City of Melville

Infrastructure Strategy 2016-2036

'Keeping the City Connected'

January 2018

REVISION HISTORY

Date amended	Description of Change	Revised by (Document Owner)	Approved by (Director / Exec. Mgr)	Date approved
25/09/16	Review of 2011 Plan	P. Kellick	J. Christie	25/9/16
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Other References that may be applicable to this Procedure

Legislative Requirements:

Delegated Authority:

Plan / Policy / Framework:
Corporate Planning and Strategy Framework
Corporate Business Plan 2012-2016
Asset Management Policy (CP-031)
Borrowings and Asset Financing Policy (CP-024)
Financial Sustainability Forward Financial Planning and Funding Allocation Policy (CP-008)

Procedures:
SP-022 Strategic Planning Procedure
SP-011 Business Planning Procedure

Contents

At a Glance

Our Challenges:

- Up to 20% more residents by 2036
- Ageing population
- Infill and higher residential density
- Climate change
- Impacts of State planning and transport decisions
- Disruptive technology in communications, transport and energy
- Social trends
- Rising community expectations and aspirations
- Reserve funding

Understanding

Alignment

Prudence

Advocacy

Foresight

Our Response

Improving our local parks

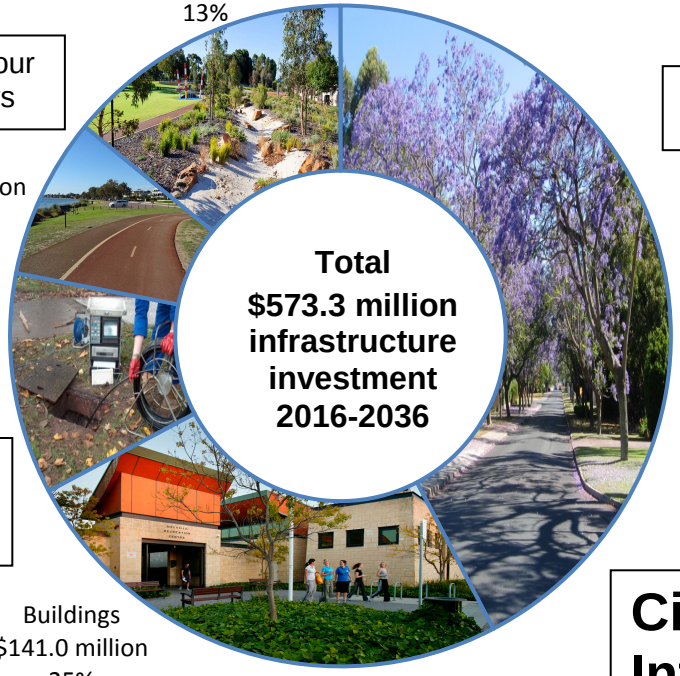
Parks Infrastructure
$72.3million
13%

Growing and connecting our footpaths and cycle ways

Paths
$39.9 million
7%

Maintaining our local road network

Roads
$271.2 million
47%



Drainage
$49.0 million
8%

Improving the capacity and cleanliness of our drainage network

Buildings
$141.0 million
25%

New Cultural Centre
Upgrading public toilets
More change rooms
Improving community facilities
New community hubs

City Infrastructure:

- **A**ppropriate
- **A**cceptable
- **A**ffordable

Introduction

The City delivers over 200 products and services to the community and manages over $700 million in physical infrastructure assets. This is the first Infrastructure Strategy for the City of Melville (the City) and its purpose is to:

- Provide the City and the community a clear view of the state of the City's core infrastructure and priorities for investment over the next 20 years;
- Identify significant issues and possible solutions for infrastructure assets over the next 20 years and provide a strategic direction that reflects current and future expectations;
- Provide the basis for long term financial plans and budgets for infrastructure

The Strategy applies to the City's community infrastructure assets, which are:

- Roads
- Buildings
- Drainage
- Paths
- Parks and river infrastructure

The Strategy supports actions across three timeframes:

- 0-5 years including projects already in development
- 5-10 years to assist in medium term planning of projects approaching development
- 10-20 years to assist in longer term planning, particularly financial.

Keeping the City Connected

Vision

The City's economic vibrancy, community well-being and environmental values are sustained and enhanced by financially, socially and environmentally responsible infrastructure investment and management.

Principles

1. Infrastructure assets are critical to the City's economic health and community wellbeing.
2. Infrastructure assets are fit for purpose based on community needs.
3. Infrastructure assets support and enhance intergenerational equity by being financially, socially and environmentally sustainable.
4. Asset management balances infrastructure renewal, upgrading and expansion to support the City's vision of working together to achieve community wellbeing for today and tomorrow.

Goals and Indicators

1. The City's infrastructure delivers appropriate service levels consistent with reasonable community expectations and demand.
2. At least 70% customer satisfaction with the City's infrastructure assets.
3. Infrastructure asset management meets or exceeds industry good practice standards with more than 80% of assets in fair-very good condition.
4. Effective long term financial planning ensures capacity for infrastructure renewal and replacement.
5. The City is recognized as a leader in local government infrastructure planning and management.

Strategies and Key Priorities

1. **Understand** the condition, functionality, utilisation and capacity of infrastructure to ensure well-targeted asset management and investment plans.
   - Undertake condition audits of parks and drainage infrastructure.
2. **Align** strategic planning and infrastructure plans to optimise efficient and effective asset management.
   - Use structure plans to drive a proactive, precinct-based approach to residential densification to ensure impacts are managed.
3. Combine **prudent**, timely investment, renewal and divestment, demand management and technological innovation to ensure service levels and standards match evolving needs.
   - Invest an additional $12.6 million over the next 20 years in a change-room upgrade program.
   - Invest an additional $5.6 million over the next 20 years to build new paths and upgrade existing paths to improve connectivity also using funds from the Public Open Space Reserve where available.
   - Develop long term programs for major park upgrades and for building upgrades and reconstruction.
   - Rationalise community buildings to reduce maintenance and renewal expenditure on vacant and unfit-for-purpose buildings.
   - Progressively grow the building replacement reserve to ensure sustainability and thereafter maintain a five year rolling average Asset Sustainability Ratio of 100%.
4. **Advocate** the funding and construction of essential State significant infrastructure by State and Federal Governments to reduce pressure on the City's community and assets.
   - Advocate for the timely construction of transport and service infrastructure to reduce the negative impacts of population increase and congestion on the City.

5. Show **foresight** in monitoring emerging issues and community needs to ensure infrastructure decisions are risk-based and reflect current and future expectations over the next 20 years.
    - Engage with the community to inform the maintenance and regular review of this strategy and asset management plans.

Our Place

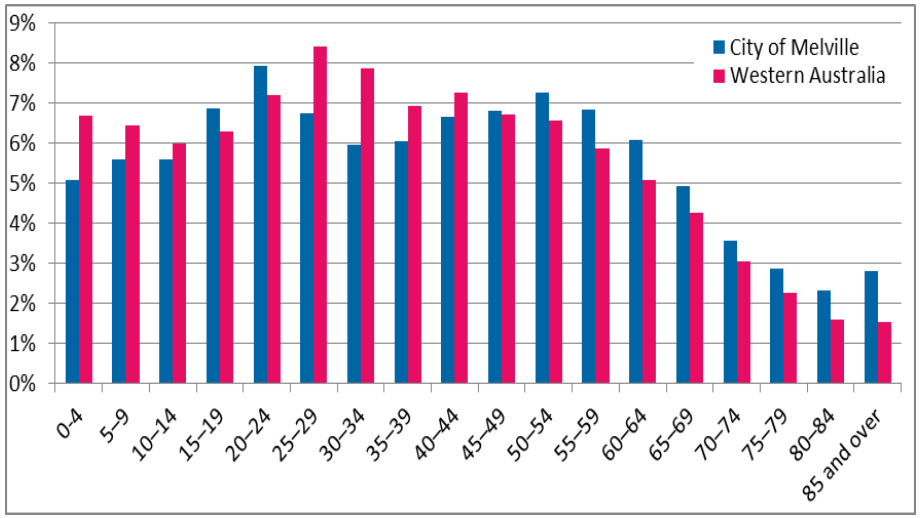
The City is bounded by the Swan and Canning Rivers, the Cities of Canning, Cockburn, Fremantle and the Town of East Fremantle. The City's Northwestern boundary is located approximately 8 kilometers from the Perth Central Business District, and the south western boundary is approximately 4 kilometers from the Port of Fremantle.

The City includes 18 suburbs and covers an area of approximately 5,287 hectares (almost 53 square kilometres). The suburbs within the City of Melville are shown below.

City of Melville Suburbs

Our People

The City has experienced moderate but steady population growth of 1.1 percent since 2005 driven largely by residential infill and medium density apartment developments. The City had a total estimated population of 106,655 in June 2015 (Australian Bureau of Statistics) with a median age of 40 (compared with a median age of 36 for Perth metropolitan area). Over half our residents are employed.



Population Age Profile

The City is home to 10,488 local businesses (Business Register 2015) providing 42,433 local jobs (NIEIR 2015) (source .id).

Our Assets

	Roads	Buildings	Drainage	Paths	Parks Infrastructure
Quantity	529km 1309 roads	153	341 km pipes 14,263 pits	478 km	711 hectares including 183 parks, one golf course, streetscapes and riverbanks.
Replacement value ($2016 millions)	255.0	220.0	112.7	86.3	30.7
Capital works budget (2016/2017) ($000)	9,265	3,056	665	928	3,228
% of assets in fair to very good condition	97%	99%	100%	98%	Assessment underway
National average	88%	89%	77%	Not measured	88%
% of assets with fair to very good function	97%	87%	Assessment underway	Assessment underway	Assessment underway
National average	77%	73%			
% of assets with fair to very good capacity/utilisation	81%	88%	Assessment underway	Assessment underway	Assessment underway
National average	78%	72%	n/a	n/a	n/a

	Roads	Buildings	Drainage	Paths	Parks Infrastructure
Catalyse 'Performance Index' (lower limit 70%)	75%	71% (*)	76% (*)	71%	81%
Service requests in 2015 (trend)	400 ↓	4,400 ↑	160 ↓	425 ↑	800 →
New work requests (2015)	115 ↑	Not monitored	25 →	60 →	50 →
Community Aspirations (2016 survey)	Manage parking and congestion, tree lined streets.	More local meeting places and cafes.		More and better safe paths cycleways, with shade.	More trees and green spaces.

**Industry high*

Additional detail including the methodology used to calculate the above metrics and definitions, may be found in Appendix 1.

Link between Services and Assets

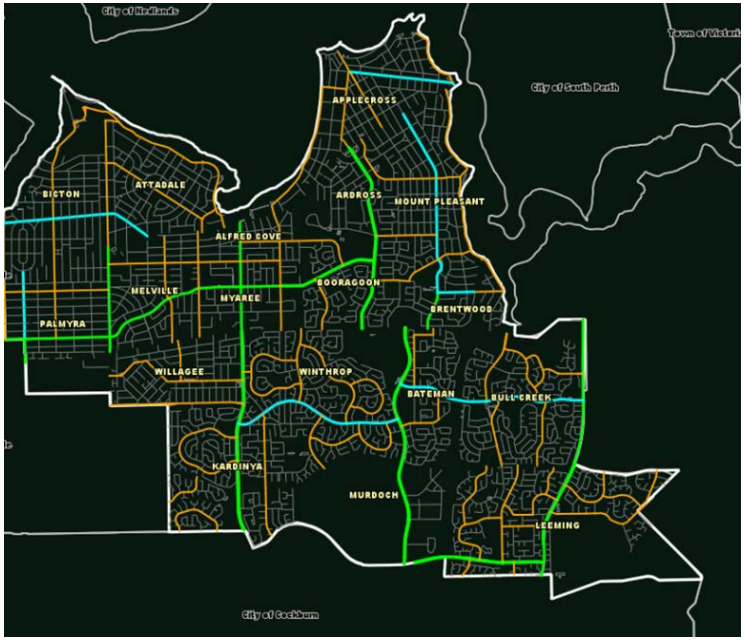
The City delivers over 200 products and services to the community and in doing so, must ensure that the infrastructure assets supporting these services are managed in a way that optimises performance for the lowest 'whole of life' cost.

Very little of the City's infrastructure portfolio is classified as in poor condition. However, the 71% of roads assessed as fair quality and 29% as having insufficient capacity suggests that investment may need to be increased in the medium term (5-10 years). While building quality is generally high, the limiting factor is functionality and capacity. Some buildings are no longer used for their original purpose and not well suited to current needs, or potentially are not efficiently located to meet community needs.

Roads

A hierarchy made up of the following roads types defines the City's road network and guides management decisions (AADT is Annual Average Daily Traffic):

- **District distributor A**: Serving as links between districts and generally carry traffic volumes above 8,000 AADT
- **District distributor B**: Also serving as a link between districts but with lower traffic volumes (6,000-8,000 AADT)
- **Local distributors**: Locally preferred routes between or within area of population or activity (3,000 – 6,000 AADT)
- **Local access roads:** All other roads servicing land use activities (< 3,000 AADT)



Buildings

The Building portfolio is the second largest infrastructure class at the City of Melville and a significant 'touch point' for the community as it includes libraries, aquatic and recreation centres, community centres and halls, public toilets, sporting club rooms and change rooms.

Class	Quantity	Proportion by value
Recreation	32	49%
Civic	11	20%
Community	26	16%
Heritage	22	9%
Strategic	24	5%
Toilets/change rooms	18	1%
Storage facilities	20	-
TOTAL	153	

Note that this does not include buildings on City controlled land that are not under our care and control such as buildings subject to land leases or storage facilities erected by tenants.

Drainage

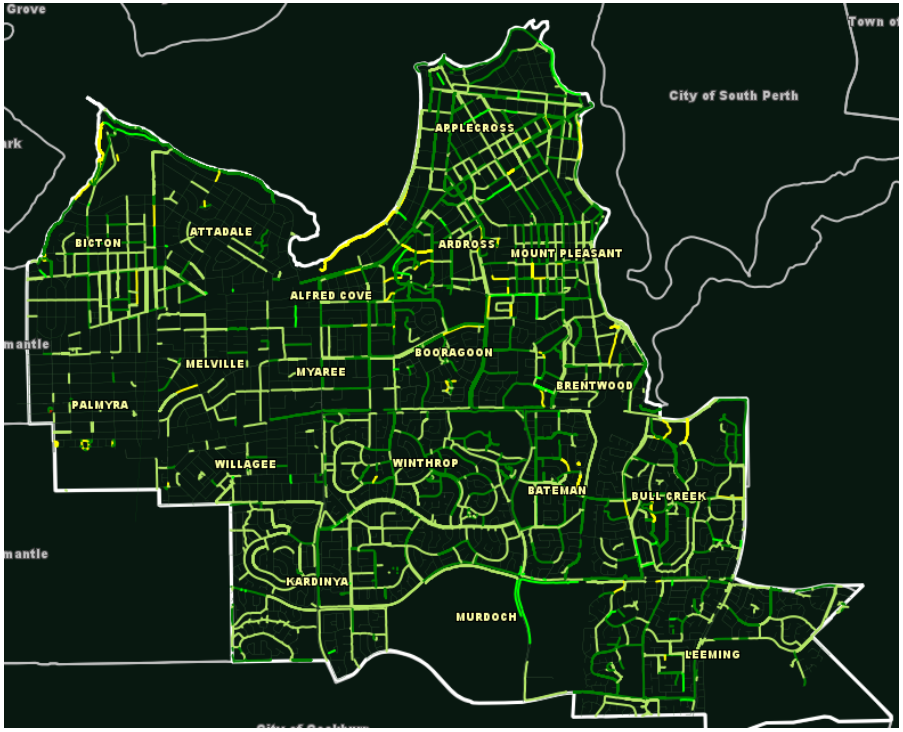
Drainage is the third largest infrastructure class by value and is made up of a network of pipes, pits and sumps. The majority of these assets are buried and, the service it provides significantly contributes to the health of the community.

The stormwater drainage network ensures that water run-off is captured quickly and diverted into storage and recharge areas such as sumps. With an effective drainage system, there should be no pooling of water on the roads or flooding under normal weather conditions.

Paths and Cycleways

The City's path network consists of both footpaths and cycle ways. Most of these paths are constructed in concrete although a small proportion is made of timber, limestone, concrete and bitumen.

A map of current path conditions is shown below. Green represents paths in good condition, yellow represents paths in fair condition and red represents paths in poor condition.



Path Network and Condition

Parks and River Infrastructure

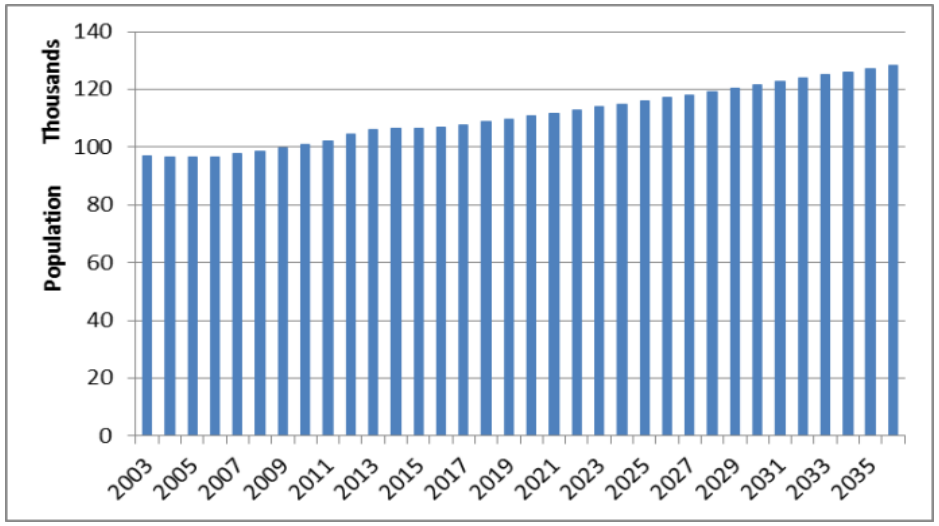
The City owns and maintains 183 parks, 306 hectares of streetscapes and a nine-hole golf course comprising a total of 711 hectares.

Parks and river infrastructure includes playground equipment, barbeques, seats and shelters, river walls, boat ramps, jetties and boardwalks.

Our Challenges

Population Growth

Population projections vary by source. Forecast.id predicts a continuation of the recent 0.95% annual growth over the next twenty years, which would see the City's population reach 128,415 by 2036. However, the WA Planning Commission's 2015 WA Tomorrow report predicts a moderating of growth to an annualised 0.67%[1] over the 15 years from 2011-2026, which if extrapolated would result in a population of 120,664 by 2036. Both projections are based on natural growth without government intervention.



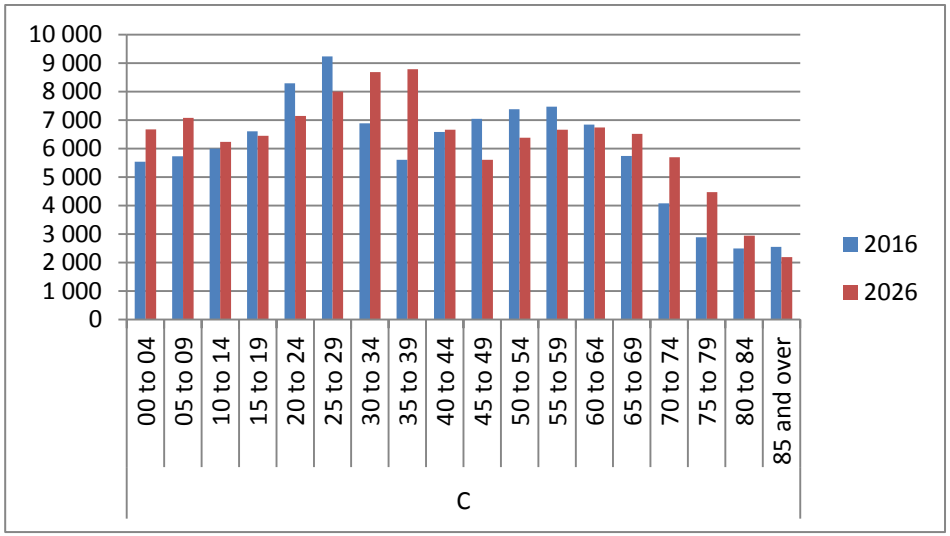
Projected Population[2]

[1] Band C, or medium growth scenario.

[2] Source: forecast.id

Demographic Changes

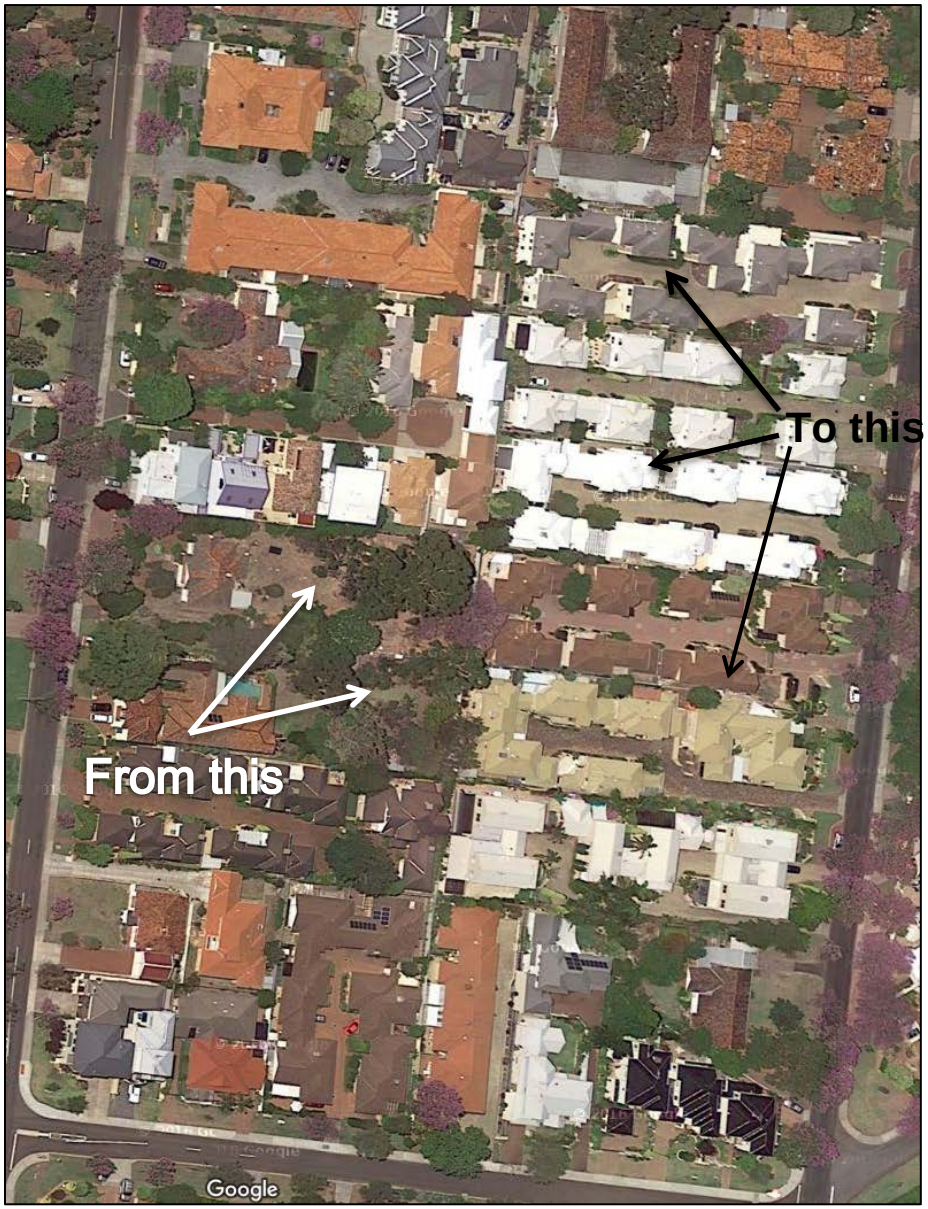
The WAPC's most recent WA Tomorrow projections suggest a significant increase in the under-10 and 30-39 year old age groups in the City over the next ten years, as well as a significant increase in the number of residents between 65 and 84 years old.



2016 and Projected 2026 Age Distribution[3]

The increase in the number of people of retirement age has significant implications for infrastructure. The current generation of this age group are in general healthier and prefer to pursue more active recreation pursuits. They are greater users of gymnasiums, sporting and outdoor recreation facilities than their predecessors, and there is no reason to expect this trend to reverse. At the same time, infrastructure design and maintenance must consider the likelihood that more users may be physically impaired, and ensure facilities are accessible to and safe for these users.

[3] Source: WAPC WA Tomorrow Report No. 10 (2015) (Band C scenario)



Infill and Residential Densification

The Western Australian Planning Commission has set a target for the City of Melville to plan for an additional 11,000 dwellings by 2031 starting from the base year of 2011, as part of the State's strategy to limit urban sprawl by increasing residential density in the inner suburbs. The Murdoch Activity Centre is expected to yield around 3,400 dwellings, but the additional homes will mainly result from subdivision or redevelopment of existing residential lots.

Most of the City was planned in the middle of the last century, with a low housing density by today's standards. Few families had more than one car, and many had none. Recreational activities tended to be less structured around built facilities.

Much of the infrastructure in the City was designed and constructed to serve mostly single family detached homes on traditional "quarter-acre" lots. Infill trends in some areas are resulting in up to eight homes on a lot that originally only had one. Although average household size is smaller, the population density in infill areas may exceed triple the original design assumptions.

These trends will place pressure on all essential services, including roads, energy, water, sewerage, drainage, public transport and waste management, and increase demand for community facilities such as paths, streetscapes, parks, sports fields and leisure and recreation services.

The increase in the proportion of hard surfaces to natural ground increases rainfall run-off, making it increasingly impractical to retain all storm water within a property.

Household Size

Average Australian household size declined from 4.5 in 1911 to 3.6 in 1960 to 2.5 in 2006, with a slight increase to 2.6 in 2011 attributed to adult children remaining in the family home (up from 21% in 1976 to 29% in 2011)[4].

Older Australians' desire to age in place, along with greater financial barriers to home ownership for young adults, appears to be leading to an increase in multi-generational households. This is likely to result in greater age diversity within neighbourhoods, with local infrastructure needing to be appropriate for children, young adults and older people.

Multiple adults in a household may mean more cars per household, with impacts on both traffic and parking, and potentially increased waste per household.

Home Ownership

As a general Australian trend, the proportion of owner-occupiers is declining and was 67% in 2011, while the proportion of people in private rental increased from 18% in 1994 to 25% in 2011.

Research shows that investor-owned housing is higher in higher density areas and around universities and hospitals, with apartments in particular likely to be investor-owned.

Split incentives occur when the person paying for the infrastructure or service (the owner through rates) is not the same as the person enjoying the benefits (the tenant).

Market pressures limit the ability of the owner to recoup higher costs through rent, and they may be more resistant to rate increases when the benefits accrue to the tenants. The effect is mitigated if the infrastructure spending is seen as adding to property values.

Conversely, with no price signal, tenants unaffected by the cost of City infrastructure and services may be more inclined to demand improvements.

Climate Change

Climate change predictions of sea level rise, increase in temperatures and change in weather patterns will have an impact on the use and need for riverfront assets.

While significant impacts are unlikely within the time frame of this strategy, infrastructure planning needs to consider the management of these risks.

Local Impacts of State Planning and Transport Decisions

Freight traffic originating from or destined for Fremantle Port travels through the City. Port-related road freight movements doubled between 2001 and 2015 and at current rates of growth may double again within the 20 year time frame of this strategy. Rail transport over short distances is uncompetitive and unlikely to mitigate road transport growth without substantial subsidies. The Outer Harbour proposal will supplement but not replace the Inner Harbour (operating at around 750 TEUs./year with an estimated capacity of 2 million TEUs).

In addition, the State's decision to locate the Fiona Stanley Hospital and the Murdoch Activity Centre adjacent to the existing hospital, university and TAFE complex at Murdoch will significantly increase traffic volumes in the area on both roads and cycleways.

While primarily affecting State-managed roads, particularly Leach Highway, South Street, Stock Road and the Kwinana Freeway, the congestion is likely to spill over into local roads.

[4] Sources: ABS Australian Social Trends 2009 and 2013, Year Book Australia 2012.

Disruptive Technology and Social Trends

Technological change is accelerating, and currently emerging technologies are likely to become widespread within the next 20 years. Disruptive technologies and behavioural trends may result in new impacts on infrastructure, and may either exacerbate or reduce existing pressures. Examples are:

1. The internet and e-books are changing the way people find information and read for pleasure, refocusing library needs from physical storage to interconnectivity;
2. The knowledge economy and the rise of e-business enables more people to work from anywhere, reducing the need to commute and potentially smoothing traffic peaks;
3. On-line shopping and 3D printing may change the way people use retail centres, and more home delivery traffic;
4. Electric vehicles may result in demand for charging stations in public parking areas;
5. On-demand public transport (e.g. Uber, Lyft, GoCar) and car-sharing (e.g. Carnextdoor, Popcar) may result in lower levels of car ownership;
6. Autonomous vehicles may change transport patterns;
7. Use of mobile communication devices are likely to lead to more demand for public wifi networks and wireless data transfer;
8. Electronic communication and "digital democracy" tools enable citizens to engage more closely with governments, from reporting faults to expressing views on proposals to paying bills, and enable governments to help the community understand the real costs of services.
9. Real-time data collection ("smart" networks, remote monitoring, "internet of things") and "big data" analytics will allow improved monitoring of infrastructure condition and fault detection.

Community Expectations

Our community is educated, articulate and assertive, with high expectations about the quality, quantity and availability of City infrastructure and services and the transparency of decision-making. Rate increases remain unwelcome.

The provision of infrastructure services has traditionally been demand-driven with a priority on meeting user expectations. In a constrained fiscal environment, with growth in both expectations and costs outstripping revenue growth, and the need to budget for the renewal or replacement of ageing assets, more focus will need to be given to demand and expectation management.

The City, including Elected Members, will need to ensure that the community understands the need to balance competing interests, plan for the long term and allocate limited budgets to achieve best overall value for money for the community as a whole.

Inheritance Gap

The City has been broadly matching depreciation with renewal expenditure for the past 6 years, but this has not always been the case. As a result, funds set aside in various reserves for asset replacement totalled only $33.7m as at 30 June 2015. This represents just 13.5% of the accumulated depreciation of $249 million that has already occurred, or 35% of the more conservative target of the Asset Consumption Ratio of 75%, which is $96.3 million.

No provision has been made for the eventual replacement of infrastructure as Asset Management and Fair Value principles assume that with sufficient maintenance and renewal the service potential of most long life assets will be retained into the foreseeable future. This assumption is appropriate for infrastructure such as roads, paths and drainage, which are relatively predictable and easily modelled on primarily technical criteria.
It is less applicable to buildings which can reach the end of their useful life due to either technical obsolescence or end of economic life.

The nominal expected life of our buildings is 62 years and the current average weighted age of our buildings is 36 years indicating that our building portfolio is 59% through its expected life cycle and has an average of only 26 years remaining. On an individual asset basis, some renewal work will extend the life of building assets, while other buildings will reach the end of their useful life earlier because of under-utilisation or no longer being fit for purpose.

In summary, the City has not 'saved' sufficiently to upgrade or replace building assets at the end of their economic or useful life and needs to retain and build up building related reserves for future works. Initial work on modelling this indicates that the additional expenditure required averages out at approximately $1.2 million per annum. This is our "Inheritance Gap".

Impacts and Risks

Roads

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Population growth Demographic change Infill and densification Household size	Increased traffic densities Increased demand for street parking Increased demand for green space	Increased congestion Inadequate parking for residents and visitors Hindrance to service vehicles (street cleaning, rubbish collection)	Continue current road maintenance levels Controlled intersections Parking regulation Development conditions	Low	No significant additions to the road network are anticipated. Upgrades to improve traffic flow may be required in specific locations. Parking issues may be more appropriately addressed through planning and development policies and regulation.
Climate change	Urban Heat Island effects	Incentive to use cars rather than walk	Shady street trees	Medium – investment in Urban Forest Strategy will look at mitigation of heat Islands.	
Impacts of State planning and transport decisions	Increased congestion on main roads	Increased congestion on local roads	Advocate for State and Federal funding to mitigate congestion on State roads	Low – however, if the State transport investment does not match higher density this will create congestion problems on local roads.	
On-line shopping/ 3D printing	Greater numbers of delivery vehicles using residential streets	Demand for “drop off” parking	Parking regulation	Low – however, it may impact revenue (rates) from commercial precincts if on-line shopping negatively impacts retail shopping.	

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
On-demand public transport Autonomous vehicles Work-from-anywhere	Changing patterns of road use	Lower levels of car ownership and less demand for resident parking	Monitor effects	Low	
Mobile communications Remote monitoring and data analytics	Industry best practice will increasingly incorporate use of this technology	Sub-optimal efficiency	Opportunistic incorporation of technology	Medium term IT investment to support monitoring and data-driven asset management	
Community expectations	Demand on City to relieve congestion and parking problems	Special interest pressure distorts asset investment and management decisions	High quality, up-to-date, risk-based asset management plans	Low – however, congestion has been consistently identified in resident surveys over a number of years as one of the major cause of dissatisfaction in the City.	

Buildings

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Population growth Demographic change Infill and densification Household size	Higher utilisation of sporting, recreation and leisure services and facilities Changing user profiles (e.g. more women's sporting teams)	Demand exceeds capacity at peak times More older users with mobility or visual impairment	New cultural centre More change rooms Upgrade public toilets Improved accessibility and safety features for older users	Medium	The most pressing demand-driven requirement is to upgrade and increase the capacity of change room and public toilet facilities to meet increased demand and the changing profile of users. The largest currently planned investment is the new Melville Cultural Centre with an expected cost of about $37.5 million over the years 2017-20. Rationalisation of older community buildings into fewer, purpose-built community hubs will provide economies of scale and more
Information storage and retrieval technology Work-from-anywhere	Changing use of libraries and methods of seeking information	Less focus on physical storage in libraries and more on electronic interconnectivity	Maintain current investment levels	Low	
On-demand public transport Autonomous vehicles		Less demand for parking at community facilities		None	
Electric vehicles	Demand for charging stations in public parking areas		Monitor demand, consider private sector supply. Implement Policy Positions to increase provision of charging stations in new developments.	Low	
Mobile communications Remote monitoring and data analytics	Demand for Wi-Fi capacity in public places		Monitor demand, consider private sector supply	Low	

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Community expectations	Demand on City for additional facilities and retention of facilities beyond the end of their economic life	Special interest pressure distorts asset investment and management decisions	High quality, up-to-date, risk-based asset management plans Identify level of subsidy for Community Clubs and facilities. Review Policy on level of public support for club subsidisation.	Low	appropriate buildings for community purposes.
Inheritance gap	Inadequate reserve provision for replacing buildings	Unable to fund replacement of building assets	Review the expected life, reconstruction and potential upgrades across the building portfolio Implement Property Strategy.	Medium within 20 years, potentially high in long term	

Drainage

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Population growth Infill and densification Demographic change Household size	Increased traffic densities Smaller lots mean less capacity for stormwater to be kept within the property. Higher ratio of hard surfaces to natural soil means more rain reaching drains.	More household and vehicle pollutants at risk of entering drainage system Rainwater entering the drainage system in high intensity storms may exceed the capacity of the system, resulting in localised flooding	Development conditions Dense canopy street trees to intercept some rainfall. Install move Gross Pollutant Traps (GPT) and living streams throughout the City.	Low	Contributions from developers, including the State Government, should be pursued to fund additional drainage infrastructure associated with development. Climate change adaptation may become a significant infrastructure issue in the second half of this century.
Climate change	More intensive storm events Sea level rise	Drain outlets may be inundated during high tides and storm surges	Monitor trends Ensure Planning Policy addresses future potential climate impacts.	Low	
Impacts of State planning and transport decisions	Increased traffic on main roads Intensive development in Murdoch Activity Centre	More household and vehicle pollutants at risk of entering drainage system Additional infrastructure required in Murdoch Activity Centre area	Advocate for State and Federal funding to mitigate congestion on State roads	Low	
Mobile communications Remote monitoring and data analytics	Industry best practice will increasingly incorporate use of this technology	Sub-optimal efficiency	Opportunistic incorporation of technology	Medium term IT investment to support monitoring and data-driven asset management	

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Community expectations	Little tolerance for faults or failure	Reputation	High quality, up-to-date, risk-based asset management plans	Low	

Paths and Cycleways

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Population growth Demographic change Infill and densification Household size	Increased demand for pedestrian and cycling infrastructure, with a safe separation from motorized traffic	Incentive to use cars rather than walk or cycle Congestion and increased cycle/pedestrian collisions	Grow and connect footpaths and cycleways	Medium	Contributions from developers, including the State Government, should be pursued to fund additional path and cycleway infrastructure associated with development. Asset utilisation data is needed to ensure transparency and value for money decisions (annualised cost per user).
Climate change	Urban Heat Island effects	Incentive to use cars rather than walk or cycle Demand for more shaded paths	More shade for streets and paths. Review provision of water stations along the path network on a regional basis	Low	
Impacts of State planning and transport decisions	Increased demand for pedestrian and cycling infrastructure serving Murdoch Activity Centre	Increased localized congestion on paths and cycleways	Advocate for State contribution to cycling infrastructure associated with Murdoch Activity Centre	Medium	
Mobile communications Remote monitoring and data analytics	Industry best practice will increasingly incorporate use of this technology Expectation of use of security monitoring technology (CCTV)	Reputational based on unmet expectations	Opportunistic incorporation of technology	Medium term IT investment to support monitoring and data-driven asset management	
Community expectations	Demand on City to provide paths and cycleways in areas of little demand	Special interest pressure distorts asset investment and management decisions	High quality, up-to-date, risk-based asset management plans	Low	

Parks and River Infrastructure

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
Population growth Demographic change Infill and densification Household size	More people using parks Streetscape expectations	Greater human impact on landscape and infrastructure	Review Public Open Space Strategy. Implement Urban Forrest Strategy Monitor and respond as needed. Implement SPARs Report Advocate for planning Policy changes to deliver greater setbacks for green space in new developments.	Low	Contributions from developers, including the State Government, should be pursued to fund additional park infrastructure and maintenance associated with development.
Climate change	Sea level rise, including potential storm surges Reduced annual rainfall High temperatures in playgrounds and picnic areas.	May require additional foreshore protection and rebuilding/relocation of jetties and boat ramps. Greater reliance on irrigation for parks and sporting grounds Reduced use of playgrounds and picnic areas in summer	Monitor and respond as needed Shade playground and picnic areas. Implement more synthethic turf in appropriate locations.	Low	
Electric vehicles	Demand for charging stations in public parking areas.	Reputational if we do not meet demand and financial if we do.	Monitor demand, consider private sector supply.	Low	

Driver	Pressure	Impact or Risk	Response	Requirement for additional new or replacement infrastructure assets, renewal and upgrades	Implications for strategy 2016-2036
On-demand public transport Autonomous vehicles	Little pressure on City	Less demand for parking at parks and sports areas.	None	Low	
Mobile communications Remote monitoring and data analytics	Industry best practice will increasingly incorporate use of this technology Expectation of use of security monitoring technology (CCTV)	Reputational based on unmet expectations	Opportunistic incorporation of technology	Medium term IT investment to support monitoring and data-driven asset management	
Community expectations	Demand for additional infrastructure	Special interest pressure distorts asset investment and management decisions.	High quality, up-to-date, risk-based asset management plans	Low	

Our Response

Key strategies

In responding to the above challenges the City will meet the community's needs and ensure fiscal responsibility through the following broad strategies and key actions.

1. Understanding

Understand the condition, utilisation and capacity of infrastructure to ensure well-targeted asset management and investment plans.

The City has developed and regularly reviews detailed asset management plans for all classes of assets.

The City's goal in managing its infrastructure assets is to meet the required level of service in the most cost effective manner for both present and future customers. The key elements of infrastructure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.

Work is underway on improving the City's knowledge of the condition and capacity of its assets through specific projects including:

- an 'Existing Network Assessment' of the drainage system to assess its capacity to cope with the likely impact of the increasing population of the City;
- a 'Drainage Inventory Update', including CCTV inspections of critical drainage infrastructure and surveys of areas representing different ages of the network; and
- a park infrastructure inventory and condition assessment is being finalised to inform a long term renewal and upgrade program to complement the Parks Infrastructure Asset Management Plan.

These will inform the asset management plans to enable further refinement of the plans and facilitate risk-based and data-based decision-making to optimise value-for-money outcomes for the community as a whole.

2. Alignment

Align strategic planning and infrastructure plans to optimise efficient and effective asset management.

The City has developed Structure Plans for the following precincts:

1. Melville City Centre
2. Canning Bridge Activity Centre
3. Riseley Activity Centre
4. Murdoch Specialised Activity Centre
5. Willagee
6. Melville District Centre (in progress)

The main outcomes of the Structure Plans will be to increase the residential density around transport hubs and increase the commercial and retail activity within existing precincts.

These Structure Plans support the Western Australian Planning Commission's objectives of creating additional dwellings in Melville. However, by focusing the additional growth into specific precincts, rather than allowing ad hoc densification at the request of individual developers, the City is better able to manage the financial, social and environmental risks of rapid infill development.

This includes being able to plan and undertake targeted spending on infrastructure upgrades and renewal to ensure best value for money. Major Projects already underway to support planned intensive development include the suite of Melville City Centre projects, and Structure Plan streetscape projects for the Riseley Centre, Willagee, Canning Bridge and Murdoch Precincts.

The City needs to be agile in assessing the risks and benefits of proactive investment in streetscape and other infrastructure improvements to encourage development in the expectation of offsetting the cost through future rates revenue, or waiting until development momentum has built up before funding supporting public works. The City's risk appetite may vary between precincts and over time.

3. Prudence

Combine prudent, timely investment, renewal and divestment, demand management and technological innovation to ensure service levels and standards match evolving needs.

Specific key priorities for the City are:

- Invest an additional $12.7 million over the next 20 years in a change-room upgrade program.
- Invest an additional $5.6 million over the next 20 years to build new paths and upgrade existing paths to improve connectivity also using funds from the Public Open Space Reserve when available.
- Develop long term programs for major park upgrades and for building upgrades and reconstruction.
- Rationalise community buildings to reduce maintenance and renewal expenditure on vacant and unfit-for-purpose buildings.

Progressively grow the building replacement reserve to ensure sustainability and thereafter maintain a five year rolling average Asset Sustainability Ratio of 100%.

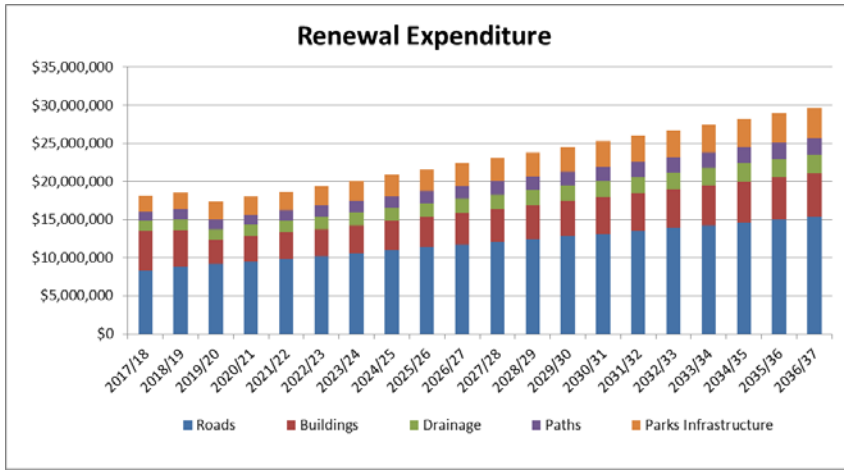
Projected capital expenditure

The capital financial forecasts shown below are based on Asset Management Plans, major project estimates and the 10 Year Long Term Financial Plan.

Renewal expenditure is considered non-discretionary and is fully funded in the 10 year long-term financial plans.

Additional renewal funding will be sought for work required on buildings in 2017/18 and 2018/19.

Upgrades and new construction are considered discretionary and not fully funded at this stage.

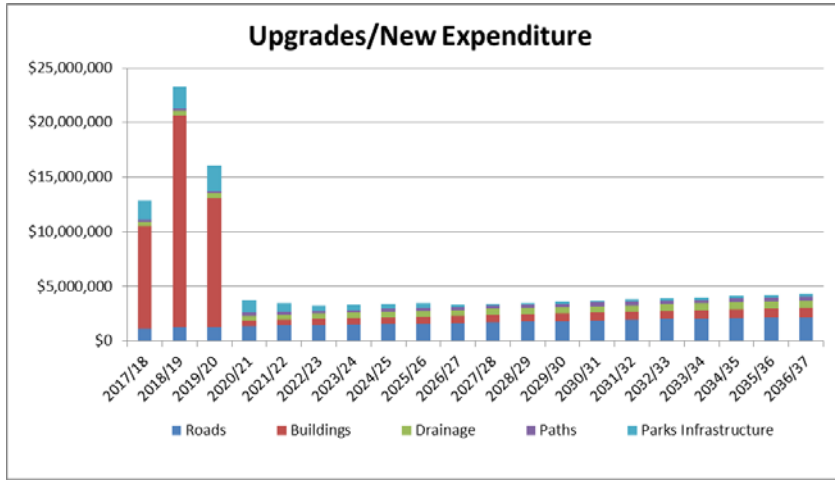


Renewals Expenditure Forecasts

The upgrades and new projects financial forecast show the peak buildings expenditures in the next two years from the Melville City Centre projects, particularly the Cultural Centre.

Note that new and upgrade funding is only clear for the next five years. Funding for new, upgraded and replacement infrastructure after 2022 will be progressively estimated and built into long term financial plans.

For example, future community hubs at Kardinya, Booragoon (Len Shearer Reserve), Willagee and Brentwood (Blue Gum), and the proposed Atwell House restoration are not included in these estimates because funding has not yet been committed. Detailed short term expenditure projections can be found in the City's 10 year Long Term Financial Plans.



Upgrades and New Projects Expenditure Forecasts

The following table provides a summary of the proposed Major Projects total costs over the next 20 years as shown in the graphs above. Further information on the projects is contained in Appendix 4.

`	Total project ($ million)	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2017/19
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Change room upgrades	12.7																				
Bicycle and Pedestrian Links	5.6																				
Melville City Centre road/streetscape improvements	1.9																				
Melville Cultural Centre	37.5																				
A.H Bracks Library Refurbishment	0.8																				
Melville Recreation (relocate Café, move Melville Bridge Club and other works for Leisurefit)	1																				
Riseley Centre Structure Plan																					
Willagee Structure Plan																					
Canning Bridge Structure Plan																					
Murdoch Precinct																					
Deepwater Point Boat Ramp and Jetty	2.3																				
Point Walter Boat Ramp and Jetty																					
Leisurefit Aquatic Assets	3.6																				
Heathcote Cultural Buildings	0.1																				
Wireless Hill Museum	0.2																				
Point Walter Golf Course Club House	0.3																				
Foreshore restoration	3.5																				

Major Projects Total Cost and Timing

Asset Class	Total anticipated funding 2016-36 ($ million)	
	Renewal	New/upgrade
Roads	237.5	33.8
Buildings	89.3	51.7
Drainage	37.7	11.3
Paths and cycleways	34.2	5.6
Park and river infrastructure	60.0	12.2
Total	**458.7**	**114.6**

Demand Management

The City will consider appropriate and effective demand management strategies while remaining sensitive to the needs of the community and particularly more vulnerable residents.

Demand management options will be considered on a case by case basis and may include regulation, fees for infrastructure-related services and/or incentives through the planning system.

Funding Strategies

The City's current practice has been to fund:

- operations costs from rates revenue
- maintenance costs from rates revenue
- renewals from rates revenue, grants, asset reserves
- upgrades and new projects from grants and asset reserves.

The City's borrowing policy includes the conditions for borrowing from internal reserves and external sources. It includes the repayment of loans over the initial half-life of the asset and accrual of the renewal reserve from the second half-life of the asset.

In the past, the City has been reluctant to borrow externally for upgrades and new projects. However the City may need to consider this option to achieve a balanced budget if the timing of major projects is brought forward. Leveraging borrowing capacity may be a practical and prudent option to fund new investment.

Appropriate reserve funding

The City will undertake a detailed review of the expected life, reconstruction and potential upgrades across the building portfolio in order to estimate the future funding required. This will be considered when determining appropriate reserve funding.

The City will develop end-of-life plans for its building assets to ensure accurate planning and budgeting for replacement or rationalisation. A number of underutilised buildings are approaching the end of their useful life and decisions on their future are required. These decisions will be made in the context of the City's Land Asset Strategy.

4. Advocacy

Advocate the timely funding and construction of essential State significant infrastructure by State and Federal Governments to reduce pressure on the City's community and assets.

The City will continue to advocate for the timely construction of transport and service infrastructure to reduce the negative impacts of population increase and congestion on the City.

In particular, the City will maintain its strong support for the completion of the Perth FreightLink project to relieve both heavy vehicle traffic and congestion resulting from the development of the Murdoch Activity Centre, Fiona Stanley Hospital and the Port of Fremantle.

5. Foresight

Show foresight in monitoring emerging issues and community needs to ensure infrastructure decisions are risk-based and reflect current and future expectations over the next 20 years.

The City will continue to engage with the community to ensure that its infrastructure assets are appropriate to the community's needs and reasonable aspirations, and that the performance and services delivered by those assets are acceptable to the users.

The City will also make efforts to manage expectations by ensuring the community understands the need to prioritise its infrastructure spending. Public information about infrastructure asset investment will emphasise the need to achieve the greatest net public benefit while remaining affordable.

Strategic Alignment

The City's Corporate Vision, Mission and Objectives are detailed in "The City of Melville Corporate Plan 2012-2016". The City's Vision is:

> "*Working together, to achieve community wellbeing, for today and tomorrow'*

The City's Corporate Plan has five goals, each incorporating strategies, key actions and objectives that we take to achieve each goal.

Corporate Plan: Asset Management Objectives

The City's Corporate Plan identifies a number of key actions relating to asset management. These are listed under the relevant goals below:

A City for People

- Ensure community facilities and infrastructure are well designed, maintained and meet both community and technical levels of service.
- ***Develop an Infrastructure Strategy to prioritise future infrastructure requirements and development opportunities***

Environmental Responsibility

- Continue to invest in existing infrastructure assets to minimise whole of life costs. Reduce energy consumption by 5% from baseline 2010/11 by June 2015 and consider the installation of alternative energy systems in high energy use locations (the organisation's own use of energy).

Economic Prosperity

- Continue to progress City strategic land projects.

Business Excellence

- Progress long term strategic planning for community facilities infrastructure (indoor and outdoor recreation facilities, passive recreation open space, libraries and museums, and general community facilities). This includes focusing on strengthening community hubs.
- Progress intergenerational financial planning for all community infrastructure assets through the Long Term Financial Plan.
- Review and update asset management plans to ensure all assets remain fit for use, are maintained in accordance with technical and community levels of service and rationalised where appropriate.

Lead by Example

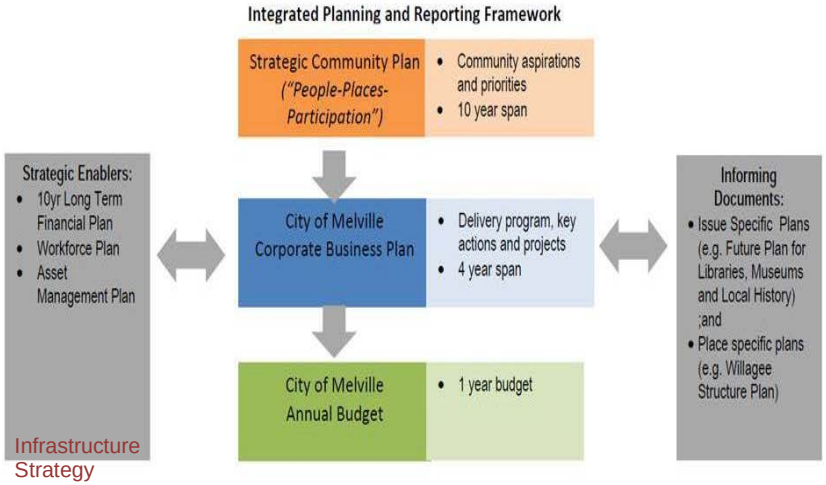
- Ensure intergenerational equity in financial asset planning for current and future communities through the application of Long Term Financial Planning to afford future generations the opportunities of today.

Policy Framework

- Accounting Policy (CP-025)
- Asset Management Policy (CP-031)
- Borrowings and Asset Financing Policy (CP-024)
- Disability Access and Inclusion Policy (CP-084)
- Financial Sustainability Forward Financial Planning and Funding Allocation Policy (CP-008)
- Neighbourhood Development – Community Hub Policy (CP-037)
- Path Policy (CP-033)
- Risk management Policy (CP-099)

Related Strategies

- Land Asset strategy
- Urban Forest strategy



Timeframes

Period	Description
Immediate action 0-5 years	In the short term, this strategy is focused on projects already in development such as those supporting structure plans. Five years is the short-term planning horizon for infrastructure capital works and is understood to a reasonable degree of confidence.
Planning for growth 5-10 years	Given the long lead-time for the delivery of some infrastructure projects, this period may include the delivery of works in the early stages of development and sits within the 10-year period of the Long Term Financial Plan.
Longer term vision 10-20 years	Beyond 10 years that is outside the period of the Long Term Financial Plan, planning is more speculative and undertaken to assist in identifying large future expenditures in time to adjust funding projections.

Appendices

Appendix 1

State of the Assets (today)

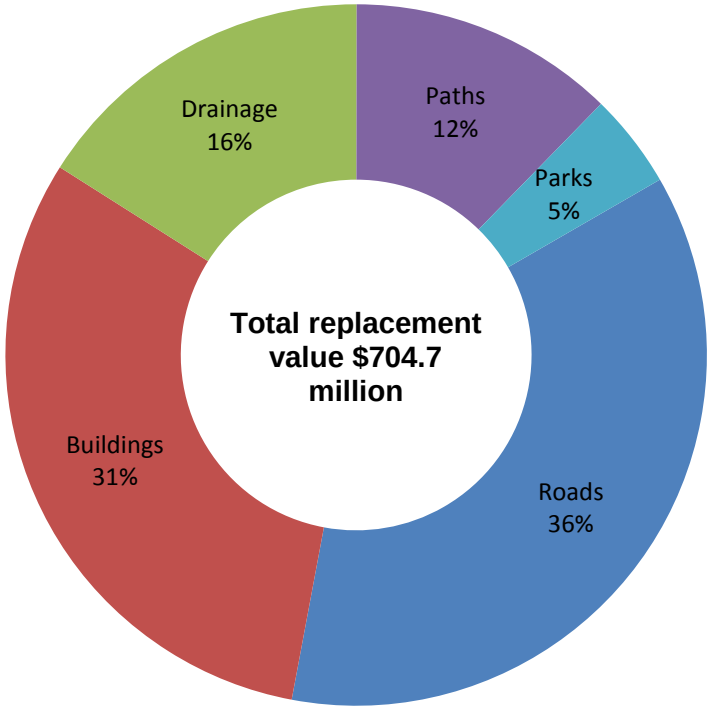
‘Understanding and delivering community and technical levels of service’

This ‘State of the Assets’ report is designed for Executive and Elected Member reporting on asset valuations, asset condition, asset performance, intervention levels, levels of service monitoring and expected lives of infrastructure assets. The intention is to give a high-level view of the infrastructure assets with more information being available in individual asset management plans. For the purposes of this Strategy, only the following infrastructure is included:

- Roads
- Buildings
- Drainage
- Paths
- Parks infrastructure

Infrastructure valuations

Infrastructure is valued using ‘Fair Value’ assessments in accordance with Australian Accounting Standard AASB13. The following chart shows that the majority (95%) of infrastructure value is contained in roads, buildings, drainage and paths that are the primary focus of this strategy. The remaining 5% of replacement value is ‘parks infrastructure’, which includes irrigation, park structures and playgrounds.



Infrastructure by Percentage of Total Value

Asset Type	Replacement Value ($ million)
Roads	255.0
Buildings	220.0
Drainage	112.7
Paths	86.3
Parks infrastructure	30.7
Total	704.7

Replacement Value by Infrastructure class

Expected Asset Lives

Expected asset life is used as the initial mechanism for forecasting renewal of infrastructure and to determine annual depreciation expenses. In reality, infrastructure assets are 'visually' inspected on a regular basis and are renewed just prior to reaching the end of its life. The City uses the following expected asset lives, which are also included in the City's Accounting Policy (CP-025).

Roads	Useful Life (years)
Formation	Not depreciated
Road Kerb	60-70
Pavement Structure	80-100
Road Surface	20-30
Buildings	
Electrical	40-120
Fit-out	15-120
Floor coverings	10-50
Hydraulics	40-160
Mechanical Services	10-120
Roof	40-240
Structure	40-400
Drainage	
All assets	80
Paths	
All assets	10-60
Parks Infrastructure	**Useful Lives**
Furniture	5-30
Playgrounds	10-15
Irrigation	5-30

The useful lives of assets are reviewed as part of the annual valuation process and adjusted when the observed condition indicates that a longer or shorter life than previously anticipated will occur and a change in the degradation rates is needed.

Intervention Levels

Intervention levels establish the moment in an assets' life when renewal works will take place. For the purposes of this strategy, the intervention level for all included assets is condition 4 (on a 1-5 scale as shown in Appendix C). For more complex assets like roads, the concept is the same but relies on a larger number of attributes.

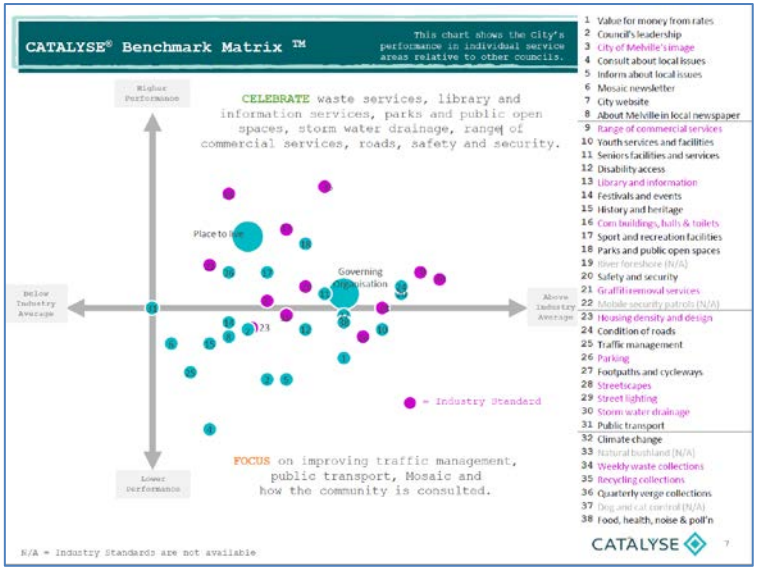
Levels of Service

The City has defined its current infrastructure levels of service in two ways:

1. Community Levels of Service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.
2. Technical Levels of Service support the community service levels to ensure minimum levels of service are met. These technical measures relate to service criteria such as:
   - Quality: Asset condition and facility cleanliness
   - Function: Assets are fit for purpose and accessible
   - Safety: Assets are safe to enter and use

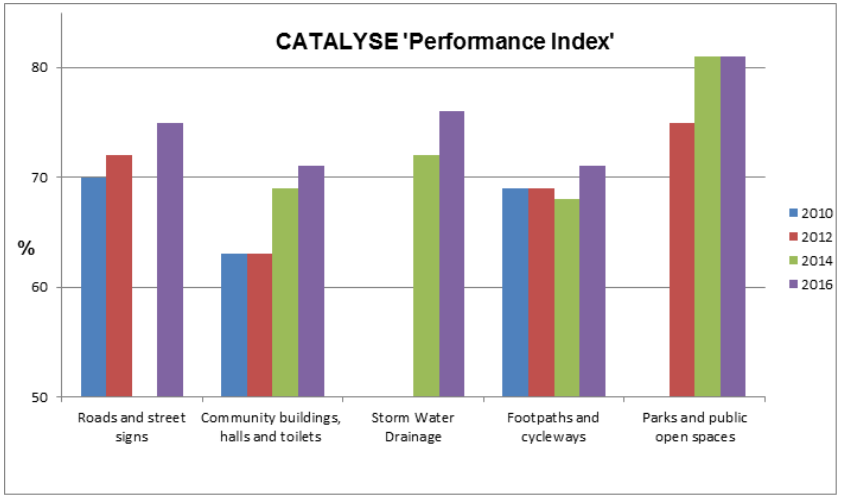
Community Levels of Service

The primary community level of service is customer satisfaction measured by the biannual Catalyse Customer Perception Surveys, which have been undertaken since 2004. The most recent results were released during the development of this report and are summarised below with overall results being shown in the Community Priorities Indicator below.



Community Priorities Indicators – Residents

The Community's Priorities Indicators shown above presents a pleasing result for infrastructure as 'community buildings, halls and toilets and stormwater drainage have both set the industry standard. Individual results for infrastructure items have also been monitored over recent years and all show improvement as are shown in the chart below.



Customer Satisfaction with Infrastructure over time

Customer satisfaction in infrastructure has been trending upwards in recent years, which is another good result.

All infrastructure is currently meeting community levels of service as all results exceed the lower limit of 70%.

Despite meeting desired levels of service, residents identified paths as having a high 'community priority'. Additional information on paths was included as part of the survey and indicated:

> *'residents want more footpaths and cycle ways, and better maintenance of existing infrastructure'*

This was similar to 2014 results and suggests there is a need to review the extent of the path network across the City of Melville. Based on these results, a further assessment will be undertaken to determine the extent of new paths required and the financial impact on the asset class into the future.

Whilst the current condition of the network is acceptable, there is a need to extend the network with new works and increase connectivity and development of a future vision of a path network will be undertaken.

Technical Levels of Service

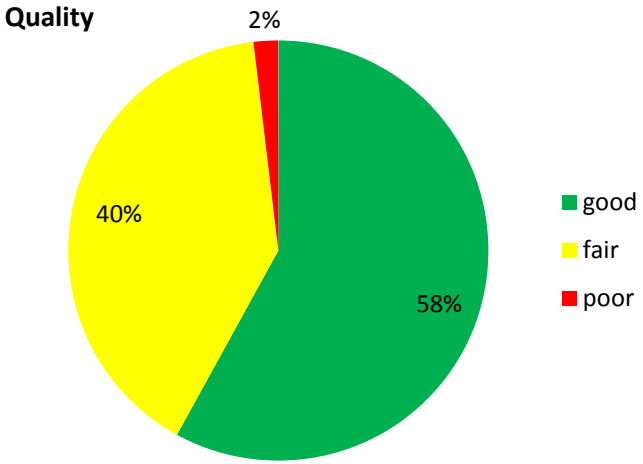
The primary technical level of service is condition (or quality). This is determined through condition assessments (with the exception of drainage). Some infrastructure is now also being assessed for function and capacity and reported in the same style as National State of the Assets reporting.

Other (road related) technical levels of service includes audit, inspection and sweeping schedules, defect response times, incidents reported and engineering specifications for design and construction.

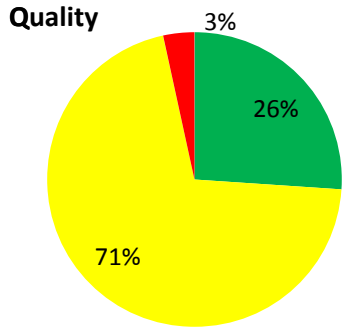
National State of the Assets Reporting 2015 has been developed by the Australian Local Government Association and summarises the outcomes of data provided by 230 or 41% of local governments across Australia.

Of importance to this Infrastructure Strategy is the assessment of the current stock of community infrastructure in terms of condition, function and capacity with associated confidence levels.

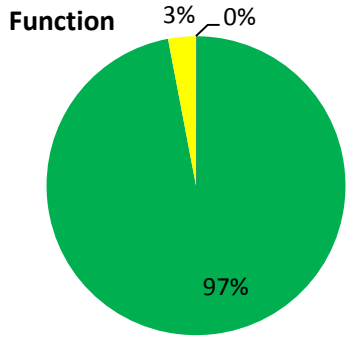
The following graphs provide a summary of the Technical Levels of Service by infrastructure class. The overall result for quality (condition) is shown immediately below.



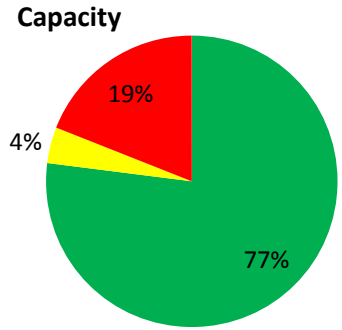
Roads



The condition of the road network portfolio has improved since 2010 when only 92% of the network was in fair or very good condition. This indicates current management practices are proving effective. 97% is currently in fair or very good condition. The National average for this result is 88%. 3% ($7.7 million) is in poor condition and requires renewal

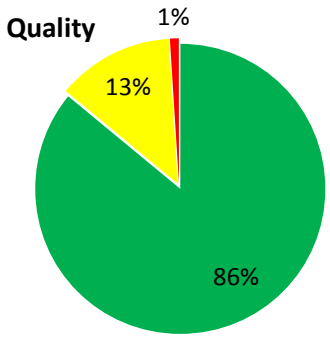


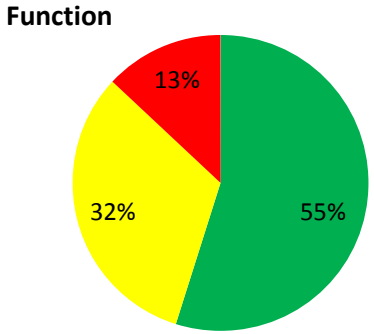
97% of roads have fair or very good function. Poor function refers to under width roads such as Reynolds Road and Marmion Street. The National average for this result is 77%. No roads have poor function.

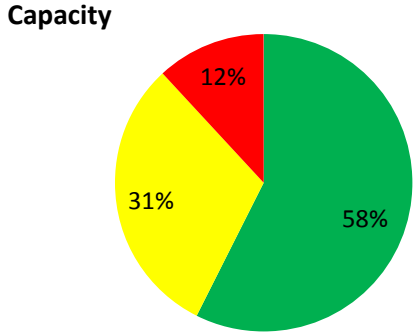


81% of roads have fair or very good capacity. Poor capacity roads are indicative of roads whose usage exceeds that of their original design capacity such as Reynolds Road. There are limited options available to the City to rectify this situation, as there is rarely room available to widen roads. The National average for this result is 78%. 19% of roads ($48.5 million) have poor capacity.

Buildings





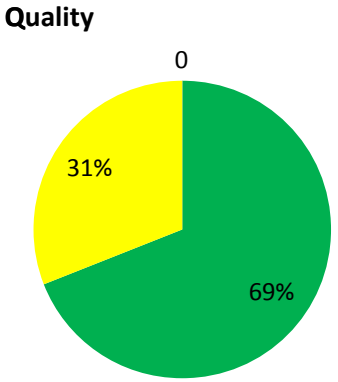


The condition of the building portfolio has improved since 2005 when only 79% of the portfolio was in fair or very good condition. This again indicates current management practices are proving effective. 99% is currently in fair or very good condition. The National average for this result is 89%. 1% of buildings ($2.2 million) are in poor condition.

Only 87% of the building portfolio has fair or very good function and this should be the focus of future upgrade works. The National average for this result is 73%. Buildings with identified poor functionality include public toilets, change rooms, smaller libraries and Bull Creek, and Bluegum community centres. 13% ($28.6 million) of the portfolio has poor function.

Only 88% of the building portfolio has fair or very good capacity. The National average for this result is 72%. 12% ($26.4 million) of the portfolio has poor capacity. Poor capacity relates to buildings that are now too small or large for their usage such as some change rooms and public toilets.

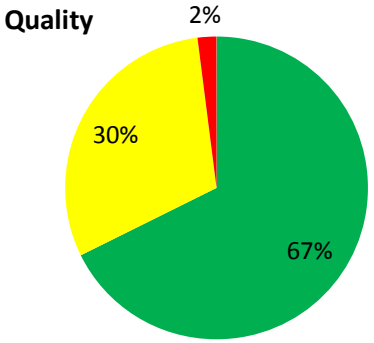
Drainage



The actual condition of the drainage network is largely unknown however, knowing both the age of the components and their expected life, it is assumed that all drainage assets are in an acceptable condition. The National average for this result is 77%.

There is no known significant capacity or flooding issues.

Paths



The condition of the path network has improved considerably since 2009 when only 73% were in fair or very good condition. This is a result of a focus on renewals and only 2% ($1.7 million) is outside the acceptable range.

There are no results for function or capacity.

Parks Infrastructure

Assessment underway.

State of the Asset reporting indicates that all infrastructure is meeting technical levels of service with the exception of 13% of buildings that have either poor function or poor capacity/utilisation.

Infrastructure Scorecard

Ratio	Description	Formula	DLG minimum standard	2014/15	2013/14	Comments
Asset Sustainability Ratio	Extent to which assets are being replaced as they reach the end of their useful lives	Capital renewal and replacement expenditure / depreciation expense	0.9 – 1.1	1.452	1.195	Ratio has improved due to increased capital expenditure on renewals and replacement of existing assets.
Asset Consumption Ratio	Extent to which depreciable assets have been consumed	Depreciated replacement cost of assets / current replacement cost of depreciable assets	0.6 – 0.75	0.683	0.619	Ratio has improved due to the City continuing to invest in its asset renewals.
Asset Renewal Funding Ratio	Ability to fund projected asset renewals / replacements in the future	NPV of planned capital renewal over 10 years / NPV of required capital expenditure over 10 years	0.95	0.998	0.998	Ratio remains unchanged as the City's planned capital renewals and the required capital expenditure for the next 10 years remains unchanged, as highlighted in the Long Term Financial Plan.

Department of Local Government and Communities (DLG) standards achieved on all indicators

Appendix 2

State of the Asset Grading Tables

Condition Grading

Condition grading	Description of condition
1	**Very good:** only planned maintenance required
2	**Good:** minor maintenance required plus planned maintenance
3	**Fair:** significant maintenance required
4	**Poor:** significant renewal/rehabilitation required
5	**Very poor:** physically unsound and/or beyond rehabilitation

Function Grading

Function grading	Description of condition
1	**Very good:** meets program/service delivery needs in a fully efficient and effective manner
2	**Good:** meets program/service delivery needs in an acceptable manner
3	**Fair:** meets most program/service delivery needs and some inefficiencies and ineffectiveness
4	**Poor:** limited ability to meet program/service delivery
5	**Very poor:** is critically deficient, does not meet program/service delivery and is neither efficient nor effective

Capacity Grading

Capacity grading	Description of condition
1	**Very good:** usage corresponds well with design capacity and no operational problems experienced
2	**Good:** usage is within design capacity and occasional operational problems experienced
3	**Fair:** usage is approaching design capacity and/or operational problems occur frequently
4	**Poor:** usage exceeds or is well below design capacity and/or significant operational problems are evident
5	**Very poor:** exceeds design capacity or is little used and/or operational problems are serious and ongoing

Source: IPWEA's NAMS.PLUS online guided pathway for asset management planning

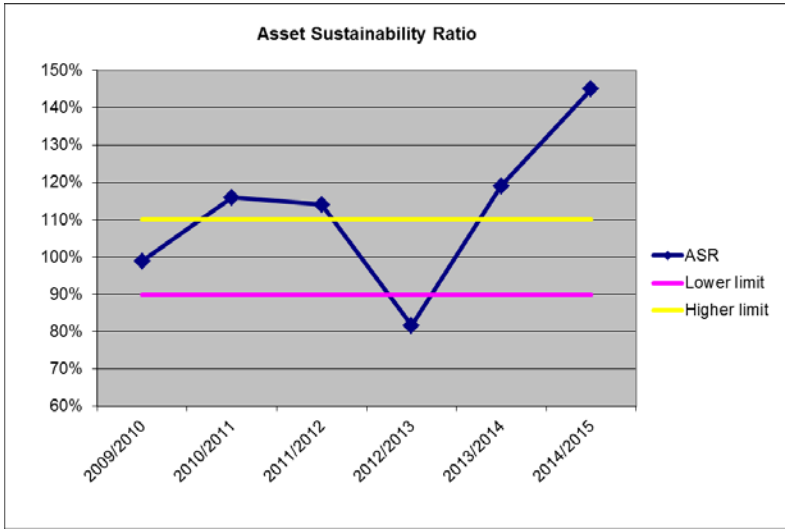
Appendix 3

Asset Sustainability Ratios

Asset Sustainability Ratio (ASR)

The ASR is the ratio of asset renewal expenditure relative to depreciation for the year. It measures whether assets are being replaced at the rate they are wearing out. This considers all assets as a whole and, as such, under expenditure on some assets is compensated by higher expenditure on others. What is important is whether the City is broadly matching depreciation with renewal expenditure.

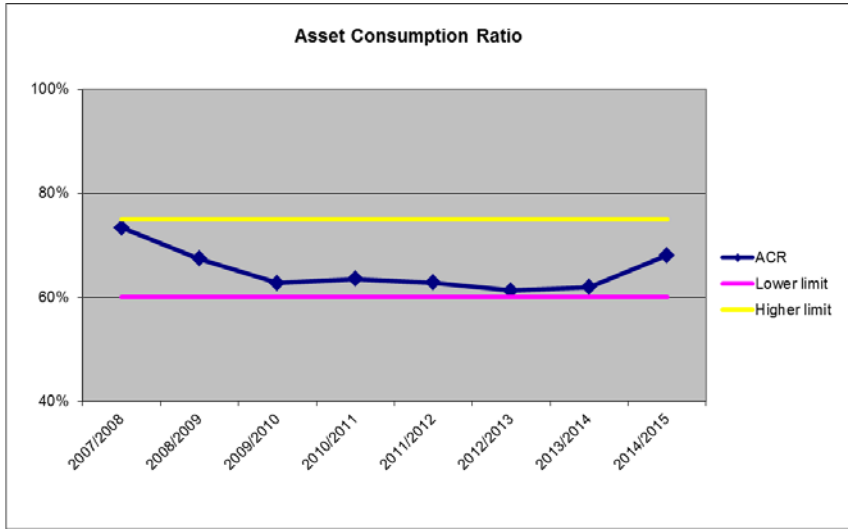
The ASR shows current performance at 145% that is some 35% better than the range of 90% to 100%. It has increased from previous years as the City's proportion of expenditure on existing capital assets has increased when compared to annual depreciation charged.



Asset Consumption Ratio (ACR)

ACR is the average proportion of 'as new condition' left in assets. This ratio shows the depreciated replacement cost (written down value) of the City's depreciable assets relative to their 'as new' (replacement) value.

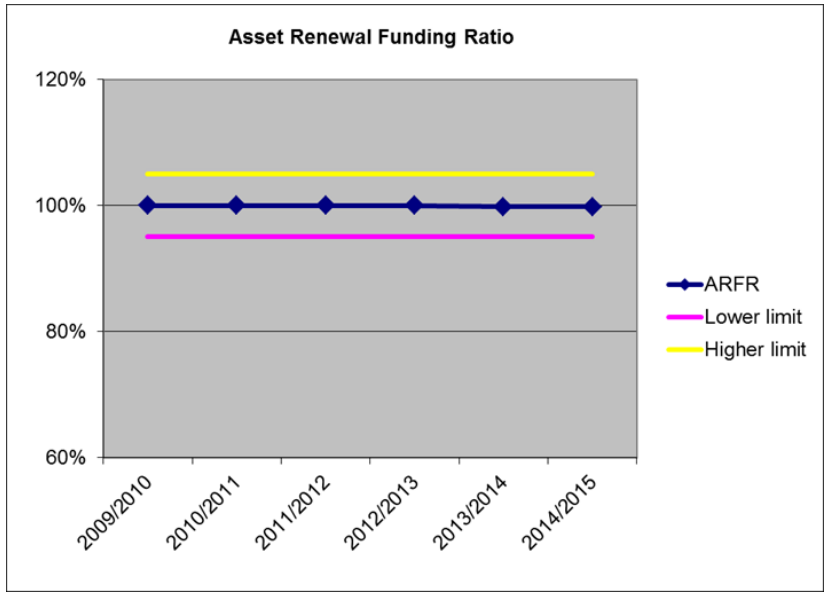
These values are available historically and show that the City has remained within the recommended range for the last 8 years.



Asset Renewal Funding Ratio (ARFR)

The ARFR is the ratio of the net present value (NPV) of asset renewal funding in the 10-year long-term financial plan (LTFP) relative to the NPV of projected renewal expenditure identified in asset management plans for the same period. It indicates the whether the City has the financial capacity to fund asset renewal as required and continue to provide existing levels of service.

The ratio remains unchanged as the City's planned capital renewals and the required capital expenditure for the next 10 years remains unchanged, as highlighted in the Long Term Financial Plan.



All Asset Sustainability Indicators are currently within the required ranges.

Appendix 4

Major Projects (as at July 2016)

The major projects listed below are included in the City of Melville's current Long Term Financial Plan and have been included in the preparation of this Infrastructure Strategy document.

Major project	Project Purpose
Change Room Upgrades	Upgrade existing change rooms to be fit for purpose
Bicycle and Pedestrian Links	Upgrades to path network to improve linkages and increase network.
Melville City Centre road/streetscape improvements	Road and Streetscape improvements required as part of Melville City Centre development.
Melville Cultural Centre	A new Civic and Cultural Centre in Melville City Centre to both replace the existing library and create a community civic hub. Will include; library, community museum, gallery and exhibition space, council chambers, committee rooms and civic reception area, flexible meeting spaces /conference room, City's customer service interface, Melville Volunteer Resource Centre, community information service and JP service, child health clinic, outdoor civic space; and commercial café/restaurant.
A.H Bracks Library Refurbishment	The existing library is in need of an upgrade to shelving, carpets, furniture and layout to meet current needs of users. The library has had no upgrades or renewal since its inception in 1997 (18 years).
Melville Recreation (relocate Café, move Melville Bridge Club and other works for Leisurefit)	Variety of works to improve functionality of the centre e.g. new entrance & relocation of reception, construct café and relocate the City of Melville of Melville Bridge Club to the site. Parking improvements / extension also required.
Structure Plans	Streetscape construction works to facilitate development of the structure plans. • Riseley Centre Structure Plan • Willagee Structure Plan • Canning Bridge Structure Plan • Murdoch Precinct
Boat Ramp and Jetty renewals	Upgrade of existing boat ramps and installation of finger jetties to improve functionality. The existing ramps were constructed in the 1960s and are at the end of their useful life • Deepwater Point Boat Ramp and Jetty • Point Walter Boat Ramp and Jetty
Tompkins Park	Large project includes rationalisation of facilities on the site into a multiuse facility and relocation / reconfiguration of playing fields. Parking improvements
Shirley Strickland	To implement renewal and upgrade plan including building upgrades, sports fields optimisation / reconfiguration and formal verge parking. Also planned are non-sport infrastructure such as walking/fitness paths and nature playground, Shirley Strickland interpretive signage, BBQ, human and dog drinking fountains.
Leisurefit Aquatic Assets	Major maintenance to facilities including spa, leisure pool and 50m pool renewal.
Heathcote Cultural	Upgrade facilities to ensure fit for use following visioning process.

Major project	Project Purpose
Buildings	
Wireless Hill Museum	New toilet and upgrade
Point Walter Golf Course Precinct	Club house works.
Foreshore restoration	Ongoing restoration of foreshore in alignment with Foreshore Restoration Strategy

The projects listed below are consistent with this strategy and are recommended for completion within the timeframe. However, these projects do not yet have committed funding and their costs are not included in the figures provided in this Strategy.

Major Project	Project Purpose
Atwell House and Environmental improvements	Atwell House & Environmental Improvements: Restoration of heritage listed building, Renewal and improvements to the eastern building & environmental improvements to the wet land area including a living stream.
Kardinya Community Hub / Morris Buzacott Reserve	Future community hub..
Len Shearer Concept Plan	Future community hub.
New Library and Community Centre Willagee	Future community hub to realign two separate buildings into one multi-use facility and relocate to have a street frontage.
Blue Gum Community Centre	Future community hub. Demolish and replace with one multi-use facility, reducing the number of stand-alone buildings.

Appendix 5

Reference Materials

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14. dTIMS analysis 2015, Opus, June 2015
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16. Heathcote Budget Submission, 2016/17
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21. Integrated Planning and Reporting, Advisory Standard, Department of Local Government and Communities, 21 December 2015
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30. Melville City Centre Structure Plan, 5 March 2015
31. Murdoch Specialised Activity Centre, 19 July 2013
32. National State of the Assets Report 2015, Australian Local Government Association
33. Neighbourhood Development - Community Hub Policy, Policy No CP-037, 17 November 2015
34. Parks Infrastructure Asset Management Plan (2014-2032)

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42. Project Prioritisation Model, City of Melville
43. Proposed Capital Works Program, Annual Budget: 2016/2017, 26 February 20156
44. Proposed Library Cultural Centre Business Case, City of Melville, 24 June 2015
45. Riseley Activity Centre Structure Plan, 5 March 2015
46. Road Asset Management Plan (2014-2034)
47. Stormwater Management Strategy Review, GHD. June 2015
48. Strategic Provision of Active Reserves 2011-2031, City of Melville, Final Draft Report, April 2011
49. Te Rautaki Hanganga – Infrastructure Strategy – Section 3
50. The City of Melville Corporate Plan 2012-2016
51. Upper Hutt City, Infrastructure Strategy 2015-2014