Long Term Plan 2021-31

Activity Plan

Information Technology

(Internal Activity)

Adopted 21 & 23 June 2021



Approvals

Role	Position	Name	For Draft LTP	
			Signature	Date of sign-off
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1. What does this activity deliver?

The Information and Technology (IT) Unit's primary functions are to provide the IT enablement for the delivery of the Organisational Digital Strategy programme, while ensuring existing IT enabled services are maintained, and continue to meet the service level expectations for digital services delivered across Council or direct to the community. Virtually all services delivered across the Council have some IT enablement touch.

The core focus areas from the Organisational Digital Strategy includes:

- **Citizen Focus**: The Citizen is our #1 focus, building trust and engagement, enhancement quality of life, supporting the growth of businesses.
- Enabling our People: Enable a digital workforce that can work more flexibly and efficiently, better understand the citizen, and make better informed decisions.
- **Delivering Value**: We will deliver values by providing secure data-driven solutions based on core architecture, collaborative planning across the organisation, and an effective funding model.

The key activities delivered by the IT to support the primary functions include:

1. Technology Enablement

- Direct to Citizen and Supplier Digital Services to enhance information accessibility, quality and timeliness of interactions for services. *Examples of Technology enabled services include: 4.5 million Library book issues p.a., 650k + p.a. calls or email to contact centre., 126k p.a. request for services (40% on digital channels), 1.8million p.a. web site visits, supporting \$13b of city assets of which many are used by the Community.*
- Technology services that enable 32 business units across Council to provide efficient and timely services. Includes operating over 600 separate applications categorised into four core Digital Platform capabilities. From extensive Tier 1 Financial and Planning applications, through to more specialist applications to enable line of business services, such as; libraries, recreation and sport, regulatory functions, community facilities technology, and building management systems.

Examples of approximate transactions through SAP Financial System includes: 11.5k Purchase Orders totalling \$550+m p.a., processing over \$867m p.a. of invoicing including rates collections, and 270k p.a. business to business work order transactions.

• A programme of regular application upgrades to reduce Cyber Security risks, reduce support costs, and through iterative improvements maximise the Digital Platforms value.

Examples of approximate transaction across core technology platforms include; processing 10.7m inbound and 5.3m outbound emails, over 1m inbound / outbound phone calls,

• Digital Solutions Brokering - Responsibility for ensuring value is delivered to our customers from the use of Digital service (Information and Technology). Collaboratively ensuring our current solutions are aligned to the organisational digital strategy along with providing expert evaluation, and brokering off new solutions. The Digital Solutions team are the IT Units primary interface to other business units. Their responsibility is to understand their customer's base and the services they provide, and maximise the support digital service can provide or the customers efficient and effective operations. This allows IT to become a partner with the business units, as an enabler and service provider.

2. Information and Records Management Services

- The management of over 17.5 million official digitised records, more than 30k of cartons containing historical paper records and 1600 linear meters of Council archival material to ensure Council records are secure, identifiable, accessible, and easily retrievable to meet Councils obligations under the Public Records Act (PRA) and support LGOIMA requests.
- The structured storage and presentation of data related to Citizens, Property, and Assets to support business operations, through Business Intelligence reporting and analysis for informed decision making, and policy development. Sharing information with our partners and external agencies and providing information to our Citizens to increase transparency and confidence in Council, supporting a prosperous economy.
- The storage and presentation of location data to 'geo-spatially' represent Council assets and services to assist with data collection, decision making, route planning, public consultations and emergency management.

3. Asset and Infrastructure Management

- The active management and monitoring of Council IT Assets, including over 3500 user devices, to ensure they are upgraded through the replacement programme, have regular security updates, and operating the applications requested by the user.
- Management of third party Infrastructure as a Service (IaaS) operating over 600+ line of business applications. Ensuring right sized capacity in place, with up to date operating system levels, and security monitoring.
- Operate a secure and resilient Data Network across the city, which connects over 70 Council Facilities, is used for City Critical service such as, Water and Waste and Canterbury Transport Operation Centre (CTOC) and provides Citizen free Wifi access.

4. Information Technology Support Services

• Provide IT helpdesk services to support Council employees during standard business hours, with IT related incidents and requests for service. Escalating support to other IT activity areas, including third part support providers. 24x7x365 IT Helpdesk service for 1st level support is available, with limited escalation available for 2nd and 3rd level support outside of standard business hours.

5. Cyber Security Programme and operational services

• Cyber Security maturity continuous improvement programme to ensure Council Cyber Security risk are effectively mitigated. Including staff training and awareness programme, Security Operations Centre (SOC) that actively monitors digital services for security risks and escalates security threats, Security Vulnerability Assessments, and Security Incident Management (SIM) response service for when security incidents do occur.

This Internal Service supports all the Community Outcomes through the organisational support provided by this Activity to the External Services of the Council.

3. Strategic Priorities – how does this activity support progress on our priorities ?

Strategic Priorities	ACTIVITY RESPONSES
Enabling active and	- Focus on the citizen is a key element of the Vision for the Organisational Digital Strategy
connected communities to	- The Organisational Digital Strategy provides for better digital access to Council services and better support for collaboration
own their future	 Note the Digital Strategy plans to better reflect different cultures and communities so more people feel engaged in the life of the city and informed about Council services Ensure digital points of contact on community owned virtual and physical spaces.
	- Easy to use digital feedback tools; closing off feedback loops to build trust for further engagement.
	 Digital transparency of relevant policy and strategy processes. Digital crowdsourcing initiatives capture voice of the communities
Meeting the challenge of climate change through	- REGGE dashboard will be published and improved over the next three years to show Council efforts to support Climate change.
every means available	 Enhanced Emergency Management through Digital Channels, including resilient services and information to support Civil Defence Emergency Management
	 Enhanced Business Intelligence Platforms and Spatial systems to provide intelligent insights to support climate change, and water management stakeholders with decision making, with timely and accurate information. A complete renewal program for IT data network to enhance resilience to adverse events, to ensure city critical, and critical
	business operational services operate.
	 Increased digital service resilience by additional transitioning to high availability and resilient cloud based services. Data Network resilience investment to ensure uninterrupted service and access to decision-making data and systems
Ensuring a high quality drinking water supply that	 Water management increasingly uses IT solutions to strengthen analytical capability that improve service delivery, and security.
is safe and sustainable	- Digital monitoring of infrastructure changes to test effectiveness of storm water management plans.
	- Livecasting of city functions including water quality and water usage to inform the community and encourage their collaboration and support
	- Ability for the community to view the status and progress of waterways six values (drainage, ecology, culture, landscape, recreation and heritage)

Internal Services may be providing business advice to the business – rather than delivering on a specific priority (e.g. HR, Legal)

Strategic Priorities	ACTIVITY RESPONSES
	 Personalisation based on digital identify enables more targeted marketing and awareness notifications to affected neighbourhoods, river care groups and other who might support them.
Accelerating the	- Smart Cities' strategic technology solutions for enhancing the city
momentum the city needs	- IT support (data or tools) for centre city marketing and promotion
	- Sharing of city data to enable citizens and 3 rd parties to identify opportunities to innovate for citizen benefit.
	- Live cast of city functions to enable citizens to respond in a timely way and contribute to knowledge of issues and mitigations.
	 Personalisation based on digital identities enables more targeted marketing of central city relevant to citizens and businesses.
Ensuring rates are affordable and sustainable	 Enhanced and more cost effective digital access to Council services and information. Digitally enabling employees and automating some repeatable tasks, enabling more value-add services to citizen and to the business and creating overall workforce efficiencies and reducing errors.
	 Timely access to accurate information within Council, reducing time wasted locating and accessing information. The transport network is rapidly changing and new transport modes are emerging. Intelligent transport systems (ITS) can support improved effectiveness, environmental performance, safety and resilience of the transport system Digital Strategy aims to support data-driven solutions and insights

4. Increasing Resilience

- Given the increasing dependence on IT systems for the delivery of digital services to citizens, there is an ongoing programme within IT to develop resilience to acute shocks. This includes the Data Network Upgrade and enhanced Network Monitoring & Analytics projects
- Most of the IT services delivered to the council are run from third party data centres which adhere to strict standards of operation to ensure service availability. This
 ensures that services can remain available even in the event of an acute shock or series of shocks. There is a push to diversify further to broader Software as a
 Service (SaaS) offerings so our digital capability is dispersed geographically.
- However there are a number of gaps in service provision which have been identified for improvement over coming years to better provide resilience of service to citizens, staff, and specifically City Critical Services. These include:
 - Having a secondary disaster recovery data centre which is able to provide critical services in the event our primary data centre fails (not currently in IT Programme for future years)
 - Implementation of Data Network Upgrade future phases for FY20 and FY21, which will introduce further provision of resilience, secondary network links to avoid single points of failure
 - Implementation of enhanced Network Monitoring & Analytics to ensure the IT service has the necessary information to manage network and system failure, and security risks proactively to minimise service disruption
 - Programme of IT Cyber Security improvements to ensure effective defence against cyber threats

5. Specify Levels of Service

LOS	C/	Performance Measures	Historic Performance	Benchmarks		Future Perfor	mance Targets		Method of Measurement	Community Outcome
number	M1	Levels of Service (LOS)	Trends		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31		
Technolo	ogy E	Enablement	·	•			·	•	·	•
13.2.26	М	IT Strategic Planning - The Technology Enablement Roadmap is aligned to the Digital Strategy Programme - IT Capital Investment Roadmap	2019/20: Achieved 2018/19: IT Investment Roadmap is published on an annual basis	No relevant benchmark	The IT Capital Investment Roadmap is approved at the start of the year through ICT Governance Board.	The IT Capital Investment Roadmap is approved at the start of the year through ICT Governance Board.	The IT Capital Investment Roadmap is approved at the start of the year through ICT Governance Board.	The IT Capital Investment Roadmap is approved at the start of the year through ICT Governance Board.	Minutes from ICT Governance Board confirming investment roadmap	Internal Service
13.2.25.1	М	IT Projects are well managed to support wider business led changes (Time)	2019/20: 91% 2018/19: 89% 2017/18: 89% 2016/17: 66% 2015/16: 73% 2014/15: 67% 2013/14: 87%	KPMG NZ/AUS Project Management Survey (2018) Percentage of Projects Completed On- Time = 30% - KMPG Project Management Survey 2018	>/= 85% of IT Projects are delivered on time.	% of projects delivered within time	Internal Service			
13.2.25.2	М	IT Projects are well managed to support wider business led changes (Budget)	2019/20: 98% 2018/19: 85% 2017/18: 100% 2016/17: 85% 2015/16: 73%	KPMG NZ/AUS Project Management Survey (2018)	>/= 85% of IT Projects are delivered within budget.	% of projects delivered within budget	Internal Service			

¹C/M – Community or Management level of service (LOS)

Community LOS - Previously known as LTP LOS. These are LOS that are community facing and will be published in our Statement of Service Provision. Management LOS - Previously known as Non-LTP LOS. These are LOS that are measured in the organisation to ensure service delivery. for copy and paste purposes where needed

LOS number	C/ M ¹	Performance Measures Levels of Service (LOS)	Historic Performance Trends	Benchmarks		Future Perfor	mance Targets		Method of Measurement	Community Outcome
number	141-	Levels of Service (LOS)	Trends		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31	Measurement	Outcome
			2013/14: 87%	Percentage of Projects Completed within Budget = 36% Although the CCC performance targets are higher than the benchmark, these are existing targets that are set to meet the expectation of Council business units, and existing						
13.2.25.3	М	IT Projects are well managed to support wider business led changes (Scope)	2019/20: 95% 2018/19: 95% 2017/18: 96% 2016/17: 95% 2015/16: 73% 2014/15: 67% 2013/14: 87%	performance KPMG NZ/AUS Project Management Survey (2018) Percentage of completed Projects delivering Scope = 47%	>/= 85% of IT Projects are delivered within scope	% of projects delivered within scope	Internal Service			

LOS	C/		Historic Performance	Benchmarks		Future Perfor	mance Targets		Method of	Community
number	MT	Levels of Service (LOS)	Trends		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31	Measurement	Outcome
13.2.31.1	М	Council internal Customer Satisfaction To build trust and an emotional connection to IT by promoting positive internal customer experiences	2019/20: 63% 2018/19: 60% 2016/17: CCC Benchmark 60% satisfaction	No relevant external benchmark	>/= 65% satisfaction	>/= 67% satisfaction	>/= 70% satisfaction	>/= 70% satisfaction	IT Satisfaction Scorecard based on InfoTech CIO vision survey > 60% satisfaction	Internal Service
13.2.31.2	М	Council internal Customer Satisfaction To build trust and an emotional connection to IT by promoting positive internal customer experiences	2019/20: 58% 2018/19: 57%	· ·	>/= 60% value (satisfaction that IT provides high value relative to the customer perception of cost and staffing)	>/= 65% value (satisfaction that IT provides high value relative to the customer perception of cost and staffing)	>/= 67% value(satisfaction that IT provides high value relative to the customer perception of cost and staffing)	>/= 67% value (satisfaction that IT provides high value relative to the customer perception of cost and staffing)	IT Satisfaction Scorecard based on InfoTech CIO vision survey > 50% value	Internal Service
13.2.33	М	IT enabling effective and efficient business led change	2019/20: 95% 2018/19: 93%	No Relevant Benchmark Related: KPMG NZ Project Management Survey (2017) 21% of projects are consistently delivering on their benefits	>/= 85% of the number of high priority benefits realised.	>/= 85% of the number of high priority benefits realised	>/= 85% of the number of high priority benefits realised.	>/= 85% of the number of high priority benefits realised.	% of the number of high priority benefits (identified at Elaboration) that can be realised by business units (measured at project closure)	Internal Service
13.2.33.1	М	Transform additional services to digital to enhance citizen self- service.	New Level of Service	No relevant external benchmark	Baseline Council services to identify which services can be delivered as digital services (end to end), ensuring value	>/= 10% of services on the plan are digitised and benefit is realised	>/= 30% of services on the plan are digitised and benefit is realised	>/= 60% of services on the plan are digitised and benefit is realised	Reference delivery against digitisation plan	Internal Service

LOS	C/	Performance Measures	Historic Performance	Benchmarks		Method of Measurement	Communit <u>.</u> Outcome			
number	M1	Levels of Service (LOS)	Trends		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31	Measurement	Outcome
					and benefit to both the Citizen and Council. Create a plan to digitise services prioritised by either volume, revenue generating opportunity, cost saving, or risk reduction.					
Informati	ion 8	& Records Management Ser	vices							
13.2.30	M	Manage Council's Corporate Records to Public Records Act (PRA) requirements	2019/20: 84% 2018/19: 85% 2017/18: 81%	Public Records Act requirements	=/> 85% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit	=/> 87% compliance to the Public Records Act as measured by Archives New Zealand maturity Assessment / Audit	=/> 90% compliance to the Public Records Act as measured by Archives New Zealand maturity Assessment / Audit	=/>90%	% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit	Internal Service
Asset and	d Inf	rastructure Management								
13.2.34	М	IT Infrastructure asset management: Asset lifecycle compliance	2019/20 Unit Baseline:		=/< 1 year past warranty	=/< 1 year past	=/< 1 year past	=/< 1 year past	vFire system asset management and compliance to IT Asset Policy	
13.2.35	M	Software and applications: Renewal policy compliance and cycles	2019/20 Unit Baseline:		Current vendor version - 1	Current vendor version - 1	Current vendor version - 1	Current vendor version - 1	vFire system asset management and compliance to IT Asset Policy	

LOS	C/	Performance Measures	Historic Performance	Benchmarks		Future Perfor	mance Targets		Method of	Community
number	M1	Levels of Service (LOS)	Trends		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31	Measurement	Outcome
13.2.36	М	Capacity management monitoring, framework and plan approved by ICT Governance Group	2019/20 Unit Baseline:		Plan Approved	Plan Approved	Plan Approved	Plan Approved		Internal Service
Informati	ion T	Fechnology Support Service	S	1		1	1	1	1	1
13.2.14.1	М	IT Operational Resilience (Availability)	2019/20: 99.99% 2018/19: 99.97% Baseline: City Critical 99.98%	No relevant external benchmark	Key Services up time >=98%	Key Services up time >=98%	Key Services up time >=99%	Key Services up time >=99%	% of availability targets achieved (by business service level objective)	Internal Service
13.2.14.2	М	IT Operational Resilience (Return to Operation).	2019/20: 100% 2018/19: 99.99% Baseline: City Critical 95%	No relevant external benchmark	Priority 1 incidents for all services >/=95%	% of return to operations targets (P1 An incident which requires immediate attention. - Loss of Service - System down)	Internal Service			
Cyber See	curit	ty Programme and operation	nal services	1		1	1	1	1	1
13.2.37	М	Provide a safe and secure network - Network devices fully patched and up-to-date.	2019/20: Unit baseline:		Network devices fully patched and up to date at least 75%	Network devices fully patched and up to date at least 80%	Network devices fully patched and up to date at least 95%	Network devices fully patched and up to date at least 95%	Network monitoring system	Internal Service
13.2.38	М	Provide a safe and secure network - efficient response to cyber security incidents	2019/20: Unit baseline:		Priority 1 Cyber Security Incident Response activation <4 hours	vFire system security calls logged and solved (P1 An incident which requires immediate attention. - Loss of Service	Internal Service			

LOS	C/ M1	Performance Measures	Historic Performance Trends	Benchmarks		Future Perfor	mance Targets		Method of Measurement	Community Outcome
number	141-	Levels of Service (LOS)	Trenus		Year 1 2021/22	Year 2 2022/23	Year 3 2023/24	Year 10 2030/31	Measurement	
									- Network down)	
13.2.39	Μ	Provide a safe and secure network - Cyber security awareness is improved through training of staff (and elected members)	2019/20: Baseline: 90% target		>/= 90% of staff have completed cyber security training	>/=95% of staff have completed cyber security training	>/=95% of staff have completed cyber security training	>/=95% of staff have completed cyber security training	Cyber Security training system	Internal Service

6. Does this Activity Plan need to change as a result of a Service Delivery Review (S17A)?

No S17A Service Delivery Review in this planning period.

7. What levels of service changed from the LTP 2018-28 and why?

Activity/ Level of Service	Change from 2018-28 LTP	Reason	Options for consultation
DELETIONS			
LTP18: 13.2.32 Empowering citizens to easily interact with Council services.	Target: 25% of our citizen's most common transactions with CCC are completed in a digital environment	The other Council Business Units drive the pace of change possible to drive more digital services for citizens. The organisational digital strategy alignment more relevant.	n/a
13.2.14.3 IT Operational Resilience	Target: Business Operational 90%	The new target proposed overrides this one to a more achievable target. The old ones were easily achieved.	n/a
13.2.14.4 IT Operational Resilience	Target: City Critical 95%	The new target proposed overrides this one to a more achievable target. The old ones were easily achieved.	n/a

Activity/ Level of Service	Change from 2018-28 LTP	Reason	Options for consultation
13.2.14.5 IT Operational Resilience	Target: Business Critical 90%	The new target proposed overrides this one to a more achievable target. The old ones were easily achieved.	n/a
13.2.14.6 IT Operational Resilience	Target: Business Operational 80%	The new target proposed overrides this one to a more achievable target. The old ones were easily achieved.	n/a
NEW			
13.2.34 IT Infrastructure asset management: Asset lifecycle compliance	Target: =/< 1 year past warranty	The objective of setting this target is to improve IT asset management aligned to ensuring rates are affordable and sustainable. New target to monitor Asset renewal and replacement policy	n/a
13.2.35 Software and applications: Renewal policy compliance and cycles	Target: Vendor version N-1	This target's purpose is to monitor software upgrades and mitigate the risk of sustainability	n/a
13.2.36 Capacity management monitoring , framework and plan approved by ICT Governance Group	Target: Plan Approved	This target's purpose is to monitor software upgrades and mitigate the risk of sustainability	n/a
13.2.37 Provide a safe and secure network	Network devices fully patched and up to date at least 75%		n/a
13.2.38 Cyber Security Incident response	Priority 1 Incident Response activation <4 hours >		n/a
13.2.39 Cyber security awareness training results: Who has taken (and completed) training?	/= 90%		n/a
13.2.33.1 Transform services to digital to enable self service - Baseline Council services to identify which services can be delivered as digital services (end to end), ensuring value and benefit to both the Citizen and Council once digitised	New Level of Service	Action item from Council briefing to reflect request for digitisation of services	n/a
Target: Identify Council services to baseline and create a plan to digitise the service end to end, with services prioritised by either volume, revenue generating opportunity, cost saving or risk reduction.			
AMENDMENTS			

Activity/ Level of Service	Change from 2018-28 LTP	Reason	Options for consultation
13.2.31.1 Council internal Customer Satisfaction To build trust and an emotional connection to IT by promoting positive internal customer experiences Target: >/= 65% satisfaction	Target changed from ">70% satisfaction" for 2020/21 (LTP 18) to >/= 65% satisfaction" in year 2021/22 (LTP 21).	The actual value is 60%, so the target was updated to reflect a more achievable value	n/a
13.2.31.2 Council internal Customer Satisfaction To build trust and an emotional connection to IT by promoting positive internal customer experiences	Target changed from " >50% value" for 2020/21 (LTP 18) to ">/= 60% value" for 2021/22 (LTP 21).	The actual value is 50%, so the target was updated to reflect a more achievable value	n/a
13.2.14.1 IT Operational Resilience (Availability)	Target changed from "City Critical 98%" to "Key Services up time >=98%"	The actual value is 98% for city critical services, so the target was updated to reflect a wider range of key IT Services	n/a
13.2.14.2 IT Operational Resilience (Return to Operation). Target: Priority 1 incidents for all services >/=95%	Target changed from "Business Critical 95%" to "P1 for all services >/=95%"	The actual value is 95% for business critical, so the target was updated to reflect a wider range of key IT services	n/a
13.2.20 Information Management Manage Council's Corporate Records to Public Records Act (PRA) requirements	Target changed from "90% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit" in Year 3 of LTP 18 (2020/21) to "=/> 85% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit" for year 1 of LTP 21 (2021/22).	The actual value is 82%, so the target was updated to reflect a more achievable value	n/a
13.2.26 IT Strategic Planning - The Technology Enablement Roadmap is aligned to the Organisational Digital Strategy programme and the investment portfolio Target: The Technology Enablement Roadmap is approved at the start of the year through ICT Governance Board	13.2.26 IT Strategic Planning - The IT roadmap is published annually containing the reviewed direction for IT Investment Target: IT Roadmap is refreshed annually and approved by ELT Business Change Board		n/a
13.2.30 Manage Council's Corporate Records to Public Records Act (PRA) requirements Target: =/> 85% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit	13.2.30 Manage Council's Corporate Records to Public Records Act (PRA) requirements Target: 90% compliance to the Public Records Act as required by Archives New Zealand Assessment Audit.		n/a

8. How will the assets be managed to deliver the services?

The Asset Management Plan is the IT Units first foray into a planned approached to asset management in line with general council principles.

As such it details a number of initiatives that are designed to respond to increased digital service demand, enhance our resilience, improve our ability to communicate, and improve our ongoing management of assets – tangible and intangible.

One of the initiatives which will aid our response to increased digital service demand will be the implementation of a new data network. This is a multi-faceted solution that looks internally to provide an enhanced environment for monitoring and managing our various systems whilst also providing robust connectivity for our customers to be able to access council systems in a timely, safe and secure way.

Our resilience will be improved by taking advantage of the advances made in the area of cloud based delivered services and solutions that focus on vendors capable of delivering high quality solutions, often packaged as Software as a Service (SaaS) subscriptions. These benefit from an economies of scales approach that minimises council risk whilst maximising our potential to deliver, with inherent resilience

Communication is key to keeping our customers and citizens aware of what the council is doing, ensuring all stakeholders have the right to be heard. Changes to the digital services we provide will enhance our capabilities both internally and externally.

IT Asset management will be redefined to ensure we meet best practice principles, understand what we have, where it is located, who is using it and when. This approach will ensure that we are utilising the right tools, that these tools are fit for purpose, we are future proofing our environment whilst at the same time retiring any technical debt, and that we have sustainable renewal programmes that take into account reasonable levels of product lifecycle.

All of our initiatives have in common the aim of a level of fiscal responsibility that shows that IT Asset Management is well managed, financially prudent, and offers value for money.

See <u>Asset Management Plan for Information Technology</u> for more details.

9. What financial resources are needed?

Information Technology											
000's	Annual Plan 2020/21	LTP 2021/22	LTP 2022/23	LTP 2023/24	LTP 2024/25	LTP 2025/26	LTP 2026/27	LTP 2027/28	LTP 2028/29	LTP 2029/30	LTP 2030/31
Activity Costs before Overheads by Service											
Asset & Infrastructure Management	7,073	8,201	8,323	8,532	7,989	8,176	8,354	8,566	8,803	9,046	9,286
Information & Records Mgmt Services	3,548	4,428	4,503	4,613	4,714	4,822	4,925	5,050	5,185	5,325	5,463
IT Support Services	10,642	8,619	9,705	9,927	10,290	10,535	10,784	11,054	11,353	11,659	11,963
Technology Enablement	3,220	3,525	2,893	2,969	3,608	3,690	3,764	3,860	3,965	4,073	4,198
	24,483	24,773	25,423	26,041	26,600	27,223	27,828	28,530	29,306	30,103	30,910
Activity Costs by Cost type											
Direct Operating Costs	4,278	4,259	4,392	4,489	4,593	4,703	4,816	4,937	5,070	5,207	5,342
Direct Maintenance Costs	2,323	2,582	2,789	2,850	2,916	2,986	3,058	3,134	3,219	3,306	3,392
Staff and Contract Personnel Costs	7,040	7,536	7,546	7,771	7,916	8,091	8,237	8,449	8,683	8,923	9,179
Other Activity Costs	10,841	10,396	10,695	10,930	11,175	11,443	11,718	12,010	12,335	12,668	12,997
	24,483	24,773	25,423	26,041	26,600	27,223	27,828	28,530	29,306	30,103	30,910
Activity Costs before Overheads	24,483	24,773	25,423	26,041	26,600	27,223	27,828	28,530	29,306	30,103	30,910
Overheads, Indirect and Other Costs	(40,470)	(43,767)	(45,131)	(44,910)	(46,173)	(47,252)	(48,786)	(49,868)	(50,324)	(50,752)	(51,318)
Depreciation	16,212	19,224	19,903	19,068	19,777	20,237	21,171	21,557	21,242	20,879	20,644
Debt Servicing and Interest		-	-	-	-	-	-	-	-	-	-
Total Activity Cost	225	230	195	199	204	208	213	219	225	231	237
Funded By:											
Fees and Charges	111	113	115	118	121	123	126	130	133	137	140
Grants and Subsidies	-	-	-	-	-	-	-	-	-	-	-
Cost Recoveries	114	117	79	81	83	85	87	89	92	94	97
Other Revenues	-	-	-	-	-	-	-	-	-	-	-
Total Operational Revenue	225	230	195	199	204	208	213	219	225	231	237
Net Cost of Service	(0)	-	0	(0)	(0)	0	0	(0)	0	0	(0)
Capital Expenditure											
Replace Existing Assets	5,555	7,632	8,069	7,276	7,458	7,644	7,842	8,054	7,864	8,092	8,311
Improve the Level of Service	7,195	11,245	13,894	10,634	9,752	9,408	9,652	9,913	10,425	10,727	11,017
Total Activity Capital	12,750	18,877	21,962	17,910	17,210	17,052	17,495	17,967	18,289	18,819	19,327

10. How much capital expenditure will be spent, on what category of asset, and what are the key capital projects for this activity?

	apital Pro	-												
ctivity	Driver	ID	Project Name	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	Tota
formatio	n Technolo	gy												
	Asset Re	enewal												
		436	Programme - Technology Systems	6,865	8,069	7,276	7,458	7,644	7,842	8,054	7,864	8,092	8,311	77,47
			Replacements & Renewals											
		62017	Windows Server OS Upgrades	442										44
		62025	Audio-visual at Community Boardrooms	20										2
		62028	ParagonIQ Replacement - Snapshot Capital	25										2
			Reporting Tool (PowerBI)											
		62029	Managed Print Services Implementation	200										20
		62771	Funding and Grants Management System	230										23
			Replacement											
		63371	InfoCouncil Integration and Website Upgrade	55										5
		63618	M365 – SharePoint Online Migration	70										7
	Level of	f Servi ce li	mprovement											
		434	Programme - Business Technology Solutions	1,945	7,987	6,156	6,310	5,880	6,033	6,196	6,401	6,587	6,765	60,26
		435	Programme - Continuous Improvement	3,467	5,907	4,477	3,442	3,528	3,620	3,717	4,024	4,140	4,252	40,57
			Technology											
		20972	Standardisation of CCC invoicing processes	100										10
		34954	Get Off GEMS	2,130										2,13
		56721	Backflow Prevention	25										2
		59286	Migrate .NET Services to Windows 2019	66										6
			Server											
		62016	Consenting and Compliance Regulatory &	50										5
			Legislative Bundle FY21											
	New Se	rvice												
		62013	Holidays Act Corrections	1,791										1,79
		62021	M365 Modern Workplace – Exchange Online	140										14
		62552	Robotic Process Automation (RPA)	169										16
		63987	Excess Water Use (IT Project)	480										48
		64361	Information Management Data Ingestion	107										10
		64449	Modern Desktop Management - End Point	200										20
		64452	IAAS Transition to Cloud	250										25
		64536	Christchurch Free Wifi	50										5
formatio	n Technolo	gy Total		18,877	21,963	17,909	17,210	17,052	17,495	17,967	18,289	18,819	19,328	184,90

11. Does this activity have any significant negative effects on social, economic, environmental or cultural wellbeing, now or in the future?

Negative Effect	Mitigation						
Social							
1. Council website not available	Communication network renewal and replacement						
Economic							
2. Council services payments not available	Replacement of old legacy technology						
Environmental							
3. 3 waters SCADA legacy systems	Replacement of legacy old technology						
Cultural	Cultural						
4. Cyber security threats	Cyber Security awareness training for all Council employees						

12. What risks are identified and what controls and mitigations are planned?

Risk / Uncertainty: (for each risk you ider risk, we suggest a maximum of 5 items aga	entify, complete the following sections. You ca iinst each risk)	Assessed Risk Level		Controls and Mitigations	
Risk Title There is a risk that/of:	Caused By:	Resulting In:	Inherent	Residual	
LoS: Council internal Customer Satisfaction: To build trust and an emotional connection to IT by promoting positive internal customer experiences IT's ability to support flexible/remote working requirements There is a risk that:	 Caused by: a sharply increased demand for staff to work remotely lack of sufficient Opex/Capex Budget to purchase the required equipment 	Resulting in: Council being unable to maintain its required levels of business/service to the community.	72	35 High	Treatments: Development/implementation of a flexible working policy (by HR) which covers the requirement for IT set-ups to meet the actual need to work remotely/flexibly, to balance business need (if/where the Council requests/requires the arrangement); and employee welfare/flexible work needs (if/where the Employee requests the arrangement) appropriately.

Risk / Uncertainty: (for each risk you ider risk, we suggest a maximum of 5 items aga		n have more than one cause or result/outcomes for each	Assessed	l Risk Level	Controls and Mitigations
Risk Title There is a risk that/of:	Caused By:	Resulting In:	Inherent	Residual	
With new flexible working arrangements, IT is unable to meet the increased demand for ITC equipment required to support such arrangements, ie to enable everyone who needs to, work from an alternative/remote location, to do so.					
LoS: IT Projects are well managed to support wider business led changes (Budget, time, scope) Failure to successfully deliver technology components of business change (people, process and technology) programmes and projects There is a risk that: IT is unable to deliver the required capital programme of work.	 Caused by: Competing priorities at a business governance level (leading to lack of prioritisation of resource for IT capital projects) Lack of business readiness (timeliness/scheduling, culture, resource availability) to undertake the planned actions, identified within organisational change programmes. 	Resulting in: The Council being unable to deliver its LoS and commitments to the Community.	64	56 High	 Treatments: Ensure project scope is clear and communicated to the required stakeholders; and that it includes the rationale of the change and benefits IT Governance Board: Ensure IT supports Business Change objectives/purpose, provides governance at portfolio/programme level and reporting including Cyber Security. All IT enabled capital programmes of work are aligned to the Council Digital Strategy and deliver against the Council Strategic Priorities Ensure that technical and business resource dependencies between BAU and Capital projects are identified and managed so that the programme of work can be delivered as planned.
LoS: IT availability and return to operations LoS Digital Network Outage There is a risk of: IT being unable to deliver the IT requirements supporting	Caused by: A Digital Network Outage and lack of network monitoring.	Resulting in: The Council being unable to deliver its LoS and commitments to the Community.	72	64 Very High	 Treatments: Deliver a program to upgrade the Data Network and address the aging hardware Ensure adequate people resources are available to manage the operation of the CCC network, including the use of

Risk / Uncertainty: (for each risk you ider risk, we suggest a maximum of 5 items aga		have more than one cause or result/outcomes for each	Assessed	d Risk Level	Controls and Mitigations
Risk Title There is a risk that/of:	Caused By:	Resulting In:	Inherent	Residual	-
Council initiatives that deliver the Council Strategic Priorities.					internal staff, contractors and external vendors.
LoS: IT availability and return to operations LoS GEMS/Worksmart and 3 Waters SCADA legacy systems - Security and Technical Sustainability There is a risk of system failure and security vulnerability from malicious activity or ransomware.	Caused by: Continued use of vulnerable GEMS/Worksmart legacy technology and SCADA out-of-life applications, which are still depended upon, by several operationally critical business functions.	 Resulting in: Inability to restore, recover or restart the GEMS platform/SCADA, losing all data and functionality the Council being unable to deliver its LoS and commitments to the Community. 	72	56 High	Treatments: Expedite replacement of GEMS/Worksmart and SCADA system functionality, and discontinue from CCC operational activities, as it is old legacy technology.
LoS: IT Infrastructure asset management: asset Lifecycle management, availability and return to operations LoS Obsolete Key Technology Systems There is a risk that: Key systems which form core CCC business solutions are not up-to-date, and/or aged beyond fit-for-purpose/useful life, and are not providing best-fit business solutions.	 Caused by: prolonged underinvestment lack of clear technology architectural strategy for IT ineffective governance over IT investment decisions lack of clear business strategy and priorities, and system/solution ownership 	 Resulting in: IT being unable to provide quality solutions in a timely manner impact to our citizens as CCC unable to deliver the expected level of service financial cost of system reinvestment compounds the longer it is deferred "shadow" IT systems implemented by business groups System Failure or systems not coping with business demands Systems / Solutions not secure 	72	40 High	 Treatments: lead the creation and maintenance of IT Platform Roadmaps, describing current and target architectures for the business information, data, application and technology domains communicate the IT Technology Strategic Roadmap to key IT vendors, so they understand Council expectations/requirements monitor compliance with IT Assets Renewal and Replacement policy monitor aging systems supported by platform teams ensuring availability include work-around in place for current aging systems remove technical debt / legacy systems.
LoS: Cyber Security Programme and operational services LoS CCC Cyber Security Incident response There is a risk of:	 Caused by: lack of adequate environment/network monitoring to enable early detection ineffective Cyber Security Incident Response Process 	 Resulting in: service disruption to Christchurch citizens Council lacking the ability to identify, detect, respond or recover from threats the integrity and availability of Council information is not protected to the 	64	15 Medium	 Treatments: ensure IT policies are maintained, approved and communicated to the CCC staff develop and publish a Cyber Security Programme of work

Risk / Uncertainty: (for each risk you identify, complete the following sections. You can have more than one cause or result/outcomes for erisk, we suggest a maximum of 5 items against each risk)			Assessed	l Risk Level	Controls and Mitigations	
Risk Title There is a risk that/of:	Caused By:	Resulting In:	Inherent	Residual		
Financial and/or reputational damage to the Council due to potential service disruption created by cyber threats to Council operations.	 lack of resource for Cyber Threat and Risk Management lack of a confirmed agreed Cyber Security Roadmap in-adequate consideration of Information Protection and Data Security lack of Cyber Security Strategy with respect to support for protective tools. 	required level, depending upon its classification. • cyber-attacks targeted at Council personnel continually happening financial or reputational loss for the Council.			 IT Governance Board/Group: Ensure IT Cyber Security Programme of work supports the Council cyber security requirements IT Unit to ensure defined cyber security training objectives are consistently achieved. Report on the number of staff undertaking the three courses defined in the cyber security awareness suite for all staff develop and maintain a Cyber Security Programme roadmap and have it approved by the IT Governance Group formalise a CCC Cyber Incident Response Team, including agreement with third party providers as required implement standard monthly reporting for the IT Governance Group develop and publish Cyber Threat Intelligence Guidelines. 	
LoS: Manage Council's Corporate Records to Public Records Act (PRA) requirements LoS Information Management risk There is a risk of: Illegal actions and unapproved access to Council data.	 Caused by: Council not managing access and security of public information/records not treating data/information as a core and strategic asset records are destroyed inappropriately records are inappropriately accessed by others lack of business data ownership (accountability) and responsibility) under-investment in training/induction for staff 	 Resulting in: inconsistent information management practice leading to poor access and security controls the Council being unable to deliver its LoS and commitments to the Community. 	72	35 High	 Treatments: build/maintain understanding of organisational PRA maturity develop and execute IRM Maturity Improvement Implementation Plan including the following elements: PRA/LGOIMA/Privacy Act induction and refresher training, and defined and owned roles and responsibilities enable and support Organisations PRA Executive Sponsor role maintain a Disposal Authority for CCC with Archive NZ define an information classification model and an enterprise data model 	

Risk / Uncertainty: (for each risk you ide risk, we suggest a maximum of 5 items age		have more than one cause or result/outcomes for each	Assessed	l Risk Level	Controls and Mitigations		
Risk Title There is a risk that/of:	Caused By:	Resulting In:	Inherent	Residual			
	across PRA, LGOIMA and Privacy Act • over-reliance on financial record keeping obligations.				 collaborate with Business Owners and Systems Owners, to identify sensitive information and systems, and business impact analysis establish and embed the Information Classification rules provide initial training and awareness of information classification prioritise the information sets and applications using output from Information Classification complete Information classification for most critical information assets. 		
LoS: IT and business availability and return to operations LOS	LoS: IT and business availability and return to operations LOS	LoS: IT and business availability and return to operations LOS	40	15 Medium	 Treatments: support the Business Continuity Policy, Objectives and Scope, and provide 		
Business Continuity Resilience There is a risk that: Council Services will be disrupted, facilities damaged, tenants displaced and/or business interruption response or recovery delayed.	 Business Continuity Resilience There is a risk that: Caused by: a natural or man-made disaster outdated or absence of BCP plans for enabling corporate services support functions under a BCP event BCP roles and responsibilities for enabling functions not being well-defined. 	 Business Continuity Resilience Resulting in: units closed with the associated reduction in rent revenue, additional costs in insurance excesses and the Housing Unit not meeting its LoS lack of clarity over corporate support roles and functions under BCP events critical service delivery interruptions or failures delayed services and functional support to business units and their BCP plans financial and legislative impact: lack of clarity and guidance to staff around BCP role and functions. 			 information required for Business Impact Analysis. Exercise, test and review the BCP review, maintain and improve the Business Continuity Plan maintain, test and update IT Business Continuity Plans. 		