IT Strategic Plan 2018 – 2023

Lachlan Shire Council

Adopted 29 August 2018

Updated 12 March 2020
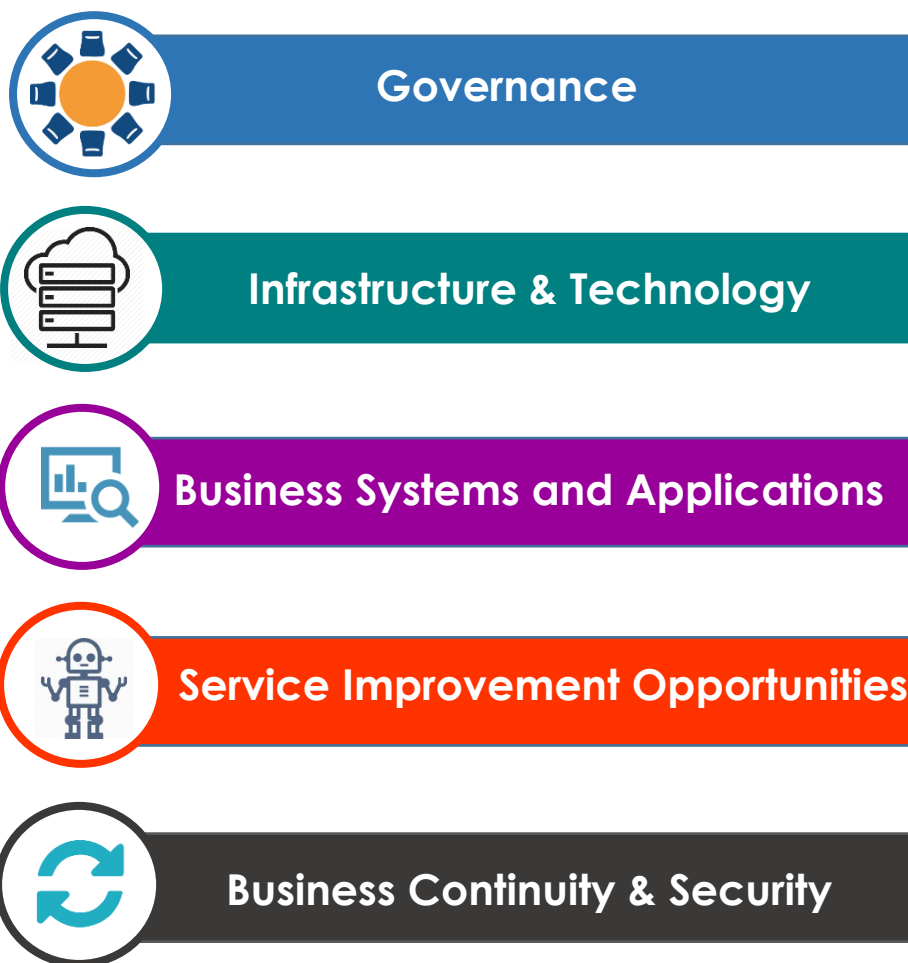
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Executive Summary

This Information Technology (IT) strategic plan establishes the actions and guidance for the development and delivery of IT services for the Lachlan Shire for the next five (5) years.

The plan focuses on key elements vital to the successful implementation and ongoing operation of IT services that will be used by the Council's staff and community.

A number of consultation sessions with key staff have been undertaken to determine both their existing IT needs and also their future work plans where new and innovative ways of working will require a strong IT system, comprising infrastructure, software applications and policies and procedures to support the safeguarding and development of IT systems.

This strategy has been developed around five key elements which Council believe are essential to maintain its existing IT systems and also to enable it to grow these in a sustainable manner to ensure IT continues to be an enabler of Council's continuous improvement in service delivery.

These five key elements can be broadly categorised as:

Governance

Infrastructure & Technology

Business Systems and Applications

Service Improvement Opportunities

Business Continuity & Security

This plan forms part of Council's overall planning framework and aligns with achievement of Council's key deliverables as outlined in its 2017/2018 -2020/2021 Delivery Plan and its 2019-2020 Community Strategic Plan.   Information contained in this plan will be used to support anticipated IT related expenditure as outlined in Council's long term financial plan

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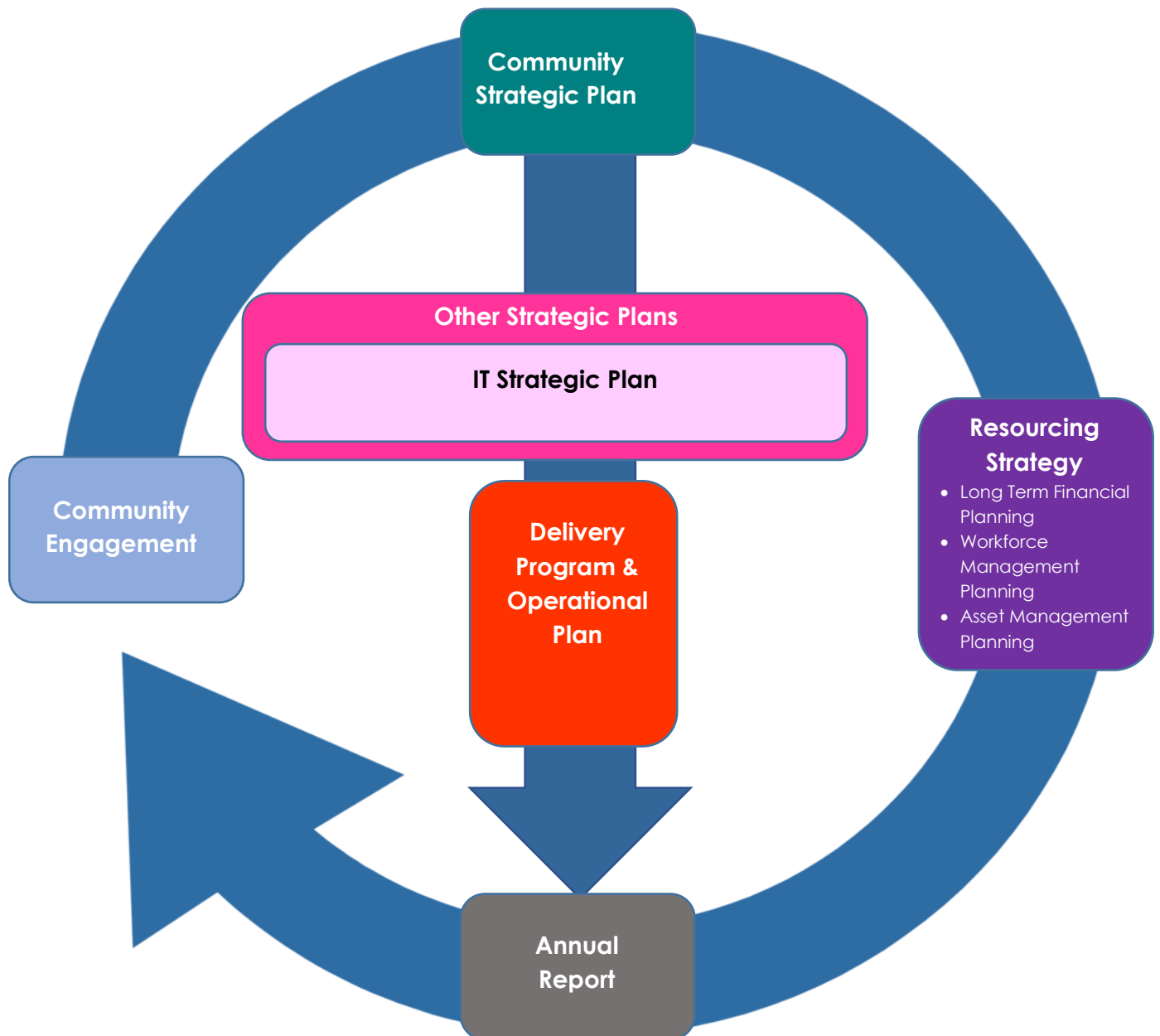
Purpose

Information technology is a core requirement in all aspects of Council operations. Effective planning for future IT needs is essential if Council is to achieve its vision of providing services that promote and facilitate enjoyment of a rich and diverse lifestyle by its community. The plan will contribute to this by developing IT systems that drive operational excellence, are innovative and add value to users in implementing continuous improvement of service delivery.

VISION

Council's Vision – That everyone in Lachlan Shire receives the services that they need to enjoy a rich and diverse lifestyle	**IT Vision** – Driving operational excellence, innovation and delivering customer satisfaction

Governance

Current Situation

Policies and Procedures

Council has a number of IT related policies and procedures in place to support operations of its IT area. These policies and procedures are progressively being reviewed and updated to ensure they continue to reflect Council's risk appetite and are appropriate for safeguarding and effectively managing the delivery of IT services to Council.

Staffing Resources

Council's IT team consists of three permanent staff – a Manager, a Technical Officer, GIS Officer with support from a Corporate Support Officer and external contractors as required.

Name of contractor	Support levels	Job No	Annual cost
Hitech Support	Available 8am – 5pm and Weekend on Request	3140.355	$12,800

Service Management

Council currently has a Service Request Management system that is not fully utilised by Council staff. Reimplementation of the system had been planned for mid-2018. This system when implemented will allow logging of incidents and improve proactive maintenance to Council's infrastructure and business systems.

The Way Forward

The current and future use of IT at the Lachlan Shire will be directed and controlled by a formalised governance framework that will ensure IT decisions are made in alignment with strategic business priorities. The development of a governance framework ensures a comprehensive understanding of the value and impact of IT investments allowing enhanced service delivery to staff and stakeholders.

Improved governance processes will assist in identifying opportunities for IT use across the organisation, making decisions visible and transparent, minimising risk, increasing benefit realisation and encouraging compliance and policies and standards
………..

Strategy: Improved IT planning and performance reporting									
Actions	Job No	Indicative Budget	Estimated Time to Complete	Timeframe/Frequency					Progress March 2020
				2018-19	2019-20	2020-21	2021-22	2022-23	
Develop IT strategic plan		Internal resources	2 months	July/August					IT Strategic Plan and reviewed March 2020
Review and update IT policies and procedures		Internal resources	2 months	August/September	Annually	Annually	Annually		Policies reviewed February & March 2020, Minor changes to be made after Cyber Security Audit April 2020
Provide annual contribution to Plant and Equipment Asset Management Plan and Expenditure Requests		Internal resources	Ongoing	April	April	April	April	April	Asset Register regularly maintained in PDQ.
Document and regularly review all IT controls, including spot audits of user access to systems		Internal resources	Ongoing	September/ Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Authority User access control audits regular conducted, Active Directory reports created weekly
Review and regularly test disaster recovery plans for all IT systems		Internal resources	Ongoing	Annual	Annual	Annual	Annual	Annual	IT Disaster Recovery Plan developed February 2020, Testing still needs to be conducted.
Strategy: Skilled and Capable IT workforce									
Actions	Job No	Indicative Budget	Estimated Time to Complete	Timeframe/Frequency					Progress March 2020
				2018-19	2019-20	2020-21	2021-22	2022-23	
Clarify and standardise IT position descriptions		Internal resources	1 month	November					IT position descriptions reviewed using LG Capability framework in 2019
Document and implement training strategy to address ICT skills shortages		Internal resources	1 month	November					Training has been provided when appropriate for staff members
Ongoing training to support IT Staff adapt to changing technologies	3100.310	$6,000 p.a.	Ongoing	When appropriate training available	When appropriate training available	When appropriate training available	When appropriate training available	When appropriate training available	Training provided when available, Technical Officer went to LG IT conference in November 2019, IS manager went to Civica Exchange in February 2020.
Total	3100.310	$6000.00		$6000.00	$6000.00	$6000.00	$6000.00	$6000.00	

Strategy: Maximise benefits through collaborative relationships and strategic procurements									
Actions	Job No	Indicative Budget	Estimated Time to Complete	Timeframe/Frequency					Progress March 2020
				2018-19	2019-20	2020-21	2021-22	2022-23	
Develop and refine best practice IT procurement policies in line with overall Council procurement framework		Internal resources	1 month Ongoing	December	Review December	Review December	Review December	Review December	IT staff follow Lachlan Shire procurement policy, use Local Government Procurement contracts, and tenders where needed. Also engage in JROC contracts to ensure best value for money.
Ensure maximum organisational value is achieved through effective contract management.		Internal resources	Ongoing	As required	As required	As required	As required	As required	Use LGP Contracts when available, always use tender and quote thresholds in Lachlan Shire Purchasing & Procurement Policy
Review licencing provisions for all Microsoft and other software licencing.		Internal resources	Ongoing	Annually	Annually	Annually	Annually	Annually	Microsoft licensing reviewed in September each year
Work collaboratively with Mid Lachlan Alliance Councils, JROCs and Authority Special Interest Groups to maximise operational and financial benefits		Internal resources	Ongoing	As required					Staff regularly attend JROC IT meetings, currently in the process of conducting Cyber Securiy Audit with other JROC Councils so reduce costs, Staff attend Authority SIG Meetings regularly.

| Costs					
Job No	2018-19	2019-20	2020-21	2021-22	2022-23
3100.310	$6,000	$6,000	$6,000	$6,000	$6,000
3140.355	$12,800	$12,800	$12,800	$12,800	$12,800

Infrastructure and Technology

Current Situation

In terms of the key IT infrastructure, systems and components, the Lachlan Shire has, over the past five years increased the total number of end-user devices (e.g PCs, tablets, telephones), while maintaining a similar level of physical infrastructure in terms of servers, storages and switches. Improvements in software, virtualisation technology, networking and storage have contributed to better IT services over this period.

Personal Computing

There are approximately 100 Personal Computers (PCs) running a mixture of Windows 10 and Windows 7 Enterprise Operating System. A breakdown of PCs can be seen in the following two figures, one indicating Desktop PCs compare with laptops, while the other shows the distribution of PCs across sites.
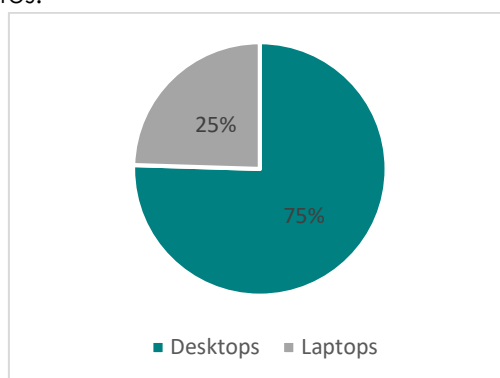
Figure 1: Distribution of Desktops and Laptops throughout Lachlan Shire Council's Network
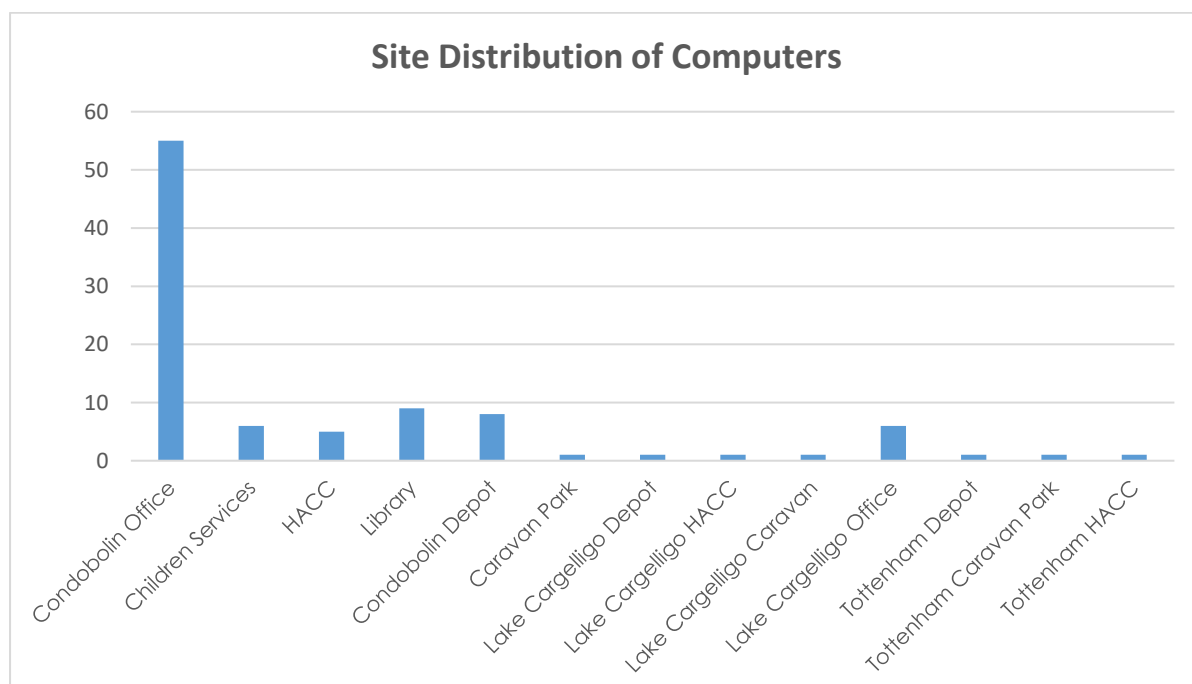
Figure 2: Distribution of Computers throughout Lachlan Shire Council's Network

Council has also issued tablet devices for senior staff and Councillors. Apple iPad tablets have been supplied to Councillors and the Executive Management team to allow for paperless access to Council minutes and agendas.

Other tablet models include:
- Motion Tablets running Windows 7 – Asset Management
- XSLATE B10 rugged tablet for Weeds and Asset Management

It is expected that the number of tablets will increase significantly over the next five years as more mobile processes and solutions are developed. Purchases and issues of tablet computing devices will be in accordance with Council's Mobile Computing Devices Policy.

Data Centres

Council currently operates two production data centres. A total of two racks of infrastructure consisting of the following hardware are installed in each of the data centres.

Description of Hardware	Year of Purchase	Location of Hardware	Storage capacity where applicable	Installed Software	Due for replacement	Progress March 2020
Dell PowerEdge R710 Server	2011	Depot Server Room	4X450GB 15K	Hyper-V, Failover Cluster Manager	2019 Replace from old	Replaced November 2019
Dell PowerEdge R710 Server	2010	Depot Server Room	6X146GB 15K	Hyper-V, Failover Cluster Manager	2019 Replace from old	Replaced November 2019
Dell PowerEdge R710 Server	2010	Depot Server Room	6X300GB 15K	Hyper-V, Failover Cluster Manager	2019 Replace from old	Replaced November 2019
Dell PowerVault MD3200 SAN	2011	Depot Server Room	12X300GB 15K		2019 Replace from old	Replaced November 2019
Dell PowerVault MD1200 SAN	2011	Depot Server Room	7X300GB 15K 5X1TB 7.2K		2019 Replace from old	Replaced November 2019
Dell PowerVault MD1200 SAN	2013	Depot Server Room	12X2TB 7.2K		2019 Replace from old	Replaced November 2019
Dell PowerEdge R730XD Server	2015	Server Room	8X4TB 7.2K	CCTV Software	2021	No Progress
Dell PowerEdge R720XD Server	2013	Server Room	6X3TB 7.2K	CCTV Software	2019	In progress of replacing
Dell PowerEdge R630 Server	2015	Server Room	5X300GB 15K	Hyper-V, Failover Cluster Manager	2019	Replaced from old November 2019
Dell PowerEdge R630 Server	2015	Server Room	5X300GB 15K	Hyper-V, Failover Cluster Manager	2019	Replaced from old November 2019
Dell PowerEdge R630 Server	2015	Server Room	5X300GB 15K	Hyper-V, Failover Cluster Manager	2019	Replaced from old November 2019
Dell SC4020 SAN	2016	Server Room	10X2TB SSD		2019	Replaced from old November 2019
Dell SC200 SAN	2016	Server Room	12X6TB 7.2K		2019	Replaced from old November 2019
HP Proliant DL360 Server	2015	Server Room	2X300GB 10K	Elastix\Asterisk PBX	2018	Replaced November 2019
APC SRT5KRMXLI UPS	2016	Server Room			2020	Replaced January 2020
Dell PowerEdge Rack Console 15FP Console	2010	Server Room			2018	Replaced February 2020

This hardware, and associated software, is used to provide network, business systems and data storage services. Further details of software are outlined below.

Data Centre 1 (DC1) is the primary data centre and is located at the Lachlan Shire Council main Administration office. Data Centre 2 (DC2) is the secondary data centre and is located 3 kilometres away at the Condobolin Depot. DC2 provides a degree of redundancy and will ultimately form the main Disaster Recovery solution as part of Lachlan Shire Council's Business Continuity Process.

In terms of data storage capacity, 75 terabytes of network storage capacity is installed in DC1 and 25 Terabytes capacity in DC2. Data that is deemed important is replicated automatically between DC1 and DC2.

Data Communication Network

Council operates both a local area network at its main Council administration building and also a wider area network to encompass its remote sites.   The local area network consists of Cat 5 cabling throughout the building, 140 data points and a two routers and two switches to support the distribution of data between desktop computing and the servers

Type of router/switch/cabling	Manufacturer	Year of purchase	Date due for replacement	Estimated cost of replacement	March 2020 Progress
Cisco SG300-28P Switch	Cisco	2013	2016	$1,000	Due to be replaced with CCTV rollout
Dell N4032F Switch x 2	Dell	2016	2020	$14,000	Moved to DR Site
Aruba 2920-48G J9729A Switch X 4	HP	2016	2020	$25,000	Still under warranty, Still no end of life date
HP ProCurve 2510G-48 Switch	HP	2011	Replace from Old	Replace from Old	Decommissioned
DLINK DSL-526E ADSL Modem	DLINK	2017	2021	$100	Replaced 2019
DLINK DSL-526E ADSL Modem	DLINK	2017	2021	$100	Replaced 2019
Ruckus Zone Director 1100 WiFi Controller	Ruckus	2015	2019	$1,500	Still under warranty , still no end of life date
HP 1910-8G PoE+ JG350A Switch	HP	2013	Replace from Old	Replace from Old	Decommissioned
Dell SonicWall NSA 3600 Firewall	Dell	2016	2020	$8,000	Still no end of life date. Sonicwall has no issues

Council has over 15 office locations directly connected to the computer network with multiple remote sites, which are connected via Virtual Private Network (VPN) or Remote Desktop Services. Over the last three years, Council has added three new remote locations to the network including Tottenham Home and Community Care (HACC) offices, Lake Cargelligo HACC offices and the Condobolin Sewerage Treatment Plant.
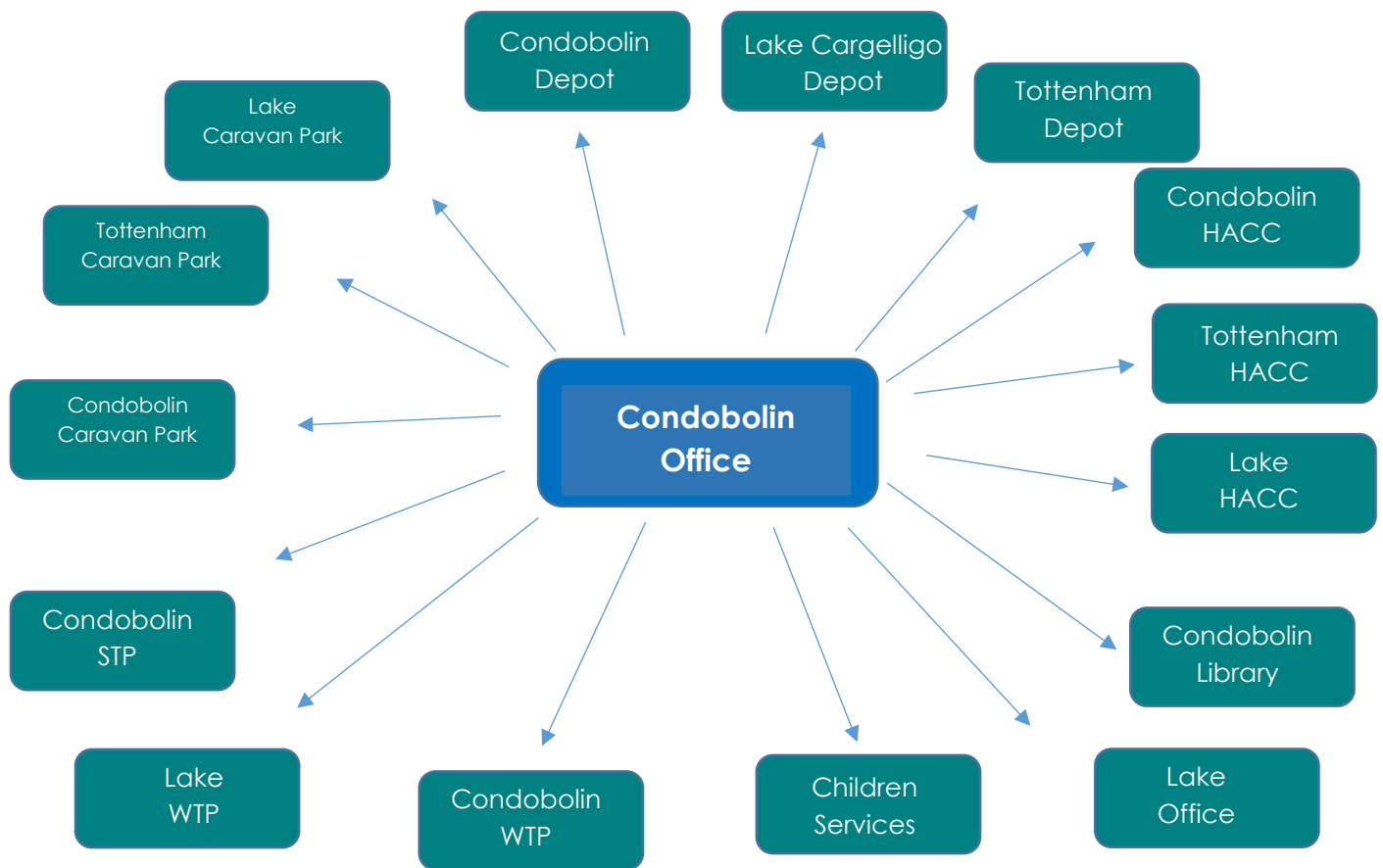
New Wireless Radios have been installed at the Condobolin Depot and separately at the Condobolin Community Centre, Condobolin Police Station, Condobolin NAB Bank & Condobolin Hotel to facilitate the Condobolin town CCTV Network. A total of eight (8) Ubiquity Air fibre Radios have been installed to support this radio network.

With an area of 14973 km2 in the Lachlan Shire, providing economical, fast and reliable ICT services to all office locations and users is a sizeable challenge. In the last two years, slow ADSL speeds have affected the level of service provided to Council employees at remote sites. The introduction of the NBN in Condobolin, Lake Cargelligo and Tottenham should provide a more stable connection and therefore improve the level of service provided to Lachlan Shire Staff.

Printing, Scanning and Fax

New Network-connected Xerox Multi-Functional Devices (MFDs) were deployed throughout the organisation in 2017. MFDs have been deployed at Lachlan Shire Council Administration Offices and larger remote sites. A combination of smaller Brother & HP Laser Jets have been deployed for smaller remote sites.

Council's total stock of printer hardware is

Type of printer	Manufacturer	Year of purchase	Date due for replacement	Estimated cost of replacement
FX ApeosPort-VI C3371	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C2271	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C2271	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C3371	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-V C7785	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C2271	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C2271	Xerox	2017 (Leased for 4 years)	2021	Leased
FX ApeosPort-VI C2271	Xerox	2017 (Leased for 4 years)	2021	Leased
HP LaserJet 400	HP	2016	2020	$1000
HP LaserJet 400	HP	2016	2020	$1000
HP LaserJet 400	HP	2016	2020	$1000
Brother MFC 9140CDN	Brother	2017	2021	$1000
Brother MFC 9335CDW	Brother	2017	2021	$1000
Brother MFC 93330CDW	Brother	2017	2021	$1000

Closed Circuit Television (CCTV)

In 2013, council installed 12 Closed Circuit Television (CCTV) cameras throughout Condobolin's main Central Business District. Since this time, Council has installed an additional two cameras in the CBD, five cameras at the Condobolin Council Office Building, 8 cameras at the Condobolin Depot, an additional five cameras at the Condobolin Swimming Pools and on premise CCTV solutions at the SRA Hall, Condobolin Library and the Conodbolin Water Treatment Plant.

Type of hardware	Manufacturer	Location	Date due for replacement	Estimated cost of replacement
8 x Fixed Cameras	Avigilon Fixed Cameras	Condobolin CBD CCTV	2019	$16,000
4 x PTZ Cameras	Avigilon PTZ Cameras	Condobolin CBD CCTV	2019	$12,000
3 x Fixed Camera	HIKVISION	Condobolin CBD CCTV	2021	$6,000
4 x Fixed Cameras	HIKVISION	Council Chambers	2022	$8,000
8 x Fixed Cameras	Avigilon	Condobolin Depot	2021	$2,000
6 x Fixed Cameras	HIKVISION	Condobolin Swimming Pool	2021	$2,000
8 x Switches	Cisco SG300-28P Switch	CCTV Network	2020	$16,000

Telephony

Council Telephony system has remained static in the last 5 years. Approximately 60 Yealink phones were deployed in 2014 when the Asterix Phone system was upgraded.

Lachlan Shire Council currently has approximately 70 Mobile phone services and handsets. Preference is currently for Apple iPhones.

Council purchases phone and data services from Telstra, as its main provider.

Power use and Emissions – Green Computing

Lachlan Shire Council has no current Green Computing policy however the following energy initiatives have been implemented

- Purchasing small form factor low energy consumption Pcs that are Energy Star Compliant, incorporated solid-state disk drives and other power saving hardware
- Leasing of Energy efficient Multi-Function devices for printing, scanning and fax that have energy saving settings enabled as standard
- Expanding use of Virtualisation software for servers, while using a smaller number of energy efficient physical servers as hosts
- Replacing network switches with newer more energy efficient units.

The Way Forward

Personal Computing

Council is committed to ensuring its Personal Computer network is of a standard that allows its staff to work efficiently and effectively, is up to date with current software, including virus and malware protection software. To achieve this Council's preference is to replace of all personal computers and laptops on a four year cyclical basis at an estimated cost of $100,000. Funding of this work is dependent on budget.

Data Centres

An annual assessment will be made of hardware and associated infrastructure located in Council's data centres to ensure these assets continue to meet the needs of IT users and operate in a way that maximises productivity.

A detailed expenditure plan will be prepared by the IT Manager on an annual basis to identify hardware and associated infrastructure to be replaced, which will inform capital budgets. As a rule of thumb it is expected these assets will be replaced as part of a four year rolling asset replacement plan.

Data Communications Network

The disbursement of Council offices over a significant area provides a number of challenges for IT in terms of access and also network speeds for uploading and downloading data. In addition to this, a number of Council outdoor staff work in the field and require access to fast and reliable technology to send data to and from the main servers. Council's IT team will continue to work with users to identify opportunities to implement a radio wireless network across the Shire to facilitate remote working and opportunities to streamline work processes through the use of technology.

Printing, Scanning and Fax

Council IT staff will continue to explore options for reducing costs associated with the printing and scanning of documents. Council has recently implemented Multi-Functional Devices to reduce the costs of hardware required to complete multiple tasks. It is expected these devices, or similar will be replaced on a four year rolling cycle. Smaller printers and scanners which are used by individual functions will be replaced on a four year rolling cycle or when required depending on cost, serviceability, and options for replacement. Prior to replacement the IT manager shall initiate a full service review of these devices to identify opportunities for cost savings.

Closed Circuit Television (CCTV)

Council is committed to ensuring the safety and security of its assets and its community. To assist with this Council will continue the rollout of CCTV in areas where it is deemed appropriate to do so.

Council's existing CCTV infrastructure will be reviewed on an annual basis. Funding for replacement and /or upgrade of this will be requested as part of the annual Plant and Equipment Capital Needs budget.

Telephony

Council's telephone systems form an important part of its communications network both internally, between council work sites and also with its community. Council will continue to work with its main service provider to identify opportunities to improve the quality of its phone services and any new technologies that may assist in improving service delivery.

Summary of Infrastructure Expenditure Requirements

Actions	Job No	Indicative Budget	Time to complete	2018-19	2019-20	2020-21	2021-22	2022-23	Progress March 2020
					Timeframe/Frequency				
Replace Physical Servers	W924.385	$50,000	2 years		August 2019				Physical servers replaced in December 2019.
Replace PC Fleet	W920.385	$100,000	4 years				July 2022		30% due to be replaced in 20/21 Financial year, the rest to be completed in 21/22 Financial year to be in line with warranty periods
Upgrade Photocopier Fleet (leased replace 2021)		In operating budget	4 years			May 2021			New photocopier contract to be advertised in January 2021, replacement due May 2021
Replace Storage Area Network	W924.385	$60,000	2 years		August 2018				Completed December 2019
Replace Switches & Modems and Network Hardware	W924.385	$40,000	2 years			August 2020			Completed December 2019
Move all Council sites from ADSL 2+ to NBN	3140.355	$2000	1 year	August 2018					Completed February 2019.
Replace Council Phone System	W922.385	$15,000	1 year	Oct 2018				July 2022	Completed May 2019
Replace Records Scanner	3140.355	$10,000	3 years			February 2021		February 2020	Current model has no issues and timeframe for replacement pushed out till 2022
Investigate the use of VOip phones at external sites in Condobolin		Internal Resourcing	2 years	May 2019					Project pushed out till January 202. No issues with phone arrangements at external council sites
Identify and rationalise environmental impacts of IT operations • Reduce print impacts • Consolidate equipment to reduce energy consumption • Reduce paper use and waste • Ongoing analysis of energy consumption • Asset disposal		Internal resourcing	Ongoing	Annually	Annually	Annually	Annually	Annually	Paper cut printing system implemented for staff to keep track of printing costs, currently investigating automated shutdown of PC Fleet overnight, Photopcopiers low power mode activated overnight
Implement wireless point to point links at Condobolin Remote Sites to improve user connectivity	W922.385	$20,000	2 years		May 2020	December 2020			No Progress. Currently Investigating options on point to point links in the town of Condobolin
Investigate integrating Council's phone system with desktops		Internal resourcing	2 years	Ongoing	Ongoing				No Progress, Not a priority at this time
Assist Infrastructure Services with the move from Analogue Radio Technology to Digital Radio Technology		Internal resourcing	2 years	Ongoing	Ongoing				Council has decided on Cell Fi Technology instead of moving to Digital Radio Technology. See additional Infrastructure Projects for new project description
Seek grant funding to expand wireless radio network		Internal resourcing	Ongoing	As Available	As Available	As Available	As Available	As Available	No grant funding has been available, still actively researching.

Additional Infrastructure Projects

Actions	Job No	Indicative Budget	Time to complete	2018-19	2019-20	2020-21	2021-22	2022-23	Progress March 2020
Replace all non-adjustable and 19 inch computer monitors with 24 inch monitors	W920.385	$8,000	1 year			September 2020			New Project
Replace CCTV Server and network infrastructure	W2980.385	$38,000	2 years		June 2020	June 2021			New Project
Rollout new ipads for new term of Councillors	3020.375	$10,000	6 months			September 2020			New Project
Purchase new projectors for Council Meeting rooms including Council Chambers & Committee Room	W920.385	$5,000	1 year			September 2020			New Project
Replace existing firewalls that have become end of life	3140.355	$3,000	1 year			July 2020			New Project
Install Cell Fi units in all Council Vehicles to boost mobile coverage available	Costed to individual Plant Nos		6 months			July 2020			New Project
Purchase and rollout new fleet of phones for all Council vehicles as part of the Cell Fi roll out	New Work Order	$15,000	6 months						New Project

Costs

Job No	2018-19	2019-20	2020-21	2021-22	2022-23
3140.355	$2,000		$3,000		$10,000
W922.385	$15,000		$20,000		$15,000
W924.385		$110,000	$40,000		
W920.385			$43,000	$60,000	
W2980.385		$38000	$38,000		
New WO			$15,000		
Total	**$17,000**	**$148,000**	**$159,000**	**$60,000**	**$25,000**

Business Systems and Applications

Current Situation

Standard Operating Environments (SOE) have been developed for all Lachlan Shire Council PCs used by staff, while a separate SOE has been developed for the Public PCs deployed at the Libraries. The consistency of PC configuration, along with the ability to automatically deploy applications to PCs has contributed to a reduction in the number of incidents relating to PCs and reduced the effort involved in resolving PC-related Service Requests.

This SOE consists of Windows operating system, Microsoft Office products, Civica Authority including Add Ins, HP Trim, Adobe Reader

Council currently operates the following software to ensure and maintain the effective operations of its network, in addition to specific purpose applications:

Name of software	Brief description of system	Job No	Supplier/Vendor	Annual licence fee	Period of licence, eg no years	Next licence renewal date
Authority	Core Business System with modules including Finance, Rates, Purchasing, HR, Customer Request Management, and Asset Management. Integrated with TRIM and Intramaps	3140.355	Civica	$67,700	Annual	September 2020
Trim	Electronic Document and Records Management System	3140.355	Informotion	$8,830	Annual	June 2020
Microsoft Licencing	Provides suite of Microsoft Products		Data #3		Annual	September 2020
		3140.355		$45,937		
	Other Microsoft licensing (External sites) costs	W92.263		$5,160		
		W94.263		$1,145		
		W93.263		$1,145		
		W88.263		$2,291		
		W1060.263		$1,145		
		W145.263		$1,718		
		W53.263		$5,154		
		W54.263		$3,435		
		W1705.263		$573		
		W683.285		$1,145		
		W74.263		$573		
		W75.263		$573		
Intramaps	Geographical Information System (GIS) providing information including Land Cadastre, Road Centre Lines, Assets and Aerial Photography	3140.355	Chartis Technology	$10,558	Annual	January 2021
FME	GIS Script			$858		December 2020
Internet / Website	Externally hosted public information system	3140.355	WEB123	$1,100	Annual	March 2020
Datafuel	Fuel Management System used as part of Engineering operations of fleet and heavy machinery at the Depot and external fuel tankers	3140.355	Datafuel Financial Systems	$5054	Annual	March 2020
	Other Plant No costs	W92.118		$389		
		P1249		$389		
		P256		$389		
		P257		$389		
		P258		$389		
		P259		$389		
		P275		$389		

			P276		$389		
			P277		$389		
			P278		$389		
			P279		$389		
			W93.115		$389		
			W94.118		$389		
RMS	Provides bookings management for Caravan Park Facilities			RMS	$3,900	Quarterly	July 2020
			W74.263		$1,950		
			W75.263		$1,950		
Libero	Library Management System			Insight Informatics	$20,553	Annual	July 2020
			W53.263		$7,600		
			W54.263		$7,600		
Sysaid	Service Request & Knowledge Management System		3140.355	Sysaid	$4,900	Annual	May 2020
InfoCouncil	Council Business Paper Management System		3140.355	Infosphere	$5,300	Annual	July 2020
Big Tin Can Hub	Provides Councillors access to Business Papers via Mobile devices		3140.355	Task Exchange	$6,000	Annual	April 2020
Fulcrum	Asset Management Capture Application for mobile and desktop devices		3200.370	Spatial Networks Incorporated	$1,000	Monthly	June 2020
Roam	Weeds Management Capture Application for mobile and desktop devices		W144.192	Chartis Technology	$5,500	Annual	October 2020
Authority BIS	Authority BIS allows for quick and easy analysis of data from Council's Corporate System		3140.355	Civica	$6,100	Annual	July 2020
Redman Solutions Email Archiving	Email Archiving Software		3140.355	Redman Solutions	$1,300	Annual	June 2020
Additional Software purchased	**Brief description of system**		**Job No**	**Supplier/Vendor**	**Annual licence fee**	**Period of licence, eg no years**	**Next licence renewal date**
PDQ	Software Deployment		3140.355	PDQ	$1,300	Annual	March 2020
Exclaimer	Email Signature Deployment		3140.355	Task Exchange	$340	Annual	March 2020
Add to Exchange	Copies contacts to all users so they have an up to date version of Councils contacts on their device		3140.355	Did it Better	$1,400	Annual	April 2020
Nuance PowerPDF	PDF editing software		3140.355	Nuance	$250	Annual	February 2021
Civilcad	Design and documentation solution for civil engineering			Civil Survey Solutions	$6,550	Annual	February 2021
Autocad				Civil Survey Solutions	$550	Annual	February 2021
Manage Engine MDM	Mobile Device Management System		3140.355	Manage Engine	$5,000	Annual	October 2020
OP Manager			3140.355	Manage Engine	$930	Annual	January 2021
ELMO	Online HR and recruitment software (still to be implemented		3140.355	ELMO Solutions	Still to be confirmed	Annual	To confirm
Webroot	Antivirus Software		3140.355	Webroot	$3500	Annual	June 20209
TOTAL			**3140.355**		**$170445.00**		

The Way Forward

In line with the IT principle to maximise investment in existing solutions, work will continue to develop Civica Authority so it delivers maximum effectiveness for the business. This will involve developing capabilities around integration, automation, online services and reporting. Best of breed software utilised for specific business unit requirements will be tailored to ensure integration with core Authority modules and other business systems where relevant.

The current SOE will be upgraded to ensure it stays current and is able to produce documents that can be easily used by others that may be on different versions of Microsoft products.

Work to be undertaken on the upgrade and implementation of business applications and systems during the course of this plan include:

Actions	Indicative Budget	Job No	Time to complete	Timeframe/Frequency					Progress March 2020
				2018-19	2019-20	2020-21	2021-22	2022-23	
Authority Business System:									
Upgrade to Civica Authority V7 & continuously update to latest version	$72,000	3140.355	Ongoing			November 2020		November 2022	Civica Authority 7.1 Upgrade scheduled for December 2020. Project has commenced
Conduct a Health Check of all modules	$20,000	3140.355	3 months	October 2018		April 2021			No Progress, this will be reevaluated after the implementation of Authority 7.1
Develop and implement staff training based on the results of the Authority Health Check conducted	$30,000	3140.355	2 years	Ongoing	Ongoing	June 2021			Put on hold until Authority 7.1 upgrade complete
Implement BIS reporting for all Authority Modules	$7,000	3140.355	Ongoing	1 module Annually	1 module Annually	1 module Annually	1 module Annually	1 module Annually	BIS reporting available for GL/WO, CRM & Payroll. Currently investigating upgrading to BIS7 and rates view
Implement Online timesheets for all staff	$25,000	3140.355	2 years (depending on availability)	Ongoing	May 2020				Product not currently available. Due to be rereleased in April 2020
Implement an Asset Management System that integrates with financial data, Intramaps, Mobile devices and allows managers to analyse and model data	$50,000	3200.361	3 years		Ongoing	Ongoing			No Progress, Council hasn't progressed with an integrated Asset Management System yet.
Improve and develop integration of Civica Authority with core business systems including Trim, InfoCouncil and Intramaps	$10,000	3140.355	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	No Progress as no additional integration available at this stage.
Email:									
Upgrade to Exchange Server 2019	$28,000	3140.355	Internal Resource		March 2020				Completed March 2020
Operating Software:									
Upgrade virtual servers to latest Windows Server Operating System (Assistance from consultants)	$15,000	3140.355	Internal Resource	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Server upgrades ongoing.
Other Software:									
Investigate / implement project management software	$20,000	3140.355		December 2018		December 2020			No progress, investigated options in 2018, no project management software chosen at that stage, currently in the process of reinvestigating options
Records Management:									
Upgrade to Trim Content Manager V9	$29,000	3140.355		December 2018			December 21		Upgraded February 2019

Additional Business System & Applications projects	Indicative Budget	Job No	Time to complete	Timeframe/Frequency					
				2018-19	2019-20	2020-21	2021-22	2022-23	Progress March 2020
Implement Authority E-Services which includes a portal for customers for Rates, Water, Development Application, Customer Request self service	$12,000	3140.356					December 2021		New Project
Implement Authority Actus App which allows Customer Requests, Applications, Registers tasks to be opened, actioned and completed in the field	$17,000	3140.356					September 2021		New Project
Upgrade Council's website, Integrated Staff Intranet & Community Engagement Software	$50,000	New WO				March 2021			New Project
Implement Authority Accounts Payable Workflow module	$27,000	**3140.356**					March 2022		New Project

Job No	2018-19	2019-20	2020-21	2021-22	2022-23
3140.355	**$116,000**	**$87,000**	**$174,000**	**$108,000**	**$32,000**
3140.356				**$56,000**	
3200.361		**$50,000**	**$50,000**		
New WO			**$50,000**		

Service Improvement Opportunities

Council is committed to a culture of continuous improvement whereby it is continually looking for ways to improve its service delivery and reduce costs to its community for these services. Technology is an important tool in driving efficiencies in service delivery.

Key Council staff were asked to identify ways they see that IT can assist with improving their service delivery.   Many of the items discussed have been identified in this document. However, other items which will be explored in more detail over the next three years include:

Improved system integration, for example between asset condition management, asset identification on mapping software and financial data;
- *Improved data management and reporting capabilities*
- *Improved Internet speeds*
- *Investigation of Cloud based storage to improve access to data and reduce costs*
- *Improved data security to protect data and ensure privacy of personal information*
- *Management of network and data in the event of an emergency shutdown*
- *Integration of remote devices, eg tablets in the field with core business systems*
- *Implementation of Smart City Technology*
- *Implement Online Development Application System*
- *Implement Intramap Public Maps*
- *Incorporate Authority E Services into Council's website to allow Customers to lodge CRMs, Pay rates & water, Lodge Development Applications*
- *Implement a Lachlan Shire Council tourism website*
- *Upgrade Council's website to a more modern interface & to meet Accessibility guidelines*
- *Ensure Council Website / online services are accessible from traditional and developing platforms including smartphones and mobile devices.*
- *Implement a staff intranet*
- *Use of drone technology to assist with data capture for asset management*
- *Implement technology at library services to allow membership cards to be used for payment for printing and internet usage.*

In addition to these identified opportunities for service improvement Council's IT staff will continue to monitor emerging technologies and evaluate these against a service improvement culture.

The use of Cloud technology to improve service delivery and reduce costs will be advanced through
- Development of a Cloud Policy ensuring assessment of and transition to cloud services is controlled, compliant and well managed.
- Ensuring cloud services are evaluated for suitability when existing ICT infrastructure or business systems are replaced and when new ICT infrastructure or business systems are procured.
- Investigating opportunities to migrate business systems and applications.

IT Business Continuity and Security

Business continuity and information security represent two critical organisational risks.

From an IT perspective business continuity involves disaster recovery planning and contingency planning, data recovery, risk management, backups, redundancy, replication and emergency response. Effective business continuity planning allows an organisation to continue to operate during a serious incident or crisis and to recover appropriately following such an incident.

As implied information security deals with risks associated with securing digital information on the Shire's corporate network and public facing systems. As a government agency we are required to ensure that our digital information and IT assets are secured effectively.

Although Council has not had to deal with a large scale disaster or security event recently, power outages have demonstrated the potential impact these events are likely to have.

Work to be undertaken to minimise identified risks include:

Action	Indicative Budget	Job No	Time to complete	2018/19	2019/20	2020/21	2021/22	2022/23	Progress March 2020
Review and Develop Lachlan Shire Council's Business Continuity Process • Disaster Recovery Plan • Implementation funding options • Testing Process and Procedures • Risk Register	Internal Resources		3 Months	Sept 2018					Business Continuity Plan & IT Disaster Recovery Plan updated in February 2020, Risk Register and Cyber Risk Register developed in November 2019, Testing due to take place in June 2020.
Ensure effective IT business continuity and disaster recovery processes Annual IT business continuity and disaster recovery audit	Internal Resources		Annually	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Audit complete and action list developed in February 2020. All actions are due to be completed by July 2020.
Implement a third offsite backup location	$10,000	3140.355	3 months	September 2018					Solution changed from third offsite backup location to an offline backup solution where daily backups are stored on premise but offline. In the process of purchasing hardware, solution due to be completed July 2020
Investigate Cloud backup capabilities	Ongoing		Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	No Progress, all on premise solution at the moment. Not currently investigating cloud solutions due to bandwidth available in Condobolin
Develop and Implement a periodic (6 monthly) procedure for failover testing of core business systems.	Internal Resources		2 months	September 2018					Failover procedure updated February 2020.
Investigate UPS technologies at remote sites to reduce time out after power loss.	$20,000	W922.385	3 years			July 2020			No progress, still investigating options and whether UPS technologies will reduce time outages
Implement robust incident management reporting and response systems	Internal Resources			January 2019					Cyber incident register created in November 2019,
Engage IT security specialist to conduct annual vulnerability assessment to maximise security and integrity of IT systems	$20,000	3140.355	2 years		January 2020				Content Security engaged through JROC to conduct Cyber Security Audit in March 2020.
Enhance, develop and implement improved remote access facilities	$10,000	3140.355	2 years		March 2020				Two Factor Authentication VPN Access implemented in January 2020.
Investigate implementing two factor authentication / single sign on across all business systems and It services to maximise accessibility and security	$5,000	3140.355	2 years		March 2020				Two Factor Authentication not currently available for major corporate systems including Authority and CM9.

Additional Business Continuity & Security Actions

Action	Indicative Budget	Job No	Time to Complete	2018/19	2019/20	2020/21	2021/22	2022/2023	Progress March 2020
Purchase 4G DLink modems which will allow Council to failover to 4G network in case of NBN Failure	$1,600	3140.355				July 2020			
Purchase and configure additional firewall for easy DR recovery at Councils Depot	$6,500	3140.355	1 year			July 2020			
Install Internet NBN Connection into Condobolin Depot	$1,200 per year	3140.355	Ongoing			Ongoing	Ongoing	Ongoing	
Purchase external Hard Drives to weekly offline backups	$3,600	3140.355				July 2020			

Costs					
	2018/19	**2019/20**	**2020/21**	**2021/22**	**2022/23**
3140.355	$10,000	$35,000	$12,900	$1,200	$1,200
W922.385			$20,000		
Total	**$10,000**	**$35,000**	**$32,900**	**$1,200**	**$1,200**

Updated IT Budget & Anticipated Expenditure

Job No	Budget 2018/19	Budget 2019/20	Budget 2020/21	Budget 2021/22	Budget 2022/23
3140.355	$311,245	$305,245	$373,145	$292,445.00	$226,445
3100.310	$6,000	$6,000	$6,000	$6,000	$6,000
3140.356				$56,000	
3020.375			$10,000		
W920.385			$43,000	$60,000	
W922.385	$15,000		$40,000		$25,000
W924.385		$100,000.00	$40,000		
W2980.385			$15,000		
New WO Cell Fi WO			$15,000		
New WO Website / Intranet WO			$50,000		
Additional Software costs	$74,236	$74,236	$74,236	$74,236	$74,236
TOTAL IT Expenditure	**$406,481**	**$485,481**	**$592,145**	**$488,681**	**$331,681**