The City with Spirit

NOTICE OF MEETING

Notice is hereby given that an **Infrastructure Works and Development Committee** meeting of the Devonport City Council will be held in the Aberdeen Room, Level 2, paranaple centre, 137 Rooke Street, Devonport, on Monday 8 April 2019, commencing at 5:30pm.

The meeting will be open to the public at 5:30pm.

QUALIFIED PERSONS

In accordance with Section 65 of the *Local Government Act 1993*, I confirm that the reports in this agenda contain advice, information and recommendations given by a person who has the qualifications or experience necessary to give such advice, information or recommendation.

Paul West
GENERAL MANAGER

3 April 2019

AGENDA FOR A MEETING OF THE INFRASTRUCTURE WORKS AND DEVELOPMENT COMMITTEE OF DEVONPORT CITY COUNCIL HELD ON MONDAY 8 APRIL 2019 IN THE ABERDEEN ROOM, paranaple centre, 137 ROOKE STREET, DEVONPORT AT 5:30PM

Agenda of a meeting of the Devonport City Council's **Infrastructure Works and Development Committee** to be held in the Aberdeen Room, paranaple centre, 137 Rooke Street, Devonport on Monday 8, April 2019 commencing at 5:30pm.

PRESENT

		Present	Apology
Chairman	Cr L Perry		
	Cr G Enniss		
	Cr P Hollister		
	Cr A Jarman		
	Cr L Laycock		
	Cr L Murphy		

IN ATTENDANCE

All persons in attendance are advised that it is Council policy to record Council Meetings, in accordance with Council's Audio Recording Policy. The audio recording of this meeting will be made available to the public on Council's website for a minimum period of six months. Members of the public in attendance at the meeting who do not wish for their words to be recorded and/or published on the website, should contact a relevant Council Officer and advise of their wishes prior to the start of the meeting.

1.0 APOLOGIES

2.0 DECLARATIONS OF INTEREST

3.0 PROCEDURAL

3.1 PUBLIC QUESTION TIME

Members of the public are invited to ask questions in accordance with Council's Public Question Time Policy (Min No 159/17 refers):

1. Public participation shall take place at Council meetings in accordance with Regulation 31 of the *Local Government (meeting Procedures) Regulations 2015.*
2. Public participation will be the first agenda item following the formal motions: Apologies, Minutes and Declarations of Interest.
3. Questions without notice will be dependent on available time at the meeting (with a period of 30 minutes set aside at each meeting).
4. A member of the public who wishes to ask a question at the meeting is to state their name and address prior to asking their question.
5. A maximum of 2 questions per person are permitted.
6. A maximum period of 3 minutes will be allowed per person.
7. If time permits, a third question may be asked once all community members who wish to ask questions have done so. A time limit of 2 minutes will apply.
8. Questions are to be succinct and not contain lengthy preamble.
9. Questions do not have to be lodged prior to the meeting, however they will preferably be provided in writing.
10. A question by any member of the public and an answer to that question are not to be debated.
11. Questions without notice and their answers will be recorded in the minutes.
12. The Chairperson may take a question on notice in cases where the questions raised at the meeting require further research or clarification, or where a written response is specifically requested.
13. Protection of parliamentary privilege does not apply to local government and any statements or discussion in the Council Chambers, or any document produced, are subject to the laws of defamation.
14. The Chairperson may refuse to accept a question. If the Chairperson refuses to accept a question, the Chairperson is to give reason for doing so in accordance with the Public Question Time Policy.

3.2 QUESTIONS ON NOTICE FROM COUNCILLORS

At the time of compilation of the agenda no questions on notice from Councillors were received.

4.0 TENDERS

In accordance with Section 22(1) of the *Local Government Act 1993* Council has delegated powers to the Infrastructure and Works Committee to accept tenders for activities related to the functions of the Committee to the extent of the estimates for the current financial year (Min 198/15 refers).

The following item is listed on the agenda for this meeting of the Infrastructure and Works Committee.

4.1 Tender Report CF0023 Supply & Delivery of a Sweeper and Scrubber

The following table details all tenders and contracts which have been entered into by Council above $100,000 for the 2018/2019 financial year.

Contract	Contract Period	Extension Options	$ Value (Excluding GST)	Contractor	Min Ref/ Meeting Date
Contract CT0220 Southern Rooke Street Renewal	January 2019 to April 2019	Not Applicable	$796,635	Kentish Construction & Engineering Co. Pty Ltd	Council 126/18 23/07/2018
Contract 1326 – Supply of Catering and Hospitality Equipment – paranaple convention centre	July-September 2018	Not Applicable	$101,583.59	Tas Hotel & Catering	GFC 47/18 Council 137/18 23/07/2018
Contract 1325 – Cash Collection Services	September 2018 – September 2019	+one+one+ one (4 year total)	$64,300 (Annual)	Southern Cross Protection	Council 147/18 29/8/2018
Contract CT0219-01 – Supply, Delivery and Placement of Hotmix Asphalt	October 2018 – March 2019	Not Applicable	$266,050	Hardings Hotmix Pty Ltd	Council 165/18 24/9/2018
Contract CT0219-02 – Supply, Delivery and Placement of Bituminous Surfacing	October 2018 – March 2019	Not Applicable	$193,675	Hardings Hotmix Pty Ltd	Council 166/18 24/9/2018
LIVING CITY Waterfront Precinct detailed design services	September 2018 – April 2019	Not Applicable	$537,388	Lyons Architects	Council 182/18 24/09/2018
Contract CT0234 – Wenvoe Street Reconstruction	October 2018 – December 2019	Not Applicable	$334,852	ATM Civil Constructions	Council 167/18 24/9/2018
Contract CS0074 William Street Stormwater Stage 8	January 2019 – March 2019	Not Applicable	$335,710	BLW Investments Pty Ltd	Council 221/18 26/11/2018
Tender Report Contract CT0236 Winspears Road Renewal - Stage 1	February 2019 – May 2019	Not Applicable	$141,859	Civilscape Contracting Tasmania	IWC 41/18 10/12/18
Tender Report Contract CT0208 Bishops Road Renewal	February 2019 – May 2019	Not Applicable	$237,811	Civilscape Contracting Tasmania	Council 238/18 17/12/18

Contract	Contract Period	Extension Options	$ Value (Excluding GST)	Contractor	Min Ref/ Meeting Date
Tender Report - Contract CT0226 - Parker and Ronald Streets Intersection Upgrade	March 2019 – June 2019	Not Applicable	$214,395	Civilscape Contracting Tasmania	Council 06/19 29/1/18
Contract 1328 – Cleaning of Council Facilities and Offices	March 2019 – March 2021	1+1+1(3 year total)	$263,146	Lazaro Pty Ltd	Council 23/19 25/02/2019
Contract CT0233 Adelaide Street Kerb Renewal	March 2019 – April 2019	Not Applicable	$135,749	Civilscape Contracting	IWC 03/19 11/02/2019
Contract CT0169 – Formby Road & Best Street Intersection	January 2019 – May 2019	Not Applicable	$192,516	Kentish Construction & Engineering Co Pty Ltd	IWC 02/19 11/02/2019

4.1 TENDER REPORT CF0023 SUPPLY & DELIVERY OF A SWEEPER AND SCRUBBER

File: 35561-02 D570902

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 5.5.2 Ensure comprehensive financial planning to meet sustainability requirements

SUMMARY

This report seeks Council's approval to award the purchase of a sweeper from Hako Australia.

BACKGROUND

This report considers tenders received for "Supply and Delivery of a Sweeper and Scrubber" listed within the 2018/19 capital expenditure budget.

The sweeper was included in the capital expenditure budget as it will be a key part of the cleaning operations in the CBD including:

- Multilevel car park
- Market Square
- Other paved surfaces including Rooke Street Mall and Stewart Street
- Waterfront precinct (once complete)

The current machine is ten years old and is not fitted with a scrubber. It has a limited remaining useful life and ergonomically is not suited to high utilisation. It also has a negligible trade value so will be retained for use in other areas of Devonport such as recreational paths. It is planned that the new sweeper be permanently located in the CBD.

STATUTORY REQUIREMENTS

Council is required to comply with Section 333A of the *Local Government Act 1993* and its adopted Code for Tenders and Contracts when considering awarding tenders.

DISCUSSION

In accordance with Council's Code for Tenders and Contracts, a Tender Planning and Evaluation Committee was formed to evaluate the tenders received.

Tenders were received from five companies. Bucher Municipal was non-conforming due to not meeting the essential specifications.

TABLE 1

No.	Tender	Status	Tender Price (ex GST)
1	Hako Australia	Conforming	$173,663
2	Garwood International	Conforming	$173,719
3	Bucher Municipal	Non-Conforming	$182,719
4	Rosmech Pty Ltd	Conforming	$189,336
5	Mike Trace Engineering	Conforming	$223,093

The Tender Planning and Evaluation Committee have considered the tenders against each of the selection criteria, these being:

- Essential Specification
- Operators Assessment
- Specification
- Price

The evaluation by the Committee indicates that Hako Australia scored highest overall against the selection criteria and therefore offers Council the best value for money.

The submission from Hako Australia was for a Citymaster 1600 as shown in the photo below.

The Tender Planning and Evaluation Committee minutes were prepared, and confidential copies can be made available upon request by Councillors.

Quotations were invited through the 'Local Buy' purchasing initiative. This is a collaborative purchasing arrangement that provides competitive tendering on a large scale. This arrangement is undertaken in accordance with the procurement principles which are required by the *Local Government Act 1993*.

COMMUNITY ENGAGEMENT

Tender applications were requested through the purchasing system 'Local Buy' allowing potential suppliers the opportunity to tender.

FINANCIAL IMPLICATIONS

The 2018/19 capital expenditure budget allocation for the "Supply and Delivery of a Sweeper and Scrubber" is $178,000.

The tendered sum of $173,663 for the purchase of the sweeper offered by Hako Australia is below the budget figure.

RISK IMPLICATIONS

To minimise risk, the tender administration processes related to this contract comply with Council's Code for Tenders and Contracts which was developed in compliance with Section 333A of the *Local Government Act 1993.*

The following risks have been addressed in the assessment of the submissions:

- WHS risk associated with the use of mobile equipment (including ergonomics)
- Risk of future reliability issues
- Access to parts and specialist advice

Operator training will be undertaken when the sweeper is delivered.

CONCLUSION

Taking into account the selection criteria assessment, the Tender Planning and Evaluation Committee has determined that Hako Australia meets Council's requirements and is therefore most likely to offer "best value" in relation to in relation to Supply and Delivery of a Sweeper.

ATTACHMENTS

Nil

RECOMMENDATION

That the Infrastructure, Works and Development Committee in relation to Project CF0023 Supply & Delivery of a Sweeper and Scrubber and in accordance with the delegated authority provided to it by Council under Minute 214/18, award the tender to Hako Australia for the tendered sum of $173,663 (ex GST).

Author:	Shannon Eade	Endorsed By:	Matthew Atkins
Position:	Project Management Officer	Position:	Deputy General Manager

5.0 INFRASTRUCTURE AND WORKS REPORTS

5.1 ELECTRIC VEHICLE INTEGRATION PLAN

File: 30116 D564143

RELEVANCE TO COUNCIL'S PLANS & POLICIES
Council's Strategic Plan 2009-2030:

Strategy 1.1.1 Lead and actively promote the adoption of practices that support the sustainable use of energy and other natural resources by Council, businesses and the community

SUMMARY
This report presents the Devonport City Council Electric Vehicle Integration Plan (the Plan), prepared by Sustainable Living Tasmania (SLT).

BACKGROUND
Council has a light vehicle fleet of forty-four vehicles, including sedans, SUVs, vans and utilities. This fleet travels 658,000km per year, consuming $103,000 of fuel and generating 177T of greenhouse gas emissions. Sixteen vehicles are nominated for replacement in the next two financial years.

The Smarter Fleets program is an initiative of the Tasmanian Government, managed by the Department of Premier and Cabinet's Tasmanian Climate Change Office and is being delivered by Sustainable Living Tasmania (SLT). The Program helps councils to plan and prepare for a rapidly approaching future where electric vehicles (EVs) are generally a cost-effective option.

The transition to EVs aligns strongly with Council's Strategic Plan 2009-2030 and is a focus of Council's Environment Strategy 2019-2024.

STATUTORY REQUIREMENTS
There are no statutory requirements related to this report.

DISCUSSION
Data supplied by Council was used to analyse the fleet and its unique performance requirements to identify suitable EVs available to replace current fleet vehicles that are due for replacement over the next two years. The analysis compared the whole of life costs and greenhouse gas emissions of internal combustion engine (ICE) vehicles to EVs, where fit-for-purpose EVs are available, based on conservative assumptions about costs and residual values.

The Plan considers the current availability and price of EVs and hybrid models and provides some general finding on EVs:

- EVs have a higher purchase price (capital cost) than hybrid or ICE vehicles
- The capital cost of EVs is reducing and the range of available models is increasing
- EVs with a higher range (km) have a higher capital cost
- Operating costs of EVs compare more favourably with ICE vehicles in low-speed urban environments
- EV life cycle costs become more competitive when held longer

- EV life cycle costs become more competitive with greater distance travelled
- FBT disadvantages EVs due to the higher capital costs

The Plan examines the four classes of vehicles currently in the fleet and considers the supporting infrastructure and business processes required for a fleet of EVs in the future.

Vans:
Council's fleet includes seven vans. There is currently only one EV model available. This would deliver a 77% reduction in greenhouse gas emissions but has a significantly higher capital costs than the ICE equivalent and therefore has a 65% higher whole of life cost/km. Unless other models enter the market or the usage of each van increases significantly, vans will likely be renewed with suitable ICE models.

Utilities:
Council's fleet includes twenty-three utilities. Currently, there are no EV or hybrid options available in Australia. Utilities will be replaced with suitable ICE models. However, a case by case assessment is required as to whether a utility is required or whether a sedan or SUV could meet the operational requirements.

SUVs:
Council's fleet includes nine SUVs. Two are scheduled for renewal in the next two years. Hybrid models are available which can reduce life cycle costs by up to 8% (depending on use) and greenhouse gas emissions by 31%. Greater emissions reductions are possible with available EVs, but life cycles costs are higher than both hybrid and ICE options. Renewing SUVs with hybrid models are an initial step towards an EV fleet.

Medium Sedans:
Council's fleet includes 5 medium sedans. Similarly, to SUVs, available hybrid options can reduce life cycle costs and greenhouse gas emissions. EVs are available and can provide greater emissions reductions, but have a higher life cycle cost.

Fleet summary:
Currently there are no cost competitive options for replacing a van or a utility. Hybrid replacements for SUVs and medium sedans are available now and should be considered. Electric SUVs and sedans are also available now and offer significantly greater emission reductions than hybrid vehicles but have higher life cycle costs.

Other recommendations:
The Plan makes other related recommendations for Council to consider as the transition to EVs progresses with lower capital costs and availability of more models likely in future. These recommendations are made to maximise the competitiveness of EVs and include:

- Review selection of FBT calculation method.
- Consider prioritisation of vehicles with no private use to avoid FBT implications.
- Consider solar panels at fleet charging points. Overnight charging at either single or three phases is likely to be low cost, but a higher powered three phase charger will provide operational flexibility for day charging.
- Review energy tariffs at charging points to ensure best fit for the energy use profile.
- Introduce administrative controls to ensure EVs and hybrids are the highest utilised vehicles in the fleet.
- Consider home charging overnight as a future option for EVs with private use, provided a simple administrative arrangement can be made.
- Consider training for drivers of EVs to ensure safe and efficient operation.

Most of these recommendations are focussed on the medium-term future, when EVs are likely to become more cost competitive with ICE vehicles and Council fleet starts to include EVs. It is important to consider these recommendations going forward as this may influence infrastructure or fleet renewal decisions.

The Devonport City Council Electric Vehicle Integration Plan is attached to this report.

COMMUNITY ENGAGEMENT

Community engagement was not undertaken in preparation of this report.

FINANCIAL IMPLICATIONS

There are no financial implications from this report. However, the recommendations of the Plan require consideration when deliberating on future capital and operating budgets.

RISK IMPLICATIONS

- Corporate and Business
  Transitioning to EVs will demonstrate commitment to Council's Strategic Plan.
- Asset & Property Infrastructure
  Continuing to use strong asset management practices will ensure that the cost of delivery of Council's services is minimised.
- Environmental Sustainability
  Transitioning to EVs will reduce Council's use of fossil fuels and its greenhouse gas emissions.

CONCLUSION

The Devonport City Council Electric Vehicle Integration Plan was prepared by Sustainable Living Tasmania to assist Council plan and prepare for an EV fleet.

An analysis of Council's current fleet was undertaken, and consideration was given to the available hybrid and EV models. There are currently no cost competitive EVs, but for SUVs and medium sedans, available hybrid models offer a life cycle cost saving and a reduction in greenhouse gas emissions. The Plan makes other infrastructure and process recommendations to maximise the competitiveness of EVs. The cost competitiveness of EVs is expected to improve in coming years, so future revisions of the Plan will include EVs.

ATTACHMENTS

⇩1. Devonport City Council Electric Vehicle Integration Plan

RECOMMENDATION

That it be recommended to Council that the report of the Infrastructure and Works Manager be noted and that the recommendations from the Electric Vehicle Integration Plan be considered when managing Council's vehicle fleet.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Deputy General Manager

Smarter Fleets Program – Electric Vehicles in Local Government

Devonport City Council

Electric Vehicle Integration Plan

Contents

Executive Summary

The *Smarter Fleets Program – Electric Vehicles in Local Government* (*the Smarter Fleets Program*) is an initiative of the Tasmanian Government, managed by the Department of Premier and Cabinet's Tasmanian Climate Change Office and is being delivered by Sustainable Living Tasmania (SLT). The Program helps councils to plan and prepare for a rapidly approaching future where electric vehicles (EVs) are generally a cost effective option.

The transport sub-sector is the highest contributor to greenhouse gas (GHG) emissions in Tasmania's economy. Tasmania is ideally suited to benefit from growing EV use, due to the State's high percentage of renewable energy generation and compact geography. By introducing EVs into their fleets, councils can demonstrate community leadership on climate change by reducing transport emissions.

Data supplied by Devonport City Council (the Council) was used to analyse the fleet and its unique performance requirements to identify suitable EVs available to replace current fleet vehicles that are due for replacement over the next two years. The analysis compared the whole of life costs and GHG emissions of internal combustion engine (ICE) vehicles to EVs, where fit-for-purpose EVs are available, based on conservative assumptions about costs and residual values.

This Electric Vehicle Integration Plan (the Plan), together with the mentoring and supporting resources delivered under the Program provides the Council with the tools to consider future opportunities to increase the number of EVs in its fleet, as costs continue to decline and the range of available vehicles increases. Within about five years, EV costs and performance are expected to provide a superior alternative to ICE vehicles for most applications.

The Plan presents a range of options for the Council that address its unique policy, asset management, taxation and performance requirements. This includes options for changes to policy, procedure, training and aspects of charging infrastructure, including type, location, tariff, contribution of solar and managing any charging at an employee's home.

The Council has 16 vehicles due for replacement in the next two years that are potentially suited to replacement with an EV; primarily medium sedans and sport utility vehicles (SUV), and some vans. Replacing some these vehicles with EVs would deliver relatively high savings on operating costs, largely offsetting the higher purchase cost for vehicles travelling higher distances.

Two commuter-use medium size sedans travel up to 21,000 km/year, making conversion to a battery electric vehicle (BEV) relatively cost effective. A third fleet pool medium size sedan may have potential for increased use by prioritising use of a low operating cost EV from the fleet pool. For other vehicles that travel lower annual distance, converting to hybrids can result in cost savings, which can more than pay for the additional cost of BEVs.

By replacing six vehicles with hybrids and three with BEVs, potential savings of $1,350 per year can be achieved, compared with ICE vehicles, over a five year holding period. This would reduce GHG emissions by about 15 tonnes per year.

Changes to fringe benefits tax (FBT) that currently applies to fleet vehicles with commuter use may affect costs. This may affect vehicle selection, with a reduced emphasis on utility vehicles (utes) once they are no longer FBT exempt. Replacing these with sedans and SUVs will increase the number of vehicles for which EV options are available. By switching from utes to more fuel efficient vehicles, this will generate savings that partly offset any increase in FBT payable. Using the operating cost calculation for FBT, while administratively more complex, may also result in further savings.

The currently available range of EVs and hybrid vehicles, have a higher capital cost than ICE vehicles used in the Council's fleet. Successfully incorporating EVs into the fleet at The Council will require consideration of a range of factors. The options presented in this Plan will assist the Council to appropriately manage the use of EVs and prepare for a future where EVs become more prevalent.

Summary of recommendations

1. Concentrate use on fleet pool vehicles with the lowest running cost for which there is a fit-for-purpose battery electric vehicle.
2. Employ existing hybrid technology available from a range of manufacturers, which are almost always cost comparable or cheaper than their internal combustion engine vehicle equivalents.
3. Subject to being confirmed as fit for purpose, replace the three highest use medium sedans with battery electric vehicles, and replace selected other vehicles with hybrids (see Table 14). Concentrate on using the low running cost battery electric vehicles first, raising their distance travelled while reducing that of the other vehicles.
4. Use the Operating Cost Method to calculate fringe benefits tax owing (subject to assessing administrative cost).
5. Prioritise vehicles with no private use (being fringe benefits tax exempt) until electric vehicle prices become similar to internal combustion engine vehicle prices.
6. If the vehicle is subject to private use, require the driver to contribute an amount equivalent to the fringe benefits tax on the vehicle from their after tax income if they exceed an agreed share of total distance travelled for private use.
7. By installing solar panels at Council sites where future electric vehicles are garaged, there is potential for the Council to provide low cost solar electricity for charging as the electric vehicle fleet expands.
8. The installation of overnight chargers at 7 kW (single phase) or 10 kW (three phase), is more than adequate for overnight charging. This level of power use would not be likely to trigger changes to billing such as introduction of demand charges.
9. Provision of a 22 kW three-phase charger where electric vehicles will be parked during the day will provide operational flexibility.
10. If an initial charger is to be installed on any of the Council's sites, it would be appropriate to install additional cabling or at least conduit to allow additional chargers to be installed at a later time, to meet the Council's increasing needs over time for electric vehicle charging overnight.
11. While every vehicle may not require charging each day, subject to use, for the modest cost per bay, it is likely to greatly simplify operations if each electric vehicle parked overnight has dedicated access to charging infrastructure.

12. If multiple chargers are installed and capable of 7 kW or higher charge rates, provision should be made to enable managed charging, where the total power supplied is limited to avoid excessive peak demands that may result in higher payments for electricity supply.
13. The Council may consider paying for the cost of timers and other minor modifications at employees' homes to enhance the savings from Tariff 93 as an incentive to employees to switch. Alternatively, providing an electric vehicle charger that remains in the dwelling after being written off by Council might be an appropriate incentive.
14. The Council should consider the whole of life cost associated with electric vehicle purchase, to include an assessment of the reduced operating costs of electric vehicles.
15. The Council should consider updating its purchasing policy, to give weight to non-financial aspects in the assessment of the costs and benefits of a strategic purchase of electric vehicles. Non-financial aspects relevant to Council might include environmental benefits, economic and community leadership factors.
16. The Council should consider if it is necessary to introduce policy to minimise the impact of fringe benefits tax due to the higher capital cost of electric vehicles, as noted above in the section 'FBT Arrangements'.
17. The most accurate and perhaps fair option for reimbursing employees for home charging of Council electric vehicles is to use a metered charging system at the employee's home, so accurate amounts can be calculated and reimbursed to the employee.
18. An alternative approach may be to pay a negotiated amount, based on the estimated distance travelled, energy consumption per kilometre and electricity price. While administratively simple, some care is required to achieve a fair estimate.
19. A minimum level of driver training and specific vehicle orientation should be a condition for using a fleet electric vehicle or receiving an electric vehicle for personal use.
20. The Council should maintain a register of staff that have been trained, so that only those trained are able to use a fleet pool electric vehicle. As electric vehicles become more common in the fleet, the longer term objective would be to train all staff who may need to drive a fleet pool vehicle.
21. Councils may wish to acknowledge training provided by other Councils and fleet operators with electric vehicles having similar policies and training standards, avoiding the need to 'retrain' in the event of staff changing employers. An agreed common training program or use of third party training/certification could enable this with confidence.

Introduction

The Tasmanian Government is supporting Devonport City Council (the Council) to prepare to introduce electric vehicles (EVs) into its fleet. The benefits of EVs for fleets include reduced transport costs and reduced emissions.

Local government fleets have been selected as the target group of participants for this Program, given the significant efforts by many Tasmanian councils addressing climate change within their municipal areas. Currently fleets are a significant cost to councils, and fleets contribute emissions to transport sub-sector; the highest emitting sub-sector of the State's economy.

The *Electric Vehicle Integration Plan* (the Plan) prepared for the Council provides tailored information and guidance on how to integrate EVs into the fleet. The Plan considers the Council's existing fleet to show the environmental benefits and reduced operating costs that can be achieved with EVs. The Plan also provides advice on suitable EV models and charging infrastructure.

This Plan will support the Council to become EV ready by considering the tools and policies to prepare for the introduction of EVs as they become available in more categories and become more affordable in Australia in the next few years.

Scope

The Plan presents information to the Council on available or soon to be available fully electric passenger vehicles and petrol-electric hybrids as options for incorporation into the Council fleet within a one and half to two year period. Information in the Plan and resources should continue to be strategically relevant into the medium term future and assist Council to assess the suitability of EVs within the fleet. The term passenger vehicle includes utility vehicles (utes).

The following data was obtained directly from the Council to analyse the Council's current fleet:

- Asset information;
- Fuel purchase information; and
- Some information from taxation records including fringe benefits tax (FBT).

The Plan includes a general-level review of the Council's existing strategies and policies that may be relevant to purchasing and operating EVs. Relevant documents include the Council's asset management strategy and policy; purchasing, tendering, and vehicle use policies; and environmental management and climate change policies.

The Plan includes information about potential new policy additions or changes the Council may wish to consider (either now or within the scheduled policy review period) to enable, support and guide the purchase and use of EVs. Examples of options include a policy to address the time and place of charging of the Council's EVs and the potential for reimbursement for at home charging. Another option is strategy, policy or procedure relating to the asset purchase of an EV, and the value of extending the hold time and or kilometres travelled before selling to the whole-of-life cost comparison.

Background

Transport is the largest contributing sub-sector to Tasmania's greenhouse gas (GHG) emissions. EVs powered by Tasmania's renewable energy provide an opportunity to reduce Tasmania's transport emissions and significantly improve the efficiency of the State's vehicle fleet.

The uptake of EVs in Tasmania will reduce the State's reliance on imported petrol and create further demand for the generation of renewable energy in Tasmania.

By supporting efforts to increase uptake of EVs the Tasmanian Government is supporting the development of a more sustainable transport system.

Smarter Fleets Program - Electric Vehicles in Local Government

The Tasmanian Government's *Smarter Fleets Program - Electric Vehicles in Local Government* (the *Smarter Fleets Program*) assists local government to incorporate EVs into their fleets.

The *Smarter Fleets Program* is helping councils to:

- Plan for future fleets;
- Improve fleet efficiency including reducing GHG emissions and fuel costs;
- Expand the great work councils are doing to address and respond to climate change;
- Lead and inspire communities to adopt EV technology;
- Overcome a lack of resources within councils for strategic analysis of new EVs; and
- Play a role in increasing the uptake of EVs in Tasmania over time, by increasing the local second hand market for ex-fleet EVs.

The *Smarter Fleets Program* is being delivered by Sustainable Living Tasmania (SLT) on behalf of the Department of Premier and Cabinet's Tasmanian Climate Change Office. The Program Delivery Team assembled by SLT to develop the Electric Vehicle Integration Plans for participating councils is described below.

Table 1 Program Delivery Team

Organisation	Name	Project Position	Key Responsibility
SLT	Todd Houstein	Project Manager	Oversight of project goals, timeline and budget
SLT	Scott Blacklow	Project Officer	Delivery and organisation of key project outputs
Australian Electric Vehicle Association	Clive Attwater	EV - Technical Advisor	Presentation at workshops, technical adviser
Sole Trader (ex-Manager LeasePlan Tasmania)	Steven Puckering	Fleet - Technical Advisor	Fleet analysis

Benefits of Electric Vehicles

EVs reduce vehicle GHG emissions particularly when powered by Tasmania's renewable energy. EVs have lower fleet service and fuel costs. In the long run they are expected to reduce total vehicle costs as their capital costs fall due to lower battery prices. Fleets will benefit from this first as they can select EVs in applications with a total cost of ownership close to or below that of internal combustion engine (ICE) vehicles as they become available.

EVs are a good fit for Tasmania given the State's high renewable energy generation. The increased uptake of EVs will also increase demand for locally produced electricity and improve utilisation of the existing electricity network. This may help to reduce future electricity prices for everyone.

Fleet uptake of EVs stimulates demand for EVs in Tasmania, potentially attracting additional models to this market. It will also provide a greater supply of EVs to the second-hand market in the future which is likely to have a significant effect on the uptake of EVs given that most car owners buy used cars.

Introducing EVs to fleets also helps to raise community awareness, through exposure to EVs. There is an opportunity to normalise EVs as the Council's staff experience driving them.

Cost of Electric Vehicles

Currently, EVs are not generally cost competitive with ICE equivalents, but in some situations they are close. According to the Australian Electric Vehicle Market Study, prepared by ENERGEIA for the Australian Renewable Energy Agency and Clean Energy Finance Corporation, EVs will reach price parity with ICE vehicles in the early to mid-2020s. The economy of an EV increases with further distance travelled and longer hold time. EV uptake within fleets requires some operational and policy change, so introducing a small number of EVs into fleet now, even at a modest additional cost, will make it easier to implement on a larger scale in the near future when they are fully cost effective.

Model Availability

While local uptake of the technology has remained low to date (EVs currently represent 0.1% of the Australia's passenger vehicle market), the global uptake of EVs is rising.

Two key factors are anticipated to increase EV uptake in Australia. Firstly, EV model availability in Australia is expected to increase in the near future with several new EV models being introduced to the Australian market in the next 18 months, many of which are likely to be priced at $40,000 to $60,000 with a realistic range of over 250 km. Secondly, EVs are predicted to reach cost parity with ICE vehicles by around 2023.

Not every EV model has been tested and received a safety rating under the Australasian New Car Assessment Program. This does not mean that these specific models are unsafe, simply that they have not been assessed. Unrated (and poorly rated) vehicles are not listed as acceptable for use in the State Government fleet, a list widely used by local governments to source vehicles. This may affect the availability of EV models to the Council, depending on the Council's policy.

The table below lists EVs currently available in Australia or expected to be available in 2019.

Table 2 Battery Electric Vehicles (BEVs) in Australia

Manufacturer	Model	Edition	Category	Availability	Price exc. ORC
Mitsubishi	i-MieV		Kei hatch	NA (orig 2011) [1]	$32,900
Hyundai	Ioniq		Compact sedan	Now	$39,350
Nissan	Leaf	Original	Compact hatch	NA (orig 2012) [1]	$39,900
Renault	Zoe		Compact hatch	now (mainland)	$43,600
Kia	Niro		CUV	TBA [2]	$50,000 (est)
Renault	Kangoo ZE		Van	now (mainland)	$50,000
Nissan	Leaf	Standard	Hatch	Mid 2019	$50,000 (est)
Tesla	Model 3	Standard	Sedan	late 2019	$60,000 (est)
Hyundai	Kona		CUV	Mid 2019	$60,000 (est)
Nissan	Leaf	e-Plus	Hatch	TBA [2]	$65,000 (est)
Tesla	Model 3	LR	Sedan	Late 2019 [2]	$TBA
BMW	i3 2019	2019	Hatch	2019	$TBA
BMW	i3 2018	2018	Hatch	Now	$80,000
SEA Electric	E4		Van	Now	$84,000
SEA Electric	E4B		Bus	Now	$99,000
Jaguar	i-Pace		Sedan	Dec-18	$120,000
Tesla	Model S	75D	Sedan	Now	$139,000
Audi	e-tron		Sedan	mid 2019	$140,000
Tesla	Model X	75D	SUV	Now	$149,000
Tesla	Model S	100D	Sedan	Now	$177,000
Tesla	Model X	100D	SUV	Now	$183,000

[1] Old vehicle, limited range, no longer available new, included for comparison.

[2] Unconfirmed upcoming models/specifications.

Table 3 Plug-in Hybrid Electric Vehicles (PHEV) Available in Australia

Manufacturer	Model	Edition	Style	Availability	Price exc. ORC
Hyundai	Ioniq PHEV		Compact sedan	Future	$35,550
Mitsubishi	Outlander		4WD	Now	$39,200

The Council's planned vehicle replacement guidelines will mean that, for vehicles purchased in 2019, their replacements will be due in 2023, which is right at the time when the first of the 'wave' of fully cost competitive, longer range EVs will be available and will, in many cases, replace petrol and diesel vehicles.

Commentators are even projecting the 'death of diesel engines' with 4X4 Vehicle drivetrain expected to move towards petrol/electric hybrids rather than the 'traditional' diesel. It is entirely possible that, by 2025, the Council will have few alternatives except to adopt either petrol/electric hybrids or full EVs.

The *Smarter Fleets Program* recognises this market imposed shift, assisting the Council to prepare and be proactive in adopting EVs to ensure a smooth transition as the change happens. While model availability is

currently restricted and the capital costs of EVs are higher, there is a good opportunity now to address the changes required by adopting some of the fit-for-purpose EVs that are available in the short term.

Other Electric Vehicles

In addition to this list of sedans and sport utility vehicles (SUVs), manufacturers in Australia produce light trucks (4-40 tonne capacity), vans as cargo or up to 13 seater formats, buses and some other specialist vehicles. Overseas manufacturers also make specialist electrically powered vehicles and equipment including street sweepers and excavators (excellent for use indoors or in confined spaces). Some imported vehicles may be required to undergo testing to meet Australian compliance requirements, which can be time consuming and costly. These other vehicles are beyond the scope of the current *Smarter Fleets Program* to deal with in detail, however information on specialist vehicles that is relevant to Council's current needs has been provided, including information shared between councils.

Electric bicycles or 'pedelecs', that use an electric motor to assist when pedalled can provide useful transportation for shorter trips, making journeys up to 10 km realistic by bicycle. These are becoming increasingly widespread for general use and provide a highly cost effective alternative to cars, when suitable. The greatest constraint in many areas is the lack of safe cycling routes.

Between electric bicycles and small cars there is an increasing proliferation of electric scooters, motorcycles, tricycles, quadricycles and other novel vehicles, some of which are rated for on-street use, others subject to restricted use but still of potential interest to local government.

Methodology

Comprehensive data was gathered from the Council through analysis of available 'facts and figures' and qualitative data obtained from meetings and communications with the Council's staff.

This method allowed the Program Delivery Team to form a complete picture of Council's fleet operations and to develop specific and tailored recommendations that take account of the relevant context. Data was supplied electronically, and was of two types:

- Fuel information –– which supplied fuel amount in litres (L), cost in dollars ($) and distances in kilometres (km); and
- Asset information – which supplied make, model and type, date of purchase/disposal, and details on usage within the Council and status as pool, shared or personal use vehicle.

Meetings

Face-to-face meetings with the Council's staff provided important qualitative information including:

- Drivers of purchasing decisions (capital value versus whole-of-life costs);
- Budgetary structures (capital allocations and operational budgets and differing treatments); and
- Fit for purpose factors (range, terrain, towing).

Fleet Analysis

Analysis of the Council's fleet was undertaken as part of the *Smarter Fleets Program*. The Council provided relevant information to allow for the assessment of the following quantitative factors:

- Current fleet composition (the number and type of vehicles in the Council's fleet);
- Purchase price;
- Change-over schedule (capital budget);
- Usage policies and guidelines;
- Total distance travelled;
- Average fuel economy;
- Total fuel used (GHG emissions produced); and
- Usage patterns (average distance travelled/day).

Cost Comparison Modelling Assumptions

The assumptions adopted to calculate values are that:

- Distance travelled per year: as specified for vehicles to be replaced;
- Duty: 50% urban km, 50% highway km unless more specific information is available;
- Driver performance: average (not trained for fuel minimisation, nor overly aggressive); and
- Registration, insurance, maintenance and tyres are taken to be the same for both ICE and EV models.

While actual maintenance required on EVs is likely to be less than for ICE vehicles, it is assumed that fixed price maintenance contracts from the manufacturer will be used as they are lower than alternative maintenance regimes and have been set to similar levels by most manufacturers.

Table 4 ICE and Hybrid Assumptions

Model	Purchase price	Fuel economy (L/100km)
Toyota RAV 4 petrol	$28,412	8.9
Toyota RAV 4 hybrid	$29,912	6.1
Toyota Camry petrol	$23,329	8.3
Toyota Camry hybrid	$25,210	5.7
Toyota Corolla sedan petrol	$21,800	6.9
Toyota Corolla hybrid	$23,600	4.1
Toyota Hiace 14 seat bus diesel	$39,000	9.9

The assumptions in relation to fuel are:

- Petrol price: $1.50/L;
- Diesel price: $1.50/L; and
- Fixed price maintenance contracts apply for duration.

Table 5 BEV Assumptions

Model	Purchase price	Fuel economy Wh/km[1]
Hyundai Ioniq	$39,350	120
Renault Kangoo	$50,000	155
Nissan Leaf, standard	$50,000	160
Renault Zoe	$43,627	164
Tesla Model 3	$60,000	157
Hyundai Kona	$60,000	171

PHEVs use a mix of electricity and petrol which strongly varies with driving cycles. Fuel consumption is modelled based on the values below blended according to average daily distance travelled.

Table 6 PHEV Assumptions

Model	Purchase price	Fuel economy	
		Wh/km	L/100km
Hyundai Ioniq PHEV	$35,550	175	6
Mitsubishi Outlander PHEV	$39,200	225	7

The assumptions in relation to electricity are:

[1] Wh/km is a unit used to measure how much energy (measured in watt-hours) is required to drive an EV a distance travelled (measured in kilometres). It is analogous to fuel economy (L/100km).

- Electricity price based on the off-peak rate for the time of use tariff unless other information was provided:
  - Tariff 93, off-peak: $0.135/kWh for residential premises; or
  - Tariff 94, off-peak: $0.107/kWh for commercial premises.

The financial assumptions are:

- Inflation: 2% p.a. (applied to annualised costs); and
- Nominal discount rate: 7% p.a. (for net present value calculations).

Note that the above two financial assumptions give an effective real interest rate of 4.90% p.a. (for net present value calculations).

Results

General Findings

Range Versus Charging Trade-Off

Vehicles vary in price and range. Broadly speaking, longer-range EVs are more expensive due to the relatively high cost of batteries. EVs with shorter ranges may limit the amount of use that can be reliably served unless there is ready access to fast charging in suitable locations.

The geographically contained nature of the Council area and its fleet usage patterns mean the EVs with even a modest range of about 200 km will serve well in most applications.

When a fast charging network is established in Tasmania, estimated to be complete in about 2021, EVs with a 250+ km range should provide practical access to all parts of the state.

In Urban Use EVs Show a Bigger Advantage Compared to ICE Vehicles

The operating cost for EVs is lower in low-speed urban driving, particularly with stop/start conditions (which are particularly inefficient for ICE cars), leading to a larger operating cost saving per kilometre in urban areas. The operating cost advantage of EVs on the highway is less than in the city. While the exact amount varies by vehicle type and driving conditions, the following table using indicative figures shows that EVs in an urban driving context result in savings of roughly double than that of highway use.

Table 7 Indicative Fuel Cost, ICE/EV in Highway and Urban Use

	ICE		EV		EV Fuel Savings	
	L/100 km	cents/km	Wh/km	cents/km	cents/km	%
Highway	6	9.6	175	4.4	5.2	54%
Urban	9	14.4	145	3.6	10.8	75%

The table compares pure petrol/diesel with BEVs. Hybrid vehicles show a much smaller difference between highway and urban fuel efficiency. The fuel savings from a hybrid for a BEV are similar for both urban and highway conditions.

EVs Show a Bigger Advantage When Held Longer

Both EVs and ICE vehicles show greater savings when held for longer periods, certainly up to about five to seven years. The average cost per kilometre for an EV drops about 5%-8% per year for each additional year held as the lower operating costs add up and capital costs are stretched over a longer payback period.

For ICE vehicles there is also an advantage in longer holding periods, up to a point, but it is lower, 1%-3% per each additional year. In later years ICE vehicle maintenance costs may rise to the extent that there is a cost not a saving in longer holding periods after about five to seven years.

Cost per kilometre is not the only reason to hold or trade in vehicles. Other considerations may include safety (newer models are generally safer than older ones), reliability, image (older vehicles may show their age) and new features available on newer models.

EVs Show a Bigger Advantage With Higher Distance Travelled Per Year

The combination of higher capital cost but lower running costs for EVs compared to ICE vehicles, means that fleet vehicles that travel more kilometres annually have greater opportunity to make savings to justify the higher initial cost. Even with today's higher EV prices there is generally an annual distance driven that would make an EV more cost effective. Currently, this distance exceeds typical local government fleet levels of use, generally over 50,000 km/year if held for five years, less for some vehicles. However, if vehicles are primarily used in urban areas and held for example, seven years, the distance required per year to make an EV cost competitive with an ICE vehicle may fall to about 30,000 km/year or less.

This analysis assumes no change in the price of petrol and diesel fuels. Over the past two years, petrol and diesel prices have increased significantly in Tasmania rising from $1.20/L in 2014, to up to $1.60/L in 2018. Although most councils purchase fuel under the Government P450 Petroleum Supply Contract (currently awarded to Caltex and BP), the pricing structure within the contract does not protect councils from price increases. Due to the nature of the Caltex agreement in particular and its tiered pricing scheme, rural councils that have no or limited access to Tier 1 or Tier 2 Caltex sites, receive a significantly smaller discount than metro-based councils. These rural councils are likely to be disadvantaged by continuous fuel price increases.

FBT Treatment Disadvantages EVs Particularly in Low-Business-Use Applications

Vehicles that are driven by the Council's employees to and from work or are driven for personal trips inside or outside of work hours are typically subject to FBT.

A Taxable Value is calculated then **Grossed Up** by a factor – currently 2.0802 – to represent the nominal pre-income tax value of the benefit to the employee, and the **FBT rate** – currently 47% – applied to the grossed-up value to determine the tax payable by the employer. The Australian Taxation Office (ATO) Guidelines stipulate that the Taxable Value on Motor Vehicles can be calculated in two different ways:

1. Statutory Method

The Statutory Method calculates FBT by reference to the capital price of the vehicle. The Statutory Method formula means that vehicles with a higher capital cost will have a proportionally higher FBT cost. Those vehicles with a lower capital cost will have a lower FBT cost. The formula for the Statutory Method as defined by the ATO is per below:

Taxable Value = (Cost of Car x Statutory Rate x Days Held) divided by 365 minus Employee Contributions

2. Operational Cost Method

The Operational Cost Method is the other main calculation methodology for car FBT (excluding Residual Benefit cents/km method which is not widely used). This method requires a log book to be kept for a 12 month period

and renewed on a five-yearly basis assuming 'there is no material change in the usage of the vehicle'. This method calculates FBT by reference to both the business use percentage and the operating costs of the vehicle. The calculation method is below:

Taxable Value = (Total Vehicle Costs x Private Use Percentage) minus Employee Contribution

Total vehicle costs include:

- Fuel;
- Repairs;
- Registration;
- Insurances;
- Depreciation; and
- Imputed Interest (for 2019 the interest rate is 5.2%).

For personal use less than about 40%, the Operational Cost Method generally results in a lower FBT payable but may entail significantly more administrative expense. For EVs the Operational Cost Method is likely to results in substantially lower FBT payable as described below.

FBT Implications for Electric Vehicles

Currently EVs have a higher capital value than ICE vehicles of an equivalent specification or size. This currently disadvantages EVs in regard to FBT calculations as the capital cost feeds:

(a) Directly into the Statutory Formula; and
(b) Indirectly into the Operating Costs Formula via the Depreciation and Imputed Interest Calculations.

Councils should consider using EVs within their fleets in a way that prevents incurring additional FBT costs. Mitigation strategies for councils could be:

- Replacing vehicles not subject to private use and therefore not subject to FBT with EVs as a priority; or
- If the vehicle is subject to private use, the driver will contribute the equivalent FBT amount owed on the vehicle, from their after tax income.

Implementing these strategies will mitigate the FBT risk on EVs and ensure that councils do not incur additional FBT costs by adopting EVs.

Once EVs reach an equivalent purchase price to ICE vehicles, EVs will be highly competitive in terms of both methods of calculating FBT costs. The lower operating costs of an EV will make them especially cost effective within the Operational Cost Method of calculating FBT.

In general, the FBT liability on EVs will be higher than for ICE vehicles, particularly using the statutory formula, while EV capital costs remain higher than those of ICE vehicles.

Changes to Vehicle FBT

As a result of the ATO's current definition of FBT and what constitutes a 'car', business and councils have moved to purchasing super cab and dual cab utes (often 4x4s) for those drivers with 'commuter use' entitlements.

These vehicles are technically not regarded as a 'car' for FBT purposes by the ATO and, as such, are exempt from FBT for commuter travel and 'minor and infrequent' personal use.

The ATO has issued a working paper which indicates it is considering changing this ruling to include these previously exempt vehicles, or a component of their use, into the FBT calculation. This taxation change may cause councils to rethink their fleet purchasing decisions and provide an opportunity to consider purchasing EVs in their fleet to replace dual cab utes, where a ute is not required for operational usage.

Changing the Mix of Use of Vehicles Can Favour EVs *and* Reduce Total Fleet Costs

Taking an approach of looking at the existing vehicles due for replacement and then considering either an EV or an ICE vehicle as options used in the same way may hide potential benefits. If an EV with higher capital costs is bought for fleet pool use, and the Council's policy were to require use of the BEV from the fleet pool first, then it may become a high-distance-per-year vehicle and the ICE vehicles (with higher operating costs) become lower-distance-per-year vehicles. While savings may be modest, this can help reduce any additional costs incurred by buying an EV instead on an ICE vehicle.

The Cost of Electricity Affects the Economy Achievable With EVs

Just as the price of petrol and diesel affects the running cost of an ICE vehicle fleet, reducing electricity costs can reduce the cost of running EVs in a fleet. Strategies that may apply include using off-peak power for overnight charging and the use of solar panels to obtain low cost renewable energy. Care should be taken to avoid charging multiple vehicles simultaneously at higher rates during peak periods where demand charges may apply, as this could substantially increase electricity costs.

Solar can only provide savings if EVs are parked where they can be plugged in and use the solar panels during the day. This can be effective if vehicles are regularly driven from one council site to another, with all sites equipped with solar panels. In practice, most charging will be done overnight and to be effective in providing benefits, the cars need to be in use much of the day not parked and charging.

The Council currently does not have solar installed. Council facilities in other local government areas with solar typically consume almost all their weekday production with little surplus for charging EVs, so the principal benefit of solar will come from charging fleet pool cars over the weekend. It is possible that the solar contribution can contribute about 20%, offering a modest opportunity for savings.

Council Fleet Findings

The Council's fleet consists of 44 Light Vehicles, the majority of which (52% or 23 vehicles) are utes. Other major vehicle types are medium SUVs – Subaru Forester, Nissan X-Trail (18.2% - eight vehicles). The balance of the fleet (30%) is very diverse with a wide range of vehicles including speciality vehicles (vans).

Overnight Location

Compared to other councils participating in the Program, a lower proportion of the Council's vehicles are garaged at home (41%), with the balance located at a Council depot overnight. The vehicles housed at the Council's premises overnight are largely utes and vans with only three passenger vehicles in this category. The suitability of the current (and soon to be available) range of BEVs and PHEVs on the Australian Market constrains replacement of utes at this time, as no EV ute models are currently available.

While the majority of the Council's fleet is housed at the Council's premises, the majority of vehicles that could be considered to be replaced with a BEV or a PHEV are taken home overnight. With this in mind, the Council may wish to consider developing an at home charging policy prior to the implementation of any EVs in the Council fleet.

Utilisation

Business-Use-Only Vehicles

Business-use-only vehicles are those parked overnight at the Council's premises. The average overall utilisation of business-use-only vehicles garaged at the Council's depot is 11,367 km/year; however there is significant variation within the utilisation of this fleet, with 13 vehicles that could be regarded as underutilised (less than 10,000 km/year) and only one vehicle with high usage, which exceeds 100 km/day.

Commuter-Use and Full-Private-Use Vehicles

The overall utilisation of commuter-use and private-use vehicles is greater than the business-use vehicles at 20,129 km/year. There is more variation from the average, with one vehicle at 5,600 km/year and four vehicles at over 25,000 km/year. These heavier usage patterns reflect the larger component of private use of these vehicles. This is a factor to be taken into account when making a decision on purchasing an EV due to the FBT implications for the Council's finances.

General Utilisation

The Council's fleet usage is slightly lower than many other large commercial fleets in Tasmania, with an average distance travelled of 14,965 km/year. Current vehicle usage is geographically confined, as evidenced by the refuelling locations, which is in line with other large fleets in Tasmania.

Travel is largely local with 86% of refuelling during the 2017/18 financial year occurring in the Devonport municipal area. There is also some vehicle operation outside the municipality, with 11% of refuels in neighbouring council areas. There are relatively few trips beyond Tasmania's North West, however this scope of travel should still be considered within the Council's transition to EVs.

While the location of refuelling indicates extent of travel to some degree, it may not be the furthest extent of the journey. It is possible to do quite a long trip in an ICE vehicle (400km+) without refuelling if starting with a full tank. As such, the following table likely provides a conservative indication of the number and extent of all long trips.

Table 8 Refuelling Locations for 2017/18

Location	Percentage of refuels
Caltex Spreyton	37.5%
Caltex Devonport S/Stn	28.4%
Devonport Caltex Woolworths S/Stn	17.2%
Caltex East Devonport S/Stn	9.4%
Caltex Sassafras S/Stn	1.3%
Ulverstone Woolworths S/Stn	1.3%
Burnie Woolworths S/Stn	0.8%
Caltex Latrobe - Wattle Hill S/Stn	0.7%
Caltex Somerset S/Stn	0.6%
Wynyard Woolworths S/Stn	0.4%
Caltex Campbell Town S/Stn	0.4%
Caltex Kempton	0.3%
Caltex Kempton No 2	0.3%
Caltex Westbury S/Stn	0.2%
Sandy Bay Caltex Woolworths	0.2%
Caltex Hobart Brooker Ave S/Stn	0.1%
Caltex New Town S/Stn	0.1%
Caltex Moonah S/Stn	0.1%
Caltex Launceston Charles St S/Stn	0.1%
Caltex Penguin S/Stn	0.1%
Caltex Sheffield S/Stn	0.1%
Caltex Invermay S/Stn	0.1%
Caltex Westbeach Burnie S/Stn	0.1%
Caltex Hobart Macquarie St Star Shop	0.0%
Caltex Longford S/Stn	0.0%
Mowbray Woolworths S/Stn	0.0%
Kings Meadows Woolworths S/Stn	0.0%
Caltex Lindisfarne S/Stn	0.0%
Caltex Glenorchy Star Mart	0.0%
Caltex Richmond S/Stn	0.0%
Howrah Woolworths (7409) S/Stn	0.0%
Campania S/Stn	0.0%

Fuel Efficiency

As most of the fleet consists of utes, the fuel use of the Council's fleet is relatively high at 10.85 L/100km. The fuel economy data, when taken in context with the utilisation data, would indicate that most vehicles are used for short trips or stop/start type of driving with a relatively low percentage of highway travel on a day to day basis. These figures could also indicate:

- A reasonable percentage of idle time (vehicle stopped, engine running);
- Vehicles towing (these can be highlighted by significantly higher than average fuel use, for example C12ST at 14.2 L/100km); or
- That a vehicle's fuel card is being used to fill an ancillary item of equipment.

These usage patterns need to be taken into account when EV adoption is being considered.

Past Consideration of EVs

The Council has not previously trialled EVs but has had some hybrids in the fleet. The Council reported that it found the resale values of those vehicles to be poor, so were discouraged from continuing to use hybrids in the fleet.

Current Infrastructure

To date, the Council does not have any EV charging infrastructure installed. While vehicles are parked at a number of sites, there are two main likely sites for EV charging infrastructure:

- Council car park – 44 Best Street; and
- Council Depot – Lawrence Drive/Cemetery Road

26 vehicles are parked at the Council's premises overnight. Up to seven vans, two medium sedans and one medium SUV could be candidates for replacement with EVs in the next two years as there are comparable EV models available.

As these vehicles are replaced with EVs over time, the Council will need to provide charging at the base. While every vehicle may not require charging daily, subject to use, for the modest cost per bay, it is likely to greatly simplify operations if each EV parked overnight has dedicated access to a charger.

Electricity Costs

Electricity costs vary according to the supply tariff chosen, use of solar and any future changes to tariffs and charges, as do fuel prices.

At Council Premises

For charging at the Council's premises, the following tariffs apply at present:

- **Council car park, 44 Best Street**: This is on Tariff 22, with a connection fee and first 500 kWh per quarter met by existing loads. Recent consumption has been 37 kWh/day, down from 260-300 kWh/day after turning down or off a large part of the lighting. This makes a substantial amount of capacity available for charging EVs from the existing power supply at this site without any need for a power

supply upgrade. An energy charge of $0.25051/kWh applies (current rate) for any additional energy used at these sites. The Council may benefit substantially if the supply to the site is changed to a time of use tariff.

- **Depot, Cemetery Road**: This relatively large energy demand site has an average daily consumption of about 200-350 kWh/day, varying seasonally. Peak demand is about 45 kW and occurs in the winter. Large sites have their accounts unbundled into various components, typically resulting in some small savings compare to the published commercial tariffs. This site is on an unbundled time of use tariff (Tariff 94). Under the current pricing, the marginal cost for charging a EVs on the site would be:
  - **Off-peak** $0.108/kWh 22:00-07:00 daily
  - **Shoulder** $0.150/kWh 07:00-22:00 weekends
  - **Peak** $0.238/kWh 07:00-22:00 weekdays

There are currently no solar panels installed at either of these sites.

Charging at Employee Homes

For charging at employees' homes, the applicable tariff would be determined by the dwelling's chosen tariff. It is estimated that approximately 99% homes in Tasmania are still on the standard light & power, Tariff 31, usually in combination with Tariff 41 for hot water and potentially an off-peak tariff for hot water and space heating. Tariff 31 is currently set at $0.26431 per kWh for all energy used. Off-peak is not being made available for charging EVs, nor is Tariff 41.

The time of use Tariff 93 is increasingly being promoted and taken up, particularly by homes with significant amounts of solar and with batteries, but is likely to benefit most households. As with Tariff 94, there are peak and off-peak prices but for domestic users there is an off-peak window in the middle of the day from 10:00 to 16:00. Under the domestic time of use Tariff the cost would currently be:

- **Off-peak** $0.14876/kWh 21:00-07:00 daily; 10:00-16:00 weekdays, and all weekend; and
- **Peak** $0.31948/kWh 07:00-10:00 and 16:00-21:00 weekdays.

For residences with solar panels, the current feed in tariff is $0.08541/kWh. For charging overnight there would be little access to any excess solar at this cost, except on weekends to charge for the following week.

Current Strategy Policies and Procedures

The Council's policies that are relevant in considering introducing EVs include the policy and strategy documents listed below. These policy documents cover a broad range of aspects relevant to purchasing and asset management, which in local government has a regulatory compliance aspect. The policies and strategies also cover environmental management issues, for example climate change, and demonstrating leadership to the community to improve environmental sustainability.

Table 9 Policy and Strategy at Council

Policy	Example
Asset Management Policy	Purpose Ensuring that Council's services and infrastructure are provided in a sustainable manner, with the appropriate levels of service for residents, visitors and the environment.

Policy	Example
	Policy Details 2.1 Managing assets based on a life-cycle perspective whereby all capital investment expenditure is only approved in conjunction with a clear understanding of what the impact will be on identified recurrent operational expenditure budgets.
Strategic Plan 2009-2030	Goal 1 Living Lightly on our Environment Through the integration of sustainable practices, we will ensure Devonport's viability socially, economically and environmentally, preserving our natural geography and landscapes for future generations. Planned and sustainable management of energy, air, water and waste will assist in the delivery of a healthy environment. Outcomes and Strategies Lead and actively promote the adoption of practices that support the sustainable use of energy and other natural resources by Council, businesses and the community Develop and implement local and regional policies and initiatives to mitigate climate change impacts in partnership with all spheres of Government
Environment Strategy 2019-2024	Focus Area - Energy Issues of Concern Reliance on cars, fossil fuels Opportunities Electric vehicles, bikes etc. Issues of Concern Low level of renewable energy uptake by Council and residents Opportunities Provide incentives, education Community / privately funded generation Schemes Issues of Concern Human induced climate change - greenhouse emissions Opportunities Energy efficient buildings/appliances, LED public / street lighting Focus Area - General Issues of Concern Lack of resources to address environmental issues Opportunities Partnerships, grants, education (preventative approach)

Options and Recommendations

This section presents strategic advice to the Council, presenting options and recommendations to introduce BEVs in the fleet or begin working towards that goal. It also includes advice on selecting charging infrastructure and advice regarding potential changes to policy to support and manage EVs within the Council's fleet.

Fleet Vehicle Selection and Usage

The change from ICE vehicles to EVs is inevitable and the momentum in the market place is growing as more EV models model arrive in Australia. However, in the short term even where EVs are available and fit for purpose, their operating savings may not fully offset the additional capital costs compared to ICE vehicles, except for relatively high use vehicles.

Under this heading, all potentially suitable BEV, PHEV, and hybrid options[2] for existing fleet vehicles due for replacement within the next 18 months are assessed side-by-side with an appropriate ICE equivalent. Some of these options may be unattractive for a number of reasons, including cost. Under the Recommendations sub-heading the specific set of EV replacement vehicles recommended is detailed and discussed.

It is important that the Council ensure the detailed specifications of a particular model are fit for the specific purpose (e.g. passenger and luggage capacity, towing ability, etc.) before making any purchasing decision.

Options

This section considers a range of possible vehicle replacements to assess their overall suitability, cost and reduction in GHG emissions.

Options for Business-Use-Only Vehicles

Business use only vehicles are those parked overnight at the Council premises. The prospects for replacement with EVs can be summarised for these vehicle as:

- 2019: three vans (E41EC, A10UP, B51JC with 14,000-18,000 km/year use); and
- 2020: three vans (B18QD, A47NQ, D16SH with 5,000-10,000 km/year), one small van (D32UC – 6,500 km/year), and two medium sedans (D52NH, B24ZE with 8,500-15,500 km/year).

The vans are typically fitted out with specialist racking for trade tools or other fittings (e.g. for animal control). As such there is often a premium that is paid for replacing like for like, to transfer these fittings to a new vehicle. This can provide a constraint on changeovers to new models. Vans also come with many variants (wheelbase, height etc.), and the proposed model may not have a matching variant. So although a number of vans may be traded, only one or even none may prove fit for purpose. A wider variety of BEV van models are likely to become available with more options for changeover with each coming year.

The following table compares the results for a BEV van to a Toyota Hiace operating at about 17,000 km/year.

[2] Luxury models were excluded as they were seen as generally not appropriate for council fleets.

Table 10 Van Replacement Options

	Toyota Hiace	SEA Electric E4
Capital cost	$30,750	$84,000
Purchase Stamp Duty (State Tax)	$1,100	$2,950

	17,000 km/year	
Annual operating cost	$4,950	$3,050
Annualised cost over 5 years	$10,150	$16,700
Whole-of-life cost ($/km)	$0.60	$0.98
Whole-of-life % difference		65%
Annual GHG emissions (kgCO2-e/year)	4,300	950
Annual GHG emissions % difference		-77%

At this point the break-even point for the BEV van shown would be in excess of 50,000 km/year. It is expected that this cost will reduce, possibly even during the current replacement cycle, but not sufficiently to become cost comparable for the expected distances travelled.

The small van due for replacement in 2020 might be replaced by the smaller and more economical Renault Kangoo BEV Van. However, the 6,500 km/year travelled by that vehicle is low, so it is still unlikely to be competitive on a whole-of-life basis.

The two medium sedans due for replacement in 2020 could be replaced with a Nissan Leaf or Hyundai Ioniq BEV. The Leaf is slightly larger and with a longer range than the Ioniq, but both are slightly smaller than the Camry models currently used, so the vehicles will need to be assessed as fit for purpose by the users. The Hyundai Ioniq offers a particularly cost effective option compared to the Camry ICE with a breakeven annual use just over 20,000 km/year. By 2020, other BEV options may also be available.

The Camry hybrid, with an identical body to the ICE sedan, provides particularly economical outcomes, representing a substantial improvement over earlier generations of hybrid vehicles in terms of economic performance. However, the GHG emissions reductions for they hybrid are significantly less than that achieved by the BEVs.

An Ioniq PHEV option is also available but does not offer attractive results. Its one advantage would be greater flexibility for longer trips in the short term, until the statewide EV charging network is established. As access to EV charging increases over time, the longer range may be less of an advantage by the time the vehicles are due for replacement.

Table 11 Medium Sedan Replacement Option

	Toyota Camry ICE	Toyota Camry hybrid	Nissan Leaf BEV	Hyundai Ioniq BEV
Capital cost	$23,350	$25,200	$50,000	$39,350
Purchase Stamp Duty (State Tax)	$800	$900	$1,750	$1,400
High km/year D52NH:	**15,500 km/year**			
Annual operating cost	$4,300	$3,700	$2,750	$2,450
Annualised cost over 5 years	$8,050	$7,200	$10,900	$8,850
Whole-of-life cost ($/km)	$0.52	$0.46	$0.70	$0.57
Whole-of-life % difference		-11%	35%	10%
Annual GHG emissions (kgCO2-e/year)	3,000	2,050	450	350
Annual GHG emissions % difference		-31%	-84%	-88%
Low km/year B24ZE:	**8,500 km/year**			
Annual operating cost	$3,450	$3,100	$2,650	$2,350
Annualised cost over 5 years	$7,200	$6,650	$10,750	$8,750
Whole-of-life cost ($/km)	$0.82	$0.76	$1.23	$1.00
Whole-of-life % difference		-8%	49%	21%
Annual GHG emissions (kgCO2-e/year)	1,700	1,150	250	200
Annual GHG emissions % difference		-31%	-84%	-88%

Options for Commuter-Use and Full-Private-Use Vehicles

The commuter and full-private-use vehicle fleet includes four medium SUVs, and three medium passenger vehicles to be replaced in 2019 or 2020 for which suitable EVs are now, or will shortly be, available.

- 2019: medium SUVs (C22ZS 17,500 km/year, C12ST 10,000 km/year); medium sedan (C36RL 21,000 km/year)
- 2020: medium SUVs (E99LK 27,000 km/year, D81YW 8,500 km/year); medium sedans (D53NH 16,000 km/year, D54NH 18,500 km/year)

For each vehicle type a comparison is shown using the highest and lowest annual distance travelled to show the range of results found. The results are different from the business-use-only comparison due to the effects of FBT.

The medium SUV comparison is shown using the Toyota RAV4 as the ICE comparator. The 27,000 km/year distance travelled makes the EVs more cost competitive with a premium of 12% ($1,600 per year) for the PHEV Outlander and 24% ($3,100) for the BEV Kona. The Kona is slightly smaller than the other vehicles and is not rated for towing and so needs to be assessed as fit for purpose before being adopted by the Council.

For the higher distance vehicle, the hybrid Toyota compares very favourably on cost, saving 8% ($1,000 per year) and is not too dissimilar from the PHEV in regard to the GHG emissions reductions achieved. For the lower

distance vehicle, the savings are less, while the more costly PHEV option does show a gain in GHG emissions reductions as it is expected to travel a higher proportion of kilometres in electric mode.

Table 12 Medium SUV Replacement Options

	Toyota RAV4 ICE	Toyota RAV4 hybrid	Mitsubishi Outlander PHEV	Hyundai Kona
Capital cost	$28,400	$29,900	$39,200	$60,000
Purchase Stamp Duty (State Tax)	$1,000	$1,050	$1,350	$2,100
High km/year: E99LK	**27,000 km/year**			
Annual operating cost	$8,450	$7,150	$7,550	$6,200
Annualised cost over 5 years	$12,850	$11,850	$14,450	$15,950
Whole-of-life cost ($/km)	$0.48	$0.44	$0.53	$0.59
Whole-of-life % difference		-8%	12%	24%
Annual GHG emissions (kgCO2-e/year)	5,550	3,800	3,500	900
Annual GHG emissions % difference		-31%	-38%	-84%
Low km/year: D81YW	**8,500 km/year**			
Annual operating cost	$5,500	$5,150	$5,250	$5,700
Annualised cost over 5 years	$9,900	$9,800	$12,150	$15,450
Whole-of-life cost ($/km)	$1.15	$1.14	$1.42	$1.80
Whole-of-life % difference		-1%	23%	56%
Annual GHG emissions (kgCO2-e/year)	1,750	1,200	550	300
Annual GHG emissions % difference		-31%	-69%	-84%

The table below compares options for replacement of the medium size sedan and costs. The higher distance vehicle shows that the BEV has a higher cost of $400 per year (4%) making it nearly cost competitive with the ICE. This cost premium increases to 11% or $1,100 per year where the vehicle travels fewer kilometres. The table shows that the Camry hybrid is more cost competitive, with savings of 9% compared to the ICE Camry.

Table 13 Medium Size Sedan Replacement Option

	Toyota Camry ICE	Toyota Camry hybrid	Nissan Leaf BEV	Hyundai Ioniq BEV
Capital cost	$23,350	$25,200	$50,000	$39,350
Purchase Stamp Duty (State Tax)	$800	$900	$1,750	$1,400
Higher km/year C36RL:	**21,500 km/year**			
Annual operating cost	$6,950	$6,050	$5,600	$4,700

	Toyota Camry ICE	Toyota Camry hybrid	Nissan Leaf BEV	Hyundai Ioniq BEV
Annualised cost over 5 years	$10,700	$9,550	$13,700	$11,100
Whole-of-life cost ($/km)	$0.50	$0.45	$0.64	$0.52
Whole-of-life % difference		-11%	28%	4%
Annual GHG emissions (kgCO2-e/year)	4,100	2,800	650	500
Annual GHG emissions % difference		-31%	-84%	-88%

Lower km/year D53NH:	**16,000 km/year**			
Annual operating cost	$6,150	$5,500	$5,450	$4,600
Annualised cost over 5 years	$9,900	$9,000	$13,550	$11,000
Whole-of-life cost ($/km)	$0.62	$0.56	$0.85	$0.69
Whole-of-life % difference		-9%	37%	11%
Annual GHG emissions (kgCO2-e/year)	3,050	2,100	500	350
Annual GHG emissions % difference		-31%	-84%	-88%

Recommendations

Vehicle manufacturers are progressing the adoption of EV technology in larger overseas markets. The widely accepted timeline for widespread EV adoption in Australia (based on price parity) is 2023-2025 but with whole-of-life costs becoming equivalent for many applications much sooner.

The most recent hybrid vehicles are particularly cost effective because they have only a small price premium on ICE vehicles of approx. $1,200-$2,500 on State Government pricing. With a slightly higher expected sale price, depreciation costs are relatively similar. In addition:

- Servicing costs on hybrids are equivalent to ICE vehicles; and
- Tyres, registration and insurance for hybrid vehicles are similar to ICE vehicles.

The Council has an opportunity to act now to introduce EVs to its fleet and gain experience with an EV, while making small overall costs-savings from hybrids while moving its fleet mix towards lower emissions vehicles.

Significant operational cost savings can be made by the following strategies:

Recommendation 1: **Concentrate use on fleet pool vehicles with the lowest running cost for which there is a fit-for-purpose battery electric vehicle.**

At 30,000 km/year, the Hyundai Ioniq BEV is cost comparable to the Corolla ICE vehicle on a whole-of-life basis, even with the FBT and Stamp Duty disadvantages. At usage of approximately 100 km/day, this is an annual level of use that potentially makes an EV cost comparable with an ICE vehicle.

Recommendation 2: **Employ existing hybrid technology available from a range of manufacturers, which are almost always cost comparable or cheaper than their internal combustion engine vehicle equivalents.**

Toyota in particular, is accelerating the rollout of petrol/electric hybrids into more popular vehicle segments which are almost always cost comparable or cheaper than their ICE vehicle equivalents.

The savings the Council could make by transitioning to hybrids can be used to fund the additional capital cost of acquiring one (or more) EVs for use in the fleet. Table 14 and Table 15 summarise the projected financial impacts of transitioning to three BEVs and six hybrids, yielding a projected net saving of $1,350 per year.

PHEVs have not been proposed at this time for the Council as they are more expensive than hybrid and ICE equivalents. For the PHEV to achieve a performance advantage for highway driving it requires significant driver training and a degree of commitment to ensure the PHEV is used correctly. Fewer changes to driver behaviour are required with hybrids and BEVs, than are required to achieve fuel reductions with a PHEV, and therefore hybrids and BEVs are better suited to the Council's fleet needs.

Recommendation 3: **Subject to being confirmed as fit for purpose, replace the three highest use medium sedans with battery electric vehicles, and replace selected other vehicles with hybrids (see Table 14). Concentrate on using the low running cost battery electric vehicles first, raising their distance travelled while reducing that of the other vehicles.**

Table 14 Summary of Whole-of-Life Savings

Current vehicle registration	Recommended model	Annualised whole-of-life cost ($/year)			GHG Savings over 5 years (kg CO2-e)
		ICE equiv.	Recommended	Difference	
C36RL	Hyundai Ioniq BEV	$10,700	$11,100	$400	18,000
D54NH	Hyundai Ioniq BEV	$10,300	$11,050	$750	15,665
D52NH	Hyundai Ioniq BEV	$8,050	$8,850	$800	13,116
B24ZE	Toyota Camry Ascent Hybrid	$7,200	$6,650	-$600	2,630
D53NH	Toyota Camry Ascent Hybrid	$9,900	$9,000	-$900	4,801
C22ZS	Toyota RAV 4 GX AWD Hybrid	$11,350	$10,800	-$550	5,735
C12ST	Toyota RAV 4 GX AWD Hybrid	$10,600	$10,450	-$150	3,179
D81YW	Toyota RAV 4 GX AWD Hybrid	$9,900	$9,800	-$100	2,780
E99LK	Toyota RAV 4 GX AWD Hybrid	$12,850	$11,850	-$1,000	8,754
	TOTAL	**$90,850**	**$89,550**	**-$1,350**	**74,660**

If the Ioniq was not deemed a suitable replacement vehicle, consider replacing C36RL with a Nissan Leaf, which would result in a projected total net annualised cost of $250 extra per year across the nine vehicles.

The summary of annual savings is based on spreading the whole-of-life cost evenly over the proposed five-year holding period. It involves a higher capital cost but lower running costs for the proposed seven hybrids and two BEVs than for conventional ICE vehicles. The difference for the nine vehicles is shown below.

Table 15 Changed Capital and Operating Mix

Item	9 x ICE vehicles	2 BEVs + 7 Hybrids	Difference

Item	9 x ICE vehicles	2 BEVs + 7 Hybrids	Difference
Capital costs	$238,350	$298,250	$59,900
Annual operating costs	$54,550	$44,600	-$9,950

EVs have a higher purchase price and, even with a higher depreciation, a likely higher residual value. However, the second-hand market for current generation EVs (vehicles with a 200 km plus range and a purchase price sub $60,000) is non-existent in Australia and has not yet been tested in Europe or the US. It is unknown what the depreciation rate on these vehicles will be or what the effect and pace of technological change will have on the future market for EVs purchased today.

The calculation in the table shows the mid-point of two estimates for the EV and hybrid residual values. The worst case (low achieved residual value) would reduce the whole-of-life savings for the nine vehicles by about $2,000 per year (making the cost $700 per year above the cost of the nine ICE vehicles). The best case (high achieved residual value) would more than double the savings to about $3,500 per year.

Should the Council be concerned about the financial risk with Council owned assets, financing alternatives could be explored that would allow for full mitigation of residual risk on these assets until the second-hand EV market is established.

The cost analysis above does not include the costs of installing charging infrastructure, which is discussed in a later section of this Plan.

Appendix 1 contains tables showing the Council's current fleet, and vehicles due for replacement in the next 2 years, for which suitable EVs or PHEVs are or are likely to become available within that period. Due to the timing of this Program, the analysis assumes vehicles due for replacement in 2018 have already been replaced. The Program Delivery Team has confirmed the status of vehicles due for replacement from 2019 and updated the analysis to reflect this.

FBT Arrangements

The addition of FBT will add to the annualised cost of the vehicle. The amount added will depend on the calculation method, the proportion of personal use, and the contribution made by employees, if any. The table below illustrates the effect of FBT on costs for medium SUVs. The statutory rate calculation method greatly disadvantages vehicles with a high up front cost and low running cost, while the operating cost method actually slightly improves the relative cost for the hybrid.

Table 16 FBT for Medium SUVs

	Toyota RAV4	Toyota RAV4 hybrid	Mitsubishi Outlander PHEV	Hyundai Kona BEV
FBT (Stat) Method	$5,482	$4,864	$7,563	$11,576
FBT (Op Method) Assume: 25% Personal, No employee contribution, 15,000 km/year	$2,496	$2,191	$2,947	$3,829

Consideration should be given to the use of EVs within the Council's fleet to ensure that additional FBT costs are not incurred, or are minimised. The following FBT mitigation strategies are recommended:

Recommendation 4: **Use the Operating Cost Method to calculate fringe benefits tax owing (subject to assessing administrative cost).**

Recommendation 5: **Prioritise vehicles with no private use (being fringe benefits tax exempt) until electric vehicle prices become similar to internal combustion engine vehicle prices.**

Recommendation 6: **If the vehicle is subject to private use, require the driver to contribute an amount equivalent to the fringe benefits tax on the vehicle from their after tax income if they exceed an agreed share of total distance travelled for private use.**

These strategies will minimise the additional FBT payable on EVs. Once EVs have an equivalent purchase price to ICE vehicles, EVs will be highly competitive in terms of FBT costs, with the lower operating costs of an EV making them superior when using the Operating Cost Method. Over time, as EV capital costs reduce, treatment can revert to the simpler statutory method to reduce administrative cost, although a lower FBT may be payable by maintaining an operating cost based calculation in the long term.

Options for EV Charging Infrastructure

Cost of Charging

The expected cost to charge EVs with different tariffs is summarised in the table below. Overall the depot site is the cheapest site at which to charge EVs, even if 30% of charging occurs during the day, which is the maximum level of daytime charging likely to occur. This depot site may benefit from installing solar panels, as 20%-25% of the charging needs of the Council's EVs could be met by surplus energy generation on weekends and holidays, which would result in additional savings.

Table 17 Charging Costs Per Vehicle Per Year

Location	Cost per year ($)		
	15,000 km	20,000 km	25,000 km
City car park, Tariff 22	$600	$800	$1,000
Depot: 70% off-peak; 30% peak	$340	$455	$570
Home, Tariff 31	$635	$845	$1,060
Home, Tariff 93, 100% off-peak	$360	$475	$600

Charging With Solar Panels

As noted earlier, Devonport currently has no solar on buildings where EVs will be garaged overnight. It would not be appropriate or cost effective to install solar for the sole purpose of charging one or more EVs. However, solar panels provide an excellent return on investment, particularly for councils with their high day time use of electricity. The benefits of solar panels increase further when used in conjunction with BEVs.

Solar arrays are typically sized for limited export in the daytime on days that the Council is operating, effectively curtailing any daytime charging of EVs from solar on working days. Solar energy may provide some surplus on the weekend.

While for The Council this situation is likely a few years into the future, the following information provides some indication of the potential contribution of solar to EV charging.

If vehicles are set up to charge when the sun shines on weekends and charge their batteries from 20% up to 80% state of charge with typically 45 kWh (usable) batteries[3], each car could accept 25-30 kWh (equivalent to about 150 km range). The solar panels might partly charge one or two EVs in winter, and many more in summer, ready for the start of the work week on Monday morning. A 25-30 kWh charge per week represents about 30% of total charging needs for high use vehicles and 60% for the average weekly drive per vehicle across the fleet.

Recommendation 7: **By installing solar panels at Council sites where future electric vehicles are garaged, there is potential for the Council to provide low cost solar electricity for charging as the electric vehicle fleet expands.**

Charger Capacity

Charging on an off-peak tariff, generally overnight, is the cheapest option. Overnight charging also ensures EVs are charged ready for daytime use. Overnight off-peak charging provides a 9-10 hour window of low cost charging.

For the first vehicle proposed for the Council's fleet, the Ioniq, a 3.5 kW charger can deliver about 150 km of range for a 9-10 hour overnight charge on off-peak power. However, a 7 kW (single phase) charger would be more than adequate for overnight charging for any future vehicles and will provide a more secure, longer term investment.

Chargers with 7 kW capacity typically cost between $750 and $1,500 plus installation, and are only marginally (approximately $100) more expensive than 3.5 kW chargers. The cost of installation is generally similar for chargers in this power range, provided there is no need to upgrade the power supply, which depending on the site could be a higher cost than the charging unit itself. Installed cost would generally range from $1,000 to $2,500 albeit some difficult sites may cost more. Where multiple chargers are installed, the additional cost is usually little more than the cost of the charger itself, unless the total demand requires demand management equipment and software to be installed.

If located in a public place, signwriting of the pavement would be desirable and add about $500 to the total cost. For vehicles parked for charging in the public car park, a charger with a Type 2 socket and no cable is preferable. This format is less vulnerable to vandalism of the cable and connector as they are only present when the car is charging. Provision for locking cables to vehicles and/or chargers to avoid theft would be required.

[3] This is indicative of future BEV battery sizes. The Ioniq proposed for the initial transition has a smaller battery, 28 kWh and so would store a little more than one day's use over a weekend or 25% of weekly use. On the other hand, the same number of solar panels would charge more Ioniqs than other, larger battery vehicles.

For chargers in public places, a notice that the site is under observation by CCTV can provide some further deterrence to vandalism.

Chargers would generally be written down over five years, but expected to have a working life of seven to ten years in a fleet or public situation, with a longer working life for household use.

Recommendation 8: **The installation of overnight chargers at 7 kW (single phase) or 10 kW (three phase), is more than adequate for overnight charging. This level of power use would not be likely to trigger changes to billing such as introduction of demand charges.**

As the proportion of EVs in the Council's fleet grows, it may be of value to provide a three-phase 22 kW charger for faster charging top-ups during the day if operational experience shows this is required and EV models selected support this faster AC charging. Only some currently available models are equipped for 3-phase charging. Other models can still be charged by a three-phase charger; however the charging is limited to one phase and 7 kW. For vehicles charged at home, providing such a charger at the normal daytime parking site would permit day time top-ups should the vehicle be subject to heavy use during the day.

The cost of three phase chargers is only about $200 more than for single phase. The capacity to install will depend on the power supply to the site and whether it already has three phase power connected. The two council sites identified would already have three phase capacity. Cost to install will depend on the location on site chosen relative to the location of the power supply, and may be very low or very much more than the cost of the charging equipment. Provision of cable and conduit for multiple chargers when installing the first charger can greatly reduce the cost of installing subsequent chargers.

Recommendation 9: **Provision of a 22 kW three-phase charger where electric vehicles will be parked during the day will provide operational flexibility.**

Installing a 50 kW DC fast charger for day time use could increase peak demand at a typical council site by 20%-25% and may invoke a change to a demand-based charge for the site, so is not recommended. They are also costly, typically $70,000 to $100,000 installed.

A DC charger with a lower power rating (12 to 25 kW) would allow some vehicles to charge faster than on AC, while keeping peak demand down. DC chargers with 25 kW capacity cost about $15,000, with prices expected to decline. Installation cost should be similar to a three phase 22kW AC unit.

A DC charger would be an option for future investigation as the fleet grows and Council gains operational experience with EVs. Alternatively, Council BEVs could use a public fast charger for day time tops ups when they become more widespread, which is expected over the next 2-5 years.

Charging at Council Sites

One of the vehicles stationed at the Council's facilities overnight has been identified for replacement with an EV in the short term. The other vehicles proposed for replacement with an EV are driven home at night and parked at the Council Chambers during the day.

For EVs garaged at home but parked at Council premises during the day, as noted above, charging facilities for top ups would provide some reassurance on busy days, particularly for the relatively short range (200 km) Ioniq proposed.

The Council car park and depot are potential sites for installing EV chargers in the medium term based on numbers of vehicles regularly parked during the daytime:

- Council car park – 44 Best Street; and
- Council Depot – Lawrence Drive/Cemetery Road.

As the Council replaces ICE vehicles with EVs over time, AC charging at the Council's facilities will be required.

Recommendation 10: **If an initial charger is to be installed on any of the Council's sites, it would be appropriate to install additional cabling or at least conduit to allow additional chargers to be installed at a later time, to meet the Council's increasing needs over time for electric vehicle charging overnight.**

Having additional chargers is particularly desirable to provide the Council with flexibility to choose shorter range EVs and PHEVs, which benefit significantly from tops ups during the day.

Recommendation 11: **While every vehicle may not require charging each day, subject to use, for the modest cost per bay, it is likely to greatly simplify operations if each electric vehicle parked overnight has dedicated access to charging infrastructure.**

Recommendation 12: **If multiple chargers are installed and capable of 7 kW or higher charge rates, provision should be made to enable managed charging, where the total power supplied is limited to avoid excessive peak demands that may result in higher payments for electricity supply.**

Charging at Employees' Homes

For charging at employees' homes, the cost on Tariff 31 is similar to charging at the Council's sites on Tariff 22. Charging at home on the time of use Tariff 93 would potentially save the Council $300-$400 per vehicle per year compared to charging at the depot during the day. While it may be in the Council's interests to encourage employees to switch to Tariff 93 and charge at home, the employees would need to be convinced of the benefits.

Modelling based on actual 10 minute interval user data from 36 households by SLT suggests that most households will save money by switching to Tariff 93, unless they have quite unusual usage patterns. This is without any change in behaviour. Savings are even greater with some interventions such as using timers to set the time for heating hot water cylinders to fall only within off-peak periods or changing time of use of other heavy power using appliances (dishwashers, heating, air conditioning, pool pumps) to be more within off-peak periods. Homes with solar panels are likely to make significant gains through increased self-consumption of their solar energy produced.

Recommendation 13: **The Council may consider paying for the cost of timers and other minor modifications at employees' homes to enhance the savings from Tariff 93 as an incentive to employees to switch. Alternatively, providing an electric vehicle**

charger that remains in the dwelling after being written off by Council might be an appropriate incentive.

New Policies and Procedures

The introduction of new technology and tools into the workplace generally requires policy and procedures to manage those resources effectively. EVs are a new technology for fleets and the progressive introduction of a small number of EVs in a strategic manner will enable the Council time to develop systems and test operational requirements. This will help the Council to prepare for the near future when EVs achieve a whole-of-life financial cost that is as good, or better than, ICE vehicles and hybrids and so begin to dominate sections of the market.

Recommendation 14: **The Council should consider the whole of life cost associated with electric vehicle purchase, to include an assessment of the reduced operating costs of electric vehicles.**

Recommendation 15: **The Council should consider updating its purchasing policy, to give weight to non-financial aspects in the assessment of the costs and benefits of a strategic purchase of electric vehicles. Non-financial aspects relevant to Council might include environmental benefits, economic and community leadership factors.**

Recommendation 16: **The Council should consider if it is necessary to introduce policy to minimise the impact of fringe benefits tax due to the higher capital cost of electric vehicles, as noted above in the section 'FBT Arrangements'.**

For EVs garaged and charged at home, the Council will need to adopt a suitable policy to reimburse employee's for electricity provided to refuel the Council's fleet vehicles. The policy and agreements should be determined in part through consultation with the staff. The cost of chargers with high accuracy built-in metering that can be read remotely is now reasonable and provides access to the information on power used to permit reimbursement without access to the employee's electricity account. This should address any privacy concerns.

Recommendation 17: **The most accurate and perhaps fair option for reimbursing employees for home charging of Council electric vehicles is to use a metered charging system at the employee's home, so accurate amounts can be calculated and reimbursed to the employee.**

Recommendation 18: **An alternative approach may be to pay a negotiated amount, based on the estimated distance travelled, energy consumption per kilometre and electricity price. While administratively simple, some care is required to achieve a fair estimate.**

Driver Training

While EVs are easy enough to drive, there are some differences that can cause issues to arise until users become more familiar with them. The time required for training is only about 30 minutes for a BEV. Training takes a little longer, about 60 minutes, for a PHEV as they operate in a wider range of modes that have significant

implications for the performance of the vehicle; however no PHEVs have been recommended for the Council in this plan.

Recommendation 19: **A minimum level of driver training and specific vehicle orientation should be a condition for using a fleet electric vehicle or receiving an electric vehicle for personal use.**

Recommendation 20: **The Council should maintain a register of staff that have been trained, so that only those trained are able to use a fleet pool electric vehicle. As electric vehicles become more common in the fleet, the longer term objective would be to train all staff who may need to drive a fleet pool vehicle.**

Recommendation 21: **Councils may wish to acknowledge training provided by other Councils and fleet operators with electric vehicles having similar policies and training standards, avoiding the need to 'retrain' in the event of staff changing employers. An agreed common training program or use of third party training/certification could enable this with confidence.**

A brief outline of the proposed training content is provided in Appendix 4 Training.

Appendix 1: Vehicle-by-Vehicle Analysis

The table below describes Council's current feet. Registration numbers from the fleet are repeated in subsequent tables, to identify which current ICE vehicles EV replacement options are available now or will be within two years.

Table 18 Current Fleet

Registration	Make	Model	Vehicle type	Fuel type	Date of purchase	Est. replacement date	Distance (km/year)	Fuel consumption km (L/year)	Fuel economy (L/100km)	Local	Intra-regional	Intra-state	Interstate	Fuel cost ($/year)	GHG emissions (kgCO2-e/year)
A02NN	Ford	Ranger	Utility	Diesel	2008	2020	4,604	501	10.9	100%	0%	0%	0%	$751	1,363
A10UP	Ford	Transit	Van	Diesel	2010	2019	16,703	2,416	14.5	100%	0%	0%	0%	$3,625	6,577
A42DS	Mitsubishi	Triton	Utility	Diesel	2008	2020	7,621	834	10.9	87%	13%	0%	0%	$1,251	2,269
A74NQ	Toyota	Hiace	Van	Unleaded	2009	2020	9,011	1,297	14.4	100%	0%	0%	0%	$1,946	3,000
A92SR	Ford	Ranger	Utility	Diesel	2009	2020	9,829	1,371	13.9	100%	0%	0%	0%	$2,056	3,730
B18QD	Ford	Transit	Van	Diesel	2010	2020	4,843	346	7.1	50%	17%	33%	0%	$519	941
B24ZE	Toyota	Camry	Medium	Unleaded	2011	2020	8,749	973	11.1	90%	0%	10%	0%	$1,459	2,250
B51JC	Toyota	Hiace	Van	Diesel	2010	2019	17,603	1,949	11.1	100%	0%	0%	0%	$2,923	5,304
C22ZS	Subaru	Forester	Medium SUV	Unleaded	2013	2019	17,712	1,884	10.6	92%	3%	5%	0%	$2,825	4,356
C08RK	Ford	Ranger	Utility	Diesel	2012	2020	5,612	633	11.3	100%	0%	0%	0%	$950	1,723
C12ST	Holden	Captiva	Medium SUV	Unleaded	2012	2019	9,819	1,396	14.2	100%	0%	0%	0%	$2,095	3,229
C17RK	Ford	Ranger	Utility	Diesel	2012	2020	7,160	776	10.8	100%	0%	0%	0%	$1,164	2,113
C36RL	Toyota	Camry	Medium	Unleaded	2012	2019	21,283	1,899	8.9	86%	2%	12%	0%	$2,849	4,393
C37EG	Ford	Ranger	Utility	Diesel	2011	2020	2,323	294	12.7	100%	0%	0%	0%	$442	801
C51VD	Ford	Ranger	Utility	Diesel	2012	2020	14,691	1,723	11.7	100%	0%	0%	0%	$2,585	4,690
C52VD	Ford	Ranger	Utility	Diesel	2012	2020	14,774	2,056	13.9	100%	0%	0%	0%	$3,084	5,595
D34NK	Holden	Colorado	Utility	Diesel	2014	2020	15,581	1,772	11.4	100%	0%	0%	0%	$2,658	4,823

Registration	Make	Model	Vehicle type	Fuel type	Date of purchase	Est. replacement date	Distance (km/year)	Fuel consumption km (L/year)	Fuel economy (L/100km)	Local	Intra-regional	Intra-state	Interstate	Fuel cost ($/year)	GHG emissions (kgCO2-e/year)
D16SH	Toyota	Hiace	Van	Unleaded	2014	2020	10,351	1,531	14.8	100%	0%	0%	0%	$2,297	3,541
D32UC	Volkswagen	CaddyD	Van	Diesel	2014	2020	6,467	588	9.1	100%	0%	0%	0%	$882	1,601
D52NH	Toyota	Camry	Medium	Unleaded	2014	2020	15,509	1,358	8.8	87%	6%	6%	0%	$2,037	3,141
D53NH	Toyota	Camry	Medium	Unleaded	2014	2020	15,968	1,732	10.8	90%	3%	6%	0%	$2,598	4,005
D54NH	Toyota	Camry	Medium	Unleaded	2014	2020	18,523	1,610	8.7	13%	88%	0%	0%	$2,415	3,723
D55GZ	Holden	Colorado	Utility	Diesel	2013	2020	8,322	1,026	12.3	94%	0%	6%	0%	$1,539	2,792
D81YW	Nissan	Xtrail	Medium SUV	Unleaded	2014	2020	8,587	1,016	11.8	100%	0%	0%	0%	$1,523	2,349
E41EC	Toyota	Hiace	Van	Diesel	2015	2019	14,160	1,468	10.4	100%	0%	0%	0%	$2,202	3,995
E54ZL	Isuzu	Dmax	Utility	Diesel	2016	2021	8,875	1,023	11.5	100%	0%	0%	0%	$1,535	2,785
E55ZL	Isuzu	Dmax	Utility	Diesel	2016	2021	15,736	1,655	10.5	100%	0%	0%	0%	$2,482	4,503
E96YI	Isuzu	Dmax	Utility	Diesel	2016	2021	9,184	1,164	12.7	100%	0%	0%	0%	$1,747	3,169
E99LK	Subaru	Forester	Medium SUV	Unleaded	2015	2020	27,038	2,630	9.7	89%	10%	2%	0%	$3,945	6,082
E99ZJ	Nissan	Xtrail	Medium SUV	Unleaded	2016	2021	23,477	1,963	8.4	85%	5%	10%	0%	$2,944	4,539
F07XP	Mitsubishi	Triton	Utility	Diesel	2017	2022	6,478	671	10.4	100%	0%	0%	0%	$1,007	1,827
F09LE	Kia	Sportage	Medium SUV	Diesel	2016	2021	36,380	2,499	6.9	62%	36%	2%	0%	$3,748	6,801
F72TD	Mitsubishi	Triton	Utility	Diesel	2017	2022	45,953	4,325	9.4	75%	21%	4%	0%	$6,487	11,771
F74VY	Nissan	Xtrail	Medium SUV	Unleaded	2017	2022	28,799	2,561	8.9	44%	50%	6%	0%	$3,841	5,922
F84CT	Ford	Ranger	Utility	Diesel	2016	2021	10,139	885	8.7	100%	0%	0%	0%	$1,327	2,408
F84DL	Isuzu	MUX	Large SUV	Diesel	2016	2021	22,232	1,966	8.8	63%	18%	18%	0%	$2,948	5,350
F85CT	Ford	Ranger	Utility	Diesel	2016	2021	15,136	1,765	11.7	100%	0%	0%	0%	$2,647	4,803
H11KH	Isuzu	Dmax	Utility	Diesel	2018	2023	14,131	1,436	10.2	100%	0%	0%	0%	$2,154	3,908
H12GB	Mitsubishi	Triton	Utility	Diesel	2017	2022	19,353	2,145	11.1	100%	0%	0%	0%	$3,217	5,837
H15GC	Nissan	Xtrail	Medium SUV	Unleaded	2018	2023	15,724	1,504	9.6	82%	0%	18%	0%	$2,256	3,478
H45LI	Isuzu	Dmax	Utility	Diesel	2018	2023	8,860	968	10.9	100%	0%	0%	0%	$1,451	2,634

Registration	Make	Model	Vehicle type	Fuel type	Date of purchase	Est. replacement date	Distance (km/year)	Fuel consumption km (L/year)	Fuel economy (L/100km)	Local	Intra-regional	Intra-state	Interstate	Fuel cost ($/year)	GHG emissions (kgCO2-e/year)
H51DZ	Mitsubishi	Triton	Utility	Diesel	2017	2022	13,947	1,612	11.6	100%	0%	0%	0%	$2,418	4,387
H63JY	Mitsubishi	Triton	Utility	Diesel	2018	2023	24,256	2,510	10.3	41%	45%	14%	0%	$3,765	6,831
H64JY	Mitsubishi	Triton	Utility	Diesel	2018	2023	26,946	2,759	10.2	88%	13%	0%	0%	$4,138	7,508

The table below shows the new ICE vehicles, which current fleet ICEs might commonly be replaced with. These comparator vehicles are used to assess the whole-of-life cost of EVs, with the most up to date ICEs.

Table 19 Current Fleet Matched to Equivalent Comparator ICE Replacement Vehicles

Current vehicle registration	Selected model	Make	Operating costs ($/year)	Annualised cost over 5 years ($/year ex GST) LOW	Annualised cost over 5 years ($/year ex GST) HIGH	GHG emissions (kgCO2-e/year)
E41EC	Hiace 3.0L Diesel Auto LWB	Toyota	$3,827	$8,643	$9,403	2,281
C22ZS	Camry Ascent	Toyota	$6,167	$9,862	$9,983	3,065
C12ST	Camry Ascent	Toyota	$6,547	$10,242	$10,363	3,555
C36RL	RAV 4 GX 4WD	Toyota	$5,519	$9,643	$10,161	1,767
A10UP	RAV 4 GX 4WD	Toyota	$8,464	$12,587	$13,106	5,565
B51JC	Camry Ascent	Toyota	$3,459	$7,154	$7,275	1,679
B18QD	Camry Ascent	Toyota	$4,301	$7,995	$8,116	2,977
E99LK	Hiace 3.0L Diesel Auto LWB	Toyota	$4,014	$8,830	$9,590	2,620
D32UC	RAV 4 GX 4WD	Toyota	$7,895	$12,019	$12,538	4,832
A74NQ	RAV 4 GX 4WD	Toyota	$9,955	$14,078	$14,597	7,488
D53NH	RAV 4 GX 4WD	Toyota	$8,745	$12,868	$13,387	5,927
D54NH	RAV 4 GX 4WD	Toyota	$6,658	$10,782	$11,300	3,236
D81YW	Hiace 3.0L Diesel Auto LWB	Toyota	$3,827	$8,643	$9,403	2,281
B24ZE	Camry Ascent	Toyota	$6,167	$9,862	$9,983	3,065
D52NH	Camry Ascent	Toyota	$6,547	$10,242	$10,363	3,555
D16SH	RAV 4 GX 4WD	Toyota	$5,519	$9,643	$10,161	1,767
E99ZJ	RAV 4 GX 4WD	Toyota	$8,464	$12,587	$13,106	5,565
F09LE	Camry Ascent	Toyota	$3,459	$7,154	$7,275	1,679
F74VY	Camry Ascent	Toyota	$4,301	$7,995	$8,116	2,977
H15GC	Hiace 3.0L Diesel Auto LWB	Toyota	$4,014	$8,830	$9,590	2,620

The table below shows BEV options available now or within two years that are suitable for replacing current ICE fleet vehicles. The cost differences are expressed relative to the Comparator ICE Vehicles, described in the table above, that the current ICE fleet might be replaced with. If blank rows appear in the table below, this indicates that there are no BEV replacement options within the two year period.

Table 20 Current Fleet Vehicles Matched to Replacement BEV Options

Current vehicle registration	Selected model	Make	Availability	Operating costs ($/year)	Annualised cost over 5 years ($/year ex GST) LOW	Annualised cost over 5 years ($/year ex GST) HIGH	Annualised cost difference MID (%)	GHG emissions (kgCO2-e/year)	GHG emissions reduction (%)
E41EC	E4 van	SEA Electric	Now	$2,785	$15,341	$17,519	82%	514	77%
C22ZS	Ioniq	Hyundai	18/11/2018	$4,608	$10,490	$11,511	11%	364	88%
C12ST	Ioniq	Hyundai	18/11/2018	$4,658	$10,540	$11,560	7%	422	88%
C36RL	Kona BEV	Hyundai	19/04/2018	$5,681	$14,650	$16,206	56%	278	84%
A10UP	Kona BEV	Hyundai	19/04/2018	$6,190	$15,159	$16,715	24%	877	84%
B51JC	Ioniq	Hyundai	18/11/2018	$2,357	$8,240	$9,260	21%	199	88%
B18QD	Ioniq	Hyundai	18/11/2018	$2,444	$8,327	$9,347	10%	354	88%
E99LK	E4 van	SEA Electric	Now	$2,828	$15,384	$17,562	79%	590	77%
D32UC	Kona BEV	Hyundai	19/04/2018	$6,092	$15,061	$16,617	29%	761	84%
A74NQ	Kona BEV	Hyundai	19/04/2018	$6,448	$15,417	$16,973	13%	1,180	84%
D53NH	Kona BEV	Hyundai	19/04/2018	$6,239	$15,208	$16,764	22%	934	84%
D54NH	Kona BEV	Hyundai	19/04/2018	$5,878	$14,847	$16,403	42%	510	84%
D81YW	E4 van	SEA Electric	Now	$2,785	$15,341	$17,519	82%	514	77%
B24ZE	Ioniq	Hyundai	18/11/2018	$4,608	$10,490	$11,511	11%	364	88%
D52NH	Ioniq	Hyundai	18/11/2018	$4,658	$10,540	$11,560	7%	422	88%
D16SH	Kona BEV	Hyundai	19/04/2018	$5,681	$14,650	$16,206	56%	278	84%
E99ZJ	Kona BEV	Hyundai	19/04/2018	$6,190	$15,159	$16,715	24%	877	84%
F09LE	Ioniq	Hyundai	18/11/2018	$2,357	$8,240	$9,260	21%	199	88%
F74VY	Ioniq	Hyundai	18/11/2018	$2,444	$8,327	$9,347	10%	354	88%
H15GC	E4 van	SEA Electric	Now	$2,828	$15,384	$17,562	79%	590	77%

The table below shows PHEV options available now or within two years that are suitable for replacing current ICE fleet vehicles. The cost differences are expressed relative to new Comparator ICE Vehicles, described in the table above, that the current ICE fleet might ordinarily be replaced with. If blank rows appear in the table below, this indicates that there are no PHEV replacement options within the two year period.

Table 21 Current Fleet Vehicles Matched to PHEV Replacement Options

Current vehicle registration	Selected model	Make	Availability	Operating costs ($/year)	Annualised cost over 5 years ($/year ex GST) LOW	Annualised cost over 5 years ($/year ex GST) HIGH	Annualised cost difference MID (%)	GHG emissions (kgCO2-e/year)	GHG emissions reduction (%)
E41EC	N.A.								
C22ZS	Outlander PHEV	Mitsubishi	Now	$6,323	$13,002	$13,468	17%	1,918	47%
C12ST	Outlander PHEV	Mitsubishi	Now	$5,942	$12,621	$13,088	22%	712	65%
C36RL	Ioniq PHEV	Hyundai	Now	$6,047	$12,467	$12,726	18%	2,122	48%
A10UP	N.A.								
B51JC	N.A.								
B18QD	N.A.								
E99LK	N.A.								
D32UC	N.A.								
A74NQ	Ioniq PHEV	Hyundai	Now	$5,492	$11,912	$12,171	21%	1,407	54%
D53NH	Ioniq PHEV	Hyundai	Now	$5,757	$12,178	$12,437	19%	1,749	51%
D54NH	Outlander PHEV	Mitsubishi	Now	$5,260	$11,939	$12,406	23%	551	69%
D81YW	Outlander PHEV	Mitsubishi	Now	$7,529	$14,208	$14,675	12%	3,475	38%
B24ZE	Ioniq PHEV	Hyundai	Now	$2,721	$9,141	$9,401	29%	457	73%
D52NH	Ioniq PHEV	Hyundai	Now	$3,266	$9,686	$9,945	22%	1,301	56%
D16SH	N.A.								
E99ZJ	Outlander PHEV	Mitsubishi	Now	$7,066	$13,745	$14,212	14%	2,878	40%
F09LE	Outlander PHEV	Mitsubishi	Now	$8,695	$15,375	$15,841	9%	4,979	34%
F74VY	Outlander PHEV	Mitsubishi	Now	$7,732	$14,411	$14,878	12%	3,736	37%
H15GC	Outlander PHEV	Mitsubishi	Now	$6,111	$12,790	$13,257	18%	1,646	49%

The table below shows hybrid options available now or within two years that are suitable for replacing current ICE fleet vehicles. The cost differences are expressed relative to new Comparator ICE Vehicles, described in the table above, that the current ICE fleet might ordinarily be replaced with. If blank rows appear in the table below, this indicates that there are no hybrid replacement options within the two year period.

Table 22 Current Vehicle Matched to Hybrid Replacement Options

Current vehicle registration	Selected model	Make	Availability	Operating costs ($/year)	Annualised cost over 5 years ($/year ex GST) LOW	Annualised cost over 5 years ($/year ex GST) HIGH	Annualised cost difference MID (%)	GHG emissions (kgCO2-e/year)	GHG emissions reduction (%)
E41EC	N.A.								
C22ZS	Camry Ascent Hybrid	Toyota	Now	$5,500	$8,723	$9,293	-9%	2,105	31%
C12ST	Camry Ascent Hybrid	Toyota	Now	$5,761	$8,984	$9,554	-10%	2,442	31%
C36RL	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$5,149	$9,562	$10,081	-1%	1,211	31%
A10UP	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$7,168	$11,580	$12,099	-8%	3,814	31%
B51JC	Camry Ascent Hybrid	Toyota	Now	$3,118	$6,341	$6,912	-8%	1,153	31%
B18QD	Camry Ascent Hybrid	Toyota	Now	$3,696	$6,919	$7,490	-11%	2,044	31%
E99LK	N.A.								
D32UC	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$6,778	$11,191	$11,709	-7%	3,312	31%
A74NQ	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$8,190	$12,602	$13,121	-10%	5,132	31%
D53NH	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$7,360	$11,773	$12,292	-8%	4,063	31%
D54NH	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$5,930	$10,343	$10,861	-4%	2,218	31%
D81YW	N.A.								
B24ZE	Camry Ascent Hybrid	Toyota	Now	$5,500	$8,723	$9,293	-9%	2,105	31%
D52NH	Camry Ascent Hybrid	Toyota	Now	$5,761	$8,984	$9,554	-10%	2,442	31%
D16SH	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$5,149	$9,562	$10,081	-1%	1,211	31%
E99ZJ	RAV 4 GX AWD Hybrid	Toyota	01/05/2019	$7,168	$11,580	$12,099	-8%	3,814	31%
F09LE	Camry Ascent Hybrid	Toyota	Now	$3,118	$6,341	$6,912	-8%	1,153	31%
F74VY	Camry Ascent Hybrid	Toyota	Now	$3,696	$6,919	$7,490	-11%	2,044	31%
H15GC	N.A.								

Appendix 2: Range and Vehicle Selection

EVs vary in price and range. Broadly speaking, longer-range EVs are more expensive due to the relatively high cost of batteries. Shorter range EVs may limit the amount of use that can be reliably served by an EV unless fast charging in suitable location(s) is readily available.

Generally, the range cited by manufacturers is for specified test conditions, in practice close to ideal conditions for maximising range. While the rated rage is achievable under those conditions, these will not be representative of typical operating conditions. Nominally the quoted range should be reduced by 25%-30% for the vehicle under average conditions when new and will be lower again under adverse conditions (aggressive driving and fast highway driving).

Factors that further reduce range are:

- Extremes of cold or heat requiring heating or air conditioning, adding to power use;
- Headwinds;
- Hilly terrain;
- Carrying heavy loads;
- Cold weather temporarily reducing battery capacity (which is restored when warm again); and
- Battery decay over the vehicle lifetime.

Generally, EV batteries last longer if charged to 80% rather than 100%, limiting the effective range somewhat further. However, periodically charging to 100% when a longer daily drive is anticipated provides an extra 25% of range for unusual circumstances with no great harm. Therefore the Council may wish to create a procedure for charging that reflects the capacity of batteries for charging.

Selecting Vehicles With Suitable Range

At least in the short term, there will be some trade-off between the lower cost of EVs with smaller batteries, which have shorter range and thus being restricted in length of daily drive or requiring charging during the day, and higher cost, longer range vehicles with greater operational flexibility and reduced need for daytime charging infrastructure.

The table below summarises some indicative vehicle use and corresponding battery size and range required, with examples of models that meet different requirements and their prices. In general, the practical battery size required is set by the maximum daily distance. The closer the average use is to the daily maximum, the better value the vehicle will be.

Table 23 Vehicle Distance Travelled Versus Range

Annual travel distance (km/year)	Average daily distance (km/day)[4]	Probable maximum daily distance (km/day)	Desirable real range @ 100% SOC (km)	Likely rated range required (km)	Real range at 80% charge (km)	Examples	Price range
7,500	30	90	100	140	70	Leaf 1, iMiEV	$40k
15,000	60	120	130	180	100	Kangoo, Ioniq	$45k
25,000	100	175	190	260	140	Zoe, Leaf 2 standard	$50-$55k
40,000	120	210	230	320	170	Tesla 3, Leaf 2+	$60-$65k
60,000	160	280	250	340	190	Kona, Niro	$65k

Once a state wide public fast charge network is in place a real range of 250 km (likely a 50-60 kWh battery) should allow vehicles to move relatively freely around the state as well as around the local government area. A minimum state wide network is expected to be completed by about 2021. It is anticipated that the main centres along the route between Burnie and Hobart will be completed first.

Given the general rise in cost for EVs with a larger capacity battery, it is tempting to consider a smaller battery but to recharge during the day. This is a practical strategy if:

- The vehicle makes frequent or regular returns to base or another Council managed site for one to two hours per day and there is capability of charging at 22 kW or more (charger and vehicle) at each site with longer stays; or
- There is access to a DC fast charger close to the base or normal route(s) and capability of charging at 50 kW or more during normal business or breaks of 20-30 minutes.

Otherwise it would be desirable to select a vehicle capable of the maximum expected daily range for business needs. This would ensure that a BEV is fit for purpose and to ensure employees don't experience issues with cars not being charged, an issue similar to that caused when staff do not refuel ICE vehicles after significant use.

[4] Assumed 250 working days per year

Appendix 3 Charging Options

Charging Rates and Times

The primary method for EV charging is generally overnight using an AC connection. A modest 15 A or at most a 32 A single phase connection is enough to meet most daily use[5]. However, a faster charge is required to provide much useful charging during the day. Relatively few EVs accommodate three phase charging with most limited to 7.2 kW, single phase. The notable exception is the Renault Zoe, which can charge on AC only, up to 23 kW (three phase).

Table 24 Typical Charging Times

Supply	Highway range (km) per hour of charge[6]	Hours to provide 200 km of highway range
15A single phase (3.6 kW)	15	13
32A single phase (7.2 kW)	30	6.5
32A three phase (23 kW)	90	2.5

DC charging can provide faster charging to vehicles equipped to accept it. Generally EVs can accept faster DC charging rates than AC, but the rate is limited by the battery management system which in turn depends on the battery characteristics, most notably total size. Larger batteries can charge faster than smaller capacity batteries, in terms of kW or km/h of charging, but with a suitable power supply and DC charger, the time to charge from near empty (5%) to 80% capacity is typically about 30-40 minutes. In practice, enough charging is done to just complete the journey or day's use, often closer to 10-15 minutes.

The charge rate may also be limited by the capacity of the charger, or the sharing of available capacity across several charge connectors. The first generation fast chargers were 50 kW for CHAdeMo[7] and CCS connectors and 110 kW for Tesla superchargers. Chargers with higher capacity are now available, up to 350 kW for CCS connectors, and also with lower capacity (25 kW or less). Higher power chargers cost more for the charging equipment, the power supply (usually requiring upgrades) and may substantially affect demand charges for power supplied.

[5] While a 10 A single phase power point may also be used to charge a car, in principle, the charge rate of would require about 20 hours to provide 200 km of highway range and would constrain flexibility if a vehicle is required for a long journey on any given day.
[6] Vehicle efficiency varies somewhat by model. Estimates above in the table are based on 225 Wh/km which is a relatively high rate of energy use per km.
[7] CHAdeMO and CCS are trade names of quick charging methods for BEVs.

Table 25 Charging Parameters for Various Battery Capacities

Usable Battery Capacity (kWh)	22	40	60	80
'Empty' @ 5% (kWh)	1.1	2	3	4
'Full' @ 80% (kWh)	17.6	32	48	64
Energy to 'fill' (kWh)	16.5	30	45	60
Real highway range, 5%-80% (km)[8]	65-80	120-150	180-225	240-300
Indicative peak charge rate (kW)	44	65	90	110
Average rate to 5%-80% (kW)	35	50	65	85
Time to charge from 5%-80% (minutes)	28	36	42	48

Charging Equipment Characteristics and Selection

Apart from the power rating, number of phases and whether they are AC or DC, chargers have other parameters to consider:

- Type of connector;
- Fixed cable or removable;
- Length of cable;
- Access control; and
- Monitoring of power consumption.

Generally for fleet cars parked at a Council facility overnight, a charging connection will be required for each EV in the fleet. The largest cost of installation is often getting power to a suitable location near the vehicle(s), including, where required, upgrading a switchboard and power supply.

As noted in the previous section, a 15 A or 32 A power point may be all that is required to supply the EV with ample range each night, using the EV supply equipment (EVSE) supplied by the manufacturer with the vehicle. While one clear advantage is low costs, a second advantage is that such power points can provide access to electricity for general use when not used for EV charging.

The limitations of this approach are:

- No control over access to or use of the electricity (unless locked covers are used);
- No or very limited data on electricity use, unless a separate meter is placed on the line(s) associated with the EV;
- No control over timing or coordination of charging several EVs to manage peak demand unless specialised external control equipment is installed;
- Potential for EV equipment to be stolen (ok if parking/charging area can be secured);
- EVSE supplied with EV may not be weatherproof so not suitable for regular outdoor use (ok for indoor or undercover parking); and
- EVSE supplied with EV often is not capable of maximum charge rate.

[8] Based on 200 to 250 Wh/km.

Fixed, specialised EVSE that is specifically designed for EV charging can be installed. This may come with a cable attached to the EVSE with a connector that can fit directly in the car. For AC this would be either a J-1772 connector or a Type 2 (also called Mennekes) connector. There is an industry consensus that future AC ports for Australian vehicles will be Type 2. However, there were a number of EVs sold with J-1772 connectors and used EVs with these connectors may be brought into the country. Councils buying new generation BEVs should select appropriate charge technology to avoid compatibility issues.

Another option being increasingly adopted in Australia is to use EVSE with a Type 2 female socket and no cord. The EV driver would provide a cord that plugs into the EVSE at one end and the car at the other. This allows cars with different ports to bring cables with the right connector for their car. Experience with public chargers overseas where this is quite common shows that drivers treat cables better when it is their own, and there is less damage to connectors from being left on the ground and cables and connectors being run over. However if cables are not secured while charging they may be liable to theft. Most cars and chargers have a cable interlock that prevents removal while charging. Removable cables are not permitted for EVSE with ratings above 23 kW.

The EVSE can come with a wide range of access and control capabilities. It may:

- Meter energy used, in total or by individual user;
- Control access to authorised vehicles or individuals;
- Provide remote monitoring, control of charging settings/conditions and maintenance; and
- Be used to manage timing or rates of charge to stagger charging and manage peak loads.

Generally the more sophisticated the control functions, the more expensive the charger. Costs range from under $1,000 for a basic charger with few controls up to about $5,000 for a sophisticated charger with capacity for billing public users and recording all use and transactions.

Some demand management systems require additional controllers to monitor and regulate the activity of a group of chargers. While this is not likely to be warranted for one or two chargers, as the EV fleet grows it may well be desirable, and the initial installation should plan for this eventuality should it be considered desirable in the long run.

DC chargers may be desirable where EVs are likely to need charging during the day at rates faster than AC is able to deliver. However higher powered DC chargers are quite expensive to purchase and install with a basic 50 kW charger likely to cost about $30,000-$35,000 and installation expenses bringing the total cost to between $70,000 and $100,000 as most sites would require significant power supply upgrades.

Unless the Council is running a particularly large and active fleet, it would generally be better to buy time on a public fast charger when available. This would usually be more economical as it would be active for more of the day and the higher utilisation factor would reduce the effective cost to users compared to having a charger dedicated to Council vehicles. Supporting a public charger(s) would also enable additional capacity to be installed sooner at more sites, adding to general support for EV users and increasing convenience to the Council's users with greater likelihood of having chargers near where they need them.

Compensation for Charging at Home

Many of the Council's vehicles are taken home at night by staff. With an EV it will be in the Council's interests that the EVs are charged and ready for use at the beginning of each day, to minimise the need to charge during the day that could reduce the EV's availability. To enable this, charging at home would require the use of electricity supplied under the employee's personal electricity account, and therefore reimbursement would be required.

Any method of reimbursement should consider the following factors:

- **Fairness**: both to the employee and in the use of public funds administered by the Council;
- **Cost minimisation**: it should encourage charging via the lowest cost options;
- **Privacy**: it should not intrude on employee's personal electricity accounts;
- **Safety**: charging at home should be safe; and
- **Administrative simplicity and robustness**: simpler administration reduces costs; a robust and transparent system can help to avoid disputes.

Method 1: Distance based cost share attribution

This method has the merit of being administratively simple. Essentially the process assumes:

- A fixed proportion of all electricity will be supplied at home, say 90% or a negotiated amount (**Share**);
- Each EV uses an agreed efficiency expressed in Wh/km (**Efficiency**);
- That the car is charged at the 'standard' Household Light And Power Tariff 31 (**Rate**); and
- The odometer is read at the end of each quarter (about the time the power bill is due) (**Distance**).

The person 'housing' the EV is reimbursed with a calculated amount:

Reimbursement = distance x share x efficiency x rate

Considerations:

1. A simple 15 A power point and the EVSE supplied with the vehicle may be sufficient for charging at home, the lowest cost solution;
2. The assumption of a fixed **share** will encourage the employee to charge at work (if possible/permitted) or at public fast chargers using the Council account to minimise home charging. This may require controls over charging at work, or an agree formula to adjust the share if charging on the Council account significantly increases, relative to the total kilometres recorded. For this to be managed, some measurement and recording of the Council's supplied charging is required. If the EV has the capacity to export electricity (V2G) then charging on the Council account would have to be monitored closely;
3. If the EV is driven conservatively, energy use may be less than the agreed **efficiency** number; if driven aggressively, it may be more. This provides an incentive to use the EV efficiently. However, it may make the employee reluctant to have staff known to drive aggressively use their car. Alternatively, it may lead to peer pressure to improve driving habits; and
4. If the employee uses off-peak tariffs or solar on weekends to reduce their costs below the standard **rate**, they would capture the benefit of paying a lower price. If the employee uses peak power to charge on the peak rate, they would pay the premium and wear the loss. This encourages employees to install solar capacity and to use off-peak power, with potential community benefits, even if the Council does not capture any savings.

Method 2: Distance based cost, measured share

This method takes advantage of the fact that all charging at the Council facilities and at public chargers can be measured and recorded reasonably accurately. The process would be:

- The amount of electricity supplied (kWh) by the Council is measured at all Council chargers or from any accounts with a public charger (**measured Council share**);
- Each EV uses an agreed efficiency in Wh/km (**efficiency**);
- The odometer is read at the end of each quarter (about the time the power bill is due) (**distance**);
- A **net employee share** for charging at home (kWh) is calculated taking the assumed total energy required (**distance** x **efficiency**) and subtracting the **measured Council share** supplied; and
- The reimbursement is at the 'standard' household light and power Tariff 31 (**rate**).

The person 'housing' the EV is reimbursed with a calculated amount of electricity assuming they supplied all that was needed but not supplied by the Council:

Reimbursement = ((distance x efficiency) – measured Council share) x rate; or

Reimbursement = net employee share x rate.

Considerations:

1. A simple 15 A power point and the EV supply equipment (EVSE) supplied with the vehicle may be sufficient for charging at home; the lowest cost solution;
2. The assumption of a **net employee share** will make charging at work 'neutral' – more charging at work simply reduces their payment. Measurement of energy provided to the EV could take into account net energy supplied, even if there is vehicle to grid capability at work. The assumption that the employee pays for all the energy required to meet distance travelled, net of the Council's contribution means than vehicle to grid transfers have no net impact on fairness;
3. An EV where the assumed consumption rate is much lower than the actual consumption and the EV is **mostly** charged at work may show no net employee share with this calculation, even though the employee knows they are charging at home. Conversely an assumed consumption rate that is too high may result in the employee being reimbursed even when they are not charging at home. This would require an adjustment to the assumed **consumption** (or a change in driving practices if actual consumption was higher than a reasonably expected level of consumption);
4. If the EV is driven conservatively, energy use may be less than the agreed **consumption** number; if driven aggressively, it may be more. Given that the net employee share is based on the assumed **consumption** value, the employee will receive all of the benefit of efficient driving or pay all of the costs, regardless of the proportion of charging done at work. This maintains the incentive to use the EV efficiently. However, it may make the employee reluctant to allow staff known to drive aggressively to use their car. This may ultimately help to improve staff driving habits; and
5. If the employee uses off-peak tariffs or solar on weekends to reduce their charging costs below the standard **rate**, they would capture the benefit of paying a lower price for the energy. If the employee uses peak power to charge on the peak rate, they would pay the premium and wear the loss. This acts to encourage staff to install solar capacity and to use off-peak power, with potential community benefits, even if the Council does not capture any savings.

Method 3: Measured supply

This method simply measures the energy consumed at the employee's residence to charge the EV:

- A metered charger is installed in the employee's residence to record the energy used in kWh (**consumption**); and

- The employee is reimbursed for energy used by the charger at the tariff (rate) associated with the charger (**rate**).

The person 'housing' the EV is reimbursed with a calculated amount of electricity:

Reimbursement = consumption x rate

Metered chargers are available that can be read remotely and do not require access to employee's residential electricity bill.

Considerations:

1. The share of charging done at home is not relevant for reimbursement. However, if the Council potentially has lower cost energy at the Council site (lower tariff or rooftop solar) they may wish to ensure that the car is charging at work as much as possible;
2. There is no incentive to drive more efficiently based on reimbursement. Aggressive driving resulting in higher energy use is simply reimbursed;
3. This method as described provides no incentive to use special tariffs or solar at home. It could be modified to reimburse employees on a standard rate, allowing them to make a gain by using off-peak or solar where this is beneficial;
4. Controls may be required on the meter to prevent the employee from charging their personal EV on the Council's charger. Some chargers can identify the EV being charged to ensure that the employee isn't reimbursed to charge other EVs at their residence; and
5. This method generally has the most expensive initial cost with suitable metred chargers ranging from $800 to $1,500 plus installation. The chargers have a long life. The Council may offer it as an incentive to the employee to convert to Tariff 93, saving charging costs, or alternatively, if the employee's tenure is particularly short the Council may seek reimbursement for the charger or to relocate it to another site it if the employee ceases to use it for charging a Council EV.

Vehicle to Grid

Vehicle to grid allows EVs to communicate with the power grid and sell electricity back to the grid to establish demand response. Vehicle to grid is likely to become more widely used for AC chargers in the future but may not be appropriate for the first vehicles introduced to the fleet. Relatively few brands have enabled their vehicles for this to date and the equipment to enable it is still relatively expensive, though this is expected to change.

The following provides an example of how vehicle to grid charging might be managed at Council site(s).

Weekdays:

- Charge overnight at 10.4 c/kWh and discharge back to the grid during the day saving 23.1 c/kWh;
- With net round trip efficiency of 75%, there is a saving in daytime consumption of 10 c/kWh delivered; and
- A Nissan Leaf with a 55 kWh (usable) battery discharged in the afternoon to 20% from 50% state of charge could deliver 16 kWh and save about $1.60 per day, or, based on four days per week, about $300 per year.

Weekends:

- Charge from solar on weekends to 80%, discharge back to the grid on Monday afternoon from 50% to 20%[9] for net savings of 14.5 c/kWh delivered. Savings per weekend would be $2.32 per weekend or about $115/year. Given the odd cloudy winter weekend, say $100/year.

Total savings are about $400/year. To put this into perspective, the annual energy cost for energy used to travel is about $400/year for 15,000 km/year if charged during off-peak periods on a time of use tariff, making the fuel cost essentially zero.

[9] This would not happen every day: days with light use might discharge more and those with heavy use discharge less. The figures proposed represent a nominal average available for discharge for such a vehicle used, on average, for 100 km per weekday.

Appendix 4 Training

Although EVs have the same sorts of controls ICE vehicles use, there are differences. By providing staff with training about EVs and PHEVs, this will ensure the new vehicles have a smooth integration into fleet vehicle pool systems. Training should also assist the Council to run its fleet at maximum cost efficiency in terms of how individual vehicles are driven and how the mix of ICE vehicles, BEV and other EVs are to be used.

Some of aspects commonly included in training are:

- Alerting staff to the fact that EVs are silent when not in motion, to train people to remember to turn them off;
- The shorter range of the early models EVs compared to ICE vehicles requires a greater attention to regular recharging, and should they not be recharged when required, they take longer to refill than an ICE vehicle;
- The dashboard prompts for available range for the current state of charge in an EV may need some interpretation, particularly for trips where the distance to be travelled is relatively close to the available range, in order to avoid unnecessary 'range anxiety' among users; and
- Charging options, procedures at public chargers, and finding chargers when travelling, are basic requirements for driving EVs.

Information resources and support materials will be produced through the Smarter Fleets Program and will consider recommendations around staff training.

5.2 BIKE RIDING STRATEGY 2015-2020 - YEAR 3 STATUS UPDATE

File: 30081 D569043

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 2.3.3 Provide and maintain Council buildings, facilities and amenities to appropriate standards

SUMMARY

To report to Council on the progress of the actions outlined in Council's Bike Riding Strategy 2015-2020 (the Strategy).

BACKGROUND

Council first developed and adopted a Cycling Network Strategy in 2010. This Strategy was revised to become the Bike Riding Strategy 2015-2020 and was adopted by Council at its meeting in September 2015 (Min IWC 28/15 refers).

A copy of the Strategy can be found on Council's website at:

http://www.devonport.tas.gov.au/Council/Publications-Plans-Reports/Council-Plans-Strategies.

The objective of the Strategy is to make bike riding more accessible and safer for everyone through promotion, community education and by providing a well maintained network of bike lanes and paths.

The Strategy action plan identifies the activities to be undertaken to meet the objective. This report provides an update on the progress on those activities.

STATUTORY REQUIREMENTS

There are no statutory requirements relating to this report.

DISCUSSION

Achievements and progress for the first year of the Strategy are outlined in the table attached to this report.

The Strategy contains 26 actions. Two actions have been completed and another six are underway. Ten are ongoing throughout the life of the Strategy. Four more are scheduled to commence prior to 2020, while the remaining four are 'future' actions to be considered in the next strategy review in 2020.

Highlights of the progress made in the last year are:

- Action 3.2: River Road link to Latrobe. Funding for this section of path has been secured from the Federal and State Governments. Council has committed $1.6M to the Coastal Pathway project (Min IWC 37/18 refers) and Latrobe Council has made a commitment to its component of the project. Work to design the project and obtain the necessary approvals has commenced and it is expected construction will start in 2019.
- Action 4: Develop a hierarchy of paths and lanes. A bike route hierarchy was adopted in 2019 (Min IWC 04/19 refers). The bike route hierarchy brings structure and transparency to the prioritisation of new infrastructure projects and allows the implementation of a more efficient set of maintenance service levels.

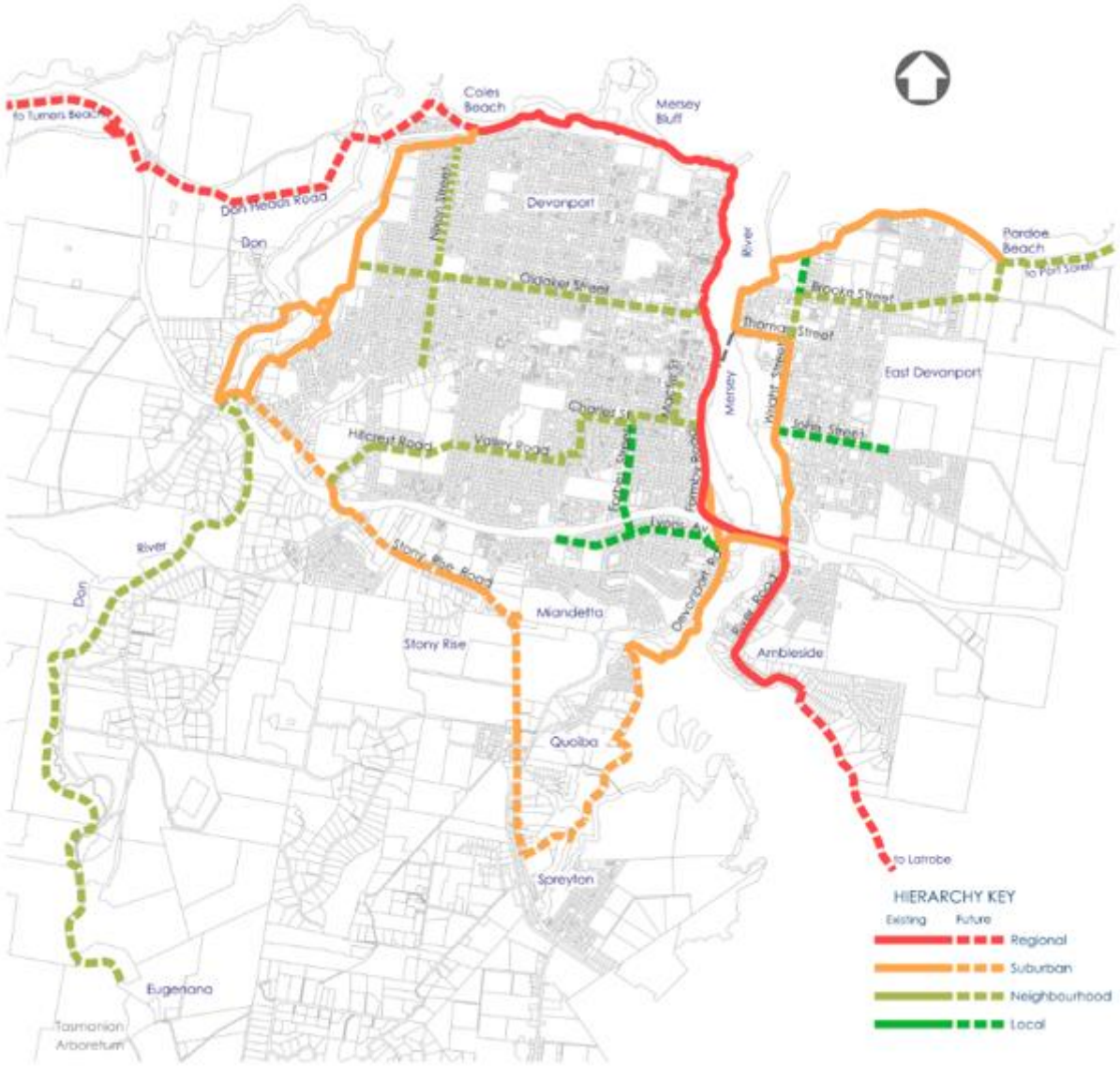


Figure 1: Bike route hierarchy

- Action 8: Coastal Pathways. As described above, funding has been secured from Federal and State Governments for the Don to Leith section of the Coastal Pathway. Council's $1.6M commitment includes an allocation for this section. It is expected that design will commence later in 2019 and construction will commence in 2020.

Remaining actions scheduled to commence between now and 2020 require capital expenditure. It will be important that these projects are considered during deliberations of the forward capital works program, noting that there are limited funds available due to Council's commitment to the Coastal Pathway.

Other actions are wholly reliant on external funding. Availability of external funds will dictate if these projects can be delivered by 2020.

COMMUNITY ENGAGEMENT

There was no community engagement as a result of this report.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this report. Actions requiring capital or operational expenditure are to be considered as part of annual budget deliberations.

RISK IMPLICATIONS

- Political/Governance
  Delivering the Strategy action plan demonstrates good governance.
- Assets, Property and Infrastructure
  A key part of the Strategy action plan is to maintain the existing paths to the required standard. This will ensure they are fit for use but also that the life cycle cost of the assets is minimised. The construction of new assets will need to be planned and completed in accordance with good asset management practices.
- Communication/Reputation
  Delivering the Strategy action plan, especially the upgrade of existing paths and construction of new paths, will be well received by the community, enhancing Council's reputation.

CONCLUSION

Progress has commenced on implementation of the actions listed in the Bike Riding Strategy 2015-2020, since it was adopted in September 2015.

ATTACHMENTS

⇩1. Bike Riding Strategy 2015-2020 - Year 3 Status - action list

RECOMMENDATION

That it be recommended to Council that the report of the Infrastructure and Works Manager be received and Council note the status of actions listed in the Bike Riding Strategy 2015-2020.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Deputy General Manager

Action Plan
Bike Riding Strategy 2015 – 2020 – Year 3 Status Update

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
	Objective 1: Improved Linkage to Coastal Pathway									
1.1	High Priority - Nicholls Street, North Fenton Street, Thomas Street						High	Underway	2017 grant submission was unsuccessful. Thomas Street link included in 2019-20 capital works program. Construction pending	Infrastructure & Works
1.2	Medium Priority - James Street, Mungala Crescent, Pardoe Street, Drew Street						Medium	Yet to commence	Proposed for future capital works.	Infrastructure & Works
1.3	Low Priority - Beaumont Drive, Forth Road near Richardson Drive, Riverview Avenue, Ronald Street/Eugene Street, Anchor Drive, Church Street, Clements Street, Oldaker Street						Low	Underway	Clements Street link included in 2019-20 capital works program. Construction pending. Other links will be considered in the 2020 Strategy update.	Infrastructure & Works
1.4	Future Priority - Miandetta: Miandetta Park, Devonport (Elizabeth Street, Lower Madden Street, George Street, Gloucester Street, West, Eugene Street, Best Street, Don: Jiloa Way, Howell Lane)						Low	Future	The need for these projects will be considered in the 2020 Strategy update.	Infrastructure & Works
	Objective 2: Road Crossing Priority									
2.1	High Priority - Victoria Parade Boat Ramp						High	Complete	Crossings were upgraded as part of the Victoria Parade Boat Ramp project completed as part of 2017/18 capital works program.	Infrastructure & Works

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
2.2	Medium Priority - Finlaysons Way, Coles Beach Road						Medium	Underway	Road crossing facilities on Coles Beach Road were constructed in 2018. A priority crossing was not required.	Infrastructure & Works
2.3	Low Priority – Westport Road						Low	Future	The need for this project will be considered in the 2020 strategy update.	Infrastructure & Works
	Objective 3: New Connection Link									
3.1	High Priority – extension to Spreyton						High	Yet to commence	Will only progress if external funding is available.	Infrastructure & Works
3.2	Medium Priority – River Road link to Latrobe						Medium	Underway	Federal, State and Local Government funding commitments have enabled design work to start on this project with construction scheduled to start in 2019.	Infrastructure & Works
3.3	Low Priority – Tea Tree Lane Link						Low	Future	The need for this project will be considered in the 2020 strategy update	Infrastructure & Works
3.4	Future Priority - Stony Rise Road: Leary Avenue to Tugrah Road, Lawrence Drive to Don Road, Don Road to Don Reserve, Middle Road to Quoiba, Oldaker Street Bike Lanes, Miandetta Primary to Middle Road, Forbes Street Bike Lanes, Lyons Avenue Link, Lawrence Drive Bike Lanes. Tugrah Road to Kelcey Tier						Low	Future	The need for these projects will be considered in the 2020 strategy update.	Infrastructure & Works
4	Network Hierarchy (develop a hierarchy of paths and lanes)						High	Complete	A bike route hierarchy was adopted in February 2019 Min IWC 04/19 refers)	Infrastructure & Works
5	Safety Assessment (undertake safety assessments of paths and lanes)						High	Yet to commence	Scheduled to commence 2019	Infrastructure & Works

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
6	Remove Hazards (remove bike riding hazards from network)						High	Ongoing	Hazards are being removed or managed as they are identified.	Infrastructure & Works
7	Lighting (Victoria Parade: Cenotaph to North Fenton Street)						Low	Underway	Path lighting has been installed from the Cenotaph to the Vietnam War Memorial Park.	Infrastructure & Works
8	Coastal Pathways (west to Leith, east to Port Sorell)						Future (unless funding available)	Underway	Federal, State and Local Government funding commitments have enabled design work to start on this Don to Leith project with construction likely to start in 2020. The link to Port Sorell is unlikely to progress in the short to medium term.	Infrastructure & Works
9	Path and Lane Maintenance (Provide adequate and regular maintenance)						High	Ongoing	Maintenance undertaken in accordance with Service Level Documents.	Infrastructure & Works
10	Infrastructure Upgrades Coastal Pathway (widen and improve sections)						Low	Ongoing	This action will be progressed when the condition of the existing path assets warrant replacement. No works are scheduled prior to 2020.	Infrastructure & Works
11	Infrastructure Upgrades Other (included in new subdivisions, road and footpath works)						Low	Ongoing		Infrastructure & Works
12	Provide Signage (provide trackmarker Signage)						Medium	Ongoing	Signage has been installed on designated bike tracks.	Infrastructure & Works
13	Provide Bike Parking (provide Bike Parking)						Medium	Ongoing	Bike racks installed in market square in 2018.	Infrastructure & Works
14	Bike Counts (collect Bike Path Usage Data and undertake counts)						Medium	Ongoing	Bike counts collected annually with the assistance of volunteers	Infrastructure & Works

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
15	Promotion (Promote the Coastal Pathway as one of Devonport's attractions)						Medium	Ongoing	There is opportunity to progress this action on a regional basis as the Coastal Pathway project progresses.	Infrastructure & Works
16	Promotion and support (bike education, Ride to Work day, bike week, encourage corporate support, implement bike track courtesy measures)						Medium	Ongoing	Bike safety park constructed at Pioneer Park, bike education program implemented as park of the project.	Infrastructure & Works
17	Lobbying for Funding (seek funding and lobby Government to extend the network)						High	Ongoing	Grant funding was obtained to assist with construction of bike safety park at Pioneer Park. Grant funding has been secured for the Don-Leith and Latrobe-Ambleside links.	Infrastructure & Works
18	New Connection Link - Nixon Street bike lanes, John Street bikes lanes, Charles Street bike Lanes						Low	Yet to commence	A review of the demand for on-road bike lanes is required prior to progressing with these projects. The bike route hierarchy provide guidance on the suitability of lanes vs dedicated paths	Infrastructure & Works

5.3 WASTE STRATEGY 2018-2023 - YEAR ONE STATUS UPDATE

File: 34048 D569057

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 1.4.2 Facilitate, and where appropriate, undertake improvements in waste and recycling collection, processing services and facilities

SUMMARY

To report to Council on the progress of the actions outlined in Council's Waste Strategy 2018-2023 (the Strategy).

BACKGROUND

Devonport City Council's 2018-2023 Waste Strategy (the Strategy) provides a framework to guide efficient and cost-effective decisions for the delivery of Council managed waste services. The purpose of the Strategy is to reduce the financial and environmental impacts of waste generation whilst placing Devonport City Council in the best place possible to optimise opportunities such as grants and contract alignment to improve waste outcomes.

The Strategy outlines Council's activities over a five-year period focusing on reaching three key outcomes:

1. Reducing the average amount of waste generated;
2. Reducing the amount of waste to landfill by increasing the recovery and recycling of resources across all waste streams; and
3. Protecting our natural environment by reducing the total amount of litter and illegal dumping.

The Strategy was adopted by Council at its meeting in February 2018 (Min IWC 55/18 refers).

A copy of the Strategy can be found on Council's website at:

http://www.devonport.tas.gov.au/Council/Publications-Plans-Reports/Council-Plans-Strategies.

The Strategy action plan identifies the actions to be undertaken to deliver the outcomes described above. This report provides an update on the progress on those actions.

STATUTORY REQUIREMENTS

There are no statutory requirements relating to this report.

DISCUSSION

The Strategy describes the success measures of the three outcomes. Performance against the measures is outlined below.

Objective 1: Reducing the average amount of waste generated

Success Measures:	Performance
The total amount of waste generated remains below 2015/2016 levels and decreases over time.	Total waste to landfill in 2017-18 was less than 2015-16. Refer to Figure 1.

Success Measures:	Performance
A range of education programs are promoted and/or delivered.	In 2017-18, CCWMG delivered a school education program, made improvements to the Rethink Waste website and held stalls at 2 public events. Refer to Figure 2.
There is an increase in the number of new Council online services provided, including the number of forms converted to electronic formats from 1 July 2018.	Council have transitioned many internal processes to online as part of the move to the paranaple centre. External online services will increase when Council's website is upgraded later in 2019.
There is an increase in the number of community events with active waste management plans from 1 July 2018.	Opportunities to include recycling and composting at community events will increase in future. CCWMG has bin toppers available for use at events. Refer Figure 3.
The quality and accuracy of waste data is improved and changes in waste data communicated to the community.	Waste data is reported publicly bi-monthly and through the annual Strategy status update

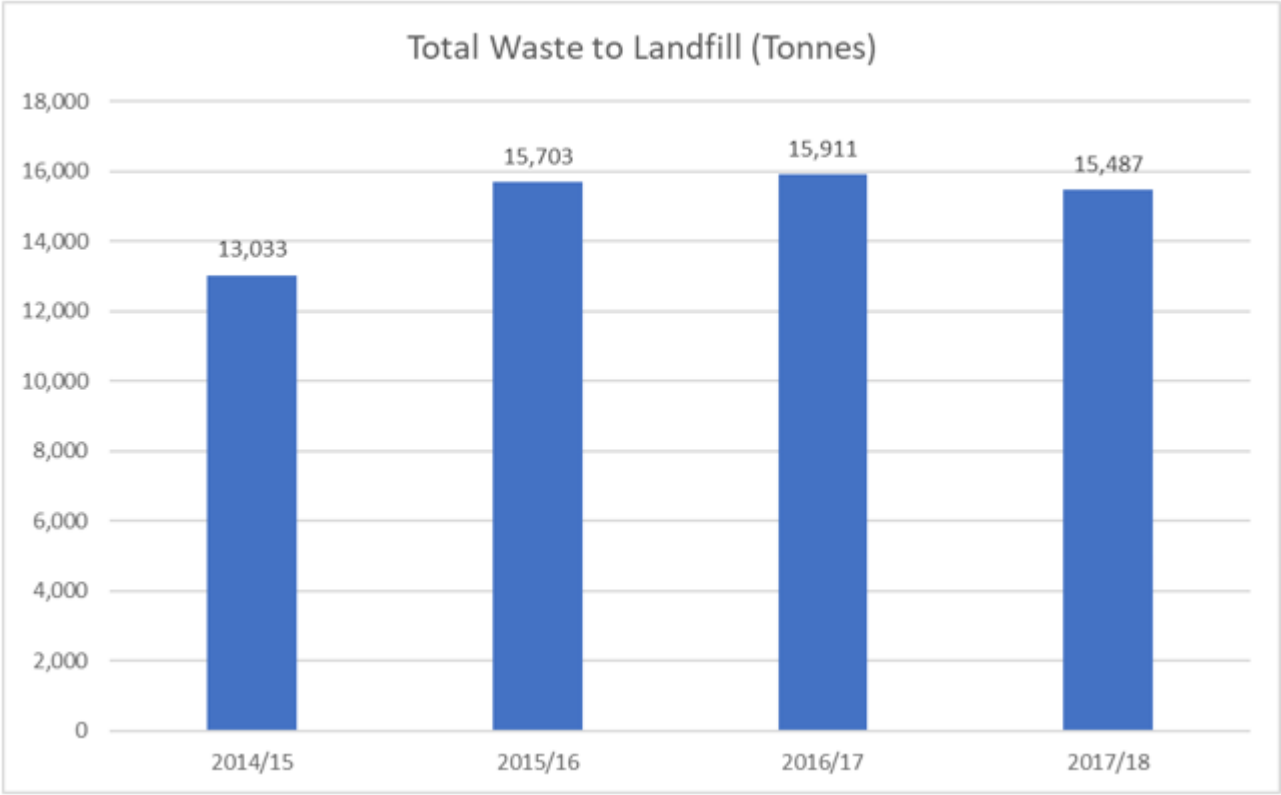


Figure 1 – Total waste to landfill

Figure 2 – Rethink Waste promotion (The Advocate)

Figure 3 – CCWMG bin toppers

Objective 2: Reducing the amount of waste to landfill by increasing the recovery and recycling of resources across all waste streams

Success Measures:	Performance
Aim to keep the resource recovery diversion rate for domestic waste above 20%.	2017-18 recovery rate was 19.8%. Refer to Figure 4
Increase resource recovery options of business and personal items across Council facilities and operations.	Recovery of e-waste has recommenced and recovery of paint, household batteries, fluorescent tubes has commenced
Range of community awareness and education programs delivered to encourage recycling	DWM and CCA contributed to the 'Rethink Waste' campaign. Refer to Figure 5.

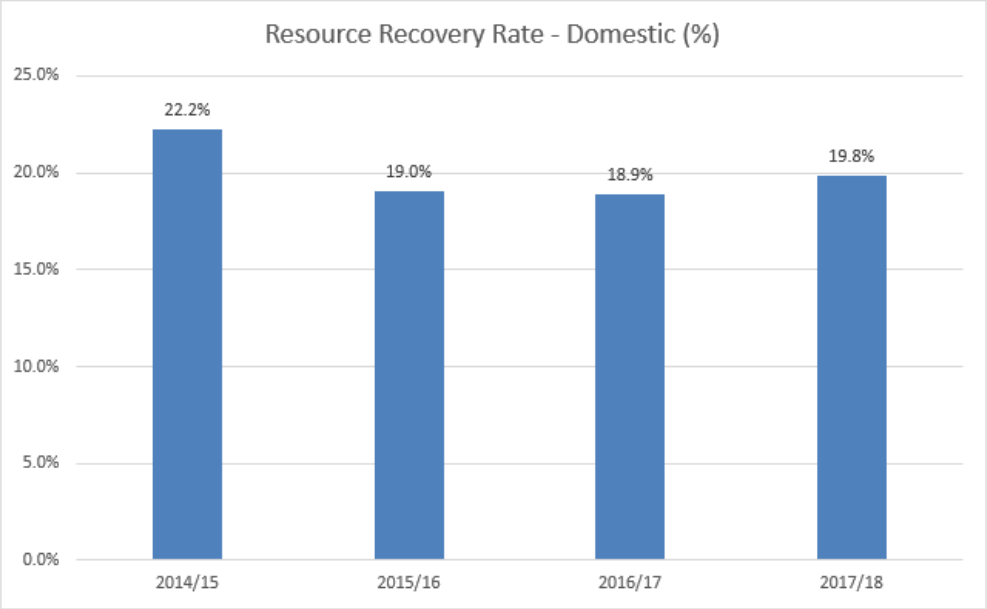


Figure 4 – Domestic resource recovery rate

Figure 5 – Rethink Waste promotion (YouTube)

Objective 3: Protecting our natural environment by reducing the total amount of litter and illegal dumping

Success Measures:	Performance
Reduction in incidences of illegal dumping of waste	Data suggests illegal dumping has increased, although an increase in reports is at least partially attributable to improved record keeping and an increased awareness of the issue. Refer to Figure 6.
Involvement by community in action-based programs	The Devonport community are involved in groups and events aimed at cleaning up litter including: • Clean Up Australia Day • Operation Marine Debris (Sea Shepherd) – refer to Figure 7 • Various "Friends of" groups • Don College

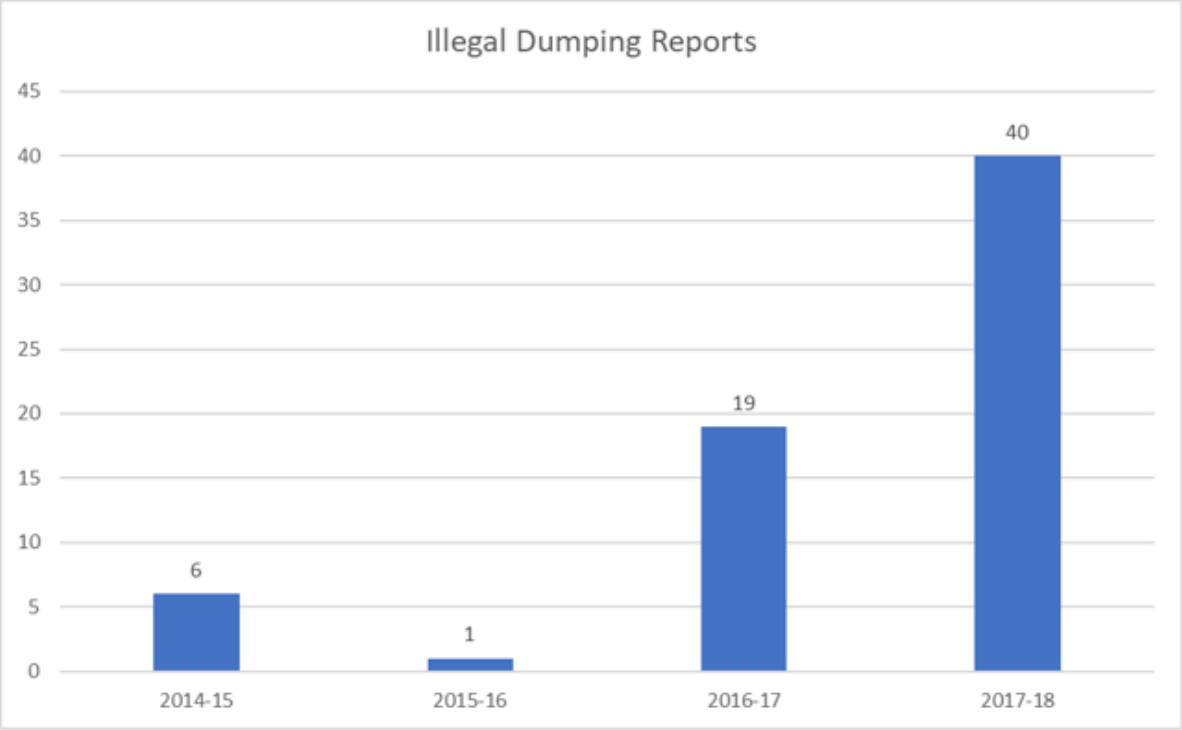


Figure 6 – Illegal dumping reports

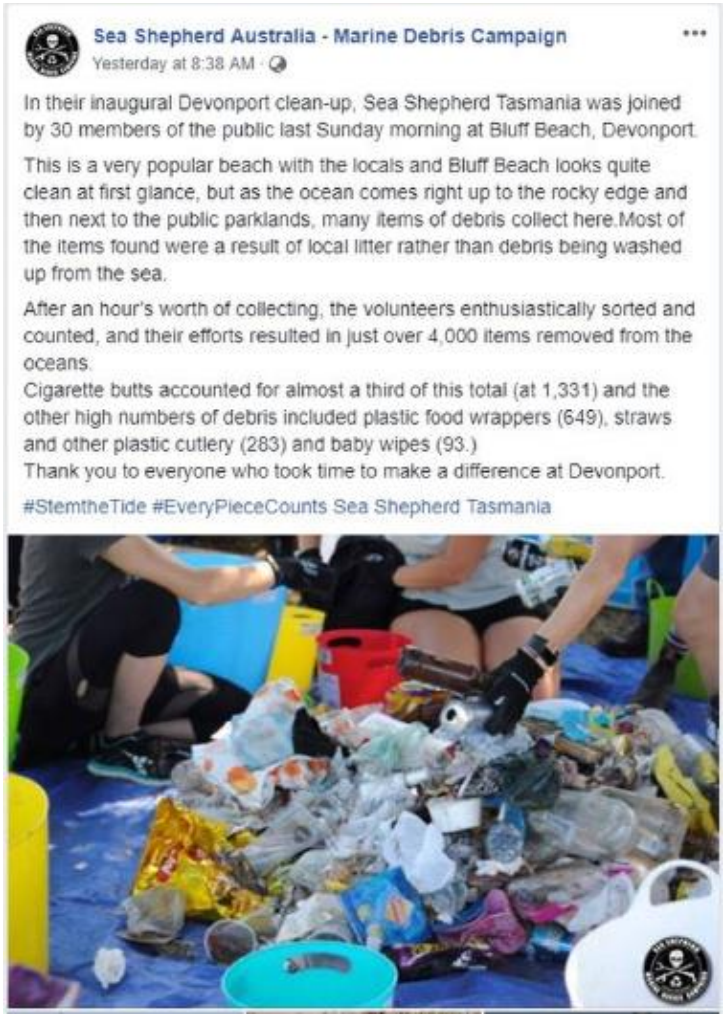


Figure 7 – Operation Marine Debris

The action plan identities the 17 actions required to deliver the three objectives of the Strategy.

Eleven of the actions are ongoing throughout the term of the Strategy. A further two are underway, while four more are scheduled to commence. Highlights of the progress made are described against the performance measures above.

COMMUNITY ENGAGEMENT

There was no community engagement undertaken in the preparation of this report. However, community engagement is a key part of achieving the strategic outcomes and is undertaken as part of each project or activity.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this report. Actions requiring capital or operational expenditure are to be considered as part of annual budget deliberations.

RISK IMPLICATIONS

- Political/Governance
  Delivering the Strategy action plan demonstrates good governance.
- Environmental Sustainability

Achieving the strategic objectives will see Council and the community improve its environmental sustainability.

- Consultation and/or Communication
  The strategic objectives require active participation and buy in from the community. Ongoing engagement on waste management issues will help to generate enduring support for the strategic objectives.

CONCLUSION

Progress has commenced on implementation of the actions listed in the Waste Strategy 2018-2023, since it was adopted in February 2018.

Performance against the identified success measures is positive for the first year of a five-year strategy.

ATTACHMENTS

⇩1. Waste Strategy 2018-2023 - Year 1 Status - action list

RECOMMENDATION

That it be recommended to Council that the report of the Infrastructure and Works Manager be received and Council note the status of actions listed in the Waste Strategy 2018-2023.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Deputy General Manager

Action Plan
Waste Strategy 2018 – 2023 – Year One Status

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2018/19	2019/20	2020/21	2021/22	2023/23				
	Objective 1: Reduce the average amount of waste generated									
1.1	Promote and/or deliver programs to increase community and business awareness, education and action to avoid and minimise waste						High	Ongoing	Council works in partnership with Dulverton Waste Management (DWM) and Cradle Coast Waste Management Group (CCWMG) to deliver a suite of programs. The DWM 2018-19 annual plan includes $589,000 of programs	Infrastructure & Works Community Services Communications
1.2	Encourage reuse of construction and demolition waste						High	Ongoing	Major material components from projects have been made available for re-use, notably the Harris Scarfe building steelwork and cladding and the Southern Rooke St pavers	All departments
1.3	Explore alternative mechanisms to encourage residents to reduce waste						High	Yet to commence		All departments
1.4	Progressively transition to more on-line platforms for delivery of Council services						High	Underway	A project is underway to upgrade the Council website which will create online processes for several activities	All departments
1.5	Work with event organisers to improve waste management at public events						Medium	Ongoing	CCWMG has made bin toppers available for Council and community events to enable diversion of recyclables. Promotion of this service is to commence in 2019	Community Services
1.6	Support for community gardens and home composting to reduce overall food waste, including waste generated through commercial food production and generation						Medium	Ongoing	Council delivers programs on living lightly, which include content on composting minimising food waste.	Community Services

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2018/19	2019/20	2020/21	2021/22	2023/23				
1.7	Improve the quality and accuracy of waste data collected to understand opportunities for improvement						Medium	Ongoing	Waste data reported publicly bi-monthly and reported to DWM for regional analysis	Infrastructure & Works
	Objective 2: Reduce the amount of waste to landfill by increasing the recovery and recycling of resources across all waste streams									
2.1	Investigate opportunities to segregate green waste from land fill						High	Underway	FOGO collection is the long-term answer to this issue. However, other smaller initiatives are being considered	Infrastructure & Works
2.2	Participate in bulk collection or free drop-off schemes for recyclables not collected through the domestic collection service (e.g. e-waste)						High	Ongoing	Council accepts e-waste paint household batteries, fluorescen tubes and tyres for recycling with assistance from DWM	Infrastructure & Works
2.3	Identify opportunities to increase resource recovery and recycling through Council facilities and operations						High	Yet to commence		Continuous Improvement
2.4	Deliver and/or support public education campaigns to encourage appropriate recycling						Medium	Ongoing	Council supports the public education campaigns of DWM and CCWMG, creating regional consistency.	Community Services Communications
2.5	Promote reuse through local businesses and charities						Medium	Ongoing	Council supports the Troll Shup at the Spreyton WTS and provides locations for charity donation bins on Council land.	Community Services Communications
2.6	Actively implement Council's business processes and policies to reflect sustainability outcomes						Medium	Ongoing	Council's purchasing policy consideration of sustainability.	Organisational Performance
2.7	Explore and trial recycling bins in public places						Low	Yet to commence	There is an opportunity to consider this as part of the Waterfront Precinct development	Infrastructure & Works
	Objective 3: Protect our natural environment by reducing the total amount of litter and illegal dumping									
3.1	Reduce litter and illegal dumping of waste through compliance and awareness raising activities						High	Ongoing	Surveillance programs are established (grant funding has been obtained to facilitate) and resources are allocated to compliance	Risk Management

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2018/19	2019/20	2020/21	2021/22	2023/23				
3.2	Participate in community action programs to improve awareness of litter and its impact (e.g. Clean Up Australia Day, Beachwatch)						Medium	Ongoing	Council supports groups and events aimed at cleaning up litter including: • Clean Up Australia Day • Operation Marine Debris (Sea Shepherd) • Various "Friends of" groups • Don College	Community Services
3.3	Investigate smart options to optimise management of public waste infrastructure to minimise litter						Low	Yet to commence		Infrastructure & Works

5.4 SIGNAGE STRATEGY 2017-2022 YEAR 2 STATUS UPDATE

File: 25428 D569058

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 3.3.1 Improve the City's physical access and connectivity

SUMMARY

To report to Council on the progress of the actions outlined in Council's Signage Strategy 2017-2022 (the Strategy).

BACKGROUND

Council first developed and adopted a Signage Strategy in 2013 to further assist with the objectives and goals in the Council's Strategic Plan 2009-2030. This Strategy was revised as the current Signage Strategy 2017-2022 and adopted by Council at its meeting in February 2017 (Min IWC 02/17 refers).

A copy of the Signage Strategy can be found on Council's website at:

http://www.devonport.tas.gov.au/Council/Publications-Plans-Reports/Council-Plans-Strategies

The goal of the Strategy is to ensure that there is a consistent approach to the design and placement of non-regulatory signage for Council owned or supported attractions and facilities by:

- providing clear guidelines for design and type;
- providing clear approach to positioning;
- defining a Signage Hierarchy; and
- providing a clear process for assessment and prioritisation of signage replacements and new signage requests.

The Strategy action plan identifies the activities to be undertaken to meet the goals of the Strategy. This report provides an update on progress on those activities for the first year of the Strategy.

STATUTORY REQUIREMENTS

There are no specific statutory requirements relating to this report.

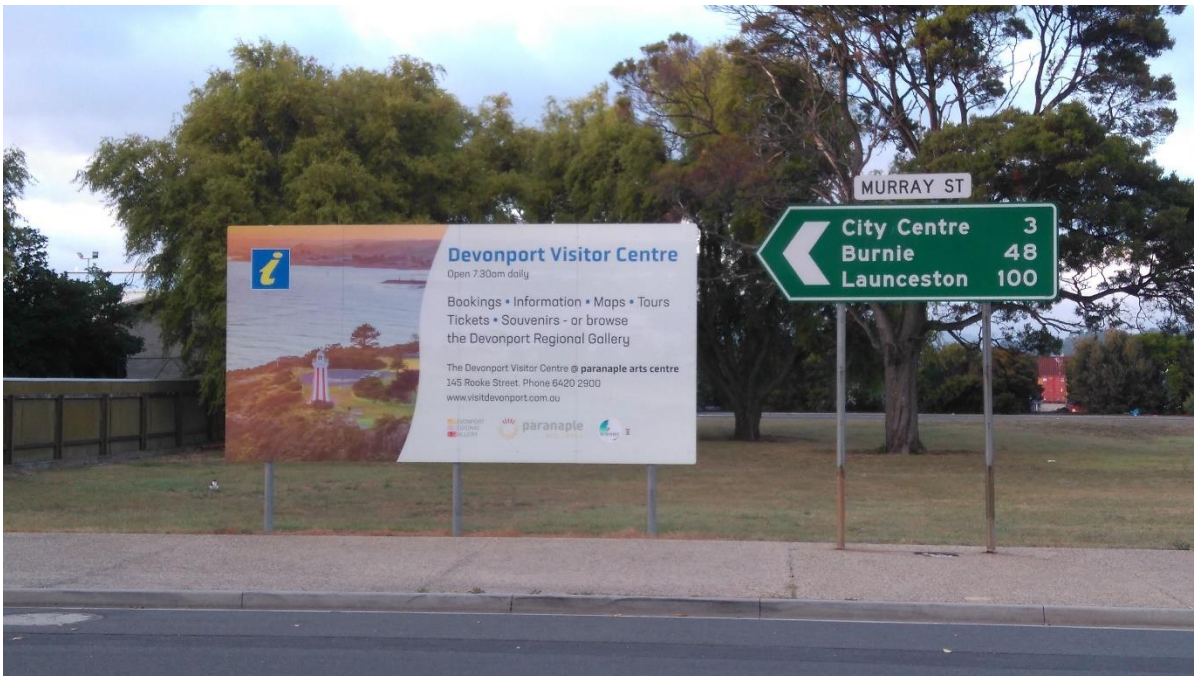
DISCUSSION

Achievements and progress for the first year of the Signage Strategy 2017-2022 are outlined in Attachment 1 of this report.

Six of the 20 actions have been completed, five are in progress, four are ongoing and five are yet to commence.

Progress in the last year includes:

- Updating of key tourist signage in East Devonport and at Devonport Airport to reflect the new location of the Devonport Visitor Information Centre.



- Updating of Google Maps with changes to the location of the Art Gallery and the Visitor Information Centre
- Home Hill signage was installed

- Mary Binks Wetlands interpretative signage was installed following the renaming of the wetlands

THE MARY BINKS WETLANDS

The Mary Binks Wetlands are named to recognise the city's first female Mayor and long-time community advocate, the late Mary Binks OAM.

Mrs Binks served as Mayor, Deputy Mayor and Alderman of Devonport over a 13-year period from 1989. She was awarded an OAM in 2005 and was Devonport's Citizen of the Year in 2008.

During her time as Mayor, Mrs Binks was instrumental in establishing support for the wetlands, an enriched habitat for a diverse range of flora and fauna on approximately 1.7 hectares of land between Mary and Caroline Streets, opposite the East Devonport Recreation and Function Centre.

Prior to the formation of the wetlands, the area was used as a landfill site for Council.

Upon its closure in 1999, local interest in re-establishing the wetlands was canvassed by Council and a Working Group involving nearby stakeholders and community members was set up.

Partnerships were established between Council, the Don College, Melaleuca Home for Aged, East Devonport Primary School and local residents.

In 2000, Council successfully gained the services of a Green Corps team to rehabilitate the site. Major earth works were carried out to form an open pond as well as adjacent boardwalk and pathway. Weed control and extensive native plantings were also undertaken.

Mary Binks OAM

CAROLINE STREET 2009 MARY STREET

CAROLINE STREET 2013 MARY STREET

CAROLINE STREET 2015 MARY STREET

In 2001, the Friends of Mary Street Wetlands Volunteer Group was formed, involving all above-mentioned stakeholders, with supervision by Council.

The Mary Street Wetlands project won a State Tidy Towns Major Environmental award in 2001. In 2002, the second stage of the walking pathway loop and seating was completed with additional assistance by local Green Corps and Work for the Dole teams.

It is a fitting tribute that the area will in future be known as the Mary Binks Wetlands ensuring that Mary's legacy and her community passion will be forever acknowledged.

In September 2018 the Devonport City Council renamed the Mary Street Wetlands to the Mary Binks Wetlands

COMMUNITY ENGAGEMENT

There was no community engagement as a result of this report.

FINANCIAL IMPLICATIONS

There are no financial implications as a result of this report.

RISK IMPLICATIONS

- Political/Governance
  Delivering the Strategy action plan demonstrates good governance.

CONCLUSION

Progress has commenced to implement the actions listed in the Signage Strategy 2017-2022, since it was adopted in February 2017.

ATTACHMENTS

⇩1. SIgnage Strategy 2017-2022 Action Plan - Year 2 Status

RECOMMENDATION

That it be recommended to Council that the report of the Infrastructure and Works Manager be received and Council note the status of actions listed in the Signage Strategy 2017-2022.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Deputy General Manager

Action Plan
Signage Strategy – Year 2 Status Update

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
	Objective 1: Improve the consistency, readability, placement, accessibility and connectivity of signage									
1	Develop a program to progressively update signage at all Council owned facilities where required.						High	Complete	A program has been developed to identify and prioritise signage requirements.	Infrastructure & Works
2	Develop and adopt a style guide for signage types detailed in this Strategy.						High	Underway	A style guide has been drafted and is being reviewed by staff.	Community Services/Infrastructure & Works
12	Conduct an audit of the existing signage and develop a program for correcting any identified issues and/or implementation of any required signage						High	Ongoing	Ongoing through service level inspections and responses to public requests	Infrastructure & Works/Community Services
16	Remove redundant signage when identified						Medium	Ongoing	Redundant signage is removed as it is identified.	Infrastructure & Works
19	Develop standard guidelines for signage installation.						High	Underway	Guidelines are being finalised	Infrastructure & Works
	Objective 2: Improve visitor's experience and enjoyment									
4	Review the current content of 'google maps' for Devonport and request updates when required.						High	Complete	Updates made for changes resultant from Living City (VIC, Art Gallery)	Community Services
6	Audit all 'Guide Signs' from the airport, Spirit of Tasmania Terminal and the Bass Highway into the City						Medium	Yet to commence	Scheduled for 2019-20	Infrastructure & Works
7	Develop and implement a styling for Major Entrance Markers • Bass Highway • Murray Street • Devonport Road						Medium	Underway	Preliminary work on locations and project scope has commenced	Community Services/Infrastructure & Works
8	Review content of existing tourism information signage at Devonport Airport						High	Complete	Billboards updated tor changes resultant from Living City (VIC). Most other content is not Devonport specific.	Community Services

No	Action:	Year Planned					Priority: H, M, L	Status	Outputs	Responsible Department
		2017/18	2018/19	2019/20	2020/21	2021/22				
	Objective 3: Make Devonport Precincts and attractions easier to navigate									
5	Conduct an audit of the existing signage for public amenities and develop a program for implementing any identified improvements.						High	Complete	An audit has been completed and required signage installed.	Infrastructure & Works
10	Install Directional Signs in CBD area and Eastside Village						High	Underway	Update of map-based signs scheduled for 2019	Infrastructure & Works
11	Identify opportunities to improve 'way finding' to key attractions within the City						High	Ongoing	Signage for Market Square pending	Community Services
	Objective 4: Increase and improve walking/cycling connectivity and make walking/cycling more attractive									
	N/A – delivered by other actions									
	Objective 5: Promote Council owned or supported local attractions and facilities									
9	Develop and implement a program for installation of Destination Signage at all Cemeteries in Devonport						Medium	Yet to commence		Infrastructure & Works
13	Implement signage for Bass Strait Maritime Centre						High	Complete		Community Services
14	Develop and implement signage for Home Hill						Medium	Underway	Entry signage. Need for other site signage to be determined.	Community Services
15	Develop a program for designing and implementing interpretive signage						Medium	Yet to commence		Community Services
	Objective 6: Prioritise investment and improve efficiencies in managing signage resources									
17	Apply for grant funding where possible to fund priorities of the strategy						Medium	Ongoing	No signage-specific grants available but able to integrate upgrades into grant funded projects in future (e.g. Coastal Pathway and LIVING CITY)	Community Services
18	Promote the use of digital technology for 'way finding'						Medium	Yet to commence		Communications
20	Implement an assessment system to prioritise signage requests						High	Complete		Infrastructure & Works
21	Incorporate signage into existing asset management guidelines						Medium	Yet to commence	Will occur as asset management practices improve	Infrastructure & Works

5.5 80-82 RIVER ROAD, AMBLESIDE

File: 10803 D569071

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 5.3.2 Provide appropriate support to elected members to enable them to discharge their functions

SUMMARY

This report provides Council with an update regarding the potential rezoning of land at 80-82 River Road, Ambleside.

BACKGROUND

The site is an approximately 1.8ha land parcel identified by Certificate of Title 145087/1 and with the property address of 80-82 River Road, Ambleside. The site generally comprises undeveloped land with well-established vegetation.

Figure 1 – Location of site 80-82 River Road, Ambleside (Source: DCC Geocortex – aerial imagery c. Sept. 2015)

The site is currently zoned Environmental Management under the *Devonport Interim Planning Scheme 2013* (the Interim Planning Scheme). Adjacent land to the north, east and south of the site is zoned General Residential and comprises established residential use and development, whilst to the west the site is bound by the Mersey River which shares the same Environmental Management zoning as the subject site.

The purpose of the Environmental Management Zone under the Interim Planning Scheme is to:

(a) provide for the protection, conservation and management of areas with significant ecological, scientific, cultural or aesthetic value, or with a significant likelihood of risk from a natural hazard; and

(b) to only allow for complementary use or development where consistent with any strategies for protection and management.

Before the Interim Planning Scheme commenced in October 2013, the site was zoned Public Open Space under the *Devonport and Environs Planning Scheme 1984*.

The reassignment of the site to an Environmental Management zoning under the Interim Planning Scheme was likely influenced by the site being identified as containing threatened native vegetation – namely *melaleuca ericifolia* (commonly known as swamp paper bark*)*. The State Government's Land Information System Tasmania (the LIST) database identifies this threatened native vegetation within the site.

The site has previously been the subject of various Council reports having long been identified as being surplus to Council's needs.

Although the subject land is owned by Council, it is not public land for the purposes of Section 177A of the *Local Government Act 1993* (the Act) – and therefore not listed on Council's Public Land Register.

At its Ordinary Meeting of 28 August 2017, the Council resolved to dispose of the land in accordance with the requirements of the Act.

A subsequent Council workshop on the matter in January 2018 recognised that the existing Environmental Management zoning is more restrictive on use and development, than the surrounding General Residential zone. In that context the value of the land that Council could expect from its sale would likely be lesser than if the site was zoned General Residential (which is more conducive to further development ie subdivision).

Council therefore determined that before commencing land sale proceedings it would pursue a rezoning of the site to General Residential as part of preparing its Local Provisions Schedule for the forthcoming Tasmanian Planning Scheme.

Whilst Council has previously been aware of the environmental values associated with the occurrence of the threatened native vegetation *melaleuca ericifolia* (swamp paper bark) on the site, additional considerations have recently been raised whereby the State Government has identified this site as containing a very high conservation value as a wetland environment. These new considerations impact on the ability of Council to pursue an alternative zoning as part of the Local Provisions Schedule process and direction is sought from Council on how it would like to proceed.

STATUTORY REQUIREMENTS

Any determination to pursue a rezoning of this land will be considered against the requirements of the *Land Use Planning and Approvals Act 1993*. A decision to proceed with the disposal of the land, or instead retain under Council ownership and place it on the public land register will be made in accordance with the requirements of the *Local Government Act 1993*.

DISCUSSION

It was always recognised that the nomination of the General Residential Zone for this site, as part of preparing the Local Provisions Schedule (LPS), would need to be supported by appropriate justification as to why the retention of the Environmental Management zone is not warranted.

More specifically, justification would require an appropriately robust assessment conducted by a suitably qualified person on the natural environment values occurring on the site.

As Council works to finalise its draft LPS, in line with Minister for Planning's direction that all local Councils have submitted their draft LPS by or before 30 June 2019, recent discussions with personnel from the State's Planning Policy Unit have revealed additional environmental considerations for the site at 80-82 River Road of which Council was not previously aware.

Whilst Council has long been aware of the identified environmental values associated with the occurrence of the *melaleuca ericifolia* (swamp paper bark) on the site, it has recently been brought to Council's attention that the site is further identified as a very high conservation value wetland environment. This identification was completed as part of the *Conservation of Freshwater Ecosystems Values* program initiated by the State's Department of Primary Industries, Parks, Water and Environment (DPIPWE).

Figure 2 – Conservation of Freshwater Ecosystems Map (Source: www.thelist.tas.gov.au)

The State's identification of this site as containing a "very high value" wetland environment means that if Council wants to pursue a rezoning of this site and make it available for residential use and development, then it will need to produce a very comprehensive and compelling assessment which disproves the previous study conducted by the State.

Council would have to engage a suitable independent consultant for this task. Such a study is likely to take some time to compile and also come at a reasonably significant cost.

A further consideration here is that the final determination on the rezoning of this land will be made by the Tasmanian Planning Commission (the Commission). Accordingly, there is no guarantee that the Commission will support a rezoning of this land.

Based on the information recently received by Council, there are four options available for Council to consider for the site:

Option 1 – Do not pursue a rezoning of the land and proceed with disposal of land
This option would mean that Council would not seek to rezone the land and to proceed with the disposal of the land in accordance with the August 2017 resolution.

The issue with this option is that the existing planning scheme zoning of Environmental Management only provides for a limited range of use and development opportunities. Were the Council to sell the land, there is some likelihood that future owners of the land would seek approval for a rezoning of the land to open the land up for development. In accordance with the previous commentary around the State's identified significant environmental value, there would need to be compelling justification as to why the retention of the Environmental Management Zone is not warranted. There is reasonable doubt that such a proposal would be endorsed by the Tasmanian Planning Commission.

For the reasons indicated above, this is not the recommended option.

Option 2 – Consider a rezoning of the site as "stand-alone" Planning Scheme Amendment
Under this option the Council would not try and include a rezoning of the land with the preparation of its Local Provisions Schedule, but instead utilise the normal planning scheme amendment process (including statutory public notification).

A comprehensive study by an independent consultant would be required on the natural environmental values of the site, and the assessment and final determination of the amendment would reside with the Tasmanian Planning Commission.

This option inherits the risk of Council spending a significant amount of time and money seeking a rezoning, when there is no guarantee that the Commission will determine favourably. That risk is made far more prevalent given the State's identification of this site as containing a very high conservation value wetland environment. Therefore, this is not the recommended option.

Option 3 – Continue to pursue a rezoning of the site as part of the Local Provisions Schedule
This option would pursue the inclusion of the reassignment of the land to the General Residential Zone as part of preparing the Local Provisions Schedule.

As with Option 2, a comprehensive study by an independent consultant would be required on the natural environmental values of the site, and the assessment and final determination of the amendment would reside with the Tasmanian Planning Commission.

This option also assumes the risks identified for Option 2, as well as consideration that all local Councils have been directed to finalise their draft Local Provisions Schedule on or before 30 June 2019. It would take some time to identify and engage a suitable consultant and then prepare a suitably robust study (assuming that study arrives at a favourable conclusion). It is unlikely that this would fit within timeframe required to finalise the draft Local Provisions Schedule.

For the reasons detailed above, this is not the recommended option.

Option 4 – Council retains ownership of the land and assign it to the Public Land Register
This option holds that Council maintain ownership and nominate the land as "public land" for the purposes of Section 177A of the *Local Government Act 1993* by assigning the site to Council's Public Land Register. The existing planning scheme zoning would be retained.

Given the State Government's identification of this site as containing a very high conservation wetland, which Council has only recently become aware of, the retention of this land under Council ownership and the addition to the Public Land Register would be the most reasonable option. It is further suggested that the addition to the Public Land Register be made with a "reserve" type listing like that made for the Mary Street wetlands in East Devonport.

This option exposes Council to the least amount of risk and provides for the most appropriate recognition of this site as a high conservation value wetland environment. This is, therefore, the recommended option.

COMMUNITY ENGAGEMENT
Community engagement was not untaken for the preparation of this report.

FINANCIAL IMPLICATIONS
The valuation information provided by the Valuer-General in 2015 identified the property as having a land value of $310,000.

A formal valuation in accordance with the Act would need to be obtained should Council wish to proceed with disposal of the land.

Legal and valuation costs would be deducted from the proceeds of sale, as well as any costs relating to the sale (real estate agent and/or auction costs etc).

RISK IMPLICATIONS

The information provided above details and identified risks with each of the four options.

CONCLUSION

Considering all the options available to Council regarding the land at 80-82 River Road, Ambleside, Council retaining ownership of the land and assigning it to the Public Land Register presents the least risk to Council and provides for the most appropriate recognition of this site as a high conservation value wetland environment. This is therefore the recommended option.

ATTACHMENTS

Nil

RECOMMENDATION

That it be recommended to Council that:

(a) Council does not proceed with the disposal of the land at 80-82 River Road, and

(b) that Council retain ownership of this land and assign it to the Public Land Register for the purposes of the *Local Government Act 1993*.

Author:	Mark McIver	Endorsed By:	Matthew Atkins
Position:	Project Officer	Position:	Deputy General Manager

5.6 RISK MANAGEMENT FRAMEWORK

File: 26920 D572595

RELEVANCE TO COUNCIL'S PLANS & POLICIES
Council's Strategic Plan 2009-2030:

Strategy 5.6.2 Develop, implement, maintain and comply with Council's Risk Management Framework

SUMMARY
Council's Risk Management Framework has been revised. This report provides an overview of the changes and seeks Council's endorsement of the revised Risk Management Framework.

BACKGROUND
The Risk Management Framework (RMF) outlines how Council will manage risks effectively and efficiently. It illustrates how risk management is embedded throughout organisational systems to ensure it is integrated at all levels and work contexts.

STATUTORY REQUIREMENTS
There are number of legislative requirements with which Council must comply, including the relevant provisions of the *Local Government Act 1993*. Ensuring compliance with Acts and Regulations is an important component of Council's RMF.

AS ISO31000:2018 – Risk Management Guidelines provides further instruction on risk management responsibilities for an organisation.

DISCUSSION
The RMF has been reviewed by Council's internal Risk Audit and Compliance Committee and the Management Team. It was also listed on the recent Audit Panel agenda. A number of minor changes have been made to reflect Council's commitment to continual improvement of risk management across the organisation.

These changes include:

- Reviewing revised AS ISO31000:2018 Risk Management Guidelines
- Updating revised risk management principles
- Reviewing key performance indicators

COMMUNITY ENGAGEMENT
Community consultation has not been undertaken as part of this report. Once the new version is adopted, the RMF will be available to the public on Council's website.

FINANCIAL IMPLICATIONS
There is significant financial risk to Council arising from poor risk management practices and inappropriate or insufficient insurance coverage.

RISK IMPLICATIONS
Incidents, significant insurance claims and poor risk management practices may have a detrimental effect on a Council's reputation.

CONCLUSION

It is recommended that Council endorse the revised Risk Management Framework, which reflects Council's current approach to risk management across the organisation.

ATTACHMENTS

⇩1. Risk Management Framework 2019-2021

RECOMMENDATION

That it be recommended to Council that the report of the Risk and Compliance Coordinator regarding the revised Risk Management Framework be received and that Council endorse the attached Risk Management Framework.

Author:	Karen Stone	Endorsed By:	Matthew Atkins
Position:	Risk & Compliance Coordinator	Position:	Deputy General Manager

RISK MANAGEMENT FRAMEWORK

The City with Spirit

TABLE OF CONTENTS

SECTION 1 -OVERVIEW

1.0 Introduction

Devonport City Council operates within the framework of local government defined by the *Local Government Act 1993* and provides service, compliance and regulatory functions to the community.

Risk management refers to coordinated activities which direct and control an organisation with regard to risk. A Risk Management Framework (RMF) is defined as the set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout an organisation.

Risk management involves establishing a customised RMF, a risk aware culture, and applying logical and systematic risk management processes to all stages of the life cycle of any decision, activity, function or operation that includes the potential for risk.

Risk Management is critical to Council's ability to achieve the outcomes and strategies contained in its Strategic Plan. The aim of the RMF is not to eliminate risk but, rather to identify and manage risk on an ongoing basis, consistently across all council activities, whilst maximising opportunities and minimising adversity. It provides a system for the setting of priorities when there are competing demands on Council's limited resources. Furthermore, the RMF supports the transparency of risk information to all stakeholders and interested parties.

This RMF defines the arrangements for managing risk across the organisation effectively and efficiently.

The RMF illustrates how risk management is embedded in Council's systems to ensure it is integrated at all levels and work contexts. It describes the key principles, elements and processes to guide staff in effectively managing risk, making it part of day-to-day decision-making and business practices.

Risk management is incorporated into strategic, annual and operational planning processes at all levels of Council.

Key objectives of the RMF include providing Council with the tools required to practice effective risk management. The Framework is designed to:

- Outline the key principles and approach Council will employ to manage risks including appropriate methodologies with respect to the identification, analysis, measurement, management, reporting and monitoring of all risks;
- Identify stakeholders and outline their risk management roles and responsibilities;
- Ensure risk management activities are consistent with Council's strategic objectives and operations including integration within service delivery planning and objectives which satisfy all legal and regulatory obligations;
- Create a sound internal control environment;
- Ensure that reporting of risk exposures and incidents are completed in an accurate and timely manner;
- Align with Council's performance measurement programs; and
- Support change management by increasing the transparency of risks.

Council's success depends upon factors including:

- The health and wellbeing of our people;
- Due care towards our customers and the community;
- The protection of our assets;

- Incorporating legislative requirements into our work processes;
- Sound financial management; and
- Good governance and political decision making.

2.0 Background

Risk is inherent in all aspects of an organisation's activity. *AS ISO 31000:2018 - Risk Management Guidelines* ('the standard') defines risk as "the effect of uncertainty on objectives".

Council utilises the framework provided by the standard and its successors, to develop and implement its approach to:

- Risk identification;
- Risk analysis;
- Risk evaluation;
- Risk treatment;
- Monitoring and review; and
- Communication and consultation.

Risks can emerge as circumstances change – risk is dynamic and as such the process of risk management is continual. Risk management will form part of how the organisation undertakes work and delivers services to the community on a day to day basis. Responsible risk management activity must be a part of the standard management practices and actions of employees.

3.0 Council's Vision, Mission, Goals and Outcomes

Risk management is essential for the successful implementation of Council's Corporate Planning Framework. It supports the achievement of Council's vision for the future and development of the community through other strategic goals, objectives and actions. Council's strategic direction section of the Annual Plan includes:

- Living lightly on our environment;
- Building a unique city;
- Growing a vibrant economy;
- Building quality of life; and
- Practicing excellence in Governance.

This RMF builds on objectives and outlines the methodology adopted to identify, assess, manage and report on all risks in the organisation to ensure all parties understand how risk is managed. The RMF integrates the process for managing risk into the organisation's various activities.

Council's Strategic Plan states, "Risk Management is a core organisational focus" and the strategies underpinning this outcome include:

5.6.1 Ensure safe work practices through adherence to Work Health and Safety Standards

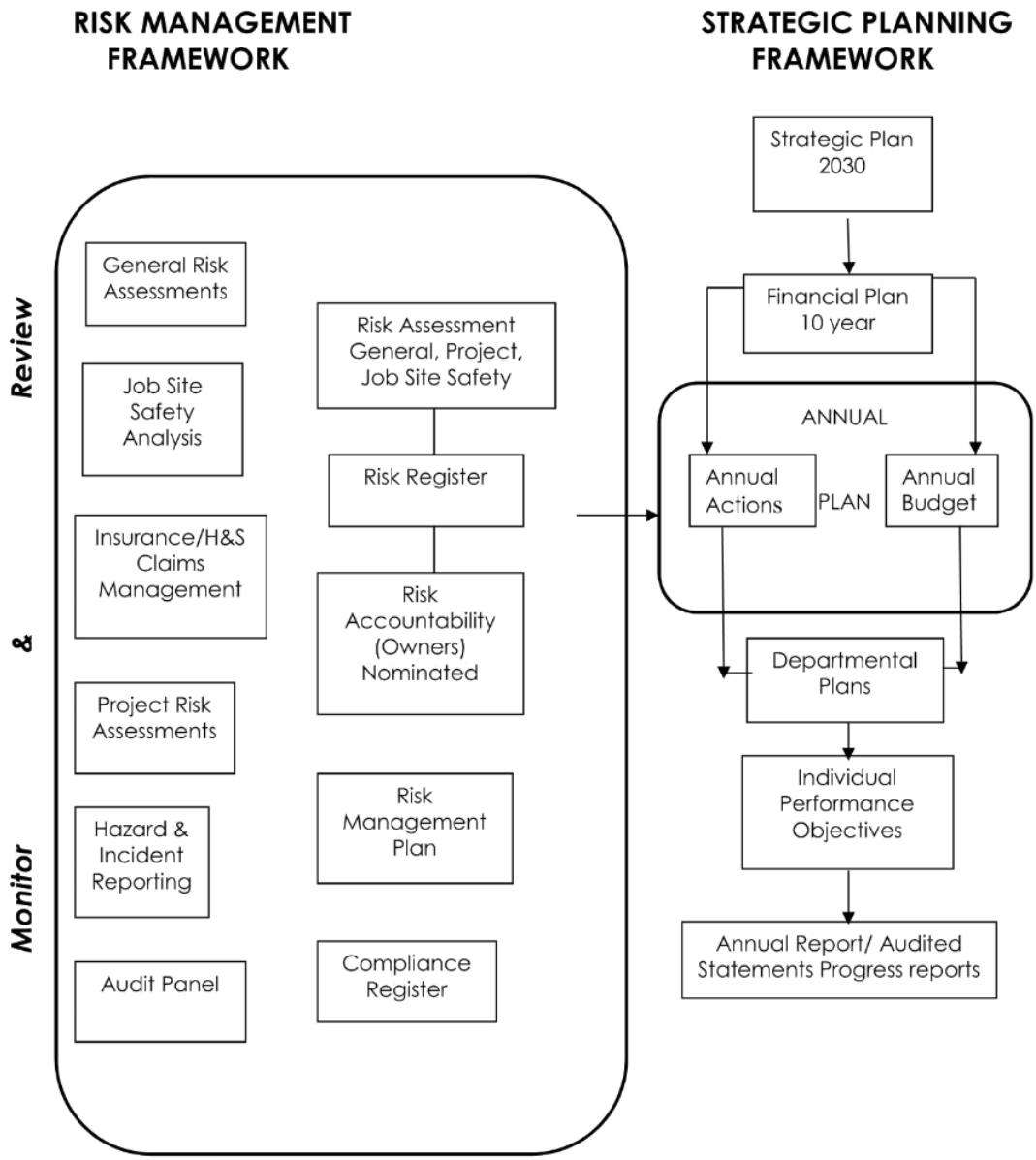
5.6.2 Develop, implement, maintain and comply with Council's Risk Management Framework

5.6.3 Integrate risk management principles into all business practices

5.6.4 Provide internal and external audit functions to review Council's performance, risk management, financial governance and reporting

5.6.5 Ensure compliance with all relevant legislative requirements, standards, policies and procedures

Figure 1 – The relationship between risk management framework and strategic planning framework



4.0 Policy Statement

Council is committed to:

- implementing a consistent and structured organisation-wide approach to risk management in order to achieve an appropriate balance between realising opportunities for gains and minimising losses; and
- managing risk at both strategic and operational levels to ensure that it makes informed decisions with respect to all activities it undertakes by appropriately considering both risks and opportunities.

Council acknowledges that the adoption of a strategic and formal approach to risk management will likely provide numerous benefits. These benefits include, but are not limited to:

- effective corporate governance;
- compliance with relevant legislation;
- protecting people's safety;
- proactive rather than reactive management;
- more rigorous decision making and planning; the right decisions for our people and our community;
- better identification of our strengths, weaknesses, opportunities and threats;
- more effective allocation and use of resources;
- improving staff confidence;
- maintaining a positive public image;
- more effective asset management;
- limiting exposure to litigation;
- a clear understanding by all employees of their roles, responsibilities and accountabilities for managing risk; and
- the development of a more risk aware organisational culture through enhanced communication, measurement and reporting of risk.

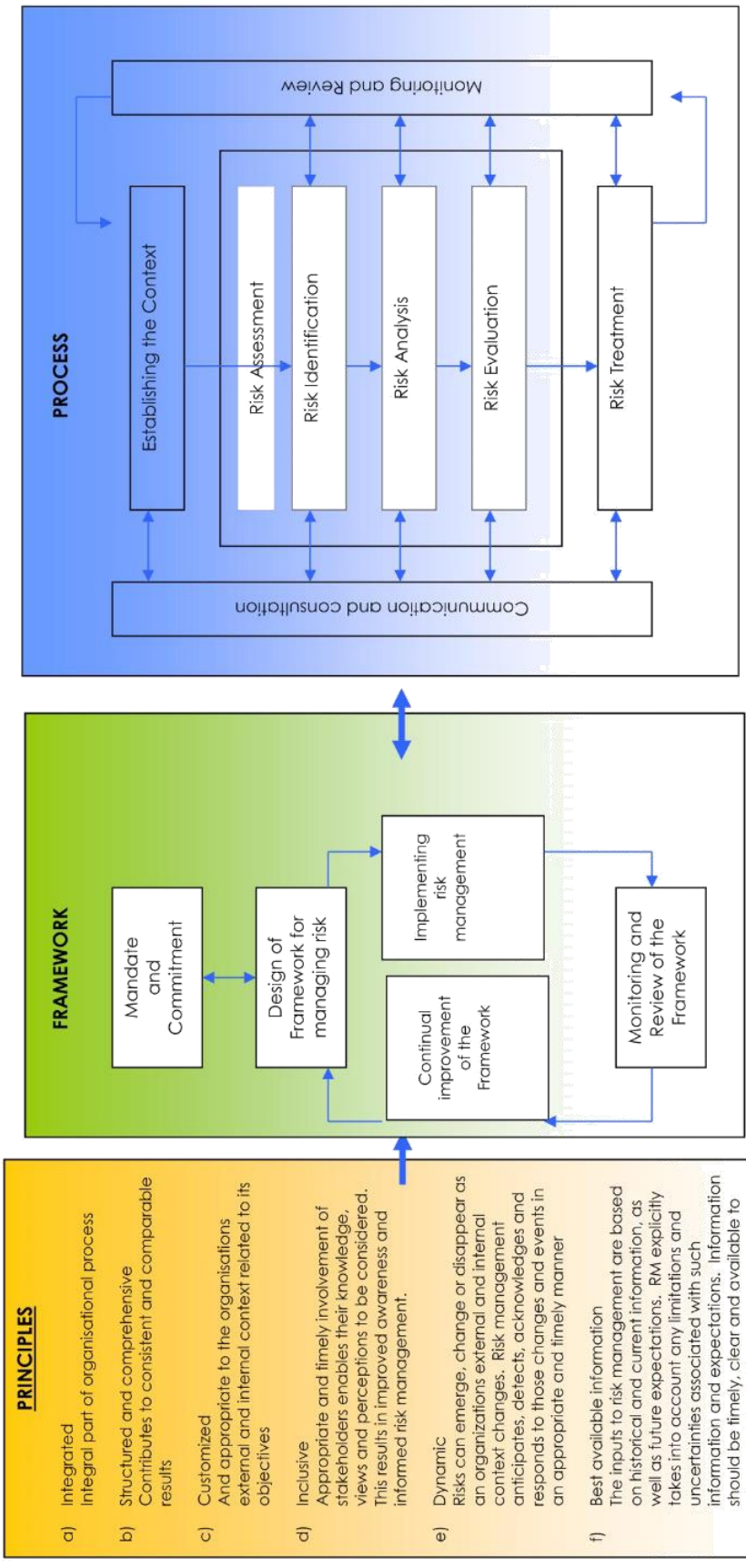
5.0 Scope

A risk event can result from an occurrence or change of a particular set of circumstances. The effect is a deviation from the expected and can be positive and/or negative.

Risk sources within the context of Council's operations include:

- Corporate Risk Register – Strategic Outcomes;
- Workplace Health & Safety;
- Corporate & Business;
- Asset/property Infrastructure;
- Legal compliance;
- Financial/Fraud;
- Information Technology;
- Environmental Sustainability;
- Consultation/communication;
- Risk Management Practices;
- Human Resources;
- Emergency/Business Continuity Management; and
- LIVING CITY

Figure 2 - The relationships between risk management principles, framework and process



6.0 Risk Appetite Statement

Defining Council's risk appetite provides the strategic guidance necessary for decision making.

Council has a role in managing outcomes for the community which recognises a wide set of values and views of its many stakeholders both current and future. These responsibilities require a high level of prudence in decision making to ensure the needs of many stakeholders are considered in the context of ongoing community development and competing interests.

Council's risk appetite is measured in this context of community stewardship.

Additionally, Council as a regulatory body, has an obligation to administer services within a prescriptive legislative framework.

However, Council may be forced to take risks beyond its choosing to comply with government directives or to satisfy public expectations of improved services.

The risk appetite statement provides direction on the risk parameters within which Council operates. Managing risks in accordance with the risk appetite statement allows Council to commit to excellence in leadership and service, live lightly on our environment, build a unique city, grow a vibrant economy, build quality of life, and practice excellence in governance activities.

Risk appetite is the amount and type of risk Council is willing to pursue or retain in order to achieve its objectives.

Council has a low appetite for risks which may:

- Have a negative impact on Council's long-term sustainability;
- Compromise the safety and wellbeing of staff, aldermen, contractors and members of the community.

Council has a medium appetite for risks that:

- Maintain and improve levels of service to the community;
- Improve efficiency, reduce costs and/or generate additional sources of income.

7.0 Risk Tolerance

Risk tolerance is Council's readiness to bear any residual risk after any risk treatment.

In determining the level of risk that Council can tolerate, risk assessment tools within the framework are used to measure the probability and potential impact of that risk, using a likelihood and consequence matrix to calculate a risk level of:

- High
- Significant
- Moderate
- Low

SECTION 2 – BUSINESS SYSTEMS

8.0 Business Systems

The RMF is one component of business systems within Council. The RMF aims to build resilience in the planning of service delivery for the Devonport municipal area by highlighting the strengths of current operating practices whilst identifying areas for improvement. The RMF supports existing programs and initiatives undertaken by Council to manage its risk to ensure delivery of its strategic and operational objectives.

The RMF is applicable to all Council operations and functions - including activities carried out under its direction, to public infrastructure it controls and to those situations where employees and contractors are required to work on Council projects.

8.1 Decision Making

The following Risk Management principles shall be a consideration in all Council decision making processes:

- Creates value;
- Integral part of organisational processes;
- Explicitly addresses uncertainty;
- Systematic, structured and timely;
- Based on the best available information;
- Tailored;
- Takes human and cultural factors into account;
- Transparent and inclusive;
- Dynamic, and responsive to change;
- Facilitates continual improvement and enhancement of the organisation; and
- Financial implications short and long term.

In accordance with its common law 'duty of care' statutory responsibilities Council will ensure that resources are allocated to:

- Minimise Council's exposure to loss and litigation;
- Protect and enhance Council's reputation;
- Protect Council's financial and physical assets;
- Maintain employee health and safety
- Ensure continuous improvement in the Risk Management process; and
- Risk implications will be included in all Council reports to aid decision making

8.2 Council Policies & procedures

Council policies and procedures are mandated statements that directly guide Council's decision making. Council policies and procedures help to direct response and organisational direction, and minimise risk through promoting consistency, establishing precedents and expected actions/outcomes, helping to avoid inefficient, inconsistent and ineffective decisions. Council policies and procedures are of direct relevance to ratepayers and the community, and help establish parameters that align with community expectations, ensuring legislative and statutory compliance, and therefore assisting in risk management.

8.3 Continuous Improvement

Council is committed to continuous improvement and the pursuit of excellence in service delivery and business processes. The Framework complements the methodology of continuous improvement by consideration of:

- Consultation and Communication;
- Cost/Quality;
- Effective resource use;
- Financial sustainability; and
- Accountability.

8.4 Business Continuity, Emergency Management and Disaster Recovery

Risk management supports Council's Business Continuity Policy and Plan and Council's Emergency Management and Disaster Recovery Plan by identifying issues and events that may pose a threat to the continuation of business and impact on the community.

8.5 Contract Administration Process

The contract administration process of Council is supported by the Risk Management Framework as effective management of risk aids in the identification of issues and events that may impact contract preparation and implementation phase.

8.6 Asset Management

The RMF operates to enhance Council's asset management system by ensuring that effective processes are in place to manage asset risks.

8.7 Event Planning

Effective risk management processes are crucial to efficient planning and delivery of events that ensure public safety and event success.

8.8 Project Management

Risk management is an integral part of project management. It is imperative that risks are identified at the project development stage so that designs and processes can be adjusted to minimise or eliminate exposure to risk.

8.9 Health & Safety Management

Risk management is effective in assisting with the integration of principles, practices and criteria for implementing best practice health and safety management.

8.10 Fleet Management

The RMF assists Council in ensuring effective processes are in place to manage risks associated with fleet management.

8.11 Organisational Risk Management

The RMF assists Council in embedding sound risk management practices into the organisation, and the creation of a safer community environment, by ensuring policies and procedures reflect risk mitigation relating to public liability matters.

Council's public liability insurer undertakes comprehensive risk assessments on selected potential risk areas. Recommendations from this process will be considered by Council.

8.12 Fraud

Council has a zero tolerance in relation to fraud and corruption. Fraud can erode confidence in the Council, deprive the public of resources, reduce the effectiveness of Council assets and equipment, harm customers, employees or the public and damage staff morale. By utilising tools within the RMF Council can assess and measure its vulnerability to fraud and implement robust controls for its prevention.

8.13 Service Levels

Council is responsible for the operation and management of its assets including road pavement, kerb and channelling, street furniture, public recreational and open space, buildings and waste management services. The service levels set out the manner in which Council will meet its various obligations and identifies a benchmark level of service to be provided.

8.14 Community Engagement

Council recognises that community engagement and participation processes are a vital part of democracy. Effective engagement is good business practice and is critical in managing reputational risk. Council is committed to engaging with the Devonport community.

An engagement framework provides direction on engagement planning including guidance on when and how council should engage with the community for different situations.

8.15 Audit Panel

While development and implementation of a robust and integrated internal control and risk management framework is Council's responsibility, the Audit Panel has a key role in overseeing and monitoring internal control and risk management programs. As part of its role, the Audit Panel should review whether Council possesses:

- An effective risk management system;
- Adequate internal controls to safeguard Council's financial sustainability and assets; and
- Internal processes for determining and managing material operating risks in the following areas:
  - Potential non-compliance with legislation, regulations and standards and internal Council policies and procedures;
  - Important accounting judgements or estimates that prove to be incorrect;
  - Litigation, claims and complaints made against Council;
  - Fraud, theft and other illegal and unethical behaviour; and
  - Significant business risks, such as workplace health and safety.

8.16 Procurement

Risk assessments are conducted prior to the procurement of all major contracts, including plant and equipment, to ensure the relevant parties are consulted, any plant and equipment acquired is suitable for its intended purpose and will meet the needs of Council now and into the future.

SECTION 3 -PLANNING

9.0 Planning and Resourcing

9.1 Resource Challenges

The RMF acknowledges that there are and always will be limitations and challenges for Council to resource and deal with risks which arise.

However, identification of risks should not be limited by the possibility that there may be insufficient funds to immediately improve how Council currently manages it risks.

This Framework approaches the understanding and identification of risks faced by Council in the broadest context. The approach to be used is to identify risks without considering possible cost of treatment but how to manage those risks with a view to maximising existing resources.

This approach is based on the philosophy that it is better to be aware of risks (even knowing that only the most critical can be dealt with after application of a prioritisation process), than to be caught unaware when a risk event occurs, suffer loss or failure, and potentially be held accountable.

9.2 Links to Council Planning and Budgeting Cycles

The RMF raises issues ranging from the highest strategic level e.g. Council's formal decision making through to the detailed issues of delivery of services to the community and the care of community assets.

The risk management process identifies issues to consider as part of Council's strategic planning and budget processes.

9.3 Budget Planning and Prioritisation

The RMF provides an effective and transparent prioritisation tool for decision making when long term and annual financial resource allocations are being considered.

This process contributes to the quality of the longer term financial plans of Council (including capital works and asset management programs) and assists in effective decision making in strategic planning which in part must recognise the future implications of today's decisions.

Safety and risk mitigation projects are identified, as part of Council's five-year capital expenditure program, to address high potential liability issues and reduce Council's exposure to risk.

Through the use of a common framework to assess priorities sound, transparent and defensible financial decisions and recommendations are possible.

9.4 Risk Assessments

Risk assessments will be conducted in accordance with Council's risk assessment methodology. Risk data will be stored in the Risk Register.

9.5 Hazards and Incidents

Hazard and incident reporting highlights hazards and incidents and allows this information to be integrated into the Risk Register. These risks are then considered.

SECTION 4 - REPORTING

10.0 Key Performance Indicators

The following measures have been developed to aid in tracking the implementation and effectiveness of the Risk Management Framework.

- % Staff provided with Risk Management Awareness Training
- Number of Risk Treatments past due date
- Number of risks without owners
- Number of Targeted Risk Appraisals actions past due date
- Number of Potential Claims
- Number of Outstanding Claims.

10.1 Reporting Mechanisms

To ensure transparency of risk management information across Council, a series of reports will be produced throughout the year:

Report	Frequency	Prepared by	Audience
Potential Claims Significant Claims Update Claims Summary	Bi-Monthly	Risk & Compliance Coordinator	Management Team
Risk Register Review	Annually	Risk & Compliance Coordinator	Management Team
Detailed Claims Report Fraud, Theft, Probity & Breaches of Law Relevant Business Risks	Quarterly	Executive Manager Organisational Performance	Audit Panel
Risk Register Overview Significant Business risks Risk Department update & Insurance Portfolio	Annually	Risk & Compliance Coordinator	Audit Panel
Detailed Claims Report Potential Claims Risk Register Review Embedded Risk Areas	Monthly	Risk & Compliance Coordinator	Risk Audit & Compliance Committee
Risk Management Activities	Annually	Risk & Compliance Coordinator	Community via Annual Report
Risk & Compliance Activities	Bi-monthly	Risk & Compliance Coordinator	Councillors

Unscheduled Reports ▪ Hazards and Incidents/Risk events: report of any risk events / incidents including remedial action	Monthly	Risk & Compliance Coordinator	Safety Committee
▪ New and emerging risks/issues	Fortnightly	Risk & Compliance Coordinator	Management Team

SECTION 5 - RESPONSIBILITY

11.0 Roles and Responsibilities

Risk management responsibilities are incorporated into Council Position Descriptions and success measures developed for staff to form the basis of both formal and informal performance management discussions. The following table outlines the general responsibilities of various stakeholders:

Stakeholder	Roles and Responsibilities
Council	Council will: ▪ Be aware of Council's Risk Management Framework, specifically through the provision of an Audit Panel ▪ Consider all risk implications when making decisions ▪ Make funding and resources available to adequately manage risks identified in the Risk Register
General Manager	The General Manager is required to take all reasonable steps to: ▪ Provide a safe and healthy work environment, in accordance with the *Work Health & Safety Act 2012*, its amendments, Regulations, related codes of practice and Australian Standards ▪ Understand the principles of Risk Management ▪ Ensure that Council meets its 'duty of care' to staff and the general public and protects its assets through education, appropriate risk financing and adequate loss control programs and measures ▪ Monitor and evaluate the performance of Managers against their Risk Management responsibilities ▪ Assist Council in the development and maintenance of Councils Corporate Planning Framework ▪ Lead the Management Team in the development and implementation of risk actions plans ▪ Promote Risk Management as a vital business principle ▪ Ensure that Council is provided with adequate risk information to make informed decisions
Managers	Managers are required to take all reasonable steps to: ▪ Provide a safe and healthy work environment in accordance with the *Work Health & Safety Act 2012*, its amendments, Regulations, related codes of practice and Australian Standards ▪ Understand the principles of Risk Management ▪ Monitor and evaluate the performance of Coordinators, Supervisors and Team Leaders against their Risk Management responsibilities ▪ Contribute to the analysis of all potential and actual high loss incidents within their jurisdiction ▪ Develop and implement risk actions plans ▪ Keep staff appropriately informed of all changes relating to registered risks ▪ Identify any risk issues that should be incorporated into the forthcoming annual plan & estimates ▪ Promote Risk Management as a vital business principle

	▪ Apply the Risk Management processes for the management of risk exposure ▪ Ensure all accidents, incidents, injuries or near misses within the area under their control are reported and investigated ▪ Managers to review with Coordinators and workers all aspects of the risk management program on a regular basis, including workplace inspections and risk management audits

Development Services Manager/Risk & Compliance Coordinator	▪ Provide advice and assistance to all Council staff in relation to the development and implementation of an effective Risk Management System that observes the principles of *AS ISO 31000:2018 Risk Management*
	▪ Monitor the overall effectiveness of the Risk Management system
	▪ Oversee and provide input into the development and maintenance of a Risk Information System integrated with other systems to provide timely, accurate and relevant information of losses, claims, premiums and other risk related information.
	▪ Ensure that all documentation maintained and generated within the Risk Management process complies with Council's record management requirements
	▪ Make available relevant and wide-ranging information on risk management issues affecting Council.Review insurance held by users of Council facilities
	▪ Review contracts and lease agreements
	▪ Negotiate & ensure appropriate insurance cover
	▪ Oversee the development of a Risk Management training program
	▪ Develop a report on Council's achievements over the previous year for inclusion in Council's Annual Report
	▪ Maintain risk management manuals and records including the following:
	  ▪ claims management manual
	  ▪ legal advice
	  ▪ property and motor vehicle schedules
	  ▪ loss records
	  ▪ management decision on risk
	  ▪ technical information
	  ▪ insurance policies
	▪ Assist in the effective operation of the Safety Management System
	▪ Ensure adequate fire protection and security arrangements are in place to protect Council's assets
	▪ Coordinate public safety issues
	▪ Monitor accident reporting and recording procedures.
	▪ Liaise with outside organisations/consultants for advice and assistance in areas where the organisation does not have the expertise or resources
	▪ Ensure all accidents and incidents reported are fully investigated and the appropriate corrective action has been taken
	▪ Review with Managers all aspects of the risks management program on a regular basis, including workplace inspections and safety audits

	▪ Consult with the Health and Safety Committee and Health and Safety representatives where appropriate to resolve health and safety issues and compliance with Risk Management principles ▪ Provide regular reports to management on the operation of the Risk Management program ▪

All employees	▪ Assist in the provision of a safe and healthy work environment and comply with the *Work Health & Safety Act 2012*, its amendments, Regulations, related Codes of Practice and Australian Standards ▪ Ensure that risk management factors are fully considered when changing or setting up new work sites, work programs or undertaking new projects. Consult with the Health and Safety Committee and Health and Safety representatives where appropriate to resolve risk management issues ▪ Ensure ongoing instruction and consultation with workers in the proper use of plant, equipment and materials and enforce safety rules and practices that apply to employees' work ▪ Report any risk identified associated with Council asset, work sites or work systems ▪ Ensure that risk management factors are fully considered when changing or setting up work sites, work programs or undertaking any contractual tasks ▪ Ensure all accidents are reported ▪ All contractors must be inducted before Council entering site/s
Risk, Audit & Compliance Committee	▪ Reviewing and analysing claims and reported incidents ▪ Progress improvements and recommendations of the MAV Service Review ▪ Discuss and plan risk management awareness training ▪ Populate and enhance the Risk Register ▪ Monitor and improve the Compliance Register ▪ Implement an audit and inspection process focused on risk management

SECTION 6 -COMMUNICATION STRATEGIES

12.0 Communication Plan

12.1 Objectives

Communication is the key to keeping employees informed and engaged with the implementation of the Framework.

Effective communication mechanisms will support the following objectives:

- To keep staff and stakeholders informed and engaged with the Risk Management program development;
- Development of a common language around risk management;
- Promote learning e.g. examples of success will highlight the different applications of risk management;
- Development of a risk aware culture;
- Demonstrate leadership in implementing the Framework; and
- Celebrate the success of the Framework's implementation.

12.2 Communication Methods

The following communication mechanisms may be utilised, amongst others:

- Outline of the Framework and risk awareness/hazard and incident analysis training provided to existing employees;
- Provide additional training to Departments upon request or where a need is identified;
- Risk implications part of Council Reporting processes;
- Progress reports to Management and Risk/Safety Team;
- Progress reports to Audit Panel;
- Progress reports to Risk Audit & Compliance Committee;
- Regular updates regarding risk management will be provided to all employees in staff newsletter; and
- Outline of the Framework provided to all new employees during Induction processes.

12.3 Progress Reports to Employees

- Quarterly via staff newsletter;
- Monthly Report to the Risk Audit & Compliance and Health & Safety Committees;
- Annual statistical report on KPIs/Fortnightly to the Management Team;

After initial stages of risk program implementation

- Comments from participants;
- Recognition of achievement; and
- Sharing of experience and learning from across the organisation.

12.4 Progress Reports to Councillors/Audit Panel

- Audit Panel quarterly reports;
- Audit Panel minutes reported to Council; and
- Updates provided through the Section 23 Infrastructure, Works & Development Committee;

12.5 Progress Reports to Community

- Annually via Annual Report

SECTION 7 - PROCEDURE

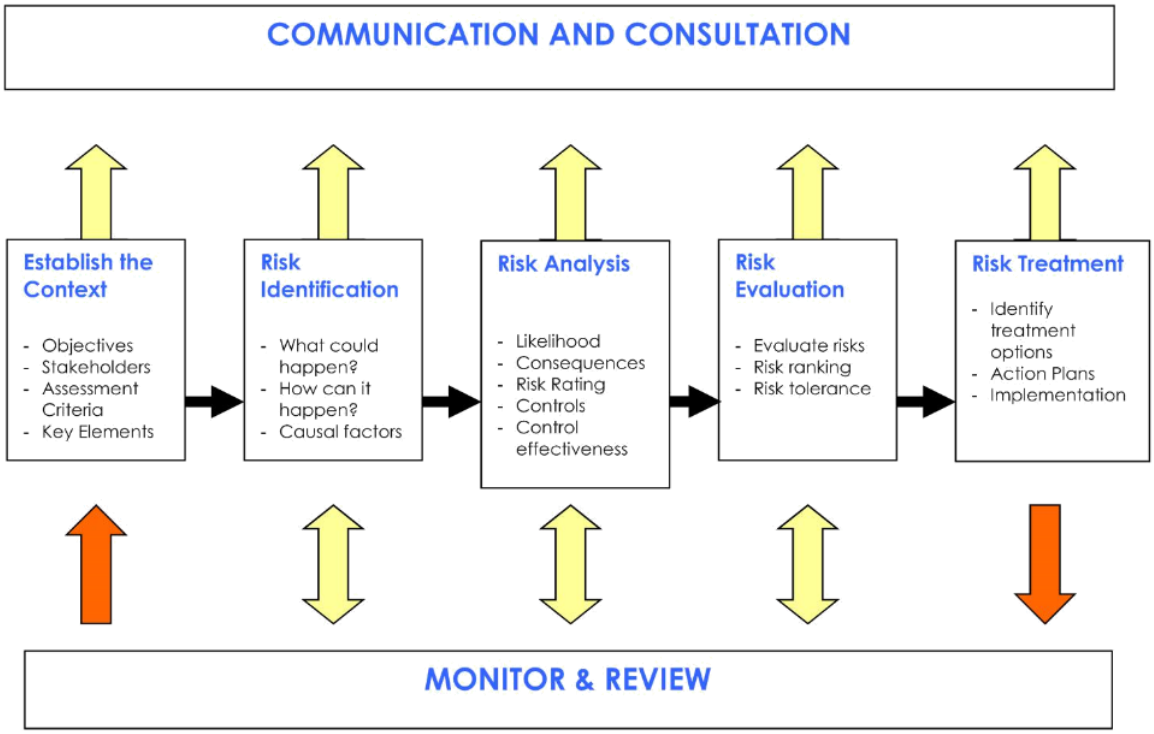
13.0 Risk Management Process

13.1 Overview

The risk management process should be:

- An integral part of management
- Embedded in culture and practice, and
- Tailored to the business processes of Devonport City Council

The risk management process adopted as part of this Framework is consistent with the Standard as depicted below:



13.2 Communication and Consultation

Contact/Involvement – has everyone who needs to know been contacted, involved, informed and kept up to date?

Information Flow/Dialogue with Stakeholders – there should always be dialogue with stakeholders with a focus on consultation.

Feedback – success will be achieved if feedback is given by all involved in the process.

The Communication Plan is outlined in detail in Section 10 of this Framework.

13.3 Risk Management Context

When identifying, assessing and managing risks, the following external factors should be considered:

- Community impact;
- Environmental implications;
- Political implications (State/Federal);
- Health, Safety and Well Being;
- Economic Impact;
- Media;
- Legal and Regulatory requirements; and
- External stakeholders/key third party service providers.

The following internal factors need to be considered:

- Council's Strategic Plan;
- Long Term Financial Plan;
- Capital and Operational Budgets;
- Annual Plan;
- Departmental Plans;
- Unit Plans;
- Council / Elected Members;
- Health and Safety and Welfare;
- Key Performance Indicators - organisation and individuals;
- Business Continuity and Emergency Management Planning;
- Governance; and
- Business efficiency and productivity.

13.4 Risk Identification

The aim of risk identification is to develop a comprehensive list of events that may create, enhance, prevent, degrade, accelerate or delay the achievement of objectives. This includes identifying the risks associated with not pursuing an opportunity.

To assist in risk identification, ask the following questions - What can happen? - How can it happen? Have we considered the causal factors?

Each department/work area is responsible for identifying their risks and undertaking risk assessments.

In identifying risks, Departments/work areas need to consider a broad range of risk sources within the context of Council's strategies and operations. These risk sources were outlined at Section 5 of this Framework.

Forums for identifying operational risk include but are not limited to:

Risk Identification Workshops

The purpose of these workshops is to brainstorm risks with relevant employees from each work area. Senior Managers are accountable for reviewing their area's registered risks formally at least on a half yearly basis, as part of the business planning process, in consultation with relevant employees.

Risk Assessment Workshops/Discussions
The purpose of these discussions is to assess the likelihood and consequence of the risks identified with relevant employees from each work area. As a result of these workshops, risk rating details are captured and documented using Council's risk assessment documentation & tools. Senior Managers are accountable for reviewing their area's registered and assessed risks formally at least on a half yearly basis, as part of the business planning process.

Strategic Projects/Change Management
A risk assessment is to be undertaken as part of any project and/or the Council's documented change management process. Senior Managers are accountable for identifying and assessing any risks emerging as a result of change/improvement/projects. These risks are to be included on the project plan which is reviewed and maintained through the life of the project/change/
improvement process.

Review of Audit findings/Loss data/Credible Customer Complaints
Systemic issues/risks can be identified upon review of this data

Strategic and Annual Planning Process
Departments are required to review their risks in the Corporate Risk Register as part of their annual planning and budgeting process. This enables the risk profile and risk control activity to be considered as part of formulating future plans, improvements, business cases and budgets.

Incident/Hazard Reporting
Incidents and Hazards are to be reported using the Incident and Hazard Reporting Process. This information and subsequent analysis may result in the identification of systemic / operational risks. These will be communicated back to relevant stakeholders to be appropriately managed in line with the risk management process.

13.5 Risk Analysis

Risk analysis involves consideration of the sources of risk, their positive and negative consequences and the likelihood that those consequences may occur. Each category of the consequence scale is based on the types of risks that may potentially impact Council's operations.

Existing controls and their effectiveness and efficiency should also be taken into account. For each identified risk ask "Is there anything currently in place that would effectively lessen the likelihood or impact of the risk?" If there are controls in place, then ask "Are the controls effective? "Can the risk be shared/transferred"? The risk can then be re-evaluated.

A risk rating is determined by combining the likelihood and the consequence ratings.

Risk analysis is about developing an understanding of the risk. It is this analysis which provides input into the decision on whether the risk needs to be controlled and the most appropriate and cost-effective manner of treatment.

The method of analysing risks is undertaken in two parts:

- Risks are measured against established criteria for likelihood; and
- The final risk score (overall risk rating) is calculated as the product of the likelihood and consequence scores.

13.6 Risk Evaluation

Risk evaluation is done to assist in decision making – the legend below identifies the actions necessary for different risk ratings.

Legend:

H	**High Risk:** Immediate action to be initiated and implement controls as outlined in Risk Assessment.
S	**Significant Risk:** Attend to in short term. Implement controls as outlined in Risk Assessment.
M	**Moderate Risk:** Attend to in medium term. Implement controls as outlined in Risk Assessment
L	**Low Risk:** Responsible Managers develop or modify policy, procedure and practices to address the risk and implement controls as outlined in Risk Assessment

The purpose of risk evaluation is to determine, based on the outcomes of risk analysis, which risks need treatment and priorities. The risk evaluation can also lead to a decision not to treat the risk in any way other than maintaining existing controls.

13.7 Risk Treatment

Risk treatment involves identifying the range of options for treating risks, assessing these options and the preparation and implementation of treatment plans. By treating the risk the aim is to either:

- Elimination the risk – repair damage/remove risk/or alternative methodology;
- Avoid the risk - by deciding not to continue with the activity;
- Taking the risk - in order to pursue an opportunity or lesser risk alternative;
- Sharing the risk – to minimise likelihood and consequences;
- Isolate the risk – relocate the risk, tag out, lock out, install barriers;
- Engineering – improve the process to remove the risk;
- Administrative – rotate jobs, adequate training, maintenance;
- Personal Protective Equipment (PPE) – use hearing, eye, head, hand, face protection and train staff in its correct use;
- Accept the risk by informed decision - retain the risk.

In order to select the most appropriate treatment action it is necessary to balance the cost of implementing each option against the benefits derived from it. It is also necessary for consideration to be given to all direct and indirect costs and benefits financial or otherwise.

13.8 Monitor and Review

On-going review of the RMF and its effectiveness is essential to ensure that risks are identified and registered in the Corporate Risk Register; are regularly assessed, including associated treatment options; and that they remain relevant. Factors that affect the likelihood and consequence may change, as may the factors that affect the suitability or cost of treatment options.

The required actions, as outlined in the Risk Evaluation section above outline the monitoring and review actions which are undertaken as part of this Framework:

- This RMF is reviewed every two (2) years.
- Regular reporting to the Audit Panel should include status of risks in the Risk Register, insurance claims and details of relevant audit results.

Any review of the RMF will consider the following:

- Are risk management objectives aligned with Council's strategic intent?
- Do risk management initiatives reflect the realities of the current environment in which Council is operating?
- Are the outcomes of risk management able to be effectively measured?
- Do risk management initiatives generate value for Council?
- Does information provided allow decisions to be made about whether to expand or contract resources and what effort is required in managing risk exposures?
- Is information provided in a clear and concise manner?

Furthermore, an assessment of the effectiveness of the risk management program at Council will be undertaken following implementation of the Framework to ensure that it meets its objectives. This assessment will be undertaken through:

- Survey of stakeholders;
- Implementation and monitoring of key risk indicators;
- Formal assessment of incident and loss data against key risk indicators; and
- Internal audit of the program.

SECTION 8 -DEFINITIONS

14. Descriptors:

Extracted from *ISO Guide 73:2009* and *Work Health & Safety Act 2012*

Risk - effect of uncertainty on objectives.

Risk Management - coordinated activities to direct and control an organisation with regard to risk.

Risk Management Framework - set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organisation.

Risk Owner - person with the accountability and authority to manage a risk.

Hazard - a source of potential harm.

Residual Risk - the risk remaining after risk treatment.

Risk Analysis - the process to comprehend the nature of risk and to determine the level of risk.

Risk Evaluation - the process of comparing the results of risk analysis with risk criteria to determine whether the risk and/or its magnitude are acceptable.

Risk Appetite - is the amount and type of risk Council is willing to pursue or retain in order to achieve its objectives.

Risk Tolerance - Risk tolerance is Council's readiness to bear the risk, after risk treatment, in order to achieve its objectives.

Risk Register - record of information about identified risks.

Risk Retention - the acceptance benefit of gain, or burden of loss, from a particular risk.

Risk Treatment - the process to modify risk.

Inherent Risk – Initial risk prior to implementation of control measures.

Stakeholders – employees, Aldermen, Committees, Contractors, general Community, Volunteers, Visitors, Lease Holders, Audit Panel and Interested parties

Worker - A person is a worker if the person carries out work in any capacity for a person conducting a business or undertaking, including work as –

- an employee; or
- a contractor or subcontractor; or
- an employee of a contractor or subcontractor; or
- an employee of a labour hire company who has been assigned to work in the person's business or undertaking; or
- an outworker; or
- an apprentice or trainee; or
- a student gaining work experience; or
- a volunteer; or
- a person of a prescribed class.

15. Legislation & Related Documents

AS ISO 31000 Risk Management Guidelines
Work Health & Safety Act 2012
Work Health & Safety Regulations 2012
Local Government Act 1993
Risk Register
DCC Health & Safety Policy
DCC Business Continuity Policy
DCC IT Disaster Recovery Plan
Regional Emergency Management Plan
Art Gallery Annexe Disaster Preparedness Plan

16. Responsibility

16.1 Responsible Manager
Development Services Manager

16.2 Document Controller
Risk & Compliance Coordinator

17. Authorisation

17.1 Adoption of Framework
Adopted by MT September 2012

17.2 Amendments to Framework
Amendments endorsed by Council (Infrastructure Works & Development Committee April 2019)

18. Document Review
This framework should be reviewed every two years

19. Framework Review
April 2021.

Trim File Ref: 26920

5.7 MUNICIPAL EMERGENCY MANAGEMENT PLAN

File: 30209 D572974

RELEVANCE TO COUNCIL'S PLANS & POLICIES
Council's Strategic Plan 2009-2030:

Strategy 4.4.1 Support the community in emergency management response and recovery

SUMMARY
The report is provided to allow Council to consider adoption of the Municipal Emergency Management Plan for the Devonport Community.

BACKGROUND
The Municipal Emergency Management Plan (Plan) outlines how Council will manage local emergencies. The Plan provides guidance on roles and responsibilities related to emergency management functions and how to plan for mitigation, preparedness, response and recovery arrangements before, during and following an emergency situation.

STATUTORY REQUIREMENTS
In Tasmania, powers and authorities for emergency management are provided in the Emergency Management Act 2006. The Act establishes a flexible emergency management system including emergency powers for the appointment of workers for emergency management functions.

DISCUSSION
The Plan has been developed in consultation with Council's Internal Emergency Management Team, State Emergency Services, and the Management Team.

The Plan has been reviewed against the *Emergency Management Act 2006*, State & Regional Emergency Management Plans and the Mersey Leven Emergency Management Plan to ensure consistency and compliance with relevant legislation.

COMMUNITY ENGAGEMENT
State Emergency Services were consulted during the development of the Plan.

FINANCIAL IMPLICATIONS
There is a significant financial risk to Council arising from inadequate emergency management arrangements, resulting in the loss of Council's assets and infrastructure and the health, safety and welfare of the community.

RISK IMPLICATIONS
The Plan details Council's current approach to emergency management. It details how Council will manage the following risks in an emergency:

- lack of emergency management planning and preparedness,
- loss of community confidence,
- slow response times,
- poor communication,
- inadequate staff training, and
- delay in recovery.

CONCLUSION

It is recommended that Council adopt the Municipal Emergency Management Plan which reflects Council's current approach to emergency management.

ATTACHMENTS

⇩1. Municipal Emergency Management Plan

RECOMMENDATION

That it be recommended to Council that the report of the Risk and Compliance Coordinator be received and that Council adopt the Municipal Emergency Management Plan, dated March 2019.

Author:	Karen Stone	Endorsed By:	Matthew Atkins
Position:	Risk & Compliance Coordinator	Position:	Deputy General Manager

DEVONPORT CITY COUNCIL

MUNICIPAL EMERGENCY MANAGEMENT PLAN

Table of Contents

SECTION 1 OVERVIEW

1.1 Introduction

The objectives for emergency management in the Devonport Municipal area are to:

- Maintain the Emergency Management Plan to guide the management of emergencies by considering all elements of PPRR (Prevention and Mitigation, Preparedness, Response and Recovery).

- Recognise the value of relationships and partnerships for emergency management, in particular the importance of:

    - Community contributions in emergency management and promoting community engagement as required.
    - Maintaining linkages with related bodies including, the North West Regional Emergency Management Committee, North West Regional Social Recovery Committee and Mersey Leven Emergency Management Committee.
    - Identifying roles and responsibilities and integration processes between emergency management and Devonport City Council management structures.

    Initiate a review post emergency utilizing the emergency management review system. The review process is thorough and covers all emergency management elements. The review is revised incorporating continuous improvement principles.

1.2 Aim

The aim of the plan is to describe and provide guidance on emergency management arrangements for the Devonport City Council Municipal Area.

1.3 Objectives

The objectives of this plan are:

- To record roles and responsibilities related to identified emergency management functions.
- To make arrangements for prevention and mitigation, preparedness, response and recovery including:
    - The legislated requirement to maintain this plan.
    - Protocols for coordinating mutual support with neighbouring Councils.
    - Identifying ways to request/access additional support from regional, state and Australian governments.
- To identify opportunities to reduce risks to the community arising from emergencies.
- To document processes for the management of emergencies in the Municipal Area.

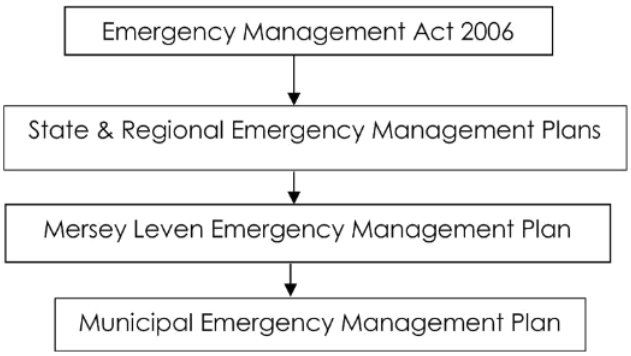
1.4 Scope and Application

The arrangements in this plan are designed to be used to address emergencies that have the following characteristics:

- Caused by events or other adverse community incidents impacting in or on the Devonport Municipal area.
- Can be managed by the capability of local emergency management structure.

These arrangements are intended to be scalable and flexible, so they can be adapted as required. They are always active across the PPRR spectrum, but specific powers/authorities may be sanctioned (typically during response and recovery) to complement existing efforts.

1.5 Emergency Management Documentation



SECTION 2 GOVERNANCE AND MANAGEMENT

Council has a central role in coordinating and facilitating a range of emergency management activities, as well as resourcing specific council responsibilities for emergency management.

2.1 Legal Framework for Emergency Management

In Tasmania, powers and authorities for emergency management are provided in the *Emergency Management Act 2006*. The Act establishes a flexible emergency management system including emergency powers for the appointment of workers for emergency management functions.

Supporting responsibilities are established in the *Local Government Act 1993* and the accompanying *Local Government (Building and Miscellaneous Provisions) Act 1993* for council functions and powers that include:

- Providing for the health, safety and welfare of the community
- Representing and promoting the interests of the community
- Providing for the peace, order and good government of the municipal area

2.2 Delegations

As a Local Government Authority, powers are delegated to Councils through the General Manager to carry out duties under legislation and in emergency situations. The General Manger provides delegation to various positions to carry out functions relating to legislation as listed below:

Relevant Act	Heading	Description	Position
Emergency Management Act 2006	Municipal Coordinator and Deputy	Appointed by the Minister under S23 of the Act	Risk & Compliance Coordinator Deputy General Manager
Local Government (Highways) Act 1982	S25 General supplementary provisions as to carrying out of highway works	Close all or part of a highway or close it to particular forms of traffic, or restrict the rights of passage over the highway, subject to conditions. Authority to leave, stack or deposit on a local highway, vehicles, plant, equipment or materials required for the work undertaken and the ability to sell or otherwise dispose of timber or	Deputy General Manager Infrastructure & Works Manager City Engineer Civil Works Coordinator

		other materials obtained due to the carrying out of highway works	
	S42 Closure of dangerous highways	Close a highway where it has been certified that a local highway is unsafe to traffic or particular class of traffic	Deputy General Manager Infrastructure & Works Manager City Engineer
Local Government Act 1993	Powers of Entry	Authority to enter land for a specific purpose or in general	Deputy General Manager Infrastructure & Works Manager City Engineer Civil Engineer Senior Environmental Health Officer Environmental Health Officer Works Supervisor Works Coordinators Engineering Coordinator Compliance Officer Building & Plumbing Supervisor Asset Management Coordinator Technical Officer Engineering Development Officer Senior Design Officer Design Officer Risk & Compliance Coordinator Risk, Safety & Compliance Officer
		The General Manager must give notice to the owner or occupier of the land before entry is made under sub section (1) unless an emergency exists	As above
		A person entering land under this section is to produce an identity card issued to that person under 20B	As above
	General Manager may take necessary action	Take necessary action to abate a nuisance if there is an immediate danger to any person or property, or the person causing the nuisance cannot be identified or found; or an abatement notice has not been complied with. Power to authorise a	Deputy General Manager Senior Environmental Health Officer Environmental Health Officer Compliance Officer

		person to enter and remain on any land; and close off or fence any place; and do anything reasonably necessary for that purpose and charge the owner occupier of the land for costs of any action taken	
Public Health Act 1997	Orders relating to water quality	Impose an order relating to water quality if satisfied that the quality of the water is or likely to become a threat to public health	Deputy General Manager Senior Environmental Health Officer Environmental Health Officer
	Samples	Take samples from any water	Senior Environmental Health Officer Environmental Health Officer
	Disclosure of information	Disclose information in relation to any notification relating to a notifiable disease or the identity of a person to whom any notification, investigation or enquiry relates in accordance with guidelines	Senior Environmental Health Officer Environmental Health Officer
Roads & Jetties Act 1935	Use of uncultivated land for temporary roads	Make use of any uncultivated land for the purpose of constructing a temporary road whilst any road is being reconstructed, widened, diverted, altered, improved or repaired without making compensation for the same, subject to conditions	Deputy General Manager Infrastructure & Works Manager City Engineer

2.3 Key Roles and Responsibilities

Municipal Emergency Management Coordinator (Risk & Compliance Coordinator)
Deputy Municipal Emergency Management Coordinator (Deputy General Manager)

The Municipal Coordinator and Deputy have the following functions in respect to the municipal area for which they are responsible:

- Lead Devonport City Council's response to the emergency event;
- Prior to, during and subsequent to the occurrence of an emergency ensure that resources of Council are coordinated and used as required;
- To assist SES units with the supply and coordination of equipment and facilities and the maintenance of such equipment and facilities;
- Provide information and advice relating to the emergency and protective measures that might be adopted to the General Manager and Communications Officer to release to the public and staff;
- Other functions in respect of emergency management imposed by the Regional Committee or Regional Controller or the Emergency Management Act 2006;
- Liaise with insurers;
- Provide advice to minimise Council's risk;
- Maintain a contact list for Emergency Management.

Recovery Coordinator (Community Services Manager)
Deputy Recovery Coordinator (Community Development & Volunteer Coordinator)

The Recovery Coordinator and Deputy have responsibility for the following functions:

- To coordinate, advise and assist council on recovery matters relevant to the municipal area and combined municipal area;
- Provide advice on recommended approaches to recovery (social, infrastructure, economy and environment) including meeting council training needs and facilitating the delivery of community awareness programs;
- Develop, review and arrange validation of relevant recovery arrangements;
- Coordinate council's recovery efforts for emergencies and arrange access to council's resources;
- Coordinate Volunteer Management.

Mayor & General Manager

- The Mayor is the principal spokesperson for the Council, based on advice from the General Manager, and the General Manager is responsible for issuing public statements on matters of Council business.
- The General Manager must ensure that adequate staff and resources are available to operate the Emergency Operational and Evacuation Centres.

Department Managers

- Coordinate Council response for emergencies within department service delivery protocols;
- Keep staff updated and informed on matters arising from the emergency;
- Assist Emergency Controller and operational personnel as requested.

Infrastructure & Works Manager

- On activation, manage establishment and ongoing operational activities for the Infrastructure & Works Department;
- Manage operations to ensure that Council's response to the emergency event is coordinated in an effective manner;
- Provide support through coordination of issues, passage of information, implementation of directives and support to the development of emergency response and contingency options;
- Review the activity log on a regular basis.

Works Supervisor

- Establish and manage the Works Team to provide coordination of the emergency response;
- Through close liaison with the Infrastructure & Works Manager and the Municipal Emergency Coordinator, maintain a current situational awareness of the response to the emergency event;
- De-conflict operational response issues that impact on achieving a coordinated response;
- Maintain an easily viewable and prominent Activity Log detailing the major emergency response activities in which Council is engaged and review its content on a regular basis;
- Prepare written situation reports outlining DCC response to the emergency;
- Maintain a Plant Register;
- Initiate as applicable an appropriate Control Centre.

Risk, Safety & Compliance Officer

- Provide support to the Infrastructure & Works Manager and Works Supervisor to ensure the emergency event is coordinated in an effective manner;
- Liaise with Works staff and assist with determining areas of risk, priorities and risk level, and hazard minimisation strategies;
- Be on standby to provide advice, support and direction to Works staff.

Communications (Media & Communications Officer)

- Provide support in developing and promoting key public and stakeholder communication messages;
- Seek appropriate resources if required to support stakeholder communication;
- Coordinate media and communications activities and messages relating to the incident;
- Participate in emergency response strategy meetings;
- Brief and keep all staff and elected members and the public well informed.

Councillors

Councillors do not have an operational role in emergency management. The key role of a Councillor during an emergency is to advocate on behalf of and represent their constituents.

The Mayor is the principal spokesperson for the Council. It is not appropriate for Councillors to comment on areas of responsibility, such as the control agency or police.

The importance of Councillors being seen in the community during emergencies and recovery phase cannot be overstated and may offer some reassurance to the community that they are well supported during a crisis.

Customer Service

- Record telephone calls, emails and other forms of notification in the Online Emergency Management Reporting System and forward information to relevant staff;
- During a bushfire refer telephone enquiries, read situation reports on the Tas Fire Services website regularly and pass on relevant details to callers;
- All infrastructure queries to be forwarded to the Works Depot;
- Other queries e.g. lost dogs can be managed by general Customer Service staff.

Staff

- Respond to instruction by Department Manager or alternate manager if deployed to another department
- Works staff refer to Operational Response Manual for guidance.

SECTION 3 EMERGENCY MANAGEMENT STRUCTURES

3.1 Local Events

These are the more frequent emergency requests that are normally received and dealt with through Council's normal processes and procedures.
The Works Depot may be set up as the Control Centre with support from other staff.

Examples of these local events may include:

- Major flood events
- Major damage to roads or bridges
- Fallen trees
- Storm event/strong winds
- Landslips causing road closures
- Large wildfires in proximity to Council infrastructure or residential areas
- Major fire event
- Major traffic incident in a built-up area
- Burst water main/Blocked Storm water pits
- Dam failure
- Infrastructure failure
- Terrorism
- Tidal erosion
- Pandemic Epidemic
- Exotic animal disease

- Marine incident including water vessel incident and pollution
- Major oil spill
- Air incident including aircraft incident and pollution
- Rail incident
- Food Crop Disease
- Water Supply Contamination

In the event of an emergency, it is essential to maintain and operate within your "normal" roles and responsibilities, and to communicate with your direct supervisors.

There may be times when staff are required to perform other duties within their skill set, which may include working outside normal work hours. At these times, a more critical team effort is required to ensure normality is returned to the municipality as soon as possible.

HAZARD	COUNCIL FUNCTION AND ACTIVITIES MAY INCLUDE
Major Flood Event	Property identification Road closures Local operations centres Community information Providing plant and machinery/unblocking storm water pits
Major Damage to Roads or Bridges (includes transport disruption)	Community information Alternative transport route Providing plant and equipment Road closures
Fallen Trees	Community information Road closures Providing Council staff, plant and equipment for clean up
Storm Event/Strong Winds	Community information Road closures Providing Council staff, plant and equipment for clean up
Landslips Causing Road Closures	Property identification Road closures Community information Providing plant and equipment
Large Wildfires in Proximity to Council Infrastructure or Residential Areas	Property identification Road closures Providing plant and machinery
Major Traffic Incident in a Built-up Area	Road closures Alternative transport route Providing plant and equipment
Burst Water Main/blocked stormwater pits	Road closures Alternative transport route Providing plant & equipment
Dam Failure	Property identification Road closures Community information Providing plant and equipment
Infrastructure Failure	Property identification Road closures Local operations centres Community information Providing plant and equipment
Terrorism	Road closures Community information

Tidal Erosion	Block access to sensitive area Signage placement
Pandemic Epidemic	Premises inspection Provide available resources to DHHS
Exotic Animal Disease	Property identification Road closures Access to disposal facility Providing plant and equipment Local operations centres
Marine Incident	Providing plant and equipment Road closures
Major oil spill	Provide plant & equipment Road Closures Clean up
Air Incident	Providing plant and equipment Road closures
Rail Incident	Providing plant and equipment Road closures
Food Crop Disease	Access to disposal facility
Water Supply Contamination	Property identification Road closures Local operations centres Providing plant and equipment Management of water carriers

SECTION 4 COUNCIL INFRASTRUCTURE & ESSENTIAL SERVICES

4.1 Stormwater Network

The municipal area's stormwater assets are identified according to type. Stormwater mains, pollution traps, stormwater pits, headwalls, outfalls, stormwater property connections and detention basins. All stormwater assets must have regular maintenance regimes.

4.2 Roads

Council's road network provides access throughout the municipality in an emergency.

4.3 Buildings/Facilities

Primary Evacuation Centres

Facility	Address	Suburb	Contact
East Devonport Recreation & Function Centre/Girdlestone Park	67 Caroline St	East Devonport	Devonport City Council
Devonport Recreation Centre	34 Forbes St	Devonport	Devonport City Council
Maidstone Park	31 – 49 Mersey Main Rd	Spreyton	Devonport City Council

The East Devonport Recreation Centre will NOT be used as a primary evacuation centre in the event of an extraordinary rain event resulting in flooding. During the flood event in June 2016 and a subsequent report, it was determined to seek an alternative centre should there be a recurrence of this event.

Maidstone Park has been nominated as the alternative evacuation centre if there is flooding in the local government area.

If a generator is required to be hired to power East Devonport Recreation Centre, then an 80kva is recommended.

Secondary Evacuation Centres

Facility	Address	Suburb	Contact
Don Memorial Hall	17 Forth Rd Don	Don	Devonport City Council
Melrose Memorial Hall	Melrose Rd	Melrose	Devonport City Council
Spreyton Memorial Hall	31-49 Mersey Main Rd Spreyton	Spreyton	Devonport City Council

4.4 Internal/External Communications

The primary methods of communication during an emergency will be landline, mobile phones, email, website and social media, unless they are unavailable due to the impact of the emergency. Given the critical importance of communications during an emergency, it is essential that we restrict use of these resources to those matters pertaining to response and recovery.
All reported incidents must be captured in Council's Online Emergency Management Reporting System and prioritised.
Staff should only respond to issues after being allocated a task from this reporting method or as directed by Emergency Services.

Depending on the severity of the emergency, radio and television may also be required to be utilised.

Operational staff will also use UHF CB radios and the GPS tracking system for communication purposes.

4.4.1 UHF Radios

UHF radios are fitted to 22 vehicles including backhoes, loader, sweeper, various trucks and one Ford Ranger. There are also two units located at the Works Depot and three units at the Transfer Station. See DCC Special Resource List for full details.

4.4.2 GPS Tracking System

The GPS Tracking System is useful in an emergency as it allows location of staff and vehicles and ensures the quickest response time of resources. Knowing where staff are during an emergency allows us scope to ensure their safety.

4.5 Staff

Staff must be made available to assist with administration requirements during an emergency.

4.6 IT

IT staff and equipment may be required during an emergency to provide services/ equipment and liaise with other services e.g. Telstra.

4.7 Employee Assistance Program

CLS (Choose Life Services) is Council's provider of employee assistance. Contact number 1300 132 098.

4.8 First Aid

Most outdoor staff have Level 1 qualification. Some indoor staff have either Level 1 or level 2 depending on the risk level of their position. First aid kits are available at all Council sites and in Council vehicles.

SECTION 5 PLANNING STRATEGIES

5.1 PREVENTION & MITIGATION STRATEGIES

Prevention strategies include such measures as:

- Building site-location and purpose-built design;
- Locate resources away from source of risk;
- Use of DCC Risk Management process
- Develop DCC specific Risk Register
- Review building standards, including smoke, fire and flood detectors;
- Multiple suppliers to provide resources or services;
- Build fault tolerance and resilience into information systems and networks;
- Adopt best practice and develop awareness of risk and prevention measures;
- Business continuity measures
- Legislation including *Land Use Planning and Approvals Act 1993*

5.2 PREPAREDNESS

Preparedness strategies include such measures as:

- Increase community safety through public awareness, information and education;
- Identify resources to maximise response;
- Develop contingency plans to address response and recovery issues;
- Establish and maintain working relationships with other agencies to increase emergency management capabilities;
- Develop employee preparedness by delivering training programs and exercises;
- Maintain a contact list for Emergency Management;
- Maintain a Plant Register;
- Ensure resource sharing protocols are in place with neighbouring Councils;
    - DCC has resource sharing arrangements with local Councils.
- Conduct validations of the emergency planning process to assess the effectiveness of emergency management arrangements. Validation includes debriefs, exercises, reviewing risks and other workshops/meetings;
- Documented procedure to manage information during emergencies;
- Implement processes to authorise, capture and record expenditure for emergencies;
- Council maintains arrangements to enable expenditure by the Municipal Coordinator (or their delegated representative) for emergencies;

5.3 RESPONSE

When an emergency occurs, initial response actions are usually carried out at the site by those who have primary responsibility for protecting the life, property or environment that is being threatened. In the first instance, this is usually the asset owner/manager of the property/premises and/or the people at the emergency site.

When nominated people are not present or cannot respond effectively, specified agencies have the authority to take control of the situation.

Councils can be requested to support response and make resources available. These requests are usually made by direct contact with the Municipal Coordinator.

5.3.1 Events Response Process

Phase	Response Action	Council Considerations
Alert	• Monitor situation • Brief stakeholders	• Monitor situation • Advise Council stakeholders
Stand-by	• Prepare for response • Provide warnings where applicable • Advise & update stakeholders	• Update stakeholders • Notify manager of potential use of Works Depot (Control Centre) and East Devonport Recreation Centre (Evacuation Centre) • Ensure adequate staff are available • Check supplies and equipment availability
Respond	• Assess emergency type, location and severity • Establish command and control arrangements • Deploy resources and request extra assistance as required • Assess impacts and effectiveness of response strategies • Consider evacuation • Provide warnings and public information as required • Conduct impact assessments and provide updates	• Establish and communicate coordination for council resources/requests • Manage requests for assistance • Open and manage centres as required e.g. evacuation centre • Ongoing assessment of impacts and community recovery needs • Update stakeholders • Coordinate sustenance and relief/accommodation for council workers
Recovery Handover	• Assess effectiveness of response actions • Plan for end of response • Assess status of recovery arrangements and hand over as required • Confirm end of response and stand down • Collate logs, costs and assess needs for re-supply	• Confirm end/close of council operations for response • Liaise with recovery workers and assess needs • Update stakeholders • Close centres as agreed • Collate logs, costs and assess needs for re-supply
Debrief	• Conduct internal debrief/s • Participate in multi-agency debrief as required	• Conduct council and committee debrief

5.3.2 Warnings & Public Information

Warnings are issued by the Bureau of Meteorology for severe weather and other events e.g. floods, tsunami and Tasmanian Fire Service for conditions with severe fire potential. These warnings are sent to media outlets who issue warnings in accordance with Tasmanian guidelines. Emails from the Bureau are sent to Municipal Coordinators when there is a severe weather warning. Where appropriate the Municipal Coordinator will forward warnings to key Emergency Management staff.

- Deputy Municipal Coordinator
- Management Team
- Works Coordinator
- Customer Service
- Emergency Management Team

- Risk, Safety & Compliance Officer
- Media & Communications Officer
- Recovery & Deputy Recovery Coordinator
- Works Supervisor
- Infrastructure & Works Manager
- Development Services Manager

During bushfire incidents the Tasmanian Fire Service website is a good source of up to date reliable data. Staff can refer telephone enquiries to the site whenever possible or read the situation reports regularly and pass on relevant details to the caller.

Situations reports and information regarding facilities, emergency assistance and arrangements, predominantly during the emergency, will be provided by the Municipal Coordinator and passed onto the General Manager or Mayor to make the relative media releases.

5.3.3 Communications

During emergency, timely, accurate and informative information to the community is critical. In a period of community uncertainty, concerns can be reduced if advice is provided on what has happened, what needs to be done, and where people can go to gain assistance. Whilst the media will provide information on what has happened, their focus will not always provide the detail that satisfies the needs of the affected community.

Devonport City Council has a critical role in providing community leadership and ongoing information updates to reduce uncertainty within the community. These roles need to be implemented as soon as possible after the emergency occurs to reduce the potential for inappropriate community action and in some cases undue concern.

The Mayor has a pivotal role as a community leader to coordinate community information and be the spokesperson for DCC and the affected community. The Mayor will need to be supported in this role by our Media & Communications Officer who can prepare community and media statements and have them endorsed by the Mayor.

All Councillor and staff need to be aware that only the Mayor (or delegate) will speak on behalf of DCC and the collective community. The Municipal Coordinator will provide emergency related information to the General Manager and Media & Communications Officer, who will then provide information to the Mayor.

5.3.4 Evacuation

Tasmania Police and Tasmania Fire Service have legislative powers to order the evacuation of people; however voluntary evacuation is the preferred strategy in emergencies.

When evacuation plans involve significant changes to traffic flows over roads and bridges, the road owner/manager should be involved i.e. council and /or DIER.

DCC maintains a register of facilities that could be used for the provision of services for displaced persons.

TFS also maintains a register of Safer Neighbourhood Places for bushfires and will provide advice through the media and the TFS website if they recommend these to be used by the community.

5.3.5 Impact Assessments

DCC may be called upon to coordinate impact assessments and gather and report to responding agencies and recovery officers.

Impact Assessments consider the following factors specifically:

- Housing/accommodation needs
- Power supply
- Water testing
- Transport networks and alternative route planning
- Telecommunications
- Public/environmental health standards

5.3.6 Registrations

Registration is an important system for recording relevant details of persons affected by emergencies or involved in emergency operations. Common groups requiring registration are:

- Affected persons (e.g. people who are evacuated/their families)
- Other stakeholders/affected groups (e.g. businesses)
- Spontaneous volunteers
- Witnesses
- Potential donors/sponsors (equipment, services, supplies)

Registration is the responsibility of Tas Police but may be commenced by the Response Management Authority and maybe coordinated by them. Council may be requested to assist. At the request of the State Controller Australian Red Cross will activate Register. Find. Reunite (a national registration system)

Directions for coordination and control of members of the public, tasking of volunteers and volunteer groups will be issued from the Emergency Coordination Centre.

5.4 RECOVERY

5.4.1 Service & Functions

In the immediate aftermath of an emergency, Council delivers or coordinates recovery services. After consultation with the Response Management Authority, Regional Recovery Coordinator and other emergency management partners about the likely impact, recovery needs and capacity, the Municipal Recovery Coordinator and the Municipal Coordinator can activate local arrangements.

Council is responsible for operating a facility that provides access to recovery services. The Social Recovery Manual identifies facilities that could be utilised as evacuation/recovery centres. These facilities are activated on the request or advice from Municipal Recovery Coordinator or Municipal Coordinator.

Service/Function	Description	Primary Agency
Social		
Accommodation	Provision of temporary accommodation/shelter	Council
Animal Welfare	Provide support to the community for preservation and protection of domestic animals	Council
Catering	Provision of emergency catering	Council
Clothing and Household Items	Provision of clothing and household items	Council
Personal support	Provision of support services ranging from providing initial comfort and reassurance to psychological services such as trauma counselling	Council

Financial Assistance	Provision of short and long term financial assistance to enable affected persons to replace essential belongings lost as a result of the emergency	DHHS Centrelink
Interpreter Services	Facilitation of the provision of interpreter services for affected persons from diverse linguistic and cultural backgrounds (and cultural information)	Translating and Interpretive Services
Legal Services	Provision of Legal Advice, information and/or referral	North West Community Legal Centre
Recovery Centres	Establishment of centre/s for a range of services	Council
Registration and Enquiry	Registration of affected persons and provision of enquiry facilities to locate those persons	Australian Red Cross
Transport	Provision of emergency evacuation support	SES
Information Management	The gathering, processing and disseminating of information to the affected community, and the gathering of community feedback	Council
Volunteer Management	Volunteer training, rostering and support Management of spontaneous volunteers	Council
Environment		
Community Clean-Up	Provision of assistance with clean-up of households and community assets following an emergency (as determined by the Recovery Committee in the context of each situation)	Council
Waste/Refuse Collection	Restoration of waste/refuse collection	Council
Disposal of animal carcasses, plant material or other infected matter	Facilitation of disposal	Council
Environmental Rehabilitation	Rehabilitation of Council affected area Rehabilitation of private property	Council Property Owner
Economic		
Financial Relief/Assistance	Facilitate discussions regarding financial relief/assistance	Council
Infrastructure		
Municipal Roads and Bridges	Restoration of Municipal roads and bridges	Council
State Roads and Bridges	Restoration of state roads and bridges	State Growth
Other Assets e.g. Dams, Pipelines, Power Lines etc.	Restoration of other assets e.g. dams, pipelines, power lines etc.	Asset and utility owner
Drinking Water	Restoration/re-supply of drinking water	Tas Water
Electricity (very high voltage)	Restoration/re-supply of electricity (very high voltage)	Transend
Electricity (Domestic and Commercial Supply)	Restoration/re-supply of electricity (domestic and commercial supply)	Tas networks
Natural Gas	Restoration/re-supply of natural gas	Tas Gas
Telecommunications	Restoration of telecommunications including radio network	Network Owner/manager
Logistics		

Resources	Identifying location of suitable resources, availability and response times	Council
Assembly Area	Identify assembly area	Council
Equipment	Identify maintenance & fuel/oil supplies	Council

SECTION 6 PLAN ADMINISTRATIONS

6.1 Service Restoration

Service restoration is an important aspect of recovery that is generally not considered by traditional recovery arrangements. The restoration of service delivery systems, people and equipment after an incident is critical to maintaining Council's organisational functions, and to ensure the safety and wellbeing of staff and members of the public that rely of the service being delivered. While not an exhaustive list, Table 5 summaries some of the activities that may assist with service restoration and a return to normal business.

Service Restoration Activities

Element	Functional Activity
Social:	Seek feedback and debrief staff during and after the incident.
	Provide staff support services if required through existing arrangements.
	Acknowledgement of staff involvement.
	Acknowledgement of staff entitlements (e.g. remuneration, leave etc).
	Provide reports that capture response activities.
	Appropriate action to address review recommendations.
Infrastructure:	Stocktake, service and/or replacement of stores and equipment used during the incident.
	Return of borrowed stores and equipment.
	Permanent repair of damage
Economic:	Audit and reconciliation of expenditure.
	Appropriate timeframes for inward and outward costs.
	Review of external contract arrangements to capture meeting agency needs during and after the incident.
	Manage all damage claims for personal effects, stores and equipment, vehicles and facilities.
Environment:	Assess operational/facility conditions.
	Staff returned to a normal work environment.
	Resumption of normal business/service activities within the agency.
	Return to a state of readiness in preparation for future emergency events.
	Identify and action staff education and training requirements.

6.2 Emergency Administration

Under the *Local Government General Regulations 2015* the General Manager may determine not to use a quotation process if there is insufficient time to obtain quotes during an emergency.

The Municipal Emergency Coordinator will be responsible for the coordination of all administrative support and documentation during times of all declared emergencies in the municipality.

Records related to the response will be subject to usual records management provisions and State archiving legislation and will be treated accordingly. Logs, reports and briefings from response and community recovery will be collated progressively and stored centrally for future reference.

Cost capture system is to be established to align different types of eligible expenditure as follows.

- Expenditure for the restoration of essential public assets and other acts of relief or restoration including extra ordinary costs of response operations during the emergency.
- Costs covering staff salaries, wages and associated expenditure, (such as overtime and on costs) are to be captured where agency or staff are redeployed from usual duties for the purposes of supporting response or recovery activities.

6.3 Authority to Incur Expenditure

During times of emergency, unbudgeted expenditure may be incurred. Details of expenditure incurred must be recorded and may be required for cost recovery. Where ever possible purchases should be accompanied by a purchase order. If this is not practicable then a Council credit card can be used, or a purchase order is required to be completed following the purchase.

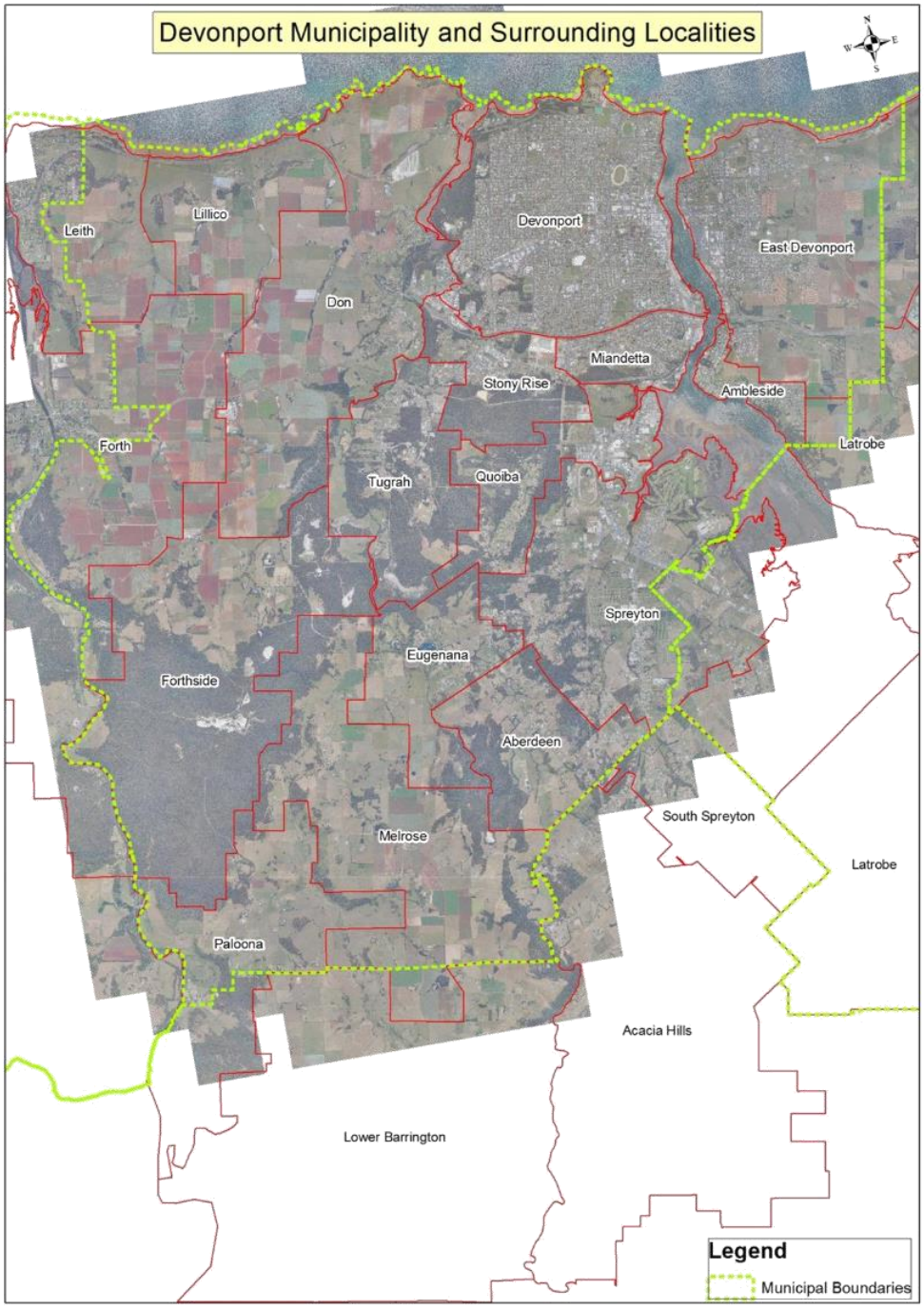
The General Manager has delegated the following to have authority to generate purchase orders and make purchases to respond to an emergency. Normal purchasing limits continue to apply.

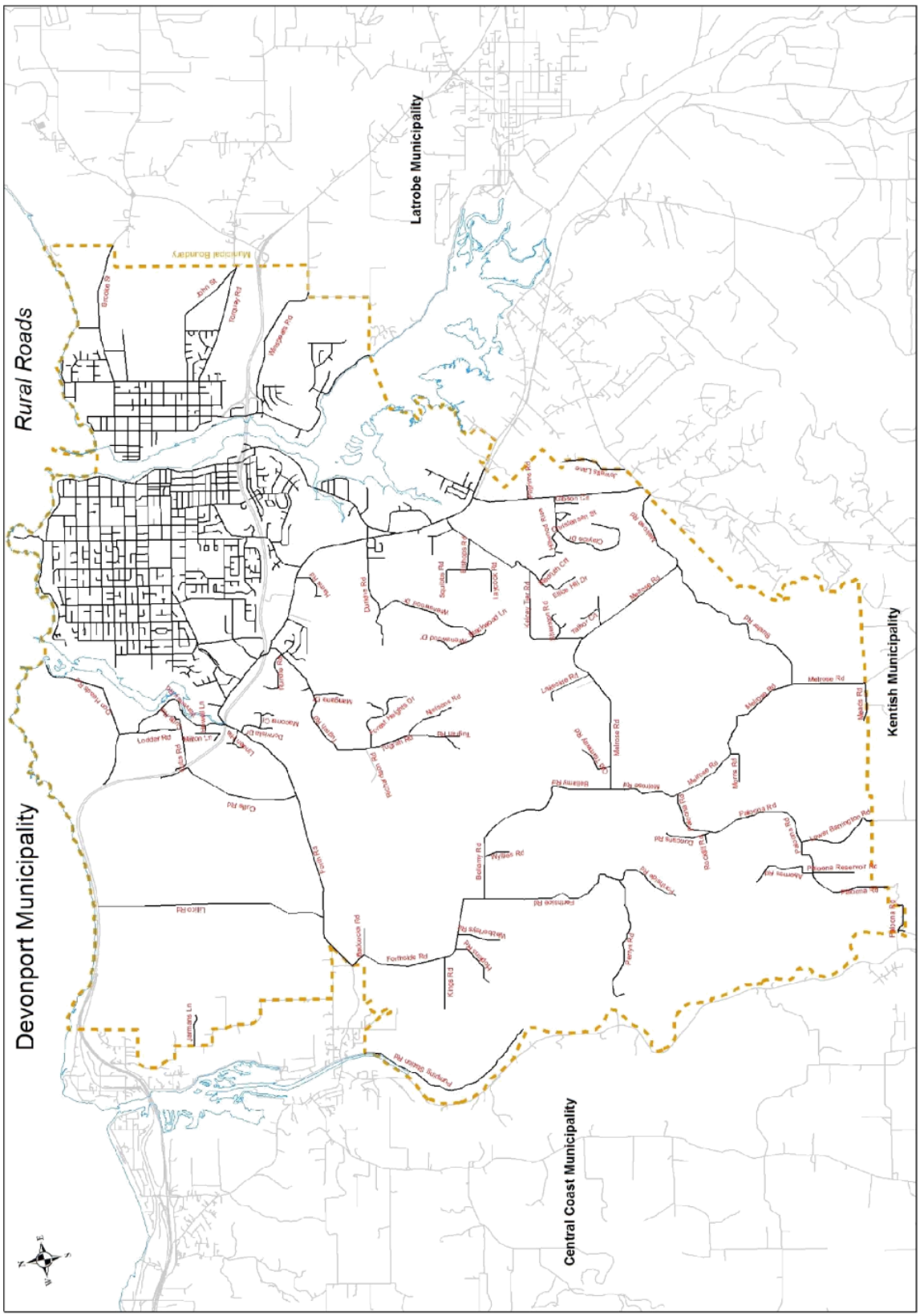
- Municipal Emergency Coordinator (Risk & Compliance Coordinator)
- Deputy Municipal Emergency Coordinator (Deputy General Manager)
- Infrastructure & Works Manager
- Works Supervisor
- Works Coordinator
- Development Services Manager
- Recovery Coordinator (Community Services Manager)
- Deputy Recovery Coordinator (Community Development & Volunteer Coordinator)
- IT Coordinator

6.4 Debriefs

- Debriefs provide an opportunity to review arrangements and decisions made.
- Key lessons identified should be shared with stakeholders including all Emergency Management Committees.
- The Devonport City Council Emergency Management Committee is responsible for reviewing emergencies that are significant to the area. Where appropriate the review findings should be shared with emergency management partners.
- Following an emergency and debrief a report should be prepared and presented to the Devonport Councillor at the first available scheduled meeting.

SECTION 7. MAPS


Devonport Municipality and Surrounding Localities
Leith
Lillico
Devonport
East Devonport
Don
Miandetta
Stony Rise
Ambleside
Forth
Latrobe
Tugrah
Quoiba
Spreyton
Eugenana
Forthside
Aberdeen
South Spreyton
Melrose
Latrobe
Paloona
Acacia Hills
Lower Barrington
Legend
Municipal Boundaries


Rural Roads
Latrobe Municipality
Devonport Municipality
Kentish Municipality
Central Coast Municipality
Municipal Boundary

SECTION 8. ASSOCIATED DOCUMENTATION

Emergency Management Act 2006

Land Use and Planning Approvals Act 1993

Local Government Act 1993

Local Government General Regulations 2015

Local Government (Highways) Act 1982

Food Act 2003

Public Health Act 1997

Roads & Jetties Act 1935

Infrastructure & Works Response Manual

Recovery Manual (set up evacuation centre)

Kelcey Tier Fire Management Plan

Don Reserve Fire Management Plan

Devonport Interim Planning Scheme 2013

Emergency Management Risk Assessment

Specialist Resource List

This plan is to be reviewed every two years by the Emergency Management Committee

SECTION 9. RESPONSIBILITY

9.1 Responsible Manager

General Manager

9.2 Document Controller

Risk & Compliance Coordinator

SECTION 10. AUTHORISATION

10.1 Adoption of Procedure

Adopted by Management Team – March 2019

10.2 Amendments to Procedure

10.3 Procedure Review

April 2021

6.0 INFRASTRUCTURE AND WORKS BI-MONTHLY UPDATE

6.1 INFRASTRUCTURE AND WORKS REPORT

File: 29528 D569299

RELEVANCE TO COUNCIL'S PLANS & POLICIES
Council's Strategic Plan 2009-2030:

Strategy 5.4.1 Provide timely, efficient, consistent and quality services which are aligned with and meet our customers needs

SUMMARY
This report provides a summary of the activities undertaken by the Infrastructure and Works Department during the months of February and March 2019.

BACKGROUND
The report is provided to the Infrastructure, Works and Development Committee and aims to update Councillors and the community on matters of interest. The functional areas of Council covered by this report are:

- Asset Management Program (forward planning and maintenance)
- Capital Works
- Roads, Footpaths and Cycleways
- Streetscape Design (including lighting, signs, furniture, vegetation)
- Stormwater Management
- Traffic Management
- Waste Management
- Recreation Reserves (including playgrounds, parks and gardens)
- Sporting Grounds and Facilities
- Tracks and Trails
- Public Buildings (including public halls, toilets)
- Marine Structures (including jetties, boat ramps)
- Recreation and open space planning

STATUTORY REQUIREMENTS
Council is required to comply with the provisions of the *Local Government Act 1993* and other relevant legislation.

DISCUSSION

1. 2018/2019 Capital Works Program

1.1. The 2018/2019 Capital Works Program is progressing with some projects completed, others underway, and more approved for construction. As normal, weather and contractor availability will determine how many projects can be completed before the end of the financial year.

1.2. Work on the Southern Rooke Street renewal project continues. The road was sealed in March with footpath and landscaping work planned for April.

1.3. The Bishops Road renewal project is underway. Difficult ground conditions have been encountered but work is progressing.

1.4. The project to extend the seal on Tugrah Road is now complete. This work will provide a long term saving to Council through reduced maintenance costs on the steep, windy section that has been sealed.

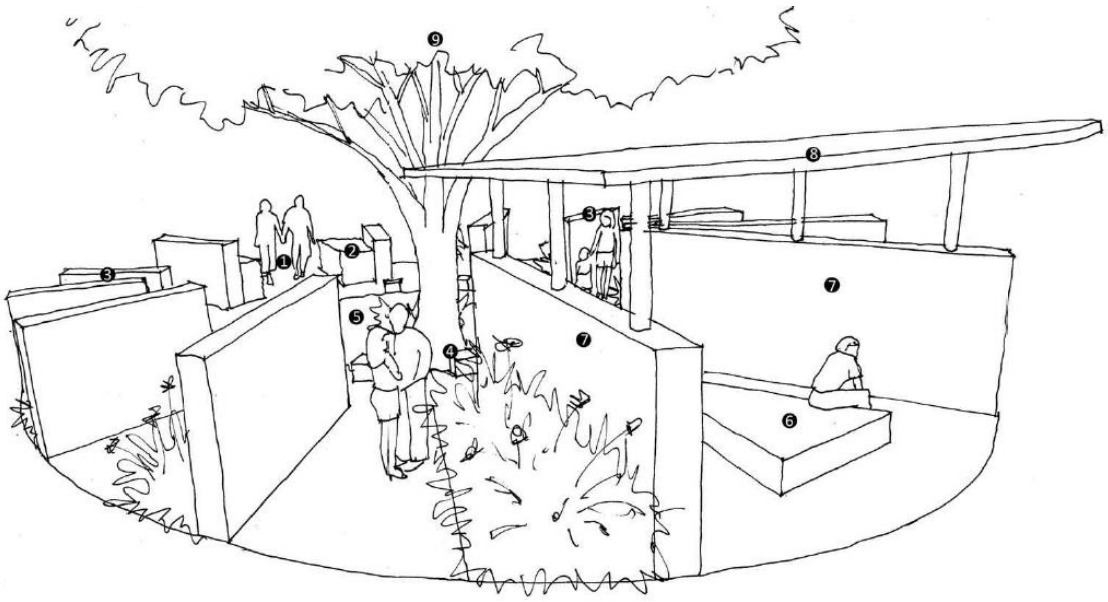
1.5. Consultation with residents has been undertaken on the Triton Road Safety Improvements project. Limited feedback was received, but when analysed with current and historic traffic volume and speed data, a scope of work can be developed that will address the measured and reported issues. Further communication with residents will occur to advise of the proposed work.

1.6. The 2018-19 reseal program is progressing with asphalting completed in Oldaker Street and at the Tarleton Street and Wright Street intersection. The outstanding sites will be completed in April.

1.7. The York Street stormwater renewal project is completed. Two pits and a pipe were renewed in order to alleviate a local flooding issue.

1.8. Work on the William stormwater catchment upgrade – stage 8 is almost complete. This project will alleviate local flooding issues. Construction was planned around major events at the Bluff over summer. Re-establishment of the grass on the Eugene Street field is now required before it can be used for winter sports.

1.9. Tenders have been requested for the construction of the children's memorial area at Mersey Vale Memorial Park.



1.10. Work has commenced on the renewal of the public amenities on the East Devonport foreshore, near Melrose Street. Work is due to commence next month on the accessible beach ramp – a project being delivered in partnership with the Rotary Club of Devonport South East and funded by the Tasmanian Community Fund. Work on the renewal of the playground is also scheduled to start next month.

1.11. An agreement is being finalised with the Devonport Men's shed for the installation of agility equipment in the dog exercise area. Council will provide material to the project and the volunteers from the Men's Shed will assemble and install the equipment.

1.12. New storage cupboards have been installed in the Devonport Recreation Centre.

1.13. The new sports field mower has been delivered and is being used on Devonport Oval, Girdlestone Park and Maidstone Park. The old mower has been redeployed to the Valley Road soccer ground.

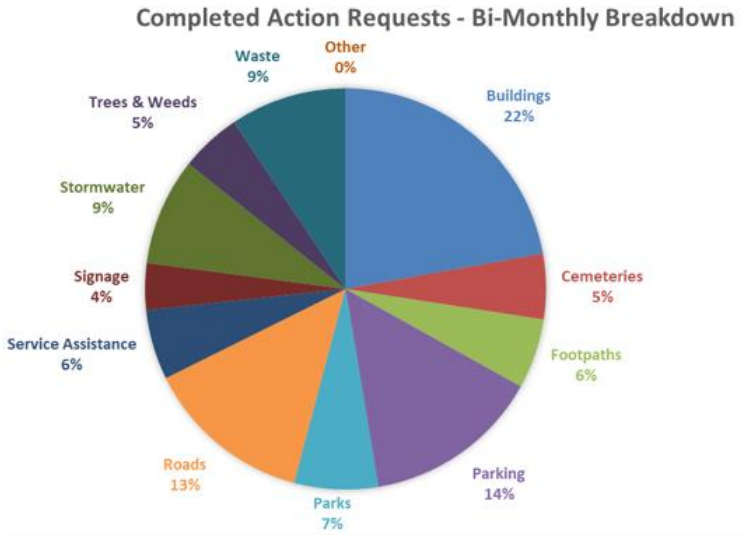
Due to the timing of the preparation of this agenda there is no capital works financial report provided.

2. Management

2.1. The following table is a summary of the action requests for the Infrastructure and Works Department:

Balance of Action Requests as at 31 January 2019	537
Number of Action Requests created in February 2019	284
Number of Action Requests completed in February 2019	281
Balance of Action Requests as at 28 February 2019	540

2.2. The following graph details the categories of the action requests completed during February.

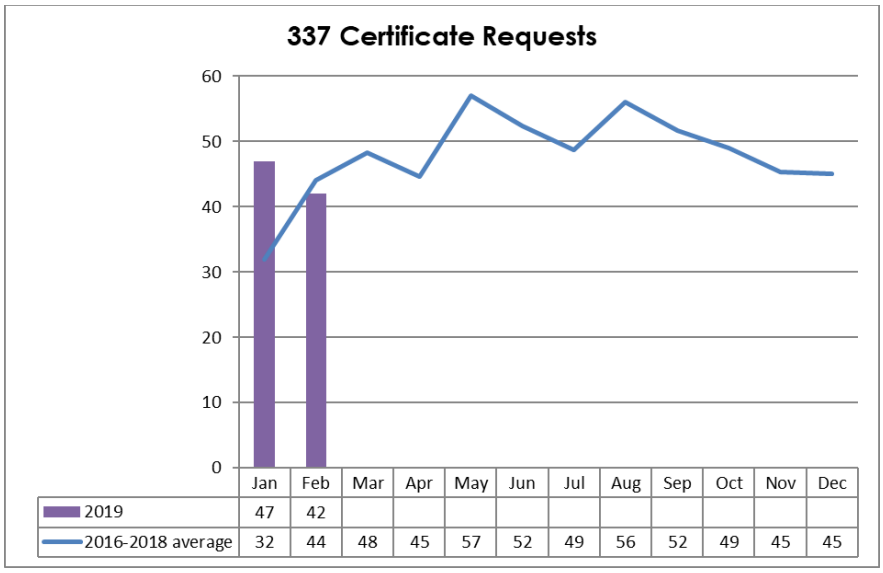


3. Technical and Engineering

3.1. The Coastal Pathway Project Control Group involves representatives from Latrobe and Central Coast Councils and the Cradle Coast Authority. The $4.8M funding deed between CCA and the Federal Government has been finalized and a consultant has been engaged to progress the Ambleside to Latrobe section to a development application. Construction is expected to commence later in 2019, with completion expected in 2021.

3.2. Progress on the hydraulic modelling of stormwater catchments is continuing, with the modelling of the CBD catchments finalised, allowing key capacity upgrades to be planned and integrated with the development of the LIVING CITY Waterfront Precinct.

3.3. 42 Section 337 Certificates were processed in February. The following graph details the 337 Certificates that have been assessed by the Infrastructure and Works Department this calendar year compared to previous years:



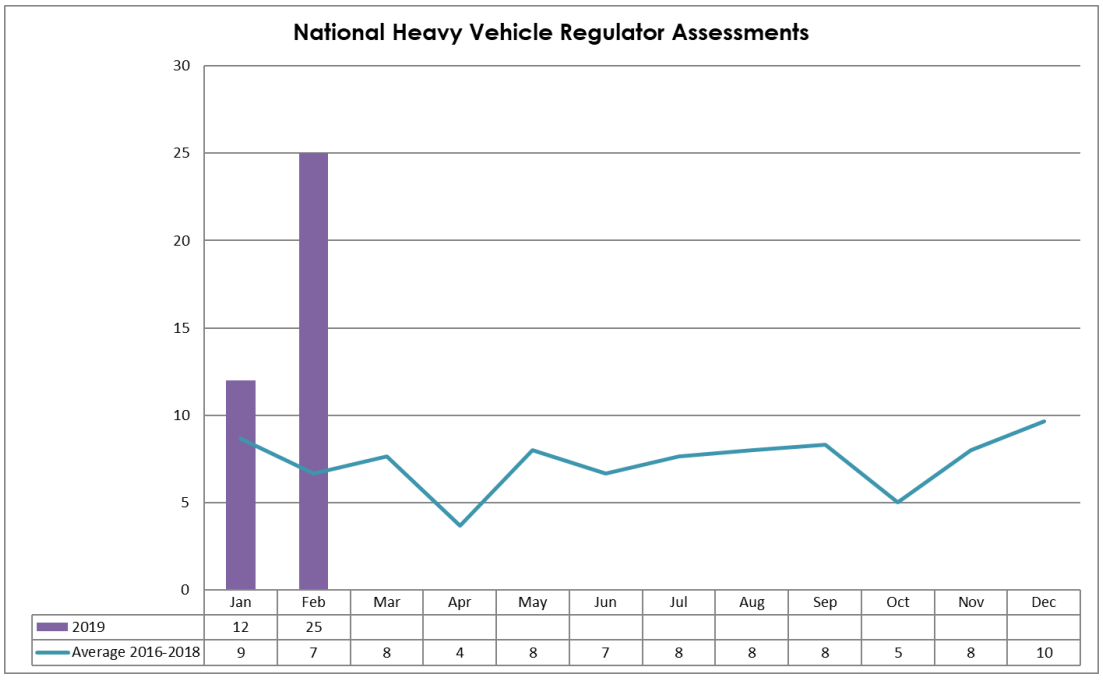
3.4. The following is a summary of the projects capitalised to 28 February 2019.

Number of projects capitalised in February	8
Total value of capitalisations in February	$0.12M
Total value of Works in Progress (WIP) as at 28 February	$64.5M*
Donated Asset Capitalised (Subdivisions) in February	$0.21M
Number of projects awaiting capitalisation next month	5

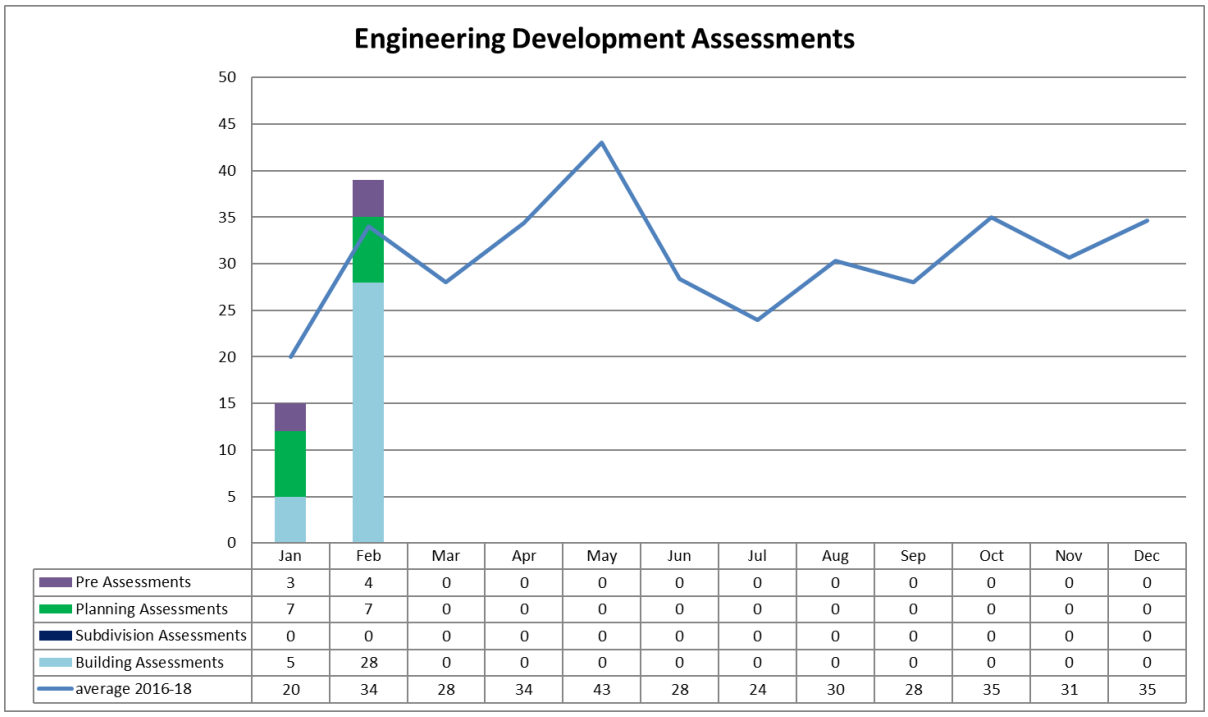
* includes $58.4 LIVING CITY costs yet to be capitalised

The projects scheduled to be capitalised next month include components of the Living City Project – the multi level car park and Providore place. These assets have a combined value of $21M which will significantly reduce WIP.

3.5. Twenty-five National Heavy Vehicle Regulator Assessments were completed in February. The following graph details the National Heavy Vehicle Regulator Assessments that have been issued this year compared to previous years:

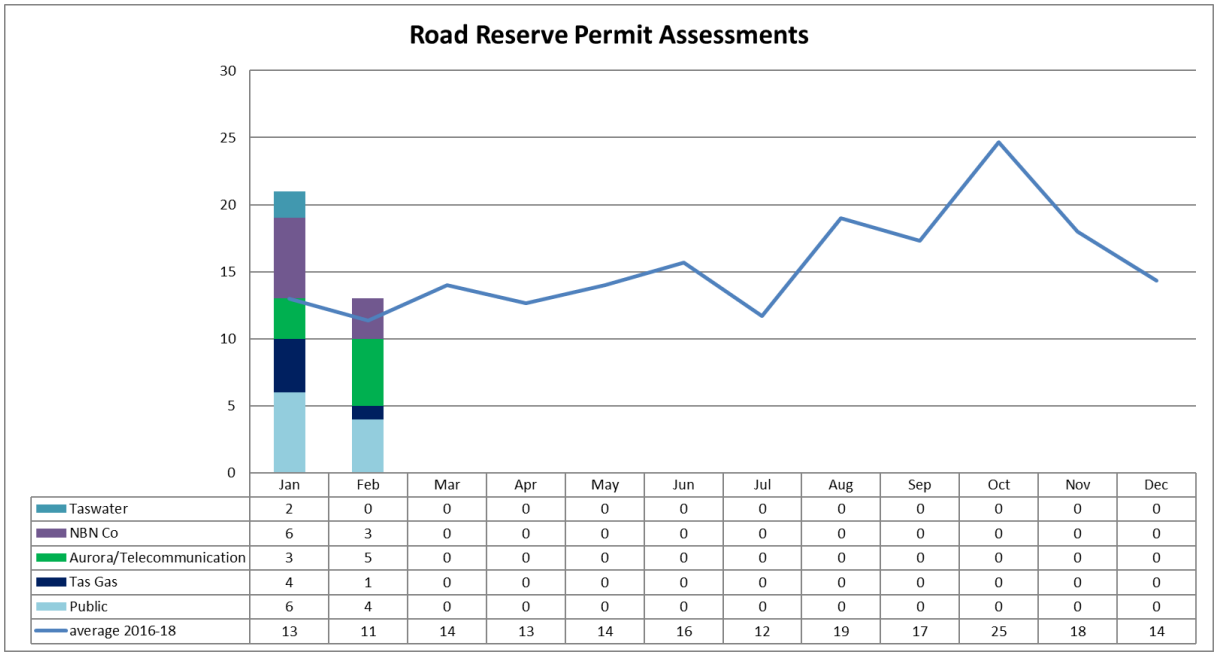


3.6. The following graph details the Engineering Assessments for Development Applications that were completed in February compared to previous years:



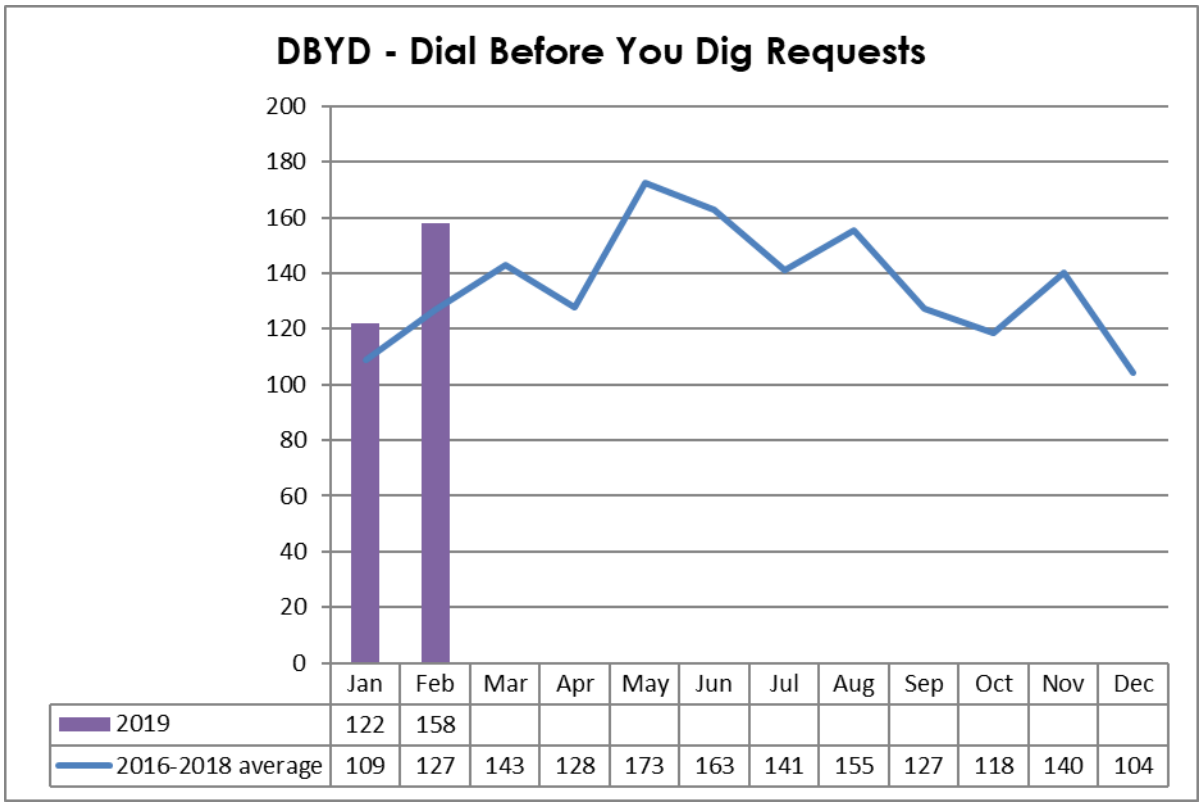
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pre Assessments	3	4	0	0	0	0	0	0	0	0	0	0
Planning Assessments	7	7	0	0	0	0	0	0	0	0	0	0
Subdivision Assessments	0	0	0	0	0	0	0	0	0	0	0	0
Building Assessments	5	28	0	0	0	0	0	0	0	0	0	0
average 2016-18	20	34	28	34	43	28	24	30	28	35	31	35

3.7. Thirteen Road Reserve Permits were issued in February. The following graph details the permits that were issued this year compared to previous years:



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Taswater	2	0	0	0	0	0	0	0	0	0	0	0
NBN Co	6	3	0	0	0	0	0	0	0	0	0	0
Aurora/Telecommunication	3	5	0	0	0	0	0	0	0	0	0	0
Tas Gas	4	1	0	0	0	0	0	0	0	0	0	0
Public	6	4	0	0	0	0	0	0	0	0	0	0
average 2016-18	13	11	14	13	14	16	12	19	17	25	18	14

3.8. 158 Dial Before You Dig requests were processed in February. The following graph details the Dial Before You Dig requests that have been processed this year compared to previous years:



4. Operational Contracts

4.1. The following table details the contracts managed within the Infrastructure and Works Department that have been extended this financial year:

Contract	Contract Period	Extension Options	$ Value (Excluding GST)	Contractor
Contract 1312 Essential Safety and Health Measures	22/11/18 option 1+1	The original contract signed in November 2016 was for a 24-month period and had an option for two 12-month extensions. Further to a review the option for the first 12-month extension was accepted.	Schedule of Rates	Safe Workplace Solutions Pty Ltd, MJ Miller Electrical and Electrical Testing & Compliance Service
Contract 1276 Waste Transfer	30/11/2018 option 1+1	The original contract signed in November 2014 was for a 36 month period and had an option for two 12 month extensions. Further to a review the option for the additional 12 months was accepted.	Schedule of Rates	Veolia Environmental Services

5. Civil Works and Stormwater Maintenance

5.1. Maintenance in accordance with the Service Level Document, undertaken in February and March included:

- Clearing of open drains at Mersey Vale Memorial Park
- Repair of a major failure on Lillico Road
- Kerb repairs in Ronald Street
- Footpath repairs in Woodrising

5.2. In April and May, it is anticipated that civil works and stormwater maintenance works will include:

- Open drain clearing on various rural roads
- Cleaning Stewart Street pavers between Rooke Street and Formby Road
- Repair retaining wall on Stony Rise Road (vehicle damage)
- Repair safety barrier on Formby Road (vehicle damage)

6. Parks and Reserves Maintenance

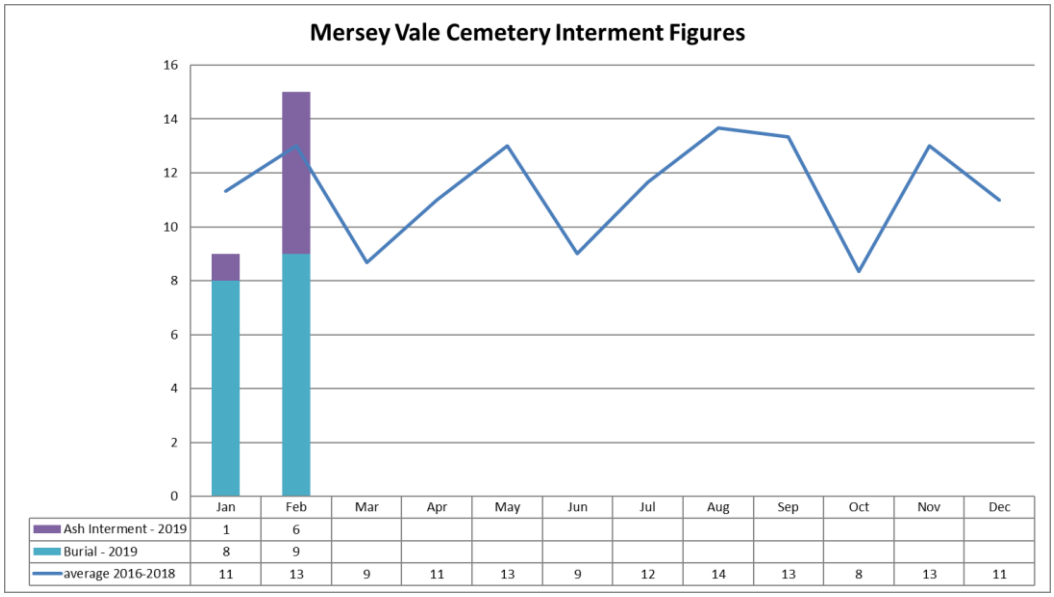
6.1. Maintenance in accordance with the Service Level Document, undertaken in February and March included:

- Irrigating sports grounds and high profile parks
- Watering planter boxes, immature street trees and park trees
- Aeration and fertilisation of sports grounds
- Commencement of sports ground transitions (goals and line marking)

6.2. In April and May, it is anticipated that parks and reserves maintenance works will include:

- Continued irrigation and watering
- Completion of sports ground transitions (goals and line marking)
- Preparation of Victoria Parade and Cenotaph for ANZAC Day

6.3. Mersey Vale Memorial Park interment figures for last year compared to previous years are as follows:



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ash Interment - 2019	1	6										
Burial - 2019	8	9										
average 2016-2018	11	13	9	11	13	9	12	14	13	8	13	11

7. Building and Facilities Maintenance

7.1. Maintenance in accordance with the Service Level Document, undertaken in February and March included:

- External painting and deck staining at Bass Strait Maritime Centre

- External painting of Devonport Cricket Club
- Service assistance to events including Taste the Harvest, Harmony Day and the Devonport Motor Show.
- Painting of James Street entrance of Devonport Oval

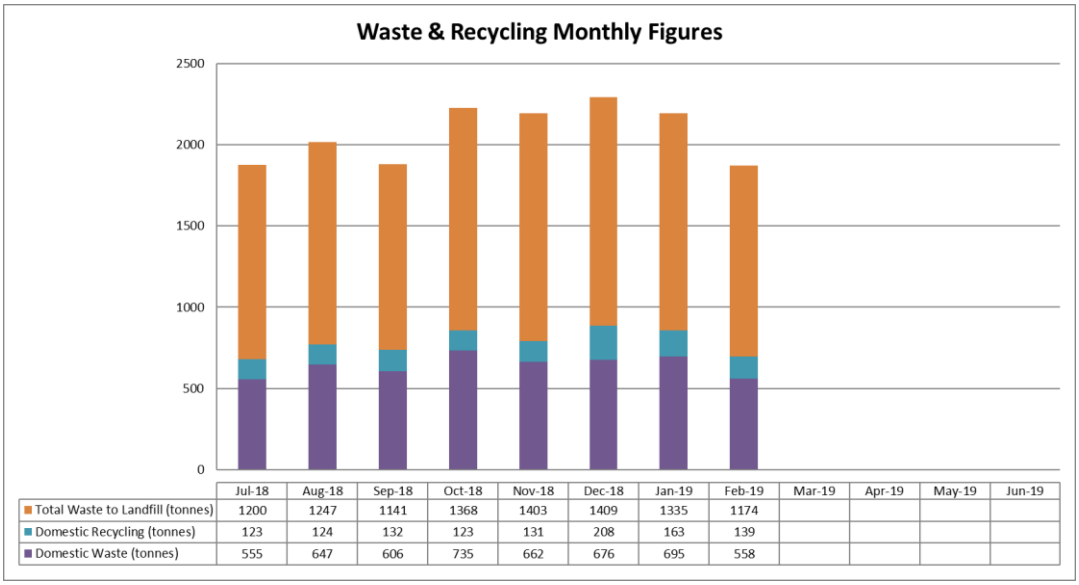
- Install memorial seat on the frontage of the former Devonport Maternity Hospital, Steele Street

7.2. In April and May, it is anticipated that building and facilities maintenance works will include:

- Stain park furniture at Mersey Bluff
- Grind and recoat changeroom floors at Devonport Recreation Centre basketball stadium
- Maintenance to 50m outdoor pool at aquatic centre
- Treatment of floors in Formby Road car park amenities to prolong non-slip coating

8. Waste Management Operations

8.1. Waste Management Services were conducted in accordance with the Service Level Document during February and March. The following graph details the volumes of waste and recycling from the domestic collection services and the total volume of waste to landfill from the Spreyton Waste Transfer Station:



	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
Total Waste to Landfill (tonnes)	1200	1247	1141	1368	1403	1409	1335	1174				
Domestic Recycling (tonnes)	123	124	132	123	131	208	163	139				
Domestic Waste (tonnes)	555	647	606	735	662	676	695	558				

8.2. The following table details the monthly figures for the Spreyton Waste Transfer Station:

Item	February 2019	18/19 YTD	17/18 Total	16/17 Total	15/16 Total
Asbestos – large loads (Tonnes)	0	5.94	9.94	11.02	12.8
Asbestos – small loads (m^3)	12	52	90.5	102.5	109
Mattresses (no.)	61	679	828	695	500
Vehicle Loads – up to 0.5m^3 (no.)	471	4,272	5,117	4,859	7,958
Vehicle Loads – 0.5m^3 to 1.5m^3 (no.)	1,426	11,162	11,724	13,985	12,492
Vehicle Loads – 1.5m^3 to 2m^3 (no.)	380	2,637	6,380	6,422	6,548
DCC Garbage Trucks (Domestic & Commercial Collection Services) (tonnes)	671	6,142	9,207	9,192	9,376
Steel Recycling (tonnes)	151	812	845	897	843
e-Waste (tonnes)	0	24	12	0	9.9
Tyres (no.)	8	223	348	293	359

COMMUNITY ENGAGEMENT
The information provided above details any issues relating to community engagement.

FINANCIAL IMPLICATIONS
Any financial or budgetary implications relating to matters discussed in this report will be separately reported to Council.

RISK IMPLICATIONS
Any specific risk implications have been outlined in the discussion above. Any specific issue that may result in any form of risk to Council is likely to be the subject of a separate report to Council.

CONCLUSION
This report is provided for information purposes only and to allow Council to be updated on activities undertaken by the Infrastructure and Works Department.

ATTACHMENTS
Nil

RECOMMENDATION
That it be recommended to Council that the Infrastructure and Works report be received and noted.

Author:	Michael Williams	Endorsed By:	Matthew Atkins
Position:	Infrastructure & Works Manager	Position:	Deputy General Manager

6.2 DEVELOPMENT AND HEALTH SERVICES REPORT

File: 29543 D571638

RELEVANCE TO COUNCIL'S PLANS & POLICIES

Council's Strategic Plan 2009-2030:

Strategy 5.4.1 Provide timely, efficient, consistent and quality services which are aligned with and meet our customers needs

SUMMARY

This report provides a summary of the activities undertaken by the Development Services Department for the months of February 2019 and March 2019.

BACKGROUND

This report is provided to the bi-monthly Infrastructure, Works and Development Committee meeting to summarise the activities of the Development Services Department in the preceding two months.

The Council functions undertaken by the Department are:

- Planning;
- Building and Plumbing Services;
- Environmental Health;
- Animal Control; and
- Risk and Regulatory Compliance Services.

STATUTORY REQUIREMENTS

In carrying out its activities, the Development Services Department is required to ensure compliance with a substantial amount of legislation and regulation. The principal legislation administered by the Department includes the:

- *Local Government Act 1993*
- *Land Use Planning and Approvals Act 1993*
- *Building Act 2016*
- *Building Regulations 2016*
- *Public Health Act 1997*
- *Food Act 2003*
- *Environmental Management and Pollution Control Act 1994*
- *Dog Control Act 2000*
- *Devonport Interim Planning Scheme 2013*
- *Work Health and Safety Act 2012*

DISCUSSION

1. State Planning Scheme/Local Provisions Schedules

Council continues to progress towards finalising its draft Local Provisions Schedule (LPS) in line with the Minister for Planning's direction that all Tasmanian local Councils will submit a draft LPS to the Tasmanian Planning Commission by or before 30 June 2019. The LPS will form part of single state-wide planning scheme to be known as the Tasmanian Planning Scheme.

A discussion paper has recently been circulated to all Councillors with information on the process for the preparation of the draft LPS.

Before the final draft LPS package (which will include a full set of zone and code maps and supporting documentation) is presented for Council's formal endorsement, it is proposed to workshop the content of the draft LPS. These workshops are expected to be conducted through May, with the further expectation that the draft LPS will be ready to seek formal endorsement from Council late May/early June.

Draft mapping proposed with the LPS is expected to be completed within the next few weeks, with the focus then shifting to finalising the supporting documentation which addresses the statutory requirements and strategic justification for the draft LPS.

Once the draft LPS is prepared it will be submitted to the TPC for review after which it will be the subject of a statutory public exhibition period.

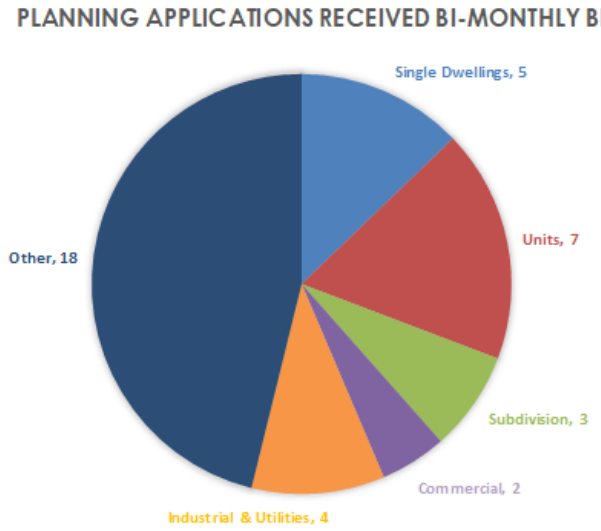
2. Building Control

The Permit Authority has had a number of matters relating to compliance including:

- illegal addition to a shed adjoining a neighbouring property.
- unauthorised excavation of land.
- boundary retaining wall drainage compliance issues.
- failing retaining walls.
- occupying a shed without an occupancy permit.
- defective plumbing installation.
- failed on-site waste water treatment system.

3. Planning

3.1. The following graph details the breakdown of planning applications received during February and March:

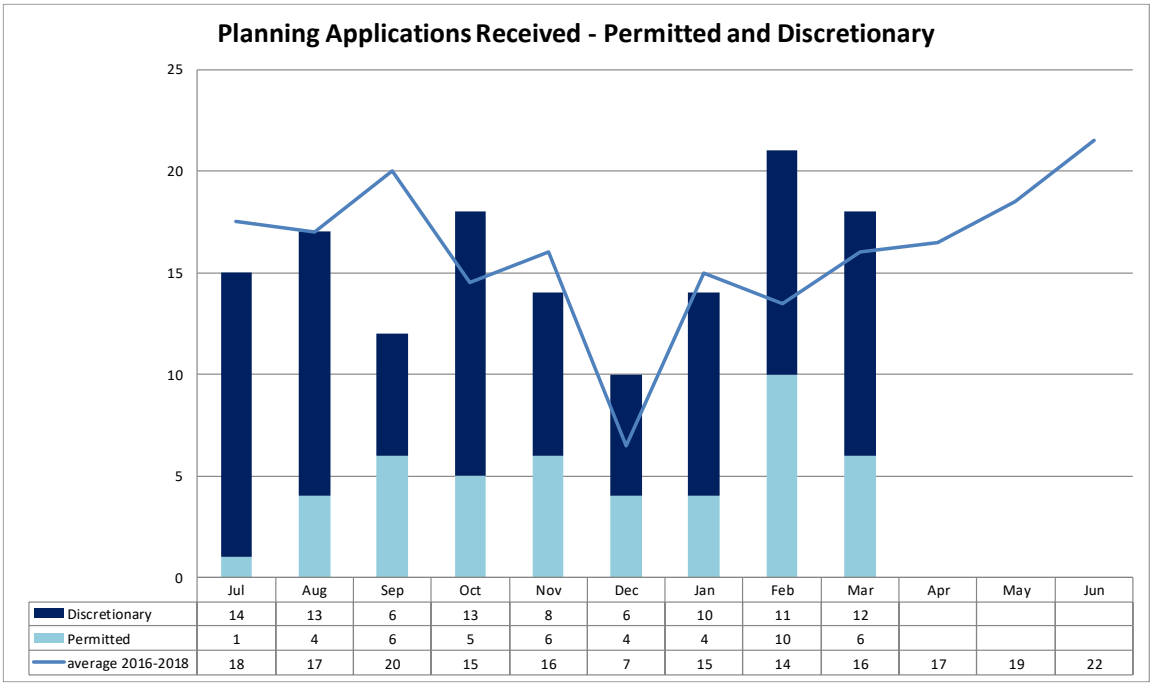


Note:

- Single Dwellings – means single residential dwelling on a single lot.
- Units – means two or more dwellings on a site.
- Subdivision – means the division of a single lot into multiple lots giving separate rights of occupation, excluding boundary adjustments.
- Commercial – means bulky goods sales, business and professional services, community meeting and entertainment, educational and occasional care, equipment and machinery sales and hire, food services, general retail and hire, hotel industry, research and development.
- Tourism – means tourist operations and visitor accommodation.

- Industrial and Utilities – means extractive industry, manufacturing and processing, port and shipping, recycling and waste disposal. Resource processing, service industry, storage, transport depot and distribution, utilities, vehicle fuel sales and service.
- Other – means all other use classes.

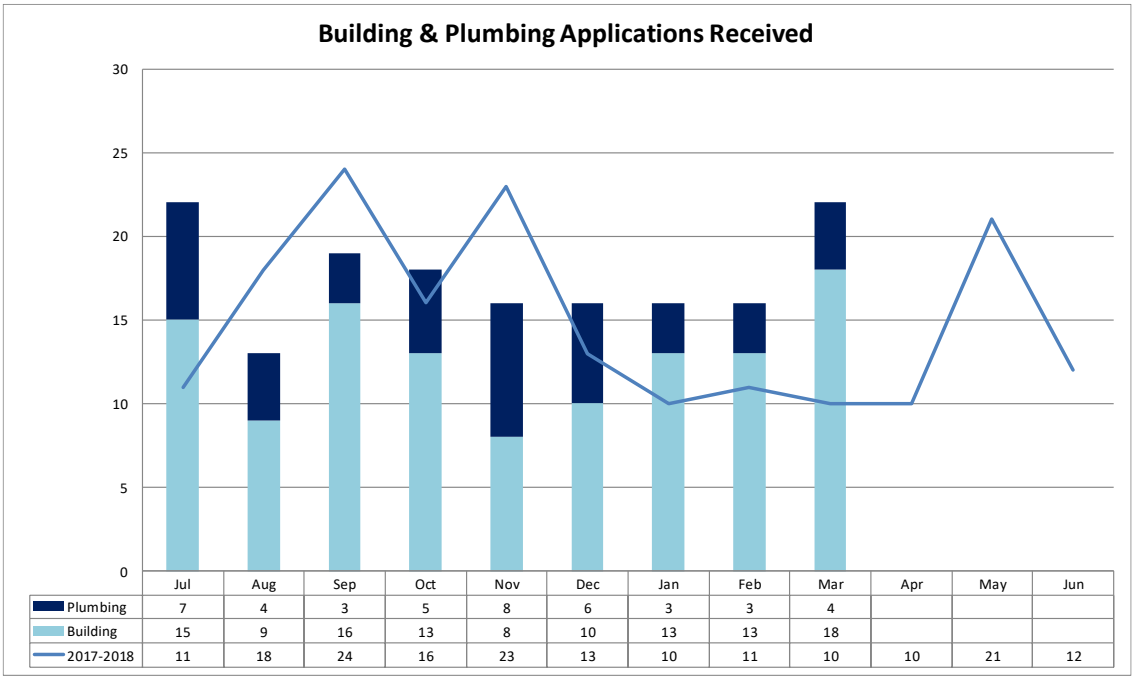
3.2. 23 Discretionary Planning Applications and 16 Permitted Planning Applications were received in February and March. The following graph details the number of Planning Applications received compared to previous years:



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Discretionary	14	13	6	13	8	6	10	11	12			
Permitted	1	4	6	5	6	4	4	10	6			
average 2016-2018	18	17	20	15	16	7	15	14	16	17	19	22

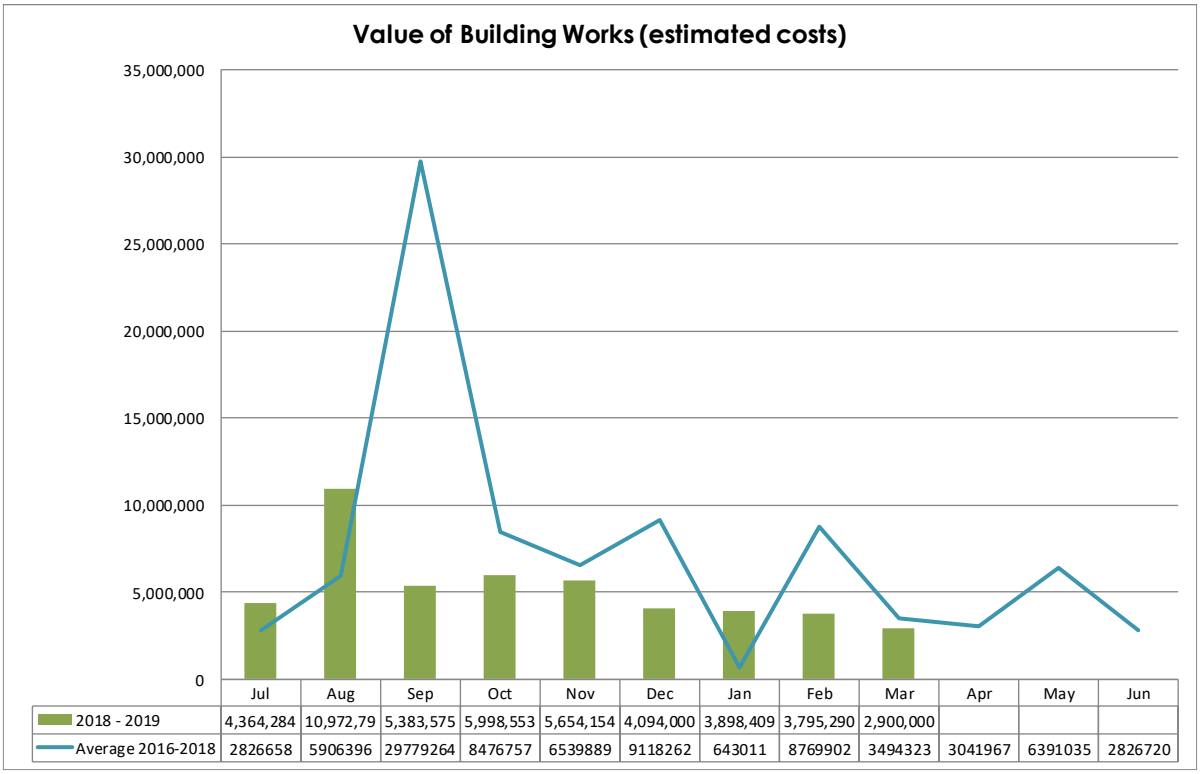
4. Building/Plumbing

4.1. 31 Building Applications and 7 Plumbing Applications were received in February and March. The following graph details the Building Applications compared to the previous year:



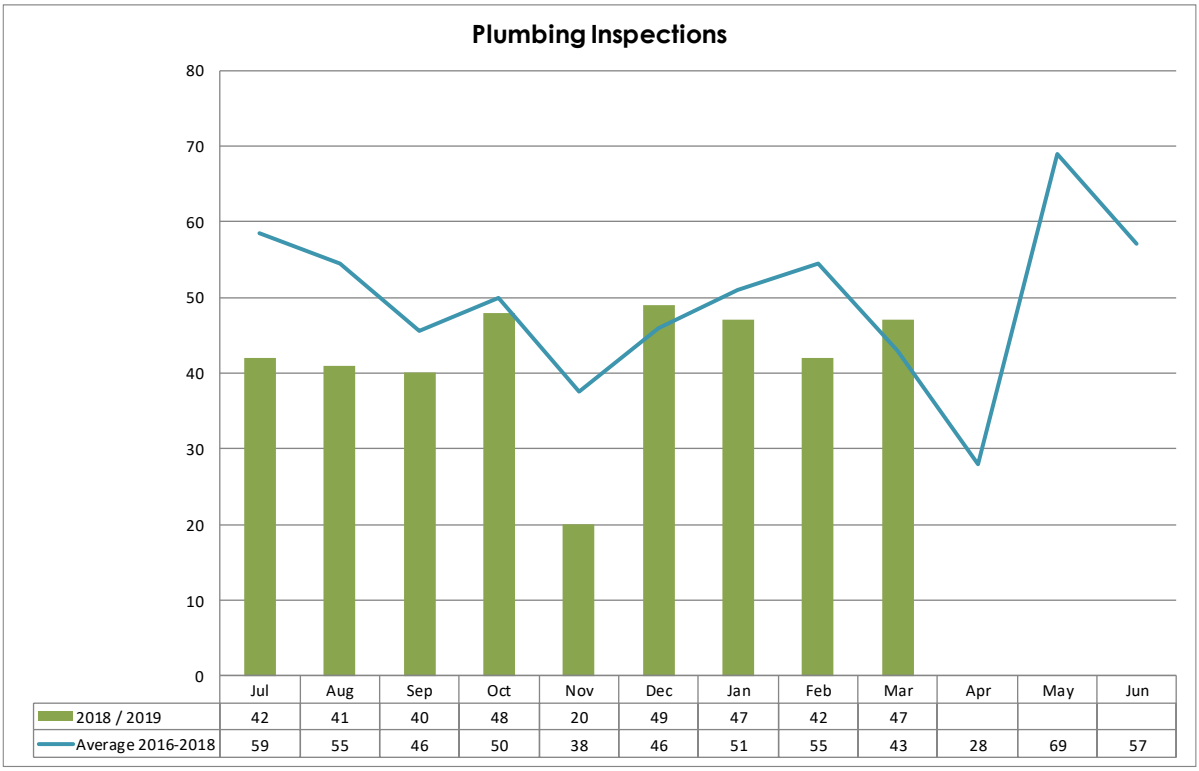
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Plumbing	7	4	3	5	8	6	3	3	4			
Building	15	9	16	13	8	10	13	13	18			
2017-2018	11	18	24	16	23	13	10	11	10	10	21	12

4.2. Building Applications for $3,795,290 worth of building works was received in February and $2,900,000 in March. The following graph details the value of buildings works received compared to previous years:



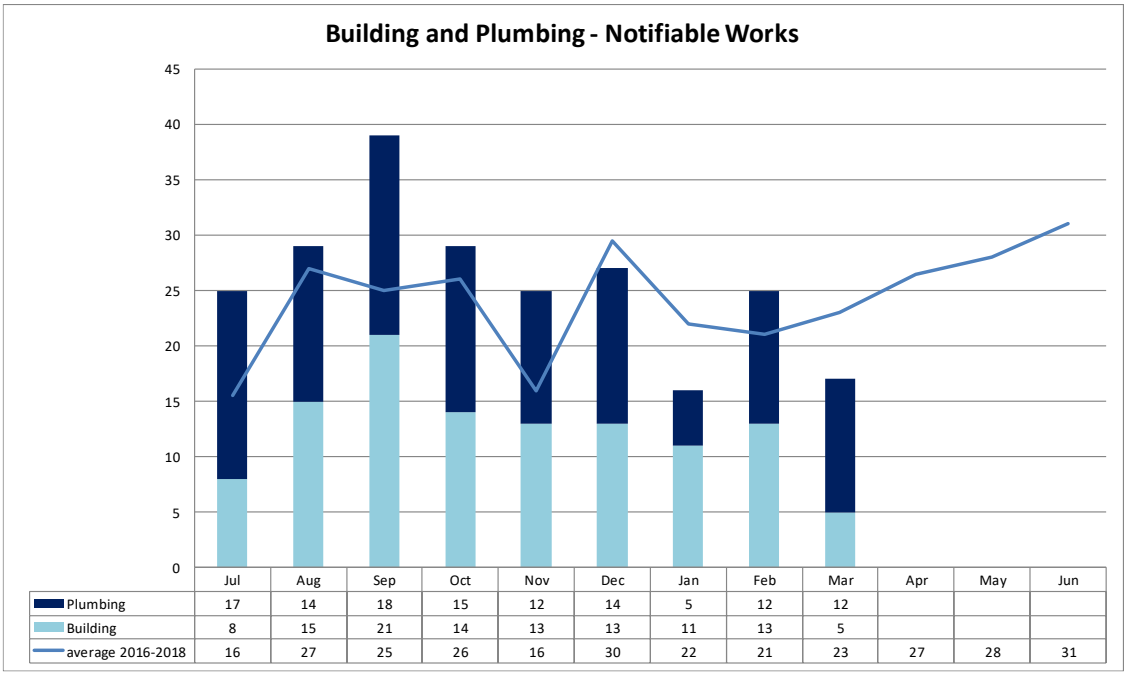
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2018 - 2019	4,364,284	10,972,79	5,383,575	5,998,553	5,654,154	4,094,000	3,898,409	3,795,290	2,900,000			
Average 2016-2018	2826658	5906396	29779264	8476757	6539889	9118262	643011	8769902	3494323	3041967	6391035	2826720

4.3. 42 plumbing inspections were carried out in February and 47 in March. The following graph details the number of plumbing inspections carried out this financial year compared to previous years:



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2018 / 2019	42	41	40	48	20	49	47	42	47			
Average 2016-2018	59	55	46	50	38	46	51	55	43	28	69	57

4.4. The following graph details the notifiable works received for building and plumbing that have been issued this year compared to previous years:



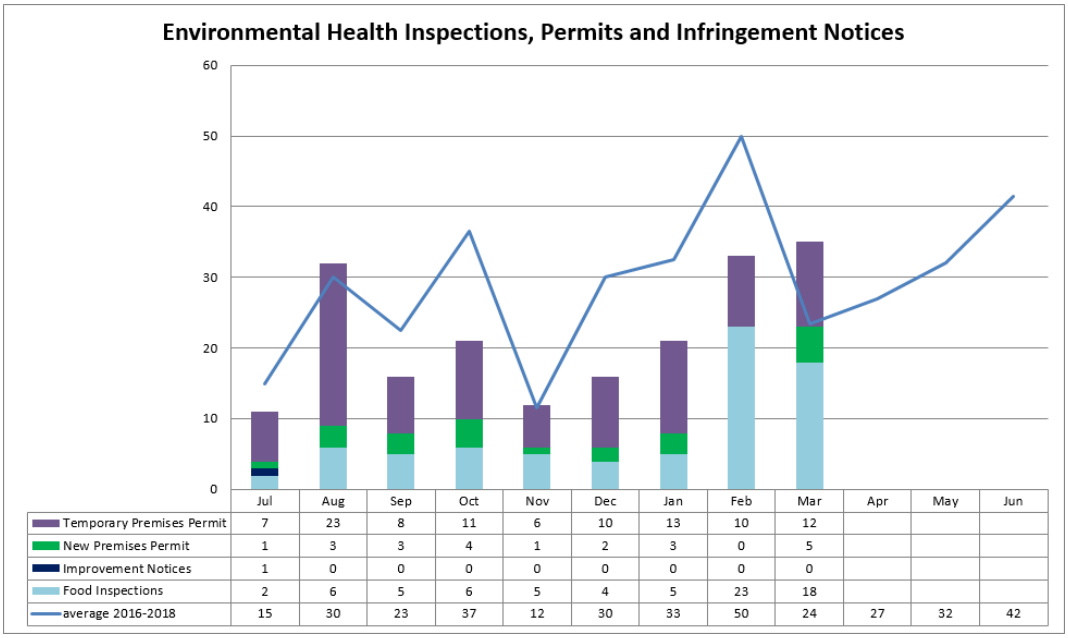
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Plumbing	17	14	18	15	12	14	5	12	12			
Building	8	15	21	14	13	13	11	13	5			
average 2016-2018	16	27	25	26	16	30	22	21	23	27	28	31

5. Environmental Health

5.1. The *Environment Management and Pollution Control (Distribution Atmospheric Emissions) Regulations 2018* expired at the end of January 2019. The Environmental Protection Authority (EPA) have advised that at this stage there are no replacement regulations in force, and they have not provided a timeline for this to occur.

The EPA has further advised that until replacement Regulations are made, the provision of section 53 of the *Environment Management and Pollution Control Act 1994* are available if any action is required to be taken.

5.2. The following graph details the inspections, permits and infringement notices that have been issued by the Environmental Health Officers this year compared to previous years:



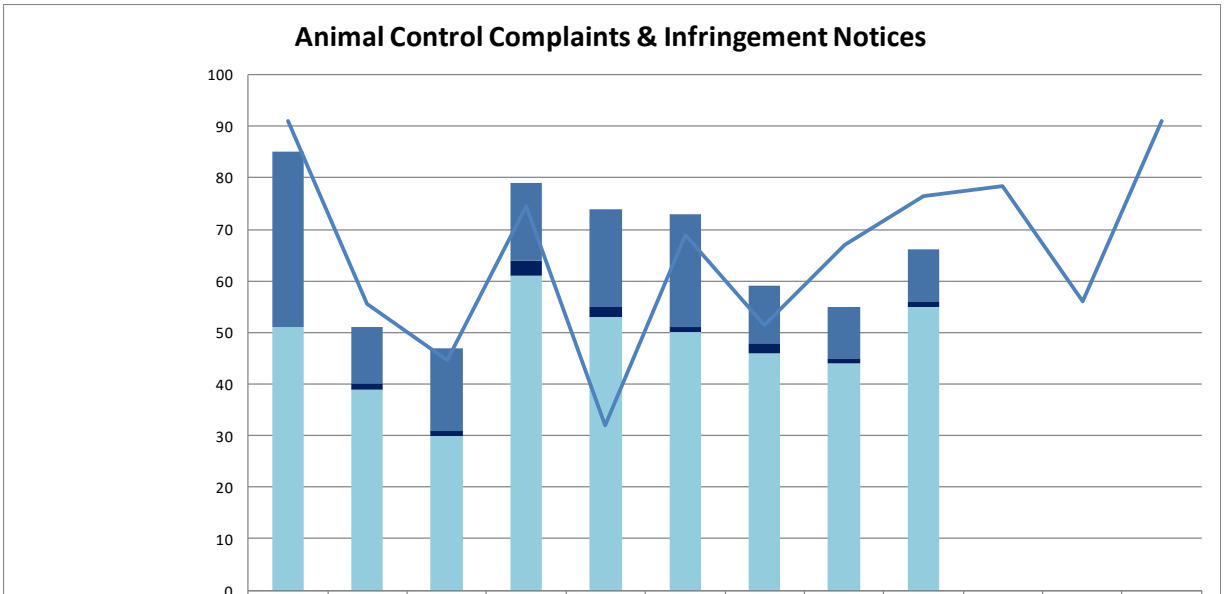
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Temporary Premises Permit	7	23	8	11	6	10	13	10	12			
New Premises Permit	1	3	3	4	1	2	3	0	5			
Improvement Notices	1	0	0	0	0	0	0	0	0			
Food Inspections	2	6	5	6	5	4	5	23	18			
average 2016-2018	15	30	23	37	12	30	33	50	24	27	32	42

6. Animal Control

6.1. At the end of March there were 3,939 dogs registered in Devonport.

6.2. In February and March, a total of 101 animal complaints were received. These complaints predominately related to dog at large and barking dogs. Ten dog attacks were reported and dealt with, within the period. All complaints were responded to within two working days.

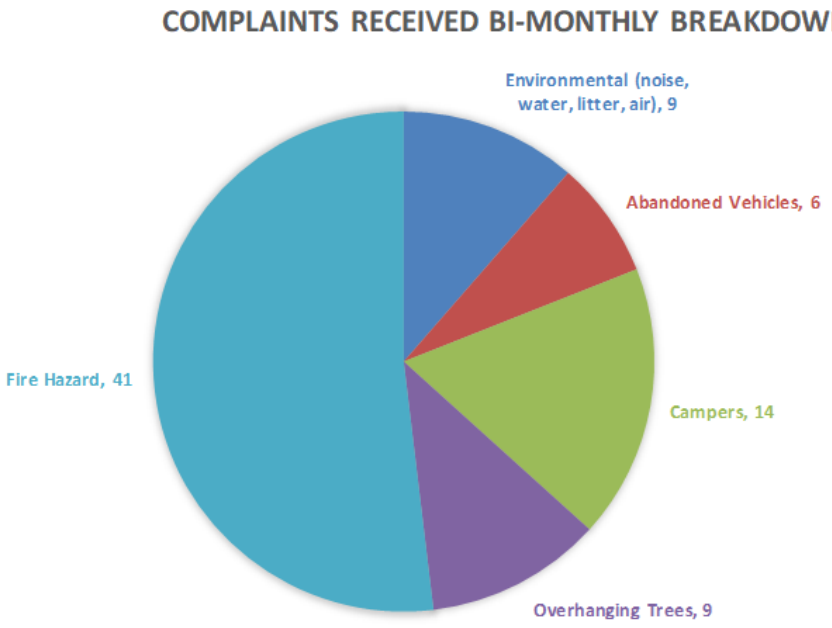
6.3. The following graph details the number of animal complaints for this financial year compared to the same period last year:



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Infringements Issued	34	11	16	15	19	22	11	10	10			
Other Animal Complaints	0	1	1	3	2	1	2	1	1			
Dog Complaints	51	39	30	61	53	50	46	44	55			
average 2016-2018	91	56	45	75	32	69	52	67	77	79	56	91

7. Risk and Compliance

7.1. The following graph details the breakdown of the complaints received by the Risk Department during February and March:



7.2. 14 internal incidents and 19 external incidents were reported during February and March. The following table details the types of incidents:

Internal Incident Type	**No. of Reports**	**Description**
Personal Injury	4	• Laceration to hand • Tear to shoulder • Insect bite • Lower back strain
Property Damage	7	• Meercroft Park – damage to ground caused by motor vehicle • Damage to multi meter parking machines • Damage to tree surround caused by motor vehicle • Break in at Devonport Cricket Club • Part ceiling collapse at BSMC • Motor vehicle crashed into boundary fence at Valley Rd Soccer ground • Wheelie bin set on fire
Motor Vehicle	6	• Object hit motor vehicle • Motor vehicle hit pillar • Hit obstacle breaking side mirror • Hit pillar breaking side mirror and scraping door • Council vehicle hit by public vehicle • Hit pine post
Hazard	1	• Syringe found near old cemetery
Near Hit	1	• Frayed edges on overalls caught on fire while welding
External Incident Type	**No. of Reports**	**Description**
Personal Injury	1	• Trip and fall
Property Damage	1	• Torn clothing on bench seat
Motor Vehicle	1	• Road closure sign blew over and hit vehicle
Hazard	1	• Spray from contractor water truck spraying vehicles and pedestrians

The following table details the breakdown of potential and actual claims:

	Internal Incidents	External Incidents
Potential Claims	1	1
Potential Claim Costs	$90	$15
Actual Claims	1	1
Actual Claim Costs	$90	$15

COMMUNITY ENGAGEMENT

The information provided above details any issues relating to community engagement.

FINANCIAL IMPLICATIONS
Any financial implications arising out of this report will be reported separately to Council.

RISK IMPLICATIONS
There are no specific risk implications as a result of this report.

CONCLUSION
This report is provided for information purposes only about the activities of the Development Services Department in February and March 2019.

ATTACHMENTS

Nil

RECOMMENDATION

That it be recommended to Council that the Development Services Report be received and noted.

Author:	Kylie Lunson	Endorsed By:	Matthew Atkins
Position:	Development Services Manager	Position:	Deputy General Manager

7.0 CLOSURE

There being no further business the Chairperson declared the meeting closed at pm.