

Information Technology

(Previously known as Information Management &
Communications Technology)

Activity Management Plan

Long Term Plan 2015–2025

As amended through the Annual Plan 2017/18

1 July 2017

Quality Assurance Statement

Christchurch City Council Civic Offices 53 Hereford Street PO Box 73015 Christchurch 8154 Tel: 03 941 8999	Version	V2 1st July 2017
	Status	
	Activity Manager: Gavin Till	
	Chief / Director: Anne Columbus	
	Asset Manager:	
	Finance Manager:	

Table of Contents

Table of Contents.....	i
List of Tables	ii
List of Figures	iii
1 Key Issues for the Information Technology Activity	1
1.1 Community Outcomes	1
1.2 Effects of growth, demand and sustainability	2
Population Growth and Demand	2
Sustainability.....	2
1.3 Key Challenges and Opportunities for Information Technology	3
2 Proposed changes to activity	6
3 Activity description	8
3.1 Focusing on what we want to achieve.....	8
3.2 How we will know we are achieving the outcomes.....	8
3.3 What services we provide	8
3.4 Our key customers	9
3.5 Key legislation and Council strategies.....	9
4 Levels of service and performance measures.....	10
5 Review of cost effectiveness - regulatory functions and service delivery.....	15
6 Long Term Infrastructure Strategy	19
6.1 Issues, principles and implications.....	19
7 Review of cost-effectiveness - infrastructure delivery.....	19
8 Significant Effects	20
8.1 Assumptions	20
9 Risk Management.....	21
10 Key Projects	22
11 Summary of Cost for Activity	25
12 Appendix A - IT Service Level Agreement	26
13 Appendix B - IT Asset Renewal Policy.....	28
14 Appendix C - IT Investment Roadmap (Subject to change)	29

List of Tables

Table 1-1 Key Issues and Opportunities	3
Table 2-1 Proposed changes to activity	6
Table 4-1 Levels of Service and performance measures.....	10
Table 8-1 Significant Negative Effects.....	20
Table 8-2 Significant Positive Effects	20
Table 8-3 Major Assumptions.....	20
Table 9-1 Significant Risks and Control Measures	21
Table 10-1 Key capital and renewal work.....	22
Table 10-2 Funding Options for ICT Asset Renewal & Replacement	24

List of Figures

Figure 5-1 Benchmarking ICT Metrics - CAPEX per FTE	17
Figure 5-2 Benchmarking ICT Metrics - CAPEX per ICT FTE	17
Figure 5-3 Benchmarking ICT Metrics - OPEX per FTE	18
Figure 5-4 Benchmarking ICT Metrics - OPEX per ICT FTE.....	18
Figure 10-1 IT Asset Renewal & Replacement Funding.....	23
Figure 11-1 Summary of Cost for Activity.....	25

1 Key Issues for the Information Technology Activity

Every service that the Council provides to the community is enabled by our investments in technologies, tools and systems.

Our Community is rapidly maturing to a high level of technological sophistication. Ownership and use of conventional computers may have reached a plateau but the rapid uptake of tablet devices and smartphones all connected to the internet are fundamentally changing the ways that people want to interact with the Council; how they obtain information, request and pay for services.

For most users of the Council's online channels, the Internet is an integral part of daily life. 87% of New Zealand's total population is now online and 70% use the internet every day. This is a growing trend, reflected in the fact that almost all our under 40s are online, and the aging generation is one of the fastest growing adopters of those not already online.

The shift in our community's media consumption habits means the Council must be resourced and ready to change to meet the needs of our community. This is particularly relevant to online, digital and mobile channels – the platforms Council has to serve its information (i.e. websites) must be able to perform on various devices (i.e. laptops, tablets and smartphones) but more importantly, serve content that is easy to find and relevant to the customer and supports our community engagement objectives.

Our IT Investment Roadmap has significant focus on Citizen and Community Self Service, where we strive to improve customer service and communication engagement by modernising our existing systems, and developing the online-services that can be consumed by our community.

To support these community engagement outcomes the Council IT department is proposing two key changes to the activity focus:

- Increased focus on citizen/community engagement and online self service
 - Citizen expectations to be able to interact with Council using channel of choice, whether it be online, digital and mobile; or more traditional channels such as face-to-face and telephone.
- Increase support for 24x7 Operations (and expectations of service delivery continuity)
 - Council is now operating a 24x7 contact centre (previously out-of-hours service was outsourced to external provider)
 - Increase of online services requires greater level of system availability, reliability and support.

We will know we are achieving the above outcomes when we see the following results:

Customers (Citizens, ratepayers, those who rely on CCC services and business partners) can access and use the services they need – how and when they need them. The main customer channels such as the CCC website and the technologies that support the Contact Centre continue to meet or exceed their availability targets.

The tools and technologies that underpin the organisation's services (Desktop devices, Network and infrastructure and business applications) are delivered and available to levels that meet or exceed the targets described in section 4

As the Council and the wider community grapple with the costs associated with recovering from the earthquakes leveraging our investments in Information Technologies will be a key component of delivering more efficient and cost-effective services to the Community

1.1 Community Outcomes

Everything that the Council does in its day-to-day work is focused on achieving community outcomes. All activities outlined in this plan aim to deliver the results required to achieve these outcomes, contribute to Council strategies and meet legislative requirements. Likewise, all Council capital and operating expenditure is directed towards a level of service that moves the community closer to these outcomes .

Information Technology services support the efficient running of the Council's business and organisation and its delivery of information to the community, and thus contribute to all community outcomes

Section 4 shows how these outcomes flow down into and influence the Council's activities and levels of service in relation to Information Technology.

1.2 Effects of growth, demand and sustainability

Describe how our population growth and demand effects the decisions Council will make in delivering services to ensure that they are sustainable and will meet the needs of the people of Christchurch into the future.

Population Growth and Demand:

Currently, the Council serves a population of 366,000 citizens who interact with us across a large number of services – ranging from regulatory services, property information and recreational memberships. Every day, citizens engage with the Council, either face-to-face, by phone, email or online.

Today the Council's service delivery remains primarily through traditional channels (phone, face to face and email) – the customer services team handled nearly 1 million interactions through these traditional channels last year. Such channels are more expensive and less responsive than online options.

Similarly, Christchurch population growth will directly affect demand for services that are provided by other Council business units. This increase in demand will in turn drive each of the lines of business to look for improvements in process, information and technology, which will in turn impact Information and Technology.

With the increased focus for Council and Community on 'Going Digital', there will be an increased demand for IT services; storage for digitisation of assets, evidence or records, and delivery new systems that support online self-service

The following key strategic priorities are demand drivers for Information Technology

- Better Public Services
 - o Increasing our customers' ability to access and interact with our digital service channels
 - o Providing a full in-house 24/7 customer contact centre
 - o Investigating e-democracy services and technology
- Better Public Value
 - o Implementation of IT Services to support business process improvement and streamlining opportunities
 - o Technology to automate common processes
- A modern, agile and innovative organisation
 - o providing the flexibility in our information technology platforms that supports business process change and improvement
 - o Improving access for staff to work from multiple locations using innovative technologies
 - o improving our business continuity and disaster recovery functions
- Visible Leadership
 - o Increased collaboration with our strategic partners and other councils to provide the best service at the best value to citizens

Increased demand for integration between agencies and businesses and improvements in information management and open access to data.

Sustainability:

The Local Government Act 2002 requires local authorities to take a sustainable development approach while conducting its business. Sustainable development is the fundamental philosophy that is embraced in Council's Vision, Mission and Objectives, and that shapes the community outcomes. The levels of service and the performance measures that flow from these inherently incorporate the achievement of sustainable outcomes. We aim to ensure that Information Technology is sustainable through the following approaches:

Environmental Sustainability:

The City Council has shown great leadership in environmental sustainability through the development of its 6 Star rated Head Office. We seek to assist in the continuation of the 6-Star rating by reducing energy usage whilst accommodating increased numbers of staff in the building. The My Workplace initiative is delivering to this ambition by the gradual virtualisation of commonly used software applications and replacing personal computers and laptops with low energy “zero” client machines. This approach along with the gradual roll-out of increased mobile technology for staff will enable staff to share workspaces in the Head Office and put less pressure on acquiring additional facilities. Investments in technologies for collaboration, conferencing, mobility will reduce the need to travel between council facilities and combined with improvements in inspections, scheduling and booking, reduced travel will reduce carbon emissions. Fleet GPS, Navigation and pool booking will reduce impact from vehicles. Provision of citizen and community only services will reduce the need to visit Council offices to do business with Council.

Economic Sustainability

Economic Sustainability contributes to the local economy and enhances our ability to grow Christchurch as a world class boutique city. Our primary focus is to provide the same or higher levels of service whilst reducing our operational costs. This will mainly happen through continued rationalisation of systems, re-negotiating of existing supplier contracts to extract greater value, leveraging the buying power of All of Government (AoG) contracts where there is a clear advantage to Christchurch City and collaborating with other local authorities and government agencies to deliver common services under shared cost arrangements. Open Data will provide access to Council information that may create new business opportunities and improve productivity of the city.

Social Sustainability

Social sustainability is the ability for a social system, such as a community, to function at a high level of well-being and harmony. For us the key issue is how technology drives or supports social change in the community and within the organisation. We seek to enhance the social bonds between the Council and the community by making the Council more accessible through technology. New Council community facilities will add touch screen Kiosks, we will provide mobile apps for our community to alert us easily and quickly that an issue in their environment needs our attention and we will become more accessible by offering more customer focused technology services such as online consultations and online payment services for common Council activities. The MyWorkplace programme will enable improved flexibility, social interaction, and harmony through teleworking, conferencing and mobility.

1.3 Key Challenges and Opportunities for Information Technology

In working towards the community outcomes, influenced by population growth and demand, Council faces the challenge of making decisions that prioritise resources to deliver the best mix of services at the right level and in a sustainable way. The key challenges and opportunities that have been priorities by Council are below in Table 1-1.

Table 1-1 Key Issues and Opportunities

Key Issue	Discussion
Increased citizen expectations for Online Services	<p>Citizens today regularly use online-services to interact with their bank, airline, retailers, central government and other business. It is this level of commoditisation that increases the expectations of today's citizens for Council to provide access to Council services using their channel of choice, from any location, at a time that is convenient to them.</p> <p>Our IT Investment Roadmap has significant focus on Citizen and Community Self Service, where we strive to improve customer service and communication engagement by modernising our existing systems, and developing the online-services that can be consumed by our community.</p>

Key Issue	Discussion
Open Data and Greater demand for integration and interoperability	<p>On 8 August 2011 government approved new principles for managing the data and information it holds. It stated that government departments should make information available easily, widely and equitably to the people of New Zealand (except where reasons preclude such availability as specified in legislation). Government also implored all Territorial authorities to follow suit</p> <p>Providing a more open relationship between Council, businesses, citizens and partners, supported with self-service information leads to greater efficiencies within the public sector, greater transparency, and can create new business opportunities through the reuse of information in private sector, driving an increase in economic value for the city of Christchurch.</p> <p>New entities have been established in response to the earthquake new entities, some of which have finite operating terms (including SCIRT, CERA, and CCDU). Council fosters an inter-agency approach for communications/engagement on rebuild/recovery issues and projects.</p> <p>A significant focus for service delivery is open and transparent systems and services that facilitate easy and rapid sharing of data that supports timely decision making.</p>
Information Governance	<p>As making information readily accessible to all is relatively new to Council, we need to adopt some Information Governance structure and principles so as to actively drive adoption of an open Council Information and Data programme, prioritise the release of public data, promotes the programme benefits, and oversee progress. In doing so we ensure Council is being open and transparent with the information that we manage.</p>
Protection of privacy of information	<p>While providing greater transparency of information and open data, and an expansion of on-line services, it is critical to retain the privacy of citizen specific data and protection of commercially sensitive information.</p> <p>We are continually managing and reviewing processes and systems for the management, access and control of such information, to protect from threats and vulnerabilities.</p>
Need for Joined up Citizen Information	<p>In order to deliver better public services, consolidated online services and to provide our citizens with 'no wrong-door' to attaining service, Council need to establish a joined-up view of our customers and the different relationships they hold with different parts of council and services consumed.</p>
Consumerisation of IT changes expectations from Council business units	<p>The exponential increase in the use of smart mobile devices and the ease in which Cloud service offerings can be obtained by everyone in their own personal lives, has changed the expectations that we have of IT in the corporate world. However while business units can readily acquire consumer like IT services from the cloud, this approach does not reflect the sensitivity and security of information, not does it consider integration to Council systems or the level of support.</p> <p>Moving from being the internal technology delivery capability for Council, the IT department is positioned as a services broker, providing faster time to market with the appropriate service delivery is used (including cloud), integrating with Council systems, while safeguarding Council assets (information and systems).</p>
24x7 Operations	<p>The increase of digital and online services and the provision of a 24x7 Contact Centre, increases the level of support required to deliver IT services to the customer facing lines of business.</p> <p>We are upgrading and expanding our core IT infrastructure and implementing new services to support 24x7 operations. Similarly processes and staffing requires review to support the extended service hours. The increase of digital and online services and the provision of a 24x7 Contact Centre, increases the level of support required to deliver IT services to the customer facing lines of business</p>
Increased demand for Enterprise Mobility	<p>Enterprise mobility provides the ability for staff to securely access and update information from any location, not only providing effectiveness and cost efficiencies, but an improved experience by being able to resolve issues at the initial point of contact.</p> <p>From our initial trials of enterprise mobility, Council business units experienced significant productivity benefits from data capture in the field, better scheduling and improvement of data quality which results in less rework</p> <p>Field technology for building inspectors not only enables more inspections to be performed, but provides better information to reduce rework and delay in decision.</p> <p>Nearly all activities within council can benefit from improvements in field technology and mobility for staff and partners.</p>

Key Issue	Discussion
Maintaining Modern and Current IT Assets in a changing Digital world	<p>The pace of change of today's digital world is moving at a rate that exceeds the current pace for Christchurch City Council. Modernisation of IT assets is required to support the Council to be a Modern Mobile and Agile organisation, improving our public services and customer engagement, while allowing our to work more remotely and more effectively, accessing information applications and communicating with colleagues, partners and customers.</p> <p>The level of funding for IT Asset Renewal and Replacement has resulted in large proportion of IT assets that are not up-to date. Without a change to increase the funding for keeping ICT assets current, the backlog will accumulate with risk to current levels of service, risk of failure of critical services and it will impede the transformational changes with adoption of new technologies to deliver business outcomes.</p> <p>The change in focus and funding on IT Asset Renewal and Replacement will not only support the Council to catch-up to today's technology landscape, but also maintain the required level of currency.</p>

2 Proposed changes to activity

Table 2-1 summarises the proposed changes for the management of the Information Technology activity since the Three Year Plan 2013-16 Activity Management Plan.

Table 2-1 Proposed changes to activity

Key Change	Reason	Level of significance? What investigations are needed?	Options for consultation and engagement
Increased focus on citizen/community engagement and online self service	Citizen expectations to be able to interact with Council using channel of choice, whether it be online, digital and mobile; or more traditional channels such as face-to-face and telephone.	High Increased focus in online services, information security and modernisation of legacy line of business transaction systems is required. Business processes to be review to ensure customer oriented and support self-service.	External focus groups and research to identify community needs, issues, feedback
Increase support for 24x7 Operations	The out-of-hours contact centre has recently been transferred from external provider to in-sourced within Council. Increase of online services requires greater level of system availability, reliability and support.	High Improvements to core IT infrastructure, telephony, and application systems is required. Review and changes to processes, support systems and staff required	Not applicable
Increased focus on Interoperability and Integration with external partners, and open data	New entities have been established post-earthquake (SCIRT, CERA, CCDU) and the focus on recovery has led to a greater need for Council, agencies and organisations to work closely together on the rebuild of city and facilities	Medium IT department has identified integration as a core competency and have planned significant investments in integration platforms, integration services, information management and information security.	Engagement with relevant business partners to deliver
To ensure that Council is compliant with the Public Records Act (PRA), an independent assessment is required as set out by Archives New Zealand to establish a current state.	It is anticipated that the assessment will confirm Council's compliance but to date Council has not been audited enabling this to be confirmed	Medium By putting an auditable process in play Council will be able to clearly show the level of compliance & in doing so will appease any audit process.	Not Applicable

Key Change	Reason	Level of significance? What investigations are needed?	Options for consultation and engagement
<p>IT has developed a new structure designed to better align with Council Business Units, by creating teams which will focus directly on specific functions (e.g. Regulatory) rather than the previous focus on IT function.</p>	<p>IT department has identified in conjunction with business partners that the previous general structure often resulted in a number of hand-off's during the delivery of solutions with each hand off requiring a new team to become acquainted with the Business Unit requirements afresh. This was leading to frustration for customers, lower productivity and lower than desired performance.</p>	<p>Medium It is expected that this transformational change will take up to a year to gain full benefits</p>	<p>Not Applicable Internal: Staff consultation on change proposal</p>

3 Activity description

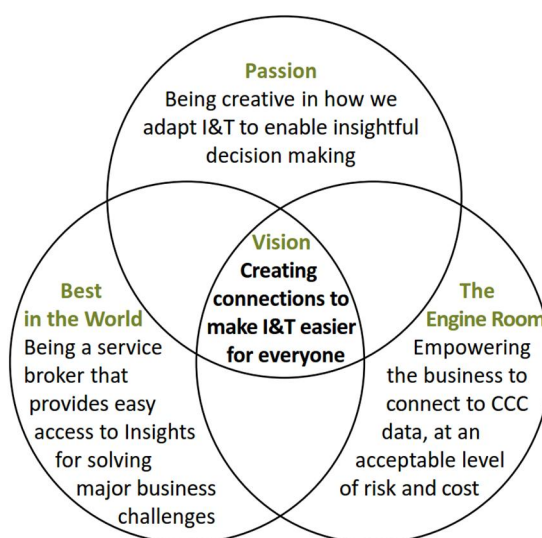
3.1 Focusing on what we want to achieve

Council undertakes activities in order to deliver on the community outcomes for Christchurch. The outcomes that relate most directly to the management of the city's Information Technology are that:

Information technology services support the efficient running of the Council's business and organisation and its delivery of information to the community, and thus contribute to all community outcomes.

Information Technology are a service broker that provides easy access to insights for solving major business challenges.

This is achieved by being creative in how we adapt information & technology to enable insightful decision making, and empowering the business to connect to CCC data at an acceptable level of risk and cost.



3.2 How we will know we are achieving the outcomes

We will know we are achieving the above outcomes when we see the following results:

Customers (Citizens, ratepayers, those who rely on CCC services and business partners) can access and use the services they need – how and when they need them. The main customer channels such as the CCC website and the technologies that support the Contact Centre continue to meet or exceed their availability targets.

The tools and technologies that underpin the organisation's services (Desktop devices, Network and infrastructure and business applications) are delivered and available to levels that meet or exceed the targets described in section 4

3.3 What services we provide

This activity includes the following services:

Information & Technology Services

IT Operations - Keeping the lights on

Ensuring that the IT tools and systems provided in and by Council and provided for citizens are operating effectively. That systems are available, secure and reliable, meet users' expectations and kept up to date. In the event of an incident or a required service request, that the service is restored

to the agreed performance level as quickly as possible. Management of IT assets and the renewal programme to ensure that levels of service¹ are protected.

IT Growth & Improvement

Assisting Council and citizens to gain the efficiencies available from the IT tools and systems provided through continuous improvement of the systems, and the processes. Development and delivery of ways to maximise value from tools through training, process improvement and development.

IT Transformation - Implementing strategic change

Delivering new and enhanced solutions which transform Council services and delight citizens based on the IT roadmap and the changing demands of the business. The focus is; fit to demand, high performance user experience, rapid delivery and cost effective, seamless introduction of new tools and services.

This is a core project delivery service focused on enabling identified benefits and ensuring that the delivery process is robust and readies the user community to realise these benefits.

IT Strategy Planning and Architecture

Formulating the IT strategic direction that encompasses the holistic view of Council strategies, emergent customer demand and the realisation of business outcomes, now and in the future. Defines, initiates and controls the programme and projects that are required to execute. Guides and direct the organisation through the business, information, process, and technology changes necessary for successful development and execution of strategy.

Information Management

Corporate Data – The management of Council data to New Zealand Open Data Standards

Records Management – The management of Council records to the Public Records Act

3.4 Our key customers

Customers (including citizens, ratepayers, business, elected members, internal staff, and business partners) are any people who for utilise IT Services from Christchurch City Council

3.5 Key legislation and Council strategies

- Health and Safety in Employment Act 1992
- Employment Relations Act 2000
- Local Government Official Information and Meetings Act 1987
- Public Records Act 2005
- Privacy Act 1993
- Corporate Services Strategy 2014
- Online Channels Strategy 2014
- Customer Service Strategy 2014
- ICT Strategy 2013-2022
- Better Public Services - Result 10 Blueprint (DIA)
- Government ICT Strategy and Action Plan to 2017 (ict.govt.nz)

¹ Refer to IT Service Catalogue for the detailed list of IT services

4 Levels of service and performance measures

Table 4-1 summarises the levels of service and performance measures for the Information Technology activity. Shaded rows are the levels of service and performance measures to be included in the Long Term Plan. Non-shaded rows are non-LTP management level measures, agreed with and reported to Council but not included as part of the community consulted document.

Table 4-1 Levels of Service and performance measures

Performance Standards Levels of Service (we provide)	Results (Activities will contribute to these results, strategies and legislation)	Method of Measurement (We will know we are meeting the level of service if.....)	Current Performance	Benchmarks	Future Performance (targets)			Future Performance (targets) by Year 10 2024/25	
					Year 1	Year 2	Year 3		
					2015/16	2016/17	2017/18		
Information & Technology Services									
13.2.14	<p>IT Operations: Customers are able to operate the right technology at the right time²</p> <p>Percentage of (Critical) Priority 1 support calls that meet our agreed service level for Incidents including Service Requests.</p>	<p>Modern, mobile and agile systems are delivered to Council and citizens</p> <p>Self-service options are available to citizens.</p> <p>Service requesters are advised of the call priority based on the overall impact to them and the urgency associated with</p>	<p>Every request is measured & reported against the standards, to establish the % that comply.</p> <p>The standard is published and upgraded where possible to reflect the increasing demand for IT lights to be "always on".</p> <p>Reporting drives capacity and capability management to proactively maintain readiness.</p>	<p>98% of Critical Incidents and Service requests are resolved or work around provided within 4 standard Service hours.</p> <p>Last 12 months figures</p> <p><u>110 Critical calls</u></p> <p>Comprising: 71 Incidents 39 Service Requests</p> <p>Of which: 5 Cancelled 16 Software failure</p>	<p>"Pink", IT Management metrics benchmark service (2012)</p> <p>82% of incidents are resolved within their expected interval for the assigned priority.</p>	95% of the IT Service Level Measures are met ³	95% of the IT Service Level Measures are met	95% of the IT Service Level Measures are met	95% of the IT Service Level Measures are met

² Complete failures of modern IT systems are very unlikely – hence the industry standard measure has moved from reliability (e.g. your computer is available 90% of the time), to measurement of responsiveness to critical incidents - and the measure of critical depends on the service, time, and impact (e.g. no system at 2am on Sunday is probably better than email down at 9am on a Monday, or SAP down at month end).

³ Refer to appendix A for IT Service Level Measures

Performance Standards Levels of Service (we provide)		Results (Activities will contribute to these results, strategies and legislation)	Method of Measurement (We will know we are meeting the level of service if.....)	Current Performance	Benchmarks	Future Performance (targets)			Future Performance (targets) by Year 10 2024/25
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	
		<i>the request.</i>	<i>Refer to appendix A for IT Service Level Agreement (SLA)</i>	<i>4 Equipment failure 5 External Provider</i>					
13.2.28	Response to feedback from Elected Members, Senior Leadership Team and other users		Provide response to feedback in terms of corrective actions and improvements	New LoS	N/A	Feedback from stakeholders is responded within 10 days, and considered with the review of IT roadmap for future delivery	Feedback from stakeholders is responded within 10 days, and considered with the review of IT roadmap for future delivery	Feedback from stakeholders is responded within 10 days, and considered with the review of IT roadmap for future delivery	Feedback from stakeholders is responded within 10 days, and considered with the review of IT roadmap for future delivery
	Customer Satisfaction		Annual Internal survey with a minimum response rate of 10% randomly selected IT customer			Baseline	Will be set once baseline established	Will be set once baseline established	Will be set once baseline established

Performance Standards Levels of Service (we provide)		Results (Activities will contribute to these results, strategies and legislation)	Method of Measurement (We will know we are meeting the level of service if.....)	Current Performance	Benchmarks	Future Performance (targets)			Future Performance (targets) by Year 10 2024/25
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	
13.2.25	Deliver transformational IT solutions and continuous improvement enhancements	<p>Citizens and Council are engaged in the regular delivery of project benefits.</p> <p>Systems enhancements support organisational continuous improvement initiatives drive operational efficiencies</p>	<p>Projects are managed using recognised methodologies and aligned to the CCC Project Management framework.</p> <p>Costs, Time and Scope changes are monitored throughout projects and reported for learning and management.</p> <p><i>Measured by the investment that is directly related to supporting organisational continuous improvement initiatives</i></p>	<p>2013/14</p> <p>87% of IT projects delivered on time</p> <p>96% of IT projects delivered within scope</p> <p>96% of IT projects delivered within budget</p> <p>(Note that these targets are higher than the organisational targets)</p> <p><i>No current measures exist within Council.</i></p>	<p>KPMG NZ Project Management Survey (2013)</p> <ul style="list-style-type: none"> Percentage of Projects Completed On-Time = 29% Percentage of completed Projects delivering Scope = 35% Percentage of Projects Completed within Budget = 33% <p><i>No relevant benchmark</i></p>	<p>13.2.25.3 90% of IT Projects are delivered on time.</p> <p>13.2.25.4 90% of IT Projects are delivered within scope</p> <p>13.2.25.2 90% of IT Projects are delivered within budget.</p> <p>At least 25% of IT projects support business continuous improvement initiatives</p>	<p>13.2.25.3 90% of IT Projects are delivered on time.</p> <p>13.2.25.4 90% of IT Projects are delivered within scope</p> <p>13.2.25.2 90% of IT Projects are delivered within budget.</p> <p>At least 28% of IT projects support business continuous improvement initiatives</p>	<p>13.2.25.3 90% of IT Projects are delivered on time.</p> <p>13.2.25.4 90% of IT Projects are delivered within scope</p> <p>13.2.25.2 90% of IT Projects are delivered within budget.</p> <p>At least 30% of IT projects support business continuous improvement initiatives</p>	<p>13.2.25.3 90% of IT Projects are delivered on time.</p> <p>13.2.25.4 90% of IT Projects are delivered within scope</p> <p>13.2.25.2 90% of IT Projects are delivered within budget.</p> <p>At least 35% of IT projects support business continuous improvement initiatives</p>

Performance Standards Levels of Service (we provide)	Results (Activities will contribute to these results, strategies and legislation)	Method of Measurement (We will know we are meeting the level of service if.....)	Current Performance	Benchmarks	Future Performance (targets)			Future Performance (targets) by Year 10 2024/25
					Year 1	Year 2	Year 3	
					2015/16	2016/17	2017/18	
13.2.26 IT Strategy Planning & Architecture The IT roadmap is published annually containing the reviewed direction for IT Investment	A broad understanding exists across whole of Council of the architecture approach and standards being followed for Council by IT department. These provide guidance to decision making in all activities partnering with IT. Modern, Mobile and agile strategies are mapped and projects identified that will deliver benefits from these tools for a wide range of Business Units.	IT Roadmap is published and circulated annually, timed to provide input to the IT Strategic Plan.	IT Investment Roadmap is published on a periodic basis	At this point, external benchmarks with relevance to Council have not been identified.	13.2.26.2 IT Roadmap is refreshed annually and approved by IT Steering Board	13.2.26.2 IT Roadmap is refreshed annually and approved by IT Steering Board	13.2.26.2 IT Roadmap is refreshed annually and approved by IT Steering Board	13.2.26.2 IT Roadmap is refreshed annually and approved by IT Steering Board

Performance Standards Levels of Service (we provide)		Results (Activities will contribute to these results, strategies and legislation)	Method of Measurement (We will know we are meeting the level of service if.....)	Current Performance	Benchmarks	Future Performance (targets)			Future Performance (targets) by Year 10 2024/25
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	
13.2.29	Customer services and open access to information and data		Customer requests for data are reduced as a result of Self Service portal. Data quality is improved as a result of more external customers using Council data & providing feed-back to Council	Limited data sharing through manual request and report delivery process.	None exist within New Zealand so need to establish a benchmark. The Australian GIS in Local Government Benchmark Study 2013 could be used as a guide.	Delivery of Self Help portal for citizens to view Council Data	Self Help portal expanded to enable citizens to create views & extracts of Council Data.	Full data sharing with external agencies and citizens	Full data sharing with external agencies and citizens.
13.2.30	Information Management Manage Council's Corporate Records to Public Records Act (PRA) requirements		<i>The Public Records Act sets a framework for creating and managing information in public offices and local authorities and promotes accountability through reliable recordkeeping, enhancing public confidence in the integrity of Records Management.</i>	<i>Subsets of the full audit requirements are measured today – Physical & Electronic documents. This must be widened to meet the full audit requirement</i>	<i>Public Records Act requirements</i>	<i>Measure organisational compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit</i>	<i>Establish current % & priority actions required ensuring compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit</i>	<i>85% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit</i>	<i>95% compliance to the Public Records Act as required by Archives New Zealand Assessment / Audit</i>

5 Review of cost effectiveness - regulatory functions and service delivery

The Local Government Act requires local authorities to review the cost effectiveness of current arrangements for delivering its services and regulatory functions

A review need not be undertaken if

- Delivery is governed by legislation, contract or other binding agreement that cannot be reasonably altered in the next two years.
- The benefits to be gained do not justify the cost of the review.

A review must be undertaken

- In conjunction with the consideration of any significant change to service levels
- Within two years before the expiry of any legislation, contract or other binding agreement affecting the service
- Not later than 6 years after any previous review.

A review must consider each of options 1 to 9 in the table below. Option 10 is discretionary.

Governance	Funding	Delivery	Option
CCC	CCC	CCC	1
CCC	CCC	CCO (CCC sole shareholder)	2
		CCO (CCC one of several shareholders)	3
		Other local authority	4
		Other person or agency	5
Joint Committee / Shared Governance	Joint Committee / Shared Governance	CCO (CCC sole shareholder)	6
		CCO (CCC one of several shareholders)	7
		Other local authority	8
		Other person or agency	9
Other arrangement	Other arrangement	CCC or other arrangement	10

This section considers reviews for regulatory functions and service delivery.

Service: IT Operations Services - Data Centre Infrastructure

The provision of the infrastructure for server compute and storage is currently outsourced to Computer Concepts Limited. This strategic initiative was to ensure that council can continue to meet its level of service while only paying for the services we consume.

Current Arrangements			
Governance	Funding	Delivery	Estimated Cost
CCC	CCC	Computer Concepts Ltd	\$3.5m-4m pa

Review of options			
Option	Date of Last Review	Findings	Estimated Cost
1	2010	CCC undertook strategic decision to outsource the infrastructure services for Datacentre server compute & storage and managed services for exchange. In-sourcing these services are not cost effective to achieve same level of service.	Not cost-effective to pursue
2-4	N/A	There are no CCOs to undertake this work. Adjacent local authorities already outsource this work or are smaller scale than CCC to manage this service	Not cost-effective to pursue
5	2010	Present arrangements. 5 year contract with Computer Concepts to expire June 2015, with annual automatic right of renewal. Will be reviewed on an annual basis	\$3.5m-4.m
6 - 9	N/A	There are no joint committees or other arrangements in place at the present time, nor time to investigate the feasibility of these prior to the deadline for preparing this long term plan.	Not cost-effective to pursue

The Council IT department regularly reviews its service delivery capability and also engages with organisation in benchmarking with NZ Local Government to ensure cost effectiveness.

The following figures are from the KPMG Local Government survey (March 2014) that compares costs across various sized NZ Local Government IT departments. Note that Auckland Council did not participate.

- Figure 5-1 illustrates our CAPEX spend per FTE is about average at \$7k (for large TAs)
- Figure 5-2 illustrates our CAPEX spend per IT FTE (i.e. the productivity of the IT department) is well above average, and best in survey.
- Figure 5-3 illustrates our OPEX spend per FTE is well below TA average at \$5.5k for each FTE. Note that we also include our server / storage costs as OPEX via the data centre as opposed to owned server assets (CAPEX).
- Figure 5-4 Figure our OPEX per IT FTE is at an average level

Gartner Research reports that, on a global level, the average IT spend for large councils is approximately \$NZD 9k. We average to approximately \$6.5k.

Figure 5-1 Benchmarking ICT Metrics - CAPEX per FTE

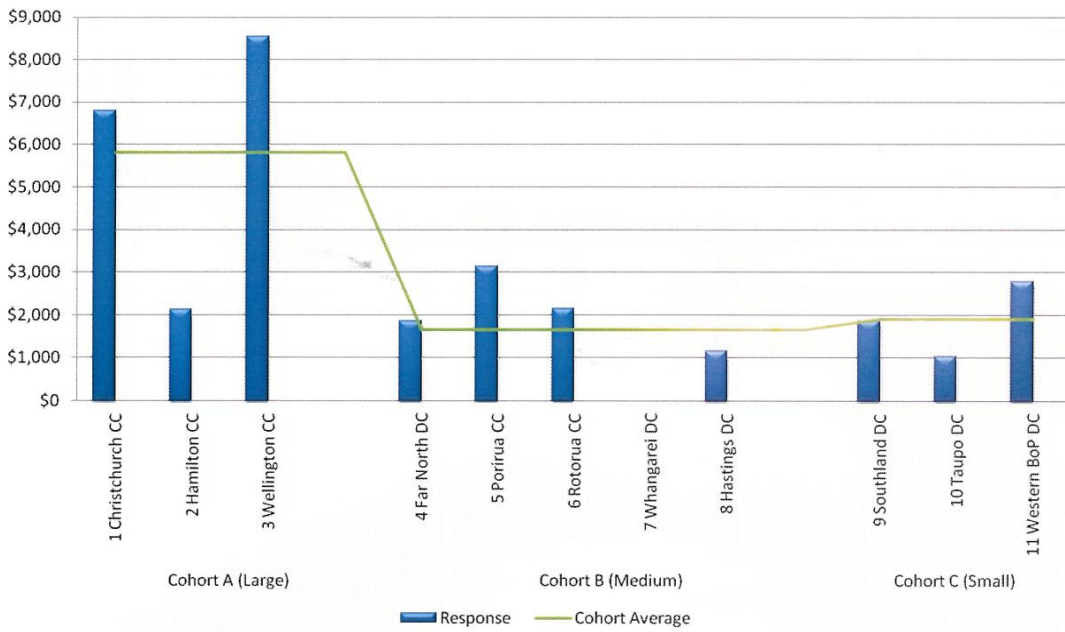


Figure 5-2 Benchmarking ICT Metrics - CAPEX per ICT FTE

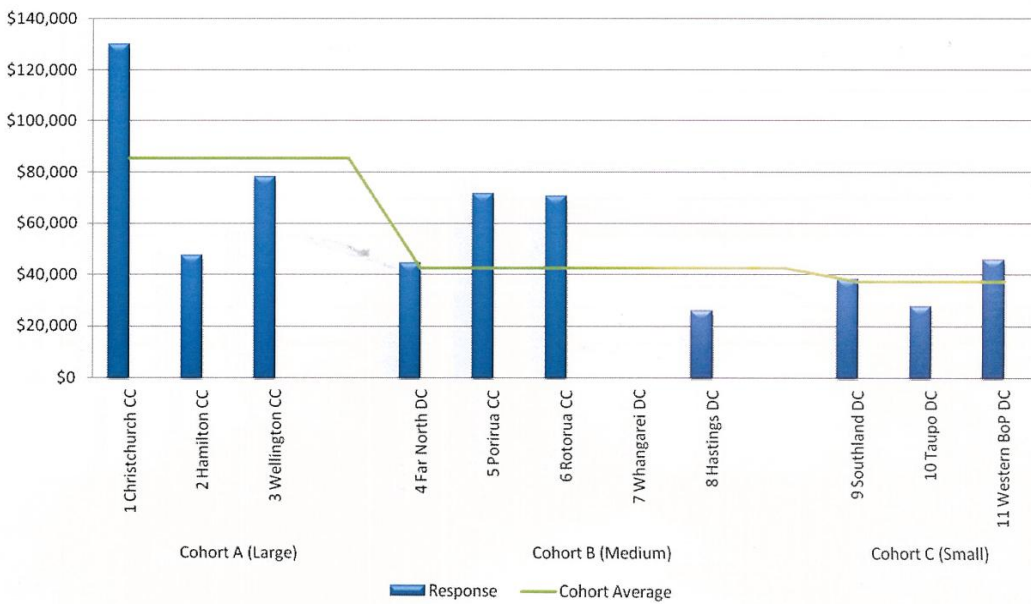


Figure 5-3 Benchmarking ICT Metrics - OPEX per FTE

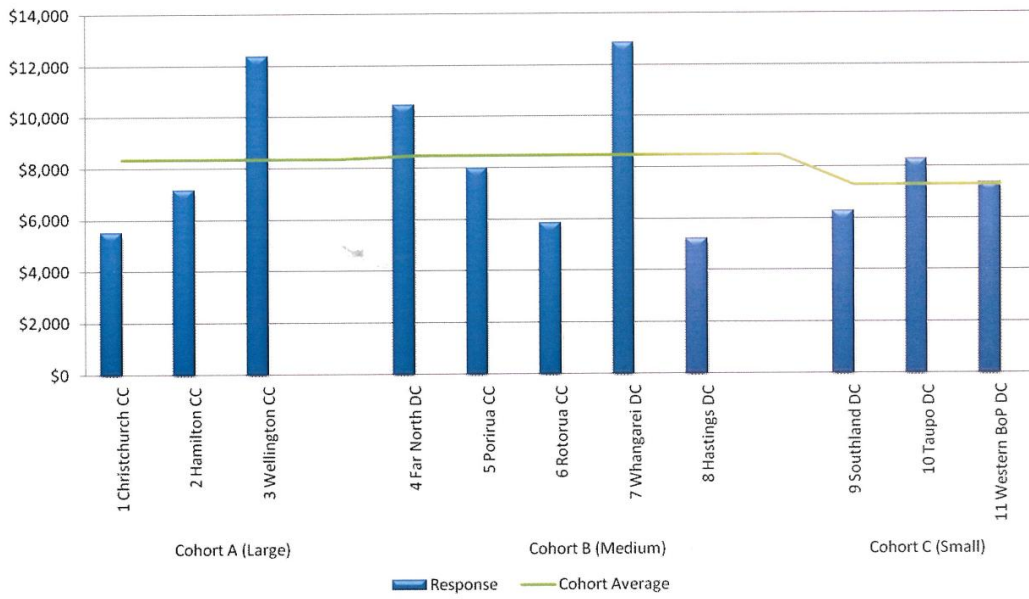
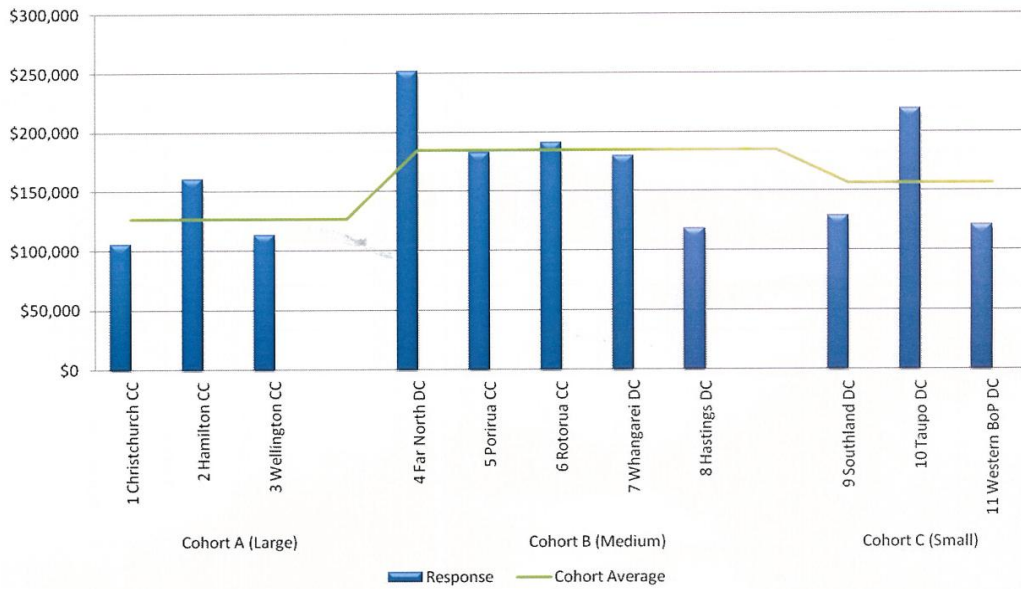


Figure 5-4 Benchmarking ICT Metrics - OPEX per ICT FTE



6 Long Term Infrastructure Strategy

6.1 Issues, principles and implications

In the Council's definition of long term infrastructure assets, the IT department does not manage any assets that would fall under this category. IT Assets are typically managed and depreciated within a 5-year timeframe.

7 Review of cost-effectiveness - infrastructure delivery

In the Council's definition of long term infrastructure assets, the IT department does not manage any assets that would fall under this category. IT Assets are typically managed and depreciated within a 5-year timeframe.

8 Significant Effects

The significant negative and significant positive effects are listed below in Table 8-1 and Table 8-2 respectively.

Table 8-1 Significant Negative Effects

Effect	Council's Mitigation Measure
Security	Proactive steps to be undertaken to ensure that all reasonable measures are in place to protect the security and integrity of Customer information from unintended access or use. Refer to section 9 for details of security risk.
Business Continuity	As Customers adopt interacting with the Council via on-line channels and services they will rapidly develop an expectation that they will be able to access these services whenever they want. The Council will need to focus on engineering these service to assure availability targets are met.

Table 8-2 Significant Positive Effects

Effect	Description
Increased community engagement through on-line services	Council intends to progressively increase the range of services available on-line with a view to making it quicker and easier for customers to interact with us in their manner of choice.
Deliver 24x7 access to systems	Provide customers with the flexibility to access and use services when it suits them
Mobile, "connected" workforce	Systems and technologies that enable CCC employees and contractors to work more productively away from their desks and have access to necessary tools and information where and when needed and deliver better, more timely services to Customers

8.1 Assumptions

Table 8-3 Major Assumptions

Assumption Type	Assumption	Discussion
Rapidly enhancing customer engagement via electronic means	That the desire to "digitally integrate" with the wider community will remain strong	The trend towards "digital first" and extending our processes and workflows to our customers delivers better results for our customers and cost -outcomes for CCC.
Commoditisation of IT Services	That the current trend of shifting from in-house bespoke solutions to cloud based "Off The Shelf" and Software As A Service continues	The skills needed to deliver and support these types of solutions are fundamentally different and Council's IT department is evolving to align to these new service delivery models.
There will be incremental changes to the Service Delivery model of the organisation	That the range and volume of CCC services will evolve over time	Any significant new CCC services or major changes to existing CCC services will be delivered as part of a specific change program
Mobility growth expectations	That the current trend towards enabling CCC staff and Contractors to connect to and work from anywhere will accelerate	There are substantial productivity gains and customer service improvements to be realised by enabling workers to be more effective away from their desks and that realising these benefits will become an increasing priority for the Council
Rapidly enhancing customer interaction via electronic means	That the desire to "digitally integrate" with the wider community will remain strong	The trend towards "digital first" and extending our processes and workflows to our customers delivers better results for our customers and cost -outcomes for CCC.

9 Risk Management

Table 9-1 Significant Risks and Control Measures

Risk Description	Current Control	Proposed Control	Target Risk Level
Unauthorised external access to CCC systems and data	Policy, Security audits, extensive IT controls	Policy, Security audits Improved IT controls through hardening of solutions, improved detection, monitoring and response	High
Privacy of citizen data	Reliant upon policy and individual actions to protect private information	Policy, Security Audits , improve information governance, security classification, access control and technology approaches to protect information	High
Reliability of Legacy Systems	Applying 'band-aid' approach to keep legacy solutions operational	Investment to migrate from legacy technology to new solution	High
Insufficient funding for Asset R&R has an increasing number of ICT assets that are not up-to-date resulting in failure of service or increased cost/delay in new technology projects	Ongoing tactical management of IT Renewals balancing priorities of break-fix issues with project dependencies for upgrades	Increased investment in Renewal & Replacement aligned with improved asset management and planning	High
Failure of core IT Infrastructure (including network and communications) with impact to 24x7 operations and contact centre	All core infrastructure is monitored, Service Level Agreements are in place, managed facility for data centre has own power generation and did not fail during earthquakes	Investment proposed to replace network core infrastructure and back-up power generation in civic offices	Medium

Note the Risk Level stated is based upon current controls. This will be mitigated with proposed controls.

The IT department has also identified and assessed assets that support Critical business services and assessed the risks, and put measures in place to address the risks to the asset.

IT Risk Matrix

Likelihood	Likely	MEDIUM	HIGH	EXTREME
	Unlikely	LOW	MEDIUM	HIGH
	Highly Unlikely	INSIGNIFICANT	LOW	MEDIUM
		Slightly Harmful	Harmful	Extremely Harmful
		Consequence		

10 Key Projects

Table 10-1 details the key capital and renewal work programmed for years 2015 to 2025.

Table 10-1 Key capital and renewal work

Project Name	Description	Year 1 (\$)	Year 2 (\$)	Year 3 (\$)	Years4-10 (\$)	Project Driver
	For details of the capital works relating to this activity refer to the draft Capital Programme, draft Long Term Plan, volume 1					

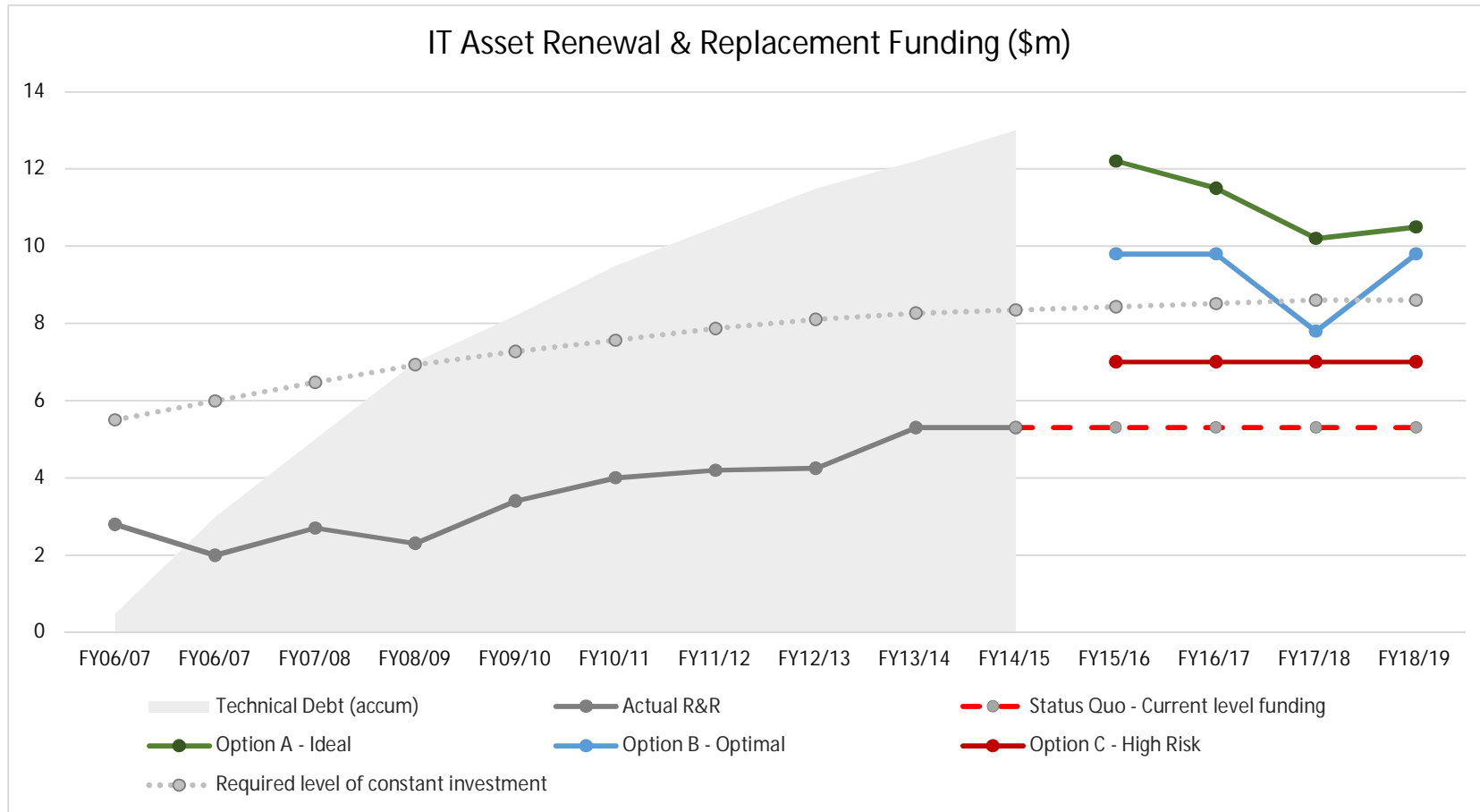
Note: G = Growth, LoS = Levels of Service, R = Renewal

1 See Appendix C for a current view of the IT Investment Roadmap

2 See Appendix B for the asset renewal policy

The following figure represents the historical investment for IT Asset Renewal & Replacement and the considered options for future budget.

Figure 10-1 IT Asset Renewal & Replacement Funding



The historical IT R&R funding has been insufficient and as a result IT assets have not been maintained or kept up to date and the technical debt is accumulating. Examples include;

- Customer and bookings for Recreation and Sport, Parks, Libraries and Community Facilities that is outside of support on end-of-life platform on 15 year old platform, that does not support online customer self service
- 20yr old un-supported solutions for managing our customer Request for Service, Health and Alcohol licensing, and parking administration
- 10 years behind current release of version of Office, impacting all areas of council
- Multiple legacy applications preventing data centre server upgrades on 11year old system software that will be unsupported within this year, posing security and reliability risks.





Having non-current IT assets that are not fit for purpose compromises our ability to deliver customer and business outcomes or respond to external changes: For example,:

- Inability to deliver online services (e.g. payments, registrations, enrolments) for community with closed legacy systems,
- Delays in ability to deliver legislative changes and process improvements required for Resource Consents, or additional cost on the case of Building Consents,
- Delay in provision of changes for legislation for Alcohol Licensing,
- Delay to the current rollout of Microsoft Office 2013 and the MyWorkplace programme (virtual desktop and office upgrade),
- Inability to provide secure platforms for holding of personalised customer information, meaning customer duplication and inefficiencies.

There is also an increased cost to deliver projects due to outdated assets.

The following table outlines the funding options for ICT Asset Renewal and Replacement.

Table 10-2 Funding Options for ICT Asset Renewal & Replacement

Option	Risk of IT Service Failure	Ability to deliver future state	Year 1 (\$)	Year 2 (\$)	Year 3 (\$)
A  Ideal	Low	High	12.2m	11.5m	10.2m
B  Optimal	Medium	Medium	9.8m	9.8m	7.8m
C  High Risk	High	Low	7m	7m	7m
 Status Quo	Extreme	Not Possible	5.3m	5.3m	5.3m

Note that both the Ideal and Optimal options include an increase in level of funding in the first two (2) years to reduce the current level of technical debt of our outdated IT assets and support the change programme for future state

Ideal	Support the accelerated delivery of transformational change for community outcomes. Focus on rapidly reducing the technical debt to bring asset renewal into line and maintain assets at current state. Based upon full asset renewal based upon asset lifecycle.
Optimal	Balanced approach to support the transformation projects for community outcomes and management of asset lifecycle, criticality and break-fix. Prioritisation supports asset upgrades in line with transformational projects and new services. Risk based deferral of renewal of IT assets to reduce required budget increase and increase the value of assets. Moderate delivery of community outcomes and reduction of technical debt.
High Risk	Sweating assets based upon break-fix, with priority given on critical services and project dependencies. Minimal change to technical debt. This approach will slow the achievement of community outcomes and place greater risk on the time and cost to deliver transformational projects
Status Quo	Current Level of funding. Only address major break-fix and key project dependencies. Selective updates to critical IT services. Does not mitigate increasing technical debt. Maintaining the status quo will impede the business ability to achieve community outcomes.



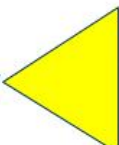
11 Summary of Cost for Activity

Figure 11-1 Summary of Cost for Activity

IM&CT	<u>Funding Caps in 2015/16 Dollar:</u>				<i>Funding splits exclude EQ Costs from all calculations</i>					
	2014/15 Annual Plan	2015/16	2016/17	2017/18	Funding - User Charges	Other revenue	General rate	Targeted rate	Period of Benefit (years)	Comments
	000's									
Operational Budget										
ICT Support	11,997	10,811	10,478	10,194						
ICT Change	-	-	-	-						
ICT Connect	2,680	2,692	2,640	2,587						
Corporate Data Management	4,212	4,267	4,247	4,181						
Activity Costs before Overheads	18,889	17,770	17,365	16,962						
Earthquake Response Costs	-	-	-	-						
Corporate Overhead	-	-	-	-						
Depreciation	10,165	11,639	13,927	14,541						
Interest	-	-	-	-						
Total Activity Cost	29,054	29,409	31,291	31,503	0%	0%	100%	Full		
Funded By:										
Fees and Charges	100	103	103	103						
Grants and Subsidies	-	-	-	-						
Earthquake Recoveries	-	-	-	-						
Internal Recoveries	28,954	29,316	31,189	31,400						
Total Operational Revenue	29,054	29,419	31,292	31,503						
Net Cost of Service	(0)	(10)	(0)	0						
Funded by:										
Rates	(0)	(10)	(0)	0						
Earthquake Borrowing	-	-	-	-						
	(0)	(10)	(0)	0						
Capital Expenditure										
Earthquake Rebuild										
Renewals and Replacements										
Improved Levels of Service										
Additional Demand										

12 Appendix A - IT Service Level Measures

The following table represents the targets for Uptime (Availability), Incidents (Reliability) and Service Requests (Serviceability) to be managed or workaround provided within standard service hours. Criticality reflects the importance of the business service that the IT Service supports.

		IT Operational Service Level Measures				
Availability		Availability				
		Critical	98% of standard service hours (each month)			
		Essential	95% of standard service hours (each month)			
		Necessary	90% of standard service hours (each month)			
Reliability			Highest (priority 1) Service Priority	Medium (priority 2) Service Priority	Low (priority 3) Service Priority	Whenever! (priority 4) Service Priority
		Critical	95% within 4 hours	95% within 4 hours	95% within 4 hours	95% Date set within 3 Days
		Essential	90% within 4 hours	90% within 16 hours	90% within 3 Days	90% Date set within 3 Days
		Necessary	80% within 8 hours	80% within 16 hours	80% within 3 Days	80% Date set within 3 Days
Serviceability		Critical	95% within 4 hours	95% within 4 hours	95% within 4 hours	95% Date set within 3 Days
		Essential	90% within 4 hours	90% within 16 hours	90% within 3 Days	90% Date set within 3 Days
		Necessary	80% within 8 hours	80% within 16 hours	80% within 3 Days	80% Date set within 3 Days

Service Schedule	Monday - Friday	Saturday, Sunday
Standard Service Hours	07:30 - 17:30	N/A
After Hours	17:30 - 07:30	24hrs
For selected Services by negotiation	24 x 7 service	24 x 7 service

Service Examples ⁴	Example 1	Example 2	Example 3
Critical	Full council voice and data network servicing all users at 9am Monday	V-Base system on Saturday evening during Game	Financial System during LTP development, or month end.
Essential	Capital project management system reporting	Mapping tools for surveyors' during work hours	Financial Systems in work hours but outside critical periods

⁴ Refer to the IT Service catalogue for a full list of services

Necessary	1 user needs to print colour reports for meeting	V-Base system on a Tuesday morning, with no current event activity	Financial System on Sunday morning
-----------	--	--	------------------------------------

13 Appendix B - IT Asset Renewal Policy

IT Asset renewals are largely driven by asset condition and vendor lifecycle management and the requirements to be compatible with that lifecycle – such as Microsoft routinely upgrading Microsoft Office suite. CCC has a deliberate policy of extracting maximum value from such assets, hence the organisation only now moving off Office 2003 as it is unsupported by Microsoft.

The CCC strategy is to move to a “cloud first” fully scalable approach, where we only pay for what we consume, avoid upgrade costs and obtain reliable services with included disaster recovery capability

The IT Asset Renewals and Replacement (R&R) policy is aligned with the IT Support service level objectives and levels of criticality and directed by the criticality of the business service that the IT Service and underlying IT Assets support. These levels are:

- Critical
- Essential
- Necessary

Assets are considered for renewal as they near the end of their effective working life or where the cost of maintenance becomes uneconomical and when the risk of failure of critical assets is sufficiently high.

For most IT assets, the main driver of renewal is compatibility with other software, hardware and infrastructure and also with other organisations. The key parameter that signals this time for renewal is asset lifecycle.

The IT Asset Renewal and Replacement policy outlines key renewal timeframes and rules based upon the asset class, namely

- Hardware
- Software - Packages
- Software - In-house developed solutions
- Software - Infrastructure Support

Software (includes Packaged, In-House developed solutions, Infrastructure support)

- R&R Policy for software assets only addresses the renewal aspect
- Replacement of software assets, including betterment, to be addressed by Business Solutions capital investment
- Software as a Service (SaaS) applications are excluded from R&R Policy as they are not classified as capitalisable assets

Hardware

- Both renewal and replacement of assets is addressed under this policy
- Hardware for End-user computing (Laptops, Desktops etc.) is grouped by the criticality of the Business Service that the user performs

Growth

- Key areas of growth relate to:
 - Increased data storage (digital assets)
 - Increased adoption of technology (e.g. mobility, software licenses)

Betterment / Aspirational

- *Software updates or version upgrades that deliver additional functionality (without additional business analysis or configuration) are not treated as betterment and considered as renewal. Should a new software solution be required or business users have requested new functionality then this is considered as betterment/enhancement and not addressed under Renewal & Replacement.*

14 Appendix C - IT Investment Roadmap (Subject to change)

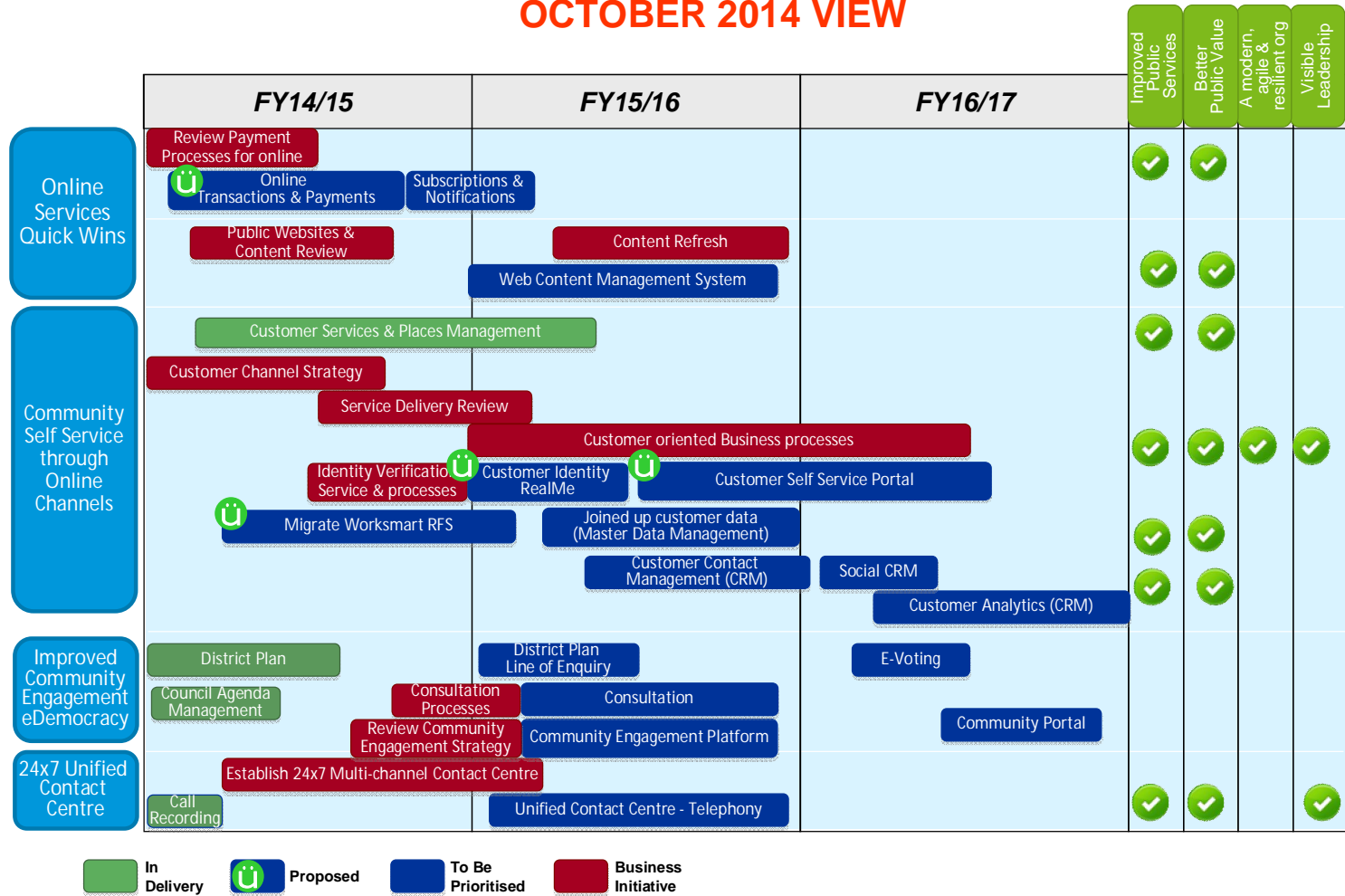
IT Roadmap Overview

October 2014 View

	FY14/15	FY15/16	FY16/17	Improved Public Services	Better Public Value	A modern, agile & resilient org	Visible Leadership
Customer & Community	Online Quick Wins & Mobile Apps			✓	✓		
		Customer Self Service Through Online Channels		✓	✓	✓	✓
			Improved Community Engagement e-Democracy				
		24x7 Unified Contact Centre		✓	✓		✓
Employee	Modernised Workplace – Remote working / mobility			✓	✓	✓	✓
		Improved Workforce Management Planning and Self Service		✓	✓	✓	✓
Business Process Optimisation		Improving Business Process Management		✓	✓	✓	✓
		Improve Core Processing Systems		✓	✓		
Partners & Agencies		Improved Information Management		✓	✓	✓	✓
		Interoperability & Integration		✓	✓	✓	✓

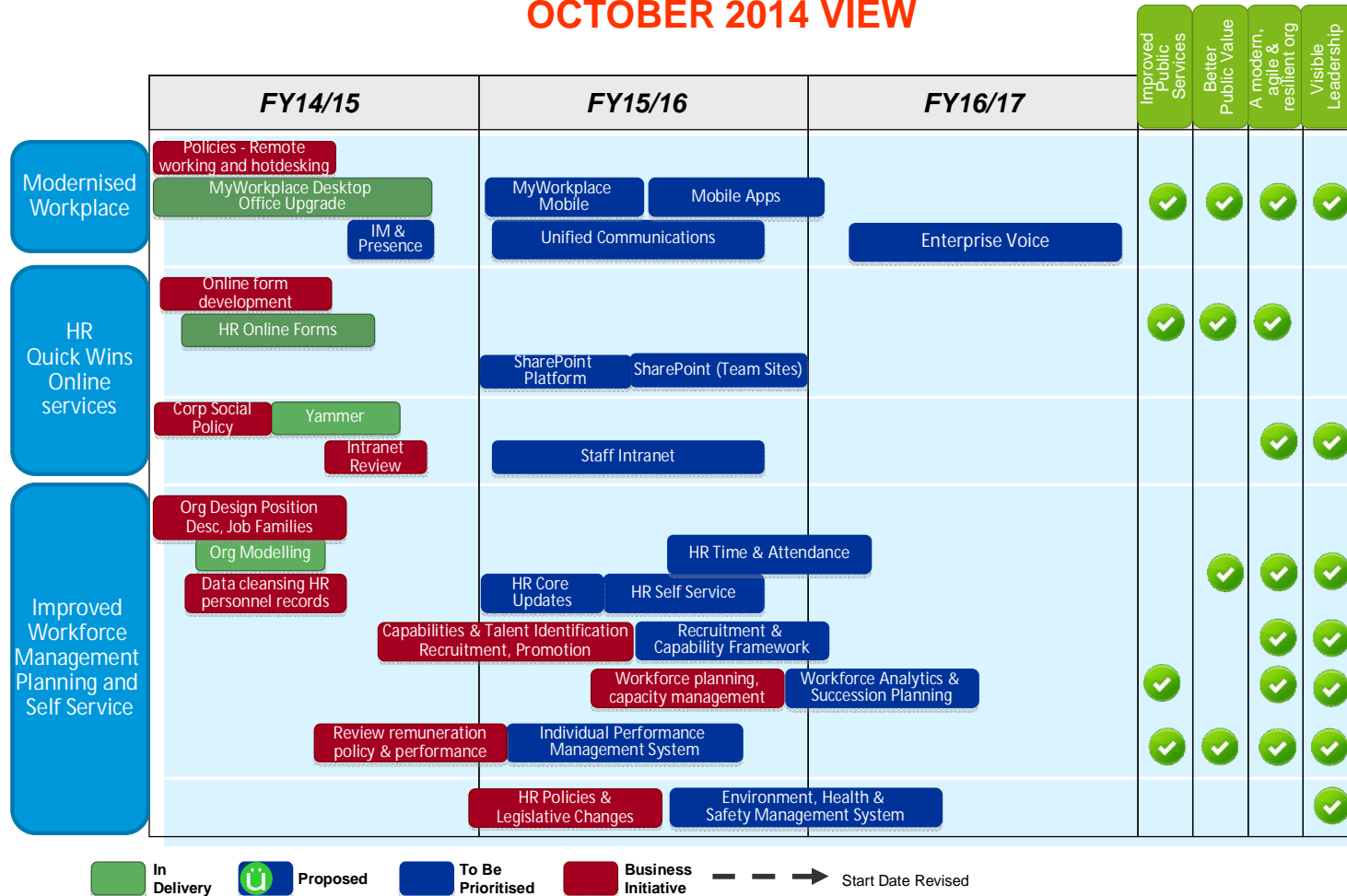
Community Self Service through Online Channels

OCTOBER 2014 VIEW



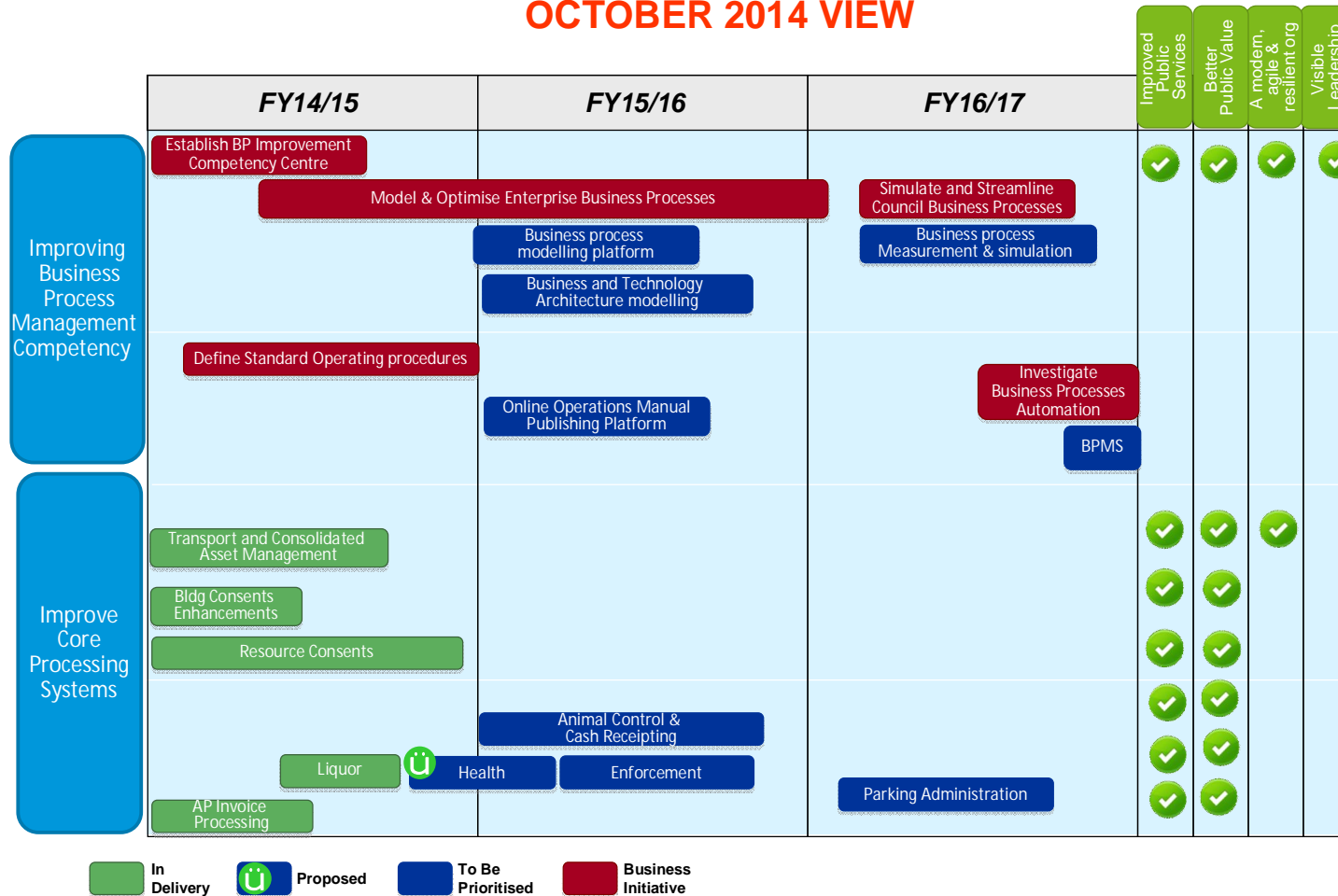
Workforce Management, Employee Self Service, and Modernised Work environments

OCTOBER 2014 VIEW



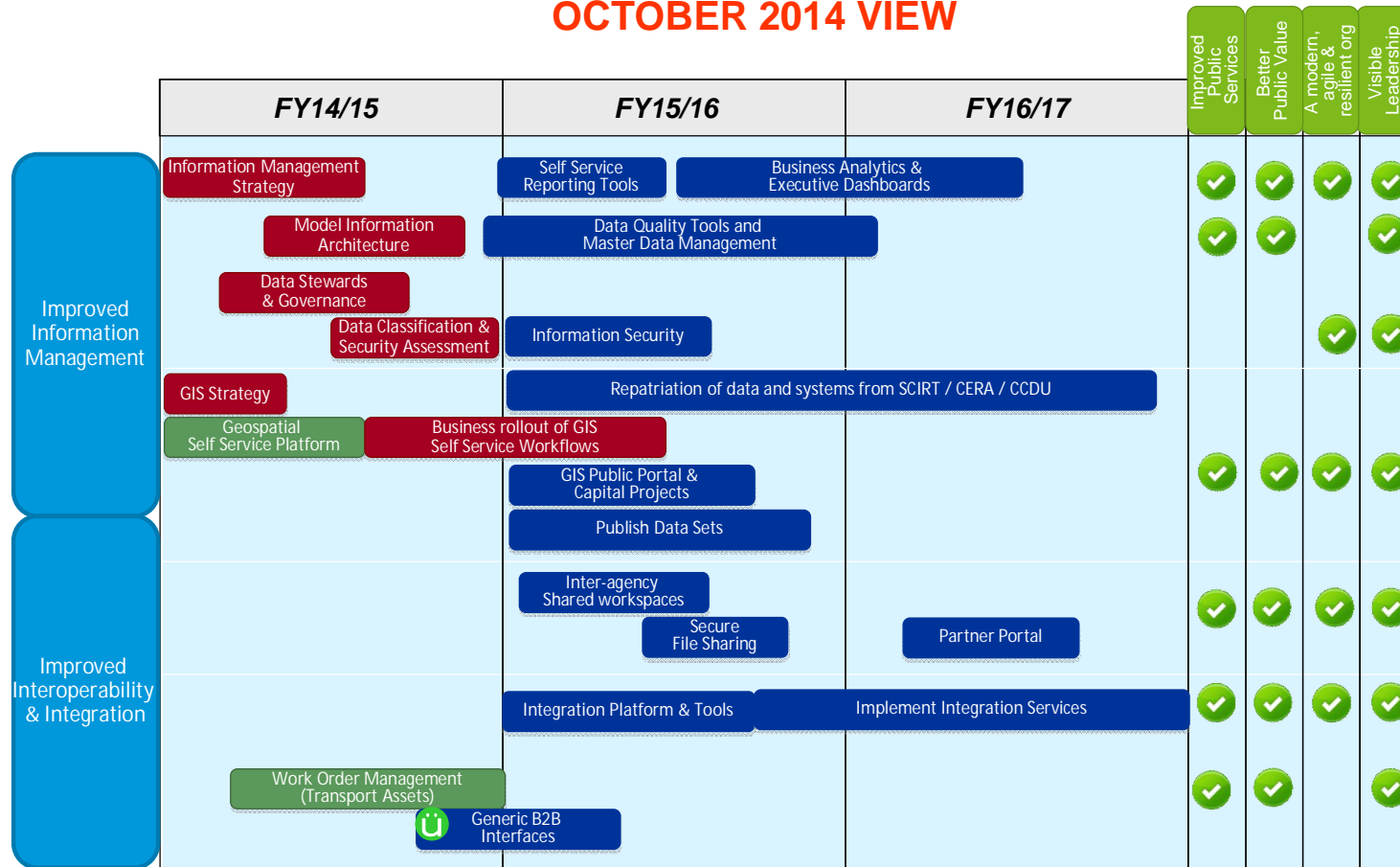
Business Process Optimisation

OCTOBER 2014 VIEW



Improved Information Management, Interoperability and Integration

OCTOBER 2014 VIEW



■ In Delivery
 ■ To Be Prioritised
 ■ Business Initiative
 ■ Proposed