City of Charles Sturt

Information Technology

Asset Management Plan

Scenario 1 Version 1.1
February 2018
<table>
<thead>
<tr>
<th>Rev No</th>
<th>Date</th>
<th>Revision Details</th>
<th>Author</th>
<th>Reviewer</th>
<th>Approver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 2018</td>
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</tr>
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<td>February 2018</td>
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<td>Executive</td>
<td>Asset Mgt Committee 19/2/2018</td>
</tr>
</tbody>
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1 EXECUTIVE SUMMARY

Context
Council provides an Information Technology (IT) network and services to enable the delivery of services to the community.

IT assets are provided in partnership with Council staff to enable the capture, organisation, sharing and use of information to meet our strategic objectives.

This plan covers the assets that provide Information Technology (IT) services. These assets have a value estimated at $9.1m and include:

- IT Infrastructure
- Computers and Devices
- IT Applications and Software

What does it Cost?
The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) over the 10-year planning period is $6.8m or $0.68m on average per year.

This AM Plan will be reflected in the Long Term Financial Plan (LTFP), with an annual review to ensure that we have adequate funding to meet our long term needs.

What we will do
We will provide an IT network and services to underpin the successful delivery of Council's strategic objectives by:

- Demonstrating leadership in gaining insights from our information to better respond to customer, community and business needs.
- Embracing the latest proven technology and leveraging best practice tools, governance models and methodologies to deliver ‘fit for purpose’ innovative solutions and transition to a hybrid cloud IT environment.
- Exercising sound commercial leadership and proactively managing the IT environment to ensure high reliability, security, performance and service levels.
- Developing strategic sourcing and workforce plans to improve service delivery, facilitate innovation, and achieve sustainable and cost-effective solutions.

Managing the Risks
The main risk consequences are insufficient resources (funding, equipment, personnel) to:

- Meet the increasing expectations of IT by Council staff and the community, to deliver 24/7 services and ease of interaction.
- Renew or upgrade IT assets in accordance with the estimated useful life expiration or poor condition assessment.

We will endeavour to manage these risks within available funding by:

- Collaborating with the local government sector, other levels of government and stakeholders for the sustainable delivery of IT services.
- Continuing to monitor and prioritise the upgrade program based on demand, risk and opportunities for strategic alliances.
- Keeping IT users informed about evolving strategies and plans, and providing associated equipment and tools to ensure key business goals are met.
- Maintaining IT assets at a secure and reliable level throughout their lifecycle.
- Providing associated equipment and tools to ensure that key business goals are met.

Confidence Levels
This AM Plan is based on an “Uncertain” level of confidence in the data behind the financial forecasts. Our confidence level will increase as we act upon our improvement plan, execute the Information Services (IS) Strategic Plan, and refine the AM Plan accordingly.

The Next Steps
The next steps resulting from this AM Plan are:

- Monitor performance and customer satisfaction surveys, to better understand IT asset performance and service delivery.
- Continue to implement alternative or latest technology options into renewal projects.
- Continuous improvement of IT asset management practices, processes and procedures.
- Develop our IT strategies and roadmaps to refine the asset management plan and increase our confidence level in the data behind the financial forecasts.
2. INTRODUCTION

2.1 Background

This AM Plan aims to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements and to outline the funding needed to provide the required levels of service.

The expectations associated with IT levels of service held by Council staff and the community continue to increase. Historically, IT investment has been opportunistic and driven by demand, resulting in inadequate resources to maintain and upgrade IT assets.

A strategic and planned approach to IT investment is being taken and is formalised by this first AM Plan, to ensure that the Council can anticipate future opportunities and respond to current needs such as delivering digital services and Smart City infrastructure.

The asset management plan is to be read with the organisation’s Asset Management Policy and Asset Management Strategy as these have been developed along with other key planning documents for the City of Charles Sturt:

- Community Plan 2016-2027 – Charles Sturt – a leading, liveable City
- Corporate Plan 2016-2020 – Charles Sturt – a leading, liveable City
- Asset Accounting Policy
- Asset Fund Policy
- Information Services (IS) Strategic Plan 2018-2022
- Business Continuity Plan
- IT Disaster Recovery Plan

The IT assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide the IT network and services.

Table 2.1: Assets covered by this Plan

<table>
<thead>
<tr>
<th>Asset Category</th>
<th>Replacement Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT Infrastructure</strong></td>
<td><strong>$2.2M</strong></td>
</tr>
<tr>
<td>Generators and UPS</td>
<td>$175,000</td>
</tr>
<tr>
<td>Infrastructure Network (including Telephony, Data and Voice Communications)</td>
<td>$870,600</td>
</tr>
<tr>
<td>Server Room</td>
<td>$152,250</td>
</tr>
<tr>
<td>Servers and Storage Arrays (including Backup Tapes and Units)</td>
<td>$524,250</td>
</tr>
<tr>
<td>Structured Cabling Systems</td>
<td>$546,250</td>
</tr>
<tr>
<td><strong>Computers and Devices</strong></td>
<td><strong>$2.2M</strong></td>
</tr>
<tr>
<td>Audio-visual Equipment</td>
<td>$250,000</td>
</tr>
<tr>
<td>Desk Phones</td>
<td>$150,000</td>
</tr>
<tr>
<td>Desktops and Laptops</td>
<td>$675,500</td>
</tr>
<tr>
<td>Printers, Scanners and Plotters</td>
<td>$380,500</td>
</tr>
<tr>
<td>Mobile Phones and Tablets</td>
<td>$782,500</td>
</tr>
<tr>
<td><strong>IT Applications and Software</strong></td>
<td><strong>$4.7M</strong></td>
</tr>
<tr>
<td>Desktop Productivity Software</td>
<td>$870,000</td>
</tr>
<tr>
<td>Enterprise Applications</td>
<td>$2,404,400</td>
</tr>
<tr>
<td>Specialised Applications</td>
<td>$1,045,000</td>
</tr>
<tr>
<td>IT Service Management Tools</td>
<td>$423,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$9.1M</strong></td>
</tr>
</tbody>
</table>
2.2 Goals and Objectives of Asset Ownership

Our goal in managing assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Linking to a long-term financial plan which identifies required, affordable expenditure and how it will be allocated.

Other references to the benefits, fundamentals principles and objectives of asset management are:
International Infrastructure Management Manual 2015
- ISO 55000

2.3 Core and Advanced Asset Management

This AM Plan is prepared as a ‘core’ asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual. Core asset management is a ‘top down’ approach where analysis is applied at the system or network level. An ‘advanced’ asset management approach uses a ‘bottom up’ approach for gathering detailed asset information for individual assets.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

The Council has not carried out any targeted research on customer expectations with regards to preparing this particular AM Plan. However in 2017, Council released the results of an independent, statistically reliable community survey to capture residents’ and business owners’ satisfaction with aspects of services and facilities provided by Council; and to test the importance of specific aspects of service provided to the community. Satisfaction with Council’s overall performance, taking all aspects of Council’s strategic direction into account, was moderate to high.

The Council uses this information in developing its strategies and in allocation of resources in the budget.

3.2 Strategic and Corporate Goals

This AM Plan is prepared under the direction of Council’s Community and Corporate Plans. Relevant organisational goals and objectives and how these are addressed in this AM Plan are outlined in Table 3.2.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objective</th>
<th>How Goal and Objectives are addressed in AM Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our Liveability</td>
<td>Council assets and infrastructure are developed and well maintained on a strategic and equitable basis.</td>
<td>• Planned maintenance/renewal</td>
</tr>
<tr>
<td>Our Leadership</td>
<td>Adaptive and sustainable management of the Council’s finances.</td>
<td>• Undertake planned maintenance programs to ensure assets achieve their useful life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develop and regularly review the Long Term Financial Plan to ensure long term financial sustainability.</td>
</tr>
</tbody>
</table>

1 Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2 | 13
2 ISO 55000 Overview, principles and terminology
3 IPWEA, 2015, IIMM.
### 3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. These include:

**Table 3.3: Legislative Requirements**

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Australian Local Government Act 1999</td>
<td>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.</td>
</tr>
<tr>
<td>South Australian State Records Act 1997</td>
<td>To ensure the City of Charles Sturt records and stores all relevant information as set out by the State Government of SA.</td>
</tr>
<tr>
<td>Work Health and Safety Act 2011</td>
<td>To take a constructive role in promoting improvements in work health and safety practices whilst assisting in the preservation of public health and safety in all undertakings of the organisation.</td>
</tr>
<tr>
<td>Freedom of Information Act 1991</td>
<td>Sets out the framework for processing requests for Council information and records.</td>
</tr>
</tbody>
</table>

### 3.4 Customer Levels of Service

The current internal customer service levels are detailed in Tables 3.4. Table 3.4 shows the expected levels of service based on resource levels in the current LTFP.

**Table 3.4: Current Service Levels**

<table>
<thead>
<tr>
<th>Responsiveness</th>
<th>Definition</th>
<th>Target response time</th>
<th>Target for completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Priority</td>
<td>System down Large scale issue Key systems ie mail, telephone</td>
<td>1 hour</td>
<td>8 hours</td>
</tr>
<tr>
<td>Medium Priority</td>
<td>Create new containers Operational difficulties Printing issues Individual phone issues New logon</td>
<td>8 hours</td>
<td>2 days 3 days</td>
</tr>
<tr>
<td>Low Priority</td>
<td>Software Installation PC moves Map production</td>
<td>2 days</td>
<td>8 days</td>
</tr>
<tr>
<td>Project</td>
<td>Large scale changes</td>
<td>3 days</td>
<td>As per project schedule</td>
</tr>
</tbody>
</table>
4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, consumer preferences and expectations, technological changes, economic factors, and environmental awareness.

The present position and projections for demand drivers that may impact future service delivery and use of assets were identified and are documented in Table 4.3.

<table>
<thead>
<tr>
<th>Demand drivers</th>
<th>Present position</th>
<th>Projection</th>
<th>Impact on services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased end users and community preferences and expectations</td>
<td>Current resource is at capacity.</td>
<td>Increased staff and community users due to population growth and augmenting services, and expectations of 24/7 customer service channels and improved customer experience.</td>
<td>Increased need for IT assets and resources.</td>
</tr>
<tr>
<td>Demographics</td>
<td>Reactive approach to any changes in demographics and population growth.</td>
<td>A significant increase in demographic impacts due to population growth, aging population with increasing instance of chronic illness and rising levels of multiculturalism.</td>
<td>Changing customer demands resulting on increased needs for services in community centres and libraries and increased access to online services (capability and capacity).</td>
</tr>
<tr>
<td>Environmental</td>
<td>Implementation of environmentally friendly equipment when renewal is due.</td>
<td>Reduce and measure carbon footprint.</td>
<td>Possibly increased cost of hardware and electricity. New software to assist in tracking electricity consumption.</td>
</tr>
<tr>
<td>Technology trends</td>
<td>Major emerging technology trends changing the face of IT. Four main streams include big data, mobility, Internet of things, smart cities, social and cloud.</td>
<td>Big data, mobility, social and cloud will continue impacting IT services at a rate that is difficult to keep up with. Asset replacement programs need to be proactive to take advantage of emerging trends.</td>
<td>Necessity to provide agile assets readily adaptable to emerging technology trends.</td>
</tr>
</tbody>
</table>

4.4 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Our IT strategies will balance a due diligence approach through the development of business cases at each stage, which examine the cost benefit of various options and offer the flexibility to adapt to emerging trends and collaborative opportunities.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this AM Plan.
Table 4.4: Demand Management Plan Summary

<table>
<thead>
<tr>
<th>Demand Driver</th>
<th>Impact on Services</th>
<th>Demand Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Risk of IT not being fit for purpose and unable to deliver services adequately.</td>
<td>IS will aim to realise the following outcomes when planning for demand management:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proactively partner with colleagues to provide systems and solutions that enable the delivery of appropriate services to the community.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure that staff have the tools to enable efficiency and productivity in the delivery of services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Continue to move towards best practice in relation to technology, processes and practices.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Explore new and emerging trends and technologies to deliver strategic advantage, promoting innovation and further enhancement of Council’s service provision.</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>Inability to provide necessary services.</td>
<td>• Ensure that services provided are driving the demand for our IT assets.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Review business as usual activities to identify and prioritise opportunities to streamline and rationalise processes and practices, and increase value to the community.</td>
</tr>
<tr>
<td>Financial</td>
<td>Financial shortfall will impact on services provided</td>
<td>• Develop long term financial plans to ensure financial sustainability and transparency.</td>
</tr>
</tbody>
</table>

4.5 Asset Programs to meet Demand

The IS Strategic Plan underpins the Community and Corporate Plans, by outlining the key change initiatives (programs and projects) that the IS Portfolio will lead and participate in over the next four years. The Executive Summary of the IS Strategic Plan is included in Appendix D.

Key change initiatives included are:

- A Digital Strategy and Roadmap provide digital citizen-centric services and enable staff to work anywhere anytime to deliver effective and efficient services.
- An IT Application and Strategy Roadmap to guide the prioritisation, selection, implementation and renewal of our IT applications to meet organisational and community demand.
- An Information Management Program to provide a holistic view of customer interactions for stronger relationships, and an open data approach to make Council data available to businesses and the community.
- An IT Infrastructure Strategy and Roadmap to support Smart City initiatives and facilitate the transition to a hybrid cloud IT environment.

The initiatives listed above are anticipated to identify the need for new assets, at which time this AM Plan will be reviewed and updated. Acquiring new assets will commit ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required - however the investment in new assets for citizen benefit and business process enhancement may be offset by operational efficiencies and cost savings.
5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Council plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while managing life cycle costs.

The assets covered by this asset management plan are shown in Table 2.1. This data covers currently owned and leased assets. It does not cover IT assets that are located in Charles Sturt facilities but are not owned or leased by the City. Examples of assets like this include Telstra’s NTU’s.

These assets still require ongoing maintenance and replacement at end of life but have not been specifically addressed in this version of the AM Plan. It is anticipated that this will be an element of consideration in future revisions.

IT assets have in general a very short estimated useful life. As such many assets and components will require multiple replacement time frames over the life of this plan. Due to the relative short life of IS assets, asset condition is not always a key driver for renewal. Technology advances and service level requirements are often the primary drivers for renewal.

Assets are generally provided to meet design standards where these are available. However several service performance deficiencies were identified during the development of the IS Strategic Plan and a review of the technical architecture environment, and are detailed in Table 5.1.2.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Service Deficiency</th>
</tr>
</thead>
</table>
| IT Infrastructure    | • Currently a typical on premise IT environment including servers, storage and communications systems which interconnect the various Council sites and provide connection to the Internet. There is an offsite disaster recovery environment with limited recovery capabilities.  
• Increasingly more systems, services and devices will be internet connected and the Smart City initiatives which are currently in their infancy will drive some of this change.  
• In order to respond effectively to these changes, there is a need to plan for and deliver IT infrastructure and platforms in ways that will support the future technology landscape – by using industry standards, adopting technology which is regarded as best practice, and transitioning to a hybrid cloud environment. |
| Computers and Devices| • Tablets are no longer effectively supporting the mobile worker in an increasingly digital workplace, and generally require users to manage two devices – a desktop computer and a tablet.  
• Core business application vendors are moving to cloud-friendly applications which typically operate from a web browser. The nature of these changes allows users to be highly mobile and utilise applications across various types of devices, including ‘2 in 1’ devices which essentially serve the dual purpose of a desktop computer and tablet. |
| IT Applications and Software | • In addition to enterprise applications, there are currently a high number of specialised applications, integration points, custom solutions and scripts with varying levels of support and maintenance.  
• There is a need for the preparation of annual upgrade plans and the development of strategic roadmaps for IT applications, to proactively guide their maintenance, renewal and investment. |
5.2 Maintenance Plan

Maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels. Routine maintenance is the regular ongoing work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. IT maintenance work is carried out in accordance with the following standards and specifications.

- IT Infrastructure – as per manufacturer warranty conditions
- Computers and Devices – as per manufacturer warranty conditions
- IT Applications and Software – as per license maintenance conditions
- Council standards and specifications

We regularly update our IT Applications and Software to latest versions as they become available. In relation to IT Infrastructure, we use monitoring tools to ensure that the equipment is being utilised efficiently.

Maintenance expenditure levels are currently considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that they will result in a lesser level of service, the service consequences and service risks have been identified and highlighted in this AM Plan and service risks considered in the Risk Management Plan.

Maintenance activities for IT assets, and annual IT Applications and Software license maintenance are funded through the annual recurrent budget. Each time we acquire a new asset, consideration must be given to the impact on the recurrent budget of maintenance activities and annual license maintenance, to ensure that we can fund whilst maintaining reasonable rate increases.

5.3 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset’s design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an upgrade/expansion or new work expenditure resulting in additional future maintenance costs.

For this AM Plan, future funding requirements are based on Method 1 - using Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year. Due to the relatively short life span of IT assets, many assets will be renewed multiple times over the life of this plan.

The annual review of this AM Plan will be vital, to ensure that IT assets are renewed where deemed appropriate in alignment with strategic imperatives and to leverage technology advances. There may be an opportunity to smooth the annual expenditure by deferring renewal and replacement where appropriate, to spread the expenditure over two financial years.

Renewals and replacement expenditure in the capital works program will be accommodated in the long term financial plan. This is further discussed in Section 7.

Projected future renewal and replacement expenditures are shown in Figure 5. However this excludes the renewal of IT Applications and Software, which will be transitioned to cloud services as the opportunity arises - impacting the annual recurrent budget, rather than capital expenditure.

Note that all amounts are shown in current (real) dollars. The projected capital renewal and replacement program is shown in Appendix B.
5.4 Creation/Acquisition/Upgrade Plan

New works are those that create a new asset that did not previously exist, or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from technology, growth, social or environmental needs. Assets may also be acquired at no cost. These additional assets are considered in Section 4.4.

New assets and upgrade/expansion of existing assets are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes.

Due to the nature of IT assets, only planned and specific assets will be budgeted for. Most other upgrades will be accommodated by renewals.

The projected upgrade/new asset expenditures which are presently known are summarised in Figure 6. Figure Values are in current (real) dollars.

The projected upgrade/new capital works program is shown in Appendix B.
The initiatives identified in the IS Strategic Plan are anticipated to identify the need for further upgrades / new assets, at which time this AM Plan will be reviewed and updated. Budget bids will be submitted for new assets in alignment with IT strategies and be assessed by Council, giving regard to the benefit rating, risk management criteria and community consultation.

Expenditure on new assets and services in the capital works program will be accommodated in the LTFP to the extent of Council’s support for the strategic initiatives.

Acquiring new assets will commit ongoing maintenance and renewal costs for the period that the service provided from the assets is required. However, the investment in new assets for citizen benefit and business process enhancement may be offset by operational efficiencies and cost savings.

6. RISK MANAGEMENT

The City of Charles Sturt is committed to applying risk management principles at both corporate and community levels to enable its strategic objectives to be achieved. Risk management involves adopting systematic procedures and practices to identify, evaluate, treat and monitor risk in all Council activities so that the risks associated with these activities are controlled and tolerable.

Risk management at the City of Charles Sturt is as much about identifying opportunities as avoiding or mitigating losses. It is an integral part of the continuous improvement process embraced by Council.

Risks, opportunities and associated controls are detailed throughout this document.

City of Charles Sturt’s organisational risks are reported to the Audit Committee. The high risks that relate to the IT AM Plan are extracted in Appendix C.

The table below lists the specific risks that were identified when developing the IS Strategic Plan and this AM Plan.
<table>
<thead>
<tr>
<th>Service or Asset at Risk</th>
<th>What can Happen</th>
<th>Risk Rating (VH, H)</th>
<th>Risk Treatment Plan</th>
<th>Residual Risk *</th>
<th>Treatment Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security of Council and citizen information, particularly with the increase in connected devices and Smart City technologies</td>
<td>Loss, misuse, or disclosure of information assets – resulting in threats, vulnerabilities, sabotage, fraud, inaccessibility</td>
<td>H</td>
<td>Undertake a high level security review and develop a plan to support continuous improvement and promote IT security awareness (allocated in 2017-2018 recurrent budget) Bring forward the replacement of firewalls and components (Included in 2019-2020 capital renewals)</td>
<td>M</td>
<td>$30,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$120,000</td>
</tr>
</tbody>
</table>

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

### 6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences. By identifying critical assets and failure modes investigative activities, condition inspection programs, maintenance and capital expenditure plans can be targeted at the critical areas.

The identification of critical business functions has been made within the Council’s Business Continuity Plan (BCP), which details the operational response and recovery from a critical incident. The IT Disaster Recovery Plan has been aligned with the BCP, and identifies the related critical IT assets and the approach to recovery of services.
7. **FINANCIAL SUMMARY**

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

7.1 **Financial Statements and Projections**

**Asset valuations**

The best available estimate of the value of assets included in this Asset Management Plan are shown below. IT equipment is carried at cost, less any accumulated depreciation and impairment losses. Assets are valued at actual replacement cost where known or estimated renewal cost based on fair value by internal estimate.

<table>
<thead>
<tr>
<th>Gross Replacement Cost</th>
<th>$9.1M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciable Amount</td>
<td>$7.8M</td>
</tr>
<tr>
<td>Depreciated Replacement Cost</td>
<td>$1.8M</td>
</tr>
<tr>
<td>Annual Depreciation Expense</td>
<td>$1.3M</td>
</tr>
</tbody>
</table>

Various IT Applications and Software (particularly enterprise applications) were implemented over 10 years ago and on this basis are now fully depreciated.

7.2 **Funding Strategy**

Funding for assets is provided from the budget and long term financial plan.

The financial strategy of the entity determines how funding will be provided, whereas the asset management plan communicates how and when this will be spent, along with the service and risk consequences of differing options.

To ensure that we maximise the value of our investment we will review the current funding model mechanisms for hardware, which in recent times has favoured pursuing capital investment over leasing options.

In future the following factors will be considered when determining the most cost effective solution, having regard to the:

- Financing options
- Ongoing recurrent budget implications
- Flexibility/agility of the solution (eg. cloud) and ability to respond to emerging markets

7.3 **Valuation Forecasts**

Asset values are forecast to increase as additional assets are added to service.

Additional assets will generally add to maintenance needs in the longer term, as well as the need for future renewal. Additional assets will also add to future depreciation forecasts.

The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets.

---

4 Also reported as Written Down Value, Carrying or Net Book Value.
7.4 Key Assumptions Made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

<table>
<thead>
<tr>
<th>Key Assumptions</th>
<th>Risks of Change to Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast on “today’s” dollars</td>
<td>If CPI or escalation factor for change in inflation varies significantly, forecast will be inaccurate</td>
</tr>
<tr>
<td>Staffing needs are resourced adequately. External costs for implementation or replacement equipment have been included in the replacement costs where relevant or identifiable that current resourcing is inadequate.</td>
<td>Unable to resource planned asset management activities</td>
</tr>
<tr>
<td>No significant changes in legislation and service levels</td>
<td>Changes may demand unplanned/unbudgeted asset management activities</td>
</tr>
<tr>
<td>Estimates are based on best currently available information</td>
<td>Subject to material changes due to the fast-paced nature of technology advancements</td>
</tr>
</tbody>
</table>

7.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale in accordance with Table 7.5.

<table>
<thead>
<tr>
<th>Confidence Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Highly reliable</td>
<td>Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%</td>
</tr>
<tr>
<td>B Reliable</td>
<td>Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%</td>
</tr>
<tr>
<td>C Uncertain</td>
<td>Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%</td>
</tr>
<tr>
<td>D Very Uncertain</td>
<td>Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%</td>
</tr>
<tr>
<td>E Unknown</td>
<td>None or very little data held.</td>
</tr>
</tbody>
</table>

The estimated confidence level for and reliability of data used in this AM Plan is considered to be Uncertain. Our confidence level will increase as we act upon our improvement plan, undertake the initiatives identified in the IS Strategic Plan, and review and update the AM Plan accordingly.

---

5 IPWEA, 2015, IIMM, Table 2.4.6, p 271.
8. PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices

The Council implemented the Technology One Finance One ERP module during 2002 and 2003. The system has been capturing all operating and capital expenses since that time. In the absence of a job costing application, the chart of accounts was developed to track all of the required information of a project as identified at the time by the project managers.

The capital works chart structure identifies the project, subproject, object and activity codes, and contained within the project and subproject numbers are codes to identify the manager, asset category, new/renew/upgrade and the project objective. The project and subproject define the location and objective of the project, the object code identifies the inputs into it, and the activity code identifies the nature of work being carried out.

The budgets for all our projects are also stored in Finance One at the project and subproject level. Reports are generated on a monthly basis from Finance One comparing actual to estimate. Once works have been completed, the subproject numbers are closed off, and the balance of the subproject is either capitalised into the Finance One Fixed Asset Register, or into a current Asset Management Services Fixed Asset Register, provided it meets the Threshold of Materiality.

The master asset data sits within the Technology One works and assets system, however IT assets are currently not captured within this system. The Technology One core enterprise suite includes the existing Financials module resulting in a consolidated asset register.

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.1.

<table>
<thead>
<tr>
<th>Task No</th>
<th>Task</th>
<th>Responsibility</th>
<th>Resources Required</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Council endorsement of this plan</td>
<td>GM Corporate Services</td>
<td>Manager Information Services</td>
<td>Feb 2018</td>
</tr>
<tr>
<td>2</td>
<td>Monitor performance and service levels to better understand asset performance and service delivery.</td>
<td>Manager Information Services</td>
<td>IS Portfolio</td>
<td>Ongoing</td>
</tr>
<tr>
<td>3</td>
<td>Continue to implement alternative or latest technology options into renewal projects where appropriate.</td>
<td>Manager Information Services</td>
<td>IS Portfolio</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4</td>
<td>Continuous improvement of IT asset management practices, processes and procedures – including entry of IT assets into the Works and Assets system, if suitable.</td>
<td>Manager Information Services</td>
<td>IS Portfolio</td>
<td>Ongoing</td>
</tr>
<tr>
<td>5</td>
<td>Develop our IT strategies and roadmaps to refine the asset management plan, and adjust the long term financial plan accordingly.</td>
<td>Manager Information Services</td>
<td>Manager Financial Services</td>
<td>Annually</td>
</tr>
</tbody>
</table>

ISO 55000 Refers to this the Asset Management System

City of Charles Sturt- INFORMATION TECHNOLOGY ASSET MANAGEMENT PLAN
8.3 Monitoring and Review Procedures

This AM Plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM Plan will be reviewed annually and revised when required to ensure it represents the current service levels, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the Council’s LTFP.

The Local Government Act 1999 sets out the requirements for the organisation in relation to preparing and reviewing its Asset Management Plans.

Chapter 8 – Administrative and financial accountability Part 1 Strategic management plans

'(1a) A Council must, in conjunction with the plans required under subsection (1), develop and adopt –

a) A long term financial plan for a period of at least 10 years and

b) An infrastructure and asset management plan, relating to the management and development of infrastructure and major assets by the council for a period of at least 10 years.

(4) A council may review its strategic plans under this section at any time but must –

(a) Undertake a review of

(i) Its long term financial plan; and

(ii) Any other elements of its strategic management plans prescribed by regulations for the purposes of this paragraph,

As soon as practicable after adopting the council’s annual business plans for a particular financial year and

(b) In an event, undertake a comprehensive review of its strategic management plans within 2 years after each general election cycle.’

Should the annual review cycle identify material changes that either have a significant financial or service delivery impact then the document will be resubmitted to the Asset Management Committee for review and update.

A comprehensive review of the AM Plan will be conducted every four years, within two years of each general election cycle as prescribed in the LG Act 1999 unless required before that time.

8.4 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into the long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and corporate structures take into account the ‘global’ works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the IS Strategic Plan and associated plans.
- The Asset Renewal Funding Ratio achieving the target of greater than 80%.

9. REFERENCES


10. APPENDICES

Appendix A Projected Capital Renewal and Replacement Works Program
Appendix B Projected Capital Upgrade/New Works Program
Appendix C Information Services – High Risks
Appendix D Executive Summary of IS Strategic Plan 2018-2022


IPWEA, 2012 LTPF Practice Note 6 PN Long Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney

TechnologyOne - FinanceOne, Corporate Financial System
City of Charles Sturt, Community Plan 2013-2027
City of Charles Sturt, Corporate Plan 2013-2017
City of Charles Sturt, Asset Accounting Policy
City of Charles Sturt, Asset Fund Policy
## Appendix A: Projected Capital Renewal and Replacement Works Program

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers and Devices</td>
<td>Audio-visual Equipment</td>
<td>4 years</td>
<td>26</td>
<td>160</td>
<td>60</td>
<td>30</td>
<td>160</td>
<td>60</td>
<td>30</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desk Phones</td>
<td>9 years</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desktops and Laptops</td>
<td>3-6 years</td>
<td>160</td>
<td>175</td>
<td>320</td>
<td>117</td>
<td>123</td>
<td>305</td>
<td>80</td>
<td>181</td>
<td>79</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobile Phones and Tablets</td>
<td>3-6 years</td>
<td>230</td>
<td>145</td>
<td></td>
<td>5</td>
<td>282</td>
<td>57</td>
<td>12</td>
<td>95</td>
<td></td>
<td></td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Printers, Scanners and Plotters</td>
<td>3-6 years</td>
<td>30</td>
<td>300</td>
<td></td>
<td>30</td>
<td>224</td>
<td>30</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>Generators and UPS</td>
<td>12-20 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Infrastructure Network</td>
<td>3-6 years</td>
<td></td>
<td>225</td>
<td>87</td>
<td>93</td>
<td>47</td>
<td>5</td>
<td>9</td>
<td>25</td>
<td>87</td>
<td>108</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Server Room</td>
<td>6-20 years</td>
<td></td>
<td>60</td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servers and Storage Arrays</td>
<td>6-15 years</td>
<td></td>
<td>305</td>
<td>135</td>
<td>$6</td>
<td>120</td>
<td>127</td>
<td>210</td>
<td>146</td>
<td>112</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structured Cabling Systems</td>
<td>30 years</td>
<td></td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Totals</td>
<td></td>
<td></td>
<td>416</td>
<td>1,191</td>
<td>919</td>
<td>281</td>
<td>647</td>
<td>894</td>
<td>342</td>
<td>649</td>
<td>1,049</td>
<td>401</td>
<td>593</td>
</tr>
</tbody>
</table>

**Transfers to Operating** (yet to be identified for years beyond 18-19)

**IT Applications and Software**
- Renewal by migration to cloud and managed services:
  - SCADA recycled water system
  - Mandalay waste management system
  - Microsoft Office 365
- Various: 113

*Asset Categories IT Infrastructure and IT Applications and Software will progressively transfer from capital to operating as we transition to a hybrid cloud environment.*

City of Charles Sturt- INFORMATION TECHNOLOGY ASSET MANAGEMENT PLAN
### Appendix B: Projected Capital Upgrade/New Works Program

<table>
<thead>
<tr>
<th>2018-2019</th>
<th>Asset Category</th>
<th>Asset Sub-Category</th>
<th>Asset Description</th>
<th>Amount $ 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW</td>
<td>Computers and Devices</td>
<td>Audio-visual Equipment</td>
<td>Audio-visual equipment (Arboriculture facilities)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>IT Applications and Software</td>
<td>Enterprise Applications</td>
<td>Customer-centric solution to close feedback loop on customer requests</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>103</strong></td>
</tr>
<tr>
<td>UPGRAGES</td>
<td>Nil identified</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix C: Extract of Relevant High Risks from Organisational Risk Assessment

<table>
<thead>
<tr>
<th>No.</th>
<th>Risk Description</th>
<th>Opportunity of Event/Situation (Potential Positive Consequences)</th>
<th>Threat of Event/Situation (Potential Negative Consequences)</th>
<th>Objective effected by Risk</th>
<th>Potential Causes of Risk Description (Positive or Negative)</th>
<th>Initial Negative Risk Rating</th>
<th>Residual Risk Rating (negative consequences after controls in place)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Provision of core information services</td>
<td>Staff are able to apply systems to capture, disseminate and plan various work efficiently. Communicate with the community using methods that are up to date with community expectations. The community are able to access hardware and software which they may not be able to at home.</td>
<td>Work sites may become unsafe. Alternative work site and/or systems access may not be available for all staff causing operations to be significantly disrupted. Financial loss to Council in its efforts to return to normal business. Inability to service customers or meet service levels. Community’s expectations not met. Loss of Council information, data held on electronic storage or physical documentation. Hazards not identified in the community leading to public health and safety risks.</td>
<td>Theme Area 1: OUR COMMUNITY – A Strong and Connected Community</td>
<td>Natural and other disasters (e.g. extreme heat) are largely unpredictable. Organisation has no access to a key system / application e.g. Email, TRIM, Internet, TechnologyOne suite, Intranet and potentially security systems lose power if back up failure. Third party behaviour e.g. hacking or terrorist activity. Failure of supporting infrastructure. Failure of an external provider. Loss of premises altogether through fire, flood, etc. Loss of utilities. Remote sites become disconnected from the network e.g. Reverley, Libraries, and Community Centres. Customers unable to contact Council. Staff unable to use phones. Switchboard failure/backup failure. Failure to enact Community Emergency Management Plan. <strong>Main concern:</strong> Flawed strategic planning</td>
<td>Likelihood: Possible</td>
<td>Likelihood: Unlikely</td>
</tr>
</tbody>
</table>

City of Charles Sturt - INFORMATION TECHNOLOGY ASSET MANAGEMENT PLAN
Appendix D : Executive Summary of IS Strategic Plan 2018-2022

The Community and Corporate Plans identify five themes and outline a range of strategic programs and initiatives for delivery from now until 2027. The IS Strategic Plan has been developed to demonstrate how IS will support the Community and Corporate Plans, and to indicate the key IS planning and direction setting activities that need to be undertaken.

The following IS strategic priorities for 2018-2022 will underpin the successful delivery of the Community and Corporate Plans.

- **Information and Insights**: We demonstrate leadership in gaining insights from our information to better respond to customer, community and business needs.

- **Architecture and Solutions**: We embrace the latest proven technology and leverage best practice tools, governance models and methodologies to deliver ‘fit for purpose’ innovative solutions.

- **Assets and Services**: We exercise sound commercial leadership and proactively manage the IT environment to ensure high reliability, security, performance and service levels.

- **Resources and Skills**: We develop strategic sourcing and workforce plans to improve service delivery, facilitate innovation, and achieve sustainable and cost-effective solutions.

These strategic priorities will increase our maturity towards playing a transformational role and trusted partner, essential to the City of Charles Sturt being a leading and transformational local government organisation.

The level of expenditure required to transform in accordance with the IS Strategic Plan will become clearer in 2018, once further research, scoping and strategies have been completed and incorporated into an approved Information Technology Asset Management Plan. Scheduling of strategic initiatives will need to consider the available capital and operational budget, projected renewal costs, and the Long Term Financial Plan.

Major opportunities and risks to the success of the IS Strategic Plan include Council amalgamation or rate capping, and the accelerating demand for Smart City infrastructure and 24/7 community services. These risks and opportunities will be mitigated and managed by:

- Developing our strategies and roadmaps for applications, infrastructure and information
- Preparing strategic workforce and sourcing plans to establish appropriate support models
- Implementing an IT asset management program to optimise resources and costs
- Increasing value to the community by streamlining and rationalising our processes and practices