His Worship the Mayor
Councillors
CITY OF MARION

NOTICE OF INFRASTRUCTURE AND STRATEGY COMMITTEE MEETING

Council Chamber, Council Administration Centre
245 Sturt Road, Sturt

Tuesday, 07 May 2019 at 06:30 PM

The CEO hereby gives Notice pursuant to the provisions under Section 83 of the Local Government Act 1999 that a Infrastructure and Strategy Committee meeting will be held.

A copy of the Agenda for this meeting is attached in accordance with Section 83 of the Act.

Meetings of the Council are open to the public and interested members of this community are welcome to attend. Access to the Council Chamber is via the main entrance to the Administration Centre on Sturt Road, Sturt.

Adrian Skull
Chief Executive Officer

TABLE OF CONTENTS

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OPEN MEETING

KAURNA ACKNOWLEDGEMENT

We acknowledge the Kaurna people, the traditional custodians of this land and pay our respects to their elders past and present.

ELECTED MEMBER'S DECLARATION (if any)

CONFIRMATION OF MINUTES

Confirmation of the minutes for the Infrastructure and Strategy Committee Meeting held on 2 April 2019

Originating Officer Governance Officer - Belinda Murch

Corporate Manager Manager Corporate Governance - Kate McKenzie

Report Reference: ISC190507R01

RECOMMENDATION:

That the minutes of the Infrastructure and Strategy Committee Meeting held on 2 April 2019 be taken as read and confirmed.

ATTACHMENTS:

#	Attachment	Type
1	ISC190402 Draft Minutes	PDF File

MINUTES OF THE INFRASTRUCTURE AND STRATEGY MEETING

HELD AT ADMINISTRATION CENTRE

245 STURT ROAD, STURT

ON TUESDAY 2 APRIL 2019

CITY OF MARION

PRESENT

Elected Members

Councillor Luke Hutchinson (Presiding Member), Councillor Ian Crossland, Councillor Tim Gard, Councillor Bruce Hull, Councillor Matthew Shilling

His Worship the Mayor Kris Hanna

Independent Member

Mr Christian Reynolds

In Attendance

Mr Adrian Skull	Chief Executive Officer
Ms Abby Dickson	General Manager City Development
Mr Tony Lines	General Manager City Services
Mr Vincent Mifsud	General Manager Corporate Services
Ms Fiona Harvey	Manager Innovation and Strategy
Mr Mathew Allen	Manager Engineering and Field Services
Ms Georgie Johnson	Smart Cities Project Officer
Mr Adam Gray	Consultant
Mr Steve Wachtel	SAPN Manager Network Assets
Ms Alex Lewis	SAPN Stakeholder Engagement Lead
Ms Louise Herdegen	Executive Assistant to General Manager Corporate Services / Minutes

1. OPEN MEETING

Councillor Hutchinson opened the meeting at 6.31 pm

2. KAURNA ACKNOWLEDGEMENT

We acknowledge the Kaurna people, the traditional custodians of this land and pay our respects to their elders past and present.

3. ELECTED MEMBER'S DECLARATION (if any)

The Chair asked if any Member wished to disclose an interest in relation to any item being considered at the meeting.

NIL

4. CONFIRMATION OF MINUTES

Confirmation of the minutes for the Infrastructure and Strategy Committee Meeting held on 5 March 2019 (Report Reference: ISC190402R01)

Moved Councillor Shilling **Seconded Councillor Crossland**

That the minutes of the Infrastructure and Strategy Committee Meeting held on 5 March 2019 be taken as read and confirmed.

Carried Unanimously

5. BUSINESS ARISING

6:33 pm Business Arising Statement - Action Items
(Report Reference: ISC190402R02)

The Committee discussed the Business Arising Statement and the Committee meeting schedule and noted the following comments:

1. Potential topics for inclusion in the meeting schedule:

- Carbon capture technology
  - opportunities for companies in this sector to be attracted to establish in the Tonsley innovation district, considering what role City of Marion can play to support this .
  - Important to consider how this aligns with state and federal environmental policies, and City of Marion's 5/10 year plans and policies.

- Electric Vehicles
  - City of Casey as a case study, which is converting their fleet to electric.
  - City of Marion fleet currently has 4 Toyota Corolla Hybrid vehicles. It was recognised that ongoing policy adjustments are needed to promote transition to e-vehicles
  - useful to look at the focus of the National Electric Vehicle Panel. It was noted that hydrogen vehicles are a medium to long term proposition and will likely replace the focus on electric vehicles over the next 5 years.

- Electric Vehicles and Carbon capture and storage discussions are aligned with the Elected Member forum agenda item scheduled for July to discuss the Energy Efficiency and Renewable Energy Plan and the new areas of focus for Council.

Actions: A report on hydrogen vs electric vehicles to be shared with the members. (C Reynolds). EV National Panel - forward details to the members (C Reynolds).

- Waste Management
  - The committee discussed the Southern Region Waste Resource Authority (SRWRA) has been extracting landfill gas (methane) through its gas management plant, and were interested to see the data associated with this.
  - Strategic agenda item schedule on waste and recycling in June should cover the whole end-to-end process of waste collection through to processing.

Action: Data from SRWRA's methane gas production to be shared with members (V Mifsud)

- Strategic Review of Customer Experience Plan in approximately November.

2. Confirmation on sequencing of reports going to Council versus Committee - where there is a timeline issue or significant discussion needed on asset/land sales, this will go to Council first.

Moved Councillor Hutchinson **Seconded Councillor Gard**

That the Infrastructure and Strategy Committee:

1. Notes the business arising statement.
2. Seeks a report on:
   a) the City of Casey's electric vehicle conversion program of heavy fleet vehicles; particularly the economic benefits.
   b) the current & future opportunities of EV via the National EV panel.

Carried Unanimously

6. REPORTS FOR DISCUSSION - Nil

7. REPORTS FOR NOTING - Nil

8. WORKSHOP / PRESENTATION ITEMS

7:00 pm Presentation from SA Power Networks (Report Reference: ISC190402)

7:00 pm Steve Wachtel, Manager Network Assets and Alex Lewis, Stakeholder Engagement Lead from SA Power Networks presented on public lighting and outlined some of the key changes that will be occurring over the next 18 months.

The following is a summary of the discussion:

- LGA/ SAPN Public Lighting Working Group first meeting was in December so it's early stages. City of Marion is represented on the group by consultant, Adam Gray. SAPN potentially hosting a forum to talk about future plans and opportunities.
- Power Line Environment Committee (PLEC) is the group that assists with projects to improve the street scape by undergrounding power lines. Strict criteria for projects to proceed. Generally doesn't progress due to costs.
- Converting overhead powerlines to underground as the system ages - replacement is assessed on condition of each asset and replaced where necessary.
- Quality of light and protecting street trees. Is there an opportunity to use lower street lights, similar to around airport, so they sit below the tree canopy. Working group can look at it as part of focus area for discussion. Street light design based on height of pole, generally use stobie poles.
- Vegetation management provides the opportunity to build good relationships between SAPN and councils.
- SAPN goal in lighting to benchmark across Australia in terms of outcomes and costs.

7:32 pm CEO entered the meeting.
7:33 pm General Manager City Development entered the meeting.
7:34 pm Mayor Hanna entered the meeting

Moved Councillor Gard **Seconded Mr Reynolds**

The Infrastructure and Strategy Committee:

1. notes the presentation

Carried Unanimously

7:34 pm Future of Lighting (Report Reference: ISC190402R05)

7:34 pm Manager Innovation & Strategy and Smart Cities Project Officer entered the meeting.

A brief presentation to facilitate discussion on the strategic approach for future lighting in public spaces throughout the City of Marion. Opportunity for the Committee provide input to ensure lighting fit for purpose, introduce smart technology and areas of focus for smart lighting into the future. Summary of the discussion to be worked through the lighting guidelines development is outlined below:

- Potential opportunity for Solar LED lighting in parks and reserves. No cabling required. Cost benefit analysis and interoperability will need to be assessed.
- The different 'P' rating demonstrates the standard of lighting levels dependant on the environment ie stairs, roadway etc.
- Oaklands Precinct project enables the opportunity to use lighting to create a captivating place at night, wayfinding, safety, and connectivity through railway station, reserve onto Marion Regional Centre. Creating a precinct approach.
- Illumination opportunities enable review of lighting pollution. Ironbark will do analysis of current standards and assets. Strategically reviewing the service delivery of all lighting solutions.
- There are no other smart precincts in SA to use as a measure. Nationally there is Newcastle foreshore & docks, Perth new football stadium - precinct approach with parking, entrance/exit stadium.
- Converting lights to LED - emission based targets that council should be looking at.
- Data – draft governance framework on the committee's forward agenda which will deliver principles enabling the security, capture and utilisation of data. Look at trends and ethics.
- Urban Renewal Project - underground powerlines - opportunity to trial innovative solutions in that precinct.

Smart City initiatives

- Urban Activation Project - data collected over a number of months. Report around project completion and data collection to be presented next meeting to review success. Lampshade Cafe - follow up on progress of completion in accordance with recommendation. Share data collected to date would be of interest.
- Playground Monitoring - Sensors out in playgrounds in trial sites. Brief update can be provided.
- Data Governance management framework around collection and storage. Discussions with Local Government smart cities network. No successful commercialisation models to look at.
- Internet of things (IoT) data collected to be owned by the City of Marion. Exploration of analytics with Flinders Uni providing insights and enabling continuous improvements.
- Metrics that Matter project - developing data platform internally to create dashboards and insights, IoT data can be integrated into system into the future for

analytics and dashboard reporting. Would be interesting for Elected Members (by Ward) to look at.

- Push notification messaging requires consumers to sign up to messaging in terms and conditions eg if users log on to free wifi you can include in the conditions of use that messaging will be pushed. Potential future commercialisation opportunity ie promote businesses in City of Marion via push notifications.

Moved Councillor Hutchinson **Seconded Councillor Gard**

That the Committee:

1. notes the engagement of Ironbark Sustainability to support the development of Lighting Guidelines and a 10 year action plan;
2. provides input into the development of the guidelines;
3. seek a report on data capture in City of Marion to date for the Urban Activation Project and playground utilisation

Carried Unanimously

9. MEETING CLOSURE

The meeting was declared closed at 8:05 pm.

10. NEXT MEETING

The next meeting of the Infrastructure and Strategy Committee will be held at 6.30pm on Tuesday 7 May 2019 in the Council Chamber, 245 Sturt Road, Sturt.

BUSINESS ARISING

Review of the Business Arising from previous meetings of the Infrastructure and Strategy Committee Meetings

Business Arising Statement - Action Items

Originating Officer	Executive Assistant to General Manager City Development - Pauline Corcoran
Corporate Manager	Manager Innovation and Strategy - Fiona Harvey
General Manager	General Manager City Development - Abby Dickson
Report Reference	ISC190507R02

REPORT OBJECTIVE

The purpose of this report is to review the business arising from previous meetings of the Infrastructure and Strategy Committee meetings, the meeting schedule and upcoming items

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. Notes the business arising statement.

Attachment

#	Attachment	Type
1	ISC190507 - Business arising statement - action items	PDF File
2	ISC forward agenda May 2019	PDF File

CITY OF MARION APPENDIX 1

BUSINESS ARISING FROM THE INFRASTRUCTURE AND STRATEGY COMMITTEE MEETINGS **AS AT 07 May 2019**

	Date of Meeting	Item		Responsible	Due Date	Status	Completed / Revised Due Date
1.	7 August 2018	ISC070818R02	**Export Marketing and Economic Development** • Additional details be provided on the details of the Exports noted in the document	Donna Griffiths	4 Sept 2018	Regional Exports (using REMPLAN data): The City of Marion's total regional exports represent the value of goods and services exported locally, interstate and overseas. Regional Exports data represents the value of goods and services exported outside of the City of Marion boundaries. No distinction is made between domestic and international exports.	
			• Update report in 12 months' time on how the 'Economic Statement' has been used	Donna Griffiths	Sept 2019		
2.	4 September 2018	ISC040918R01	**Renewable Energy and Battery Options** • Administration to provide implementation status and financial details to Committee members on HVAC expenditure at the Marion Cultural Centre	Ann Gibbons	2 October 2018	Information emailed to Committee Members 12 September 2018	
			• Requests a report be provided to the next term of Council on the viability of a bulk procurement process by Council Solutions for the purchasing of batteries and solar.	Ann Gibbons	Early 2019	Contact has occurred with Council Solutions on this matter and is does not appear it is a high priority for them at this time. LG SA Commercial has engaged 'Peak Services' to provide Energy consumption review and auditing services for member councils.	29/4/19

	Date of Meeting	Item		Responsible	Due Date	Status	Completed / Revised Due Date
3.	5 March 2019	ISC190305R04	**Marino Hall – Update on Development Options** • Redevelopment opportunity comes into the City Property Strategic Asset Management Plan.	Megan Hayward	30/6/19		
4.	5 March 2019	ISC190305F01	**Marion Golf Club** • Profiling of sports use report to be provided to members.	James O'Hanlon	2/4/19		
			• Copy of current lease to be shared with members.	James O'Hanlon	2/4/19	Completed	
			• Provide copy of original report that went to Council about the hand over responsibility of Belair Golf Club.	Abby Dickson	31/3/19	Completed	26/3/19
5.	2 April 2019	ISC190402R02	**Business Arising Statement** **Electric Vehicles** • A report on hydrogen vs electric vehicles to be shared with the members. EV National Panel - forward details to the members **Waste Management** • Data from SRWRA's methane gas production to be shared with members • Seeks a report on: • a) the City of Casey's electric vehicle conversion program of heavy fleet vehicles; particularly the economic benefits.	 C Reynolds C Reynolds Vincent Mifsud Colin Heath/Ann Gibbons			

	Date of Meeting	Item		Responsible	Due Date	Status	Completed / Revised Due Date
			• b) the current & future opportunities of EV via the National EV panel.				
6.	2 April 2019	ISC190402R05	**Future of Lighting** • seek a report on data capture in City of Marion to date for the Urban Activation Project and playground utilisation	Fiona Harvey/Georgie Johnson			

* Completed items to be removed are shaded

Infrastructure and Strategy Committee 2019

Meeting schedule

5 February	**6.30 – 9.30**
5 March	**6.30 – 9.30**
2 April	**6.30 – 9.30**
7 May	**6.30 – 9.30**
4 June	**6.30 – 9.30**
2 July	**6.30 – 9.30**
6 August	**6.30 – 9.30**
3 September	**6.30 – 9.30**
1 October	**6.30 – 9.30**
5 November	**6.30 – 9.30**
3 December	**6:30 – 9:30**

Committee Membership

- Membership – 5 Elected Members + 1 Expert Member
- Quorum - 4 Committee Members

Presiding Member – Luke Hutchinson

Expert Member – Christian Reynolds

Members

- Ian Crossland
- Tim Gard
- Bruce Hull
- Matthew Shilling

Infrastructure & Strategy Committee	**Date: Tuesday, 4 June Time: 6.30pm – 9.30pm**			**Venue: Chamber**	
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Strategic Discussion/Innovation Opportunities – Waste and Recycling	Current challenges and Future opportunities across the end-to-end process of managing waste and recycling				Alison Byrne Mat Allen Colin Heath
Guest Speaker	SRWRA Rep				Vincent Mifsud

Infrastructure & Strategy Committee	**Date: Tuesday, 2 July Time: 6.30pm – 9.30pm**			**Venue: Chamber**	
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Use of recycled material in roads					Tony Lines

Infrastructure & Strategy Committee	**Date: Tuesday, 6 August Time: 6.30pm – 9.30pm**			**Venue: Chamber**	
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Strategic Priority – City Property Strategic Asset Management Plan	Progress update on development of Plan				Megan Hayward
Strategic Discussion – Innovation and Entrepreneurship	CoM's focus on Innovation Smart South Consortium (SAEDB) Energy Project (SAEDB) Export Marketing and economic development Workforce of the Future Opportunities through Lot 14 and Tonsley in relation to business attraction and innovation				Abby Dickson/ Fiona Harvey

	Federal Election commitments, policy change and funding opportunities				
Guest Speaker (Options- TBC)	Jim Whalley – Chief Entrepreneur John Spoeher - Factory of the Future Mark Fusco -Advanced Manufacturing Robert Dew – Innovation Management				

Infrastructure & Strategy Committee **Date: Tuesday, 3 September Time: 6.30pm – 9.30pm** **Venue: Chamber**					
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
ICT Digital Plan + Transformation project					Vincent Mifsud
Edwardstown/Melrose Park Employment Precinct					Greg Salmon/Donna Griffiths
Updates: - Oaklands Smart Precinct Project - Capital Construction Program					Various

Infrastructure & Strategy Committee **Date: Tuesday, 1 October Time: 6.30pm – 9.30pm** **Venue: Chamber**					
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Strategic Discussion/Innovation Opportunities- Future City Transport/Mobility Planning	Hydrogen and Electric vehicles Autonomous vehicles **First mile/last mile opportunities**				Mathew Allen / Fiona Harvey
Guest Speaker -TBC	Christian Reynolds Renmark Paringa Council – Autonomous vehicle trial experience				

Infrastructure & Strategy Committee **Date: Tuesday, 5 November** **Time: 6.30pm – 9.30pm** **Venue: Chamber**					
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Strategic Priority – City Property Strategic Asset Management Plan	Progress update on development of Plan				Megan Hayward
Strategic Discussion –Strategic Review of the Customer Experience Plan	Committee's input into the strategic review of City of Marion's Customer Experience Plan				Karen Cocks
Updates:					Various

Infrastructure & Strategy Committee **Date: Tuesday, 3 December** **Time: 6.30pm – 9.30pm** **Venue: Chamber**					
Topic	**Description**	**Presentation / Workshop**	**Duration**	**External Attendees**	**Staff Responsible**
Strategic Discussion – The value of Data					Fiona Harvey
Guest Speaker (Options- TBC)	Peter Worthington Eyre – Chief Data Officer SA Government Aron Hausler /Matt Salier – NVI Nick Faulkner – Adelaide University				

WORKSHOP / PRESENTATION ITEMS

Southern Adelaide Economic Development Board (SAEDB)

Originating Officer	Manager Corporate Governance - Kate McKenzie
Corporate Manager	Manager City Activation - Greg Salmon
General Manager	General Manager City Development - Abby Dickson
Report Reference	RSC190507R03

REPORT OBJECTIVE

The purpose of this report is to provide an update to the Infrastructure and Strategy Committee on the Southern Adelaide Economic Development Board (SAEDB). This will include a presentation from the Nikki Govan, Chair of the SAEDB.

EXECUTIVE SUMMARY

The Southern Adelaide Economic Development Board (SAEDB) is an independent industry led Board in Southern Adelaide. It is supported by two Councils – City of Onkaparinga and City of Marion. There are two paid roles – Chair and Executive Officer – jointly funded by the two Councils. The following people are on the Board:

1. Nikki Govan, Chair
2. Pip Forrester, Regional Food Champion
3. Paul Sandercock, Regional Start-Up Champion
4. Terry Burgess, Chair Tonsley Innovation District
5. Colin Stirling, Vice Chancellor Flinders University
6. Richard Turner, Founder and Director of Innovation, SIMEC Zen

The SAEDB was revitalised in 2017 with a new Chair, new board and new priorities. The Board is currently focusing on the following four projects:

- Smart South Consortium
- Southern Adelaide Energy Project
- Investigations into a Innovation Hub at Noarlunga Centre
- Investigations into a McLaren Vale Centre Culinary & Tourism School

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. Note the update report on the Southern Adelaide Economic Development Board.

DISCUSSION

The SAEDB was revitalised in August 2017 with a new Chair, new board and new priorities. After one full year in operation, the SAEDB released a progress report in early 2019. The 2018 Progress Report can be found in attachment one.

Given the SAEDB has now been in operation for two years, it was timely for the board to be reviewed to ensure the board was still representative of the right future focused industry people, it was representative of Southern Adelaide business views, its direction was in line with the ongoing economic trends and resourcing

was appropriate. An overview of the review findings is contained in attachment two.

The board has five priorities that lay the foundation for regional economic growth over the next three years. These are:

1. Development of key mixed use precincts
2. Work as a region to maximise the visitor experience and position Southern Adelaide as a region of choice for domestic and international visitors
3. Develop and deliver an integrated regional approach to transport and infrastructure
4. Adopt a regional approach to supporting start-ups and scale-ups
5. Position Southern Adelaide as a smart region

Within 2018/19 financial year, the SAEDB received $200,000 from the South Australian Government to deliver four projects under these five priorities. The four projects chosen by the SAEDB are:

1. Development of a **Smart South Consortium** ($50,000). This project is managed by the City of Marion. The purpose of this is to establish a consortium governance model to facilitate collaboration between consortium members. The model will be applied and tested during the Oaklands Smart Precinct Project. Flinders Connect students have been engaged to undertake local analysis and mapping of key 'smart' expertise, models and initiatives being progressed in South Australia to identify gaps and opportunities for Smart South. Furthermore, students will undertake research on best practice regarding the governance and management of big data and open data.

2. **Development of a Southern Adelaide Energy Project** ($100,000). This project is managed by the City of Marion. This project has delivered a Southern Adelaide Energy Report and a survey of businesses. The Southern Adelaide Energy Report is contained in Attachment Three and the Business Energy Survey results are in Attachment Four. The report identified a number of opportunities for further development including: provision of energy advice for business, energy procurement hub (bulk purchasing), network utilisation, shifting demand to solar hours and embracing the hydrogen economy.

The second part of the Southern Adelaide Energy Project is the development of a scalable and replicable project that focusses on improving the energy performance of a precinct of businesses. The project is delivered in partnership with the Tonsley Future Energy Consortium (a group of five businesses based at the Tonsley Innovation Precinct). This will support five business / property owners in Woodlands Terrace, Edwardstown with an energy audit, energy monitoring device and energy saving provisions (up to $10,000). A university will be engaged to monitor the results of this project for two years in relation to investment, scale-up ability, job outcomes and impact of energy reduction on the precinct.

3. **Investigation into an Innovation Hub at Noarlunga Centre** ($25,000). This project is managed by the City of Onkaparinga. The project working group invited consultants to develop a feasibility study into an Innovation Hub at Noarlunga incorporating co-working, business advisory services and ON Business Program workshops and events.The feasibility study will be completed by 30 June.
4. **Investigation into a McLaren Vale Centre – Culinary and Tourism School** ($25,000). This project is managed by the City of Onkaparinga. The project working group invited consultants to undertake a demand study into a centre. The demand study consists of investigation into potential facility use by industry, education sector and visitors; as well as a desktop review on best in class centres from around the world. The final report is expected on 21 June 2019.

All four projects will be completed by 30 June 2019. There is no further project funds post 1 July 2019.

Next steps for the Board include:

- Implement key findings from the review.
- Undertake a future planning session
- Identify a key project(s), and seek appropriate funding plus resourcing, for a future project(s) post 1 July 2019.

Attachment

#	Attachment	Type
1	1. SAEDB - 2018 Report	PDF File
2	2. Board Review	PDF File
3	Southern_Adelaide_Energy_Baseline_Report_FINAL_20_Mar_2019	PDF File
4	SAEDB Business Energy Survey - Summary	PDF File

southern adelaide
economic development board

2018 Report

200+	Five	$200,000	ALL
Government Advocacy/ Industry Development Discussions Attended	Major Strategic Projects Established	South Australian Government Funding Received	24 Tactical Actions Advanced

Executive Summary

2018 was the first complete year following the Southern Adelaide Economic Development Board (SAEDB) membership revitalisation. In March 2018, and after 16 years in opposition, the Liberal Party was elected into South Australian Government. Accordingly, SAEDB's 2018 activities focused on building meaningful relationships with southern Adelaide industry, and across both State and Federal Governments. Meetings were held with each applicable State Government Minister and with elected Members of Parliament of both major parties. Over 200 meetings were attended to align SAEDB's direction with priorities of government and regional industry, ensuring a thriving Southern Adelaide and prosperous South Australia.

SAEDB's regional leadership and influence were recognised and endorsed through 2018. The Board provided advocacy and support for regional infrastructure, industry programs and projects, and was invited to appear at the State Government's 2018 Parliamentary Enquiry into Economic Development.

Industry response to SAEDB's revitalisation and direction was enthusiastically expressed by our regional business leaders. This value and sentiment will be formally measured from early 2019.

SAEDB extensively progressed its five major priorities, with five additional strategic projects activated. These new projects return high-value to our partnering councils and augment the region's future. $200,000 was received from the South Australian Government to progress four SAEDB projects.

Major Projects

Potential projects were identified and evaluated for their capacity to support local industry and enhance regional liveability. The following initiatives were evaluated against our five priorities and selected with consideration to the region's existing assets, industry mix and stakeholder strengths:

- Southern Adelaide Energy (Industry Energy Initiatives);
- Southern Business Innovation Hub;
- *Smart South* - Smart Cities / Smart Industry Consortium;
- McLaren Vale Food and Wine Centre;
- Southern Adelaide Infrastructure Committee

Forward Opportunities

SAEDB is the region's strongest champion for local business and community, and we are well-positioned to pursue regional investment advocacy. SAEDB will support industry through defined, high-value and innovative programs that unlock industry opportunity through collaboration. We will support our councils, and their recently elected members, to ensure that southern Adelaide continues to offer an unparalleled quality of life, smart and connected communities, and is SA's most accessible and appealing tourism destination.

PRIORITIES	REGIONAL SUCCESS
Priority One - Growth Precincts: *Develop key mixed-use precincts across the Cities of Marion and Onkaparinga, linked by the Seaford / Tonsley electric rail lines and the north-south corridor.*	
Oaklands Hub – A *Heart* for the City of Marion	• $174m to the rail/road separation and development.
Tonsley Innovation District	• 1,400 people working across precinct with 6,500 students. • District Energy Plan.
Priority Two - Regional approach to the visitor and lifestyle economy: *Maximise the visitor experience, positioning southern Adelaide as domestic and international 'destination of choice'.*	
Marion International Hotel	• An EOI was undertaken and Council decided not to progress submissions received to the next stage. Council remains interested in a future hotel development within the City of Marion.
National Park and Recreation Precinct	• State Government and Adelaide University agreed to progress Glenthorne Farm development.
McLaren Vale Luxury Tourism Accommodation (large scale)	• $25,000 grant received to investigate tourism and hospitality study. • Two developments progressing through planning stages: $30m Wirra Wirra (30-45 luxury suites) in partnership with Adelaide-based developer Greaton; and 150 room, 5-star accommodation at Leconfield, McMurtrie Road.
Priority Three - Integrated transport and infrastructure*: Develop and deliver an integrated regional approach to transport infrastructure and public transport services.*	
Diversity of Public Transport Services	• Autonomous vehicle fleet partnership leadership for the Oaklands Precinct and McLaren Vale precincts.
Main South Road Duplication	• 2018 State election commitment to duplicate Main South Road from Seaford to Aldinga.
Priority Four - Vibrant business community: *Adopt a regional approach to supporting both the creation of new businesses and the growth of existing businesses.*	
Business Hubs	• Activation of business hubs at Tonsley, Hallett Cove, Noarlunga, McLaren Vale and Aldinga through the Open for Business Program and ON Business Program. • $25,000 grant received for Noarlunga Innovation Hub report.
Southern Adelaide Business Advisory Service	• $240,000 grant received to deliver a Southern Adelaide Business Advisory Service for businesses in Onkaparinga, Mitcham, Marion and Holdfast Bay. 480 businesses using this service.
Business SA Membership	• Joint promotion of exclusive southern Adelaide industry discount for Business SA membership. 32 offers accepted.
Priority Five - Smart region: *Position Southern Adelaide as a 'smart region' with smart strategies, technologies, data capture and application, and resource management.*	
Smart Region Strategy	• $50,000 grant received for *Smart South* Collaboration. • Supported City of Marion's successful $860m Smart City bid.
Community Energy Hubs	• $100,000 grant received for Southern Adelaide Energy projects. • Building Upgrade Finance offered in the South.

Attachment Two

Board Review

In February 2019, an internal and external review was undertaken of the Southern Adelaide Economic Development Board.

Key strengths of the board include:

- Priorities, vision, growth industries and economic drivers are relevant
- Representative of Southern Adelaide industry
- Considered a strong advocate for the South
- Chair leadership is highly regarded
- Board members have the right skills, experience and knowledge
- Frequency, timing and duration of meetings is appropriate
- Exemplar of regional collaboration

Key opportunities for improvement for consideration include:

- Branding, marketing and communication about the region, board's work and achievements
- Consultation with key stakeholders to focus on local business needs
- Promotion of Southern Adelaide as a place for investment
- Enhancing tourism, skills development and visitor stay
- Funding and resourcing models to achieve goals and value to the region that is realistic and achievable
- Planning for the future

Southern Adelaide Energy Baseline Report

For the Southern Adelaide Economic Development Board, City of Onkaparinga and City of Marion

20 March 2019

85 Halifax Street, Adelaide SA 5000 • mailbox@energyproject.com.au • www.energyproject.com.au • ABN 62 153 059 253

Contents

Project Contact:

Dr Andrew Nance

andrew.nance@energyproject.com.au

1 Executive Summary

The Southern Adelaide Economic Development Board's (SAEDB) stated goal relevant to this project is to significantly enhance the region's appeal for further and new industry investment, attracting industry to the region through an innovative approach to energy affordability, improved security and stability of the local networks. This report, **The Southern Adelaide Energy Baseline Report**, is the first stage of pursuing this goal. The second stage, or 'Opportunities' stage, will pursue project opportunities in more detail informed by this Baseline report.

Section 2 of this report provides some background material relevant to understanding the components of the cost of electricity for businesses in South Australia and explains that the main components are wholesale energy costs and network charges.

Section 3 describes the electricity and gas infrastructure in the region and highlights that the electricity network has significant 'spare' capacity for new industry and, as illustrated in the consumption patterns presented in Section 4, is under-utilised outside of peak times.

Section 5 provides an estimate of the local energy economy: approximately $250m per annum in electricity expenditure and $30m for natural gas. The estimated investment in over 130MW of rooftop PV by households and small business also exceeds $250m over the last decade. This Section also illustrates the large number of energy service businesses based in the region.

Section 6 provides a summary of trends in the electricity markets relevant to energy consumers in the region including Wholesale prices and Renewable Energy Target costs. This section also describes the impact of South Australia's growing list of solar energy projects – rooftop and utility scale solar farms - and how this is expected to put downward pressure on wholesale electricity prices during daylight hours.

Section 7 outlines a number of opportunities to improve energy affordability and security for the region. These include providing energy advice to business and establishing an energy procurement hub, improving utilisation of the local electricity network, shifting energy consumption into solar hours and participating in the Hydrogen economy.

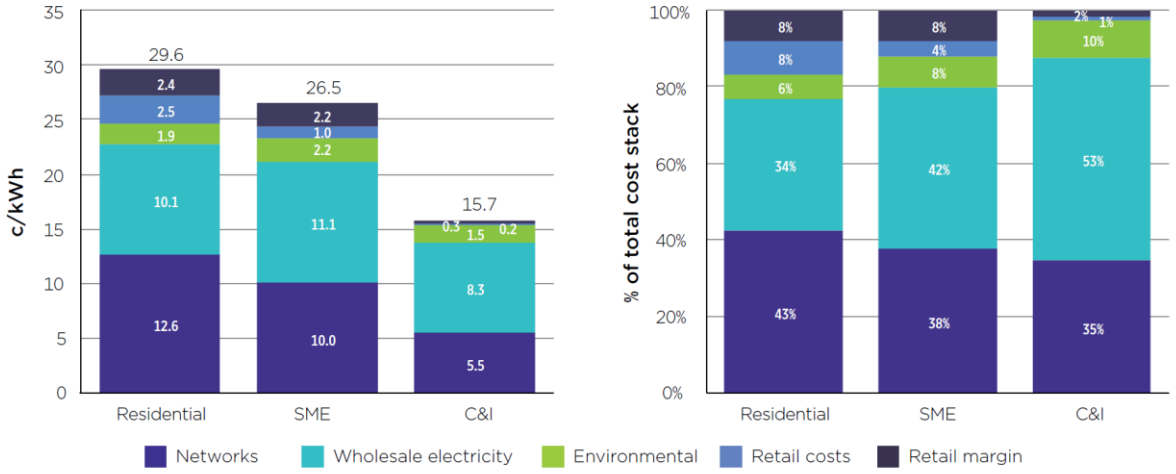
The subsequent stage of this project can develop specific projects from each of these opportunities.

2 Background

2.1 Components of the electricity cost stack for businesses

The ACCC's recent Retail Electricity Pricing Inquiry showed this national summary of the cost components for different customers.[1] The proportions shown are considered to be indicative for South Australia even though actual prices for consumers are higher in SA than the national average prices shown.

Figure 1.28: Comparison of residential, SME and C&I cost stacks, NEM wide, 2017–18 estimate, c/kWh, real $2016–17 values and percentage of cost stacks



	Residential	SME	C&I
Network	12.6	10.0	5.5
Wholesale electricity	10.1	11.1	8.3
Environmental	1.9	2.2	1.5
Retail costs	2.5	1.0	0.2
Retail margin	2.4	2.2	0.3
Total cost stack	29.6	26.5	15.7

Source: ACCC analysis based on retailers' data.

SME refers to Small Medium Enterprises and is reflective of 'small market' business customers (consuming less than 160MWh pa). C&I stands for Commercial and Industrial and refers to 'large market' business customers. As can be seen the main cost components are Networks and Wholesale Electricity.

In terms of lowering the costs for businesses in the region, the proposed solar project at Southern Region Waste Management Authority's Pedlar Creek Landfill - as a local example - would target the Wholesale Electricity component but the other elements would remain. Unlike 'behind the meter' solar projects, 'over the grid' solar projects – either in the region or over the Transmission

[1] https://www.accc.gov.au/regulated-infrastructure/energy/electricity-supply-prices-inquiry

Network from utility scale solar farms elsewhere in the state - have very limited potential to reduce network costs for energy consumers.

In the context of this report, it is important to outline that network charges – approx 35-40% of the average business customer's bill as shown above – are applied on a *statewide* or *postage stamp* basis. This obligation is applied to ensure a degree of equity in access to electricity in the areas outside of metropolitan Adelaide and the major regional towns. Without this, the cost to serve these areas of low customer density would be reflected in substantially higher prices.

The consequence of this is that location is not a determinant of this component of the bill and there is no immediate opportunity for price signals to reflect the spare capacity in the Southern Adelaide part of the network.

2.2 Survey Results

The Southern Energy Working Group surveyed 78 businesses on a range of energy issues while this report was being prepared (Feb 2019). In summary:

- 83% of respondents were small businesses with less than 20 employees.
- 68% of respondents use gas.
- When asked about current experiences with energy retailers, just over half were positive (53%), around 23% were negative about their experiences and the remainder were neutral.
- 13% (i.e. 10) respondents had recently undergone an energy audit or assessment.
- Barriers to energy-efficient solutions in businesses included renting not owning premises, access to finance, perceptions of low returns on investment (ROI) and access to expertise, skills and experience.
- Respondents indicated an expectation of rising electricity prices over the next 2-5 years (72%) compared to stable or falling prices (28%)
- Some respondents were able to identify sources of financial assistance for energy efficiency upgrades but 80% were not aware of any.
- A majority of respondents were interested in more information on bulk purchase initiatives (58%) and four businesses stated that they were currently involved in an initiative (5%).
- When asked what aspects of energy use they would like more information on, the results were quite diverse. Lighting, Insulation, Refrigeration, Hot Water, Power Factor Correction, Solar and Batteries were the more common themes.

Overall, opportunities to support businesses include the provision of information, conduct of energy assessments and potentially providing case studies of local businesses using actual dollar figures to illustrate the real ROIs being achieved. Opportunities also exist to meet the appetite for bulk purchase initiatives.

3 Energy Infrastructure

3.1 Electricity

The South Australian electricity supply chain is depicted in the image below from SA Power Networks[2]:

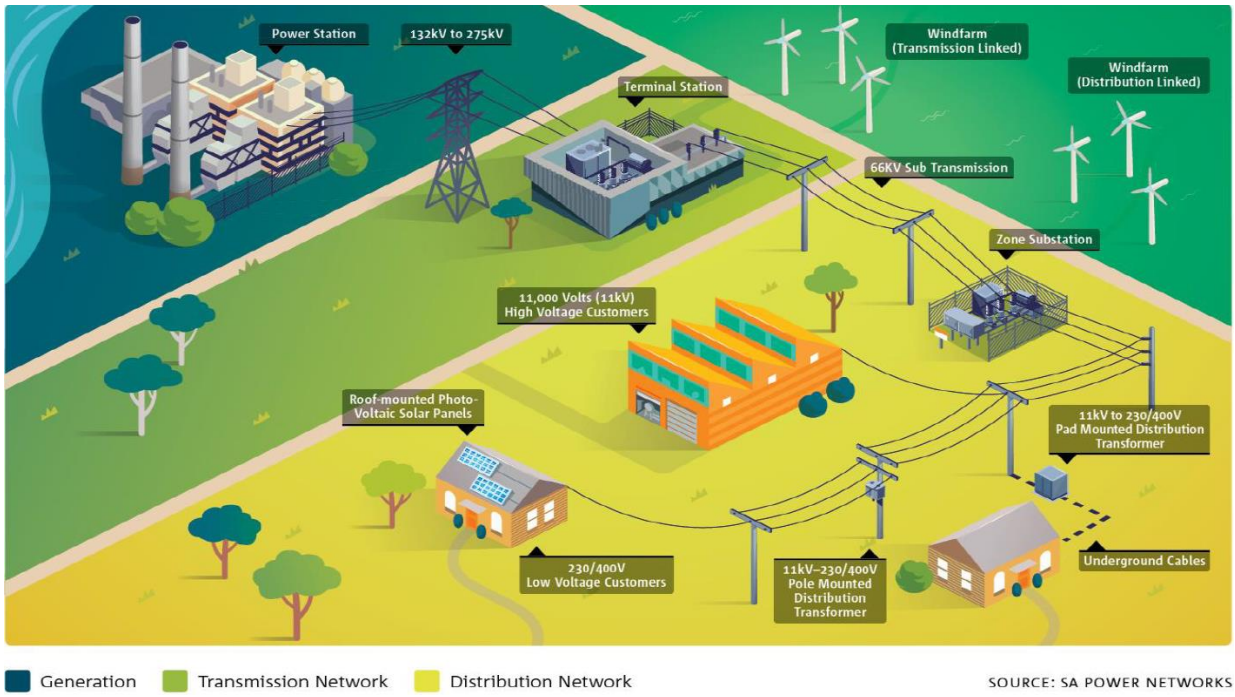


Figure 1: Indicative Electricity Supply Chain

The SAEDB region is part of SA Power Networks Distribution Network, in their Southern Suburbs Planning Region (see Figure 2, overleaf). This includes suburbs from Glenelg North to the west extending north-east to North Unley, south-west to Aldinga, and south to Willunga, from where it supplies the Fleurieu region and Kangaroo Island. There are four main connection points to ElectraNet's Transmission Network in the Southern Suburbs: City West, Magill, Morphett Vale East and Happy Valley.

According to SA Power Networks 2018 Distribution Annual Planning Report, there are **no** system limitations in the Southern Suburbs region forecast for the 2018/19 to 2022/23 period[3]. The online Network Opportunity Maps published by the Australian Renewable Energy Agency (ARENA) provide a visual representation of the available capacity on the network[4]. The map for the SAEDB region illustrates that substantial capacity exists at most substations (see Figure 2).

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[2] www.sapowernetworks.com.au 2018 Distribution Annual Planning Report
[3] 2018 DAPR Sections 6 and 7
[4] www.energynetworks.com.au/accessing-network-opportunity-maps

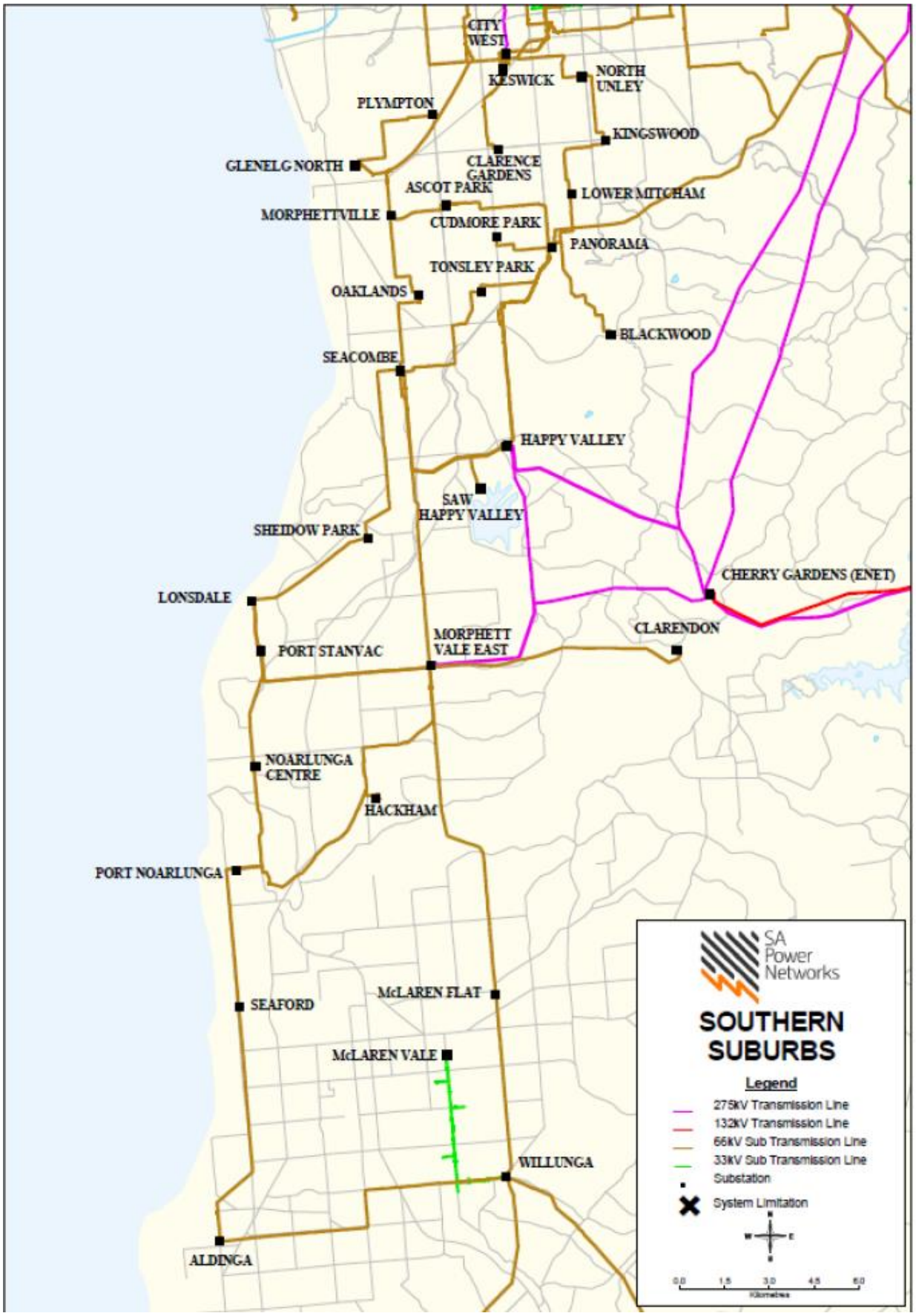

Figure 2: SA Power Networks Southern Suburbs Network Region

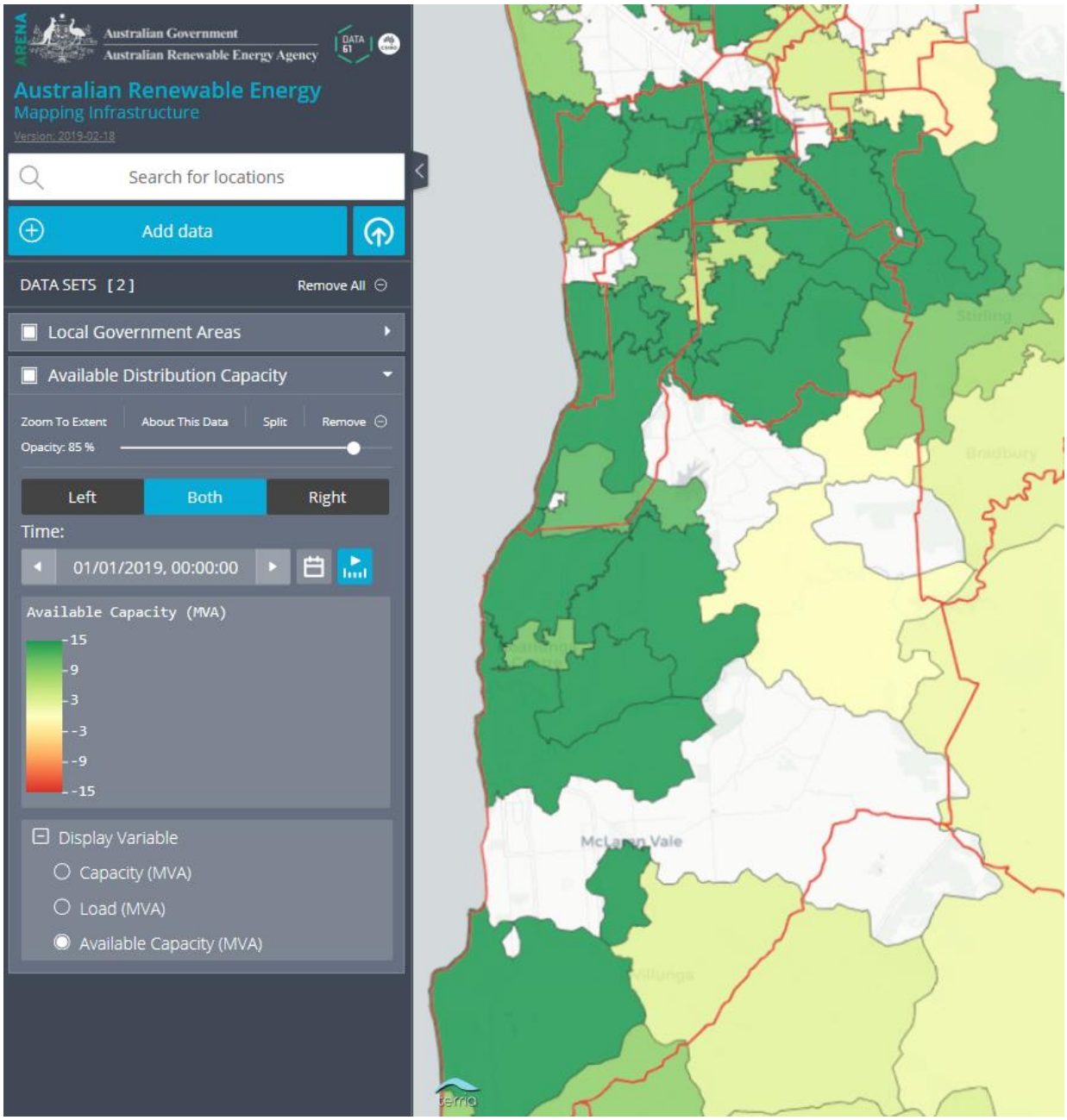

Figure 3: Network Opportunity Maps

The White patches on the map in Figure 3 correspond to absence of data rather than indicating no spare capacity. The source data (SA Power Networks Distribution Annual Planning Reports) indicate that for the large patch across the lower portion of the map, similar levels of spare capacity exist:

- Seaford 66/11kV is rated at 15.8 MVA and has a 2018/19 forecast demand of 9.8 MVA indicating 6MVA of spare capacity
- McLaren Flat 11kV TF1 is rated at 15.5 MVA, and has a 2018/19 forecast demand of 6.3 MVA = 9 MVA spare

- McLaren Flat 11kV TF2 is rated at 15.2 MVA, and has a 2018/19 forecast demand of 2.4 MVA = 12 MVA spare

It is recommended that the SAEDB seek to have the missing data restored in the next update of the maps as it is a positive story for the region that would be easier to tell if the maps were complete.

In terms of network reliability, there is no publicly available data that separates out the reliability performance of the region from the rest of the Metropolitan network. SA Power Networks does manage a list of the worst performing feeders but this is provided to ESCOSA on a confidential basis. As such we were unable to determine if any parts of the SAEDB region met this criteria.

Similarly, for power quality issues – especially over voltage issues that have been affecting solar inverters in recent times – there is no publicly available data to indicate if this is more or less prevalent in the region than elsewhere.

In both cases, SAPN have stated (when interviewed for this report) that such issues are transient in nature as SAPN acts to rectify any underlying issues.

3.2 Gas

The Australian Gas Networks' Distribution Network extends to McLaren Vale and Aldinga as shown in this coverage map provided by Australian Gas Networks (Figure 4).

There is very little specific information on quantities and end-uses for the region. An estimate of regional consumption can be obtained by taking a pro-rata approach to statewide figures. The Cities of Marion and Onkaparinga represent around 15% of dwellings (Source: ABS Census 2016) and according to ESCOSA, around 10,400 TJ of gas is sold to the state's 448,000 domestic, Industrial and Commercial Customers[5]. An estimate of gas use in the region is therefore around 1,500 TJ per annum. Small customers are likely to be paying between $20 and $30 per GJ of gas delivered, larger customers would pay somewhat less (more around $15/GJ including network costs). At an average $20/GJ, the regional consumption estimate of 1500 TJ (1,500,000 GJ) equates to around $30m pa.

For small businesses and residential customers the fixed price of connection is a significant proportion of cost.

[5] *Energy performance report 2017-18 – time series data tables* from www.escosa.sa.gov.au/projects-and-publications/publications

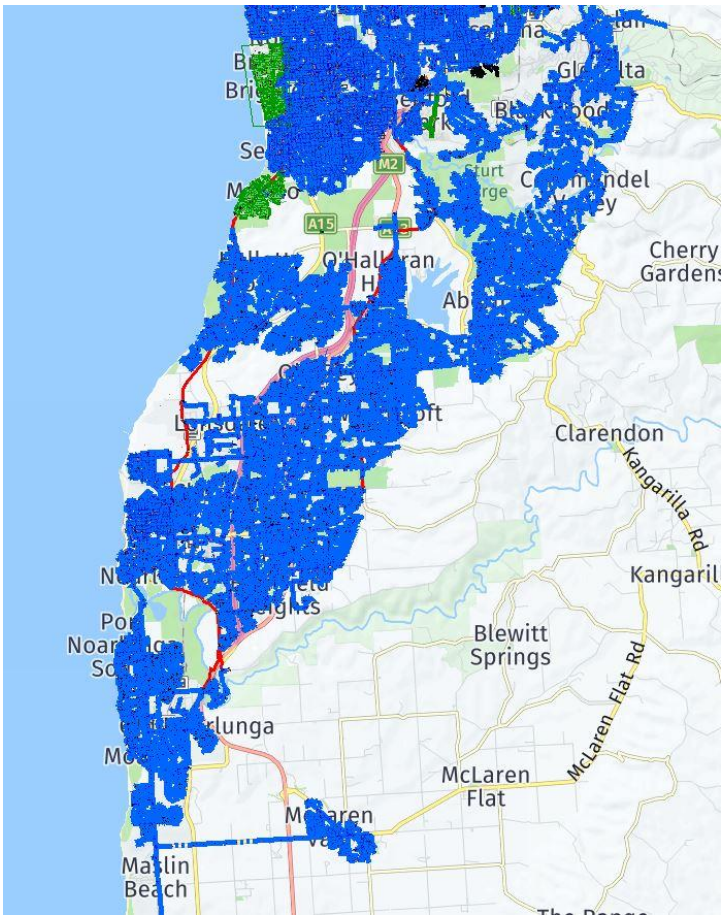

Figure 4: Reticulated Natural Gas coverage – Southern Suburbs (Source: AGN)

The price of gas for business and industry is very topical and wholesale prices have risen dramatically as a result of Australia's LNG export industry and Commonwealth Government interventions have been required as have inquiries by the Australian Competition and Consumer Commission.

Hydrogen is emerging as they key opportunity for gas infrastructure beyond its current uses. The South Australian Government has produced a Hydrogen Roadmap[6] and the CSIRO has also published important material recently[7].

The Australian Gas Infrastructure Group (AGIG) is developing the Hydrogen Park of SA at Tonsley[8]. HyP SA will contain a 1.25 MW electrolyser plant that will produce hydrogen from renewable electricity, which will then be injected into the local gas distribution network.

AGIG have also stated that they are investigating the establishment of a co-located National Hydrogen Centre of Excellence at Tonsley.

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[6] www.renewablessa.sa.gov.au/topic/hydrogen/hydrogen-roadmap
[7] www.csiro.au/en/Do-business/Futures/Reports/Hydrogen-Roadmap
[8] http://www.renewablessa.sa.gov.au/topic/hydrogen/hydrogen-projects/hydrogen-park-south-australia

4 Electricity Consumption

4.1 Consumption Patterns

SA Power Networks publishes 30-minute interval data for each of its main substations[9]. From this we can see that regional demand peaks sharply on a number of summer days.

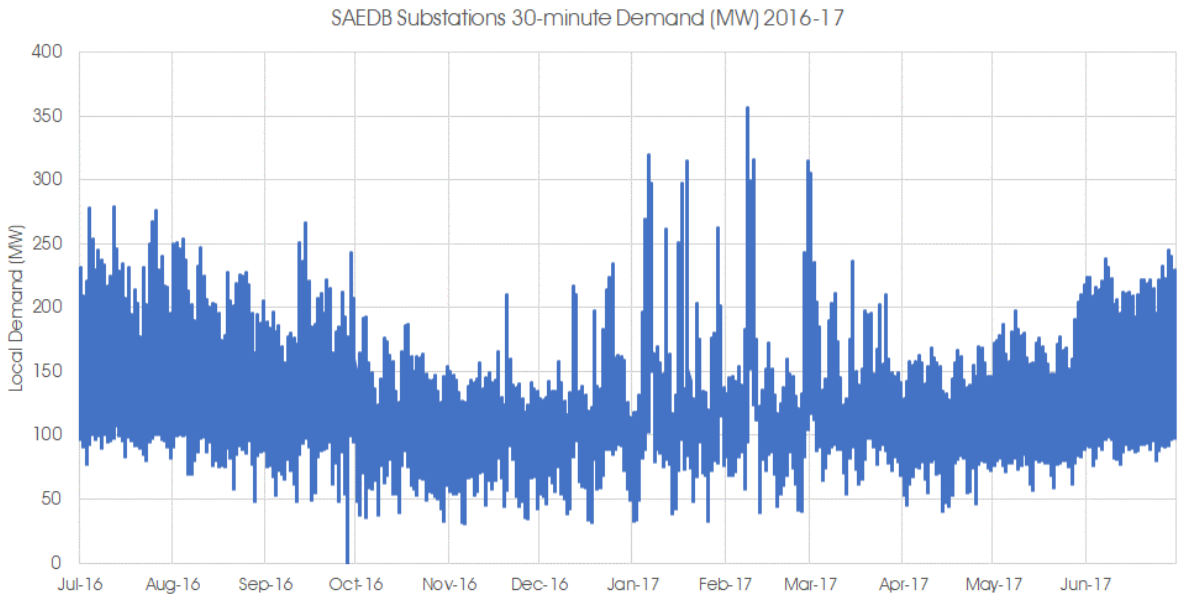

Figure 5: Regional Electricity Demand 2016-17

The peaks in demand in January-March are obvious. These short spikes in demand can be reflected in what is known as a load duration curve that illustrates the utilisation of infrastructure capacity over a year. As shown in Figure 6, 50% of demand is only apparent for less than 10% of the year.

This poor level of electricity network infrastructure utilisation is common in South Australia and contributes to the state's relatively high network charges and energy prices – the network is built to meet peak demand, but the costs are largely recovered from the volume of electricity that flows. Conversely, this can be seen as an opportunity to lower prices by improving utilisation of the existing network. Figure 7 replicates Figure 6 but shows the combined rated capacity of the major substations (668 MVA) in the region and illustrates the substantial under-use of the available capacity – and hence the capacity evident in the Network Opportunity Maps (Figure 3).

[9] **SAEDB Substations** are those identified as most closely representing the populations of the Cities of Onkaparinga and Marion. These are: Aldinga, Ascot Park, Clarendon, Cudmore Park, Hackham, Happy Valley, McLaren Flat, Morphett Vale East, Morphetville, Noarlunga Centre, Oaklands, Port Noarlunga, Port Stanvac, Seacombe, Seaford, Sheidow Park, Tonsley Park, Willunga

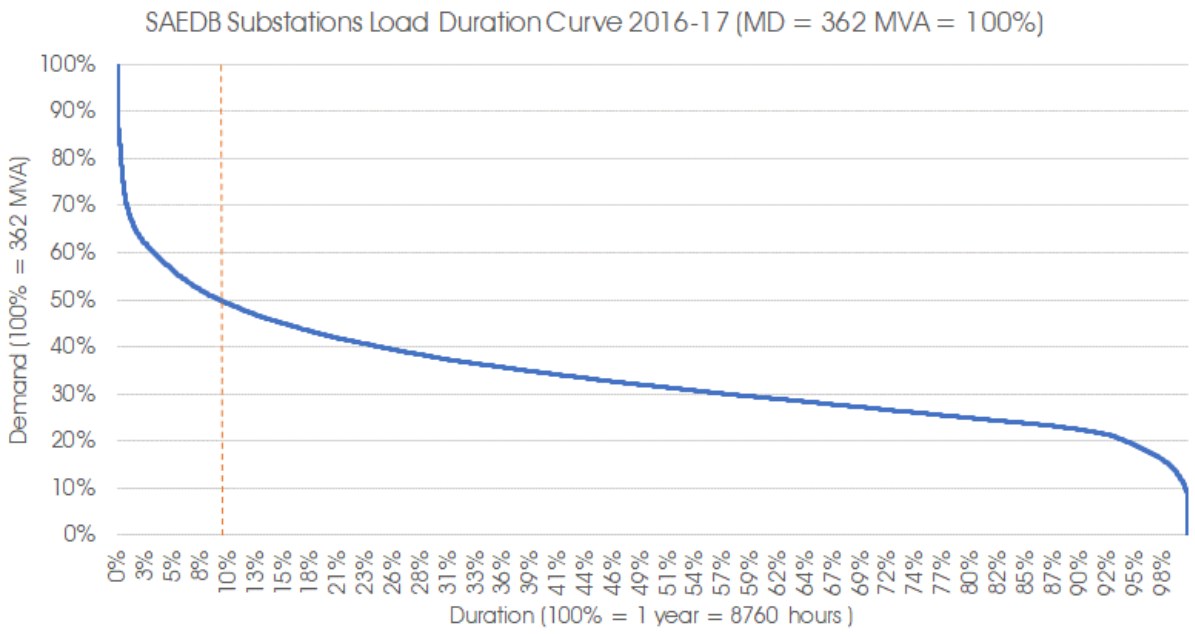

Figure 6: Regional Load Duration Curve (Source: SAPN)

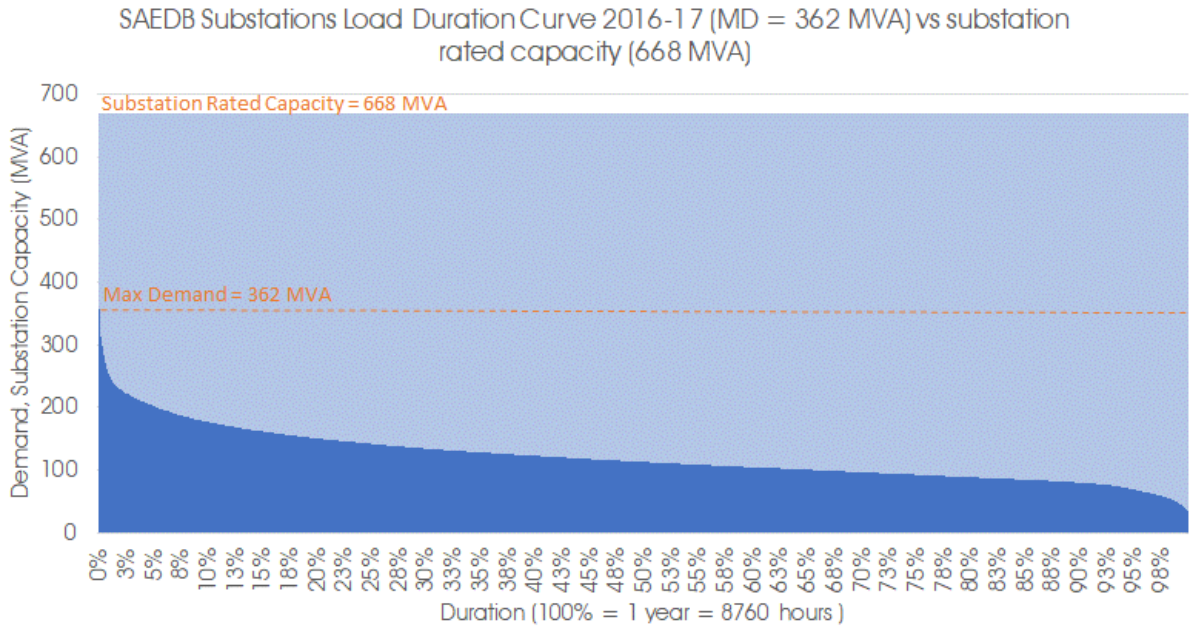

Figure 7: Regional Load Duration Curve compared to Substation Rated Capacity 2016-17 (Source: SAPN)

4.2 Local Electricity Generation

4.2.1 Solar

According to the Australian PV Institute and based on Clean Energy Regulator data up to September 2018, regional rooftop PV capacity is 134MW:

Marion (C)(44060)	Onkaparinga (C)(45340)	Combined
Est. dwellings: 37461	Est. dwellings: 71549	Est. dwellings: 109,010
Installations: 11518 (approx. 30.1% of dwellings)	Installations: 26836 (approx. 36.6% of dwellings)	Installations: 38,354 (approx. 35.1% of dwellings)
Est. installed capacity: 40,094 kW	Est. installed capacity: 93,636 kW	Est. installed capacity: 133,730 kW

Table 1 – Solar Power System data – source APVI, Clean Energy Regulator

4.2.2 Other generation capacity

The region is also home to some significant generation capacity of around 212 MW 'embedded' in the local Distribution Network. These include:

- Pedlar Creek Landfill 4MW (from 2019);
- The SA Government Generators – a procurement process commenced in late 2018 for a 25 year lease of the four-unit 123MW gas/diesel power plant at Lonsdale commencing no earlier than May 2019; and
- Snowy Hydro's diesel generators at Lonsdale (20 MW) and Pt Stanvac (65 MW). [10]

[10] www.snowyhydro.com.au/our-energy/gas/diesel/

5 The regional energy economy

5.1 An estimate of size

An estimate of the size of the SAEDB regional energy economy has been derived based on estimated electricity and gas consumption in the region and estimates of electricity and gas prices.

Of the nearly 1100 GWh of grid electricity consumption measured for the region:

- Residential estimate of 460 GWh pa (approx. 45%) at an average bundled price of $0.35/kWh ($350/MWh) = c$190m pa
- Business (Small, Commercial and Industrial) estimate of 600 GWh at an average bundled price of $0.25/kWh ($250/MWh) = c$160m pa

This equates to a combined electricity expenditure of around $250m pa. Further, it is estimated that around $30m of gas is consumed by homes and businesses in the region (Section 3.2).

There is also 134MW of 'consumer owned' PV (from close to zero in 2008) that generates around 175 GWh[11] of electricity pa that is not reflected in the above figures. At an average investment of around $2,000/kW installed, households and businesses have invested around $270m in meeting some of their electricity needs.

5.2 Key Businesses in the Local Energy Economy

The major Commercial and Industrial energy users in the region are expected to include[12]:

- SA Water (WWTPs, Desalination Plant)
- Shopping Centres (Westfield Marion, Noarlunga Centre, Southgate, Castle Plaza etc)
- Businesses located in the region's manufacturing and commercial precincts such as Lonsdale, St Mary's, Tonsley, Melrose Park, Edwardstown, Plympton
- Flinders University and Medical Centre

There are also numerous businesses with an energy focus located in the region including:

- SIMEC Zen Energy (www.zenenergy.com.au; www.simecenergy.com.au/)
- Seeley International (www.seeleyinternational.com/)
- REDARC (www.redarc.com.au)

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[11] A number of alternate methods could be applied to valuing this electricity. At a conservative 10c/kWh, 175GWh is worth $17.5m pa, increasing the estimate by a further 6%.

[12] Actual energy consumption is commercially confidential information not available in the public domain and not used for this report. The summary presented is based on our knowledge of the region and the types of economic activities that have high energy use

- Azzo Automation (http://azzo.com.au/)
- ELWA Energysavers (www.elwa.com.au/)
- CCT Energy Storage (www.cctenergystorage.com/ Lonsdale)
- Power and Drive Solutions (www.poweranddrive.com.au, Lonsdale)
- EfficientSee (http://www.efficientsee.com.au/)
- Sol Energy (http://solenergy.com.au/)
- Sustainability House (SUHO, Edwardstown https://suho.com.au/)
- Sustainable Works (www.sustainableworks.com.au, Clarendon)
- Keystones Solar Group (http://keystones.com.au/)
- Solar Man (http://solarman.net.au/)
- Solar Depot (http://solardepot.com.au)
- Apex Energy (www.apexenergyaustralia.com.au/)
- My Energy Engineering (http://www.myenergysolar.com.au/)

There is very likely to be more service providers in the region and it is recommended that SAEDB establish a more complete list of such businesses.

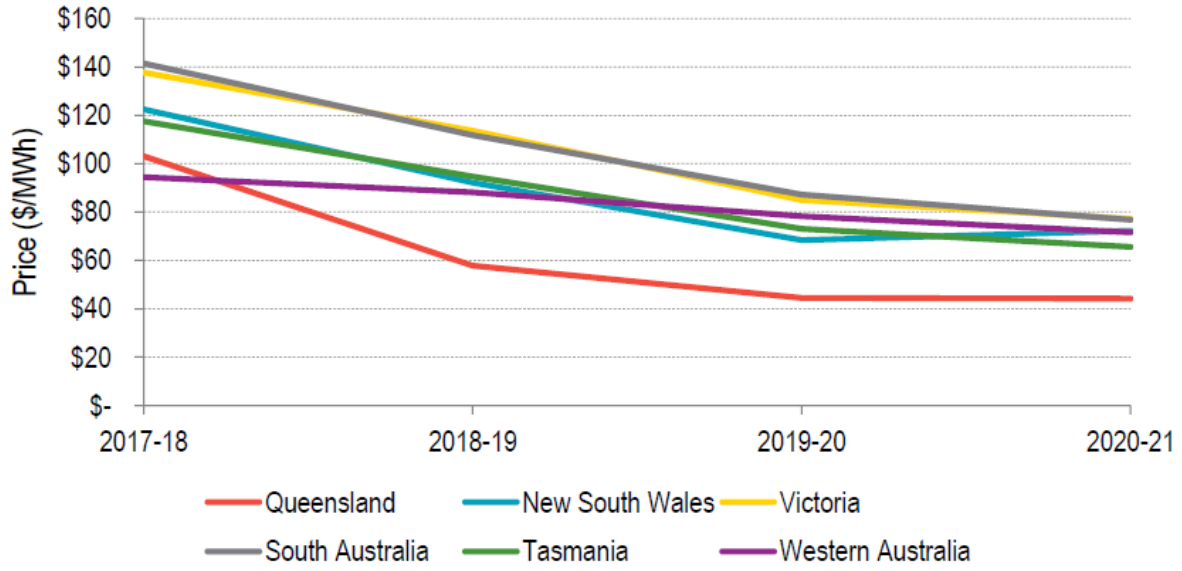
6 Relevant aspects of the National Electricity Market

6.1 Wholesale Pool

The National Electricity Market operates on a compulsory wholesale electricity pool that, from 2021, will settle on a five-minute basis[13]. There is much uncertainty in projecting long term wholesale electricity prices but there are publicly available reports that suggest downward pressure on wholesale prices in coming years. Further, there is strong evidence that this downward pressure will be most pronounced during 'solar hours' of the day.

The Australian Energy Markets Commission (AEMC) publishes annual retail price projections for residential customers[14]. The 2018 Projections are based on Wholesale Cost Modelling by EY that indicates a fall back to an average wholesale price of around $80/MWh (8c/kWh) by 2021.

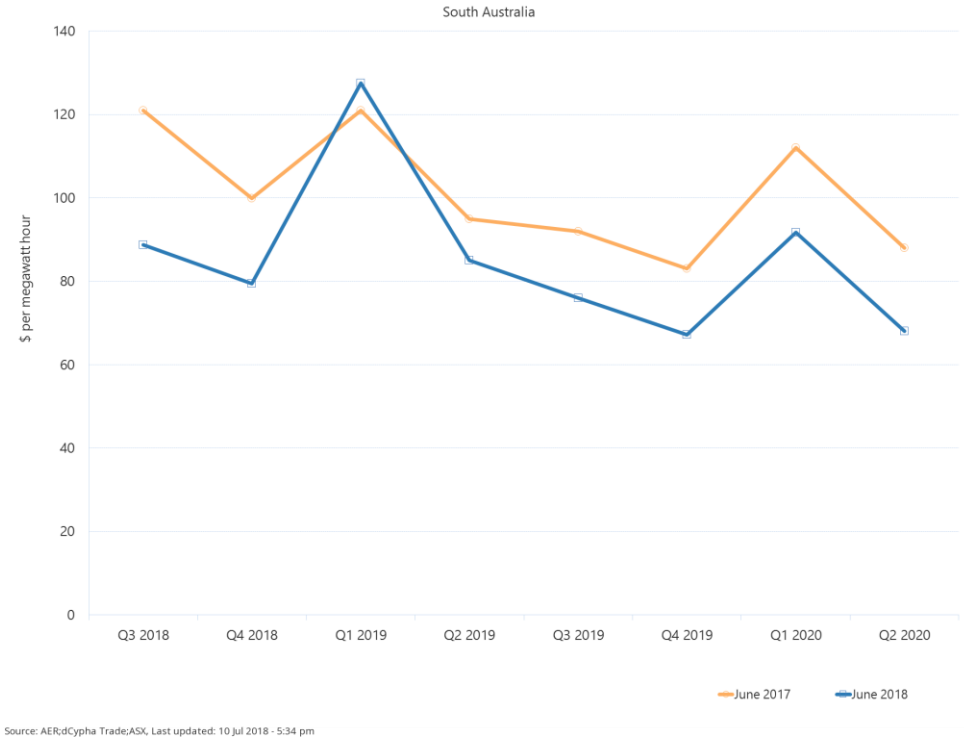
Figure 4: Average wholesale electricity spot market price forecast for the base scenario



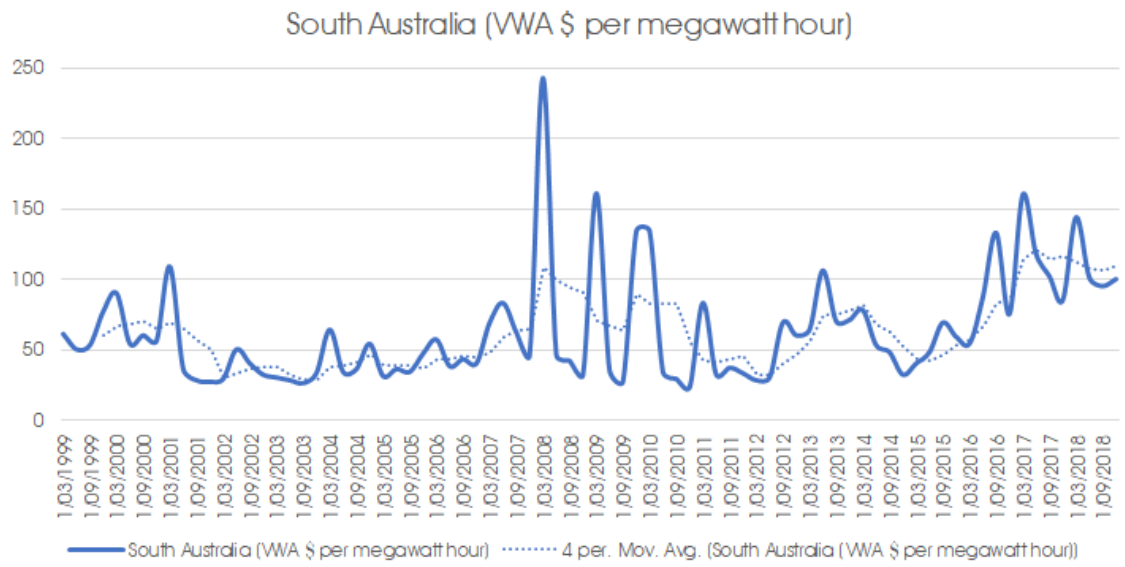
* Note that the Western Australia wholesale electricity price in Figure 4 is based on market modelling and includes the estimated cost associated with the reserve capacity mechanism in addition to wholesale balancing market price
** ACT results are based on NSW price outcome

The Australian Energy Regulator (AER) publishes summary data for the NEM futures market (from sources including the ASX)[15]. For South Australia, the data indicates a clear decline in base futures prices after Q1 2019 similar to that of the EY modelling for the AEMC of around $80/MWh.

[13] www.aemc.gov.au/rule-changes/five-minute-settlement
[14] AEMC 2018 Residential Price Trends, December 2018 www.aemc.gov.au
[15] www.aer.gov.au/wholesale-markets/wholesale-statistics/south-australia-comparative-base-futures-prices



The following chart is of quarterly volume weighted average spot prices in SA[16]. The dashed line represents the 12-month rolling average price and highlights how the recent period has been well above long-run averages:



Longer term projections are made more difficult by the lack of a settled national energy policy but the trajectory for solar power generation is potentially a stronger guide to the longer-term economics of solar projects and renewables PPAs. This is discussed in the next section.

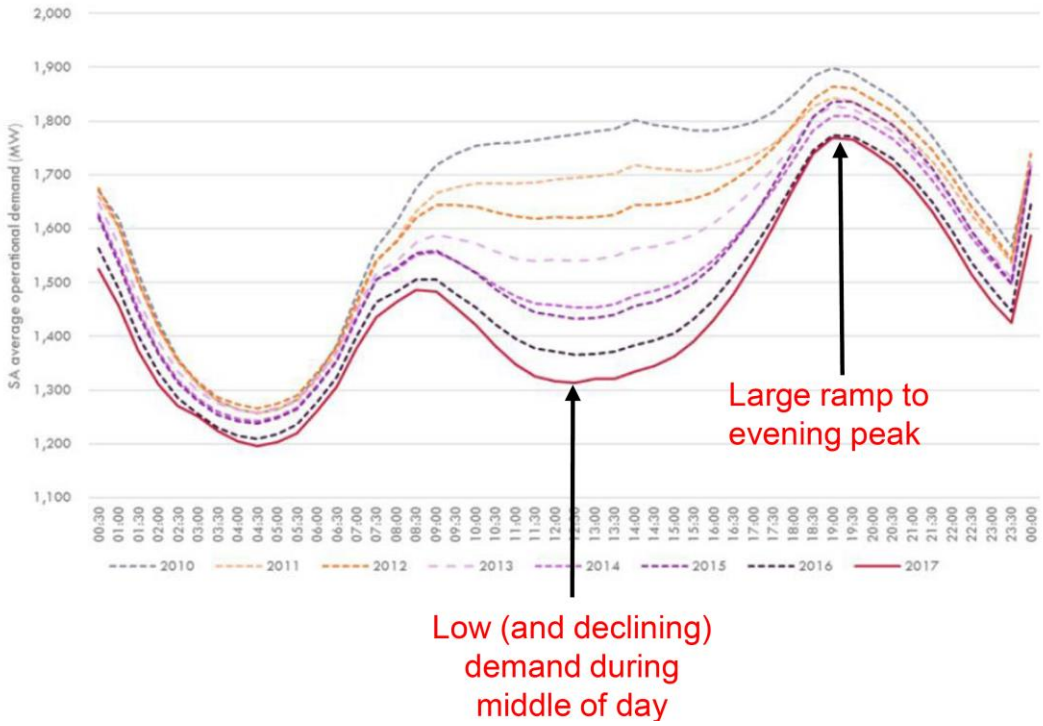
[16] www.aer.gov.au/wholesale-markets/wholesale-statistics/quarterly-volume-weighted-average-spot-prices

6.2 South Australia's 'solar electricity market'

There is evidence that South Australia's growing solar power capacity will place strong downward pressure on revenues for solar projects. AEMO's 2018 South Australian Electricity Report stated (p14):

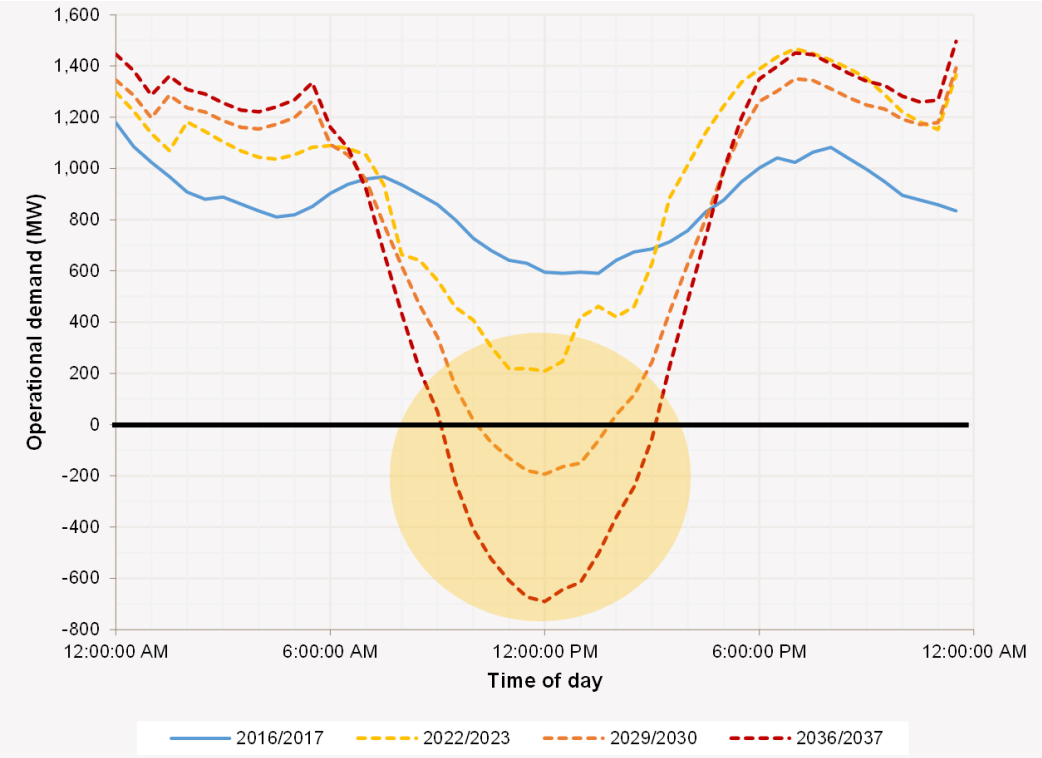
> *"Rooftop PV systems continue to be installed at a very high rate. An additional 155 megawatts (MW) was estimated to have been installed in 2017-18 across business and residential sectors, bringing the total estimated residential and business PV combined capacity in South Australia to 930 MW. Of the two sectors – business and residential – the business sector saw stronger relative growth by a considerable margin."*
>
> (p15) *"Rooftop PV installed capacity is forecast to grow steadily over the next 10 years, reaching 1,432 MW in 2027-28."*

The following chart from the SA Department of Energy and Mining (DEM)[17] illustrates the impact of solar on daytime demand since 2010:



The following chart from DEM illustrates the view within DEM and AMEO that solar production will regularly exceed South Australian demand by the end of the 2020s:

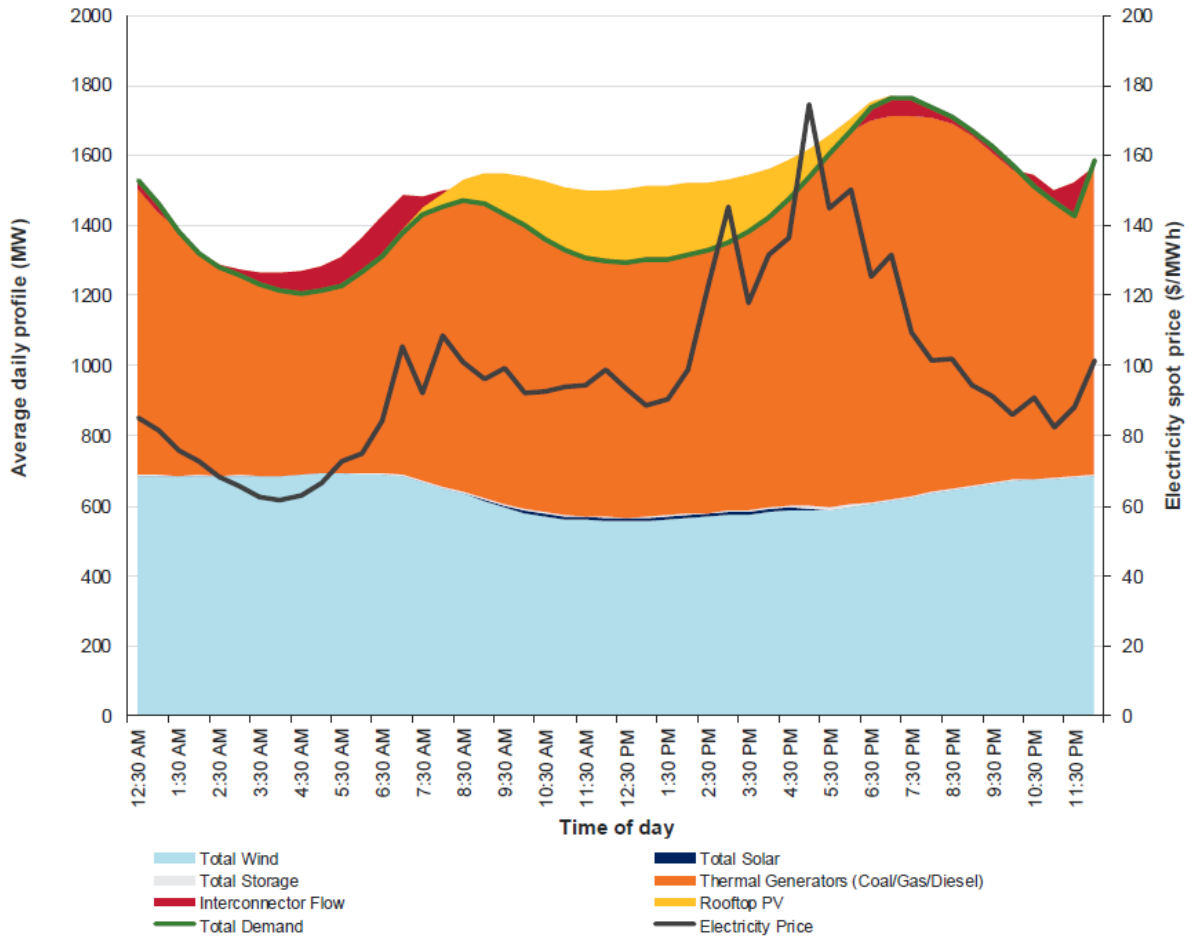
[17] Presentation 3 December 2018, Mr Vince Duffy, Executive Director
www.energymining.sa.gov.au/energy_and_technical_regulation/energy_resources_and_supply/south_australian_demand_management_trials_program



The impact on wholesale prices of solar across the day is also becoming apparent. The following chart from AEMO's 2018 South Australian Electricity Report illustrates the average price across the hours of the day in 2017-18[18]. As is clearly shown, the highest prices are achieved after solar production has peaked. The data behind the chart indicates that the wholesale price for solar, on average, was around $108/MWh in 2017-18.

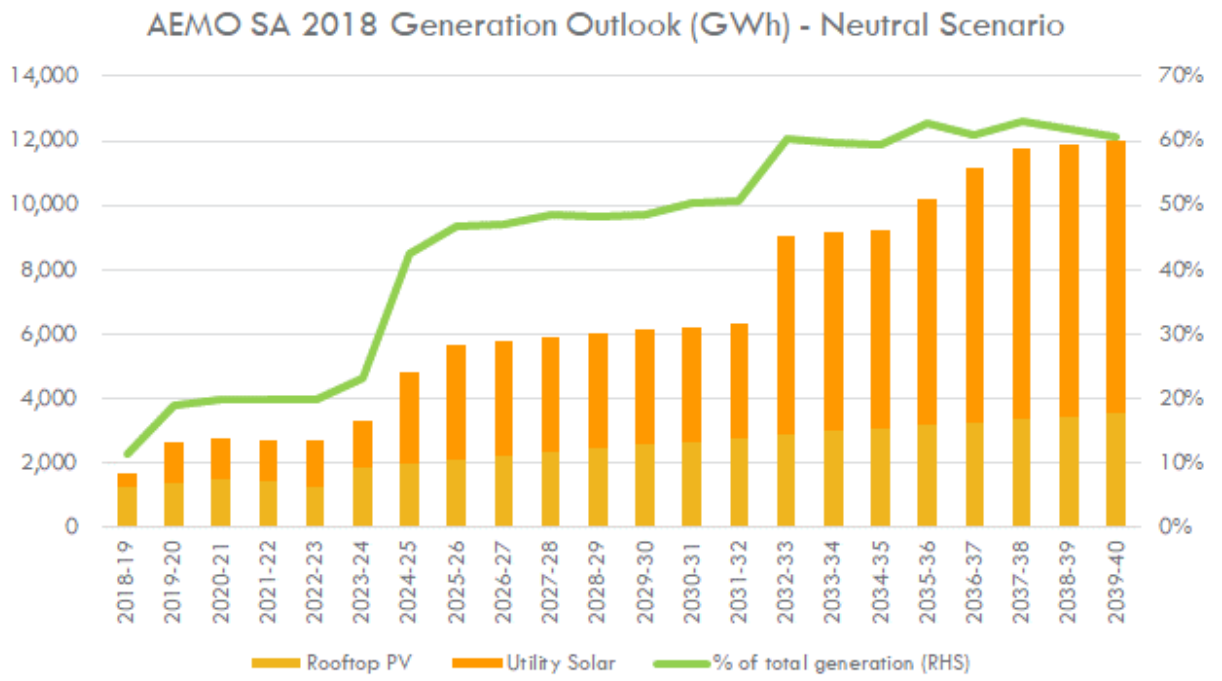
[18] "The average daily supply profile for South Australia, seen in Figure 12, represents the supply (in MW) for each 30-minute trading interval of a day, averaged over the 2017-18 financial year."

Figure 12 Average daily supply profile averaged for the 2017-18 financial year



Looking forward, there is significantly more solar capacity planned – from 'utility scale' solar projects in particular. The 110MW Bungala Solar Farm began generating in 2018[19]. This is the first 'utility scale' solar farm in SA and adds to the state's 930MW of rooftop solar. AEMO reports a further 218MW as committed and 2,387MW as 'proposed'. The following chart from AEMO's 2018 Integrated System Plan illustrates how they expect solar to reach 50% of total generation in SA by around 2030[20]:

[19] http://www.reachsolarenergy.com.au/bungala.html,
[20] http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Planning-and-forecasting/Integrated-System-Plan



Given that almost all of this solar capacity will be competing to sell its output during daylight hours, we are projecting strong downward pressure on wholesale prices for solar projects.

In our view, solar projects are unlikely to return more than $100/MWh from the spot market in the short term and a value of around $80/MWh for the period 2020-2030 may still prove to be optimistic.

The impact is being felt in the low-voltage parts of the network first as a 'solar trough'. SA Power Networks 2020-25 Regulatory Reset Proposal Overview Section 7: Tariff Structure Statement (page 36) states:

> *"Solar rooftop generation is exceeding localised demand in many parts of our network, creating a solar 'trough' in the middle of mild sunny days. Cost-reflective tariffs that encourage customers to shift electricity use into the 'solar trough' will help manage this emerging issue and avoid augmenting the network to cope with this surplus energy."*

The network tariffs for residential customers proposed for 2020-25 include a new residential tariff for all customers with a smart meter that has peak, off peak and a 'solar sponge' from 10AM to 3PM. Indicative rates for this tariff in 2020-21 are 18c/kWh peak, 7.2c/kWh off peak and only 3.6c/kWh during the solar sponge. This is illustrated below to show the strong incentive that will exist to shift residential consumption to the middle of the day:

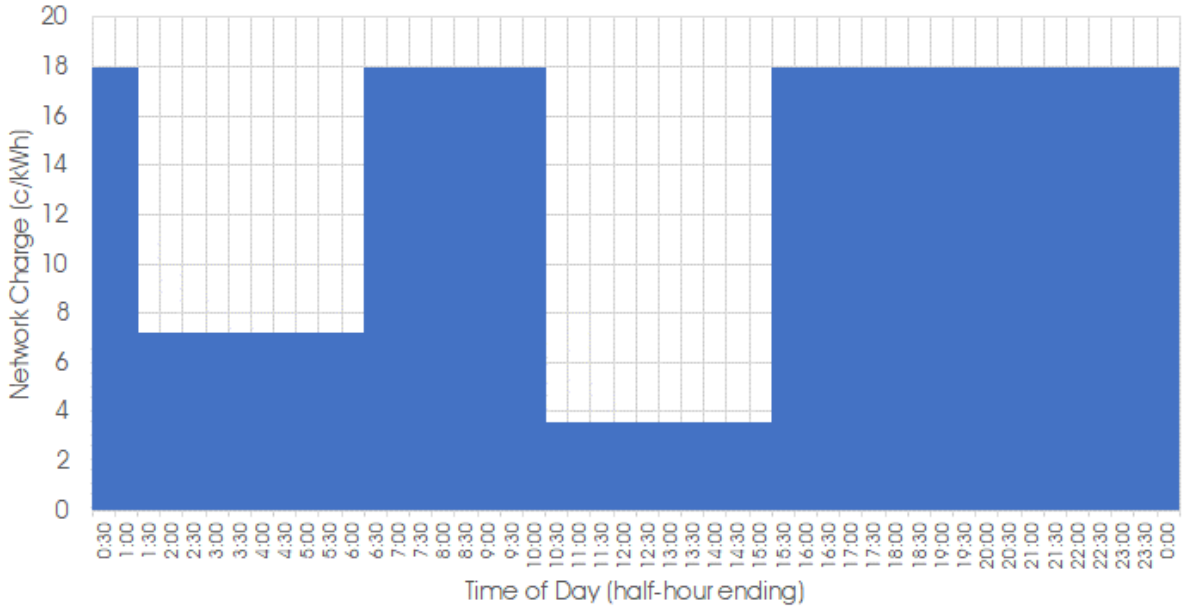


Figure 8: Proposed Residential Network Tariff for 2020-21 (Source: SAPN DRAFT TSS)

The final form of this tariff is not yet agreed and the price signal sent to customers will ultimately be decided by electricity retailers. However, SAPN expect around 40% of households will have a smart meter by 2025 and these will all be assigned to this sort of tariff. In our view this strong price signal will create opportunities for innovative approaches to reducing household electricity bills.

6.3 Renewable Energy Target

A key source of revenue for renewable projects has been from the sale of the certificates required by electricity retailers to meet their obligations under the Commonwealth's *Renewable Energy (Electricity) Act 2000*[21]. These certificates are known as LGCs and price projections are based on futures markets and consideration of supply and demand fundamentals. These costs are passed on to consumers as part of their electricity bills.

In terms of market fundamentals, the Clean Energy Regulator reported in January 2018 that the 2020 Renewable Energy Target will be met by existing and committed projects[22]. There is no current commitment from either side of federal politics to extend the RET and so the target (of 33,000 GWh per annum) will remain constant until 2030 when the legislation expires. Some new certificates will likely need to be created to make up for plant outages and retirements

[21] More information at the Clean Energy Regulator website: http://www.cleanenergyregulator.gov.au/RET/Pages/default.aspx
[22] CER Media Release "Record year of investment means Australia's 2020 Renewable Energy Target will be met" 23 January 2018 available from http://www.cleanenergyregulator.gov.au/RET/News-and-updates#January-2018

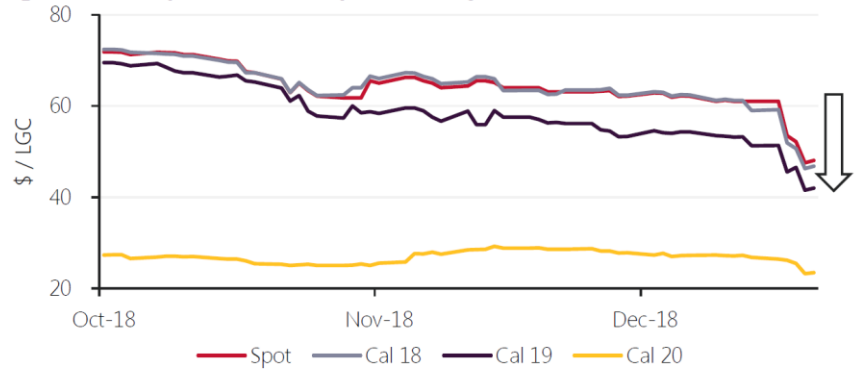
and LGCs can also be used as a way of voluntary offsetting greenhouse emissions. As a result, the value of LGCs is not expected to fall to zero but it is expected that the price of LGCs will fall from its heights of over $80/MWh in early 2018 to below $20 for the period 2020-2030.

Mercari is an active trader of LGCs and publishes futures prices for LGC trades[23]. The following table illustrates recent trades in LGCs to be delivered out to calendar 2022 and shows a steady decline in price over the years and also during the period of preparing this report.

Tenor	Mid Point Index 11 December 18	Mid Point Index 16 January 19	Mid Point Index 07 February 19
Spot	61.250	44.875	38.000
Cal 18	61.475	44.300	37.900
Cal 19	53.375	44.725	36.800
Cal 20	27.125	25.750	23.750
Cal 21	18.450	16.950	15.250
Cal 22			12.250

The Australian Energy Market Operator (AEMO) also sources prices from Mercari and published the following chart in their regular Quarterly Dynamics report (this one for Q4 2018)[24]:

Figure 21 LGC spot and forward prices over Q4 2018



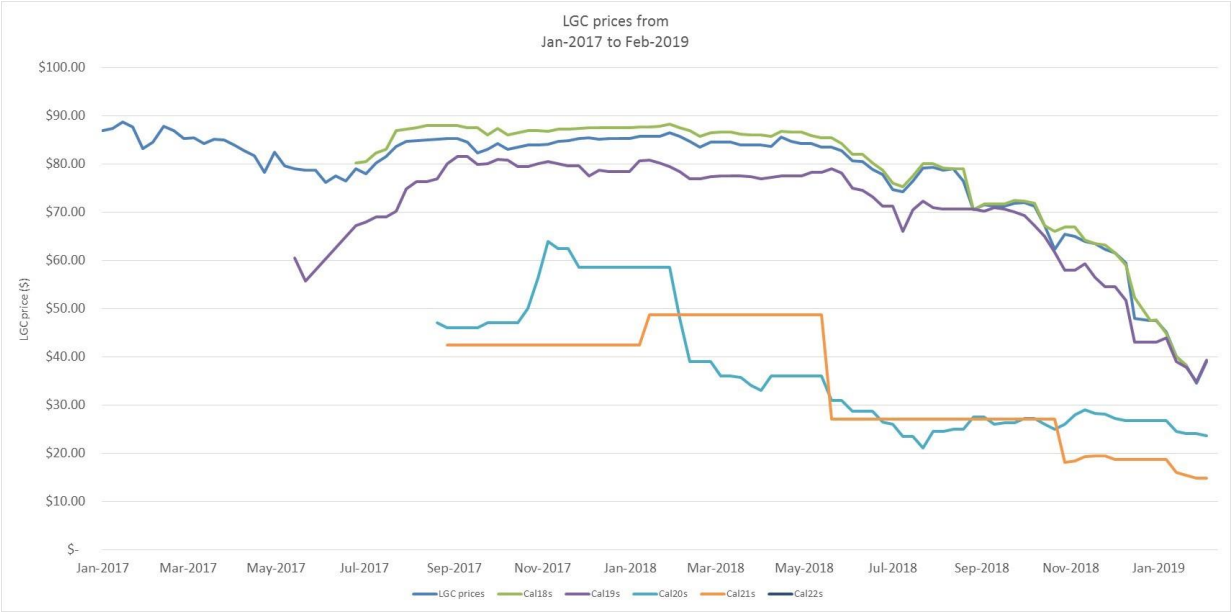
Source: Mercari

Table 4 LGC prices

Product	Change over Q4 18
Spot	▼ $24.25 (34%)
Cal 18	▼ $25.38 (35%)
Cal 19	▼ $28.53 (40%)
Cal 20	▼ $2.63 (10%)

The Clean Energy Regulator uses data from another LGC trader TFS Green and recently published a similar price trajectory[25]:

[23] www.lgc.mercari.com.au accessed 11 December 2018, 16 January 2019, 07 February)
[24] Released Feb 13 2019 and available from http://www.aemo.com.au/Media-Centre/AEMO-publishes-Quarterly-Energy-Dynamics---Q4-2018
[25] http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/Large-scale-Renewable-Energy-Target-market-data/large-scale-generation-certificate-market-update



Taking all of the above into account, we recommended the application of a conservative approach to LGC prices from 2020 until 2030 of around $10-$15 when evaluating projects or electricity contracts.

6.4 Microgrids, Embedded Networks and District Energy Schemes.

The supply of electricity to households and businesses is a regulated activity in Australia and the regulatory frameworks cater for situations where, instead of a dedicated connection to the electricity grid (often referred to as the shared network), energy consumers are connected to private electricity networks. These are usually referred to as *embedded networks* or *inset networks*. The district energy scheme at Tonsley is an example of an arrangement regulated under this framework. Renewable energy 'hubs' and microgrids also fall under this framework and the Australian Energy Markets Commission is actively reforming the regulatory frameworks that apply[26].

The intent of the framework is to replicate the consumer protections available to all other energy customers (South Australia operates under the National Energy Customer Framework administered by the Australian Energy Regulator). This sector specific framework sits alongside the protections provided under Australian Consumer Law and includes access to industry specific dispute resolution (The Energy and Water Ombudsman in SA).

With the increased number of these embedded networks and increasing interest in local energy schemes, the Australian Energy Markets Commission (AEMC) released a Draft Report in

[26] www.aemc.gov.au/market-reviews-advice/updating-regulatory-frameworks-embedded-networks, https://www.aemc.gov.au/news-centre/media-releases/consultation-starts-regulatory-arrangements-stand-alone-power-systems.

their Market Review*: Updating the Regulatory Frameworks for Embedded Networks* on 31 January 2019[27]. The report sets out the AEMC's view on how electricity should be regulated inside private electricity networks. This process will update the framework for regulating energy 'on-selling' in shopping centres, airports, apartment buildings, retirement villages etc.

The proposed changes will enhance the ability of consumers within these private networks to access electricity supply from a retailer of their choice. Changes to metering obligations also mean that operators of these private networks will not be able to 'capture' customers and impose higher prices than would be the case otherwise – a common complaint under the existing arrangements from customers but an important component of the business case for proponents.

These changes are relevant when considering an energy hub or other on-selling arrangement. The cost of regulatory obligations are likely to place pressure on the business case for small scale, local schemes.

[27] www.aemc.gov.au/market-reviews-advice/updating-regulatory-frameworks-embedded-networks

7 Opportunities

Based on the survey responses, market context and infrastructure utilisation, we have distilled the following general opportunities from this Baseline Report.

It is recommended that the SAEDB discuss these and determine which of these to prioritise for development into specific initiatives. The 'Opportunities' stage of this project (the second stage, subsequent to this Baseline Report) can be used to develop a suite of initiatives that promote the energy opportunities available to businesses in the region.

7.1 Energy Advice for Business

the Australian Competition and Consumer Commission Retail Electricity Pricing Inquiry found that small businesses tend to have limited bargaining power to lower their prices and limited resources to identify and implement energy efficiency measures[28]. In response, the Australian Government released details of the Business Energy Advice Program (BEAP) on 06 February 2019 when it opened applications for 'roll-out partners' for the program. The program aims to "… *deliver trusted advice to help small businesses get better energy deals and reduce their usage*"[29].

Ensuring local small businesses can access this service – or something similar - should be considered a priority. Prioritising higher energy using businesses such as those in Section 5 would be a logical place to start.

As noted in Section 5, there are a number of businesses with an energy services focus based in the region. Connecting these with local energy users would be a logical inclusion in such an initiative. There is very likely to be more service providers in the region and it is recommended that SAEDB establish a more complete list of such businesses.

A well utilised example of 'quick wins' for many types of small business is the South Australian Government's Retailer Energy Efficiency Scheme (REES) program for upgrades for Commercial Lighting[30]. AGL for example offers "free" LED lighting upgrades under the scheme[31].

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[28] www.accc.gov.au/regulated-infrastructure/energy/electricity-supply-prices-inquiry
[29] Media Release The Hon. Angus Taylor MP Minster for Energy 17 December 2018 http://www.environment.gov.au/minister/taylor/media-releases/mr20181217.html ; 07 February 2019 http://www.environment.gov.au/minister/taylor/media-releases/mr20190206.html
[30] http://www.energymining.sa.gov.au/energy_and_technical_regulation/energy_efficiency/retailer_energy_efficiency_scheme and www.escosa.sa.gov.au/industry/rees/overview/rees-overview
[31] without endorsing the scheme, more information is available here: http://rees.agl.com.au/business/

In response to the survey, providing case studies of local businesses using actual dollar figures to illustrate the real ROIs being achieved is likely to be an effective tool for engaging more businesses.

7.2 Energy Procurement Hub

As indicated by the survey responses (Section 2.2), an opportunity exists to pursue local bulk purchase initiatives. We must acknowledge that such initiatives often have 'cat herding' attributes but, in our experience, there is value in facilitating an opportunity to share different energy procurement experiences even if a 'bulk deal' is not the end result.

There has been significant attention paid to corporate renewable power purchase agreements (PPAs) in recent times, where large energy users have been able to secure long-term electricity supply contracts while underwriting new renewable energy generation projects. This approach has been adopted by individual entities as well as buying groups. Substantial resources detailing the pros and cons of such approached are published by the Business Renewables Centre Australia[32] and not reproduced here. However, the general approach of buying groups has seen a resurgence of interest on the back of the positive stories emerging.

It is recommended that the SAEDB engage with the SA Department of Industry and Skills to consolidate work underway on similar procurement initiatives.

7.3 Network Utilisation

As shown in Section 4, the local electricity grid has substantial capacity at the substation level and that current consumption patterns mean that outside of peak times there is much more capacity available to drive economic activity.

As a first step, it is recommended that the SAEDB seek to have missing data restored in the next update of the Network Opportunity Maps as it is a positive story for the region that would be easier to tell if the maps were complete (Section 3.1).

Further, it is recommended that the SAEDB engage directly with SA Power Networks and Australian Gas Networks in order to create a regular dialogue on electricity and gas infrastructure that can be shared with local industry to inform investment decisions.

[32] https://businessrenewables.org.au/knowledgebank/

7.4 Shifting demand to solar hours

Opportunities exists to improve network utilisation by increasing electricity consumption during solar hours. As shown in Section 6.2, network tariffs are expected to lower the cost of consumption during solar hours. If electricity retailers can be encouraged to pass this price signal on to customers then a range of opportunities emerge to lower electricity bills for households in the region.

It is recommended that the SAEDB engage directly with SA Power Networks on tariff reform to identify opportunities for local businesses to lower costs.

7.5 The Hydrogen Economy

Opportunities exist for regions to establish themselves as leaders in this increasingly prospective space. The SAEDB region has an advantage in the Hydrogen Park for SA initiative at Tonsley described in Section 3.2. It should be noted that Hydrogen developments in other locations are also occurring[33].

The South Australian Government's Renewable Technology Fund has provided a $3.6 million grant towards a $7.7 million project at UniSA's Mawson Lakes campus that includes hydrogen production and a 50kW hydrogen fuel cell, a 0.45MWh flow battery, 3.2 million litres of chilled water storage and 1.8MW of ground and roof mounted solar PV. The project will cut campus emissions by 35 per cent and reduce peak demand on the grid and is being designed as a testing facility.

The same fund is supporting a "green hydrogen" plant at Port Lincoln to be built by Hydrogen Utility (H2U) and including a 10MW hydrogen-fired gas turbine, fuelled by local wind and solar power, and a 5MW hydrogen fuel cell[34].

Renewables developer Neoen's 50 megawatt (MW) Hydrogen Super hub planned at Crystal Brook is envisioned to be the world's largest co-located wind, solar, battery and hydrogen facility.

It is recommended that SAEDB engage directly with Australian Gas Networks on developing a Hydrogen Centre for Excellence at Tonsley.

[33] http://www.renewablessa.sa.gov.au/topic/hydrogen/hydrogen-projects
[34] https://reneweconomy.com.au/s-a-to-host-australias-first-green-hydrogen-power-plant-89447

southern
economic development board

Southern Adelaide Business Energy Survey – Summary

The Southern Energy Working Group surveyed businesses on a range of energy issues during January and February 2019.

Approximately 10,000 southern Adelaide businesses were invited to participate, and 78 businesses responded to the survey.

Below is a summary of the responses:

Business Profile

- 83% are small businesses with less than 20 employees and 70% have less than 5 employees
- 64% have a turn-over of less than $500,000 per year and 35% less than $75,000 per year
- 60% operate during normal business hours (8am – 5pm) while 17% operate 24/7
- A wide variety of industry sectors were represented, with manufacturing (22%), professional, scientific and technical services (20%), and financial and insurance services (9%) being the most prevalent

Energy Use and Experiences

- Almost all businesses use mains electricity, 68% of respondents use gas, and 33% have solar power
- 71% spend less than $10,000 per year on electricity
- 12% use more than 160,000 kWh of electricity per year
- 48% had experienced a disruption in energy services during the last 18 months
- Respondents indicated an expectation of rising electricity prices over the next 2-5 years (72%) compared to stable or falling prices (28%)
- When asked about current experiences with energy retailers, just over half were positive (53%), around 23% were negative about their experiences and the remainder were neutral.

Opportunities

- 13% (i.e. 10) respondents had recently undergone an energy audit or assessment.
- Barriers to energy-efficient solutions in businesses included renting not owning premises, access to finance, perceptions of low returns on investment (ROI) and access to expertise, skills and experience.
- Some respondents were able to identify sources of financial assistance for energy efficiency upgrades but 80% were not aware of any.
- A majority of respondents were interested in more information on bulk purchase initiatives (58%) and four businesses stated that they were currently involved in an initiative (5%).
- When asked what aspects of energy use they would like more information on, the results were quite diverse. Lighting (24%), Insulation (27%), Refrigeration (24%), Solar Hot Water (24%), Power Factor Correction (18%), Solar and Batteries were the more common themes.

Regional Collaboration and Working Across Boundaries

Originating Officer Executive Assistant to CEO - Dana Bartlett

Corporate Manager Manager Corporate Governance - Kate McKenzie

General Manager Chief Executive Officer - Adrian Skull

Report Reference ISC190507R04

REPORT OBJECTIVE

This purpose of this presentation is for the Chief Executive Officer to brief Elected Members on the regional collaboration with Port Adelaide Enfield and Charles Sturt Councils.

EXECUTIVE SUMMARY

Ideas for future collaborative partnerships will be canvassed.

Speakers

Adrian Skull - Chief Executive Officer

REPORTS FOR DISCUSSION

CONFIDENTIAL ITEMS

REPORTS FOR NOTING

City of Casey Electric Vehicle Case Study

Originating Officer	Unit Manager Contracts - Colin Heath
Corporate Manager	Manager Finance - Ray Barnwell
General Manager	General Manager Corporate Services - Vincent Mifsud
Report Reference	ISC190507R05

REPORT OBJECTIVE

To provide the Committee with a report on the City of Casey's electric vehicle (EV) conversion program of heavy fleet vehicles.

EXECUTIVE SUMMARY

The City of Casey has a long term goal of being carbon neutral by 2040, and has adopted an Emissions Management Plan 2018-2022 (EMP) to guide and support the city towards these goals. The EMP establishes an emission reduction goal of 15% by 2021/22.

As part of the EMP Action Plan, Casey is seeking to reduce emissions associated with its fleet by continuing to investigate and trial electric vehicles.

The EMP (ie reduction in emissions), and desire for positive public perception, were the key drivers behind promoting EV take-up, and Casey staff have identified operating cost savings and environmental benefits associated with their decision. The City of Marion consider whole of life analysis would provide additional useful decision making information to assess economic benefits of EV versus conventional petrol vehicles.

RECOMMENDATION

That:

1. **The Infrastructure and Strategy Committee notes this report.**

DISCUSSION

Background

At the 2 April 2019 Infrastructure and Strategy meeting the Committee requested a report on the City of Casey's electric vehicle conversion program of heavy fleet vehicles, particularly the economic benefits.

The City of Casey ("Casey") is a local government area in Victoria, Australia in the outer south-eastern suburbs of Melbourne. Casey is Victoria's most populous municipality, with a 2016 census population of 299,301. It has an area of 409.9 square kilometres.

The City of Marion's Fleet Policy requires us to:

- consider emission levels, alternative fuel sources and other environmental factors in buying decisions
- seek to procure fleet assets that minimise carbon emissions and the resultant impact on our environment, and
- transition to fleet assets with lower emissions over time.

Strategic Context

Casey has a long term goal of being carbon neutral by 2040, and has adopted an EMP to guide and support the city towards these goals. The EMP establishes an emission reduction goal of 15% by 2021/22, with a 'stretch' emissions goal to reduce its corporate greenhouse gas emissions by 25% by 2021/22.

As part of the EMP Action Plan, Casey is seeking to reduce emissions associated with its fleet by continuing to investigate and trial electric vehicles (eg switch fleet to electric vehicles), and promote fleet vehicle fuel efficiency improvements.

Casey has adopted a range of strategies to assist in the overall reduction in emissions, including:

- offsetting 100% of their fleet emissions through local reforestation carbon offset purchases
- modifying their vehicle procurement by leasing/procuring a range of EV/hybrid vehicles (see details below)
- providing EV awareness training to council staff to counter concerns regarding 'range anxiety'
- prioritising EV's over petrol vehicles within their vehicle booking system (EV's are offered as the first choice)
- considering revising their internal policies to allow a greater range of staff with take home/packaged vehicles to be able to select an EV vehicle (which generally are not available to all staff due to higher purchase prices)
- considering hydrogen powered vehicles/trucks, however considered technology was not yet advanced

Light Fleet

Following its involvement in the Victorian Electric Vehicle Trial in 2011 (conducted through the Department of Transport), Casey has leased two electric passenger vehicles (a Nissan Leaf and a BMW i3), which are charged at their Narre Warren Work Centre which houses an 80kW solar PV system. The leases expire in June 2019. Both EV's have a range of around 100kms, with the BMW having an onboard generator to extend the range by an additional 100kms.

The leased EV's are in the process of being replaced by two Hyundai Ionic vehicles, which are being purchased outright by Casey (approx. $40,000 +GST each). The Ionic will have a range of 220km.

Casey has a light fleet of approx. 130 vehicles, and will have 16 (12% of total fleet) EV/Hybrid vehicles within this fleet by the end of June 2019:

- 2 x Hyundai Ionic (pool vehicles)
- 7 x Corolla Hybrid (4 x pool vehicles, 2 x private use, 1 x commuter use)
- 2 x Camry Hybrid (private use)
- 5 x Pathfinder Hybrid (private use)

For comparison purposes, the City of Marion has a light fleet of 68 vehicles, of which 5 (7% of the total fleet) are Hybrid vehicles (Toyota Corolla Hybrids). Council until February 2019 had a fully electric Mitsubishi i-Miev within its fleet since approximately 2011.

Heavy Fleet

Casey has a heavy fleet of 60 trucks, and currently have 2 (3% of the total fleet) Hino Hybrid trucks

(manufactured by SEA, and used in Parks).

Casey is currently specifying a further one full electric truck for future purchase (medium rigid tipper with work body, anticipated to tow a skid steer). This EV truck is anticipated to cost in excess of $100k more than a standard equivalent diesel truck.

Casey's waste collection contractor uses 1 x EV truck (manufactured by SEA) to undertake bin deliveries, and some waste collection activities. It is not used as part of a standard ongoing collection route.
None of the City of Marion heavy fleet vehicles (55 items) are EV/Hybrid.

Benefits

Casey has undertaken analysis of the operating costs and greenhouse gas emissions of an EV versus an equivalent petrol engine vehicle, which saw a 75% reduction and 10% reduction respectively (the reduction in greenhouse gas emissions, prior to offset purchases, being much less significant due to Victoria's electricity being sourced from inefficient brown coal). No whole of life cost analysis (eg considering original purchase price, expected resale value, and ongoing operating costs etc) was undertaken.

The City of Marion consider whole of life analysis would provide additional useful decision making information to assess economic benefits of EV versus conventional petrol vehicles.

As an example, the recent decision to purchase 5 Toyota Corolla Hybrid vehicles was based on an additional whole of life cost of approximately $2500 over a 5 year period, to achieve a 45% reduction in greenhouse gas emissions compared to an equivalent petrol engine vehicle.

Conclusion

Discussions with Casey staff indicated the EMP (ie reduction in emissions) and desire for positive public perception were the key drivers behind promoting EV take-up, and have identified operating cost savings and environmental benefits associated with their decision.

The City of Marion consider whole of life analysis would provide additional useful decision making information to assess economic benefits of EV versus conventional petrol vehicles.

Grants Attraction Program Update

Originating Officer	Communications Adviser - Richard Watson
Corporate Manager	Manager Customer Experience - Karen Cocks
General Manager	General Manager Corporate Services - Vincent Mifsud
Report Reference	ISC190507R06

REPORT OBJECTIVE

The purpose of this report is to provide the Infrastructure and Strategy Committee with an update on how the City of Marion is identifying and pursuing external funding opportunities for Council projects.

EXECUTIVE SUMMARY

At its meeting of 3 July, 2018 (ISC180703R04) the Infrastructure and Strategy (I&S) Committee received a report on:

"Projects ready for implementation; how funding opportunities to be identified/activated; need for a Council public policy statement on how Council funds its projects."

The report outlined the formation of the External Funding Attraction Program (EFAP) and how it seeks to attract funding for projects aligned to Council's Community Vision – Towards 2040.

This report outlines the progress the EFAP has made since:

- Training staff in identifying and seeking external funding
- Developing an online user guide
- Promoting upcoming funding opportunities on a monthly basis
- Commencing the development of new systems to track and report on funding applications

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. **Note the report**

GENERAL ANALYSIS

Since reporting to the Infrastructure and Strategy Committee on 3 July, 2018, the EFAP has:

- Coordinated training in identifying and seeking external funding to about 46 staff
- Distributed monthly updates to SLT on upcoming opportunities for external funding
  Consolidated documents to support applications into the internal Sharepoint site, including Council's Strategic Plans, Annual Reports and statewide data such as health reports
- Worked with the CAMMS project management system team to include seeking external funding as a compulsory action when staff set up a project.

- Organised a staff training session for June 2019 with three funding officers from external organisations which seeks to improve staff understanding of the requirements of funding bodies and shape applications to meet their requirements

In development:

- Begun developing a new way of providing Elected Members with monthly updates on the status of grant applications using the CAMMS New Project Management System.
- To further improve funding submissions, EFAP is investigating training for staff in utilising demographic data to strengthen applications.

Funding status

To date in 2018-19, the City of Marion has received confirmation of $1,663,623 in external funding for once off capital and operational grants. These include:

- Oaklands Park smart precinct $867,500
- Cove Sports and Community Club $396,000
- Move it Marion $282,248
- Marion Sports andCommunity Club oval lighting $30,500
- Shamrock Rd Reserve $16,400

A document showing the current status of 2018-19 Funding Submissions for capital and operational grants, is attached as Appendix 1.

The document also includes projects for which external funding will potentially be sought. This list will continue to be updated in line with Council's strategic priorities.

Targeted projects

The EFAP continues to identify potential projects for external funding. The list of projects will be renewed on an ongoing basis in line with Council's strategic priorities, including the projects listed in the final City of Marion Business Plan 2019-23.

- The City of Marion has received confirmation of $4,081,663 of external funding in recurring operational grants, including:
- Grants Commission Financial Assistance Grant $1,784,868
- Roads to Recovery $370,000
- Community Home Support Program $1,520,183
- Library Services $287,686
- Home & Community Care $118,926

To date, the total external funding confirmed for 2018-19 is about $5.75million.

Attachment

#	Attachment	Type
1	EFAP funding applications update	PDF File

GRANTS FUNDING CONFIRMED FOR 2018-2019 AND TARGET PROJECTS

Note: Excludes recurrent operational funding.

PROJECT	FUNDING BODY	AMOUNT CONFIRMED
Shamrock Rd Reserve	Federal Govt (Stronger Communities)	$16,400
Activities recognising 125 years of women's suffrage	Office for Women (State Govt)	$5,000
Oaklands Park Smart Precinct	Smart Cities and Suburbs (Federal Govt)	$867,500
Edwardstown Soldiers' Memorial Gardens upgrade	Dept Treasury and Finance (State Govt)	$20,350
Edwardstown Soldiers' Memorial Gardens memorial plaques	Armistice Centenary	$21,140
Marion Sports Club oval lighting	Office of Recreation Sport and Racing	$40,000
Move it Marion fitness for older people	Australian Sports Commission	$282,248
Cove Sports Club change rooms upgrade	Australian Sports Commission	$396,466
ANZAC event workshops	Armistice Centenary Grant	$9,269
Woodlands Park Railway Station public art	ArtsSA	$5,250
TOTAL		**$1,663,623**

THIRD PARTY APPLICATIONS SECURED WITH STAFF SUPPORT

PROJECT	FUNDING BODY	AMOUNT CONFIRMED
Climate Ready Communities	Australian Red Cross/Resilient South	$99,600
Basketball SA facilities upgrade	Office of Recreation Sport and Racing	$129,000
Hallett Cove Beach Tennis Club courts refurbishment	Office of Recreation Sport and Racing	$86,000
South Bank Tennis Club, courts repair	Office of Recreation Sport and Racing	$64,000
Meteors Triathlon Club	Office of Recreation Sport and Racing	$4,250
TOTAL		**$382,850**

FEDERAL ELECTION PLEDGES

PROJECT	FUNDING BODY	AMOUNT PLEDGED
Mitchell Park Sports and Community Club upgrade	Labor Boothby	$5 million
Marion Golf Club kitchen upgrade	Liberal Boothby	$200,000
Glandore Community Centre playground	Liberal Boothby	$100,000
TOTAL		**$5.3 million**

FUNDING APPLICATIONS PENDING

PROJECT	FUNDING BODY	FUNDING APPLIED FOR
Capella and Nannigai reserves planning and design	Places for People (State Govt)	$75,000
Fairford Coach House restoration	SA Heritage fund (State Govt)	$85,000
Adelaide Cricket Club net relocation	Office for Recreation Sport and Racing	$325,000
Seaview High School Sport facilities	Office for Recreation Sport and Racing	$1,000,000
Mitchell Park Sports and Community Club cricket nets	Cricket Australia	$25,000
TOTAL		**$1,510,000**

UNSUCCESSFUL APPLICATIONS

PROJECT	FUNDING BODY	AMOUNT APPLIED FOR
Bandon Tce Reserve upgrade	Stronger Communities	$17,500
Bandon Tce Reserve upgrade	State Govt	$51,790
Living Kaurna Cultural Centre	Stronger Communities (Federal Government)	$19,922
Morphettville Park Sports and Community club oval realignment	Federal Community Sporting Infrastructure	$500,000
TOTAL		**$589,212**

OTHER PROJECTS TO BE TARGETED FOR FUNDING

Note
The projects targeted for external funding will be updated on an ongoing basis in line with Council's strategic priorities. This will include projects in the City of Marion Business Plan 2019-2023.

Projects targeted for external funding currently include:

Project	Estimated project cost	Funding body	External funding sought	Status
Southern Adelaide Economic Development Board	$500,000	Dept of Innovation and Skills	$500,000 over three years	Continuing to seek opportunities
Southern Adelaide Business Advisory Service	$500,000	Dept of Innovation and Skills	$500,000 over three years	Continuing to seek opportunities
Edwardstown Employment Precinct (access activation, amenity)	TBC	TBC		Continuing to seek opportunities
Economic activation analysis for Edwardstown, Hendon and Somerton Park industrial areas	$500,000	Dept of Innovation and Skills	$500,000 over three years	
Playgrounds and Reserves: • Yanyarri • Alpine Road • The Crescent Reserve • Central Avenue • Christopher Grover • Skipper Close • Capella	$3 million	State Govt	$3 million	Continuing to seek opportunities
Field River Restoration	TBC	State Govt	TBC	Continuing to seek opportunities
Plan a water supply business	TBC	State Govt	TBC	Project in development.
Stormwater partnerships	TBC	State Govt	TBC (depending on project details)	Continuing to seek opportunities

Urban Activation Project Data Analysis

Originating Officer	Unit Manager Economic Development - Donna Griffiths
Corporate Manager	Manager City Activation - Greg Salmon
General Manager	General Manager City Development - Abby Dickson
Report Reference	ISC190507R07

REPORT OBJECTIVE

To provide an update on the Urban Activation Project data collection.

EXECUTIVE SUMMARY

The Urban Activation Project was established in 2017 to uplift the public realm around commercial centres. The value of the project was $250,000. An expression of interest process was conducted. Eleven expressions of interest were received with four successful project recipients. An independent data analysis tool was sought to track the project outcomes over a period of two years. A draft data analysis is contained.

RECOMMENDATION

That the Infrastructure and Strategy Committee note the report.

DISCUSSION

The City of Marion have engaged an independent data collection source Kepler Analytics to understand the impact of the Urban Activation Project in March 2018.

Kepler Analytics offers trend data by connecting their device with individual blue tooth / smart devices. Please note people without smart devices are not counted hence this is considered trend data only. Data was collected before the intervention, immediately after intervention and will continue over two years post intervention. Intervention is considered when the Urban Activation Project is implemented at the site.

Trend data is tracked for:

- Foot traffic
- Dwell time
- Repeat customers

The Committee should note the data is still being analysed and is in draft format.

Each business has access to their own unique dashboard of data. The City of Marion have visibility over all sites.

To complement the quantitative data a survey was also administered to obtain qualitative data. The survey data helps to build the story for each site. It captures other details such as number of jobs, vacancies within the precinct, property values, social media following and community comments.

The draft trend data report is contained in Attachment one.

The first representation of the data is contained in Attachment two.

Attachment

#	Attachment	Type
1	Urban Activation Project Trend Data Report - Draft	PDF File
2	Urban Activation Data Excel PDF	PDF File

Urban Activation Project: Trend Data Overview Draft

August 2018 – March 2019

The Urban Activation Project provides businesses with infrastructure to support the activation of places, within the City of Marion. The value of the project was $250,000. To capture data from each project, a Kepler Data Analytics tool has been installed at each site. The data captured includes: number of visitors to the site, average dwell time and return visits. Business owners have also been asked to provide data at key intervals as per their reporting requirements.

The five successful applications of the Urban Activation Project include:

1. Lampshade Coffee Lounge
2. Once and Again Book Café
3. Trott Park Local Shopping Precinct (Little Bici Bakery)
4. SA Aquatic and Leisure Centre
5. Next Chapter Gourmet Café

Key Statistics for all Projects:

Total number of people outside all sites (with a smart device):

1,353,673

People

Total number of converted customers to all sites:

489,949

People

5 **Business participated in the Southern Adelaide Business Advisory Session**

4 **Businesses undertook a Digital Growth Consultation**

2 **New jobs created**

Average dwell time for all projects:

11 minutes, 52 seconds

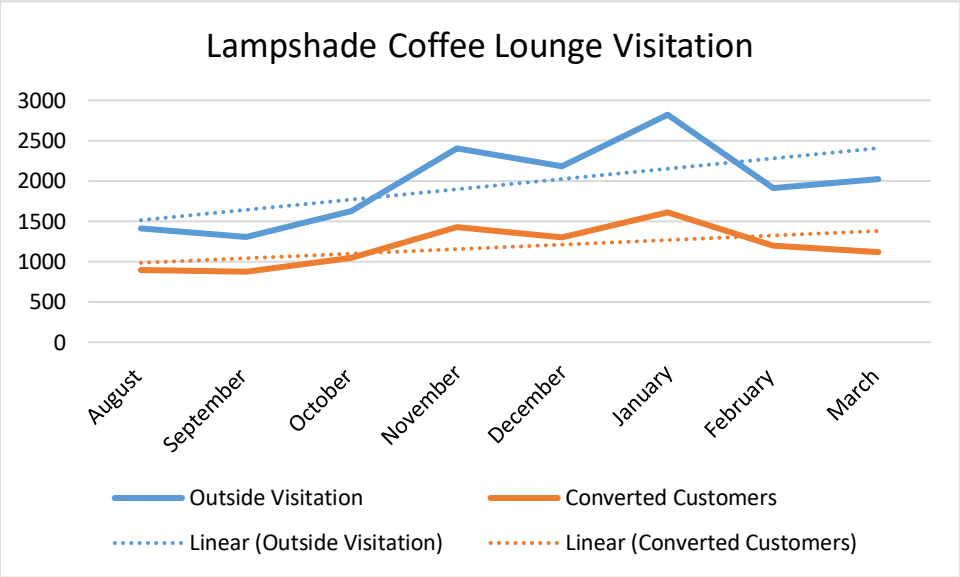
1. Lampshade Coffee Lounge Trend Data

August 2018 – March 2019

The aim of the Lampshade Coffee Lounge Urban Activation Project was to create a vibrant, generous space outside the café that enhances the streetscape and encourages community interaction.

The project at lampshade consists of a parklet, micro-community garden, pergola, lighting and public art. The space can accommodate small gatherings that engage the community, enhance interaction between neighbours and encourage visitors.

Budget:
$82,335



Total number of people outside Lampshade (with a smart device):

15,680
People

Total number of customers (people within range for more than 3 minutes):

9,457
Customers

Total number of return visits:

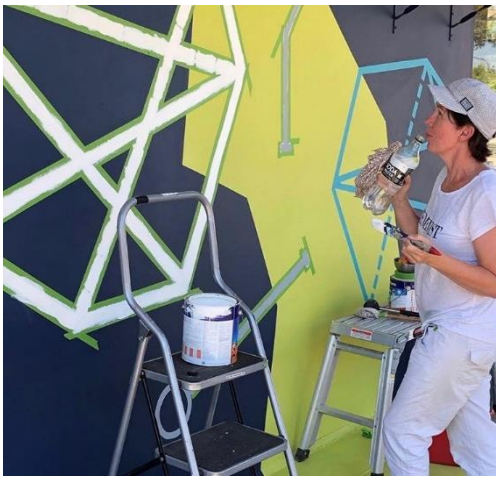
1,288
Customers

Average dwell time:

14 minutes, 25 seconds

Before:

After:



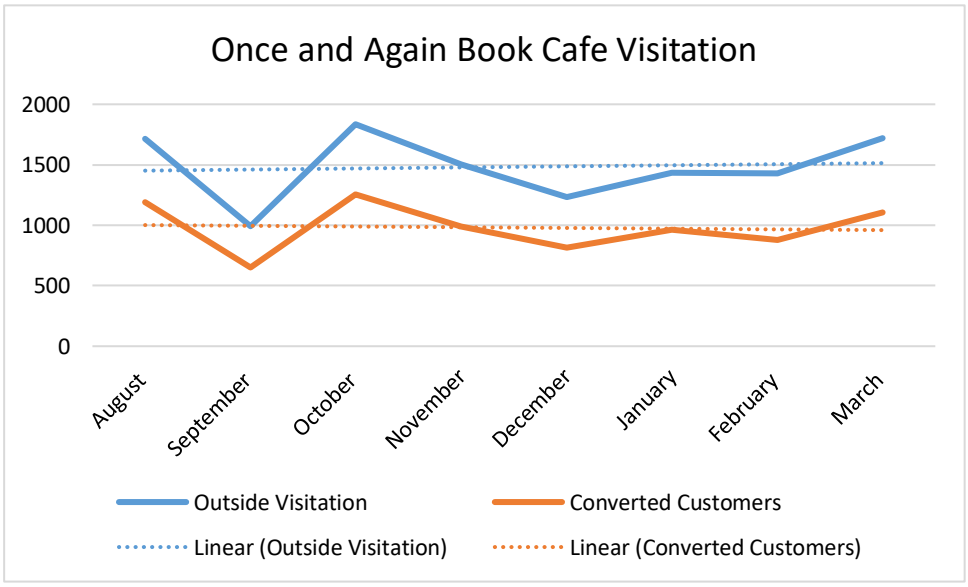
2. Once & Again Book Cafe Trend Data

August 2018 – March 2019

The aim of the Once & Again Urban Activation Project was to become a destination for the community and to support local artists, musicians, authors and local producers/microbusinesses through the creation of a community hub where local residents can feel a sense of place. The goal was to create a more 'palatable' street frontage and outdoor dining area where locals could walk from their home or business to support their health and wellbeing, purchase from local accessible businesses, rather than travel by car, and attend community activities such as mini markets, Fringe and SALA events.

Elements of this project includes: the rejuvenation of the Façade through paint, shutters and artistic stencil on the footpath, installation of planter boxes and installation of fencing to separate properties for events/use of outdoor entertaining in side driveway.

Budget:
$17,957



Total number of people outside Once & Again (with a smart device):

11,861
People

Total number of customers (people within range for more than 3 minutes):

7,845
Customers

Total number of return visits:

985 **Customers**

Average dwell time:

11 minutes, 13 seconds

Before

Community Quotes:

- "Place is looking good, you should be very proud of what you have achieved" – Shane Ince
- "That looks like a gourgous space to enjoy a coffee. Well done Judy and team." – Sophie Weaver
- "Fabulous, I drive past and see the changes – I must pop in one day" – Heather Portway

After

3. Trott Park Local Shopping Precinct Trend Data

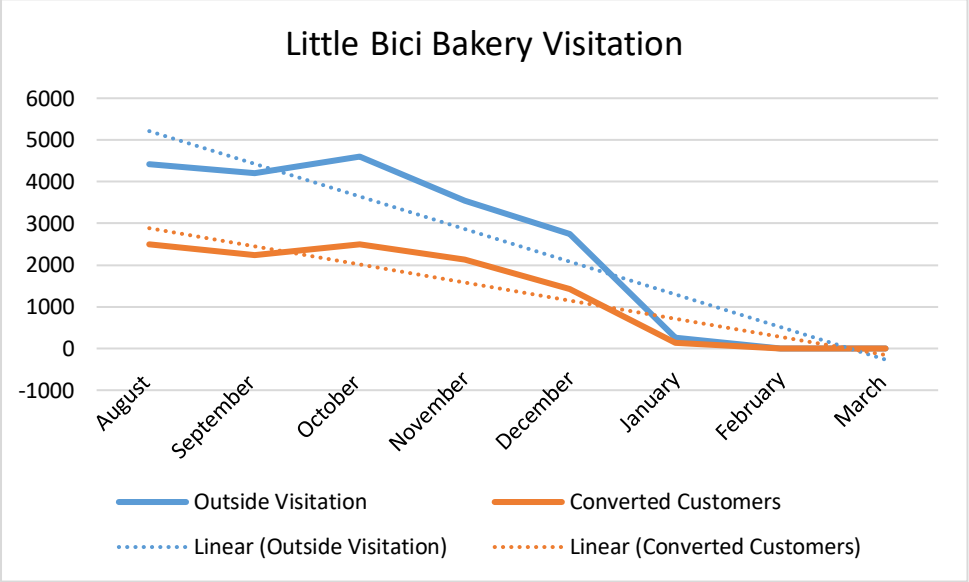
August 2018 – March 2019

The aim of the Little Bici Bakery/Trott Park Precinct Urban Activation project was to revitalise the tenancies and surrounding area. Through the development of the precinct, the end results were aimed to be engaging, safe, attractive and be a place of convenience. At the time, three vacancies were present.

Elements of this project include: creating an ambient outdoor decking area, installation of bike racks ad bike tool station, remodel the gardens and surrounds, repairs and remodelling of the carpark including line marking.

Little Bici Bakery officially closed in early January 2019. The former Little Bici tenancy is currently available for lease through Whan Holdings Business Brokers.

Budget:
$48,400



Total number of people outside Little Bici (with a smart device):

19,779
People

Total number of customers (people within range for more than 3 minutes):

10,915
Customers

Total number of return visits:

983
Customers

Average dwell time:

9 minutes, 23 seconds

Before

After

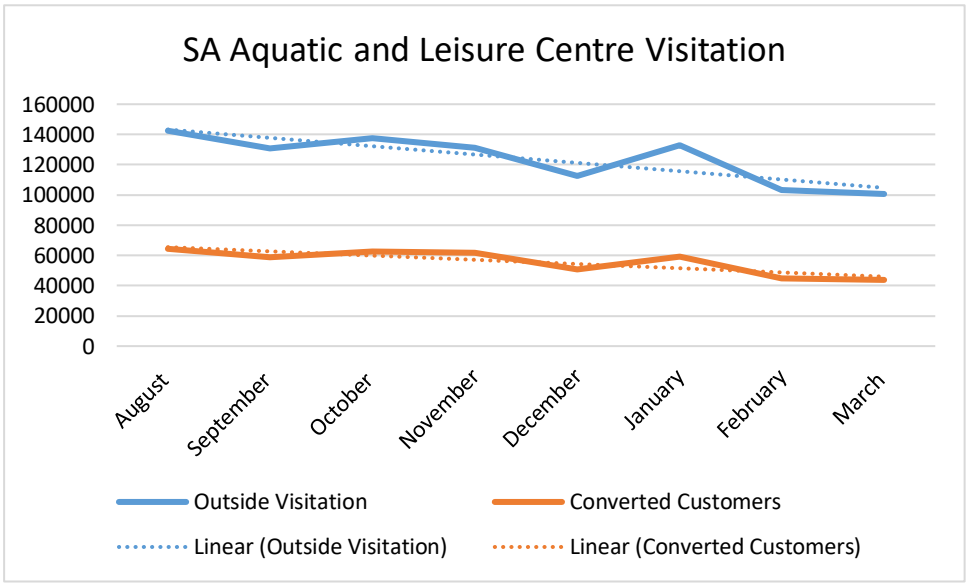
4. SA Aquatic and Leisure Centre Trend Data

August 2018 – March 2019

The intention of the SA Aquatic and Leisure Centre's Urban Activation Project was to achieve more foot traffic in the plaza which will benefit the local café and increase recreation and swimming.

This project consisted of installing two art bench spaces within the Marion Central Plaza. The benches aim to be a talking piece with the added benefit of greening for the purpose of reducing the heat island and umbrellas to protect customers from the sun. Public Wi-Fi was installed to encourage people to linger longer in the area.

Budget:
$36,850



Total number of people outside SAALC (with a smart device):

991,611
People

Total number of customers (people within range for more than 3 minutes):

445,642
People

Total number of return visits:

75,370
Customers

Average dwell time:

7 minutes 30 seconds

After

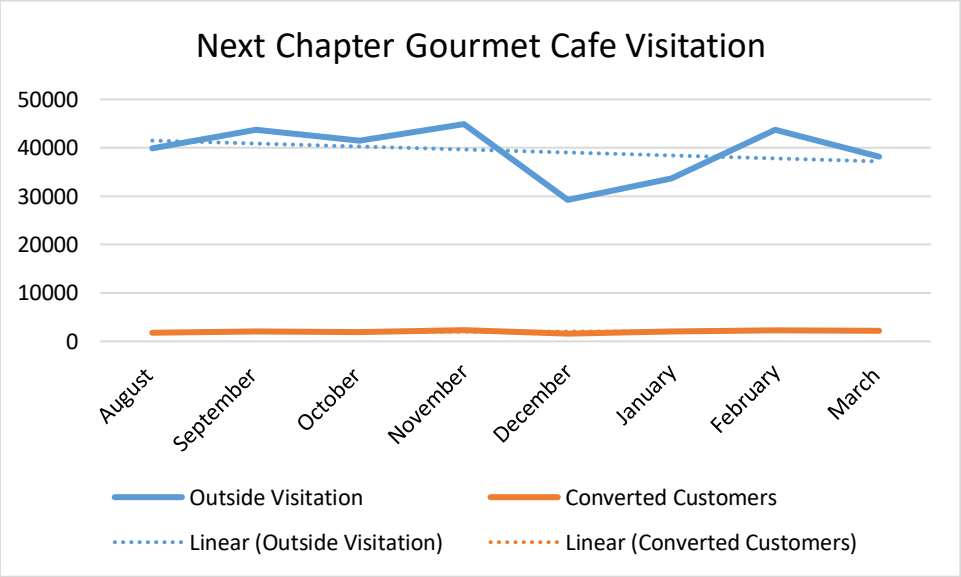
5. Next Chapter Gourmet Cafe Trend Data

August 2018 – March 2019

Council endorsed the allocation of up to $10,000 from the Urban Activation Project budget to undertake a 'Lighter Quicker Cheaper' approach to the Marion Cultural Centre Plaza and Next Chapter Café area to increase the amenity in front of the café.

Elements of this project include: installation a benching that frames the outdoor dining area, tables and chairs and planter boxes that originally contained herbs that could be used in the kitchen but due to theft they have now been replaced with grasses.

Budget:
$10,000



Total number of people outside Next Chapter (with a smart device):

314,742
People

Total number of customers (people within range for more than 3 minutes):

16,090
Customers

Total number of return visits:

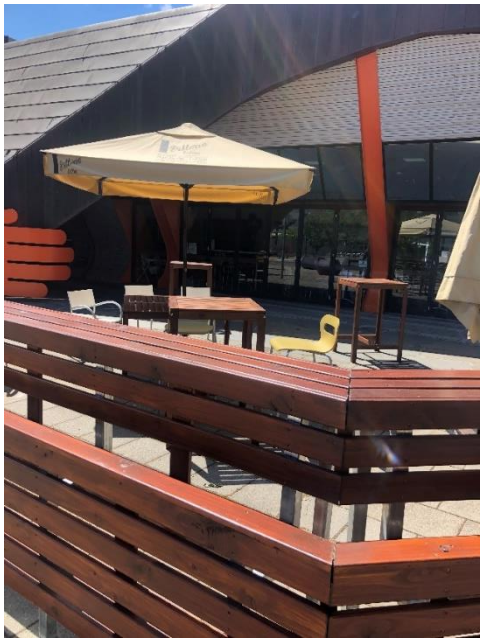
1,924
People

Average dwell time:

16 minutes, 35 seconds

Before

After



Urban Activation - Kepler Data Collection: August 2018 (before the intervention) to March 2019 DRAFT

Key:
Outside Visition : includes all visitors to the site with a smart device.
Converted Customers : visiors to the site with a smart device that linger for longer than three minutes.
Shopfront Conversion : Converted Customers divided by Outside visitation.
Return Visits : Number of visitors (with a smart device who have been to the location within 30 days.
Dwell Time : Time Vistiors spend at your location with a smart device

Unit of Measure	Month 1	Month 2	% Change	Month 1	Month 2	% Change	Month 1	Month 2	% Change	Month 1	Month 2	% Change	Month 1	Month 2	% Change	Month 1	Month 2	% Change	Month 1	Month 2	% Change
Lampshade Coffee Lounge	**August**	**Septembe**	**% Change**	**Septembe**	**October**	**% Change**	**October**	**November**	**% Change**	**November**	**December**	**% Change**	**December**	**January**	**% Change**	**January**	**February**	**% Change**	**February**	**March**	**% Change**	**March**	**April**	**% Change**
Outside Visitation	1408	1305	-7%	1305	1624	24%	1624	2406	48%	2406	2182	-9%	2182	2821	29%	2821	1908	-32%	1908	2026	6%	2026		
Converted Customer	891	874	-2%	874	1044	19%	1044	1428	37%	1428	1303	-9%	1303	1610	24%	1610	1193	-26%	1193	1114	-7%	1114		
Shopfront Conversion	63.28	66.97	6%	66.97	64.29	-0.04	64.29	59.35	-8%	59.35	59.72	1%	59.72	57.07	-4%	57.07	62.53	10%	62.53	54.99	-12%	54.99		
Return Visit	151	203	34%	203	202	0%	202	184	-9%	184	126	-32%	126	155	23%	155	148	-5%	148	119	-20%	119		
Average Dwell Time	14	13	-7%	13	14	8%	14	12	-14%	12	11	-8%	11	11	0%	11	12	9%	12	11	-8%	11		

Once & Again Book Cafe	**August**	**Septembe**	**% Change**	**Septembe**	**October**	**% Change**	**October**	**November**	**% Change**	**November**	**December**	**% Change**	**December**	**January**	**% Change**	**January**	**February**	**% Change**	**February**	**March**	**% Change**	**March**	**April**	**% Change**
Outside Visitation	1716	992	-42%	992	1835	85%	1835	1502	-18%	1502	1232	-18%	1232	1434	16%	1434	1429	0%	1429	1721	20%	1721		
Converted Customer	1189	651	-45%	651	1255	93%	1255	990	-21%	990	814	-18%	814	962	18%	962	876	-9%	876	1108	26%	1108		
Shopfront Conversion %	69.29	65.63	-5%	65.63	68.39	4%	68.39	65.91	-4%	65.91	66.07	0%	66.07	67.09	2%	67.09	61.30	-9%	61.30	64.38	5%	64.38		
Return Visit	134	75	-44%	75	145	93%	145	121	-17%	121	113	-7%	113	128	13%	128	118	-8%	118	151	28%	151		
Average Dwell Time	10	9	-10%	9	9	0%	9	10	11%	10	10	0%	10	9	-10%	9	10	11%	10	10	0%	10		

Trott Park Precinct	**August**	**Septembe**	**% Change**	**Septembe**	**October**	**% Change**	**October**	**November**	**% Change**	**November**	**December**	**% Change**	**December**	**January**	**% Change**	**January**	**February**	**% Change**	**February**	**March**	**% Change**	**March**	**April**	**% Change**
Outside Visitation	4414	4210	-5%	4210	4601	9%	4601	3543	-23%	3543	2745	-23%	2745	263	-90%	263	0	-1	0	0	0	0		
Converted Customer	2497	2238	-10%	2238	2497	12%	2497	2130	-15%	2130	1423	-33%	1423	130	-91%	130	0	-1	0	0	0	0		
Shopfront Conversion %	56.57	53.16	-6%	53.16	54.27	2%	54.27	60.12	11%	60.12	51.84	-14%	51.84	49.43	-5%	49.43	0.00	-1	0.00	0	0	0		
Return Visit	185	230	24%	230	225	-2%	225	213	-5%	213	122	-43%	122	8	-93%	8	0	-1	0	0	0	0		
Average Dwell Time	9	9	0%	9	9	0%	9	8	-11%	8	5	-38%	5	4	-20%	4	0	-1	0	0	0	0		

SAALC	**August**	**Septembe**	**% Change**	**Septembe**	**October**	**% Change**	**October**	**November**	**% Change**	**November**	**December**	**% Change**	**December**	**January**	**% Change**	**January**	**February**	**% Change**	**February**	**March**	**% Change**	**March**	**April**	**% Change**
Outside Visitation	142458	130806	-8%	130806	137574	5%	137574	131273	-5%	131273	112486	-14%	112486	133076	18%	133076	103318	-22%	103318	100620	-3%	100620		
Converted Customer	64371	58607	-9%	58607	62460	7%	62460	61859	-1%	61859	50672	-18%	50672	59049	17%	59049	44820	-24%	44820	43804	-2%	43804		
Shopfront Conversion %	45.19	44.80	-1%	44.80	45.40	1%	45.40	47.12	4%	47.12	45.05	-4%	45.05	44.37	-1%	44.37	43.38	-2%	43.38	43.53	0%	43.53		
Return Visit	11421	11084	-3%	11084	11016	-1%	11016	11570	5%	11570	7647	-34%	7647	7539	-1%	7539	7571	0%	7571	7522	-1%	7522		
Average Dwell Time	8	8	0%	8	8	0%	8	8	0%	8	8	0%	8	7	-13%	7	7	0%	7	7	0%	7		

Next Chapter	**August**	**Septembe**	**% Change**	**Septembe**	**October**	**% Change**	**October**	**November**	**% Change**	**November**	**December**	**% Change**	**December**	**January**	**% Change**	**January**	**February**	**% Change**	**February**	**March**	**% Change**	**March**	**April**	**% Change**
Outside Visitation	39905	43762	10%	43762	41432	-5%	41432	44902	8%	44902	29234	-35%	29234	33682	15%	33682	43677	30%	43677	38670	-11%	38670		
Converted Customer	1770	2038	15%	2038	1928	-5%	1928	2248	17%	2248	1596	-29%	1596	2105	32%	2105	2277	8%	2277	2094	-8%	2094		
Shopfront Conversion %	4.44	4.66	5%	4.66	4.65	0%	4.65	5.01	8%	5.01	5.46	9%	5.46	6.25	14%	6.25	5.21	-17%	5.21	5.42	4%	5.42		
Return Visit	214	297	39%	297	278	-6%	278	328	18%	328	175	-47%	175	175	0%	175	214	22%	214	240	12%	240		
Average Dwell Time	18	19	6%	19	17	-11%	17	17	0%	17	10	-41%	10	14	40%	14	15	7%	15	14	-7%	14		

Playground Data Analysis Report

Originating Officer Open Space and Recreation Planner - Rebecca Deans

Corporate Manager Manager City Property - Megan Hayward

General Manager General Manager City Development - Abby Dickson

Report Reference ISC190507R08

REPORT OBJECTIVE

To provide an update on the Innovation trial for playground data collection and analysis.

EXECUTIVE SUMMARY

In the delivery of the playground works program Elected Members asked for data in relation to playground usage. At the 18 March 2018 General Council Meeting Council endorsed the collection of data in playgrounds to inform future development and upgrades of playgrounds.

Data collection for playgrounds is still in its infancy and a full 12 months of data will provide a clearer picture of how Council's playgrounds are being used for asset management and business planning into the future.

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. **Notes this progress report on the use of data collection technologies within Council playgrounds.**
2. **Notes a future report will be presented at the completion of the 12 month trial for the three data collection technologies and future data collection opportunities.**

DISCUSSION

An Innovation review brief is included as attachment 1 describing the technology being trialed.

A sample report for the BIBAGames technology is included as attachment 2.

Attachment

#	Attachment	Type
1	Attachment 1 ISC070519 Playground Data collection	PDF File
2	Attachment 2 BIBA REPORTS Roy Lander Reserve_A	PDF File

City of Marion
Innovation Review

Project: Playground Data Collection
Date: April 2019

Project Description

In the delivery of the playground works program Elected Members asked for data in relation to playground usage. A report was endorsed by council to enable the collection of data in playgrounds to inform future development and upgrades of playgrounds.

Objectives

- To collect data that will inform playground and open space works into the future
- To collect data to inform usage of other open space in the City of Marion (CoM)

Playground Data Collection Trial Locations

Biba playgrounds
- Appleby Road Reserve
- Roy Lander Reserve
- Barton Terrace Reserve

Connected Parks
- Oakvale Way Reserve
- Cowra Crescent Reserve
- Hendrie Street Reserve

SAGE Automation (SAGE)
- Jervois Street Reserve

Timeframe

The trial will be undertaken for twelve months commencing the 1st January and concluding on the 1st of February 2020. The length of trial will enable a long term view of data collection that allows for data sets across a range of seasons and holidays to capture comprehensive data collection on playground usage.

Cost

A budget of $48 000 was allocated to collect data across a range of playgrounds. After reviewing a number of data collection devices and companies, it was decided to trial a range of products and devices to identify which data collection best suits CoM needs into the future.

The following companies and devices have been selected
- SAGE – battery sensors to monitor Jervois Street Reserve
- Connected Parks
  - Oakvale Way Reserve – Wi-Fi sensors to monitor use of open space and play equipment
  - Cowra Crescent Reserve – gate counters
  - Hendrie Street Reserve – gate counters
- Biba – Augmented reality markers fitted to playgrounds to enable games to be played on devices with and around play equipment.

All three technologies are costing a total of $45 781 to trial. The technology will belong to the CoM after the trial ends, ongoing costs will be for data collection and analysis.

City of Marion
Innovation Review

Assessment

Biba games have been installed at three playgrounds since February 2019. Reports are received quarterly as per sample report (Attachment 2). Data insights are assessed against similar playgrounds within the CoM and worldwide.

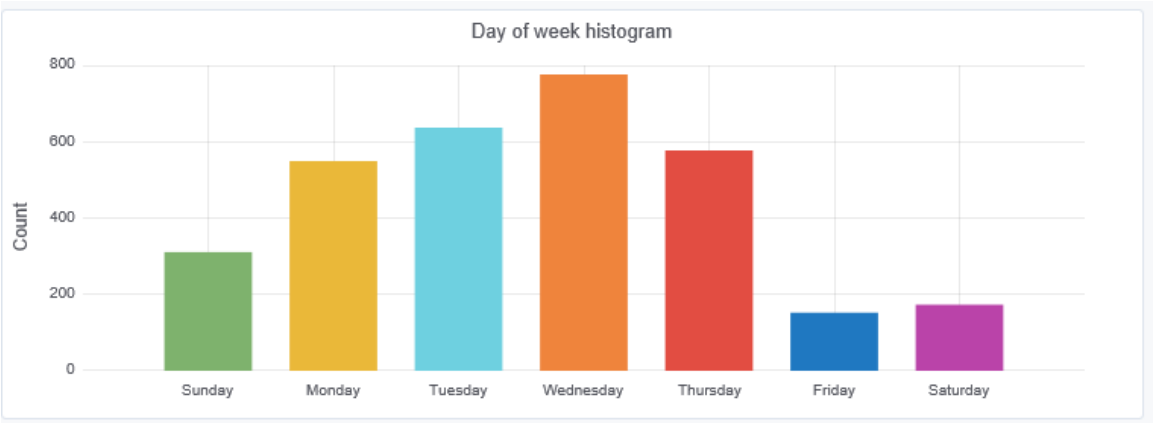
Connected Parks have installed and tested sensors at Oakvale Way Reserve and data collection was started April 2019. The data will be collected to a dashboard housed by Connected Parks. This is currently being tested and will be available to CoM in May.

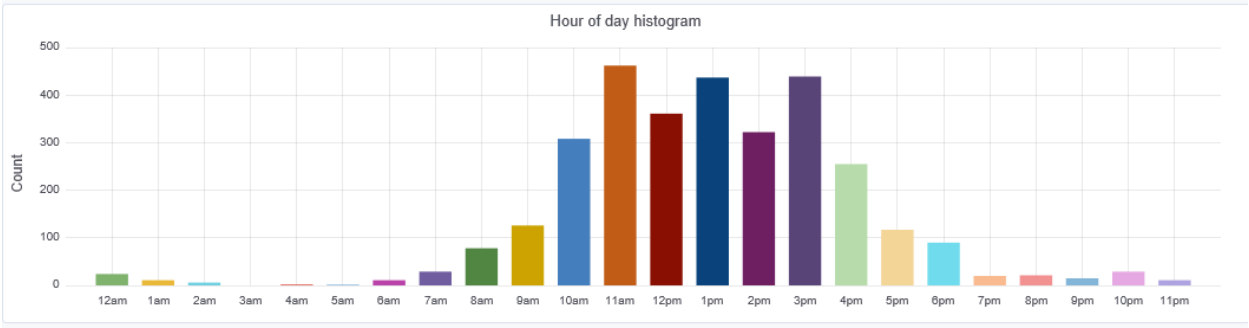
Data collected includes

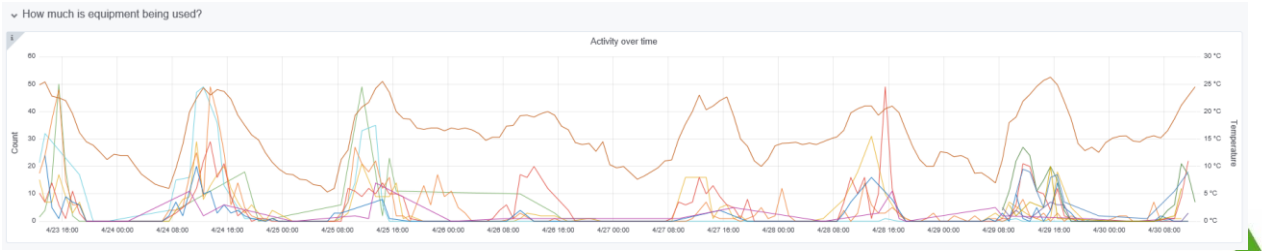
- Equipment preference
- Peak usage days and times
- Temperature
- Length of session

Sensors at Jervois Street Reserve have been in place since March 2019 and data is collected and analyzed in a dashboard housed by SAGE, which can be visualised in a variety of ways.
This type of technology and monitoring is new to SAGE and they continue to develop the sensors to ensure the best data collection is achieved.

The following graphs summarize a sample of usage data from Jervois Street Reserve.







playground centre®

PGC Smart Playgrounds

Play Games Connect

ROY LANDER RESERVE

BIBA REPORT

April 2019

Powered by Biba

HOW TO READ THIS REPORT

HOW BIBA GENERATES YOUR DATA

The way Biba generates data is by using our games to collect a sample of your playground traffic and general user behavior. Every time a Biba game is played on one of your playgrounds we collect interesting information that stems from gameplay events, be it the time of day a family was on your playground or what the weather was like when they attended. These data are all collected in a COPPA compliant manner, with all of our games remaining in the parents' hands during play.

HOW TO USE THESE REPORTS

Each chart page presented within provides you with a full page of details on what the chart is representing, how we calculate the measures shown and how you can use these reports in your own practice. Standard versions of these reports come with a basic set of data that can be augmented or added to by request. If, for example, you would like to dive into what Saturdays specifically look like for park attendance at a given location, or want more UV index information to help inform something like a shade purchase, we can incorporate these things into subsequent reports for you.

HOW TO REACH US WITH QUESTIONS

Undoubtedly there will be some questions either about the data we're presenting or the data you would like to see. We're here to help. If there is anything you'd like to see expanded on or added to your data reports, please do not hesitate to reach out to our contact representative at sarah@playbiba.com.

EQUIPMENT PREFERENCE

WHAT THIS CHART SHOWS

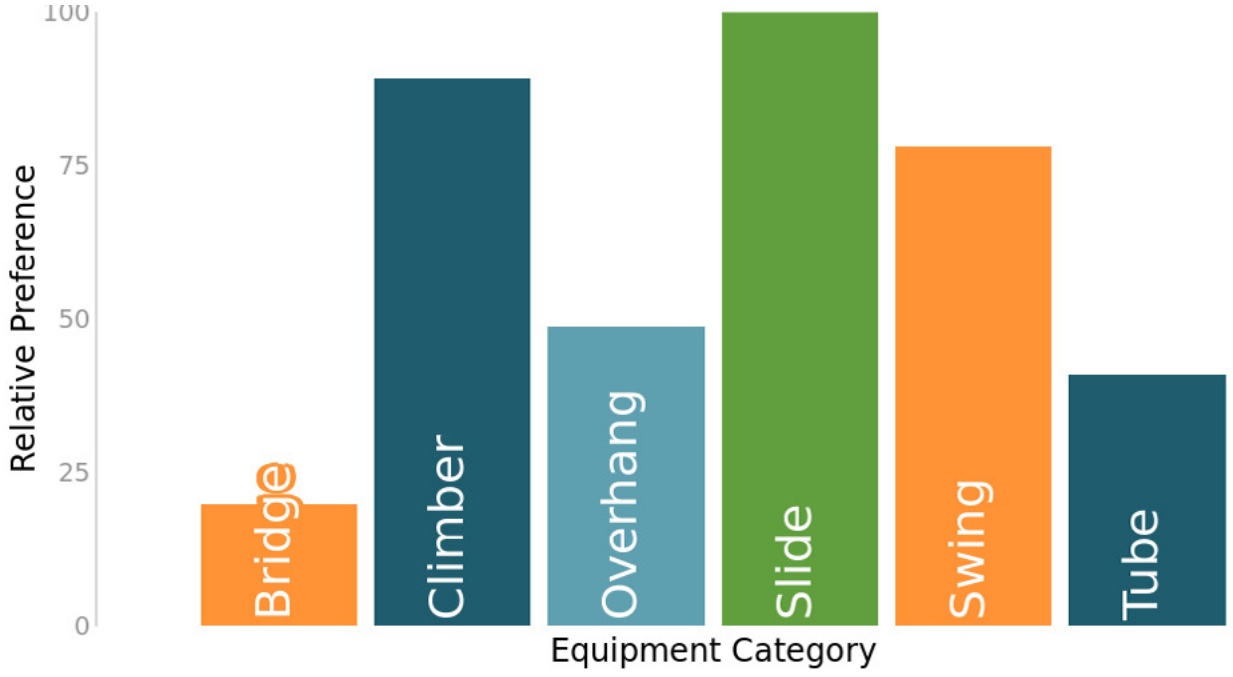
This page displays what equipment was most preferred by children while playing Biba games along with their preferred equipment sub-types.

HOW WE CALCULATE THIS

Biba games automatically request a parent to input what they see as present in terms of equipment at a playground, but equipment preferences are specifically derived from play choices made during Biba gameplay by players. We analyze all the choices children make between equipment during different points in gameplay to model which types of equipment are selected the most often. We can also determine the popularity of specific sub-types (e.g. spiral slides, curved tubes) this way.

HOW YOU CAN USE THIS INFORMATION

The chart below can assist in identifying choices for equipment purchases or upgrades, or at larger scale, can point to trends with regard to favorite equipment pieces in a region.



PEAK DAYS OF THE WEEK

WHAT THIS CHART SHOWS

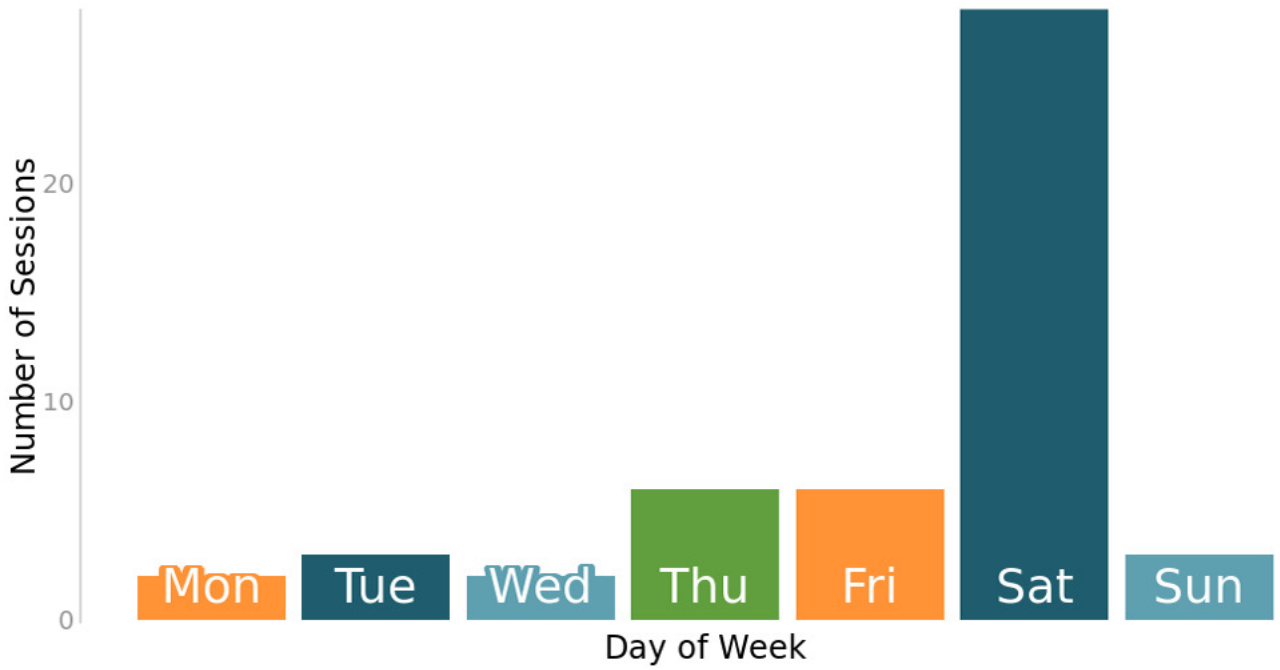
This graph lets you know on which days of the week families tend to spend the most time at your playground or play site.

HOW WE CALCULATE THIS

Biba games take simple time stamps that allow us to see what day of the week Biba sessions occur. As a sample of playground attendance, this provides us with a sense of your site's peak days.

HOW YOU CAN USE THIS INFORMATION

This information is useful in pointing out interesting trends for purposes of scheduling and program planning. We can also provide an array of these graphs across a year or dig into particular days on request if you're looking to schedule against more specific trend data, such as the impact of public holidays or school holidays.



PEAK HOURS OF THE DAY

WHAT THIS CHART SHOWS

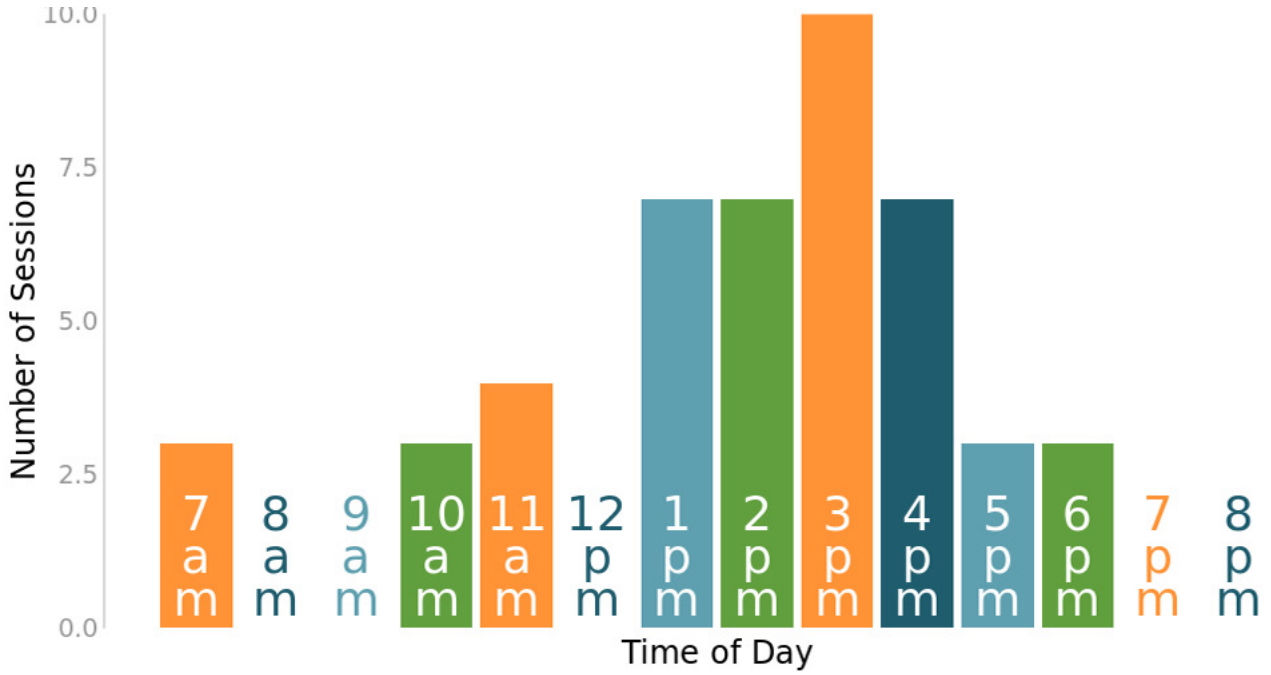
This graph lets you know which hours of the day families tend to spend the most time at your playground or play site.

HOW WE CALCULATE THIS

Biba games take simple time stamps that allow us to see what time of the day Biba sessions occur. As a sample of playground attendance, this provides us with a sense of your site's peak hours.

HOW YOU CAN USE THIS INFORMATION

This information is useful in pointing out interesting trends for purposes of scheduling and program planning. We can also provide an array of these graphs across a year to allow for things such as seasonal comparisons or the impact of external events like school vacations on timing.



ACTIVITY LEVELS

WHAT THIS CHART SHOWS

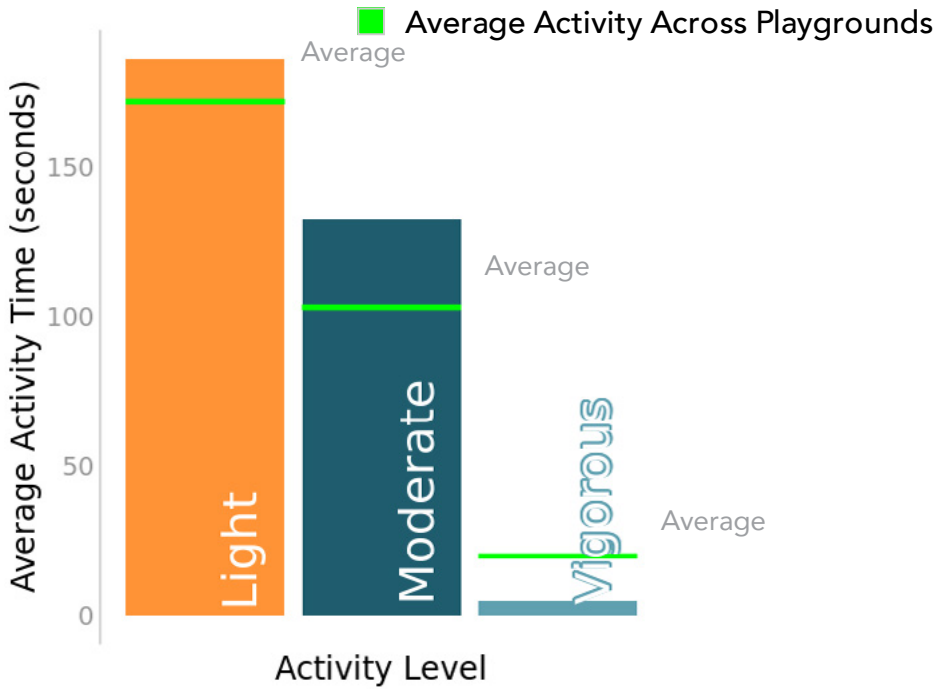
This lets you know how much light, moderate, and vigorous activity children engaged in during Biba gameplay. This is not only an indicator of the types of games they chose to play, but also how they chose to play them in terms of physical exertion.

HOW WE CALCULATE THIS

Biba games adopt the World Health Organization's rubric in distinguishing between moderate and vigorous activity levels during gameplay. We achieved this in partnership with Simon Fraser University Child Psychology researchers to provide each game with a profile that generates a strong inference as to how much physical activity is being conducted in each game. This lets you see which types of games and what level of exertion kids in your playground gravitate towards.

HOW YOU CAN USE THIS INFORMATION

This lets you get a sense of activity levels in your different communities, but also can provide you reinforcing data that helps make the case in grant proposals for health and activity initiatives and other related programming.



TEMPERATURE IMPACT

WHAT THIS CHART SHOWS

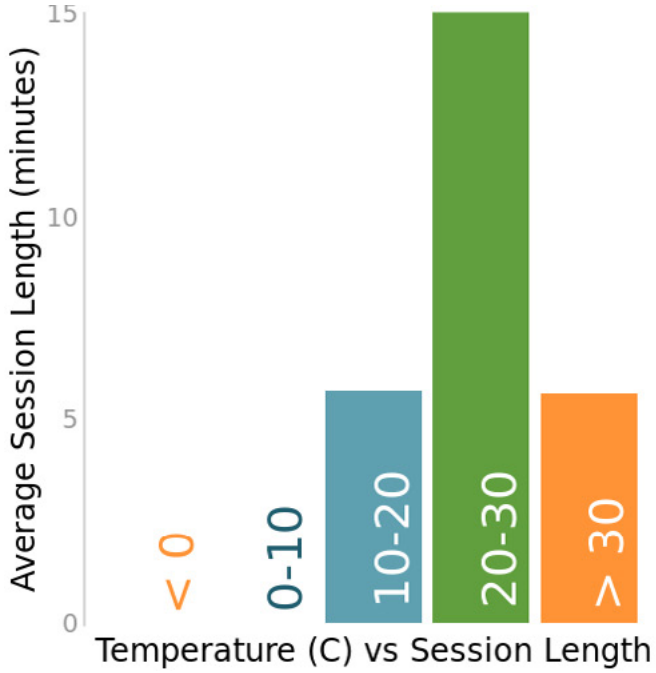
This page visualizes the relationship between different ranges of temperature and on-site sessions. This graph lets you know the relative impact of temperature on how long families play on-site (a good indicator of what temperature conditions a family is most likely to play through) and the relative impact of temperature on how much families play on-site (an indicator of the conditions during which a family is most likely to attend the playground).

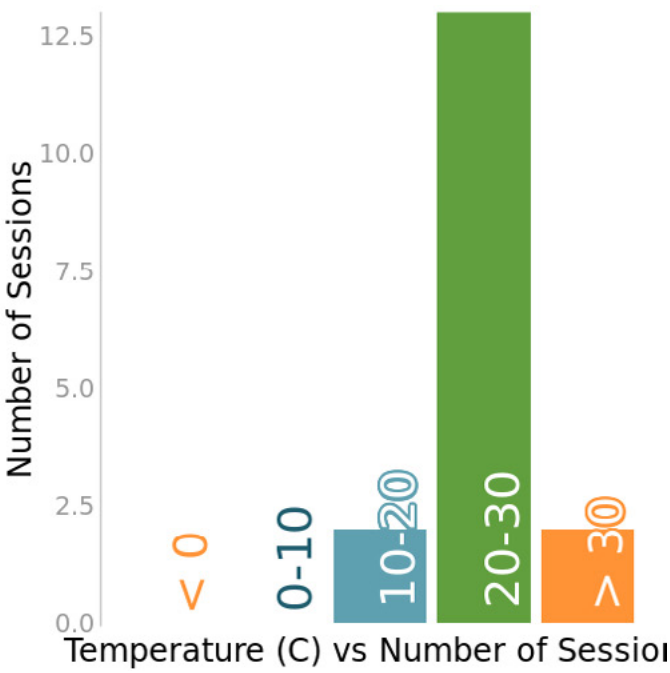
HOW WE CALCULATE THIS

Biba games track the temperature and check it at regular intervals during gameplay. We compare the observed temperature at a particular site with the number and length of sessions at that site in order to see what play patterns emerge during different temperature conditions.

HOW YOU CAN USE THIS INFORMATION

This information is useful in terms of program planning for your community, but also helps inform decisions around the purchase of things such as shading for high-sun regions or other facilities that can help promote attendance during more frigid periods.





WEATHER IMPACT

WHAT THIS CHART SHOWS

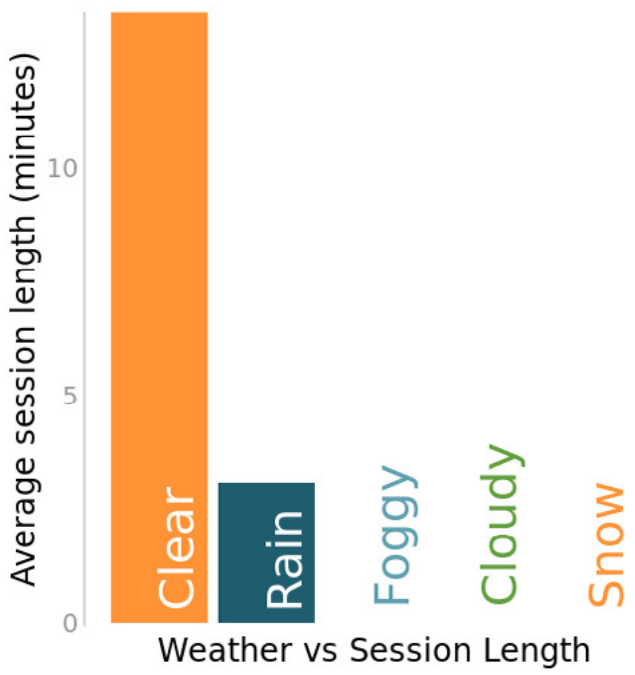
This page visualizes the relationship between different types of weather and on-site sessions. This graph lets you know the relative impact of weather on how long families play on-site (a good indicator of what weather conditions a family is most likely to play through) and the relative impact of weather on how much families play on-site (an indicator of the conditions during which a family is most likely to attend the playground).

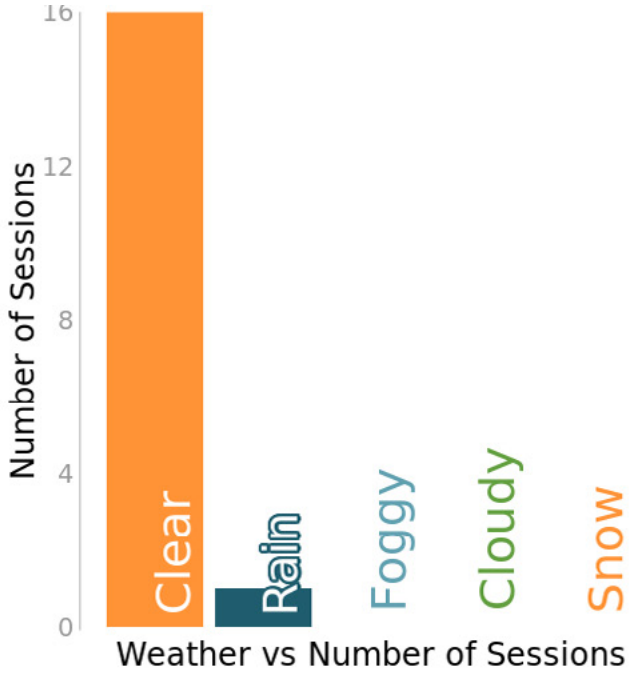
HOW WE CALCULATE THIS

Biba games track the weather conditions and check them at regular intervals during gameplay. We compare the observed weather conditions at a particular site to how many sessions occurred and their length in order to see what play patterns emerge during different weather conditions.

HOW YOU CAN USE THIS INFORMATION

As with temperature, this information is useful in terms of program planning for your community. It can also help you determine which play sites maintain the highest attendance during particular conditions when making considerations for amenity upgrades.





SESSIONS BY MONTH

WHAT THIS CHART SHOWS

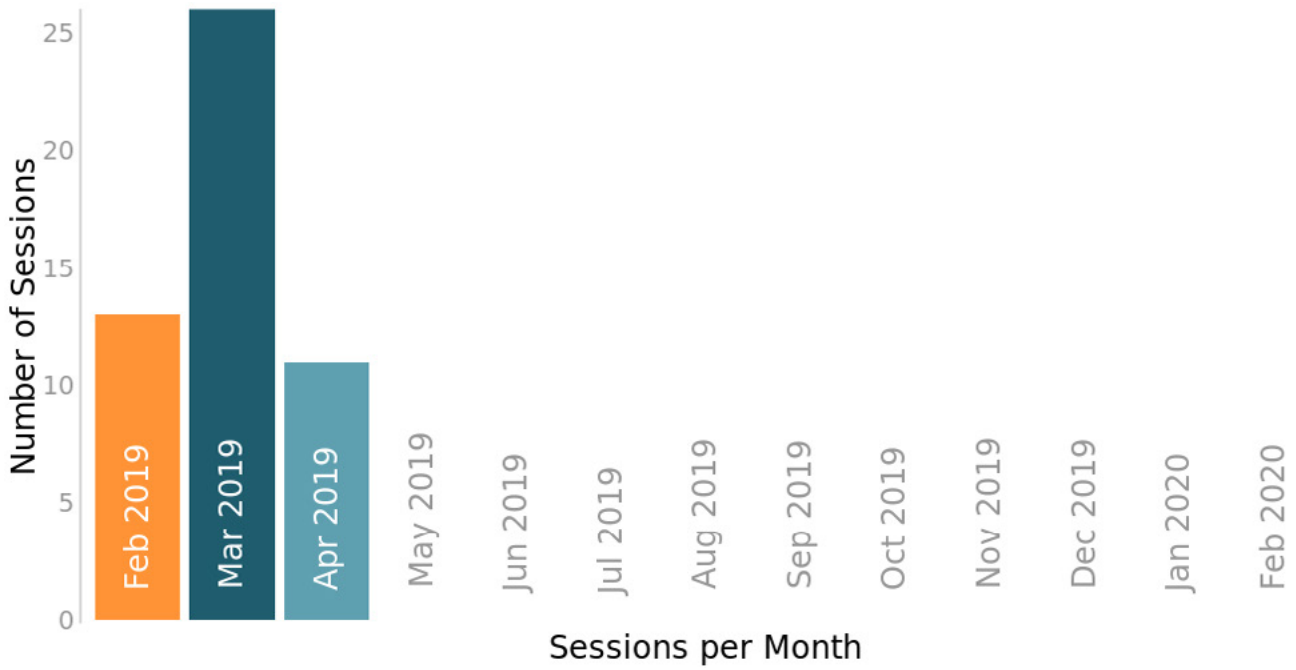
This page displays up to the last 12 months in terms of sessions per month, allowing you to compare month-to-month session totals for that period.

HOW WE CALCULATE THIS

Biba games automatically track game sessions every time they happen. We tally these up in order to provide the monthly totals represented in the graph below.

HOW YOU CAN USE THIS INFORMATION

The chart shows the general activity trend of your playground over the year and can be used to garner a high-level sense of the traffic patterns at your play site.



Capital Works Progress Update

Originating Officer Unit Manager Statutory Finance and Payroll - David Harman

Corporate Manager Manager Engineering and Field Services - Mathew Allen

General Manager General Manager Corporate Services - Vincent Mifsud

Report Reference ISC190507R09

REPORT OBJECTIVE

This report provides an overview of City of Marion's quarterly capital construction progress.

RECOMMENDATION

That the Infrastructure and Strategy Committee notes the report.

DISCUSSION

The Infrastructure and Strategy Committee at its meeting on 2 May 2017 requested that quarterly updates on capital construction be provided to the Committee.

It is important that Council delivers on the commitments identified in the capital works programs to ensure assets are renewed and upgraded for the benefit of the community. The capital works program includes asset classes relating to the following categories:

Engineering & Field Services	**City Property**
Street Trees	
Bores	Open Space Developments
Roads	Playgrounds
Kerbing	Public Toilets
Footpaths (New and Renewal)	Sports Facilities and Courts
Bridges	Building Upgrades
Transport (including walking trails, traffic calming devices and bus stops)	
Drainage	
Wetlands	
Streetscapes	

Irrigation	

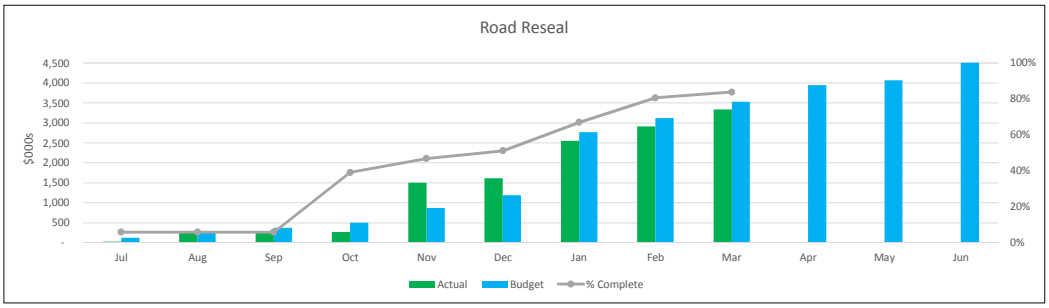
Progress on the capital works program is reported monthly and includes a review meeting involving members of the Senior Leadership Team (SLT) and Executive Leadership Team (ELT). In addition, a monthly progress report is provided to the Project Control Group (PCG) and a General Council meeting.

The progress of capital works to the end of March 2018/19 is provided in **Attachment 1** and identifies the planned versus actual works completed.

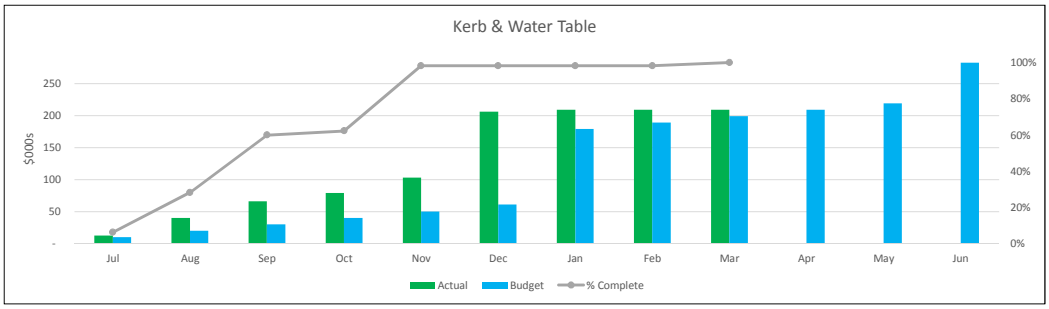
Attachment

#	Attachment	Type
1	ISC190507 Capital Works Update Attachment	PDF File

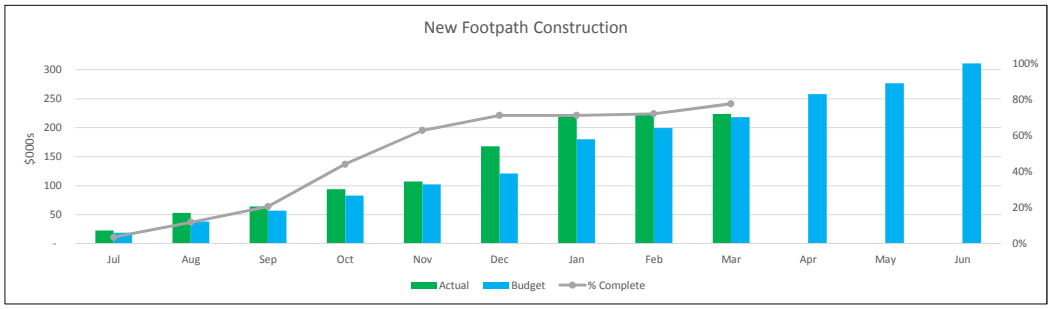
Capital Construction Progress - 2018/19



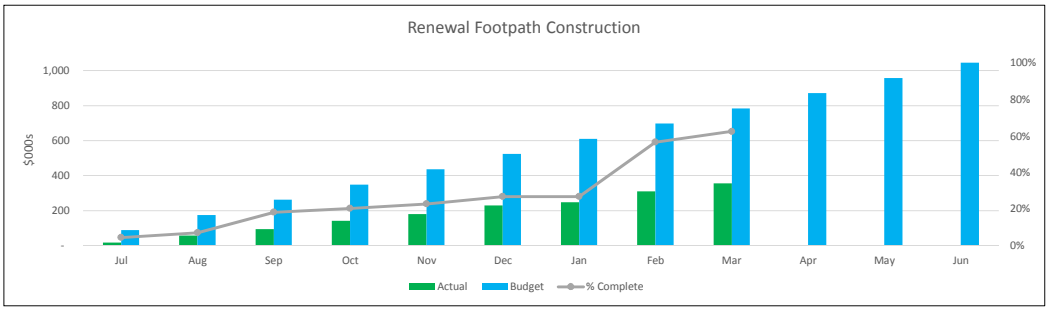
- Programed works are now 84% complete and on track.



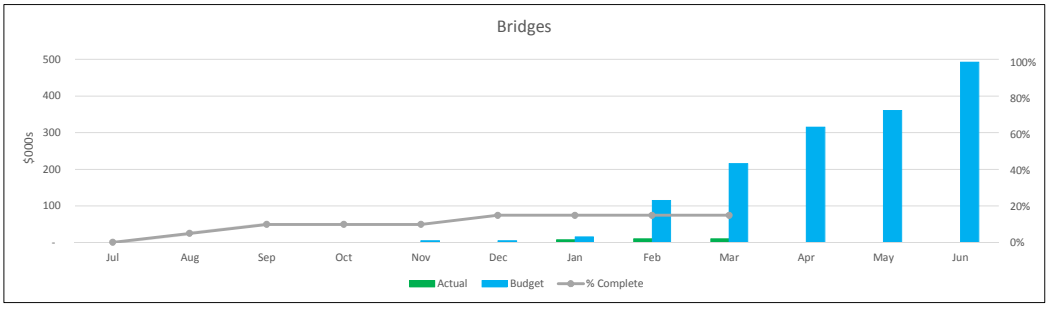
- Program completed - 100% of works carried out.



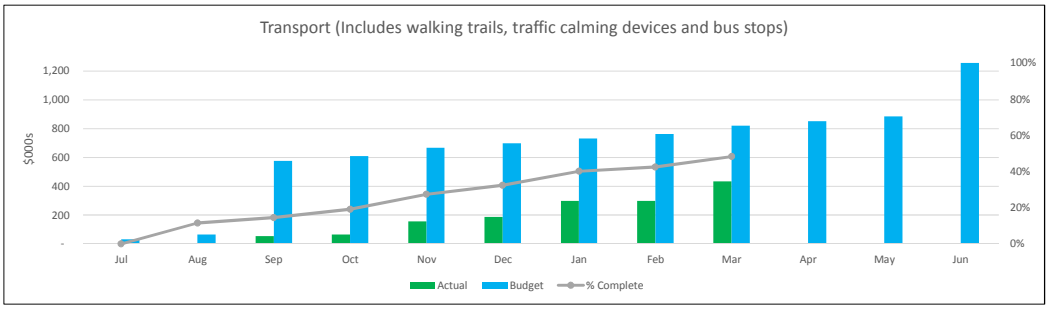
- Program in progress - 77% complete
- Works are being scheduled for Bathbank Crescent, Brayden Court, Main South Road and Emma Street & Ruth Court.



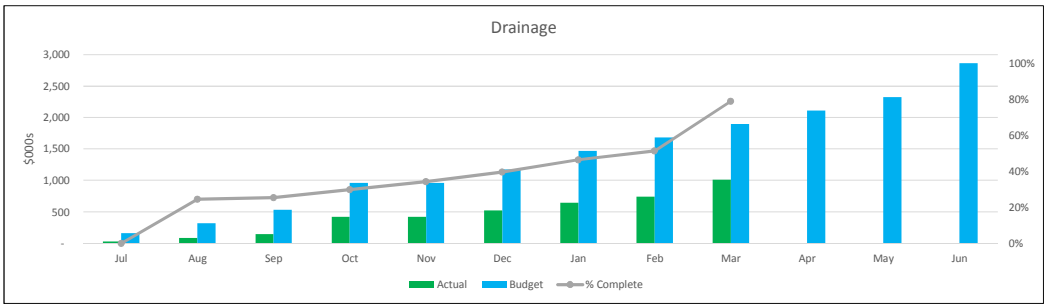
- Program in progress and on track - 62% complete
- A Contractor has been engaged to increase the output of the program.



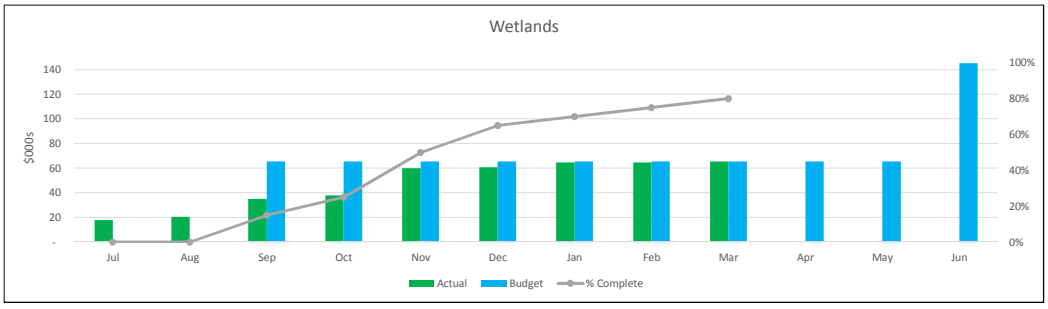
- Tender for both bridges have been awarded, completion of construction works is expected for June 2019.



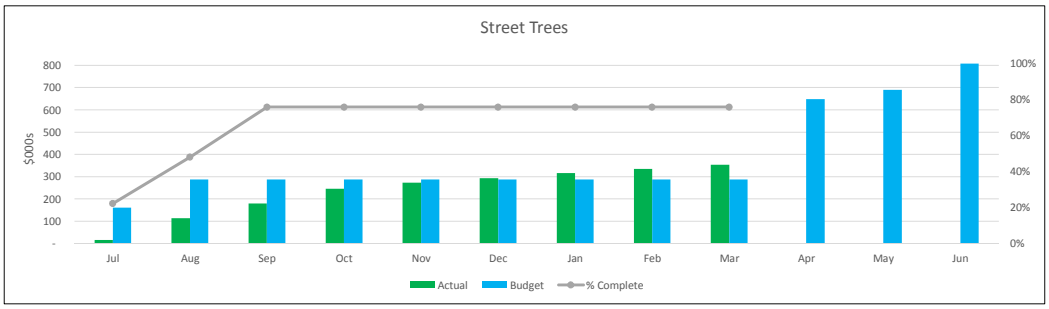
- Program in progress - 48% complete
- Works are in progress for Sturt River Linear Path. Design has been completed for Calum Grove Crossing.
- Cove Road Carpark (Carryover (C/O)), Livingston Filmer Roundabout, Kangaroo Thorn Parking Bay and 17 bus stops are complete.
- Grand Central Shamrock Hallett Cove is likely to be carried over due to additional consultation requirements.



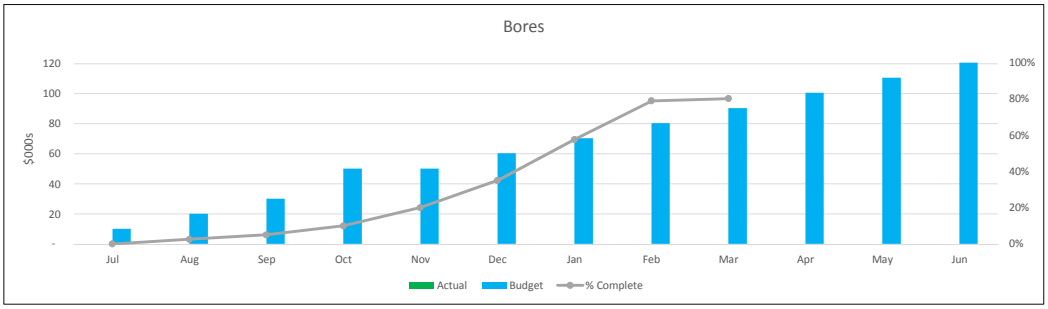
- Mitchell Street, Barramundi Drive and Glamis Avenue/ Wilga Street Drains completed (C/O).
- John Street, Heron Way and Forrest Avenue Drains are in progress. Ridgefield Avenue Drain to commence in May.



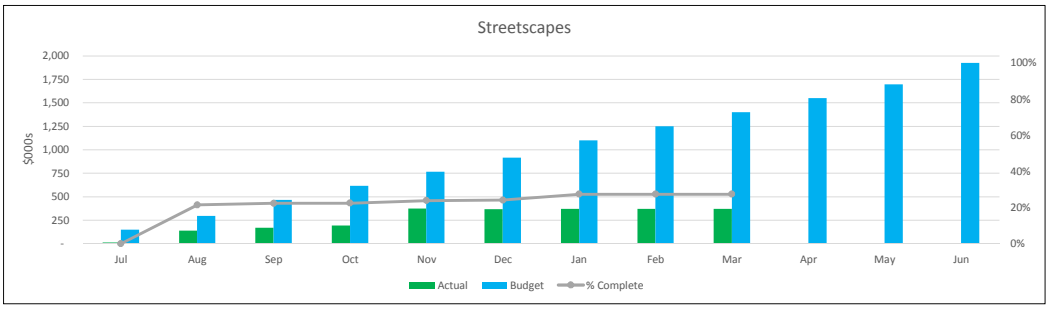
- Landscaping and weed control has commenced at Glade Crescent Reserve.



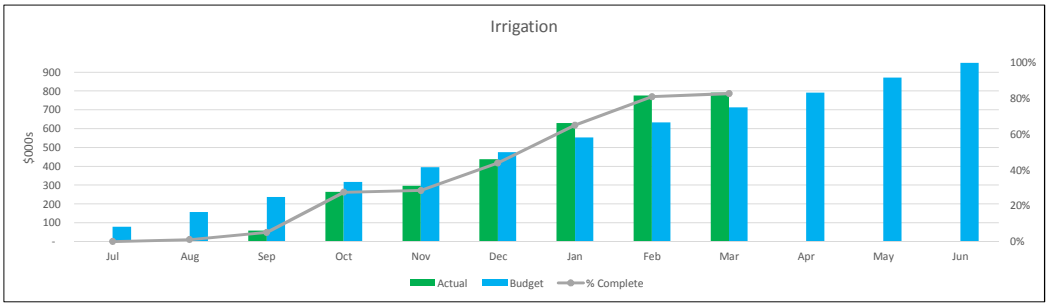
- Program in progress with 1,365 street trees planted. Planting to recommence in April.



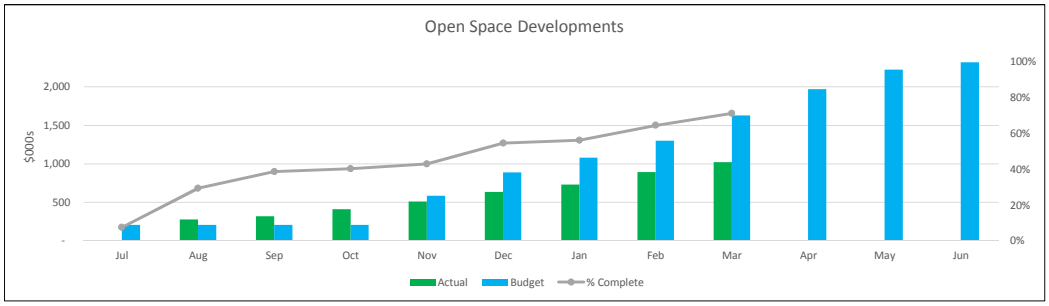
- Edwardstown, Warriparinga Reserve and Hazelmere Bores are complete.



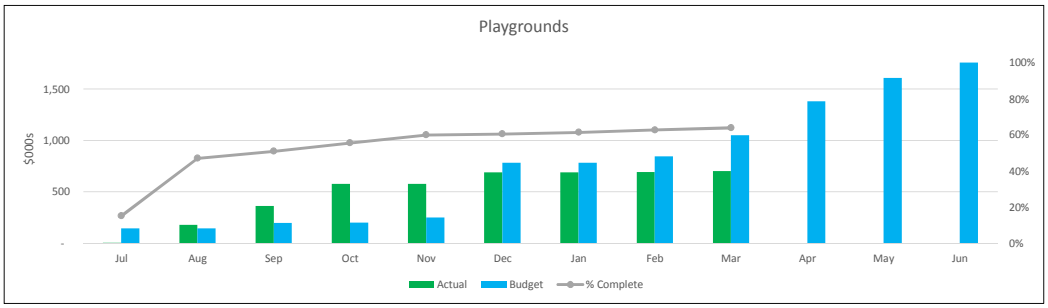
- Program in progress - 27% complete
- Finniss Street (C/O), Heron Way (C/O) and Railway Terrace design (C/O) are complete.
- Railway Terrace Streetscape works and Bray Street are anticipated to have some carry over at 30 June.



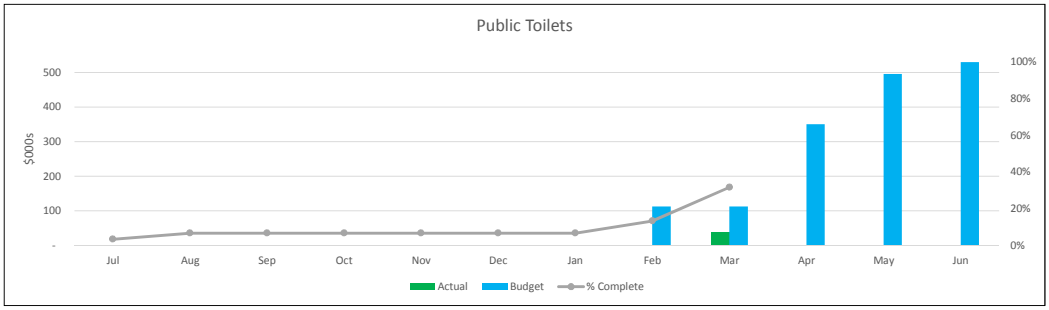
- Program in progress with Mitchell Park Reserve, Marion Sports, Parsons Trees, Heron Way Reserve, Edwardstown, Plympton, Cosgrove Hall, South Park Holme and South Park Holme complete.



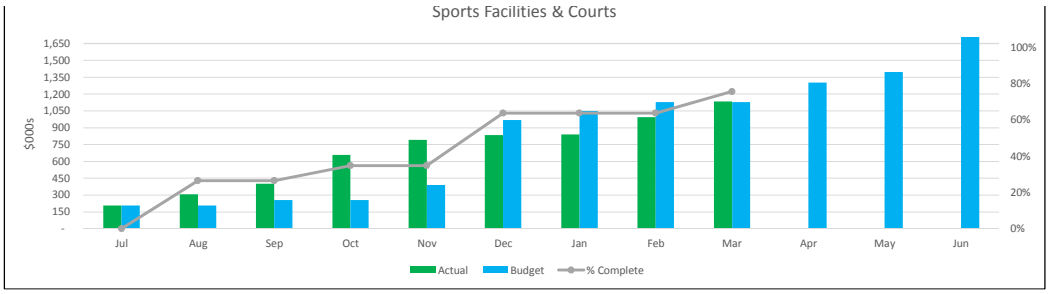
- Program in progress - 71% complete
- Youth Plaza Oaklands Wetlands stage 2 (C/O) is complete. Progress on Oaklands Estate Reserve is ahead of schedule. 2nd Dog park, Shade Solutions and Shade Sails for Reserves are in progress. Heron Way stage 6 will be carried over.



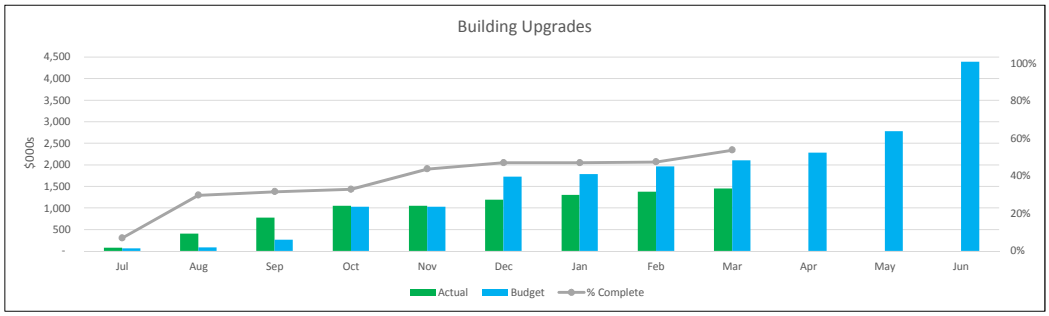
- Program in progress - 64% complete
- Construction on Heron Way Stage 4 Portion A is complete with minor defects to be resolved. Hendrie Street Inclusive Playground is complete.
- Bandon Terrace playground is in progress. There may be a potential carry over for final works at Shamrock Road Reserve.



- Program in progress - 32% complete
- Capella Reserve toilet will be carried over to coincide with Capella precinct plan works. Shamrock Reserve toilet is estimated to be delivered in June.



- Program in progress - 76% complete
- Tender for concept design has been awarded for Seaview High School, Marion Basketball Floorboards, Replacement and Morphettville Kendall Courts Upgrade.
- Woodforde Reserve Courts Development (C/O), Warradale Tennis Club, Marion Sports Club Solar Installation and Southern Carpark (C/O) and Southbank Tennis Club Lighting are complete.



- Program in progress - 54% complete

Completed
- Trott Park External Signage & Kitchen Upgrade
- Public Toilet Trott Park- Asbestos Removal
- Park Holme Windows
- Glengowrie YMCA - Kitchen
- Cosgrove Hall Air Conditioner
- Warradale Kindy Asbestos Removal
- Community Club Sheds
- Edwardstown Solar Panels
- Glandore Community Centre - Clark Kitchen
- Vietnam Veterans Marion RSL Sheds
- Vietnam Veterans Marion RSL Clubhouse
- Electric BBQ - LKCC (C/O)
- Marion Outdoor Pool Masterplan (C/O)
- Coastal Walking Trail Renewal (C/O)

Completed (cont.)
- Cover over Material Bays (C/O)
- Glandore Community Centre - Rugby Kitchen

In Progress
- Fitzjames Building DDA works
- Coach House Rehabilitation
- Park Holme Library Toilets DDA works
- Marion Outdoor Pool Renewal Works
- Woodforde Reserve DDA works
- Carpark - Marion Outdoor Pool
- Oaklands Solar Install - City Services
- Solar Options for Marion (C/O)
- Admin Foyer Refurbishment (C/O)
- Glandore Community Centre - Clark Kitchen

Oaklands Smart Precinct Update

Originating Officer	Smart Cities Project Officer - Georgie Johnson
Corporate Manager	Manager Innovation and Strategy - Fiona Harvey
General Manager	General Manager City Development - Abby Dickson
Report Reference	ISC190507R10

REPORT OBJECTIVE

To provide the Infrastructure and Strategy Committee with a progress report on the Oaklands Smart Precinct project.

EXECUTIVE SUMMARY

The City of Marion and the Federal Government executed the Grant agreement on the 14 January 2019 for the Smart Cities and Suburbs Grant funding, awarding $867,500 50/50 matched funding, leveraging Council funds already committed to the Oaklands Crossing Project and the Metrics that Matter Project for the Oaklands Smart Precinct Project.

The Oaklands Smart Precinct project focuses on addressing known problems and opportunities in the precinct and nearby areas, as well as using the opportunity the Oaklands Crossing project provides to test and embed technology and data gathering devices in key infrastructure elements of the precinct. The project has 3 elements:

- Oaklands Precinct project
- Data Platform
- Smart South Consortium

The project will be delivered over 18/19 and 19/20 with all grant funding commitments to be completed by June 2020.

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. **Notes the progress report on the Oaklands Smart Precinct Project.**

DISCUSSION

The report attached in appendix 1 provides a progress update on the Oaklands Smart Precinct project against the key project performance measures of schedule, budget, milestones, and issues/risks identified.

The Oaklands Smart Precinct project has three key elements:

- Oaklands Precinct Smart infrastructure
- Smart South 'consortium'
- Data Platform

This update highlights the progress of the data platform element. The data platform is being developed as part of the 'Metrics that Matter' project, which is a priority new initiative Council funded through the 18/19 Annual Business Plan. The project is being delivered through the Performance and Innovation team, in partnership with consultants Exposé: Data Exposed (Exposé).

Exposé were engaged through a staged procurement process to work with teams to identify, design and deliver sustainable metrics/Business Intelligence (BI) dashboards for divisions, departments, teams and services to manage performance, costs and efficiencies.

The Data Platform / BI Reporting Solution allows information stored in disparate ICT systems to be brought together to produce meaningful, real time metrics to inform decision making, establish current states as a basis for review and demonstrate delivery of improvements, monitoring of services and respond to the changing needs of our community.

This first stage (18/19) of the Metrics that Matter project has established the best practice approach for a data platform and is currently developing BI dashboards for 4 business units; Open Space Operations, Customer Service, Community Safety and HR based on the development and consolidation of 3 key data models – Customer Events, Workforce Management and Expiations.

The focus for 2019/20 will be to continue the development of dashboards for further business units and services, and well as beginning to capture and integrate the data being collected through IoT devices at the Oaklands Smart Precinct. A key objective is to ensure that CoM has a robust data platform that supports the collation and integration of both internal and external data sources, that can add value to decision making and community outcomes. The dashboards will also provide a mechanism to share data with the community (as appropriate).

A further focus for 2019/20 will be to continue to support and train teams to understand BI dashboards and interrogate the data to support their day to day and strategic decision making for the services provided to the Community.

The 'Smart South consortium' project element is currently working with a team of Masters students from Flinders University New Venture Institute - 'Smart Star Consulting' to develop recommendations for best practices regarding data management collected through 'Smart City' infrastructure.

The Infrastructure and Strategy Committee has on its forward agenda in December 'Data governance and open data'. The report in December will provide further opportunity for the committee to discuss the draft data governance framework from the 'Metrics that Matter' project, the opportunities identified through the Flinders University- NVI students research and the opportunities related to data commercialisation.

Work on data governance and open data is also progressing through another Smart Cities project- the 'Connected Cities' project being delivered by the Eastern Alliance Region of 5 Councils in partnership with Adelaide University which we have been following closely and will provide an update on at the December meeting.

Attachment

#	Attachment	Type
1	ISC Oaklands Smart Precinct May 2019	PDF File

MAY 2019 INFRASTRUCTURE AND STRATEGY COMMITTEE

Project: PR-404 – Oaklands Smart Precinct

Project Manager: Georgie Johnson – *Smart Cities Project Officer*

Work Area / Department: Fiona Harvey - *Manager Innovation and Strategy*

Project Sponsor (ELT): Abby Dickson - *General Manager City Development*

Strategic Connection: 3-year Business Plan 2016-19, Commonwealth Grant Funding, Department Industry & Skills Grant Funding

Start/End date: 1-July-2018 to 30-June-2020

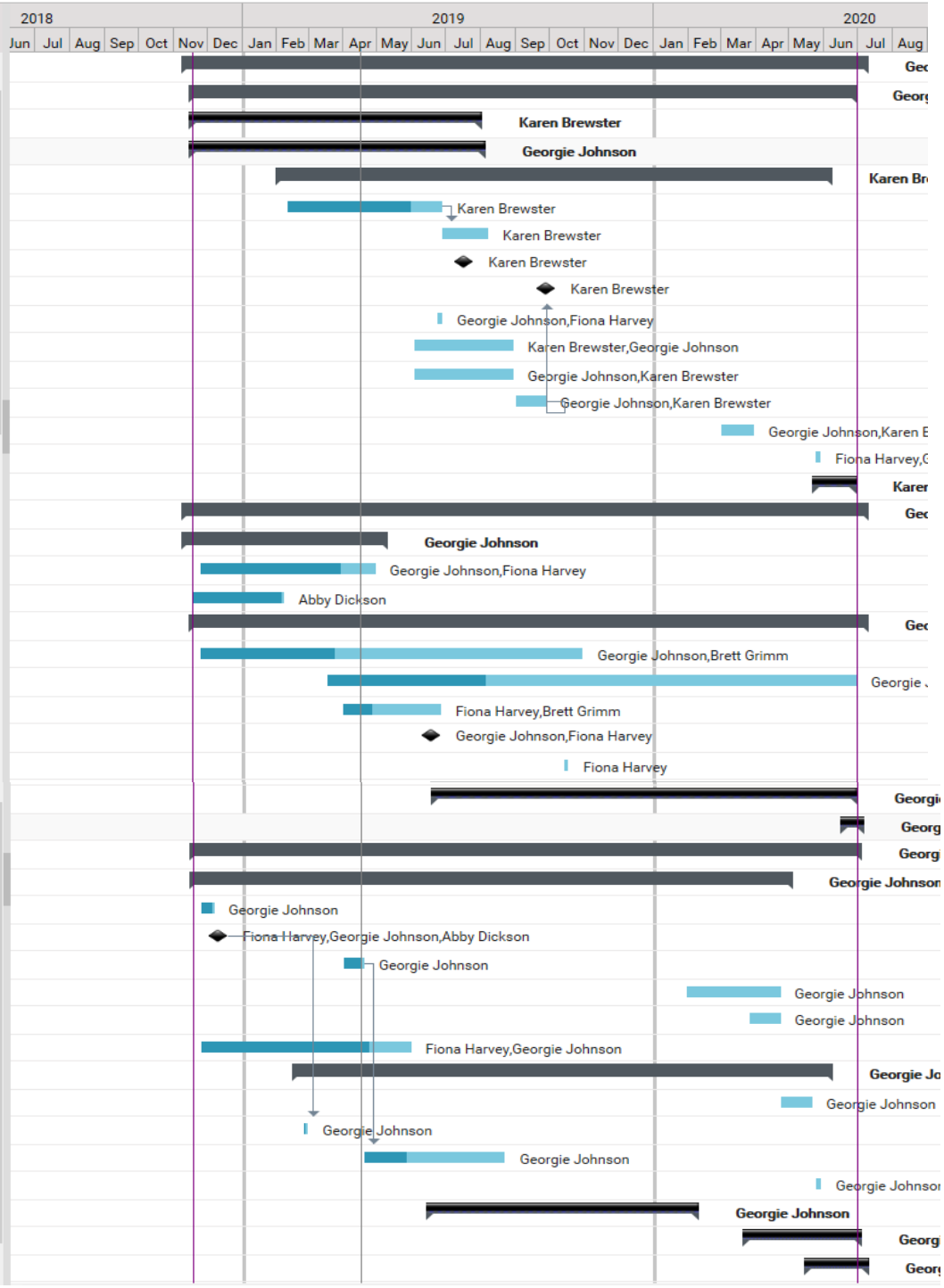
Current Phase: Plan

Schedule Progress Summary **Progress**

Progress in the reporting period:	**Oaklands Smart Precinct:** LGA Network identified partnering with Connected Cities project to enable data sharing/benchmarking ability across councils. Tender exemption for Strategic Technology Partner. **Oaklands Crossing Project:** Community Engagement prepared for Road Closure and reserve design consultation awaiting GC230419 approval. **Metrics that Matter Project:** Performance and Innovation team are currently running 8-week process building dashboards with Business Units for Stage 1 of the project in consultation with Exposé. **Smart South:** Smart Cities Project Officer and Manager Innovation and Strategy have worked with Norman Waterhouse to draft MOU & Project Agreement, distributed to partners for discussion. Flinders Connect students provided return brief for eco-system mapping and review of data governance in a Local Government sector. Baseline Data Project identified for remaining grant funding.
Planned but not completed task/s:	Community Engagement for physical infrastructure due to postponed items in GC230319 meeting.
Next Steps:	**Oaklands Smart Precinct:** Technology solution integration with design consultancy for detailed design of precinct. Investigate what technology solutions procurement for precinct and connecting area. **Oaklands Crossing Project:** Community Engagement commenced for Road Closure and reserve design consultation subject to GC230419 approval. **Metrics that Matter Project:** Scope Stage 2 with the integration of the Oaklands Smart Precinct funding. **Smart South:** Flinders Connect students to provide draft eco-system mapping prior to Workshop May 6th with Founding partners. Project agreement scope to be defined for Baseline Data Project.

PROJECT SCHEDULE

Task	Start Date	End Date
Oaklands Smart Precinct	**19/11/2018**	**30/06/2020**
Data Platform	**26/11/2018**	**19/06/2020**
Initiation Phase	**26/11/2018**	**23/07/2019**
Plan Phase	**26/11/2018**	**26/07/2019**
Delivery Phase	**11/02/2019**	**29/05/2020**
S1 Data Collection, Analysis	11/02/2019	28/06/2019
S1 Dashboard Development	28/06/2019	08/08/2019
S1 Testing, Staff Training	16/07/2019	16/07/2019
S1 Go-Live Virtual Platform, Dashboa	28/09/2019	28/09/2019
Grant 3 Milestone Reporting	24/06/2019	28/06/2019
S2 Data Collection, Analysis	3/06/2019	30/08/2019
S2 Dashboard Development	3/06/2019	30/08/2019
S2 Testing, Staff Training	2/09/2019	30/09/2019
S2 Go-Live Virtual Platform, Dashboa	2/03/2020	31/03/2020
Grant 4 Milestone Reporting	25/05/2020	29/05/2020
Close Phase	**1/06/2020**	**19/06/2020**
Oaklands Precinct	**19/11/2018**	**30/06/2020**
Initiation Phase	**19/11/2018**	**30/04/2019**
Procurement Planning & Design Docu	26/11/2018	30/04/2019
Grant 5 Milestone Reporting	19/11/2018	08/02/2019
Planning Phase	**26/11/2018**	**30/06/2020**
Design Development	26/11/2018	31/10/2019
Community Consultation	18/03/2019	30/06/2020
Tender Release, Evaluation, Award	1/04/2019	27/06/2019
Council Approval to proceed to Delive	17/06/2019	17/06/2019
Grant 6 Milestone Reporting	14/10/2019	18/10/2019
Delivery Phase	**27/06/2019**	**22/06/2020**
Close Phase	**25/06/2020**	**25/06/2020**
Smart Region	**26/11/2018**	**23/06/2020**
Initiation Phase	**26/11/2018**	**22/04/2020**
Smart South Consortium research	26/11/2018	07/12/2018
Working Group Establishment	10/12/2018	10/12/2018
Grant 9 Milestone Reporting	1/04/2019	19/04/2019
Data Collection	30/01/2020	22/04/2020
User Acceptance Testing	26/03/2020	22/04/2020
Working Group MOU Documentation	26/11/2018	31/05/2019
Planning Phase	**25/02/2019**	**29/05/2020**
User Training	23/04/2020	20/05/2020
DIS Grant Halfway reporting	25/02/2019	28/02/2019
Flinders EcoSystem Mapping/Data G	19/04/2019	22/08/2019
Grant 10 Milestone Reporting	25/05/2020	29/05/2020
Delivery Phase	**24/06/2019**	**31/01/2020**
Close Phase	**30/03/2020**	**23/06/2020**
Oaklands Smart Precinct Close Phase	**25/05/2020**	**30/06/2020**



RISK ANALYSIS

Risk Code:	Risk Title:	Responsibility:	Risk Active:
Risk - 1186	Lack of knowledge and understanding by citizens on the role data and technology can play to improve service delivery.	Fiona Harvey - Manager Innovation and Strategy	Yes
Risk - 1185	Availability and/or capability of resources to meet Technology and Data elements in the Smart Cities and Suburbs Funding	Abby Dickson - General Manager City Development	Yes
Risk - 1183	Potential not to meet the deed time frames for the Smart Cities and Suburbs Funding for June 2020.	Fiona Harvey - Manager Innovation and Strategy	Yes
Risk - 1184	Potential not to fulfil the DIS Grant deed for June 2019.	Fiona Harvey - Manager Innovation and Strategy	Yes

ISSUES ANALYSIS: NIL

COMMITTEE COMMENTS

Confidential Comments: Nil

Recommendations: That the committee notes the progress report.

Documents to be discussed:

OTHER BUSINESS / LATE ITEMS

Seaview High School Sports Facilities Partnership

Originating Officer Community Facilities Planner - Sean O'Brien

Corporate Manager Manager City Property - Megan Hayward

General Manager General Manager City Development - Abby Dickson

Report Reference ISC190507R11

REPORT OBJECTIVE

This report provides an update on the redevelopment of the courts at Seaview High and to build a multi-purpose facility to support community use of the courts and playing fields in partnership with the Department of Education endorsed in principle at the 26 march 2019 General Council Meeting. Report Reference: GC260326R06

EXECUTIVE SUMMARY

As part of a resolution for the redevelopment of the courts at Seaview High and to build a multi- purpose facility to support community use of the courts and playing fields in partnership with the Department of Education Council authorised Administration to Lodge a grant application of up to $1 Million to the Office of Recreation Sport and Racing to seek partnership funding.

In accordance with the resolution an application has been submitted to the Office for Recreation, Sport and Racing (ORSR)Community Recreation and Sport Facilities Program (CRSFP) for $1 Million. ORSR have indicated applicants will receive notification after 31 July 2019.

A further report will be brought to Council on September 2019 which will include updates on the additional items resolved at the 26 March 2019 General Council Meeting and the outcome of the grant funding application.

RECOMMENDATION

That the Infrastructure and Strategy Committee:

1. **Notes the report**

Liveable: L1 We will make our services, facilities and open spaces more accessible

DISCUSSION

At the General Council Meeting 26 March Council resolved the following items:

1. Endorses, in principle, the redevelopment of the courts at Seaview High and to build a multi-purpose facility to support community use of the courts and playing fields in partnership with the Department of Education.

2. Requests Administration bring a further report to Council in regards to the potential partial sale of the western half of the Tarnham Road Courts and retention of the Eastern half for open space

3. Notes Department of Education current commitment of $500k subject to matching funding by the

Council

4. Notes the current funding gap in the order of $2.2 Million required to fully fund the project

5. Authorises Administration to Lodge a grant application of up to $1 Million to the Office of Recreation Sport and Racing to seek partnership funding

6. Requests a further report be brought to Council detailing:

    1. The outcomes of the grant application
    2. Capital project costs and Whole of life costs
    3. Funding model
    4. Council's capacity to fund the project

5. Notes a Further report will be brought to Council for consideration of the management agreement with the school in August 2019

Report Reference: GC260326R06

Since the Council resolution the Education Depetment, Seaview High School and the Dover Square Tennis Club have all been notified of the Council decision.

An application for $1million has been submitted to the to the Office for Recreation, Sport and Racing (ORSR) Community Recreation and Sport Facilities Program (CRSFP). The CRSFP closed applications on 17 April 2019. The ORSR website indicates the applicants will receive notification for 2019/20 after 31 July 2019.

Investigations for the western half of the Tarnham Road Courts and retention of the eastern half for open space have commenced.

A further report will be brought to council in September to notify the outcome of the grant application and include updates on the additional items resolved at the 26 March 2019 General Council Meeting.

MEETING CLOSURE

The meeting shall conclude on or before 9.30pm unless there is a specific motion adopted at the meeting to continue beyond that time.