife and I chose this location and residence for its family friendly amenities, quiet surroundings, beautiful landscape, parklands and reserves, away from the concrete jungle of closer to city living and somewhere safe to raise our family. There were no telecommunication towers in the area. By allowing a 35m 5G tower directly behind my back fence (within 50 meters from my boundary fencing and a further 5 meters to the wall of my house) this significantly impacts and reduces the 'safe' aspect of living in the area. It also impacts the amenity of the area creating a (but ugly) eyesore on the horizon.</p>

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#	Method	Date	Please tell us why
			<p>As we live so close to the proposed tower, it directly affects me and my family! I am not against new technology, but not at the expense of something that can impact our family's health and quality of life!! Please refer to the attached (say NO to 5G flyer.pdf) which provides supporting information on the risks with living close to these towers. I concur with everything that is in the attachment. I say NO to the proposed tower!!</p> <p>Whilst the Council's "fact or Fiction" section on this proposal suggests that harm from 5G is a myth, there is a large number of peer reviewed information and case studies that counters that suggestion. See below example: <a href="https://ehtrust.org/cell-towers-and-cell-antennae/compilation-of-research-studies-on-cell-tower-radiation-and-health/">https://ehtrust.org/cell-towers-and-cell-antennae/compilation-of-research-studies-on-cell-tower-radiation-and-health/</a> - after reading a couple of these reports and case studies, would you want a tower in close proximity to you and your family 24 hours a day?? It's a NO from me.</p> <p>In addition to the health concerns and risks associated with the 5G tower being so close, is the loss of property value it will have for me and other local residences. Studies/surveys (<a href="https://www.emfsa.co.za/news/property-values-desirability-cell-towers/">https://www.emfsa.co.za/news/property-values-desirability-cell-towers/</a>) have shown an immediate and considerable loss in property values of up to 30%!! Upton 95% of people surveyed would not move or rent in close proximity to a 5G tower! I know I would be one of them!!! Significantly reducing desirability which in turn reduces property values!!- Ask yourself, would you want a 5G tower behind your fence knowing it will decrease your property value?? say NO to the proposed tower.</p> <p>I have spoken with many of the locals, no one wants (including me) a tower soaring over their property!!. Others have expressed removing their children from playing sports at Templeton Reserve and/or not visiting themselves so as to not be exposed to the ill effects of the tower, and my family would be subjected to this radiation 24/7. And if it were to go ahead, it would lend the other tower from Optus/Vodaphone to be upgraded without further community involvement, hence, doubling the amount of radiation in the area!! I say NO to the proposed tower!!</p> <p>This is a residential area where mums, dads, children and visitors visit and play, a 35mtr tower does not belong here. How is this value adding to the community where locals are afraid to enjoy the area, especially after the council has spent so much rate payers money on ground upgrades?? Vote NO to the proposal</p> <p>The first image below shows a view from inside my living room as I sit in my arm chair. In between the trees as it begins to clear at the top, is the top of the existing 25m light pole where the proposed 35m tower would take its place. Now imagine a thicker pole and 10mtr higher with antennas sticking out from them, I ask you, would you want to view that from your living room every day? The second image is a photo viewing from my front gate. Again, imagine a thicker pole, 10mtrs higher with antennas sticking out, I ask you, would you want to see this leaving and coming home to every day?? you can't not notice it no matter how hard you try to block it out. Ask yourselves, would YOU put this in your backyard?? if the answer is no, then vote NO in allowing it into someone else's backyard!!</p> <p>Furthermore, my family have signed both the written and online forms (change.org) petitions to support against the proposal!</p> <p><b>VOTE NO TO 5G TOWER PROPOSAL!!! I DONT WANT IT IN MY BACKYARD</b></p>



## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

#	Method	Date	Please tell us why
86	Email	26-03-2023	<p>I am writing to provide feedback about the Telecommunications pole at Templeton Reserve.</p> <p>I am opposed to the installation, as I have strong concerns about the levels of radiofrequency electromagnetic energy this will emit, not just immediately around the site but also to the to the area within 500 m of the pole/station. While this technology is presented as having shown "no evidence for causing harm", there is no long term research into the effects of this level of EME exposure. This is of particular concern at this site, given that it is frequently used by young children and families, is surrounded by houses, and has a kinder and playground.</p>
87			<p>I oppose the telecommunications pole at Templeton reserve. Is Knox Council an environmentally aware council or not? Apart from further eroding beautiful park lands, if this is accepted, it will clearly show that the council is more intent on raising revenue than protecting the environment. If this gets the go ahead, I am sure there will be more proposals in the future with a precedent set. Our parklands and nature reserves need to be protected for our use and future use. We should not be encouraging the commercial degradation of our recreational areas. I know that this is replacing the tower already there, which is an eyesore, yet this is much taller. We need to protect our environment not have it taken away bit by bit for a huge corporation to profit from.</p> <p>Also 5G radiation is not safe and it has clearly been demonstrated that it is harmful to animals, insects and humans. There are many examples of this available online. I have seen many dead birds at the base of 5G towers, Different varieties of birds. I have seen videos of birds attacking these towers and trying to pull cables because it is a threat to them. I have also seen the effect of 5G radiation on the behaviours of insects, totally changing their movement pattern. What studies has the council been shown and has an independent review taken place? If this is not known, then this is a purely commercial decision putting money above the environment.</p> <p>Council is meant to be for the local environment and all its inhabitants, now and for the future. If the council continue to cave into big business it will not end. There will be future proposals and the environment will continue to suffer.</p> <p>Put the lives of all creatures in the Knox council area first and show that the council is supportive of keeping Knox green and enjoyable.</p>
88	Email	26-03-2023	<p>As residents of Wantirna who live in very close proximity to Templeton Reserve, I wish to lodge my objection to having the new 5G tower erected. I object on the grounds that it could adversely affect the general health and wellbeing of residents, and those who use the reserve for recreation, and it will almost certainly devalue my property and the property of the surrounding residents.</p> <p>Council should find a place of less impact on humans. Alternately, they should arrange for rates to be reduced significantly, and insurance policies set up to cover all medical and living costs for residents who become ill in future with illnesses caused by long-term radiation.</p> <p>If Council give permission for this to go ahead, it will surely lead to further danger and devaluation when Optus and Vodaphone request upgrades. Please consider our arguments</p>

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#	Method	Date	Please tell us why
89	Email	25-03-2023	<p>I'm not sure if you have conducted any research into what these telecommunications poles are or do. They are ultimately a weapon. 5G is microwave frequency. It's damaging to life. It is used to create dis-ease and to control. If you consent to this technology, you as the man or woman can be held personally liable for the harm caused. Not your position, but YOU, and it will follow you wherever you go. You can be sued in your personal capacity. I urge you to do some research into what 5G actually is. What smart cities actually are and about personal liability. We do not consent to this lethal technology. I require acknowledgment of receipt of this email.</p>
90	Email	23-03-2023	<p>I have been to Tuesday's meeting at Templeton Reserve and wish to present my big concerns as follows:                      Your brochure's first para states: "This will enable Telstra to provide better service to support residents working from home, local schools and industries".                      Q: Has Telstra actually given such a statement highlighting that the community will have better service? If yes, I wish to get Telstra's version of better service - what this actually means.                      Q: Have Knox Residents agreed to eventually have cell antennas every 100 to 200m installed - perhaps even in front of their home?                      Q: Does Knox envisage any form of control on its people (for which 5G is suited)?                      Q Does Knox have contact with any Organisation envisaging war-like activities?                      Q: Will Knox City arrange for an Insurance regarding possible Microwave harm of its residents?                      Q: What is G5 designated to do - other than what G4 does?                      As I understand via my husband's knowledge due to his work for most of his life, the current G4 fully services our society's current needs of Internet and Telecommunication and we can send sophisticated Australian designs to the other side of the world without any problem.                      My interest in World news over about the last 6 years or so had educated me that truth is hard to come by. Knox does not even give us Telstra's statement what better service means. So, what is G5 actually being designated to do? What interest does Knox City have to make G5 sound better? Tests on animals in regard to biological damage caused by any microwave frequencies exist and they are rather concerning. The Telecommunications companies would grandly advertise a non-effect of Microwaves on biology - if they had any .....!                      In view of the above as well as the well known fact that all Microwave frequencies do biological harm, I don't even have a microwave oven, as it destroys proteins during cooking as well.                      This brings me to my common sense approach:                      The Councillors of Knox City - as in any other Council - are elected by the people and have accepted that it is their duty to represent the people's wishes in the Council chambers.</p>

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#	Method	Date	Please tell us why
			<p>If the people's elected representatives vote against the people's wishes, in my opinion they no longer are the People's representatives - but they have become traitors.</p> <p>I instruct the elected Councillors of Knox to vote NO in regard to 5G - not just to the proposed pole at Templeton Reserve. Maybe this Equinox meeting at the Templeton Reserve gives Councillors courage and makes Knox the first Council without 5G? Others might follow .....</p> <p>Thank you for taking my big concerns on board!</p>
91	Email	22-03-2023	<p>Hi Greg Marcia &amp; Susan, thank you so much for organising the meeting at Templeton Reserve last night. Please find attached some links for the councillors to research before making a decision on the 5G Tower. I believe that the testing of the 5G frequencies have not been tested over long periods of time e.g. Weeks months years to claim the technology is safe. We owe it to our children and our children's future to make sure the correct decisions are made. The book that was being passed around last night is called Cell Phones and the dark deception by Carleigh Cooper I am trying to get a hold of a few copies for the councillors to read. :)</p> <p><a href="https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/">https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/</a></p> <p><a href="https://www.youtube.com/watch?v=BwyDCHf5iCY">https://www.youtube.com/watch?v=BwyDCHf5iCY</a></p> <p><a href="https://wearenotsam.com/">https://wearenotsam.com/</a></p> <p><a href="https://l.facebook.com/l.php?u=https%3A%2F%2Fwearenotsam.com%2F26000%2F&amp;h=AT3lBWpDc_iC_dcUfmUN3CD182a-65Ub60MFTlbsC33v7oZj4iKJhYZDcdCe9nhPYMrpFsJhR9GV98eYgKLrGGcrhkWXA8Pc0nhNsW5C_9BW8LmK1Wrsablxvekliev_mHcWt7JOaPy9w_Q&amp;s=1">https://l.facebook.com/l.php?u=https%3A%2F%2Fwearenotsam.com%2F26000%2F&amp;h=AT3lBWpDc_iC_dcUfmUN3CD182a-65Ub60MFTlbsC33v7oZj4iKJhYZDcdCe9nhPYMrpFsJhR9GV98eYgKLrGGcrhkWXA8Pc0nhNsW5C_9BW8LmK1Wrsablxvekliev_mHcWt7JOaPy9w_Q&amp;s=1</a></p>
92	HYS and Email	23-02-2023 09-03-2023 22-03-2023	<p>Have Your Say submission – received 09-03-2023</p> <p>This is proposed to be put in a community sensitive area, near residential homes. It is of high impact and will destroy our view. We live in a quiet area without power poles, we back onto the reserve with windows at the back of our home. A huge ugly tower will destroy our view. Also, there are no long term studies of the health effects of these 5G towers. European cities do not allow them to be closer than 400 meters from residences. The Australian industry code C564:2020 states to avoid community sensitive areas such a residential homes, schools, kindergartens, nursing homes, hospitals. The proposal is for the tower to be installed less than 45 meter from homes, zero meters from cricket nets where children gather and play, right on the path around the oval where children play, ride their bikes and many people gather to watch the games. Although they say there is no proof they are harmful, there are no studies of the long term effects and only studies have been based on 6 second interval of exposure. Don't take the risk that these towers are not harmful. Put them away from residential homes and where children play. Studies have shown they may be carcinogenic to humans. These towers should not be put near our homes.</p>
93	Email	23-02-2023 09-03-2023	<p><b>Email sent 23 February 2023</b></p> <p>Dear Knox City Councillors,</p>

## Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

#	Method	Date	Please tell us why
			<p>I am writing regards a proposal from Knox City Council to increase the height of a 3G communications pole (18metres) to 35metres tall 5G. This is doubling the height. Having looked at 5G telecommunications poles in commercial areas in Knox they are huge, imposing ugly sites. Many residents are absolutely livid about this proposal. The communication put in my letterbox did not mention moving this pole or if they intend to install a second pole. Of even greater concern is that Knox council have not made their intentions clear that they plan to move the pole close to our homes. Currently the 3G pole is near the cricket club and further away from homes. Many of the residents are unaware of their intention to place the new pole right next to the cricket practice nets which are right at the back of our homes. We purchase our homes in an area where there are no above ground poles, our power is underground and we back onto a lovely reserve. This proposal be the council will destroy our amenities and outlook. Many residents are livid that Knox council would allow this monstrous pole near residences, surely they could put it away from homes. According to the report given out our exposure to the electrical field will increase 220% from the current exposure from the 3G pole, not only does 5G have a much higher electrical field, but moving the proposed pole closer to our homes increases the exposure. While 5G technology is new, there have been no studies as to the effects of long term exposure. The government do not put these telecommunication poles in school grounds or kindergarten grounds. Why is that? If they do not dare put them in schools, where children spend 6 hours a day, 40 weeks a year, then why would they put them near homes where babies and small children spend 24/7 52 weeks of the year. Our children sleep in these houses. These poles are best placed in commercial or industrial areas. Please do not let Knox council sell out the health of our families for a few extra dollars made by leasing out our parks and reserves. Surely there can be other alternatives. Your assistance in this matter would be appreciated as I and many residents are becoming increasingly incensed.</p> <p><b>Email received 9 March 2023 - 1 attachment to email</b></p> <p>I am writing to you as one of many concerned residents of the local area. We live in a beautiful peaceful area with underground power lines and a beautiful outlook over the reserve. The proposal by Knox council to place a very large ugly tower right on the edged or the oval. This tower is HIGH IMPACT in a community sensitive area. The proposed tower is to go right next to the cricket practice nets and less than 45 metres from residences. Not only will this proposed tower destroy our views and the look of the entire reserve. It is proposed to be 35 metres tall, which is 114 feet high. Apart from the sight of this huge eyesore, the proposed configuration will increase the exposure from the current 3 G pole by 2,200 per cent. The electric field at the nets and closest houses will increase from 1.28 (mW/m2) to 179.84 (mW/m2) and to 217.70 (mW/m2) at the centre of the oval.</p>

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#	Method	Date	Please tell us why
			<p>While we are not against 5G we are against it being put in residential areas and areas where our children play and many people use the ground. The ground is used a lot by families with many children riding, walking, playing as well as watching cricket and football at the ground.</p> <p>5G technology is new and no one can tell us that it is safe and that long term exposure is not harmful. The communication companies can tell you that there is no PROOF that exposure causes harm to health. This is new technology, there is no research into the long term effects of this RF EMRs electromagnetic radiation. For decades the tobacco companies told us that there no harmful effects from smoking, but we all now know smoking kills. We also now know that exposure to the sun can cause cancer. It will be many years before the true health consequences are known. The current guidelines for radiation exposure were developed over two decades ago. There is evidence from laboratory and epidemiological studies showing the previous and present generation of wireless networking technology have significant adverse health effects (Kostoff, Heroux, Aschner &amp; Tsatakis, 2020).</p> <p>The communication Alliance- Industry Code C564:2020, Mobile Base Station Deployment states that EME exposure to the public must be minimised. It also states that the objective must be to avoid community sensitive locations, such as residential areas, childcare centres, schools, hospitals and other community locations.</p> <p>A study by the European Parliamentary research service of the health impact of 5G (PE 690.012 -July 2021) found that EMF's (450-6000MHz) are probably carcinogenic for humans and are linked to infertility. Many cities in Europe have adopted precautionary regulations on where 5G towers can be located and restricted the electric field (v/m) to less than 5 (v/m) in residential areas. This equates to keeping the towers to 400 metres from residential properties and community sensitive areas.</p> <p>We are not anti 5G but put the health of our families first. We request that you inform all your members and deny the proposal of placing the 5G tower at Templeton reserve. Please read all the research and vote against the council proposal. I will send information on some research.</p> <p><a href="https://pubmed.ncbi.nlm.nih.gov/31991167/">https://pubmed.ncbi.nlm.nih.gov/31991167/</a>  <a href="https://www.acma.gov.au/sites/default/files/2020-12/C5642020-Mobile-Phone-Base-Station-Deployment.PDF">https://www.acma.gov.au/sites/default/files/2020-12/C5642020-Mobile-Phone-Base-Station-Deployment.PDF</a></p>
94	Email	07-03-2023	<p>I live in Skipton Court, Wantirna, with the Templeton Reserve at the bottom of my street, with location of new tower just meters across the road. Besides it being a hideous visual obstruction at the end of my street, the increased radiation exposure is of problematic concern.</p> <p>Currently the existing tower is obscured by trees, but the new tower will be an eyesore from a huge radius. This type of infrastructure belongs in an industrial estate or on top of a shopping centre, where one might expect something like this, not in local suburbia with just residential homes around.</p> <p>Will council pay the difference in my reduced house value when I sell? I certainly wouldn't be buying my existing house if that monstrosity was sitting at the end of my street, with it being so intrusive, it definitely cannot be overlooked by anyone.</p> <p>Will council be paying my medical bills when health problems start presenting themselves?</p>

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#	Method	Date	Please tell us why
			I'm also certain if you were living in my street, you would find this proposal rather alarming and concerning. I believe a lot more thought needs to be placed on how something like this impacts the immediate residents and environment. I would love to hear your thoughts on this matter.
Nothing listed here?			<p>Are the 5G towers that have been approved by Know council beneficial or detrimental for the health &amp; wellbeing of the community?</p> <p>I believe the rollout of 5G raises threat of harm to human health, animals, insects, plant life and the environment</p> <p>The introduction of 5G changed the nature of the telecommunication Business. The telecommunication companies went from powering landline phones and mobile phones using 3G, &amp; 4G.... To 3G, 4G &amp; 5G radiating electromagnetic radiation in the form of radio frequency (RF) from the same towers at the same time.</p> <p>However, 5G is not just a power source for phones, 5G is the power source on a grand scale for all wireless network and applications: all household appliances, smart homes, smart cities, self-driving cars, computers, laptops, phones, drones, surveillance cameras, including machines, objects, artificial intelligence, microchips in everything, everyone &amp; in all devices.</p> <p>4G – 3.2GHz .....5G – 3 to 300GHz this is military grade technology</p> <p>Are there any safe guards in place to stop the telecommunication companies increasing levels of radio frequency waves released into the atmosphere?</p> <p>My understanding of 5G technology is that the wavelengths are primarily in millimetres. Millimetre long wavelengths are defined as microwaves and are the wavelengths that microwave ovens use. If we have multiple towers constantly outputting microwaves, then presumably they are having a heating effect of the atmosphere, effecting people, animals, plants &amp; the Earth.</p> <p>Knox Council declared a climate emergency on 29/8/2022., if council has any real concerns around climate change, then it would make sense to verify the wavelengths emitted from these telecommunication towers and stop 5G towers from being erected</p> <p>Why have the telecommunication companies been allowed to manufacture &amp; distribute military grade technology in residential areas?</p> <p>Lack of inscription during the connection process makes using 5G technology an easy target for cyberattacks &amp; data</p> <p>The dangers of Electro Magnetic fields, or EMFs, are now widely recognized as a serious 21st century health threat – by The American Academy of Paediatrics, Consumer reports, researchers from the Cleveland Clinic and independent research from: Harvard, Colombia &amp; Yale</p> <p>Even before the introduction to 5G over 2000 peer reviewed reports, scientific studies conducted by independent researchers all over the world show biological harm from 3G &amp; 4G wireless technology. Scientific studies show both ionizing &amp; non – ionizing radiation cause biological harm</p> <p>(Stop5GspaceAppeal.org)</p>

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#	Method	Date	Please tell us why
			<p>There are already over 5000 satellites in space, there will eventually be 20,000 satellites in space to support the application of 5G, radiating power up to 5 million watts, satellites will be located in the Earths Magnetosphere this will have significant influence over the electrical properties of the atmosphere, this alteration of the Earths electromagnetic environment may be an even greater threat to life than the radiation from ground base antennas.</p> <p>Did Knox council upon seeing the changes in the nature of the telecommunications business create safety regulations? If so what are the safety regulations?</p> <p>Are there any safe guards in place to stop the telecommunication companies increasing levels of radio frequency waves released into the atmosphere?</p> <p>Why have these telecommunication companies been allowed to manufacture and install 5G towers in residential areas, and on residential properties, when 5G towers can release wavelengths from 3 to 300 GHz? 300 GHz is military grade technology.</p> <p>4G LTE's release wavelengths around 3.2 GHz                      Frequencies: 5G – 700MHz, 850MHz, 3500MHz</p> <p>5G towers should be banned from residential areas &amp; any 5G towers that are in residential areas should be removed                      All 5G towers must be removed from residential areas and residential properties.</p> <p>To protect humans, 5G towers &amp; antennas must be located far from where people live, and work. This includes all people's bodies, children, women, men and elders, including the vulnerable, and includes animal, bees and bird, plants and trees, including the soil, rocks, rivers, lakes and all other bodies of water.</p> <p>To protect animals, bees and other insects, to protect plants and water 5G towers must be excluded from wilderness sanctuaries, and strictly minimized in remote areas</p> <p>Safety guidelines were last updated in 1996 when we had 2G phones...SAR tests ....Dummy representing our head, is filled with water, salt, sugar. Then the dummy head is exposed to radiation. The radiation is held 5 to 25cm from the dummy head                      P. Gandhi did a number of tests &amp; concluded that using a homogeneous liquid to mimic our brain &amp; the complexity of the human head is not accurate. &amp; it doesn't take into account areas like bone marrow, eyes &amp; saliva glands which are much more likely to absorb radiation, especially in children.</p> <p>New safety standards are needed based on cumulative exposure, power levels, frequency, band width, modulation, waveform, pulse width.</p> <p>At least five companies are proposing to provide 5G from space from a combined 20,000 satellites in low and medium Earth orbit that will blanket the whole Earth with powerful, focused, steerable beams. Each satellite will emit millimetre waves with an effective radiated power of up to 5 million watts from thousands of antennas arranged in a phased array, it will irradiate areas of the Earth not reached by other transmitters and will be additional to ground based 5G transmissions from billions of IoT objects. Even more importantly, the satellites will be located in the Earth's magnetosphere, which exerts a significant influence over the electrical properties of the atmosphere.</p>

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#	Method	Date	Please tell us why
			<p>The alteration of the Earth’s electromagnetic environment may be an even greater threat to life than the radiation from ground based antennas.(5GSpaceAppeal.org)</p> <p>The outer Space treaty 1967 requires use of outer space be conducted so as to avoid harmful contamination &amp; also adverse changes in the environment of the earth</p> <p>The Numberg Code 1947 applies to all experiments on humans including the distribution of 5G with new higher RF radiation that has not been premarket tested for safety</p> <p>‘The deployment of 5G constitutes an experiment on humanity and the environment that is defined as a crime under international law’ (www.5gSpaceAppeal.org)</p> <p>There is the need to inform the public of the concerns that have been raised &amp; of the potential effects of exposure EMF</p> <p>The current testing methods since 1996 that are still being used are obsolete – many tests since then show non ionizing radiation is harmful</p> <p>Testing done for radiation - SAR tests - SAR – Specific Absorption Rate</p> <p>....Dummy called SAM used for testing mobile phones after they have been manufactured, he represents a man who is over 6ft tall &amp; weighs 100kg- 3% of the population...Specific Anthropomorphic Mannequin – SAM, his head, is filled with water, salt, sugar. Then the dummy head is exposed to radiation 5 to 15 cm away from the dummy ear....most people put their phone to their head, Telco should warn people of the dangers of doing so.</p> <p>P. Gandi did a number of tests &amp; concluded that using a homogeneous liquid to mimic our brain &amp; the complexity of the human head is not accurate. &amp; it doesn’t take into account areas like bone marrow, eyes &amp; saliva glands which are much more likely to absorb radiation, especially in children, pregnant women &amp; infants?</p> <p>Research: Who’s providing the funding? 30% are funded by the industry 70% are independent - They say EMFs are harmful to people, animals, insects, bees, plants &amp; the environment</p> <p>30% research funded by the telecommunication companies say there is no harm coming from the telecommunication equipment &amp; devises.</p> <p>The cobalt mines. Cobalt is used to manufacture Lithium which is used in all smart appliances including mobile phones</p> <p>According to reports by UN agencies, in the southern Katanga province, more than 40,000 children, some as young as 4yrs old, are being forces to work in hazardous conditions in the cobalt mines,12 hours a day, with inadequate safety equipment and for very little money, one or two \$ a day. They dig with their bare hands. Their homes were bulldozed to make way for mining. Child trafficking; children living sometimes hundreds of miles away are taken from their parents &amp; forced to work in the mines</p> <p>Blasting &amp; electricity consumption in cobalt mining is damaging to the environment. Eutrophication and global warming are the most affected impact categories. Carbon dioxide &amp; nitrogen dioxide emission are highest from cobalt minning mining.www.sciencedirect.com</p> <p>These mines are often dangerous and polluting. The mining and refining processes are often labour intensive and associated with a variety of health problems as a result of accidents, overexertion, exposure to toxic chemicals and gases, and violence.</p>



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			<p>Switzerland has banned 5G</p> <p>The French, German &amp; Spanish governments have issued recommendations to ban Wi-Fi from schools because of the developmental problems it could potentially cause in children</p> <p>Bio effects of long term radiation exposure:</p> <p>Brain: headaches, blood brain barrier leakage, memory disruption, learning difficulties</p> <p>Immune: Tumour growth</p> <p>Heart: Cardio Vascular</p> <p>Skin: Rashes</p> <p>Reproductive: Sperm &amp; fertility damage, DNA damage</p> <p>Oxative stress, Endocrine: Hormone disruption, Gene expression</p> <p>Biochemical reactions, Haematological/Blood disorders</p> <p>McCredden, J</p> <p>NPR <a href="http://www.npr.org">www.npr.org</a></p> <p>Fresh Air: Article</p> <p>How modern day slavery in the Congo powers the rechargeable battery economy</p> <p>Siddharth Kara 36 minute talk...</p> <p>Book: Cobalt Red – Siddharth Kara</p>

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### APPENDIX 3 – PUBLIC QUESTIONS TO COUNCIL MEETINGS

During the consultation period two Public Questions were presented to Council Meetings relating to the proposed lease. They are below.

## PUBLIC QUESTION TIME

### ORDINARY COUNCIL MEETING - 27 FEBRUARY 2023

#### TREVOR ROWLANDS

**Q:** This question pertains to Council's neighborhoods, housing and infrastructure projects. Has the Council conducted any risk assessments or health impact studies or relied upon external studies relating to the wellbeing of people, animals and plant life with regard to the current and further proposed installation of 5G transmission towers in Knox? Please specify in writing any internal or external studies upon which you have relied.

**R:** The Acting Director City Liveability, Shiranthi Widan responded:  
In response to your question I advise as follows.

I advise that Council considered a report regarding Electromagnetic Radiation and 5G Mobile Technology at its meeting on 24 February 2020. Please see below for a link to the Agenda and Minutes of that meeting – please refer to item 6.3 in the Agenda **24 February 2020** Council Meeting for a copy of the report for your information.

#### Agendas and Minutes 2020

Without repeating the detail of the report, I want to emphasise the two main conclusions which were:

1. The 5G rollout has commenced under the regulatory authority of the Australian Communications and Media Authority (ACMA), and will involve telecommunications organisations implementing their own 5G compliant technology. The ACMA requires that 5G infrastructure meet Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) standards in any publicly accessible location, and that the applicable ARPANSA standard (RPS3) would need to be substantially exceeded for harm to occur.

Local Government involvement in regulating telecommunication facilities occurs when the installation of a new facility is not 'low impact' as defined by the Telecommunications Code of Practice – 2018. The role of Council is limited to assessing planning considerations. The safety and risk management aspects in association with electromagnetic radiation remains under the auspice of ACMA and ARPANSA.

2. Publicly available information on the potential impacts of electromagnetic radiation from ARPANSA and ACEBR was made available as part of the Inquiry into the Deployment, Adoption and Application of 5G in Australia convened by the Hon. Minister of Communications, Paul Fletcher MP. ARPANSA identified approximately 30,000 studies and reviews in relation to electromagnetic fields and radio waves. ARPANSA identifies that telecommunication radio frequencies are capable of causing thermal effects which are managed through safety measures, and that '...there is no established evidence for health effects from radio waves used in telecommunications'.

It is the cumulative opinion of the ACMA, ACEBR and ARPANSA that existing ARPANSA standards are positioned to sufficiently protect against any adverse health impacts from the 5G telecommunications rollout, and that 5G is safe.

I advise that I am satisfied that the Council report on this topic was a thoroughly researched and balanced report, which clearly presents that the key Government regulator for communications technology is the Federal Government (and that Local Government has a very limited role in this issue), and that the

Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

scientific evidence on harm from 5G radio waves, is that harmful effects can only occur if the levels of electromagnetic radiation substantially exceed the regulated levels.

## **PUBLIC QUESTION TIME ORDINARY COUNCIL MEETING - 27 MARCH 2023 CHRIS EVANS**

**Q:** In regard to the proposed changes to the telco towers in Templeton Reserve detailed in the "Have your say" section of the council website, why has council only presented 5G information from government websites in which the prevailing opinion is that this technology is completely biologically safe whilst totally ignoring the wealth of research and opinion readily available from world respected scientific persons written in peer reviewed literature that is of the opposite opinion?

Is it Council's opinion or policy to present only one side of a story or issue to the citizens of Knox when an opposing side is readily available to be presented?

**R:** The Director Customer and Performance, Greg Curcio responded:

- The Have Your Say website references government endorsed information – from the Federal Department of Infrastructure. This is the endorsed reference material available to local government agencies to provide the public, and is not a Council generated reference. That reference material is an appropriate source for local councils point to, and rely upon.
- To be clear, the safety and risk management aspects in association with electromagnetic radiation remains under the auspice of the Australian Communications and Media Authority (ACMA) and the requirements of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

In relation to the second question in the submission:

- The role of Council in this instance is limited to consider the placement of the proposed infrastructure as a land-owner.
- In doing so, and what is legislatively required, Council is committed to a transparent deliberative community engagement process and encourages all questions and feedback
- The resulting feedback is then provided to Council in a report for consideration in the decision of the proposed lease – due in Council meeting at the end of May.
- If anyone wishes to provide alternative sources and reference materials, they can do so as part of this engagement process by emailing [propertymanagement@knox.vic.gov.au](mailto:propertymanagement@knox.vic.gov.au) so it may be included in the final report to Council. The Have Your Say page has now closed for further submissions.

Community Consultation Report - Proposed Lease for Telecommunications Pole at Templeton Reserve

#### APPENDIX 4 - PETITION

The following petition was presented to Council on 27 March 2023, with a claimed 130 signatures and at the 26 April 2023 Council meeting a claimed additional 94 signatures were submitted to Council.

The petition states “We the undersigned hereby petition Knox City Council to oppose the increase in height and installation of 5G telecommunications pole at Templeton Reserve in Wantirna.” The majority of petitioners that signed the original petition submitted on 26 March 2023 are from Wantirna, whilst other petitioners who are from Bayswater, Ferntree Gully, Rowville, Knoxfield and other suburbs. The majority of additional signatures submitted on 26 April 2023 are from people outside of Knox. There are a small number of duplicate signatures.

The petition is difficult to respond to as there have been no reasons stated for the objection.

As per section 54.4 of the [Governance Rules of Knox City Council](#):

*‘Every petition or joint letter must be signed by the persons whose names are appended to it by their names or marks, and, except in cases of incapacity or sickness, by no one else, and **the address of every petitioner or signatory must be clearly stated.**’*

Based on the above, of the claimed 222 signatures on the petition, a significant 176 are valid. This comprises of 126 people from Knox, and 50 from outside Knox. A breakdown of the petitioners’ suburbs is presented below.

##### Suburbs within Knox

Bayswater	2
Boronia	1
Ferntree Gully	14
Knoxfield	3
Lysterfield	
Rowville	2
Scoresby	1
The Basin	
Upper Ferntree Gully	1
Wantirna	99
Wantirna South	3

##### Suburbs outside of Knox

1 person from each of the following suburbs

Bayswater North	Belgrave South	Bulleen	Cranbourne	Croydon Hills
Doncaster	Doncaster East	Donvale	Kallista	Mentone
Menzies Creek	Mount Waverley	Mulgrave	Vermont	Wheelers Hill

2 people from each of the following suburbs

Croydon	Emerald	Macclesfield	Mooroolbark
Nunawading	Ringwood North		

2 people from Kilsyth, 4 people from Clematis and Lilydale, and 6 people from Mitcham and Upwey.



27 March 2023

## Petition – Telecommunication pole at Templeton Reserve in Wantirna

Council has been provided a copy of a petition with a claimed 130 signatures as at 23 March 2023 which relates to the proposed 5G telecommunications pole located at Templeton Reserve in Wantirna. The petitioners are calling on Council to oppose the increase in height, and the installation of a 5G telecommunications tower.

The Majority of the petitioners that have signed the petition are from Wantirna, while we have other petitioners who are from Bayswater, Ferntree Gully, Rowville, Knoxfield and other suburbs.

We have noted a small number of duplicate signatures; however, I don't believe this impacts the validity of the petition.

A copy of the petition has been circulated to all Councillors and I note that the petition will be referred to the Director of City Strategy and Integrity to provide a response to the lead petitioner.

Mayor Timmers-Leitch

27 March 2023

## RESPONSE TO QUERIES FROM COMMUNITY

The following are representative of specific queries asked by community members through drop-in sessions, emails and Have Your Say webpage responses.

A response from Council is provided below to each query.

*Please note the main themes identified during the consultation period have been addressed in the report "Proposed lease for telecommunications pole at Templeton Reserve" which is presented to Council at the meeting on Monday 22 May 2023. This document is intended to be the reference point for other queries asked during the community consultation period and close the loop on community engagement feedback.*

### **Q1. Why were the floodlight towers at Templeton Reserve replaced? Was the community consulted? How were the new floodlight towers funded?**

In June 2016 a Sports Field Floodlighting Infrastructure and Lux Testing Audit was carried out on all Council-owned sports fields in Knox. As part of the audit illuminance testing was undertaken in accordance with the methodology outlined in Australian Standard AS 2560-2002 Sports Lighting. The floodlighting at Templeton Reserve, (four 18m tall floodlighting towers), did not meet the required illuminance standard for training and holding matches at night time. Templeton Reserve was the fourth ranked priority for upgrading.

Community consultation for the 2016 Masterplan for Templeton Reserve also identified a need for improved lighting at the Reserve. The consultation process for the Masterplan included:

- A meeting was convened at the Templeton Reserve Tennis Club House on 7th March 2016 with external (non-council) stakeholder groups who use or have an interest in the reserve.
- A preliminary community site meeting was held at the reserve on 19th March 2016 at which a concept masterplan was available to be viewed.
- A community survey was mailed out with the concept design to 891 residents within close proximity to the reserve.
- The community survey was also available online, as was the ability to email or telephone council officers to provide feedback and suggestions.

The floodlighting was placed on the Capital Works Program in the 2017/2018 financial year, as forward planning for design and application for Sports and Recreation Victoria funding in 2019/2020 and installation in 2020/2021.

The floodlighting upgrade was jointly funded by Council and Sport & Recreation Victoria in 2021.

### **Q2. If the site still had 18 metre high floodlight towers, what impact would that have on the proposed telecommunications tower?**

It would have no impact on the proposed 35m telecommunications pole. The process of land owner permission, which would be managed through a lease, and a development planning permit would still apply.

#### Note

Changes to the telecommunications planning provisions introduced by [Amendment VC226](#) to the Victoria Planning Provisions and all planning schemes came into operation on 4 November 2022. Clause 52.19 of the [Victorian Planning Provisions – Telecommunications Facility](#) states

*"A permit is required to construct a building or construct or carry out works for a telecommunications facility. This does not apply to the construction of a building or the construction or carrying out of works for any of the following:*

- *A telecommunications tower that replaces an existing light pole on public land if the following requirements are met:*
  - *The public land manager must be a municipal council.*
  - *The tower must not be more than 8 metres higher than the light pole."*

Telstra has stated

"The local terrain is undulating and therefore a minimum of 30m antenna height is required to improve coverage in the area. The ideal height is 35m."

### **Q3. If the lease goes ahead Knox Council will be getting \$24,000 per year from Telstra. What benefits will rate payers get from this?**

The revenue from the proposed lease will be managed through Council's annual budget processes. The budget details how income will be spent to maintain and deliver Council services and facilities in each financial year.

The 2022-23 Annual Budget details how income will be spent to maintain and deliver the services and facilities our community values and relies on. It includes important things like:

- assisting older people to live independently at home
- maintaining our parks and reserves and cleaning public facilities
- upgrading street lights to use energy saving LED bulbs
- installing solar panels on community facilities
- providing support to new parents and their babies
- repairing footpaths and drains
- improving and maintaining sporting facilities
- sweeping our streets
- managing venues that host community and cultural activities.

You can read more about Council's [annual budget](http://www.knox.vic.gov.au) on our website. [www.knox.vic.gov.au](http://www.knox.vic.gov.au)

### **Q4. Council declared a climate emergency in July 2022. Does the presence of mobile phone towers with 5G technology in Knox contradict that declaration?**

Research by [Accenture](https://www.accenture.com) states that 5G is expected to reduce carbon dioxide emissions by 330.8 million metric tons (the equivalent of removing 72 million passenger vehicles from the road) by 2025 in the US, according to [5G Connectivity: A Key Enabling Technology to Meet America's Climate Change Goals](https://www.accenture.com). Here are just some of the ways, 5G can benefit the environment by helping to reduce energy consumption and emissions.

- International standards have called for 5G to require much less energy to run than 4G, which means using less power while transmitting more data. For example, one kilowatt-hour (kWh) of electricity is needed to download 300 high-definition movies in 4G; with 5G, one kWh can download 5,000 ultra-high-definition movies. 5G linked with the Internet of Things (IoT) will also cut energy use, because devices will be able to power up and shut down automatically when not needed. Sensors in appliances, transportation networks, buildings, factories, street lights, residences and more will monitor and analyse their energy needs and consumption in real time and automatically optimize energy use.
- 5G and the IoT will enable microgrids to be brought on line when the main grid fails or is unavailable. This will make it possible to better integrate intermittent renewable energy sources

such as wind and solar into the grid. By enabling more people to work or access entertainment remotely and avoid commuting and flying for business, 5G will save energy and reduce greenhouse gas emissions from vehicles and airplanes.

**Q5. Why can't we just use 3G technology?**

The three main providers of phone and internet in Australia, Telstra, Optus and Vodaphone, are scheduled to shut down their 3G networks between December 2023 and September 2024.

**Q6. Will the 35m pole require a flashing light to warn planes or helicopters of its presence?**

No. CASA only requires notification of tall structures or plumes that extend to a height of 100m or more above local ground level. Source: Civil Aviation Safety Regulations 1998 (CASR)

**Q7. Does Knox envisage any form of control on its people for which 5G is suited?**

No.

**Q8. Does Knox have contact with any organisation envisaging war-like activities?**

No.

**Q9. Has Council considered the effects of 5G on human health? Did Knox council upon seeing the changes in the nature of the telecommunications business create safety regulations?**

In October 2019 Council called for a report providing information to Council on:

1. How the new 5G mobile network technology will be rolled out;
2. The role of the Australian Communications and Media Authority (ACMA) will be in guiding the roll out and regulating the technology under legislation, including any risks of Electromagnetic Radiation;
3. Any scientific research or studies that have been undertaken to determine any detrimental impacts to human health as a result of the new 5G technology, including the potential impacts of Electromagnetic Radiation; and
4. The location of existing phone towers across the municipal district of Knox shown spatially, with towers within 100 metres of residential areas and schools specifically identified.

The [report](#) was presented on 24 February 2020 and Council resolved to:

1. Note the information contained within this report regarding 5G rollout and the roles of specific Australia Federal Government Authorities; and
2. Note that it is the cumulative advice from the Australian Radiation Protection and Nuclear Safety Agency, the Australian Communications and Media Authority, and the Australian Centre for Electromagnetic Bioeffects Research the 5G will not impact human health, that it is safe, and that appropriate standards are in place to protect against harm.

The report and meeting minutes can be viewed on Council's website <https://www.knox.vic.gov.au/our-council/councillors-and-meetings/council-meetings/agenda-and-minutes/archived-agendas-and-minutes/agendas-and-minutes-2020>

**Q10. Will Knox City Council pay for medical expenses related electromagnetic hypersensitivity (EHS)?**

The proposed lease would indemnify Council against any claims arising from the occupation of leased area; any claims will be directed to the tenant.

**Q11. What checklist or assessment has been undertaken about the site in light of the community areas in close proximity?**



For each proposal a Carrier must prepare a Precautionary Approach Checklist which addresses each of the points raised by section 4.1 of the C564:2020 Deployment Code. This forms the written procedure for site selection.

Further comment

The [C564:2020](#) clause 4.1 NEW SITE SELECTION, contains nineteen points a Carrier must consider, or have regard to, when selecting new site. It is not explicit regarding requirements for upgrading an existing site, such as the one at Templeton Reserve.

Clause 4.1.4 states

*The Carrier must ensure that its written procedures for new site selection require it to have regard to:*

...

*(c) the likelihood of an area being a community sensitive location*

*(d) the objective of avoiding community sensitive locations.*

...

The purpose of this is to ensure the carrier has regard for community sensitive locations and consider these as part of site selection, including implementing mitigation strategies where possible and appropriate. It does not mean that a site cannot be built in an area that is defined by the C564:2020 as a community sensitive area.

**Q12. Can Council or community obtain this list and the mitigations prior to approving the lease?**

Should Council approve the lease for a 35m pole, Telstra will provide the Precautionary Approach Checklist as part of the supporting documents for the planning permit application.

Should Council approve the lease for a 30m pole, Telstra would make the Precautionary Approach Checklist available to the public and Council, as per the guidelines of the C564-2020 Deployment Code.

**Q13. Are there regulations that prevent mobile phone base stations being put near schools and homes, specifically C564:2020?**

Regulations regarding telecommunications facilities do not stipulate a minimum distance sites must be from specific land uses. The [Communications Alliance Ltd Industry Code C564:2020 for Mobile Phone Base Station Deployment](#) contain nineteen points a Carrier must consider, or have regard to, when selecting a site.

**Q14. Why is Knox City Council allowing telecommunication companies to manufacture & distribute military grade technology in residential areas?**

Local Government involvement in regulating telecommunication facilities occurs when the installation of a new facility is not 'low impact' as defined by the [Telecommunications Code of Practice 2021](#). The role of Council is to assess planning considerations and the other role Council may have with regard to the installation of a new facility is that of land owner. There are circumstances in a Carrier must obtain land owner consent for the installation of a new facility. The safety and risk management aspects in association with electromagnetic radiation remains under the auspice of ACMA and ARPANSA.

**Q15. What type of facilities will be required for 5G, and how far apart will the facilities be in the future?**

This depends on local terrain limitations and the 5G coverage footprint and capacity requirement of neighboring existing sites. Usually, it is 2.0 to 2.6km in metro areas. (Source Telstra)

Mobile network operators use different infrastructure solutions to achieve maximum, optimal coverage for customers. The distance between mobile base stations, and the location of those base stations will be impacted by many things including topography, how built up the infrastructure in the area is, the demand on the network. Mobile base stations vary in size and shape to address varying types of environments.



**Macrocells** cover large geographic areas. They are typically made up of antennas and associated equipment located on building rooftops, towers or poles.

**Inbuilding cells** provide coverage inside buildings such as multi storey office buildings, shopping centres, apartments, and underground railway systems by installing specially designed “In Building” systems. These systems are sometimes referred to as Distributed Antenna Systems (DAS) or In Building Coverage (IBC). Small antennas located on ceilings or walls in strategic locations throughout the building.

**Small cells** provide mobile device coverage or additional network capacity to a small geographic area. They operate at lower power than a traditional mobile phone base station and use smaller equipment. Small cells complement existing technology and work with existing sites to provide a better network experience.

Small cells can be deployed with minimal visual impact as they use smaller antennas, smaller equipment and can be co-located on existing infrastructure such as electricity and light poles.

Small cells can be used to either increase the existing network capacity or provide new coverage. Small cells are built in all areas including urban and rural communities and are suitable for residential areas.

**The 5G network will need more small cells.**

Radiofrequency spectrum in higher ranges such as the 26-28 GHz bands have characteristics that enable a greater amount of data to be transmitted and received. These spectrum bands are referred to as millimetre wave (mmWave) bands and have been allocated globally for use by 5G.

While mmWave spectrum can carry large amounts of data, the characteristics of the spectrum mean that data cannot travel long distances or through obstructions, including buildings. This means telecommunications companies need to install more infrastructure to enable the mmWave network to effectively operate. Small cells are an effective solution for mmWave networks and locations with high data traffic such as:

- airports
- office buildings
- shopping centres
- railway stations
- sports venues and school campuses
- city streets and densely populated urban areas and regional centres.

**Will more small cells mean I'm exposed to more electromagnetic energy (EME)?**

The level of EME emitted from telecommunications equipment, including from 5G small cell, is related to its power output. 5G networks are designed to be more efficient and use less power than current networks for similar services.

Experience with the introduction of previous wireless technologies (3G and 4G) is that even with an increasing amount of telecommunications equipment being installed to support 5G networks, we can expect overall exposure levels to remain constant and at a small fraction of the exposure limits set out in the ARPANSA Standard.

Small cells are not new and will remain an essential part of the telecommunications network supporting the rollout of 5G.

Source [Department of Infrastructure, Transport, Regional Development, Communications and the Arts](#) and [Australian Mobile Telecommunications Industry](#)

**Q16. The information on your website 'Further Information – Fact or Fiction & Common Myths' appear to have been provided by a phone company. Have you checked to make sure it is not misleading?**

The information provided on the 'Have Your Say' website is publicly available from the Department of Infrastructure, Transport, Regional Development, Communications and the Arts, one of the Commonwealth bodies involved in regulating and researching the effects telecommunications technology.

Source <https://www.infrastructure.gov.au/sites/default/files/fact-or-fiction-the-truth-about-5g.pdf>

**Q17. What should I do if I want more research done regarding the effects of 5G technology?**

Individuals and groups concerned regarding the effects of radiofrequency electromagnetic energy (RF EME) associated with 5G technology should contact the Australian Federal agencies involved in regulating and researching the effects of telecommunications technology in Australia. Contact details are provided below.

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

Website: [www.infrastructure.gov.au](http://www.infrastructure.gov.au)

Phone: [1800 075 001](tel:1800075001)(within Australia) or [+61 2 6274 7111](tel:+61262747111) (from outside Australia)

Email: [clientservice@infrastructure.gov.au](mailto:clientservice@infrastructure.gov.au)

Mail: Director, Governance Section

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

GPO Box 594

CANBERRA ACT 2601

Australian Communications and Media Authority

Website: [www.acma.gov.au](http://www.acma.gov.au)

Phone: 1300 850 115 or 03 9963 6800

Fax: +61 2 6219 5353

Email: [info@acma.gov.au](mailto:info@acma.gov.au)

Online enquiries: <https://www.acma.gov.au/online-enquiries>

Mail: PO Box 13112 Law Courts, Melbourne, Victoria 8010

Australian Radiation Protection and Nuclear Safety Agency

Website: [www.arpansa.gov.au](http://www.arpansa.gov.au)

Phone: 1800 022 333 or 03 9433 2211

Fax: +61 3 9432 1835

Online enquiries: <https://www.arpansa.gov.au/contact-us/contact-us-form>

Mail: 619 Lower Plenty Road, Yallambie, Victoria 3085

Australian Centre for Electromagnetic Bioeffects Research

Website: [www.uow.edu.au/acebr](http://www.uow.edu.au/acebr)

Phone: 02 4221 3652

Email: [acebr-info@uow.edu.au](mailto:acebr-info@uow.edu.au)

**Q18. How much radiofrequency electromagnetic energy (RF EME) does the Vodaphone and Optus telecommunications pole at Templeton Reserve emit?**

The maximum EME level calculated for the existing systems (Vodaphone and Optus telecommunications pole) at RFNSA site 3152013 is 2.43% of the public exposure limit.

**Calculated EME Levels**

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined.

Distance from the antennas at Templeton Reserve, Templeton St in 360° circular bands	Maximum Cumulative EME Level at 1.5m above ground – all carriers at this site					
	Existing Equipment			Existing and Proposed Equipment		
	Electric Field V/m	Power Density mW/m <sup>2</sup>	% ARPANSA exposure limits	Electric Field V/m	Power Density mW/m <sup>2</sup>	% ARPANSA exposure limits
0m to 50m	3.98	42.091	0.51%			
50m to 100m	6.52	112.79	1.92%			
100m to 200m	7.49	148.78	2.43%			
200m to 300m	5.31	74.69	1.2%			
300m to 400m	3.53	33.09	0.53%			
400m to 500m	2.64	18.5	0.3%			
<b>Maximum EME level</b>	7.49	148.78	2.43			
	125.84 m from the antennas at Templeton Reserve, Templeton St					

(Source [RFNSA](#))

**Q19. How much radiofrequency electromagnetic energy (RF EME) will the new telecommunications pole emit?**

At 2.2%, the maximum EME level of the proposed new telecommunications pole at Templeton Reserve is calculated to be 97.8% below the RPS- S1 standard, refer Figure 1 below. The EME would need to be 45 times higher to reach the limit of exposure as set by ARPANSA. Figure 2 shows a comparison of the maximum EME level for the existing 18 metre Telstra (3G) telecommunications pole and the proposed 35 metre telecommunications pole (4G & 5G). (source [RFNSA](#))

Figure 1 – Percentage of calculated electromagnetic energy level for the proposed site:

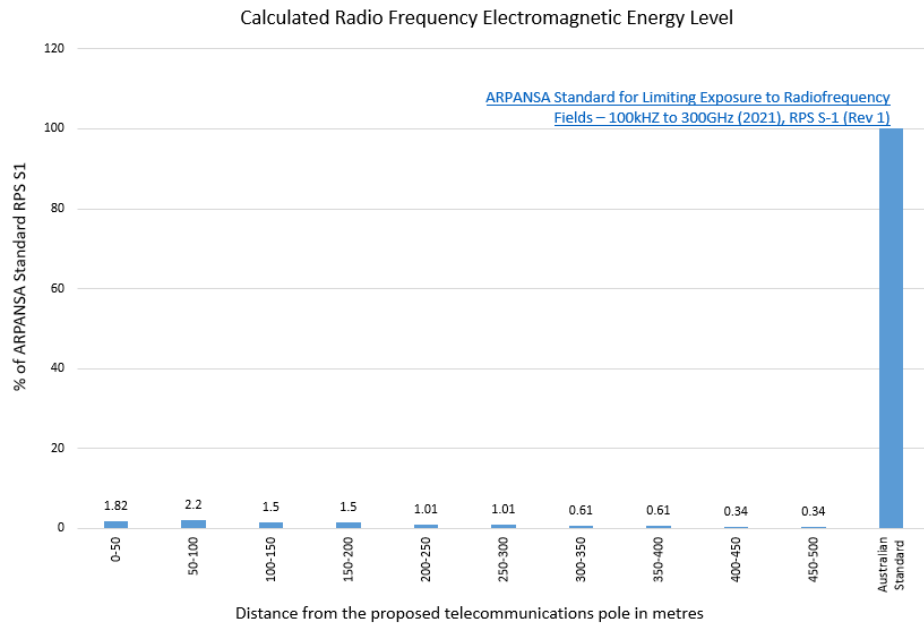
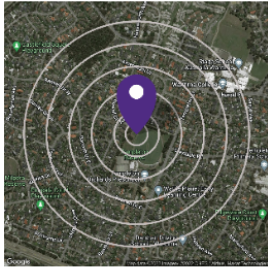


Figure 2 – Comparison of the maximum EME level for the existing 18 metre Telstra pole and the proposed 35 metre pole. Note ‘public exposure limit’ refers to ARPANSA RPS SI standard.

<p>The maximum EME level calculated for the <b>existing</b> systems at this site is</p> <h1 style="font-size: 2em; margin: 0;">0.03%</h1> <p>out of 100% of the public exposure limit, 33 m from the location.</p>	<p>The maximum EME level calculated for the <b>proposed</b> changes at this site is</p> <h1 style="font-size: 2em; margin: 0;">2.20%</h1> <p>out of 100% of the public exposure limit, 61 m from the location.</p>																
	<table border="1" style="width: 100%; border-collapse: collapse; background-color: #4b0082; color: white;"> <thead> <tr> <th colspan="2" style="text-align: left;">EME levels with the proposed changes</th> </tr> <tr> <th style="text-align: left;">Distance from the site</th> <th style="text-align: left;">Percentage of the public exposure limit</th> </tr> </thead> <tbody> <tr> <td>0-50 m</td> <td>1.82%</td> </tr> <tr> <td>50-100 m</td> <td>2.20%</td> </tr> <tr> <td>100-200 m</td> <td>1.50%</td> </tr> <tr> <td>200-300 m</td> <td>1.01%</td> </tr> <tr> <td>300-400 m</td> <td>0.61%</td> </tr> <tr> <td>400-500 m</td> <td>0.34%</td> </tr> </tbody> </table>	EME levels with the proposed changes		Distance from the site	Percentage of the public exposure limit	0-50 m	1.82%	50-100 m	2.20%	100-200 m	1.50%	200-300 m	1.01%	300-400 m	0.61%	400-500 m	0.34%
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<p><b>Q20. How are 3G, 4G and 5G technologies different?</b></p>																	
<p>Wireless mobile services have been available since the late 1970's. 5G is the 5th generation of global wireless technology used for mobile and internet services, building on the progress of 4G, 3G, 2G and 1G. 5G has been designed to meet the very large growth in data and connectivity of today's modern society, the internet of things with billions of connected devices, and tomorrow's innovations.</p> <p>5G will initially operate in conjunction with existing 4G networks before evolving to fully standalone networks in subsequent releases and coverage expansions. In addition to delivering faster connections and greater capacity, a very important advantage of 5G is the fast response time referred to as latency. Latency is the time taken for devices to respond to each other over the wireless network.</p> <p>3G networks had a typical response time of 100 milliseconds, 4G is around 30 milliseconds and 5G will be as low as 1 millisecond. This is virtually instantaneous opening up a new world of connected applications.</p>																	
<div style="background-color: #ff9800; color: white; padding: 5px; border-radius: 5px; text-align: center;"> <p>Lower latency - Faster response times</p> </div> <div style="background-color: #e0e0e0; padding: 10px; border-radius: 10px; margin-top: 5px;"> <p>Lower latency with 5G is achieved through significant advances in mobile device technology and mobile network architecture.</p> <table border="1" style="width: 100%; border-collapse: collapse; background-color: #e0e0e0;"> <thead> <tr> <th style="text-align: left;">Technology</th> <th style="text-align: left;">Response time (milliseconds)</th> </tr> </thead> <tbody> <tr> <td>4G - LTE systems</td> <td>20-30 ms</td> </tr> <tr> <td>5G - enhanced mobile broadband</td> <td>4-5 ms</td> </tr> <tr> <td>5G - URLLC (Ultra Reliable Low Latency Communications) systems</td> <td>1 ms</td> </tr> </tbody> </table> </div>		Technology	Response time (milliseconds)	4G - LTE systems	20-30 ms	5G - enhanced mobile broadband	4-5 ms	5G - URLLC (Ultra Reliable Low Latency Communications) systems	1 ms								
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## What will 5G enable?

### **5G will enable instantaneous connectivity to billions of devices, the Internet of Things (IoT) and a truly connected world.**

#### **There are three major categories of use case for 5G:**

- **Massive machine to machine communications** – also called the Internet of Things (IoT) that involves connecting billions of devices without human intervention at a scale not seen before. This has the potential to revolutionise modern industrial processes and applications including agriculture, manufacturing and business communications.
- **Ultra-reliable low latency communications** – mission critical including real-time control of devices, industrial robotics, vehicle to vehicle communications and safety systems, autonomous driving and safer transport networks. Low latency communications also opens up a new world where remote medical care, procedures, and treatment are all possible.
- **Enhanced mobile broadband** – providing significantly faster data speeds and greater capacity keeping the world connected. New applications will include fixed wireless internet access for homes, outdoor broadcast applications without the need for broadcast vans, and greater connectivity for people on the move.

**For communities**, 5G will enable the connection of billions of devices for our smart cities, smart schools and smart homes, smart and safer vehicles, enhance health care and education, and provide a safer and more efficient place to live.

**For businesses and industry**, 5G and IoT will provide a wealth of data allowing them to gain insights into their operations like never before. Businesses will operate and make key decisions driven by data, innovate in agriculture, smart farms and manufacturing, paving the way for cost savings, better customer experience and long term growth.

**New and Emerging technologies** such as virtual and augmented reality will be accessible by everyone. Virtual reality provides connected experiences that were not possible before. With 5G and VR you will be able to travel to your favourite city, watch a live football match with the feeling of being at the ground, or even be able to inspect real estate and walk through a new home all from the comfort of your couch.

**5G will keep us connected in tomorrow's smart cities, smart homes and smart schools, and enable opportunities that we haven't even thought of yet.**

Source: EMF Explained 2.0

[https://www.emfexplained.info/site/misc/emf/downloads/5G&EMF%20Explained\\_AMTA\\_23Aug\\_2019\\_20.pdf](https://www.emfexplained.info/site/misc/emf/downloads/5G&EMF%20Explained_AMTA_23Aug_2019_20.pdf)



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## 6.3 Electromagnetic Radiation & 5G Mobile Technology

### **SUMMARY: Strategic Planner, David Cameron**

**This report responds to a Council call up item on 28 October 2019 regarding electromagnetic radiation and the rollout of 5G mobile technology. Federal Government agencies predominantly regulate telecommunication networks in Australia and have provided publicly accessible information regarding the ongoing 5G rollout, in addition to addressing perceived safety concerns. Statements from relevant federal agencies and research centres were recently submitted to an ongoing federal Inquiry into the deployment, adoption and application of 5G technology in Australia. These submissions articulate that existing regulatory measures are sufficient to prevent any adverse harm from 5G technology.**

### **RECOMMENDATION**

**That Council:**

- 1. Note the information contained within this report regarding the 5G rollout and the roles of specific Australian Federal Government authorities; and**
- 2. Note that it is the cumulative advice from the Australian Radiation Protection and Nuclear Safety Agency, the Australian Communications and Media Authority, and the Australian Centre for Electromagnetic Bioeffects Research that 5G will not impact human health, that it is safe, and that appropriate standards are in place to protect against any harm.**

### **1. INTRODUCTION**

Acronyms used in this report:

DITRDC – Department of Infrastructure, Transport, Regional Development and Communications (Australian federal department)

DCA – Department of Communications and the Arts (former Australian federal department now known as DITRDC)

ACMA – Australian Communications and Media Authority

ARPANSA – Australian Radiation Protection and Nuclear Safety Agency

ACEBR – Australian Centre for Electromagnetic Bioeffects Research

WHO – World Health Organisation

ICNIRP – International Commission on Non-Ionising Radiation

AMTA – Australian Mobile Telecommunications Association

RPS3 – Radiation Protection Series No.3 (2002)

RF-EMF – Radio frequency electromagnetic fields

Council requested a call up item on 28 October 2019 to address electromagnetic radiation and the roll out of 5G mobile technology. The item requested a report to be presented to Council by February 2020 with detail into the 5G rollout along with the roles of specific Australian Federal

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Government authorities and the science detailing any impacts to health from 5G. The four specific points of the call up are addressed within the discussion section of this report. As part of undertaking the work required for this Call Up Item, officers have had regard to Council's Call Up Items at Council Meeting Policy and in particular, Item 6.5 which states:

*"Where preparing a report responding to a Call Up Item which will require more than three person days or \$5,000 in costs, then the matter which is subject to the Call Up Item should be referred by Council to the next budget considerations with a supporting business case for consideration along with competing priorities."*

This report provides the information outlined above as requested.

5G is the fifth-generation wireless technology for digital cellular networks that began wide deployment in 2019. The DITRDC (previously the DCA) is currently implementing a 5G telecommunication network, in accordance with the Australian Federal Government 5G strategy (5G – Enabling the Future Economy paper, October 2017 (Attachment 1)).

From this Strategy the Federal Government views the implementation of the 5G mobile communications network as providing '*...the underlying architecture that will enable the next wave of productivity and innovation across different sectors of the Australian economy*'. The Strategy notes that 5G means high data rates, massive connectivity, ultra-low latency, high reliability and mobility at high speeds, demonstrating '*a significant leap from the capabilities of previous generations and introduces a range of new technological possibilities*'.

The current rollout of 5G telecommunications technology is predominantly regulated by the Australian Federal Government through the ACMA, including the responsibility for allocation of the 5G spectrum (allocation of a pre-set radio frequency to a private telecommunications organisation). The complete 5G rollout is a combined effort in partnership with private industry, as telecommunications organisations implement their 5G compatible networks and infrastructure.

Both national and international attention has been given to regulating and researching the effects of 5G technology. Australian Federal agencies involved include DITRDC, ACMA and ARPANSA. Additionally, federally linked research centres, including the ACEBR, conduct research surrounding the effects of exposure to radio frequencies and electromagnetic fields. Internationally, organisations including the WHO and the ICNIRP produce information, standards and research regarding 5G technology with the aim of providing worldwide best practice and uniformity.

Each of these organisations have produced documentation surrounding the rollout of 5G technology, addressing any potential to cause adverse harm. In addition, efforts have been made by Australian federal agencies to provide publicly accessible information to clarify the current state of research regarding 5G to alleviate wider concerns of the technology. An example of this includes the ARPANSA webpage titled '*Misinformation about Australia's 5G network*' published on 3 June 2019.

Currently, the House of Representatives Standing Committee on Communications and the Arts is conducting an Inquiry into the Deployment, Adoption and Application of 5G in Australia. All of the previously mentioned Australian federal authorities (along with the ACEBR) have made submissions to this Inquiry. This report relies on these submissions, providing the views of federal agencies and scientists, to address the points raised within the call up item. This report is based on publicly available research conducted by officers. It reflects Federal Government statements and the opinions of Research Centres.

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## 2. DISCUSSION

The Council call up item contained four distinct points. These points are addressed respectively below, and are summarised from a more systematic analysis provided in the attachments.

The full submissions to the Inquiry into the Deployment, Adoption and Application of 5G in Australia from the DCA (now known as the DITRDC), ACMA, ARPANSA and ACEBR are included as Attachments 2, 3, 4 and 5 respectively, along with the combined submission from the AMTA and Communication Alliance in Attachment 6.

a) How the new 5G mobile network technology will be rolled out.

The 5G rollout process will be a joint public/private process involving the management of the 5G spectrum, and implementation of compliant telecommunications infrastructure. ACMA manages the Australian radiofrequency spectrum under the Radiocommunications Act (1992) and has commenced allocating frequency banding for 5G application. ACMA auctions and sells spectrum when made available for 5G.

Federal regulation and direction will guide the telecommunication industry rollout of 5G technology. Information regarding individual telecommunication business practices are limited, however the locations of existing telecommunications infrastructure remains publicly accessible. Telecommunication industry associations AMTA and the Communications Alliance indicate that the 5G infrastructure required will include more macro cells (traditional base stations) and small cells. Small cells complement the 5G network over a small area, are small in size, and utilise lower power than base stations. Both small cells and base stations are required to meet the relevant ARPANSA standard (RPS3) for radiofrequency exposure.

b) The role of the Australian Communications and Media Authority (ACMA) will be in guiding the roll out and regulating the technology under legislation, including any risks of Electromagnetic Radiation.

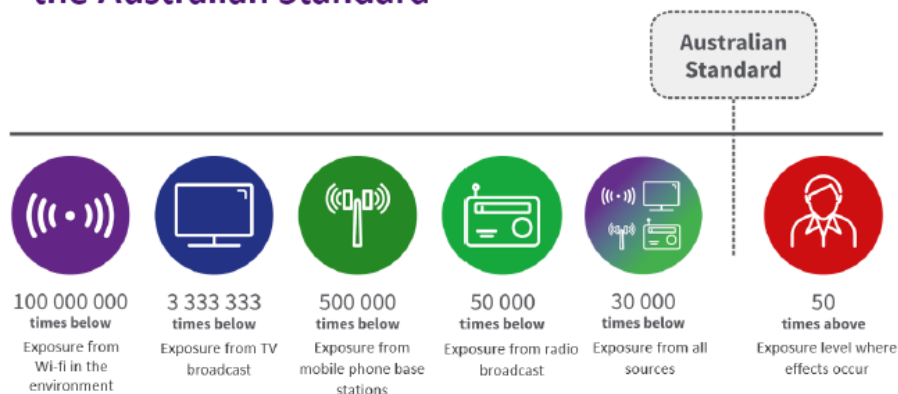
ACMA is the authority guiding the 5G rollout including 5G spectrum management (allocation of a pre-set radio frequency to a private telecommunications organisation) in accordance with the Radiocommunications Act (1992). It is ACMA's role to regulate electromagnetic energy and enforce compliance with the Mobile Base Station Deployment Code, which guides the location and design of new telecommunication facilities and devices.

The installation of such infrastructure is required to meet ARPANSA Standard RPS3, which as stated by ACMA is placed to '*protect people against all known adverse health effects from EME exposure*'.

Licensing conditions by ACMA require transmitters to not exceed the ARPANSA standard at any publicly accessible location. ARPANSA specifically notes in its submission to the Inquiry into the Deployment, Adoption and Application of 5G in Australia that exposure to radio waves would need to be 50 times higher than the RPS3 standard to have any recognised health effects:

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## Typical public exposure to radio waves against the Australian Standard



Local Government involvement in regulating telecommunication facilities occurs when the installation of a new facility is not 'low impact' as defined by the Telecommunications Code of Practice – 2018. The role of Council is limited to assessing planning considerations. The safety and risk management aspects in association with electromagnetic radiation remains under the auspice of ACMA and ARPANSA.

- c) Any scientific research or studies that have been undertaken to determine any detrimental impacts to human health as a result of the new 5G technology, including the potential impacts of Electromagnetic Radiation.

Publicly available information on the potential impacts of electromagnetic radiation from ARPANSA and ACEBR was made available as part of the Inquiry into the Deployment, Adoption and Application of 5G in Australia convened by the Hon. Minister of Communications, Paul Fletcher MP.

ARPANSA identified approximately 30,000 studies and reviews in relation to electromagnetic fields and radio waves. Condensed responses from ACEBR and ARPANSA are as follows:

ACEBR:

ACEBR is a Medical Research Council of Australia funded Centre of Excellence. The Centre conducts research into health effects from exposure to radiofrequency and electromagnetic fields, which include those emitted by telecommunications infrastructure (including 5G).

The relevant standard for RF-EMF is currently the ARPANSA Standard RPS3. It is important to note that the lowest determinable health impact of RF-EMF is used to inform the RPS3 limits. ACEBR further reports that the values of RPS3 are very conservative and would need to be substantially exceeded for any harmful health effects to occur.

Scientific research demonstrates that RF-EMF is capable of causing heating of the human body. This is regulated by the ARPANSA Standard RPS3 to prevent any adverse effects for radiofrequency fields associated with the 5G network. Other adverse health effects have failed to be demonstrated and attributed to RF-EMF through the research. It is noted by ACEBR that the initial rollout of 5G will use similar frequencies to 4G and will have the same effects as

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existing network technology. ARPANSA and ACMA will continue regular monitoring and adjust regulations as appropriate.

This section of the call up item posed the question of 'Any scientific research...'. It is the advice of the ACEBR that singly pointing to individual scientific studies is problematic when related to RF-EMF. As RF-EMF exposure is a highly researched area, it is important that evaluation of the entire scientific literature is considered, as singular scientific studies can be flawed, and one of the cornerstones of empirical science is the reproducibility of scientific results.

ACEBR reports that while '5G' appears new to a wide audience, science has already established the factors from RF-EMF that would impact human health. As the frequencies and power to be utilised for 5G technology are known, ACEBR states that the ARPANSA Standard RPS3 is '*...sufficient to ensure that exposures associated with 5G will not be able to adversely affect health*'.

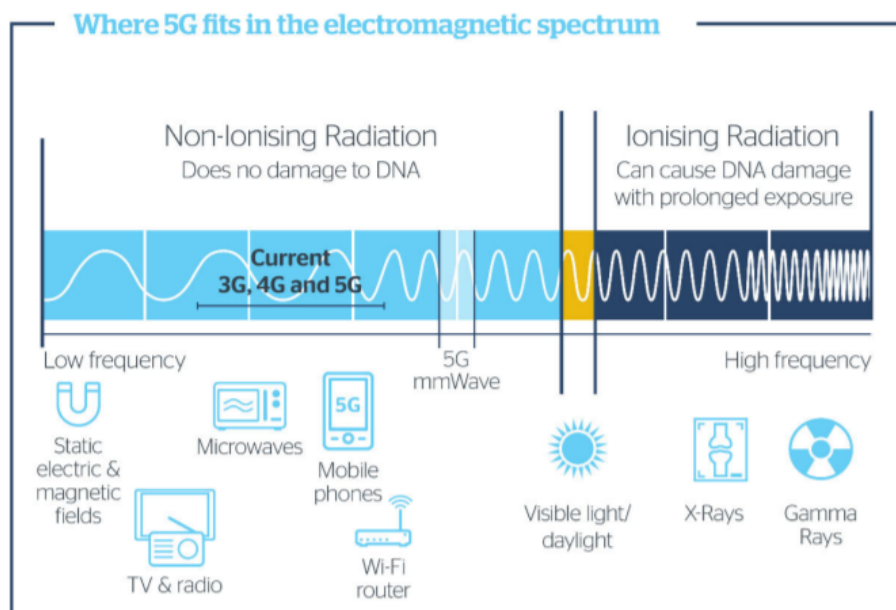
ARPANSA:

ARPANSA is the Australian Government's primary authority surrounding radiation protection and nuclear safety. ARPANSA acts as a regulator in this regard, by promoting national uniformity and implementing international best practice. Additionally, ARPANSA has a function of conducting research related to radiation protection under the Australian Radiation Protection and Nuclear Safety Act 1998.

ARPANSA distinguishes between the radio frequencies utilised in telecommunications, and ionising radiation (not utilised within 5G) which is associated more broadly with nuclear energy or for medical uses. ARPANSA notes that radio waves are capable of causing tissue damage through thermal effects when used at high power (which is not applicable to 5G), and which is managed by appropriate safety measures. The public are exposed to levels of RF-EMF which ARPANSA considers too low to cause significant increases in temperature, and that '*the evidence for production of harmful biological effects is ambiguous and unsubstantiated*'.

In its submission to the Inquiry into the Deployment, Adoption and Application of 5G in Australia, AMTA included the following diagram to demonstrate where 3G, 4G and 5G sit on the Non-Ionising Radiation spectrum:

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ARPANSA summarises the current body of research regarding exposure to radio waves as: *'Health authorities around the world, including ARPANSA and the World Health Organization (WHO), have examined the scientific evidence for possible health effects from telecommunications sources. Current research indicates that there is no established evidence for health effects from radio waves used in mobile telecommunications. This includes the upcoming roll-out of the 5G network. ARPANSA's assessment is that 5G is safe.'*

- d) The location of existing phone towers across the municipal district of Knox shown spatially, with towers within 100 metres of residential areas and schools specifically identified.

The location of existing telecommunication towers within a 100m radius to residential areas and schools are located as Attachments 7 and 8 respectively.

### 3. CONSULTATION

Officers initiated contact with major telecommunication organisations such as Telstra and Optus. No further information on the 5G rollout was obtained.

### 4. ENVIRONMENTAL/AMENITY ISSUES

Human health issues related to 5G have been discussed within the report. According to ARPANSA, limited ecological research indicates that, electromagnetic fields have *'...little or no evidence of a significant environmental impact'*.

### 5. FINANCIAL & ECONOMIC IMPLICATIONS

The rollout of 5G is considered to have significant economic benefits nationally. The DCA in their response to the Inquiry indicated that 5G could *'...provide an additional \$1,300 to \$2,000 in gross*

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*domestic product per person after the first decade of the rollout*'. DCA noted that this is likely a conservative estimate and does not take into account all benefits (including cost and time savings) that better mobile telecommunications can afford households.

This report has been prepared within the current City Futures operational budget. Should further technical advice or research be required, qualified experts will need to be engaged subject to available budget and resources.

## **6. SOCIAL IMPLICATIONS**

It is considered there will be limited social implications as a result of this report.

## **7. RELEVANCE TO KNOX COMMUNITY AND COUNCIL PLAN 2017-2021**

### **Goal 4 - We are safe and secure**

Strategy 4.4 - Protect and promote public health, safety and amenity

### **Goal 5 - We have a strong regional economy, local employment and learning opportunities**

Strategy 5.3 - Promote and improve infrastructure and technology within the municipality and enhance strategic employment places for business

## **8. CONFLICT OF INTEREST**

Under section 80c of the Local Government Act 1989 officers providing advice to Council must disclose any interests, including the type of interest.

Author – Strategic Planner, David Cameron - In providing this advice as the Author, I have no disclosable interests in this report.

Officer Responsible – Director, City Development, Matt Kelleher - In providing this advice as the Officer Responsible, I have no disclosable interests in this report.

## **9. CONCLUSION**

The 5G rollout has commenced under the regulatory authority of the ACMA, and will involve telecommunications organisations implementing their own 5G compliant technology. The ACMA requires that 5G infrastructure meet ARPANSA standards in any publically accessible location, and that the applicable ARPANSA standard (RPS3) would need to be substantially exceeded for harm to occur.

ARPANSA identifies that telecommunication radio frequencies are capable of causing thermal effects which are managed through safety measures, and that '*...there is no established evidence for health effects from radio waves used in telecommunications*'. It is the cumulative opinion of the ACMA, ACEBR and ARPANSA that existing ARPANSA standards are positioned to sufficiently protect against any adverse health impacts from the 5G telecommunications rollout, and that 5G is safe.

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## 10. CONFIDENTIALITY

There are no items of a confidential nature in this report.

**Report Prepared By:** Strategic Planner, David Cameron

**Report Authorised By:** Director, City Development, Matt Kelleher

### Attachments

1. Attachment 1 - 5G Enabling the Future Economy [6.3.1 - 15 pages]
2. Attachment 2 - DCA Submission 5G Inquiry [6.3.2 - 17 pages]
3. Attachment 3 - ACMA Submission 5G Inquiry [6.3.3 - 20 pages]
4. Attachment 4 - ARPANSA Submission 5G Inquiry [6.3.4 - 10 pages]
5. Attachment 5 - ACEBR Submission 5G Inquiry [6.3.5 - 5 pages]
6. Attachment 6 - AMTA Submission 5G Inquiry [6.3.6 - 47 pages]
7. Attachment 7 - Map Mobile Base Stations - Residential Zones January 2020 [6.3.7 - 1 page]
8. Attachment 8 - Map Mobile Base Stations - Schools January 2020 [6.3.8 - 1 page]



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Attachment 6.3.1



**Australian Government**  
**Department of Communications and the Arts**



## 5G—Enabling the future economy

October 2017

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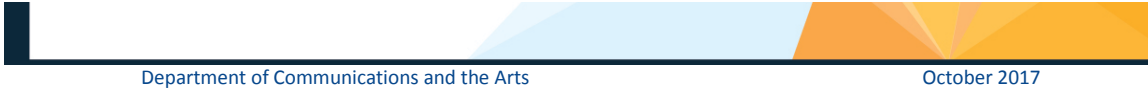
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## Australia's 5G vision

5G is the next step in the evolution of mobile wireless communications technology, promising improved connectivity, greater network speeds and bandwidth, and very low latency. It is the fifth generation in mobile technology which, at each step, has seen significant developments in communications networks:

- 1G—The first generation of mobile phone networks were deployed in the early 1980s, providing a basic voice service using analogue transmission.
- 2G—In 1991, second generation networks were deployed, making the switch to digital standards with improved voice messaging and the introduction of the short message service (SMS).
- 3G—The third generation launched in 2001 and introduced data services in addition to voice and SMS.
- 4G—In 2009, the fourth generation protocol, Long Term Evolution (LTE), was introduced, supporting improved mobile broadband which saw increased capacity and speed for data.

New capabilities of mobile communications networks enabled by 5G technology will allow for a variety of 'use cases':

- higher quality and more video services provided to multiple users with full mobility, even at high speed
- massive scale automation delivered through widespread sensor networks and multiple connected devices
- delivery of critical communications assured by low latency and ultra-reliable networks, and
- improved productivity assisted by high quality, real time data analytics.

Unlike existing mobile communications networks, 5G networks have the potential to allow tailoring of requirements for each of these different use cases within the same network.

The Government considers that 5G is more than an incremental change for mobile communications. Instead, it provides the underlying architecture that will enable the next wave of productivity and innovation across different sectors of the Australian economy. Efficient rollout of 5G and uptake of the services it supports has the potential to produce far-reaching economic and social benefits and support growth of Australia's digital economy. This will be supported by the rollout of the National Broadband Network (NBN) allowing greater capabilities for the seamless delivery of services across high speed mobile, fixed line and fixed wireless networks.

The Government wants to create an environment that allows Australia's telecommunications industry to be at the forefront of seizing the benefits of 5G across the economy. The communications sector will lead the rollout of 5G networks in Australia. However, the Government can create the policy and regulatory environment to support a more efficient rollout, given its potential benefits to the economy.

The Government's direction will be to support the timely rollout of 5G in Australia to enable the next wave of broad-based industry productivity, and support the growth of Australia's digital economy.

This includes immediate actions by Government that enable the communications market to introduce new 5G technologies in line with international developments. These include:

- making spectrum available in a timely manner
- actively engaging in the international standardisation process
- streamlining arrangements to allow mobile carriers to deploy infrastructure more quickly, and
- reviewing existing telecommunications regulatory arrangements to ensure they are fit-for-purpose.

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Attachment 6.3.1



The Government recognises that as 5G continues to develop, other issues relating to the technology will likely emerge which may require future Government action. In particular, while there are opportunities for 5G to create economy-wide transformation, this will require a broader examination of sectoral regulatory frameworks.

To that end, the Government will work collaboratively with industry to foster an ongoing dialogue on 5G beyond the launch of this paper to identify and remove sectoral barriers to its successful and timely rollout. Through this dialogue, the Government will also look at opportunities to build on other Government activities, such as the national Digital Economy Strategy which will more broadly focus on building the productivity of sectors across the economy.

## What is 5G?

The International Telecommunication Union (ITU) is the United Nations specialised agency for information and communications technologies. This body decides global spectrum allocation frameworks and harmonises international spectrum to ensure networks and connected devices can communicate seamlessly. The ITU will undertake the formal, international process to identify bands for 5G by 2020. It has developed draft technical specifications for 5G which include:<sup>1</sup>

- high data rates (1 Gbps for hotspots, 100 Mbps download and 50 Mbps upload for wide-area coverage)
- massive connectivity (1 million connections per square kilometre)
- ultra-low latency (1 millisecond)
- high reliability (99.999% for mission critical 'ultra-reliable' communications), and
- mobility at high speeds (up to 500 km/h i.e. high speed trains).

In working towards these specifications, 5G represents a significant leap from the capabilities of previous generations and introduces a range of new technological possibilities. The success of 5G in delivering new technologies and services will be supported by existing communications infrastructure, including the NBN. This convergence of high-speed fixed-line and mobile services will collectively produce a consistent and ubiquitous user experience.

## The 5G economics case

Unlike early generations of mobile networks, 5G will represent a significant shift in the telecommunications industry's focus away from voice and more towards mobile broadband and increased industrial applications. These new use cases are expected to create benefits across a range of sectors—including transportation, health, manufacturing and agriculture—and have varying networking requirements. These use cases, as identified by the industry, can be divided into the following categories:

- enhanced Mobile Broadband
- massive Machine Type Communications, and
- critical communications.

### Enhanced Mobile Broadband (eMBB)

eMBB will deliver improved capacity to a greater number of devices. This will enable higher rates and volumes of data transmission per device and improve coverage to a broader range of locations. eMBB will likely be the focus of early 5G deployments as it can immediately support the growing communications requirements for the digital economy.

#### An improved mobile experience for consumers

5G networks will give consumers a better mobile experience in more locations. Increased network capacity will support more users, even in crowded areas, such as large public events, and at peak times. Faster network speeds will also enable consumers to view rich content in more places, supporting the streaming of live events and high resolution media.

<sup>1</sup> ITU, 23 February 2017, '[Press Release: ITU agrees on key 5G performance requirements for IMT-2020](#)'.

## Massive machine type communications (mMTC)

As 5G networks mature, they will support the widespread and dense deployment of sensors and other network-connected devices by significantly reducing their power requirements and providing flexible coverage across different spectrum bands. This proliferation of the Internet of Things (IoT) across industries is expected to produce significant productivity benefits and support integration between sectors.

### Supporting productivity and innovation

The term Industry 4.0 describes the next step in the advancement of the manufacturing sector (the 'fourth industrial revolution'). Industry 4.0 introduces autonomous systems supported by a combination of technologies such as IoT, artificial intelligence, continued technological improvements and digitalisation in manufacturing.

Australia stands to benefit from Industry 4.0, given our world-class manufacturing sector, which includes several high-value industries such as medical technology and aerospace. Australian manufacturers can improve their productivity and international competitiveness through Industry 4.0 processes by supporting their participation in global value chains. This is of particular benefit to SME manufacturers, opening them up to new markets and opportunities. 5G can support Industry 4.0, by providing communications infrastructure that is more accessible and flexible to suit specific industry needs.

5G can enable innovation in other sectors such as agriculture. A challenge for Australia's agricultural sector is identifying how to improve productivity while balancing environmental and commercial constraints. Precision agriculture, which focuses on improving yields and minimising economic risks, seeks to provide more control in the management of agricultural production. While precision agriculture requires a range of enablers—including data analysis, sensor networks and geographical information systems—5G can provide the supporting infrastructure for these technologies.

## Critical communications

Low latency and 'ultra-reliable' communications networks will support the delivery of critical communications, i.e. to support public safety use and playing role in the technology ecosystem supporting autonomous vehicles. In addition to automation, critical communications will also help to support technological advancement in areas including robotics and artificial intelligence.

### The social benefits from autonomous vehicles

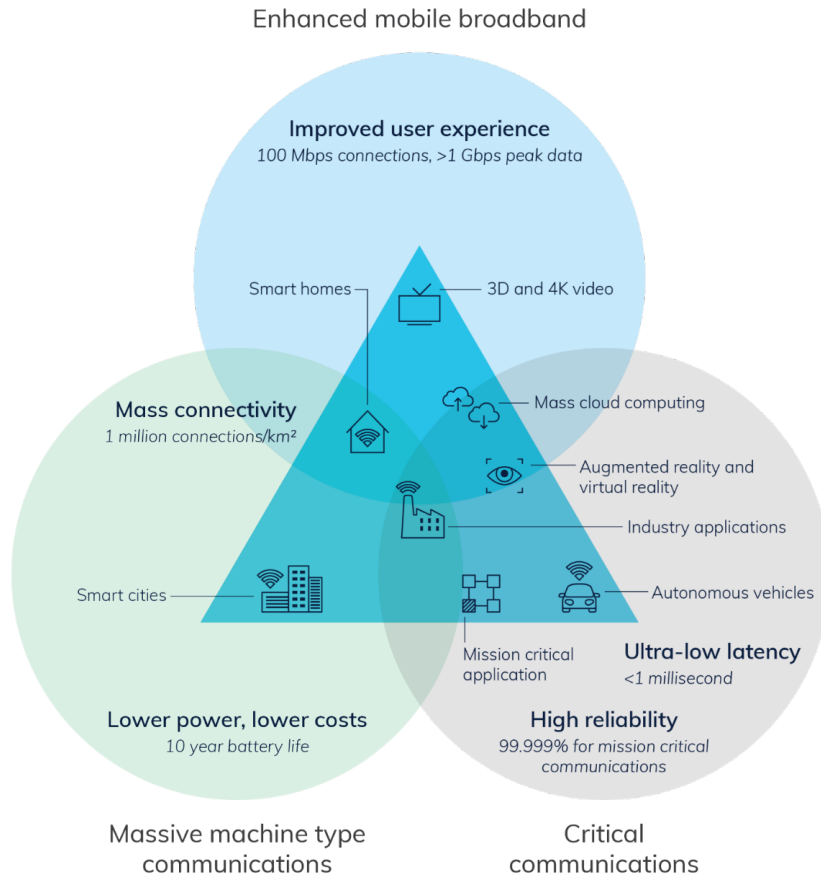
5G networks are expected to play a role in the technology ecosystem supporting the development of autonomous vehicles, which will enable a number of social benefits for transportation. Traffic congestion, which is estimated to cost Australia \$53 billion by 2031,<sup>2</sup> could be proactively reduced by smart city traffic management systems that are informed by machine-to-machine communications with autonomous vehicles.

Improved road safety is also expected to be a key outcome of autonomous vehicles, as the majority of car accidents involve human error. In the 12 months to July 2017, there were 1,235 deaths on Australian roads with road trauma costing the Australian community an estimated \$27 billion annually.<sup>3</sup> Autonomous vehicles can have a valuable role not just in terms of financial savings, but in saving human lives.

<sup>2</sup> Infrastructure Australia, 2015, '[Australian Infrastructure Audit](#)'.

<sup>3</sup> Bureau of Infrastructure, Transport and Regional Economics, August 2017, '[Road deaths—monthly bulletins](#)'.

Figure 1—Outline of the relationship between the technical requirements of 5G and expected services and applications it will deliver



Source: Based on figure 2 from the ITU paper, *'IMT Vision—Framework and overall objectives of the future development of IMT for 2020 and beyond.'*



## What is different about 5G?

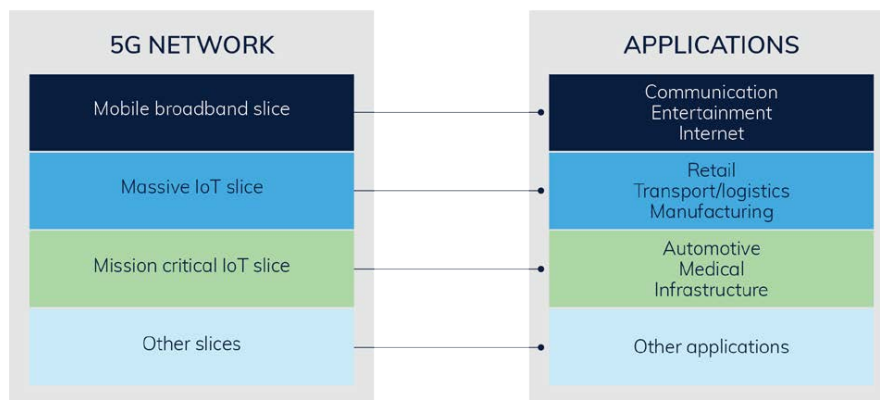
5G is expected to enable productivity outcomes across key verticals of the economy as a result of a range of characteristics, such as **network slicing** and **mesh networks**. However, it will need to overcome deployment challenges such as **spectrum acquisition** and **coverage**. This is expected to lead to new approaches for deployment to enable widespread 5G coverage in Australia. The industry will also need to develop a robust **business case** for 5G rollout, which will likely be demand driven, to support the significant capital expenditure required.

### Network slicing

Network slicing allows operators to split their network into separate sub-networks (also referred to as slices), enabling them to dedicate network resources to different users and applications. Sub-networks can 'slice' the infrastructure resources from the physical network to create virtual independent networks. This is a significant development from previous mobile network generations, as it enables an operator to deliver many different capabilities by creating slices that can be tailored for the intended usage. For example, an operator could create a network slice for IoT devices, or alternatively, a network slice for higher security for a higher quality of service for government or public safety uses.

Network slicing also provides a model for infrastructure sharing between network operators. In this case, a single transmitter's network could be shared with more than one operator. Given the capital expenditure that will be associated with 5G rollout, network slicing can provide a cost effective, short-term solution for operators.

Figure 2—5G network slicing enables operators to create separate virtual networks to meet application requirements



Source: Based on figure 2 from the ITU article, [‘Why end-to-end network slicing will be important for 5G.’](#)

### Mesh networks

Mesh networks can be utilised to increase the range of coverage, where the ‘mesh’ is an interconnection among a network of devices. Only one device in the mesh needs to be connected to the network, which can then relay data to other nearby devices.

Mesh networks not only provide the opportunity to support 5G deployment but also have the additional benefit of providing efficient network speeds. Through dynamic routing, devices on a mesh network are able to seek the fastest and most reliable pathway to send and receive data. As such, this architecture can provide a cost effective solution for coverage in more remote areas. For example,

primary industries would benefit from this network approach by simplifying network connections and costs associated with deploying and managing an IoT sensor network. However, the application of mesh networks is still highly speculative as the industry considers how they will operate in practice and in different environments. This may contribute to the development of new business models for 5G.

### Spectrum sharing

Spectrum is a critical enabler of Australia's current and future communications infrastructure. The specific spectrum bands and quantity of spectrum required for 5G are still being considered. However, 5G will likely require a mix of low, medium and high frequency spectrum to meet different scenarios relating to coverage, connectivity, and latency:

- Low frequency (less than 1GHz)—providing widespread coverage across urban, suburban and rural areas and supporting IoT for low data rate applications.
- Medium frequency (1–6GHz)—providing good coverage and high speeds, and including the expected initial 5G range of 3.3–3.8GHz which has been identified as the most likely band for launching 5G globally.
- High frequency (above 6GHz)—providing ultra-high broadband speeds for advanced mobile broadband applications, and most suitable for applications in dense traffic hotspots.

5G technologies can be expected to deliver improvements in spectral efficiency (the data rate that can be supported per unit of spectrum). However, the use of 5G networks for applications such as widespread industrial applications is likely to require significantly more amounts of contiguous spectrum to be made available.

While some of the potential bands for 5G currently have unused spectrum, other bands would need to be 'refarmed', noting that it is likely that bands currently used for 2G, 3G and 4G in Australia will transition over time to 5G. Refarming enables spectrum to be transitioned to the highest value use as required. The refarming of spectrum already held by mobile broadband operators is a commercial decision for those operators. 5G is also expected to provide the opportunity for 'soft-refarming' where 4G and 5G technologies can both be supported simultaneously, minimising the impact to legacy devices during transition periods.

Spectrum sharing, that is spectrum accessed by numerous users on a shared basis, has also been identified as an option for 5G technology. Spectrum sharing encompasses a range of different aspects of spectrum management. Spectrum can be shared by geography, time, economic priority schemes, code modulation, polarisation, directionality or power. Access to spectrum is divided between users so it can be used without interference issues.

5G opens up new opportunities for increased spectrum sharing, through mechanisms such as network slicing. 5G technology is also designed to support shared arrangements, and allows for the sharing of the same spectrum ('unlicensed Wi-Fi' spectrum) with other technologies. Operators can augment their holdings in situations where existing exclusive holdings are insufficient to meet customer needs. Spectrum sharing in the 5G context is also supported by the expected use of highly directional antenna technology which would enable operators to operate in closer proximity without interference.

### Antenna technology and network topology

5G will require radically different structures of networks if it is to achieve successful deployment in Australia. As 5G will likely utilise different frequencies, new equipment will be necessary. Additionally, the higher frequency 5G spectrum can only travel a small distance and will need more cells to ensure adequate coverage. However, antennas and equipment will be smaller, making it easier to attach these cells to existing infrastructure such as street lights and buildings.

The more dense deployment of cells will also give rise to other approaches that improve the reliability of data transmission across a 5G network. Data may be divided into individual streams and transmitted through multiple antenna segments in a process called Multiple Input Multiple Output (MIMO) which allows for more information to be transmitted simultaneously. This technique is further empowered by 'beamforming' which allows base stations to direct focused beams of energy to a specific area rather than dissipate the available power of a larger area. These developments will enable more efficient transmission and increase overall throughput.

5G is also expected to assist the adoption of IoT by further reducing power consumption through extended discontinuous reception. In this scenario, IoT devices shift between active and inactive cycles, transmitting only when required. This will allow connected devices to operate for extended periods on a single charge, reducing operational costs.

5G will also increase the support for a greater density of devices that would have otherwise been limited by the capacity on 3G and 4G networks. They will also enhance IoT deployment through the use of network slicing to create virtual network configurations that are optimised for the low power and coverage requirements of IoT networks.

### Business case

For Australians to experience the benefits of 5G, the communications sector will need to explore and develop new business cases to attract investment and support the rollout of 5G services. As 5G becomes an integral part of the communications ecosystem, the sector will need to be agile to respond to the needs and expectations of other sectors which will be seeking to take advantage of these next generation networks.

While residential consumers will inevitably be attracted to the enhanced mobile broadband services offered by 5G, it is the industrial applications for 5G where industry expects to see the greatest opportunity for new business models.

Compelling industrial applications are still to be developed. For example, industry sectors can be expected to seek tailored solutions for their business needs such as enhancing their local area network or enabling autonomous systems, and small businesses will look for low cost deployments of IoT.

It is therefore expected that the model for 5G will be demand driven and will require the communications industry to foster new business opportunities.

## How are countries preparing for 5G?

In preparation for 5G, many countries have been taking steps to test the technology and review their spectrum arrangements.

### Examples of 5G work being undertaken by other countries

The United States is clearing the 600MHz band through an incentive auction for the potential early deployment of 5G. The United States has also identified reforms to infrastructure deployment as a priority for 5G rollout. Mobile network operators are also conducting trials of low-band spectrum for use in 5G services.

The Asia-Pacific Telecommunity (APT), the regional arm of the ITU, approved a recommendation for the use of the 700MHz band for 5G, with 26 countries in the Asia-Pacific region identifying this band for this use, including Australia, Japan, South Korea and New Zealand.

Korea and Japan have stated their intention to use some or all of the 26.5 to 29.5GHz range to trial enhanced mobile broadband applications ahead of the 2018 Winter and 2020 Summer Olympics respectively. It is expected that these trials will lead to commercial availability of 5G services.

The European Communications Commission (ECC) identified the 3.4–3.8 GHz and 26GHz band (from 24.25 to 27.5GHz) bands for the deployment of 5G in Europe. All European countries are expected to select at least part of this range to launch 5G by 2020.

In the United Kingdom, the government launched its 5G strategy in March 2017. It is funding testbeds to understand the different deployment requirements and security considerations for 5G. The United Kingdom is also working to make suitable spectrum available in the high (24.25 GHz–27.5 GHz, and other bands above 30 GHz), medium (3.4–3.8 GHz) and low frequency (700 MHz) bands.

### Industry 5G preparations in Australia

Australia is well positioned to harness the opportunities of 5G. Australia has an effective and competitive mobile communications market, with voice and data coverage available to more than 99 per cent of the population.<sup>4</sup> It is the top performer internationally in terms of having in place effective enablers—infrastructure, affordability, consumer readiness and content availability—to support mobile internet adoption.<sup>5</sup>

5G trials have already commenced in Australia, with each of the main carriers working with mobile equipment suppliers in testing the application and limits of the technology. These trials will continue and will inform the communications sector on how 5G can be effectively deployed for the Australian environment.

<sup>4</sup> Department of Communications and the Arts, accessed 1 September 2017, '[Mobile phone towers](#)'.

<sup>5</sup> GSM Association, 24 June 2016, '[Global Mobile Connectivity Index](#)'.

## The Government's direction for 5G

The Government has made significant investments to improve telecommunications infrastructure in Australia, through the NBN and the Mobile Black Spot Program. The Government is also working to create a policy and regulatory environment that supports a competitive and innovative communications market.

The Government recognises that 5G will enable innovation and productivity across industry sectors and can significantly contribute to Australian's growth and future prosperity. Therefore, the Government will focus on enabling the early deployment of this new generation of mobile networks in Australia and encourage its use in delivering new services and applications.

The Government will support the timely rollout of 5G in Australia to enable the next wave of broad-based industry productivity, and support the growth of Australia's digital economy.

Industry expects and needs to lead the deployment of 5G. However, the Government has a role in supporting network rollout by modernising policy and regulatory frameworks and removing barriers that would delay rollout and adoption unnecessarily.

In the first instance, the Government will support the early deployment of 5G in Australia by:

- making spectrum available in a timely manner
- actively engaging in international spectrum harmonisation activities
- streamlining arrangements to allow mobile carriers to deploy infrastructure more quickly, and
- reviewing existing telecommunications regulatory arrangements to ensure they are fit-for-purpose.

### Making spectrum available in a timely manner

A clear, efficient and flexible regulatory framework governing spectrum access will be essential to support the timely deployment of 5G networks in Australia.

The Government is currently undertaking work to modernise Australia's spectrum management framework to ensure it remains fit-for-purpose. In May 2017, it outlined its proposed reforms to the framework which are designed to simplify and streamline the processes for spectrum allocation and provide a transparent, efficient and flexible spectrum management framework. This will be the most significant change to the Australian spectrum management framework in the last 25 years.

The reforms will remove barriers between licence types, and enable flexible licensing issue and allocation processes. This strategic approach will remove outdated processes and support the Australian Communications and Media Authority (the ACMA) to more effectively respond to market demands and new technologies, such as 5G. This will help Australia remain internationally competitive with a modern, innovative economy over the coming decades.

#### **The Government will put in place its new spectrum management framework by 2019.**

In addition, the ACMA will continue to work on making spectrum available for 5G. The ACMA has been investigating the use of 1.5GHz and 3.6GHz and high frequency mmWave bands in considering additional spectrum for mobile broadband services. The ACMA has decided to prioritise refarming of the 3.6GHz band over the 1.5GHz band, citing industry submissions noting this band is likely to be a pioneer band for early 5G deployments and the need to provide greater clarity and investment certainty for incumbents and potential new band entrants alike. The ACMA is currently engaging with industry on which parts of the 3.6GHz band should be reallocated and on what terms. This approach also follows international trends which have seen the 3.6GHz band commonly used for 5G trials.

#### **The ACMA will work to bring 3.6GHz spectrum to auction in 2018.**

### Actively engaging in international spectrum harmonisation activities

There is already significant work underway globally with several countries trialling 5G, but standards for this new generation technology are yet to be finalised. The formal, international process to define 5G is led by the ITU. The ITU's Working Party 5D is responsible for shaping the standard for "futuristic mobile technologies" to support International Mobile Telecommunications (IMT) for 2020 and beyond.<sup>6</sup> This process is known as IMT-2020.

Stakeholders such as regulatory and policy setting bodies, hardware manufacturers and governments of countries in which they are based will be seeking to influence the international dialogue. A key body is the industry-driven 3GPP which undertakes technology standardisation. Collectively, the ITU and 3GPP will drive spectrum harmonisation activities: the ITU, led by administrations, will focus on the spectrum requirements; and the 3GPP, led by industry, will concentrate on equipment and device standards.

Industry is well-placed to lead the standardisation process particularly given its role identifying the application of 5G technologies. However, there is also an important role for the Government in these processes. This is particularly the case in the harmonisation of international spectrum arrangements which will have significant impact on the availability and cost of 5G devices in Australia and can be strongly contested.

In the past, Australia and the Asia-Pacific region have been influential in contributing to standards and spectrum plans that have been adopted across the world. This ensured that Australia was able to adopt new technologies quickly and that the Australian market could take advantage of the economies of scale and have a greater choice of mobile handset equipment.

**The Government will ensure strong participation by Australian in domestic and international discussions about 5G spectrum harmonisation.** Our continued involvement provides the opportunity to contribute to this dialogue and secure outcomes that will benefit the adoption of 5G in Australia.

### Streamlining arrangements to allow mobile carriers to deploy infrastructure more quickly

The design and deployment of mobile networks will be radically different from those of today. 5G is expected to require additional infrastructure in new forms, including smaller cells and more densely-located antennas, particularly in the use of high-band spectrum.

Carriers have specific powers and immunities relating to telecommunications infrastructure deployment and installation. These laws help carriers to rollout telecommunications infrastructure quickly in a nationally-uniform way, rather than having to follow state, territory and local government requirements. These laws have existed in their current form since 1997.

The Government has recently consulted on proposed new arrangements that take account of technology developments and changes in operating practices as well as identifying opportunities to streamline deployment processes. Under these new proposed arrangements, mobile carriers would be able to rollout new communications technologies such as 5G more efficiently.

The Government understands that some members of the community have expressed concerns about the impact on public amenity from increased telecommunications infrastructure. The Government considers that telecommunications providers should work with local communities to address concerns about their infrastructure plans and is encouraging industry to consider consultation requirements for future 5G networks.

**The Government continues to work with stakeholders and will implement the first tranche of changes to carrier powers and immunities following the conclusion of the consultation process.**

<sup>6</sup> ITU, accessed 1 September, ITU towards "[IMT for 2020 and beyond](#)."

5G—Enabling the future economy  
[www.communications.gov.au](http://www.communications.gov.au)  
[www.arts.gov.au](http://www.arts.gov.au)  
[www.classification.gov.au](http://www.classification.gov.au)

## Reviewing existing telecommunications regulatory arrangements to ensure they are fit-for-purpose

The pace of change in the communications sector is impacting on the effectiveness of the existing telecommunications regulatory framework. In response, the Government is progressively working to modernise the regulatory architecture to ensure that the regulatory and policy settings flexibly respond to the current and future needs of the communications sector.

In undertaking reform, the Government is cognisant that the communications regulatory framework will need to be sufficiently flexible to address the emergence of new technologies and business models.

5G deployment will benefit from the Government's reform efforts, including updates to the regulatory framework for telecommunications and radio spectrum and modernising the ACMA. In these cases, the Government has been revising regulation to shift it away from the traditional vertical telecommunications sectors to principles based, flexible arrangements. This will provide the versatility necessary to account for 5G developments and services.

**The Government will continue to work with industry to modernise current telecommunications regulatory arrangements to ensure they encourage competition and innovation in the sector.**

As with previous mobile networks, cybersecurity will be a critical consideration as 5G is deployed. Security will be even more so a challenge for 5G, as the reliability of communications will be pivotal in the technology's ability to deliver benefits, particularly in the case of critical communications.

Additionally, in providing the architecture for automation, 5G networks will trigger an ever-increasing volume of data. While the bulk of data will be machine-to-machine communications, users will want assurance that their personal information is protected. User consent will be an area of growing complexity due to the intersection between autonomous systems and the individual.

Industry has strong incentives to address cybersecurity risks in 5G's new types of network deployments and systems. However, **the Government will continue to assess cybersecurity and privacy issues as they evolve to ensure Australians have confidence in using 5G.**

## Next steps

The Government recognises the opportunities presented by 5G for economy-wide transformation, creating productivity benefits in sectors such as transportation, health, manufacturing and agriculture. However, realising the benefits of 5G in sectors other than communications will need the right sectoral regulatory settings.

**The Government will work to ensure that sectoral regulatory frameworks are updated to take advantage of 5G.** The communications portfolio is well-placed to facilitate an ongoing strategic dialogue on 5G that will support sectors to identify and work towards unlocking the potential benefits of the technology. This dialogue would provide a starting point for greater engagement across Government and with industry and the community.

To that end, **the Government will establish a 5G working group that will bring together representatives from across Government and industry.** The working group will create a platform for this strategic dialogue with a mandate to seek out opportunities and emerging issues on 5G. This will provide better coverage across Government of the evolving policy and regulatory challenges associated with 5G.



# House of Representatives Standing Committee on Communications and the Arts: Inquiry into the deployment, adoption and application of 5G in Australia

## Submission

November 2019



2020-02-24 - Ordinary Meeting Of Council

Attachment 6.3.2

Inquiry into the deployment, adoption and application of 5G in Australia  
Submission 330

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## Introduction

Digital connectivity is a key enabler of Australia's social and economic activity. The mobile and fixed telecommunications networks that provide this connectivity are critical to our lives. Mobile services have long outnumbered fixed services, although fixed services carry greater volumes of data. The direct contribution from the technology sector in Australia is around \$69 billion while the broader total contribution from the technology sector is around \$122 billion (including both direct and indirect contributions).<sup>1</sup>

While still at an early stage, the fifth generation of mobile technology, or 5G, promises to be a significant advance on current 3G and 4G networks. 5G is designed to provide greater network capacity, higher speeds and lower latency. It is expected to be a transformative technology that could have significant implications; supporting greater innovation, productivity and international competitiveness. However, there is a need to keep 5G in perspective and balance hype with the reality.

The Government recognises the potential of 5G and put in place Australia's first 5G Strategy in October 2017. The Department of Communications and the Arts (the Department) is working with industry to implement the 5G Strategy, through spectrum allocation and improving regulations such as powers and immunities in order to facilitate the rollout of 5G and its operation. The establishment of the 5G Working Group is another example of this collaboration.

A large amount of material has been published about 5G as a technology and its potential uses. We also expect many other submitters will cover these matters in detail with the Committee. Our submission therefore discusses 5G technology and its uses only briefly, and largely where this helps explain 5G's capabilities and related policy issues. In the main, our submission focusses on the potential benefits of 5G for Australia and what the Government is doing to support its rollout, up-take and productive use.

## 5G technology and network design

5G represents a step change in mobile communications, with several characteristics that differentiate it from 4G. In particular, 5G will offer significantly greater capacity and faster data speeds, significantly lower signal latency or delay, and will support much larger numbers of devices in a given area.

5G also promises better outcomes in terms of spectrum efficiency, energy usage (both in the network and in devices), mobility at high speed and reliability.

It has been deliberately designed to deliver greater capabilities to support improved and new applications, not only for the mass market, but also industrial and enterprise users. As such 5G is seen as a potential general purpose technology that can underpin a range of industrial, agricultural and other commercial applications.

To achieve these outcomes 5G will operate over several different spectrum bands, including low bands (sub 1 GHz), mid bands (1 to 6 GHz) and high, or millimetre wave (mmWave), bands (24 to 86 GHz). The reason for this is that signals can travel longer distances at low frequencies but carry less data, while they can carry large amounts of data at high frequencies but only over shorter distances.

<sup>1</sup> AlphaBeta, September 2019, *Australia's Digital Opportunity: Growing a \$122 billion a year tech industry*, Page 12, [www.alphabeta.com/wp-content/uploads/2019/09/australias-digital-dividend-final.pdf](http://www.alphabeta.com/wp-content/uploads/2019/09/australias-digital-dividend-final.pdf)



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5G network operators will draw on the complementary properties of these different spectrum bands to deliver the full potential of 5G.

This use of spectrum will see a different approach to network design to prior generations of mobile telecommunications. 5G will continue to use towers with transmitters using lower bands, providing wide area coverage. In areas with greater concentrations of users and traffic, 5G will use high band frequencies to carry larger amounts of data with less latency but over shorter distances, and will use more small cells to do this. Typically small cells are used in high traffic areas such as transport hubs or office buildings, as is common with 4G today.

Generally established carriers like Telstra, Optus and Vodafone in Australia will operate commercial networks offering services to the public. However, 5G can also be used to operate private networks. For example, 5G can be used to provide networking in a specific area such as a factory or warehouse. Apart from its high performance, 5G could reduce costs associated with more typical cabled approaches.

Features such as the use of different spectrum and new network design approaches raise new issues for Government, for example, in spectrum management and access to transmission sites.

In addition to its use of mmWave bands, 5G's capabilities are attributable to technologies like multiple input, multiple output (MIMO) antennas, beamforming, edge computing and network slicing. MIMO antennas have multiple constituent antennas to send and receive more data simultaneously. Beamforming uses MIMO and advanced signal processing algorithms to direct radio signals to users and devices using the best path, rather than transmitting signals in all directions.

With edge computing, data is processed near the edge of the network, where the data is generated, rather than a distant centralised data-processing facility, improving performance. Network slicing allows the network to be segmented or sliced allowing particular services and applications to particular users like consumers, businesses or utilities on a dedicated basis. This makes it feasible for a 5G customer to be assigned a dedicated 5G network slice and rely on 5G for their communications rather than building their own dedicated network infrastructure.

As well as being a significant technological advance in its own right, 5G will also be able to work with other emerging technologies like cloud computing, artificial intelligence and robotics to provide powerful new tools for consumers and enterprise.

The International Mobile Telecommunications-2020 (IMT-2020) is the international technical framework supported by the International Telecommunications Union (ITU) to underpin 5G, including broadband networks and customer devices. The development of 5G as a concrete technology is, however, largely driven by industry, through the 3rd Generation Partnership Project (3GPP). In April 2019, 3GPP announced that work had been completed on Release 15, the first full set of 5G standards. Release 15 enables vendors to progress chip design and initial network implementation.<sup>2</sup> The second of the two 5G technical specifications, Release 16, is due for release in March 2020. Release 16 will provide the technical specifications for full-scale 5G networks.<sup>3</sup> Development of specifications will continue to be enhanced even after Release 16 is completed.<sup>4</sup>

<sup>2</sup> 3GPP, *Release 15*, [www.3gpp.org/release-15](http://www.3gpp.org/release-15)

<sup>3</sup> 3GPP, *Release 16*, [www.3gpp.org/release-16](http://www.3gpp.org/release-16)

<sup>4</sup> Ericsson, *5G NR release 16 – start of the 5G Evolution*, [www.ericsson.com/en/blog/2018/9/5g-nr-release-16--start-of-the-5g-evolution](http://www.ericsson.com/en/blog/2018/9/5g-nr-release-16--start-of-the-5g-evolution)

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At present, 5G is at a relatively early stage of deployment. Its standards are still being finalised, spectrum is still being allocated and equipment and handsets are still being developed. 5G is currently operating in conjunction with 4G infrastructure in what is known as non-standalone mode, with full 5G standalone operation to come. As such the full potential of 5G is still some time off. This needs to be taken into account in assessing 5G's performance today.

### Economic potential of 5G

Given its capabilities, 5G is widely seen as a platform for improved productivity growth around the world. The potential for new and improved products, and better efficiency in their production, means that 5G is likely to have an economic effect well beyond any short-term commercial return. Depending on the scale and pace of the rollout, and the development and uptake of the services it supports, it has the potential to produce far-reaching economic benefits by supporting, and even accelerating, Australia's digital transformation.

The overall productivity effect of 5G will stem from how inputs and outputs change as a result of the technology. On the outputs side, the benefits from 5G are expected to lead to more efficiently produced goods and services—a greater volume of production for given inputs. On the inputs side, there will be additional investment and costs to build the physical infrastructure of the network (upgrading new and existing base stations, and upgrading backhaul capacity) as well as purchasing access to spectrum.

In April 2018, the Department's Bureau of Communications and Arts Research (BCAR) examined publicly available sources on the likely costs and benefits of 5G in order to model the impact of the technology on productivity and economic growth. Based on this evidence, the BCAR estimated 5G could provide an additional \$1,300 to \$2,000 in gross domestic product per person after the first decade of the rollout.<sup>5</sup> The sooner 5G networks are deployed, the sooner these economic opportunities are likely to be realised.

This estimate of the economic benefit is likely to be conservative in that it does not fully take into account the consumer and non-market benefits that are not captured in economic statistics. These include cost and time savings for households enabled by better mobile telecommunications. The sharing economy (which harnesses household assets for market production) is also likely to increasingly blur the line between productive and household sectors in terms of the drivers of output, innovation and productivity growth.

Other research has identified the economic value and importance of 5G in the future. A 2019 report released by Deloitte estimated that the economic benefits of mobile connectivity (including 5G and other generations of technology) to the Australian economy by 2023 would be \$65 billion or approximately \$2500 for every Australian.<sup>6</sup> From a global perspective, a 2017 report commissioned by Qualcomm found that 5G could enable US\$12 trillion in economic activity by 2035.<sup>7</sup>

<sup>5</sup> BCAR, 2018, *Impacts of 5G on productivity and economic growth: Working paper*, Page 1,

[www.communications.gov.au/departmental-news/impacts-5g-productivity-and-economic-growth](http://www.communications.gov.au/departmental-news/impacts-5g-productivity-and-economic-growth)

<sup>6</sup> Deloitte Access Economics, 2019, *Mobile Nation 2019: The 5G future*, Page 1,

[www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-mobile-nation-2019-080419.pdf](http://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-mobile-nation-2019-080419.pdf)

<sup>7</sup> IHS Economics & IHS Technology, January 2017, *The 5G economy: How 5G technology will contribute to the global economy*, Page 4, [www.qualcomm.com/media/documents/files/ihs-5g-economic-impact-study.pdf](http://www.qualcomm.com/media/documents/files/ihs-5g-economic-impact-study.pdf)

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## 5G use cases

5G has three core capabilities around which use cases are built:

- Enhanced mobile broadband (eMBB);
- Ultra reliable, low latency communications (URLLC); and
- Massive machine to machine communications (MTC) – commonly associated with the enhanced Internet of Things (IoT).

5G has the potential to better support existing applications as well as new and emerging applications.

5G promises to significantly improve many existing uses of mobile and wireless broadband, both for the everyday consumer and businesses. This includes more data intensive applications like video conferencing, video streaming, online gaming, teleworking and extended reality. This is because 5G will provide much greater capacity and thus minimal congestion as well as low latency and high reliability. Moving traffic to 5G will also improve the performance of 4G services. The capability of enhanced mobile broadband was recently demonstrated by Telstra at this year's AFL Grand Final at the Melbourne Cricket Ground.<sup>8</sup> Telstra has indicated that 5G users experienced three to four times the speeds available on 4G, and 4G users also had improved performance due to traffic moving to 5G.<sup>9</sup>

Telstra's Chief Executive Officer, Andy Penn, has been reported as saying for 5G "the business case for the technology stands up purely on the increased capacity and throughput it gives to our networks".<sup>10</sup>

5G is being used to provide fixed broadband services in many countries. Optus has actively pursued this option in Australia, as has Verizon in the USA<sup>11</sup> and BT in the UK.<sup>12</sup>

Beyond the familiar mass market uses, 5G is seen as providing a wide range of new capabilities for commercial, industrial and other business users.

5G can significantly enhance the use of IoT, improving the use of networked remote sensors and actuators for data collection, analytics and control. IoT has been in operation for some time, using a range of communication platforms. However, 5G will facilitate new IoT applications as it can support more devices per square kilometre and will be able to utilise the ultra-low latency communications to support applications existing technologies cannot facilitate. Smart factories and warehouses, logistics management and autonomous vehicles are some examples expected to be able to leverage these capabilities.

<sup>8</sup> Nikos Katinakis, 22 September 2019, *5G arrives at the MCG, just in time for the AFL Grand Final*, Telstra Exchange, [www.exchange.telstra.com.au/5g-arrives-at-the-mcg-just-in-time-for-the-afl-grand-final/](http://www.exchange.telstra.com.au/5g-arrives-at-the-mcg-just-in-time-for-the-afl-grand-final/)

<sup>9</sup> Nikos Katinakis, 21 October 2019, Communications Day Congress, *Communications Day*, Page 9

<sup>10</sup> 25 February 2019, 5G price hike unlikely, say's Telstra's Andy Penn, *The Australian*, [www.theaustralian.com.au/business/technology/telstra-cba-team-for-5g-finance-applications/news-story/c056eed2ca7d0bc614944aedd2b12ea3](http://www.theaustralian.com.au/business/technology/telstra-cba-team-for-5g-finance-applications/news-story/c056eed2ca7d0bc614944aedd2b12ea3)

<sup>11</sup> George Paul, 13 September 2019, Verizon's fixed 5G improvements will boost the appeal of its broadband service, *Business Insider*, [www.businessinsider.com/verizons-fixed-5g-rollout-will-shake-up-home-internet-2019-9/?r=AU&IR=T](http://www.businessinsider.com/verizons-fixed-5g-rollout-will-shake-up-home-internet-2019-9/?r=AU&IR=T)

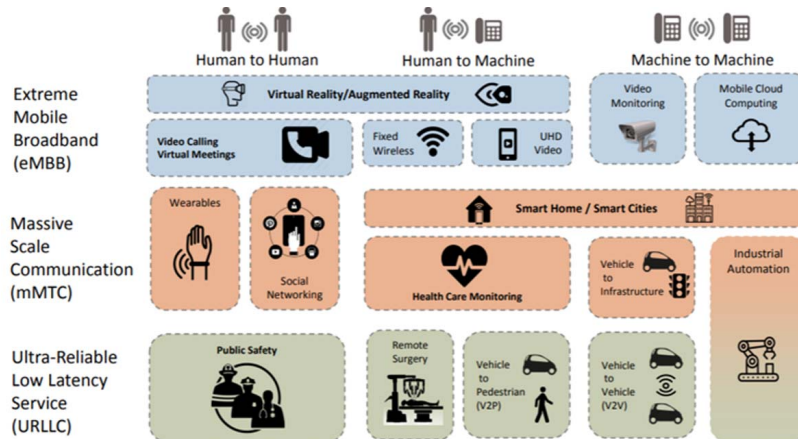
<sup>12</sup> Manny Pham, 9 October 2019, BT rings in convergence changes with Halo offer, *Mobile World Live*, [www.mobileworldlive.com/featured-content/home-banner/bt-rings-in-convergence-changes-with-halo-offer/](http://www.mobileworldlive.com/featured-content/home-banner/bt-rings-in-convergence-changes-with-halo-offer/)

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5G’s capabilities lend themselves to a wide range of other new use cases. The diagram below provides a sample of applications that may be enhanced or supported by 5G.



Source: 5G Americas, 5G Services and Use Cases<sup>13</sup>

While 5G will provide a connectivity platform of greater capability, users, particularly in the commercial sector who best understand their business needs, will play a key role. They can best determine how 5G’s capabilities can be best employed to innovate to improve production and distribution process and capture savings and productivity gains. Given 5G’s technological and commercial potential, particularly if combined with artificial intelligence and automation, significant work to develop use cases continues around the world. This includes work by vendors, carriers, software developers and retail service providers, typically collaborating closely.

Early reporting has already indicated a strong interest by business in 5G. For example, the recent *5G for Business in Australia* report identified that in the next 18 months 24 per cent of Australian businesses plan to adopt 5G services. Nearly 80 per cent of Australian businesses in the next three years are looking to adopt 5G.<sup>14</sup>

There are opportunities for Australian businesses to develop services and applications that leverage 5G. In this context, Telstra established its 5G Innovation Centre on the Gold Coast in 2018. Amongst other things, Telstra has been reported as working with the Commonwealth Bank on how to use 5G to provide better banking experiences.<sup>15</sup> Optus has access to SingTel’s 5G Garage in Singapore.<sup>16</sup> Global

<sup>13</sup> 5G Americas, November 2017, *5G Services and Use Cases: 5G Americas Whitepaper*, Page 19, [www.5gamericas.org/wp-content/uploads/2019/07/5G\\_Service\\_and\\_Use\\_Cases\\_FINAL.pdf](http://www.5gamericas.org/wp-content/uploads/2019/07/5G_Service_and_Use_Cases_FINAL.pdf)

<sup>14</sup> Eliza Booth, 18 October 2019, *Research explores the 5G readiness of Australian Businesses*, Infrastructure Magazine, [www.infrastructuremagazine.com.au/2019/10/18/research-explores-the-5g-readiness-of-australian-businesses/](http://www.infrastructuremagazine.com.au/2019/10/18/research-explores-the-5g-readiness-of-australian-businesses/)

<sup>15</sup> Telstra Media Release, 25 February 2019, *Telstra, CBA and Ericsson to trial 5G for the banking sector*, [www.telstra.com.au/aboutus/media/media-releases/Telstra\\_CBA\\_Ericsson\\_trial\\_5G\\_banking\\_sector](http://www.telstra.com.au/aboutus/media/media-releases/Telstra_CBA_Ericsson_trial_5G_banking_sector)

<sup>16</sup> Singtel News Release, 22 February 2019, *Singtel, Optus, Ericsson and OPPO achieve ground-breaking Augmented Reality 5G video call between Singapore and Australia*, [www.singtel.com/about-us/news-releases/singtel-optus-ericsson-and-oppo-achieve-ground-breaking-augmented-reality-5g-vi](http://www.singtel.com/about-us/news-releases/singtel-optus-ericsson-and-oppo-achieve-ground-breaking-augmented-reality-5g-vi)

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software developer, InfoSys, opened one of five 5G innovation labs globally in Melbourne in June 2019.<sup>17</sup>

In December 2018, the Minister for Industry, Innovation and Science, the Hon Karen Andrews MP, launched Australia's Tech Future.<sup>18</sup> The document sets out a vision for a strong, safe and inclusive economy, boosted by digital technology, identifying four key areas of focus – people, services, digital assets and the enabling environment. 5G is identified as a potential general purpose technology. The document notes the opportunities and challenges of new technologies and seeks to ensure that Australia's digital infrastructure, such as 5G, is built on the principle of 'secure-by-design'.

How to foster the productive use of 5G across the economy and society is a key priority for the Government. As businesses see their competitors looking to use 5G to gain a commercial edge, they too will need to do so, opening up the prospective of a wave of 5G-based innovation. With an early lead in 5G in the field, there may be scope for Australian firms to leverage this intellectual property more widely around the world.

### Government's 5G Strategy

Recognising the transformative potential of 5G, the Australian Government released a 5G Strategy 'Enabling the Future Economy', in 2017.<sup>19</sup>

The 5G Strategy is set within the context of Australia's competitive mobile communications market and competition is fundamental to the overall Strategy. This is discussed below.

The Strategy highlighted four key actions the Government would take to support the timely rollout of 5G in Australia:

- making spectrum available in a timely manner;
- actively engaging in global spectrum harmonisation processes;
- streamlining arrangements for the deployment of infrastructure; and
- reviewing other regulatory arrangements to ensure they are fit-for-purpose.

The Strategy also flagged the formation of the 5G Working Group to enable an ongoing dialogue between industry and Government on 5G issues.

In targeting these matters, Australia's 5G Strategy is similar to many others in developed countries around the world.

The following is a short report on progress against the Strategy, noting that its elements are under constant review, with a view to updating it as appropriate. We envisage the Committee's report will provide useful guidance in this regard.

<sup>17</sup> Infosys Newsroom, 6 June 2019, *Infosys launches Melbourne 5G Living Lab*, [www.infosys.com/newsroom/features/Pages/launches-5G-living-lab-melbourne.aspx](http://www.infosys.com/newsroom/features/Pages/launches-5G-living-lab-melbourne.aspx)

<sup>18</sup> Department of Industry, Innovation and Science, December 2018, *Australia's Tech Future*, [www.industry.gov.au/data-and-publications/australias-tech-future](http://www.industry.gov.au/data-and-publications/australias-tech-future)

<sup>19</sup> Department of Communications and the Arts, October 2017, *5G—Enabling the future economy*, [www.communications.gov.au/departmental-news/5g-enabling-future-economy](http://www.communications.gov.au/departmental-news/5g-enabling-future-economy)

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### *Competition*

Competition is the foundation of Australia's 5G Strategy. Competition in Australia's mobile market has been highly successful in delivering investment in infrastructure across both metropolitan and regional Australia, strong consumer take-up of mobile services and positive consumer outcomes on pricing and inclusions. This has occurred with minimal regulation. Australia has been assessed as having some of the world's best mobile services.<sup>20</sup>

As noted above, 5G is being used as a fixed broadband option by Optus and in markets overseas. Such competition is welcome. 5G's ability to compete in this market may, however, be constrained by its carrying capacity relative to that of fixed lines. That is, the vast majority of data in Australia is currently delivered over the fixed line networks, notwithstanding the vast majority of services being mobile.<sup>21</sup> In this context, 5G may be a more attractive option for users needing a high speed service with relatively low data consumption.

The Department's preference is to continue to foster strong competition and minimal regulation as the best means of promoting network investment and delivering consumer benefits. In this context, it is important that competitors are strong and robust and have appropriate flexibility to determine their mode of operation. The spectrum allocation framework takes into account the promotion of competition (as a relevant policy objective of the Government, and through the imposition of allocation limits to prevent monopolisation of the spectrum and promote competitive market outcomes). Mobile network operators are treated equally in other relevant areas like numbering and powers and immunities. The 5G Strategy should be understood as operating in this broader pro-competitive framework.

### *Spectrum*

Spectrum is key to the rollout of 5G. Spectrum allocations involve a number of complex decisions regarding existing users and future usage and can take a number of years to plan and undertake.

The rollout of 5G services in Australia is being facilitated by Government actions to make 5G-suitable spectrum available in a timely manner.

In December 2018, the Government successfully auctioned 125 MHz of the 3.6 GHz spectrum which mobile network operators are starting to use for 5G via early access arrangements to the band.

Optus and Telstra also hold spectrum in the 3.4 GHz band which we understand they are currently using for early 5G services. The Government is working to optimise the 3.4 GHz band to make it better suited for 5G services. As the existing wireless broadband arrangements in the band are fragmented and not optimally configured for future technologies, including 5G, the Australian Communications and Media Authority (ACMA) is considering restacking apparatus licences in regional areas and undertaking a defragmentation of the band. This will improve spectral efficiencies for incumbents, and in turn, support the deployment of 5G infrastructure. The Government also anticipates the optimisation of the band will free up further spectrum, which ACMA can allocate via market-based mechanisms.

<sup>20</sup> GSMA, 2018, *State of Mobile Internet Connectivity 2018*, Page 7 [www.gsma.com/mobilefordevelopment/resources/state-of-mobile-internet-connectivity-2018/](http://www.gsma.com/mobilefordevelopment/resources/state-of-mobile-internet-connectivity-2018/)

<sup>21</sup> ACMA, 2019, *ACMA Communications Report 2017-18*, Page 61, [www.acma.gov.au/publications/2019-02/report/communications-report-2017-18](http://www.acma.gov.au/publications/2019-02/report/communications-report-2017-18)

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The Government has also recently taken steps to bring 5G-suitable mmWave spectrum to market. On 25 October 2019, the Minister for Communications, Cyber Safety and the Arts, the Hon Paul Fletcher announced his decision to issue a spectrum re-allocation declaration for the 26 GHz band, consistent with advice from ACMA. This decision paves the way for ACMA to auction 2.4 GHz of 5G-suitable spectrum in the 26 GHz band in early 2021. This will give carriers access to mmWave band spectrum with high data carrying capacity, which will be important for achieving 5G's full potential. The spectrum will be auctioned in geographic areas covering 29 cities and regional centres. Pending access to spectrum in the 26 GHz band, carriers and others can make use of scientific licences to trial services in new bands, including mmWave.

Spectrum in the 3.4 GHz, 3.6 GHz and 26 GHz bands will be vital to ensuring that mobile network operators can optimally deploy 5G networks around Australia. The 3.4 GHz and 3.6 GHz bands will provide broader geographic coverage for 5G services, while the 26 GHz band will provide for shorter-range, higher capacity services.

The Department continues to work with ACMA to determine required spectrum, undertake spectrum auctions for allocation and to provide the regulatory framework to prevent monopolies and promote competition. ACMA's Five Year Spectrum Outlook 2019-2023 (FYSO) provides details of its forward looking spectrum management priorities and work plan. This includes optimisation of existing holdings in the 3.4 GHz, and the allocation of spectrum in the 26 GHz band, as mentioned above.

### *Global spectrum harmonisation*

The Government is further supporting 5G through its work internationally on spectrum harmonisation. This includes engagement in international forums such as the World Radiocommunication Conference (WRC), where member states of the International Telecommunication Union (ITU), and key industry experts, are working to identify frequency bands for use by 5G International Mobile Telecommunication (IMT) services, and coordinate the development of telecommunication standards.

The ITU is the United Nations' specialised agency for information and communication technologies. Every three to four years, the ITU holds the WRC to review and, if necessary, revise the Radio Regulations, the international treaty governing the use of the radio-frequency spectrum and satellite orbits.

A multi-stakeholder Australian delegation is currently attending the World Radiocommunication Conference 2019 (WRC-19) in Sharm El-Sheikh, Egypt. One of the key issues being considered at WRC-19 is the identification of several frequency bands above 24 GHz for use by IMT services. Australia supports identification (and associated spectrum allocations) in the 24.25-27.5 GHz, 40.5-42.5 GHz, 42.5-43.5 GHz, 47.2-50.2 GHz and 66-71 GHz frequency bands, subject to varying band-specific conditions.

Additionally, several other countries have made proposals for bands between 3.3 GHz and 24 GHz to be studied for use by IMT over the next four years.

### *Deployment*

Carriers can choose to deploy facilities under relevant state and territory planning laws or Commonwealth laws in some cases. Where a carrier chooses to deploy under state or territory planning laws, they must follow the processes for community and local government consultations set out in those laws. Approvals for the installation of free-standing towers, for example, are the responsibility of state, territory and local governments.



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However, there are laws at the Commonwealth level that are designed to assist carriers to deploy their networks and support ready access to telecommunications services. Telecommunications carriers have certain specific legal powers under Schedule 3<sup>22</sup> of the *Telecommunications Act 1997* (the Act) to undertake inspections and to install and maintain facilities, and have immunity from some state and territory laws, such as planning, when doing so. These laws are known as carrier “powers and immunities” and primarily relate to low-impact facilities which are specified in the *Telecommunications (Low-impact Facilities) Determination 2018*<sup>23</sup> (LIFD). Powers and immunities are important as they provide a nationally consistent framework for the deployment of facilities that helps reduce the time and cost involved for carriers in delivering services to the wider community.

The types of facilities that are listed as low-impact are those considered to be essential to the effective and efficient operation of telecommunications networks in providing services to the public, but are considered to be of low visual impact and unlikely to cause significant disruption to the community during installation or operation. Low-impact facilities include cabinets, antennas, or underground cables, but exclude other kinds of facilities such as free standing towers, which are covered by state and territory arrangements as noted above.

The specification of low-impact facilities encourages carriers to roll out networks using components that fall within strict type, size, colour and location limitations, thereby minimising the impact of telecommunications infrastructure on the community generally while expediting the supply of services.

The powers and immunities framework has safeguards built in so the interests of landowners and the community are taken into account. In exercising their powers, carriers must adhere to strict requirements including notifying landholders and land occupiers of their intention to install telecommunications infrastructure on land. Carriers must also advise landholders of their right to object, the grounds for objection (for example, the use of the land or the location of the facility on the land), the right to have a decision reviewed by the Telecommunications Industry Ombudsman (TIO) and timeframes for lodging objections.

In addition to the conditions in the Act, the *Telecommunications Code of Practice 2018*<sup>24</sup> (Code of Practice) sets out further obligations on carriers. For example, under the Code of Practice, carriers must comply with good engineering practice and consider noise limits, the environment, and obstruction of essential services when installing or maintaining facilities. Obligations on carriers under the Act and Code of Practice also apply to contractors acting on behalf of carriers.

The Act makes provision for the payment of compensation in certain circumstances. Clause 42 of Schedule 3 to the Act specifically provides that if a person suffers financial loss or damage because of a carrier’s actions in exercising its powers and immunities, compensation is payable. If an affected party is dissatisfied with the amount of compensation offered, it may apply to a court of competent jurisdiction. The laws also allow for compensation with regard to an acquisition of property.

Telecommunications carriers installing low-impact facilities for mobile phone networks must also comply with the Industry Code for *Mobile Phone Base Station Deployment C564:2018*<sup>25</sup> (the Industry

<sup>22</sup> *Telecommunications Act 1997*, [www.legislation.gov.au/Details/C2019C00273/Html/Volume\\_2#\\_Toc19539643](http://www.legislation.gov.au/Details/C2019C00273/Html/Volume_2#_Toc19539643)

<sup>23</sup> *Telecommunications (Low-impact Facilities) Determination 2018*, [www.legislation.gov.au/Details/F2018C00150](http://www.legislation.gov.au/Details/F2018C00150)

<sup>24</sup> *Telecommunications Code of Practice 2018*, [www.legislation.gov.au/Details/F2018L00171](http://www.legislation.gov.au/Details/F2018L00171)

<sup>25</sup> Communications Alliance, 2018, *Industry Code C564:2018 Mobile Phone Base Station Deployment*, [www.commsalliance.com.au/\\_data/assets/pdf\\_file/0018/62208/C564\\_2018-181206.pdf](http://www.commsalliance.com.au/_data/assets/pdf_file/0018/62208/C564_2018-181206.pdf)

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Code). The Industry Code sets out additional processes that mobile carriers are to follow when they are installing low-impact facilities.

Following public consultation, in early 2018 the Government amended the powers and immunities framework with a number of changes to help carriers rollout new infrastructure, including 5G. The amendments clarified a facility is a co-located facility where it is installed on or in a telecommunications facility or public utility infrastructure. They also specified omnidirectional antennas as low-impact facilities in residential and commercial areas, not just industrial and rural areas. In addition, they replaced the technology-specific term 'microcell' with 'radiocommunications facility' to be more inclusive of small cellular and non-cellular transmitters, including WiFi.

The Department is working to identify further opportunities to streamline deployment processes to support the timely rollout of 5G in Australia, whilst ensuring that the views of landowners and the community are taken into account.

To further help with the deployment of telecommunications infrastructure so it is readily available for users, the Department has proposed in various forums that state and territory planning regimes give greater consideration in their early stages to the provision of telecommunications facilities. This could include, for example, working with carriers to identify sites for facilities, rights of way for ducts and conduits and require the installation of ducts and conduits. This has gained some traction, particularly through the digital commitments in the Western Sydney City Deal (see below). Such engagement will be an ongoing focus for the Department.

The rollout of 5G facilities could also be facilitated by infrastructure owners like councils, state and territory governments or other authorities providing access to their assets. However, this would need to be at a cost and using arrangements that make it viable for carriers. Carriers, such as Telstra<sup>26</sup> and Optus,<sup>27</sup> have recently expressed concerns about rental arrangements proposed by NSW's Independent Pricing and Regulatory Tribunal for communication towers on Crown land.

Another area of interest to the Department, industry and other stakeholders is improving the visual amenity of telecommunications facilities. With 5G's network design there are opportunities to deploy facilities, like small cells, by integrating them into street furniture or co-locating on existing infrastructure with minimal visual impact. The Department is engaged in the Western Sydney City Deal, which includes a commitment to develop uniform local government engineering design standards and telecommunications planning to enhance connectivity outcomes.<sup>28</sup> Through mechanisms such as this there are opportunities to advocate for improvements in visual amenity.

### ***Reviewing other regulation***

The 5G Strategy also provides for the review of other regulation relevant to 5G. This has taken three main forms to date.

First, the Government has been reviewing and revising the *Radiocommunications Act 1992*, which governs the management of the spectrum so important to the operation of 5G and many other

<sup>26</sup> Itnews, 29 July 2019, *Telstra warns NSW influencing Australia-wide mobile costs*, [www.itnews.com.au/news/telstra-warns-nsw-influencing-australia-wide-mobile-costs-528807](http://www.itnews.com.au/news/telstra-warns-nsw-influencing-australia-wide-mobile-costs-528807)

<sup>27</sup> Optus, 2019, *Review of Rental Arrangements for Communication Towers on Crown Land*, [www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-section-9-submissions-rental-arrangements-of-communication-towers-on-crown-lands-draft-report/online-submission-optus-l-van-hooft-6-sep-2019-160414510.pdf](http://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-section-9-submissions-rental-arrangements-of-communication-towers-on-crown-lands-draft-report/online-submission-optus-l-van-hooft-6-sep-2019-160414510.pdf)

<sup>28</sup> *Western Sydney City Deal Implementation Plan*, 2018, [www.infrastructure.gov.au/cities/city-deals/western-sydney/files/western-sydney-city-deal-implementation-plan.pdf](http://www.infrastructure.gov.au/cities/city-deals/western-sydney/files/western-sydney-city-deal-implementation-plan.pdf)

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services. A key aim of this work has been to develop a more efficient process for the allocation of spectrum. This work is well advanced, following public consultation on draft legislation in May 2017. The Department now expects amendments to the existing legislation will be put forward in early 2020.

Second, a focus of the 5G Working Group is identifying regulatory enablers and barriers to 5G, including in industry sectors or 'verticals' in which 5G is expected to play a keen role. To date, the Working Group has focussed on the potential use of 5G in health, transport and agriculture, but has not identified significant regulatory issues at this time. A generic issue which has arisen is whether regulation governing the use of data could unduly inhibit the use of data collected by IoT applications. This is something the Department is continuing to explore. The role of the Working Group is discussed further below.

In considering 5G's potential use in various industry sectors, it is apparent that there may be issues outside the Commonwealth's jurisdiction and the regulation of 5G itself that are relevant to its success. If 5G is to be used to support downstream technologies they also need to have appropriate sectoral frameworks. For example, if 5G is to support autonomous vehicles there needs to be a framework for autonomous vehicles so there is scope for 5G to support them. In the case of autonomous vehicles, Australia is well advanced in this regard, in that several jurisdictions have relevant legislation in place, all have trials underway and there are Guidelines for Trial of Autonomous Vehicles in Australia.<sup>29</sup>

Third, the Department has recently established a deregulation review as part of the Government's wider deregulation agenda. This will be another mechanism by which possible regulatory enablers and barriers to 5G and its use can be explored.

### **5G Working Group**

In October 2017, the Government announced the formation of a 5G Working Group to bring together industry and Government. The Group was established in February 2018.

The Working Group provides a forum for ongoing dialogue between industry and the Government on 5G issues. A key focus of the group is to identify enablers and barriers to 5G and use cases that can help with sectoral productivity.

Membership of the 5G Working Group includes relevant Government departments, mobile carriers, equipment vendors and industry peak bodies.

The 5G Working Group's terms of reference are:

1. identify enablers and barriers to the deployment and effective use of 5G in Australia, including at the sector and industry level
2. examine how the Commonwealth regulatory settings in sectors, including but not limited to communications, can be optimised for 5G networks and technologies
3. provide a platform for collaboration across Government and industry on 5G matters
4. engage, with the input of subject matter experts, in ongoing strategic dialogue about 5G matters.<sup>30</sup>

<sup>29</sup> NTC, *Automated Vehicle Trial Guidelines*, [www.ntc.gov.au/codes-and-guidelines/automated-vehicle-trial-guidelines](http://www.ntc.gov.au/codes-and-guidelines/automated-vehicle-trial-guidelines)

<sup>30</sup> Department of Communications and the Arts, 2017, *5G Working Group membership and terms of reference*, [www.communications.gov.au/departmental-news/5g-working-group-membership-and-terms-reference](http://www.communications.gov.au/departmental-news/5g-working-group-membership-and-terms-reference)



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The Working Group has met four times to date and focussed on 5G's use in the transport, agricultural and health sectors as well as its ongoing role.

The Group's terms of reference have recently been reviewed and its role going forward is being considered.

### Western Sydney City Deal

In recognition of the importance of telecommunications in modern cities and in particular to the Western Parkland City that's growth is being supported by the construction of the Western Sydney International (Nancy-Bird Walton) Airport, the Western Sydney City Deal includes a number of digital commitments. These are developing a Western City Digital Action Plan, delivering a Smart Western City Program for smart and secure technology, developing a 5G Strategy including the trialling of 5G, and making data publicly available in line with open-data principles. Also relevant is the planning and housing commitment to develop uniform, best practice local government engineering design standards to simplify the development assessment process, including for telecommunications.

These commitments seek to raise awareness of the potential of 5G in our cities, demonstrate its utility through early use trials, streamline rollout through forward looking community-sensitive planning arrangements, and maximise its utility through appropriate open data arrangements. It is envisaged that the lessons learnt in Western Sydney may be of benefit in other contexts and the Department is interested in the role of 5G being considered in future City and Regional Deals.

### Concerns about the health effects of 5G

Radio transmitters on telecommunications equipment emit electromagnetic energy (EME) emissions to function. Importantly, these emissions are in the non-ionizing part of the electromagnetic energy spectrum.<sup>31</sup> There is nevertheless strict regulation of the EME from telecommunications facilities, so the community can have reassurance that there are no negative health effects from the EME from telecommunications facilities.

There are a number of agencies involved in the regulation of EME emissions from telecommunications equipment. These include the Australian Radiation and Nuclear Protection Agency (ARPANSA) and the National Health and Medical Research Council (NHMRC) in the Health portfolio. Within the Communications portfolio, the Department sets the policy and legislative framework for deployment of telecommunications equipment, and ACMA regulates industry's compliance with legislative requirements.

ARPANSA is the Australian Government's independent authority on radiation protection and nuclear safety. ARPANSA's role is to protect people and the environment from the harmful effects of radiation, which is done through a range of activities, including setting standards on the emission of radiation. The Department and ACMA, like industry, rely on the expert scientific advice of ARPANSA on EME.

The ARPANSA *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 200 GHz* (the RF Standard)<sup>32</sup> limits the amount of radio frequency EME telecommunications facilities can emit. The RF Standard is based on decades of Australian and international peer-reviewed research into EME and is set well below the level at which adverse health effects occur, it includes a

<sup>31</sup> ARPANSA, *What is radiation?*, [www.arpansa.gov.au/understanding-radiation/what-is-radiation](http://www.arpansa.gov.au/understanding-radiation/what-is-radiation)

<sup>32</sup> ARPANSA, 2002, *Maximum Exposure Levels to Radiofrequency Fields – 3 KHz to 300 GHz*, [www.arpansa.gov.au/sites/g/files/net3086/f/legacy/pubs/rps/rps3.pdf](http://www.arpansa.gov.au/sites/g/files/net3086/f/legacy/pubs/rps/rps3.pdf)



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wide safety margin to further protect the public, and covers the frequency ranges that 5G technology will use.

The *Radiocommunications Act 1992* allows ACMA to determine conditions in relation to a particular type of apparatus licence. The *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015* (LCD) sets the licence conditions for apparatus licences, including a requirement that transmitters operating under an apparatus licence must comply with the RF Standard.

Regarding spectrum licences, a standard licence condition for those licences requires compliance with the LCD. This regulatory approach means that transmitters being operated under a spectrum licence must also comply with RF Standard.

ACMA also regulates portable equipment, such as mobile phone handsets, through the *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2014* and the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2014*, which also requires compliance with the RF Standard.

Telecommunications devices and facilities are also subject to testing and compliance checks to ensure that they do not exceed the ARPANSA exposure limits. Equipment deployed as part of a 5G network will need to comply with the RF Standard and ACMA regulations just as other equipment does today.

### ***Research into EME***

The effects of EME exposure have been the subject of extensive and rigorous scientific study around the world for many decades. ARPANSA consults with the world's peak health bodies, such as the World Health Organization and the International Commission on Non-Ionizing Radiation Protection (ICNIRP), so that Australia can contribute to and benefit from the best international research and guidance on this matter. Based on the best available research, ARPANSA and other leading health authorities advise that there are no known health effects of EME at levels below the RF Standard.

There have been many studies done on electromagnetic energy, by a host of national and international bodies, which cover but are not necessarily restricted to the range in which 5G technology will operate. ARPANSA published an independent review of the state of research on RF health effects, covering a large number of studies, in its *Review of Radiofrequency Health Effects Research – Scientific Literature 2000-2012*.<sup>33</sup> These studies cover research on EME overall, including the frequency ranges where 5G technology will operate.

The Australian Government also directs funding to the NHMRC to implement a domestic research program about exposure to EME from mobile phones, mobile phone towers and broadcast towers. NHMRC has granted \$2.5 million over five years to the Australian Centre for Electromagnetic Bioeffects Research (ACEBR) to undertake a range of EME research projects. ACEBR's programs include research into human neurophysiology, cellular response studies, dosimetry, and social sciences<sup>34</sup>.

There has been an increased level of misinformation spread about EME and 5G through social media, including claims that research studies prove that EME is dangerous. Internationally, it has been noted that on occasion low-quality studies have been put forward as evidence that the deployment of 5G

<sup>33</sup> ARPANSA, 2014, *Review of Radiofrequency Health Effects Research – Scientific Literature 2000-2012* [www.arpansa.gov.au/sites/default/files/legacy/pubs/technicalreports/tr164.pdf](http://www.arpansa.gov.au/sites/default/files/legacy/pubs/technicalreports/tr164.pdf)

<sup>34</sup> Further information about ACEBR's research is available through its website at [www.acebr.uow.edu.au](http://www.acebr.uow.edu.au).



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will be dangerous.<sup>35</sup> Where a particular study raises community interest, ARPANSA and ACEBR may publish position statements about the implications of the study. For example, ARPANSA published a paper in 2018 in the *British Medical Journal Open* on mobile phone use and incidence of brain tumours. The research reported no increase in brain tumours that can be attributed to mobile phone use in Australians aged 20-59. The article received significant attention and some criticism. As a result, ARPANSA undertook further research to address the identified gap in their sample group and released its results in August this year<sup>36</sup> which showed that any increases in older people are minor and consistent with improvements in diagnosis.

Similarly, ACEBR has published an analysis of a US Toxicology Program study on rats. This study is often referred to by people who are concerned about EME. However, ACEBR's position statement notes several methodological and interpretational issues with the study, including abnormalities in the control group.<sup>37</sup>

### *Information for the community*

Depending on the particular nature of their concern, individuals and community groups may seek information about the safety and regulation of EME from a range of sources. Residents who have been notified of a proposed installation or maintenance activity may be supplied with information about a particular site from the relevant telecommunications carrier. This information usually includes a report of the expected EME from the site. Interested parties can also find this information by searching on the industry-managed Radio Frequency National Site Archive.<sup>38</sup> ACMA's website contains a range of information for both industry and consumers relating to EME from telecommunications facilities.<sup>39</sup> ARPANSA's website<sup>40</sup> provides a range of resources at a more technical level. ARPANSA also operates a program, accessible online, where the public can talk directly with scientific experts on EME exposure.<sup>41</sup>

If a person is concerned about a facility's compliance with EME requirements, they should contact the carrier in the first instance. If those concerns are not resolved, then they can contact ACMA at [info@acma.gov.au](mailto:info@acma.gov.au), which can investigate whether the relevant carrier is meeting its regulatory obligations.

### **Progress of the 5G rollout**

The rollout of 5G is fundamentally a commercial activity of private sector carriers like Telstra, Optus and Vodafone, however, the Department is monitoring its rollout, take-up and performance because of its potential benefits for everyday consumers, business and productivity.

<sup>35</sup> David Robert Grimes, 28 October 2019, *Don't Fall Prey to Scaremongering about 5G*, [www.blogs.scientificamerican.com/observations/dont-fall-prey-to-scaremongering-about-5g/](http://www.blogs.scientificamerican.com/observations/dont-fall-prey-to-scaremongering-about-5g/)

<sup>36</sup> BMJ Open, [www.bmjopen.bmj.com/content/8/12/e024489.responses](http://www.bmjopen.bmj.com/content/8/12/e024489.responses)

<sup>37</sup> ACEBR, *Position Statements*, [www.acebr.uow.edu.au/position-statements/index.html](http://www.acebr.uow.edu.au/position-statements/index.html)

<sup>38</sup> AMTA, *Welcome to the Radio Frequency National Site Archive*, [www.rfnsa.com.au](http://www.rfnsa.com.au)

<sup>39</sup> ACMA, *Emehub*, [www.acma.gov.au/emehub](http://www.acma.gov.au/emehub)

<sup>40</sup> ARPANSA, *ARPANSA website landing page*, [www.arpansa.gov.au](http://www.arpansa.gov.au)

<sup>41</sup> ARPANSA, *Talk to a Scientist*, [www.arpansa.gov.au/contact-us/talk-to-a-scientist](http://www.arpansa.gov.au/contact-us/talk-to-a-scientist)

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Department of Communications and the Arts

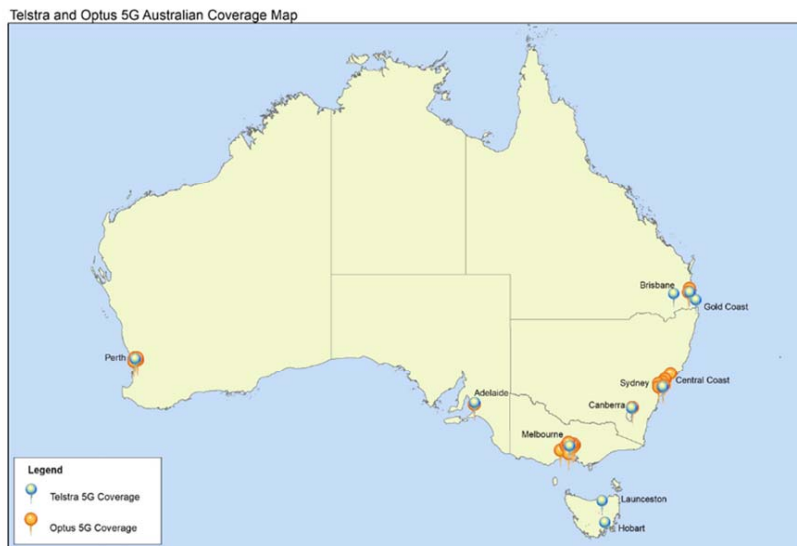
November 2019

Telstra and Optus have started offering 5G services in select centres. Vodafone is expected to start offering services in 2020. Dense Air’s business model is around extending mobile coverage on a neutral host basis for carriers, rather than direct marketing to consumers.<sup>42</sup>

Optus has built around 230 5G sites in six areas in Southeast Queensland, Sydney and the central coast of NSW, Canberra, Melbourne and surrounds, Adelaide and Perth. It is aiming for 1,000 sites by March 2020.<sup>43</sup> Optus launched its initial 5G services on 31 January 2019 on a fixed basis in select locations in Canberra and Sydney. Optus has been using a range of fixed customer devices and launched its first 5G mobile handset, the Samsung Galaxy Note 10, in late September 2019.

Telstra is offering 5G in ten cities across Australia, including Sydney, Adelaide, Brisbane, Canberra, Gold Coast, Hobart, Launceston, Melbourne, Perth and Toowoomba. Over the next 12 months it expects its 5G service area to increase almost five-fold<sup>44</sup> and include an additional 20 cities. It has launched a number of commercial devices including an HTC 5G Hub and three 5G phones.

The map below shows the locations of 5G infrastructure deployed across Australia as at October 2019.



Source: Departmental analysis of announced 5G deployments

### Consumer expectations and experience

Earlier rollouts of new mobile technologies have generally been smooth for consumers, but ensuring consumers have realistic expectations and a positive experience will be important to 5G’s reception.

<sup>42</sup> Cision PR Newswire, 26 September 2019, *Dense Air Partners With Spark to Launch 5G Services*, [www.prnewswire.com/news-releases/dense-air-partners-with-spark-to-launch-5g-services-300926129.html](http://www.prnewswire.com/news-releases/dense-air-partners-with-spark-to-launch-5g-services-300926129.html)

<sup>43</sup> Optus, *Optus 5G*, <https://www.optus.com.au/for-you/5g>

<sup>44</sup> Andrew Penn, 22 May 2019, *Providing our customers with more choice as we build 5G*, [www.exchange.telstra.com.au/providing-our-customers-with-more-freedom-as-we-build-5g/](http://www.exchange.telstra.com.au/providing-our-customers-with-more-freedom-as-we-build-5g/)

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November 2019

As 5G is in its early stages and much is yet to be done, it will be important that carriers do not over promise and under deliver.

There may be concerns in the community, such as how long deployment will take, coverage, performance, service and prices of handsets.

The rollout of 5G will take time. Spectrum needs to be secured and infrastructure installed. It is expected that the rollout will take a number of years and that not all areas in Australia will be covered. Even now, while more than 99% of people in Australia have access to 3G and 4G, their geographical coverage is around 31% of Australia's area.

The full capabilities of 5G are dependent on finalisation of its specifications and its deployment in a manner that allows the performance goals to be achieved.

As with other new technologies, the price of 5G handsets initially may be higher compared to 3G and 4G phones, but prices are expected to reduce over time.

Appropriate information and good customer service from carriers and service providers will be important to consumer's experience, particularly if 5G is marketed and viewed as a premium product, particularly in its earlier stages.

## Conclusion

The Department considers that 5G is a potentially transformative technology that could contribute significantly to Australia's future innovation, productivity and international competitiveness. As well as a platform for mass market communications, it may also be a new general purpose technology for wider business use.

5G is however in its early stages and its full potential is as yet uncertain. Nevertheless, given its potential significance, it is important that we seek to capture the opportunities that it offers. Other countries are introducing 5G and Australia is currently one of the global leaders in this regard. We should seek to leverage this advantage and not allow Australia to fall behind.

The Department is seeking to support 5G in a balanced way as set out in our submission. This includes implementing the Government's 5G Strategy and identifying further measures that may be of assistance.

The Department would be happy to provide the Committee with further information on matters that may be of interest to it.

We look forward to the Committee's report and its ideas on how the benefits of 5G can be captured for the advantage of the Australian community.





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Australian  
Communications  
and Media Authority

# **ACMA Submission**

## **Inquiry into the Deployment, Adoption and Application of 5G in Australia**

OCTOBER 2019

[acma.gov.au](https://www.acma.gov.au)

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## Executive summary

The Australian Communications and Media Authority (ACMA) welcomes the opportunity to contribute to the House of Representatives Standing Committee on Communications and the Arts' inquiry into the deployment, adoption and application of 5G in Australia.

As the communications regulator, the ACMA is aware of the heightened industry and community interest in the rollout of 5G networks – particularly with the productivity benefits these networks offer to sectors across the Australian economy.

The ACMA has three roles of relevance to the Inquiry's terms of reference:

### **1. Spectrum management**

The ACMA plans and manages Australia's radiofrequency spectrum in accordance with the *Radiocommunications Act 1992*. 5G has emerged as one of the major drivers of change to spectrum demand and existing spectrum arrangements. The ACMA is committed to planning and managing spectrum to ensure that Australia is well placed to maximise the benefits of 5G. Our planning activity is focused on the development of technical and licensing frameworks that will support the use of 5G in 'new' frequency bands (bands previously unused for wireless broadband), as well as optimising existing spectrum bands for 5G uses.

### **2. Regulating Electromagnetic energy (EME) from facilities and devices**

The ACMA is responsible for regulating radiofrequency electromagnetic energy (EME) for consumer devices such as mobile phones and telecommunications facilities such as mobile phone towers. To make sure EME exposure is kept low, the ACMA applies the exposure limits set by Australia's authority on radiation protection, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

### **3. Enforcing industry compliance with the Mobile Base Station Deployment Code**

The Code ensures that mobile carriers inform, consult and engage with local communities, councils, and interested and affected parties when a mobile phone base station is being proposed or built in their local area. We are closely monitoring how carriers are rolling out small cells to support the 5G.

More recently, we have an increased focus on consumer information about the rollout of 5G and small cells in coordination with industry and government agencies. We are cognisant of community concerns about the potential impacts of 5G and EME and will continue to work with stakeholders to distribute information within the community.

## Introduction

5G refers to the fifth generation of mobile technology, in line with the International Mobile Telecommunications-2020 (IMT-2020) Standard of the International Telecommunications Union and the associated releases of the 3rd Generation Partnership Project (3GPP). 5G wireless broadband includes both fixed and mobile broadband services.

### Key characteristics of 5G networks

Key characteristics of 5G that distinguish it from previous developments include:

- > **Peak data rates**—peak data rates of 1–10 Gbit/s (and in some cases up to 20 Gbit/s), which is a step change for mobile networks and is expected to facilitate a high quality and a more seamless user experience. By comparison, 4G networks in Australia provide advertised data rates of between 2–100 Mbit/s.<sup>1</sup>
- > **Ultra low latency**—reduce latency to a one millisecond end-to-end round trip delay. This is also a step change for mobile networks. By comparison, 4G networks can theoretically achieve a minimum latency of 10 milliseconds.<sup>2</sup>
- > **Bandwidth**—provide 1000 times more bandwidth per unit area than available on existing mobile networks. This will support faster data rates and increase network capacity to support data intensive applications in both the uplink and downlink.
- > **Connections**—support the growth of between 10 to 100 times more connected devices than is now supported by existing networks. This is also theoretically possible on evolving 4G networks and mass connectivity is identified as a key enabler for the Internet of Things (IoT).
- > **Always on**—be available everywhere (100 per cent coverage) at all times (99.999 per cent of the time). This requirement is also theoretically achievable using evolving 4G technologies. It is necessary for high mobility applications and coverage indoors and outdoors as well as high reliability requirements for services where network outage could have catastrophic consequences.
- > **Energy usage**—reduce network energy usage by 90 per cent.
- > **Battery life**—facilitate up to 10 years battery life for low power, machine-type devices. Both the energy usage and battery life requirements are theoretically achievable using evolving 4G technologies and are aimed at ensuring future networks are cost effective for network operators.<sup>3</sup>

5G usage scenarios could include enhanced mobile broadband, ultra-reliable low latency communications and massive machine type communications (see Figure 1 below).

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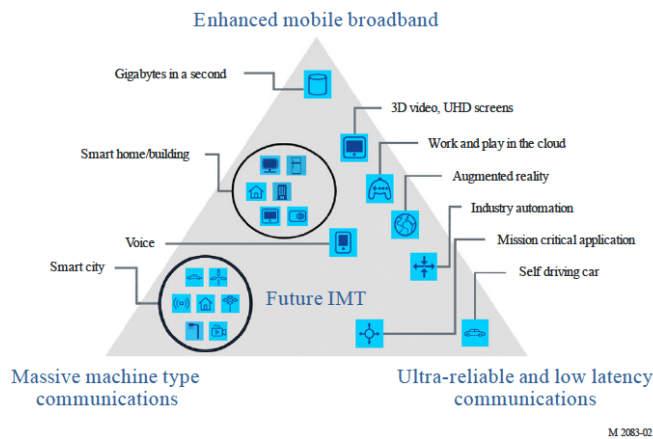
<sup>1</sup> Australian mobile network operator websites.

<sup>2</sup> GSMA Intelligence, [Understanding 5G: perspectives on future technological advancements in mobile](#), December 2014, page 13.

<sup>3</sup> [5G and mobile network developments—Emerging issues](#), ACMA February 2016

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**Figure 1: Usage scenarios of International Mobile Telecommunications (IMT) for 2020 and beyond. Source: Recommendation ITU-R M.2083-0 (09/2015)**

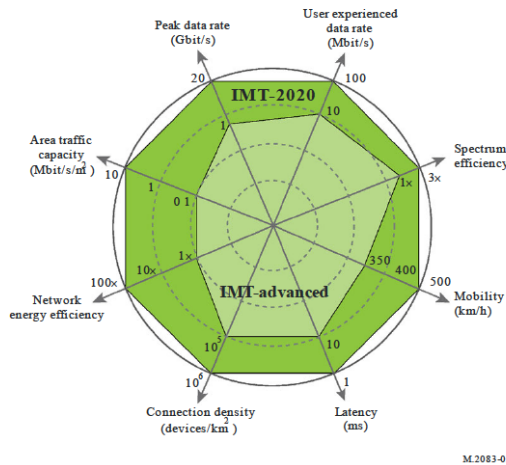


5G is intended to improve on every network performance metric compared to 4G (see Figure 2 below). Essentially this translates to much higher:

- > capacity broadband for consumers and business
- > reliability to support automated vehicles and public safety communications
- > numbers of interconnections such as for very large numbers of low bandwidth devices under the IoT.

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**Figure 2: Enhancement of key capabilities from IMT-Advanced (4G/LTE) represented by the light green area to IMT-2020 (5G) represented by the dark green area. Source: Recommendation ITU-R M.2083-0 (09/2015)**



**Benefits and use cases in the Australian economy**

A range of 5G uses cases are emerging in Australia. To date, Australian telecommunication carriers are focused on mobile and fixed broadband with satellite operators also developing 5G uses cases.

The particular characteristics of 5G provide flexibility and options for new use cases meaning that it has the potential to be adopted by non-traditional users and uses such as private 5G networks supporting healthcare, manufacturing and transportation.

The Australian Government is actively supported 5G deployment through measures such as the release of Australia’s first 5G strategy in October 2017 and the establishment of the 5G Working Group.

The establishment of the working group recognises the transformative potential of 5G across disparate parts of the Australian economy. The group brings together representatives from across Government and industry to foster an ongoing discussion on 5G issues. It is particularly focused on how 5G can best be used in agriculture, health and transport and provides a mechanism to identify and remove sectoral barriers to 5G’s successful and timely rollout.

The ACMA is working closely with industry to maximise the social and economic benefits of 5G while minimising the impact on existing services and customers. This includes through the [IoT Alliance Australia](#).



## Spectrum Management

The ACMA is committed to ensuring that Australia is well placed to maximise the benefits of 5G and spectrum use. The ACMA continues to implement arrangements to support the rollout of 5G services in Australia, across a number of bands. 5G will utilise spectrum across an unprecedentedly wide range of frequency bands. This will include:

- > 'low-band' spectrum below 1 GHz, much of which is already used for mobile broadband networks
- > 'mid-band' spectrum between 1 and 6 GHz, some of which is already used for wireless broadband
- > 'high-band' spectrum, above 6 GHz, specifically the mmWave bands, until recently unused for widespread wireless broadband purposes.

Each of the broad bands identified for 5G (sub 1 GHz, 1–6 GHz, above 6 GHz) requires a specific approach by the ACMA. This is because different considerations apply, such as intrinsic features of the band—for example, propagation characteristics, as well as international harmonisation and standardisation, domestic policy, legacy planning and allocation arrangements, and other incumbency factors.

The ACMA is facilitating 5G applications in Australia by

- > planning new frequency bands for 5G services
- > optimising bands currently available for wireless broadband
- > working internationally to identify new bands capable of supporting its use.

### Planning new frequency bands for 5G services

#### *Mid-band spectrum*

The mid-band between 1 and 6 GHz is currently the focus of near-term 5G deployments.

In December 2018, the ACMA successfully allocated 125 MHz of spectrum in the 3.6 GHz band (3575–3700 MHz), in metropolitan and regional areas. All 350 lots available in the auction were sold, realising total revenue of approximately \$853 million. Further information about the results of this auction is available at: <https://www.acma.gov.au/theACMA/3-6-ghz-band-spectrum-auction-results>.<sup>4</sup>

Spectrum in the 3700–4200 MHz band has been the subject of considerable interest internationally as well as domestically from large mobile network operators and Fixed Wireless Access (FWA) operators (such as Wireless Internet Service Providers), with several processes underway considering arrangements in the band. The ACMA is paying close attention to the global environment in this band and has released a discussion paper to commence a broad review of arrangements in the 3700–4200 MHz band.<sup>5</sup>

<sup>4</sup> <https://www.acma.gov.au/theACMA/australias-5g-auction-concludes>

<sup>5</sup> <https://www.acma.gov.au/theACMA/planning-of-the-3700-4200-mhz-band>

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The ACMA is alert to the needs of existing fixed satellite and point-to-point uses of this band, as well as the potential for both wide area and site based—for example, FWA, wireless broadband. Considering the whole band simultaneously will maximise the opportunity for balanced approaches that take appropriate account of all interests.

*High-band spectrum*

The ACMA's consideration of high-band spectrum for wireless broadband is focused on the mmWave in the bands above 24 GHz.

We have completed planning decisions for the 26 and 28 GHz and are now preparing allocation arrangements. The ACMA released two consultation papers in September 2018, which considered planning options for 5G in the 26 GHz band (24.25–27.5 GHz) and discussed the suitability of the 28 GHz band (27.5–29.5 GHz) for a broad range of users and service types, including 5G. A decision paper on the 26 GHz band was released in April 2019,<sup>6</sup> and a decision paper for the 28 GHz band was released in September.<sup>7</sup> On 25 October 2019, the Minister for Communications, Cyber Safety and the Arts announced that he had made a spectrum re-allocation declaration for the 26 GHz band.<sup>8</sup> As a result, the ACMA is proceeding to allocate 2.4 GHz of spectrum in the 26 GHz band in defined cities and regional centres through spectrum licences.

Overall, the ACMA's recent decisions on the 26 GHz and 28 GHz bands have established new planning arrangements for over 5 GHz of mmWave spectrum of great interest for both terrestrial and satellite broadband services.

Satellite services are also expected to contribute to the 5G ecosystem. The ACMA continues to ensure that appropriate spectrum is available for satellite services including in the 28 GHz and 11 GHz bands.

Higher in the spectrum, the ACMA has recently consulted<sup>9</sup> on changes to class-licensing arrangements to support additional spectrum in the 60 GHz range for wireless data communications systems (including those supporting 5G). An update to [Radiocommunications \(Low Interference Potential Devices\) Class Licence 2015](https://www.acma.gov.au/theACMA/class-licensing-updates-supporting-5g-and-other-technology-innovations) (the LIPD class licence) was recently released which varied and expanded existing 60 GHz arrangements.

*Further re-planning for 5G wireless broadband services*

In addition to the planning and allocation activities currently underway, the ACMA continues to monitor several other bands for possible replanning for 5G wireless broadband services, including the 1.5 GHz band (1427–1518 MHz). These bands are generally less mature in terms of harmonisation, standardisation and international implementation of 5G. Some stakeholders have indicated interest in planning for private LTE networks in mid-band spectrum, such as 1.5 GHz.

Spectrum between 37–43.5 GHz is of significant interest for both terrestrial 5G and satellite broadband services. The United States (US), for example, has established arrangements supporting both services. The ACMA will consider global trends and local circumstances, including domestic and international take-up of mmWave 5G services, in determining whether replanning for possible 5G in the 37–43.5 GHz band

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<sup>6</sup> <https://www.acma.gov.au/theACMA/options-for-wireless-broadband-in-the-26-ghz-band>

<sup>7</sup> <https://www.acma.gov.au/theACMA/planning-options-for-the-28-ghz-band>

<sup>8</sup> <https://www.minister.communications.gov.au/minister/paul-fletcher/news/opening-more-5g-spectrum>

<sup>9</sup> <https://www.acma.gov.au/theACMA/class-licensing-updates-supporting-5g-and-other-technology-innovations>

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is appropriate. The ACMA notes that the case for replanning of part of this band for satellite services may be appropriate regardless.

### **Optimising existing mobile broadband frequency bands for 5G**

Achieving more efficient configuration and use of bands that are already licensed for wireless broadband is a vital adjunct to the clearance and reallocation of new bands to address rising demand for wireless broadband. In part, this work falls on existing licensees, as well as the regulator, to use market mechanisms to reconfigure existing holdings to maximise the overall utility of bands.

In addition, there are continuing opportunities for spectrum users to enter into commercial arrangements to share infrastructure or spectrum in a way that will realise more efficient spectrum use.

#### *Low-band spectrum*

In the bands below 1 GHz, the ACMA has two primary short-to-medium-term objectives:

- > working with industry to optimise the efficient configuration of the existing 850 MHz (825–845 MHz and 870–890 MHz) and 900 MHz (890–915 MHz and 935–960 MHz) band allocations, already licensed for mobile broadband purposes, including by securing a 1 MHz downshift of the 850 MHz spectrum licences
- > implementing the existing planning decision to make additional spectrum available for mobile broadband in the 850 MHz expansion band (809–824 MHz and 854–869 MHz).

#### *Mid-band spectrum*

The ACMA recognises that optimising spectrum and apparatus licence arrangements in the 3400–3575 MHz bands, adjacent to the 3.6 GHz band auctioned in 2018, is an important priority. This is expected to result in more efficient use of spectrum and a reduction in deployment costs, supporting the implementation of 5G services in Australia.

Reviewing the arrangements in bands that are already licensed for wireless broadband is important to ensure existing allocations are efficient and can cater for new technology developments such as 5G. For example, the ACMA is considering updating the technical framework for the 2.3 GHz band.

The combination of planning decisions across the low, mid and high band spectrum will position Australia well for wireless broadband services (for mobile and fixed wireless), including use for 5G services.

### **International cooperation and harmonisation efforts**

As 5G is an emerging technology with global reach, it is important that the ACMA's activities in spectrum management and equipment regulation are consistent with international developments. International harmonisation allows Australian networks and equipment suppliers the benefits of internationally recognised standards and supply chains, and gives Australian consumers the benefit of global economies of scale in the development and manufacture of devices, and helps roaming capabilities for Australian devices overseas.

The 2019 World Radiocommunication Conference (WRC-19) will be held from 28 October to 22 November 2019 in Sharm El-Sheikh, Egypt. WRCs are held every

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three to four years, and WRC-19 will consider a large agenda concerning a range of new frequency allocation and procedural matters, including possible allocations for satellite services and identification of spectrum suitable for 5G services. The Department of Communications and the Arts (the Department) will lead the Australian delegation to this meeting, with the ACMA providing technical expertise.

Since 2016, the ACMA has engaged with stakeholders via WRC preparatory processes to develop Australian positions on WRC-19 agenda item 1.13. This agenda item focuses on spectrum harmonisation requirements for 5G mobile broadband technologies. Developments in Europe, other regions and countries (such as the US) are being monitored for possible early implementation bands for 5G.

Separately, the 4940–4990 MHz band is included in Institute of Electrical and Electronics Engineers (IEEE) standard 802.11y Public Safety Wireless Local Area Network but has also been included in 5G standards (3GPP band n79). This may enable public safety agencies in Australia to deploy their own 5G capabilities under the [Radiocommunications \(Public Safety and Emergency Response\) Class Licence 2013](#). To help foster markets for public safety-grade 5G equipment in this band, the ACMA recently led an Australian proposal to update the relevant ITU-R band plan (Recommendation ITU-R M.1826) to include provisions for 5G channel bandwidths of up to 50 MHz. This proposal was agreed at the May 2019 meeting of ITU-R Working Party 5A.

## Regulating Electromagnetic energy (EME) from facilities and devices

The ACMA regulates the EME from telecommunications facilities and wireless devices, including those used in 5G networks and small cell deployments. We do this in two ways:

- > through technical performance requirements at the point of supply for radiocommunications equipment that is portable or mobile and has integral antennas (e.g. mobile phones and wi-fi devices)
- > through licence conditions on transmitters at radiocommunications installations (e.g. mobile phone towers, small cells and radio transmission towers).

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the government agency which provides expert advice on exposure to electromagnetic energy. ARPANSA establishes exposure limits, which it states sit well below the level at which adverse health effects are known to occur and includes a wide safety margin to protect the public.<sup>10</sup> This includes EME from all existing communications deployments such as small cell networks and 5G.

### Equipment standards

EME from radiocommunications equipment that is portable or mobile with integral antennas is regulated through the *Radiocommunications* (Compliance Labelling – Electromagnetic Radiation) Notice 2014 which places obligations on suppliers of the equipment that need to be met before the equipment can be supplied to the Australian market. These obligations include:

- > ensuring the equipment complies with the levels set in the ARPANSA document Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz (2002) (the ARPANSA Standard)
- > to label the equipment
- > to hold compliance documents including a declaration of conformity, test report stating compliance, and a description of the equipment, which the ACMA may audit.

The ACMA has recently consulted on amending the equipment arrangements to adopt the latest international and European test method standards for equipment operating on frequencies below 6 GHz. These amendments are expected to be completed by the end of 2019.

The ACMA is monitoring the development of international standards for EME of equipment that operates on frequencies above 6 GHz and is participating in the Standards Australia committee that provides Australian input into the international standards. The ACMA plans to consult on adopting international standards for testing

<sup>10</sup> See for example, <https://www.arpansa.gov.au/news/5g-new-generation-mobile-phone-network-and-health>.

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equipment that is used in close proximity to the head and body and operates on frequencies above 6 GHz when suitable standards are available.

### Facilities regulation

Every mobile phone base station, including small cells and 5G base stations, must comply with the ARPANSA Standard.

The ARPANSA Standard is designed to protect people against all known adverse health effects resulting from EME exposure. It is based on scientific research that has determined the levels at which harmful effects occur and is consistent with internationally accepted guidelines endorsed by the World Health Organization and widely adopted by the European Union and various governments around the world. The ARPANSA Standard sets allowable EME exposure levels which are significantly below the levels at which potential harm may occur. In the case of radiocommunications installations, such as mobile phone towers, the Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015 (the LCD) requires licensees to:

- > ensure that EME exposure from a transmitter does not exceed the levels set in the ARPANSA Standard at any location accessible by a member of the general public
- > to hold compliance documents including a declaration of conformity, details of any person who assessed the transmitter's compliance, results of assessments, and details of the transmitter, which the ACMA may audit.

It is also a requirement of the Communications Alliance Ltd Industry Code C564:2018 Mobile Phone Base Station Deployment code, which has been registered by the ACMA under Part 6 of the *Telecommunications Act 1997*, that network operators produce an EME environmental report prior to the proposed installation of a facility.

The EME environmental report contains information about the location of the site, the transmission facilities installed and maximum levels of EME based on predictive modelling. These reports are made available to the general public on the Radio Frequency National Site Archive (RFNSA) website, maintained by the Australian Mobile Telecommunications Association.

The Code also requires that network operators obtain a compliance certificate from an accredited provider stating that the facility is EME compliant post-installation.

#### *Recent compliance activities*

In response to community concerns about small cell deployments, in January 2019 the ACMA conducted a formal audit of TPG's EME compliance records for 30 of its proposed small cell deployments. The results of the audit program indicated EME levels well below the exposure limits set by the ARPANSA Standard for all 30 sites audited. There were no significant issues of non-compliance identified. The audit did identify an administrative issue relating to delays in the production of compliance documents, due to clarification being required about the nature and volume of the records required to be produced.

TPG demonstrated a high level of knowledge of its EME compliance obligations and associated record-keeping requirements. TPG also demonstrated that it has processes in place to ensure that compliance assessments accurately reflected environmental and site conditions.

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*2018-19 compliance priority*

Given community concerns about the rollout of 5G technologies, the ACMA has made EME and small cell base stations a compliance priority for 2019-20.

The ACMA has sought details from Telstra, Optus and Vodafone about their deployments of small cells to inform our compliance program. This information will assist us to:

- > identify any systemic patterns or emerging trends
- > assess whether the carriers changed or altered their proposed small cell deployments in response to community feedback received.

We have also commenced an audit program to measure the level of compliance with their licence conditions with reference to the EME human exposure limits developed by ARPANSA. The program will be based on the previous TPG audit and will use a combination of desk-based assessments, formal compliance records audits with a number of spot measurements for reference. The ACMA will report on the results of the program in 2020.

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# Enforcing industry compliance with the Mobile Base Station Deployment Code

## Low-impact facilities and 5G

Low-impact facilities include, among other things, mobile phone base stations used for 3G, 4G and 5G mobile technologies. These facilities are commonly installed on structures such as light and power poles, building rooftops, masts or towers.

Low-impact facilities may also be used for other 5G-related technologies such as 5G fixed-wireless access services. For example, one carrier is currently offering high-speed fixed wireless services in some metro areas using 5G technology.

Under Schedule 3 to the *Telecommunications Act 1997*, licensed telecommunications carriers have the power to enter onto someone's land to:

- > inspect the land
- > install low-impact facilities
- > maintain facilities, including low-impact facilities

without a need to obtain State or Local government planning approvals.

The Telecommunications (Low-impact Facilities) Determination 2018, made by the Minister, specifies what a low-impact facility is and defines the category of land these types of facilities can be installed on.

When entering land for the purposes specified above, carriers must also comply with the Telecommunications Code of Practice 2018, made by the Minister under Schedule 3. The code of practice sets out additional notification and objection procedures for landowners and occupiers affected by the land access process.

If a facility is not a low-impact facility, such as a free-standing telecommunications tower, the carrier must install it in accordance with the applicable local government, State or Territory planning laws.

## Mobile phone base station deployments

The current version of the Communications Alliance Ltd Industry Code C564:2018 Mobile Phone Base Station Deployment (the Code) was registered by the ACMA in December 2018. The Code is designed to ensure that communities are informed and consulted about proposed mobile infrastructure deployments.

As small cell and 5G deployments are increasing, concerns are more frequently being expressed by local councils and communities. These concerns mainly focus on the perceived health effects of electromagnetic energy exposure, visual impact, and perceived deficiencies in the carriers' consultation processes.

The Code ensures that mobile carriers inform, consult and engage with local communities, councils, and interested and affected parties when a mobile phone base station is being proposed or built in their local area.



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The Code contains several important provisions, including:

- > a requirement that mobile carriers collaborate with local councils and the community when they deploy mobile phone base stations in their community
- > ensuring that local councils and the community are informed and given the opportunity to voice any concerns about new mobile phone base stations, or an upgrade to existing mobile phone base stations
- > requiring mobile carriers to identify community sensitive locations at an early stage in planning for mobile phone base station deployments
- > making EME information about mobile phone base stations available through the RFNSA website
- > requiring mobile carriers to apply a precautionary principle<sup>11</sup> to the site selection, design and operation of mobile phone base stations.

### Community consultation for 5G and small cell mobile infrastructure

The Code specifies the community consultation requirements for 5G mobile phone base station installations at new sites (section 6) and existing sites (section 7), while small cell deployments have separate and more streamlined consultation requirements (section 5.2).

#### *5G mobile phone base station installations at new sites*

In these circumstances, the carrier must consider whether the 5G mobile phone base station requires development application approval in accordance with state or local council planning laws, or whether it is a low-impact facility. In the majority of cases:

- > low-impact mobile phone base station facilities require a mobile carrier to follow the consultation requirements under section 6 of the Code
- > free-standing mobile phone base station poles or towers will require a mobile carrier to follow applicable state or local council planning laws, where it is expected that the public consultation will occur through that process.

#### *5G mobile phone base station installations at existing sites*

In accordance with section 7 of the Code, the carrier must notify the relevant local council and the local community about the proposed installation. They must also provide EME information about the 5G mobile phone base station and make an invitation for written comments on the proposed work. Before a mobile carrier commences any works, it must have regard to any comments received from the public and the local council.

#### **Small cell deployments**

A more streamlined approach to community notification requirements is available for small cell deployments under clause 5.2 of the Code. This is because they are generally smaller, require less auxiliary equipment to operate, are generally mounted on existing infrastructure (e.g. light and power poles) and have lower power output.

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<sup>11</sup> The precautionary principle offers mobile carriers advice about how to act responsibly in the face of uncertainty and lack of full scientific knowledge.

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### **Small-cell deployment and EME compliance priority**

As referred to earlier in the submission, the ACMA has identified 5G and small cell deployment as a compliance priority for 2019–20. As part of this program, the ACMA will be scrutinising mobile carriers' practices in informing and consulting local communities before installing small cell base stations. This will assist the ACMA in identifying any systemic patterns and/or emerging trends in relation to small cell deployments.

This builds upon the ACMA's previous monitoring and compliance program.

- > In December 2018, the ACMA directed PIPE Networks (a subsidiary of TPG) to comply with the small cell provisions of the Code.
- > In May 2019, the ACMA formally warned Telstra for not fully consulting with interested and affected parties and for not acknowledging a complaint within the prescribed timeframe.

More information including media release, formal warning and investigation report is on the ACMA's website at <https://www.acma.gov.au/theACMA/telstra-fails-to-consult-community>.

## Consumer information and advice

Australian carriers are already deploying 5G networks and some commercial services are already available to consumers. Carriers and equipment suppliers are also starting to introduce 5G devices onto the Australian market.

With the increasing rollout of networks, we are aware of concerns in some segments in the community about the potential health impacts of 5G.

### Consumer information on 5G and small cells

The ACMA is working to give communities the information they need to understand the infrastructure deployment and EME requirements that apply to the rollout of small cells and 5G.

This is being undertaken through a collaborative and complementary approach to communication on 5G and EME emissions with industry, the Department and ARPANSA.

In response to increased community concern about small cells and 5G, the ACMA:

- > has developed an "EME hub" on our website including information with respect to specific devices and technologies, such as mobile phones, wifi and smart meters
- > has developed a fact sheet for consumers (**Appendix A**) that explains small cells and 5G and provides information about EME
- > will be providing authoritative information about 5G, small cells and EME to local communities.

We also plan to undertake a small-scale, social media campaign (targeting several areas where small cells are being deployed) and search engine advertising. The objective of these communications is to provide clear, relevant and independent information about small cells, EME and 5G.

While the ACMA is taking steps to be more proactive with communities, these activities are not a substitute for carrier consultation and community engagement, as per their regulatory requirements.

### Consumer safeguards

The ACMA also monitors industry compliance with a range of safeguards to improve consumers' experience with their telecommunications services. Existing safeguards such as the Telecommunications (Consumer Complaints Handling) Industry Standard 2018 and Telecommunications Consumer Protections Code 2019 apply to 5G services deployed to consumers and small businesses.

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## Appendix A

*A guide to small cells.*

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Australian Government  
Australian Radiation Protection  
and Nuclear Safety Agency



## Submission to the House of Representatives Standing Committee on Communications and the Arts Inquiry into 5G in Australia



arpansa.gov.au

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**Introduction**

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. ARPANSA regulates Commonwealth entities using radiation with the objective of protecting people and the environment from the harmful effects of radiation. A key function of the CEO as described in the *Australian Radiation Protection and Nuclear Safety Act 1998* (ARPANS Act) is to undertake research in relation to radiation protection. ARPANSA also provides services and promotes national uniformity and the implementation of international best practice across all jurisdictions.

With the deployment of 5G technology, ARPANSA has observed an increase in public interest with regard to health impacts from the radio waves that are emitted from mobile telecommunications. With approximately 30,000 studies and reviews in the area of electromagnetic fields, including radio waves, it is a widely researched area.

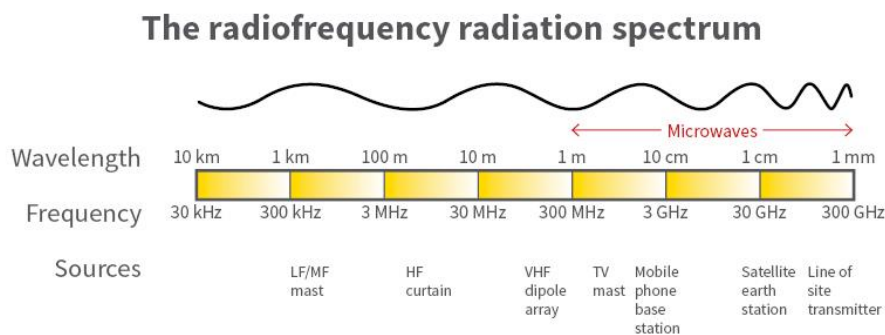
This submission is aimed at providing information to the inquiry on health and environmental impacts of radio waves to assist with consideration around the deployment of 5G technologies including the planned shift to higher frequency radio waves, and to outline the role of ARPANSA.

**Impact of EME RF on Health and Environment**

**Wireless radiation and 5G**

Mobile phone networks and other wireless telecommunications emit low-powered radio waves also known as radiofrequency (RF) electromagnetic energy (EME). These radio waves lie in the frequency range between 3 kilohertz (kHz) to 300 gigahertz (GHz). RF EME is different from ionising radiation, which is associated with nuclear energy or use in medicine.

Wireless telecommunications operate using radio waves at different frequencies. The 5G network will initially use similar frequencies as the current mobile phone networks (3G and 4G) which operate at lower microwave frequencies. In the future, 5G will use a higher microwave frequency band, sometimes called 'millimetre waves'. Higher frequencies do not mean higher exposure levels.



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### What the science says about impact on humans

Very high levels of exposures to radio waves (more than 50 times above the limit in the ARPANSA RF standard) can heat biological tissue and cause tissue damage. For example, in applications such as industrial use of radio waves for welding, or close occupational exposure to AM radio towers that operate at a low frequency but high power to provide vast coverage. In these applications, appropriate safety measures are taken to manage risk to the public and workers.

The exposure to radio waves routinely encountered by the general public in the environment is too low to produce significant heating or increased body temperature. For the very low level of exposure from radio waves used in telecommunications, the evidence for production of harmful biological effects is ambiguous and unsubstantiated. Although there have been studies reporting biological effects ('bio-effects') at these levels, there has been no indication that such effects might constitute a human health hazard. Biological effects are physiological responses that can occur for a broad range of reasons, and are differentiated from 'health effects', which result in adverse conditions to the human body that may require medical treatment.

Health authorities around the world, including ARPANSA and the World Health Organization (WHO), have examined the scientific evidence for possible health effects from telecommunications sources. Current research indicates that there is no established evidence for health effects from radio waves used in mobile telecommunications. This includes the upcoming roll-out of the 5G network. ARPANSA's assessment is that 5G is safe.

### The future use of millimetre waves by 5G

At the frequencies where current mobile phone technology operates (including 4G and 5G), some of the energy is absorbed into the body. However, it is too low to produce any significant heating of tissue. The millimetre waves that are planned to be used by 5G in the future do not penetrate past the skin. The power level will be low and no appreciable heating will occur in the skin. Millimetre wave frequencies, while higher than current frequencies used, are covered by the current *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz* (ARPANSA RF Standard).

### Electromagnetic hypersensitivity

Some individuals have reported a wide range of non-specific health problems that they attribute to low-level radio waves and other electromagnetic sources. The symptoms most commonly reported include headaches, body pain, lethargy, tinnitus (ringing in the ear), nausea, burning sensation, heart arrhythmia and anxiety. This self-proclaimed sensitivity to electromagnetic fields is termed 'electromagnetic hypersensitivity' or EHS, which in medical literature is also known as idiopathic environmental intolerance attributed to electromagnetic fields (IEI-EMF). EHS is not a medically recognised syndrome.

While ARPANSA and the WHO recognise that the symptoms of EHS are real and can have a disabling effect for the affected individual, EHS has no clear diagnostic criteria and the science so far has not provided evidence that RF exposure is the cause. The majority of scientific studies published to date have found that under controlled laboratory conditions, EHS individuals cannot detect the presence of RF sources any more accurately than non-EHS individuals. Several studies have indicated a placebo effect i.e. an adverse effect due to the belief that something is harmful.



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### ***Do radio waves cause cancer?***

Radio waves are classified as non-ionising radiation, meaning that they have insufficient energy to break chemical bonds, and in doing so cause DNA damage that may lead to cancer. There is no established evidence that low-level exposure to radio waves causes cancer. However, the assessment of potential health risks of exposure to radio waves includes a level of uncertainty. Some epidemiological studies have shown an association between heavy mobile phone use and brain cancer; however, limitations of the methods of these studies prevent conclusions of causality being drawn from these observations. Based largely on this limited evidence, the International Agency for Research on Cancer (IARC) in 2011 classified RF EME as possibly carcinogenic to humans. This classification is not intended to cause alarm, but to encourage further research in this area. Other things that IARC classify at this level include pickled vegetables and aloe vera.

Even when taking the IARC decision into account, the overall evidence suggests that the radio waves from mobile phone handsets and other wireless devices are not harmful to the user. A recent study led by ARPANSA, published with the British Medical Journal Open, found that the wide use of mobile phones in Australia has not increased the rate of brain cancer.

### **How ARPANSA and other health authorities consider the science and provide advice**

#### ***Expertise required***

To study the biological effects of radio waves, various disciplines of expertise need to be utilised, including biology, epidemiology, medicine, physics, engineering and social sciences. All of these disciplines play important individual and collective roles in evaluating possible adverse effects on health, and provide information on the need for, and approaches to, protection. ARPANSA has expertise in many of these areas and collaborates with a number of key organisations including universities, other health authorities (WHO, the International Commission for Non-Ionizing Radiation Protection (ICNIRP)), and various national agencies, that collectively have expertise in all of the specialised disciplines relevant to health research.

To determine any health effects in human or other biological populations, a key area of expertise required is epidemiology. This is the scientific study and research of causes and distribution of disease across populations, including ways to reduce the impact of diseases on the health of communities. ARPANSA employs staff with epidemiological expertise to assess the state of the science on EME and population health.

#### ***Approach taken***

No single scientific study, considered in isolation, will provide a meaningful answer to the question of whether or not radio waves can cause (or contribute to) adverse health effects in people, animals or the environment. The relevance of individual studies to health and environmental protection also varies. In order to draw an informed conclusion from research studies, it is critical to weigh-up the science in its totality.

Scientific evidence is deemed to be established when it is consistent and generally accepted by the broader scientific community. This usually follows an evaluation of the available data by expert scientific bodies, using a 'health risk assessment' approach. In a health risk assessment, all available studies with either positive or negative effects need to be evaluated and judged on their own merit, and then collectively using the weight-of-evidence approach. It is important to determine how much a single set of new evidence may change the probability that exposure to radio waves causes an effect that has not been shown across the

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existing body of evidence. Generally, studies must be replicated, or be in agreement with similar studies to exclude the possibility that the results were random or caused by an external factor. The evidence for an effect is further strengthened if the results from different types of studies (epidemiology and laboratory) point to the same conclusion.

Health authorities like ARPANSA, or international organisations such as WHO and ICNIRP, assess scientific evidence and provide appropriate advice. Individual studies are usually published as peer-reviewed journal papers, however conclusions from these can often vary. Science continually evolves, and ARPANSA reviews new research into the potential health effects of radio waves on an ongoing basis, and consults relevant stakeholders in order to provide accurate up-to-date health advice.

### ***Unsubstantiated views***

Opinions on health risks, which are not peer-reviewed, are often provided in the media and on the internet. This includes the possible health effects of radio waves from some scientists that are contrary to the assessment of ARPANSA and the WHO.

For example, the 2007 Bioinitiative Report, including updated versions, is an online document reporting on the relationship between the electromagnetic fields associated with power lines and wireless devices and health. It has not been peer-reviewed and has been heavily criticised by governments and independent research groups for its lack of balance in formulating views, selective use of scientific data and claims that lack a scientific basis. ARPANSA supports the critical assessment of this Report.

The 5G Appeal was prepared in 2017 by some scientists and doctors around the world (including in Australia) who are calling for the European Union to 'halt the roll out of 5G due to serious potential health effects from this new technology'. The Appeal is selective in the use of the available literature and scientific data on radio waves and health. Neither the 5G Appeal nor the Bioinitiative report follow the weight of evidence approach described earlier.

### **Impact on the environment**

A common theme ARPANSA has observed in arguments by anti-5G groups is the impact this network would have on flora and fauna. As an example, a common argument is that bee populations are being impacted by exposure to current mobile networks and this will be made worse under 5G.

The majority of studies investigating the effects of radio waves or electromagnetic fields in general are usually performed on standard laboratory animals used in toxicological studies, such as rats and mice. However, some studies have also included other species such as short-living flies for the investigation of genotoxic effects. There is limited research on the effects of electromagnetic fields on the diversity or abundance of insects or bees. The few ecological studies that do exist generally report little or no evidence of a significant environmental impact. The studies that do show an effect, such as the ones listed, suffer from poor scientific method and the reported effect of electromagnetic field exposure cannot be separated from other environmental factors.

### **Recommendations for further research**

Although the body of science demonstrates there are no health effects from radio waves in mobile telecommunications, it is important to continue the research in radiation safety. ARPANSA has made recommendations for areas where the body of knowledge can be expanded. The research

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recommendations include ongoing assessment of personal and environmental exposure to radio waves from new and emerging technologies.

The WHO's Radiation Programme has an ongoing project to assess potential health effects of exposure to radio waves in the general and working population. The WHO has identified areas of further research and will commission in 2020 systematic reviews to analyse and synthesise the evidence.

## ARPANSA and our role in mobile telecommunications

### Role in 5G

ARPANSA is not a proponent of technology and does not have a regulatory role for public mobile telecommunications. Our role as a radiation health authority is the development of the safety standard for exposure to radio waves from telecommunications sources like 5G. ARPANSA also provides information and advice on the safety of sources emitting radio waves. In order to provide the best advice on the protection of the Australian public from the effects of radio waves, ARPANSA undertakes its own research and reviews the relevant scientific research. ARPANSA's role is not to convince people of the science, rather to provide our assessment based on the body of the evidence and where possible, respond to questions or provide information to highlight this information.

### The ARPANSA RF Standard

To address the health risks of radio waves, in 2002, ARPANSA published the *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz* (ARPANSA RF Standard). The ARPANSA RF Standard is designed to protect people of all ages and health status against all known adverse health effects from exposure to radio waves. It is based on scientific research that shows the levels at which harmful effects occur and it sets safety limits, based on international guidelines that are considered best practice, well below these harmful levels. The ARPANSA RF Standard applies a precautionary approach in setting exposure limits. In order to compensate for uncertainties in the scientific knowledge, large safety factors are incorporated into the exposure limits i.e. the limits are set well below the level at which all known adverse health effects occur.

Using this standard, the Australian Communications and Media Authority (ACMA) establishes EME exposure limits under its *Radiocommunications (Electromagnetic Radiation-Human Exposure) Standard 2014* and *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015* under which all licence holders must operate. Radio wave exposure to the public from all wireless telecommunications sources including 5G have to comply with the limits set by the ARPANSA RF Standard and enforced via the ACMA regulatory instruments.

The ARPANSA RF Standard is closely aligned with international guidelines prepared by the International Commission for Non-Ionising Radiation Protection (ICNIRP) in 1998 and endorsed by the World Health Organization (WHO). The ICNIRP guidelines form the basis for regulations for the majority of countries. Some regions worldwide have, without any scientific justification, developed limits that are lower than the ICNIRP guidelines. Health authorities like ARPANSA, or international organisations such as WHO and ICNIRP, do not support such an approach, and the WHO has in response developed its Framework for Developing Health-Based EMF Standards.

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Since 2000, research in the area of RF and health has grown rapidly and several major research programs and reviews have been undertaken internationally. Through the national EME Program, ARPANSA was able to undertake a review in 2014 of the current level of evidence which was published in the 'Review of Radiofrequency Health Effects Research – Scientific Literature 2000–2012'. The review concluded that, while the exposure limits of the ARPANSA RF Standard are still valid for protection against known adverse effects, under some circumstances the margin of safety between these limits and the threshold for harmful effects may be less than originally intended. This review provided a level of confidence to concerned members of the public that the Standard remained fit for purpose.

At the time, the ARPANSA RF Standard was prepared, it was recognised that new scientific research may indicate that changes may need to be made to the limits or the implementation of the Standard. Since then, the rationale for known health effects has remained the same. However, there have been advances in the measurement of radio wave absorption by the human body and ICNIRP is currently revising its guidelines. ARPANSA is planning to revise its RF Standard following the publication of the revised ICNIRP Guidelines. It should be pointed out that changes are expected to refine the maximum exposure limits and are not expected to impact exposure from telecommunications (including 5G) which tend to be much lower than the maximum exposure limits.

### **National EME program**

Commencing in 1997, the Australian Government established the EME Program. This program provides \$1 million per annum to support research into, and provide information to the public, about health issues associated with telecommunications devices and equipment. The program is indirectly offset by a levy on radiocommunication licensees collected by the ACMA.

The program has three elements:

- an Australian research program managed by the National Health and Medical Research Council (NHMRC) to conduct research into EME issues of relevance to Australia and to complement overseas research activities,
- international engagement with Australian participation in the WHO Electromagnetic Fields Project through ARPANSA's role as a WHO Collaborating Centre for Radiation Protection, and
- a public information program (managed by ARPANSA) to provide information to the public on EME and health.

Of the total \$1m funding, \$700,000 is allocated to NHMRC for research, and \$300,000 allocated to ARPANSA for international engagement and public information programs. This set amount has not been changed since 1997. This funding allocation is part of ARPANSA's government appropriation.

The program however has evolved considerably from when it first started with ARPANSA taking on an expanded role in the NHMRC grant program and development of standards.

### **ARPANSA's communication activities on 5G and EME generally**

ARPANSA's communication activities on radio waves centres around four key focus areas: website content and fact sheets, direct public engagement, media engagement and advice to key stakeholders.

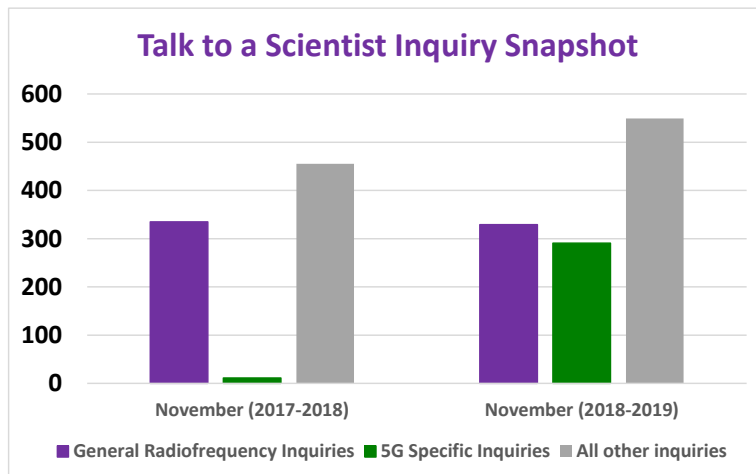
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**Website content and fact sheets**

ARPANSA has developed a large range of information for its website and flyers covering the issue of radio waves. While 5G is currently being discussed, prior focus has been on other types of technologies using radio waves that has been topical including smart meters, NBN fixed wireless and mobile phone towers. With increasing discussion in the community around 5G, ARPANSA has also increased its use of social media and news articles on the ARPANSA website. This included a 3 June 2019 post on 'Misinformation about Australia's 5G network' that was reported widely in media.

**Direct public engagement**

ARPANSA provides a unique opportunity for the public and community to talk directly with our scientists on issues about radiation exposure and protection in Australia via its Talk-to-a-Scientist Program. This service offers members of the public the opportunity to find answers to science-related questions that they have been unable to find using other resources. While covering all issues to do with both ionising and non-ionising radiation, the service receives a high volume of calls and email enquiries around radio waves with a particular increase in those related to 5G.



**Media engagement**

With increased interest in 5G, ARPANSA have actively worked to ensure that the Australian media have access to accurate information. Since January 2019, ARPANSA has been interviewed by print, online, radio and television media on this topic on more than 40 occasions. More broadly ARPANSA advice (including our misinformation statement) or research has been referenced in 151 Australian news articles with a calculated average potential reach of 1.22 million readers, and 105 broadcasts on radio with a calculated national viewership of 1.74 million listeners/viewers. Internationally ARPANSA has been widely reported with 72 articles in the same period reaching a calculated average of 2.15 million readers.

**Advice to key stakeholders**

ARPANSA has prioritised the provision of information to key stakeholders as a cost-efficient way of reaching a broader audience. ARPANSA has played a key role in supporting broader Australian Government, through

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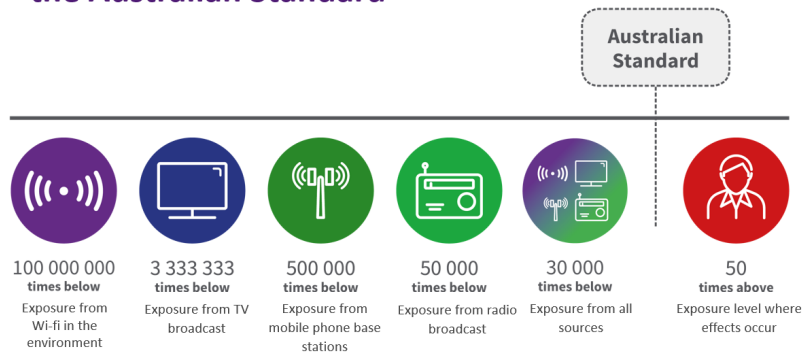
the provision of expert advice including supporting the development of content on the ACMA website, and the Department of Communications and the Arts video ‘Electromagnetic energy (EME) and you’<sup>1</sup>. ARPANSA has also supported state and territory, and local government through the provision of information and technical briefings.

**Key ARPANSA research**

As mentioned previously, ARPANSA has recently completed a study (published in the British Medical Journal Open) comparing the incidence of brain cancer in Australia from 1982 to 2013 to mobile phone use during the same period. The study found that there was no increase in brain tumours that can be attributed to mobile phone use.

ARPANSA has also conducted its own measurements of environmental radio waves from various sources (radio, mobile phone towers, TV, Wi-Fi etc.) detectable in urban areas. All the measurements have shown radio wave exposure in the everyday environment is typically much lower than the safety limits prescribed in the ARPANSA RF Standard and international guidelines. As an example, the Wi-Fi in schools measurement study conducted in 2016 found that in a schoolyard, the dominant exposure continued to be from AM radio with the combined exposure of all sources including mobile networks still 30,000 times below these limits.

**Typical public exposure to radio waves against the Australian Standard**



<sup>1</sup> [https://www.youtube.com/watch?v=XGI\\_LcqtDIQ](https://www.youtube.com/watch?v=XGI_LcqtDIQ)

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Inquiry into the deployment, adoption and application of 5G in Australia  
Submission 167

House of Representatives Standing Committee on Communications and the Arts  
Committee Secretariat  
PO Box 6021  
Parliament House  
CANBERRA  
Canberra ACT 260

Re: Submission to Inquiry into 5G in Australia  
Date: 30<sup>th</sup> October 2019

Dear Secretariat,

On behalf of the Australian Centre for Electromagnetic Bioeffects Research, a National Health and Medical Research Council of Australia *Centre of Research Excellence*, I would like to submit comment on the proposed deployment, adoption and application of 5G in Australia. Please note that this submission is restricted to the issue of *potential health consequences* of exposure to the electromagnetic fields that will emanate from 5G.

**1. Competence to comment on the relation between 5G exposure and health**

The Australian Centre for Electromagnetic Bioeffects Research (ACEBR) is a Centre of Excellence funded by the National Health and Medical Research Council of Australia since 2005. ACEBR's remit is, among other things, to conduct cutting-edge research into potential health effects associated with exposure to the radiofrequency (RF) electromagnetic fields (EMFs) emitted by telecommunications devices, such as 5G. The ACEBR board is comprised of senior Australian academics with expertise ranging from mechanisms (e.g. how does RF-EMF affect the body), to experimental animal research (e.g. does RF-EMF cause pathology in mice) and experimental human research (e.g. does RF-EMF cause symptoms in those who report being 'electro-hypersensitive'). Importantly, the ACEBR board has substantial experience addressing this issue in terms of both national and international science evaluation, including roles within the International Commission on Non-Ionising Radiation Protection (ICNIRP) and the World Health Organisation (WHO). For example, the lead ACEBR researcher (Croft) chairs the current ICNIRP revision of the ICNIRP (1998) RF-EMF Guidelines, which cover the EMF exposures relevant to 5G.

**2. How will RF-EMF exposures from 5G technologies differ from previous technologies (e.g. 4G)?**

Wireless telecommunications devices, such as 4G and 5G mobile phones and base stations, emit EMFs within the RF range (circa 100 kHz to 300 GHz). This is essentially the same as those from technologies that have been around for many years, such as from radio and television broadcast towers, as well as from a range of more recent conveniences such as microwave ovens, Wi-Fi and Bluetooth.

There is a substantial body of science that has demonstrated that RF-EMFs cause heating in the body, and that health can be adversely affected by this heating. There is also a substantial body of science that has failed to find evidence of RF-EMF induced health effects that do not depend on this heating. Indeed the potential for adverse health effects arising from exposure to the RF-EMFs from 5G is entirely dependent on heating, with the only factors relevant to such harm the *power* and *frequency* of the RF-EMFs – the higher the power the more heating, and the higher the RF-EMF frequency the more superficial will be this heating.

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The initial 5G roll-out will occur using RF-EMF powers and frequencies that are essentially the same as those from 4G technologies. The effect of the RF-EMF from 5G technologies on the body will thus be the same as from the current 4G technologies. However, it should be noted that both 4G and 5G differ from older technologies such as FM radio and TV, in that the RF-EMFs from 4G and 5G do not penetrate into the body as deeply as do the RF-EMFs from FM radio and TV. In terms of RF-EMF power, a recent investigation found that in Australia, the RF-EMF from 4G mobile phone base stations was substantially lower than that due to FM radio and TV (*Environment International* 2018, 114:297-306).

It is anticipated that in the coming years 5G technologies will be developed further to utilise higher RF-EMF frequencies, such as those that have been extensively utilised for radar. Although not relevant to the current 5G roll-out, if/when this development occurs, the heat caused by the RF-EMF will be restricted to more superficial layers of the body (e.g. skin) than results from current 4G/5G technologies. If this development occurs, this difference would mean that it would be important to ensure that the change in heating profile is accounted for in mandated RF-EMF restrictions (see Section 4).

**3. Will RF-EMF exposure from 5G technologies pose a health risk?**

Australia has safety standards to ensure that EMF exposure does not adversely impact on health. The relevant RF-EMF standard is currently the ARPANSA RPS3 (2002), which provides protection against all adverse health effects in the frequency range 3 kHz to 300 GHz (i.e. it includes the RF-EMFs relevant to 5G). This is based upon the Guidelines set by the International Commission on Non-Ionising Radiation Protection (an NGO independent of industry, and in official relations with the World Health Organisation), and as such the RPS3 represents international best practice. The ARPANSA RPS3 sets limits that are lower than the lowest exposure levels that have been shown to cause harm. That is, similar to 4G, 5G technologies are not permitted to expose people to RF-EMF levels that can cause harm.

It is noted that although the ARPANSA RPS3 sets limits below which no harm will result, the limit values are very conservative in that they would need to be exceeded by a substantial margin in order for harm to occur. Indeed at the RPS3 limits, the biological effects that might arise under worst-case conditions for the general public would be a localised temperature rise in the skin of up to 0.5°C, and a body core temperature rise that would be too small to be detected (< 0.1°C), which are not sufficient to adversely affect health.

**4. What type of adverse health effect does the ARPANSA RPS3 (2002) Standard protect against?**

The ARPANSA RPS3 (2002) is based on research that has looked for *any* harm that could result from RF-EMF exposure. This includes those where mechanisms of action are known (e.g. the thermal effects described in Section 3), but also research that has made no assumptions about mechanisms of action. Cancer is a good example of the latter type, where a huge investment has been made to determine whether there is a relationship between RF-EMF exposure and cancer, with no assumptions made about whether such an effect is feasible. That is, the research has been entirely empirically driven, merely asking such questions as 'is mobile phone usage related to cancers in the general population' (using epidemiological methods), and 'does the RF-EMF from mobile phones cause cancer' (using randomised control trials in rodents).

From this research, the 'lowest' RF-EMF exposure levels found to be relevant to health have been used to derive the RPS3 limits. These were based on thermal effects, merely because the thermal effects

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resulted from the lowest RF-EMF exposure levels that were found to cause harm (i.e. no other effects occur at lower exposure levels). Thus although it is often said that the RPS3 limits are only based on thermal effects, this is not true – it is merely that the lowest exposure levels found to cause harm are thermally mediated. However, it is noted that cancer, which is of great concern to the community, has not been found to be caused by RF-EMF exposure, even at far higher exposure levels than those known to cause thermally-mediated adverse health effects. The ARPANSA RPS3 Standard thus protects against ‘all’ adverse health effects, regardless of mechanism.

In terms of potential developments in 5G technologies and the associated move to higher RF-EMF frequencies (e.g. 26 GHz), this would result in the RF-EMF induced temperature rise being restricted to more superficial regions of the body (primarily the skin). This is accounted for within the ARPANSA RPS3 in that limits have been set that restrict the peak temperature rise in the body across the entire RF-EMF spectrum, which includes the potential for higher frequencies of 5G EMFs in the future. Consequently, the highest worst-case temperature rises at 26 GHz would be the same as at the current 5G RF-EMF frequencies (see Section 3).

**5. Clarification regarding common complaints from the community about 5G**

There are a number of views about RF-EMF exposure and health that have been raised by the community in relation to concerns about RF-EMF emitting devices. As ACEBR has encountered many of these views through its community interaction and have thus had the opportunity to address these in terms of the radiation science, it may be useful to comment briefly on these.

***5.1. “But ARPANSA RPS3 only protects against thermal effects”***

As described in Section 4, the ARPANSA RPS3 protects against ‘all’ adverse health effects caused by RF-EMF exposure. The limits have indeed been set to protect against thermal effects, but this is merely because these represent the lowest RF-EMF exposure levels capable of adversely affecting health, and so if there are any other adverse health effects that require higher RF-EMF exposure levels to occur, these will also be protected against.

***5.2. “But ARPANSA RPS3 does not protect against cancer”***

As described in Section 4, the ARPANSA RPS3 protects against ‘all’ adverse health effects caused by RF-EMF exposure, which would include cancer if it was found to be related to RF-EMF exposure. However, after careful consideration of the literature, all independent international reviews have concluded that there is no evidence that RF-EMF exposure causes cancer. This includes consideration of: 1/ the IARC 2011 evaluation on carcinogenicity (which, although classifying RF-EMF as ‘possibly carcinogenic’, did not find any evidence that RF-EMF in fact caused cancer); and 2/ the US National Toxicology Program carcinogenicity studies (which, although reporting that RF-EMF exposure was carcinogenic, suffered from too many scientific flaws to be able to provide any evidence for this assertion; see for instance the critical review by the International Commission on Non-Ionising Radiation Protection, *Health Physics* 2019, doi: 10.1097/HP.0000000000001137).

***5.3. “But why would some other countries have lower RF-EMF limits if ARPANSA RPS3 was safe”***

It is true that there are countries that have lower RF-EMF limits than are in the ARPANSA RPS3. However, these are not science-based. That is, they do not show that there is science that has

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demonstrated that the RF-EMF limits used in the RPS3 are not safe, but have adopted non-scientific reasons for lowering their limits. For example, although limits are lower in Russia, there is no evidence in support of there being adverse health effects at levels lower than the RPS3 limits. Similarly, India has taken the limits specified in RPS3 and divided them by 10 to set their limits, but there is no science to justify this position. This has resulted in substantial difficulties in terms of providing efficient network coverage, but presumably this is an intended consequence of balancing the wishes of some concerned community members against the functionality of the technology. Thus, the fact that a few countries have adopted lower limits does not provide any reason for concern about the ARPANSA RPS3 limits, it merely suggests that considerations other than science have been important in those countries. It is noted that most countries do use equivalent RF-EMF exposure limits to those specified in the RPS3.

**5.4. 'But 5G will need lots more base stations, and this will increase RF-EMF exposure'**

It is true that 5G technologies would require the number of base stations to increase. This is in part because the 5G base stations would be directional, focusing the exposure to areas that need the RF-EMF to communicate, and reducing RF-EMF exposure in other areas. However, regardless of the number of base stations, the RF-EMF levels would still need to be kept within the ARPANSA RPS3 limits, and so protection against any adverse health effects would be maintained. Indeed the early evidence suggests that, similar to the current situation for 4G technologies, 5G technologies would still result in exposures many times lower than the RPS3 limits, and thus there would be no opportunity for 5G-related RF-EMFs to adversely affect health.

**5.5. 'But there is lots of literature listed on the web that shows that the RPS3 limits are not protective'**

It is true that there are many papers that are referred to on the web as evidence that RF-EMF exposure below the RPS3 limits causes harm. However, it is important to note that a study claiming to have shown that RF-EMF caused an adverse health effect does not provide sufficient evidence to conclude that RF-EMF can in fact cause an adverse health effect. The reason for this is that science does not rely on one particular study, but must consider a range of such studies, because there are many reasons why individual studies (and indeed groups of studies) can be flawed. Science thus relies on verification to determine the facts, such that if a study has made an error, the results will typically not be replicated in the follow-up study. It is noted that such erroneous claims are not merely due to poorly designed or executed research designs, but science itself is probabilistic, and is set up so that it will often arrive at erroneous conclusions due to chance alone. Indeed the scientific process is set up so that one in every twenty tests will *incorrectly* claim that there is an effect, and as most studies will conduct many tests, there will be many false conclusions reported in the scientific literature. By repeating the study to test the claim, we then have an opportunity to reduce the impact that chance has on the results. Therefore, it is crucial to consider the entire scientific literature, and not merely a selection of studies without consideration of both methodological adequacy and chance.

Such overall evaluation of the literature is a challenging task given that the science is one of the most heavily funded to date. However, a number of good scientific reviews have been conducted, and each of these has concluded that there is no evidence that RF-EMF below RPS3 limits can cause adverse health effects. Examples of these include those by the Scientific Committee on Emerging and Newly Identified Health Risks (Opinion on potential health effects of exposure to electromagnetic fields (EMF), 27 January, 2015), the Swedish Radiation Safety Authority (SSM's Scientific Council on Electromagnetic Fields. Recent Research on EMF and Health Risk, 2015; 2016; 2018), the World Health Organisation (Radiofrequency Fields; Public Consultation Document, released October, 2014. Geneva, Switzerland),

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and the International Commission on Non-Ionising Radiation Protection (Public Consultation Document, July 2018).

**5.6. 'But there is not enough research on 5G to determine whether it is safe'**

It is true that the latest instantiation of mobile telecommunications technology has only recently been designated as '5G'. However, from the perspective of science, the critical issue is whether the RF-EMF that enables 5G communication is harmful, and there is a substantial literature addressing this issue. That is, science has clearly established that the critical factors that determine whether RF-EMF will adversely affect health are its frequency and power. As we know the RF-EMF frequency and power that will result from 5G, we can use this to determine whether there will be any adverse health effects on humans.

In terms of RF-EMF frequency, the initial 5G roll-out will be at the same frequency as that used by the current (4G) technology, and so will result in the same biological effect that results from current (4G) technology; the ARPANSA RPS3 Standard will protect against harm in both cases. It is anticipated that the RF-EMF frequency that 5G will utilise will increase in the next few years, to approximately 26 GHz. When this occurs, the distribution of RF-EMF power in the body will become more superficial than that from current (4G) technology, with most power absorbed within the skin. These superficial exposure scenarios and their effects on health are already known to science. Thus, although the term '5G' has not been used until recently, a substantial body of science is available concerning the RF-EMF exposures that will be produced by 5G technologies, and based on this research, the ARPANSA RPS3 Standard is sufficient to ensure that exposures associated with 5G will not be able to adversely affect health.

**6. Conclusions**

As can be seen from the above discussion, the RF-EMFs resulting from 4G and current 5G technologies can be treated as equivalent in terms of health, and the ARPANSA RPS3 Standard will provide protection against all adverse health effects associated with RF-EMF exposures, including those arising from 5G technologies. There is thus no impediment to 5G deployment in Australia on the basis of concerns regarding potential adverse health effects from the technology.



Professor Rodney Croft  
30<sup>th</sup> October, 2019

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## **AMTA and Communications Alliance Submission**

House Standing Committee on Communications and the Arts

### **Inquiry into 5G in Australia**

1 November 2019

Inquiry into the deployment, adoption and application of 5G in Australia  
Submission 335

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## Background

This submission is made jointly by the Australian Mobile Telecommunications Association (AMTA) and Communications Alliance (the Associations).

[AMTA](#) is the peak industry body representing Australia's mobile telecommunications industry. Its mission is to promote an environmentally, socially and economically responsible, successful and sustainable mobile telecommunications industry in Australia.

[Communications Alliance](#) is the primary telecommunications industry body in Australia. Its vision is to provide a unified voice for the telecommunications industry and to lead it into the next generation of converging networks, technologies and services. The prime mission of Communications Alliance is to promote the growth of the Australian communications industry and the protection of consumer interests by fostering the highest standards of business ethics and behaviour through industry self-governance.

The combined membership of the two Associations includes Australia's mobile network operators, mobile service providers, network equipment vendors, handset manufacturers, retailers and suppliers as well as telecommunications carriers, carriage and internet service providers, content providers, IT companies, consultants and business groups.

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## Executive Summary

5G networks will transform the way Australians live and work by delivering unprecedented digital connectivity across the community and economy.

5G will deliver substantial improvements in the speed, latency and reliability of mobile networks in order to meet the current and forecast strong and ever-increasing demand for mobile services including new capabilities that will be enabled by this next generation of services.

5G is expected to transform industries and sectors including agriculture, transport and logistics, manufacturing, health, education and emergency services. It will change the way both Government and enterprise deliver goods and services as we transition to smarter cities and an increasingly connected world.

Mobile technology has long been recognised for its enabling impact on our economy and productivity. 5G has the potential to magnify that impact in a transformative fashion as the world moves towards Industry 4.0.

Eighty percent of Australian businesses report that they have already implemented at least one emerging technology, or that they expect to do so in the next 3 years.

The mobile industry directly contributed \$8.2 billion to our economy in 2017-18 and directly employed almost 25 000 FTE people. For every FTE role employed by the mobile industry there are also 3.7 people employed in flow-on industries.

Mobile technologies are also driving productivity. Deloitte Access Economics estimates that the productivity impact of mobile will be equivalent to \$2500 for every Australian by 2023. This amounts to a total of \$65 billion of additional GDP by 2023, or a 3.1% increase in GDP.

The growing demand for 5G is driving continued industry investment in radiocommunications spectrum and the deployment of network infrastructure.

It is in Australia's national interest that the transition to 5G is fast-tracked so that the economic, productivity and social benefits can be realised sooner.

As a small, agile economy with a history of early adoption of digital technology and innovation, Australia is uniquely positioned to take advantage of the potential that 5G has to offer to develop our role in the region and globally as a leading technology nation. For the last four years, Australia has consistently ranked 1<sup>st</sup> in an index that includes 165 countries (representing 99% of global population) for its mobile connectivity. 5G is the innovation platform that will grow the mobile industry's capacity as a key contributor to Australia's future global competitiveness.

This will require a co-ordinated policy approach from all levels of Government, working with industry and across key portfolios, to ensure that policy and regulatory settings support efficient network deployment. This includes timely spectrum allocation and broad community support for and understanding of the economic and social benefits of 5G.

Ensuring a pipeline of new spectrum is made available for 5G and progressing reviews of technical frameworks so that in-market spectrum is 'fit for 5G' is critical to meet forecast demand.

AMTA estimates that each mobile operator will need additional low band spectrum, around 100 MHz of mid band spectrum and an initial 1GHz of mmWave spectrum for 5G to reach its full potential and deliver what it is designed to do.



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Similarly, timely and efficient deployment of network infrastructure requires a flexible regulatory framework including thoughtful consideration and timely decision-making by policy makers to ensure that the benefits of 5G are realised. It is imperative that industry has certainty on the regulatory inputs to its investment decision making processes to encourage 5G infrastructure deployment.

5G services will be as critical as power, gas and water. Indeed, communications is commonly regarded as the fourth utility. Long term reform is required so that telecommunications can be treated in a manner consistent with the other utilities with regard to access to public property, just as we are seen as vital infrastructure in national security matters and by consumers and businesses alike.

Industry is keenly aware that the deployment of 5G mobile networks has caused concern among some members of the community, both in Australia and overseas, in relation to health and safety.

Australian mobile network operators and equipment suppliers all adhere to and operate conservatively within the safety standards set by the regulator – the Australian Radiation Protection and Nuclear Safety Agency ([ARPANSA](#)) as endorsed by the World Health Organisation ([WHO](#)).

Industry relies on the expert opinions and guidance of leading health, safety and research agencies such as ARPANSA and the WHO in relation to electromagnetic energy (EME). Following extensive global research both ARPANSA and the WHO note that there are no established health effects from the radio waves that the 5G network uses.

Industry regards safety as paramount, both for customers and employees, and prioritises compliance with the requisite health and safety standards across all business operations to ensure safe, reliable networks and mobile devices.

Finally, we believe there is scope for Government to play a greater role in leading a strategy to work with all levels of government and industry to promote a pathway to 5G including building awareness around the potential benefits of 5G within the public sector itself as well as across industries and enterprise.

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## 1. Introduction – 5G will transform the way we live and work

5G networks will transform the way Australians live and work by delivering unprecedented digital connectivity across the community and economy.

As a small, agile economy with a history of early adoption of digital technology and innovation, Australia is uniquely positioned to take advantage of the potential that 5G has to offer to develop our role in the region and globally as a leading technology nation. For the last four years, Australia has consistently ranked 1<sup>st</sup> in an index that includes 165 countries (representing 99% of global population) for its mobile connectivity.<sup>1</sup> 5G is the innovation platform that will grow the mobile industry's capacity as a key contributor to Australia's future global competitiveness.

5G will deliver substantial improvements in the speed, latency and capacity of mobile networks in order to meet the current and forecast strong and ever-increasing demand for mobile services including new capabilities that will be enabled by this next generation of services.

5G has the potential to transform industries and sectors including agriculture, transport and logistics, manufacturing, health, education and emergency services. It will change the way both Government and enterprise deliver goods and services as we transition to smarter cities where everything that can be connected is connected.

This submission:

- outlines the potential benefits of 5G for Australian society and the economy;
- highlights a few of the many use cases for 5G;
- addresses community health concerns about 5G and small cells; and
- outlines how Government can work with industry and across key portfolios, to ensure that policy and regulatory settings support efficient deployment of networks, including timely spectrum allocation, and that there is broad community support for and understanding of the economic and social benefits of 5G.

*5G will connect our communities and transform the way Australians live and work*



<sup>1</sup> GSMA Mobile Connectivity Index, [The State of Mobile Internet Connectivity Report](#), July 2019

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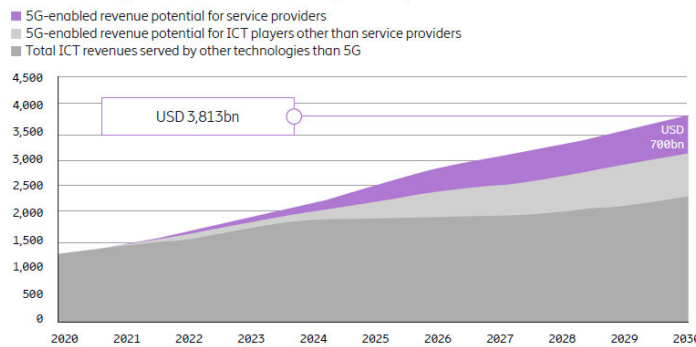
## 2. Economic impact of 5G

### 5G is enabling the digital revolution

Mobile telecommunications have historically had an enabling impact on other industries, across the economy and society. Latest generation mobile technologies, applications and services continue to change the way we work, live and play by enabling a mobile and data rich dimension to our connectivity. 5G has the potential to drive economic growth further as it enables service providers to offer cost-effective technology to meet consumer demand for data and new advanced 5G services.<sup>2</sup> Digitisation is forecast to generate USD 3.8 trillion in revenue for the ICT industry by 2030, with USD 700bn to be addressable by mobile service providers. The graph below shows up to 18 per cent of this 5G enabled opportunity is addressable by mobile service providers.<sup>3</sup>

ii 5G enabled global revenue potential for service providers

Figure 2: Of the total ICT revenue expected in 2030, up to 18 percent of the 5G-enabled opportunity is addressable by service providers



### Demand for mobile continues to grow

The total number of global mobile subscriptions has surpassed 7.9 billion.<sup>5</sup> This takes global mobile subscription penetration to 104% with smartphone users accounting for almost 70% of subscriptions.

Ericsson reports that mobile data traffic continues to grow strongly with an increase of 78% from Q2 2018 to Q2 2019. This growth is being driven by increasing use of data on smartphones and other mobile devices with video content driving the increasing average data volume per subscription.<sup>6</sup>

Ericsson also reports that the adoption of 5G is happening at a faster pace than previously predicted. In terms of forecast demand, by the end of 2024, it is now estimated that globally there will be 1.5

<sup>2</sup> Ericsson and Arthur D. Little, [5G for business: a 2030 market compass](#), Oct 2019, page 3

<sup>3</sup> Ericsson, [5G for business: a 2030 market compass, Oct 2019](#), page 4

<sup>4</sup> Ericsson, [5G for business: a 2030 market compass, Oct 2019](#), page 4

<sup>5</sup> [Ericsson Mobility Report, Q2 Update](#), August 2019

<sup>6</sup> [Ericsson Mobility Report, Q2 Update](#), August 2019

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billion 5G subscriptions for enhanced mobile broadband, with 5G networks covering 40 percent of the world's population and carrying 25% of the world's mobile data traffic.<sup>7</sup>

South Korea, one of the early adopters of 5G, acquired 1 million 5G subscribers in only 69 days, which is faster than the 80 days it took to get the country's first 1 million 4G subscribers in 2011.<sup>8</sup>

As of 9 September 2019, South Korea had:

- surpassed 3 million 5G subscribers, with coverage expected to reach 93 per cent of the population by the end of the year.<sup>9</sup>
- deployed 90,000 5G base stations deployed, nearly double the number installed at launch with a choice of two 5G smartphone models from Samsung and LG.<sup>10</sup>

Looking ahead, in the first five years, 5G subscription uptake is expected to be significantly faster than that of LTE, following its launch in 2009.<sup>11</sup>

5G will deliver substantial improvements in the speed, latency and capacity of mobile networks in order to meet the current and forecast strong and ever-increasing demand for mobile services including new capabilities that will be enabled by this next generation of services.

Ensuring a pipeline of new spectrum is made available for 5G at a price that will not deter investment and progressing reviews of technical frameworks so that in-market spectrum is 'fit for 5G' is critical to meet forecast demand.

AMTA estimates that each mobile operator will need additional low band spectrum, around 100 MHz of mid band spectrum and an initial 1GHz of mmWave spectrum for 5G to reach its full potential and deliver on what it is designed to do.<sup>12</sup>

Recent research points to the potential of 5G for consumers<sup>13</sup> with a key finding that data usage for one in five users could reach more than 160GB per month on a 5G device by 2025. Other key findings were:

- Australian consumers expect 5G to provide relief from urban network congestion in the near term - *especially in Australia's bigger cities, where nearly half (47%) smartphone users report facing network issues in crowded areas* - and to create new home broadband choices.
- Current 4G usage patterns are not indicative of future usage behaviours. Video consumption is set to rise significantly with 5G. Australian consumers expect to not only stream video in higher resolutions but also use immersive video formats such as Augmented reality (AR) and Virtual reality (VR), resulting in an additional two hours of video content

<sup>7</sup> [Ericsson Mobility Report](#), Special Edition, World Economic Forum, January 2019

<sup>8</sup> Venture Beat 2019, [South Korea hits 1 million 5G subscribers in 69 days](#)

<sup>9</sup> Mobile World Live, 24 Sept 2019, [South Korea hits 3m 5G subs as base stations double](#)

<sup>10</sup> Mobile World Live, 24 Sept 2019, [South Korea hits 3m 5G subs as base stations double](#)

<sup>11</sup> Ericsson Mobility Report June 2019, [Mobile subscriptions outlook](#). The peak of LTE subscriptions is projected for 2022, at around 5.3 billion subscriptions, with the number declining slowly thereafter. However, LTE will remain the dominant mobile access technology by subscription for the foreseeable future, and it is projected to have nearly 5 billion subscriptions at the end of 2024.

<sup>12</sup> [AMTA submission](#) to ACMA's Five Year Spectrum Outlook, 16 May 2019.

<sup>13</sup> Ericsson [5G Consumer Potential](#) report, 2019

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being watched weekly on mobile devices by users in the 5G future when they are out and about, including half an hour wearing AR glasses or VR headsets.

- Consumers are willing to pay a premium on 5G, with Australian smartphone users stating that they are willing to pay 20 percent more for fifth-generation services, and early adopters as much as 42 percent more.

**Mobile contribution to Australia’s economy and productivity**

Australia’s mobile sector is an integral part of the broader telecommunications industry. It is a significant component of the critical infrastructure that facilitates our ability to connect, work and transact.

The mobile industry directly contributed \$8.2 billion to our economy in 2017-18. The industry also directly employed almost 25 000 FTE people in 2017-18.

Indirectly, the industry contributed \$14.7 billion of economic activity, through contributions to revenue and employment in other sectors.<sup>14</sup>

And for every FTE role employed in the mobile industry there are 3.7 employed in flow-on industries.<sup>15</sup>

Beyond the total \$22.9 billion value added to GDP by mobile in 2017-18 and the employment contribution, mobile technologies, including 5G, continue to drive productivity throughout the Australian economy. While productivity has generally declined over the last decade, mobile technologies have boosted both labour and capital productivity as shown in the diagram below.

iii Productivity benefits of mobile



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<sup>14</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), chapter 2

<sup>15</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), chapter 2

<sup>16</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 18

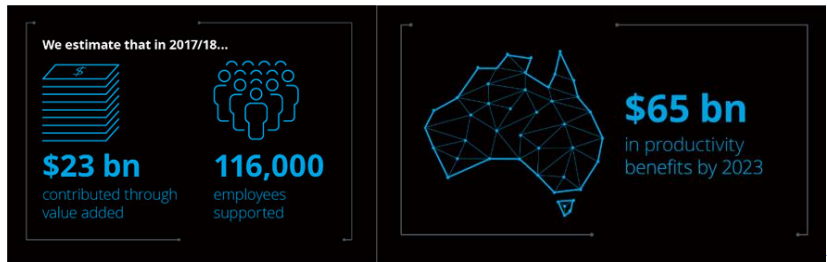
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Deloitte Access Economics estimates that the productivity impact of mobile will be equivalent to \$2500 for every Australian by 2023. This amounts to a total of \$65 billion of additional GDP by 2023, or 3.1% increase in GDP.

*iv Forecast productivity benefits by 2023*



The Bureau of Communications and Arts Research also recognises that:

“Digital transformation has long held the promise of improving productivity outcomes, and the planned rollout of 5G internationally has been viewed as the next development continuing the critical enabling capacity of communications services across the economy.”<sup>18</sup>

The Bureau’s own research forecast a \$1300-2000 per capita benefit to GDP after the first decade of a 5G roll-out in Australia, noting that this is a conservative estimate that did not fully consider consumer and indirect benefits. The Bureau, however, concludes that 5G has the potential to transform the economy by “supporting, and even accelerating, Australia’s digital transformation”.<sup>19</sup>

The Bureau also notes in its findings that the Government’s stated 5G strategy,

“...details the actions that are to be taken to allow for the introduction of 5G in line with international developments, including:

- Making spectrum available in a timely manner
- Actively engaging in the international standardisation process
- Streamlining arrangements to allow mobile carriers to deploy infrastructure more quickly, and
- Reviewing existing telecommunications regulatory arrangements to ensure they are fit-for-purpose.<sup>20</sup>

In addition to the direct and indirect impacts on productivity and connectivity 5G will play a central role in an increasingly convergent and intelligent technology ecosystem that will drive the 4<sup>th</sup> Industrial Revolution.

<sup>17</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), chapter 2

<sup>18</sup> Bureau of Communications and Arts Research, [Impacts of 5G on productivity and economic growth](#), April 2018

<sup>19</sup> Bureau of Communications and Arts Research, [Impacts of 5G on productivity and economic growth](#), April 2018, page 6

<sup>20</sup> Bureau of Communications and Arts Research, [Impacts of 5G on productivity and economic growth](#) April 2018

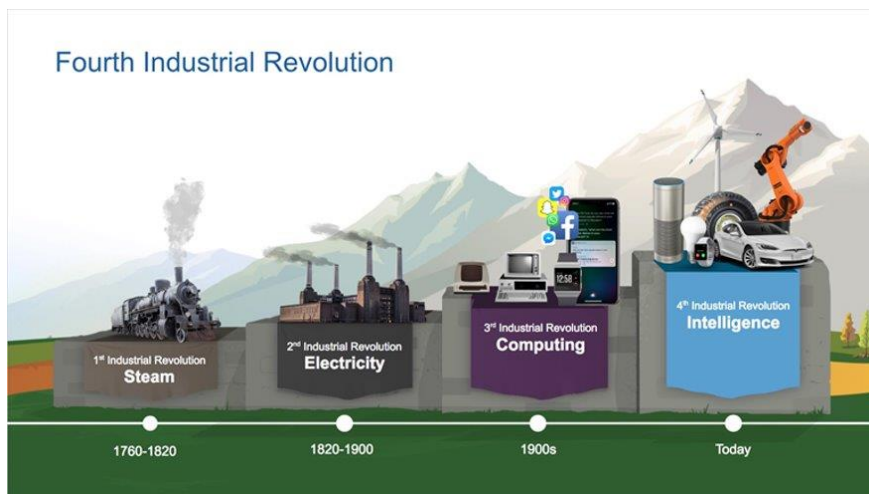
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In addition to the direct and indirect impacts on productivity and connectivity 5G will play a central role in an increasingly convergent and intelligent technology ecosystem that will drive the 4<sup>th</sup> Industrial Revolution as illustrated below.

*v Industry 4.0*



We believe that 5G will enable the infrastructure to underpin Australia's transition to Industry 4.0 as businesses move to increase automation and become ever increasingly reliant on data. Australian businesses will increasingly rely on mobile derived data to drive innovation, develop new revenue streams, and streamline operations. In a 2018 survey of 550 Australian businesses by Deloitte Access Economics, 80% of enterprises reported that they had already implemented at least one emerging technology, or that they expect to implement one in the next 3 years.<sup>21</sup>

#### Mobile's global impact

A less conservative global forecast by Qualcomm predicts \$USD12.3 trillion worth of goods and services will be enabled by 5G by 2035, as illustrated in the graph below.<sup>22</sup> In the same timeframe, Qualcomm found that 22 million jobs could be supported globally with \$3.5 trillion revenue generated by the mobile supply chain alone. And the overall contribution of 5G to global GDP could be as high as \$3 trillion.<sup>23</sup>

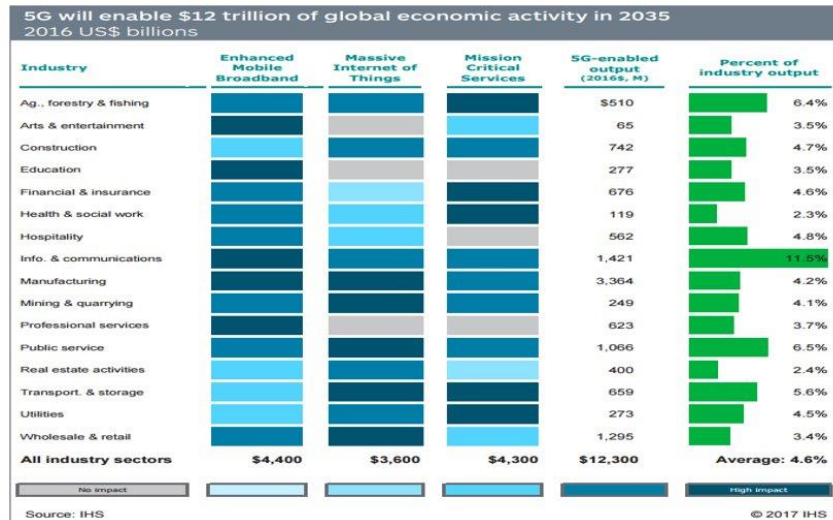
<sup>21</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), chapter 4

<sup>22</sup> Qualcomm, [The 5G Economy](#), 2018

<sup>23</sup> Qualcomm, [The 5G Economy](#), 2018

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vi 5G impact on global economic activity



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Social benefits of mobile technology

Mobile technology also provides significant social benefits with 60% of Australians reporting that their smartphone has replaced 3 or more other devices or items, such as cameras, street directories, or calendars. And 94% of mobile users do not leave the house without taking their smartphone with them. Mobiles are now a multi-purpose utility tool that enable us to remain connected both at work and socially.

5G promises applications and use cases that will revolutionise the health, transport and education sectors. Mobile devices provide social connectivity as well as enable flexible work arrangements, promoting greater workforce participation.<sup>25</sup> Wearable mobile devices can help Australians track their health and reach fitness goals, and can also provide more critical health monitoring, enabling older Australians to live in their own homes for longer. Transport and logistics will be able to rely on IoT smart trackers to improve efficiency and autonomous vehicles will reduce costs as well as improve safety and accessibility for all road users. The NRMA notes that autonomous vehicles will deliver improved safety, decrease congestion, provide options for young, elderly and disabled people, as well as reduce pollution and emissions.<sup>26</sup>

<sup>24</sup> Qualcomm, [The 5G Economy](#), 2018, IHS Report 2017

<sup>25</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 33

<sup>26</sup> NRMA, [Driverless cars: the benefits and what it means for the future of mobility](#)



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**Growing demand for 5G drives continued investment in spectrum and networks**

Some Australian mobile carriers began deploying 5G mobile services in 2019 and all have flagged their commitment to invest in 5G networks.<sup>27</sup> The deployment of 5G requires significant capital investment in both spectrum resources and network infrastructure to both densify and expand network capacity.

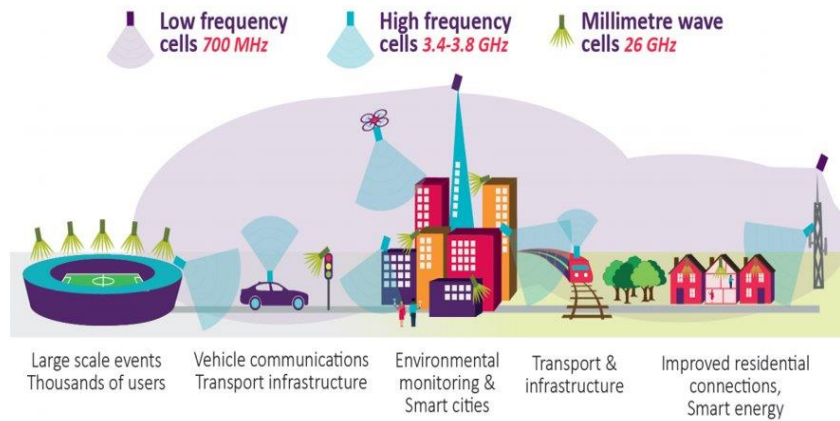
AMTA notes the Government’s recognition that spectrum must be made available in a timely manner to enable innovation and productivity across industry sectors with a particular focus on enabling the early deployment of 5G mobile networks in Australia.<sup>28</sup>

Ensuring a pipeline of new spectrum is made available for 5G and progressing reviews of technical frameworks so that in-market spectrum is ‘fit for 5G’ is critical to meet forecast demand.

It will also ensure Australia remains at the forefront of rolling out the next generation of mobile technologies to enable transformative social and economic benefits across industries such as transport and logistics, health, agriculture, education, emergency services and the automotive industry,<sup>29</sup> as well as consumer benefits.

We welcome the Government’s recent decision to bring the 26 GHz band to market, however it is critical that more spectrum for 5G is progressed to market in a timely manner (see *Spectrum required for 5G* - page 35). Note the diagram below refers to ‘High frequency cells’ which are more commonly referred to as mid-band/frequency in the Australian market.

vii Spectrum frequencies for 5G



<sup>27</sup> [Optus](#), [Telstra](#), [Vodafone](#) Hutchison Australia;

<sup>28</sup> Department of Communications and the Arts, [5G-Enabling the future economy](#), Directions paper, Oct 2017.

<sup>29</sup> AMTA Mobile Minute '[5G A connected future for Australia](#)' June 2017

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### 3. What is 5G?

5G is about enhancing mobile broadband and connecting things to people and other things.

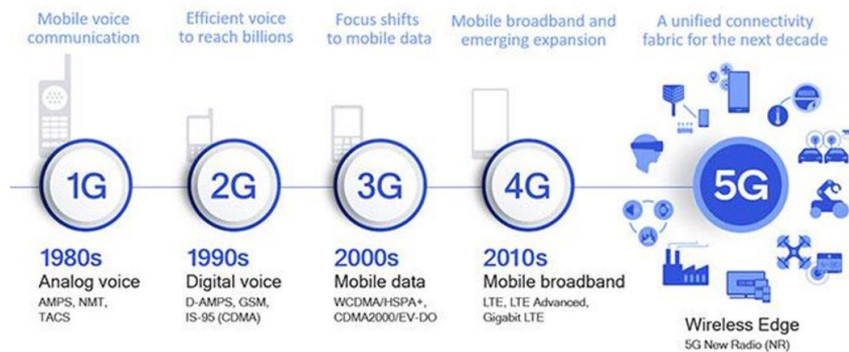
Previous generations of mobile networks, as illustrated in the diagram below, delivered predominantly voice and SMS in 2G, email and web-browsing in 3G, and higher-speed data and video streaming in 4G.

5G is focused on the both the requirements of people and industries - and is in effect the 1<sup>st</sup> generation of mobile for machines.

2019 has seen the initial deployment and availability of 5G services in many countries, including Australia, with widespread global availability expected by 2025.

The transition to 5G will not only deliver an enhanced mobile broadband experience to consumers but also deliver technology tools for enterprises and government services to move to Industry 4.0 and increased digitisation. 5G will deliver data rates up to 100 times faster than 4G, network latency will be lowered by a factor of 5, data volumes expanded by a factor of 1000, and battery life will be improved by a factor of 10. 5G networks will be more sustainable and will enable the use of remote devices for IoT applications on a much wider scale.

viii. Mobile generations - 1G to 5G

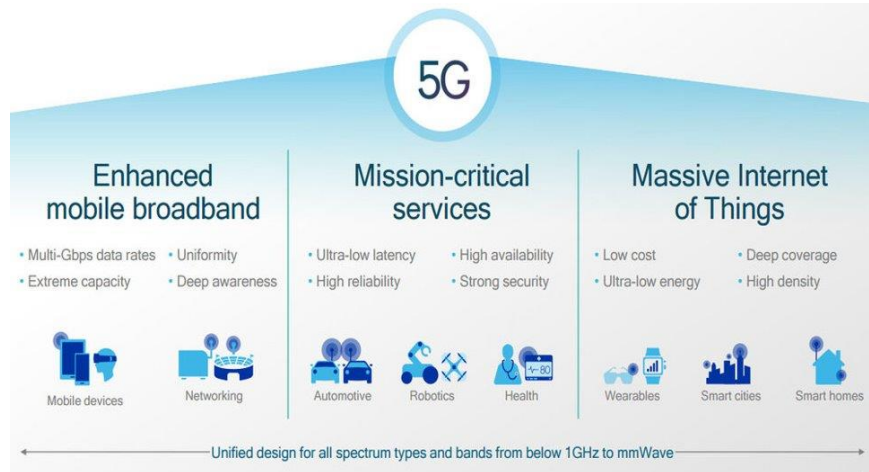


This [video](#)<sup>30</sup> from Ericsson explains 5G and its primary use cases – eMBB (enhanced mobile broadband), URLLC (ultra-reliable low latency communications) and MMTC (massive machine type communication).

<sup>30</sup> Ericsson, [This is 5G](#), Jan 16, 2019.

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ix 5G Primary Use Cases – eMBB, URLLC and MMTC



#### Enhanced mobile broadband (eMBB)

**Enhanced mobile broadband** will provide substantially faster data speeds as well as greater capacity for networks.

#### Ultra-reliable low latency communications (URLLC)

5G will also enable **ultra-reliable low latency communications** for mission critical applications, as illustrated in the diagram above. This has the potential to open up a new world where remote medical care, procedures and treatment are all possible.

#### Massive machine-type communication (MMTC)

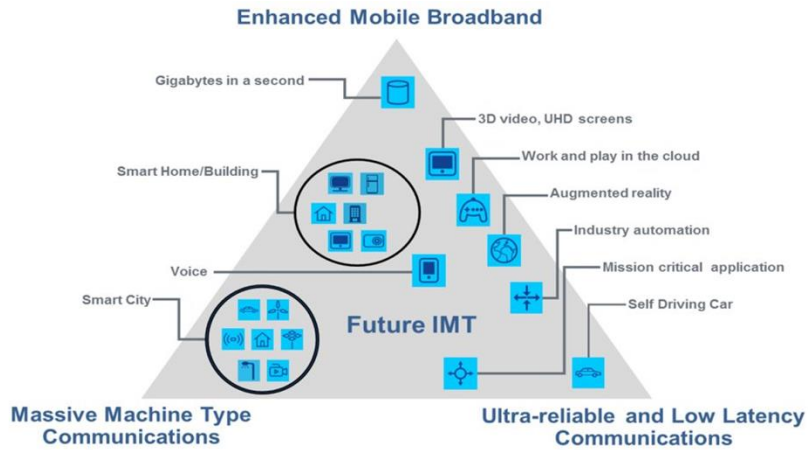
**Massive machine type communication** with 5G will enable a truly connected world, meeting the growing demand for data and enabling innovations that will build on the Internet of Things (IoT) to connect billions of devices without human intervention at a never before seen scale. As shown in the diagram above, this has the potential to revolutionise modern industrial processes and applications, including agriculture, manufacturing, transport and business communications.

The 5G ecosystem will also make use of the characteristic strengths of satellite services as part of the service delivery matrix, including in areas such as coverage extension (including for IoT), remote-area backhaul, content caching, multi-casting and additional resilience.

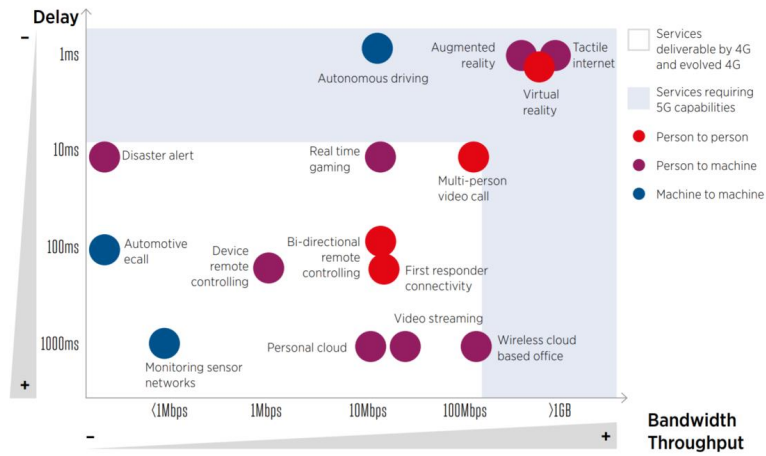
The prime benefits of 5G, compared to 4G, will be significantly faster speeds in data access, downloading and streaming content. 5G devices will have increased computing power and make use of lower latency, meaning that devices will enjoy virtually instantaneous connections to the network, as well as greater connectivity when on the move due to the use of antenna beam steering.

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x The key benefits delivered by 5G – eMBB URLLC and MMTTC



xi Services supported by 5G



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As shown above, two of the key mobile technical characteristics are the speed of data transmission (the throughput) and the time taken for the data to be transmitted across the network (the delay – also termed latency). Many applications today are supported on existing 4G networks, however as requirements for lower latency and higher bandwidth increase so the demand for 5G will grow.

<sup>31</sup> [GSMA Intelligence](#)

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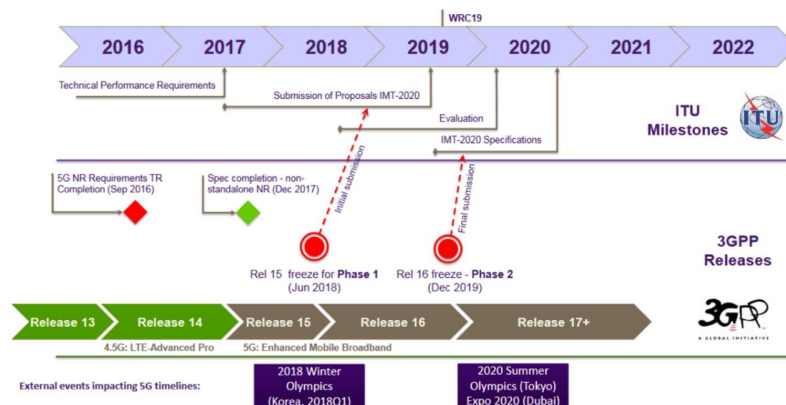
4G/5G ecosystem and development of technical standards

5G has been designed to meet the very large growth in data and connectivity of today’s modern society, the internet of things (IoT) with billions of connected devices and tomorrow’s innovations.

As with 4G, 5G mobile networks will complement the NBN, fixed wireless and satellite services, as an essential part of the nation’s interconnected system of telecommunications networks. Mobile networks deliver a connectivity capability to consumers and businesses alike, while still relying on interconnection with fixed and microwave networks to provide the requisite backhaul and capacity.

The 3<sup>rd</sup> Generation Partnership Program (3GPP) has already developed the requisite initial technical standards for 5G. This includes several standards, including those for the wireless over the air interface and the network architecture which will be released in stages as per the diagram below. In parallel, the ITU will specify 5G requirements in 2020. Commercial deployments of 5G have been and will continue to be made while the Standards are in development.

xii 5G technical standard releases (3GPP)



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5G networks will initially integrate with 4G networks to provide a continuous connection. A mobile network has two components: the radio access network (RAN) and the core network. The border between the RAN and Core network is blurred in 5G, with many of the components running as virtual network functions.

The RAN consists of various types of infrastructure including small cells, towers, masts and dedicated in-building and home systems that connect mobile users and devices to the main core network.

When transitioning from 4G to 5G, operators have two options, Non-standalone (NSA) and standalone (SA). At a high level, 5G NSA refers to a 5G network that requires a 4G one to work. 5G stand-alone (SA) is not linked to a 4G network and will provide support for a wider set of use cases.

Most operators are initially launching with NSA and it is expected they will evolve to SA over time.

<sup>32</sup> 3GPP website – [Specifications releases and freezes](#).

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### 5G base stations

**Small cells** are mini base stations that will be a feature of 5G networks particularly where the new mmWave frequencies are used as the connection range is very short. Small cells will provide additional capacity and coverage over a small geographic area, utilising lower power than a traditional mobile phone base station and using smaller equipment. Small cells will therefore complement the macro network that provides wide area coverage. Small cells are already used in today's 4G networks in order to provide coverage and capacity in areas not adequately serviced by the macro network, for example, as illustrated in the images below.

*xiii Small cells*



**Macro cells** (traditional base stations) will also continue to be used for 5G and will utilise MIMO (multiple input, multiple output) antennas that have multiple elements or connections to send and receive more data simultaneously. This enables more users to simultaneously connect to the network and maintain high throughput. Where MIMO antennas use very large numbers of antenna elements they are referred to as 'massive MIMO' although their actual physical size is similar, or smaller, to existing 3G and 4G base station antennas, as can be seen in the images below.

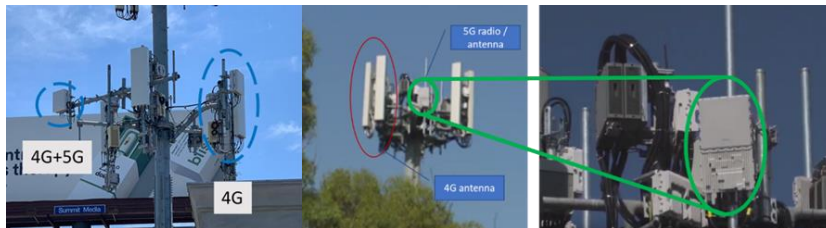
**Beam steering** is a technology that allows the massive MIMO base station antennas (pictured in the images below) to direct the radio signal to the users and devices rather than in all directions. The beam steering technology uses advanced signal processing algorithms to determine the best path for

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the radio signal to reach the user. This increases efficiency as it reduces interference (unwanted radio signals). Greater efficiency, in turn, will mean lower power and therefore generally lower EME emissions than used today.

xiv MIMO 5G Antennas – smaller than 4G antennas

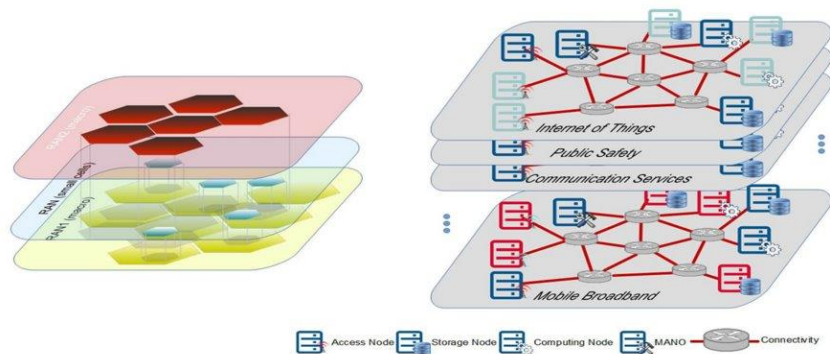


Network slicing – a key differentiator

**Network slicing** is a key differentiator that will be enhanced by 5G, as compared to 4G. Network slicing enables a smart way to segment the network for a particular industry, business or application. For example, emergency services could operate on a network ‘slice’ that is independent of other users, as illustrated below, thus avoiding congestion and providing dedicated services. Network slicing therefore has much potential for both enterprise and government services that require guaranteed connectivity, security and reliability.

xv Network slicing enables secure segmenting of 5G networks for various applications

Figure 16: Example of network slicing



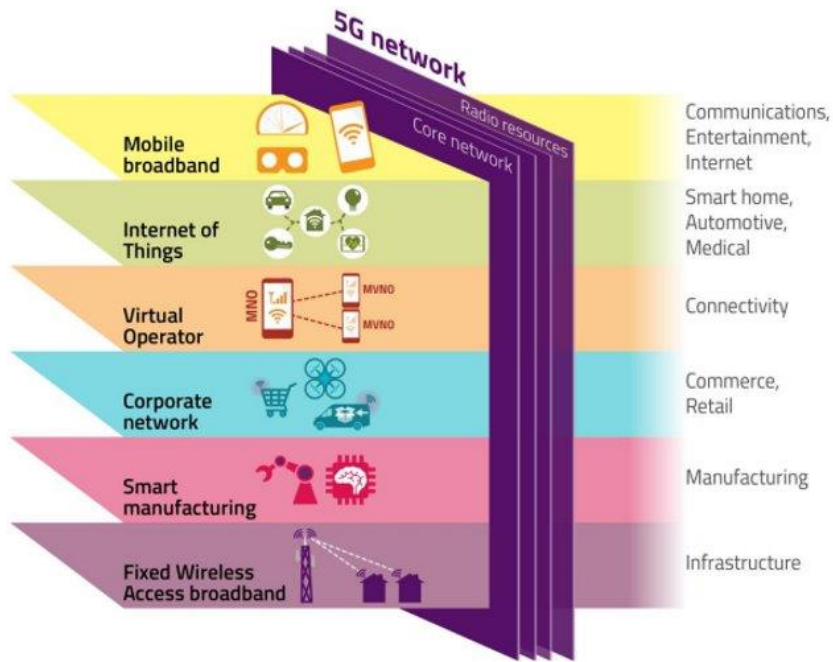
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<sup>33</sup>GSMA: [Unlocking Commercial opportunities from 4G evolution to 5G](#)



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xvi Network slicing enables various uses in different network segments





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#### 4. Health and safety

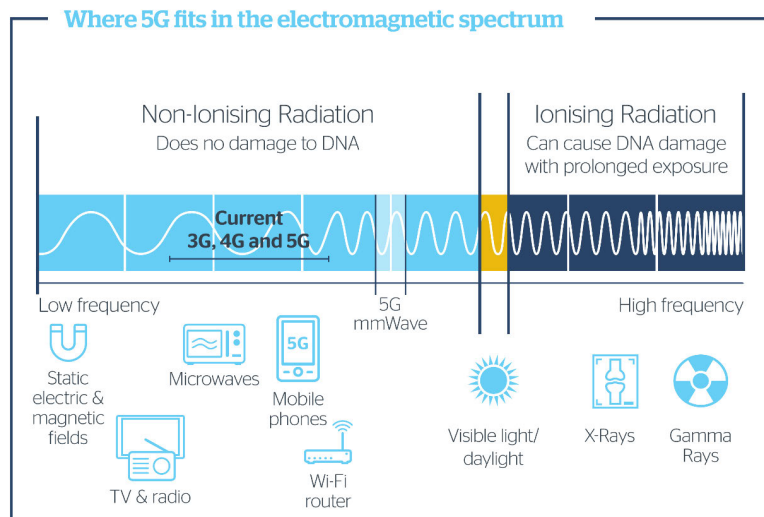
Industry is keenly aware that the deployment of 5G mobile networks has caused concern among some members of the community, both in Australia and overseas, in relation to health and safety.

Australian mobile network operators and equipment suppliers all adhere to and operate within the safety standards set by the regulator – the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)<sup>34</sup> as endorsed by the World Health Organisation (WHO)<sup>35</sup>.

Safety is paramount, both for our customers and employees, and industry complies with the requisite health and safety standards across all business operations to ensure we deliver safe, reliable networks, customer equipment and devices.

Electromagnetic frequencies used for 5G are part of the non-ionising range of radio frequency spectrum which has been extensively researched in terms of health and environmental impacts for decades. The diagram below (not to scale) illustrates where the spectrum used for 5G sits in the electromagnetic spectrum – well within the non-ionising range.

*xvii 5G spectrum - where it fits*



#### International safety limits for 5G

Comprehensive international guidelines exist governing exposure to radio waves including the frequencies proposed for 5G. The limits have been established by independent scientific organisations, such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP),

<sup>34</sup> ARPANSA [website](#)

<sup>35</sup> WHO [website](#)

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and include substantial margins of safety to protect all people including children and the elderly at all times.

These guidelines have been widely adopted in standards around the world, including in Australia by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and are endorsed by the World Health Organization (WHO).

In relation to 5G, ARPANSA note for their standard:<sup>36</sup>

*The operating frequencies of the 5G network are included within the limits set by the ARPANSA safety standard. 5G infrastructure and devices emitting RF EME are regulated by the Australian Communications and Media Authority (ACMA), and emissions are required to comply with the limits of the ARPANSA safety standard.*

#### How safety standards are set

In most Western countries, safety standards for human exposure to EME are based on the guidelines produced by [ICNIRP](#)<sup>37</sup>. ICNIRP is a special commission of the World Health Organisation and is made up of a wide range of independent scientists who are expert in the key areas that the guidelines address (i.e. the whole body of research on the health effects of EME). ICNIRP periodically undertakes an extensive review of the new EME research literature to determine that its guidelines remain current and appropriate for the protection from the known effects of EME on human health for all members of the public, including children. The guidelines apply across all RF applications at all frequencies in the range 100kHz-300GHz, including those frequencies used by 5G now, and into the foreseeable future.

ICNIRP's guidelines are in turn adopted by national and international agencies to implement in regulation within respective jurisdictions to ensure public and worker exposure to EME is within the guidelines. In Australia, the agency responsible for adopting these limits in a safety standard is ARPANSA, while the regulating bodies who implement the standard are the Australian Communications and Media Authority (ACMA) for general public exposure, and the Federal and State Work Health and Safety agencies for occupational exposures.

The current ICNIRP guidelines and Australia's own safety standard (the [ARPANSA standard](#)<sup>38</sup>) is based on guidelines first published by [ICNIRP in 1998](#)<sup>39</sup>. These guidelines were again reviewed in [2009](#)<sup>40</sup> when ICNIRP published an update having reviewed research up to that time and found the guidelines remained protective with a significant safety margin although some detailed adjustments may be warranted to provide greater scientific consistency with advances in EME measurement and calculation. Importantly, there was no new health research that suggested any changes to the limits were required.

<sup>36</sup> ARPANSA, [5G new generation mobile phone network and health](#)

<sup>37</sup> ICNIRP [website](#)

<sup>38</sup> ARPANSA 2002. Maximum exposure levels to radiofrequency fields – 3 kHz to 300 GHz, Radiation protection Series No. 3 (RPS3), available [here](#).

<sup>39</sup> ICNIRP 1998, ICNIRP Guidelines for limiting exposure to time varying electric, magnetic and electromagnetic fields (up to 300 GHz), Health Physics 74 (4):494-522; 1998, available [here](#).

<sup>40</sup> ICNIRP 2009, ICNIRP Statement on the "ICNIRP Guidelines for limiting exposure to time varying electric, magnetic and electromagnetic fields (up to 300 GHz)", Health Physics 97 (3):257-258, 2009, available [here](#).

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ARPANSA also reviewed its own standards, making similar findings in their [2014 report](#)<sup>41</sup> that the limits continued to provide ample protection but could be improved with some detailed adjustments arising out of improved measurement and calculation techniques.

Following their 2009 update, ICNIRP conducted an exhaustive review of the scientific research up to the present time, and again examined their guidelines for any required adjustments, issuing a [draft new guideline in 2018](#)<sup>42</sup> for public and scientific review. ICNIRP presented the draft guidelines at the 2018 BioEM Conference and emphasised the thorough review of the science to support the new guidelines, the conservative nature of the guidelines and that they cover the existing and new mmWave 5G frequencies. The draft guidelines maintained a conservative approach and made no major departures from the previous guidelines even though a further 10 years of scientific study had been undertaken, indicating the basis for the original and current guideline remains sound and appropriate for protection of the public. ICNIRP have indicated the completed new guideline will be published in the peer reviewed scientific journal [Health Physics](#)<sup>43</sup> in the coming months.

#### Precautionary limits used in other countries

Some countries, including several European jurisdictions, choose to adopt precautionary limits which are more stringent than those recommended in the ICNIRP and Australian standards. These limits are adopted for political and social reasons and are not based on any new or different scientific basis. Therefore, these limits also provide no benefit for those countries' citizens in terms of safety from exposure to EME, although in several cases the limits have frustrated the deployment of mobile networks in those countries, and if retained, will also inhibit the deployment of 5G.

The WHO have warned against such precautionary limits, noting in their [framework document](#)<sup>44</sup> that *'Large disparities between national limits and international guidelines can foster confusion for regulators and policy makers and increase public anxiety.'*

Further, the guidelines already incorporate significant precautionary or safety factors, as the [WHO note](#).<sup>45</sup>

*'International guidelines and national safety standards for electromagnetic fields are developed on the basis of the current scientific knowledge to ensure that the fields humans encounter are not harmful to health. To compensate uncertainties in knowledge (due, for example, to experimental errors, extrapolation from animals to humans, or statistical uncertainty), large safety factors are incorporated into the exposure limits.'*

No further benefit to the public can therefore be gained from any additional precautionary limits but the societal benefit of mobile technology may be lost.

For example, in Switzerland, an Ordinance relating to Protection from Non-Ionising Radiation (ONIR) specifies a precautionary 'Installation Limit' (i.e. applying to installed base stations only) about 100 times below the international exposure limit values. Swiss authorities acknowledge these limits are

<sup>41</sup> Report by the ARPANSA Radiofrequency Expert Panel on Review of Radiofrequency Health Effects Research – Scientific Literature 2000–2012 (ARPANSA 2014) available [here](#).

<sup>42</sup> <https://www.icnirp.org/en/activities/public-consultation/consultation-1.html>

<sup>43</sup> <https://journals.lww.com/health-physics/pages/default.aspx>

<sup>44</sup> WHO 2006, Framework for developing health-based EMF standards, available [here](#).

<sup>45</sup> WHO, [What is EMF](#)

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not suggested by the established EME science, noting that for the ICNIRP limits, ‘...if these limits are complied with, none of the scientifically accepted negative effects on our health can occur.’

Similarly, in Brussels (Belgium), a limit of about 400 times less than the ICNIRP guidelines has been imposed on top of the international limits. It was not possible to deploy 4G in Brussels under these restrictive limits and in 2014 the Brussels Environment Minister relaxed the limits (to about 100 times less than ICNIRP) to allow 4G to proceed although much delayed. A 2018 report ([PDF](#))<sup>46</sup> by the Federal Belgian Institute for Postal Services and Telecommunications (BIPT) concluded that the present Brussels limits negatively impact current 4G indoor coverage and would need to be at least relaxed by a factor of two to allow the deployment of 5G. The commercial deployment of 5G is consequently currently on hold.

The conclusion from the experience in these two countries alone is that there is a very significant loss of benefit in economic and social productivity that 4G and 5G services can bring, with no benefit to the population in terms of health and safety from the unnecessarily low limits their governments have imposed.<sup>47</sup>

#### Health effects research for 5G

The electromagnetic frequencies used for 5G are part of the radio frequency spectrum which has been extensively researched in terms of health impacts for decades. Over 50 years of scientific research has already been conducted into the possible health effects of the radio signals used for mobile phones, base stations and other wireless services including frequencies planned for 5G and mmWave exposures.

In relation to radio frequency exposures and wireless technology and health, including frequencies used for 5G, the World Health Organization (WHO) states<sup>48</sup>:

*“Despite extensive research, to date there is no evidence to conclude that exposure to low level electromagnetic fields is harmful to human health.”*

ARPANSA states<sup>49</sup>:

*“This [5G] network currently runs on radio waves similar to those used in the current 4G network, and in the future will use radio waves with higher frequencies. It is important to note that higher frequencies does not mean higher or more intense exposure. Higher frequency radio waves are already used in security screening units at airports, police radar guns to check speed, remote sensors and in medicine and these uses have been thoroughly tested and found to have no negative impacts on human health.”*

<sup>46</sup> BIPT 2018, Study of 12 September 2018 on the impact of the radiation standards in Brussels on the deployment of mobile networks, available at [https://www.ibpt.be/public/files/en/22619/Study\\_impact\\_radiation\\_standards\\_Brussels\\_deployment\\_mobile\\_networks.pdf](https://www.ibpt.be/public/files/en/22619/Study_impact_radiation_standards_Brussels_deployment_mobile_networks.pdf)

<sup>47</sup> A PwC [analysis](#) conducted on behalf of the Swiss operators compared the deployment costs in Switzerland to those of Germany, France, Italy and Austria (all of which are neighbouring countries). Costs were estimated to be 40-110% higher with about one third of the extra costs linked to complying with the restrictive installation limit values.

<sup>48</sup> World Health Organization: [What are ElectroMagnetic Fields](#)

<sup>49</sup> ARPANSA. 3 June 2019. [‘Misinformation about Australia’s 5G network’](#).

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ARPANSA also states:

*“ARPANSA and the World Health Organization (WHO) are not aware of any well-conducted scientific investigations where health symptoms were confirmed as a result of radio wave exposure in the everyday environment.”, and in regards to 5G, “... there are no established health effects from the radio waves that the 5G network uses.”*

Australia’s leading academic research centre in this area is the Australian Electromagnetic Bioeffects Research Centre ([ACEBR](#)), a federally funded Centre of Research Excellence, headquartered at the University of Wollongong. In their recent [fact sheet](#)<sup>50</sup>, ACEBR note:

*“Extensive research has been conducted on the 5G frequencies soon to be introduced, including specifically on mobile phone applications. For future 5G frequencies, there has been extensive research on other applications using these frequencies (for example, radar and military applications) which have been using these frequencies for many decades at power levels far higher than those used in mobile telecommunications. No indication of any health impacts from exposures at the intensities related to mobile communications have been observed.”*

International authorities have also considered the potential health effects of 5G technology. In a recent [statement](#)<sup>51</sup> from the UK health authority, Public Health England, PHE note that:

*“Exposure to radio waves is not new and health-related research has been conducted on this topic over several decades.”*

And although in future 5G may be implemented at higher frequencies (mmWave) than used for current technologies:

*“... the biophysical mechanisms that govern the interaction between radio waves and body tissues are well understood at higher frequencies and are the basis of the present ICNIRP restrictions. The main change in using higher frequencies is that there is less penetration of radio waves into body tissues and absorption of the radio energy, and any consequent heating, becomes more confined to the body surface.”*

PHE conclude:

*“It is possible that there may be a small increase in overall exposure to radio waves when 5G is added to an existing network or in a new area. However, the overall exposure is expected to remain low relative to guidelines and, as such, there should be no consequences for public health.”*

In Australia, preliminary testing on Australian 5G networks conducted with commercial devices in real-world settings shows levels similar to 3G, 4G and Wi-Fi. In many cases, levels from 5G network base stations measured in the street and in homes and apartments were around 1,000 times below the safety limits.<sup>52</sup>

#### 5G, small cells and health

A key feature of the infrastructure required to deliver future 5G services, and currently already a feature of 4G deployments, is the use of small cells. Small cells operate at lower power than a traditional mobile phone base station and use smaller equipment. Small cells can be deployed with

<sup>50</sup> ACEBR Nov 2018, 5G Wireless Technology Fact Sheet, available [here](#).

<sup>51</sup> Public Health England, 2019 available at <https://www.gov.uk/government/publications/5g-technologies-radio-waves-and-health/5g-technologies-radio-waves-and-health>

<sup>52</sup> Telstra Exchange, July 2019, [5 Surveys of 5G show EME levels well below safety limits](#).

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minimal visual impact as they use smaller antennas, smaller equipment and can be co-located on existing infrastructure such as electricity and light poles.

Some members of the public have expressed concern that this new type of deployment will bring EME sources closer to their homes and workplaces and therefore increase their exposure to EME.

The deployment of small cells, like all mobile network infrastructure, must comply with strict science-based safety standards set by ARPANSA. These limits protect the community, including children and the elderly, 24 hours a day. The environmental EME levels from small cells, the levels typically experienced by the public and which are many times below the safety standards, are reported in an ARPANSA environmental report, and are available at [www.rfnsa.com.au](http://www.rfnsa.com.au).

#### Working safely with EME

In a world-leading initiative, in partnership with the industry, AMTA has developed an RF safety program, which is based on a publicly accessible database of all Carriers' mobile network radiocommunications facilities called the Radio Frequency National Site Archive ([RFNSA](http://www.rfnsa.com.au))<sup>53</sup>. The website documents the details of all Australian mobile network base stations, including environmental EME reports (the ARPANSA report) for public information, site safety documentation for safe work on site, site locations, carrier contact details for existing sites and community consultation information for new sites, including 5G. The database is also used by the Carriers to assist them meet their regulatory obligations for EME safety under their licence conditions<sup>54</sup> with the ACMA, and also their regulatory obligations under the industry code for mobile base station deployment.

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<sup>53</sup> RFNSA [website](http://www.rfnsa.com.au)

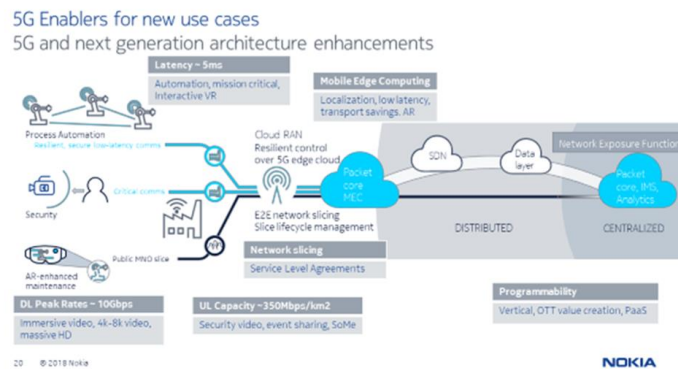
<sup>54</sup>Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015.

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### 5. 5G Technologies and use cases

5G’s key capabilities - low latency, increased speed and more efficient, stable and secure networks and network slicing – will either significantly enhance or make possible a broad range of use cases for enterprise and government, as illustrated in the diagram below.

xviii 5G enablers for new use cases



Provided below are use cases that explain 5G’s potential for both Government and enterprise.

#### 5G will drive innovation in enterprise

A survey of 550 businesses by Deloitte in 2018 found that 80% of them have already implemented, or expect to implement in the next 3 years, at least one emerging technology in their enterprise.<sup>55</sup> This willingness to implement emerging technology by Australia’s business sector bodes well for early adoption of 5G technology by small to medium businesses.

xix Emerging technologies for businesses



<sup>55</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 24

<sup>56</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 23

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#### Financial services

The Commonwealth Bank (CBA) has partnered with Telstra and Ericsson to trial 5G edge computing across its network of branches. This will reduce the need for IT infrastructure at individual branch locations, enabling branches to set up more easily, responding to local needs.

“5G has the potential to transform the financial services sector and deliver innovation in a faster and more efficient manner,” said Nikos Katinakis, Telstra’s Group Executive, Networks & IT.<sup>57</sup>

“5G edge computing is all about bringing the network closer to the user or application. For financial institutions like Commonwealth Bank, it will help to enhance existing banking applications as well as deliver new use cases such as artificial intelligence, all supported by a range of software defined networking solutions,” explained Mr Katinakis.<sup>58</sup>

#### Factories of the future

This [video](#) from Nokia shows how 5G will transform manufacturing.

#### Precision drives decisions in agriculture

The high-level global challenge in agriculture is to increase food production by 70% to meet projected population levels (9.6 billion) by 2050.

Related challenges such as falling productivity, limited land supply, climate change, water supply, energy supply/cost and labour/skills shortages – all point to a critical role for technology in so-called smart farming or precision agriculture.

5G will be central to precision agriculture with applications servicing real time data for on-farm needs such as monitoring, analysis and control of crops/stock, water/soil, pathogens/disease, planting/harvest cycles, vehicles safety maintenance (incl. drones), and power usage.

In addition, linking the smart farm to real-time data sources off-farm such as market trends and prices, options for transport, freight or logistics as well as climate conditions and weather forecasts further expand the role of technology and data in driving higher productivity, sustainability and international competitiveness.

For example, Australian start-up, [Smart Paddock](#)<sup>59</sup> is using IoT to track and monitor animal related health issues in cattle herds to identify animals that are sick (or especially healthy). As around 450,000 cattle die prematurely in herds across Australia each year — amounting to around 7 percent of cows in the country, or more than \$700 million in lost revenue - this data helps to identify the causes of illness, and to reduce spread of disease within a herd, so that those premature death numbers can head as close to zero as possible.

Australia’s agricultural sector, represented by 15 Rural Research and Development Corporations, have estimated that precision digital-driven agriculture could lift the gross value of production by 25% above 2014/15 levels. The role of 5G and Internet of Things (IoT) will be central to this degree of enhancement in future agricultural output and efficiency.

5G networks also have the potential to enable dynamic, end-to-end food traceability. Embedded IoT sensors can trace food from farm to table. The food supply chain will be able to further modernize

<sup>57</sup> Telstra, CBA and Ericsson to trial 5G for the banking sector, [media release](#), 25 Feb 2019.

<sup>58</sup> Telstra, CBA and Ericsson to trial 5G for the banking sector, [media release](#), 25 Feb 2019.

<sup>59</sup> Telstra, Oct 2018, [IoT in focus: transforming the agriculture industry](#).



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its practices and processes, becoming super-interconnected and better equipped to leverage technologies like blockchain and AI. This can increase the accountability of food businesses in the event of foodborne illness outbreaks, help organizations better mitigate food safety risk and streamline costs for companies and, in turn, benefit consumers.<sup>60</sup>

The combination of mobility and IoT provided by the 4G/5G ecosystem is key to smart farming just as it is for smart cities/homes.

#### Transforming transport and logistics

IoT smart trackers to improve efficiency and autonomous vehicles will reduce costs as well as improve safety and accessibility for all road users. The NRMA notes that autonomous vehicles will deliver improved safety, decrease congestion, provide options for young, elderly and disabled people, as well as reduce pollution and emissions.<sup>61</sup>

Autonomous vehicles are being used now with 4G, particularly in mining and agriculture, but 5G and ultra-reliable low latency communications will greatly enhance the use of autonomous vehicles across industries and the general community.

Telstra, Ericsson and Lexus have recently trialled Vehicle-to-Everything (V2X) technology over Telstra's 4G network in Victoria.<sup>62</sup> V2X technology lets cars talk to the environment around them using both short range communications and Telstra's 4G network. The 'environment' around the car could be other cars and trucks, traffic lights, roadworks or even pedestrians and cyclists. The use and development of V2X, over 4G and 5G networks will help create clever transport systems to support more efficient use of roads, better traffic management (i.e. reduced congestion) and, in the future, coordinated and safer driverless vehicle operation.

4G and IoT have already delivered benefits to the transport and logistics industry.

The transport and logistics industries are using mobile enabled IoT systems to improve tracking, cut costs and deliver a more transparent, reliable service for customers. DHL's Smartsensor technology monitors temperature and humidity, while also indicating shock and light events that help ensure goods are not damaged during transportation.<sup>63</sup>

Similarly, Linfox's advanced fleet monitoring system, FoxTrax, uses precise GPS tracking and real-time communication between drivers and control room staff to improve safety, security and operational efficiency.<sup>64</sup>

In the public sector, Transport for NSW tracking data provides customers using the TripView app with live timetabling and capacity data to ensure a comfortable commute on public transport.<sup>65</sup>

5G, by providing ultra-reliable low latency communications will enhance the ability to track vehicles and goods being transported in real time and provide live information to business operators and customers alike.

<sup>60</sup> RT Insights, July 2019, [How 5G could improve food traceability](#).

<sup>61</sup> NRMA, [Driverless cars: the benefits and what it means for the future of mobility](#)

<sup>62</sup> Telstra, June 2019, [Making our roads safer with connected vehicles](#).

<sup>63</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 26

<sup>64</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 26

<sup>65</sup> Deloitte Access Economics, [Mobile Nation 2019: the 5G Future](#), page 26

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### Government

#### More time for patients

Nokia has provided a solution to Oulu University Hospital that allows doctors and staff to focus their time on providing care for patients by automating many routine tasks that can be better performed by robots. This [video](#) shows how it is working.<sup>66</sup>

Another [video](#) from Nokia illustrates how radiology can be performed remotely, so that the specialist can actually review the patient's scan as it is happening. This eliminates the need to wait for the radiologist to review each patient's case and can enable 24/7 support from the specialist. 5G networks can enable technology like this that has the potential to improve accessibility to expert healthcare in Australia's regions.<sup>67</sup>

#### Emergency services – responding in real time with 5G

In Portugal, Ericsson has partnered with network operator, Altice to [demonstrate](#) how 5G technology can optimise and co-ordinate an emergency services response to a critical incident in real-time. As pictured below, first responders from several agencies were equipped with body kit, comprising of cameras and sensors connected via a 5G test network to a command centre, as they responded to a staged incident involving a driver trapped in a vehicle. Connected drones provided an aerial view. The extremely low latency of the 5G video allowed instant feedback from the scene, enabling the command centre to co-ordinate and monitor first responders and their actions.<sup>68</sup>

*xx Ericsson live demonstration in Portugal*



#### The connected ambulance – real time interaction

In a collaboration between Ericsson, Kings College and British Telecom, this [connected ambulance](#) shows how a doctor, paramedic and patient can interact in real time via 5G to expedite diagnosis.<sup>69</sup>

With 4G, near real time communication was via voice and video. 5G brings the capability to touch and move in real time over the network.

<sup>66</sup> Nokia, [More time for people – Oulu University Hospital](#), Dec 2018

<sup>67</sup> Nokia, [See the future in action – remote radiology](#), May 2019

<sup>68</sup> Ericsson News, Sept 2019, [5G emergency response abilities highlighted by Altice and Ericsson](#)

<sup>69</sup> Ericsson North America, [Real time interaction with 5G: mobile ultrasound](#) (the connected ambulance), March 4, 2019.

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In this demonstration a patient is in an ambulance with a suspected blood clot on their way to hospital.

The paramedic adds a 5G data channel to the VoLTE call to connect to the Doctor at the emergency room.

Acting as a surrogate arm for the Doctor, the paramedic uses a haptic glove, controlled in real-time by the Doctor, to undertake an ultrasound examination.

By the time the patient arrives at the hospital diagnosis is complete and next treatment steps are clear.

The connected ambulance has the potential to save lives and improve both the efficiency and cost of healthcare diagnosis protocol.

#### Smarter cities

5G will enable smarter cities, homes, schools and communities. The technology will enable autonomous vehicles and smart parking meters. IoT sensors can be used to enable smart lighting of public spaces, guide emergency responses in crowded areas, monitor air quality and traffic patterns. Maintenance drones can be deployed to repair infrastructure and restore public services without endangering workers.<sup>70</sup>

The NSW Government is working collaboratively with 8 local councils, the Commonwealth, industry and community stakeholders to ensure that the Western Sydney City Deal delivers a 5G ready Western Parkland City.

This [video](#) shows how the Western Parkland City will deliver innovative digital connectivity across education, transport, the airport, manufacturing and an agribusiness precinct that will connect farmers to air transport and create a truly smart city.

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<sup>70</sup> Ericsson, [5G will be the platform for tomorrow's smart cities](#), Aug 28, 2018

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## 6. How can Government pave the way for a smooth 5G evolution?

### Government and industry partnership

The Government has already indicated its strong support for the deployment of 5G networks by establishing the 5G Industry Working Group (the Working Group) – a partnership between Government and industry to enable a co-ordinated approach to the efficient deployment of infrastructure to ensure the benefits of 5G technology are fully realised.

The Terms of Reference of the Working Group indicate how such a partnership will work:

*Having regard to the transformative potential of 5G networks for the Australian economy and how Australians live, and the facilitative role that communications technology plays in driving productivity and innovation, the working group's role is to:*

*identify enablers and barriers to the deployment and effective use of 5G in Australia, including at the sector and industry level;*

*examine how the Commonwealth regulatory settings in sectors, including but not limited to communications, can be optimised for 5G networks and technologies;*

*provide a platform for collaboration across Government and industry on 5G matters;*

*engage, with the input of subject matter experts, in ongoing strategic dialogue about 5G matters.*

AMTA and Communications Alliance have both been active participants in the Working Group, to date, and we see potential for the Working Group to guide the Government's stated 5G direction including a specific role in building awareness of the economic and social benefits of 5G across Government portfolios. We also see a role for the Working Group in relation to building awareness among the small business community and with consumers. 5G has the potential to revolutionise the way Australians live and work, but we need to ensure that businesses and communities are aware of the opportunities that exist so that these are not missed. We believe an awareness campaign similar to those that have supported the roll-out of the NBN could be very helpful in both allaying community concerns about health and safety as well as ensure that the positive impact of 5G is understood, enabled and shared.

### Promoting industry and public awareness of 5G

Globally governments are very focussed on the evolution of 5G including initiatives to support local industry via timely allocation of suitable spectrum and rules that allow efficient network infrastructure deployment. The Australian Government is also focussed in these areas as outlined in the 5G Directions Paper<sup>71</sup> and by the establishment of the Working Group.

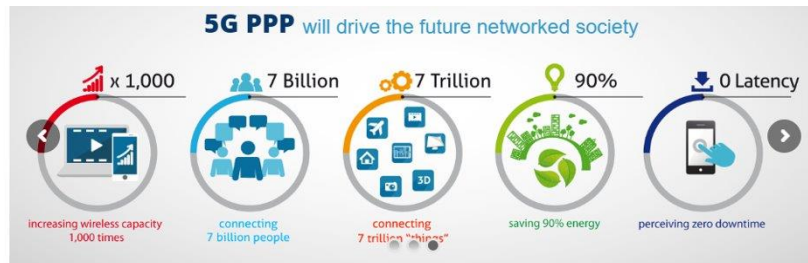
In addition, the role of government in some jurisdictions extends to direct and/or joint funding of 5G programs ranging from test beds to public awareness and education campaigns.

For example, the European Commission has funded a multi-billion Euro Public Private Partnership (PPP) which is in its 3<sup>rd</sup> phase, aiming to secure 5G leadership position for Europe.

<sup>71</sup> Department of Communications and the Arts, 2017, [5G Directions Paper](#).

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xxi EU's 5G Public Private Partnership



Similarly, the UK Government has contributed substantial resources to support the evolution of 5G. The UK regulator, OfCom is working with government and industry on a strategy "Enabling 5G in the UK".<sup>72</sup>

In the USA the President and Chairman of the FCC have several policies in play, most notably, the 5G FAST Plan.<sup>73</sup>

xxii The USA's FAST Plan

### The FCC's 5G FAST Plan



Under Chairman Pai, the FCC is pursuing a comprehensive strategy to Facilitate America's Superiority in 5G Technology (the 5G FAST Plan). The Chairman's strategy includes three key components: (1) pushing more spectrum into the marketplace; (2) updating infrastructure policy; and (3) modernizing outdated regulations.

**"Forward-thinking spectrum policy, modern infrastructure policy, and market-based network regulation form the heart of our strategy for realizing the promise of the 5G future." - FCC Chairman Pai**

As a leading early adopter of mobile technology, the Australian mobile industry is at the forefront of 5G deployment with the opportunity to further develop a national leadership position. This opportunity will need support from the Australian Government, including strategic engagement with industries as well as State and local Governments. The Inquiry should consider how to best enable this level of collaboration and its focus, including learnings from other countries where public 5G programs have been implemented.

#### 5G needs a fit for purpose regulatory framework

The deployment of 5G networks requires significant investment by industry in both physical infrastructure and spectrum resources. It is critical that Government supports and encourages this

<sup>72</sup> OfCom, March 2018, [Enabling 5G in the UK](#).

<sup>73</sup> FCC, [5G Fast Plan](#).

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investment with a policy approach that streamlines regulation, removes regulatory barriers and makes the necessary reforms to the existing legislative and regulatory framework.

Fit for purpose deployment related policy and regulatory settings will be critical inputs to support the implementation of 5G. Timely and efficient deployment of infrastructure requires a flexible regulatory framework as well as thoughtful consideration and timely decision-making by policy makers to ensure that the benefits of 5G are fully realised.

Industry is already building the first 5G networks, with critical investment decisions being made now and in the very near future. It is imperative that there is certainty around the ability to deploy the requisite infrastructure to provide certainty for the associated long-term investment decision-making processes.

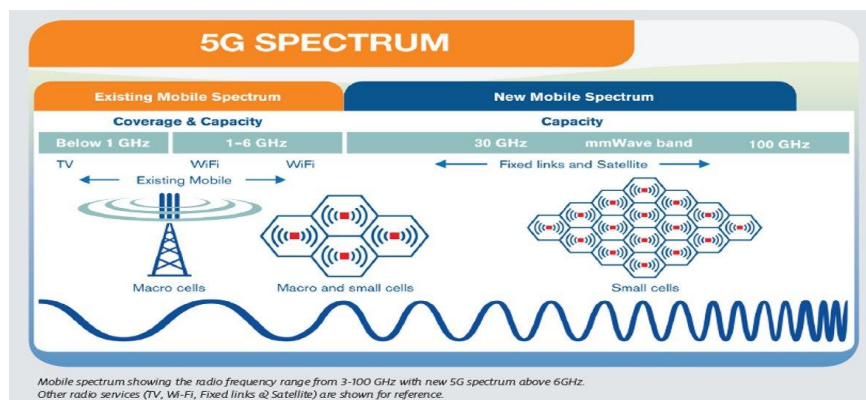
Spectrum required for 5G

In Australia 5G is initially utilising spectrum in the bands below 6 GHz as well as additional spectrum in the mmWave bands in the 26-28 GHz range.

We therefore welcome the Government’s recent decision to bring the 26 GHz band to market, however it is critical that more spectrum for 5G is progressed to market in a timely manner.

The mmWave spectrum will supply the additional spectrum that 5G networks require to deliver ultra-high-speed capacity. Further work is needed in relation to existing bands to enable the deployment of 5G services, including reallocation of low band spectrum and licence reform in mid band spectrum.<sup>74</sup>

xxiii Spectrum ranges for 5G



AMTA estimates that each mobile operator will initially require additional low band spectrum and around 100 MHz of mid band spectrum and an initial 1GHz of mmWave spectrum for 5G to reach its full potential and deliver on what it is designed to do.<sup>75</sup>

<sup>74</sup> Includes, 2.1 GHz, 2.3 GHz and 2.6 GHz bands

<sup>75</sup> [AMTA submission](#) to ACMA’s Five Year Spectrum Outlook, 16 May 2019

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Industry notes the Government's recognition that spectrum must be made available in a timely manner to enable innovation and productivity across industry sectors with a particular focus on enabling the early deployment of 5G mobile networks in Australia.<sup>17</sup>

We strongly believe this is needed to ensure ongoing demand for all types of services can be met and Australia remains at the forefront of rolling out the next generation of mobile technologies to enable transformative social and economic benefits across industries such as transport and logistics, health, education and the automotive industry,<sup>18</sup> as well as consumer benefits.

5G has been designed to operate in the *operating bands* defined in 3GPP TS 38.104<sup>76</sup>. It is important that the spectrum allocations in Australia are aligned with the global standards. There is also the possibility to support 5G on spectrum currently utilised for 3G and 4G, potentially through a software upgrade to existing base stations.

The mobile industry notes the ACMA's spectrum work plan and supports the continuing work to bring additional spectrum to market. We also support increased focus on the timely reallocation of low band spectrum to enable the deployment of national 5G networks, especially in regional areas. We note the potential for use of spectrum in the 600 MHz band in the longer term.

We also support the work to optimise the 3.4 GHz band and the progression of planning work in relation to the 3.8 GHz (3700-4200 MHz) band.

The Associations have been working closely with the ACMA and Department of Communications, Cyber-safety and the Arts with regard to preparation of Australia's position and delegation to the World Radiocommunication Conference in 2019 (WRC-19).

AMTA has supported the development of an Australian position for WRC-19 Agenda item 1.13 that supports international harmonisation of key bands 24.25-27.5 GHz, 37-43.5 GHz, 66-76 GHz and spectrum around 50 GHz, for longer term use by 5G.

#### Reform of the spectrum management framework

The Government has been reviewing the way spectrum is managed under the current *RadioCommunications Act 1992*<sup>77</sup> with a view to reforming or replacing the Act to reflect a more contemporary spectrum management and planning framework.

The Associations have identified the following principles as key to reforming the current radiocommunications legislative framework to make it fit for purpose and encourage investment in a 5G world:

1. The licensing framework needs to be flexible as well as provide sufficient certainty to encourage continued investment.
2. Flexibility means technology neutral, and multi-purpose use.
3. Certainty means – spectrum licence tenure of up to at least 20 years; with renewal pathway certainty.

<sup>76</sup> 3GPP TS 38.104 NR; [Base Station \(BS\) radio transmission and reception](#)

<sup>77</sup> [Radiocommunications Act 1992 \(Cth\)](#)

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4. Allocations need to be efficient through streamlining processes (in terms of cost, timeliness and complexity of engagement), using market forces where appropriate, and supporting secondary trading.
5. Property rights of licence holders need to be enforced.
6. Sharing should never be imposed on spectrum licence holders. Sharing of spectrum licences should be at the licence holder's discretion on a commercial basis. Introduction of sub-licence, as part of the spectrum reform agenda, would facilitate such sharing.<sup>78</sup>

The Associations have previously advocated for certainty in the radiocommunications licensing framework, and specifically, certainty around the licence renewal processes. Given the slow progress with drafting a new Act, the Government's recent decision to re-consider amendments to the existing Radiocommunications Act is welcomed as a way to expedite this important reform.

Please see **Appendix A** for more details regarding the spectrum management framework and future spectrum bands for 5G.

#### Network deployment reform

5G promises to be a comprehensive advance in mobile technology and the step from 4G to 5G will deliver broader and more diverse impacts on all sectors of the economy and community. 5G services require the deployment of new 5G networks.

Deployment related policy and regulatory settings are critical inputs to support the implementation of 5G. Timely and efficient deployment of infrastructure requires a flexible regulatory framework as well as thoughtful consideration and timely decision-making by policy makers to ensure that the benefits of 5G are fully realised.

Industry is already building the first 5G networks, with critical investment decisions being made now and in the very near future. It is imperative that there is certainty around the ability to deploy the requisite infrastructure to provide certainty for the associated long-term investment decision-making processes.

The regulatory framework should be agnostic to technology or deployment types, thereby relieving the need to constantly update the regulations as technology and deployment practices evolve. Issues of visual and other amenity, which are the real impact on communities, can be governed by a more constant over time set of principles based on what a deployment looks like and where it occurs. What function it performs or what technology it supports is not relevant to this consideration.

AMTA and Communications Alliance have been advocating for a package of reforms which would relieve a highly constrained system where only a few "permitted" developments are excluded from a regulatory process (i.e. not requiring planning approval) to a more inclusive and technology agnostic specification of permitted developments that is flexible enough to keep pace with the rapid

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<sup>78</sup> The Associations are not opposed to spectrum sharing outside of spectrum licences where this could improve the efficiency of spectrum use. Sharing should involve cooperation and coordination between all relevant spectrum users.



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evolution of mobile technology and infrastructure types. We continue to work with Government to finalise these reforms, and we welcome its finalisation in a timely fashion.

#### Communications is the 4<sup>th</sup> utility

As described above, 5G networks have the potential to be a key input into the 4<sup>th</sup> industrial revolution. 5G services will be as critical as power, gas and water. Indeed, communications is commonly regarded as the fourth utility. However, the communications industry does not have the same rights as utility companies to deploy assets in a timely and cost-effective manner. The industry is concerned that continuation of this approach risks making 5G networks commercially unviable

Communications is no longer a luxury but a key utility for all businesses. Too many local and state bodies see communications assets as a potential income stream rather than a facilitator of vital community services. Long term reform is required so that telecommunications can be treated in a manner consistent with the other utilities with regard to access to public property, just as we are seen as vital infrastructure in national security matters and by consumers and businesses alike.

#### Infrastructure sharing – passive and active

There is a well-established industry practice across fixed and mobile networks where operators share passive infrastructure such as towers, poles, buildings and housings. AMTA members expect sharing of passive infrastructure to continue on throughout the 5G era where it is technically feasible (e.g., physical space, wind-loading, matching equipment rack types, etc) and makes economic sense to do so. However, sharing active infrastructure such as electronics including radio transmitters and antennas, has a range of technical and economic constraints that make it generally not feasible to share.

One example of the type of technical challenge that can arise in active equipment sharing is the ability to build radio transmitters capable of spanning the spectrum holdings of multiple network operators. In the 3.6 GHz band, where operators are using 60-100 MHz, or worse, in the 26 GHz band where operators are likely to be using 800 MHz or more each, it is simply not possible to build a single radio system capable of spanning such a wide frequency range. Thus, multiple cells are still required in a 1:1 relationship for each carrier. A further example relates to the physical placement and orientation of antennas to avoid interference to/from other operators in the same or adjacent band(s). In practice, this means sharing of passive infrastructure such as a single tower is possible, but restrictions on the orientation of antennas mean separate electronics as one transmitter cannot drive two separate antennas.

As we move to deploying small cells, precise placement is critical for them to be effective. It will be rare that the needs of all carriers align for any small cell to a sufficient extent for sharing the small cell to be viable. The factors requiring precise small cell site placement include amount and geographic focus of customer demand and location of surrounding network elements (macros and other small cells) and these are unique to each carrier.

There are also economic challenges to be overcome. Most of the economic gains derived from sharing are made in the sharing of passive infrastructure given the cost of physical infrastructure such as towers and buildings. The incremental savings realised from sharing active infrastructure are marginal at best after compensating for the increased complexity arising from the need to coordinate between multiple operators. When offset against the yield and market share, reductions arising from the loss of competitive differentiation means there are strong economic incentives against sharing of active infrastructure.

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While passive infrastructure sharing has and will continue to play a role in current network generations, even there, it is worth observing that carriers do not share every tower or facility. The reason is each carrier has a unique set of evolving constraints ranging from specific spectrum holdings, vendor capabilities (and limitations), engineering expertise, through to unique and changing target markets, customer demands and service offerings.

#### Support for EME health research and the agencies regulating EME safety

To ensure the continued confidence of the public in mobile networks in general and 5G deployment in particular, it is important that the public continue to hear the reasoned voice of Australia's world leading academic EME research bodies (such as the Australian Centre for Electromagnetic Bioeffects Research, ACEBR) and the government's own expert health agency (ARPANSA). It is important therefore that these bodies are suitably resourced to undertake the necessary research and review activities to allow them to remain at the forefront of knowledge on EME and health effects research and standards setting.

#### Funding for Australian EME research

While extensive research activities over many decades have not found any scientifically established health effects from exposure to EME from mobile network technologies, health bodies such as ARPANSA continue to note that while no health effects are expected from radio frequency exposures below the limits set in the ARPANSA standard, *"it is important to continue the research in order to reassure the Australian population."*<sup>79</sup> In 2017, ARPANSA published a [research agenda](#)<sup>80</sup> recommending future research topics including some specifically aimed at 5G (in particular the methods of measurement and calculation to ensure compliance with the ARPANSA safety standard for 5G applications).

The Associations strongly support ongoing funding of EME research in Australia. The National Health and Medical Research Council (NHMRC) funded centres of research excellence such as ACEBR continue to address public concerns about the safety of mobile network technologies through their publications, seminars fact sheets and other communications about the state of the EME science. This is particularly the case in the media, both traditional and digital, where often misinformed commentary can unnecessarily alarm the public, who may then seek to frustrate mobile network deployments within their communities. The continued ability of both research and health agencies to impact positively on such debates is vital to the efficient and effective deployment of 5G and realisation of the many benefits it brings to Australian communities and businesses.

#### ARPANSA

Likewise, ARPANSA as the primary health body responsible for the development of Australia's EME exposure standard, must also have a strong and authoritative voice in debates concerning the science of EME and plays an important role in ensuring public confidence in health standards and their implementation in Australia. The ARPANSA environmental EME report remains an important public information tool to assure typical EME levels in the community are not only in compliance with the ARPANSA safety limits, but base station EME is typically 100s of times below these limits. ARPANSA's RF survey activities play an important role in both informing the public about EME in their environment and also corroborating the industry's activities in assessing and communicating

<sup>79</sup> <https://www.arpansa.gov.au/news/5g-new-generation-mobile-phone-network-and-health>

<sup>80</sup> ARPANSA 2017, Radiofrequency Electromagnetic Energy and Health: Research Needs, Technical Report 178, June 2017 available at <https://www.arpansa.gov.au/research-and-expertise/technical-reports/radiofrequency-electromagnetic-energy-and-health-research>

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the compliance of all mobile network infrastructure, including 5G and small cells, with the science-based safety limits. The Associations therefore support a well-resourced ARAPNSA so that it can continue its valuable program of EME activities, especially at this critical time as 5G networks are rolled out.

#### [Opportunities for enterprise and government](#)

The opportunities for enterprise are clear as illustrated by the case studies outlined in section 5. There are also opportunities across all levels of government in Australia to be an early adopter of 5G. Government services are increasingly digitising and this is transforming how people interact with Government. There is also potential for 5G to further enhance how some of these services are delivered to the public.

Adoption of 5G at all levels of Government could be encouraged by requiring tenders for the provision of services to consider what role 5G technology could play.

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## 7. Conclusion – Ensuring Australia reaps the benefits of 5G

The potential benefits of 5G for Australian society and the economy have been clearly outlined in this submission.

As a small, agile economy with a history of early adoption of digital technology and innovation, Australia is uniquely positioned to take advantage of the potential that 5G has to offer to develop our role in the region and globally as a leading technology nation. For the last four years, Australia has consistently ranked 1<sup>st</sup> in an index that includes 165 countries (representing 99% of global population) for its mobile connectivity.<sup>81</sup> 5G is the innovation platform that will grow the mobile industry's capacity as a key contributor to Australia's future global competitiveness.

It is in Australia's national interest that the transition to 5G is fast-tracked so that the economic, productivity and social benefits can be realised sooner

This will require a co-ordinated policy approach from all levels of Government, working with industry and across key portfolios, to ensure that policy and regulatory settings support efficient network deployment, including timely spectrum allocation and that there is broad community support for and understanding of the economic and social benefits of 5G.

5G networks will transform the way Australians live and work and we must ensure that the enabling effects of this next generation technology are fully realised and shared across the whole community.

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<sup>81</sup> GSMA Mobile Connectivity Index, [The State of Mobile Internet Connectivity Report](#), July 2019

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## Appendix A - Spectrum Management reforms needed for 5G

AMTA has identified the following principles as key to reforming the current radiocommunications legislative framework to make it fit for purpose in a 5G world:

- The licensing framework needs to be flexible as well as provide sufficient certainty to encourage continued investment.
- Flexibility means technology neutral, and multi-purpose use.
- Certainty means – spectrum licence tenure of up to at least 20 years; with renewal pathway certainty.
- Allocations need to be efficient through streamlining processes (in terms of cost, timeliness and complexity of engagement), using market forces where appropriate, and supporting secondary trading.
- Property rights of licence holders need to be enforced.
- Sharing should never be imposed on spectrum licence holders. Sharing of spectrum licences should be at the licence holder's discretion on a commercial basis. Introduction of sub-licence, as part of the spectrum reform agenda, would facilitate such sharing.<sup>82</sup>

AMTA has previously advocated for certainty in the radiocommunications licensing framework, and specifically, certainty around the licence renewal processes.

We note that while the current legislation<sup>83</sup> (the Act) does contain a pathway to spectrum licence renewal,<sup>84</sup> the gaps are:

- an absence of a clear entitlement of incumbent licence holders to renewal;
- uncertainty about the policy guidance for the criteria and mechanism for evaluation of spectrum licence renewal eligibility; and
- the determination of the renewal price.

AMTA would prefer to see a rebuttable right of renewal inserted in the Act. AMTA considers that this would balance the need for investment certainty against the public interest in ensuring highest value use of spectrum. Failing that, the next best solution would be timely, transparent and public Ministerial guidance on the criteria and the process to be followed for the re-issue of spectrum licences.

We accept that it is unlikely to be in the public interest to renew spectrum which does not support substantial existing investment. However, where such investment exists, it is not desirable to have a

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<sup>82</sup> The Associations are not opposed to spectrum sharing outside of spectrum licences where this could improve the efficiency of spectrum use. Sharing should involve cooperation and coordination between all relevant spectrum users.

<sup>83</sup> [Radiocommunications Act 1992](#)

<sup>84</sup> [Radiocommunications Act 1992](#), (Act) s82.

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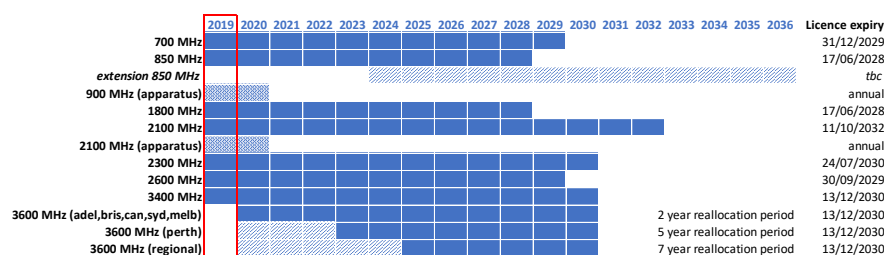
'presumption' of the return of spectrum to the market upon licence expiry, for the following reasons:

- Returning in-use spectrum to market will add cost to licensees as their investment in network infrastructure will have a shorter expected period of recovery (i.e. licensees should expect the spectrum will not be renewed and they may have to reinvest in alternative infrastructure after the licence term) and the cost of obtaining replacement spectrum is likely to be greater. The additional cost will be factored into bidding strategies, meaning lower returns to government from spectrum auctions. The shorter recovery period will also result in higher prices for consumers and/or reduced investment, particularly towards the end of a licence term.
- If the in-use spectrum is not re-issued, then the provider will either not compete in the related downstream markets (as it would not have any spectrum) and will be displaced by a rival, or it will need to find alternative spectrum and potentially displace another rival. This means that competition won't be enhanced, but rather competitors will just be replaced, and with a high deadweight loss given the real costs associated with replacing competitors.
- Even if the incumbent wins part of the spectrum being renewed and the remainder goes to a new entrant, it is most likely (given the increasing demand for spectrum to support mobile capacity) that the two providers now operating on spectrum previously held by one provider, will be capacity constrained. Competition is more likely when each has spare capacity – i.e. the incremental benefit of filling the spare capacity is high relative to the cost of leaving it unused. Providers that are capacity constrained have little incentive to compete with each other, as lowering price will increase congestion and worsen customer experience, so is less likely to attract any new customers.

AMTA also sees merit in codifying the process and timelines around licence renewal. For example, making clear in the Act that the renewal process must begin at least 5 years prior to the licence expiry date; and is to be completed within 12 months.

Making such decisions any closer to the licence expiry would reduce incentives for investment and secondary trading during the later years of the licence term and, if reallocation is required, may not leave sufficient time for the ACMA to complete a reallocation process before the expiry of the existing licences and potentially leaving the spectrum unused for a period of time.

The chart below illustrates the allocated mobile spectrum bands and licence expiry deadlines. The next tranche of spectrum licence expiries occurs in 2028 so a renewal pathway needs to be defined now to provide licence holders with the requisite certainty for ongoing investment in this spectrum.



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AMTA has several suggestions for ways to improve the flexibility of the licencing framework that we have outlined below:

***Align maximum licence terms to at least 20 years***

The maximum available licence terms, which are currently hardwired into the Act at five years for apparatus licences<sup>85</sup> and fifteen years for spectrum licences,<sup>86</sup> should be aligned and extended to at least twenty years. It would then be a matter for the ACMA to appropriately determine licence terms, with Ministerial policy guidance where appropriate.

***Greater flexibility for the ACMA in spectrum allocation***

The existing legislation has highly prescriptive timelines for spectrum designation, conversion and re-allocation, as well as prescribed involvement of the Minister at several points in these processes.<sup>87</sup> These highly codified processes cause unnecessary cost and delay to the ACMA's work, and also restrict its discretion in respect of matters where repeated Ministerial involvement should not be required. AMTA's view is that relatively simple amendments to the relevant parts of the Act would remove these pain points and enable the Minister's role to be focused on policy guidance to the ACMA, with Ministerial decisions on allocation matters only to be retained (if appropriate) for the most sensitive and contentious aspects such as allocation limits<sup>88</sup> and reserve pricing.<sup>89</sup> We recognise that greater flexibility for the ACMA in releasing and re-allocating spectrum requires diligent consultation with all stakeholders, especially potentially affected licensees. However, this process does not need to be micro-managed in the Act with repeated Ministerial involvement, as is currently the case. Appropriate consultation is a fundamental principle of our administrative law that is already subject to adequate legal safeguards. Elimination of this detail in the Act would enable the removal of numerous provisions, which would amount to a significant reduction of 'red tape'.

***Existing licence categories should be made more flexible in their use***

Apparatus licensing has traditionally been applied to specific bands where supply exceeded demand and no single user required exclusive or consistent access across large portions of geographic area, and therefore over-the-counter assignment and coordination was sufficient. But congestion has arisen in some apparatus licensed bands, e.g. the 400 MHz band, and this has been addressed by the ACMA adopting Administrative Incentive Pricing.<sup>90</sup> This example illustrates the ACMA is able to work within the existing licence categories to continue the effective functioning of the regulatory regime. Indeed, the ACMA is now investigating the creation of a new 'area wide' type of apparatus licence.<sup>91</sup>

For this reason, AMTA considers that it should not be a reform priority to consolidate the apparatus and spectrum licensing categories into a single licence type. Such consolidation would likely involve high transition costs along with unnecessary complexity and uncertainty without significant benefit.

<sup>85</sup> Act, s103(3).

<sup>86</sup> Act, s65(3).

<sup>87</sup> For example, the highly prescriptive steps in Part 2.2 of the Act (designation and conversion) and Part 3.6 of the Act "re-allocation).

<sup>88</sup> Currently s60(5) of the Act.

<sup>89</sup> Currently s294(3) of the Act.

<sup>90</sup> ACMA, Regulation Impact Statement - Opportunity Cost Pricing in the high density areas of the 400 MHz Band, June 2012, <https://ris.pmc.gov.au/sites/default/files/posts/2012/08/ACMA-400MHz-RIS-20120717.pdf>

<sup>91</sup> Consultation IFC 19/2019, Proposed area-wide apparatus licence. <https://www.acma.gov.au/theacma/proposed-area-wide-apparatus-licence>.

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A similar outcome could be achieved through the ACMA continuing to exercise regulatory flexibility, possibly supported by minor changes to the legislation for the two licence types and Ministerial policy guidance.

A further step towards increasing flexibility between spectrum and apparatus licences would be to remove the restrictions which prevent segments of spectrum and apparatus licensed space being restacked into more efficient arrangements without requiring the prior conversion of apparatus licences to spectrum licenses. If equivalent quantities of spectrum are being reshuffled, and incumbent licensees do not object, then it should be possible for ACMA to do this administratively.

Licences should be neutral in technology terms so that licence holders can deploy any technology provided it meets the current licence conditions. With long duration licences there will be a need to refresh the Licence Technical Frameworks since these are always based on some assumptions around the technology expected to be most used. Most of the existing spectrum licences have assumed 4G technology, which may not be appropriate as new technology cycles are introduced. Previously, re-issue of a licence often resulted in some changes to licence conditions, however, with a 10-year technology cycle and 20-year licence duration we will need a way to update the licence conditions without detriment to the rights of spectrum licence holders. AMTA notes that this issue may be partly addressed through Issue 2 above, providing greater flexibility to the ACMA to amend licence conditions to reflect technology developments.

We also suggest that creating an ability for licensees to subdivide and sub-licence spectrum within their holdings would be a useful tool to further enable spectrum trading and sharing. This could also be extended to the sub-licensing of class licences which would give mobile operator licensees flexibility to control the authorisation and use of various types of ubiquitous user devices (e.g. handsets and mobile repeaters) within their holdings.

***Allocation limits need to have one standard – i.e. section 50 of the CCA***

The advice provided to the Minister by the ACCC on allocation limits for spectrum auctions,<sup>92</sup> has been carried out on the basis of differing criteria and considerations over time. AMTA's view is that the relevant criteria for advice should be made explicit and public at the time advice is sought from the ACCC. AMTA supports a public process, where the request for advice, industry submissions, and ACCC advice are made public. Further, where Ministerial action differs from the ACCC advice, AMTA sees value in requiring a statement explaining reasons for any difference.

AMTA also supports the Minister providing advice outlining the framework under which the ACCC is to undertake the work. At a minimum, this should require that the ACCC provide its advice on the basis of the criteria set out in section 50 of the *Competition and Consumer Act (Cth) 2010* (CCA). However, the Ministerial may also seek advice on further grounds contained in the CCA, for example the long-term interest of end-users (s.152AB of the CCA).

Further, it would be helpful to have a 'safe harbour' provision for any spectrum acquisition that has been subject of an allocation limit, to avoid any post-auction challenges that the quantity of spectrum a bidder has legitimately acquired is anti-competitive under s.50 of the Act.

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<sup>92</sup> Act, s60(5).



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***Use of early access arrangements under section 153P of the Act should be formalised***

AMTA welcomes the ACMA's innovative use of its discretion under section 153P of the Act to speed up access to spectrum that has been re-allocated, through early access licensing arrangements. This approach has now become a critical aspect of the flexibility of the bringing to market of spectrum by the ACMA. We think the Act could benefit from minor amendment to making this approach the default position, rather than requiring the administrative step of having the successful bidder apply for confirmation that it satisfies the 'special circumstances' requirement.

***Introduce a graduated enforcement regime for compliance***

The draft Bill<sup>93</sup> addressed the need for the ACMA to have graduated enforcement powers, rather than the current situation where only criminal enforcement is available.<sup>94</sup> AMTA's view is that this drafting can be used to amend the existing legislation, with the same outcome. A graduated enforcement scheme would enable more effective ACMA enforcement against devices causing harmful interference in an increasingly congested spectrum environment. While we think the ACMA should be devoting more resources to technical radiocommunications enforcement, our view is that even existing resources would be far better used if a graduated enforcement scheme (starting with a 'parking ticket' style option) was implemented. These reforms should also include better linkage between device standards and prohibitions, and the triggering of Border Force action under the relevant provisions.

***Create an ability for the ACMA to accept enforceable undertakings from licensees on facilitating spectrum defragmentation***

The mobile carriers have participated in successful spectrum defragmentation initiatives in both the 1800 MHz and 3.6 GHz bands. However, there are other bands in which defragmentation would result in considerable efficiency and community benefit, but which are frustrated by strategic and transaction timing hurdles, for example the need for a 1 MHz downshift in the 850 MHz band to support changes to licensing in the 900 MHz band. The provision and acceptance of undertakings by parties is a well-known and often used mechanism in Australian regulation. If incumbent licensees were able to provide undertakings to the ACMA regarding future participation in defragmentation activity based on potential allocations by the ACMA this would provide the ACMA with a strengthened capability to enable defragmentation. The ability to accept such undertakings would require only a minor addition to the Act. It would then be possible for the ACMA to make participation in future auctions and spectrum conversions in the relevant band, conditional on such cooperation by incumbents to defragment the band, in circumstances where secondary market failure would stymie this outcome.

***Clarify stamp duty on secondary market trades***

State and territory stamp duty continues to pose a material cost on and disincentive to secondary market trading of spectrum. There remains some uncertainty as to the instances in which stamp

<sup>93</sup> Exposure Draft, Radiocommunications Bill, 2017

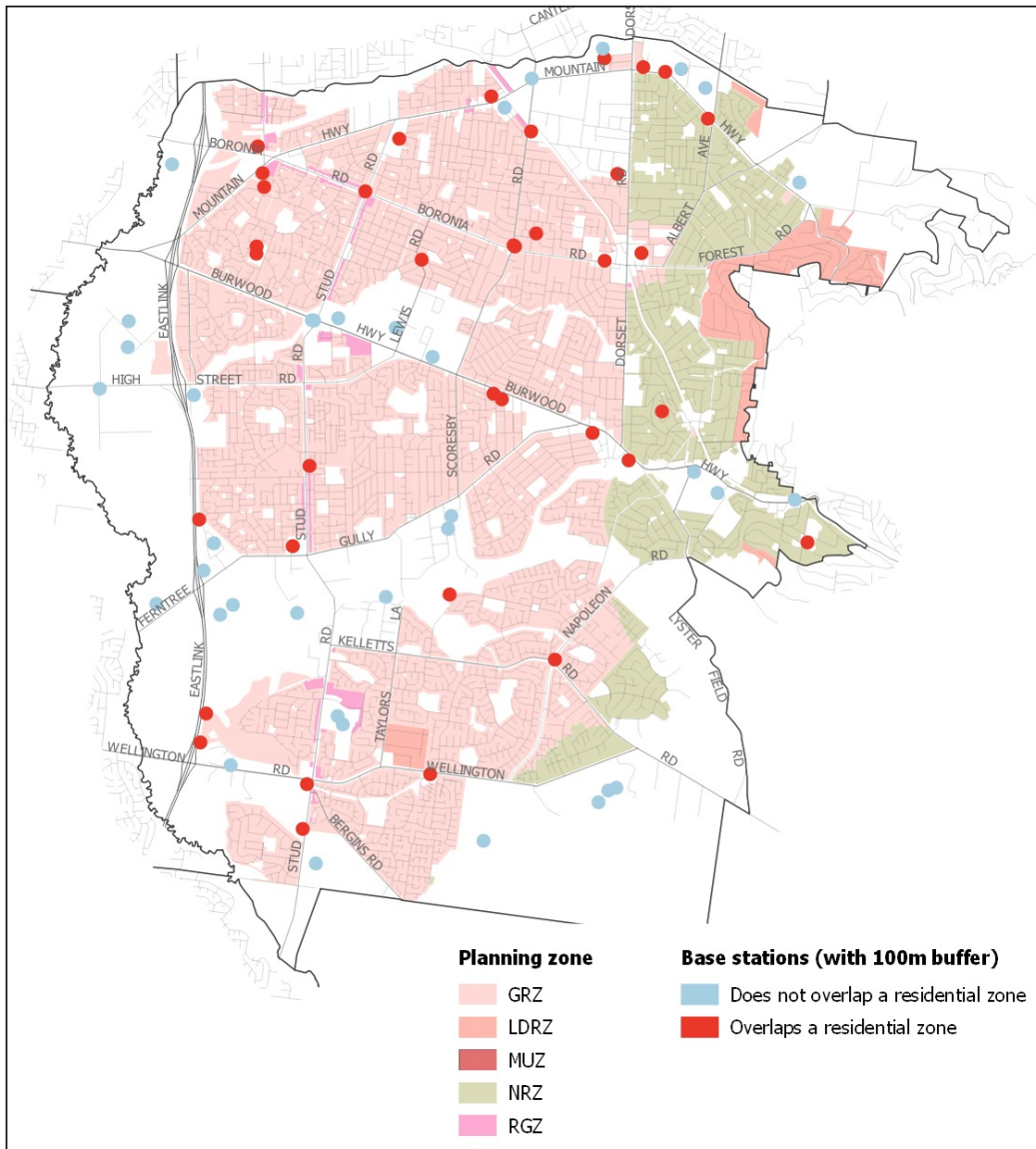
<sup>94</sup> See, for example, the unlicensed operation offence in s46(1)(a) of the Act only allows for criminal prosecution, which is impractical in circumstances where mobile operators' customers are using illegal repeaters despite repeated request to shut down the infringing device. Given that authorised legal repeaters can be purchased for less than \$1,000, amendment of the Act to provide for an administrative fine of up to \$1,000 would be an effective means to obtain greater compliance. We believe that actual enforcement action would be rare -- mere awareness of the risk of this fine would be sufficient deterrent.

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duty will be imposed by the states and territories which still apply this impost to spectrum trades. AMTA proposes a simple amendment to the Act which would prohibit the application of stamp duty to spectrum trades. We appreciate that this is a matter for COAG however we submit that it is important for the Department and the Minister to continue to highlight the issue.

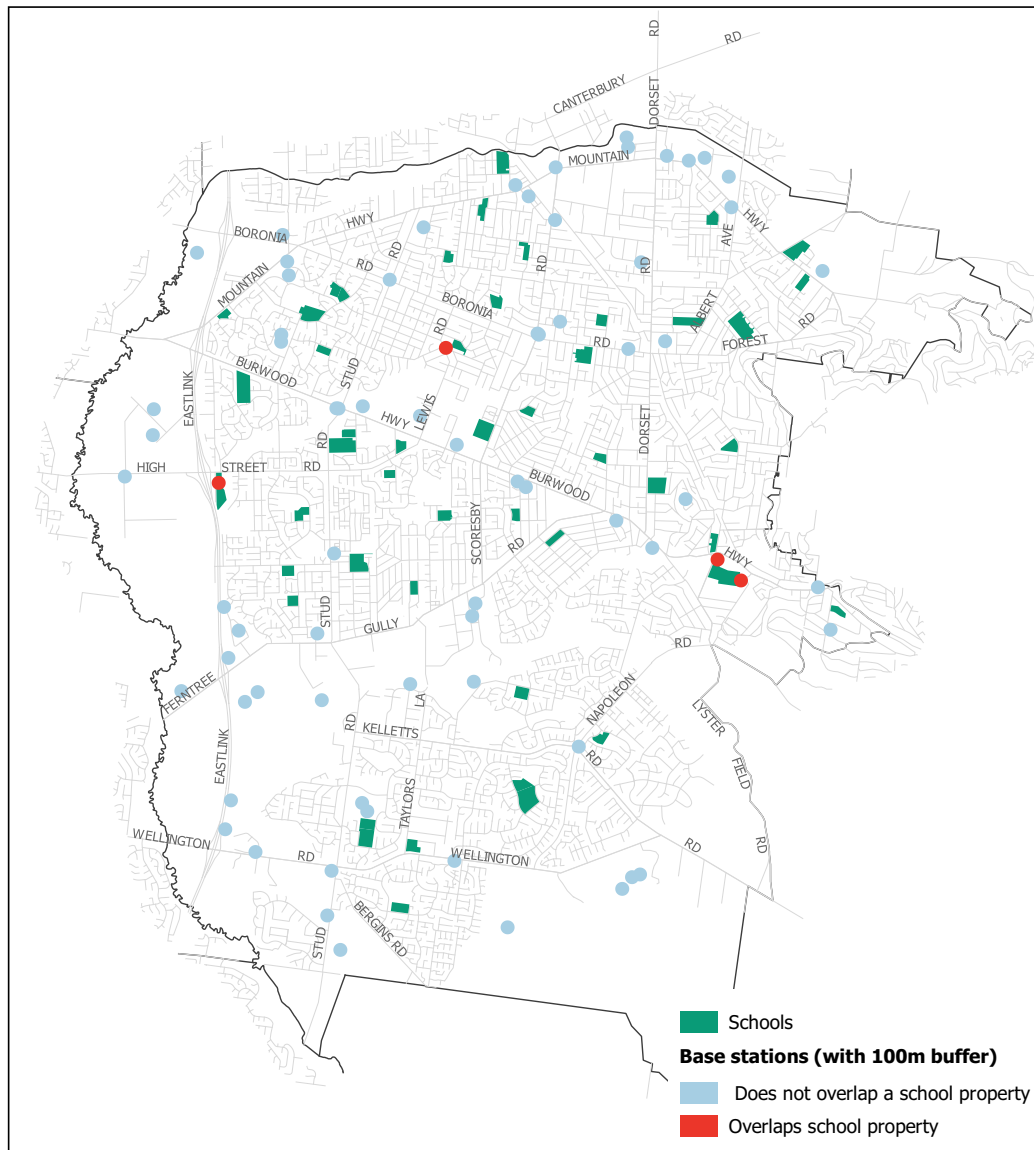


### Mobile base stations and residential zones - December 2019

Disclaimer:  
 Roads and Title Boundaries - State of Victoria, Knox City Council  
 Planning Scheme Information - DELWP, Knox City Council  
 Mobile Base Station Locations - Radio Frequency National Site Archive (December 2019)

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### Mobile base stations and schools - December 2019

**Disclaimer:**  
 Roads and Title Boundaries - State of Victoria, Knox City Council  
 Planning Scheme Information - DELWP, Knox City Council  
 Mobile Base Station Locations - Radio Frequency National Site Archive (December 2019)  
 School locations - My School website (December 2019)

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## 8.2 Quarterly Performance Report for the Quarter Ended 31 March 2023

**SUMMARY: Coordinator Finance Operations, James Morris and Head of Strategy and Business Intelligence, Kate McInnes**

**The Quarterly Performance Report for the period ended 31 March 2023 is presented for consideration.**

### **RECOMMENDATION**

**That Council receive and note the Quarterly Performance Report for the period ended 31 March 2023.**

#### **1. INTRODUCTION**

The provision of the quarterly Financial Performance Report to Council ensures that associated processes are accountable, transparent and responsible resulting in sound financial management and transparent reporting on Council Plan initiatives.

The Council Plan Quarterly Progress Report provides an overview on how we are tracking in Year 2 of the Council Plan 2021-2025.

#### **2. DISCUSSION**

##### **Financial Performance Report**

The Financial Performance Report (Attachment 1) has been prepared in accordance with Australian Accounting Standards and contains the following financial statements:

- Comprehensive Income Statement
- Balance Sheet
- Cash Flow Statement
- Statement of Capital Works

The Financial Performance Report is designed to identify major variations against Council's year to date financial performance (actual results) and the Adopted and Amended Budgets. Council adopted its 2022-23 Annual Budget at its Ordinary Council Meeting held 27 June 2022. The Amended Budget was tabled to Council at its Ordinary Council Meeting held 28 November 2022 as part of the September 2022 Quarterly Performance Report. The year-to-date position is compared with the amended budget position. The forecast end of year position is compared to the Amended Budget and the Adopted Budget.

The Amended Budget enables Council to review and approve variances to revenue and expenditure resulting primarily from external factors, ensuring accountability and optimal budget control for management reporting purposes. The Annual Report will detail performance against the original Budget as adopted by Council as the Budget.

The financial year-end position of Council is anticipated by way of forecasts. The full year Adopted and Amended Budgets are compared against the projected financial year-end position as reflected by the Forecast. The 2022-23 forecast includes the following details:

- The 2022-23 Adopted Budget;
- Carry forward funding from 2021-22 into 2022-23 for both operational and capital works expenditure items. These funds are required for the successful completion and delivery of key outcomes and projects; and
- Adjustments to forecasts as a result of officers periodically assessing Council's budgetary performance considering emerging events and matters.

General discussion in regards to Financial Performance Report (Attachment 1) is detailed under Section 5 'Financial & Economic Implications'.

### **Council Plan Progress Report**

The Council Plan 2021-2025 (incorporating the Municipal Public Health & Wellbeing Plan) was adopted on 25 October 2021 and outlines Council's contribution to achieving the Community Vision. The progress of the Council Plan is monitored and reviewed each quarter through a series of progress reports. The Council Plan 2021-2025 Year 2 Quarterly Progress Report for the period 1 January to 31 March 2023 (see Attachment 2) reports on the initiatives identified in the Annual Budget 2022-23. It is not a comprehensive report on all of Council's activities but identifies the progress Council has made in the achievement of the Key Directions of the Council Plan and ultimately the Community Vision.

Included in this report are the milestones for 2022-23. The milestones articulate what progress is expected to be achieved in the 2022-23 year against the multi-year Council Plan initiatives and follow the format "Initiative – Milestone".

Attachment 2 provides the Council Plan 2021-2025 Year 2 Quarterly Progress Report for the third quarter of 2022-23.

Of the 51 initiatives included in 2022-23 (Year 2) of the Council Plan:

- Seven (7) initiatives are complete.
- Thirty-eight (38) initiatives are on schedule.
- Five (5) initiatives are behind schedule, and require monitoring. This includes one (1) initiative that was scheduled to start in Quarter 3, but has not started.
- One (1) initiative is flagged to be deferred as the initiative has not commenced and is reliant on additional budget.

The initiatives completed during the third quarter are:

- CP 4.4.21 - Develop a sustained and responsible model for supporting community-led events, particularly in a post-COVID-19 environment - Monitor the community event portal to assist groups to deliver community events that are compliant and safe.
- CP 5.2.4 - Refresh and implement the 'THRIVE: Future Ready Knox' workplace strategy - Complete a review of the current 'THRIVE: Future Ready Knox' workplace strategy.

The initiatives currently behind schedule are:

- CP 1.3.9 - Coordinate the implementation of Knox's Retail Activation Strategy - Present the Retail Activation Strategy to Council for adoption and subsequent development of the Implementation Plan. Commence implementation of 1st year actions of the Retail Activation Strategy. (Major Initiative)
- CP 2.2.11 - Commence review and upgrade of Council's strategic planning documents including the Open Space Plan, Play Space Plan and Liveable Streets Plan - Finalise the

Open Space Strategy Background Research Project to inform the development of a draft consolidated Open Space Plan.

- CP 4.2.10 - Embed the State Government's Child Information Sharing Scheme (CISS) to support the safety and wellbeing of children - Implement access to Child Link for Early Childhood Educators in 2023 (dependent on advice from the Department of Training), and ongoing monitoring of effectiveness of policies and procedures.
- *Note: This initiative has not been able to progress due to the delayed roll out of Child Link by the Victorian Government.*
- CP 4.4.19 - Participate in the review of the Eastern Region Pandemic Plan - Collaborate with the eight Eastern Metropolitan Region Councils to review and update the Local Government Eastern Region Pandemic Sub Plan, and work with the Department of Health to lead a more integrated review of the Sub Plan that includes all sectors of government.
- *Note: This initiative has been delayed as the Department of Health is yet to advise schedule for review.*
- CP 5.3.7 - Implement an internal self-assessment process to monitor Council's performance in decision making - Develop and distribute a self-assessment survey, analyse the results and conduct workshops with councillors, including an externally facilitated self-assessment workshop.

One initiative is flagged to be deferred as the initiative has not commenced and requires additional budget. This will be reconsidered in consultation with Council, and the future pending budget allocation:

- CP 2.2.10 - Develop an Integrated Major Infrastructure Development Plan for sport, leisure and recreation.

Progress comments on all initiatives can be found in Attachment 2.

The format of Attachment 2 has changed from that of Quarter 2, as the report is now automatically generated using our newly rolled out Pulse reporting system. The report now includes the addition of an Action Code for each action, as well as a Status Symbol system to visually show the progress status.

Progress targets are set against each initiative by quarter based on when key milestones for the year will be completed. The progress status reflects the status of the key milestones, not necessarily the status of completion of the initiative overall, as many of the initiatives run over multiple years. Progress Status Symbols are reported based on the following colour coding:

- Completed – green tick
- On Schedule – green circle
- Behind Schedule – red circle
- Not Started – grey circle
- Deferred - blue circle

These progress statuses are defined as below:

- Completed – milestone is complete.
- On Schedule – milestone is on schedule and we are progressing as anticipated. This now includes initiatives that may not have changed since the previous quarter, so long as the

milestone is still on schedule. This is necessary as some projects may not be due to progress until a later reporting period. Therefore, they are still on schedule despite not having progressed by a certain percentage.

- Behind Schedule – milestone is behind schedule. This now includes initiatives that may be behind schedule at the end of the reporting period, although they are still expected to be back on track by the end of the next reporting period. The commentary will explain why we are behind schedule, how we will get back on schedule, and when we expect to be back on schedule. We are encouraging reporting officers to use this status if applicable, to promote transparency with our community, given the reasoning behind this status is often due to factors outside of Council's control. There is also no longer a 15% behind schedule threshold, whereby previously, initiatives were flagged as either more than 15%, or less than 15% behind schedule.
- Not Started – milestone has not started yet and was not due to start yet.
- Deferred – milestone has been deferred.

These changes have been implemented to allow for differing complexities, milestones and rates of completion in project delivery, and creates more meaningful and accurate project reporting.

Also included in this report are the incomplete initiatives from Year 1 of the Council Plan 2021-25 (see Attachment 3). These initiatives were incomplete on 30 June 2022 primarily due to external factors outside of Council's control or the need to temporarily shift priorities in responding to COVID-19 Pandemic impacts. These Year 1 initiatives will be included as an appendix to this report until completion. During the quarter, none of these initiatives were completed and two initiatives remain incomplete.

### **3. CONSULTATION**

This report does not necessitate community consultation. A copy of the quarterly Financial Performance Report is provided to Council's Audit and Risk Committee.

Significant community engagement was incorporated into the development of the Council Plan 2021-2025 and the Community Plan 2021-2031, which incorporates the Community Vision. The initiatives identified in the Council Plan 2021-2025 Year 2 Quarterly Progress Report (2022-23) support the delivery of the Council Plan 2021-2025 and ultimately will help achieve the Community Vision.

### **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council's Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

### **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

This report does not have any environmental or amenity issues for discussion. A number of initiatives within Year 2 (2022-23) of the Council Plan 2021-2025 seek to have a positive impact on environmental issues within the Knox municipality.

### **6. FINANCIAL & ECONOMIC IMPLICATIONS**

The overall financial position as at 31 March 2023 is satisfactory with a working capital ratio of 2.23 to 1, and indicates that Council, after taking into consideration carry forward funding



requirements from 2021-22 into 2022-23, is on track to meet the established operational targets this financial year established in the 2022-23 Amended Budget. The major watch point for the year will be the timing of land sale proceeds, together with the timing of receipt of capital grants and monetary contributions.

For the period ended 31 March 2023, Council has achieved an operating surplus of \$23.658 million. This is \$11.773 million favourable to the year to date (YTD) Amended Budget. The favourable variance of \$20.592 million for YTD expenditure includes a favourable variance of \$14.155 million for materials and services and \$2.959 million for employee costs. These are largely timing variances. This is partially offset by an unfavourable variance of \$8.819 million for YTD income, including unfavourable timing variances of \$4.573 million for capital grants related to the Fairpark Reserve Pavilion Upgrade and LRCI projects, and \$2.731 million for contributions towards capital projects.

Council expects to deliver an operating deficit of \$10.675 million for the financial year, which is a \$2.402 million unfavourable to the Amended Budget. The forecast deficit includes the transfer of the Knox Regional Sports Park assets to the State Government (\$25.421 million). Movements from the 2023-24 Proposed Budget forecast include the carry forward to 2023-24 of some land sale proceeds and capital monetary contributions.

The total capital works expenditure for the period ended 31 March 2023 is \$38.864 million. This is \$26.761 million less than the YTD Amended Budget. The asset classes with the greatest underspend against budget are Recreation, Leisure, Parks and Playgrounds (\$12.625 million), Buildings (\$6.042 million), Roads (\$3.067 million), Footpaths and Cycleways (\$1.851 million), and Drainage (\$1.158 million).

Some projects within the capital works program have been impacted by poor weather conditions, which in turn puts pressure on project timing due to the flow-on effect of having to reschedule construction activities. The delivery of the capital works program has also been impacted by a lack of available labour and material shortages.

The Amended Budget capital works expenditure totalling \$85.017 million includes \$36.607 million in capital works carried forward from 2021-22 into 2022-23. The forecast capital works expenditure for the year is \$67.414 million, with the proposed 2023-24 budget including carry forward capital works expenditure totalling \$19.496 million.

Council's cash and financial assets are \$41.610 million as at 31 March 2023.

Further detail and discussion of the financial performance of Council for the period ended 31 March 2023 is provided in the attached Financial Performance Report (Attachment 1).

## **7. SOCIAL IMPLICATIONS**

There are no direct social implications arising from this report. A number of initiatives within Year 2 (2022-23) of the Council Plan 2021-2025 seek to have a positive social impact within the Knox municipality.

## **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

### **Civic Engagement & Integrity**

Strategy 5.2 - Manage our resources effectively to ensure financial sustainability and improved customer experience.

Strategy 5.3 - Ensure our processes are transparent and decisions are accountable.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By: Coordinator Finance Operations, James Morris; Coordinator Strategy and Business Intelligence, Kate McInnes**

**Report Authorised By: Chief Financial Officer, Navec Lorkin**

### **Attachments**

1. Attachment 1: Financial Performance Report - March 2023 [**8.2.1** - 22 pages]
2. Attachment 2: Q3 2022-23 Council Plan Quarterly Progress Report [**8.2.2** - 26 pages]
3. Attachment 3: Q3 2022-23 Council Plan Update - Incomplete 2021-22 Actions (Appendix 1) [**8.2.3** - 3 pages]

**KNOX**  
your city



# Financial Performance Report

For year to date ended 31 March 2023

## Contents

### Financial Performance Report for year to date ended 31 March 2023

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# Executive Summary

## Financial Performance Report for the year to date ended 31 March 2023



### Introduction and Purpose

This report is aimed and designed to identify major variations against Council's year to date financial performance (actual results) and the amended budget, reflect the amended budget which reflects changes which have occurred since the adoption of the annual budget, and anticipate the financial position of Council as at financial year end by way of forecasts.

The amended budget aligns with the 'Amended Budget Principle' financial strategy adopted as part of the 2022-23 Budget. The principle states Council will amend the Budget for internal management reporting purposes to ensure prudent and transparent budgeting and financial planning.

The full year adopted budget and amended budget is compared against the full year projected position as reflected by the forecast. The 2022-23 forecast includes carry forward funding from 2021-22 into 2022-23 for both operational and capital works expenditure items. These funds are required for the successful completion and delivery of key outcomes and projects.

### Financial Performance

#### Summary

Summary	Year to Date			Full Year				
	Amended Budget \$'000's	Actual \$'000's	Variance \$'000's	Adopted Budget \$'000's	Amended Budget \$'000's	Forecast \$'000's	Amended Variance \$'000's	Adopted Variance \$'000's
<b>Operating</b>								
Income	185,735	176,915	(8,819)	190,956	203,245	199,113	(4,132)	8,157
Expense	173,850	153,258	20,592	182,863	211,518	209,787	1,731	(26,924)
<b>Surplus (Deficit)</b>	<b>11,885</b>	<b>23,658</b>	<b>11,773</b>	<b>8,092</b>	<b>(8,273)</b>	<b>(10,675)</b>	<b>(2,402)</b>	<b>(18,767)</b>
Capital Works	65,625	38,864	26,761	81,827	85,017	67,414	17,603	14,413
Cash and Investments	16,116	41,610	25,495	39,135		51,390		12,255

The overall financial position at 31 March 2023 is satisfactory with a working capital ratio of 2.23 to 1.

The year-to-date favourable variance of \$11.8M is driven by an underspend in employee costs and materials and services against the amended budget, while this has been partially offset by an unfavourable variance for child care and kindergarten fees, together with unfavourable timing variances for capital grants and monetary contributions.

The forecast reduction in income against the amended budget, primarily in user fees (childcare and kindergarten fees), statutory fees (traffic infringement fines) and operating grants, has been partially offset by a forecast reduction in expenditure, with reductions in employee costs and materials and services, and an increase in the net loss on disposal of property due to the timing of land sales.

The forecast capital works expenditure totalling \$67.4M is \$17.6M lower than the amended budget, and takes into account identified carried forward expenditure up to the end of March 2023. The reduction in forecast capital expenditure is reflected in an increased forecast cash and investments balance at year-end.

# Executive Summary (continued)

## Financial Performance Report for the year to date ended 31 March 2023



### Operating

Operating Results	Year to Date			Full Year				
	Adopted Budget \$'000's	Actual \$'000's	Variance \$'000's	Adopted Budget \$'000's	Amended Budget \$'000's	Forecast \$'000's	Amended Variance \$'000's	Adopted Variance \$'000's
Income	185,735	176,915	(8,819)	190,956	203,245	199,113	(4,132)	8,157
Expense	173,850	153,258	20,592	182,863	211,518	209,787	1,731	(26,924)
<b>Surplus (Deficit)</b>	<b>11,885</b>	<b>23,658</b>	<b>11,773</b>	<b>8,092</b>	<b>(8,273)</b>	<b>(10,675)</b>	<b>(2,402)</b>	<b>(18,767)</b>

### Year-to-Date

There is a \$11.8M favourable variance between the YTD actual result and the adopted budget. This variance primarily relates to:

#### Revenue

- \$2.2M unfavourable variance (timing) for capital grants receivable for the Fairpark Reserve Pavilion Upgrade, and \$2.4M unfavourable variance (timing) for LRCI capital grants – these were all previously budgeted to be received in prior years;
- \$0.5M unfavourable variance for kindergarten grants, \$0.9M unfavourable variance for kindergarten parent fees, \$1.0M unfavourable variance for childcare benefit subsidy and \$0.3M unfavourable variance for childcare parent fees, all unfavourable variances due to utilisation;
- \$0.5M favourable variance for unbudgeted grants received for Boronia Placemaking and Activation, and the Boronia Wayfinding and Branding Strategy, with this income to be offset by expenditure;
- \$0.6M unfavourable variance for traffic enforcement fines;
- \$2.7M unfavourable variance for capital monetary contributions towards the Kingston Links development and Knox Hockey facility development, and a \$0.4M unfavourable variance for Public Open Space contributions;
- \$0.9M favourable variance for supplementary rates received; and
- \$0.3M favourable variance for interest received due to higher than budgeted cash and investment balances together with the increase in interest rates.

#### Expenditure

- \$14.1M favourable variance in materials and services including \$2.7M in Waste Management due to timing of invoices and projects, \$2.2M in the Connected Communities directorate, \$0.8M in the City Futures Department, \$0.8M in the Chief Information Office, and \$5.4M for capital expenditure that is operational in nature due to the timing of capital activities;
- \$3.0M favourable variance in employee costs primarily due to vacancies and childcare and kindergarten service utilisation (this decreased expenditure is offset by decreased income); and
- \$4.0M favourable variance for net loss on disposal of property, infrastructure, plant and equipment due to the timing of sales.

### Forecast

The 2022-23 forecast result is showing a deficit of \$10.7M which is \$2.4M unfavourable to the amended budget result. Revenue is forecast to reduce by \$4.1M, while expenditure is forecast to decrease by \$1.7M compared with the amended budget position. The main variances relate to:

#### Revenue

- A \$0.8M increase in supplementary rates income;
- A \$0.5M increase in interest received on cash and investments;

# Executive Summary (continued)

## Financial Performance Report for the year to date ended 31 March 2023



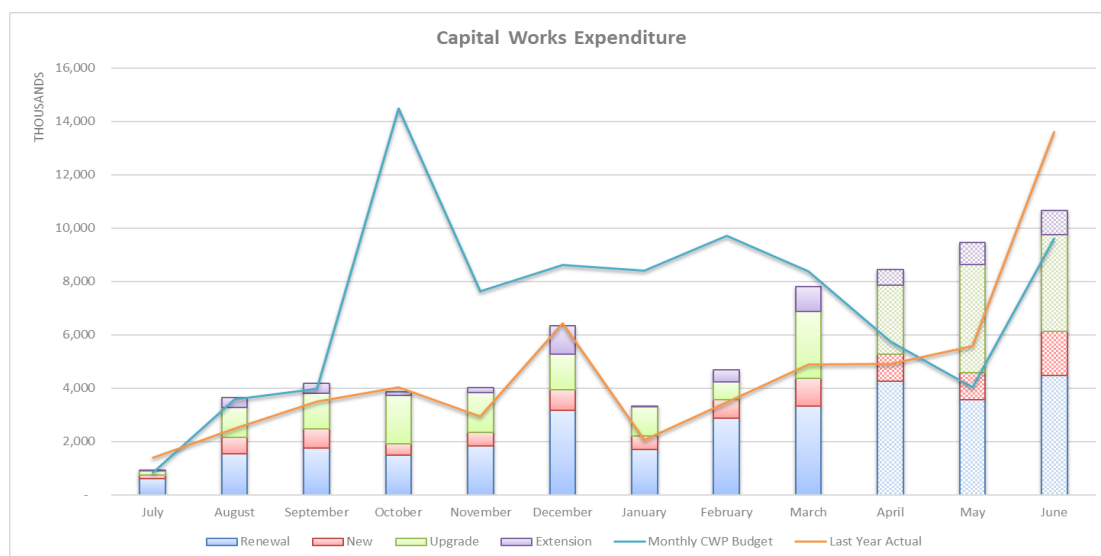
- A reduction in child care parent fees (\$0.3M) and grant income (\$1.2M) due to lower utilisation;
- A reduction in kindergarten parent fees (\$0.9M) and grant income (\$0.2M) due to lower utilisation and kindergarten being offered to families for free in 2023, with additional funding being provided by the State Government in place of parent fees (childcare and kindergarten revenue reductions are partially offset by a reduction in employee costs);
- \$0.7M decrease in traffic enforcement fines due to the delays in the implementation of the parking strategy;
- \$0.5M decrease variance for Public Open Space contributions, with this income directly contingent on developer activities in the municipality; and
- \$2.2M decrease in monetary contributions due to the timing of capital monetary contributions (these will be carried forward to the 2023/24 financial year).

### Expenditure

- \$3.2M decrease in employee costs against the amended budget due to vacancies, together with lower utilisation in child care (\$0.9M) and kindergarten (\$0.7M), this reduced expenditure is offset through reduced income;
- \$2.4M decrease in materials and services against the amended budget, including a \$1.1M reduction in the Chief Information Office; and
- \$4.4M increase in the net loss on disposal of property due to the timing of the sale of property, plant and motor vehicles.

### Capital

Capital Works Expenditure	Year to Date			Full Year				
	Amended Budget \$'000's	Actual \$'000's	Variance \$'000's	Adopted Budget \$'000's	Amended Budget \$'000's	Forecast \$'000's	Amended Variance \$'000's	Adopted Variance \$'000's
Property	15,108	9,067	6,042	19,658	20,226	14,593	5,633	5,065
Plant and Equipment	2,840	2,523	317	9,157	9,391	5,456	3,935	3,701
Infrastructure	47,677	27,274	20,402	53,012	55,400	47,365	8,035	5,647
<b>Total Capital Works Expenditure</b>	<b>65,625</b>	<b>38,864</b>	<b>26,761</b>	<b>81,827</b>	<b>85,017</b>	<b>67,414</b>	<b>17,603</b>	<b>14,413</b>





# Executive Summary (continued)

## Financial Performance Report for the year to date ended 31 March 2023



### Year-to-Date

The capital works underspend is spread across property and infrastructure (particularly roads, footpaths and cycleways, drainage and recreation, leisure, parks and playgrounds). These are timing variances for projects such as the Knox Athletics Track Facility Upgrade (\$3.0M), the Fairpark Reserve Pavilion Upgrade (\$2.8M), Westfield Library (\$2.0M), the Knox Hockey Facility Development (\$1.9M), the Road Resurfacing Program (\$1.3M), Lewis Park Stages 1,2 and 5 (\$1.3M), the Egan Lee Reserve Top Oval Renewal (\$1.2M), the Stamford Park Development (\$0.9M), the Footpath Renewal Program (\$0.8M), Cardiff Street Flood Mitigation (\$0.6M), the Knox Regional Netball centre (\$0.6M), the reconstruction activities on Avalon Road, Rowville (\$0.5M), and the Playground Renewal Program (\$0.5M).

Some projects within the capital works program have been impacted by poor weather conditions, which in turn puts pressure on project timing due to the flow-on effect of having to reschedule construction activities. The delivery of the capital works program has also been impacted by a lack of available labour and material shortages.

### Forecast

The forecast capital expenditure is currently \$17.6M below the amended budget. The forecast capital expenditure includes capital expenditure carried forward from 2021-22, while capital expenditure has been identified to be carried forward to 2023-24.

### Balance Sheet

Balance Sheet	Year to Date			Full Year		
	Adopted Budget \$'000's	Actual \$'000's	Variance \$'000's	Adopted Budget \$'000's	Forecast \$'000's	Variance \$'000's
Current Assets	61,339	85,739	24,400	60,955	71,055	10,100
Non-Current Assets	2,046,181	2,160,055	113,874	2,053,894	2,177,899	124,005
<b>Total Assets</b>	<b>2,107,520</b>	<b>2,245,793</b>	<b>138,273</b>	<b>2,114,849</b>	<b>2,248,954</b>	<b>134,105</b>
Current Liabilities	36,140	38,431	(2,290)	44,500	45,766	(1,266)
Non-Current Liabilities	45,224	45,003	221	73,406	70,624	2,782
<b>Total Liabilities</b>	<b>81,364</b>	<b>83,433</b>	<b>(2,070)</b>	<b>117,906</b>	<b>116,391</b>	<b>1,515</b>
<b>Net Assets</b>	<b>2,026,156</b>	<b>2,162,360</b>	<b>136,204</b>	<b>1,996,943</b>	<b>2,132,563</b>	<b>135,620</b>
Accumulated Surplus	738,475	729,477	(8,998)	714,808	709,381	(5,427)
Asset Revaluation Reserve	1,261,516	1,400,349	138,833	1,261,516	1,400,349	138,833
Other Reserves	26,165	32,534	6,369	20,619	22,833	2,214
<b>Total Equity</b>	<b>2,026,156</b>	<b>2,162,360</b>	<b>136,204</b>	<b>1,996,943</b>	<b>2,132,563</b>	<b>135,620</b>
<b>Working Capital Ratio</b>	<b>1.70</b>	<b>2.23</b>		<b>1.37</b>	<b>1.55</b>	

The Balance Sheet as at 31 March 2023 indicates a sustainable result. A comparison of total Current Assets of \$85.7M with total Current Liabilities of \$38.4M continues to depict a sustainable financial position (Working Capital Ratio of 2.23 to 1). The Working Capital Ratio for the same period last year was 2.46, with the reduction this year being due to increased borrowings and higher trade payables to the same stage last year. Current Assets primarily comprises Cash, Cash Equivalents and Other Financial Assets (\$41.6M) and Trade and Other Receivables (\$41.0M). Trade and Other Receivables includes \$37.2M of rates debtors (of which \$6.4M relates to arrears pre July 2022) and \$3.1M in other debtors.



# Executive Summary (continued)

## Financial Performance Report for the year to date ended 31 March 2023



The working capital ratio of 2.23 is greater than the Adopted Budget working capital ratio of 1.70. The Working Capital Ratio is anticipated to continue to reduce over the course of the financial year, reflecting the utilisation of funds by Council to deliver on its operating programs and capital works. The forecast working capital ratio is anticipated to be 1.55 at year end, which is higher than the Adopted Budget working capital ratio of 1.37 as a result of the forecast capital works underspend and the subsequent improved cash position at year-end.

Trade and Other Receivables	Ageing				Total \$'000
	Current - 30 Days	31 Days - 60 Days	61 Days - 90 Days	More than 90 Days	
	\$'000	\$'000	\$'000	\$'000	
Rates Debtors	30,821	0	0	6,426	37,247
Special Rate Assessment	0	0	0	52	52
Parking and Animal Infringement Debtors	135	128	36	331	630
Other Debtors	1,864	21	762	438	3,085
<b>Total Trade and Other Receivables</b>	<b>32,820</b>	<b>149</b>	<b>798</b>	<b>7,247</b>	<b>41,014</b>

Rate amounts owing are a charge over the property and therefore Council has recourse to collect these debts. The due date for rates being paid was 15 February 2023, while the last instalment due date is 31 May 2023.

Rates outstanding for more than 90 days is \$1.1M lower than at the same time last year, while other debtors outstanding for more than 90 days is \$1.6M lower than at the same time last year.

### Investment Analysis

Investment	Year to Date			Full Year		
	Adopted Budget	Actual	Variance	Adopted Budget	Forecast	Variance
	\$'000's	\$'000's	\$'000's	\$'000's	\$'000's	\$'000's
Cash and Cash Equivalents	16,116	34,110	17,995	39,135	46,390	7,255
Other Financial Assets	0	7,500	7,500	0	5,000	5,000
<b>Total Funds Invested</b>	<b>16,116</b>	<b>41,610</b>	<b>25,495</b>	<b>39,135</b>	<b>51,390</b>	<b>12,255</b>
<b>Earnings on Investments</b>	<b>15</b>	<b>327</b>	<b>312</b>	<b>20</b>	<b>567</b>	<b>547</b>

The earnings on investments for the period ended 31 March 2023 were greater than budgeted due to higher than budgeted cash and investment balances together with the increase in interest rates.



## Financial Performance Indicators

as at 31 March 2023

The following table highlights Council's current and forecasted performance across a range of key financial performance indicators. These indicators provide a useful analysis of Council's financial position and performance and should be interpreted in the context of the Council's objectives.

Indicator	Calculation of Measure	Full Year			Notes
		Expected Bands	Adopted Budget	Forecast	
<p><b>Operating Position - Measures whether a council is able to generate an adjusted underlying surplus.</b></p> <p><b>Adjusted Underlying Result</b></p> <p>Indicator of the broad objective that an adjusted underlying surplus should be generated in the ordinary course of business. A surplus or increasing surplus suggests an improvement in the operating position. The adjusted underlying surplus and the adjusted underlying revenue exclude the following types of income: grants - capital (non-recurrent), contributions - monetary (capital) and contributions - non-monetary.</p>					
	[Adjusted Underlying Surplus (Deficit) / Adjusted Underlying Revenue] x 100	(20%) to 20%	2.18%	(12.36%) ❌	1
<p><b>Liquidity - Measures whether a council is able to generate sufficient cash to pay bills on time.</b></p> <p><b>Working Capital</b></p> <p>Indicator of the broad objective that sufficient working capital is available to pay bills as and when they fall due. High or increasing level of working capital suggests an improvement in liquidity.</p>					
	[Current Assets / Current Liabilities] x 100	100% - 400%	136.98%	155.26% ✅	2
<p><b>Unrestricted Cash</b></p> <p>Indicator of the broad objective that sufficient cash which is free of restrictions is available to pay bills as and when they fall due. High or increasing level of unrestricted cash suggests an improvement in liquidity.</p>					
	[Unrestricted Cash / Current Liabilities] x 100	10% - 300%	52.71%	68.59% ✅	3
<p><b>Obligations - Measures whether the level of debt and other long term obligations is appropriate to the size and nature of the Council's activities.</b></p> <p><b>Loans and Borrowings</b></p> <p>Indicator of the broad objective that the level of interest bearing loans and borrowings should be appropriate to the size and nature of a council's activities. Low or decreasing level of loans and borrowings suggests an improvement in the capacity to meet long term obligations.</p>					
	[Interest Bearing Loans and Borrowings / Rate Revenue] x 100	0% - 70%	57.23%	55.05% ⚠️	4
<p><b>Debt Commitments</b></p> <p>Defined as interest and principal repayments on interest bearing loans and borrowings as a percentage of rate revenue.</p>					
	[Interest and Principal Repayments / Rate Revenue] x 100	0% - 20%	6.17%	6.00% ⚠️	5
<p><b>Indebtedness</b></p> <p>Indicator of the broad objective that the level of long term liabilities should be appropriate to the size and nature of a Council's activities. Low or decreasing level of long term liabilities suggests an improvement in the capacity to meet long term obligations</p>					
	[Non Current Liabilities / Own Source Revenue] x 100	2% - 70%	45.47%	45.55% ⚠️	6



## Financial Performance Indicators

as at 31 March 2023

Indicator	Calculation of Measure	Full Year			Notes
		Expected Bands	Adopted Budget	Forecast	
<b>Asset Renewal</b> Indicator of the broad objective that assets should be renewed as planned. High or increasing level of planned asset renewal being met suggests an improvement in the capacity to meet long term obligations	[Asset Renewal Expenditure / Depreciation] x 100	40% - 130%	146.56%	119.57% <span style="color: red;">✘</span>	7
<b>Stability - Measures whether a council is able to generate revenue from a range of sources.</b>  <b>Rates Concentration</b> Indicator of the broad objective that revenue should be generated from a range of sources. High or increasing range of revenue sources suggests an improvement in stability.	[Rate Revenue / Adjusted Underlying Revenue] x 100	30.00% - 80.00%	71.39%	71.96% <span style="color: orange;">!</span>	8
<b>Treasury Corporation of Victoria - Undertakings to obtain and maintain loans</b>  <b>Indebtedness</b> The aggregate Interest Bearing Loans and Borrowings at all times must not exceed 60% of Own Source Revenue	[Interest Bearing Loans and Borrowings / Own Source Revenue] x 100	0% - 60%	49.58%	47.82% <span style="color: orange;">!</span>	9
<b>Interest Cover Ratio</b> The Interest Cover Ratio at all times must not be less than 2.00:1.00	[EBITDA / Interest Expense]	2.00 - 100.00	16.78	7.68 <span style="color: red;">✘</span>	10

✔ Forecasts improvements in Council's financial performance / financial position indicator compared to the Adopted Budget position.  
! Forecasts that Council's financial performance / financial position indicator will be reasonably steady and is within Expected Bands.  
✘ Forecasts deterioration in Council's financial performance / financial position indicator compared to the Adopted Budget position.

**Notes:**

- Permanent Variance:**  
 - The adjusted underlying result ratio is within the expected bands  
 - The forecast decrease in the ratio is driven by the transfer of the Knox Regional Sports Park assets to the State Government; this was budgeted to occur during the 2021-22 financial year, but occurred in July 2022
- Timing Variance:**  
 - The working capital ratio is within the expected bands  
 - The forecast increase in the ratio is due to the increased cash and investments balance at year-end, which is largely due to the carry forward of capital expenditure to the 2023-24 financial year
- Timing Variance:**  
 - The unrestricted cash ratio is within the expected bands
- Timing Variance:**  
 - The loans and borrowings ratio is within expected bands  
 - Budgeted borrowings for the 2022-23 financial year have yet to be taken up
- Timing Variance:**  
 - The debt commitments ratio is within expected bands
- Timing Variance:**  
 - The indebtedness ratio is within expected bands  
 - Budgeted borrowings for the 2022-23 financial year have yet to be taken up
- Timing Variance:**  
 - The forecast asset renewal is within the expected bands  
 - The forecast decrease in the ratio is due to the carry forward of capital expenditure to the 2023-24 financial year
- Timing Variance:**  
 - The rates concentration ratio is within the expected bands
- Timing Variance:**  
 - The TCV indebtedness ratio is within the expected bands
- Timing Variance:**  
 - The TCV interest cover ratio is within the expected bands  
 - The forecast decrease in the ratio is driven by the transfer of the Knox Regional Sports Park assets to the State Government; this was budgeted to occur during the 2021-22 financial year, but occurred in July 2022

## Appendix A

### Summary of Net Income and Expenditure by Department

for year to date ended 31 March 2023



Net (Income) / Expenditure	Notes	Year-to-Date				Full Year					
		Amended Budget	Actual	Variance		Adopted Budget	Amended Budget	Forecast	Amended Variance	Adopted Variance	
		\$000'S	\$000'S	\$000'S	%	\$000'S	\$000'S	\$000'S	\$000'S	\$000'S	
<b>Rates</b>											
Rates and Valuation		(111,228)	(112,168)	941	0.85%	✔	(111,290)	(111,290)	(112,169)	879	879
<b>Net (Income) / Expense - Rates</b>		<b>(111,228)</b>	<b>(112,168)</b>	<b>941</b>	<b>0.85%</b>		<b>(111,290)</b>	<b>(111,290)</b>	<b>(112,169)</b>	<b>879</b>	<b>879</b>
<b>CEO</b>											
Chief Executive Office		474	494	(21)	(4.33%)	⚠	631	631	631	0	0
Chief Financial Office	1	2,530	1,878	653	25.80%	✔	3,405	3,405	3,158	247	247
Chief People Office	2	4,028	3,600	427	10.61%	✔	5,353	5,353	5,103	251	251
<b>Net (Income) / Expense - CEO</b>		<b>7,032</b>	<b>5,972</b>	<b>1,060</b>	<b>15.07%</b>		<b>9,389</b>	<b>9,389</b>	<b>8,891</b>	<b>497</b>	<b>497</b>
<b>City Liveability</b>											
Directorate City Liveability		405	395	11	2.60%	✔	540	540	540	0	0
City Futures	3	3,432	1,805	1,626	47.39%	✔	4,258	4,907	4,523	384	(266)
City Planning and Building	4	(3,109)	(2,680)	(430)	(13.82%)	✘	(4,152)	(4,152)	(3,620)	(532)	(532)
City Safety and Health	5	2,125	1,825	299	14.09%	✔	2,488	2,890	3,310	(420)	(822)
City Projects	6	498	349	149	29.97%	✔	663	663	569	94	94
<b>Net (Income) / Expense - City Liveability</b>		<b>3,350</b>	<b>1,694</b>	<b>1,656</b>	<b>49.42%</b>		<b>3,797</b>	<b>4,849</b>	<b>5,323</b>	<b>(473)</b>	<b>(1,525)</b>
<b>Connected Communities</b>											
Directorate Connected Communities		546	570	(24)	(4.39%)	⚠	717	717	737	(21)	(21)
Community Access and Support	7	2,763	2,395	368	13.31%	✔	3,766	3,770	3,396	373	369
Community Wellbeing	8	6,811	7,199	(388)	(5.70%)	✘	8,595	8,799	8,548	250	46
Active and Creative Communities	9	3,052	2,448	605	19.81%	✔	3,665	3,832	3,941	(109)	(276)
Family and Children's Services	10	3,392	4,323	(932)	(27.48%)	✘	5,350	5,360	5,293	68	58
<b>Net (Income) / Expense - Connected Communities</b>		<b>16,564</b>	<b>16,935</b>	<b>(372)</b>	<b>(2.24%)</b>		<b>22,092</b>	<b>22,477</b>	<b>21,915</b>	<b>562</b>	<b>177</b>
<b>Customer and Performance</b>											
Directorate Customer and Performance		252	293	(41)	(16.44%)	✘	335	335	335	0	0
Governance and Risk		4,107	3,990	117	2.84%	✔	4,867	4,867	4,866	1	1
Chief Information Officer	11	7,765	7,198	567	7.30%	✔	9,794	9,794	9,198	596	596
Strategy and Transformation	12	1,399	806	593	42.41%	✔	1,918	1,918	1,548	369	369
Customer and Communications	13	3,596	3,119	477	13.27%	✔	4,606	4,756	4,623	133	(18)
<b>Net (Income) / Expense - Customer and Performance</b>		<b>17,119</b>	<b>15,406</b>	<b>1,713</b>	<b>10.00%</b>		<b>21,519</b>	<b>21,670</b>	<b>20,570</b>	<b>1,100</b>	<b>949</b>
<b>Infrastructure</b>											
Directorate Infrastructure		348	260	89	25.48%	✔	464	464	364	100	100
Sustainable Infrastructure	14	(5,649)	(9,297)	3,648	64.59%	✔	1,903	1,903	1,379	524	524
Community Infrastructure		5,276	5,367	(91)	(1.73%)	⚠	7,104	7,104	6,872	233	233
Operations		13,306	12,775	531	3.99%	✔	17,553	17,553	17,905	(352)	(352)
Major Initiatives		255	194	62	24.11%	✔	339	339	340	(1)	(1)
<b>Net (Income) / Expense - Infrastructure</b>		<b>13,537</b>	<b>9,298</b>	<b>4,238</b>	<b>31.31%</b>		<b>27,364</b>	<b>27,364</b>	<b>26,860</b>	<b>504</b>	<b>504</b>

Indicators of the variances between year to date (YTD) Adopted Budget and Actual results:

- ✔ 0% or greater.
- ⚠ Less than 0% and greater than negative 5%.
- ✘ Negative 5% or less.

Notes have been provided for these variances:

1. Favourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or greater than positive \$100K and equal to or greater than positive 5%.
2. Unfavourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or less than negative \$100K and equal to or less than negative 5%.

## Summary of Net Income and Expenditure by Department

for year to date ended 31 March 2023



Notes:	
1	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$199K favourable variance for employee costs and oncosts across the department, including \$148K in Strategic Procurement</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$160K favourable variance for the fire services levy payable on Council properties</li> <li>- \$78K favourable variance for debt collection</li> <li>- \$54K favourable variance for property rental income</li> </ul>
2	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$100K favourable variance for employee costs and oncosts across the department</li> <li>- \$59K favourable variance for unbudgeted grant received for the Wellbeing Program</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$101K favourable variance for Leadership Development</li> <li>- \$75K favourable variance for Child Safe Standards</li> </ul>
3	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$355K favourable variance for unbudgeted grant received for Boronia Placemaking and Activation</li> <li>- \$376K favourable variance for employee costs and oncosts throughout the department</li> <li>- \$180K favourable variance for unbudgeted grant received for the Boronia Wayfinding and Branding Strategy</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$159K favourable variance for City Strategy and Planning (excluding employee costs)</li> </ul>
4	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$198K favourable variance for employee costs and oncosts across the department</li> <li>- \$198K favourable variance for supervision fees</li> <li>- \$440K unfavourable variance in Public Open Space Contributions; income of this nature is unpredictable and is directly contingent on developer activities in the municipality</li> <li>- \$244K unfavourable variance for statutory planning application fees</li> <li>- \$150K unfavourable variance for fines revenue</li> </ul>
5	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$163K favourable variance for COVID Concierge and Hospitality Support operating grants recognised this year that were received in 2021-22 but have been treated as unearned income as at 30 June 2022 in accordance with accounting standards</li> <li>- \$586K unfavourable variance for traffic enforcement fines due to delays in the implementation of the parking strategy</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$636K favourable variance in Community Laws expenditure, including \$237K favourable variance in Community Laws employee costs and oncosts, and \$130K favourable variance relating to implementation of the parking strategy</li> <li>- \$105K favourable variance for School Crossings, including \$81K for employee costs and oncosts</li> <li>- \$150K unfavourable variance for animal registration fees</li> </ul>
6	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$222K favourable variance for employee costs and oncosts across the department; partially offset by an unfavourable variance of \$49K in consultants and contracts</li> </ul>
7	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$197K favourable variance for employee costs and oncosts throughout the department</li> </ul>
8	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$167K favourable variance for employee costs and oncosts throughout the department</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$162K favourable variance for the Empowering Communities Project (excluding employee costs)</li> <li>- \$125K favourable variance for the Community Planning &amp; Places program (excluding employee costs)</li> <li>- \$74K favourable variance for the Community Access &amp; Equity program (excluding employee costs)</li> <li>- \$69K favourable variance for Community Partnerships (excluding employee costs)</li> <li>- \$1,102K unfavourable variance for the fourth quarter library contribution to Eastern Regional Libraries</li> </ul>
9	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$389K favourable variance for Arts and Cultural Services, including favourable variance of \$111K for fees received, \$117K for unbudgeted grants received, and \$69K for Civic Events</li> <li>- \$266K favourable variance for Sports and Leisure Services, including \$77K favourable variance for Leisure Services recreation grants scheme</li> </ul>
10	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$1,022K unfavourable variance for Integrated Early Years Hubs grants received, and \$276K unfavourable variance for parent fees received due to lower than budgeted utilisation; partially offset by a \$556K favourable variance in employee costs and oncosts</li> <li>- \$883K unfavourable variance for Kindergarten Services parent fees received, and \$772K unfavourable variance for Kindergarten grants received due to lower than budgeted utilisation and with the free kindergartens grants commencing in January 2023; partially offset by a \$175K favourable variance in employee costs and oncosts, and a \$229K favourable variance for the special education grant that is now receivable with Kindergartens now being fully grant funded</li> <li>- \$314K favourable variance for Child, Family Health &amp; Wellbeing, including \$203K for employee costs and oncosts</li> <li>- \$365K favourable variance for Integrated Systems Quality and Operations, including \$262K for employee costs and oncosts and \$223K for Early Years Resources</li> </ul>

## Summary of Net Income and Expenditure by Department

for year to date ended 31 March 2023



Notes (continued):	
11	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$221K favourable variance for Chief Information Office renewal expenditure</li> <li>- \$185K favourable variance for telephone and communications due to the timing of receipt of invoices</li> <li>- \$96K favourable variance for subscriptions</li> </ul>
12	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$368K favourable variance for employee costs and oncosts throughout the department</li> <li>- \$125K favourable variance for Business Transformation consultant costs due to timing of activities</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- A further \$72K favourable variance for Business Transformation consultant costs is expected to be utilised</li> </ul>
13	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$378K favourable variance for employee costs and oncosts throughout the department, including \$312K for Customer Service</li> </ul>
14	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$122K favourable variance for Green Waste bin charge due to a higher takeup of green waste bins</li> <li>- \$104K favourable variance for Commercial Waste garbage charge</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2,715K favourable variance for Waste Management materials and services due to the timing of the receipt of invoices, and includes a favourable variance of \$1,824K for the Kerbside Reform Transition Project, \$272K for hard rubbish collection, \$210K for the State Government Landfill Levy, and \$134K for Waste/Recycling Education</li> <li>- \$322K favourable variance for Asset Strategy, including \$125K for survey/condition ratings, \$90K for consultants, and \$59K for employee costs and oncosts</li> <li>- \$342K favourable variance for Traffic Management, including 103K for employee costs and oncosts, and \$90K for the Mobility Plan Implementation</li> </ul>

## Comprehensive Income Statement

for year to date ended 31 March 2023



Description	Notes	Year-to-Date				Full Year					
		Amended Budget	Actual	Variance Fav/(Unfav)		Adopted Budget	Amended Budget	Forecast	Amended Variance Fav/(Unfav)	Adopted Variance Fav/(Unfav)	
		\$000'S	\$000'S	\$000'S	%	\$000'S	\$000'S	\$000'S	\$000'S	\$000'S	
<b>Income</b>											
Rates and Charges		133,259	134,337	1,077	0.81%	✓	133,469	133,469	134,351	882	882
Statutory Fees and Fines	1	3,229	2,433	(797)	(24.67%)	✗	4,306	4,306	3,317	(989)	(989)
User Fees		14,173	13,155	(1,018)	(7.18%)	⚠	16,673	16,673	15,748	(925)	(925)
Grants - Operating		15,577	14,518	(1,058)	(6.79%)	⚠	21,812	23,459	22,361	(1,098)	549
Grants - Capital	2	9,608	4,922	(4,686)	(48.77%)	✗	3,478	10,346	10,346	0	6,868
Contributions - Monetary	3	9,229	6,117	(3,112)	(33.72%)	✗	8,316	12,091	9,349	(2,743)	1,032
Contributions - Non-Monetary		0	0	0	0.00%	✓	2,000	2,000	2,000	0	0
Increment on investment in associates		0	0	0	0.00%	✓	0	0	0	0	0
Other Income	4	659	1,434	775	117.50%	✓	901	901	1,641	740	740
<b>Total Income</b>		<b>185,735</b>	<b>176,915</b>	<b>(8,819)</b>	<b>(4.75%)</b>		<b>190,956</b>	<b>203,245</b>	<b>199,113</b>	<b>(4,132)</b>	<b>8,157</b>
<b>Expenses</b>											
Employee Costs		59,538	56,579	2,959	4.97%	✓	79,480	79,480	76,263	3,217	3,217
Materials and Services	5	59,246	45,092	14,155	23.89%	✓	75,450	78,684	76,302	2,382	(853)
Depreciation		17,718	17,265	453	2.55%	✓	23,625	23,625	23,193	432	432
Amortisation - Intangible Assets		670	670	(0)	0.00%	✓	893	893	893	0	0
Amortisation - Right-of-Use Assets		554	449	105	18.92%	✓	739	739	630	109	109
Contributions and Donations	6	4,665	5,794	(1,129)	(24.21%)	✗	5,835	5,835	5,926	(92)	(92)
Borrowing Costs		1,461	1,304	157	10.76%	✓	1,948	1,948	1,773	175	175
Finance Costs - Leases		29	18	12	40.13%	✓	39	39	30	9	9
Bad and Doubtful Debts		225	212	13	5.90%	✓	308	308	308	0	0
Other Expenses		423	543	(120)	(28.31%)	✗	626	626	692	(65)	(65)
Net (Gain) Loss on Disposal of Property, Infrastructure, Plant and Equipment	7	29,320	25,333	3,987	13.60%	✓	(6,080)	19,340	23,777	(4,436)	(29,857)
<b>Total Expenses</b>		<b>173,850</b>	<b>153,258</b>	<b>20,592</b>	<b>11.84%</b>		<b>182,863</b>	<b>211,518</b>	<b>209,787</b>	<b>1,731</b>	<b>(26,924)</b>
<b>Surplus (Deficit)</b>		<b>11,885</b>	<b>23,658</b>	<b>11,773</b>	<b>99.05%</b>		<b>8,092</b>	<b>(8,273)</b>	<b>(10,675)</b>	<b>(2,402)</b>	<b>(18,767)</b>
<b>Total Comprehensive Income for the Year</b>		<b>11,885</b>	<b>23,658</b>	<b>11,773</b>	<b>99.05%</b>		<b>8,092</b>	<b>(8,273)</b>	<b>(10,675)</b>	<b>(2,402)</b>	<b>(18,767)</b>

Indicators of the variances between year to date (YTD) Adopted Budget and Actual results:

- ✓ 0% or greater.
- ⚠ Less than 0% and greater than negative 10%.
- ✗ Negative 10% or less.

Notes have been provided for the following variances:

1. Favourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or greater than positive \$500K and equal to or greater than positive 10%.
2. Unfavourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or less than negative \$500K and equal to or less than negative 10%.

## Comprehensive Income Statement

for year to date ended 31 March 2023



Notes:	
1	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$0.586M unfavourable variance for traffic enforcement fines due to delays in the implementation of the parking strategy</li> <li>- \$0.244M unfavourable variance for statutory planning application fees</li> </ul>
2	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$1.567M favourable variance for capital grants that were received in 2021-22 but have been treated as unearned income as at 30 June 2022 in accordance with accounting standards and have subsequently been expended</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.353M unfavourable variance for LRCI grants originally budgeted to be received in prior years</li> <li>- \$2.220M unfavourable variance for the Fairpark Reserve Pavilion Upgrade originally budgeted to be received in 2021-22</li> <li>- \$0.429M unfavourable variance for Knox Regional Netball Centre</li> <li>- \$0.425M unfavourable variance for Quarry Reserve, Ferntree Gully</li> </ul>
3	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.531M unfavourable variance for contributions towards the Kingston Links development</li> <li>- \$0.440M unfavourable variance in Public Open Space Contributions; income of this nature is unpredictable and is directly contingent on developer activities in the municipality</li> <li>- \$0.200M unfavourable variance for contributions towards the Knox Hockey facility development</li> </ul>
4	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$0.312M favourable variance for interest received due to higher than budgeted cash and investment balances together with the increase in interest rates</li> <li>- \$0.250M favourable variance for the receipt of the prior year WorkCover premium overpayment refund</li> <li>- \$0.219M favourable variance for WorkCover salaries and medical expenses recouped</li> </ul>
5	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$5.371M favourable variance for capital expenditure that is operational in nature due to the timing of capital activities</li> <li>- \$2.715M favourable variance in Waste Management due to the timing of the receipt of invoices, and includes a favourable variance of \$1.824M for the Kerbside Reform Transition Project, \$272K for hard rubbish collection, \$0.210M for the State Government Landfill Levy, and \$0.134M for Waste/Recycling Education</li> <li>- \$0.818M favourable variance in City Futures, including \$0.395M for City Strategy and Planning, and \$0.225M for Economic Development</li> <li>- \$0.751M favourable variance in the Chief Information Office, including \$0.507M in renewal expenditure</li> <li>- \$0.695M favourable variance in Family &amp; Children's Services</li> <li>- \$0.615M favourable variance for Community Wellbeing</li> <li>- \$0.501M favourable variance for Community Access &amp; Support, including \$0.193M for Property Maintenance, and \$0.152M for Youth Services</li> <li>- \$0.379M favourable variance for Active &amp; Creative Communities, including \$0.187M for Arts and Cultural Services</li> <li>- \$0.348M favourable variance for Rates &amp; Valuations, including \$0.160M for the fire services levy payable on Council properties</li> <li>- \$0.311M favourable variance in the Operations department, including \$0.618M for Urban Forest and City Presentation, and \$0.088M for Waste Disposal, due to the timing of the receipt of invoices, partially offset by an unfavourable variance of \$0.197M for Drainage Maintenance Works, \$0.177M for Operation Callouts and Emergencies, and \$0.151M for Construction Works and Management</li> <li>- \$0.297M favourable variance for the Chief People Office</li> <li>- \$0.273M favourable variance in Community Laws</li> <li>- \$0.267M favourable variance for Asset Management, including \$0.125M for survey/condition ratings</li> <li>- \$0.225M favourable variance for Strategy &amp; Transformation</li> <li>- \$0.212M favourable variance in Biodiversity Management, including \$0.168M for Bushland Management</li> <li>- \$0.211M favourable variance in Traffic Management, including \$0.090M for Mobility Plan Implementation and \$0.075M for signal maintenance charges</li> <li>- \$0.164M favourable variance in Governance &amp; Risk</li> <li>- \$0.844M unfavourable variance for Building Maintenance Services, including \$0.381M for unscheduled repairs, \$0.246M for routine maintenance, \$0.161M for gas, and \$0.129M for cleaning, partially offset by a favourable variance of \$0.096M for water and electricity</li> </ul>
6	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$1.102M unfavourable variance for the fourth quarter library contribution to Eastern Regional Libraries</li> </ul>
7	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$3.987M favourable variance for Net (Gain) Loss on Disposal of Property due to the timing of the sale of property, plant and motor vehicles</li> </ul>

The 2022-23 Forecast includes \$3.234M in carry forward expenditure from 2021-22 into 2022-23 required for the completion and delivery of key operational projects. Operational and capital grants received totalling \$4.363M were treated as unearned income in 2021-22 and carried forward to 2022-23 in accordance with accounting standards. Capital grants totalling \$4.151M and capital contributions totalling \$3.775M were budgeted to be received in 2021-22 but have been carried forward to be received in 2022-23.



# Balance Sheet

as at 31 March 2023



Description	Notes	Year-to-Date				Full Year		
		Adopted Budget	Actual	Variance		Adopted Budget	Forecast	Variance
		\$000'S	\$000'S	\$000'S	%	\$000'S	\$000'S	\$000'S
<b>Current Assets</b>								
Cash and Cash Equivalents	1	16,116	34,110	17,995	111.66%	39,135	46,390	7,255
Other Financial Assets	2	0	7,500	7,500	100.00%	0	5,000	5,000
Trade and Other Receivables		43,894	41,014	(2,880)	(6.56%)	20,491	18,542	(1,949)
Other Current Assets	3	1,318	171	(1,147)	(86.99%)	1,318	1,109	(209)
Non-Current Assets classified as Held for Sale	4	0	2,928	2,928	100.00%	0	0	0
Inventories		11	14	3	27.65%	11	14	3
<b>Total Current Assets</b>		<b>61,339</b>	<b>85,739</b>	<b>24,400</b>	<b>39.78%</b>	<b>60,955</b>	<b>71,055</b>	<b>10,100</b>
<b>Non-Current Assets</b>								
Investment in Associates		3,074	3,469	395	12.85%	3,074	3,469	395
Property, Infrastructure, Plant and Equipment		2,039,775	2,154,290	114,514	5.61%	2,047,916	2,171,219	123,303
Right-of-Use Assets		1,776	814	(962)	(54.18%)	1,533	1,059	(474)
Intangible Assets		1,556	1,482	(74)	(4.73%)	1,371	2,152	781
<b>Total Non-Current Assets</b>		<b>2,046,181</b>	<b>2,160,055</b>	<b>113,874</b>	<b>5.57%</b>	<b>2,053,894</b>	<b>2,177,899</b>	<b>124,005</b>
<b>Total Assets</b>		<b>2,107,520</b>	<b>2,245,793</b>	<b>138,273</b>	<b>6.56%</b>	<b>2,114,849</b>	<b>2,248,954</b>	<b>134,105</b>
<b>Current Liabilities</b>								
Trade and Other Payables		10,532	11,487	(956)	(9.07%)	14,383	17,410	(3,027)
Trust Funds and Deposits	5	1,918	3,162	(1,244)	(64.87%)	1,918	2,540	(622)
Unearned Income	6	0	1,427	(1,427)	(100.00%)	0	0	0
Provisions - Employee Costs		18,127	17,504	623	3.44%	19,615	18,104	1,511
Defined Benefits Superannuation		0	0	0	0.00%	0	0	0
Provision - Landfill Rehabilitation		389	324	65	16.78%	389	324	65
Interest-Bearing Loans and Borrowings		4,560	4,374	186	4.09%	7,590	6,849	741
Lease Liabilities		615	153	461	75.04%	605	539	66
Other Provisions		0	0	0	0.00%	0	0	0
<b>Total Current Liabilities</b>		<b>36,140</b>	<b>38,431</b>	<b>(2,290)</b>	<b>(6.34%)</b>	<b>44,500</b>	<b>45,766</b>	<b>(1,266)</b>
<b>Non-Current Liabilities</b>								
Provisions - Employee Costs		1,276	1,166	110	8.60%	1,276	1,166	110
Interest-Bearing Loans and Borrowings		40,618	41,350	(732)	(1.80%)	68,800	67,107	1,693
Provision - Landfill Rehabilitation		2,396	1,825	571	23.82%	2,396	1,825	571
Defined Benefits Superannuation		0	0	0	0.00%	0	0	0
Lease Liabilities		934	662	272	29.15%	934	526	408
Other Provisions		0	0	0	0.00%	0	0	0
<b>Total Non-Current Liabilities</b>		<b>45,224</b>	<b>45,003</b>	<b>221</b>	<b>0.49%</b>	<b>73,406</b>	<b>70,624</b>	<b>2,782</b>
<b>Total Liabilities</b>		<b>81,364</b>	<b>83,433</b>	<b>(2,070)</b>	<b>(2.54%)</b>	<b>117,906</b>	<b>116,391</b>	<b>1,515</b>
<b>Net Assets</b>		<b>2,026,156</b>	<b>2,162,360</b>	<b>136,204</b>	<b>6.72%</b>	<b>1,996,943</b>	<b>2,132,563</b>	<b>135,620</b>
<b>Equity</b>								
Accumulated Surplus		738,475	729,477	(8,998)	(1.22%)	714,808	709,381	(5,427)
Asset Revaluation Reserve		1,261,516	1,400,349	138,833	11.01%	1,261,516	1,400,349	138,833
Other Reserves		26,165	32,534	6,369	24.34%	20,619	22,833	2,214
<b>Total Equity</b>		<b>2,026,156</b>	<b>2,162,360</b>	<b>136,204</b>	<b>6.72%</b>	<b>1,996,943</b>	<b>2,132,563</b>	<b>135,620</b>

## Balance Sheet

as at 31 March 2023



Notes have been provided for items with the following variances:

1. Favourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or greater than positive \$1M and equal to or greater than positive 10%.
2. Unfavourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or less than negative \$1M and equal to or less than negative 10%.

### Notes:

1	<p><b>Timing Variance:</b> - \$25.495M favourable variance across cash and cash equivalents, and other financial assets; this includes a favourable variance of \$21.172M for cash from payments for Property, Infrastructure, Plant and Equipment, and a favourable variance of \$4.677M from net cash provided by operating activities</p>
2	<p><b>Timing Variance:</b> - Other financial assets are term deposits currently held with an original maturity date of more than 90 days</p>
3	<p><b>Timing Variance:</b> - Prepayments are taken up at financial year end</p>
4	<p><b>Timing Variance:</b> - \$2.928M favourable variance for land and buildings that have been agreed to sell</p>
5	<p><b>Timing Variance:</b> - Trust funds and deposits primarily reflects the cash holdings for refundable deposits - This includes \$1.333M collected for the fire services levy; this amount is payable to the State Revenue Office by the 28th June 2023</p>
6	<p><b>Timing Variance:</b> - Unearned grants are operating and capital grants that were received in 2021-22 but have been treated as unearned income as at 30 June 2022 in accordance with accounting standards and have yet to be expended</p>

## Cash Flow Statement

for year to date ended 31 March 2023



Description	Notes	Year-to-Date				Full Year		
		Adopted Budget	Actual	Variance		Adopted Budget	Forecast	Variance
		\$000'S	\$000'S	\$000'S		\$000'S	\$000'S	\$000'S
<b>Cash Flows from Operating Activities</b>								
<b>Receipts</b>								
Rates and Charges		109,193	112,089	2,896	2.65%	132,599	134,351	1,752
Statutory Fees and Fines	1	3,229	2,433	(797)	(24.67%)	4,306	3,317	(989)
User Fees		14,041	13,944	(96)	(0.69%)	16,632	15,748	(884)
Grants - Operating	2	15,455	13,109	(2,346)	(15.18%)	21,798	20,715	(1,083)
Grants - Capital	3	9,598	3,320	(6,278)	(65.41%)	3,477	7,629	4,153
Contributions - Monetary	4	9,227	6,115	(3,112)	(33.72%)	8,315	9,349	1,034
Interest Received		15	327	312	2,077.49%	20	567	547
Other Receipts		644	1,107	463	71.85%	881	1,074	194
Net Movement in Trust Deposits	5	33	655	622	1,885.54%	33	33	0
Employee Costs		(60,495)	(57,179)	3,316	5.48%	(78,949)	(76,263)	2,686
Materials and Services	6	(63,091)	(52,032)	11,059	17.53%	(75,561)	(76,442)	(881)
Contributions and Donations	7	(4,845)	(6,087)	(1,242)	(25.64%)	(5,787)	(5,927)	(140)
Short Term, Low Value and Variable Lease Payments		(6)	(6)	0	0.00%	(8)	(8)	0
Other Payments		(417)	(537)	(120)	(28.71%)	(618)	(684)	(65)
<b>Net Cash Provided by / (Used in) Operating Activities</b>		<b>32,580</b>	<b>37,257</b>	<b>4,677</b>	<b>14.36%</b>	<b>27,137</b>	<b>33,459</b>	<b>6,322</b>
<b>Cash Flows from Investing Activities</b>								
Payments for Property, Infrastructure, Plant and Equipment	8	(60,036)	(38,864)	21,172	35.27%	(73,675)	(60,557)	13,118
Proceeds from Sales of Property, Infrastructure, Plant and Equipment		875	462	(413)	(47.20%)	12,447	8,135	(4,312)
Payments for investments	9	0	(7,500)	(7,500)	(100.00%)	0	(5,000)	(5,000)
Proceeds from sale of investments	10	0	5,000	5,000	100.00%	0	5,000	5,000
<b>Net Cash Used in Investing Activities</b>		<b>(59,160)</b>	<b>(40,901)</b>	<b>18,259</b>	<b>30.86%</b>	<b>(61,228)</b>	<b>(52,422)</b>	<b>8,805</b>
<b>Cash Flows from Financing Activities</b>								
Proceeds of Borrowings		0	0	0	0.00%	34,312	29,312	(5,000)
Repayment of Borrowings		(3,184)	(3,184)	0	0.00%	(6,284)	(4,263)	2,021
Finance costs		(1,461)	(1,304)	(157)	(10.76%)	(1,948)	(1,779)	169
Interest Paid - Lease Liability		(29)	(18)	(12)	(40.13%)	(39)	(30)	9
Repayment of Lease Liabilities		(554)	(592)	38	6.86%	(739)	(739)	0
<b>Net Cash Provided by / (Used in) Financing Activities</b>		<b>(5,229)</b>	<b>(5,098)</b>	<b>(131)</b>	<b>(2.50%)</b>	<b>25,302</b>	<b>22,501</b>	<b>(2,801)</b>
<b>Net increase / (decrease) in Cash and Cash Equivalents</b>		<b>(31,808)</b>	<b>(8,742)</b>	<b>(23,067)</b>	<b>(72.52%)</b>	<b>(8,789)</b>	<b>3,538</b>	<b>12,327</b>
Cash and Cash Equivalents at the Beginning of the Financial Year		47,924	42,852	(5,072)	(10.58%)	47,924	42,852	(5,072)
<b>Cash at the End of the Year</b>		<b>16,116</b>	<b>34,110</b>	<b>17,995</b>	<b>111.66%</b>	<b>39,135</b>	<b>46,390</b>	<b>7,255</b>

Notes have been provided for items with the following variances:

1. Favourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or greater than positive \$500K and equal to or greater than positive 10%.
2. Unfavourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or less than negative \$500K and equal to or less than negative 10%.

## Cash Flow Statement

for year to date ended 31 March 2023



Notes:	
1	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$0.586M unfavourable variance for traffic enforcement fines due to delays in the implementation of the parking strategy</li> <li>- \$0.244M unfavourable variance for statutory planning application fees</li> </ul>
2	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$0.356M favourable variance for unbudgeted grant received for Boronia Placemaking and Activation</li> <li>- \$0.180M favourable variance for unbudgeted grant received for the Boronia Wayfinding and Branding Strategy</li> <li>- \$1.012M unfavourable variance for the childcare benefit subsidy due to utilisation</li> <li>- \$0.114M unfavourable variance for the School Focused Youth Service</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$0.543M unfavourable variance in Kindergarten Services grants received due to utilisation; this will be offset by additional grants that are now receivable with kindergartens now being fully grant funded</li> </ul>
3	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.353M unfavourable variance for LRCI grants originally budgeted to be received in prior years</li> <li>- \$2.220M unfavourable variance for the Fairpark Reserve Pavilion Upgrade originally budgeted to be received in 2021-22</li> <li>- \$0.429M unfavourable variance for Knox Regional Netball Centre</li> <li>- \$0.425M unfavourable variance for Quarry Reserve, Ferntree Gully</li> </ul>
4	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.531M unfavourable variance for contributions towards the Kingston Links development</li> <li>- \$0.440M unfavourable variance in Public Open Space Contributions; income of this nature is unpredictable and is directly contingent on developer activities in the municipality</li> <li>- \$0.200M unfavourable variance for contributions towards the Knox Hockey facility development</li> </ul>
5	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Trust funds and deposits primarily reflects the cash holdings for refundable deposits</li> <li>- This includes \$1.333M collected for the fire services levy; this amount is payable to the State Revenue Office by the 28th June</li> </ul>
6	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.715M favourable variance in Waste Management due to the timing of the receipt of invoices, and includes a favourable variance of \$1.824M for the Kerbside Reform Transition Project, \$272K for hard rubbish collection, \$0.210M for the State Government Landfill Levy, and \$0.134M for Waste/Recycling Education</li> <li>- \$0.818M favourable variance in City Futures, including \$0.395M for City Strategy and Planning, and \$0.225M for Economic Development</li> <li>- \$0.751M favourable variance in the Chief Information Office, including \$0.507M in renewal expenditure</li> <li>- \$0.695M favourable variance in Family &amp; Children's Services</li> <li>- \$0.615M favourable variance for Community Wellbeing</li> <li>- \$0.501M favourable variance for Community Access &amp; Support, including \$0.193M for Property Maintenance, and \$0.152M for Youth Services</li> <li>- \$0.379M favourable variance for Active &amp; Creative Communities, including \$0.187M for Arts and Cultural Services</li> <li>- \$0.348M favourable variance for Rates &amp; Valuations, including \$0.160M for the fire services levy payable on Council properties</li> <li>- \$0.311M favourable variance in the Operations department, including \$0.618M for Urban Forest and City Presentation, and \$0.088M for Waste Disposal, due to the timing of the receipt of invoices, partially offset by an unfavourable variance of \$0.197M for Drainage Maintenance Works, \$0.177M for Operation Callouts and Emergencies, and \$0.151M for Construction Works and Management</li> <li>- \$0.297M favourable variance for the Chief People Office</li> <li>- \$0.273M favourable variance in Community Laws</li> <li>- \$0.267M favourable variance for Asset Management, including \$0.125M for survey/condition ratings</li> <li>- \$0.225M favourable variance for Strategy &amp; Transformation</li> <li>- \$0.212M favourable variance in Biodiversity Management, including \$0.168M for Bushland Management</li> <li>- \$0.211M favourable variance in Traffic Management, including \$0.090M for Mobility Plan Implementation and \$0.075M for signal maintenance charges</li> <li>- \$0.164M favourable variance in Governance &amp; Risk</li> <li>- \$0.844M unfavourable variance for Building Maintenance Services, including \$0.381M for unscheduled repairs, \$0.246M for routine maintenance, \$0.161M for gas, and \$0.129M for cleaning, partially offset by a favourable variance of \$0.096M for water and electricity</li> </ul>

## Cash Flow Statement

for year to date ended 31 March 2023



Notes (continued):	
7	<b>Timing Variance:</b> - \$1.102M unfavourable variance for the fourth quarter library contribution to Eastern Regional Libraries
8	<b>Timing Variance:</b> - \$5.371M favourable variance for capital expenditure that is operational in nature due to the timing of capital activities - \$26.761M unfavourable variance for capital works expenditure against budget as detailed in the Statement of Capital Works
9	<b>Timing Variance:</b> - Payments for investments are term deposits taken out during the financial year and still held with an original maturity date of more than 90 days
10	<b>Permanent Variance:</b> - Proceeds from sale of investments are term deposits held at 30 June 2022 with an original maturity date of more than 90 days but have now matured

## Statement of Capital Works

for year to date ended 31 March 2023



Description	Notes	Year-to-Date				Full Year				
		Amended Budget	Actual	Variance Fav/(Unfav)		Adopted Budget	Amended Budget	Forecast	Amended Variance Fav/(Unfav)	Adopted Variance Fav/(Unfav)
		\$000'S	\$000'S	\$000'S	%	\$000'S	\$000'S	\$000'S	\$000'S	\$000'S
<b>Expenditure - Capital Works Program</b>										
<b>Property</b>										
Land		0	0	0	0.00%	0	0	0	0	0
Buildings	1	15,108	9,067	6,042	39.99%	19,658	20,226	14,593	5,633	5,065
<b>Total Property</b>		<b>15,108</b>	<b>9,067</b>	<b>6,042</b>	<b>39.99%</b>	<b>19,658</b>	<b>20,226</b>	<b>14,593</b>	<b>5,633</b>	<b>5,065</b>
<b>Plant and Equipment</b>										
Artworks		284	67	217	76.44%	417	417	204	213	213
Plant, Machinery and Equipment		976	614	362	37.07%	2,026	2,310	1,310	1,000	716
Fixtures, Fittings and Furniture		0	192	(192)	100.00%	0	0	0	0	0
Computers and Telecommunications		1,580	1,650	(70)	(4.41%)	6,714	6,714	3,942	2,772	2,772
<b>Total Plant and Equipment</b>		<b>2,840</b>	<b>2,523</b>	<b>317</b>	<b>11.17%</b>	<b>9,157</b>	<b>9,441</b>	<b>5,456</b>	<b>3,985</b>	<b>3,701</b>
<b>Infrastructure</b>										
Roads (including Kerb and Channel)	2	6,756	3,689	3,067	45.40%	9,047	8,756	8,340	416	707
Drainage	3	3,292	2,134	1,158	35.17%	4,962	4,610	3,720	890	1,243
Bridges		856	369	487	56.87%	545	856	857	(1)	(312)
Footpaths and Cycleways	4	3,927	2,076	1,851	47.13%	4,908	4,596	3,975	621	933
Off Street Car Parks	5	710	145	565	79.57%	968	970	956	14	12
Recreation, Leisure, Parks and Playgrounds	6	30,948	18,323	12,625	40.80%	31,547	34,247	28,571	5,676	2,976
Other Infrastructure	7	1,188	538	650	54.69%	1,034	1,315	945	369	89
<b>Total Infrastructure</b>		<b>47,677</b>	<b>27,274</b>	<b>20,402</b>	<b>42.79%</b>	<b>53,012</b>	<b>55,350</b>	<b>47,365</b>	<b>7,985</b>	<b>5,647</b>
<b>Total Expenditure - Capital Works Program</b>		<b>65,625</b>	<b>38,864</b>	<b>26,761</b>	<b>40.78%</b>	<b>81,827</b>	<b>85,017</b>	<b>67,414</b>	<b>17,603</b>	<b>14,413</b>
<b>Represented by:</b>										
Extension / Expansion		6,340	3,647	2,693	42.48%	7,080	8,802	5,950	2,852	1,130
Legal Requirements		0	0	0	0.00%	0	0	0	0	0
New		10,555	5,417	5,138	48.68%	13,143	12,918	9,091	3,827	4,052
Renewal		29,820	18,292	11,527	38.66%	38,493	39,361	30,595	8,766	7,898
Upgrade		18,909	11,507	7,402	39.15%	23,110	23,936	21,778	2,158	1,332
<b>Total Expenditure - Capital Works Program</b>		<b>65,625</b>	<b>38,864</b>	<b>26,761</b>	<b>40.78%</b>	<b>81,827</b>	<b>85,017</b>	<b>67,414</b>	<b>17,603</b>	<b>14,413</b>
<b>Funding Source for Capital Works Program</b>										
<b>External Funding</b>										
Contributions - Monetary - Capital	8	2,931	244	(2,687)	(91.68%)	0	3,775	1,525	(2,250)	1,525
Grants - Capital	9	9,608	4,922	(4,686)	(48.77%)	3,478	10,346	10,346	0	6,868
User Fees - Capital		0	0	0	0.00%	0	0	0	0	0
Proceeds from Loan Borrowings		0	0	0	0.00%	34,312	34,312	29,312	(5,000)	(5,000)
Other Income - Capital		0	0	0	0.00%	0	0	0	0	0
<b>Total External Funding</b>		<b>12,539</b>	<b>5,166</b>	<b>(7,373)</b>	<b>(58.80%)</b>	<b>37,790</b>	<b>48,433</b>	<b>41,183</b>	<b>(7,250)</b>	<b>3,393</b>
<b>Internal Funding</b>										
Proceeds from Sale of Property, Infrastructure, Plant and Equipment		875	460	(415)	(47.39%)	12,447	12,447	5,207	(7,240)	(7,240)
Reserves		6,658	6,007	(651)	(9.78%)	13,500	12,500	19,073	6,573	5,573
Rate Funding	10	45,553	27,231	(18,322)	(40.22%)	18,089	11,637	1,951	(9,686)	(16,139)
<b>Total Internal Funding</b>		<b>53,086</b>	<b>33,698</b>	<b>(19,388)</b>	<b>(36.52%)</b>	<b>44,036</b>	<b>36,584</b>	<b>26,231</b>	<b>(10,353)</b>	<b>(17,806)</b>
<b>Total Funding Source for Capital Works Program</b>		<b>65,625</b>	<b>38,864</b>	<b>(26,761)</b>	<b>(40.78%)</b>	<b>81,827</b>	<b>85,017</b>	<b>67,414</b>	<b>(17,603)</b>	<b>(14,413)</b>
<b>Less Operating Projects Expenditure</b>										
Operating Projects Expenditure		5,589	3,886	1,703	30.47%	8,152	8,152	6,857	(1,295)	(1,295)
<b>Net Capital Works (Capitalised Expenditure Excluding Operating Projects Expenditure)</b>		<b>60,036</b>	<b>34,978</b>	<b>25,058</b>	<b>41.74%</b>	<b>73,675</b>	<b>76,865</b>	<b>60,557</b>	<b>(16,308)</b>	<b>(13,118)</b>

## Statement of Capital Works

for year to date ended 31 March 2023



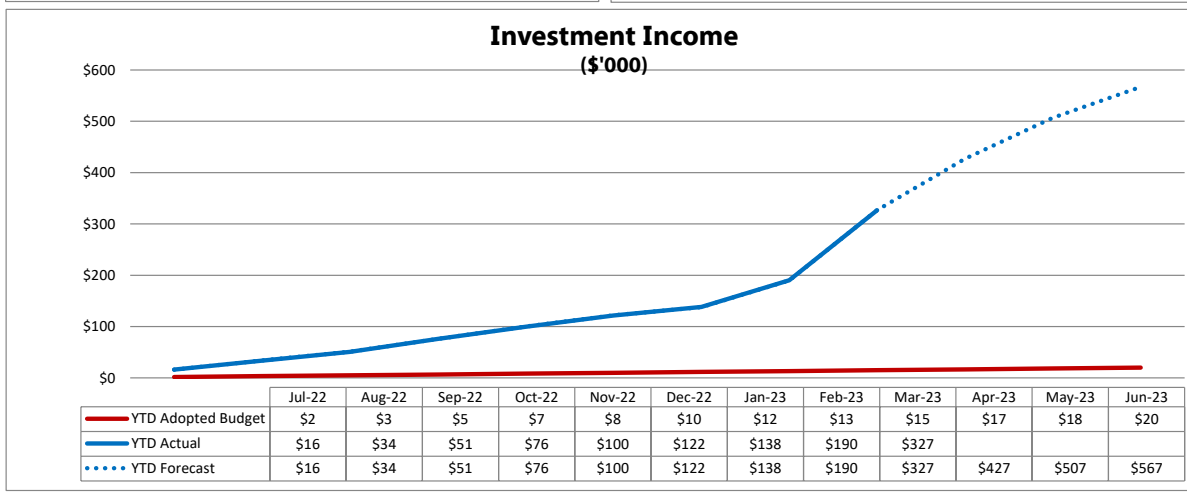
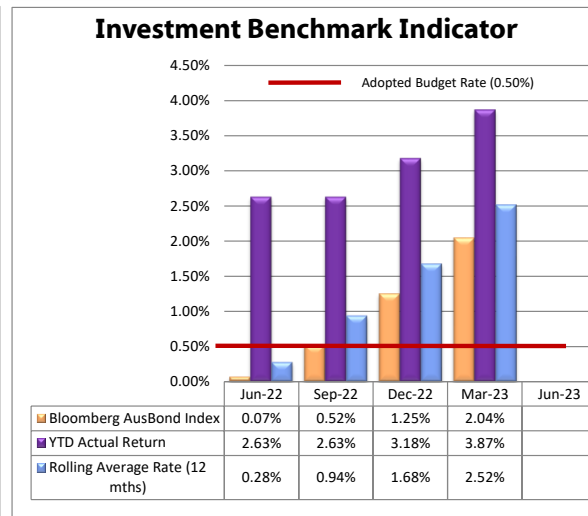
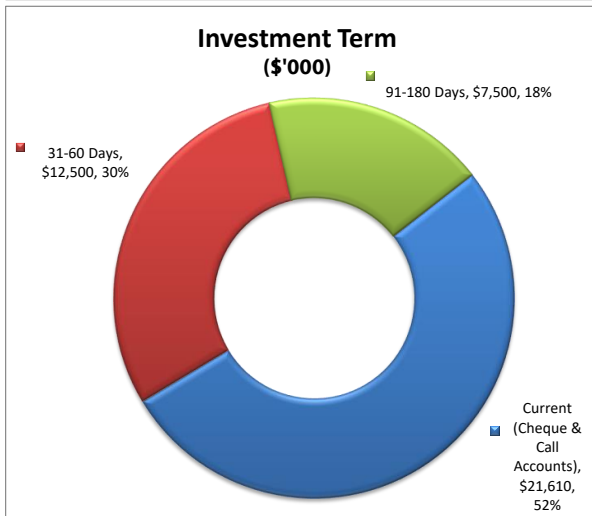
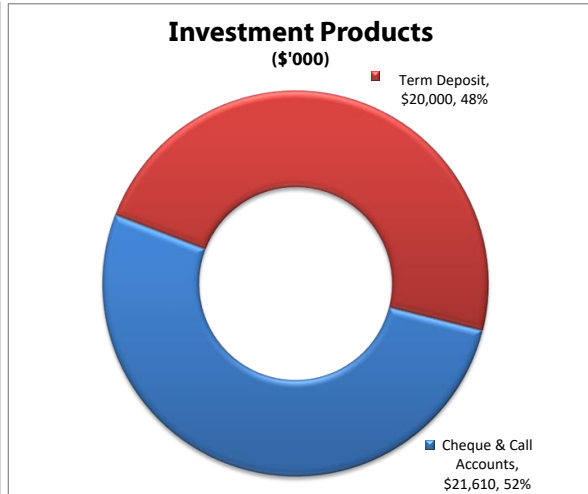
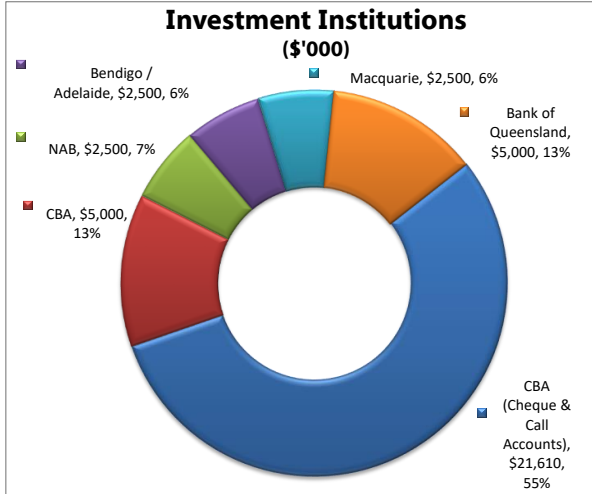
<p>Indicators of the variances between year to date (YTD) Adopted Budget and Actual results:</p> <ul style="list-style-type: none"> <li>✔ 0% or greater.</li> <li>⚠ Less than 0% and greater than negative 10%.</li> <li>✘ Negative 10% or less.</li> </ul> <p>Notes have been provided for the following variances:</p> <ol style="list-style-type: none"> <li>Favourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or greater than positive \$500K and equal to or greater than positive 10.00%.</li> <li>Unfavourable variances between year to date (YTD) Adopted Budget and Actual results are equal to or less than negative \$500K and equal to or less than negative 10%.</li> </ol>	
<p><b>Notes:</b></p>	
1	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance relating to the timing of activities for the Fairpark Reserve Pavilion Upgrade (\$2.825M); Westfield Library (\$2.003M); the Building Renewal &amp; Rehabilitation Program (\$0.289M); the Community Toilet Replacement Program (\$0.196M); Millers Homestead Upgrade (\$0.139M); Solar in Community Facilities (\$0.132M); and KCAC Seating Bank Upgrade (\$0.118M)</li> </ul>
2	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance due to the timing of activities for the Road Resurfacing Program (\$1.290M)</li> <li>- Favourable variance relating to timing of reconstruction activities for Avalon Road, Rowville (\$0.526M); Mossfield Avenue, Ferntree Gully (\$0.327M); the High Risk Road Failure Road Reconstruction Program (\$0.199M); Liberty Avenue, Rowville LATM Treatment (\$0.193M); and Studfield Shops Rear Laneway, Wantirna South (\$0.136M)</li> </ul>
3	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance relating to timing of activities for Cardiff Street Flood Mitigation (\$0.610M); and 1825 Ferntree Gully Road Flood Mitigation (\$0.348M)</li> </ul>
4	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance relating to the timing of activities for the Footpath Renewal Program (\$0.771M); the Napoleon Road Stage 4 Shared Path Construction (\$0.330M); the Bicycle/Shared Path Renewal Program (\$0.267M); the Upper Ferntree Gully Rail Link Shared Path Construction (\$0.148M); and the Liverpool Road Shared Path Design (\$0.120M)</li> </ul>
5	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance relating to timing of activities for the Rowville Recreation Reserve Car Park Upgrade (\$0.311M); and the Car Parks Renewal Program (\$0.248M)</li> </ul>
6	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance due to the timing of activities for the Knox Athletics Track Facility Upgrade (\$3.049M); Knox Hockey Facility Development (\$1.897M); the Egan Lee Reserve Top Oval Renewal (\$1.191M); Lewis Park Stage 1 (\$0.975M), Stage 2 (\$0.190M) and Stage 5 (\$0.108M); the Stamford Park Development (\$0.926M); the Knox Regional Netball Centre (\$0.609M); the Playground Renewal Program (\$0.527M); the Eildon Park Tennis Court Renewals (\$0.442M); Kings Park Floodlighting (\$0.400M); the Bayswater Oval Cricket Net Renewal (\$0.321M); Knox Park Athletics Track Lighting (\$0.300M); HV Jones Reserve Masterplan (\$0.264M); the Guy Turner Reserve Floodlighting Upgrade (\$0.201M); Quarry Reserve, Ferntree Gully (\$0.170M); the VARMS Relocation (\$0.132M); the Peregrine Reserve Masterplan (\$0.126M); and the Parks new tractor (\$0.120M)</li> <li>- Unfavourable variance due to the timing of activities for the Wantirna Reserve Tennis Court Renewal (\$0.104M)</li> </ul>
7	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Favourable variance relating to timing of activities for the Erica Avenue Streetscape Renewal (\$0.361M); and the Boronia Bowls Club Green Lighting (\$0.110M)</li> </ul>
8	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.531M unfavourable variance for contributions towards the Kingston Links development</li> <li>- \$0.200M unfavourable variance for contributions towards the Knox Hockey facility development</li> </ul>
9	<p><b>Permanent Variance:</b></p> <ul style="list-style-type: none"> <li>- \$1.567M favourable variance for capital grants that were received in 2021-22 but have been treated as unearned income as at 30 June 2022 in accordance with accounting standards and have subsequently been expended</li> </ul> <p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- \$2.353M unfavourable variance for LRCI grants originally budgeted to be received in prior years</li> <li>- \$2.220M unfavourable variance for the Fairpark Reserve Pavilion Upgrade originally budgeted to be received in 2021-22</li> <li>- \$0.429M unfavourable variance for Knox Regional Netball Centre</li> <li>- \$0.425M unfavourable variance for Quarry Reserve, Ferntree Gully</li> </ul>
10	<p><b>Timing Variance:</b></p> <ul style="list-style-type: none"> <li>- Council generates cash from its operating activities which is used as a funding source for the capital works program</li> <li>- It is forecast that \$1.951M will be required from operations to fund the 2022-23 capital works program (inclusive of projects carried forward from 2021-22)</li> </ul>



# Investment Analysis

as at 31 March 2023

A total amount of \$41.61 million in funds were invested with various financial institutions as at 31 March 2023







## Introduction

On 25 October 2021, Council formally adopted the Community Plan 2021-2031 and Council Plan 2021-2025 (incorporating the Municipal Public Health and Wellbeing Plan). These plans are our commitment to making Knox a great place now and into the future.

### Community Plan 2021-2031

This plan was developed with and for our community. It includes our Community Vision statement, and describes what we, as a collective, will focus on to achieve that vision.

**Knox: where we connect with our people and our environment, ensuring they are safe, supported and have every opportunity to thrive.**

### Council Plan 2021-2025

This plan provides direction to the organisation and describes how we're going to contribute to the achievement of the Community Vision. It also demonstrates our commitment to the health and wellbeing of the community by incorporating Knox's Municipal Public Health & Wellbeing Plan (MPHWP). We have flagged the initiatives that will contribute to the health and wellbeing of our community with a ♦ symbol.

### Our Key Directions

Both plans contain five Key Directions which describe in further detail what we as a community are going to focus on to achieve our Community Vision. These Key Directions drive the work of Council and ensure we are working towards achieving the Community Vision.



#### Opportunity and innovation

Knox strives to be a city of opportunity, embracing innovation and change, and providing local learning and employment opportunities for all. It's a place where people and business can thrive.



#### Connection, resilience and wellbeing

Knox is a place to call home. Our community is strong, healthy and we support and respect each other.



#### Neighbourhoods, housing and infrastructure

Building on what's great about our city, Knox's housing and infrastructure will meet the changing needs of our community.



#### Civic engagement and integrity

Knox Council is a trusted and respected leader in our community, acting appropriately and ensuring all voices are heard.



#### Natural environment and sustainability

Knox's natural environment is protected and enhanced to ensure sustainability for future generations.

## Progress Report Q3, 2022/2023





This report provides an overview of the progress against the Council Plan initiatives under each Key Direction and how we’re making a difference.

### **Initiatives**

The initiatives reported are those that will be delivered or have significant work completed in the given financial year with the commentary detailing the work completed each quarter.

Each Key Direction also has a major initiative(s). The major initiatives are those identified by Council as priorities to be undertaken during the financial year and have “(Major Initiative)” in the title. Major initiatives are the critical pieces of work that deliver on Council’s objectives.

Progress targets are set against each initiative by quarter based on when key milestones for the year will be completed. The progress status reflects the status of the key milestones, not necessarily the status of completion of the initiative overall, as many of the initiatives run over multiple years. Progress status is reported based on the following colour coding:

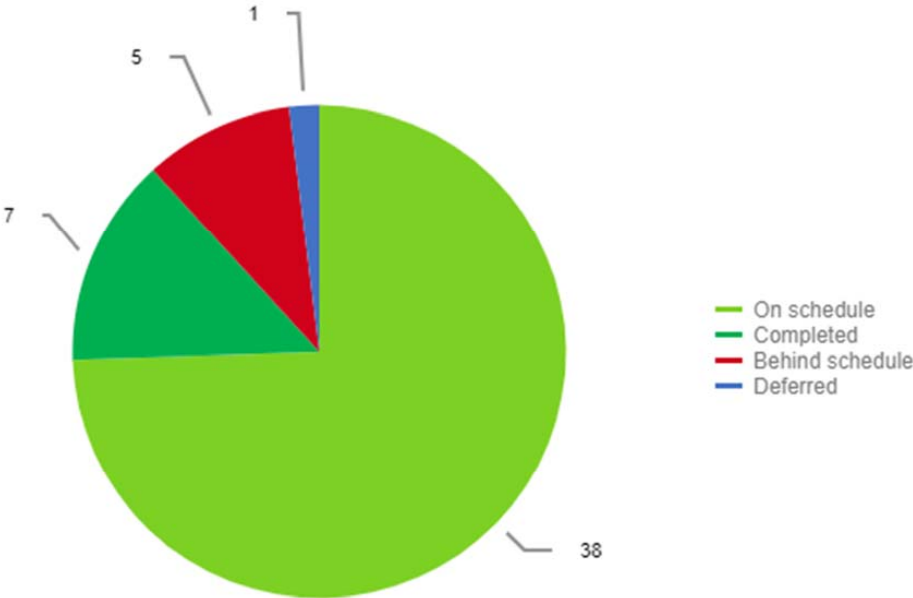
Complete	On schedule	Behind schedule	Not started	Deferred
✓				

### **Indicators**

The indicators identified in the Council Plan tell us if the work that we’re doing is contributing to a positive change in our community. They span the four years of the plan and will be reported on every six months. It must be noted however that some data will not change due to different reporting timeframes, and therefore some indicators will still include baseline data. Updated data for these indicators will be reported in future progress reports, as it becomes available. The next report to include indicators will be the Quarter 4 2022-23 progress report.

### Q3, 2022/2023 - Progress Summary




The assessment of progress against the milestones relates only to Q3, 2022/2023 of the four-year Council Plan 2021-25, with the majority of initiatives spanning multiple years.




## Opportunity and innovation


Knox strives to be a city of opportunity, embracing innovation and change, and providing local learning and employment opportunities for all. It's a place where people and business can thrive.


**Maximise the local economy by supporting existing businesses and attracting new investment.**

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 1.1.1	<b>Work with Maroondah and Yarra Ranges Councils to deliver key initiatives of the Bayswater Business Precinct Transformation Strategy - Present the Bayswater Business Precinct Transformation Strategy to Council for adoption. Undertake engagement with Council on the BBP Governance Framework and finalise for deployment.</b>	On schedule	65%	The Project Working Group and Steering Committee have met regularly during Quarter 3, to discuss the scope of the spatial plan (an implementation action of the adopted Bayswater Business Precinct Transformation Strategy) and implement the new Governance Framework, that incorporates the strategic planning functions of Knox, Maroondah and Yarra Ranges Councils.	
CP 1.1.2	<b>Work alongside the State Government on the implementation of the Wantirna Health Precinct Masterplan - Actively participate in the State Government Planning Scheme Amendment process for the Wantirna Health Precinct, including making a submission and engaging in any panel/advisory committee process. ♦</b>	On schedule	70%	A draft submission to the Wantirna Health Precinct Masterplan planning scheme amendment exhibition process was prepared and endorsed by Council at the March 2023 meeting of Council.	
CP 1.1.3	<b>Research and review supply chain connectivity and networks, to enable and advance the circular economy - Prepare a project scope to enable and advance the circular economy, and the resources needed to deliver it.</b>	On schedule	75%	A project scope is under development for a full complement of research and advice to be delivered for this project. This scope was used to apply for funding from Sustainability Victoria. If Council is successful in receiving this funding, the project will be complete by 30 June 2024. If Council is not successful in receiving this funding, the scope of the project will be reviewed to meet a reduced budget requirement.	


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 1.1.4	<b>Continue to monitor the local economy to inform the strategic direction of future economic development initiatives - Create a reporting framework to deliver regular relevant information to stakeholders about the Knox economy.</b>	On schedule	75%	Council's Economic Development team are creating a series of economic indicators to incorporate into their strategic work plan review, and to incorporate into a Knox Economic Indicator dashboard for internal monitoring. This dashboard will create a simple way for Council to report high level and local economic performance. Any gaps in data that are identified will be collated and investigated either by the internal research department or by a consultant if required.	

***Encourage and support opportunities for skills development and lifelong learning for all people in Knox.***

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 1.2.6	<b>Implement Council's decision regarding kindergarten expansion - Complete the service review for Kindergartens in consultation with the community and key stakeholders.</b>	On schedule	75%	The Kindergarten Service Review is on schedule. At the February 2023 meeting of Council, Council resolved to consider three options in relation to kindergarten service provision and to commence the community panel process. Staff pre-consultation was undertaken throughout March 2023. The community panel process is now completed, and community statements will be considered in upcoming briefings. A further report is scheduled to be presented to Council in mid-2023.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 1.2.7	<b>Explore opportunities to increase the number and diversity of creative learning opportunities offered through Council's cultural and community venues. - Deliver diverse and creative workshops and program expansion at Knox Community Arts Centre and Ferntree Gully Community Arts Centre. ♦</b>	On schedule	75%	<p>The Cultural Venues April 2023 school holiday workshop program has been launched and sold out, including new science workshops for children at Knox Community Arts Centre.</p> <p>Additional children's craft workshops were added to the April 2023 school holiday program at Ferntree Gully Community Arts Centre (FTGCAC) to alleviate pressure on, and demand for, the popular pottery workshops.</p> <p>Three new adult painting and drawing classes have been added to the Term 2 program at FTGCAC, affordable and accessible to all skill levels.</p> <p>Conversations have been started with an external organisation and other teams within Council around introducing art classes for people with disabilities, with added assistance for use of National Disability Insurance Scheme (NDIS) funding to pay enrolment fees.</p>	



*Support organisations in Knox to navigate recovery and new ways of working.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 1.3.9	<b>Coordinate the implementation of Knox's Retail Activation Strategy - Present the Retail Activation Strategy to Council for adoption and subsequent development of the Implementation Plan. Commence implementation of 1st year actions of the Retail Activation Strategy. (Major Initiative)</b>	Behind schedule	75%	Council's Economic Development team has led meetings with other internal teams to inform an implementation plan for the Retail Activation Strategy. The implementation plan was expected to be completed by 31 March 2023, but will now be completed by 30 June 2023 due to resourcing limitations.	

## Neighbourhoods, housing and infrastructure





Building on what's great about our city, Knox's housing and infrastructure will meet the changing needs of our community.


*Plan for and support diverse housing to meet changing community needs.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 2.1.1	<b>Develop and implement a Social and Affordable Housing Strategy and Action Plan to increase the supply of social housing and address homelessness in Knox - Conduct an awareness campaign for Homelessness Week, an expression of interest process with community housing providers to explore the development of a social housing project on surplus Council land in Station Street, Bayswater, and establish an internal working group to drive the social and affordable housing strategy. ♦ (Major Initiative)</b>	On schedule	70%	<p>Planning has commenced for a number of initiatives that will form part of the Year 1 actions for the Social and Affordable Housing Strategy once it is adopted. This includes developing a project brief to undertake an audit of Council and other publicly owned land, and to identify prospective sites for social and affordable housing development. Further internal consultation has also taken place in relation to the development of a working group to drive the strategy. Planning has commenced for an awareness campaign anticipated to commence in June 2023, to coincide with the strategy launch and run until Homelessness Week in August 2023.</p> <p>Progress has continued towards establishing the request for proposal (RFP) process for Station Street, Bayswater. Council staff have finalised the evaluation criteria and brief to support the process, which will be underway in the coming months.</p>	
CP 2.1.3	<b>Build on regional partnerships by contributing to the work of the Eastern Affordable Housing Alliance (EAHA) - Facilitate an Eastern Affordable Housing Alliance (EAHA) film screening and panel discussion to raise awareness and build on collective advocacy, and deliver phase one of the Preventing Homelessness in Older Women Research project. ♦</b>	On schedule	80%	<p>The Making it Home; Uncovering Solutions to Older Women's Housing event was held on 16 March 2023 at the Karralyka Centre in Ringwood. This event featured a screening of the Under Cover documentary, to highlight the issue of homelessness among older women. It was hosted by the Eastern Affordable Housing Alliance (EAHA) and the expert panel discussion was chaired by Jane Caro. The event was introduced by local member Will Fowls, and there were approximately 200 people in attendance, including Councillors from all six member Councils, housing and community sector stakeholders, community leaders, and the general public.</p>	







*Create, enhance and maintain places and spaces for people to live, work, play and connect.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 2.2.4	<b>Facilitate and support the implementation of the Boronia Renewal program - Public consultation (Exhibition) of Amendment C192knox (implementation of the Boronia Renewal Strategy into the Knox Planning Scheme) and progression of other key projects under the Boronia Renewal Strategy.</b>	On schedule	75%	Public consultation on the Boronia Renewal Strategy and Exhibition of Amendment C192knox commenced on 6 March 2023 and will close on 13 April 2023. Work in Quarter 3 has therefore focused on preparation and delivery of this significant public engagement program. The engagement has included four drop-in information sessions, two walk around/postcard distribution sessions in Boronia, one-on-one conversations, mailout, various stakeholder/public notifications and online engagement through Council's Have your Say page.	
CP 2.2.5	<b>Progress implementation of the Knox Central program - Present the Central Precinct Plan to Council for consideration.</b>	On schedule	90%	Council were briefed on the draft Central Precinct Land Use Plan and preliminary business plan in March 2023. A Community Engagement Plan has been developed and a Council report has been prepared seeking Council approval to commence Stage 1 consultation. The report will be considered by Council on 11 April 2023.	
CP 2.2.9	<b>Understand community needs across the suburbs of Knox to plan for community infrastructure requirements for the next 5-20 years - Conduct a Community Infrastructure Needs Analysis for suburbs across Knox to identify requirements for additional future community infrastructure.</b> ◆	On schedule	85%	Research was completed to ascertain data-driven evidence-based Community Infrastructure Needs Analysis (CINA), resulting in Council subscribing to a database and modelling tool, CASIMO. This subscription will enable cost effective integrated planning, building internal capacity to develop CINA. In Quarter 4, Council's focus will be on populating the database of community infrastructure in the Connected Communities Directorate, and developing place-based infrastructure ratios.	
CP 2.2.10	<b>Develop an Integrated Major Infrastructure Development Plan for sport, leisure and recreation.</b>	Deferred	0%	This initiative has not commenced and will be deferred pending future budget allocation.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 2.2.11	<b>Commence review and upgrade of Council's strategic planning documents including the Open Space Plan, Play Space Plan and Liveable Streets Plan - Finalise the Open Space Strategy Background Research Project to inform the development of a draft consolidated Open Space Plan. ♦</b>	Behind schedule	35%	The Background Research Project, the first stage of the new Open Space Strategy, is under development. Consultants have been engaged to collect and analyse data. This was planned for completion by the end of 2022-23 but is now estimated to be completed in Quarter 1 2023-24. This is primarily due to additional stages being included in the project. These stages need to be completed before community consultation and the other scheduled stages can commence. Community engagement plans have been prepared and a final review is currently taking place. Community Engagement & Consultation 01 is scheduled to commence soon.	

*Provide, maintain and advocate for accessible and sustainable ways to move around Knox.*


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 2.3.14	<b>Advocate to State Government for improved public transport and arterial road connectivity in Knox - Advocate to Federal and State Governments to commence the Business Case for a Trackless Tram to Rowville, and reinstate the Dorset Road extension and Napoleon Road duplication projects onto the forward delivery program. Develop an arterial road priorities listing and present to Council for consideration, and advocate for the provision of public transport services within the Caribbean Business Park, incorporating new bus services to the estate. ♦</b>	On schedule	75%	Council staff, representing Knox City Council, and participating with the neighboring Councils comprising the Eastern Transport Coalition, are currently identifying priority needs to inform Infrastructure Victoria's 30-year Infrastructure Strategy. The submission process is open until mid-May 2023, providing an opportunity to highlight priority public transport corridors and new era bus services across Knox and Melbourne's East, in addition to recently cancelled arterial road improvement projects within Knox.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 2.3.15	<b>Enhance sustainable transport utilisation through delivery of active transport infrastructure - Deliver active transport infrastructure as defined in Council's Capital Works Program for 2022-23. ♦</b>	On schedule	70%	On road shared path treatments have been completed at Templeton Street, Wantirna and Renou Road, Wantirna South. Off road paths along Mountain Hwy (Scoresby Road to Jersey Road), Bayswater have also been completed. Design development is continuing to progress for a number of projects across Knox to inform delivery of the 2023-24 program.	
CP 2.3.16	<b>Implement Knox's Parking Strategy - Complete the tender process to secure a contractor to implement the delivery of new parking technology and systems. Commence installation and testing of new parking technology and systems.</b>	On schedule	75%	The tender for in-ground parking sensors is now complete and Council has engaged a contractor. The next phase of the project will be the planning, communications plan, installation and finally the enforcement of the parking sensors. It is envisaged that installation of the sensors will commence early in Quarter 1 of 2023-24.	
CP 2.3.17	<b>Provide new and innovative community transport for the Knox community - Conduct a review of the Knox City Council Community Transport program and work with Community Transport providers to investigate a cooperative booking system, share resources, increase revenue streams, and pilot new service models. ♦</b>	On schedule	75%	A combination of new, revised and resumed transport programs, along with lifted capacity limits, has significantly increased transport participation rates in Knox. Although these rates are not yet as high as they were before the COVID-19 pandemic. Progress is on schedule and completion is expected by the end of 2022-23. New day trips have been planned for 2023 and community interest has been significant. A client survey was undertaken in early 2023, and feedback is being analysed in consideration of future community transport options.	


## Natural environment and sustainability



Knox’s natural environment is protected and enhanced to ensure sustainability for future generations.

### *Preserve our biodiversity and waterways, and enhance our urban landscape.*




Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 3.1.2	<b>Implement Knox's Biodiversity Resilience Plan - Complete the Habitat Corridor Plan, Resilient Tree Framework, Biodiversity Action Plan and Tree Analysis Report. ♦</b>	On schedule	85%	Final completion of the habitat corridor map has been delayed with the draft Habitat Corridor Plan now expected to be completed by the end of June 2023, once visual mapping is completed. The Biodiversity Action Plan is currently being drafted, with completion of the draft expected by the end of June 2023.	

### *Prepare for, mitigate and adapt to the effects of climate change.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 3.2.5	<b>Implement the high priority actions from Years 2-4 of the Climate Response Plan - Implement the high priority actions from Year 2 of the Climate Response Plan. (Major Initiative)</b>	On schedule	75%	<p>Implementation of the Year 2 Climate Response Plan (CRP) actions progressed well during Quarter 3. The installation of 2 Electric Vehicle Charging Stations commenced in Ferntree Gully and Bayswater, which will provide the first 15 minutes of free charge to local residents and visitors.</p> <p>The Boronia Streetlight Replacement Project is now complete - improving the lighting along major roads and the Boronia commercial core. The bulk upgrade involved the replacement of old inefficient lighting technology with new light-emitting diodes (LEDs), which are up to 82% more energy efficient and will result in a saving of ~2,800 tonnes of greenhouse gas emissions during the life of the new lighting assets. In addition to energy cost savings, this project will contribute to an improved perception of safety and amenity in Boronia after dark.</p> <p>Work continued on scoping a sustainability program targeting the Knox business sector, following the completion of market research into this sector.</p>	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 3.2.6	<b>Trial new and recycled materials in the construction of shared paths and as part of Council's road renewal program - Complete a trial to incorporate new and recycled materials in the construction of shared paths, and complete Council's road renewal program with at least 70% recycled content in asphalt. ♦</b>	On schedule	75%	Council has continued to use Alex Fraser's PolyPave product as our standard road resurfacing product, as this product meets our material standards. Council has scheduled another trial early in May 2023, to try Downer's Reconophalt product for asphalt resurfacing of Mountain Gate Shopping Centre carpark. Reconophalt is an asphalt surfacing material containing high recycled content derived from waste streams, such as soft plastics, glass and toner, which would otherwise be bound for landfill. Downer's Reconophalt is similar to Alex Fraser's PolyPave.	
CP 3.2.7	<b>Investigate electric heavy vehicle transport options to deliver Council services - Complete investigation of currently available heavy electric vehicles and complete the Whole of Life cost analysis.</b>	On schedule	70%	<p>A leading supplier of electric equipment has visited Council to provide a demonstration of their Electric Ride on Mower Range. They have agreed to a trial with an electric mower to allow us to evaluate its performance. Council continues to monitor the industry for appropriate electric heavy vehicles that could meet Council operational needs. The whole of life costs for electric heavy vehicles still remains prohibitive, however, new suppliers are expected to enter the market shortly which may see prices reduce.</p> <p>Council applied for Government grants through the Australian Renewable Energy Agency (ARENA) and EAGA (Eastern Alliance for Greenhouse Action) for funding towards the first electric truck purchase. An application was also made for funding under ARENA grants from EAGA to assist with the cost of three truck conversions over the next three years. Unfortunately, Knox was unsuccessful in securing this funding.</p>	



*Lead by example and encourage our community to reduce waste.*




Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 3.3.9	<b>Implement Food and Green Organics (FOGO) waste service across Knox - Commence the bin lid changeover to support the Food and Green Organics (FOGO) waste service and commence implementation of the service. ♦ (Major Initiative)</b>	On schedule	75%	Bin lid changeovers and bin rollouts have commenced, with two whole of community letter drops being distributed to all residential properties across Knox. Council's waste team and customer service officers are continuing to manage a high volume of calls including opt out requests and special needs requests. Planning is in place to support the continued rollout of new food and garden waste bins and continuing bin lid changeovers in the leadup to the key service changes scheduled for July 2023.	
CP 3.3.10	<b>Secure long term solutions for the treatment and disposal of residual waste streams - Participate in Advanced Waste Processing (AWP) tender process to secure AWP provider.</b>	On schedule	70%	Council officers continue to participate in the Advanced Waste Processing procurement process, as facilitated by the Department of Energy, Environment and Climate Action.	
CP 3.3.11	<b>Progress planning and programming to standardise bin lids across Knox in line with Recycling Victoria policy - Commence the Food and Green Organics (FOGO) bin lid changeover and plan for the changeover for recycling and garbage bin lids in late 2024.</b>	On schedule	75%	Bin lid changeovers for green waste bins across Knox have commenced, with the intention to have all existing bin lids changed over in time for the commencement of the weekly food and garden waste service in July 2023. This work is being complemented by the rollout of new food and garden waste bins for properties that do not already have a garden waste bin.	

## Connection, resilience and wellbeing



Knox is a place to call home. Our community is strong, healthy and we support and respect each other.


*Support our community to improve their physical, mental and social health and wellbeing.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.1.1	<b>Respond to emerging social and health issues caused by COVID-19 pandemic - Establish and facilitate the Knox Emergency Food Relief Taskforce. ♦(Major Initiative)</b>	On schedule	75%	<p>The Knox Food Relief Taskforce officially meet for the first time in January 2023, with the group establishing a Terms of Reference, and prioritising key projects. As a result of this meeting, Council staff have been progressing key recommendations from the Food Relief Audit conducted in 2022, including a service user survey, development of a collective advocacy approach and the need for a local food distribution point in Knox.</p> <p>Council staff met with Foodbank in March 2023, with Foodbank identifying the Knox municipality as a key focus area for increasing the supply of food, including a focus on fresh foods.</p>	
CP 4.1.2	<b>Prioritise mental health and wellbeing initiatives by focusing on community partnerships and collective impact - Facilitate the Knox Mental Health Roundtable quarterly meetings and deliver initiatives including the Move Your Way 2023 program promoting physical activity, facilitating social connection and contributing to positive mental health and wellbeing. ♦</b>	On schedule	85%	<p>In March 2023, the Move Your Way 2023 program was completed, with nearly double the number of partnerships from 2022 and 29% increase in scheduled activities and 1565 registrations, up from 700 last year. Participants have reported improvement in their mental and physical health. There will be one more Mental Health Roundtable meeting this financial year, working with our partners to improve mental health across the municipality.</p>	


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.1.3	<b>Progress implementation of the Children, Youth and Seniors Plan - Implement the Year 2 actions of the Child, Youth and Seniors Plan. ♦</b>	On schedule	90%	The Child, Youth and Seniors Plan implementation is continuing to progress well. Key actions where significant progress has been made during Quarter 3 include finalisation of the implementation of the Early Years online project to provide families with seamless online access to systems for registration, enrolments and attendance in Council's Early Years Services; commencement of work on embedding the State Government Child Information Sharing Scheme; continuation of work and promotion to support access and participation to funded kindergarten for children in Knox; implementation of Train the Trainer workshops to support indigenous young people to deliver traditional aboriginal games in their schools and communities; the inaugural Knox Freeza Crew planned and facilitated the canopy stage line up at Knox Festival; hosting of the Intergenerational Forum in March 2023 with over 100 people attending to share their knowledge and experience; community transport outings now running at full capacity with clients enjoying the opportunity to visit different places; continued strong demand for food services, home maintenance, home modifications and occupational therapy.	
CP 4.1.4	<b>Develop and implement an Active Participation Plan - Beyond Structured Sport - Finalise the initial brief for the development of an Active Participation Plan - Beyond Structured Sport. ♦</b>	Completed	100%	The project brief was completed in Quarter 2 with Council planning to obtain quotations from February 2023. Council's Open Space Plan Review will be considered during this work to ensure alignment.	
CP 4.1.5	<b>Review the Sports Club Development Program and usage of Council resources to support club sustainability - Deliver the Sports Club Development Program for 2023. ♦</b>	On schedule	75%	Two Club Development Programs (CDP) have been delivered so far in 2022-23, including attracting and retaining volunteers and female participation. Relevant clubs also participated in a Sports Field Seminar, which looked at ways clubs can ensure sports field are kept in good condition throughout the season. A further CDP session is planned for clubs in 2022-23. Council continues to review the CDP on an ongoing basis to ensure it meets the needs of sporting clubs.	







Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.1.6	<b>Explore opportunities for active cultural tourism through creating a Public Art Trail - Commence planning for a database of public artworks in Knox and digital resources to support accessibly and promotion of the trail.</b>	On schedule	60%	<p>The Knox Public Art database is near completion, with a digital collection now captured of all known public artwork in Knox using a visual record of assets with key data related to the works. Links to Geographic Information System (GIS) mapping is underway to enable a public art overlay on Council's asset list on GIS, which will assist with the development of maintenance scheduling, reporting of damage, and public trail mapping. Major renewal works are underway, as well as deaccession of works deemed irreparable by the Arts Assessment Panel.</p> <p>The next stage of the project is to move towards creation of a series of Public Art Trails and related digital platforms and public programs to support active participation, recreation, retail activation and renewal programs. This project also has regional links to tourism including the Yarra Ranges Ridgewalk arts project and Greater South-East Melbourne creative tourism initiatives.</p>	
CP 4.1.7	<b>Support the creation of new physical activity based programs and community infrastructure across the municipality - Implement new infrastructure in parks, programs such as Move Your Way, and introduce Pickleball at Rowville Community Centre. ♦</b>	Completed	100%	<p>Council continues to deliver programs such as Move Your Way and the Master Plan implementation to expand the range of options for residents to remain active. Pickleball has been introduced at Rowville Community Centre, with 30 participants so far. Additional activities are currently being explored for the coming year, to increase utilisation once the Knox Regional Netball Centre re-opens post construction/upgrade.</p>	



Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.1.8	<b>Develop and implement programs to enable older and vulnerable residents to access technology - Conduct a desktop review of digital literacy programs available within the Knox municipality. ♦</b>	On schedule	75%	Facilitation of the Knox Digital Connection Stakeholder Group is progressing well. During Quarter 3, the group met twice, with 80% attendance. A high level work plan was developed to help guide the topics of conversation for each meeting. The group is preparing a diagram which is intended to be distributed amongst the Stakeholder Group and is based on the research Council conducted covering demographics, course topics, engagement type, organisational summaries and learner levels. A draft guide is also being developed and is intended to be used as an external document. Community members will be able to use the guide to identify which learner level they are at (Foundation, Beginner, Intermediate or Advanced) and then locate the relevant provider/course topic within Knox.	


*Foster inclusivity, equality, belonging and safety within the community.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.2.9	<b>Contribute to the collective efforts in preventing and responding to family violence - Deliver family violence prevention activities including 16 Days of Activism against Gender-Based Violence and MoneyGirl seminars. ♦</b>	On schedule	90%	<p>During Quarter 3, key initiatives included delivery of the Dad's Stuff program in partnership with the Maternal and Child Health Service. Over two sessions, 40 attendees participated in discussions about parenting and healthy relationships in a safe space for men who are new fathers. Program leads are currently working through the feedback and next steps for these attendees, including requests for more information on mental health.</p> <p>Work has also been undertaken on developing guidelines for frontline staff in responding to disclosures of family violence from community members. The guidelines have been developed in consultation with Council's Child Safe Advisor, Customer Service staff, People, Culture and Development staff, and the Internal Family Violence Reference Group. These guidelines will be rolled out to the relevant Council teams from Quarter 4.</p>	


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.2.10	<b>Embed the State Government's Child Information Sharing Scheme (CISS) to support the safety and wellbeing of children - Implement access to Child Link for Early Childhood Educators in 2023 (dependent on advice from the Department of Training), and ongoing monitoring of effectiveness of policies and procedures. ♦</b>	Behind schedule	40%	<p>Implementation of access to the Child Link for Early Childhood Educators has not been able to progress due to the delayed roll out of Child Link by the Victorian Government. At a recent meeting with the Department of Education, they advised they have no further update on the availability of child link for early childhood educators.</p> <p>Council continued to monitor effectiveness of policies and procedures during Quarter 3. A survey has been undertaken to assess the effectiveness of the policies and procedures and analysis of this information will support future activities.</p>	
CP 4.2.11	<b>Develop and implement the Municipal Disability Leadership Plan - Implement actions within the Municipal Disability Leadership Plan to expand on the work Council will be doing to support access and inclusion and to support the launch and implementation of the Knox Connection, Access, Respect, Equality and Safety Strategy 2022-26 in December 2022. ♦</b>	On schedule	80%	The Municipal Disability Leadership Plan actions are progressing, of particular note is the delivery of the Knox Disability Access & Inclusion Expo in March 2023, professional development training for Early Years educators online, carer support activities including carer exercise classes and carer walks.	
CP 4.2.12	<b>Develop and implement the Dementia Friendly Action Plan - Conduct a community wide survey to better understand the aspirations and needs of people living with dementia, their carers, family and friends. ♦</b>	Completed	100%	Following the community wide survey, 14 people participated in three focus group discussions to explore the survey findings and themes. These results and insights gathered, along with Dementia Australia's requirements, informed the content of the Knox Dementia Friendly Action Plan. This report will be presented at the June 2023 Council Meeting.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.2.13	<p><b>Work and partner with the multicultural community and key services to support our diverse communities - Establish relationships with refugee communities in Knox to increase participation in community activities and events, develop partnerships with key providers to increase access to community services and support for multicultural communities, and commence planning to enable accessible information for all communications and information. ♦</b></p>	On schedule	65%	<p>A Cultural Diversity Week community celebration event, Culture-fest, was hosted by Council in partnership with the Eastern Regional Library Corporation at Miller's Homestead on Saturday 18 March 2023. Joining Knox's First Nations Lead were, musicians, dance groups and artists representing Culturally and Linguistically Diverse (CALD) communities. The CALD communities represented included Zomi; Indian; Chinese; Vietnamese; El Salvadoran; Afghan; German; and West African (Mali). There were approximately 80 to 100 attendees, and over 40 CALD community performers and artists. The Knox Multicultural Advisory Committee members supported the event, inviting artists and guests from their respective communities.</p> <p>Planning is in progress to hold an event for Refugee Week commencing 18 June 2023, to raise the profile of refugee communities settling in Knox, and their journey to Australia. Consideration is being given to Council's communication channels in order to reach diverse communities.</p>	




Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.2.14	<b>Implement Council's adopted Gender Equality Action Plan - Deliver Year 1 of the Gender Equality Action Plan.</b>	On schedule	40%	This action is now on schedule and due for completion by 30 June 2023. Council officers are making progress with their assigned Gender Equity Action Plan (GEAP) action items by the nominated dates. GenderWorks and Right Lane Consulting have been engaged to ensure that immediate deadlines that are due by 30 June 2023 are met in line with GEAP requirements. Council has also signed up to the People Matter Survey that is once again being facilitated by the Commission of Gender Equality. The outcomes from this survey will inform a report on our compliance with the seven gender equality workplace indicators. In March 2023, the sexual harassment prevention plan was finalised and endorsed by the Executive Management Team. This will be monitored and reported on internally. The Chief Executive Officer (CEO) statement of commitment is also in its final stages of completion by its nominated due date by 30 June 2023. A gendered responsive budgeting policy is underway for consideration by the Chief Financial Officer.	
CP 4.2.15	<b>Develop and implement education and advocacy programs to address ageism and increase community respect and inclusion for all ages across Knox - Conduct a desktop review of ageism/intergenerational activities, events and programs provided within the municipality, region, state, nationally, or internationally.</b>	Completed	100%	A desktop review of ageism/intergenerational activities, events and programs provided within the municipality, region, state, nationally, or internationally has been completed, and findings have been shared with key internal and external stakeholders. In addition, Council has met with Coonara Community House, Aurora Early Education and Auburn High School to learn more about various intergenerational programs and activities within the community. Council will soon partner with these organisations to help educate the community on how to address ageism, the benefits of intergenerational practice and to share successes and learnings. This will be through a series of hybrid meetings in Quarter 3. Council has met twice with Your Library (Eastern Regional Libraries) staff to discuss the planning and implementation of an intergenerational pilot games program with a local secondary school. It is intended that this program will be designed to include representatives from both younger and older generations across the community. Implementation is likely to occur in Quarter 4.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.2.16	<b>Develop and deliver a range of evidence based community training initiatives to build volunteer capacity - Develop and deliver free workshops throughout the year for individuals, community groups, clubs and not-for-profit organisations who provide activities, programs and services in Knox.</b>	On schedule	75%	Six workshops were delivered in Quarter 3 with a total of 91 attendees. The workshops were Child Safe Standards; Grant writing - are you grant ready?; Cultural sensitivity training; Acquitting your Knox City Council grant; Grant information session; and Successful grant writing. Promotion is underway for the training calendar for Quarter 4.	

*Honour and integrate First Nations Culture into actions and environments.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.3.17	<b>Work in partnership with local First Nations people, relevant services and key networks to progress Reconciliation - Continue supporting our ongoing partnerships with First Nations People, continue to develop and implement Council's first Reconciliation Action Plan, and continue to build organisational and community understanding and acknowledgement of First Nations culture &amp; history. (Major Initiative)</b>	On schedule	75%	<p>The draft Reconciliation Action Plan (RAP) was presented to Council for discussion in March 2023, and further work to include Traditional Owner language is progressing. Elders have supported this request and will provide guidance to Council regarding appropriate wording and spelling to include in the RAP. The final draft of the RAP will be presented at the May 2023 meeting of Council, and the RAP is anticipated to launch during the National Aborigines and Islanders Day Observance Committee (NAIDOC) Week in July 2023.</p> <p>Planning is underway for Sorry Day to be held at the Knox Civic Centre in May 2023. Guest speakers will include Sue Ann Hunter (Commissioner of the Yoorook Justice Commission). There will also be a Welcome to Country and smoking ceremony by Wurundjeri, and a dance by Mullum Mullum. Mullum Mullum have relocated to HV Jones Reserve in Ferntree Gully and will be running youth and men's groups for the local First Nations Community from the premises. Council staff supported their relocation, assisted with resourcing, furniture and in starting up programs.</p>	

*Support the community to identify and lead community strengthening initiatives.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.4.18	<b>Develop and implement a Resilience Plan to support the community to cope with stresses, emergencies and disasters - Develop the Social Network Analysis (SNA) and Stakeholder Strength mapping process to inform the development of the Resilience Plan. Develop an Interim Resilience Planning Toolkit.</b>	On schedule	55%	<p>The consultant's final draft has now been received for the Social Network Analysis (SNA) &amp; Interim Resilience Planning Toolkit (IRPT). These will be deployed in Quarter 4.</p> <p>Draft discussion papers are due to be completed by the end of Quarter 4 as anticipated.</p> <p>The Knox Community Resilience Plan outline has been drafted and includes base-line resilience data.</p>	
CP 4.4.19	<b>Participate in the review of the Eastern Region Pandemic Plan - Collaborate with the eight Eastern Metropolitan Region Councils to review and update the Local Government Eastern Region Pandemic Sub Plan, and work with the Department of Health to lead a more integrated review of the Sub Plan that includes all sectors of government.</b>	Behind schedule	50%	<p>The Department of Health is yet to advise schedule for review. Knox and the Eastern Metropolitan Councils Emergency Management Partnership (EMCEMP) continues to advocate for this to occur to complement the current EMCEMP Regional Pandemic Sub Plan.</p>	
CP 4.4.20	<b>Support the review of the Knox Municipal Emergency Management Plan and associated sub plans - Engage with the Municipal Emergency Management Planning Committee (MEMPC) to review and/or develop the scheduled sub plans, complementary plans, and the Community Emergency Risk Assessment (CERA).</b>	On schedule	75%	<p>The Community Emergency Risk Assessments (CERA) deferred from late 2022 (bushfire; grass fire: HAZMAT risks) have now been completed and CERA program is back on track.</p>	


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 4.4.21	<b>Develop a sustained and responsible model for supporting community-led events, particularly in a post-COVID-19 environment - Monitor the community event portal to assist groups to deliver community events that are compliant and safe.</b>	Completed	100%	<p>The community event support service is now established as a fully operational business area of Council, providing expert event management advice to community event organizers as they navigate the complex tasks involved in delivering safe, compliant, engaging and lawful events.</p> <p>The portal's digital presence is located online at <a href="http://www.knox.vic.gov.au/communityevents">www.knox.vic.gov.au/communityevents</a>. It provides resources, templates, information and online event registration, as well as access to a variety of event equipment for use at community events, funded through the Outdoor Activation Victorian Government grant.</p> <p>The service is overseen by Council's Arts and Culture department, and has seen a significant increase in event and filming permit applications post COVID-19, with local groups seeing tremendous value in reactivating spaces and celebrating community life. Most community events require at least five different areas of Council support, which are now managed through this centralized event portal with a strong customer focus.</p> <p>This project has reached its intended outcomes in supporting community events post COVID-19, and is now operating as 'business as usual'.</p>	




## Civic engagement and integrity



Knox Council is a trusted and respected leader in our community, acting appropriately and ensuring all voices are heard.

*Provide opportunities for all people in Knox to have their say.*


Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 5.1.1	<b>Implement priority actions of the Community Engagement Framework and Action Plan - Continue implementation of the Community Engagement Framework and Action Plan including leadership training activities and commencement of the evaluation program.</b>	On schedule	75%	<p>Implementation in Quarter 3 involved a facilitated workshop with senior management to reflect on current practices and capabilities, review recent community engagement activities and identify opportunities and priorities for improvement. This will inform the focus for future staff training and development.</p> <p>The online community engagement platform hosted 15 projects in Quarter 3, attracting 700 contributions from 9,253 visitors. 470 new members signed up to the platform during this time.</p>	

*Manage our resources effectively to ensure financial sustainability and improved customer experience.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 5.2.2	<b>Develop and implement a Customer Experience Strategy and Action Plan - Present the Customer Experience Strategy to Council for consideration, review the Complaints Policy and complete the digital roadmap. (Major Initiative)</b>	Completed	100%	The 2022-23 milestone for this initiative was completed in Quarter 2, however, significant further progress has also been made on this project. Implementation in Quarter 3 has involved recruiting the resources to progress the actions in the strategy, launching the strategy internally, developing ongoing induction materials, undertaking the procurement process for staff training and commencing work on a detailed procedure to support consistent implementation of the revised Complaints Policy.	

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 5.2.3	<b>Refresh and implement Council's ICT Strategy, including consideration of Smart Cities technology - Develop the new Enterprise ICT Strategy and Roadmap.</b>	On schedule	90%	<p>The current ICT Strategy is approaching completion, with program results and benefits presented to Council's Strategic Planning Committee in Quarter 3.</p> <p>Council has identified a need to integrate its future ICT program with the rest of its transformation activities. As such, this action will be part of and captured in the wider transformation portfolio with the development and implementation of the Customer and Performance Enablement Roadmap.</p>	
CP 5.2.4	<b>Refresh and implement the 'THRIVE: Future Ready Knox' workplace strategy - Complete a review of the current 'THRIVE: Future Ready Knox' workplace strategy.</b>	Completed	100%	A review of all action items has been completed. All outstanding items within the THRIVE: Future Ready Knox strategy will be transitioned into the Organisational Development Plan - currently in development or in the Workforce Plan.	

*Ensure our processes are transparent and decisions are accountable.*

Action Code	Action Name	Status	Progress	Comments	Status Symbol
CP 5.3.7	<b>Implement an internal self-assessment process to monitor Council's performance in decision making - Develop and distribute a self-assessment survey, analyse the results and conduct workshops with councillors, including an externally facilitated self-assessment workshop.</b>	Behind schedule	0%	Implementation of this initiative was scheduled to commence in Quarter 3, however, it has been delayed due to other priority projects. This initiative is unlikely to be completed by 30 June 2023.	



## Appendix 1: Incomplete Year 1 Council Plan Initiatives (2021-22)

At the conclusion of 2021-22 there were eight Year 1 initiatives that were incomplete. The items behind schedule were primarily related to external factors outside of Council’s control or the need to temporarily shift priorities in responding to COVID-19 impacts.

To ensure we are being fully transparent to our community on the progress of our Year 1 milestones, we have chosen to separate the incomplete initiatives in Year 1 from the Year 2 initiatives and continue to report on these until completion of the Year 1 milestones.

The progress below reflects the status of the key milestones for 2021-22, not necessarily the status of completion of the initiative overall, as many of the initiatives run over multiple years. The below Year 1 initiatives will be included in this appendix report until completion.

### Neighbourhoods, housing and infrastructure

Building on what’s great about our city, Knox’s housing and infrastructure will meet the changing needs of our community.

*Plan for and support diverse housing to meet changing community needs.*


Action Code	Action Name	Status	Progress	Comments	Traffic Lights
CP 2.1.1	<b>Incomplete 2021-22 initiative: Develop and implement a Social and Affordable Housing Strategy and Action Plan to increase the supply of social housing and address homelessness in Knox. ♦</b>	Behind schedule	95%	<p>The draft Social and Affordable Housing Strategy was presented to EMT in February 2023 and is scheduled for an Issues Briefing on 3 April 2023. Progress to Issues Briefing was delayed due to the focus on 2023-24 budget workshops during briefings held in March 2023.</p> <p>Community Wellbeing and City Futures staff presented a workshop to Councillors in February 2023, to provide an overview of the process so far and the key findings of the needs analysis. Preliminary feedback was also sought on some of the key opportunities for action that have been identified in the draft strategy.</p> <p>It is anticipated that the draft strategy will be presented at the April</p>	

Action Code	Action Name	Status	Progress	Comments	Traffic Lights
				2023 Council meeting for endorsement, with a community launch to take place in June 2023.	

### Natural environment and sustainability

Knox’s natural environment is protected and enhanced to ensure sustainability for future generations.

*Preserve our biodiversity and waterways, and enhance our urban landscape.*

Action Code	Action Name	Status	Progress	Comments	Traffic Lights
CP 3.1.1	<b>Incomplete 2021-22 initiative: Undertake vegetation mapping analysis and habitat corridor planning to manage our urban biodiversity. (Major Initiative)</b>	Behind schedule	95%	The draft Habitat Corridor Plan is near completion. The final element is the tree/habitat vector data informing the Habitat Corridor Plan which has recently been provided by the consultant. Council is currently developing a habitat corridor visual map to include in the plan. A delay has occurred due to resourcing constraints. The draft Habitat Corridor Plan is expected to be completed by the end of June 2023, once visual mapping is completed.	

### 8.3 Minor Grants Program 2022-2023 Monthly Report

**SUMMARY:** Community Partnerships Officer, Rachel Phillips

This report summarises the grant applications recommended for approval in May for the 2022-2023 Minor Grants Program. All applications have been assessed against the criteria set out in the Minor Grants Program Procedure.

Applications under the Minor Grants Procedure Category 1 (General) are limited to a maximum of \$3,000.00 within the current financial year. Applications under the Minor Grants Procedure Category 2 (Food Relief Supplies) are limited to a maximum of \$5,000.00 within the current financial year.

#### RECOMMENDATION

That Council:

1. Approve nine applications for a total of \$23,112.00 as detailed below:

Applicant Name	Project Title	Amount Requested	Amount Recommended
<b>Category 1 (General)</b>			
Cantonese Art Association Inc.	Cantonese Fabulous Music Melody	\$2,680.00	\$2,680.00
Friends of Koolunga Native Reserve Inc.	Native Plant Showcase: Inspiring Community Action for Biodiversity	\$828.00	\$828.00
Boronia Road Uniting Church	Line Marking in the Church Car Park	\$1,500.00	\$1,500.00
Wantirna Retirement Village	Wantirna Village Shop request	\$3,000.00	\$3,000.00
Saga Productions	Twisted: The Untold Tale of a Royal Vizier	\$2,500.00	\$2,500.00
Flamingo Community Group Inc.	Electronics Grant	\$2,604.00	\$2,604.00
St Vincent De Paul - Scoresby	Equipment Purchase - Printer, Scanner, Trolley	\$2,000.00	\$2,000.00
<b>Sub Total</b>		<b>\$15,112.00</b>	<b>\$15,112.00</b>
<b>Category 2 (Food Relief Supplies)</b>			
Restore Community Care	Restoring Broken Lives	\$5,000.00	\$5,000.00
Vinnies, Scoresby	Food Relief Hampers	\$3,000.00	\$3,000.00
<b>Sub Total</b>		<b>\$8,000.00</b>	<b>\$8,000.00</b>
<b>TOTAL</b>		<b>\$23,112.00</b>	<b>\$23,112.00</b>

**2. Refuse one application requesting \$1,695.00 as detailed below:**

<b>Applicant Name</b>	<b>Project Title</b>	<b>Amount Requested</b>	<b>Reason for Ineligibility</b>
<b>Australian Jazz Museum</b>	<b>At the Heart of our Museum</b>	<b>\$1,695.00</b>	<b>This project is ineligible under clause 6.20 of the Minor Grants Procedure as the organisation has already been granted \$3,000.00 this financial year.</b>

- 3. Note that inclusive of the above recommended grants totalling \$23,112.00, a total of \$183,935.48 has been awarded to date under the 2022-2023 Minor Grants Program.**
- 4. Note that if approved as recommended, there will be \$22,745.14 available for Category 1 applicants and \$26,303.30 available for Category 2 applicants for the remainder of this financial year (excluding GST adjustments).**
- 5. Note the rescinded grant previously approved under the 2021/22 Minor Grants Program.**

**1. INTRODUCTION**

The Minor Grants Program provides a pool of grant funding that can respond on a monthly basis to requests for small amounts of funding to assist with short term, one-off projects or initiatives that are relatively minor in nature.

The objective of the Minor Grants Program is to be an accessible and responsive funding source to assist a wide range of community led activities across the municipality and support volunteer effort and civic participation.

It operates under the principles of other Knox Council grants programs to ensure:

- Funded projects will provide benefit to the Knox community and help meet Council objectives;
- Co-operation and collaboration between groups will be encouraged;
- The grant process will be consistent, equitable and transparent; and
- The grant process will support and strengthen community groups in developing local solutions to local needs.

Applications are assessed against criteria specified in the Minor Grants Program Procedure (approved in November 2022), to determine the eligibility of the applicant organisation and the eligibility of the grant application.

The Procedure and Council's Grant Framework Policy set out an open and transparent grant program that meets the principles of good governance and is compliant with the requirements of the Local Government Act 2020.

In accordance with the Procedure, applications for funding have been assessed by the Chief Executive Officer, or delegate, for Council's approval.

**2. DISCUSSION**

This report presents to Council the recommendations for recent Minor Grant applications in accordance with the Procedure.

Ten applications have been assessed this month, requesting grants totalling \$24,807.00.

One application has been determined to be ineligible and is recommended for refusal:

- The Australian Jazz Museum is ineligible under clause 6.20 of the Minor Grants Procedure as the organisation has already been granted \$3,000.00 in this financial year. Staff have encouraged the applicant to resubmit their application in the new financial year, when they will have a further \$2,000.00 available to them.

A summary of the recommended projects is as follows:

### **Category 1 (General)**

- Boronia Road Uniting Church is seeking a grant to renew the line marking in the Church car park, to include designated disability spaces and directional arrows to ensure safety for all visitors and users of their facility.
- Wantirna Retirement Village is seeking a grant to replace their freezer in their shop. This volunteer-run, not-for-profit shop assists many residents with limited mobility to access emergency perishable foods.
- Saga Productions, based in Wantirna South, is seeking a grant to assist towards the venue hire for their theatrical performance which will take place at the Knox Community Arts Centre in July.
- Flamingo Community Group, Wantirna South, is seeking a grant to upgrade and purchase some additional electronic items for their kinder program. The aim of these purchases is to improve efficiency for the staff and communication with the students.
- St Vincent De Paul, Scoresby is seeking a grant to purchase electronic items to assist in document preparation and trolleys to assist volunteers to safely transfer food hampers from their location to clients' homes.
- The Cantonese Art Association are seeking a grant to support their Cantonese Fabulous Music Melody event which will be held at the Knox Community Arts Centre in July. This application had been deferred at the April Council meeting whilst staff sought further clarification on some aspects of the application. This information has now been provided.
- The Friends of Koolunga Native Reserve are seeking a grant to purchase 50 native plants and to design 25 small signs to describe each species. This application was not recommended at the April Council Meeting, however, further consultation with the Infrastructure Directorate has determined that the Future Directions Plan for the Reserve should not impact this project. The project relates to an existing garden maintained by the Friends of Koolunga Native Reserve.

### **Category 2 (Food Relief Supplies)**

- Restore Community Care is seeking a grant to provide short term emergency relief for the increasingly high demand for those experiencing hardship. This will assist by providing food hampers across many Knox suburbs.
- Vinnies, Scoresby is seeking a grant to provide non-perishable food relief items to be included in their hampers which are delivered four days a week.

Application details are provided in Attachment 1.



### **Reconciliation of Previous Applicant**

- A \$2,000.00 grant to Koorie Academy Ltd was approved in February 2022 under the 2021/22 Minor Grants Program for the Koorie Academy Charity AllStar Game. Despite multiple contacts and reminders from officers over the past year, the funding agreement has not been completed. In accordance, with Council's Grant Framework Policy, this grant will no longer be paid due to the length of time that has passed.

### **3. CONSULTATION**

Consultation is undertaken with organisations in relation to their grant applications whenever possible and if necessary, to clarify details regarding their applications prior to Council's consideration.

Advice or information may be sought from officers across Council in relation to either the applying organisation or the proposed project, or both, if considered necessary.

The Minor Grants Program Procedure specifies assessment can occur by the Chief Executive Officer, or delegate, and make recommendation for Council's determination.

### **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council's Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

### **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

There are no environmental or amenity issues associated with this report.

### **6. FINANCIAL & ECONOMIC IMPLICATIONS**

The approval of Minor Grants is managed within Council's adopted budget. The 2022-2023 budget provides \$221,576.00 for the Minor Grants Program (comprising the annual allocation of \$152,093.00 plus an additional \$69,483.00 carried forward from the 2021-2022 Minor Grants Program, as per the Minor Grants Procedure).

Recommended applications for the May period total \$23,112.00. If approved as recommended, the remaining Minor Grants budget for 2022-23 will total \$49,048.44 before GST adjustments.

This would comprise of \$22,745.11 available for Category 1 applications, and \$26,303.30 available for Category 2 applicants in the final month of this financial year (excluding GST adjustments).

### **7. SOCIAL IMPLICATIONS**

The Minor Grants Program allows Council to respond promptly to requests from Knox- based community groups for small amounts of funding to assist a variety of community-based programs, projects or activities. Council's Minor Grants are a simple and streamlined source of funding that can make a significant difference for local community organisations in need of short-term, specific purpose assistance.

## **8. RELEVANCE TO KNOX COMMUNITY AND COUNCIL PLAN 2021-2025**

### **Opportunity & Innovation**

Strategy 1.2 - Encourage and support opportunities for skills development and lifelong learning for all people in Knox.

### **Natural Environment & Sustainability**

Strategy 3.1 - Preserve our biodiversity and waterways, and enhance our urban landscape.

### **Connection, Resilience & Wellbeing**

Strategy 4.1 - Support our community to improve their physical, mental and social health and wellbeing.

Strategy 4.2 - Foster inclusivity, equality, belonging and safety within the community.

Strategy 4.4 - Support the community to identify and lead community strengthening initiatives.

### **Civic Engagement & Integrity**

Strategy 5.2 - Manage our resources effectively to ensure financial sustainability and improved customer experience.

Strategy 5.3 - Ensure our processes are transparent and decisions are accountable.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By:** Community Partnerships Officer, Rachel Phillips

**Report Authorised By:** Director Connected Communities, Judy Chalkley

### **Attachments**

1. Attachment 1 - Minor Grants Applications Redacted - May - 2023-05-10 [8.3.1 - 66 pages]

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	No	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

### APPLICANT DETAILS

**\* indicates a required field**

#### Applicant Details

**Organisation Name \***

Cantonese Art Association Inc

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

[Redacted]

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

27 696 190 918

**Information from the Australian Business Register**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

<b>ABN</b>	27 696 190 918
<b>Entity name</b>	Cantonese Art Association Inc
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	No
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Not endorsed <a href="#">More information</a>
<b>ACNC Registration</b>	No
<b>Tax Concessions</b>	No tax concessions
<b>Main business location</b>	3150 VIC

*Information retrieved at 12:00am today*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

0116729

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

**Please provide an email address where you would like this sent**

cantoneseart@gmail.com

Must be an email address.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

Cantonese Fabulous Music Melody

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

**Project Start Date \***

01/07/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

10/08/2023

Must be a date.

**(a) Briefly describe details of the request: \***

To organize and perform a combination of Cantonese Music, opera, and popular songs together with the Chinese Instruments ensemble music at Knox Community Arts Centre on 30/07/2023, Saturday from 12 am to 6 pm.

**(b) What community benefit is gained from this project / activity? \***

1. It will bring all ages and various cultures from different backgrounds and their families to attend this Multicultural show.
2. To promote an appreciation of Chinese music, arts, and culture to residents in the City of Knox and an increased understanding of Chinese cultures (Cantonese)
3. The event will foster respect and understanding in the wider community and encourage freedom of expression and cultural tolerance.
4. It aims to provide emerging musicians from Chinese and other culturally diverse backgrounds including people with disabilities, opportunities to develop musical skills in playing Chinese traditional instruments.
5. The event will foster respect and understanding of the wider community and encourage freedom of expression, cultural tolerance, community involvement, and build the well-being of local communities and neighborhood connections and inclusion
- 6 To promote an appreciation of Chinese music, arts, and culture and improve the quality of life for residents of Knox.
7. This event could create residents a sense of belonging in the City of Knox and other local communities volunteering artistic and culture contribute to the communities

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

7

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

130

Must be a number

**How many of the above are Knox residents? \***

90

Must be a number

**BUDGET**

**\* indicates a required field**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

**(d) What is the total cost of the project / activity? \***

\$3,800.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$2,680.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

Please detail the items you would like the Minor Grants Program to fund.

<b>Expenditure</b>	<b>\$</b>
Knox Community Arts Centre	\$880.00
2 Rehearsal prior to concert date	\$240.00
Photographer and camera man	\$300.00
Light and Sound technician hire	\$350.00
Hire of amplifier Microphones and speakers	\$400.00
Invited Artists for performance	\$300.00
Music conductor	\$250.00
Transport to/fr concert venue, the petrol fee for musician 30 x \$12	\$360.00
Light refreshment for foods and drinks	\$280.00
Stage decoration material	\$100.00
Printing and Advertisement	\$100.00
Flyers, brochure and Concert program	\$120.00
Gift to volunteers who help us edit video and update our Website and Social media, like YouTube	\$120.00
	Must be a dollar amount.

**Minor Grant Budget Total****Total Expenditure Amount**

\$3,800.00

This number/amount is calculated.

**Quotes For Planned Expenses****Attach quotes for expenses here. \***

Filename: KCAC Theatre Hire Form 2022-23-final edit (2).pdf

File size: 1.0 MB

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
 Form Submitted 2 May 2023, 1:28PM AEST

A minimum of 1 file must be attached.  
 Quotes must support all expenditure items listed in table above

## Other Grant Funding

**(e) Have funds been sought / provided from other Council grants? \***  
 Yes  No

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

---

Filename: Document3 (1).pdf  
 File size: 96.6 kB

**Public Liability Expiry Date \***

26/08/2023  
 Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan
- Evidence of Incorporation

**Attach relevant documentation:**

---

Filename: CERT-A0116729B.pdf  
 File size: 113.2 kB

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Filename: Knox 030623 Plan.pdf  
 File size: 47.7 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 5 of 5)**  
**Application No. 55-MGP-2022-23 From Cantonese Art Association Inc**  
Form Submitted 2 May 2023, 1:28PM AEST

**I declare that all information within this application is true and correct.**  
**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Name \***

[REDACTED]

**organisation) \***

[REDACTED]

**Declaration Date \***

26/04/2023

Must be a date.

### **Privacy Statement**

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
 Form Submitted 4 Apr 2023, 7:47PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
Form Submitted 4 Apr 2023, 7:47PM AEST

< \$500  \$501 to \$1,000  \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Friends of Koolunga Native Reserve Inc

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

92 133 259 283

**Information from the Australian Business Register**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
 Form Submitted 4 Apr 2023, 7:47PM AEST

<b>ABN</b>	92 133 259 283
<b>Entity name</b>	THE FRIENDS OF KOOLUNGA NATIVE RESERVE INCORPORATED
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Charity <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Rebate, GST Concession, Income Tax Exemption
<b>Main business location</b>	3156 VIC

*Information retrieved at 9:43am yesterday*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

A0029951K

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

Native Plant Showcase: Inspiring Community Action for Biodiversity

**Project Start Date \***

01/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
 Form Submitted 4 Apr 2023, 7:47PM AEST

**Project End Date \***

31/12/2023

Must be a date.

**(a) Briefly describe details of the request: \***

In Koolunga Native Reserve our volunteer group maintains a garden bed that is designed to be a demonstration of native plants for community members to learn about the large variety available, and encourage them to plant these species in their own gardens.

We aim to add to its educational impact by designing 25 small signs with photos and brief descriptions of each species. These signs will be attached to small stakes and rotated seasonally to match flowering times and maintain interest. Our hope is that this initiative will encourage residents to plant more native species in their own gardens.

In addition, we plan to purchase 50 diverse and interesting native plants from the Knox Environment Society, all propagated from local sources. These plants will be incorporated into the garden bed to showcase the range of species available and further inspire community members to plant natives in their own gardens.

**(b) What community benefit is gained from this project / activity? \***

Our project aims to promote knowledge and awareness of native plant species in the community, and to encourage residents to plant these species in their own gardens.

Community members will gain knowledge about which native plants are in their area, and the benefits they provide to biodiversity eg. supporting butterflies, birds or skinks. This knowledge will encourage residents to visit local native plant nurseries and incorporate these species into their own gardens, thereby strengthening habitat corridors.

Through this initiative, we aim to foster a sense of pride and ownership in Koolunga Native Reserve and inspire residents to take action in their own backyards to enhance the local environment.

Overall, this project will promote environmental sustainability and community engagement, and contribute to the preservation of the natural environment in the City of Knox.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

20

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

200

Must be a number

**How many of the above are Knox residents? \***

200

Must be a number

**BUDGET****\* indicates a required field**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
 Form Submitted 4 Apr 2023, 7:47PM AEST

**(d) What is the total cost of the project / activity? \***

\$828.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$828.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

Please detail the items you would like the Minor Grants Program to fund.

Expenditure	\$
Signs	\$563.00
Stakes	\$65.00
Native plants	\$100.00
Gardening gloves	\$100.00
	\$
	Must be a dollar amount.

**Minor Grant Budget Total**

**Total Expenditure Amount**

\$828.00

This number/amount is calculated.

**Quotes For Planned Expenses**

**Attach quotes for expenses here. \***

---

Filename: Quote - gloves - Bunnings.pdf  
 File size: 373.3 kB

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Filename: Quote - plants - KES March 22.pdf  
 File size: 94.1 kB

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Filename: Quote - signs 1 - Signs Extra - cheaper.pdf  
 File size: 636.3 kB

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Filename: Quote - signs 2 - Sign Gallery - more costly.pdf  
 File size: 806.4 kB

---

Filename: Quote - stakes - Bunnings.pdf  
 File size: 215.8 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

**Other Grant Funding**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
 Form Submitted 4 Apr 2023, 7:47PM AEST

**(e) Have funds been sought / provided from other Council grants? \***

Yes  No

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

Filename: \_Landcare Victoria Inc Certificate of Currency 22\_23 Public Liability.pdf  
 File size: 73.2 kB

Filename: Friends of the Koolunga Native Reserve Inc Landcare Victoria Inc Membership Certificate 2022\_23.pdf  
 File size: 610.8 kB

**Public Liability Expiry Date \***

30/06/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- **A project plan**
- **Evidence of Incorporation**

**Attach relevant documentation:**

Filename: Demo garden plan & budget.xlsx  
 File size: 11.2 kB

Filename: Incorporation status.pdf  
 File size: 66.2 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 109-MGP-2022-23 From Friends of Koolunga Native Reserve Inc**  
Form Submitted 4 Apr 2023, 7:47PM AEST

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Name \***

[REDACTED]

**(if organisation) \***

[REDACTED]

**Declaration Date \***

04/04/2023

Must be a date.

### **Privacy Statement**

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
 Form Submitted 14 Apr 2023, 10:31AM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1670	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
Form Submitted 14 Apr 2023, 10:31AM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Boronia Road Uniting Church

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

[Redacted]

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

59 472 343 549

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
 Form Submitted 14 Apr 2023, 10:31AM AEST

Information from the Australian Business Register	
<b>ABN</b>	59 472 343 549
<b>Entity name</b>	UCA BORONIA RD
<b>ABN status</b>	Active
<b>Entity type</b>	Other Unincorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Charity <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Rebate, GST Concession, Income Tax Exemption
<b>Main business location</b>	3178 VIC
<i>Information retrieved at 3:51am yesterday</i>	

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

**Is your organisation a registered not-for-profit legal entity? \***

Yes  No

If your organisation isn't incorporated and not registered as a not-for-profit legal entity, you will require an auspice who is one or both of these things.

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

LINE MARKING IN THE CHURCH CAR PARK

**Project Start Date \***

01/07/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
 Form Submitted 14 Apr 2023, 10:31AM AEST

**Project End Date \***

30/09/2023

Must be a date.

**(a) Briefly describe details of the request: \***

Renew the line marking in the church car park with designated disability spaces and directional arrows to ensure safety and that there is no confusion as to where parking is allowed.

**(b) What community benefit is gained from this project / activity? \***

Our church buildings, and consequently the car park, are used frequently by community organisations. The safety of all who use the car park is of paramount importance to us. To fulfill our duty of care, clear and precise line marking is necessary to ensure we meet those obligations.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

24

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

130

Must be a number

**How many of the above are Knox residents? \***

115

Must be a number

**BUDGET****\* indicates a required field****(d) What is the total cost of the project / activity? \***

\$1,670.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$1,500.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

Please detail the items you would like the Minor Grants Program to fund.

**Expenditure****\$**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
 Form Submitted 14 Apr 2023, 10:31AM AEST

Line Marking by SJR LINE MARKING	\$1,500.00
	\$
	\$
	\$
	\$
	Must be a dollar amount.

### Minor Grant Budget Total

**Total Expenditure Amount**

\$1,500.00

This number/amount is calculated.

### Quotes For Planned Expenses

**Attach quotes for expenses here. \***

---

Filename: Line Marking Quote.pdf  
 File size: 6.9 kB  
 A minimum of 1 file must be attached.  
 Quotes must support all expenditure items listed in table above

### Other Grant Funding

**(e) Have funds been sought / provided from other Council grants? \***

Yes  No

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

---

Filename: Public Liability 2022-23.pdf  
 File size: 69.3 kB

**Public Liability Expiry Date \***

30/11/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan
- Evidence of Incorporation

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 113-MGP-2022-23 From Boronia Road Uniting Church**  
Form Submitted 14 Apr 2023, 10:31AM AEST

**Attach relevant documentation:**

*No files have been uploaded*

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

[Redacted]

**Position (if organisation) \***

[Redacted]

**Declaration Date \***

14/04/2023

Must be a date.

### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
 Form Submitted 27 Apr 2023, 9:50PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
Form Submitted 27 Apr 2023, 9:50PM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Wantirna Retirement Village

**Organisation Address \***

[Redacted] ralia

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted] me

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

37 392 906 092

**Information from the Australian Business Register**



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
 Form Submitted 27 Apr 2023, 9:50PM AEST

<b>ABN</b>	37 392 906 092
<b>Entity name</b>	WANTIRNA VILLAGE APARTMENTS ASSOCIATION INC
<b>ABN status</b>	Active
<b>Entity type</b>	Other Unincorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Not endorsed <a href="#">More information</a>
<b>ACNC Registration</b>	No
<b>Tax Concessions</b>	No tax concessions
<b>Main business location</b>	3152 VIC

*Information retrieved at 4:55am yesterday*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

a0034479f

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

Wantirna Village Shop request

**Project Start Date \***

01/06/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
 Form Submitted 27 Apr 2023, 9:50PM AEST

30/06/2023

Must be a date.

**(a) Briefly describe details of the request: \***

We would like to apply for the grant of \$3,000 to purchase a replacement Commercial Freezer for our shop. The freezer we are currently using is intermittently turning itself on and off, and therefore is detrimental to the health of those purchasing its contents. The reason the shop has a freezer is that many of our residents have limited mobility, and therefore need emergency perishable foods at times when it is impossible for them to access these products. The goods they would need emergency access to include bread (which the shop freezes for them), and frozen meals.

Our shop is in constant use by residents and it provides a valuable service to Wantirna Village.

We hope your committee will give serious consideration to this application.

**(b) What community benefit is gained from this project / activity? \***

we will be able to accomodate residents with their needs at the village without needing to stress about leaving the village.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

12

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

180

Must be a number

**How many of the above are Knox residents? \***

180

Must be a number

## BUDGET

**\* indicates a required field**

**(d) What is the total cost of the project / activity? \***

\$3,000.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$3,000.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

## Minor Grant Expenses

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
 Form Submitted 27 Apr 2023, 9:50PM AEST

Please detail the items you would like the Minor Grants Program to fund.

<b>Expenditure</b>	<b>\$</b>
3000	\$3,000.00
	\$
	\$
	\$
	\$
	Must be a dollar amount.

### Minor Grant Budget Total

**Total Expenditure Amount**  
 \$3,000.00

This number/amount is calculated.

### Quotes For Planned Expenses

**Attach quotes for expenses here. \***

Filename: Freezer Shop 2023 Wantirna Village.docx

File size: 379.8 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

### Other Grant Funding

**(e) Have funds been sought / provided from other Council grants? \***

Yes  No

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

Filename: levande insurance 2023 2024.pdf

File size: 122.7 kB

**Public Liability Expiry Date \***

30/06/2023

Expiry date must extend beyond your project start and finish date

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 114-MGP-2022-23 From Wantirna Retirement Village**  
Form Submitted 27 Apr 2023, 9:50PM AEST

**Please attach relevant supporting documentation, including:**

- **A project plan**
- **Evidence of Incorporation**

**Attach relevant documentation:**

Filename: Levande\_COC\_Liability\_22-23.pdf  
File size: 122.7 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

[REDACTED]

**Position (if organisation) \***

[REDACTED]

**Declaration Date \***

27/04/2023

Must be a date.

### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
 Form Submitted 8 May 2023, 8:35PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
Form Submitted 8 May 2023, 8:35PM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***  
Saga Productions

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

63 347 001 278

**Information from the Australian Business Register**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
 Form Submitted 8 May 2023, 8:35PM AEST

<b>ABN</b>	63 347 001 278
<b>Entity name</b>	Saga Productions Inc.
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	No
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Not endorsed <a href="#">More information</a>
<b>ACNC Registration</b>	No
<b>Tax Concessions</b>	No tax concessions
<b>Main business location</b>	3152 VIC

*Information retrieved at 12:20am today*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

A0112088T

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

Twisted: The Untold Tale of a Royal Vizier

**Project Start Date \***

28/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
 Form Submitted 8 May 2023, 8:35PM AEST

22/07/2023

Must be a date.

**(a) Briefly describe details of the request: \***

We are requesting funding from the Council to assist in funding our second theatrical performance. We are performing a musical at Knox Community Arts Centre, in Bayswater on the 21st and 22nd of July, and require funding to cover the cost of venue hire. In addition, if there is any spare funding, it would be put towards materials to make costumes and set.

**(b) What community benefit is gained from this project / activity? \***

We aim to further engage the community in theatre. Our cast is comprised of people in their early twenties through to their early thirties and we are hoping to provide them with a social and artistic outlet which is often difficult for adults.

In addition, we are hoping to give more of the community access to local and affordable musical theatre. In particular, this musical's primary audience are young adults/adult.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

18

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

170

Must be a number

**How many of the above are Knox residents? \***

100

Must be a number

**BUDGET****\* indicates a required field****(d) What is the total cost of the project / activity? \***

\$4,500.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$2,500.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

Please detail the items you would like the Minor Grants Program to fund.

**Expenditure****\$**



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
 Form Submitted 8 May 2023, 8:35PM AEST

Venue hire of Knox Community Arts Centre	\$2,910.00
	\$
	\$
	\$
	Must be a dollar amount.

### Minor Grant Budget Total

**Total Expenditure Amount**

\$2,910.00

This number/amount is calculated.

### Quotes For Planned Expenses

**Attach quotes for expenses here. \***

Filename: KCAC Quote Twisted 2023.pdf

File size: 951.7 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

### Other Grant Funding

**(e) Have funds been sought / provided from other Council grants? \***

Yes  No

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

Filename: GIO Mobile Business Protect Certificate of Currency GPM005613112 (1).pdf

File size: 71.0 kB

**Public Liability Expiry Date \***

10/04/2024

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan
- Evidence of Incorporation

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 2 of 2)**  
**Application No. 115-MGP-2022-23 From Saga Productions**  
Form Submitted 8 May 2023, 8:35PM AEST

**Attach relevant documentation:**

Filename: CERT-A0112088T Certificate of Incorporation.pdf  
File size: 115.1 kB

Filename: Minor Grant Program Plan 2023.pdf  
File size: 126.4 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Position (if organisation) \***

**Declaration Date \***

08/05/2023

Must be a date.

### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
 Form Submitted 2 May 2023, 9:20PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
Form Submitted 2 May 2023, 9:20PM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Flamingo Community Group Inc

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted] me

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

79 546 533 014

**Information from the Australian Business Register**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
 Form Submitted 2 May 2023, 9:20PM AEST

<b>ABN</b>	79 546 533 014
<b>Entity name</b>	FLAMINGO COMMUNITY GROUP INC
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	No
<b>ATO Charity Type</b>	Charity <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Rebate, GST Concession, Income Tax Exemption
<b>Main business location</b>	3152 VIC

*Information retrieved at 5:23am yesterday*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

A0015488R

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

**Please provide an email address where you would like this sent**

adminoffice@flamingo3yokindergarten.org.au

Must be an email address.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

Electronics Grant

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
 Form Submitted 2 May 2023, 9:20PM AEST

**Project Start Date \***

29/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

29/06/2023

Must be a date.

**(a) Briefly describe details of the request: \***

We would like to request a grant to improve and add some electronics to our Kinder program. We would like to request the following:

- New laptop for kinder teacher. The current laptop is old and very slow and likely to stop working soon. We would like to purchase a new laptop to aid in kinder teacher activities and admin.
- iPad. We would like to purchase an iPad to assist with the learning process for the kinder students. This would allow for real time searching for answers to questions, provide visual and audio aids, assist in communication with children with diverse needs (e.g. pictures, verbal difficulties, english as second language, hearing impaired).
- iPad case. We would require a robust case for the iPad as it will be used with young children present.
- Google nest mini. We would like to purchase a Google nest mini (or something similar) to allow connection to the iPad and provide speaker functions and potential voice assistance functions. The speaker functions would aid quiet time (where soft music is played for calming down the children) and music time.
- Projector. We would like to purchase a star projector to be used as a calming device during quiet time for the children.

**(b) What community benefit is gained from this project / activity? \***

The requested electronics would improve our Kinder program by adding technological aspects, improving efficiency for the staff, and assist and aid in communication with the students. This in turn benefits the children in the kinder program and their parents who are all part of the Knox community.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

10

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

24

Must be a number

**How many of the above are Knox residents? \***

24

Must be a number

**BUDGET**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
 Form Submitted 2 May 2023, 9:20PM AEST

**\* indicates a required field**

**(d) What is the total cost of the project / activity? \***

\$2,604.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$2,604.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

Please detail the items you would like the Minor Grants Program to fund.

Expenditure	\$
Laptop	\$1,710.00
iPad	\$700.00
iPad case	\$50.00
Google nest mini	\$75.00
Star projector	\$69.00
	Must be a dollar amount.

**Minor Grant Budget Total**

**Total Expenditure Amount**

\$2,604.00

This number/amount is calculated.

**Quotes For Planned Expenses**

**Attach quotes for expenses here. \***

---

Filename: JB Quote.pdf

File size: 268.9 kB

---

Filename: Projector.pdf

File size: 488.9 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

**Other Grant Funding**

**(e) Have funds been sought / provided from other Council grants? \***

Yes  No

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
 Form Submitted 2 May 2023, 9:20PM AEST

## ADDITIONAL SUPPORTING INFORMATION

**\* indicates a required field**

### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

Filename: Certificate of currency-Flamingo Community Group Inc.-A17388 CSOE PPL (2).pdf  
 File size: 139.1 kB

**Public Liability Expiry Date \***

30/06/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- **A project plan**
- **Evidence of Incorporation**

**Attach relevant documentation:**

Filename: Certificate of incorporation.pdf  
 File size: 350.9 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Name \***

██████████

**Position (if organisation) \***

██████████

**Declaration Date \***



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 117-MGP-2022-23 From Flamingo Community Group Inc**  
Form Submitted 2 May 2023, 9:20PM AEST

02/05/2023  
Must be a date.

**Privacy Statement**

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**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
 Form Submitted 8 May 2023, 1:44PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
Form Submitted 8 May 2023, 1:44PM AEST

< \$500  \$501 to \$1,000  \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

VINCENT DE PAUL SOCIETY, SCORESBY

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

28 911 702 061

**Information from the Australian Business Register**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
 Form Submitted 8 May 2023, 1:44PM AEST

<b>ABN</b>	28 911 702 061
<b>Entity name</b>	ST VINCENT DE PAUL SOCIETY VICTORIA
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	Yes (Item 1)
<b>ATO Charity Type</b>	Public Benevolent Institution <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Exemption, GST Concession, Income Tax Exemption
<b>Main business location</b>	3128 VIC

*Information retrieved at 12:19am today*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

**Please provide an email address where you would like this sent**

scoresby.conf.pres@svdp-vic.org.au

Must be an email address.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

EQUIPMENT PURCHASE - PRINTER, SCANNER, TROLLEY

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
 Form Submitted 8 May 2023, 1:44PM AEST

**Project Start Date \***

26/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

26/05/2024

Must be a date.

**(a) Briefly describe details of the request: \***

Scoresby conference been assisting the needy every week with food hampers, assisting with bills, medical expenses etc. We have senior citizens as volunteers who require trollies to pick up food hamper from pantry to car and car to clients homes. Due to OHS this is required in volunteer interest. Also we need to print copies of documents/reports regular that we require Printer and scanner for our members.

**(b) What community benefit is gained from this project / activity? \***

visits by our volunteers regularly every week to assist these clients in desperate situation predominantly due to domestic violence. We offer rent assistance, with bills, medical expenses

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

10

Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

50

Must be a number

**How many of the above are Knox residents? \***

50

Must be a number

**BUDGET**

**\* indicates a required field**

**(d) What is the total cost of the project / activity? \***

\$2,000.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$2,000.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

**Minor Grant Expenses**

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
 Form Submitted 8 May 2023, 1:44PM AEST

Please detail the items you would like the Minor Grants Program to fund.

<b>Expenditure</b>	<b>\$</b>
PRINTER 2	\$500.00
SCANNER 2	\$500.00
TROLLEY 4	\$1,000.00
	\$
	\$
	Must be a dollar amount.

**Minor Grant Budget Total**

**Total Expenditure Amount**  
 \$2,000.00  
 This number/amount is calculated.

**Quotes For Planned Expenses**

**Attach quotes for expenses here. \***

---

Filename: PRINTER2.pdf  
 File size: 34.2 kB

---

Filename: SCANNER.pdf  
 File size: 377.6 kB

---

Filename: TROLLEY.pdf  
 File size: 3.1 MB  
 A minimum of 1 file must be attached.  
 Quotes must support all expenditure items listed in table above

**Other Grant Funding**

**(e) Have funds been sought / provided from other Council grants? \***  
 Yes  No

**ADDITIONAL SUPPORTING INFORMATION**

**\* indicates a required field**

**Evidence of Public Liability**

**Evidence of current Public Liability Insurance must be supplied \***

---

Filename: CERTIFICATE OF CURRENCY 2022-23.pdf  
 File size: 139.6 kB

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023 (Version 3 of 3)**  
**Application No. 118-MGP-2022-23 From VINCENT DE PAUL SOCIETY, SCORESBY**  
Form Submitted 8 May 2023, 1:44PM AEST

**Public Liability Expiry Date \***

30/06/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan
- Evidence of Incorporation

**Attach relevant documentation:**

Filename: KNOX GRANT PROJECT PLAN 30 APR2023.docx

File size: 12.4 kB

## DECLARATION

\* indicates a required field

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Name \***

[REDACTED]

**Position (if organisation) \***

[REDACTED]

**Declaration Date \***

02/05/2023

Must be a date.

### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

## Minor Grants Program - Food Relief Supplies

### Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

Application No. 2-MGP-FOOD From Restore Community Care

Form Submitted 9 May 2023, 10:06AM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant - Category 2 (Food Relief Supplies), applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.
- Be able to supply permits and plans appropriate to the funded activity where requested by Council.
- Have provided evidence to Council's satisfaction of the expenditure of any previous grant provided by Council.
- Have no outstanding debts to Council.
- Not be an operator of Electronic Gaming Machines, in line with Council's Electronic Gaming Machine Policy
- Demonstrate current need and evidence of operation in Knox prior to January 2022 if a service applying for a grant under Category 2 (Food Relief Support).

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline

Council meeting date

Fri 13 Jan 2023 Mon 30 Jan 2023

Fri 10 Feb 2023

Mon 27 Feb 2023

Fri 10 Mar 2023

Mon 27 Mar 2023

Fri 7 Apr 2023

Wed 26 Apr 2023

Fri 5 May 2023

Mon 22 May 2023

Fri 9 June 2023

Mon 26 June 2023

**Application  
Amount**

**Incorporated or  
Auspiced?**

**Assessment &  
Determination**

**Acquittal**



## Minor Grants Program - Food Relief Supplies

### Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

#### Application No. 2-MGP-FOOD From Restore Community Care

Form Submitted 9 May 2023, 10:06AM AEST

< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$5,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

**Application Amount \***

< \$500    \$501 to \$1,000    \$1,001 to \$5,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Restore Community Care

**Organisation Address \***

[Redacted Address]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Have you been operating as a food relief support provider in Knox prior to January 2022? \***

Yes  
 No

If no, unfortunately you are ineligible to apply for this category of funding

**Please provide evidence of operation prior to January 2022 eg social media promotion of service, other promotional material, website/newsletter/newspaper advertisement and/or listing on Knox Emergency Relief Network (KERN) \***

Filename: Emergency Relief Support Services Pamphlet\_11th AUG 21\_FA3.pdf

File size: 231.5 kB

**Contact Name**

[Redacted Contact Name]

**Minor Grants Program - Food Relief Supplies**  
**Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)**  
**Application No. 2-MGP-FOOD From Restore Community Care**  
 Form Submitted 9 May 2023, 10:06AM AEST

**Project Contact Address \***

[Redacted] ralia  
 n, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted] tralian phone number.

**Phone Number**

[Redacted] alian phone number.

**Email \***

[Redacted]

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted] tralian phone number.

**Secretary Email \***

[Redacted]

**Please provide your ABN**

86 794 376 078

Information from the Australian Business Register	
<b>ABN</b>	86 794 376 078
<b>Entity name</b>	Restore Community Care Inc
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	Yes (Item 1)
<b>ATO Charity Type</b>	Public Benevolent Institution <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Exemption, GST Concession, Income Tax Exemption
<b>Main business location</b>	3178 VIC
<i>Information retrieved at 6:05am yesterday</i>	

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN plesae complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

### Application No. 2-MGP-FOOD From Restore Community Care

Form Submitted 9 May 2023, 10:06AM AEST

If no, please confirm if you are a registered not-for-profit legal entity

### Incorporation Details

#### Please provide your Incorporated number

A0052973D

This can be found on the Consumer Affairs Victoria website

#### Would you like to receive our e-Bulletin containing information on community training, grants and more? \*

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROGRAM DETAILS

\* indicates a required field

### Request Details

#### Food Program Name \*

RESTORING BROKEN LIVES

#### Program Start Date \*

29/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

#### Program End Date \*

29/12/2023

Must be a date.

#### (a) Briefly describe details of the request: \*

Restore community care is a local community care center within the Rowville area that provides short term emergency food relief, including other vital services and supports for those who are going through difficult times.

Due to the high demands of families that are coming in and receiving food parcels and other services from our crisis center, we are asking for further support to enable us to continue to further provide food parcels and other services to be able to make more of an impact within the families that attend our center and the local Knox communities.

What sort of food supplies are required to maintain or increase your food relief support

#### How is the food provided? (click in drop down box for options)

Pick up - food hampers

If other or a combination of options, please describe in a) above.

#### (b) Please explain / demonstrate the current need for the program / activity \*

Due to the rise in costs for basic necessities within the Knox and Rowville and surrounding areas we have experienced a higher than usual demand of people coming in for emergency food relief within our community crisis centre.

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

**Application No. 2-MGP-FOOD From Restore Community Care**  
Form Submitted 9 May 2023, 10:06AM AEST

With this grant the community care centre will be able to continue to provide emergency food parcels and other services listed for the community of Knox and surrounding areas, we will also be able to continue to make an impact within these families that are attending our crisis centre which will intern help and aid the Knox communities that are doing it tough.

For example: How is your program currently funded/resourced and how many people it provides for?

**(c) Which areas of Knox benefit from this program? \***

We have families coming from the following parts of the City of Knox, Knoxfield, Rowville, Ferntree Gully, Boronia, Bayswater, Scoresby area.

**How many Knox residents will directly benefit from food relief supplies purchased with this grant? \***

320  
Must be a number

**How many people who identify as volunteers (inc committee members) are currently involved in keeping this service active?**

5-10  
Must be a number

### BUDGET

**\* indicates a required field**

**(d) What is the total cost of the program / activity? \***

\$5,600.00  
Must be a dollar amount.  
What is the total budgeted cost (dollars) of your project?

**(e) What amount is being requested? \***

\$5,000.00  
Must be a dollar amount.  
What is the total financial support you are requesting in this application?

### Minor Grant Expenses - Food Relief Supplies

Please detail the items you would like the Minor Grants Program to fund.

Expenditure	\$
Grocery items dry and packaged goods, Toiletries, Fresh & Frozen, refrigerated items	\$5,000.00
	\$
	\$
	\$
	\$

## Minor Grants Program - Food Relief Supplies

### Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

Application No. 2-MGP-FOOD From Restore Community Care  
Form Submitted 9 May 2023, 10:06AM AEST

Please only list items to be funded by the grant | Must be a dollar amount.

### Minor Grant Food Relief Supplies - Budget Total

#### Total Expenditure Amount

\$5,000.00

This number/amount is calculated.

### Quotes For Planned Expenses

#### Attach quotes for expenses here. \*

Filename: Food Bank invoices.pdf  
File size: 401.8 kB

Filename: Restore community care new expenses form .docx  
File size: 16.5 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

### Other Grant Funding

#### (f) Do you have any unexpended funds from other Council grants you've received for food relief? \*

Yes  No

#### If yes, please explain why you are seeking further funds

Based on more families needing assistance with food parcels within our crisis center our funds are decreasing, needing more funds to sustain the demand.

### Other Fund Details

#### Year of Application:

2022

#### Grant Program:

PANDEMIC RECOVERY: FOOD AND EMERGENCY RELIEF GRANT

#### Amount:

\$7,128.00

Must be a dollar amount.

## ADDITIONAL SUPPORTING INFORMATION

\* indicates a required field

### Evidence of Public Liability

Evidence of current Public Liability Insurance must be supplied \*

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)

**Application No. 2-MGP-FOOD From Restore Community Care**  
Form Submitted 9 May 2023, 10:06AM AEST

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Filename: Certificate00000052100 insurance.pdf  
File size: 47.9 kB

**Public Liability Expiry Date \***

30/09/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- **A project plan**
- **Evidence of Incorporation**

**Attach relevant documentation:**

---

Filename: Community Care Project plan 2022-2023 (4) (2) (2).docx  
File size: 53.7 kB

---

Filename: Incorporation Document.pdf  
File size: 121.1 kB

## DECLARATION

**\* indicates a required field**

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful our organisation commits to provide an acquittal to Council of the grant funds received, reporting on the food service/meals achieved in a provided template in the Minor Grants Category 2 Acquittal Form.**

**Name \***

[REDACTED]

**Position (if organisation) \***

[REDACTED]

**Declaration Date \***

04/05/2023

Must be a date.

### Privacy Statement

**Minor Grants Program - Food Relief Supplies**  
**Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 2 of 2)**

**Application No. 2-MGP-FOOD From Restore Community Care**

Form Submitted 9 May 2023, 10:06AM AEST

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

## Minor Grants Program - Food Relief Supplies

### Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

Application No. 13-MGP-FOOD From Vinnies, Scoresby

Form Submitted 8 May 2023, 1:41PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant - Category 2 (Food Relief Supplies), applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.
- Be able to supply permits and plans appropriate to the funded activity where requested by Council.
- Have provided evidence to Council's satisfaction of the expenditure of any previous grant provided by Council.
- Have no outstanding debts to Council.
- Not be an operator of Electronic Gaming Machines, in line with Council's Electronic Gaming Machine Policy
- Demonstrate current need and evidence of operation in Knox prior to January 2022 if a service applying for a grant under Category 2 (Food Relief Support).

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline

Council meeting date

Fri 13 Jan 2023 Mon 30 Jan 2023

Fri 10 Feb 2023

Mon 27 Feb 2023

Fri 10 Mar 2023

Mon 27 Mar 2023

Fri 7 Apr 2023

Wed 26 Apr 2023

Fri 5 May 2023

Mon 22 May 2023

Fri 9 June 2023

Mon 26 June 2023

**Application  
Amount**

**Incorporated or  
Auspiced?**

**Assessment &  
Determination**

**Acquittal**



## Minor Grants Program - Food Relief Supplies

### Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

#### Application No. 13-MGP-FOOD From Vinnies, Scoresby

Form Submitted 8 May 2023, 1:41PM AEST

< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$5,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

#### Application Amount \*

< \$500  \$501 to \$1,000  \$1,001 to \$5,000

## APPLICANT DETAILS

\* indicates a required field

### Applicant Details

#### Organisation Name \*

Vinnies, Scoresby

#### Organisation Address \*

[REDACTED]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

#### Have you been operating as a food relief support provider in Knox prior to January 2022? \*

Yes

No

If no, unfortunately you are ineligible to apply for this category of funding

#### Please provide evidence of operation prior to January 2022 eg social media promotion of service, other promotional material, website/newsletter/newspaper advertisement and/or listing on Knox Emergency Relief Network (KERN) \*

Filename: REPORT FOOD HAMPERS 2019 - 8 MAY23.pdf

File size: 404.5 kB

Filename: VINNIES PROMOTION.pdf

File size: 536.3 kB

**Minor Grants Program - Food Relief Supplies**  
**Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)**

**Application No. 13-MGP-FOOD From Vinnies, Scoresby**  
 Form Submitted 8 May 2023, 1:41PM AEST

**Contact Name**

[Redacted]

**Project Contact Address \***

[Redacted]

Address, Telephone, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Australian phone number.

**Phone Number**

Must be an Australian phone number.

**Email \***

[Redacted]

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Australian phone number.

**Secretary Email \***

[Redacted]

**Please provide your ABN**

28 911 702 061

Information from the Australian Business Register	
<b>ABN</b>	28 911 702 061
<b>Entity name</b>	ST VINCENT DE PAUL SOCIETY VICTORIA
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	Yes (Item 1)
<b>ATO Charity Type</b>	Public Benevolent Institution <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Exemption, GST Concession, Income Tax Exemption
<b>Main business location</b>	3128 VIC

Information retrieved at 12:19am today

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

**Application No. 13-MGP-FOOD From Vinnies, Scoresby**

Form Submitted 8 May 2023, 1:41PM AEST

### Is your organisation Incorporated? \*

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

### Please provide your Incorporated number

This can be found on the Consumer Affairs Victoria website

### Would you like to receive our e-Bulletin containing information on community training, grants and more? \*

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROGRAM DETAILS

\* indicates a required field

### Request Details

#### Food Program Name \*

FOOD RELIEF HAMPERS

#### Program Start Date \*

26/05/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

#### Program End Date \*

26/05/2024

Must be a date.

#### (a) Briefly describe details of the request: \*

Currently assisting the needy with food hampers 4 days a week based on their request

What sort of food supplies are required to maintain or increase your food relief support

#### How is the food provided? (click in drop down box for options)

Delivery - food hampers

If other or a combination of options, please describe in a) above.

#### (b) Please explain / demonstrate the current need for the program / activity \*

Donations are drying due to current economic condition and we need to raise funds for this noble activity to continue assisting the needy

For example: How is your program currently funded/resourced and how many people it provides for?

#### (c) Which areas of Knox benefit from this program? \*

Scoresby

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

**Application No. 13-MGP-FOOD From Vinnies, Scoresby**  
Form Submitted 8 May 2023, 1:41PM AEST

**How many Knox residents will directly benefit from food relief supplies purchased with this grant? \***

50

Must be a number

**How many people who identify as volunteers (inc committee members) are currently involved in keeping this service active?**

10

Must be a number

### BUDGET

**\* indicates a required field**

**(d) What is the total cost of the program / activity? \***

\$3,000.00

Must be a dollar amount.

What is the total budgeted cost (dollars) of your project?

**(e) What amount is being requested? \***

\$3,000.00

Must be a dollar amount.

What is the total financial support you are requesting in this application?

### Minor Grant Expenses - Food Relief Supplies

Please detail the items you would like the Minor Grants Program to fund.

Expenditure	\$
Non perishable items	\$3,000.00
Food hamper of non perishable items	\$
\$50 x 5 per week attached report previous page	\$
	\$
	\$
Please only list items to be funded by the grant	Must be a dollar amount.

### Minor Grant Food Relief Supplies - Budget Total

**Total Expenditure Amount**

\$3,000.00

This number/amount is calculated.

### Quotes For Planned Expenses

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

### Application No. 13-MGP-FOOD From Vinnies, Scoresby

Form Submitted 8 May 2023, 1:41PM AEST

#### Attach quotes for expenses here. \*

Filename: CHRISTMAS 2 29 NOV 22.jpg  
File size: 58.8 kB

Filename: GROCERIES 14 MAR22.jpg  
File size: 73.3 kB

Filename: GROCERIES 14 MAR22.jpg  
File size: 73.3 kB

Filename: PANTRY RECEIPT 19 FEB23.jpg  
File size: 49.4 kB

Filename: REPORT FOOD HAMPERS 2019 - 8 MAY23.pdf  
File size: 404.5 kB

Filename: WOOLWORTH RECEIPT 1 MAY2022.jpg  
File size: 59.9 kB

A minimum of 1 file must be attached.

Quotes must support all expenditure items listed in table above

#### Other Grant Funding

**(f) Do you have any unexpended funds from other Council grants you've received for food relief? \***

Yes  No

If yes, please explain why you are seeking further funds

### ADDITIONAL SUPPORTING INFORMATION

\* indicates a required field

#### Evidence of Public Liability

**Evidence of current Public Liability Insurance must be supplied \***

Filename: CERTIFICATE OF CURRENCY 2022-23.pdf  
File size: 139.6 kB

**Public Liability Expiry Date \***

30/06/2023

Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan
- Evidence of Incorporation

**Attach relevant documentation:**

## Minor Grants Program - Food Relief Supplies Minor Grants - Category 2 Food Relief Supplies - Application 2022-23 (Version 3 of 3)

Application No. 13-MGP-FOOD From Vinnies, Scoresby  
Form Submitted 8 May 2023, 1:41PM AEST

Filename: PROJECT PLAN 30 APR23.pdf  
File size: 384.5 kB

### DECLARATION

\* indicates a required field

#### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful our organisation commits to provide an acquittal to Council of the grant funds received, reporting on the food service/meals achieved in a provided template in the Minor Grants Category 2 Acquittal Form.**

**Position (if organisation) \***

**Declaration Date \***

02/05/2023

Must be a date.

#### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
 Form Submitted 3 May 2023, 12:48PM AEST

## MINOR GRANTS PROGRAM APPLICATION FORM

\* indicates a required field

### Minor Grants Information

**To be eligible for a Minor Grant, applying organisations must:**

- Provide services, projects and programs that directly benefit residents of the City of Knox.
- Be a not-for-profit legal entity that provides services, support or activities to the Knox community (or auspiced by an incorporated body or other not-for-profit legal entity).
- Have an Australian Business Number or complete a Statement by Supplier form.
- Have a Committee of Management or similar governing body that accepts responsibility for the administration of the Grant.
- Hold adequate public liability insurance appropriate to the activity outlined in the application.

Your project start date must be after the Council meeting date where your application is being presented for approval. Projects that are due to begin before the Council meeting date at which they're being presented will not be considered.

Submission deadline Council meeting date

13 January 2023 30 January 2023

10 February 2023 27 February 2023

10 March 2023 27 March 2023

7 April 2023 26 April 2023

5 May 2023 22 May 2023

9 June 2023 26 June 2023

Application Amount	Incorporated or Auspiced?	Assessment & Determination	Acquittal
< \$500	Yes	Assessed and determined by the CEO or delegate.	Proof of expenditure / purchase (i.e. receipt).
\$501 to \$1,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Proof of expenditure / purchase (i.e. receipt).
\$1,001 to \$3,000	Yes	Assessed by the CEO or delegate. Determined by Council at the monthly ordinary meeting of Council.	Funding Agreement & Acquittal required.

### Application Category

Application Amount \*

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
Form Submitted 3 May 2023, 12:48PM AEST

< \$500    \$501 to \$1,000    \$1,001 to \$3,000

## APPLICANT DETAILS

**\* indicates a required field**

### Applicant Details

**Organisation Name \***

Australian Jazz Museum Inc

**Organisation Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

[Redacted]

**Project Contact Address \***

[Redacted]

Address Line 1, Suburb/Town, State/Province, Postcode, and Country are required.

**Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Phone Number**

[Redacted]

Must be an Australian phone number.

**Email \***

[Redacted]

Must be an email address.

**Committee Secretary (Second Contact Person)**

[Redacted]

**Secretary Mobile Phone Number \***

[Redacted]

Must be an Australian phone number.

**Secretary Email \***

[Redacted]

Must be an email address.

**Please provide your ABN**

53 531 132 426

**Information from the Australian Business Register**



**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
 Form Submitted 3 May 2023, 12:48PM AEST

<b>ABN</b>	53 531 132 426
<b>Entity name</b>	VICTORIAN JAZZ ARCHIVE INC
<b>ABN status</b>	Active
<b>Entity type</b>	Other Incorporated Entity
<b>Goods &amp; Services Tax (GST)</b>	Yes
<b>DGR Endorsed</b>	Yes (Items 1 & 4)
<b>ATO Charity Type</b>	Charity <a href="#">More information</a>
<b>ACNC Registration</b>	Registered
<b>Tax Concessions</b>	FBT Rebate, GST Concession, Income Tax Exemption
<b>Main business location</b>	3152 VIC

*Information retrieved at 1:59am yesterday*

Must be an ABN.

provide ABN of auspice organisation if relevant. If no ABN please complete a Statement by Supplier declaration.

**Is your organisation Incorporated? \***

Yes  No

If no, please confirm if you are a registered not-for-profit legal entity

## Incorporation Details

**Please provide your Incorporated number**

A0033964L

This can be found on the Consumer Affairs Victoria website

**Would you like to receive our e-Bulletin containing information on community training, grants and more? \***

Yes  No  Already subscribed

There is the option to unsubscribe later if you choose to.

## PROJECT DETAILS

**\* indicates a required field**

### Request Details

**Project Title \***

At the Heart of our Museum

**Project Start Date \***

01/06/2023

Must be a date after the Council meeting at which your application is being presented. See dates at beginning of this application for guidance.

**Project End Date \***

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
 Form Submitted 3 May 2023, 12:48PM AEST

09/06/2023  
 Must be a date.

**(a) Briefly describe details of the request: \***

Australia Jazz Museum (AJM) is in urgent need of a new Cardiac Defibrillator for its premises. We had an old Defibrillator that just stopped working this past week, and have been advised that it is too old to be fixed.

**(b) What community benefit is gained from this project / activity? \***

The Museum has on average 40 volunteers that work on the premises weekly. We also have hundreds of visitors each year, which include group tours (many of which have senior citizen members), such as Probus, and University of the 3rd Age.

A Cardiac Defibrillator is required as part of Occupational Health and Safety, and will help us to ensure our volunteers and visitors are safe and can be kept alive in the event of a cardiac arrest.

**How many people who identify as volunteers (inc committee members) are currently involved in keeping your group / organisation active?**

40  
 Must be a number

**How many people will directly benefit from or participate in your project / activity? \***

40  
 Must be a number

**How many of the above are Knox residents? \***

25  
 Must be a number

## BUDGET

**\* indicates a required field**

**(d) What is the total cost of the project / activity? \***

\$1,695.00  
 Must be a dollar amount.  
 What is the total budgeted cost (dollars) of your project?

**(c) What amount is being requested? \***

\$1,695.00  
 Must be a dollar amount.  
 What is the total financial support you are requesting in this application?

## Minor Grant Expenses

Please detail the items you would like the Minor Grants Program to fund.

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
 Form Submitted 3 May 2023, 12:48PM AEST

Expenditure	\$
FRED-PA Cardiac Defibrillator Bundle	\$1,695.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	Must be a dollar amount.

**Minor Grant Budget Total**

**Total Expenditure Amount**  
 \$1,695.00  
 This number/amount is calculated.

**Quotes For Planned Expenses**

**Attach quotes for expenses here. \***

---

Filename: FRED PA-1 Bundle - Cardiac Defibrillators Australia.pdf  
 File size: 199.3 kB  
 A minimum of 1 file must be attached.  
 Quotes must support all expenditure items listed in table above

**Other Grant Funding**

**(e) Have funds been sought / provided from other Council grants? \***  
 Yes  No

**ADDITIONAL SUPPORTING INFORMATION**

**\* indicates a required field**

**Evidence of Public Liability**

**Evidence of current Public Liability Insurance must be supplied \***

---

Filename: AJM Cert of Public Liability.pdf  
 File size: 297.9 kB

**Public Liability Expiry Date \***

17/05/2024  
 Expiry date must extend beyond your project start and finish date

**Please attach relevant supporting documentation, including:**

- A project plan

**Minor Grants Program - 2022 - 2023**  
**Minor Grants Program Application Form 2022-2023**  
**Application No. 119-MGP-2022-23 From Australian Jazz Museum Inc**  
Form Submitted 3 May 2023, 12:48PM AEST

• **Evidence of Incorporation**

**Attach relevant documentation:**

---

Filename: AJM Cert of Incorporation.jpg  
File size: 3.8 MB

## DECLARATION

\* indicates a required field

### Conflict of Interest

**Do you or a family member have a relationship with a Council staff member or Councillor? \***

Yes  No

If you have any queries regarding this, please call Council's Community Partnerships Team on 9298 8000 to discuss.

**I declare that all information within this application is true and correct.**

**If successful the organisation commits to provide an acquittal of all grant funds to Council as outlined in the Minor Grants Program Policy.**

**Name \***

[REDACTED]

**Position (if organisation) \***

[REDACTED]

**Declaration Date \***

03/05/2023

Must be a date.

### Privacy Statement

The personal information requested in this application form is for the purposes of administering the Minor Grants Program and will only be used by Council for that primary purpose or directly related purposes. Whilst information relating to groups and the specific request/project details will be published, personal information in regards to individuals will not be disclosed except as required by law.

## 8.4 Knox Sport and Leisure Awards 2023 Recipients

### **SUMMARY: Club Development Project Officer, Dayna Nicholas**

**This report outlines the nominations received and provides the recommendations of the Evaluation Panel for the winner of each category in the Knox Sport and Leisure Awards 2023. The Knox Sport and Leisure Awards are designed to recognise the contribution of volunteers in community sporting clubs and leisure groups; recognise good governance structures and inclusive practices amongst community sporting clubs and leisure groups within Knox; and to acknowledge programs initiated by community sporting clubs and leisure groups that have a positive impact on the local municipality.**

### **RECOMMENDATION**

**That Council:**

- 1. Approve the organisations and individuals set out in Confidential Attachment 1 as the 2023 Knox Sport and Leisure Award winners in the following categories:**
  - **Club of the Year;**
  - **Best Club Initiated Program;**
  - **Club Person of the Year (Adult);**
  - **Club Person of the Year (Junior); and**
  - **Women in Sport Leadership**
- 2. Note the individuals also set out in Confidential Attachment 1 for their Years of Service.**
- 3. Note that the approved award winners will be announced and made public at the Knox Sport and Leisure Awards event that will occur on 21 June 2023.**

### **1. INTRODUCTION**

At the Council Meeting held on 28 July 2015, Council endorsed the Knox Sport and Leisure Awards (KSLA) Guidelines. These guidelines outline the aim of the KSLA, which includes:

- Promotion of a culture of volunteer reward and recognition in sporting clubs and leisure groups;
- Encourage and reward attendance at Council's Club Development Program seminars and workshops, which focus on good governance structures for sporting clubs and leisure groups;
- Recognise sporting clubs and leisure groups that actively engage in best practice;
- Recognise the sporting clubs and leisure groups that have implemented skills learnt through Council's Club Development Program; and
- Recognise programs initiated by local sporting clubs and leisure groups that have a positive impact on the community and its residents.

The ranking criteria for these awards was reviewed in October 2022.

### **2. DISCUSSION**

#### **2.1 Nominations Received**

Nominations opened on 20 January 2023 to all sporting clubs and leisure groups within Knox. The awards were promoted to the broader community via Council's website, via a series of social media posts, and regular direct email correspondence with clubs and groups.

Nominations were made by completing an application, which prompted nominators to answer questions relating to the criteria of each specific award. Nominations closed on 27 March 2023.

Two nominations were accepted upon advice from the Australia Day Awards Committee, who transferred unsuccessful Australia Day award nominees involved in sporting clubs to the KSLA.

In total, 30 nominations were submitted, which consisted of:

- Club of the Year – three Nominations;
- Best Club Initiated Program – three nominations;
- Club Person of the Year (Adult) – nine nominations;
- Club Person of the Year (Junior) – two nominations;
- Women in Sport Leadership – nine nominations; and
- Years of Service – four nominations.

## **2.2 Evaluation Committee**

The KSLA Evaluation Panel (Panel) consisted of two Councillors (Councillor Lisa Cooper and Councillor Sorina Grasso) who are represented at the Recreation and Leisure Committee (RLC), and two community members (Greg Mastertoun of the Ferntree Gully Football Club and Peter Williams of Knox Baseball Club) who are also representatives of the RLC. The Panel discussed rankings of each nomination based on pre-determined criteria at a meeting held on Tuesday 18 April 2023.

Based on the Panel's rankings, the recommended candidates in each award category are provided in Confidential Attachment 1 and the Panel recommends the candidate winners for consideration by Council.

The Evaluation Committee agreed to award a joint winner in the Junior Category to both applicants, given there were two equally impressive nominees for this category.

The ranking criteria is attached as Confidential Attachment 2. The overall nominations received which includes all ranking, is attached as Confidential Attachment 3.

## **2.3 Award Ceremony**

An Awards Ceremony is planned to be held on 21 June 2023 at the Knox Civic Centre to recognise and acknowledge all nominees from the Knox sporting and leisure community. Formal invitations will be distributed to all nominees and the nominators following endorsement by Council.

## **3. CONSULTATION**

The KSLA are supported by Council's Recreation and Leisure Committee.

Council officers from Leisure and the Recreation and Leisure Committee have reviewed the procedure and administration associated with the receipt of awards.

The ranking criteria, as provided in Confidential Attachment 2, was reviewed by officers within Leisure Services and the Recreation and Leisure Committee last year and updated to Councillors in a memo dated 26 October 2022.

## **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council's Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

## **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

There are no environmental or amenity issues associated with this report.

## **6. FINANCIAL & ECONOMIC IMPLICATIONS**

The KSLA ceremony will cost approximately \$13,000 to host (catering, award prizes, trophies, guest speaker, master of ceremonies, light entertainment and graphic design for the event). This is funded through Council's adopted operational budget.

The award prizes are distributed as follows:

- Club of the Year Award - \$1,000;
- Best Club Initiated Program - \$500;
- Club Person of the Year Award, Adult - \$500;
- Club Person of the Year Award, Junior - \$500 x 2 (joint winners); and
- Women in Sport Leadership Award - \$500.

## **7. SOCIAL IMPLICATIONS**

The KSLA contribute to the development of the social environment and health and wellbeing within Knox by developing community connection and promoting active lifestyles. The KSLA also recognises the work undertaken by volunteers within local sport and leisure groups, to encourage retention of existing volunteers and attracting new volunteers. The KSLA evening is also seen as a great networking opportunity and one where all sport and leisure groups come together.

## **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

### **Connection, Resilience & Wellbeing**

Strategy 4.1 - Support our community to improve their physical, mental and social health and wellbeing.

Strategy 4.2 - Foster inclusivity, equality, belonging and safety within the community.

Strategy 4.4 - Support the community to identify and lead community strengthening initiatives.

### **Civic Engagement & Integrity**

Strategy 5.3 - Ensure our processes are transparent and decisions are accountable.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

Confidential Attachments 1, 2, and 3 are included in the confidential agenda, as it contains confidential information pursuant to Council's Governance Rules and Section 66 of the Local Government Act 2020, as it relates to personal information, being the names and details of award winners which would be unreasonable to disclose publicly, or to disclosure before they are awarded.

**Report Prepared By:** Club Development Project Officer, Dayna Nicholas  
**Report Authorised By:** Director Connected Communities, Judy Chalkley

## **Attachments**

Nil

## 8.5 Knox Arts & Culture Committee

**SUMMARY: Coordinator Arts and Cultural Services, Elissa Bates**

**The Knox Arts and Culture Committee (2021-2023) comprises 12 community members and four industry members, who provide a diverse range of specialist skills, experience and industry knowledge in arts and culture management. The Committee performs as a strategic consultative group who guides the planning, development and evaluation of Council's Arts and Cultural Services, and provides insight into the local arts and cultural sector's needs and interests.**

**The current Knox Arts and Culture Committee (the Committee) are nearing completion of their two-year term, having delivered some significant outcomes during their term, including the review and development of new policies, re-scoping of Council's festivals, events and Immerse programs, recommendation and review of public artwork commissions and deaccessions, and provided leadership and guidance for arts recovery in a post-Pandemic environment.**

**The current Committee term will be complete on 30 June 2023, which prompts the recruitment campaign for new membership to the Committee from 14 August 2023 to 14 August 2025.**

**The current Committee's Terms of Reference remain valid, with two minor updates proposed to align this document with the Knox Public Art Policy and extend its duration to align with the next Committee term, which would be 14 August 2025.**

### **RECOMMENDATION**

**That Council:**

- 1. Acknowledge the achievements of the Knox Arts and Culture Committee 2021-2023;**
- 2. Note Council's prior commitment at its Meeting held on 28 April 2021 to extend the Knox Arts and Culture Committee until 2025, now prompting the recruitment process for new membership from August 2023 to August 2025; and**
- 3. Adopt the minor changes proposed to the current Knox Arts and Culture Committee Terms of Reference 2021-2025 located in Attachment 1 and the updated clean version provided in Attachment 2.**

### **1. INTRODUCTION**

The function of the Committee is to facilitate stakeholder engagement which supports quality decision making and in turn, the achievements of Council's goals and strategies under the Community and Council Plan.

The Committee provides Council with strategic advice on issues relating to the advancement of arts and culture in Knox. It assists in promoting greater awareness and understanding of arts and cultural services in Knox, and the value of arts and culture in supporting community health and wellbeing. The Committee also provides Council with direct insight into the local needs, interests and trends in arts, culture and creative industry development in Knox.



The objectives of the Committee are to:

- Provide advice and recommendations to Council on arts and cultural issues;
- Promote access to a diverse range of arts and cultural activities within the Knox;
- Assist Council in the development of arts and cultural policy, procedure and planning;
- Contribute ideas and recommendations on the key service portfolios of the Arts and Cultural Services Unit, such as Festivals and Events, Creative Placemaking, Community and Public Arts, Heritage and Arts and Cultural Venues;
- Advocate and promote arts and cultural development in Knox; and
- Actively network and build connections and opportunities for increased collaboration between the Knox Community and Council through arts and cultural initiatives.

The Committee has contributed significantly to a range of strategic reviews, service improvements and new initiatives during their term, and of note is their support and guidance for adapting our service in a post- Pandemic environment.

At its meeting held on 28 April 2021, Council resolved to: “Support the continuation of the Knox Arts and Culture Committee for a further four years until (July) 2025.” The current Committee membership two-year term sunsets on 30 June 2023, prompting a final report of this Committee to Council, followed by a recruitment campaign for new membership to the Committee for a two-year term from 14 August 2023 to 14 August 2025.

## **2. DISCUSSION**

### **2.1 Committee Overview 2021-2023**

The Committee provides an effective engagement tool for Council to collaborate and partner with local arts and cultural representatives in the review, development and monitoring of arts and cultural services, projects, events and programs that impact the wider Knox community.

Membership comprises a diverse suite of representatives across a variety of sectors including arts management, public art, visual arts, secondary and tertiary education, music and voice, festivals and events, performing arts, cultural development and arts venue management.

With quarterly meetings and a social end of year gathering, this Committee is actively engaged in strategic level discussions, and has a deep understanding of the issues that impact the Knox arts sector, Council’s role in supporting local arts and cultural development, and over the past year, insightful guidance on how to support recovery of the debilitated arts sector as a result of the Pandemic. Overall, the thoughtful and curious commentary on Council’s arts and cultural service planning, development and evaluation has had a profound impact on the way we deliver our services and has heightened our customer focused service modelling.

Members also advocate, participate and promote local partnerships between Council and local arts services, and take an active role within Council venues, programs, projects and events. This partnership modelling ensures socially engaged and highly relevant services within the local community and strengthens our community engagement practice.

Despite the interruptions of the Pandemic and the need to move to a largely online Committee format for the better part of the two-year term, attendance has been consistently high at both

virtual and in-person meetings. Four meetings were held in 2022/2023, and one social function at Miller's Homestead at Christmas in 2022.

## 2.2 Committee Membership 2021-2023

The current Committee comprises two Councillors, 12 Community members and four Industry members, as follows:

<b>Councillor Representatives</b>		
1	Councillor Sorina Grasso	Chair Knox Arts and Culture Committee Judge of Knox Factor Competition
2	Councillor Jude Wright	Deputy Mayor Chair of the Knox Arts Assessment Panel
<b>Community Representatives</b>		
1	Mark Grondman	The Basin Music Festival
2	Mudit Dhami	SLAMS Music Theatre Company
3	Olga Megele	Ferntree Gully Arts Society and Spring Parks Primary School, Visual Arts Specialist Teacher
4	Daniel van Bergen	Wantirna College, Leader of Performing Arts
5	Marten Visser	St Margaret's Berwick Grammar, Director of Music and Curriculum Leader of Performing Arts
6	Richard Bird	The Company of the Tavern
7	Dexter Bourke	1812 Theatre
8	Mark McDowell	Your Show Pty Ltd
9	Janette Anderson	Knox Photographic Society
10	Sarah Hopkins	Eastern Regional Libraries
11	George Thompson	Basin Theatre Company
12	Kathy Kermanidis	Drumming Circle
<b>Industry Representatives</b>		
1	Larry Parkinson	Swinburne University – TAFE
2	Julia Zhu	Heide Museum of Modern Arts
3	Travis Clarke	Lighthouse Events Group – Holmesglen University
4	Shane Hulbert	RMIT University School of Art, Associate Dean, Photography

Councillor Susan Larkins and the Mayor, Councillor Marcia Timmers-Leitch, both participated as active members of the Committee until December 2022, after which time they nominated to other Council Committees.

## 2.3 Committee Achievements 2021-2023

The Committee has been instrumental in a range of key arts and cultural service planning, development and evaluation during their two-year term, meeting four times per year plus one social event. Some of their key achievements include:

- Review of the arts based COVID-19 Recovery business grants managed by Council.
- Support in the development of two Community Event Kits, funded through the Victorian Government Outdoor Activation Fund as a post-COVID recovery initiative.
- Review of Miller's Homestead year one tenancy arrangement with Eastern Regional Libraries and their success in meeting the brief as an Arts and History Centre.

- Program planning, partnerships and evaluation of Major Festival and Events 2021-2023:
  - Knox Festival.
  - Stringybark Festival.
  - Carols by Candlelight.
  - Knox Factor Competition.
- Review of Year One and Two of Council’s Community Event Support Services, providing feedback on event permit processes, event management resources and training provisions.
- Review of the annual Pop-Up Events Schedule, providing insight into the interests, locations and themes suitable for this neighbourhood activation program.
- Program planning, partnerships and evaluation of Pop Up events 2021-2023, such as:
  - Virtual Arts Events and performances through 2021.
  - Moonlight Drive-In at Knox Community Arts Centre.
  - Sumer Sunset at Gilbert Park.
  - The Haunted Theatre at Knox Community Arts Centre.
  - Play Park 257 Activations and Twilight Movie Series.
- Review of the Knox Public Arts Policy and Knox Civic Art Policy, supporting detailed evaluation of current policies, benchmarking, research and final draft review of the endorsed Council policies.
- Guidance, review and partnerships for the Ferntree Gully Creative Placemaking Project and support for the funding application to the Victorian Government.
- Participation in the Arts Assessment Panel, reviewing many local murals and lightbox gallery installations as part of Boronia Renewal and Ferntree Gully Placemaking Plan. Review of major public art commission works for Knox Regional Netball Centre, Erica Avenue, Fairpark, Knox Central Library and Rowville Library, and review of works proposed for restoration or deaccession.
- Guided the rescoping of Immerse Arts Festival biennial as a local winter arts festival to support the local arts and visitor economy in colder months. Refocusing towards the Public Art Trail, local arts-venue partnerships and a variety of interactive public art programs planned for Winter 2024.
- Review of the Ferntree Gully Community Arts Program with the aim to diversify the programming and broaden the engagement, outcomes to be realised in Term 2,2023.

These contributions have supported Council in making effective decisions regarding arts and cultural service provisions and have directly contributed to guiding Council’s ability to offer meaningful support to local arts and cultural groups and services as they recovered from extreme economic hardship due to the Pandemic.

#### **2.4 New Committee Membership 2023-2025**

As per the commitment made by Council in 2021, it is recommended that continued engagement of an Arts and Culture Committee is vital for a further two years until 2025. This will prompt the commencement of a campaign to recruit new and eligible returning members to the Committee for a term duration, from 14 August 2023 to 14 August 2025. The recruitment of members for 2023-2025 will be undertaken in partnership with People, Culture and Development using the “Better Impact” process for volunteer recruitment, an online application and induction process.

## 2.5 Updates to the Terms of Reference

To support the continued operation of the Knox Arts and Culture Committee, the Terms of Reference (2021-2025) have been reviewed. The following minor updates are recommended for Council endorsement:

1. Extend the life span of the Terms of Reference to align with the new Committee term, formerly sunsetting in May 2025, to new sunset date of August 2025; and
2. Include the formal acknowledgement of the Committee's role in the Knox Art Assessment Panel (AAP) as detailed in Attachment 1, Item 3.4. A summary of this inclusion is that between two and four members of the Committee will take part in the AAP for their two-year term, and at least one Councillor will act as Chair, as supported by the Council endorsed Public Art Policy (2022-2026).

## 3. CONSULTATION

Key engagement and consultation timeline is as follows:

Activity	Proposed Dates
Report to seek Council support for a further two-year term for this Committee, operating alongside the updated Terms of Reference	22 May 2023
Recruitment of new Committee members 2023-2025 – EOI Open via “Better Impact” Volunteer Recruitment Framework (four weeks)	24 May to 21 June 2023
Applications reviewed by Panel. Draft report presenting proposed Committee membership for 2021-2023	26 June to 14 July 2023
EMT report for proposed Committee membership for 2023-2025	25 July 2023
SPC Meeting: Report presenting proposed Committee membership for 2023-2025	14 August 2023
Knox Arts and Culture Committee Members 2023-2025 commences two-year term alongside updated Terms of Reference	14 August 2023 to 14 August 2025

## 4. CLIMATE CHANGE CONSIDERATIONS

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council's Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

## 5. ENVIRONMENTAL/AMENITY CONSIDERATIONS

There are no environmental issues related to this report.

## 6. FINANCIAL & ECONOMIC IMPLICATIONS

The Committee requires an operational budget allocation of approximately \$2,000 to support catering and materials required for meetings and is funded within existing operational resources.

## 7. SOCIAL IMPLICATIONS

The Knox Arts and Cultural Committee is the strategic conduit between Council and the community that enables a deeper understanding of the impact of Arts and Cultural Services on the health and wellbeing of a community, and how the Service might positively contribute to the social and cultural connections between members of our diverse community.

## **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

### **Connection, Resilience & Wellbeing**

Strategy 4.1 - Support our community to improve their physical, mental and social health and wellbeing.

Strategy 4.2 - Foster inclusivity, equality, belonging and safety within the community.

### **Civic Engagement & Integrity**

Strategy 5.1 - Provide opportunities for all people in Knox to have their say.

Strategy 5.3 - Ensure our processes are transparent and decisions are accountable.

## **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

## **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By:** Coordinator Arts and Cultural Services, Elissa Bates

**Report Authorised By:** Director Connected Communities, Judy Chalkley

### **Attachments**

1. Attachment 1 - Terms of Reference - Knox Arts & Culture Committee - 2021-2025 - Proposed Changes [8.5.1 - 6 pages]
2. Attachment 2 - Terms of Reference - Knox Arts & Culture Committee - 2021-2025 - Updated clean copy [8.5.2 - 6 pages]



## Knox Arts & Culture Committee

<b>Directorate:</b>	Connected Communities		
<b>Approval by:</b>	Council	<b>Responsible Officer:</b>	Coordinator Arts & Cultural Services
<b>Approval Date:</b>	10 May 2021	<b>Version Number:</b>	<u>4</u>
<b>Review Date:</b>	<del>10 May</del> <u>14 August</u> 2025		

### 1. Purpose

The function of the Knox Arts and Culture Committee is to facilitate stakeholder engagement which supports quality decision making and in turn, the achievements of Council's goals and strategies under the Community and Council Plan.

The Knox Arts and Culture Committee (the Committee) provides Council with strategic advice on issues relating to the advancement of arts and culture in Knox. It assists in promoting greater awareness and understanding of arts and cultural services in Knox, and the value of arts and culture in supporting community health and wellbeing. The Committee also provides Council with direct insight into the local needs, interests and trends in arts, culture and creative industry development in Knox.

### 2. Objectives

The objectives of the Committee are to:

- Provide advice and recommendations to Council on arts and cultural issues.
- Promote access to a diverse range of arts and cultural activities within the Knox.
- Assist Council in the development of arts and cultural policy, procedure and planning
- Contribute ideas and recommendations on the key service portfolios of the Arts and Cultural services Unit, including but not limited to Festivals and Events, Community and Public Arts, and Cultural Venues;
- Advocate and promote arts and cultural development in Knox; and
- Actively network and build connections and opportunities for increased collaboration between the Knox Community and Council through arts and cultural initiatives.

The Committee supports the delivery of the following Knox Community & Council Plan goals:

Goal 1. We value our natural and built environment.

Goal 7. We are inclusive, feel a sense of belonging and value our identity.

The Arts and Culture Committee is aligned to the 'Inclusive, Active and Creative Communities' Group. Whilst the individual committees will meet at the designated times within its Terms of Reference each 'group' will meet once annually, this will generally be between October to December each year. A designated Directorate will be responsible for coordinating group meetings.

The purpose of these meetings will be to:

- Provide feedback to group on priorities for individual committees;
- Update group of progress of key issues; and



- Identify synergies between groups and links to progressing the Community and Council Plan.

In addition to group meetings, all committees will be provided with an opportunity to meet together annually. The 'annual advisory committee' sessions will generally be held between April or May each year and will be coordinated by the Governance team. The purpose of these meetings will be to:

- Report on progress by Council against Community and Council Plan;
- Provide overview of industry trends and Council priorities for the upcoming year;
- Consider synergies and opportunities for sharing information and collaboration; and
- Deliver training to support to committees.

### 3. Membership, Period of Membership and Method of Appointment

The Arts & Culture Committee shall comprise the following:

- A maximum of 12 community members
- A maximum of 4 industry members (including any relevant government agency representatives)
- 3 Councillors

#### 3.1 Selection and Recruitment of Community and Industry Representative Members

The process to appoint community members will be advertised on Council's website, digital platforms, publications and through local networks. Applicants must make an application via an online expression of interest process.

Submissions for community and industry membership will be assessed alongside the following selection criteria:

- Live, work or study in Knox, or regularly participate in Knox Arts and Cultural activities;
- Demonstrate an interest and knowledge of Arts and Cultural activities within Knox, including services, events, venues, programs, projects and initiatives offered through Council, Community and local Businesses;
- Contribute specialist skills and experience in one of more areas of Arts and Culture, including but not limited to Cultural Development, Arts Management, Public Art, Arts Facilities, Programming, Arts Education, Event Management, Placemaking, Cultural Tourism, Arts Marketing, Community Engagement, Creative Industry Development, Arts Funding, Performance or Creative Arts Practice; and
- Offer insight into the social, cultural, environmental and economic factors impacting the wider Knox community and how these may influence local arts and cultural service delivery.

The approach and method for appointing representatives will include the following:

- Community and industry members will be selected by a panel comprising a Councillor and 2 Council Officers from the relevant service unit;
- The method of appointment will be via an online expression of interest process;
- Members will be appointed for a two year term;
- All members will be eligible to re-apply for appointment, however continuous membership for longer than four years will not be considered, unless otherwise recommended by the Committee Chair and endorsed by Council on a case by case basis;
- Council will be responsible for appointing all Councillor, community and industry representative members; and



- Casual vacancies which occur due to community or industry members being unable to complete the full term of their appointments, may be filled by co-opting suitable candidates from a previous selection process for the remainder of the previous incumbents' terms, or where the previous applications are unsuitable, new members may be recommended and must apply as per Item 3.1. The selection panel will make a recommendation to the CEO, who will have the authority to appoint the recommended candidate/s to the committee for the remainder of the previous incumbent's term.
- Community and Industry representatives unable to attend a committee meeting are able to nominate a proxy or alternate member from the organisation they represent. Any proxy attendance should be notified to Council's nominated officer at least 24 hours prior to the meeting. It is expected the Committee member will provide an appropriate briefing of the committee purpose and objectives and relevant meeting notes to enable active participation and contribution of the proxy representation within the meeting.
- The committee Chair may invite observers to meetings from time to time. This is at the discretion of the committee.
- The committee Chair may invite guests to attend and participate at meetings, this would generally be for a specific purpose and/or specified period of time. This is at the discretion of the committee.

### 3.2 Councillors

Council will appoint Councillor representation annually.

Unless otherwise appointed to the committee by Council, the Mayor is, by virtue of the Office, an ex officio member of the committee. It is important that whilst the Mayor may not chair these meetings, appropriate recognition should be given to the presence of the Mayor if in attendance.

The role of Councillors is to participate in the meetings, review Agendas and Minutes, listen to community and stakeholder views and keep the Council informed, through reports on committees by Councillors at Council meetings, on issues of community and Council interest being considered at meetings.

### 3.3 Council Officers

Council officers will be nominated to support the committee by the CEO as required to provide advice and administrative support to the committee.

### 3.4 Arts Assessment Panel Membership

The Art Assessment Panel (AAP) is a working group that assesses and makes recommendations for the acquisition and deaccession of public art and civic art collection items, as per the Knox Public Art Policy (2022 – 2026). Community and Councillor representation on the AAP is derived from the Knox Arts and Culture Committee, joining key internal officers.

At the commencement of the two year term for Knox Arts and Culture Committee members, between two and four community/industry members will be nominated to be members of the AAP for their Committee term, with a preference for nominated members to demonstrate experience in visual arts management. At least one Councillor will be also nominated from the Committee, who will take on the role of AAP Chair. Where multiple Arts and Culture Committee Councillors wish to take part in the AAP, the role of Chair will be given to the Mayor or Deputy Mayor, or negotiated where this does not apply. Other Councillors may also take part in the AAP, by negotiation with the AAP Chair.

Meetings of the AAP are ad-hoc as required (approximately 4 per year), and some decisions may be made via email. The AAP members will regularly report back to the Knox Arts and Culture Committee on outcomes.





#### 4. Delegated Authority and Decision Making

The committee acts in an advisory capacity only and has no delegated authority to make decisions on behalf of Council.

#### 5. Meeting Procedures

The committee will meet approximately every three months with a minimum of four meetings per year, and an annual schedule of meetings will be agreed upon at the first meeting of the committee in each year. The committee will also be invited to participate in the 6 monthly Group Meetings and the annual advisory committee Forum.

The committee is not required to give public notice of its meetings and its meetings are not open to the public.

At the commencement of each financial year the committee will develop a work plan for the upcoming year. This will generally be aligned with the Community and Council Plan. The committee may also highlight any emerging issues which will also be documented. For efficiency purposes the business of the committee throughout the ensuing year should align with the work plan and list of emerging issues.

Meetings will follow standard meeting procedure protocols, which are in summary:

- Commence on time and conclude by the stated completion time;
- Be scheduled and confirmed in advance with all relevant papers distributed (as appropriate) to each member;
- Encourage fair and reasonable discussion, participation and respect for each other's views;
- Focus on the relevant issues at hand; and
- Provide advice to Council as far as possible on a consensus basis.

#### 6. Chair

The position of Chairperson shall be held by a Councillor and shall be reviewed annually immediately following Councillor appointments to committees. The position of Chairperson is to be agreed upon between Councillors. When this cannot be achieved, the Mayor of the day shall determine the Chair.

If the Chairperson is not present at a meeting, any other Councillor who has been appointed to the committee shall be appointed Chairperson. In the absence of any other Councillor representative/s, a staff member appointed by the relevant Director may Chair the meeting.

#### 7. Agendas and Meeting Notes

Agendas and meeting notes must be prepared for each meeting.

The Agenda must be provided to members of the committee not less than 4 days before the time fixed for the holding of the meeting.

The Chairperson must arrange for meeting notes of each meeting of the committee to be kept.

The meeting notes of a Council Committee must:

- (a) contain details of the proceedings and recommendations made;
- (b) be clearly expressed;
- (c) be self-explanatory; and



(d) incorporate relevant reports or a summary of the relevant reports considered by the committee.

Draft meeting notes must be:

- (a) submitted to the Committee Chairperson for confirmation within 7 days of the meeting;
- (b) distributed to all Committee Members following confirmation from the Chairperson and within 14 days of the meeting; and
- (c) submitted to the next meeting of the Committee for information.

In compliance with section 58 of the 2020 Act and the requirements of the Council's Public Transparency Policy the agenda and minutes of this group will be made available on Council's website unless:

- the information contained in the agenda and/or minutes is confidential by virtue of the 2020 Act or any other Act; or
- the public availability of the information has been deemed by the Chief Executive Officer or nominee to be contrary to the public interest.

## 8. Voting

As this is an advisory committee, voting on issues is not required. Any recommendations will generally be developed through consensus. Where a matter cannot be agreed the differing opinions should be clearly expressed in the notes of the meeting.

## 9. Conflict and Interest Provisions

In performing the role of Advisory Committee member, a person must:

- Act with integrity;
- Impartially exercise his or her responsibilities in the interests of the local community;
- Not improperly seek to confer an advantage or disadvantage on any person;
- Treat all persons with respect and have due regard to the opinions, beliefs, rights and responsibilities of other persons;
- Commit to regular attendance at meetings; and
- Not make improper use of information acquired because of their position or release information that the member knows, or should reasonably know, is confidential information.

Meetings of the Panel will typically constitute a Meeting Conducted under the Auspices of Council pursuant to Council's Governance Rules and Councillors are consequently required to comply with the conflict of interest provisions as set down in section 131 of the 2020 Act and Chapter 5 of the Council's Governance Rules.

Councillors must:

- disclose that conflict of interest by explaining the nature of the conflict of interest to those present immediately before the matter is considered;
- absent themselves from any discussion of the matter; and
- as soon as practicable, provide the CEO with a written notice recording the nature of the conflict.

Where a member of staff or a community member has a conflict of interest or perceived conflict of interest in relation to a matter before the Group, they must disclose the matter to the group before the matter is



considered or discussed. Disclosure must include the nature of the interest and be recorded in the meeting notes. It will be at the discretion of the Chairperson if the staff and/or community member remains or leaves the room whilst the matter is discussed, and this must also be recorded in the notes of the meeting.

All members of the Advisory Committee shall participate in training on the Conduct and Interest provisions which will be run a minimum of annually by the Governance team.

## 10. Reporting

The committee will prepare a formal report on an annual basis in line with their stated objectives. The report must be adopted by the committee and should directly reflect the objectives and the performance measures of the committee as set out in the Terms of Reference. Once adopted by the committee the report will be presented to Council.

## 11. Administration Support

Administration support will be provided by the Connected Communities Directorate.

## 12. Contact with the Media

Contact with the Media by Advisory Committee members will be conducted in accordance with the Councillor and Staff Media Policies. Community members should defer any media enquiries to the Chairperson in the first instance and should take care not to respond as a representative of the committee.

## 13. Review Date

The committee will sunset after 4 years. If the committee continues to have a relevant function, a report must be presented to Council prior to this date that includes a review of the committee's Terms of Reference and seeking endorsement from Council to continue act in an advisory capacity.

## 14. Meals

The provision of refreshments during the course of a committee meeting will be provided in accordance with the Meals and Beverages for Council Committees Policy.

## 15. Administration Updates

From time to time, circumstances may change leading to the need for minor administrative changes to this document. Where an update does not materially alter this Terms of Reference, such a change may be made administratively. Examples of minor administrative changes include change to names of Council departments or positions, change to names of Federal or State Government departments or a minor amendment to legislation that does not have material impact. Where any change or update may materially change the intent of this Terms of Reference, it must be considered by Council at a Council or delegated Committee meeting.



## Knox Arts & Culture Committee

<b>Directorate:</b>	Connected Communities		
<b>Approval by:</b>	Council	<b>Responsible Officer:</b>	Coordinator Arts & Cultural Services
<b>Approval Date:</b>	10 May 2021	<b>Version Number:</b>	4
<b>Review Date:</b>	14 August 2025		

### 1. Purpose

The function of the Knox Arts and Culture Committee is to facilitate stakeholder engagement which supports quality decision making and in turn, the achievements of Council's goals and strategies under the Community and Council Plan.

The Knox Arts and Culture Committee (the Committee) provides Council with strategic advice on issues relating to the advancement of arts and culture in Knox. It assists in promoting greater awareness and understanding of arts and cultural services in Knox, and the value of arts and culture in supporting community health and wellbeing. The Committee also provides Council with direct insight into the local needs, interests and trends in arts, culture and creative industry development in Knox.

### 2. Objectives

The objectives of the Committee are to:

- Provide advice and recommendations to Council on arts and cultural issues.
- Promote access to a diverse range of arts and cultural activities within the Knox.
- Assist Council in the development of arts and cultural policy, procedure and planning
- Contribute ideas and recommendations on the key service portfolios of the Arts and Cultural services Unit, including but not limited to Festivals and Events, Community and Public Arts, and Cultural Venues;
- Advocate and promote arts and cultural development in Knox; and
- Actively network and build connections and opportunities for increased collaboration between the Knox Community and Council through arts and cultural initiatives.

The Committee supports the delivery of the following Knox Community & Council Plan goals:

Goal 1. We value our natural and built environment.

Goal 7. We are inclusive, feel a sense of belonging and value our identity.

The Arts and Culture Committee is aligned to the 'Inclusive, Active and Creative Communities' Group. Whilst the individual committees will meet at the designated times within its Terms of Reference each 'group' will meet once annually, this will generally be between October to December each year. A designated Directorate will be responsible for coordinating group meetings.

The purpose of these meetings will be to:

- Provide feedback to group on priorities for individual committees;
- Update group of progress of key issues; and



- Identify synergies between groups and links to progressing the Community and Council Plan.

In addition to group meetings, all committees will be provided with an opportunity to meet together annually. The 'annual advisory committee' sessions will generally be held between April or May each year and will be coordinated by the Governance team. The purpose of these meetings will be to:

- Report on progress by Council against Community and Council Plan;
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#### 6. Chair

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- Commit to regular attendance at meetings; and
- Not make improper use of information acquired because of their position or release information that the member knows, or should reasonably know, is confidential information.

Meetings of the Panel will typically constitute a Meeting Conducted under the Auspices of Council pursuant to Council's Governance Rules and Councillors are consequently required to comply with the conflict of interest provisions as set down in section 131 of the 2020 Act and Chapter 5 of the Council's Governance Rules.

Councillors must:

- disclose that conflict of interest by explaining the nature of the conflict of interest to those present immediately before the matter is considered;
- absent themselves from any discussion of the matter; and
- as soon as practicable, provide the CEO with a written notice recording the nature of the conflict.

Where a member of staff or a community member has a conflict of interest or perceived conflict of interest in relation to a matter before the Group, they must disclose the matter to the group before the matter is





considered or discussed. Disclosure must include the nature of the interest and be recorded in the meeting notes. It will be at the discretion of the Chairperson if the staff and/or community member remains or leaves the room whilst the matter is discussed, and this must also be recorded in the notes of the meeting.

All members of the Advisory Committee shall participate in training on the Conduct and Interest provisions which will be run a minimum of annually by the Governance team.

## 10. Reporting

The committee will prepare a formal report on an annual basis in line with their stated objectives. The report must be adopted by the committee and should directly reflect the objectives and the performance measures of the committee as set out in the Terms of Reference. Once adopted by the committee the report will be presented to Council.

## 11. Administration Support

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## 12. Contact with the Media

Contact with the Media by Advisory Committee members will be conducted in accordance with the Councillor and Staff Media Policies. Community members should defer any media enquiries to the Chairperson in the first instance and should take care not to respond as a representative of the committee.

## 13. Review Date

The committee will sunset after 4 years. If the committee continues to have a relevant function, a report must be presented to Council prior to this date that includes a review of the committee's Terms of Reference and seeking endorsement from Council to continue act in an advisory capacity.

## 14. Meals

The provision of refreshments during the course of a committee meeting will be provided in accordance with the Meals and Beverages for Council Committees Policy.

## 15. Administration Updates

From time to time, circumstances may change leading to the need for minor administrative changes to this document. Where an update does not materially alter this Terms of Reference, such a change may be made administratively. Examples of minor administrative changes include change to names of Council departments or positions, change to names of Federal or State Government departments or a minor amendment to legislation that does not have material impact. Where any change or update may materially change the intent of this Terms of Reference, it must be considered by Council at a Council or delegated Committee meeting.

## 8.6 Road Management Plan

**SUMMARY: Alexander Bourke, Asset Engineer – Sustainable Infrastructure**

The Road Management Act (the Act) was introduced in 2004 as a means to ensure Road Authorities manage their road networks in a more proactive and responsible manner. Road Management Plans must identify responsibilities, maintenance standards and inspection standards required to manage civil liability claims and must demonstrate that Council is responsibly managing all road assets within its control.

The Knox Road Management Plan (RMP) has recently undergone a comprehensive review, with significant administrative changes being made around the document's presentation and format to streamline the Road Management Plan into one self-contained document with less reliance on attachments.

In reviewing the RMP, Council's insurers and internal auditor have recommended that key non-road related asset categories (including street trees/roadside vegetation) be excised from the Plan. The review of the Plan incorporated all service standards previously included. As a result of this review - which incorporated benchmarking against plans of similar Councils - service standards have been removed and/or consolidated. These changes result in a more concise and navigable document.

The revised Road Management Plan was endorsed as a draft by Council on 30 January 2023 to be presented for public consultation and feedback on the Council Have your say webpage. The feedback received was more general and didn't directly to the RMP content. Feedback and concerns were responded to and referred to relevant departments for follow-up where necessary.

### RECOMMENDATION

That Council:

1. Endorse the Knox Road Management Plan 2023 attached to this report;
2. Note that this update to the Knox Road Management Plan incorporates a major review of the previous iteration of the plan and modifications to reflect advice received from both Council's internal audit process and Council's insurers.
3. Note that in developing this plan, a significant benchmarking exercise against Road Management Plans of equivalent Councils was undertaken to assist in defining maintenance service standards.
4. Note that adopting a Road Management Plan and executing the articulated maintenance standards and inspection standards provides Council with a policy defence against liability claims.

### 1. INTRODUCTION

The Knox Road Management Plan (RMP) sets out Council's approach to the inspection, maintenance and repair of its public roads and road related assets. If complied with, the RMP provides Council with a policy defence against civil liability claims associated with management of the road network.

Under Section 39(4) of the Road Management Act (2004):

*“A road authority is to be taken to have made a policy or policy decision relating to a road management function if the road authority has made a road management plan that includes provisions relating to the performance of that road management function.”*

The Knox Road Management Plan was initially developed in accordance with the Road Management Act (2004), supporting Regulations and Codes of Practice. It was reviewed in 2006, 2009, 2013, 2017, and 2021. Amendments occurred in 2006, 2010, 2015 and 2017.

The RMP was subject to formal review in accordance with the Road Management (General) Regulations (2016), which was undertaken in 2021, recommendations from which directed the core changes made during this update. Council endorsed this Road Management Plan review in June 2021.

This report introduces the Knox Road Management Plan 2023 as presented in Appendix A. The amended Road Management Plan was endorsed by Council as a draft on 30 January 2023 to be made publicly available as specified in the Road Management Act (2004) – Part 4 – Management of Roads – Clause 54:2, which states:

*“If a road authority proposes to make a road management plan, the road authority must give a notice stating—*

- (a) the purpose and general purport of the proposed road management plan;
- (b) where a copy of the proposed road management plan can be obtained or inspected;
- (c) that any person who is aggrieved by the proposed road management plan may make a submission on the proposed road management plan to the road authority within the period specified in the notice

– (54:3)

*“The road authority must allow at least 28 days after the day on which a notice is given under subsection (2) for the making of submissions.”*

This public consultation period on the Council ‘Have Your Say’ portal received general feedback concerning the operation and maintenance of the council road network however none directly regarding the Road Management Plan or its contents. Resident queries we’re responded to where appropriate and forwarded onto relevant departments if actionable.

## **2. DISCUSSION**

This RMP amendment has aimed to improve the overall accessibility of the document by presenting a more concise and readable version. As recommended by internal stakeholders and in alignment with advice received by Council’s insurers and Council’s internal audit recommendations, the new RMP has also been presented to be read as an all-inclusive document with less reliance on external attachments. Most of the previous attachments have been excluded from the plan and/or embedded into the main document to align with other modern RMPs.

Attachment	Action
Public Road Register	Removed – Available Online
Road and Path Hierarchies	RMP Appendix
Maintenance Activities/Service Agreements	RMP Appendix
Demarcations and Operational Agreements	RMP Appendix
VicRoads Schedule	Maintained
VicRoads Code of Practice	Maintained
Instrument of Delegation	Maintained
Glossary of Terms	Embedded in Document
Work Order System	Embedded in Document
Integrated Risk Management Process	Embedded in Document
Revision Schedule	Embedded in Document

Maintenance Activities/Service Standards were updated to read as a more succinct list of activities managed under the plan. Most of the new maintenance activities consolidate several standards identified in the previous plan, especially where they shared the same initial response and rectification timeframe.

A review of asset types to be included in the Road Management Plan - as recommended by Council's insurers and internal auditor - was undertaken and non-road infrastructure assets such as roadside vegetation and roadside furniture were removed from maintenance activities covered in the RMP. Management of these removed assets will be serviced and maintained by the same delivery department with service standards captured in related strategic documents such as the Road Asset Management Plan (RAMP) and record keeping of these activities will be maintained, however it's not appropriate for them to be stored in the RMP as it subjects Council to potentially unnecessary claims.

An overview of key service level changes by asset category is presented in Appendix 1 of this report, noting occasions where there is a merging of multiple maintenance activities from the previous Road Management Plan into a consolidated maintenance activity in the updated Road Management Plan. There exists one new category in the Plan – "Obstructions" - which was developed to replace common previous activities which sat across multiple asset service levels groupings.

### 3. CONSULTATION

Internal consultation was undertaken through establishment of an officer-led Road Management Plan Reference Group, which considered and provided feedback on key matters raised by both the insurance audit and internal audit processes and feedback received from operations teams with responsibility for delivering on service standards within the Plan.

The revised Road Management Plan as a draft was presented for public consultation on Council's Have your Say web portal and sought to identify relative priorities from the community of competing road management maintenance activities. The feedback received through the Have Your Say website wasn't directly relevant to the contents/intent of the Road Management Plan. Most feedback was more generally directed towards operational road maintenance matters. Each of the feedback concerns raised have been referred – where necessary - to the relevant departments.

It should be noted that receiving community feedback on previous road management plans has proved challenging since its original adoption in 2006. Legislation requires that changes to Road Management Plans requires exhibition in the Victorian Government Gazette.

#### **4. CLIMATE CHANGE CONSIDERATIONS**

Implementation of the recommendation is considered to have no direct implications or has no direct impacts upon Council's Net Zero 2030 target, the Community Net Zero 2040, exposure to climate risks or climate change adaptation.

#### **5. ENVIRONMENTAL/AMENITY CONSIDERATIONS**

There are no environmental issues associated with the Road Management Plan. Amenity, in terms of road performance for users may be influenced by targeted adjustments to maintenance service standards.

#### **6. FINANCIAL & ECONOMIC IMPLICATIONS**

Any work required to implement proposed amendments or any implications from potential amendments to maintenance service standards has been established to align with current budget capacity. Any enhanced service levels, as identified by Council or the community will require that equivalent financial efficiencies be found within other areas of the road management budget. While some maintenance standards have been excised from the Road Management Plan, it is not proposed that these elements will incur a loss of service, acknowledging that operational budgets will be retained to support these services. The monitoring and record of these maintenance standards will be maintained in other strategic documents.

#### **7. SOCIAL IMPLICATIONS**

The road network has an impact on all community groups by providing connectivity across the municipality, as well as by providing economic benefits. The Road Management Plan documents how Council's roads are managed and to what service standards – it is imperative it is reviewed, updated and amended regularly to reflect current community expectations and Council's available resources. The legislated review recognises the importance of the community's input by seeking to create an opportunity for residents to inform Council of their expectation.

#### **8. RELEVANCE TO KNOX COUNCIL PLAN 2021-2025**

##### **Neighbourhoods, Housing & Infrastructure**

Strategy 2.2 - Create, enhance and maintain places and spaces for people to live, work, play and connect.

Strategy 2.3 - Provide, maintain and advocate for accessible and sustainable ways to move around Knox.

#### **9. CONFLICT OF INTEREST**

The officers contributing to and responsible for this report have no conflicts of interest requiring disclosure under Chapter 5 of the Governance Rules of Knox City Council.

#### **10. CONFIDENTIALITY**

There is no content in this report that meets the definition of confidential information from the Local Government Act 2020.

**Report Prepared By:** Asset Engineer, Alexander Bourke

**Report Authorised By:** Director, Infrastructure, Grant Thorne

**Attachments**

1. Road Management Plan 2023 - Maintenance Activity Updates [**8.6.1** - 9 pages]
2. Knox Road Management Plan 2023 [**8.6.2** - 35 pages]

**Bridges & Culverts**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Bridge or Culvert damage that poses injury or damage to users.	<ul style="list-style-type: none"> <li>• B&amp;C-REA-072 - Road Bridge Maintenance IR: 2 days, R:64 days</li> <li>• B&amp;C-REA-073 - Pedestrian Bridge &amp; Boardwalk Maintenance IR: 2 days, R:64 days</li> </ul>	Component damage or deterioration is presenting a hazard to road or path users	2 days	64 days

**Bus Shelters**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Bus Shelter & Surrounds Repair	<ul style="list-style-type: none"> <li>• BS-REA-053 - Bus Shelter &amp; Surrounds Repair IR: 3 days, R:64 days</li> </ul>	Temporary repair/ protective works to broken/damaged panels, seating of Council owned bus shelters which impact road reserve.	3 days	64 days

**Drainage / Stormwater**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Flood impacting road use	<ul style="list-style-type: none"> <li>• D-REA-064 - Clear Blocked Drainage Pipes IR: 3 days, R:100 days</li> </ul>	Flooding across the travel path of a road surface to a depth of 50mm at left wheel path.	3 days	120 days
2	Drainage Pipes, Pit Lids, Lintel Structure Repair	<ul style="list-style-type: none"> <li>• D-REA-063 - Clear Blocked Drainage Pipes &amp; Culverts IR: 3 days, R:120 days</li> <li>• D-REA-065 - Drainage Pit Lintel Repair IR: 3 days, R:120 days</li> <li>• D-REA-066 - Drainage Pit Lid/ Structure Repair (excluding lintels) IR: 3 days, R:120 days</li> </ul>	Provide temporary and/or permanent repair when: <ul style="list-style-type: none"> <li>• Pit covers or Lintel is missing, or dangerously broken or displaced to an extent that is likely to be a hazard to road users.</li> </ul>	3 days	120 days
3	<b>Removed</b>	<ul style="list-style-type: none"> <li>• D-REA-016 - Household Drainage Connection Repair</li> </ul>	Treatment to repair and/or replace non-functional household drainage connections (within the road reserve where it is proven that a Council Asset was the primary cause.		

**Footpaths**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous or Damaged Path	<ul style="list-style-type: none"> <li>FP-REA-027 - Concrete Footpath Maintenance IR: 3 days, R:50 days</li> <li>FP-REA-008 - Brick Paved Footpath Maintenance IR: 3 days, R:50 days</li> <li>FP-REA-029 - Asphalt Footpath Maintenance IR: 3 days, R:50 days</li> </ul>	Provide Temporary or permanent repair of surface if: <ul style="list-style-type: none"> <li>Asphalt / Concrete : 20mm Displacement</li> <li>Brick : 20mm Vert Displacement / 10mm paver gap</li> <li>Unsealed : &gt;50mm deep pothole, 300mm in diameter.</li> </ul>	3 days	50 days
2	Dangerous Path Surrounds (Edge Drop/Shoulder Repair)	<ul style="list-style-type: none"> <li>FP-REA-046 - Edge/ Shoulder Repair IR: 5 days, R:64 days</li> </ul>	Reduce hazard so path is safe for residents via providing a repair of depressions at the interface of the nature strip and constructed paths or by appropriate signage, or tape, bollards, fencing. <ol style="list-style-type: none"> <li>depressions &gt;50mm for Commercial footpaths</li> <li>depressions &gt;75mm for other footpaths</li> </ol>	5 days	64 days



**Kerb & Channel**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Kerb & Channel Repair	<ul style="list-style-type: none"> <li>K&amp;C-REA-014 - Kerb &amp; Channel Repair</li> </ul> IR: 3 days, R:150 days	Provide temporary repair measures for damaged kerb & channel which presents a direct hazard/or results in ponding of stormwater on trafficable areas along link, collector and industrial roads. 50mm at left wheel path (as above).	3 days	150 days

**Obstructions**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Obstructions	<b>New Maintenance Activity</b>	Removal of litter/dumped rubbish that poses a hazard to pedestrians and/or obstructs traffic movements, including visual obstructions to sightlines required to safely use the road. Temporary works may include placement of litter/dumped rubbish on nature strips until litter can be removed.	3 days	7 days

**Signage**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous, Damaged, Missing or obstructed Signage	<ul style="list-style-type: none"> <li>SI-REA-030 - Sign Maintenance - Regulatory/ Warning</li> </ul> IR: 2 days, R:32 days <ul style="list-style-type: none"> <li>SI-REA-032 - Sign Maintenance - Special Purpose/ Directional/ Street Name/ Parking</li> </ul> IR: 10 days, R:150 days <ul style="list-style-type: none"> <li>SI-REA-020A - Sign Obstruction – Pruning</li> </ul> IR: 3 days, R:32 days	a) Provide temporary and/or permanent repair of illegible/damaged/missing signs. b) Repair school crossing signage and posts to meet AS1742.10-1990 Pedestrian Control & Protection. c) Prune foliage obstructing regulatory/warning signs	3 days (Regulatory) 10 days (Other)	45 days (Regulatory) 150 days (Other)

**Roadside Furniture**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous or Damaged Fencing, Guideposts, or Guardrails	<ul style="list-style-type: none"> <li>RF-REA-032 - Maintain Fencing within Road Reserve</li> </ul> IR: 3 days, R:64 days <ul style="list-style-type: none"> <li>RF-REA-050 - Maintain Guard Rail</li> </ul>	Provide temporary and/or permanent repair to maintain functionality (i.e. rotten, corroded, broken, missing, vandalised) and/or if fencing poses a hazard to the public. <ul style="list-style-type: none"> <li>Distressed fencing &gt;15m • 50% of Guidepost is noticeably degraded</li> </ul>	3 days	64 days

		IR: 2 days, R:96 days • RF-REA-049 - Maintain Guide Posts IR: 3 days, R:32 days	• Replace posts when more than 10% of posts are missing on straights, more than 5% are missing on curves, or where more than two posts in a row are missing.		
2	<b>Removed</b>	• RF-REA-056 - Maintain Bins	Replace missing and/or damaged plastic wheelie bins and metal enclosures to maintain functionality.		
3	<b>Removed</b>	• RF-REA-058 - Fire Plug Marker Repair	Maintenance of fire hydrants as per South East Water protocols. • Straighten, repaint posts and/or replace markers.		
4	Hazardous or Damaged Non-Standard Street Lighting	• RF-REA-060 - Maintain Street Light Infrastructure IR: 5 days, R:150 days	Provide temporary and/or permanent repair to damaged standards/ poles/arms & masts for streetlights that are non-functional or a hazard to road users / pedestrians or property.	5 days	150 days
5	<b>Removed</b>	• RF-REA-055 - Bike Rack Repair • RF-REA-061 - Miscellaneous Roadside Furniture Maintenance	• Replace non-functional or missing bike racks with standard bike racks. • Provide temporary and/or permanent repair if furniture is non-functional, broken, vandalised, rotten, corroded or a hazard to road users/pedestrians and/or property.		

**Road Surface**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous Road Surface	• RS-REA-002 - Pothole Repair/ Minor Patching IR: 3 days, R:32 days • RS-REA-004 - Edge Repair IR: 3 days, R:32 days • RS-REA-007 – Regulation IR: 3 days, R:32 days	Provide temporary repair when failed area is >500mm in diameter and >50mm in depth with potential for pavement collapse and/or where other treatments have failed to remediate the pavement.  Distressed areas > 5m <sup>2</sup> are managed to mitigate risk and programmed for renewal.	3 days	32 days
2	Pavement Linemarking	• RS-REA-009 - Pavement Markings Maintenance IR: 3 days, R:150 days	Replace damaged/ dislodged or missing pavement markers (RRPMs & RPMs) on link, collector and industrial roads.  Reinstate faded linemarking on link roads and statcom markings associated with link roads, collector roads and designated school crossings.  Reinstate faded line marking (<50% effective reflectivity) on All Roads to meet Australian Standard AS1743.	3 days	150 days

3	Clear Hazardous Spill	<ul style="list-style-type: none"> <li>• RS-REA-011 - Clear Liquid Spillage IR: 1 days, R:1 days</li> <li>• RS-REA-010 - Clear Fuel Spillage IR: 1 days, R:1 days</li> </ul>	Temporary measures to limit access and clear fuel spill from road surface where there is a potential danger to traffic.	1 day	1 day
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**Shared Paths**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous or Damaged Path	<ul style="list-style-type: none"> <li>• SP-REA-027 - Concrete Shared Path Maintenance IR: 3 days, R:45 days</li> <li>• SP-REA-023 - Unsealed Shared Path Maintenance IR: 3 days, R:45 days</li> <li>• SP-REA-008 - Brick Paved Shared Path Maintenance IR: 3 days, R:45 days</li> <li>• SP-REA-029 - Asphalt Shared Path Maintenance IR: 3 days, R:45 days</li> <li>• SP-REA-046 - Edge/ Shoulder Repair IR: 3 days, R:64 days</li> </ul>	Provide Temporary or permanent repair of surface if: <ul style="list-style-type: none"> <li>• Asphalt / Concrete: 20mm Displacement</li> </ul> Clear dirt, silt & debris, or vegetation that is likely to cause slipping or is hazardous to the path user.	3 days	45 days
	<b>Removed</b> (Severe instances contained within obstructions)	Vegetation	Clear dirt, silt & debris that is likely to cause slipping or obstruction of stormwater flow into spoon drains. <ol style="list-style-type: none"> <li>Edge trim grass/ weeds extending &gt;200mm onto shared path - for All Shared paths;</li> <li>Remove weeds within constructed shared path area - for All Shared paths.</li> </ol>		

**Unsealed Roads**

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
1	Hazardous Unsealed Road (Grading /Edgedrop)	<ul style="list-style-type: none"> <li>• US-REA-023 - Unsealed Surface Repair (Grading) IR: 3 days, R:32 days</li> </ul>	a) Install temporary measures and/ or grade unsealed roads when rutting and corrugations exceed 50mm over 20% of the unsealed road surface and/or potholes exceed 450mm in diameter and 50mm deep over 20% of the unsealed road surface.	3 days	32 days

			<p>Treatment may include spot gravelling with crushed rock.</p> <p>b) Grade shoulder when edge drop from traffic lane to shoulder exceeds 50mm over 20m length under a 1.5m straight edge or when shoulder becomes rough or scoured. Trim lower edge of shoulder when build up holds water.</p>		
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### Roadside Vegetation

Roadside Vegetation is now contained within obstructions and only applies when vegetation or overgrowth causes an obstruction to the traffic lane/road reserve footpath resulting in an impedance to traffic flow.

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
	Removed	Line Clearance	Prune street trees to provide adequate clearance around overhead cables. Line Clearance in accordance with Electricity Safety (Electric Line Clearance) Regulations 2005.		
	Removed	Pruning - Street Trees & Shrubs	<p>Prune Street Trees and Shrubs (where no overhead powerlines exist) to comply with the following clearance limits:</p> <ul style="list-style-type: none"> <li>• Footpaths &amp; Shared Paths - 2.5m</li> <li>• Roadway - 5m (Link/industrial - 3.5m (other))</li> </ul> <p>Remove vegetation where no overhead powerlines exist within clearance sight triangles as per Austroads Guidelines Part 5 - Intersections at Grade (Table 5.3).</p>		
	Removed	Tree & Stump Removal	<p>Provide temporary protection works and/or remove dangerous street trees, tree stumps and/or limbs posing a potential hazard to road users/pedestrians or property.</p> <p>Trees/shrubs within identified significant vegetation areas are referred for impact assessment by Sustainability department prior to works.</p>		
	Removed	Blackberry Removal	Remove or control Blackberry infestations		
	Removed	Mowing / Edge Trimming - Nature Strip	a) Mow grass > 500mm high posing fire hazard and/or resulting in the accumulation of pests		



### Litter & Graffiti

Litter & Graffiti maintenance activities is now contained within obstructions and only applies when litter causes an obstruction and impedes traffic flow.

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
	<b>Removed</b>	Graffiti Removal	Remove offensive graffiti in line with Graffiti and Vandalism Management Plan and other graffiti within rectification timeframes		
	<b>Removed</b>	Litter Clearing/ Dumped Rubbish/ Debris/ Animal carcass	Removal of litter/ dumped rubbish that poses a hazard to pedestrians and/or obstructs stormwater flows and traffic movements (excluding cigarette butts & gum).  Temporary works may include placement of litter/ dumped rubbish on nature strips until litter can be removed.		

### Local Area Traffic Management Devices (LATMs)

Local Area Traffic Management (LATM) devices maintenance activities are now contained within obstructions and Kerb and Channel, to account for both structural damage and overgrowth that results in a physical obstruction, sightline issues.

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
	<b>Removed</b>	• LATM-REA-014A - Kerb & Constructed Infill Maintenance	Treatment to repair and/or regulate damaged, dislodged or settled traffic island and roundabout kerbs and/or constructed Provide temporary repair measures only for damaged kerb & channel < 4.8m in length which is likely to result in ponding.		
	<b>Removed</b>	• LATM-REA-019 - Weed Control and Surrounds Cleaning	Treatment to clean debris & remove weeds from constructed (brick paved/ concrete or asphalt) infill areas of traffic islands and Local Area Traffic Management Treatments. Remove weeds >200mm high.		

### Road Pavement

Road Pavement's maintenance activities is now contained within Road surface, nominally under the Hazardous Road Surface maintenance activity. Even though pavement and surface are distinct elements of the road structure, a compromised and defective pavement will show itself through the resulting failure of the surface above.

#	New Maint. Activity	Old Maint. Activity	Intervention standard	Initial Response	Rectification
	<b>Removed</b>	<ul style="list-style-type: none"><li>• RP-REA-001 - Repair Pavement Collapse (Digouts/ Major Patching)</li></ul>	Provide temporary repair when failed area is >500mm in diameter and >50mm in depth with potential for pavement collapse and/or where other treatments have failed to remediate the pavement. Distressed areas > 5m <sup>2</sup> are managed to mitigate risk and programmed for renewal.		





# Knox City Council





## PLAN ADOPTION RECORD

<i>VERSION</i>	<i>DESCRIPTION</i>	<i>DATE</i>
Draft	Draft plan accepted by Council for public consultation	June 2004
Version 1	First plan adopted by Council	November 2004
Version 2	Proposed amendments resulting from 2005 audit	January 2005
Version 3	Amended and adopted by Council following the 2009 audit	November 2009
Version 4	Amended and adopted by Council following the 2013 audit	July 2013
Version 5	Proposed amendments resulting from 2017 audit	September 2017
Version 6	Amended and adopted by Council following 2022 audit	April 2023

<i>ISSUED BY</i>	<i>NAME</i>	<i>DATE</i>
Coordinator Strategic Asset Management	Robin Cassidy	November 2022

The latest approved version of this document and the Knox Register of Public Roads may be viewed at the Knox City council civic centre during normal business hours. The Road Management Plan and Public Road Register may also be viewed on Council’s website.

Knox City Council Civic Centre  
511 Burwood Hwy, Wantirna South VIC 3152

Knox City Council Operation Centre  
14 Henderson Rd, Knoxfield VIC 3180

Website:  
<https://www.knox.vic.gov.au>





## EXECUTIVE SUMMARY

Knox City Council is responsible for the management of the majority of the road network within the municipal boundary and is committed to the delivery of a safe and efficient road network for use by all members of the public. Council is also devoted to good asset management practices that deliver the best service available with regard to financial resources, policies and priorities.

This Road Management Plan was prepared in accordance with the Road Management Act 2004 incorporating amendments from Part 3 of the Road Management (General) Regulations 2016.

### The RMP contains the following:

- o An outline of the types of road infrastructure managed by Council, the shared responsibilities with other road authorities and infrastructure not managed within this plan.
- o Levels of service and standards for inspection, maintenance and repair of road and road related infrastructure;

In defining Council's Road Management Practices, account is taken of competing priorities which may impact on deliverable outcomes. These priorities may include, but not be limited to, prevailing budgetary context, the current economic environment, social context and service delivery priorities.





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## BACKGROUND

### PURPOSE OF THE ROAD MANAGEMENT PLAN

The principal purpose of the Road Management Plan is to ensure that a safe and efficient integrated transport network is provided for the movement of persons and goods and that road reserves are available for other appropriate uses.

The purpose of the Road Management Act is to reform the law in relation to road management in Victoria. It establishes principles surrounding the management of roads by Road Authorities and outlines the rights and duties of road users. The Act imposes several precise obligations on Council as a "Road Authority".

These include:

- o A description of the road infrastructure managed by Council, the shared responsibilities with other road authorities and the infrastructure not included in this plan.
- o Establishing appropriate asset management practices for its road infrastructure
- o Define levels of service to be delivered and apply targets for inspection, maintenance and repair.
- o Identifying and assessing needs and setting priorities
- o Allocating funds to meet those needs and priorities

### RELATED STRATEGIC DOCUMENTS

The Road Management Plan is developed as part of a suite of strategic documents developed by Council which should be read in conjunction. In addition to aligning its Road Management responsibilities with Council's 4 year and annual planning documents, this plan attempts to align with the objectives of other strategic Council documents such as:

- o Community Plan
- o Council Plan
- o Asset Plan
- o Financial Plan
- o Workforce Plan
- o Rating and Revenue Plan
- o Climate Response Plan
- o Strategic Asset Management Plan
- o Integrated Transport Plan
- o Road Asset Management Plan
- o Principle Pedestrian Network and Bicycle plan

The RMP also seeks to respond to key themes in the Council Plan, which include:

- o Opportunity and innovation
- o Neighborhoods, housing and infrastructure
- o Natural environment and sustainability
- o Connection, resilience and wellbeing
- o Civic engagement and integrity



## DEMARICATION AGREEMENTS

There are a number of roads which form the boundary between City of Knox and adjoining municipalities. In addition, there are approximately 100 kilometres of Arterial Roads within the municipality. In order to manage areas where road management responsibilities may be unclear, Council has demarcation agreements with the following organisations:

- o Casey City Council
- o City of Greater Dandenong
- o Maroondah City Council
- o Monash City Council
- o Whitehorse City Council
- o Yarra Ranges Shire Council
- o Parks Victoria
- o VicRoads
- o Victrack/Metro Trains Melbourne

The Road Management Code of Practice (Management of Infrastructure in Road Reserves), 2016 also provides guidance on demarcation of responsibility for road and roadside assets.

## LEGISLATIVE AND STATUTORY REQUIREMENTS

The RMP has been developed pursuant to the requirements of the following legislation:

- o Road Management Act 2004
- o Road Management (Works and Infrastructure) Regulations 2015
- o Road Management (General) Regulations 2016

The Road Management Act 2004, has been developed to govern alongside the principles of other Acts such as the Transport Act 1983, the Road Safety Act 1986 and the Local Government Act 2020, all of which set out principles and applicability to the management of the road network and the allocation of funding by Council. The Road Management Act 2004 identifies relevant amendments where it is deemed to supersede these other Acts.

A municipal Council must conduct and complete a review of its road management plan within the period referred to in section 54 of the Road Management Act 2004.







## KEY STAKEHOLDERS

The key stakeholders in this Plan include:

- o Residents and businesses, tourists and visitors to the area
- o Users of motor vehicles;
- o Pedestrians & Cyclists;
- o Emergency services (police, fire, ambulance, SES);
- o Utility agencies (water, sewerage, gas, electricity, telecommunications).
- o Council as the responsible road authority, and other State and Local Government road and transport authorities.

## TERMS AND DEFINITIONS

<b>Arterial Roads</b>	A road that is declared to be an arterial road under Section 14 of the Road Management Act, 2004.
<b>Asset Creation</b>	The provision of an asset to satisfy or improve a level of service, provide for new demand from customers, or to provide a commercial return, e.g. new subdivisions.
<b>Asset Disposal</b>	Removal of an asset that is no longer required or becomes uneconomical to maintain or rehabilitate.
<b>Asset Lifecycle</b>	The cycle of stages that an asset goes through from planning and design to construction, operation, maintenance, renewal and decommissioning or disposal.
<b>Asset Management System</b>	Computer based application that stores the Knox Public Road Register, the Knox Asset Register and other asset information used for financial, economic, engineering and management processes related to physical assets.
<b>Capital Expansion</b>	Expenditure on extending an existing infrastructure network to make the asset available to a new group of community users, e.g. extending a road or shared path network.
<b>Capital Renewal</b>	Expenditure on renewing an existing asset or a portion of an infrastructure network which increases the service potential or extends the life, e.g. resurfacing a sealed road, pavement rehabilitation.
<b>Capital Upgrade</b>	Expenditure on upgrading the standard of an existing asset or infrastructure network to provide a higher level of service to community users, e.g. widening the pavement and sealed area of an existing road, sealing an existing unsealed road.
<b>Coordinating Road Authority</b>	A road authority which has coordinating road functions as defined by The Road Management Act. I.e.
<b>Current Service Level</b>	Describes the maintenance activity to be undertaken and the intervention level that will serve as a trigger point to determine whether repair works are to be carried out.
<b>Maintenance</b>	Expenditure to maintain the asset in use without increasing its service potential or life, e.g. repairing a pothole in a road, repairs to prevent early failure of an asset



<b>Non-Road Infrastructure</b>	Infrastructure in, on, under or over a road which is not road infrastructure; i.e. gas pipes, water and sewerage pipes, cables, electricity poles and cables, tram wires, rail infrastructure
<b>Reactive Maintenance</b>	Maintenance works undertaken to provide temporary or permanent repair to provide protection against potential risks and /or to rectify a failure to restore the asset's intended functionality.
<b>Responsible Road Authority</b>	A road authority which has operational road functions as defined by the Road Management Act.
<b>Road Related Infrastructure</b>	Infrastructure which is installed or constructed by the relevant road authority for road-related purposes
<b>Roadside</b>	Any land that is within the boundaries of a road (other than the shoulders of the road) which is not a roadway or a pathway and includes the land on which any vehicle crossing or pathway which connects from a roadway or pathway on a road to other land has been constructed.
<b>Routine Maintenance</b>	Maintenance works undertaken to preserve the life of the asset and ensure that it retains its intended functionality
<b>Rural Arterial Roads</b>	Arterial roads through areas that are not considered to be urban areas as defined in the Road Management Act, 2004.
<b>Target time for initial Response</b>	Identified target period for a Council Officer to inspect the site if required, identify the defect and assess the associated public safety risk level
<b>Target time for Rectification Works</b>	Identified target period for completion of maintenance works necessary to rectify the failure or restore the asset's intended functionality.
<b>Temporary Protection Works</b>	Maintenance intervention measures intended to minimise localised risk until a defect can be repaired or returned to a functional status. May include warning signage, asset closure, or other appropriate measure.
<b>Arterial Roads</b>	High - capacity urban road that sits below freeways/motorways on the road hierarchy in terms of traffic flow and speed.



## DEVELOPING THE PLAN

### 1.1 FUNCTIONS OF A ROAD AUTHORITY

The Act establishes a statutory framework to facilitate and outline the roles and responsibilities that Council (as a Road Authority) must adhere to in order to adequately exercise its duty.

#### General Functions of a Road Authority

- To provide and maintain roads for use by the community served by the road authority.
- To manage use of a road effectively to meet its primary purpose of being a public road without having adverse effect on the safe and efficient operation of the road and on the environment.
- To manage traffic in a manner that enhances the safe and efficient operation of roads.
- To design, construct, inspect, repair and maintain roads and road infrastructure.
- To coordinate installation of infrastructure on roads and the conduct of other works in such a way as to minimise, as far as is reasonable, adverse impacts on the provision of utility and public transport services.
- To undertake works and activities which promote the functions referred to in the above paragraphs.

**Notes:** Extract from Road Management Act Section 34.1

Under the Act, road authorities can have responsibility both as a coordinating road authority and a responsible road authority. These functions are defined in Section 36 and 37 of the Act.

**Coordinating Road Authority:** The road authority with the responsibility for coordinating works within a particular road reserve.

**Responsible Road Authority:** The road authority with the responsibility for the operational functions within the road reserve.

### 1.2 OBLIGATIONS OF ROAD USERS

All road user have general responsibilities and obligations. Section 17A of the Road Safety Act 1986 defines and outlines these responsibilities.

These obligations recognise that while Council has a responsibility to manage its road network, there is also an onus upon road users to take due care when using the network. Table 2 below clarifies these obligations.

#### Table 2 - Obligations of Road Users

A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all the relevant factors, including (without limiting the generality) the —

- (a) physical characteristics of the road;
- (b) prevailing weather conditions;
- (c) level of visibility;
- (d) condition of the motor vehicle;





- (e) prevailing traffic conditions;
- (f) relevant road laws and advisory signs;
- (g) physical and mental condition of the driver.

A road user other than a person driving a motor vehicle must use a highway in a safe manner having regard to all the relevant factors.

A road user must—

- (a) have regard to the rights of other road users and take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users;
- (b) have regard to the rights of the community and infrastructure managers in relation to road infrastructure and non-road infrastructure on the road reserve and take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve;
- (c) have regard to the rights of the community in relation to the road reserve and take reasonable care to avoid conduct that may harm the environment of the road reserve

Notes: **Extract from Road Safety Act, 1986 – Section 17A**

### 1.3 BALANCING COUNCIL’S FUNDING PRIORITIES

Knox City Council’s Financial Plan uses current financial information, economic factors, and long-term infrastructure planning and maintenance needs to guide Council in its financial decision-making. The strategy clearly identifies recurrent (operating) and capital (infrastructure) expenditure necessary to ensure that the needs of Council are met into the future.

Council’s Capital Works program is set up to closely align with the asset categories used in the annual financial reporting of Council’s infrastructure assets. As part of its Asset Plan, Council identified five key asset management categories in addition to a general maintenance category against which works should be recognised.

As it delivers its annual budget program, works on road and road related assets will be allocated to one of the following categories:



Council’s annual operating and capital budget provides the framework for assigning maintenance funding for road management. The allocation of funding for road management related activities is made on an annual basis, taking account of the global range of services delivered by Council including aged care, youth, leisure and cultural services, family and children’s services, community wellbeing, city strategic planning and environmental sustainability. The allocation of funding within the operational budget recognises that Council needs to provide a balanced level of service delivery across all competing service areas.

In documenting road maintenance service levels within this plan, Council has attempted to more accurately define when works will be carried out and timeframes for delivery of these tasks. Council is also obliged to incorporate a



proactive, whole of network approach when managing its road infrastructure, rather than the reactive approach employed prior to adoption of its Road Management Plan.

Roadworks can be funded from sources other than those directly provided by Council. These can include:

Special Rates schemes / Special Charge schemes, Developer Contribution Schemes and direct funding of assets by developers.

## 1.4 DEVELOPMENT OF THE ROAD MANAGEMENT PLAN

The Knox City Council Road Management Plan incorporates:

### Inclusions within the Road Management Plan

Identification of responsibilities for roads managed by others but for which Council acts as the Responsible Road Authority;

Identification of asset categories that are maintained in accordance with the maintenance service levels set out in this plan but not listed on Council's Public Road Register as they are not 'public roads' as defined by the Act.

Road and footpath hierarchy classifications and associated desirable functional descriptions for all roads on the public road register;

Maintenance standards, inspection regimes, maintenance recording and risk-based prioritisation processes which take into account budget constraints and address Council's duties with respect to public roads and other assets maintained in accordance with this plan;

A service level review and implementation process.

**Table 1 – Road Management Plan Inclusions**

## 1.5 ROAD MANAGEMENT PLAN ADOPTION AND REVIEW

The recent review considered the following:

- o Amendments to relevant Acts and regulations since the introduction of the Road Management Plan
- o Staff feedback regarding implementation of the existing policy directives
- o Historic service delivery performance (inspection, repair and maintenance)
- o Benchmarking against Road Management Plans of neighbouring municipalities
- o Public feedback, Community satisfaction data
- o Recommendations from relevant internal/external audits/relevant Council plans and strategies
- o Road and path hierarchies
- o Maintenance demarcation responsibilities

All road management policies and procedures were reviewed including Council's approach to:

- o responding to reported incidents
- o monitoring hazards, asset condition, and analysing asset performance.
- o setting standards for inspection repair and maintenance, and establishing maintenance priorities



- o allocating resources
- o delivering and auditing maintenance and inspection programs

## 1.6 ASSET MANAGEMENT INFORMATION SYSTEM

To enable Council to effectively manage and maintain its assets, the inventory of each asset class is maintained in Council's Asset Management Information System (AMIS).

The local road network is divided into road segments of manageable lengths for asset management purposes. Each of these segments stored in the AMIS are uniquely identified and assigned a category in the hierarchy equivalent to its purpose and function.

Assets such as road pavement, kerb & channel, footpath are 'itemised' according to the road segment in which they are installed. Further detail relating to Council's Asset Management System can be found in the relevant Asset Management Plans.

Currently is currently introducing a new Asset Management System (Confirm) to replace the existing AMIS system (Lifecycle), with key modules of the system going live in November 2022.

The Confirm system fully integrates the AMIS with the Work Order System utilised by Council staff and contractors, enabling seamless updates to asset data and handover with direct integration to Council's Graphical Information System (GIS). Comprising performance dashboards, enhanced asset performance and modelling systems and supporting Road Management Plan compliance, the system will enabling real time workflows and operations to be managed, assisting officers to deliver service to the community within the statutory framework of the Road Management Act.

## 1.7 WORK ORDER SYSTEM

Through the new Asset Management System, Council has will manage a Works Order System to receive, manage and track inspection and maintenance works on Council's road and road-related assets. The system has been specified to process all reactive maintenance activities and inspection regimes.

Council's AMIS system incorporates a direct link to Council's Customer Response System (CRS) - Pathway, enabling all relevant enquiries raised by Knox customers to be actioned by key staff as required. The Work Order System allows tracking of all identified maintenance issues from the moment the issue is received through to completion of individual tasks, be they inspections, temporary works and rectification works. It also has the capacity to record and report histories against individual tasks and assets.

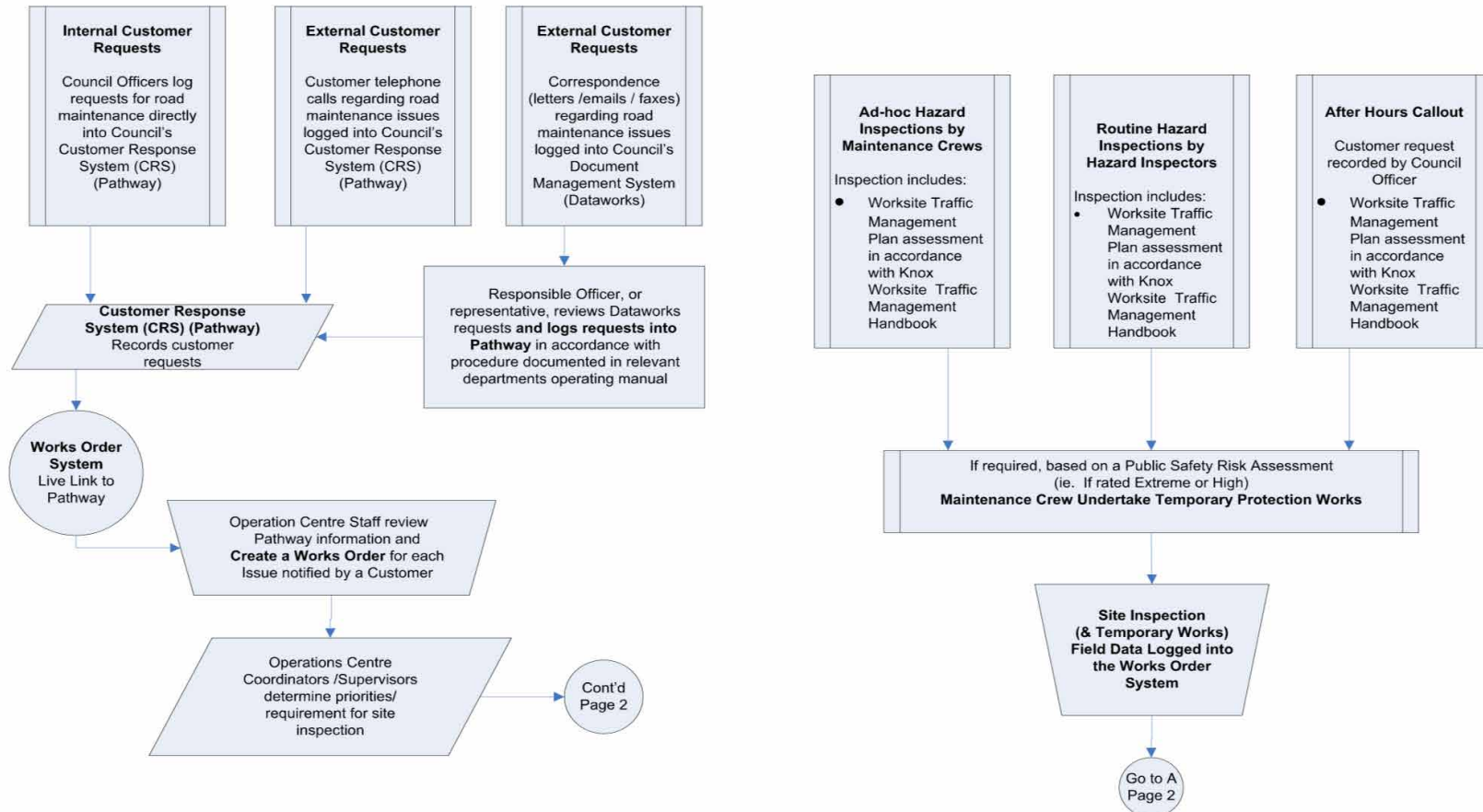
The system will measure Council's ability to meet the maintenance service levels as prescribed in this Road Management Plan and track maintenance activities and costs against each road asset. This will provide Council with an opportunity to identify efficiency gains in the management of its road and road-related assets.

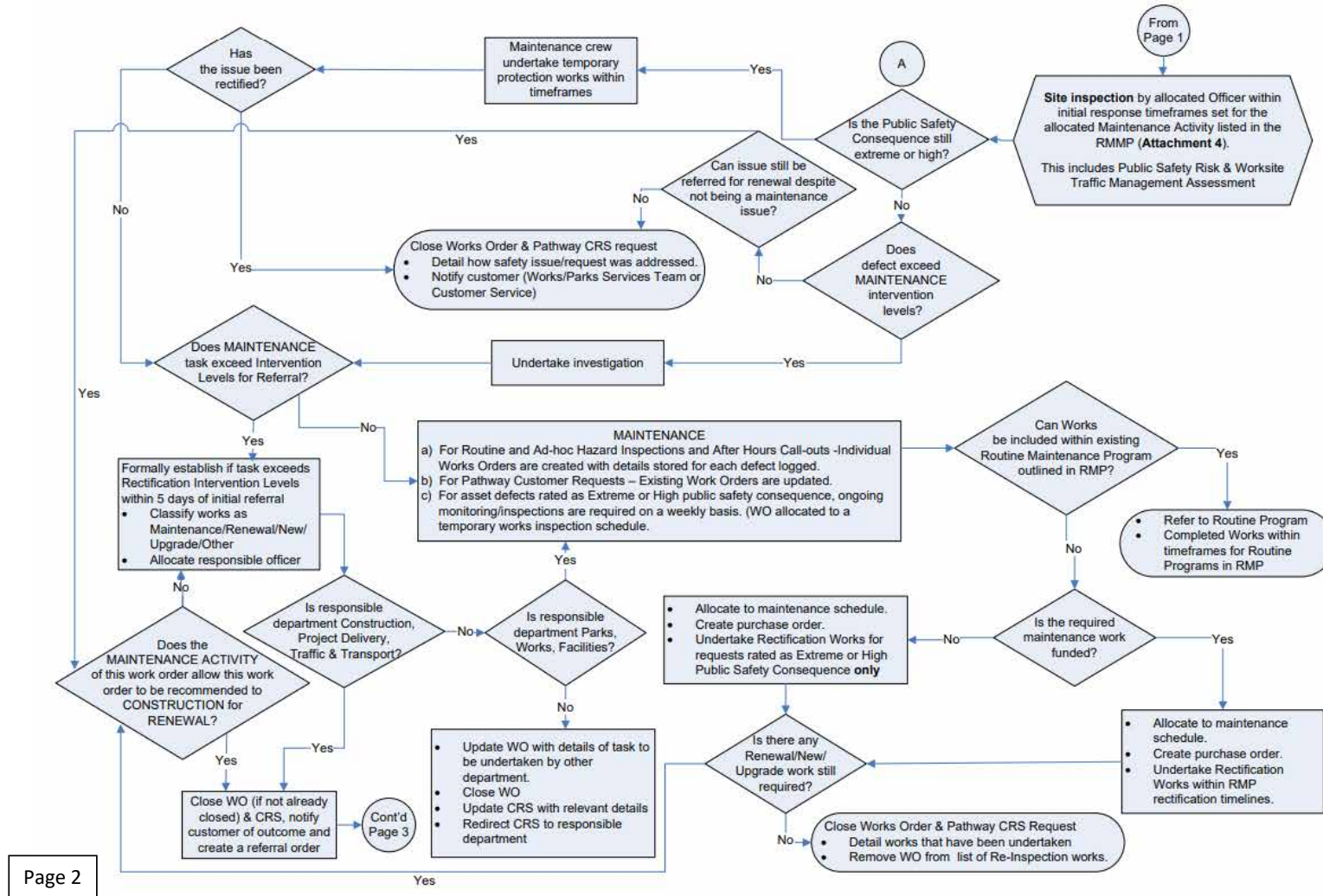
The process chart on the following page shows how the Works Order System is used to record reactive maintenance activities undertaken in response to:

- o Customer requests for repair of a road asset (external customers including afterhours call outs);
- o Council officer requests for maintenance intervention (internal customers);
- o Defects identified by maintenance crews, including contractors, undertaking other maintenance activities within the Municipality (ad-hoc inspections); and
- o Defects identified by routine hazard inspections.

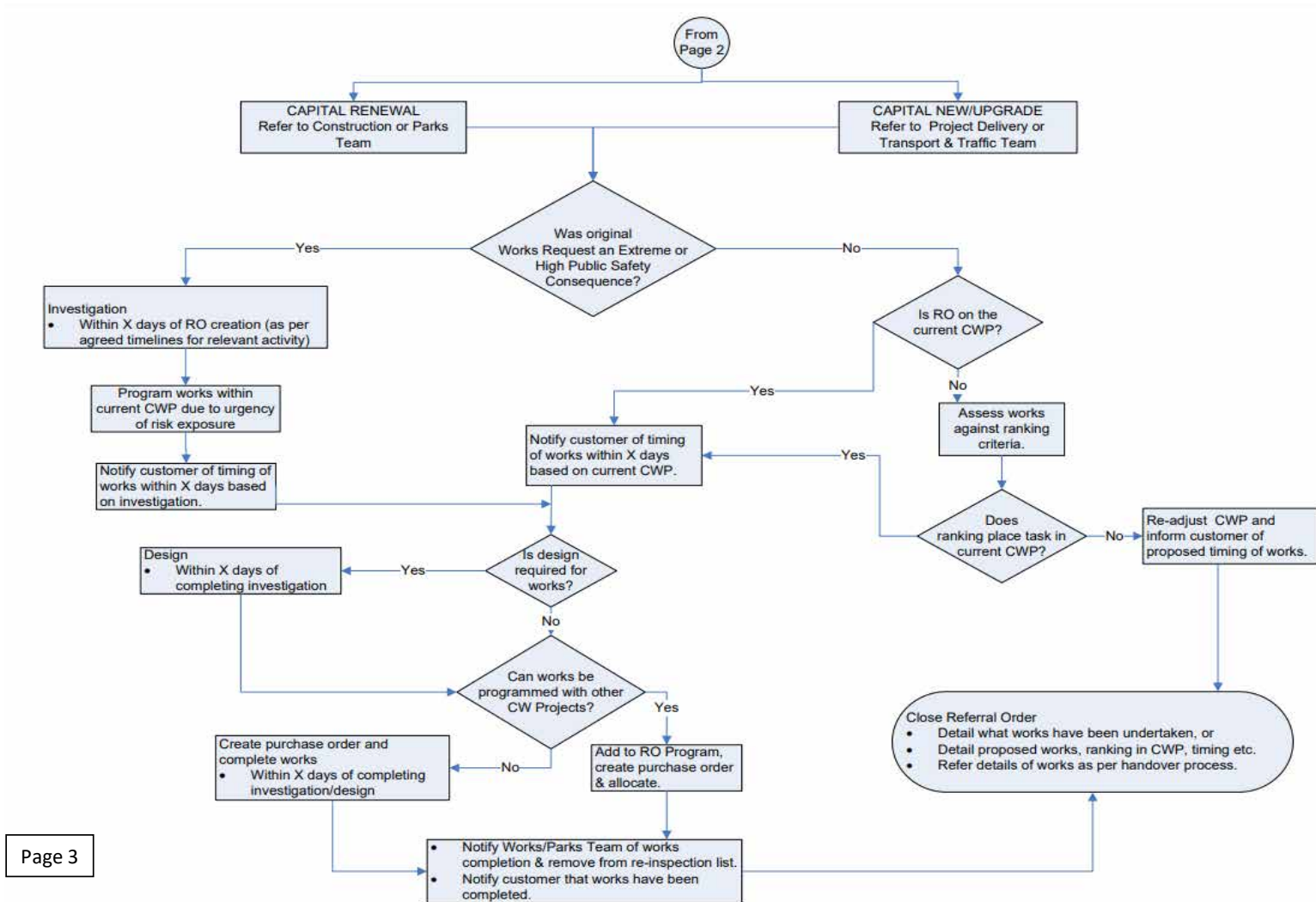


Knox Management System – Inspection, Repair & Maintain Roads





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## PUBLIC ROAD REGISTER

### 2.1 PUBLIC ROAD REGISTER DETAILS

The Knox City Council Public Road Register is separate to this document, and is publicly available online. The register is prepared in accordance with and meets the requirements set out in Section 19 and Schedule 1 of the Road Management Act, which identifies matters that must be included in the register.

#### Public Road Register Inclusions

The name of the public road, or if a road is unnamed, a description which enables the particular road to be easily identified;

The date on which a road becomes a public road if the road becomes a public road after 1 July 2004;

The date on which a road ceases to be a public road;

The classification, if any, of the public road;

The reference of any plan or instrument made on or after 1 July 2004 that fixes or varies the boundaries of a public road and ancillary areas;

A reference to any arrangement under which road management function in respect of any part of a public road or ancillary area is transferred from one authority to another.

The Knox City Council Road Register is available as a tabulated list for viewing at Council's customer service centres during regular business hours or via Council's website at [knox.vic.gov.au](http://knox.vic.gov.au)

Whilst not a requirement of the Road Management Act, the Knox City Council Public Road Register also includes a Geographical Information System (GIS) reference key to link Public Road Register entries to Council's Asset Management System.

#### ADDITIONAL ASSET DETAILS

Council possesses additional data pertaining to many of its road register inclusions. Stored in Council's Asset Register, this data may relate to construction standards used for existing public roads, infrastructure in, on, over or under a public road and already established reference plans that fix boundaries of a road reserve.

Whilst relevant to the ongoing management of the road, the decision to exclude this additional data from the Public Road Register has been made by Council based on an assessment of the likely accuracy of available information. In addition, this decision has taken account of the magnitude of the task necessary to provide an up to date and accurate reflection of these elements within the Public Road Register.



## 2.2 INFRASTRUCTURE COVERED BY THIS PLAN

Within the public road reserve, Council is responsible for the following road related infrastructure:

- The constructed road including wearing surface, sub-surface drainage, base/pavement, and sub-base;
- Traffic Management devices (Local Area Traffic Management), pavement marking , regulatory traffic signs, warning and guide signs , safety barriers;
- Surface level drainage such as kerbs, channels , pits , swales and table drains;
- Footpaths and shared pathways within road reserve;
- Pedestrian and Vehicle bridges, Major Culverts, approaches and retaining walls.
- Roadside infrastructure – vehicle safety barriers, pedestrian safety fencing and council owned bus shelters
- Off road at-grade carparks –excluding removed off-street carparks.
- Council owned streetlights

## 2.3 INFRASTRUCTURE NOT COVERED BY THIS PLAN

Within the road reserve, certain infrastructure is maintained or managed by other road authorities and infrastructure managers:

- General Street Lighting, Electricity poles, pts and related equipment from electricity and telecommunication services.
- Entry roads that lead into parks, reserves, car parks, etc.
- Facility car parks such as pavilions, activity centres etc.
- Pathways, walkways, shared paths, furniture and lighting in reserves/parks and associated Council buildings but not within the road reserve
- Underground drainage and gas supply lines. Sewerage network, access pits, hydrants.
- Car Parks that are not within the road reserve.
- Roads Constructed by others or without Council approval, uninformed access tracks for purpose of local access or unconstructed right of ways not contained in the Public Road Register
- Public Transport assets and equipment owned by other transport authorities.
- Vegetation, Street Trees and landscaped garden beds located on the road reserve that are maintained by Council.





#### COORDINATING VS RESPONSIBLE ROAD AUTHORITY

Among the primary objectives of the Act is the establish road management functions and responsibilities through designation of Coordinating and Responsible Road authority.

In a general sense, the Department of Transport (previously VicRoads) is the coordinating road authority for:

- Freeways;
- arterial roads

Knox City Council is the coordinating road authority for:

- municipal (local) roads (all roads listed in the Knox Public Road Register).
- service roads adjacent to arterial roads
- any part of the roadway not used by through traffic
- for any pathway (footpath or shared path), other than a pathway on a freeway road reserve
- for the outer separator strip between the roadway and the service road
- for the roadside in an urban area (defined by 50kph zone or street lights or abutting development).

Council may enter into management agreements with both the Department of Transport and neighbouring road authorities with respect to management of road and roadside related areas for operational purposes. These are operational in nature and may change by agreement over time.

Under the Road Management Act, 2004, a Code of Practice has been developed for the management of infrastructure in road reserves, with general responsibilities for road management as shown below.

#### 2.4 DEMARCATION OF ROAD AUTHORITY RESPONSIBILITIES

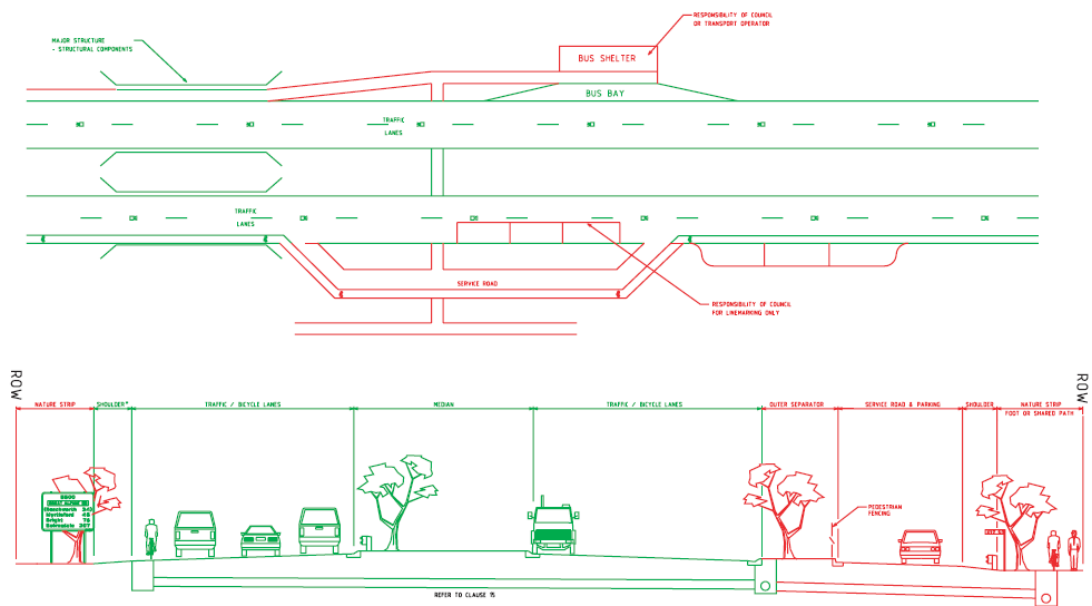
For all ancillary areas, reference is made to agreements in place between coordinating and responsible road authorities. These agreements are set in place to allow road authorities to manage each other's assets in a financially beneficial manner. The agreements are included, as outlined below, in Appendix 4. It is intended that the appropriateness of agreements entered into with other road authorities are reviewed whenever the Road Management Plan is reviewed.

##### MUNICIPAL BOUNDARY AGREEMENTS

The Road Management Act makes provision for Council to enter into an arrangement with another road authority to transfer road maintenance responsibilities. In these agreements, Knox may take on either a coordinating and/or responsible road authority function

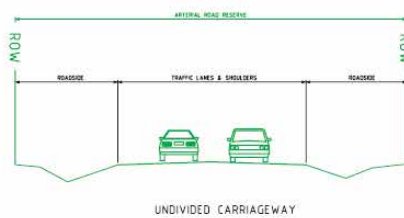
##### RAIL AUTHORITY AGREEMENT

Recent changes to the Rail Safety Act have placed increased obligations on both road and rail authorities to manage public safety risks at road-rail interfaces. Road and rail authorities are now required to enter into Safety Interface Agreements which identify the roles and responsibilities of each party at the road-rail interface.

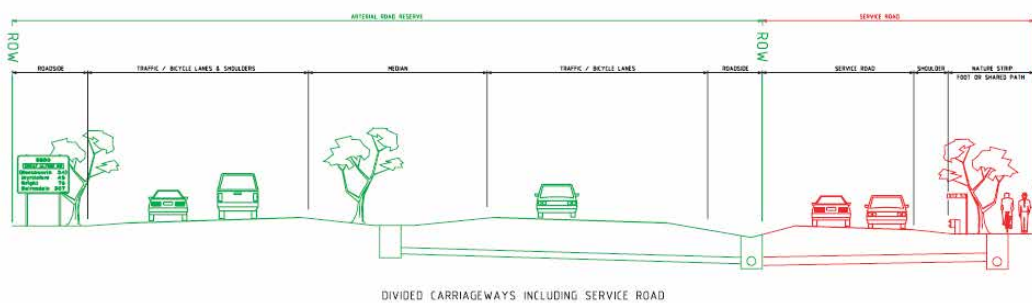


**LEGEND**  
 — DEPARTMENT OF TRANSPORT RESPONSIBILITY  
 — COUNCIL RESPONSIBILITY

***RESPONSIBILITY FOR URBAN ARTERIAL ROADS BETWEEN INTERSECTIONS***



UNDIVIDED CARRIAGEWAY



DIVIDED CARRIAGEWAYS INCLUDING SERVICE ROAD

**LEGEND**  
 — DEPARTMENT OF TRANSPORT RESPONSIBILITY  
 — COUNCIL RESPONSIBILITY

***RESPONSIBILITY FOR RURAL ARTERIAL ROADS BETWEEN INTERSECTIONS***

NOTE WHERE THE BOUNDARY OF A ROAD HAS NOT BEEN FIXED, THE BOUNDARY IS DEEMED TO BE IN ACCORDANCE WITH SCHEDULE 5, CLAUSE 3 OF THE ACT.



## CLASSIFICATION

### 3.1 REASONS FOR DEVELOPING A ROAD HIERARCHY

The Road Management Act, 2004 requires that Council's Public Road Register include a classification for each public road. Through the development of a road hierarchy and subsequent classification of roads, Council recognises that different roads within Knox perform differing functions. The establishment of a hierarchy will encourage efficient management practices, providing for variation of standards across each classification.

The adopted road hierarchy classifications inform inspection, maintenance, renewal, upgrade, disposal and capital expenditure programs. They also inform Council's traffic management strategies, land use planning activities, design and construction standards, and assist the co-ordination process across Council to enhance the community's understanding of Council's approach to road management.

### 3.2 FUNCTION/ FEATURES OF A ROAD HIERARCHY

Knox City Council has adopted the following five classification and functional standards for roads listed in its Public Road Register:

Road Hierarchy Classification	Current Function / Features
Link Roads	<ul style="list-style-type: none"> <li>Efficiently channel traffic through the Municipality</li> <li>Carry traffic between major commercial, industrial and residential areas</li> <li>Link Department of Transport (VicRoads) arterial roads</li> </ul>
Collector Roads	<ul style="list-style-type: none"> <li>Provide connectivity to commercial and residential areas from Link Roads or directly from the VicRoads arterial network</li> <li>Provide direct access to the local road network without necessarily acting as a through traffic route</li> <li>Carry local traffic to key attractors such as shops, schools, commercial districts, hospitals, sporting and other local facilities</li> </ul>
Industrial Roads	<ul style="list-style-type: none"> <li>Service industrial zoned land uses and supporting functions concentrated in these areas</li> <li>Channel traffic through an Industrial Zone</li> <li>Support regular heavy vehicle traffic and design requirements of such vehicles.</li> </ul>
Access Roads	<ul style="list-style-type: none"> <li>Provide access to abutting residential properties and/ or fire truck access</li> <li>Public amenity, safety and aesthetic aspects of these constructed roads take priority over speed and ease of movement of vehicles</li> </ul>
Unsealed Roads	<ul style="list-style-type: none"> <li>Generally have a gravel/crushed rock surface</li> <li>May function as Link, Collector or Access roads</li> </ul>

The adopted road hierarchy classifications are consistent with the Municipal Association of Victoria's (MAV) suggested road hierarchy and will readily allow for future comparisons and benchmarking of services across Victorian councils.



### 3.3 PATH HIERARCHY

Knox Council has developed a hierarchy for managing its shared paths and footpaths within road reserves to improve management processes across the path network. This path hierarchy aims to identify high use pedestrian areas that may require enhanced design and management practices when compared with lesser used paths. As with the road hierarchy, the path hierarchy has been linked to Council’s GIS system with relevant details listed in Council’s Asset Register.

Knox City Council has adopted the following categories and functional features for the path hierarchy.

Path Hierarchy	Current Function / Features
Commercial Access Routes	Provide service for commercial areas with high volumes of pedestrian traffic.
Key Access Routes	Provide a supporting network service to commercial access routes and other areas with medium volume pedestrian traffic.
Local Access Routes	Provide for low volume pedestrian access to service residential and other areas.
Shared Paths	Provide designated regional connectivity for both pedestrians, cyclists and mobility scooters
Reserve Access Routes	Provides frontage and direct access to reserves within Knox

**Table 2 – Path Hierarchy Functional Features**

#### Desirable Path Hierarchy Criteria

The classification of paths is based on Council’s understanding of the current function of each path and a review of existing data relating to:

- o Locality;
- o Expected usage;
- o Pavement width;
- o Surface material; and
- o Disability Discrimination Act (DDA) compliance.

Due to the often informal/unstructured approach applied to the development of paths within the municipality, many footpaths are unlikely to conform to identify desirable criteria. Assessment of the footpath network has been used to set desirable physical and functional features for each hierarchy category.



### 3.4 APPLICATION OF HIERARCHIES

The desirable criteria specified when identifying road and path hierarchies sets minimum standards that Council will aim to provide for each road and path classification. As such, the development of road and path hierarchies will impact on a number of Council's road management activities. In particular, they will inform:

- o Inspection programs;
- o Capital expenditures programs for the expansion, renewal and upgrade of the road and path network;
- o Traffic management strategies;
- o Land use planning activities; and
- o Design and construction standards.

#### Inspection Programs

For the purposes of the Road Management Act, inspection programs need to be implemented to proactively manage risks. Two types of inspections have been identified as necessary for Council to manage its network of road and road related assets:

- o **Hazard Inspections** – to be undertaken between scheduled condition audits and specifically directed at identifying potential public safety risks.
- o **Condition Audits** - used to determine the structural condition of the asset and enable non-urgent maintenance needs to be assessed and prioritised. Subject to budget approval, Council will undertake regular condition audits of its assets. Condition Audits however predominantly serve and support long term asset management objectives, including financial modelling and renewal planning.

Hazard inspection frequencies are included overleaf and have been developed for each asset category by evaluating the highest risk associated with that category. Hazard inspection frequency is reflective of usage, service, and risk.

Frequencies for routine inspections are developed for each asset group based on risk and rates of deterioration. For example, if not dealt with promptly, conditions on unsealed roads and unsealed shoulders of sealed roads can rapidly change resulting in increased maintenance cost and safety hazards, justifying frequent inspections. Footpaths adjacent to business districts, schools and facilities are identified for 6 monthly inspections and higher maintenance activity than other footpaths that have less use.

The process of assigning risk to the various asset categories takes account of the proposed hierarchy of roads and footpaths. In recognising that different classes of roads and footpaths may perform different functions, they may also be deemed to represent a different risk to the community.



ASSET CATEGORY	HAZARD INSPECTION FREQUENCIES			
	ROAD HIERARCHY			
	LINK	COLLECTOR	INDUSTRIAL	ACCESS
BRIDGES / STRUCTURES	Road Bridges & Major Culverts - 6 month cycle Pedestrian Bridges & Boardwalks - 6 month cycle			
RETAINING WALLS, STAIRS, MINOR STRUCTURES (within Road Reserve)	6 month cycle	1 year cycle	1 year cycle	2 year cycle
BUS SHELTERS	All Council owned bus shelters - 1 year cycle			
DRAINAGE – External Inspection(Pit Lintel, Lid and Surrounds) within Road Reserves and along constructed shared paths	6 month cycle	1 year cycle	1 year cycle	2 year cycle
DRAINAGE – Internal Inspection (Side Entry Pits) within Road Reserves	All side entry pits in road reserves – 1 year cycle			
KERB AND CHANNEL	6 month cycle	1 year cycle	1 year cycle	2 year cycle
LOCAL AREA TRAFFIC MANAGEMENT DEVICES (LATMs)	6 month cycle	1 year cycle	1 year cycle	2 year cycle
<b>ROAD FURNITURE</b>				
BIKE RACKS	Nil - Reactive Service Only			
BINS	Nil - Reactive Service Only			
FENCING	6 month cycle	1 year cycle	1 year cycle	2 year cycle
FIRE PLUG MARKERS	Nil - Reactive Service Only			
GUARD RAIL	6 month cycle	1 year cycle	1 year cycle	2 year cycle
GUIDE POSTS	6 month cycle	1 year cycle	1 year cycle	2 year cycle
MISCELLANEOUS ROADSIDE FURNITURE	Nil - Reactive Service Only			
STREET LIGHT INFRASTRUCTURE	Nil - Reactive Service Only			
ROAD PAVEMENT	6 month cycle	1 year cycle	1 year cycle	2 year cycle
ROAD SURFACE	6 month cycle	1 year cycle	1 year cycle	2 year cycle
ROADSIDE VEGETATION	1 year cycle	1 year cycle	1 year cycle	2 year cycle
ROADSIDE VEGETATION IN VICINITY OF OVERHEAD CABLES	1 year cycle	1 year cycle	1 year cycle	2 year cycle
SCHOOL CROSSINGS (Linemarking and furniture)	All school crossings - 1 year cycle			
SHARED PATHS (including regulatory signage along shared paths)	All shared paths - 1 year cycle			
SIGNS - REGULATORY & WARNING	6 month cycle	1 year cycle	1 year cycle	2 year cycle
SIGNS - OTHER	Nil - Reactive Service Only			
TABLE DRAINS (excluding drainage pipes)	6 Roads – (Basin-Olinda Road, Cathies Lane, Quarry Road, Doongalla Road, Old Coach Road, Sheffield Road) - 1 year cycle Other unsealed Roads – 3 month cycle or in accordance with Grading Program (KNOX MAINTENANCE SCHEDULE III - Routine Grading Program)			
UNSEALED ROADS (excluding drainage pipes)	6 Roads – (Basin-Olinda Road, Cathies Lane, Quarry Road, Doongalla Road, Old Coach Road, Sheffield Road) - 1 week cycle Other unsealed Roads – 3 month cycle or in accordance with Grading Program (KNOX MAINTENANCE SCHEDULE III - Routine Grading Program)			
VICROADS ARTERIAL ROADS	Roadside Vegetation for arterials listed in Table 5 of Knox Public Road Register – 1 year cycle VicRoads Arterial Parking Bays listed in Table 3 of Knox Public Road Register – 2 year cycle Other Assets – in accordance with nominated asset class and responsibilities outlined in Code of Practice for Operational Responsibility on Public Roads			
	<b>COMMERCIAL ACCESS ROUTES</b>	<b>KEY ACCESS ROUTES</b>	<b>LOCAL ACCESS ROUTES, INDUSTRIAL ROUTES, RESERVE ROUTES</b>	
FOOTPATHS	6 month cycle	1 year cycle	2 year cycle	

The routine maintenance frequencies documented in the table above are not precise. Due to the operational nature of assigning inspection programs via inspection zone into monthly programs a ± 1 month latitude is allowable.

Table 6 – Hazard Inspection Frequencies





### 3.5 ROAD REGISTER REVIEW PROCESS

The values adopted in setting desirable hierarchy criteria have been chosen to represent a 'best available fit' for the Knox road and path networks. The Road Management Plan is a 'living' document updated as and when necessary.

Reviews of classification criteria for hierarchies, and road and path asset classification are constantly updated where evidence supports the decision. Opportunities exist to re-classify road and path assets at any time however such an assessment will generally be undertaken following serviceability audits. These audits determine whether roads and paths are fulfilling their intended function.

The two primary catalysts for updates and review are:

- o Election of new council. The Road Management Act requires the plan to be updated within 6 months of a change in governance after the Council Election
- o When changes are required to the plan due to resourcing, risk and service delivery impacts.





## Road Management Plan 2023

### SERVICE LEVELS

#### WHAT ARE SERVICE LEVELS?

Council's Road Management Plan includes the identification of service levels as they relate to the inspection, initial response and rectification road and road related assets. Service levels define performance expectations and are formulated through an assessment of legislative requirements, organisational objectives, customer expectations and financial capacity.

The service levels frame the following activities:

- o The Inspection of road and road related assets
- o Intervention Standards, and frequency
- o Management Controls and Response Times

#### WHY DO WE NEED SERVICE LEVELS?

Setting road management service levels has many applications for Council. Specifically, service levels can be used to:

- o Ensure legislative compliance;
- o Communicate Council's road management methodologies;
- o Measure performance of Council's maintenance practices, and evaluate community expectation;
- o Identify costs and benefits of the services offered; and
- o Strategically plan for ongoing asset management practices.

#### INSPECTIONS

The Road Management Act requires Council's to proactively inspect road and road related assets. The primary reason for proactively inspecting road assets (including bridges, footpaths, bike lanes, and shared paths) is to identify hazards, as defined by Council's service levels and manage inherent risks in the interest of public safety.

Council and the community jointly identify any road defects. Inspections of road assets are performed in the modes as follows:

- o Proactive inspections – where trained Council officers proactively assess the condition of Council's assets to identify hazards in line with adopted service levels;
- o Reactive inspections – where Council responds to complaints as identified by the community, other road authorities to assess whether a hazard (exceedance of a service level) exists;

Hazards identified during both proactive and reactive inspection will be secured and made safe with the help of temporary or permanent safety measures in accordance with service level timeframes: Where response actions and maintenance is reasonable the defects will be scheduled for maintenance/repair.

Inspection data is collected during the inspection and imported into a maintenance management system for the generation of works instructions and ultimately the completion of action, reporting and recording.





## Road Management Plan 2023

### REACTIVE INSPECTIONS

Reactive inspections are initiated by the municipality notifying the council of a concern or danger relating to a street object. Trained operations officers are best placed to detect hazards and Document response actions during visual inspections. Where measures are appropriate, they are scheduled for repair. Hazards identified during inspection is secured with the help of provisional or permanent security measures or Warnings according to the deadlines in Appendix 1: Intervention standards

### REPAIR AND MAINTENANCE STANDARDS

The standards of repair and maintenance applicable to the road infrastructure subject to Council's Road Management Plan are detailed in **Appendix 1: Intervention Standards** and encompass:

- a) The circumstances under which intervention action is to be taken with respect to repair or maintenance needs for defects reported or found on inspection; and
- b) Provision, as far as practicable, for the unpredictable (e.g. emergencies, natural disasters, etc).

When a defect is identified by Council that does exceed the stated intervention standard then these will be addressed through an intervention action. From time to time, Council may, at its discretion, chose to address a defect that is below its intervention standards through programmed maintenance activities. It is important to note that this forms part of Council's long-term asset preservation and service strategy does not mean that such a defect represented an unreasonable hazard.

### MANAGEMENT DURING EMERGENCY SITUATIONS

On occasion throughout the year, natural events or emergency situations such as major storms, traffic accidents and other random events may result in increased impost on the resources of Council's Operations Centre. On such occasions, whilst attending to issues considered to be high or extreme risks and implementing temporary protection works, the ability to meet the timeframes and service levels designated may be impaired. A return to delivery of service levels as defined in the Appendix 1 will occur as soon as practicable.

### MANAGING NEW ASSETS

Knox City Council has an obligation to provide and maintain assets now and into the future. To achieve this, an accurate assessment and inclusion of all ongoing maintenance costs will be required in Council's Maintenance Operating Budget every financial year. This will require that financial assessment is made of both Capital Works projects delivered by Council and developer contributed assets to determine their maintenance requirements throughout their lifecycle.

The continuing provision of new assets for the community without adequate consideration for maintenance of existing assets is unsustainable. To alleviate this issue, future maintenance budgets will require indexation equivalent to the proportion of assets added to Council's asset portfolio or management responsibility. This will enable current service levels adopted by Council to be improved and refined to meet community expectations into the future.



## Road Management Plan 2023

### 4.6 PERFORMANCE REVIEW

As the setting of service levels is an iterative process, it follows that those levels adopted by Council will evolve over time to meet the changing needs of the community, taking into account the level of risk, industry benchmarking and the financial capacities of Council. It is proposed that this road management plan be adopted as a draft for public consultation prior to being formally adopted by Council. Such a review process will ensure that Council is continually working towards providing the best road management service with its limited resources. It is expected that the Road Management Plan review process will utilise a variety of information and formats including:

- o formal and informal feedback received from the community via public opinion surveys and customer requests;
- o external audits undertaken by the Municipal Association of Victoria as part of the MAV Insurance Audit.
- o an annual review of current services through delivery of Council's budget;
- o asset performance monitoring, assessed in conjunction with the delivery of individual asset management plans;
- o independent audits of Council's performance relative to the Road Management Plan;
- o service reviews based on an assessment of Council's Works Order System, taking into account issues such as response times, inspection frequencies, intervention levels and costs to deliver services; and
- o ongoing review of Council's Risk Management processes.

Through use of the Works Order System, Council has established a process of recording all maintenance works undertaken against each road asset. This process will enable Council to identify the true costs of managing assets over their respective lifecycles and provide a means to monitor asset performance.



## Road Management Plan Review 2023

### 1. Appendix 1 –Maintenance Response Times

Maintenance Activity	Intervention Standard	Initial Response	Rectification Time
<b>Bridges &amp; Culverts</b>			
Bridge or Culvert damage poses injury or damage to users.	Component damage or deterioration is presenting a hazard to the bridges function posing potential harm to road or path users.	2 days	64 days
<b>Bus Shelters</b>			
Bus Shelter & Surrounds Repair	Temporary repair/ protective works to broken/damaged panels, seating of Council owned bus shelters which impact road reserve.	3 days	64 days
<b>Drainage/Stormwater</b>			
Flooding impacting road use.	Flooding across the travel path of a road surface to a depth of 50mm at left wheel path.	3 days	120 days
Structure Repair - Drainage Pit , Pit Lids, Lintel	Provide temporary and/or permanent repair when: • Pit covers or Lintel is missing, or dangerously broken or displaced to an extent that is likely to be a hazard to road users.	3 days	120 days
<b>Footpaths</b>			
Hazardous or Damaged Path	Provide Temporary or permanent repair of surface if: • Asphalt / Concrete : =>20mm Displacement • Brick : =>20mm Vert Displacement / =>10mm paver gap • Unsealed : >50mm deep pothole , 300mm in diameter	3 days	50 days
Hazardous Path Surrounds (Edge Drop/Shoulder Repair)	Reduce hazard so path is safe for residents via providing a repair of depressions at the interface of the nature strip and constructed paths or by appropriate signage, or tape, bollards, fencing. a) depressions >50mm for Commercial footpaths b) depressions >75mm for other footpaths	5 days	64 days
<b>Shared Path</b>			
Hazardous or Damaged Path	Provide Temporary or permanent repair of surface if: • Asphalt / Concrete : 20mm Displacement Clear dirt, silt & debris, or vegetation that is likely to cause slipping or is hazardous to the path user.	3 days	45 days
<b>Kerb &amp; Channel</b>			
Kerb & Channel Repair	Provide temporary repair measures for damaged kerb & channel which presents a direct hazard/or results in ponding of stormwater on trafficable areas along link, collector and industrial roads. 50mm at left wheel path (as above).	3 days	150 days



## Road Management Plan 2023

Maintenance Activity	Intervention Standard	Initial Response	Rectification Time
<b>Obstructions</b>			
Obstructions	Removal of litter/ dumped rubbish that poses a hazard to pedestrians and/or obstructs traffic movements, including visual obstructions to sightlines required to safely use the road. Temporary works may include placement of litter/ dumped rubbish on nature strips until litter can be removed.	3 days	7 days
<b>Signage</b>			
Hazardous, Damaged, Missing or obstructed Signage (Regulatory or Warning)	<ul style="list-style-type: none"> <li>a) Provide temporary and/or permanent repair of illegible/damaged/missing sign.</li> <li>c) Repair school crossing signage and posts to meet AS1742.10-1990 Pedestrian Control &amp; Protection.</li> <li>d) Prune foliage obstructing regulatory/ warning signs</li> </ul>	3 days (Regulatory) 10 days(Directional/Street/Other)	45 days(Regulatory) 150 days (Directional/Street/Other)
<b>Road related Furniture</b>			
Hazardous or Damaged Fencing, Guideposts, or Guardrails	Provide temporary and/or permanent repair to maintain functionality of fencing, guideposts or guardrails posing hazard to the public.	3 days	64 days
Hazardous or Damaged Non-Standard Street Lighting.	Provide temporary and/or permanent repair where required to damaged poles/ arms & masts for street lights that are non-functional or a hazard to road users/ pedestrians or property.	5 days	150 days
<b>Road Surface</b>			
Hazardous Road Surface	Provide temporary repair when failed area is >300mm in diameter and >50mm in depth.	2 days	32 days
Pavement Line marking	Replace damaged/ dislodged or missing pavement markers (RRPMs & RPMs) on link, collector and industrial roads. Reinstate faded/non-serviceable line marking on link roads and stat-com markings associated with link roads, collector roads and designated school crossings.	3 days	150 days
Clear Hazardous Spill	Temporary measures to limit access and clear fuel spill from road surface where there is a potential danger to traffic.	1 day	1 day
<b>Unsealed Roads</b>			
Hazardous Unsealed Road (Grading / Edge drop)	<ul style="list-style-type: none"> <li>a) Install temporary measures and/ or grade unsealed roads when rutting and corrugations exceed 50mm over 20% of the unsealed road surface and/or potholes exceed 300mm in diameter and 50mm deep over 20% of the unsealed road surface.</li> <li>b) Grade shoulder when edge drop from traffic lane to shoulder exceeds 50mm over 20m length under a 1.5m straight edge</li> </ul>	3 days	32 days



## Appendix 2:

Table 1 - Road Hierarchy Description

Classification	ResCode Equivalent	Current Function/ Features	Council's current approach to managing these roads
Link Road	N/A	<ul style="list-style-type: none"> <li>Efficiently channel traffic through the Municipality.</li> <li>Carry traffic between major commercial, industrial and residential areas.</li> <li>Link VicRoads arterial roads.</li> <li>Provide for through traffic movements and heavy vehicle use.</li> </ul>	<ul style="list-style-type: none"> <li>Principal public transport and designated on-road bicycle routes are actively encouraged.</li> <li>Off-road shared paths and footpaths are encouraged, with controlled pedestrian crossings where required.</li> <li>LATMs, such as speed humps, chicanes or threshold treatments should be avoided. Preferred treatments include roundabouts, traffic splitter islands and lane markings.</li> <li>Restrictions to on-street parking may be used during peak hours to facilitate peak hour traffic movements.</li> </ul>
Collector Road	<ul style="list-style-type: none"> <li>Collector Street</li> <li>Trunk Collector Street</li> </ul>	<ul style="list-style-type: none"> <li>Provide connectivity to commercial and residential areas from Link Roads or directly from the VicRoads arterial network.</li> <li>Concentrate locally generated traffic to an outlet.</li> <li>Provide direct access to the local road network but road does not act as a through traffic route.</li> <li>Carries local traffic to shops, schools, commercial districts, hospitals, sporting and other local facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Public transport vehicles may be expected.</li> <li>Designated on-road bicycle routes may be provided.</li> <li>Shared/ pedestrian paths are encouraged and pedestrian treatments considered to improve pedestrian safety and amenity.</li> <li>Traffic management treatments used to improve safety and residential amenity, reduce local traffic speeds and discourage through traffic use not generated from within the immediate local area.</li> <li>Restriction of on-street parking may be used during peak times.</li> </ul>
Industrial Road	<ul style="list-style-type: none"> <li>Industrial Zone Major Road</li> </ul>	<ul style="list-style-type: none"> <li>Service local light industries concentrated in small areas that tend to be adjacent to VicRoads arterial roads.</li> <li>Road is in an Industrial Zone.</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate movement of numerous large heavy vehicles particularly during business hours.</li> <li>Provision of safe pedestrian and cyclist access where possible.</li> <li>Speed humps and chicanes should be avoided with preferred LATM treatments including roundabouts, traffic splitter islands and lane markings.</li> <li>Street parking may be restricted during business hours to facilitate access.</li> </ul>
Access Road	<ul style="list-style-type: none"> <li>Access Place</li> <li>Access Street Level 1</li> <li>Access Street Level 2</li> </ul>	<ul style="list-style-type: none"> <li>Provide access to abutting residential properties.</li> <li>Public amenity, safety and aesthetic aspects of these roads take priority over speed and ease of movement of vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Maximise aesthetic value.</li> <li>Local public transport services permitted where access to residential areas or route continuity is required and the road is of an acceptable width.</li> <li>Provide a safe environment for formal and informal use by both pedestrians and cyclists.</li> <li>LATMs considered if safety and amenity concerns warrant treatment.</li> <li>Informal all-day street parking encouraged.</li> </ul>
Right-of-Way/Laneways	N/A	<ul style="list-style-type: none"> <li>Easement, allowing access to other properties.</li> <li>Is numbered and named in Knox City Council Road Register.</li> </ul>	<ul style="list-style-type: none"> <li>Remove obstructions and maintain to facilitate movement through.</li> </ul>
Unconstructed Right-of-Way	N/A	<ul style="list-style-type: none"> <li>Easement, allowing access to other properties.</li> <li>Isn't maintained or responsibility of council</li> </ul>	<ul style="list-style-type: none"> <li>Unmanaged – no responsibility</li> </ul>
Unsealed Road	N/A	<p>These roads have a predominantly gravel/ crushed rock surface. They may function as Link, Collector or Access roads. Following formal construction of a sealed pavement, these roads will be re-classified into the appropriate class in accordance with their functional, physical and traffic characteristics.</p>	



## Road Management Plan 2023

Table 2 - Road Hierarchy Desirable Traffic and Physical Conditions

Classification	Relevance to ResCode	Desirable Traffic Conditions			Desirable Physical Conditions		
		Two Way AADT (24 hours)	% Commercial Vehicles	Posted Speed Limit (km/hr)	Kerb Type	Pavement Width (m)	Pavement Type
Link Road <sup>5</sup>	N/A	Over 6,000	Less than 7%	50 to 80	Barrier / Rollover	7.4 to 12.0	Surface: Asphalt Pavement Std Drawings: S202.2 or S202.3
Collector Road <sup>5</sup>	• Collector Street • Trunk Collector Street	Less than 6,000	Less than 5%	50 to 60	Barrier / Rollover	6.4 to 11.3	Surface: Asphalt Pavement Std Drawings: S202.1 S202.2 S202.3
Industrial Road <sup>4</sup>	• Industrial Zone Major Road	Less than 6,000	Variable	50 to 60	Barrier	7.6 to 11.8	Surface: Asphalt Pavement Std Drawings: S203.1 S200.3
Access Road <sup>7</sup>	• Access Place • Access Street Level 1 • Access Street Level 2	Less than 2,000	Less than 3% <sup>6</sup>	15 to 50	Rollover / Plinth or no Kerb & Channel <sup>2</sup>	3.8 to 8.8	Surface: Asphalt/ Concrete Pavement Std Drawings: S200.1 S200.2 S201.1 S201.2 S201.3
Unsealed Road	N/A	Less than 1,000	Less than 1%	50	Shoulder with table drain	Variable	Gravel

**Note:**

1. The levels of service defined in the Knox Road Hierarchy do not conflict with the classifications included in the ResCode provisions. New roads will therefore continue to be designed and constructed in accordance with the ResCode Provisions.
2. Existing barrier kerb will be retained for Access Roads constructed prior to the standard introduction of rollover kerb into Knox. Where no kerb exists the current construction standard will be maintained.
3. L.O.K. - measurement of pavement width (Lip of Kerb)
4. Road is in an area zoned as Industrial
5. Link and Collector Roads within an industrial zone must have the pavement type as per standard drawing S203.1 or S200.3
6. Access Roads that accommodate a bus route may carry more than 3% commercial vehicles
7. Access Roads include right-of-ways located within a road reserve which have a constructed road.

Table 3 – Path Hierarchy - Description

Classification	Description	Desirable Physical Features		Desirable Physical Conditions Kerb Type	Pavement Width (m)
		Surface	Width (m)		
Commercial Access Routes	Footpaths surrounding, shopping strips, commercial centres, and transport hubs.	Asphalt or Concrete	2.5	Provide service for commercial areas with high volumes of pedestrian traffic.	Undertake six monthly hazard inspections • Encourage sealed pavements with low defect tolerances • Service with paths on both sides of road
Key Access Routes	Footpaths servicing community centres, tourist attractions, religious centres, schools recreational facilities, pre-schools, childcare centres hospitals and elderly citizen facilities.	Asphalt or Concrete	1.4-2.0	Provide a supporting network service to commercial access routes and other areas with medium volume pedestrian traffic.	• Undertake annual hazard inspections • Sealed pavements with low defect tolerances • Programmed assessment of need for DDA1 compliance • Service with paths on both sides of road
Industrial Access Routes	Footpaths located within Industrial precincts	Concrete	1.4-2.0	Provide network capable of withstanding additional vehicle loading within industrial precincts	Undertake hazard inspection audits on a 2 year cycle • Encourage sealed surfaces • Provide suitable construction to withstand use by heavy vehicles
Shared Paths	Designated shared paths for use by pedestrians and cyclists	Asphalt, Concrete or granitic material	3.0	Provides linkage for pedestrians and/or cyclists through parkland and between major trip generators.	Undertake hazard inspection audits on an annual cycle • Sealed or unsealed surfaces • Provide suitable construction to withstand use/access by maintenance vehicles
Reserve Access Routes	Footpaths located within and/ or adjacent to reserves	Asphalt or Concrete	1.4-2.0	Provides frontage and direct access to reserves within Knox	Undertake hazard inspection audits on a 2 year cycle • Provide connectivity with reserve paths • Provide suitable construction to withstand use/access by maintenance vehicles
Local Access Routes	All other constructed footpaths within the Municipality.	Asphalt, Concrete or granitic material	1.4	Provides for low volume pedestrian access to predominantly residential areas.	• Undertake hazard inspection audits on a 2 year cycle • Encourage sealed or unsealed surfaces • Service low use areas with paths on either one or both sides of road

1. DDA – Disability Discrimination Act



## Appendix 4: Local Boundary Roads &amp; Structures Maintenance Agreements with Adjoining Councils 2022

Local Roads	Boundary of Responsibility	Structure	Adjoining Council	Coordinating Authority	Responsible Authority
Police Road, Lysterfield South	Stud Road to Churchill Park Drive	Local Road	Casey City Council	Knox	Knox (Boundary – south side)
Churchill Park Drive, Lysterfield South	Bergins Road to Municipal Boundary	Local Road	Casey City Council	Knox	Knox
Providence Place, Rowville	Bergins Road to end	Local Road	Casey City Council	Knox	Knox (Boundary – south side)
Wantirna Road, Wantirna	Maroondah – North Bridge Abutment Knox – South Bridge Abutment	Local Roads	Maroondah City Council	Knox	Knox (Boundary – South of Bridge Abutment)
Bayswater Road, Bayswater North	Maroondah – North Bridge Abutment Knox – South Bridge Abutment	Local Roads	Maroondah City Council	Knox	Knox (Boundary - South of Bridge Abutment)
Dorset Road, Dandenong North	South Wall of Underpass	Local Roads	Maroondah City Council	Knox	Knox (Boundary - South of Bridge Wall)
Colchester Road, Boronia	South wall of underpass and to extent of concrete path to the south on east side of Colchester Road	Local Roads	Maroondah City Council	Knox	Knox (Boundary - South of Bridge Wall)
Liverpool Road, Boronia	South boundary of 420 Liverpool Road, Kilsyth South	Local Roads	Maroondah City Council	Knox	Knox (Boundary - South of 420 Liverpool Road , Kilsyth South)
Bungalook Road Pedestrian Bridge	Structure	Pedestrian Bridge	Maroondah City Council	Knox	Knox
Colchester Road Underpass	Structure	Vehicle Underpass	Maroondah City Council	Maroondah	Maroondah
Marlborough Road, Pedestrian Bridge	Structure	Pedestrian Bridge	Maroondah City Council	Maroondah	Maroondah
Bungalook Road Bridge - Railway underpass	Structure	Railway underpass	Maroondah City Council	Knox	Knox
Abbey Walk Pedestrian/ Bicycle Bridge over Dandenong Creek	Abbey Walk to Dandenong Creek Trail	Pedestrian Bridge	Whitehorse City Council	Whitehorse	Whitehorse
Boronia Road Bridge	Over Dandenong Creek	Vehicle Bridge	Whitehorse City Council	VicRoads	VicRoads
Boronia Road – Bicycle Underpass	East side of Dandenong Creek	Bicycle – Pedestrian underpass	Whitehorse City Council	Knox	Knox
Burwood Highway Bridge	Over Dandenong Creek	Vehicle Bridge	Whitehorse City Council	VicRoads	VicRoads
Liverpool Road, The Basin	Mountain Highway to Maroondah Municipal Boundary	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox (except for vegetation area on east side, north of Pavitt Lane – Yarra Ranges)
Pavitt Lane, The Basin	Liverpool Road to Park Gate, east of Sheffield Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Yarra Ranges (including south side)





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Simpsons Road, The Basin	Doongalla Road to Park Gate	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Doongalla Road, The Basin	Sheffield Road to Park Boundary	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Basin-Olinda Road, The Basin	Old Coach Road to Municipal Boundary	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Ferndale Road, The Basin	Mountain Highway to Old Coach Road	Local Roads	Yarra Ranges Shire Council	Yarra Ranges	Yarra Ranges
Ferndale Road, The Basin	Old Coach Road to Basin-Olinda Road	Local Roads	Yarra Ranges Shire Council	Knox/	
Old Coach Road/ Old Bayswater Road, The Basin	Basin-Olinda Road to Park Gate (approx. 400m east off Ferndale Road)	Local Roads	Yarra Ranges Shire Council	Yarra Ranges/	Knox (including road grading only beyond Ferndale Road)
Mountain Highway (Wantirna-Sassafras Road, The Basin)	Forest Road to Municipal Boundary	Local Roads	Yarra Ranges Shire Council	VicRoads	VicRoads (roadside 1458 to municipal boundary) Knox (roadside Forest Road to No.1458)
Government Road, The Basin	Old Forest Road to Park Gate	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Bayview Crescent, The Basin	Nyora Avenue to end	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Nyora Avenue, The Basin	Lachlan Road to Hansen Road	Local Roads	Yarra Ranges Shire Council	Knox / Yarra Ranges	
Lachlan Road, Boronia	Burston Road to Nyora Avenue	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Hansen Road, Boronia	Burston Road to Philippa Road Philippa Road to Gate	Local Roads	Yarra Ranges Shire Council	Knox / Yarra Ranges	Knox
Philippa Road, Boronia	Hansen Road to end	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Heath Avenue/ Nyora Avenue, Boronia	North of Mont Albert Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	
Arbor Avenue, Ferntree Gully	Heath Avenue to end	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Himalaya Road/ Track, Ferntree Gully	Olive Bank Road to Perra Street	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Hatherly Grove, Ferntree Gully	Kia Ora Parade to Park Boundary	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Boulevard, Ferntree Gully	North of Walbundry Avenue	Local Roads	Yarra Ranges Shire Council	Yarra Ranges	
Walbundry Avenue, Ferntree Gully	Kia Ora Parade to Butlers Road	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Ladys Walk, Ferntree Gully	Butlers Road to The Boulevard	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
The Boulevard, Upper Ferntree Gully	Ladys Walk to Jean Street	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Jean Street, Upper Ferntree Gully	The Boulevard to Hilltop Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox



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Glass Road, Upper Ferntree Gully	Hughes Road to Park Boundary	Local Roads	Yarra Ranges Shire Council	Knox	Knox
Musk Grove, Upper Ferntree Gully	Barclay Avenue to Park Boundary	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Barclay Avenue, Upper Ferntree Gully	Musk Grove to Park Boundary	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Burwood Highway, Upper Ferntree Gully	Mt Dandenong Tourist Road to Hughes Street	Local Roads	Yarra Ranges Shire Council	VicRoads	VicRoads (including roadsides)
Royal Street, Upper Ferntree Gully	Old Belgrave Road to Municipal Boundary at No. 20 Royal Street	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Old Belgrave Road, Upper Ferntree Gully	Royal Street to Wynette Avenue	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Wynette Avenue, Upper Ferntree Gully	Albert Street to Old Belgrave Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Forest View Lane, Upper Ferntree Gully	Albert Street to Talaskia Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
Victoria Ridge, Upper Ferntree Gully	Grandview Crescent to Talaskia Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Knox
33. Fern Road, Upper Ferntree Gully	Ferndale Road to Victoria Ridge	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Yarra Ranges
Ferndale Road, Upper Ferntree Gully	Fern Road to New Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Yarra Ranges
New Road, Upper Ferntree Gully	Glenfern Road to Ferndale Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Yarra Ranges
Glenfern Road, Upper Ferntree Gully	New Road to Lysterfield Road	Local Roads	Yarra Ranges Shire Council	Knox/Yarra Ranges	Yarra Ranges
Lysterfield Road, Lysterfield	Glenfern Road to Wellington Road	Local Roads	Yarra Ranges Shire Council	VicRoads	VicRoads
Wellington Road, Lysterfield	Lysterfield Road to Powells Road	Local Roads	Yarra Ranges Shire Council	VicRoads	VicRoads
Powells Road, Lysterfield	Wellington Road to Park Boundary/Gate	Local Roads	Yarra Ranges Shire Council	Knox/Parks Vic.	Knox/Parks Vic.

For further detail signed demarcation agreements can be accessed online at the Knox City Council Website

The **relevant Council** is to be responsible for:

- Maintenance of all sealed pavements including pothole patching, crack sealing, edge repairs, regulation and minor surface patching;
- Maintenance and management of all existing signs associated with traffic control and advice for through traffic movements on the roadway, bicycle paths and shared paths including supply and installation of new or replacement signs;
- Maintenance and management of line / pavement marking associated with through traffic movements on the roadway, bicycle paths and shared paths.

The **relevant Council** is to be responsible for the following within its own municipal district:

- Vegetation Management, including tree pruning;
- Serving of statutory notices on property owners to undertake works to remove overhanging vegetation;
- Maintenance and management of all existing signs not associated with traffic control and advice for through traffic movements on the pathway, including supply and installation of new or replacement signs;
- Maintenance of all existing street furniture and supply and installation of new furniture

9 Supplementary Items

10 Notices of Motion

11 Urgent Business

12 Questions Without Notice

13 Confidential Items