

RECREATION ASSET MANAGEMENT PLAN

Part 1 - Summary

Version 3.0

December 2017

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Executive Summary

The Town of Bassendean owns and maintains a range of assets that help to support the delivery of a recreation service. This includes softscape, hardscape, sports equipment, irrigation and so on.

This document is the Town's Asset Management Plan (AMP) for the recreation portfolio (parks, gardens and natural areas). It outlines the activities and programmes that will be carried out over the next 15 years. It also details the service levels (standard) the Town will provide and the resources required to deliver them.

While the document is comprehensive, it is also evolving with the Town's practice maturity. As such there are a number of actions that have been identified that will improve the AMP's accuracy over time. All readers of this AMP must understand its limitations and applied assumptions before acting on any information contained within it. All information within this AMP is fully detailed within a separate Part 2 document.

Overall, the Town's recreation portfolio is worth approximately \$6.5m and generally appears to be in a very good condition. The portfolio's asset consumption ratio currently sits at 75%, being above the normal target range of between 50% - 70%. The Town has a robust asset inventory, with limitations only existing across underground irrigation.

In order to improve the Town's management practices, a number of key tasks have been identified, these are to:

- = Update the Town's spatially referenced (e.g. GIS) recreation asset database, with inventory characteristics and condition ratings for all assets.
- = Ensure that all recreation assets are valued.
- = Review the Town's current safety and maintenance inspection procedures and develop associated procedures for the assessment of inventory and condition data.
- = Investigate the reasons as to why two of the asset performance measures are above the target band.
- = Monitor recreation areas' costs and usage levels.

Background and Objectives

Purpose of this Asset Management Plan

This document is an Asset Management Plan (AMP) for the Town's recreation assets. These are typically defined as infrastructure located within parks, gardens, ovals etc., but excluding buildings and paths. The AMP documents how the Town plans to manage these assets, to deliver services of a specified quality (service levels) and what the associated long term costs are.

Focus of this Asset Management Plan

The AMP focuses on recreation assets. The number of recreation 'places' that make up the portfolio is detailed in Table 1.

Place/Park Type	Quantity	Area (sq.m.)
District Public Open Space	4	208,657
Drainage Reserve	1	6,325
Local Public Open Space	25	99,320
Neighbourhood Public Open Space	9	294,413
Pocket Park	2	1,653
Regional Public Open Space	7	619,534
Road Closure	26	25,107
Total	74	1,255,009

Table 1: Assets covered by the Recreation AMP

Corporate Document Relationships

This AMP integrates with the other following Town documents:

- = Strategic Community Plan
- = Corporate Business Plan
- = Long Term Financial Plan
- = Annual Budget

Time Period of the AMP

The Asset Management Plan covers a 15 year period.

Service Levels

Introduction

Service Levels describe the standard (e.g. quality) that the Town provides from its recreation assets. These have been developed through the consideration of strategic inputs, policy inputs (Appendix A) and perceived customer requirements. The process through which the Town's Service Levels were developed is found in Appendix B.

Community Perceptions/Expectations

The last Community Perceptions Survey (2016) indicated the following performance results and trends.

Focus	Satisfied or Very Satisfied	Trend

Table 2: Community Perceptions Survey Results

Service Level Performance

Table 3 details the service level performance that the Town is currently achieving. At present, no KPIs have yet been ascertained.

KPI	Performance	Tactic
Accessibility	Unknown	Monitoring
Environmental Sustainability	Unknown	Monitoring
Financial Sustainability	Unknown	Monitoring
Natural Area Sustainability	Unknown	Monitoring
Quality	Unknown	Monitoring
Safety	Unknown	Monitoring
Usage	Unknown	Monitoring

Table 3: Service Level Performance

Demand

This section summarises likely factors that may affect the demand for recreation services over the life of the AMP. Full details of past and future demand factors are recorded in Appendix C.

Historic Demand

The following table outlines the key factors that have affected historical service demand change.

Driver Type	Effect	Demand Change
Population	Town population up by 1,781 people (+13%) between 2001 and 2016.	Increase
Demographic	Population increase in all demographic age bands (2001 – 2016) except 5-14 and 15-19 years. Median age has remained steady at 39 years (2006 – 2016).	Neutral
Recreation Participation	Participation rates continue to fall slightly year on year across the general population. Walking remains the most popular activity for recreation.	Decrease
Tourism	Perth metropolitan visitor rates up from 13.2m Y/E March 2013 to 18.2m Y/E March 2017. A small portion could be expected to visit locations within the Town (e.g. foreshore)	Increase
Climate	Annual rainfall down from approximately 910mm to 680mm (1886 to 2016). Annual monthly mean maximum temperatures up from 31.8°C to 33.6 °C (1945 to 2016). Changes could have decreased assets' lives, while increasing maintenance frequencies and costs.	Increase

Table 4: Historic Demand Drivers

Future Demand

Consideration was given to six possible future demand drivers (political, economic, social, technological, legal and environmental) that may influence demand on the provision of recreation based services.

Driver Type	Effect	Demand Change
Political	Land use planning changes may increase demand for recreation services, though a limited number of new 'spaces' can realistically be created. IPRF legislation	Increase

Driver Type	Effect	Demand Change
	will likely to continue to demand at least a short-term increase in asset management resources and effort. Potential rate capping legislation may cause long term challenges.	
Economic	Demand pressure to reduce the use of non-renewable energy resources and to increasingly reuse water and/or reduce water usage. Further internal asset management practice improvements would increase financial efficiency and long term sustainability.	Increase
Social	A forecasted increase in the Town's future population will in theory increase the demand for recreation services. However, if the trend in declining recreation participation continues, this will offset demand to a decrease of -0.2% per annum. At this point in time, demographic and social disadvantage drivers seem not to be a cause of demand change.	Decrease
Technological	Opportunity exists to manage and maintain the recreation portfolio more efficiently and sustainably and thus reduce demand. Major changes to participation rates caused by technology influences are unlikely. Possible increase in resource demand due to required additional asset management practices.	Increase
Legal	No identified demand change drivers.	Neutral
Environmental	Increased demand for clearer decision making around asset need. Increased demand for more environmentally sustainable recreation assets and maintenance techniques. Increased demand to use drought tolerant vegetation and non-rain sourced water.	Increase

Table 5: Future Demand Drivers

Demand Management

A review of past and future demand factors shows that recreation service demand change has occurred, and will also likely occur into the future. Looking forward, the following initiatives/improvements are proposed to meet demand changes.

- = Develop a climate change response plan for the recreation service.
 - = Investigate alternative energy sources for recreation services and other initiatives that improve service environmental sustainability.
 - = Review the Town's asset renewal funding ratio.
- Undertake a review of actual recreation participation rates within the Town.

Risk Management

A risk analysis of the current recreation asset management deficiencies identified by the AMP has been undertaken. The results are detailed in Appendix D. Table 6 outlines the top identified risks.

Ref.	Risk	Level of Risk	Further Action

Table 6: Major Recreation Asset Management Risks

Lifecycle Management Plan

The lifecycle management plan details how the Town intends to manage and operate its recreation portfolio at the agreed service levels. Full details of the portfolio can be found in Appendix E.

Recreation Portfolio Physical Parameters

Table 7 details the types of recreation assets within the Town and their combined values.

Asset Type	Quantity (Number)	Current Replacement Cost	Fair Value	Annual Depreciation
Furniture	503	\$1,772,162	\$1,490,792	\$47,535
Hardscape	133	\$383,714	\$253,748	\$12,152
Irrigation	N/A	\$1,082,382	\$835,236	\$48,623
Lighting	101	\$484,539	\$343,385	\$19,953
Softscape	N/A	\$771,493	\$510,544	\$44,243
Sports Equipment	88	\$319,941	\$273,443	\$16,734
Structures	812	\$1,651,306	\$1,112,449	\$63,793
Total	1,637	\$6,465,537	\$4,819,597	\$253,033

Table 7: Recreation Portfolio Physical Parameters

Recreation Portfolio Condition

Table 8 details the percentage of asset types within each condition band.

Asset Type	Excellent	Good	Average	Poor	Very Poor	Unknown
Furniture	16%	55%	21%	5%	2%	1%
Hardscape	13%	62%	23%	1%	0%	1%
Irrigation	-	-	-	-	-	-
Lighting	10%	66%	14%	10%	0%	0%
Softscape	-	-	-	-	-	-
Sports Equipment	7%	31%	56%	6%	1%	0%
Structures	10%	57%	29%	3%	1%	0%
Total	12%	56%	27%	4%	1%	0%

Table 8: Recreation Portfolio Condition

Recreation Portfolio Data Confidence and Reliability

Table 9 details the reliability and confidence levels of the current asset data the Town holds. It is the Town's intention to maintain data confidence levels for all areas as either a 1 or 2.

Park Type	Inventory	Condition	Valuation
District POS	2	2	2
Drainage Reserves	1	1	1
Local POS	2	2	2
Neighbourhood POS	2	2	2
Pocket Parks	1	1	1
Regional POS	2	2	2
Road Closures	1	1	1

Table 9: Recreation Portfolio Data Confidence Levels

Lifecycle Management Strategies

Operation & Maintenance Strategy

The Town employs preventative maintenance strategies to maximise asset performance and minimise long terms costs. Each asset group's strategy is specifically designed for its own requirements. Technical maintenance service levels are listed in a standalone manual and the asset inspection frequencies in Appendix F. All planned maintenance activities are individually costed and used to inform long term budgets.

Renewal Strategy

Recreation assets are periodically inspected to determine their condition. Results are then used to predict assets' potential year of renewal. Staff then determine the timing, scope and budget of any future renewal project. Projects are then listed on a long term works programme and reported within this AMP.

Upgrade/New Strategy

The need for new and/or upgraded assets (e.g. to meet a service deficiency) are identified from several potential sources. Each potential asset is investigated by staff and where valid, often prioritised against similar projects. Approved projects are then listed onto the works programme. At present, the Town does not have a formal prioritisation framework for upgrade/new assets, where their 'strategic fit' against the Strategic Community Plan can be determined.

Disposal Strategy

The Town does not frequently dispose of recreation assets (this is where the asset is not replaced/renewed). Where a potential need is identified, then this is considered by staff, and in some cases, Council.

Financial

This section contains the financial requirements resulting from all the information presented in this AMP. A detailed financial model is recorded in Appendix G.

Projected Expenditure Requirements

Expense Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22
Operations					
Maintenance					
Renewal					
Upgrade					
New					
Disposal					
Required Funds					

Expense Type	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	Year 10 2026/27
Operations					
Maintenance					
Renewal					
Upgrade					
New					
Disposal					
Required Funds					

Expense Type	Year 11 2027/28	Year 12 2028/29	Year 13 2029/30	Year 14 2030/31	Year 15 2031/32
Operations					
Maintenance					
Renewal					
Upgrade					
New					
Disposal					
Required Funds					

Table 10: Recreation Asset Projected Expenditure Requirements

Projected Potential Revenue Sources

Source	Year 1	Year 2	Year 3	Year 4	Year 5
	2017/18	2018/19	2019/20	2020/21	2021/22
Nil					
Municipal Funds					
Source	Year 6	Year 7	Year 8	Year 9	Year 10
	2022/23	2023/24	2024/25	2025/26	2026/27
Nil					
Municipal Funds					
Source	Year 11	Year 12	Year 13	Year 14	Year 15
	2027/28	2028/29	2029/30	2030/31	2031/32
Nil					
Municipal Funds					

Table 11: Recreation Asset Projected Funding Sources

Plan Improvement and Monitoring

This Section of the AMP outlines the degree to which it is an effective and integrated tool within the Town. It also details the future tasks required to improve its accuracy and robustness.

Performance Measures

The effectiveness of the AMP will be monitored by the performance of the three statutory ratios that the Town reports on. Each ratio is described in Appendix H. The Town's current performance is recorded in Table 12.

Year	Asset Consumption Ratio	Asset Sustainability Ratio	Asset Renewal Funding Ratio
2017	75% (above)		

Table 12: AMP Performance Measures

Improvement Plan

The asset management improvement plan generated from this AMP is shown in Table 13.

Task No	Task	Responsibility	Timeline
1			
2			
3			
4			
5			
6			
7			
8			

Table 13: Recreation AMP Improvement Plan

Monitoring and Review Procedures

This AMP will be reviewed during annual budget preparation and amended to recognise any changes in levels of service and/or resources available to provide those services as a result of the budget decision process.

RECREATION ASSET MANAGEMENT PLAN

Part 2 - Detailed

Version 3.0

December 2017

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Appendix A – Legislation, Acts, Regulations & Standards

This section provides details on all legislation, standards, policies and guidelines that should be considered as part of the management practices of the Town's recreation assets.

Legislation / Standard / Organisation	Requirement / Document
Local Government Act 1995	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by AMPs for sustainable service delivery. The Act also provides guidance on the rules around local governments who derive revenue from operations such as non-core business.
Environmental Protection Act 1986	The Act's key objective is to simply protect the environment of the State and sets out a host of regulations and requirements to achieve its goal. Requires permit and flora survey prior to vegetation removal, relates to the prevention of pollution - either to land air or water. Defines two types of harm - material environmental harm or serious environmental harm.
Environment Protection Act (unauthorised discharges) Regulations 2004	States that pesticide cannot be discharged into the environment.
Building Code of Australia	The Building Code of Australia (BCA) is Volumes One and Two of the National Construction Code (NCC). The BCA is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian Government and State and Territory Governments. The BCA has been given the status of building regulations by all States and Territories.
Aboriginal Heritage Act 1972	Regulations and requirements that the Town must comply with relating to aboriginal heritage.
Aboriginal Heritage Regulations 1974	Preservation of the community places and objects used by traditional owners.
Native Title Act 1999	Regulations and requirements that the Town must comply with in relation to the use of land.

Dangerous Goods Safety Act 2004	Relates to the safe storage, handling and transport of dangerous goods (e.g. herbicides).
Poisons Act 1964	Regulates the possession and use of poisons.
Department of Employment & Workplace Relations - Code of Practice - Management of Hazardous Substances (NOH:1994)	Regulates the possession and use of poisons
Health Act 1911	Relates to the handling and disposal of hazardous materials including asbestos.
Wildlife Conservation Act 1950	Provides for the conservation and protection of native flora and fauna.
Dividing Fences Act (1961)	Local government exemption from 50/50 contribution for dividing fences abutting public open space.
Rights in Water and Irrigation Act 1914	Licence to take water from the groundwater aquifer for the purposes of irrigation of public open space
Contaminated Sites Act 2003	Current parks are built on former tip and contaminated sites, effects quality of bore water and regulates treatment for contaminated soils
Contaminated Sites Regulations 2006	Current parks are built on former tip and contaminated sites, effects quality of bore water and regulates treatment for contaminated soils
Health (Pesticides) Regulations 1956	Regulates the possession and use of pesticides.
Bush Fires Act 1954	Regulates the specifications of firebreaks
Occupational Health and Safety Act 1984	The Occupational Health and Safety Act is concerned with protecting the safety, health and welfare of people engaged in work or employment. Full consideration and application of the Act should be given in order to identify, manage and reduce or mitigate the risk of harm to the Town's employees.
OSH Regulations 1996	The guidelines for employees and employers to undertake within the work environment
Disability Discrimination Act 1992	The Federal Disability Discrimination Act 1992 (D.D.A.) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that

	flow from participation by the widest range of people. Disability discrimination happens when people with a disability are treated less fairly than people without a disability. Disability discrimination also occurs when people are treated less fairly because they are relatives, friends, carers, co-workers or associates of a person with a disability.
Disability Services Act 1993	An Act for the establishment of the Disability Services Commission and the Ministerial Advisory Council on Disability, for the furtherance of principles applicable to people with disabilities, for the funding and provision of services to such people that meet certain objectives, for the resolution of complaints by such people, and for related purposes.
Disability Services Regulations 2004	Current amendments to Disability Services Act (1993)
Agriculture and Related Resources protection (European House Borer) regulations	Regulation 3 all properties within 100m are declared as priority management zones Regulation 9 pinewood timber within priority management zone is required to be destroyed and disposed of.
Agricultural and Veterinary Chemicals Act 1994	Control of certain high toxicity herbicides
Agriculture and Related Resources Protection Act 1976	Control and prevention of certain plants
Biological Control Act 1986	Provision for the Biological control of pests
Energy Safety WA Code of Practice for Personnel Electrical Safety for Vegetation Control Works near Live Powerlines	The Code details the requirements for vegetation control work carried out near the live conductors of overhead power lines and is to be read in conjunction with Electricity Regulations 1947 Regulation 316A.
WA Department of Sport & Recreation (Sports dimensions for playing fields)	This guide has been prepared with the assistance of national and State sporting associations responsible for the administration of their respective rules.
AS 4373-2007 Pruning of Amenity Trees	The Standard aims to encourage pruning practices and procedures that reduce the risk of hazard development, branch failure, pathogen infection and premature tree death.

AS 26983-1990 Plastic Pipes & Fittings for Irrigation	Specifies requirements for mechanical jointing fittings suitable for use as fixed joints with polyethylene pipes manufactured in accordance with AS 2698.
AS/NZS 4486.1-1997 Playgrounds & Playground Equipment	Specifies requirements for the development, installation, inspection, maintenance and operation of playgrounds and playground equipment to ensure a continuing level of function and safety. It also contains requirements for information to be supplied by the manufacturer.
Accounting Standards	= AASB 5 Non-Current Assets Held for Sale and Discontinued Operations = AASB 13 Fair Value Measurement = AASB 116 Property, Plant and Equipment = AASB 118 Revenue = AASB 136 Impairment of Assets = AASB 138 Intangible Assets
Other Standards and Regulations	Other relevant documents include, but are not limited to: = AS/NZS 4360: 1995 Risk Management = All other relevant State and Federal Acts & Regulations = All Local Laws and relevant policies of the organisation
Town of Bassendean Policies	= 1.8 – Significant Tree = 1.10 – Street Tree Protection = 1.11 – Street Tree Pruning, Removal & Replacement = 1.12 – Amenity Tree Evaluation = 2.2 – Treatment of Weeds and Noxious Plants = 2.3 – Natural Areas Management = 2.4 – Local Biodiversity = 2.5 – Landscaping with Local Plants = 2.6 – Foreshore Restoration = 2.10 – Nutrient & Irrigation Management = 2.11 – Wetlands = 4.2 – Public Art Acquisition & Management = 4.3 – Public Art = 4.5 – Banner Poles = 5.17 – Sports Lighting = 5.22 – Reserves Sponsorship Signage = 6.16 – Purchasing = 6.17 – Risk Management = 6.24 – Asset Management

Table 1: Legislative Requirements, Standards, Policies and Guidelines

Appendix B – AMP Stakeholders and Service Levels

AMP Stakeholders

Analysis of the Town's recreation service revealed that there are seven key stakeholder groups. These stakeholders are identified below and while there may be other minor stakeholders, they have not been specifically considered by this AMP.

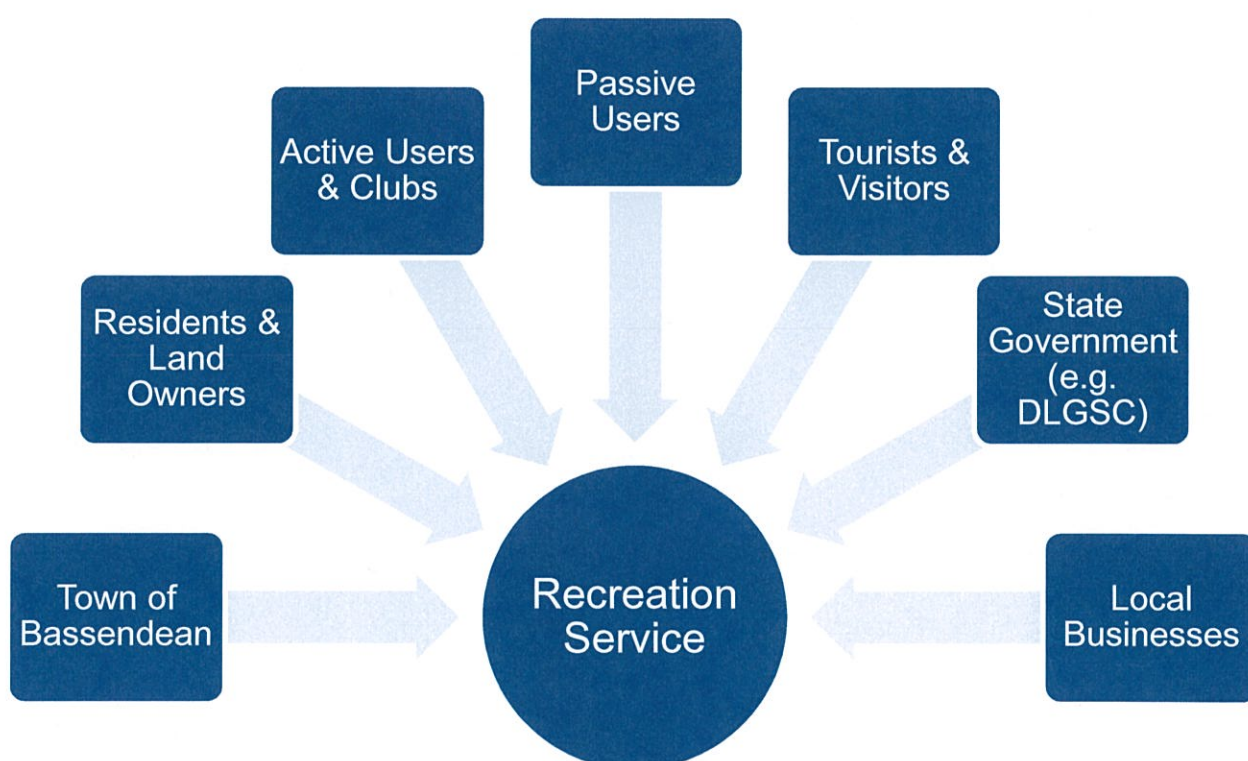


Figure 1: Recreation Stakeholders

Process for Developing Potential Service Levels

In developing the service levels for the recreation assets, the Town has generally applied the framework as set out in the International Infrastructure Management Manual (IIMM). The process broadly applies 5 steps, being:

- = Identify service attributes important to customers;
- = Define the delivered customer service levels;
- = Develop performance measures;
- = Consult with customers; and
- = Make service level based decisions.

Strategic Community Plan (SCP) Drivers

In addition to considering the needs and wants of different stakeholder groups, the SCP (2017-2027) was also reviewed in order to identify strategic priorities of relevance. The

following table outlines those priorities and objectives that may influence this AMP's service levels.

Priority	Objective(s)	Strategies
Social	1.2 – Ensure all community members have the opportunity to be active, socialise and be connected.	= 1.2.1 – Provide accessible facilities that support leisure, learning and recreation for people of all ages.
Natural Environment	2.2 – Protect our River, Bushland Reserves and Biodiversity.	= 2.2.1 – Protect and restore our biodiversity and ecosystems. = 2.2.2 – Sustainably manage significant natural areas. = 2.2.3 – Partner with stakeholders to actively protect, rehabilitate and enhance access to the river.
	2.3 – Ensure the Town's open space is attractive and inviting.	= 2.3.1 – Enhance and develop open spaces and natural areas to facilitate community use and connections. = 2.3.2 – Sustainably manage ground water, facilitate the conversion of drains to living streams.
Good Governance	5.1 – Enhance organisational accountability.	= 5.1.5 – Ensure optimal management of assets.

Table 2: Strategic Community Plan Objectives Aligned to the Recreation Portfolio

Consideration of the objectives listed above shows that the following recreation service areas are of high importance to the Strategic Community Plan:

- = Accessibility
- = Natural area sustainability
- = Recreation area usage
- = Water sustainability
- = Financial sustainability

Community Perceptions Survey

In order to understand the ratepayer's satisfaction with the services provided by the Town, a period consultation survey is performed. The 2016 consultation focused on a broad range of service areas, but those result related to recreation have been summarised below.

Topic	Very Satisfied	Satisfied	Neutral	Dissatisfied

Table 3: Community Perceptions Survey Results

Areas that may need consideration through future service level performance monitoring are:

Stakeholder Key Service Attributes

Each of the key stakeholders were considered as to what they value and expect from recreation assets. These needs and wants were captured and have been presented in the table below. Those considered of high importance (frequently reoccurring) and those which are needed, were then considered to form the basis of the AMP's Service Levels. Note, no service attribute can occur more than once for any stakeholder group.

Stakeholder	Specific Needs/Wants	Service Attribute	Need or Want?
Town (Council & Staff)	Assets are well used / are at appropriate levels	Usage	Want
	Assets are accessible to users of all ability	Accessibility	Want
	That parks assets are provided at a fair and accessible cost	Value	Want
	That strong relationships are maintained between all stakeholders through engagement and consultation	Consultation	Want
	That active parks assets can generate revenue to cover their higher levels of expenditure	Financial Performance	Want
	That the Town's and users' risk exposure and liability is minimised	Safety	Want
	That park places are designed and maintained in a manner that reduces crime incidences		Want
	That the Town is a 'good neighbour' and that its parks areas add value to local properties	Aesthetics	Want
	That existing areas of natural/native vegetation are retained and where possible improved	Environmental Sustainability	Want
	That the energy and carbon footprint of the Town's parks assets is progressively reduced		Want

	That water usage levels on parks areas is minimised and that water recycling/reuse is increased		Want
Active Users and Clubs	That sports playing areas meet applicable Australian Standards / are well maintained	Quality	Need
	That sports playing areas have good aesthetic appeal	Aesthetics	Want
	That sports playing areas are open for use every day during day light hours	Availability	Want
	That park places have car parking available	Accessibility	Want
	That park places are linked to the Town's path network		Want
	That park places are accessible by users of all physical ability		Want
	That sports playing facilities represent good value for money	Financial Performance	Want
	That the Town helps to facilitate/organise events and competitions	Events	Want
	That users are treated with respect and consulted with	Consultation	Want
	That park areas discourage antisocial behaviour	Safety	Want
Passive Users	That parks assets are well maintained	Quality	Want
	The parks areas have good aesthetic appeal	Aesthetics	Want
	That parks areas discourage antisocial behaviour	Safety	Want
	That parks areas are well lit at night time		Want
	That parks areas have good path infrastructure that connects to the Town's wider network	Accessibility	Want
	That the Town consults on what assets it puts into parks areas	Consultation	Want

Residents & Landowners	That parks assets are well maintained	Quality	Want
	The parks areas have good aesthetic appeal	Aesthetics	Want
	That parks areas discourage antisocial behaviour	Safety	Want
	That the Town consults on what assets it puts into parks areas	Consultation	Want
Tourists & Visitors	That parks assets are well maintained	Quality	Want
	The parks areas have good aesthetic appeal	Aesthetics	Want
	That parks areas discourage antisocial behaviour	Safety	Want
	That parks areas have available car parking	Accessibility	Want
	That parks assets are well signed	Well Signed	Want
State Government	That assets are managed to meet all applicable legislative requirements and Australian Standards	Quality	Want
	That assets are well used and align with sport demands	Usage	Want
	To provide parks assets that increase participation levels in active and passive activities		Want
	That assets are accessible to users of all ability	Accessibility	Want
	That parks assets are provided at a fair and accessible cost	Value	Want
	That strong relationships are maintained between all stakeholders through engagement and consultation	Consultation	Want
	That assets are managed in a financially sustainable manner	Financial Performance	Want
	That parks places are designed and maintained in a manner that reduces crime incidences	Safety	Want

	That the Town's parks areas do not allow pollution and rubbish to enter the Swan river	Environmental Sustainability	Need
	That the Town's parks assets do not adversely affect Swan River water levels.		Want
Local Businesses	That parks assets are well maintained	Quality	Want
	The parks areas have good aesthetic appeal	Aesthetics	Want
	That Parks areas discourage antisocial behaviour	Safety	Want
	That parks assets have available car parking	Accessibility	Want
	That parks assets are well signed	Well Signed	Want
	That parks assets are provided at a fair cost	Value	Want

Table 4: Stakeholder Service Levels

The following service attributes are either frequently occurring and/or needed. As such, they are considered for potential Service Levels.

- = Environmental Sustainability – Frequency: 2 and Needed
- = Quality – Frequency: 6 and Needed
- = Safety – Frequency: 7

Service Level Targets and Performance

By considering the potential service attributes from the SCP, **customer survey** and stakeholder key service attributes, the following KPIs are used to monitor the performance of the recreation service.

KPI	Driver	Level of Service	Performance Measure	Target	Current	Data Confidence
Accessibility	Strategic community plan.	Recreation areas are accessible to all users.	Percentage of recreation areas that comply with the disability services act.	-	TBC	-
Environmental Sustainability	Stakeholder attributes and strategic community plan.	Recreation areas are managed so as to active minimise negative environmental outcomes.	Total annual units of water and electricity directly used on the Town's recreational areas.	Water – Electricity -	TBC	-
Financial Sustainability	Strategic community plan.	Service is financially sustainable over the longer term.	Number of sustainability ratios within the target bands.	100%	TBC	-
Natural Area Sustainability	Strategic community plan.					
Quality	Stakeholder attributes.	Recreation asset condition	Percentage of recreation assets at the end of each financial year within their intervention condition level.	-	TBC	-
Safety	Stakeholder attributes.	Ensure effective management of risks to health in accordance with relevant legislation and community needs.	Percentage of compliance, safety and maintenance defects corrected within intervention targets.	-	TBC	-
Usage	Strategic community plan.	Recreation areas are well utilised.	Annual amount of hours per annum, per Hectare, that active reserves are booked for use.	-	TBC	-

Table 5: Service Level Targets and Performance

Appendix C – Demand

Background

Predicting future demand for services is an important element of any organisation's asset management practices. It enables practitioners to plan ahead and identify the best way of meeting future demand.

This section of the AMP looks at both historical and future levels of demand. Whilst future demand is arguably the more important focus, crucial evidence and trends can be learnt from examining what has happened, and what is happening. Readers should be aware though that as with any demand forecasting, prediction is rarely ever 100% correct. The Demand Section takes a broad view to possible demand influences and as an outcome, attempts to identify those most likely to have the greatest impact on demand over the life of the AMP.

Historic Recreation Demand

Demand for services is generally measured by how many customers use the asset(s). However, the Town has not historically monitored recreation areas' usage levels. To ascertain historical influences on demand, a range of different demand sources have been considered. Each is discussed as follows.

Population Change

When the overall population change of the Town (Figure 2) between 2001 and 2016 is considered, the population at census night has risen from 13,306 to 15,087. This increase of 1,781 people (+13%) would suggest that demand for some recreation services may have increased. As such, some parks assets may be at or above their capacity. To understand where demand may be misaligned with a capacity, a usage survey has been listed as an improvement action.

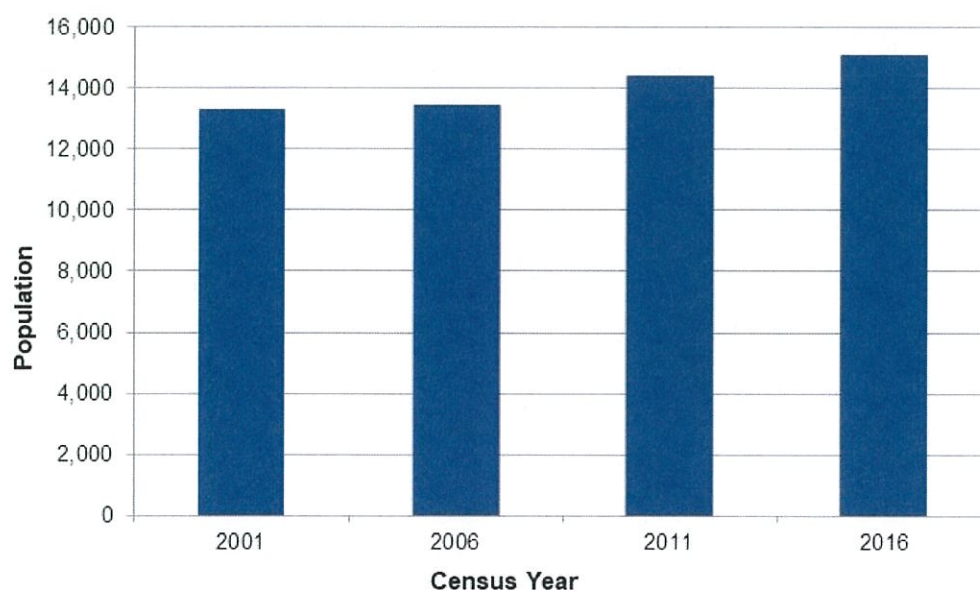


Figure 2: ABS Census Population – Town of Bassendean 2001 - 2016

Demographic Change

ABS census data shows that despite growth in the Town's overall population, its median age has remained unchanged, at 39 years of age. Growth in population numbers occurred in all age bands, except for 5-14 and 15-19 years. Due to the seemingly stable median age, demographic change does not seem to have been a historical demand change driver.

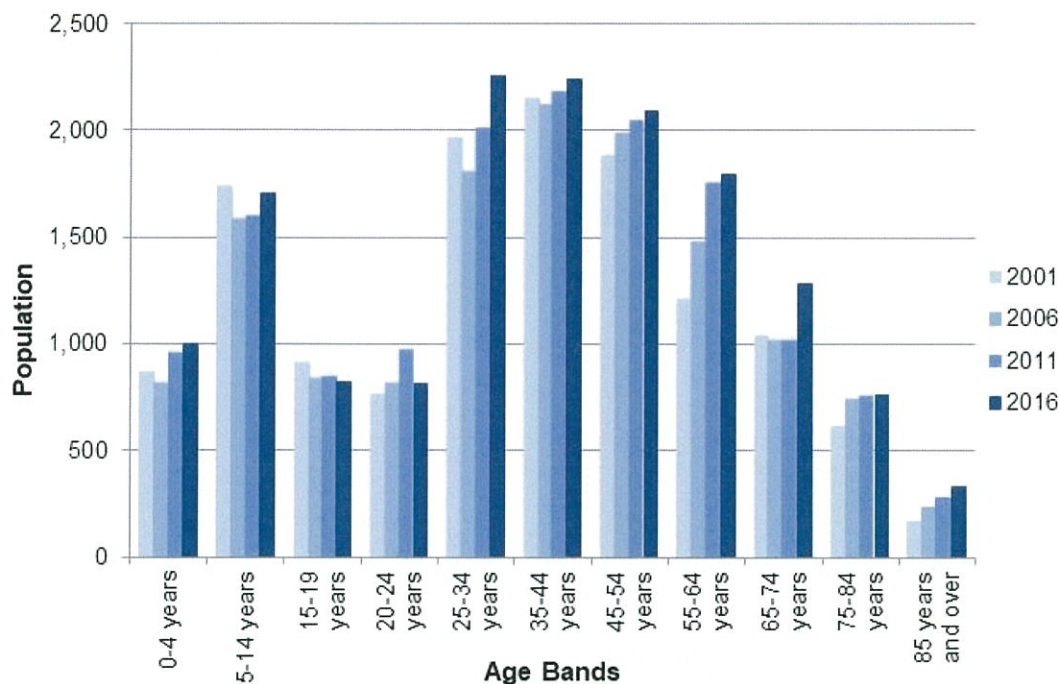


Figure 3: ABS Census Demographics – Town of Bassendean 2001-2016

Recreation Participation Change

The ABS Participation in Sport and Physical Recreation Survey was last conducted in 2013-14 and has been conducted periodically since 1995-96. Within Australia, walking for exercise remained the most popular activity over time with a participation rate of 19.2%. The second and third most popular activities were fitness/gym (17.4%) and jogging/running (7.4%) respectively.

Within WA (Figure 4), participation rates peaked at around 75% in 2002 and have since steadily fallen to 63% in 2013. If this trend is also representative of the Town's population, then it is important, as this could offset the demand growth from an increasing population size. However, this position cannot be categorically determined without the assistance of a local participation survey. The survey has been listed as an improvement action.

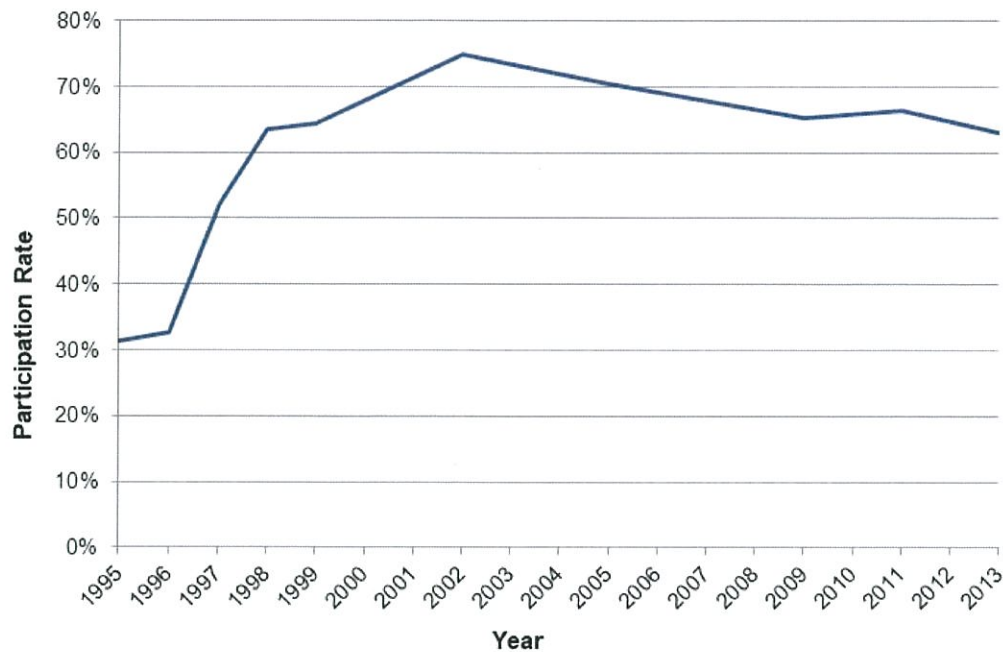


Figure 4: ABS Sport and Recreation Participation Rates

Tourist & Visitor Numbers Change

Outside of immediate local demand, there may be potential demand from visitors to the Town, whether day trippers or tourists. Figures from Tourism WA show that over the past 5 years, the estimated number of visitors to/within the Perth Metropolitan area have risen from 13.2million in 2012/13 to 18.2million in 2016/17.

The figures show that approximately 61% of visitors go to the Perth metropolitan region, within which the Town sits. Assuming that a lesser portion of these visitors may visit locations within the Town (primarily thought to be the foreshore), increases in WA tourist numbers may have resulted in increasing demand of parks services and assets.

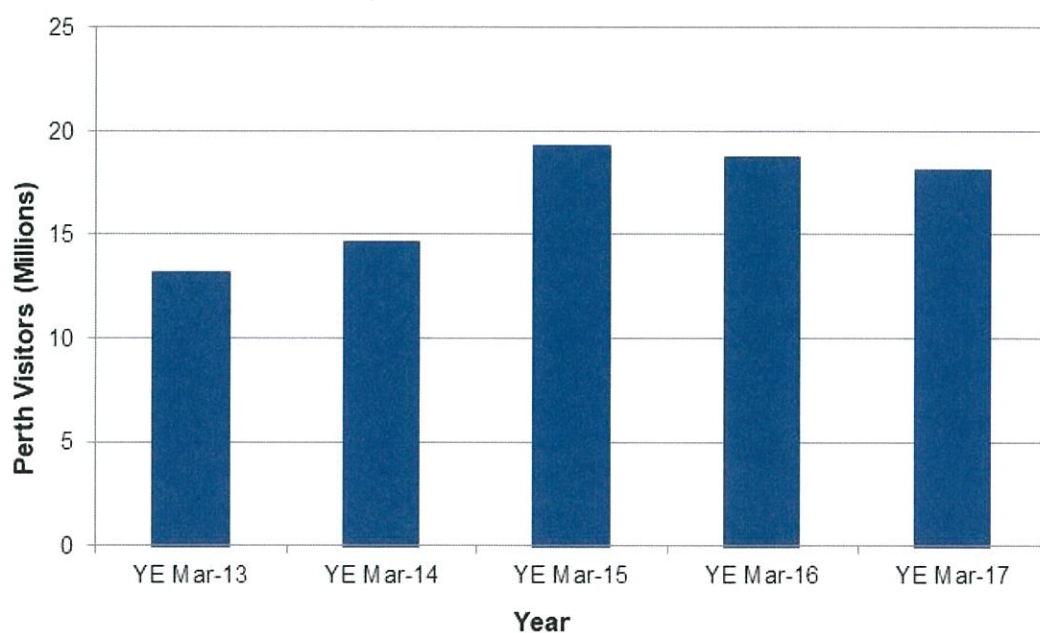


Figure 5: Estimated Perth Metropolitan Visitors (Source: Tourism WA February 2017)

Rainfall Change

Consideration of historical annual rainfall may provide an indication of climate change and whether the recreation service will need to change to meet water security challenges. Figure 6 shows the annual total rainfall at the Midland weather station from 1886 to 2016. Considering the linear trend line, it can be seen that average annual rainfall levels are falling, from approximately 910mm to 680mm. Assets such as active recreation areas (e.g. ovals) may become increasingly reliant on artificial watering methods. Furthermore, water security and efficiency of use will become increasingly important.

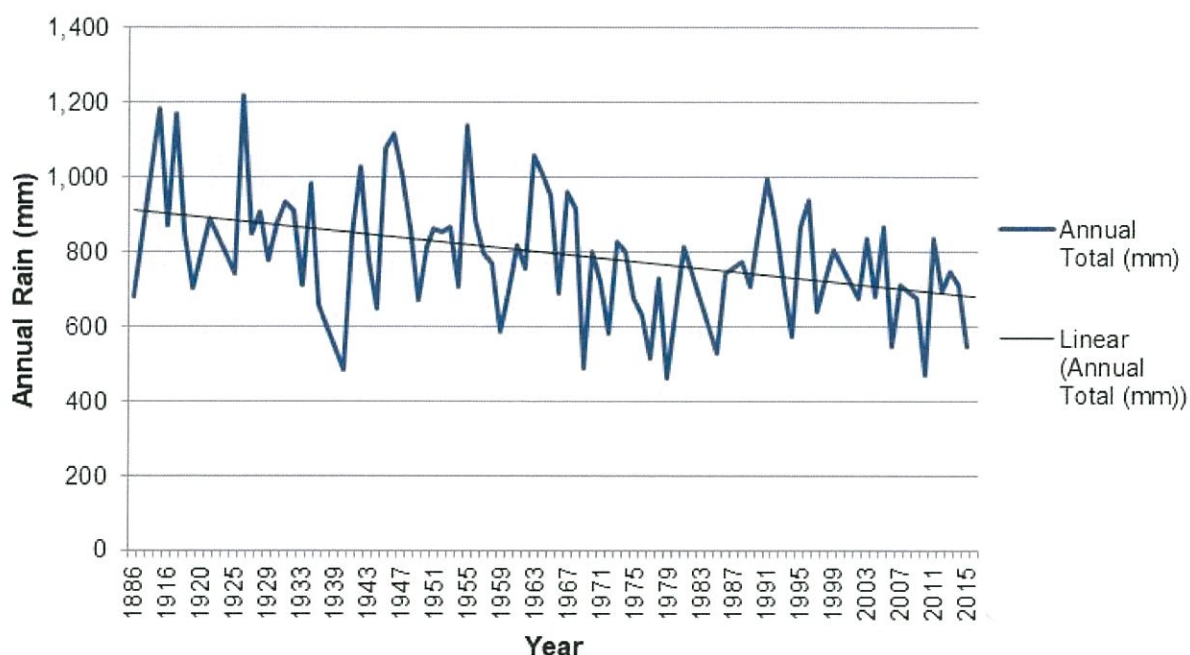


Figure 6: Midland Weather Station Historical Annual Rainfall

Temperature Change

A review of the historical annual monthly mean maximum temperatures shows that between 1945 and 2016, there has been an increase from about 31.8 degrees to 33.6 degrees (Figure 7). This change demonstrates that the local environment is indeed experiencing hotter temperatures. Over time, this climatic temperature change is likely to affect a number of recreation assets, and their likely achievable maximum lives. If this occurs, then the whole of life costs will increase, resulting in additional budgetary demands.

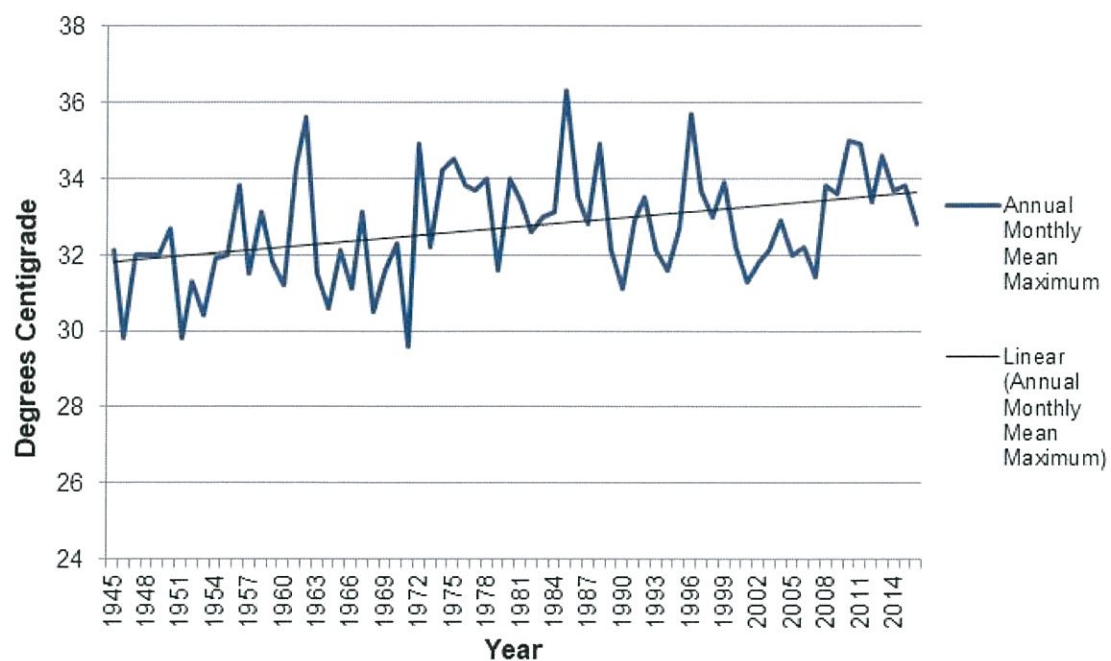


Figure 7: Perth Airport Weather Station Historical Annual Monthly Mean Highest Maximum Temperature

Future Demand Drivers

In order to identify future demand pressures on the Recreation Portfolio (both positive and negative), six driver categories, being political, economic, social, technological, legal and environmental have been considered. Drivers such as these will not only influence actual usage levels, but also possibly require future resources to meet specific needs or goals. Each of these demand drivers are discussed below and their effect summarised. The exact effects of many of these drivers are difficult to quantify and may also require further study and research.

Political Demand

Town Planning Scheme review

The Town periodically reviews, and where required amends, its Town Planning Scheme (TPS). While revisions to the TPS have the potential to change land use, given the Town's largely developed nature, it is not thought likely that additional recreation areas will be created. Future TPS reviews are likely to focus on increasing the density of residential areas, particularly around transport hubs such as railway stations. As a result, it is likely that future larger populations will increase the usage levels of recreations areas.

State Government

Political influence on the Town's recreation service delivery is limited to a number of high level areas. Political influence can also generally be separated by that which occurs from the Town's Council and that which arises from other political levels, such as through state or federal Legislation and Acts.

The general minimal provision of public open space (POS) area has long been determined by the Western Australian Planning Commission's (WAPC) public open space in residential areas policy. Since 1956, a standard (minimum) contribution rate of 10 percent of the gross residential area for POS has existed within the Policy. The Policy favours a balance between what can be defined as either passive or active recreational spaces. Passive areas are typically readily available to all residents and suited to recreational activities which are generally not of an active nature. Active areas tend to be larger and therefore designed for active activities such as organised sports.

When the Town's current situation is considered, it is thought unlikely that significant additional parks areas will be added to the portfolio either by way of vesting agreements or development. This is due to the fact that the Town is already highly developed and there is little remaining scope for new parks areas to be added to the portfolio.

Council

The largest area of demand that the Town's Council can influence is that around changes to service levels. For example, by enforcing changes to current maintenance practices (e.g. increasing mowing frequency) or by providing enhanced services (e.g.

building additional infrastructure), Council can then also increase or decrease the associated whole of life costs. To ensure that this demand is managed, Council need to be informed on both service demand from other areas, as well as the financial sustainability of the service levels that they may wish to provide. This AMP will help to ensure demand changes imposed by Council are manageable.

Integrated Planning and Reporting and Fair Value

The introduction of the Integrated Planning and Reporting Framework (IPRF) to WA local governments, as well as the requirement of fair value accounting standards, has meant that there is now increased demand for improved asset and financial management practices. These requirements are most likely to remain in place over the life of this AMP. It is therefore likely that the Town will need to continue to increase the resources it allocates for asset management practices, and continue to make steady improvements.

Structural Reform

In recent years, the WA local government sector has been engaged in a number of state government driven reform initiatives. This included the now ceased amalgamation programme and the introduction of the IPRF. At present, the state government is continuing with this reform, with the next major initiative scheduled being the Auditor General taking over responsibility for local government audits from 1 July 2018. As part of this change, the state government is also considering a range of potential measures that could be applied to poorly performing local governments. This could include rate capping.

Rate Capping

Within WA there has been recent debate on the possible introduction of rate capping. Such an initiative would prevent large future increases in rate rises. As a result, there would be increased demand to ensure that service provision is well defined and its resource requirements well understood. However, by improving its asset management practices, the Town will be able to limit the effect of any possible rate capping scheme.

Change Effect: Land use planning changes may increase demand for recreation services, though a limited number of new 'spaces' can realistically be created. IPRF legislation will likely to continue to demand at least a short-term increase in asset management resources and effort. Potential rate capping legislation may cause long term challenges.

Economic Demand

Energy and Water Costs and Availability

The operation and maintenance of the Town's recreation assets uses basic commodities such as energy (e.g. electricity) and water (e.g. reticulation). Energy costs, typically in the form of electricity, have increased sharply over the last 15-20 years due

to the higher costs of supply and transmission/transportation. Equally, with falling rain falls and higher median maximum temperatures, water security and cost have also become increasingly important.

It is likely that prices for basic commodities will continue to rise above normal inflation levels over the life of this AMP. To help protect itself against future price increases, there is value in the Town investigating alternative sources, such as whether the installation of technologies such as solar power have benefit. This has been listed as an improvement action.

Council Financial Sustainability

In recent years there has been a moderate level of publicity and investigation into the long term sustainability of WA local governments. A key introduced initiative has been the publication of a number of asset sustainability ratios. These are published in the Town's Annual Report and also through the mycouncil.wa.gov.au website. A review of the 2015/16 ratios showed that the Town was underperforming in the asset sustainability ratio. This suggests that the Town has underfunded past renewal needs. In addition, the asset consumption ratio (a measure of assets' average state of condition) is also at the lower end of the preferred range. This further strengthens the thought that the Town has historically underfunded asset renewal.

Looking forward, the asset renewal funding ratio (ARFR) seems to suggest that through its Long Term Financial Plan, the Town will meet emerging renewal needs. However, the LTFP's bottom line remains underfunded. As such there are concerns about how future works will be funded. An improvement action to undertake further analysis into recreation assets' long term financial sustainability has been listed.

Change Effect: Demand pressure to reduce the use of non-renewable energy resources and to increasingly reuse water and/or reduce water usage. Further internal asset management practice improvements would increase financial efficiency and long term sustainability.

Social Demand

Population

Western Australia Tomorrow is a set of forecasts representing the best estimate of Western Australia's future population size based on current fertility, mortality and migration trends. These trend forecasts are used to identify potential preferred future scenarios that can be built upon; as well as less favourable possibilities for which mitigating action can be taken. The forecast contains a Town population forecast spanning from 2011 until 2026. The forecast contains 5 bands of population projections, with A being the most pessimistic and E the most optimistic. The results are shown in Table 6.

Year	Band A	Band B	Band C	Band D	Band E
2011	15,180	15,180	15,180	15,180	15,180
2016	15,810	16,060	16,290	16,480	16,820
2021	16,230	16,640	16,980	17,280	17,770
2026	16,530	17,060	17,490	17,870	18,490
Change	+1,350 (9%)	+1,880 (12%)	+2,310 (15%)	+2,690 (18%)	+3,310 (22%)

Table 6: Population Forecasts by Bands

When the 2016 census results are considered, it suggests that the Town's population is growing at approximately 1.0% per annum (5 year rolling average), being broadly in line with Band A. This suggests that an additional 1,350 people may live within the Town by 2026. This growth will steadily increase the service demand for recreation assets, likely represented by higher usage levels.

Demographics

Historical census data showed that the Town's median age has remained steady at 39, between 2006 and 2016, bucking a national ageing population trend. As such, the Town's apparent appeal to younger generations may mean that it will experience less demand change due to demographic drivers than its peers.

Social Disadvantage

A review of the ABS 2011 SEIFA index of advantage and disadvantage showed that the Town has an index number of 1003. This places the Town at the 74 percentile within Australia and 86 percentile within WA. This means that the Town's population are generally above average in the index, suggesting that as a community, there are not access barriers to recreation pastimes (e.g. cost). Nonetheless, ensuring that parks assets are provided at a fair cost to all potential stakeholders is important to the health and wellbeing of the community.

Participation Rates

Figures from the ABS' Sport and Recreation Participation surveys show that since 2002, participation has fallen by around 11.9% up to 2013. If this decline of around 1.08% per annum were to continue, then participation rates may fall to around 49% by 2036, as shown in Figure 8.

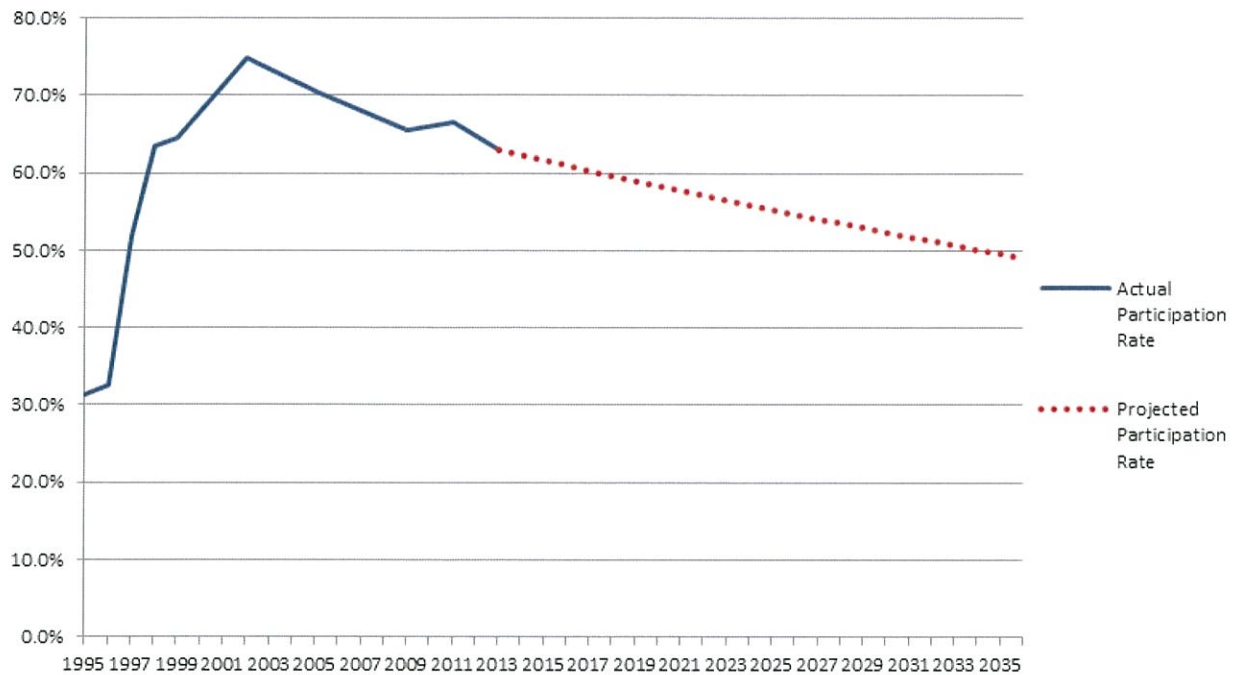


Figure 8: WA Actual (ABS) and Projected Recreation Participation Rates

When the potential rate decline is considered against the Town's projected future population (Figure 9), it shows that the actual numbers of sport and recreation participants actually falls. The figures predict that participation decline is likely to be around -0.2% per annum, or about 16 people per year. As such, while population growth potentially remains a demand driver, this will be offset if participation rates continue to decline. This suggests that there will be little demand change in recreational services due to population growth and declining participation rates.

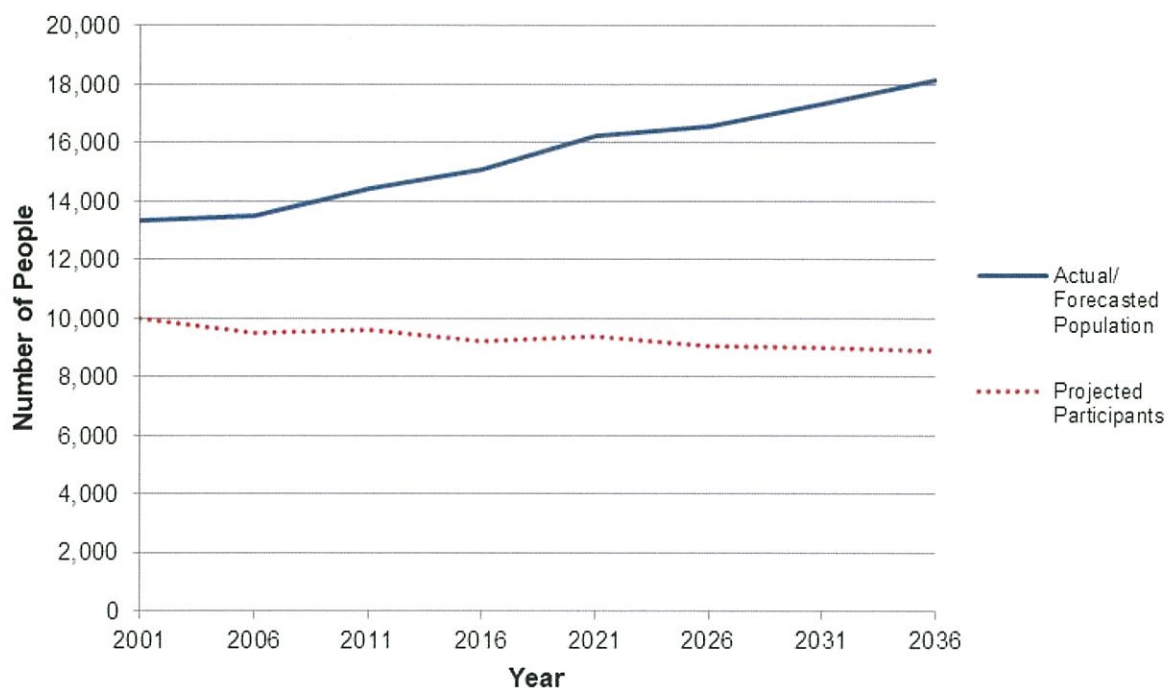


Figure 9: Projected Town Population and Actual Recreation Participation

Change Effect: A forecasted increase in the Town's future population will in theory increase the demand for recreation services. However, if the trend in declining recreation participation continues, this will offset demand to a decrease of -0.2% per annum. At this point in time, demographic and social disadvantage drivers seem not to be a cause of demand change.

Technological Demand

Technology Affecting Participation Rates

Over the past decade or so, technology advancement has resulted in large changes to recreational activities, particularly at a professional level. Advancements have naturally filtered down to a general user level, as evidenced in the sophistication of sporting equipment currently available. High quality equipment is now often available at accessible prices which may help encourage participation rates, particularly in sports. Elsewhere, the forecast change in participation levels since the rise of computer gaming and social media seems to be starting to occur, according to ABS figures.

Technology Assisting Maintenance

The area of technology change that is thought to have the biggest likely impact on recreation is around its actual application to enable the refinement of operation and maintenance techniques. There are a range of modern software tools available commercially, that can be used to help achieve greater efficiencies, and more optimal outcomes. For example software such as GIS can be used to map reticulation head locations and water coverage to identify areas of over or under watering. This may in turn help to achieve several outcomes including reducing the use of materials (e.g. water, fertiliser etc.) while helping to increase the capacity at venues (e.g. helping turf to recover more quickly from wear).

Overall, it is thought the main demand influence from technology is around better application to achieve enhanced outcomes and service levels.

Condition Monitoring and Asset Management Systems

Changes and improvements to the way WA local governments are managing their infrastructure means that there is a growing need to develop and manage data in the form of inventories, condition ratings, financial performance etc. To meet this need the Town already operates a number of robust GIS databases that provide the platform for the storage and display of asset information. Opportunity exists to build upon the existing databases and provide even stronger information outcomes. This includes refining the accuracy and robustness of asset data and strengthening the relationships between the GIS databases and the financial management system. These areas will require an increase in resources to achieve.

Change Effect: Opportunity exists to manage and maintain the recreation portfolio more efficiently and sustainably and thus reduce demand. Major changes to participation

rates caused by technology influences are unlikely. Possible increase in resource demand due to required additional asset management practices.

Legal Demand

Litigation

In providing and maintaining recreational assets which are fit for purpose and safe, the Town undertakes a range of different maintenance activities. This includes formal inspection processes covering all recreation assets. Aside from the normal risks associated with assets, no specific additional legal demand drivers have been identified at this time.

Change Effect: No identified demand change drivers.

Environmental Demand

Environmental Sustainability

In recent years, the community's awareness of environmental issues, including climate change, has resulted in some change to habits and broader government legislation. It is likely that over the term of this AMP that infrastructure managers will have to ensure that assets are maintained at increasingly environmentally sustainable levels. This will include:

- = Questioning whether assets are required
- = Ensuring that maximum life is obtained from assets
- = That construction and maintenance techniques reduce and avoid the use of virgin materials wherever possible

While opportunities to reduce the Town's energy and material consumption have already been discussed, and remain valid, there is also a driver to identify and consider other activities that can increase recreational environmental sustainability. Establishing a process to identify and consider possible initiatives has been listed as an improvement action.

Climate Change

Historical data (Figure 6 and Figure 7) shows that regardless of cause, Perth is becoming increasingly dryer with less rainfall, but also hotter with higher mean maximum temperatures. Therefore to deliver the current levels of service into the future, specific strategies and technologies will have to be applied as vegetation becomes increasingly dependent on irrigation, from non-rain sources.

Change Effect: Increased demand for clearer decision making around asset need. Increased demand for more environmentally sustainable recreation assets and maintenance techniques. Increased demand to use drought tolerant vegetation and non-rain sourced water.

Appendix D – Risk Management Analysis

This appendix details the desktop risk analysis undertaken on the management of the recreation portfolio. The risk analysis has considered ISO 31000 (Risk Management).

Risk Context

The risk analysis applies only to the management activities undertaken on the recreation portfolio. It does not seek to identify physical risks. The following statement defines what an 'acceptable' level of risk is with regards to recreation infrastructure.

Through risk management, the Town of Bassendean aims to:

- = Protect the quality of the recreation portfolio
- = Protect users of recreation assets
- = Protect the Town's assets and public image
- = Reduce the Town's exposure to risk
- = Promote effective financial and asset management practices

This will be achieved through:

- = Identifying, decreasing the likelihood, and mitigating the consequences of, risk within the constraints of sensible commercial objectives and practices
- = Applying risk based practices to the management of recreation assets and associated decision making
- = Maintaining safe and reliable plant, equipment and infrastructure
- = Preparing appropriate contingencies
- = Reviewing the risk profile of the recreation portfolio at appropriate intervals and when circumstances dictate
- = Maintaining an up to date Recreation AMP

Risk Criteria

The following criteria have been applied as part of the risk analysis.

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood		1	2	3	4	5
Almost Certain	5	Moderate (5)	High (10)	High (15)	Extreme (20)	Extreme (25)
Likely	4	Low (4)	Moderate (8)	High (12)	High (16)	Extreme (20)
Possible	3	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
Unlikely	2	Low (2)	Low (4)	Moderate (6)	Moderate (8)	High (10)
Rare	1	Low (1)	Low (2)	Low (3)	Low (4)	Moderate (5)

Likelihood Scale

Level	Likelihood Scale		
	Descriptor	Indicative Frequency	Probability
5	The event is expected to occur in most circumstances	More than once per year	> 90% chance of occurring
4	The event will probably occur in most circumstances	At least once per year	60% - 90% chance of occurring
3	The event should occur at some time	At least once in 3 years	40% - 60% chance of occurring
2	The event could occur at some time	At least once in 10 years	10% - 40% chance of occurring
1	The event may only occur in exceptional circumstances	Less than once in 15 years	< 10% chance of occurring

Consequence Scale

Severity Level	Consequence Types						
	Health	Financial Impact	Service Interruption	Compliance	Reputational	Property	Environment
5	Fatality, permanent disability	More than \$500,000	Indeterminate prolonged interruption of services – non-performance > 1 month	Non-compliance results in litigation, criminal charges or significant damages or penalties	Substantiated, public embarrassment, widespread loss of community trust, high widespread multiple media profile, third party actions	Extensive damage requiring prolonged period of restitution Complete loss of plant, equipment & building	Uncontained, irreversible impact
4	Lost time injury (>5 days)	\$50,001 - \$500,000	Prolonged interruption of services – additional resources; performance affected < 1 month	Non-compliance results in termination of services or imposed penalties	Substantiated, public embarrassment, widespread high impact on community trust, high media profile, third party actions	Significant damage requiring internal & external resources to rectify	Uncontained, reversible impact managed by a coordinated response from external agencies
3	Medical type injuries	\$10,001 - \$50,000	Medium term temporary interruption – backlog cleared by additional resources < 1 week	Short term non-compliance but with significant regulatory requirements imposed	Substantiated, public embarrassment, moderate impact on community trust or moderate media profile	Localised damage requiring external resources to rectify	Contained, reversible impact managed by external agencies
2	First aid injuries	\$1,001 - \$10,000	Short term temporary interruption – backlog cleared < 1 day	Some temporary non-compliances	Substantiated, localised impact on community trust or low media item	Localised damage rectified by routine internal procedures	Contained, reversible impact managed by internal response
1	Negligible injuries	Less than \$1,000	No material service interruption	No noticeable regulatory or statutory impact	Unsubstantiated, localised low impact on community trust, low profile or no media item	Inconsequential or no damage.	Contained, reversible impact managed by on site response

Risk Analysis

Table 7: Asset Management Plan Risk Analysis

Appendix E – Portfolio Physical Parameters

Data Confidence

To be able to effectively manage its assets, the Town collects and maintains a range of data on its recreation portfolio. Understanding where gaps in this data exist is important to determine the confidence that we can put in the outcomes (e.g. valuations) that result. Table 9 details the reliability and confidence levels of the current asset data the Town holds. In assessing the data, the Town has applied the IIMM confidence framework as detailed in Table 8.

Confidence Grade	Description	Accuracy
1 - Excellent	Accurate	100%
2 - Good	Minor inaccuracies	± 5%
3 - Average	50% estimated	± 20%
4 - Poor	Significant data estimated	± 30%
5 – Very Poor	All data estimated	± 40%

Table 8: Data Confidence Measures

Park Type	Inventory	Condition	Valuation
District POS	2	2	2
Drainage Reserves	1	1	1
Local POS	2	2	2
Neighbourhood POS	2	2	2
Pocket Parks	1	1	1
Regional POS	2	2	2
Road Closures	1	1	1

Table 9: Recreation Portfolio Data Confidence Levels

Inventory

The following section outlines the Town's recreation asset places as at 30 June 2017.

Asset ID	Name	Category	Park Area (m ²)
3001	Anstey Road Foreshore	Road Closure	545
3002	Anzac Terrace Reserve	Neighbourhood Public Open Space	6213
3019	Ashfield Flats	Regional Public Open Space	388,070
3003	Ashfield Parade Reserve	Regional Public Open Space	21,619
3004	Ashfield Reserve	District Public Open Space	77,532
3154	Baltic Court POS	Road Closure	985
3005	Bassendean Oval	Regional Public Open Space	60,372
3006	BIC Reserve	District Public Open Space	38,923
3007	Bindaring Park	Neighbourhood Public Open Space	74,447
3008	Bradshaw Reserve	Local Public Open Space	2,512
3009	Bridson/Elder Reserve	Local Public Open Space	2,046
3010	Broadway Arboretum	Local Public Open Space	30,663
3011	Calnon Street POS	Local Public Open Space	1,330
3012	Carman Way Reserve	Local Public Open Space	2,922
3143	Carnegie Road POS	Road Closure	3,053
3013	Chapman Street POS	Pocket Park	809
3162	Chapman/Guildford POS	Road Closure	451
3014	Christie Park	Local Public Open Space	1,535
3015	Clarke Way Reserve	Local Public Open Space	2,298

Asset ID	Name	Category	Park Area (m ²)
3155	Colgoola Brace POS	Road Closure	748
3016	Colin Smith Reserve	Local Public Open Space	3,045
3017	Culworth/Mickleton Reserve	Neighbourhood Public Open Space	14,634
3018	Deakin Street Foreshore Reserve	Local Public Open Space	2,145
3161	Deakin Street/West Road POS	Road Closure	632
3141	Earlsferry Court POS	Road Closure	567
3146	Esther Street POS	Road Closure	449
3147	Fifth/Anzac POS	Road Closure	451
3148	Fifth/Walter POS	Road Closure	170
3139	Fourth Avenue POS	Road Closure	551
3020	Freeland Square	Neighbourhood Public Open Space	5,686
3021	Freiberg Reserve	Local Public Open Space	2,239
3153	Gallagher Street POS	Road Closure	404
3022	Gary Blanch Reserve	Local Public Open Space	6,703
3156	Geraldine Street POS	Road Closure	392
3023	Hamilton Street Reserve	Regional Public Open Space	46,426
3142	Harcourt POS	Road Closure	3,567
3158	Hardy/Villiers POS	Road Closure	516
3024	Hatton Court Reserve (Pinzone Park)	Local Public Open Space	2,851
3025	Iveson Place Reserve	Regional Public Open Space	15,370
3026	Jubilee Reserve	Neighbourhood Public Open Space	138,363
3027	Kelly Park	Local Public Open Space	3,718

Asset ID	Name	Category	Park Area (m²)
3151	Kenny Street POS	Road Closure	106
3140	Lamb Street POS	Local Public Open Space	1,381
3028	Link Park	Local Public Open Space	1,908
3029	Lord Street Reserve	Pocket Park	844
3149	Lord/Anzac POS	Road Closure	219
3030	Lord/Schofield Reserve	Neighbourhood Public Open Space	11,224
3150	Lord/Walter POS	Road Closure	338
3031	Lovelock Place POS	Road Closure	1,660
3032	Mary Crescent Reserve	District Public Open Space	75,427
3033	May Holman Reserve	Local Public Open Space	2,539
3163	Morley/Chedworth Drainage Reserve	Drainage Reserve	6,325
3034	Padbury Place POS	Road Closure	425
3035	Padbury Way Reserve	Neighbourhood Public Open Space	8,300
3036	Palmerston Square Reserve	Local Public Open Space	7,119
3157	Palmerston/Guildford POS	Road Closure	967
3037	Park Estate Reserve	Neighbourhood Public Open Space	8,391
3038	Park Lane Reserve	Road Closure	3,857
3039	Parmelia Way Reserve	Local Public Open Space	3,975
3144	Parnell Parade POS	Road Closure	686
3040	Pickering Park	Neighbourhood Public Open Space	27,155
3041	Point Reserve	District Public Open Space	16,775
3152	Reid Street POS	Road Closure	287

Asset ID	Name	Category	Park Area (m ²)
3042	Sandy Beach Reserve	Regional Public Open Space	28,284
3043	Success Hill Reserve	Regional Public Open Space	59,393
3044	Surrey Street POS	Local Public Open Space	1,791
1056	Third Avenue POS	Local Public Open Space	372
3045	Third Avenue Reserve POS	Local Public Open Space	3,383
3046	Tonkin Park	Local Public Open Space	1,882
3047	Troy Street Reserve	Local Public Open Space	6,357
3048	Villiers Street POS	Road Closure	833
3049	Watson Street POS	Local Public Open Space	1,359
3050	Whitfield Street POS A	Local Public Open Space	3,247
3165	Whitfield Street POS B	Road Closure	2,248

Table 10: Town Recreation Place Inventory

The following table outlines the number of different above ground assets installed within the Town.

Asset Type	Number
Furniture	503
Hardscape	133
Lighting	101
Sports Equipment	88
Structures	812
Total	1,637

Table 11: Recreation Asset Quantities

Condition

The following section outlines the Town's recreation assets' condition as at 30 June 2017.

Asset Type	Condition					
	0	1	2	3	4	5
Furniture	6	78	279	104	27	9
Hardscape	1	17	83	31	1	0
Lighting	0	10	67	14	10	0
Sports Equipment	0	6	27	49	5	1
Structures	1	81	462	236	25	7
Total	8	192	918	434	68	17

Table 12: Recreation Assets' Condition

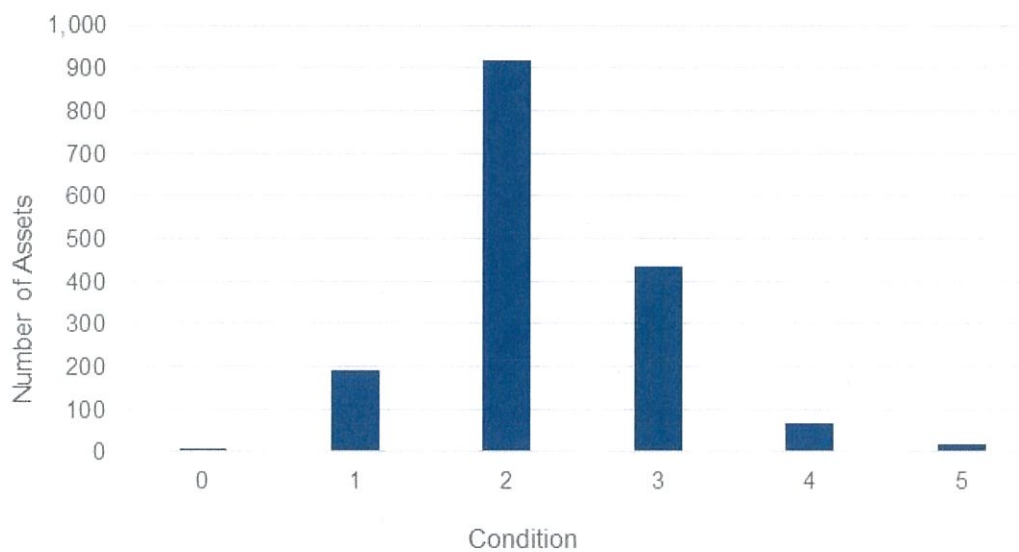


Figure 10: Recreation Assets' Condition

Valuation

The following section records the current and historical values of recreation assets.

Recreation Assets

Current Replacement Cost

Asset Type	2015
Softscape	\$771,493
Hardscape	\$383,714
Structures	\$1,651,306
Furniture	\$1,772,162
Equipment	\$319,941
Lighting	\$484,539
Irrigation	\$1,082,382
Total	\$6,465,537

Fair Value

Asset Type	2015
Softscape	\$510,544
Hardscape	\$253,748
Structures	\$1,112,449
Furniture	\$1,490,792
Equipment	\$273,443
Lighting	\$343,385
Irrigation	\$835,236
Total	\$4,819,597

Appendix F – Lifecycle Management Strategies

Background

Lifecycle management encompasses all strategies and practices that the Town employs to manage recreation assets at the lowest lifecycle cost. This section details all the strategies and practices that are currently employed.

Principles & Definitions

In considering the Town's asset lifecycle management, the following key principles and definitions must be considered.

Work Category Definitions

The Town considers the activities it undertakes across six categories as follows.

Activity	Definition
Operation	Continuously required expenditure which enables assets to provide benefits to the community such as utility charges, inspections, cleaning etc.
Maintenance	Regular works to maintain the assets' capability, such as minor repairs, servicing, mowing, painting, crack seals etc.
Renewal	Works to replace existing assets which are worn, poorly functioning or dated with assets of equivalent capacity or performance. For example, the renewal of an internal wall in a building, renewal of an engine in a grader, resurfacing a road (re-sheeting or resealing) or replacing girders on a bridge.
Upgrade	The significant upgrade of an asset to produce a higher service level, such as the widening of a road, extension of a building, installation of reticulation to a dry park etc.
New Work	The creation of a new asset, in a location where that asset type has not existed before.
Disposal	The process of removing and disposing of an asset upon the end of its useful life. For the purpose of this AMP this is only when an asset is not replaced.

Table 13: Activity Categories

Lifecycle Cost Basis

All assets have a lifecycle. This is defined as the time interval that commences with the identification of the need for an asset and ends with the decommissioning of the asset (i.e. disposal but with no replacement). It generally covers conception & design, acquisition & construction, operation, maintenance, renewal and disposal.

Operation & Maintenance Strategy

Background

The Town has developed an integrated framework that guides the operation and maintenance of recreation assets. As described by the figure below, the task based 'Recreation Operation & Maintenance Service Level Manual' is the central document and links to the other key documents.



Figure 11: Recreation Asset Maintenance Framework

The intent of each document (except this AMP) is summarised below.

Recreation Operation & Maintenance Levels of Service Manual

The Town seeks to minimise its levels of reactive maintenance by developing and applying planned activities. These activities are fully documented within the Town's task based 'Recreation Operation & Maintenance Service Level Manual'. This document sets out every typical planned and reactive task undertaken during the year. Each task is also fully costed, so that a required operation and maintenance budget for each asset is produced. These budgets are then used within this AMP.

Annual Budget

Town's Annual Budget that covers all functions, and includes all relevant recreation asset expenditure.

Staff Resources

The management of the Town's recreation service falls within the responsibility of the Operational Services Directorate, being one of four Directorates that report to the Chief Executive Officer. The Operational Services Directorate is organised into two groups, of which one has a direct relationship to the management of transport assets, being Asset Services

The management of the recreation service involves a number of Town staff and external resources. The following table summarises the responsibilities of each stakeholder group.

Stakeholder	Responsibilities
Council	= Determination of long term service(s) vision = Adoption of asset management policy
Senior Management	= Determination of long term management strategy = Provision of long term resources
Asset Management	= Production of AMP = Development of long term works programmes, lifecycle management strategies, demand forecasts and service level monitoring
Parks & Gardens	= Performing and/or coordinating on-site works
Finance	= Integration of AMP financial projections into LTFP = Recording of asset lifecycle management costs
External Contractors	= Discrete projects as required

Table 14: Asset Management Roles

Software Systems

The Town currently employs the use of the following software systems to manage recreation asset data.

Software	Uses
QGIS & IntraMaps	QGIS is used to record spatial data for all parks assets. IntraMaps is then used to display spatial data across the organisation.
AIM Works Planning Tool	The Town uses the Works Planning Tool to record its Long Term Works Programme.
ITVision SynergySoft	SynergySoft is used to record all recreation asset revenue and expenditure, record keeping, planned inspection programmes and customer requests.

Table 15: Asset Management Software Systems

Renewal Strategy

Background

The Town periodically inspects recreation assets to collect critical inventory and condition information. This information then informs several key outputs, including condition based models to predict assets' approximate year of renewal. The Town is able to confidently scope and prioritise these renewal projects over future years. Further out, results help staff to understand the likely amount of renewal expenditure that will be required, from years 6 to 15, even if the exact project details are not yet known.

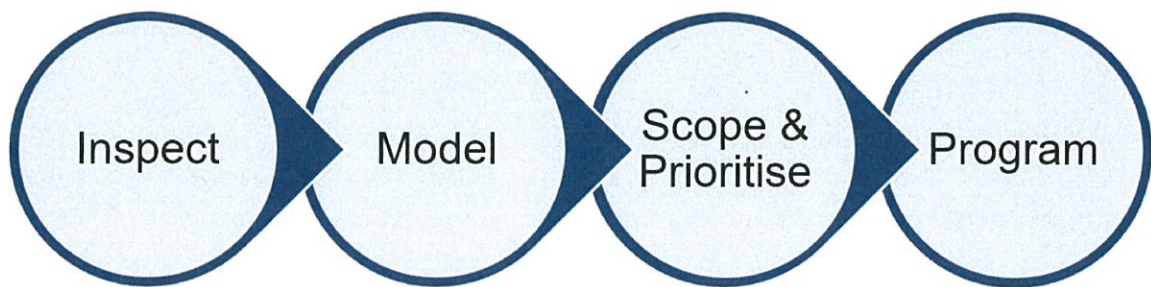


Figure 12: Recreation Asset Renewal Planning Process

Condition Inspection Methodology

Portfolio Asset Condition Rating Scale

The Town condition rates its assets to determine their remaining useful life and to prioritise future capital works. By undertaking regular inspections, the Town can understand at what rate assets are deteriorating and then monitor the effectiveness of maintenance and renewal activities in extending the life of assets. In assessing assets' condition, the Town applies a 1 to 5 scale, as shown in Table 16.

Grade	Condition	Description
1	Very Good	A new or near new asset, or an asset recently rehabilitated back to new condition, with no visible signs of deterioration. The asset or component will have no drop in level of service.
2	Good	An asset in good overall condition. There would be only very slight condition decline but it would be obvious that the asset was no longer in new condition.
3	Average	An asset in fair overall condition. Deterioration would be obvious and there would be some serviceability loss.
4	Poor	An asset in fair to poor overall condition. The condition deterioration would be quite obvious. Asset serviceability would now be affected and maintenance costs would be rising.
5	Very Poor	An asset in poor to unserviceable overall condition. Deterioration would be quite severe and would be starting to

		limit the serviceability of the asset. Maintenance costs would be high.
--	--	---

Table 16: Condition Rating Measures

The Town aims to minimise the number of assets that are rated as a 5 unless assets are in this state as part of a specific management program (i.e. part of an asset decommissioning plan).

Condition Inspection Frequencies

Recreation assets are inspected to the following frequencies.

Asset	Inspection Frequency
Playgrounds	3 monthly cycle
All recreation assets (ex playgrounds)	Ad-hoc

Table 17: Condition Inspection Frequencies

Modelling

Results from the Town's condition inspections are uploaded into its management software. The software is then used to forecast when each asset will reach a condition intervention level of 4 (poor).

Project Prioritisation/Selection Criteria

Assets or components that have reached, or will reach over the next five years, their intervention trigger, are then further investigated by Town staff for potential renewal. The investigation seeks to determine when any works should be undertaken, what the scope is and what budget is required. This information is then used to build up the future renewal works programme.

Renewal Works Programme

The Town maintains a long term capital works programme, which includes renewal projects. All projects include timings and budgets. This programme directly informs this AMP.

Upgrade/New Strategy

Background

From time to time the Town constructs or acquires upgraded and/or new assets. Expenditure on these assets is often considered as discretionary, and ultimately results in either a new or improved service (e.g. a deeper bore resulting in a higher yield). The following section outlines the Town's general approach to upgrade and new projects.

Project Prioritisation/Selection Criteria

The need for either upgraded or new assets is typically identified by staff from many potential sources including customer and Council request, strategic plans, poor asset performance and so on. Assets' needs are then investigated by staff to determine their potential scope, benefit and costs. Where determined as being required, many potential assets are then reported to Council and senior management for their consideration and approval. Approved projects are considered for future funding, and prioritised under a basic framework. However, this framework is limited in its effectiveness and has no direct link to the Strategic Community Plan. An improvement task to redevelop the framework has been listed.

Upgrade/New Works Programme

The Town maintains a long term capital works programme, which includes upgrade and new projects. All projects include timings and budgets. This programme directly informs this AMP.

Disposal Strategy

Background

At the present time the Town generally does not frequently dispose of recreation assets. Where such a project is identified, then the need and scope is considered by staff and (in some instances) Council.

Disposal Programme

Any assets identified for disposal are recorded within the Town's web-based works planning software.

Appendix G – Works & Financial Model

The Town uses the Works Planning Tool (WPT) to record its works programme. The WPT is the master source, and the following programme extract should not be relied upon as being 100% correct as changes may have occurred since this AMP being published. The WPT also contains individual project scopes. Due to the size of the programme, these projects are not itemised within this AMP.

Key Assumptions

A number of key assumptions are made in preparing forecasts of required portfolio expenditure. They are that:

- = Recreation assets will remain in Council ownership throughout the period covered by this AMP, unless specifically detailed otherwise.
- = Standards, Acts and Regulations associated with recreation assets will remain essentially the same over the AMP life.
- = Expenditure projections do not allow for inflation.
- = Operation and maintenance costs are based primarily on planned programmes where available. Where not available, cost projections are based on historical expenditure trends which are not necessarily a sound indicator of future need, nor are tied to actual activities.
- = Renewal programmes have been based primarily on defined works programmes where available. Where not available, programmes are based on either modelling projections, historical cost and/or annual depreciation rates.
- = Upgrade, acquisition/construction and disposal programmes are based on defined works programmes. Where not available, programmes are based on either modelling projections and/or historical cost.
- = Inventory information used in calculations is the latest available at hand, but consideration of overall data confidence levels is critical when using this AMP.
- = Historical expenditure reports split by activity may contain expenditure that was actually expended on different activities.

Works Programme

Recreation Works Programme Summary																		
Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	Year 10 2026/27	Year 11 2027/28	Year 12 2028/29	Year 13 2029/30	Year 14 2030/31	Year 15 2031/32
Softscape																		
Bushland/Native Vegetation	Maintenance	Mary Crescent Reserve - Construction and upgrade works to improve water quality	Municipal Funds	\$113,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bushland/Native Vegetation	Maintenance	Volunteer Environmental Education and Volunteer Bushcare Action Plans	Municipal Funds	\$5,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bushland/Native Vegetation	Maintenance	Broadway Arboretum - General Operation & Maintenance	Municipal Funds	\$52,000.00	\$14,080.00	\$16,243.00	\$58,491.00	\$60,833.00	\$63,266.00	\$65,797.00	\$68,428.00	\$71,166.00	\$74,012.00	\$76,973.00	\$80,053.00	\$83,254.00	\$0.00	\$0.00
Bushland/Native Vegetation	Maintenance	Ashfield Flats - General Operation & Maintenance	Municipal Funds	\$22,880.00	\$23,795.00	\$24,747.00	\$25,737.00	\$26,766.00	\$27,837.00	\$28,950.00	\$30,109.00	\$31,313.00	\$32,565.00	\$33,868.00	\$35,223.00	\$36,632.00	\$0.00	\$0.00
Bushland/Native Vegetation	Maintenance	Bushland Management Programme	Municipal Funds	\$249,600.00	\$259,584.00	\$269,967.00	\$280,766.00	\$291,997.00	\$303,677.00	\$315,824.00	\$328,437.00	\$341,593.00	\$355,299.00	\$369,489.00	\$384,248.00	\$399,618.00	\$0.00	\$0.00
Garden Bed	Maintenance	Street Gardens - General Operation and Maintenance	Municipal Funds	\$218,400.00	\$227,136.00	\$236,222.00	\$245,670.00	\$255,497.00	\$265,717.00	\$276,346.00	\$287,400.00	\$298,895.00	\$310,851.00	\$323,285.00	\$336,217.00	\$349,665.00	\$0.00	\$0.00
Grassed Area	Maintenance	Verge Maintenance	Municipal Funds	\$301,600.00	\$313,664.00	\$326,211.00	\$339,259.00	\$352,829.00	\$366,943.00	\$381,620.00	\$396,885.00	\$412,760.00	\$429,271.00	\$446,442.00	\$464,299.00	\$482,871.00	\$0.00	\$0.00
Play surface (Soft)	Maintenance	BIC Tennis Courts - General Operation and Maintenance	Municipal Funds	\$62,400.00	\$64,896.00	\$67,492.00	\$70,192.00	\$72,999.00	\$75,919.00	\$78,956.00	\$82,114.00	\$85,399.00	\$88,815.00	\$92,367.00	\$96,062.00	\$99,904.00	\$0.00	\$0.00
Street Trees	Maintenance	Street Tree - General Operation and Maintenance	Municipal Funds	\$582,400.00	\$605,696.00	\$629,924.00	\$655,121.00	\$681,326.00	\$708,579.00	\$736,922.00	\$766,399.00	\$797,055.00	\$828,937.00	\$862,094.00	\$896,578.00	\$932,441.00	\$0.00	\$0.00
Wetland	Maintenance	Surrey Street Living Stream	Municipal Funds	\$17,680.00	\$18,387.00	\$19,123.00	\$19,888.00	\$20,683.00	\$21,510.00	\$22,371.00	\$23,266.00	\$24,196.00	\$25,164.00	\$26,171.00	\$27,218.00	\$28,306.00	\$0.00	\$0.00
Bushland/Native Vegetation	Operation	Success Hill Reserve - Foreshore and Bush restoration	Municipal Funds	\$76,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bushland/Native Vegetation	Operation	Success Hill Reserve - Foreshore and Bush restoration	Swan River Trust (Rivers and Estuaries Division)	\$76,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bushland/Native Vegetation	Operation	Street Tree Master Plan - Local Distributor Priority Rds (North Rd, Ivanhoe St, Iolanthe St, Broadway, Railway Pde, Shackleton St, Jackson St, Colston Rd, Hardy Rd, Kenny St, Reid St, West Rd, Palmerston St) planting of biodiversity corridors	Municipal Funds	\$152,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Street Trees	Operation	Reconciliation Action Plan - Sony Day Tree Planting	Municipal Funds	\$2,080.00	\$2,163.00	\$2,250.00	\$2,340.00	\$2,433.00	\$2,531.00	\$2,632.00	\$2,737.00	\$2,847.00	\$2,960.00	\$3,079.00	\$3,202.00	\$3,330.00	\$0.00	\$0.00
SOFTSCAPE TOTAL				\$1,912,040.00	\$1,569,401.00	\$1,632,178.00	\$1,697,466.00	\$1,765,363.00	\$1,835,979.00	\$1,909,418.00	\$1,985,795.00	\$2,065,236.00	\$2,147,834.00	\$2,233,748.00	\$2,322,099.00	\$2,412,621.00	\$0.00	\$0.00
Structures																		
Boardwalk/Decking/Platform	New	Broadway Terrace - Construction of observation deck including earthworks and drainage	Municipal Funds	\$0.00	\$0.00	\$398,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Bollards	Upgrade	Port & Rail Replacement Program - Bollards	Municipal Funds	\$20,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
STRUCTURES TOTAL				\$20,000.00	\$0.00	\$398,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Irrigation/ Water																		
Bore	Maintenance	Bore & Pump - General Operation and Maintenance	Municipal Funds	\$27,040.00	\$28,122.00	\$29,246.00	\$30,416.00	\$31,633.00	\$32,898.00	\$34,214.00	\$35,583.00	\$37,006.00	\$38,486.00	\$40,026.00	\$41,627.00	\$43,292.00	\$0.00	\$0.00
Other	Operation	Water Quality Monitoring Programme	Municipal Funds	\$10,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Pond	Renewal	48 Old Perth Rd Community Hall - Repair Pond & Reinstated Garden	Municipal Funds	\$10,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Retic Controller	Renewal	Replacing rainbird flow meters and controllers for the automatic reticulation system at 4 parks (specific parks TBC)	Municipal Funds	\$15,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Retic Communication Equipment	Upgrade	Upgrade of Reticulation System (Valves, Rewiring) of reticulation system at Sandy Beach	Municipal Funds	\$25,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Retic Controller	Upgrade	Jubilee Reserve- Reticulation Upgrade of pipes from 20mm to 25 MM to increase volume	Municipal Funds	\$15,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IRRIGATION/ WATER TOTAL				\$102,040.00	\$28,122.00	\$29,246.00	\$30,416.00	\$31,633.00	\$32,898.00	\$34,214.00	\$35,583.00	\$37,006.00	\$38,486.00	\$40,026.00	\$41,627.00	\$43,292.00	\$0.00	\$0.00
Furniture																		
Barbecue	New	Installation of free gas BBQ facilities for the community at the BIC Reserve	Municipal Funds	\$0.00	\$8,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Public Art	New	Commission of new public art (OCM 10/06/09)	Municipal Funds	\$26,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Public Art	New	Commission of new public art (OCM 10/06/09)	Lotterywest Grant	\$26,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Signage	New	Reconciliation Action Plan - BIC Reserve OCM	Municipal Funds	\$0.00	\$12,750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Signage	New	Reconciliation Action Plan - BIC Reserve OCM	Lotterywest Grant	\$0.00	\$12,750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Sandy Beach Reserve - Play spaces implementation design and construction of nature based regional playground	Municipal Funds	\$0.00	\$250,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Play Spaces Implementation Plan - BIC Reserve	Municipal Funds	\$0.00	\$76,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Sandy Beach Reserve - Play spaces implementation design and construction of nature based regional playground	Lotterywest Grant	\$0.00	\$500,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Play Spaces Implementation Plan - BIC Reserve	Lotterywest Grant	\$0.00	\$76,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Sandy Beach Reserve - Play spaces implementation design and construction of nature based regional playground	Reserve Funds	\$550,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Renewal	Mary Crescent Reserve Playground renewal (funded by cash in-lieu)	Reserve Funds	\$250,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Signage	Renewal	Significant Street Tree - Management & Placards OCM 14/02/12	Municipal Funds	\$0.00	\$30,000.00	\$0.00	\$0.00	\$0.00	\$35,000.00	\$0.00	\$0.00	\$40,000.00	\$0.00	\$0.00	\$45,000.00	\$0.00	\$0.00	\$0.00
Signage	Renewal	Success Hill Reserve Upgrade of Shelters (S), Aboriginal History information to be replaced and signage upgrade on Seventh & Success Hill	Municipal Funds	\$7,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Play Equipment	Upgrade	Garden Playground upgrade Wind in Willows Wilson Street (Babies Area)	Reserve Funds	\$20,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FURNITURE TOTAL				\$879,040.00	\$966,500.00	\$0.00	\$0.00	\$35,000.00	\$0.00	\$0.00	\$40,000.00	\$0.00	\$0.00	\$45,000.00	\$0.00	\$0.00	\$0.00	\$0.00

[illegible]

Appendix H – Asset Ratios

Background

On an annual basis each WA local government reports seven key performance indicators (KPIs) (available within the Annual Report). Of these, three KPIs reflect the performance of the Town's assets. These KPIs are useful in determining the current physical state of the asset portfolio, the level of past renewal expenditure against average annual depreciation, and the level of future required renewal expenditure against that allowed within the Long Term Financial Plan. Essentially they assess past, present and future performance. Each of the ratios and their historical performance are reported in this appendix.

Asset Consumption Ratio

The ratio is a measure of the condition of the Town's physical assets, by comparing their condition based fair value (what they're currently worth) against their current replacement cost (what their replacement asset is currently worth as new). The ratio highlights the aged condition of the portfolio and has a target band of between 50%-70%. Non-depreciating assets (e.g. land etc.) should be excluded from the calculation.

Depreciated Replacement Cost (Fair Value) of Depreciable Recreation Assets
Current Replacement Cost of Depreciable Recreation Assets

Asset	DRC (FV)	CRC	ACR
Softscape	\$510,544	\$771,493	66%
Hardscape	\$253,748	\$383,714	66%
Structure	\$1,112,449	\$1,651,306	67%
Furniture	\$1,490,792	\$1,772,162	84%
Equipment	\$273,443	\$319,941	85%
Lighting	\$343,385	\$484,539	71%
Irrigation	\$835,236	\$1,082,382	77%
Total	\$4,819,597	\$6,465,537	75%

Table 18: Recreation Assets Consumption Ratios

Asset Sustainability Ratio

The ratio is a measure of the extent to which assets managed by the Town are being replaced as they reach the end of their useful lives. The ratio is essentially past looking, and is based upon dividing the average annual depreciation expense of the recreation asset portfolio by the average annual renewal expenditure, for a number of past years (e.g. 3). The ratio has a target band of between 90%-110%.

$$\frac{\text{Recreation Asset Renewal Expenditure}}{\text{Recreation Asset Depreciation}}$$

Asset	2012/13-2014/15 Average	ADE (2015)	ASR
All recreation assets		\$253,033	
Total		\$253,033	

Table 19: Recreation Assets Sustainability Ratios

Asset Renewal Funding Ratio

The ratio is a measure as to whether the Town has the financial capacity to fund asset renewal as and when it is required over the future 10 year period. The ratio is calculated by dividing the net present value of planned renewal expenditure over the next 10 years in the LTFP, by the net present value of planned renewal expenditure over the next 10 years in the AMP. The same net present value discount must be applied in both calculations. The ratio has a target band of between 90%-110%.

$$\frac{\text{NPV of LTFP Planned Renewal Expenditure over the next 10 years}}{\text{NPV of AMP Required Renewal Expenditure over the next 10 years}}$$

Asset	LTFP	AMP	ARFR
All recreation assets			
Total			

TRANSPORT ASSET MANAGEMENT PLAN

Part 1 - Summary

Version 3.1

November 2017

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Executive Summary

The Town of Bassendean maintains a range of assets to provide an integrated transport service. This includes infrastructure such as roads, paths, bridges, drainage, car parks and street furniture.

This document is the Town's Asset Management Plan (AMP) for the transport network. It seeks to outline the activities and programmes that the Town will carry out over the next 15 years. It details the service levels the Town will provide and the resources required to deliver them. While the document is comprehensive, it is also evolving with the Town's practice maturity. As such there are a number of actions that have been identified that will improve the AMP's accuracy over time. All readers of this AMP must understand its limitations and applied assumptions before acting on any information contained within it. All information within this AMP is fully detailed within a separate Part 2 document.

Overall, the Town's transport network is worth approximately \$139million. The network is in a good physical condition, but there may be some long term financial sustainability issues. That is, it's not currently clear as to:

- = what service levels (e.g. quality) stakeholders want/need
- = what service levels the Town is currently providing
- = what the whole of life costs of the transport network are
- = whether the financial needs of the network can be met by the Long Term Financial Plan

In order to continue the improvement of its asset management practices, the actions that require addressing in the short term are to:

- = monitor the current performance of all service levels
- = review the resource requirements of the Town's asset management programme/activities
- = collect inventory and condition data for all transport assets to meet the require data confidence levels
- = align the AMP with the Town's Long Term Financial Plan
- = complete the development of the Transport Maintenance Service Level Manual

Background and Objectives

Purpose of this Asset Management Plan

This document is an Asset Management Plan (AMP) for the Town's Transport Network. It documents the Town's management practices, processes and strategies. This ensures that transport assets are maintained to an agreed standard (i.e. service levels), balanced against long term resource availability.

Focus of this Asset Management Plan

The AMP focuses on assets that support a transport service. The assets that make up the network, and their replacement costs, are detailed in Table 1.

Asset Type	Quantity	Current Replacement Cost
Roads	96.67km	\$75,923,831
Paths	100.77km	\$10,256,412
Structures (Bridges)	4	\$31,000
Stormwater Drainage	2,601 pits 69.07km pipes 2 Sumps	\$39,635,969
Car Parks	34 38,450 sq.m.	\$2,882,259
Foreshore Furniture (Boardwalks, Jetties & Ramps)	7	\$1,430,088
Street Furniture	796	\$8,539,734
Total		\$138,699,293

Table 1: Assets covered by Transport AMP

Corporate Document Relationships

This AMP integrates with the following Town documents:

- = Strategic Community Plan
- = Corporate Business Plan
- = Long Term Financial Plan
- = Capital Works Plan
- = Annual Budget

Time Period of the AMP and Next Review Data

The AMP covers a 15 year period and will be next reviewed by 1st July 2019.

Service Levels

Introduction

Service Levels describe the outputs that the Town provides from its transport service. These have been developed through the consideration of strategic and policy inputs, and customer needs and wants. The process through which the Town's Service Levels were developed, as well as all detailed information is found in Appendix B.

Community Perceptions/Expectations

The Town has not historically undertaken research into customers' service expectations.

Service Level Performance

Table 2 details the service level performance that the Town provides.

KPI	Performance	Tactic
Accessibility	Unknown	Investigating
Availability	Unknown	Investigating
Compliance	Unknown	Investigating
Quality	Above target	Maintaining and investigating further
Safety	Unknown	Investigating

Table 2: Service Level Performance

Demand

This section summarises likely factors that may affect the demand for transport services over the life of the AMP. Full details of past and future demand factors are recorded in Appendix C.

Historic Demand

The following table outlines the key factors that have affected historical demand change.

Driver Type	Effect	Demand Change
Vehicle Ownership	Dwellings with a registered motor vehicle up from 4,583 (2001) to 5,300 (2016), being a growth of 1% per annum.	Increase
Travel to Work	Number of people travelling to work up from 5,518 (2006) to 6,122 (2011), being a growth of 2.2% per annum. Car as driver is by far the most common mode.	Increase
Population	The population grew from 13,306 (2001) to 15,087 (2016), being a growth rate of 0.9% per annum.	Increase
Demographics	Although there was an actual growth in all-but-two demographic age ranges between 2001 and 2016, the median age largely remained unchanged over this time, at 39 years old.	Neutral
Recreation	Participation in recreational activities that utilise transport assets (e.g. walking in paths) remained virtually unchanged in recent years.	Neutral
Tourism	Tourist numbers in the Perth metropolitan regional grew from 13.2m (2012/13) to 18.2m (2016/17). However with limited tourist destinations within the Town, this growth is thought to have had a negligible local demand effect.	Neutral
Climate	Local annual rainfall levels have fallen from around 910mm (1886) to 680mm (2016). At the same time mean maximum temperatures have risen from 32°C (1945) to 34°C (2016). As a result, asset lives may be shorter due to heat exposure, but demand for some assets (e.g. drainage) may be reducing due to lower rainfalls.	Increase and decrease. Overall unclear

Table 3: Historic Demand Drivers

Future Demand

Consideration was given to six possible future demand drivers that may influence demand on the provision of transport services.

Driver Type	Effect	Demand Change
Political	Negligible affects from future TPS amendments. Need to at least sustain the internal asset management programme to reach a desired future level of proficiency. Possible increased demand for additional municipal resources as a result of decreasing grant funding.	Increase for additional Asset Management and financial resources.
Economic	The medium term global economic outlook points to negligible energy and price changes. Road maintenance costs are likely to increase slightly above inflation (at least in the short term). The long term financial sustainability position of the Town broadly looks questionable and requires further investigation.	Neutral , but further work through the Town's IPRF is required to balance AMP and LTFP.
Social	Future projected population growth is considered to have a moderate impact on increased service demand. Demand will probably not be affected by demographic change. Transport modelling would be useful in order to identify future infrastructure requirements and initiatives. No specific demand change due to recreation or tourism drivers.	Increase due to population growth. Increase to provide transport options for older people. Increase in peak congestion.
Technological	Software systems that currently help manage the network, meet the Town's current needs, at cost-efficient prices. Opportunity exists to plan for the future reuse and/or recycling of waste materials. Consideration will be given to remote sensing technologies, as they emerge.	Neutral
Legal	No identified demand change.	Neutral
Environmental	Increased demand for clearer decision making around asset need. Increased demand for more environmentally sustainable construction and maintenance practices. Increased need to understand future rainfall events and allow for shorter asset lives and higher costs.	Increase for long term planning and material reuse/recycling. Likely increase in whole of life costs due to climate change.

Table 4: Future Demand Drivers

Demand Management

A review of past and future demand factors shows that change has occurred, and will also likely occur into the future. Looking forward, the following initiatives/improvements are proposed in order to meet demand changes.

- = Review the AMPs' long term financial requirements against the LTFP.
- = Develop and maintain a long term transport model that enables infrastructure requirements to be identified.
- = Develop a transport asset waste minimisation strategy.
- = Develop a transport asset climate change adaptation strategy.

Risk Management

An analysis of the current transport asset management risks identified by the AMP has been undertaken. The results are detailed in Appendix D. Table 5 outlines the top identified risks.

Ref.	Risk	Level of Risk	Further Action
1	AMP service levels are not currently all monitored / known. This means that service delivery may be misaligned.	Very High	Service levels will begin to be monitored at the earliest opportunity.
5	Increasing reliance (over time) on municipal revenue sources to fund the transport network (e.g. due to changes to current external funding sources).	High	Challenge will be industry wide and as such, require an industry solution. Not to be addressed until risk event occurs.
6	Town's internal asset management programme is moderately reliant on external resources, the availability of which cannot be fully guaranteed.	High	DOS to review the structure of the AM programme/resources.
10	Not all transport asset inventories' accuracy (inventory and condition) is within the target band (e.g. drainage)	High	Develop and implement a cyclical inspection programme/manual.
14	Asset expenditure misreported, leading to inaccurate asset sustainability ratio.	Very High	Instigate a project to refine budget/GL codes so that activities are correctly reported.

Table 5: Major Transport Asset Management Risks

Lifecycle Management Plan

The lifecycle management plan details how the Town intends to manage and operate its transport network at the agreed service levels. Full details of the network can be found in Appendix E.

Transport Network Physical Parameters

Asset	Quantity	Current Replacement Cost	Fair Value
Roads	96.7km Road 189.6km Kerbing	\$65,445,866 \$10,477,965	\$53,009,939 \$8,861,301
Paths	100.8km Path 98 Grab Rails 172 TGSIs	\$10,174,014 \$59,787 \$22,611	\$7,207,539 \$23,931 \$16,787
Structures	4 Pedestrian Bridges	\$31,000	\$18,100
Drainage	2,601 Pits 69.07km Pipes 2 Sumps	\$10,817,502 \$28,701,767 \$116,700	\$4,058,036 \$18,610,740 \$75,738
Car Parks	34 Car Parks	\$2,882,259	\$2,362,095
Foreshore Furniture	7 Items	\$1,430,088	\$441,407
Street Furniture	796 Items	\$8,539,734	\$6,988,633
Total		\$138,699,293	\$101,674,246

Table 6: Transport Network Physical Parameters

Transport Network Condition

Asset Class	Excellent	Good	Average	Poor	Very Poor	Unknown
Road Surfaces	17%	35%	39%	8%	0%	0%
Road Kerbing	-	-	-	-	-	100%
Path Surfaces	19%	60%	20%	1%	0%	1%
Structures	25%	25%	50%	0%	0%	0%
Drainage	-	-	-	-	-	100%
Car Park Surfaces	8%	25%	31%	28%	3%	5%
Foreshore Furniture	-	-	-	-	-	100%
Street Furniture	7%	35%	20%	16%	3%	19%

Table 7: Transport Network Condition

Transport Network Data Confidence and Reliability

Table 8 details the reliability and confidence levels of the current asset data the Town holds. It is the Town's intention to progress towards a position whereby data confidence levels for all areas are classified as either a 1 or 2.

Asset Class	Inventory	Condition	Valuation
Road seal	1	1	1
Road pavement	3	2	3
Road formation	1	-	1
Kerbing	2	3	3
Paths	1	1	1
Structures	1	2	1
Drainage	3	5	3
Car Parks	1	1	1
Foreshore Furniture	1	1	1
Street Furniture	2	2	2

Table 8: Transport Network Data Confidence Levels

Lifecycle Management Strategies

Operation & Maintenance Strategy

Where possible, the Town employs preventative maintenance strategies to maximise asset performance and minimise long terms costs. Technical maintenance service levels are listed in a standalone manual and the asset inspection frequencies are listed in Appendix G. All planned maintenance activities are individually costed, and these are used to inform the long term budget requirements.

Renewal Strategy

All transport assets are periodically inspected to determine their condition. Results are then modelled to predict assets' potential year of renewal. Town staff then inspect these assets to determine the timing, scope and budget of any future renewal project. Projects are listed on a consolidated long term works program.

Upgrade/New Strategy

The need for new and/or upgraded assets (e.g. to meet a service deficiency) are identified from a number of potential sources. Each potential project is investigated by Town staff and where valid, often prioritised against similar projects. Approved projects are then listed onto a consolidated long term works program. An improvement project to consider a single common prioritisation framework has been identified.

Disposal Strategy

The Town does not frequently dispose of transport assets. Where a potential need is identified, then this is considered by Town staff and (in some cases) Council.

Financial

This section contains the financial requirements of this AMP. All figures are expressed with a 2017/18 base year with no annual inflation rates.

Projected Expenditure Requirements

Expense Type	Year 1	Year 2	Year 3	Year 4	Year 5
	2017/18	2018/19	2019/20	2020/21	2021/22
Operations	\$673,390	\$657,926	\$654,390	\$676,390	\$656,390
Maintenance	\$1,352,848	\$1,342,848	\$1,342,848	\$1,342,848	\$1,342,848
Renewal	\$1,515,843	\$2,411,167	\$2,451,220	\$1,727,554	\$2,293,075
Upgrade	\$532,000	\$638,968	\$303,506	\$317,906	\$314,952
New	\$560,000	\$314,576	\$116,922	\$118,152	\$135,383
Disposal	\$29,500	\$0	\$0	\$0	\$0
Total	\$4,663,581	\$5,365,485	\$4,868,886	\$4,182,850	\$4,742,648

Asset Type	Year 6	Year 7	Year 8	Year 9	Year 10
	2022/23	2023/24	2024/25	2025/26	2026/27
Operations	\$656,390	\$680,390	\$638,090	\$638,090	\$663,090
Maintenance	\$1,342,848	\$1,342,848	\$1,342,848	\$1,342,848	\$1,342,848
Renewal	\$2,310,731	\$2,018,557	\$2,223,538	\$2,380,600	\$2,381,600
Upgrade	\$327,998	\$302,645	\$350,766	\$318,521	\$317,167
New	\$107,075	\$121,845	\$164,305	\$104,614	\$39,384
Disposal	\$0	\$0	\$0	\$0	\$0
Total	\$4,745,042	\$4,466,285	\$4,719,547	\$4,784,673	\$4,744,089

Asset Type	Year 11	Year 12	Year 13	Year 14	Year 15
	2027/28	2028/29	2029/30	2030/31	2031/32
Operations	\$638,090	\$638,090	\$660,090	\$638,090	\$638,090
Maintenance	\$1,342,848	\$1,342,848	\$1,342,848	\$1,342,848	\$1,342,848
Renewal	\$2,406,600	\$2,445,600	\$2,463,600	\$2,463,600	\$2,463,600
Upgrade	\$282,090	\$226,266	\$200,000	\$200,000	\$200,000
New	\$114,460	\$104,614	\$111,999	\$119,000	\$111,200
Disposal	\$0	\$0	\$0	\$0	\$0
Total	\$4,784,088	\$4,757,418	\$4,778,537	\$4,763,538	\$4,755,738

Table 9: Transport Asset Projected Expenditure Requirements

Projected Potential Revenue Sources

Asset Type	Year 1	Year 2	Year 3	Year 4	Year 5
	2017/18	2018/19	2019/20	2020/21	2021/22
Financial Assistance Grant	\$210,000	\$210,000	\$210,000	\$210,000	\$210,000
Direct Grant (SRFLG)	\$30,174	\$30,000	\$30,000	\$30,000	\$30,000
Roads to Recovery	\$190,000	\$114,470	\$188,000	\$188,000	\$188,000
Regional Road Group	\$401,461	\$28,603	\$231,321	\$0	\$166,667
Blackspot	\$0	\$0	\$0	\$0	\$0
LGIS Insurance	\$102,000	\$0	\$0	\$0	\$0
Other	\$85,022	\$0	\$0	\$0	\$0
Municipal Funds	\$3,644,924	\$4,982,412	\$4,209,565	\$3,754,850	\$4,147,981

Asset Type	Year 6	Year 7	Year 8	Year 9	Year 10
	2022/23	2023/24	2024/25	2025/26	2026/27
Financial Assistance Grant	\$210,000	\$210,000	\$210,000	\$210,000	\$210,000
Direct Grant (SRFLG)	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Roads to Recovery	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000
Regional Road Group	\$405,586	\$12,525	\$63,516	\$0	\$0
Blackspot	\$0	\$0	\$0	\$0	\$0
Municipal Funds	\$3,911,456	\$4,025,760	\$4,228,031	\$4,356,673	\$4,316,089

Asset Type	Year 11	Year 12	Year 13	Year 14	Year 15
	2027/28	2028/29	2029/30	2030/31	2031/32
Financial Assistance Grant	\$210,000	\$210,000	\$210,000	\$210,000	\$210,000
Direct Grant (SRFLG)	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Roads to Recovery	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000
Regional Road Group	\$0	\$0	\$0	\$0	\$0
Blackspot	\$0	\$0	\$0	\$0	\$0
Municipal Funds	\$4,356,088	\$4,329,418	\$4,350,537	\$4,335,538	\$4,327,738

Table 10: Transport Asset Projected Funding Sources

Plan Improvement and Monitoring

This Section of the AMP outlines the degree to which it is an effective and integrated tool within the Town and the future tasks required to improve its accuracy and robustness.

Performance Measures

The effectiveness of the AMP will be monitored by the performance of the three statutory ratios that the Town reports on. Each ratio is described in Appendix J. The Town's current performance is recorded in Table 11.

Asset Consumption Ratio	Asset Sustainability Ratio	Asset Renewal Funding Ratio
Above Target	Below	Pending

Table 11: AMP Performance Measures

Improvement Plan

The asset management improvement plan generated from this AMP is shown in Table 12.

Task No	Task	Responsibility	Timeline
1	Review the Town's operational AM structure.	DOS	May 2018
2	Compare the AMPs financial projections against the Town's LTFP to align.	AMC & MCS	March 2018
3	Review transport asset's usage levels and identify any potential future capacity issues.	ETC	June 2018
4	Define and implement cyclical inspections for all transport assets.	MAS & AMC	May 2018
5	Develop an asset material reuse & recycling guideline document.	ETC	September 2018
6	Review the current environmental impact of the network.	EO	December 2018
7	List relevant Standards within the AMP.	AMC	June 2018
8	Develop a clear strategy for the use of IT for transport network management.	AMC	December 2018
9	Develop a capital project prioritisation framework.	AMC	July 2018
10	Complete all transport asset inventories.	MAS	June 2018
11	Complete the transport maintenance levels of service manual.	AMC	June 2018

Table 12: Transport AMP Improvement Plan

Monitoring and Review Procedures

This AMP will be reviewed during annual budget preparation and amended to recognise any changes in levels of service and/or resources available to provide those services as a result of the budget decision process.

TRANSPORT ASSET MANAGEMENT PLAN

Part 2 - Detailed

Version 3.1

November 2017

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Appendix A - Legislation, Acts, Regulations & Standards

This section provides details on all legislation, standards, policies and guidelines that should be considered as part of the management practices of the Town's transport assets.

Legislation / Standard / Organisation	Requirement / Document
Local Government Act 1995	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery. The Act also provides guidance on the rules around local governments who derive revenue from operations such as non-core business. For example, this would include charges from car parks.
Civil Liability Amendment Act 2003	In 2001, the High Court of Australia abolished the Common Law Rule exempting Highway Authorities from liability for the non-repair of roads (or nonfeasance 'failure to perform an act'). A level of protection for road authorities from failure to carry out work was subsequently restored under Civil Liability Amendment Act 2003. Under subsection (2) of section 5Z of Part 1C of the Civil Liability Amendment Act 2003; "...a roads authority is not liable in proceedings to which this Part applies for harm arising from a failure of the authority to carry out work, unless at the time of failure the authority had actual knowledge of the particular risk that caused the harm."
Environmental Protection Act 1986	The Act's key objective is to simply protect the environment of the State and sets out a host of regulations and requirements to achieve its goal. Requires permit and flora survey prior to vegetation removal, relates to the prevention of pollution - either to land air or water. Defines two types of harm - material environmental harm or serious environmental harm.

Environment Protection Act (unauthorised discharges) Regulations 2004	States that pesticide cannot be discharged into the environment.
Aboriginal Heritage Act 1972	Regulations and requirements that the Town must comply with relating to aboriginal heritage.
Aboriginal Heritage Regulations 1974	Preservation of the community places and objects used by traditional owners.
Native Title Act 1999	Regulations and requirements that the Town must comply with in relation to the use of land.
Land Administration Act 1997	Parameters for control and vesting of road reserves.
Dangerous Goods Safety Act 2004	Relates to the safe storage, handling and transport of dangerous goods.
Poisons Act 1964	Regulates the possession and use of poisons.
Health Act 1911	Relates to the handling and disposal of hazardous materials.
Wildlife Conservation Act 1950	Provides for the conservation and protection of native flora and fauna.
Health (Pesticides) Regulations 1956	Regulates the possession and use of pesticides.
Road Traffic Act 1974	The Road Traffic Act 1974 covers several key areas relevant to Local Authorities. Section 81 gives Local Authorities the power to effect road closures, both temporary and permanent. Sections 84 and 85 empower LA's to recover costs for certain damages to road reserve assets from the owner of the vehicle found to cause the damage. Other sections also set out the regulations for unauthorised parking and vehicles types, requirements and uses on roads.

Main Roads Act 1930	The Main Roads Act 1930 set out the framework by which Main Roads and the Commissioner operate and the regulations and requirements that the Town must comply with in relation to use of roads. The Act focuses heavily on the function of Main Roads but also links with several key areas of Local Government. The act sets out Main Roads right of delegation of power to Local Government, ability to proclaim roads highways and main roads and power to make relevant regulations. MRWA must also consult relevant LG bodies prior to the improvement of any roads. Local Government must also comply with information requests from MRWA.
Dividing Fences Act	Local government exempt from 50/50 contribution for dividing fences abutting public open space.
Occupational Health and Safety Act 1984	The Occupational Health and Safety Act is concerned with protecting the safety, health and welfare of people engaged in work or employment. Full consideration and application of the Act should be given in order to identify, manage and reduce or mitigate the risk of harm to the Town's employees.
OSH Regulations 1996	The guidelines for employees and employers to undertake within the work environment
Disability Discrimination Act 1992	The Federal Disability Discrimination Act 1992 (D.D.A.) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people. Disability discrimination happens when people with a disability are treated less fairly than people without a disability. Disability discrimination also occurs when people are treated less fairly because they are relatives, friends, carers, co-workers or associates of a person with a disability.
Disability Services Act 1993	An Act for the establishment of the Disability Services Commission and the Ministerial Advisory Council on Disability, for the furtherance of principles applicable to people with disabilities, for the funding and provision of services to such people that meet certain objectives, for the resolution of complaints by such people, and for related purposes.

Disability Services Regulations 2004	Current amendments to Disability Services Act (1993)
Disability Standards for Accessible Public Transport 2002	The Disability Standards for Accessible Public Transport 2002 set out the minimum accessibility requirements that providers and operators of public transport must comply with, as well as ensuring that access to transport is consistently improved. The transport standards recognise that access to public transport enables people with disabilities, their families and their carers to fully participate in community life and also benefits many older Australians and parents with infants in prams.
AustRoads Guidelines	Guidelines include (but are not limited to): = Guide to Road Design – Part 4A: Unsignalised and signalised intersections = Guide to Road Safety – Part 8: Treatment of Crash Locations = Guide to Road Transport Planning = Guide to Traffic Management – Part 12: Traffic Impacts of Development = Guideline for Freight Routes in Urban and Rural Areas = Revision of Guide to Traffic Engineering Practice – Part 8: Traffic Control Devices
WA Department of Planning	= Liveable Neighbourhoods Edition 2 – Sustainable Cities Initiative
Institute of Public Works Engineering Australia	= Local Government Guidelines for Subdivisional Development - Edition 2 = Complete Streets – Guidelines for Urban Street Design (IPWEAQ)
Main Roads WA	= Traffic Management for Works on Roads – Code of Practice = Standard Contract Drawings = Guideline Drawings = Presentation Drawings = Geometric Design = Roundabouts = Temporary Alignments in Urban Areas = Driveways/Crossovers

Other Standards and Regulations	Other relevant documents include, but are not limited to: = AS/NZS 4360: 2004 – Risk Management = ISO 31000 – Risk Management = ISO 55000 – Asset Management = All other relevant State and Federal Acts & Regulations = All Local Laws and relevant policies of the organisation
Town of Bassendean	= 1.16 – Communication & Consultation, Community & Stakeholders = 1.20 – Financial Sustainability Policy = 1.21 – Purchasing Policy = 1.22 – Risk Management = 1.23 – Sustainable Bassendean Policy = 1.34 – Safety Guideline for Visitors & Contractors = 1.39 – Occupational Safety & Health Responsibility. = 2.1 – Asset Management Policy = 2.2 – Road Reserve Policy Series = 2.3 – Streetscapes Policy Series = 2.4 – Environment Policy Series

Table 1: Legislative Requirements, Standards, Policies and Guidelines

Appendix B - AMP Stakeholders and Service Levels

AMP Stakeholders

Analysis of the Town's transport network revealed that there are 6 key stakeholder groups. These stakeholders are identified below. Groups in dark blue have been determined to be major stakeholders and those in light blue minor stakeholders. Only major stakeholders have been specifically considered by this AMP.

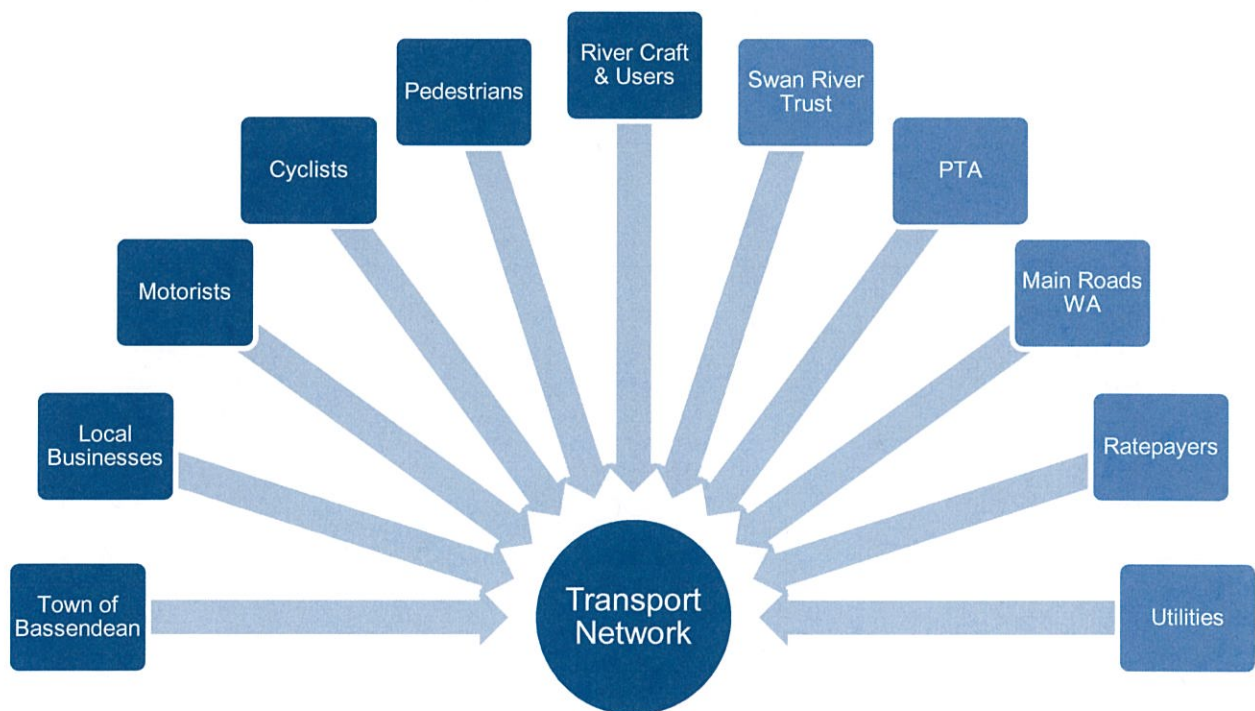


Figure 1: Transport Network Stakeholders

Process for Developing Potential Service Levels

In developing the service levels for the Transport Network, the Town has generally applied the framework as set out in the International Infrastructure Management Manual. The process broadly applies 5 steps, being:

- = Identify service attributes important to customers
- = Define the customer service levels
- = Develop performance measures
- = Consult with customers
- = Make service level based decisions

Strategic Community Plan (SCP) Drivers

In addition to considering the needs and wants of different stakeholder groups, the SCP (2017-2027) was also reviewed in order to identify strategic priorities of relevance. The following table outlines those priorities and objectives that may influence this AMP's service levels.

Priority	Objective(s)	Strategies
Built Environment	= 3.2 – Enhance connectivity between places and people.	= 3.2.1 – Connect the Town through a safe and inviting walking and cycling network. = 3.2.3 – Enhance the liveability of local neighbourhoods. = 3.2.4 – Enhance road safety through design.
Good Governance	= 5.1 – Enhance organisational accountability.	= 5.1.5 – Ensure optimal management of assets.

Table 2: Strategic Community Plan Strategies Aligned to the Transport Network

Consideration of the objectives listed above shows that the following transport service areas are of high importance to the Strategic Community Plan:

- = Connectivity (accessibility)
- = Safety
- = Effective infrastructure management (monitored through the asset performance ratios)

Community Perceptions Survey

The Town has not historically undertaken research into customers' service expectations. The engagement of customers will be considered in future versions of this AMP.

Stakeholder Key Service Attributes

Each of the key stakeholders were considered as to what they value and expect from the transport network. These needs and wants were captured and have been presented in the table below. Those considered of high importance, that is are frequently reoccurring, and those which are needed, were then chosen to form the basis of the AMP's Service Levels.

Stakeholder	Specific Needs/Wants	Need or Want?	Service Attribute
Town of Bassendean	Infrastructure managed to meet all applicable regulations.	Need	Compliance
	Infrastructure managed in a financially sustainable manner.	Want	Value for Money
	Infrastructure maintained in a safe condition so as to minimise the Town's and users' risk exposure.	Want	Safety
	Infrastructure is accessible to all users.	Want	Accessibility
	Infrastructure is managed to reduce and where possible avoid, negative environmental outcomes (e.g. that the energy and carbon footprint of the Town's transport assets is progressively reduced).	Want	Environmental
	Users are satisfied with the Transport Network.	Want	Customer Satisfaction
	Assets are well used.	Want	Utilisation
	That strong relationships are maintained between all stakeholders through engagement and consultation.	Want	Consultation
	Infrastructure is maintained to agreed levels of service.	Want	Quality
Local Businesses	Infrastructure is available for use when required (e.g. parking is available for staff and customers).	Want	Availability
	Infrastructure is maintained to a good standard.	Want	Quality
	Business areas are well signed.	Want	Signage

Motorists	Transport network is accessible.	Need	Accessibility
	Transport network is available.	Want	Availability
	Transport network is integrated.	Want	Integration
	Infrastructure is well maintained.	Want	Quality
	Transport network is well signed.	Want	Signage
	Transport network is safe.	Want	Safety
	Infrastructure adds to the aesthetic appeal of town.	Want	Aesthetics
Cyclists	Transport network is accessible.	Need	Accessibility
	Transport network is available.	Want	Availability
	Transport network is integrated.	Want	Integration
	Infrastructure is managed to reduce and where possible avoid, negative environmental outcomes.	Want	Environmental
	Infrastructure is well maintained and to a high standard.	Want	Quality
	Transport network is safe.	Want	Safety
	Infrastructure adds to the aesthetic appeal of town.	Want	Aesthetics
Pedestrians	Transport network is accessible.	Need	Accessibility
	Transport network is available.	Want	Availability
	Infrastructure is managed to reduce and where possible avoid, negative environmental outcomes.	Want	Environmental
	Infrastructure is well maintained and to a high standard.	Want	Quality
	Transport network is safe.	Want	Safety
	Infrastructure adds to the aesthetic appeal of town.	Want	Aesthetics

	Infrastructure meets applicable standards and regulations for impaired users.	Need	Compliance
	Transport network is integrated.	Want	Integration
River Craft & Users	Mooring points, launching points, fishing points and car parks are available.	Want	Availability
	River assets are maintained to a good standard.	Want	Quality
	Suitable safety devices and information is available.	Want	Safety

Table 3: Stakeholder Service Levels

The following service attributes were selected for Service Levels:

- = Accessibility – Frequency: 4 and Needed
- = Availability – Frequency: 5
- = Compliance – Frequency: 2 and Needed
- = Quality – Frequency: 6
- = Safety – Frequency: 5

Service Level Targets and Performance

By considering the potential service attributes from the SCP and stakeholder service attributes, six KPIs have been selected.

KPI	Driver	Level of Service	Performance Measure	Target	Current	Data Confidence
Accessibility	Stakeholder attributes & SCP	Network accessible to all users	Percentage of properties within the Town that have access to a road reserve and path.	TBC	TBC	
			Percentage of path segments (structure) that comply with Disability and Discrimination Act requirements.	TBC	TBC	
Availability	Stakeholder attributes	Availability of travel options	Percentage of users satisfied with the availability of travel options within the transport network.	TBC	TBC	
Compliance	Stakeholder attributes	Ensure effective management of risks to health in accordance with relevant legislation and community needs.	Number of validated compliance based complaints received over the preceding 3 years for transport assets.	0	TBC	
Quality	Stakeholder attributes	Transport network is maintained to an agreed quality.	Percentage of transport assets whose condition is under their renewal intervention level.	80%+	91%	Moderate
Safety	Stakeholder attributes & SCP	Sites with fatal or serious injury crashes are investigated.	Percentage of sites investigated with 2 or more recorded crashes over the previous 5 years.	100%	TBC	

Table 4: Service Level Targets and Performance

Appendix C - Demand

Background

Predicting future demand for services is an important element of any organisation's asset management practices. It enables practitioners to plan ahead and identify the best way of meeting future demand.

This section of the AMP looks at both historical and future levels of service demand. Whilst future demand is arguably the more important focus, crucial evidence and trends can be learnt from examining what has happened, and what is happening. Readers should be aware though that as with any demand forecasting, prediction is rarely ever 100% correct. The Demand Section takes a broad view to possible demand influences and as an outcome, attempts to identify those most likely to have the greatest impact on demand over the life of the AMP.

Historic Transport Demand

Motor Vehicle Ownership

Analysis of the ABS census data shows that between 2001 and 2016, there has been an increase in the number of Town dwellings with registered motor vehicles (Figure 2). The number of occupied dwellings owning at least one motor vehicle rose from 4,583 to 5,300, an increase of 16% (+1% pa). There were decreases in the number of dwellings with no motor vehicles and those with one motor vehicle. The figures show that locally, it has become more common for dwellings to have multiple motor vehicles, thus potentially increasing the demand of road assets (e.g. higher traffic volumes).

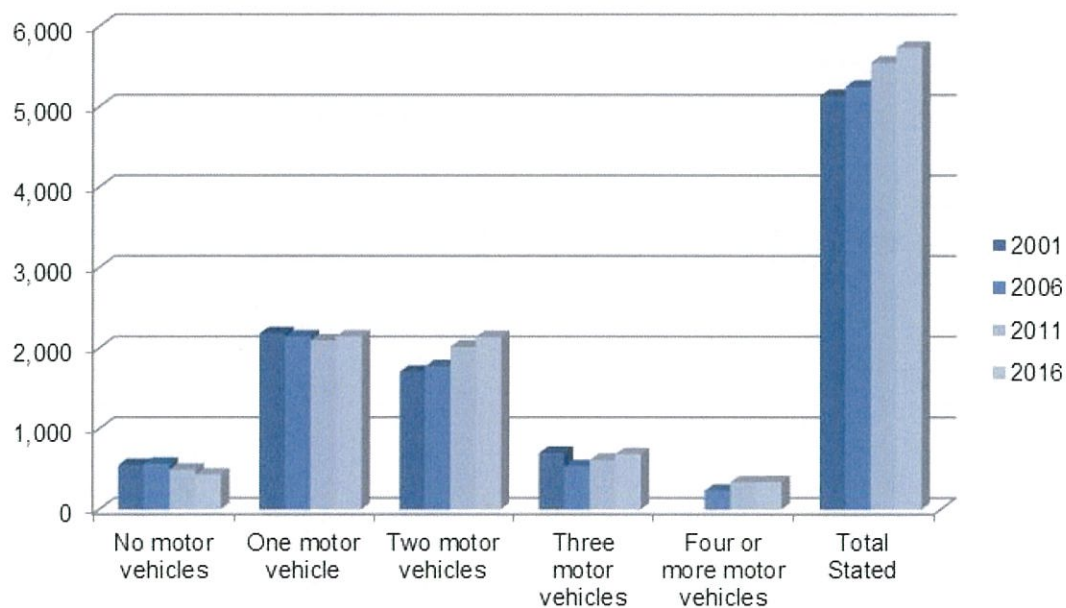


Figure 2: Dwellings with Registered Motor Vehicles (Source: ABS 2017)

Travel Modes to Work

Figure 3 shows that between 2006 and 2011, there has been an increase in the number of people travelling to work from 5,518 to 6,122. This represents an increase of 11%, or 2.2% per annum. The greatest increase (by number) has occurred in the modes of car as driver, train and bus. The figures indicate that Town residents are heavily reliant on cars, but will embrace public transport options where provided.

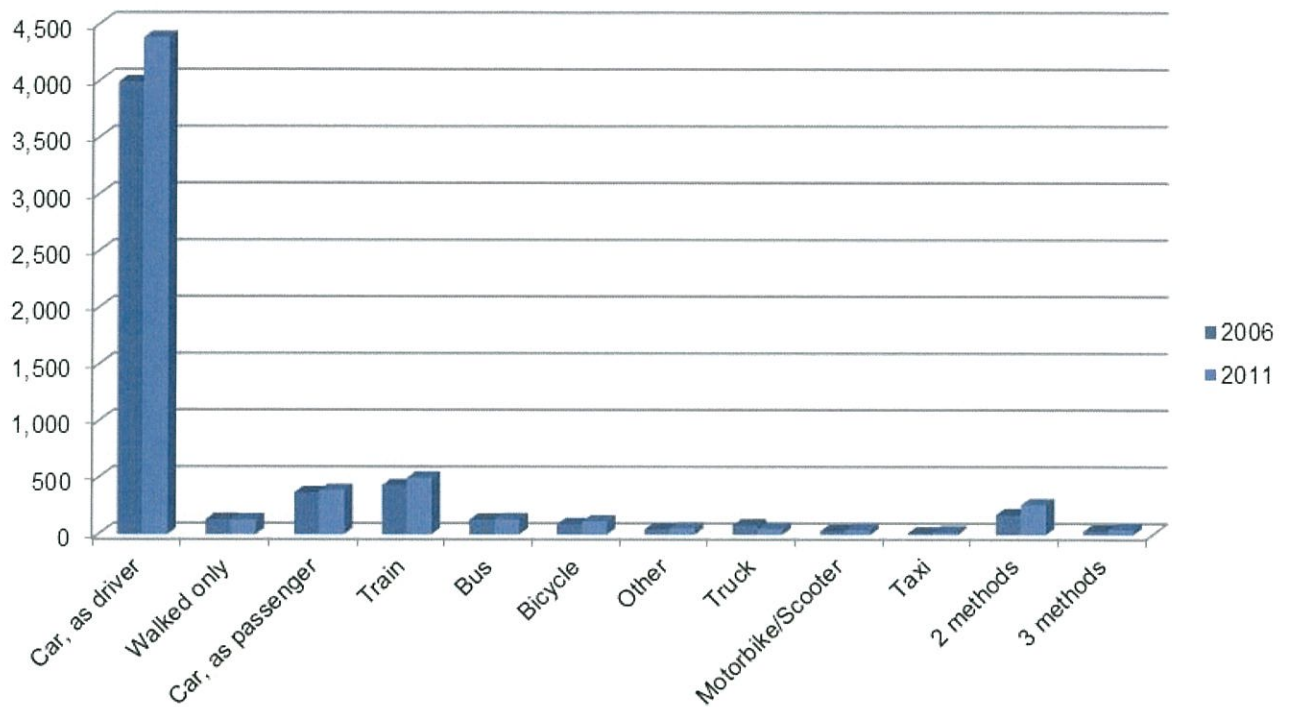


Figure 3: Travel Mode to Work (Source: ABS 2016)

Population Change

When the overall population change of the Town (Figure 4) between 2001 and 2016 is considered, the number of recorded people at census night has risen from 13,306 to 15,087. This represents an annual average increase of 0.9%. Naturally as the population has increased, so too would demand for transport services.

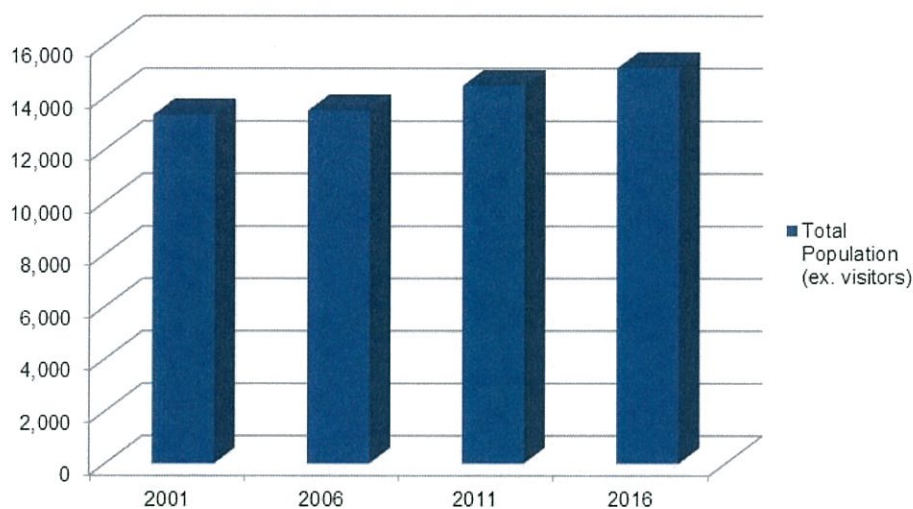


Figure 4: ABS Population – Town of Bassendean 2001-2016

Demographic Change

ABS census results between 2001 and 2016 show that despite growth in the Town's overall population, its median age has remained unchanged, at 39 years of age. While population increases can be observed in all-but-two age bands (Figure 5), the stationary median age would suggest that demographics have not been a major influence on demand change.

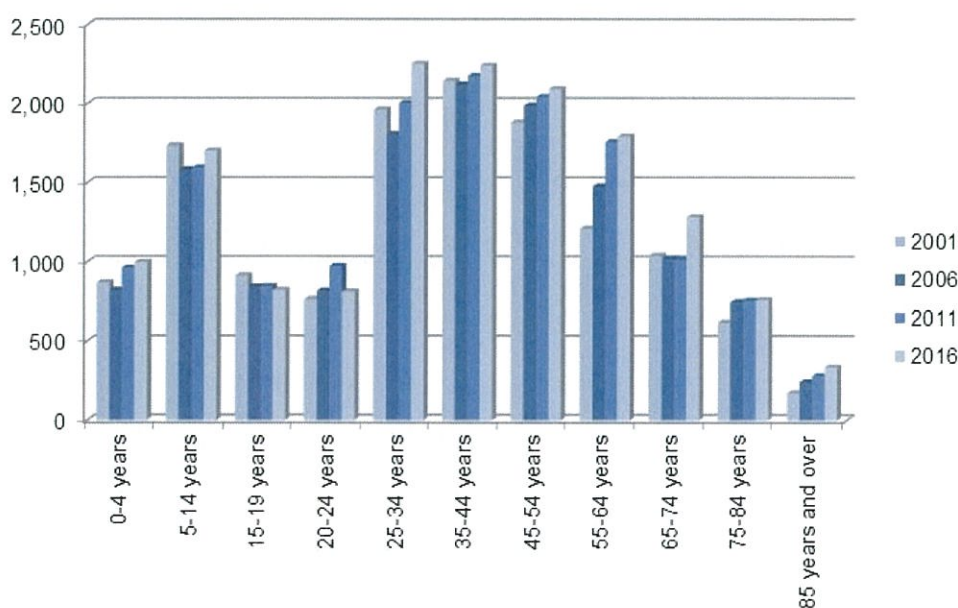


Figure 5: ABS Demographics – Town of Bassendean 2001-2016

Recreation Participation Change

The ABS Participation in Sport and Physical Recreation Survey was last conducted in 2013-14. Within Australia, walking for exercise remained the most popular activity over time with a participation rate of 19.2%. The second and third most popular activities were fitness/gym (17.4%) and jogging/running (7.4%) respectively. Ensuring that the Town provides a quality path network upon which people can walk is therefore of a high importance.

Tourist & Visitor Numbers Change

Outside of immediate local demand, there may be potential demand from visitors to the Town, whether day trippers or tourists. Figures from Tourism WA show that over the past 5 years, the estimated number of visitors to/within the Perth Metropolitan area have risen from 13.2million in 2012/13 to 18.2million in 2016/17. However, the Town is not a significant tourist destination. As such, increased tourism would largely have been represented in general higher traffic volumes across the road network.

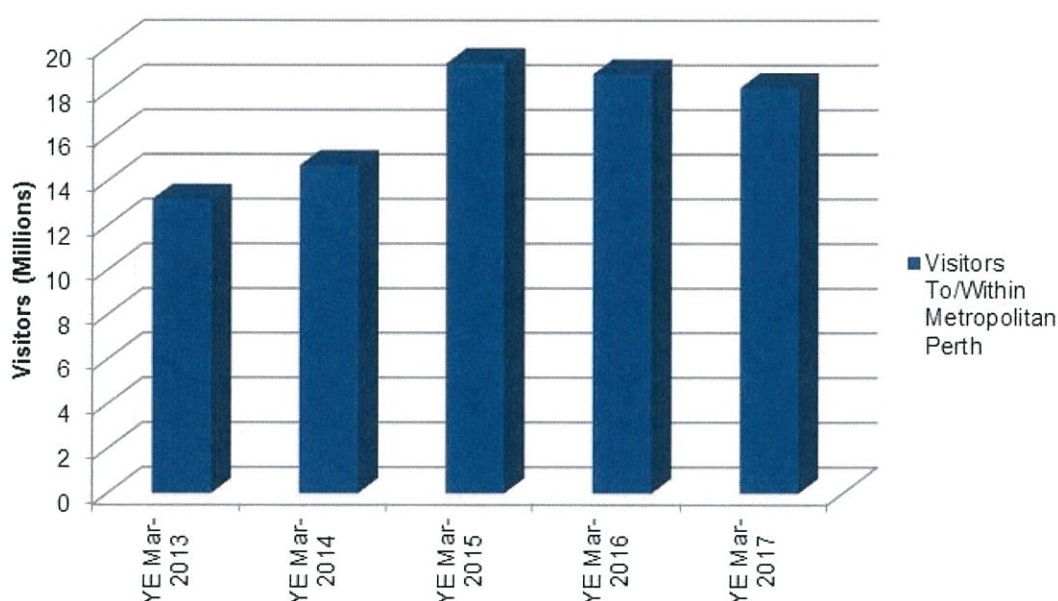


Figure 6: Estimated Perth Metropolitan Visitors (Source: Tourism WA March 2017)

Rainfall Change

Consideration of historical annual rainfall may provide an indication of climate change and how frequently water may be flowing through assets such as drainage. Figure 7 shows the annual total rainfall at the Midland weather station from 1886 to 2016. Considering the linear trend line, it can be seen that average annual rainfall levels are falling, from approximately 910mm to 680mm. These results certainly suggest that drainage type assets would have experienced falling demand levels, although further investigation would be required to determine any changes to peak storm events.

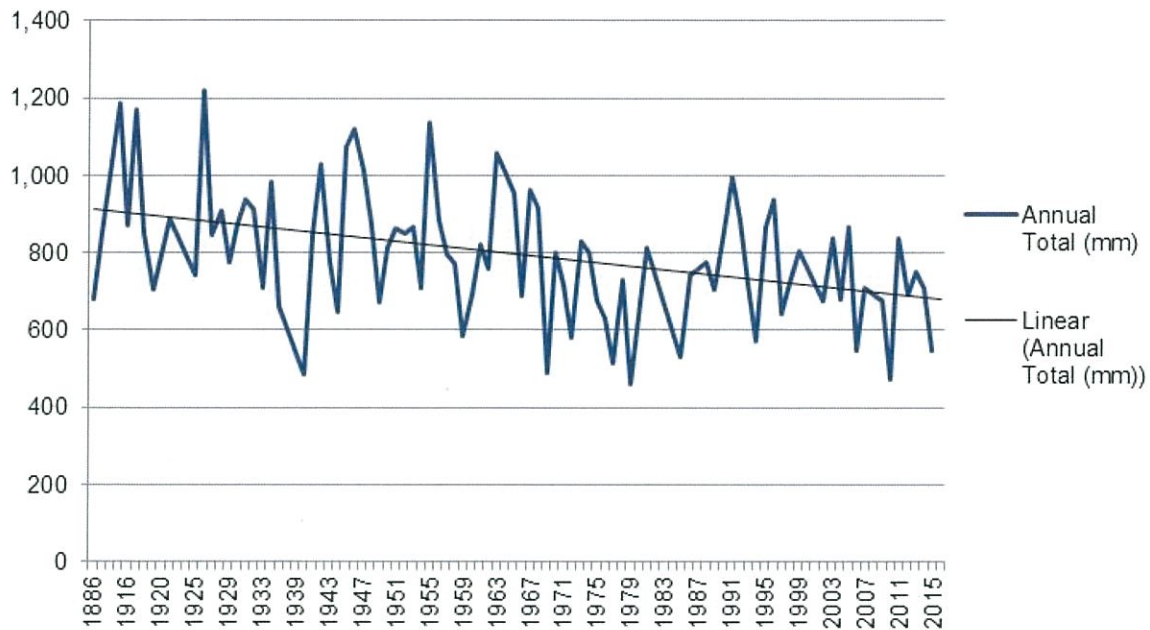


Figure 7: Midland Weather Station Historical Annual Rainfall

Temperature Change

A review of the historical annual monthly mean maximum temperatures shows that between 1945 and 2016, there has been an increase from about 31.8 degrees to 33.6 degrees. This 2 degree change demonstrates that the local environment is indeed experiencing hotter temperatures. Over time, this climatic temperature change is likely to affect a number of transport assets, and their likely achievable maximum life. If this occurs, then the whole of life costs may increase, resulting in additional budgetary demands.

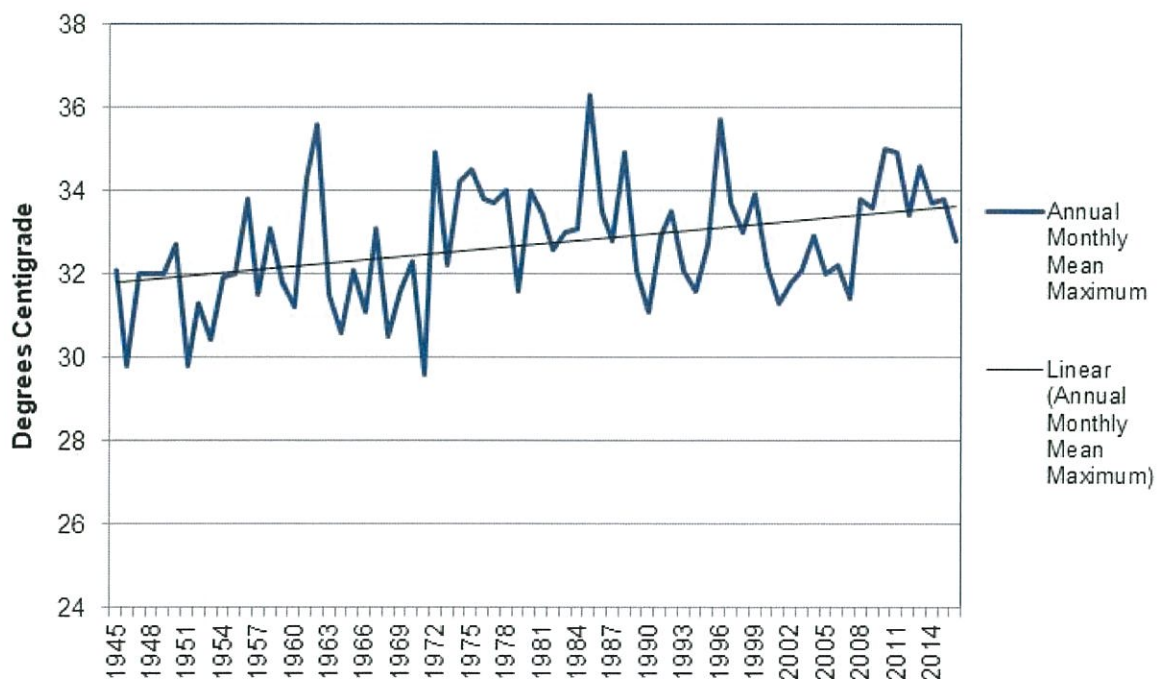


Figure 8: Perth Airport Weather Station Historical Annual Monthly Mean Highest Maximum Temperature

Future Demand Drivers

In order to identify future demand pressures on the transport network (both positive and negative), six driver categories, being political, economic, social, technological, legal and environmental have been considered. Drivers such as these will not only influence actual usage levels, but also possibly require future resources in order to meet specific needs or goals. Each of these demand drivers are discussed below and their effect summarised. The exact effects of many of these drivers are difficult to quantify and may also require further study and research.

Political Demand

Town Planning Scheme review

The Town periodically reviews and where required amends its Town Planning Scheme (TPS). Revisions to the TPS have the potential to change land use and therefore affect the demand of the transport network. As indicated by future population projections, and the TPS, the Town will experience some level of growth over the life of the AMP. As such, new infrastructure will either be gifted to, or built by, the Town. However, given the Town's relatively developed structure, the amount of additional assets is likely to be minimal.

Integrated Planning and Reporting and Fair Value

The introduction of the Integrated Planning and Reporting Framework (IPRF) to WA local governments, as well as the requirements of fair value accounting standards, has meant that there is now increased demand for improved asset and financial management practices. These requirements are most likely to remain in place over the life of this AMP.

Although the Town has been committed to the principles of long term planning prior to the introduction of the IPRF, there still remain areas where improvement is required, in terms of asset inventory information, performance monitoring, long term predictive planning, works prioritisation and efficiency. As such, it is likely that the Town will need to at least maintain its current resource levels for its asset management programme over at least the next 2-5 years. An improvement action to review and forecast the exact resources required has been listed. It is also recommended that a long term plan of asset management activities, complete with resources requirements, is produced.

Council Policy

Council policy changes can influence demand. A good example of this is whereby the Council opts to provide different service levels (higher or lower) than that which is currently provided. The introduction of more formal asset and financial practices will in theory provide Council with greater ability to change service levels, while also providing the opportunity to ensure financial sustainability. However, the Town has not yet reached a point whereby it is actively determining service levels through Council and/or stakeholder consultation. As such, further work is required in order to reach this

position. At present, no specific changes to Council Policy that will affect asset demand have been identified.

Changes to Grant Schemes

A significant portion of the Town's annual transport budget is derived from state and federal grant scheme funding. All schemes are naturally finite and therefore subject to renewal and amendment over time. With both federal and state budgets currently being under pressure, it is highly likely that non municipal income sources will at best be maintained and at worse decrease over the life of this AMP. This may mean that the transport portfolio increasingly requires proportionally more resources from municipal sources (e.g. rates).

Structural Reform

In recent years, the WA local government sector has been engaged in a number of state government driven reform initiatives. This included the now ceased amalgamation programme and the introduction of the IPRF. At present, the state government is continuing with this reform, with the next major initiative scheduled being the Auditor General taking over responsibility for local government audits from 1 July 2018. As part of this change, the state government is also considering a range of potential measures that could be applied to poorly performing local governments. This could include rate capping.

Rate Capping

Within WA there has been recent debate on the possible introduction of rate capping. Such an initiative would prevent large future increases in rate rises. As a result, there would be increased demand to ensure that service provision is well defined and its resource requirements well understood. However, by continuing to improve its asset management practices, the Town will be able to limit the effect of any possible rate capping scheme.

Change Effect: Negligible affects from future TPS amendments. Need to at least sustain the internal asset management programme to reach a desired future level of proficiency. Possible increased demand for additional municipal resources as a result of decreasing grant funding.

Economic Demand

Energy Costs and Availability

The vehicles that use the Town's transport network are dependent on energy. Therefore a direct link may exist between energy availability, cost, and network use. Focusing on just fuel price and availability, Australian Institute of Petroleum data shows that in recent years Australian petrol and diesel prices have not been overly volatile, with annual rises of about 3% for diesel and 4.5% for petrol noted. However during 2015 and 2016, the prices of both fuels within WA have notably dropped, due mainly to oversupply. While

this may be an anomaly, forecasting long term pricing trends remains difficult. Based upon historical observations, it could be assumed that over the life of this AMP that fuel prices will continue to rise above the rate of CPI. This will effectively make transportation increasingly more expensive. However, it is difficult to foresee this position having a notable effect on transport use levels.

Material Costs and Availability

The Bureau of Infrastructure, Transport and Regional Economics (BITRE) provides economic analysis, research and statistics on infrastructure, transport and regional development issues. Amongst the range of publications it produces, BITRE releases a road construction and maintenance price index (RCMPI). Whilst the index doesn't measure the prices at which services and products are sold, it does measure price changes in the inputs in road construction and maintenance in Australia.

The 2017 update concludes that the outlook is for a period of faster growth in the index from 2017-18, following matching inflation in the 2020s. This means that roads in particular will become slightly more expensive to maintain in the short term.

Council Financial Sustainability

In recent years there has been a moderate level of publicity and investigation into the long term sustainability of WA local governments. A key introduced initiative has been the publication of a number of asset sustainability ratios. These are published in the Town's Annual Report and also through the mycouncil.wa.gov.au website. A review of the 2015/16 ratios showed that the Town was underperforming in the asset sustainability ratio. This suggests that the Town has underfunded past renewal needs. In addition, the asset consumption ratio (a measure of assets' average state of condition) is also at the lower end of the preferred range. This further strengthens the thought that the Town has historically underfunded asset renewal.

Looking forward, the asset renewal funding ratio (ARFR) seems to suggest that through its Long Term Financial Plan, the Town will meet emerging renewal needs. However, the LTFP's bottom line remains underfunded. As such there are concerns about how future works will be funded. An improvement action to undertake further analysis into transport assets' long term financial sustainability has been listed.

Change Effect: The medium term global economic outlook points to negligible energy and price changes. Road maintenance costs are likely to increase slightly above inflation (at least in the short term). The long term financial sustainability position of the Town broadly looks questionable and requires further investigation.

Social Demand

Population

Western Australia Tomorrow is a set of forecasts representing the best estimate of Western Australia's future population size based on current fertility, mortality and

migration trends. These trend forecasts are used to identify potential preferred future scenarios that can be built upon; as well as less favourable possibilities for which mitigating action can be taken. The forecast contains a Town population forecast spanning from 2011 until 2026. The forecast contains 5 bands of population forecast, with A being the most pessimistic and E the most optimistic. The results are shown Table 5.

Year	Band A	Band B	Band C	Band D	Band E
2011	15,180	15,180	15,180	15,180	15,180
2016	15,810	16,060	16,290	16,480	16,820
2021	16,230	16,640	16,980	17,280	17,770
2026	16,530	17,060	17,490	17,870	18,490
Change	+1,350 (9%)	+1,880 (12%)	+2,310 (15%)	+2,690 (18%)	+3,310 (22%)

Table 5: Population Forecasts by Bands

When the 2016 census results are considered, it suggests that the Town's population is growing at approximately 1.0% per annum (5 year rolling average), being broadly in line with Band A. This suggests that an additional 1,350 people may live within the Town by 2026. This growth will steadily increase the service demand for transport assets, likely represented by higher usage levels.

Demographics

Historical census data showed that the Town's median age changed has remained fairly stable at around 39 years of age (2006 to 2016). While a significant change in the median age is not forecast over the life of this AMP, the Town does predict that there will be an increase in the number of older persons over the life of the AMP. This situation means that specific demand of non-car transport modes will increase. As such, the Town will need to ensure that its path network is appropriately provided, managed and maintained. The Town will also need to continue to ensure that its current defect identification and correction processes are appropriate in order to reduce users' exposure to risk and harm (e.g. from path trip hazards).

Travel to Work

The Town's population forecasts suggest that by 2026, there will be an increase in the population of working age people. As such, there will be an increase in peak transport service demand. However, given the Town's well-developed state, this increased demand will have to be serviced by existing transport assets, as there is limited opportunity to increase the current level of infrastructure. There remains a risk of potential congestion over the life of this AMP. As such, the Town will consider an improvement action to develop a long term transport model that identifies locations of future possible congestion. The Town will then be able to plan and implement works at timely intervals to meet service demand.

Recreation

In considering the past changes, it is presumed that in-lieu of specific independent forecasts, that recreation participation will remain constant over the life of this AMP. No specific demand change due to recreation trends has therefore been forecast.

Tourism

With past figures demonstrating significant growth in the WA tourism sector, and with growth being encouraged by the WA state government, it is highly likely that tourist numbers will increase over the life of this AMP. The direct effect of this growth on the Town's transport network is not exactly known, however it is thought to be somewhat negligible when compared to other drivers such as population growth.

Change Effect: Future projected population growth is considered to have a moderate impact on increased service demand. Demand will probably not be affected by demographic change. Transport modelling would be useful in order to identify future infrastructure requirements and initiatives. No specific demand change due to recreation or tourism drivers.

Technological Demand

Road Construction Technology

Although road pavement and seal construction technology is constantly evolving and improving, given the comparatively long life of typical WA roads, it is not thought that significant demand trends exist from road construction technology over the life of this AMP.

Data Management Systems

The Town currently uses a number of software products to manage its transport assets (e.g. RAMM, SynergySoft and QGIS). At present, while none of these systems integrate, they meet most of the Town's functional needs, at a relatively cost-efficient price. No specific future demand change from systems has been noted at present.

Assessment Technologies

Developments in condition monitoring technologies such as automated assessment may appear within the timeframe of this AMP. This may result in the Town being able to monitor its transport assets' performance and condition to a more accurate level, to ensure that consistent service levels, at a more efficient cost, are provided. However, a clearer strategy on the Town's application of these technologies is needed. This has been listed as an improvement action.

Material Recycling/Reuse

Technology currently exists whereby once at the end of their life, many transport assets' materials can be reused. While levels of waste material are thought to currently be low, there would be merit in developing a simple set of guidelines that would help staff to

plan for material reuse or recycling of materials. This has been listed as an improvement action.

Change Effect: Software systems that currently help manage the network, meet the Town's current needs, at cost-efficient prices. Opportunity exists to plan for the future reuse and/or recycling of waste materials. Consideration will be given to remote sensing technologies, as they emerge.

Legal Demand

Litigation

Evidence from the Town's insurer shows that across WA, there is a frequent occurrence of claims related to transport assets, although the majority invariably involve minor claim values. A large percentage of claims typically arise from incidents on path networks. Regardless of the outcomes of these claims, the Town has a duty of care to users of all transport assets and as such, is committed to progressing practices that not only limit its own liability, but seek to remove the potential for accidents to occur and hence protect users. The Town does have a number of proactive 'identify and fix' maintenance programmes. No litigation based changes to demand have been identified.

Change Effect: No identified demand change.

Environmental Demand

Environmental Awareness

In recent years, the community's awareness of environmental issues, including climate change, has resulted in some change to habits and broader government legislation. It is likely that over the term of this AMP that infrastructure managers will have to ensure that assets are maintained at increasingly environmentally sustainable levels. This will include:

- = Questioning whether assets are required
- = Ensuring that maximum life is obtained from assets
- = That construction and maintenance techniques reduce and avoid the use of virgin materials wherever possible

The result of the above initiatives will be that over time, the Town should ideally be able to demonstrate that the environmental cost of the transport network is progressively reduced. An improvement action to review the current sustainability of the network has been listed in order to identify long term initiatives.

Rainfall and Temperature Changes

Historical evidence suggests that climate change has occurred, with falling average rainfalls, but increasing maximum mean temperatures. Regardless of cause, if this trend were to continue into the future, then the Town may experience some demand changes to its transport infrastructure, this includes:

- = Falling demand of/for drainage infrastructure as rainfalls continue to decline. However, further investigation is required to determine whether storm events will become more intense, when they do occur.
- = Increasing temperatures will likely reduce the achievable lives of many assets. For example, higher temperatures may cause road bitumen to soften and thus increase the chance of premature failure. As a result, the whole of life costs for some assets will increase.

Change Effect: Increased demand for clearer decision making around asset need. Increased demand for more environmentally sustainable construction and maintenance practices. Increased need to understand future rainfall events and allow for shorter asset lives and higher costs.

Appendix D - Risk Management Analysis

This appendix details the desktop risk analysis undertaken on the management of the Transport Network. The risk analysis has considered ISO 31000 (Risk Management).

Risk Context

The risk analysis applies only to the management activities undertaken on the transport network. It does not seek to identify physical risks on the network. The following statement defines what an 'acceptable' level of risk is with regards to transport infrastructure.

Through risk management, the Town of Bassendean aims to:

- = Protect the quality of the transport network
- = Protect users of transport assets
- = Protect the Town's assets and public image
- = Reduce the Town's exposure to risk
- = Promote effective financial and asset management practices

This will be achieved through:

- = Identifying, decreasing the likelihood, and mitigating the consequences of risk, within the constraints of sensible commercial objectives and practices
- = Applying risk based practices to the management of transport assets and associated decision making
- = Maintaining safe and reliable plant, equipment and infrastructure
- = Preparing appropriate contingencies
- = Reviewing the risk profile of the transport network at appropriate intervals and when circumstances dictate
- = Maintaining an up to date Transport AMP

Risk Criteria

The following criteria have been applied as part of the risk analysis.

Risk Matrix

Consequence	5	VH	VH	VH	E	E	Extreme
	4	H	H	H	VH	E	Very High
	3	M	M	M	H	VH	High
	2	L	L	M	H	VH	Moderate
	1	L	L	M	H	VH	Low
		1	2	3	4	5	
		Likelihood					

Likelihood Scale

Level	Likelihood Scale	
	Descriptor	Indicative Frequency (expected to occur)
5	Almost certain	The event will likely occur once a year or more frequently.
4	Likely	The event will likely occur every three years.
3	Possible	The event will likely occur every ten years.
2	Unlikely	The event will likely occur every thirty years.
1	Rare	The event will likely occur every one hundred years.

Consequence Scale

Severity Level	Consequence Types					
	Political (P)	Economic (E)	Social (S)	Legal (L)	Environmental (E)	Health & Safety (HS)
5		Annual economic benefit or cost change of greater than +/- \$1,000,001.		Significant prosecution and fines. Very serious litigation including class actions	Very serious, long term environmental impairment of ecosystem functions.	Multiple fatalities, or significant irreversible effects to >50 persons.
4	Serious public or media outcry (international coverage).	Annual economic benefit or cost change of between +/- \$200,001 to \$1,000,000.	On-going serious social issues. Significant damage to structures/items of cultural significance.	Major breach of regulation. Major litigation		Single fatality and/or severe irreversible disability (>30%) to one or more persons.
3	Significant adverse national media/ public/ NGO attention.	Annual economic benefit or cost change of between +/- \$50,001 to \$200,000.		Serious breach of regulation with investigation or report to authority with prosecution and/or moderate fine possible.	Serious medium term environmental effects.	Moderate irreversible disability or impairment (<30%) to one or more persons.
2	Attention from media and/or heightened concern by local community. Criticism by NGOs.	Annual economic benefit or cost change of between +/- \$10,001 to \$50,000.	On-going social issues. Permanent damage to items of cultural significance.	Minor legal issues, non compliances and breaches or regulation.	Moderate, short term effects but not affecting ecosystem functions.	Objective but reversible disability requiring hospitalisation.
1	Minor, adverse local public or medical attention or complaints.	Annual economic benefit or cost change of upto +/- \$10,000.	Minor medium term social impacts on local population. Mostly repairable.		Minor effects on biological of physical environment.	No medical treatment required.

Risk Analysis

Asset: Transport Network				Compiled by: Ben Symmons (AIM Consultants)				Date: 30 October 2017				
Date of risk review:				Reviewed by:				Date:				
Reference	The Risk	Event (what can happen)	Cause (how this can happen)	Consequence (what results)	Existing controls	Effectiveness of existing	Analysis (1 (Low) - 5 (High))			Risk priority	Treat Risk (Y/N)	Further Action/ Comment
							Likelihood	Consequence	Level of risk			
1	AMP service levels are not currently all monitored.	Actual service delivery does not align to any known metric (KPI)	Lack of metrics (KPIs).	Service delivery (and asset portfolio) is misaligned and potentially inefficient and ineffective (E).	AMP service levels	Low	4	4	VH	=1	Y	Establish current performance at the earliest opportunity.
2	AMP service levels have not been endorsed by Council	Funding required to meet service levels may not be allocated	Council allocate funding elsewhere	Asset(s) condition may deteriorate with time, exposing users to potential harm. (HS & E)	Production of AMP and LTFF	High.	2	3	M	=10	N	
3	AMP is not supported by Council	Funding and management decisions made in isolation of AMP	AMP is not adopted, Council do not understand AM principals.	Assets incorrectly managed, resulting in potential for increased risk as well as sub-optimal whole of life costs. (E)	Production of AMP	Moderate, AMP not adopted.	2	3	M	=10	N	
4	Future demand is not known in terms of quantitative metrics.	The Town has no future transport model.	Transport plan not developed by the Town.	Assets experience over and/or under service demand, leading to poor efficiency and effectiveness. (P)	Road traffic counts.	Low	3	1	M	=14	N	Consider as a future task due to maturity of current network.
5	Increasing reliance on municipal revenue.	External funding sources diminish.	State and federal governments reduce and/or remove financial programmes.	Higher reliance on Town based income sources (e.g. rates). (E)	Nil	N/A	3	4	H	=3	N	Difficult to address until risk occurs. Likely to affect whole industry.
6	AM internal programme lacks structure and required skills.	AM programme utilises external resources	Internal resources are insufficient to enable the programmes development	External resources become unavailable, leading to a contraction in current AM programme's proficiency. (E & L)	AMO	Moderate	4	3	H	=3	Y	DOS to review corporate structure.
7	Climate change	Climatic change (e.g. higher temperatures, falling rainfall etc.) affect assets.	Climate change	Assets have shorter lives leading to higher costs. (E)	Nil	N/A	3	3	M	=6	N	Consider as a future task once the condition of all assets is known.
8	No formal condition rating procedure	Condition data held of poor quality. Unable to predict renewal needs.	No formal inspection procedure.	Assets become unsafe, and/or are replaced at sub-optimum times (HS & E).	Periodical inspection	Moderate.	2	3	M	=10	Y	Establish procedure for all assets.
9	Poor maintenance management	Maintenance items are corrected ad-hoc	No formal maintenance management strategy exists	Maintenance items are not corrected in a timely fashion, critical infrastructure not functional (HS).	Reactive maintenance regime	Moderate	3	3	M	=6	Y	Develop the 'Transport Maintenance Levels of Service Manual'
10	Some asset inventories are not accurate.	Asset inventories are inaccurate.	Lack of resource and expertise.	AMP inaccurate, risks not identified, asset mismanaged (E).	AMP and LTFF	Moderate	4	3	H	=3	Y	Implement an asset inspection manual/programme.
11	Asset condition not known	Some asset's condition not known and/or recorded.	Lack of a formal cyclical inspection programme.	Assets fail and/or ineffectively managed. (E)	AMP	Moderate	3	2	M	=10	Y	Implement an asset inspection manual/programme.
12	Asset valuations are inaccurate	Asset valuations are inaccurate.	Lack of resource and expertise.	Valuations inaccurate, renewal needs not planned for, under insured, breach legislation. (L).	AMP and LTFF	Moderate	3	3	M	=6	N	
13	No capital project evaluation procedure	Town does not have a capital project evaluation procedure aligned to the Strategic Community Plan	Lack of procedure.	Projects are not prioritised, hence do not optimally support SCP outcomes, making outcomes harder to achieve (E).	Nil	N/A	3	3	M	=6	Y	Develop procedure and test.
14	Expenditure misrecorded.	Town captures expenditure incorrectly (i.e. renewal as maintenance).	Lack of staff understanding.	Asset Sustainability Ratio lower than actual position. Disproportional higher renewal budget (E).	Nil	N/A	5	4	VH	=1	Y	Instigate project to refine budget/GL codes.

Table 6: Asset Management Plan Risk Analysis

Appendix E - Network Physical Parameters

Data Confidence

To be able to effectively manage its assets, the Town collects and maintains a range of data on its transport network. Understanding where gaps in this data exist is important to determine the confidence that we can put in the outcomes (e.g. valuations) that result. Table 8 details the reliability and confidence levels of the current asset data the Town holds. In assessing the data, the Town has applied the International Infrastructure Management Manual confidence framework as detailed in Table 7.

Confidence Grade	Description	Accuracy
1 - Excellent	Accurate	100%
2 - Good	Minor inaccuracies	± 5%
3 - Average	50% estimated	± 20%
4 - Poor	Significant data estimated	± 30%
5 – Very Poor	All data estimated	± 40%

Table 7: Data Confidence Measures

Asset Class	Inventory	Condition	Valuation
Road Seal	1	1	1
Road Pavement	3	2	3
Road Formation	1	-	1
Kerbing	2	3	3
Paths	1	1	1
Structures	1	2	1
Drainage	3	5	3
Car Parks	1	1	1
Boardwalks, Jetties & Ramps	1	1	1
Street Furniture	2	2	2

Table 8: Transport Network Data Confidence Levels

Inventory

The following section outlines the Town's transport asset inventory as at 30 June 2017.

Roads

Road Materials

Asset/Component	Unit	Quantity
Formation	Metres	96,417
	Square Metres	793,043
Pavement	Metres	96,870
	Square Metres	794,698
Seal		
<i>Dense Graded Asphalt</i>	Metres	91,270
	Square Metres	744,521
<i>Stone Mastic Asphalt</i>	Metres	4,621
	Square Metres	37,649
<i>Brick Paving</i>	Metres	930
	Square Metres	6,159
Kerbing		
<i>Flush Edge</i>	Metres	174
<i>Mountable</i>	Metres	119
<i>Semi Mountable</i>	Metres	397
<i>Barrier</i>	Metres	188,868

Road Cross Section

Cross Section Type	Unit	Quantity
Unbuilt	Metres	810
	Square Metres	810
Unformed	Metres	0
	Square Metres	0
Formed	Metres	0
	Square Metres	0
Paved	Metres	0
	Square Metres	0
Sealed with no kerbing	Metres	840
	Square Metres	4,887
Sealed with kerbing one side	Metres	340

	Square Metres	2,295
Sealed with kerbing both sides	Metres	95,390
	Square Metres	781,929

Road Hierarchy

Hierarchy	Unit	Quantity
Regional Distributor	Kilometres	0.00
District Distributor A	Kilometres	8.16
District Distributor B	Kilometres	0.00
Local Distributor	Kilometres	16.76
Access Road	Kilometres	71.75
Unrecorded	Kilometres	0.00
TOTAL	Kilometres	96.67

Paths

Material	Unit	Quantity
Asphalt (Black & Red)	Metres	3,570
	Square Metres	8,356
Brick Paving	Metres	4,329
	Square Metres	11,250
Concrete Slabs	Metres	126
	Square Metres	167
Gravel	Metres	179
	Square Metres	357
Limestone	Metres	226
	Square Metres	778
Insitu Concrete	Metres	92,343,
	Square Metres	153,927
Pavers	Metres	27
	Square Metres	129
TOTAL	Metres	100,773
	Square Metres	174,964

Item	Unit	Quantity
Grab Rails	Number	98
Tactile Ground Surface Indicators	Number	172

Bridges & Structures

Item	Unit	Quantity
Road Bridges	Number	0
Pedestrian Bridges	Number	4
Culverts	Number	0

Drainage

Item	Unit	Quantity
Pits	Number	2,601
Pipes	Metres	69,067
Sumps	Number	2

Car Parks

Item	Unit	Quantity
Formation	Square Metres	38,450
Pavement	Square Metres	38,450
Seal	Square Metres	38,450
Kerbing	Metres	4,841

Boardwalks, Jetties & Ramps

Item	Unit	Quantity
Boat Ramps	Number	2
Boardwalks	Number	1
Jetties/Platforms	Number	5

Street Furniture

Item	Unit	Quantity
Banner Poles	Number	14
Bus Shelters / Bus Stop Seats	Number	20 / 2
Islands	Number	78
Medians	Number	7

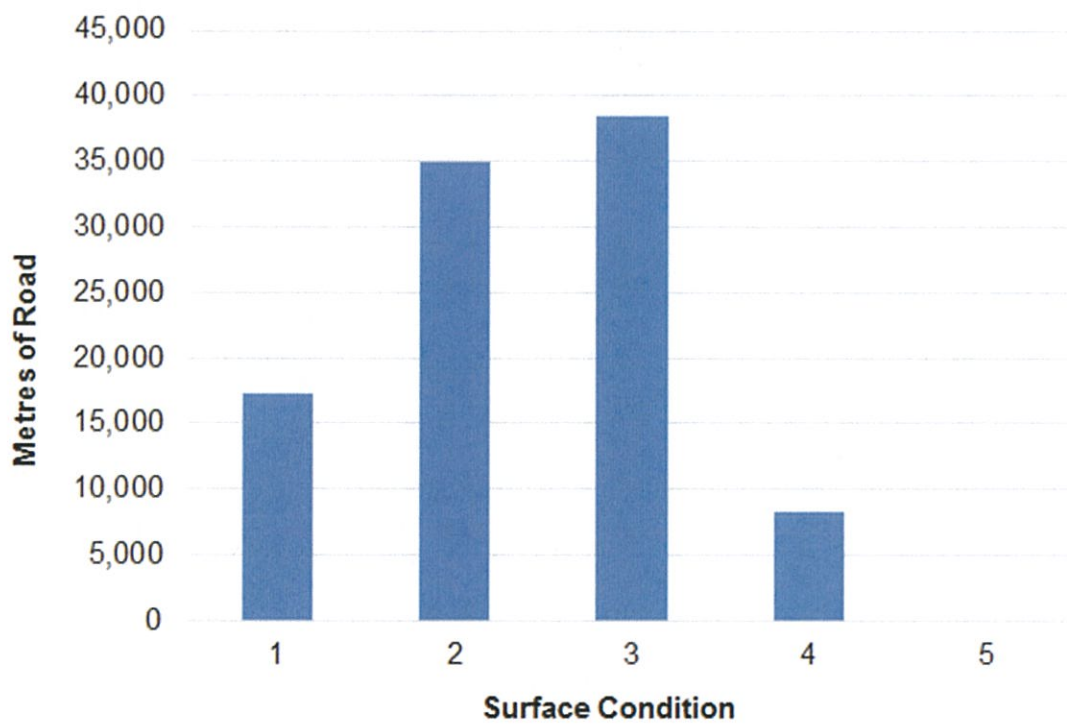
Roundabouts	Number	12
Rubbish Bins	Number	51
Signs	Number	522
Slow Points	Number	12
Street Lighting (non-Western Power)	Number	39
Other	Number	104

Condition

The following section outlines the Town's transport assets' condition as at 30 June 2017.

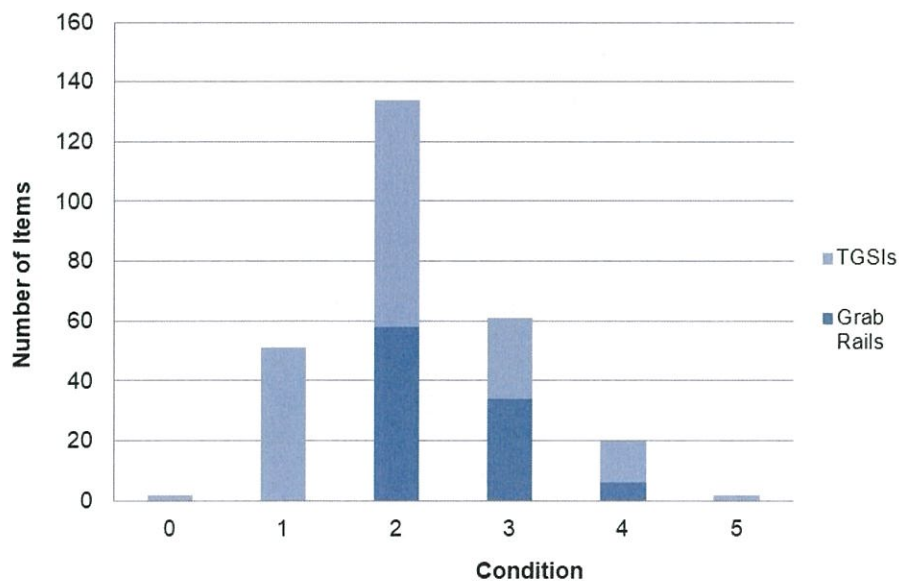
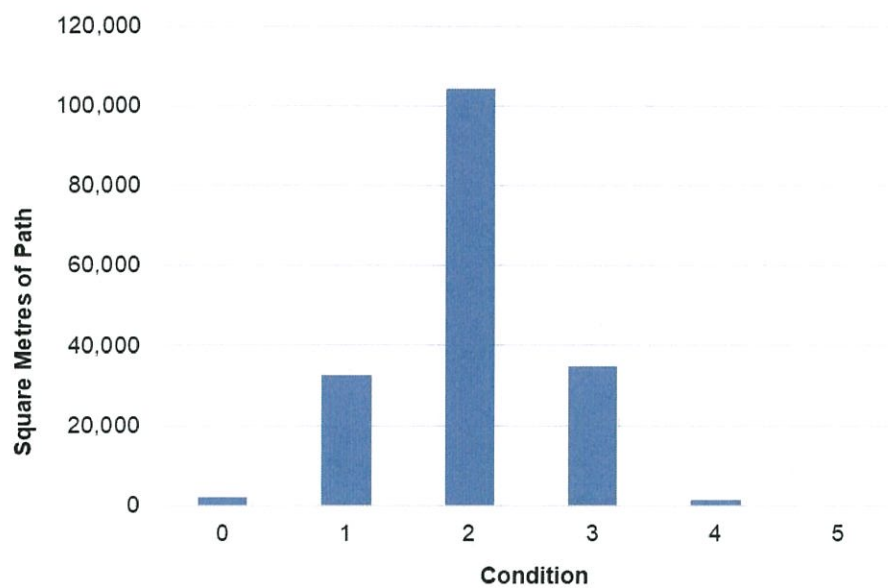
Roads

Rating	Surface Condition	Crack Extent	Rutting Extent
0	1,265m	1,255m	1,255m
1	15,563m	29,553m	95,015m
2	33,960m	33,5692m	90m
3	37,519m	20,200m	0m
4	8,263m	9,500m	0m
5	0m	2,390m	0m



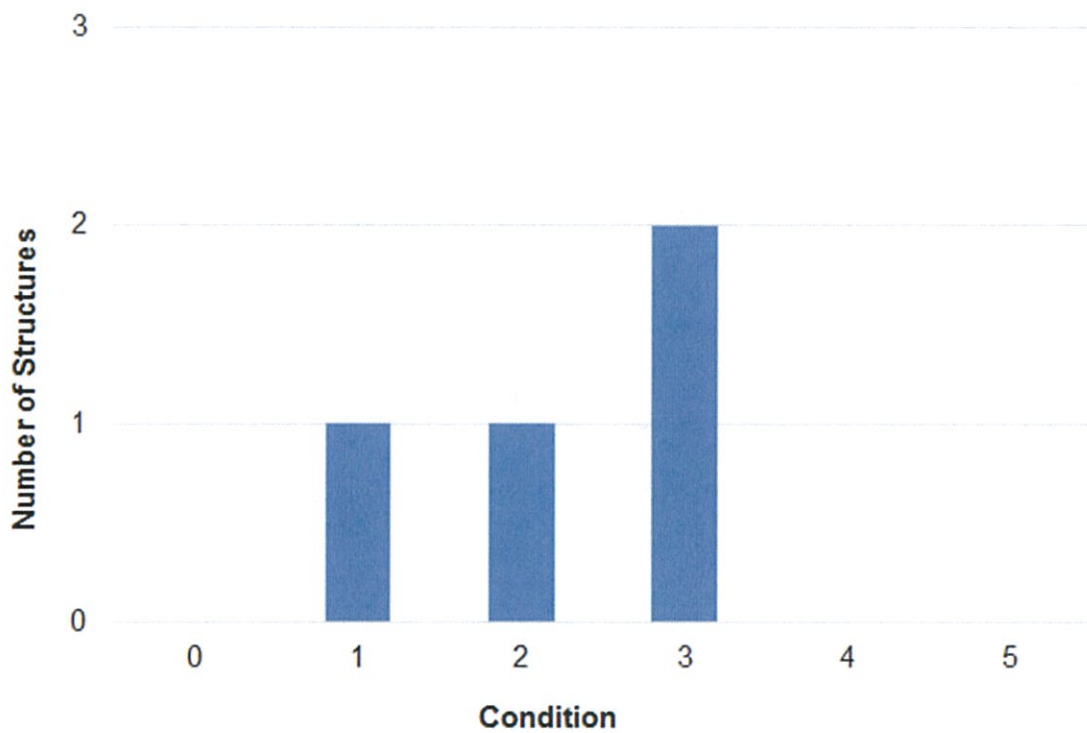
Paths

Rating	Path	Grab Rails	TGSIs
0	881m / 1,927m ²	0	2
1	17,753m / 32,621m ²	0	51
2	60,997m / 104,201m ²	58	76
3	20,671m / 34,933m ²	34	27
4	498m / 1,282m ²	6	14
5	0m / 0m ²	0	2



Bridges & Structures

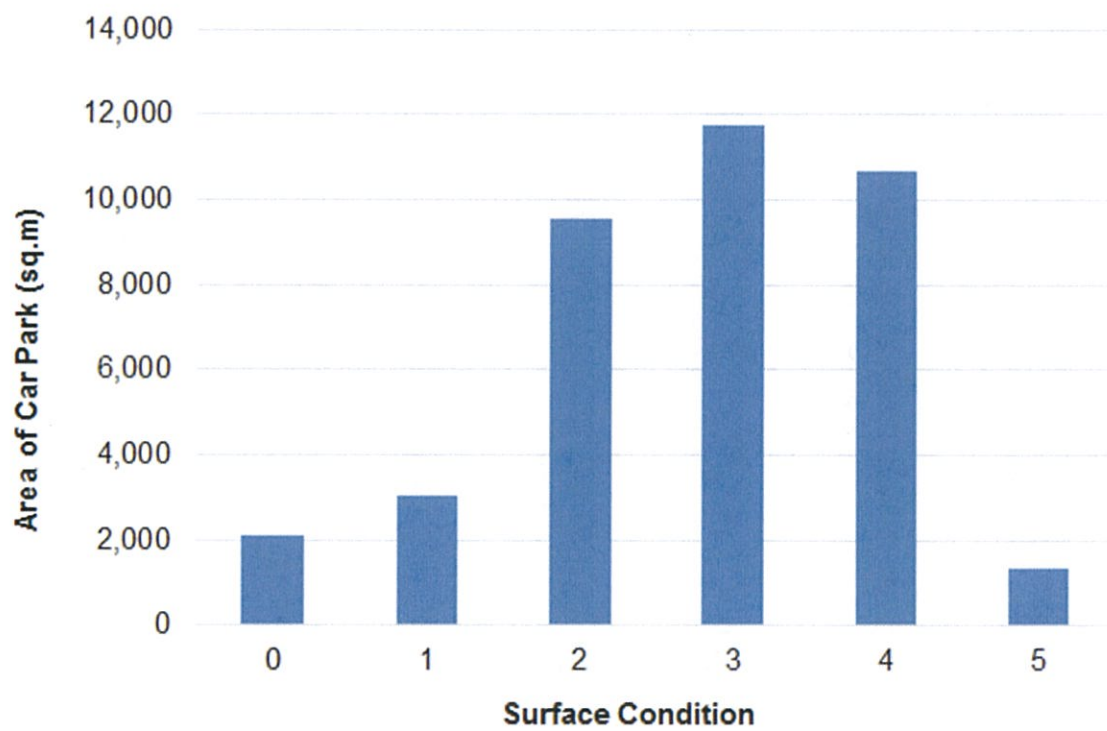
Rating	Number
0	0
1	1
2	1
3	2
4	0
5	0

**Drainage**

The condition of drainage assets is not formally known.

Car Parks

Rating	Area
0	2,084 m ²
1	3,024 m ²
2	9,536 m ²
3	11,775 m ²
4	10,698 m ²
5	1,334 m ²

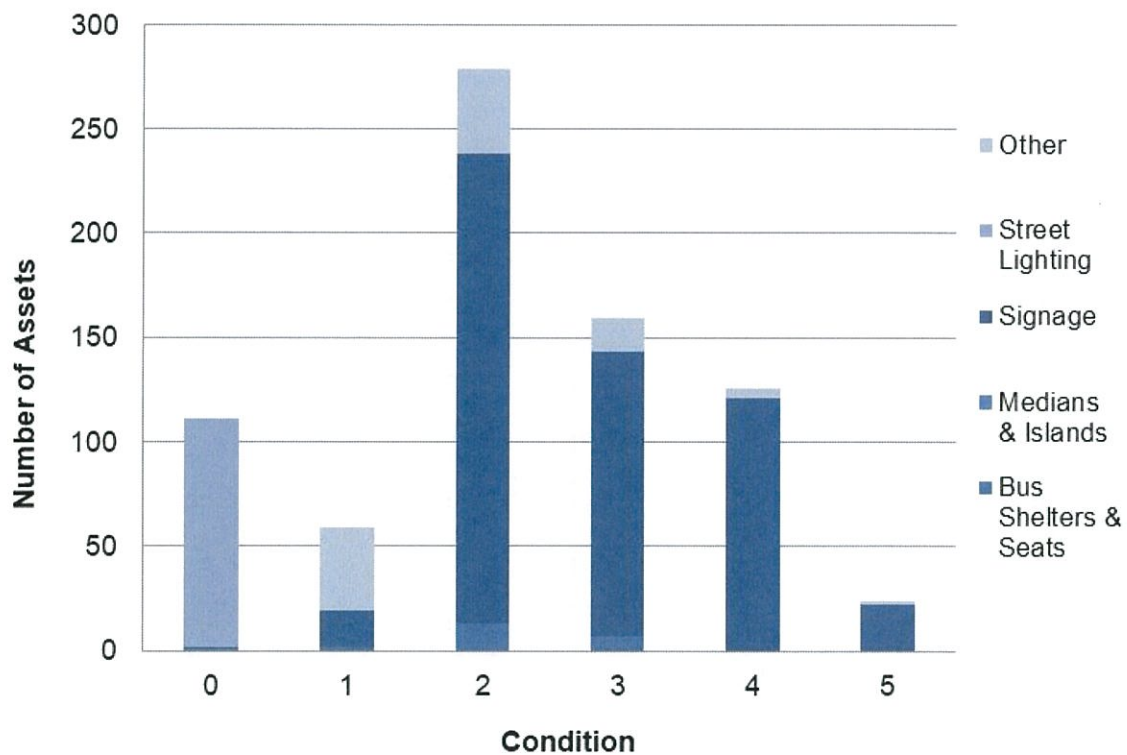


Boardwalks, Jetties & Ramps

The condition of these assets is not formally known on a 1-5 scale.

Street Furniture

Rating	Bus Shelters & Seats	Medians & Islands	Signs	Street Lighting	Others
0	0	109	1	39	0
1	2	-	17	-	40
2	13	-	225	-	41
3	7	-	136	-	16
4	0	-	121	-	5
5	0	-	22	-	2



Valuation

The following section records the current and historical values of transport assets.

Roads

Current Replacement Cost

Year	Formation	Pavement	Surface	Kerb
2017	\$2,847,024	\$41,538,010	\$21,060,832	\$10,477,965
2016	\$26,736,865	\$41,119,215	\$14,990,223	\$10,450,209
2013	\$26,715,800	\$54,147,700	\$16,183,700	\$8,371,960

Fair Value

Year	Formation	Pavement	Seal	Kerbs
2017	\$2,704,811	\$40,416,507	\$9,888,621	\$8,861,301
2016	\$26,736,865	\$25,899,062	\$4,324,310	\$4,821,903
2013	\$25,764,792	\$39,898,810	\$433,182	\$167,439

Paths

Current Replacement Cost

Year	Paths	Grab Rails	TGSIs
2017	\$10,174,014	\$59,787	-
2016	\$12,155,499	\$70,789	\$22,611
2013	\$12,934,340	-	-

Fair Value

Year	Paths	Grab Rails	TGSIs
2017	\$7,207,539	\$23,931	-
2016	\$8,173,956	\$45,691	\$16,787
2013	\$5,820,453	-	-

Bridges & StructuresCurrent Replacement Cost

Year	Pedestrian Bridges
2015	\$31,000

Fair Value

Year	Pedestrian Bridges
2015	\$18,100

DrainageCurrent Replacement Cost

Year	Pits	Pipes	Sumps/Swales
2017	\$10,817,502	\$28,701,767	\$116,700
2013	\$5,493,000	\$20,839,783	-

Fair Value

Year	Pits	Pipes	Sumps/Swales
2017	\$4,058,036	\$18,610,740	\$75,738
2013	\$3,182,388	\$12,423,624	-

Boardwalks, Jetties & RampsCurrent Replacement Cost

Year	Boardwalks	Jetties	Ramps
2015	\$290,000	\$1,121,088	\$19,000

Fair Value

Year	Boardwalks	Jetties	Ramps
2015	\$86,000	\$351,407	\$4,000

Car ParksCurrent Replacement Cost

Year	Pavement	Surface	Kerbs
2016	\$1,765,638	\$849,495	\$267,126
2015	\$928,008	\$793,788	\$212,960
2013	\$501,200	\$426,300	-

Fair Value

Year	Pavement	Surface	Kerbs
2016	\$1,765,638	\$444,257	\$152,200
2015	\$757,856	\$429,931	\$118,272
2013	\$390,990	\$158,150	-

Street FurnitureCurrent Replacement Cost

Year	Bus Shelters	Medians	Signs	Street Lighting	Other
2017	-	\$3,686,950	-	-	\$3,889,300
2015	\$392,000	-	\$25,584	-	\$144,046
2013	-	-	-	\$545,900	-

Fair Value

Year	Bus Shelters	Medians	Signs	Street Lighting	Other
2017	-	\$3,137,594	-	-	\$3,309,795
2015	\$255,750	-	\$13,694	-	\$125,762
2013	-	-	-	\$271,800	-

Appendix F - Functional Road Hierarchy Criteria

Criteria & Activity	District Distributor A	District Distributor B	Regional Distributor	Local Distributor	Access Road
Primary Criteria					
Location	Only built up area	Only built up area	Only non-built up area	All of WA	All of WA
Degree of Connectivity	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	Medium. Minor network role, connects to Distributors and Access roads.	Low. Provides mainly for property access.
Predominant Purpose	High capacity traffic movements between industrial, commercial and residential areas.	Reduced capacity but high traffic volumes travelling between industrial, commercial and residential areas.	Roads linking significant destinations and designed for efficient movement of people and goods between and within regions.	Movement of traffic within local areas and connect access roads to higher order Distributors.	Provision of vehicle access to abutting properties.
Secondary Criteria					
Indicative Traffic Volume (AADT)	Above 8,000 vehicles per day (vpd).	Above 6,000 vpd.	Greater than 100 vpd	<u>Built up area:</u> Maximum desirable volume 6,000 vpd. <u>Non built up area:</u> up to 100 vpd.	<u>Built up area:</u> Maximum desirable volume 3,000 vpd. <u>Non built up area:</u> up to 75 vpd.
Recommended Operating Speed	60 – 80 km/h.	60 – 70 km/h.	50 – 110 km/h (depending on design characteristics).	<u>Built up area:</u> 50 – 60 km/h (desired speed). <u>Non built up area:</u> 60 – 110 km/h (depending on design characteristics).	<u>Built up area:</u> 50 km/h (desired speed). <u>Non built up area:</u> 50 – 110 km/h (depending on design characteristics).
Heavy Vehicles permitted	Yes	Yes	Yes	Yes, but preferably only to service properties.	Only to service properties.
Intersection Treatments	Controlled with appropriate measures e.g. traffic signals.	Controlled with appropriate Local Area Traffic Management.	Controlled with measures such as signing and line marking of intersections.	Controlled with minor Local Area Traffic Management or measures such as signing.	Self-controlling with minor measures.
Frontage Access	Prefer not to have residential access. Limited commercial access,	Residential and commercial access due to its historic status. Prefer to limit when and where possible.	Prefer not to have property access. Limited commercial access, generally via lesser roads.	Yes, for property and commercial access due to its historic status. Prefer to limit whenever possible. Side	Yes.

	generally via service roads.			entry is preferred.	
Pedestrians	With positive measures for control and safety e.g. pedestrian signals.	With appropriate measures for control and safety e.g. median/ islands refuges.	Measures for control and safety such as careful siting of school bus stops and rest areas.	With minor safety measures where necessary.	Yes.
Buses	Yes.	Yes.		Yes.	If necessary.
On-road Parking	Generally no. Clearways where necessary.	Not preferred. Clearways where necessary.	No – emergency parking on shoulders – encourage parking in off road rest areas where possible.	<u>Built up area:</u> yes, where sufficient width and sight distance allow safe passing.. <u>Non built up area:</u> no. Emergency parking on shoulders..	Yes, where sufficient width and sight distance allow safe passing.
Signs & Line Marking	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs and guide signs.	Speed and guide signs.	Urban areas – generally not applicable. Rural areas – Guide signs.
Rest Areas/Parking Bays	Not Applicable	Not Applicable	Parking Bays/Rest Areas. Desired at 60km spacing.	Not Applicable	Not Applicable.

Table 9: WA Functional Road Hierarchy

Appendix G - Lifecycle Management Strategies

Background

Lifecycle management encompasses all strategies and practices that the Town employs to manage all transport assets at the lowest lifecycle cost. This section details all the strategies and practices that are currently employed.

Principles & Definitions

In considering the Town's Asset Lifecycle Management, the following key principles and definitions must be considered.

Work Category Definitions

The Town considers the activities it undertakes across 6 categories as follows.

Activity	Definition
Operation	Continuously required expenditure which enables the asset to provide benefits to the community such as mowing, street sweeping, electricity costs etc.
Maintenance	Regular repair works to prevent deterioration of the assets' capability, such as minor repairs, servicing etc.
Renewal	Works to replace existing assets which are worn, poorly functioning or dated with assets of equivalent capacity or performance. For example, the resurfacing a road or replacing girders on a bridge.
Upgrade	The significant upgrade of an asset to produce a higher service level, such as dualling or widening of a road, extension of a building, installation of reticulation to a dry park etc.
New Work	The creation of a new asset, in a location where that asset type has not existed before.
Asset Disposal	The process of removing and disposing of an asset upon the end of its useful life. For the purpose of this AMP this is only when an asset is not replaced.

Table 10: Activity Categories

Lifecycle Cost Basis

All assets have a lifecycle. This is defined as the time interval that commences with the identification of the need for an asset and ends with the decommissioning of the asset (i.e. disposal but with no replacement). It generally covers conception & design, acquisition & construction, operation, maintenance, renewal and disposal.

Operation & Maintenance Strategy

Background

The Town has developed an integrated framework that guides the operation and maintenance of transport assets. As described by the figure below, the task based 'Transport Operation & Maintenance Service Level Manual' is the central document and links to four other key documents.

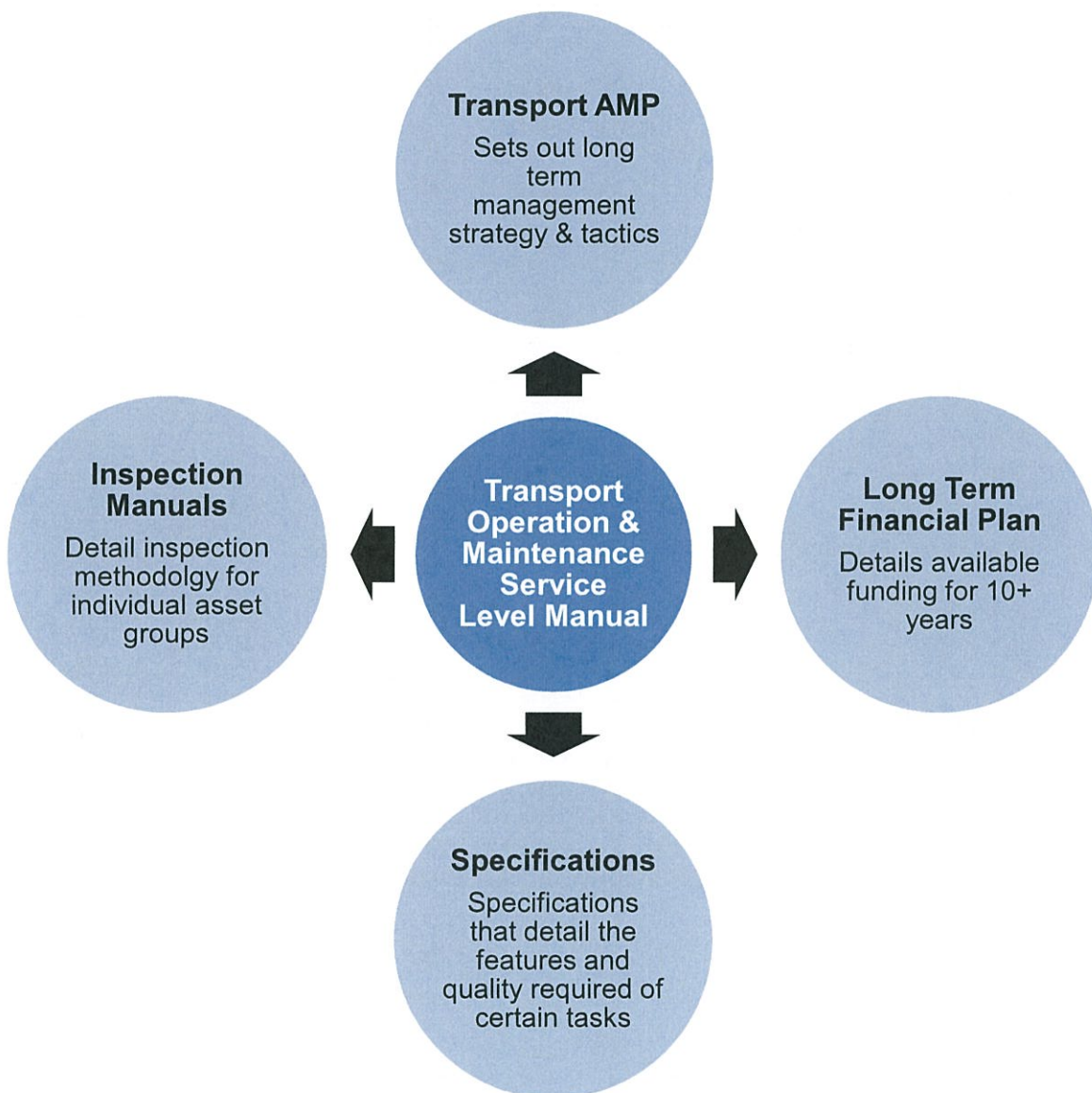


Figure 9: Transport Asset Maintenance Framework

The intent of each document (except for this AMP) is summarised below.

Transport Operation & Maintenance Service Level Manual

The Town seeks to minimise its levels of reactive operation and maintenance by developing and applying planned activities. These activities are fully documented within the Town's task based 'Transport Operation & Maintenance Service Level Manual'. This

document sets out every typical planned and reactive task undertaken during the year. Each task is also fully costed, so that a required operation and maintenance budget for each asset is produced. These budgets are then used within this AMP.

Inspection Manuals

A key aspect of the Town's asset operation and maintenance strategy is the proactive identification of defects and condition through periodic inspections. These inspections are seen as crucial to help reduce the levels of reactive maintenance and stakeholders' exposure to risk. At present, the following manuals are employed by the Town.

Asset	Manual
Roads	Road and Path Safety Inspection Manual – Internal document.
	WALGA Road Visual Condition Assessment Manual – External document.
Paths	WALGA Road Visual Condition Assessment Manual – External document.
Structures	Main Roads WA Routine Visual Bridge Inspection Guidelines (Level 1 Inspections) for Bridges. – External document.
Drainage	NAMS Practice Note 5: Stormwater Drainage Condition Assessment & Asset Performance Guidelines – External document.
Car Parks	As per the WALGA Road Visual Condition Assessment Manual – External document.
Boardwalks, Jetties & Ramps	No Manual, based upon Town's standard 1 (Very good) to 5 (Very poor) scale.
Street Furniture	No Manual, based upon Town's standard 1 (Very good) to 5 (Very poor) scale.

Table 11: Asset Inspection Manuals

Specifications

Where relevant, certain operation and maintenance tasks must be performed as per nominated specifications. These specifications may exist due to a number of reasons, including industry standards, manufacturer guidelines, best practice, contract conditions and so on. A detailed list of all relevant specifications does not exist and its potential creation has been listed as an improvement action.

Long Term Financial Plan

The Town's Long Term Financial Plan covers all functions, and includes all relevant transport asset expenditure for a period of at least ten years.

Staff Resources

The management of the Town's transport network falls within the responsibility of the Operational Services Directorate, being one of four Directorates that report to the Chief Executive Officer. The Operational Services Directorate is organised into two groups, of which one has a direct relationship to the management of transport assets, being asset services.

The management of the transport network involves a number of Town staff and external resources. The following table summarises the responsibilities of each stakeholder group.

Stakeholder	Responsibilities
Council	= Determination of long term service(s) vision = Adoption of asset management policy
Senior Management	= Determination of long term management strategy = Provision of long term resources
Asset Management	= Production of AMP = Development of long term works programmes, lifecycle management strategies, demand forecasts and service level monitoring
Design & Traffic	= Identification and planning of new infrastructure requirements
Civil Works	= Performing and/or coordinating on-site works
Finance	= Integration of AMP financial projections into LTFP = Recording of asset lifecycle management costs
External Contractors	= Discrete projects as required

Table 12: Asset Management Roles

Software Systems

The Town currently employs the use of the following software systems to manage asset data. The Town does not however have a clear IT strategy around the application of different software systems for Transport assets and this has been listed as an improvement action.

Software System	Uses
RAMM	RAMM is used to record inventory and condition data for road surfaces, pavements, subgrades and kerbs.
QGIS & IntraMaps	QGIS is used to record spatial data for all transport assets except roads and road kerbs. IntraMaps is used to display spatial data across the organisation.

AIM Works Planning Tool	The Town uses the Works Planning Tool to record its Long Term Works Programme.
ITVision SynergySoft	SynergySoft is used to record all transport asset revenue and expenditure, record keeping, planned inspection programmes and customer requests.
MetroCount	MetroCount is used to process and hold data from onsite road traffic counts.

Table 13: Asset Management Software Systems

Renewal Strategy

Background

The Town periodically inspects all transport assets in order to collect critical inventory and condition information. This information then informs a number of key outputs. Condition data is primarily used to develop asset renewal programmes for approximately the next 5 years. Further out, results from the Town's own modelling allows its staff to understand the likely amount of renewal expenditure that will be required, from years 6 to 15, and beyond.

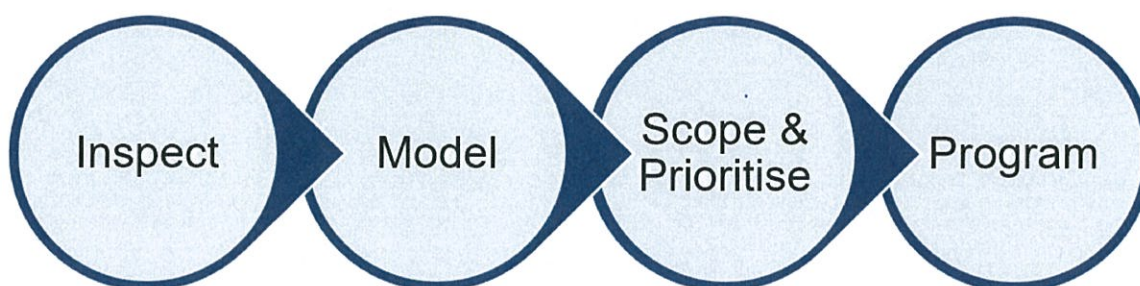


Figure 10: Transport Asset Renewal Planning Process

Inspections

Asset Condition Rating Scale

The Town undertakes the condition rating of many of its infrastructure assets in order to determine their remaining useful life and to prioritise future capital works. By undertaking regular inspections, the Town is able to understand at what rate assets are deteriorating and then monitor the effectiveness of maintenance and renewal activities in extending the life of assets.

In assessing assets' condition, the Town has adopted a 1 to 5 scale of rating which allows the overall condition of different asset classes to be compared. Table 14 details the scale applied and what each rating means.

Grade	Condition	Description
1	Very Good	A new or near new asset, or an asset recently rehabilitated back to new condition, with no visible signs of deterioration. The asset or component will have no drop in level of service.
2	Good	An asset in excellent overall condition. There would be only very slight condition decline but it would be obvious that the asset was no longer in new condition.
3	Average	An asset in fair overall condition deterioration in condition would be obvious and there would be some serviceability loss.
4	Poor	An asset in fair to poor overall condition. The condition

		deterioration would be quite obvious. Asset serviceability would now be affected and maintenance costs would be rising.
5	Very Poor	An asset in poor to unserviceable overall condition deterioration would be quite severe and would be starting to limit the serviceability of the asset. Maintenance cost would be high.

Table 14: Condition Rating Measures

The Town aims to minimise the number of assets that are rated as a 5 unless assets are in this state as part of a specific management program (e.g. part of an asset decommissioning plan).

Condition Inspection Frequencies

Transport assets are inspected in line with the relevant Manuals listed in Table 11 to the following frequencies.

Asset	Inspection Frequency
Roads	3 year cycle
Paths	Annual
Structures	Ad-hoc
Drainage	Ad-hoc
Car Parks	Ad-hoc
Boardwalks, Jetties & Ramps	Ad-hoc
Street Furniture	Ad-hoc

Table 15: Condition Inspection Frequencies

Formal inspection programmes for structures, drainage, car parks, boardwalks, jetties & ramps and street furniture assets do not currently exist. The development of programmes has been listed as an improvement action.

Modelling

Results from the Town's condition inspections are uploaded into its management software. The software is then used to forecast when each asset will reach the following intervention levels:

Asset	Triggers
Roads	= Surface Deficiencies = 4 or 5 = Cracking Extent $\geq 30\%$ = Surface Defects $\geq 10\%$ = Patching $\geq 15\%$
Paths	= Condition = 4 or 5
Structures	= Condition = 4 or 5

Drainage	= Condition = 4 or 5
Car Parks	= Condition = 4 or 5
Boardwalks, Jetties & Ramps	= Condition = 4 or 5
Street Furniture	= Condition = 4 or 5

Table 16: Asset Renewal Condition Triggers

Project Scoping/Prioritisation

Assets or components that have reached, or will reach over the next five years, their intervention trigger, are then further investigated by Town staff for potential renewal. The investigation seeks to determine when any works should be undertaken, what the scope is and what budget is required. This information is then used to build up the future renewal works programme.

Renewal Works Programme

The Town maintains a long term capital works programme, which includes renewal projects. All projects include timings and budgets. This programme directly informs this AMP.

Upgrade/New Strategy

Background

The Town occasionally constructs or acquires upgraded and/or new assets. Expenditure on these assets is often considered as discretionary and ultimately results in either a new or improved service (e.g. road widening results in a safer and/or higher capacity road). The following section outlines the Town's general approach to upgrade and new projects.

Project Prioritisation/Selection Criteria

The need for either upgraded or new assets is typically identified by Town staff from a number of potential sources including customer and Council request, strategic plans, poor asset performance and so on. Assets' needs are then investigated by staff in order to determine their potential scope, benefit and costs. Where determined as being required, many potential assets are then reported to Council and senior management for their consideration and approval. Approved projects are considered for future funding, and prioritised under a basic framework. However, this framework is limited in its effectiveness and has no direct link to the Strategic Community Plan. An improvement task to redevelop the framework has been listed.

Upgrade/New Works Programme

The Town maintains a long term capital works programme, which includes upgrade and new projects. All projects include timings and budgets. This programme directly informs this AMP.

Disposal Strategy

Background

At the present time the Town generally does not frequently dispose of transport assets. Where such a project is identified, then the need and scope is considered by Town staff and (in some instances) Council.

Disposal Programme

The Town maintains a long term capital works programme, which includes disposal projects. All projects include timings and budgets. This programme directly informs this AMP.

Appendix H - Works & Financial Model

The Town uses the Works Planning Tool (WPT) to record its works programme. The WPT is the master source, and the following programme extract should not be relied upon as being 100% correct as changes may have occurred since this AMP being published. The WPT also contains individual project scopes. Due to the size of the programme, these projects are not itemised within this AMP.

Key Assumptions

A number of key assumptions are made in preparing forecasts of required transport network expenditure. They are that:

- = Transport assets will remain in Council ownership throughout the period covered by this AMP, unless specifically detailed otherwise.
- = Standards, Acts and Regulations associated with transport assets will remain essentially the same over the AMP life.
- = Expenditure projections do not allow for inflation.
- = Operation and maintenance costs are based primarily on planned programmes where available. Where not available, cost projections are based on historical expenditure trends which are not necessarily a sound indicator of future need, nor are tied to actual activities.
- = Renewal programmes have been based primarily on defined works programmes where available. Where not available, programmes are based on either historical cost or annual depreciation rates.
- = Upgrade, acquisition/construction and disposal programmes are based on defined works programmes.
- = Inventory information used in calculations is the latest available at hand, but consideration of overall data confidence levels is critical when using this AMP.
- = Unit costs and assumed asset lives are the Town's but do not necessarily represent actual asset performance.
- = Historical expenditure reports split by activity may contain expenditure that was actually expended on different activities.

Transport Works Programme Summary																		
Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Roads																		
Median	Maintenance	Guildford Road Maintenance	Municipal Funds	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400
Seal	Maintenance	Roads - General Operation and Maintenance	Municipal Funds	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600	\$301,600
Seal	Maintenance	Right of Ways - General Operation and Maintenance	Municipal Funds	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360	\$35,360
Seal	Maintenance	Crack Sealing Programme	Municipal Funds	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400	\$36,400
Seal	Maintenance	Lord Street - Walter Road East to Morley Drive - Crack seal	Municipal Funds	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	New	Shackleton St LATM - OCM 11/07/16 Medium Traffic Island replacement along street	Municipal Funds	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	Operation	Software Subscription(s)	Municipal Funds	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Other	Operation	EMRC - Regional Integrated Transport Strategy	Municipal Funds	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300	\$6,300
Other	Operation	Engineering Consultancy Fees	Municipal Funds	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000
Seal	Operation	Asset Management Contract Services	Municipal Funds	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000	\$104,000
Seal	Operation	Road Condition Inspection (ROMAN II)	Municipal Funds	\$11,000	\$0	\$11,000	\$0	\$0	\$11,000	\$0	\$0	\$11,000	\$0	\$0	\$11,000	\$0	\$11,000	\$0
Seal	Operation	Street Sweeping	Municipal Funds	\$88,400	\$91,936	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400	\$88,400
Kerbing	Renewal	General Renewal Allocation	Municipal Funds	\$0	\$0	\$0	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Pavement	Renewal	General Renewal Allocation	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Seal	Renewal	Maley Street - 30m east of Maley Court to Mons Street - 10mm, 35mm DGA with C320 edge mill and overlaying	Municipal Funds	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Success Road - Seventh Avenue to Lord Street - 10mm, 35mm DGA with C320, edge mill and overlay	Municipal Funds	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Success Road - 20m east of Fifth Avenue to Fourth Avenue - 10mm, 35mm DGA with C320 edge mill & overlaying	Municipal Funds	\$0	\$45,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Bassendean Parade - North Road to Reid Street - 30mm SMA overlay	Municipal Funds	\$0	\$162,550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Colstoun Road - Guildford Road to Haig Street - Mill and replace 30mm DGA MRRG Resurfacing Program	Municipal Funds	\$36,593	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Colstoun Road - Haig Street to Margaret Street - Mill and replace 30mm DGA	Municipal Funds	\$46,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Colstoun Road - Maley Street junction - 30mm SMA overlay	Municipal Funds	\$0	\$2,970	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Old Perth Road - Wilson Street to West Road - Mill & replace 30mm SMA - combine with LATM improvements	Municipal Funds	\$0	\$0	\$115,660	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Old Perth Road - West Road to Brook Street - Mill and replace 30mm SMA - combine with LATM improvements	Municipal Funds	\$0	\$0	\$308,892	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Blockley Way - Culworth Road to Culworth Road - 30mm SMA overlay	Municipal Funds	\$0	\$60,204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Bradshaw Street - 10m west of Lord Street to Lord Street - 30mm SMA overlay	Municipal Funds	\$0	\$2,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	French Street - Guildford Road CDS to Maidos Street - 30mm SMA overlay	Municipal Funds	\$0	\$20,985	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Gallagher Street - CDS near Lord Street to 95m west of CDS - 30mm SMA overlay	Municipal Funds	\$0	\$0	\$25,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kathleen Street - Guildford Road to Palmerston Street - 30mm SMA overlay	Municipal Funds	\$0	\$27,924	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,000
Seal	Renewal	Walter Road East - Lord Street CDS to Seventh Avenue - 30mm SMA overlay	Municipal Funds	\$0	\$22,075	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Oyrl Street - Fisher Street to Geraldine Street - 30mm SMA Overlay	Municipal Funds	\$0	\$130,442	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Palmerston Street - Hamilton Street to Guildford Road - Mill & replace 30mm DGA MRRG Resurfacing Program	Municipal Funds	\$60,071	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Whitfield Street - 60m south of Palmerston Street to Harcourt Street - 30mm SMA overlay	Municipal Funds	\$0	\$23,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Whitfield Street - Bridson Street to Watson Street - 30mm SMA overlay	Municipal Funds	\$0	\$10,543	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Whitfield Street - 28m south of Reid Street to 125m south of Reid Street - 30mm SMA overlay	Municipal Funds	\$0	\$19,446	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Atkins Way - Chedworth Way to May Road - 30mm SMA overlay	Municipal Funds	\$0	\$68,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Burford Street - Iolanthe Street to Padbury Way - 30mm SMA overlay	Municipal Funds	\$0	\$52,714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Calton Street - Sunley Street to Garnsworthy Place - 30mm SMA overlay	Municipal Funds	\$0	\$33,737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Chedworth Way - Ivanhoe Street to May Road - 30mm SMA overlay	Municipal Funds	\$0	\$87,362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Eileen Street - Palmerston Street to 180m south of Palmerston Street - 30mm SMA overlay	Municipal Funds	\$0	\$34,364	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Esther Street - Bradshaw Street to Fifth Avenue - 30mm SMA overlay	Municipal Funds	\$0	\$50,605	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Fifth Avenue - Railway Parade to 150m north of Railway Parade - 30mm SMA overlay	Municipal Funds	\$0	\$22,653	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	First Avenue - Railway Parade to 200m north of Railway Parade - 30mm SMA overlay	Municipal Funds	\$0	\$42,171	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	First Avenue - Walter Road East to Esther Street - 30mm SMA overlay	Municipal Funds	\$0	\$25,935	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Third Avenue - 180m north of Railway Parade to 210m north of Railway Parade - 30mm SMA overlay	Municipal Funds	\$0	\$6,326	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Clay Street - Gallagher Street to Morley Drive - 30mm SMA overlay	Municipal Funds	\$0	\$19,797	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Culworth Place - Cul de Sac to Cul de Sac - 30mm SMA overlay	Municipal Funds	\$0	\$2,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Anzac Terrace - Lord Street to Seventh Avenue - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$20,231	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Grey Street - End of Northlink works to Shire Boundary 55m north of start - Mill & replace asphalt plus SAMI SMA 30mm	Municipal Funds	\$0	\$14,301	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hamilton Street - Palmerston Street to 110m south of Harcourt Street - Mill & replace asphalt SMA 30mm	Municipal Funds	\$0	\$0	\$83,127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Penzance Street - Anzac Terrace to Walter Road East - Mill & replace asphalt SMA 30mm	Municipal Funds	\$0	\$0	\$145,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Watson Street - Elder Parade to Farnell Parade - 30mm SMA Overlay	Municipal Funds	\$0	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Fourth Avenue - 30m north of Anzac Terrace to Walter Road East - 30mm SMA Overlay	Municipal Funds	\$0	\$88,559	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Maidos Street - 24m east of Pearson Street to Colstoun Street - 30mm SMA Overlay	Municipal Funds	\$0	\$94,330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Third Avenue - Walter Road East to Esther Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$26,670	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Anstey Road - Carnegie Road to Cul de Sac by river - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$58,697	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Aussart Drive - 130m east of Collins Court to Collins Court - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$26,088	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Brown Way - Villiers Street to Dead End - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$13,478	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street - 95m north of Bradshaw Street to Morley Drive - Mill & replace asphalt plus SAMI SMA 30mm	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$76,563	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Walter Road East - 30m east of Marmion Street to 50m east of Ivanhoe Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$83,333	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - Lord Street cul de sac to Cul de Sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$66,562	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Cloughton Way - Villiers Street to Dead End - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$19,091	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Dorothy Street - 30m west of Latham Street to French Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$23,336	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hyland Street - 40m west of Carnegie Street to 100m west of North Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$77,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Marion Street - Walter Road East to Robinson Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$50,377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Pearson Street - Guildford Road to Maidos Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$61,820	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Transport Works Programme Summary

Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Roads																		
Seal	Renewal	Robinson Road - Marion Street to Padbury Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$125,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Walkington Way - May Road to 290m north of May Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$60,321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kathleen Street - 50m south of Palmerston Street to Reid Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$110,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Shackleton Street - Geraldine Street to seal change 35m west of Kenny Street roundabout - Mill & replace asphalt plus SAMI SMA 30mm MRRG Resurfacing Program	Municipal Funds	\$45,969	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Carnegie Road - Hyland Street to 50m north of Hyland Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$7,836	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Carman Way - Iolanthe Street to Ida Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$93,545	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Cumberland Way - Ida Street to Ida Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$1,817	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Cumberland Way - 10m north of Ida Street to 420m north of Ida Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$80,894	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Geraldine Street (N) - North cul de sac to 30m south of cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$6,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Grange Court - Littlemore Way to 14m north of Littlemore Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$2,553	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Haig Street - 110m east of Pearson Street to 100m east of French Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$39,593	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Harcourt Street - Wilson Street to Whitfield Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$53,340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Harcourt Street (A) - West Road to 70m east of West Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$12,366	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hatton Court - 84m north of Chapman Street to 25m east of end of road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$28,296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hobley Place - Chedworth Way to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$20,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Jubilee Place - Jubilee Avenue to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$17,817	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lamb Street - Thompson Road to 30m west of Thompson Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$6,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lovelock Place - West Road to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$17,239	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lukin Way - Ida Street to Ivanhoe Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$71,690	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Padbury Place - Padbury Way to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$11,113	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Parmelia Way - Anzac Terrace to Penance Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$74,454	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Rosetta Street - Old Perth Road to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$36,448	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Seventh Avenue - 30m south of Anzac Terrace to Walter Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$67,473	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Thompson Road - Guildford Road to 50m north of Guildford Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$10,305	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hamilton Street - Old Perth Road to 40m south of Old Perth Road - Mill & replace 30mm SMA	Municipal Funds	\$0	\$0	\$0	\$0	\$12,315	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Anzac Terrace - 10m east of Penance Street to 30m east of Penance Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$4,217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ivanhoe Street - 50m south of Chedworth Way to 30m south of Easter Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$29,306	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ivanhoe Street - 80m south of Walter Road East to 93m north of Broadway - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$56,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kenny Street - 35m south of Guildford Road to 20m north of Chapman Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	May Road - Robinson Road to 20m south of Walkington Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$52,714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Penance Street - 20m north of Broadway to 70m north of Parmelia Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$33,737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 20m east of the Town boundary to 60m east of the Town boundary - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$3,837	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 140m west of Jackson Street to 20m west of Jackson Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$11,509	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 50m west of Scaddan Street to 20m west of Scaddan Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$2,819	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - Second Avenue to 60m west of Fourth Avenue - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$25,809	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Yelland Way - 90m west of May Holman Drive to 160m west of May Holman Drive - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$17,951	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Alice Street - Jackson Street to 20m south of Collier Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$136,827	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	James Street - 10m north of Old Perth Road to 20m north of Bridson Street - 30mm SMA Overlay	Municipal Funds	\$0	\$165,264	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Walkington Way - 360m north of May Road to 420m north of May Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$12,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Shackleton Street - Guildford Road to Geraldine Street - Mill & replace asphalt plus SAMI SMA 30mm MRRG Resurfacing Program	Municipal Funds	\$32,454	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lynham Place - Rugby Street to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$17,654	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Many Crescent Reserve access road - Gallagher Street to End of road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$13,559	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Parker Street - 30m south of Old Perth Road to 110m south of Palmerston Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$77,788	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Whitfield Street - Harcourt Street to 60m north of Bridson Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$40,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Whitfield Street - 125m south of Reid Street to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$41,117	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Bradshaw Street - 100m west of Steele Street to 10m west of Lord Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$67,473	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Esther Street - Fifth Avenue to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$27,411	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Gallagher Street - 60m west of Kirke Street to Morley Drive East - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$43,254	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Deakin Street - Hamilton Street to West Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$44,279	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Reid Street - 90m east of Iveson Place to 20m east of Hamilton Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$6,452	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Earlsferry Court - Cul de sac to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$23,194	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Nurstead Avenue - 85m east of Thompson Road to Earlsferry Court - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$40,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kathleen/Palmerston ROW - 20m east of Kathleen Street to End of Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$13,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Clune Street - Southern Cul de sac to 80m south of Lavan Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$27,069	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Dyer Road - May Holman Drive to Yelland Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$53,238	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Eighth Avenue - Anzac Terrace to Success Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$42,171	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Freeland Way - Freeland Square to Wicks Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$75,908	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ireland Way - Penance Street to 110m north-east of Penance Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$21,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Jubilee Avenue - 100m west of May Road to Northmoor Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$69,753	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Parkin Court - Freeland Way to 10m west of Freeland Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,567	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ryce Court - Freeland Way to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ashfield Parade - 170m north of Moojebing Street to 260m north of Moojebing Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,643	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Barton Parade - Watson Street to 150m south of Watson Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,201	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Brigs Street - 140m south of Old Perth Road to Devon Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Carnegie Road (north) - Devon Road to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hardy Road - 40m west of Kenny Street to Kenny Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,688	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Iveson Place - 30m south of Best Street to Cul de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,548	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kenmore Avenue - 20m east of Moojebing Street to 130m east of Moojebing Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,881	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Maigret Street - 40m west of Fisher Street East to Fisher Street East - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,434	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Pearson Street - 47m north of Hardy Road to Hardy Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,776	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Transport Works Programme Summary

Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Roads																		
Seal	Renewal	Pearson Street - 110m south of Dorothy Street to Dorothy Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,803	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Surrey Street - Old Perth Road to North Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,974	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Villiers Street (East) - 22m east of West Road to Cui de sac - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$31,206	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road - 90m south of Reid Street to 50m north of Reid Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,110	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road - Palmerston Street to Guildford Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Bradshaw Crescent - Bradshaw Street (W) to 70m east of Bradshaw Crescent (E) - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,433	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	First Avenue - 140m north of Anzac Terrace to 220m north of Anzac Terrace - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,868	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Jackson Street - 80m south of Duffy Street to 30m north of Duffy Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,716	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kirke Street - Mary Crescent Reserve to 10m north of Gallagher Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,909	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Mary Crescent - 20m west of Lord Street to Lord Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,217	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Scaddan Street - Iolanthe Street to 50m west of Iolanthe Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,543	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Schofield Street - 20m east of Second Avenue to 30m west of Gaunt Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76,477	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Second Avenue - 10m south of Anzac Terrace to 12m north of Anzac Terrace - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,639	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Second Avenue - 130m north of Anzac Terrace to 160m north of Anzac Terrace - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,326	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Second Avenue - 5m north of Walter Road East to 7m north of Drysdale Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,109	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Watkins Street - 19m west of Lord Street to Lord Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,736	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Wilson Street - Guildford Road to 20m south of Guildford Road - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,668	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Wilson Street - 118m south of Old Perth Road to 10m north of Palmerston Street - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,133	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street - 20m north of Railway Parade to 110m north of Anzac Terrace - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,163	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street (northbound) - 10m south of Success Road to Walter Road East - Mill and replace 30mm SMA	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,899	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Iolanthe Street - 20m north of Ireland Way to 48m north of Ireland Way - 30mm SMA Overlay	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,658	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	General Renewal Allocation	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$612,000	\$612,000	\$612,000	\$612,000	\$612,000	\$612,000	\$612,000
Seal	Renewal	West Road - Old Perth Road to Guildford Road - Mill and replace 30mm DGA MRRG Resurfacing Program	Municipal Funds	\$40,731	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road/Old Perth Road Roundabout - Roundabout and approaches - Mill & replace 50mm DGA MRRG Resurfacing Program	Municipal Funds	\$54,263	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Colstoun Road - Guildford Road to Haig Street - Mill and replace 30mm DGA MRRG Resurfacing Program	MRRG Rehabilitation	\$48,407	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Old Perth Road - Wilson Street to West Road - Mill & replace 30mm SMA - combine with LATM improvements	MRRG Rehabilitation	\$0	\$0	\$231,321	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Palmerston Street - Hamilton Street to Guildford Road - Mill & replace 30mm DGA MRRG Resurfacing Program	MRRG Rehabilitation	\$119,929	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Grey Street - End of Northlink works to Shire Boundary 55m north of start - Mill & replace asphalt plus SAMI SMA 30mm	MRRG Rehabilitation	\$0	\$28,603	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street - 95m north of Bradshaw Street to Morley Drive - Mill & replace asphalt plus SAMI SMA 30mm	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$133,127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Walter Road East - 30m east of Malmion Street to 50m east of Ivanhoe Street - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$166,667	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Shackleton Street - Geraldine Street to seal change 35m west of Kenny Street roundabout - Mill & replace asphalt plus SAMI SMA 30mm MRRG Resurfacing Program	MRRG Rehabilitation	\$65,031	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ivanhoe Street - 50m south of Chedworth Way to 30m south of Esther Street - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$56,888	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Ivanhoe Street - 80m south of Walter Road East to 93m north of Broadway - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$110,210	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 20m east of the Town boundary to 60m east of the Town boundary - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$7,447	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 140m west of Jackson Street to 20m west of Jackson Street - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$22,342	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - 50m west of Scaddan Street to 20m west of Scaddan Street - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$5,473	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Railway Parade - Second Avenue to 60m west of Fourth Avenue - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$50,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Shackleton Street - Guildford Road to Geraldine Street - Mill & replace asphalt plus SAMI SMA 30mm MRRG Resurfacing Program	MRRG Rehabilitation	\$64,896	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Reid Street - 90m east of Iveson Place to 20m east of Hamilton Street - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$12,525	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street - 20m north of Railway Parade to 110m north of Anzac Terrace - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$37,198	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Lord Street (northbound) - 10m south of Success Road to Walter Road East - Mill and replace 30mm SMA	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$21,157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Iolanthe Street - 20m north of Ireland Way to 48m north of Ireland Way - 30mm SMA Overlay	MRRG Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$5,161	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road - Old Perth Road to Guildford Road - Mill and replace 30mm DGA MRRG Resurfacing Program	MRRG Rehabilitation	\$81,461	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road/Old Perth Road Roundabout - Roundabout and approaches - Mill & replace 50mm DGA MRRG Resurfacing Program	MRRG Rehabilitation	\$21,737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Fifth Avenue - 90m north of Anzac Terrace to Walter Road East - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$114,470	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Watson Street - Elder Parade to Parnell Parade - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$188,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kathleen Street - 90m south of Palmerston Street to Reid Street - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$33,364	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Chapman Street - Elder Parade to Cui de sac - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$154,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Hamilton Street - 30m north of Watson Street to Reid Street - Mill and replace 30mm SMA	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$188,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Kenny Street - 35m south of Guildford Road to 20m north of Chapman Street - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$188,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Esther Street - Ivanhoe Street to Bradshaw Street - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Faulkner Way - Ivanhoe Street (N) to Ivanhoe Street (S) - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$0	\$108,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	Padbury Way - Burford Street to Robinson Road - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	West Road - Palmerston Street to Guildford Road - 30mm SMA Overlay	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$0	\$108,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Renewal	General Renewal Allocation	Roads to Recovery (I)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000
Seal	Renewal	West Road Traffic Calming Devices upgrade & Improve Parking Issues (Bassendean Primary School) R2R Funding Program	Roads to Recovery (I)	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Upgrade	Local Area Traffic Management Plan - (Ref 4) Lord St / Walter Rd East detailed design and modified "T" intersection - OCM 10/4/13	Municipal Funds	\$0	\$231,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seal	Upgrade	Fifth Avenue - Investigation & design of Walter Road east Cui-De-Sac to accommodate truck turning movements	Municipal Funds	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROADS TOTAL				\$1,537,002	\$2,254,849	\$2,199,513	\$1,454,414	\$2,005,935	\$2,033,591	\$1,891,417	\$1,912,098	\$2,047,160	\$2,058,160	\$2,047,160	\$2,047,160	\$2,058,160	\$2,047,160	\$2,047,160

Transport Works Programme Summary																		
Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Paths																		
Surface	Maintenance	Paths - General Operation and Maintenance	Municipal Funds	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000	\$468,000
Surface	Maintenance	Steam clearing of weeds, including roads, ROWs & PAWs	Municipal Funds	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000	\$156,000
Ramps & Steps	New	Collier Road - Collier Road (#328/Aus Vehicle Sales) to McDonald Crescent	Municipal Funds	\$0	\$6,134	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Anstey Road - Lovelock Place Bridge to Anstey Road Cul de Sac by river - 450m x 1.5m wide	Municipal Funds	\$0	\$55,384	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Hyland Street - West Road to North Road - 530m x 1.5m	Municipal Funds	\$0	\$76,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Whitfield Street - Reid Street to Cul de sac - 350m x 1.5m	Municipal Funds	\$0	\$44,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Carman Way - Iolanthe Street to Ida Street - 500m x 1.5m	Municipal Funds	\$0	\$61,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Geraldine Street - Guildford Road to Chapman Street - 500m x 1.5m	Municipal Funds	\$0	\$0	\$61,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Parnell Parade - Watson Street to Bessenden Parade - 300m x 1.5m	Municipal Funds	\$0	\$0	\$36,923	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Villiers Street East - West Road to cul de sac - 150 x 1.5m	Municipal Funds	\$0	\$0	\$18,461	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Wilmington Way - May Road to Wilmington Way return - 650 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$79,999	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Wendlebury Way - Wicks Street to Littlemore Way - 200 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$24,615	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Jackson Street - Collier Road to Railway Parade - 1100 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$135,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Littlemore Way - Blackthorn Road (W) to Blackthorn Road (E) - 320 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$19,384	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	May Holman Drive - Railway Parade to Alice Street - 550 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$67,691	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Mann Way - Anzac Terrace to Ida Street - 340 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$41,846	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Wood Street - Alice Street to Railway Parade - 650 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$79,999	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Chesterton Road - Filkins Street (N) to Filkins Street (S) - 500 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Clarke Way - Elder Parade (N) to Elder Parade (S) - 400 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,230	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Dyer Road - Collier Road to Yelland Way - 400 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,230	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Jubilee Avenue - Northmoor Road to May Road - 450 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,384	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Moogebing Street - Jacqueline Street to Hardy Road - 50 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,154	\$0	\$0	\$0	\$0	\$0
Surface	New	Sylvia Way - Iolanthe Street to Ida Street - 270 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,230	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Freeland Square - Freeland Way (N) to Freeland Way (S) - 210 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,846	\$0	\$0	\$0	\$0
Surface	New	Feeland Way - Northmoor Road to Wicks Street - 720 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88,614	\$0	\$0	\$0	\$0
Surface	New	Alice Street - Collier Road to Jackson Street - 550 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,691	\$0	\$0	\$0	\$0
Surface	New	Barton Parade - Watson Street to Deakin Street - 300 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,923	\$0	\$0	\$0	\$0
Surface	New	Duffy Street - Clune Street to Jackson Street - 200 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,615	\$0	\$0
Surface	New	Elisfield Way - Troy Street (N) to Troy Street (S) - 300 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,923	\$0	\$0
Surface	New	Lukin Way - Ida Street to Ivanhoe Street - 410 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,461	\$0	\$0
Surface	New	Charlbury Way - Jubilee Avenue to May Road - 360 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,000	\$0
Surface	New	Naunton Crescent - Naunton Way to Naunton Way - 600 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$74,000	\$0
Surface	New	Clune Street - Duffy Street to Cul de sac - 700 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$86,200
Surface	New	Lavan Street - Clune Street to Jackson Street - 200 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000
Surface	New	Earlsferry Court - Nurstead Avenue to Guildford Road - 67 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,246	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Prowse Street - Old Perth Road to North Road - 203 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$24,984	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Mons Street - End of Construction to Maley Street - 110 x 1.5m	Municipal Funds	\$0	\$0	\$13,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Railway Parade - End of construction (#186) to Shire Boundary with BCC - 165 x 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	New	Hatton Court - Bridson Street PAW - Construction of new path through PAW and the installation of solar bollards or lights.	Municipal Funds	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Operation	Path Condition Inspection (inc grab rails and TGS's)	Municipal Funds	\$11,000	\$0	\$0	\$11,000	\$0	\$13,000	\$0	\$0	\$14,000	\$0	\$0	\$0	\$11,000	\$0	\$0
Surface	Renewal	Ashfield Flats (#140) - Path Intersection to Boardwalk - Red Asphalt 2.5m	Municipal Funds	\$0	\$6,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	Broadway Arboretum (#636) - Broadway to centre of Arboretum - Insitu concrete 2.0m	Municipal Funds	\$0	\$22,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	Broadway Arboretum (#637) - Centenary Court to Centre of Broadway Arboretum - Insitu concrete 2.0m	Municipal Funds	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	Broadway/Ivanhoe Street (#684) - Ivanhoe Street material change to Material change south - planning condition for developer to conduct this	Municipal Funds	\$0	\$3,036	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	Walter Road East (#603) - Ida Street to Marion Street - Insitu concrete 2.0m	Municipal Funds	\$21,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	Walter Road East (#419) - Material change to Ivanhoe Street - Insitu concrete 5.4m	Municipal Funds	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Renewal	General Renewal Allocation	Municipal Funds	\$0	\$95,000	\$173,000	\$162,000	\$165,000	\$155,000	\$173,000	\$140,000	\$162,000	\$161,000	\$188,000	\$227,000	\$241,000	\$245,000	\$245,000
Surface	Upgrade	Guildford Road (#276) - West Road to Width change - Insitu concrete 2.0m	Municipal Funds	\$22,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Old Perth Road (#36) - Sundry Street to Prowse Street - Insitu concrete 1.5m	Municipal Funds	\$0	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Parnell Parade (#19) - Deakin Street to End of Construction - Insitu concrete 1.5m	Municipal Funds	\$0	\$8,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Railway Parade (#43) - Seventh Avenue to Width change - Insitu concrete 1.5m	Municipal Funds	\$0	\$39,507	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Railway Parade (#289) - Lord Street to Seventh Avenue - Insitu concrete 1.5m	Municipal Funds	\$0	\$14,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Railway Parade (#548) - Start of construction south of railway carpark to entrance to railway carpark - Insitu concrete 1.5m	Municipal Funds	\$0	\$13,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Thompson Road (#689) - Lamb Street to Width Change - Insitu concrete 1.8m	Municipal Funds	\$0	\$11,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Robinson Road (#440) - Padbury Way width change to May Road - Insitu concrete 2.1m	Municipal Funds	\$0	\$58,928	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Walter Road East (#52) - Iolanthe Street to Ida Street - Insitu concrete 2.0m	Municipal Funds	\$0	\$40,533	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Clay Street (#467) - Gallagher Street to Morley Drive East - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$12,308	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Ivanhoe Street (#476) - Chedworth Way to Faulkner Way - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$32,615	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Mickleton Reserve (#53) - Culworth Place to Mickleton Terrace - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$15,261	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Walter Road East (#368) - Penance Street to Iolanthe Street - Insitu concrete 2.0m	Municipal Funds	\$0	\$0	\$43,322	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Mary Crescent (#443) - Ivanhoe Street to Second Avenue - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$32,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Mary Crescent (#457) - Second Avenue to Gaunt Street - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$28,923	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Mary Crescent (#459) - Kirke Street to Lord Street - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$39,753	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Mary Crescent Reserve (#711) - Ivanhoe Street path to Span Building - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$2,338	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	First Avenue (#303) - Material change at Railway Parade to Anzac Terrace - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$54,645	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Second Avenue (#299) - Railway Parade to Anzac Terrace - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$55,630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Second Avenue (#722) - Walter Road East to 130 Second Avenue crossover - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$4,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Ivanhoe Street (#306) - Broadway Material Change to Anzac Terrace - Insitu concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$51,322	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Ivanhoe Street (#357) - Anzac Terrace to Walter Road East - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$76,676	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Transport Works Programme Summary

Asset Sub Type	Activity Type	Activity Description	Funding Type	Year 1 2017/18	Year 2 2018/19	Year 3 2019/20	Year 4 2020/21	Year 5 2021/22	Year 6 2022/23	Year 7 2023/24	Year 8 2024/25	Year 9 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Paths																		
Surface	Upgrade	Parmelia Way Reserve (#653) - Parmelia Way Reserve to Iolanthe Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$11,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Scaddan Street (#45) - Iolanthe Street to Ida Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$28,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Scaddan Street (#307) - Ida Street to Railway Parade - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$20,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	West Road (#147) - 176 West Road to Reid Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$42,461	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Fisher Street (#87) - Hardy Road to Villiers Street West - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,430	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Fisher Street (#104) - Villiers Street West to Fisher Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,615	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Fisher Street (#134) - Start of Construction at 2 Fisher Street Driveway to Cyril Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,415	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Fisher Street (#136) - Cyril Street to Guildford Road - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,923	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Fisher Street (#709) - Width Change to End of Construction at 2 Fisher Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,677	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Parker Street (#223) - 12 Parker Street to 2 Parker Street material change - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Parker Street (#24) - Palmerston Street to 16 Parker Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,169	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Parker Street (#241) - Palmerston Street to 17 Old Perth Road material change - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,692	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Parker Street (#515) - Bridson Street to Palmerston Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,984	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Kenny Street (#109) - Chapman Street to Bridson Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$41,969	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Kenny Street (#175) - Shackleton Street to Palmerston Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,999	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Kenny Street (#227) - Palmerston Street to Kenny Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,553	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Eileen Street (#167) - Shackleton Street to Palmerston Street - Insitu Concrete 1.5 (Variable Width)	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,045	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Shackleton Street (#25) - Geraldine Street to Eileen Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,677	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Shackleton Street (#26) - Cyril Street to Geraldine Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,969	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Shackleton Street (#112) - Kathleen Street to Kenny Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,538	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Shackleton Street (#171) - Eileen Street to Kathleen Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,400	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Shackleton Street (#246) - Guildford Road to Cyril Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,538	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Bridson Street (#113) - Parker Street to Wilson Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,554	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Bridson Street (#154) - Whitfield Street to West Road - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,061	\$0	\$0	\$0	\$0
Surface	Upgrade	Bridson Street (#180) - Kenny Street to Parker Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,461	\$0	\$0	\$0	\$0
Surface	Upgrade	Bridson Street (#516) - Wilson Street to James Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,661	\$0	\$0	\$0	\$0
Surface	Upgrade	Chapman Street (#106) - Kathleen Street to Kenny Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,538	\$0	\$0	\$0	\$0
Surface	Upgrade	Colstoun Road (#571) - Guildford Road to IGA Carpark Entrance - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,261	\$0	\$0	\$0	\$0
Surface	Upgrade	Hardy Road (#493) - 100 Hardy Road Driveway to Moojebing Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,554	\$0	\$0	\$0	\$0
Surface	Upgrade	Mons Street (#585) - Margaret Street to End of construction at 9 Mons Street - Insitu Concrete 1.5m (undertake works with extension)	Municipal Funds	\$0	\$0	\$0	\$14,031	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Surface	Upgrade	Gary Blanch Reserve (#83) - Hardy Road to Pearson Street - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,569	\$0	\$0	\$0
Surface	Upgrade	James Street (#252) - James Street Driveway Material Change to Old Perth Road - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,189	\$0	\$0	\$0
Surface	Upgrade	Point Reserve (#212) - Point Reserve lower car park - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,277	\$0	\$0	\$0
Surface	Upgrade	Point Reserve (#670) - Point Reserve Toilet Block to Path T junction - Insitu Concrete 1.5m	Municipal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,231	\$0	\$0	\$0
PATHS TOTAL				\$719,000	\$1,172,180	\$1,017,428	\$1,033,058	\$1,039,315	\$1,014,073	\$1,034,490	\$1,079,071	\$1,009,115	\$957,551	\$1,008,550	\$981,880	\$991,999	\$988,000	\$980,200

[illegible]

Car Parks

[illegible]

Other

[illegible]

Street Furniture

[illegible]

Drainage

[illegible]

Jetties & Pontoons

[illegible]

Crossovers

[illegible]

Appendix I - Asset Ratios

Background

On an annual basis, each WA local government reports seven key performance indicators (KPIs) (available within the Annual Report). Of these, three KPIs reflect the performance of the Town's assets. These KPIs are useful in determining the current physical state of the asset portfolio, the level of past renewal expenditure against average annual depreciation, and the level of future required renewal expenditure against that allowed within the Long Term Financial Plan. Essentially they assess past, present and future performance. Each of the ratios and their historical performance are reported in this appendix.

Asset Consumption Ratio

The ratio is a measure of the condition of the Town's physical assets, by comparing their condition based fair value (depreciated replacement cost) (what they're currently worth) against their current replacement cost (what their replacement asset is currently worth as new). The ratio highlights the aged condition of the portfolio and has a target band of between 50%-70%. Non depreciating assets (e.g. road formation) should be excluded from the calculation.

Fair Value of Depreciable Transport Assets
Current Replacement Cost of Depreciable Assets

Asset	FV	CRC	ACR
Roads (ex formation)	\$59,166,429	\$73,076,807	81%
Paths	\$7,248,257	\$10,256,412	71%
Structures	\$18,100	\$31,000	58%
Drainage	\$22,744,514	\$39,635,969	57%
Car Parks	\$2,362,095	\$2,882,259	82%
Boardwalks, Jetties & Ramps	\$441,407	\$1,430,088	31%
Street Furniture	\$6,988,633	\$8,539,734	82%
Total	\$98,969,435	\$135,852,269	73%

Table 17: Transport Assets Consumption Ratios

Asset Sustainability Ratio

The ratio is a measure of the extent to which assets managed by the Town are being replaced as they reach the end of their useful lives. The ratio is essentially past looking, and is based upon dividing the average annual depreciation expense of the transport asset portfolio by the average annual renewal expenditure, for a number of past years (e.g. 2). The ratio has a target band of between 90%-110%.

Transport Asset Renewal Expenditure
Transport Asset Depreciation

Asset	2014/15-2016/17 Average	ADE (2017)	ASR
Roads	\$934,843	\$1,373,870	68%
Paths	\$170,916	\$244,081	70%
Structures	\$0	\$775	0%
Drainage	\$67,083	\$581,690	12%
Car Parks	\$12,820	\$42,646	30%
Boardwalks, Jetties & Ramps	\$29,394	\$37,127	79%
Street Furniture	\$60,118	\$128,713	47%
Total	\$1,275,175	\$2,408,902	53%

Table 18: Transport Assets Sustainability Ratios

Asset Renewal Funding Ratio

The ratio is a measure as to whether the Town has the financial capacity to fund asset renewal as and when it is required over the future 10 year period. The ratio is calculated by dividing the net present value of planned renewal expenditure over the next 10 years in the LTFP, by the net present value of planned renewal expenditure over the next 10 years in the AMP. The same net present value discount must be applied in both calculations. The ratio has a target band of between 90%-110%.

$$\frac{\text{NPV of LTFP Planned Renewal Expenditure over the next 10 years}}{\text{NPV of AMP Required Renewal Expenditure over the next 10 years}}$$

To be confirmed
To be confirmed

The ratio has not yet been calculated.

Updated
22/01/2018



	Preliminary Works (RFT Drawings, RFT Specifications , Procurement Process, Appointment of Contractor)
	Contractor undertaking Works
	Contractor expected completion date.
	Completed
	Reconciliation of accounts / Reports to Main Roads-R2R/Financial Acquittals (Please note: Road aquitals can take up to two months before official sign off.)

LAND & BUILDINGS

[illegible]

[illegible]

LAND

						2017						2018						COMMENT
	DESCRIPTION	AREA	BUDGET	FEB BUDGET REVIEW	FUNDING REMAINING	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
AL1701	Purchase of portion of 97 Kenny Street for a PAW and for the wind-up of TPS4A	Manager Development Services	\$5,000		\$5,000													Manager Development Services Project
AL1702	Purchase of portion of 13 Hatton Court for a PAW and for the wind-up of TPS4A	Manager Development Services	\$6,000		\$6,000													Manager Development Services Project
	TOTAL		\$11,000															

PLANT & EQUIPMENT

[illegible]

[illegible]