Schedule 13
Funding Request for the 2014-15 Budget Cycle

Department: Governor's Office of Information Technology

Request Title: IT Service Management Ecosystem

Priority Number: R-6

Dept. Approval by: _David B. ___(signature)___ 11/1/2013
Date

☑	Decision Item FY 2014-15
☐	Base Reduction Item FY 2014-15
☐	Supplemental FY 2013-14
☐	Budget Amendment FY 2014-15

OSPB Approval by: ___(signature)___ 10/24/13
Date

Line Item Information		FY 2013-14		FY 2014-15		FY 2015-16
		1	2	3	4	5
	Fund	Appropriation FY 2013-14	Supplemental Request FY 2013-14	Base Request FY 2014-15	Funding Change Request FY 2014-15	Continuation Amount FY 2015-16
Total of All Line Items	Total	5,319,745	-	5,449,040	3,455,000	645,000
	FTE	68.9	-	68.9	-	-
	GF	57,499	-	-	-	-
	GFE	-	-	-	-	-
	CF	-	-	-	-	-
	RF	5,262,246	-	5,449,040	3,455,000	645,000
	FF	-	-	-	-	-
(5) Office of Information Technology, (A) Management and Administration of OIT, Statewide IT Management, Personal Services	Total	5,319,745	-	5,449,040	3,455,000	645,000
	FTE	68.9	-	68.9	-	-
	GF	57,499	-	-	-	-
	GFE	-	-	-	-	-
	CF	-	-	-	-	-
	RF	5,262,246	-	5,449,040	3,455,000	645,000
	FF	-	-	-	-	-

Letternote Text Revision Required? Yes: ☐ No: ☐ If yes, describe the Letternote Text Revision:

Cash or Federal Fund Name and COFRS Fund Number: COFRS Fund 613

Reappropriated Funds Source, by Department and Line Item Name: User Charges

Approval by OIT? Yes: ☑ No: ☐ Not Required: ☐

Schedule 13s from Affected Departments: The request requires corresponding schedule 13s from departments

Other Information:

This page intentionally left blank.

Cost and FTE

- The Office of Information Technology requests $3,455,000 Reappropriated Funds in FY 2014-15 for software, licensing, training and professional services to complete and implement a comprehensive enterprise service management system.
- OIT further requests $645,000 to finish implementation and pay for maintenance and support in FY 2015-16. $345,000 per year (a 6% increase) would be required for ongoing, for software maintenance and licensing in FY2016-17.

Current Program

- The Statewide IT Management program is responsible for the over sight, management, and centralization of IT services with the state government.
- OIT owns eight of the 12 essential IT Service Management Ecosystem components. The existing eight require upgrade and the remaining four require purchasing. The goal is to fully integrate all 12 into a fully leveraged IT Operating Model. This model defines and provides data for the services provided, resource planning, rate setting for common policy, and full asset management. This complex system describes and classifies the assorted personnel, technical, and workload data of the operations and domains in order for OIT to accomplish its mission.

Problem or Opportunity

- A subset of OIT Service Management Ecosystem components have been purchased and implemented as standalone; these components do not "speak to each other" providing a frustrating customer experience.
- No single repository for data exists which creates an inability to quickly respond to requests and an inability for users to generate reports automatically. As a result, manual processes and inefficiencies abound within OIT and State agencies.
- OIT, as a service provider, has established a Service Catalog from which agencies may request services; however, that Service Catalog is not automated and does not link with other systems to provide a seamless deployment and tracking of services ordered (including FTE, hardware, software, operations, and maintenance).

Consequences of Problem

- OIT will continue to face challenges in reporting ongoing OIT expenses, resource allocation, common policy billing, asset management, and service delivery with limited visibility by the Departments into OIT processes and information.
- Purchase of the four remaining "OIT mission control" components; fully configure, populate, and implement a standardized and process-driven IT Service Management (ITSM) Ecosystem (software tools linking disparate IT systems together) to drive operational efficiencies, link financial information directly to services, and improve overall service delivery.
- Integrate OIT systems across business programs and processes enabling OIT to deliver a standardized customer experience, streamlined timelines, and increased transparency.
- Create forecasts and plans directly tied to State agency strategies and OIT resource allocation.
- A single data repository links financial data to assets and services, and to State agency programs.
- Linked tools and processes make IT budgeting easier, standardized, and transparent.

This page intentionally left blank.

COLORADO

Office of Information Technology

John W. Hickenlooper
Governor

Kristin D. Russell
Secretary of Technology and
Chief Information Officer

FY 2014-15 Funding Request | November 1, 2013

Department Priority: R-6
Request Detail: IT Service Management Ecosystem

Summary of Incremental Funding Change for FY 2014-15	Total Funds	Re-Appropriated Funds
Statewide IT Management Personal Services	$1,870,000	$1,870,000
Statewide IT Management Operating Services	$1,585,000	$1,585,000

Problem or Opportunity:

The Governor's Office of Information Technology has reached a level of maturity as a cohesive organization that requires similar growth in the tools used to accomplish its mission. The IT Service Management (ITSM) Ecosystem is a set of cohesive and integrated tools necessary for a group the size of OIT to most efficiently and consistently deliver technology support and services to State agency programs and to Colorado residents. Without this set of enterprise-class tools, OIT will continue to operate with many different, disconnected systems which will impede the potential for the organization to truly improve on customer service, project completion and technology innovation.

Workload Indicators

- IT system outages are identified at the time of failure resulting in an unplanned loss of service to the agency customers. Repairing a failed service takes substantially more resources than preventative, proactive maintenance.
- Many routine processes are still completed "by hand," meaning a technician must be physically present to perform a task, or information must be entered manually into multiple, disconnected systems to complete a process. New employee on-boarding is a prime example.
- There is little flexibility to move IT resources and services across the enterprise. In the event of an emergency or disaster, a very manual effort is needed to redistribute applications to alternative agency offices, even when optional locations are identified ahead of time.
- IT security incidents are identified days or even weeks after the initial event. Without cohesive system mapping and network control, the manual effort to track and mitigate the risk can take several additional days or weeks.
- It is very difficult to report meaningful system performance metrics across so many disparate and disconnected IT systems and environments.

Business Drivers
There is a clear need for a cohesive, integrated, real-time framework across OIT emphasizing quality of service delivery and focusing on the relationship with the customer. Key State agency program area requirements include:

- Real-time infrastructure and business application monitoring with configurable performance levels and automated notification well ahead of full system failures.
- Systematic, integrated work flow processing across OIT and vendor partners to expedite customer service requests.
- Rapid response and implementation of disaster recovery, business continuity plans, processes, and programs.
- Real-time identification and traceability of security incidents and problems from initiation to resolution.
- Reduced duplication of IT-related effort across multiple State agencies.
- Efficient and effective sharing of IT resources (people and financial) across multiple State agencies.
- Ability to systematically connect with various IT systems across State agencies to provide more visible, integrated, and reportable data.
- Web and mobile accessibility for OIT staff monitoring systems enabling faster response to issues and requests.
- Web and mobile accessibility for OIT customers submitting requests or using self-service options for standard requests for change or support.

OIT has implemented parts of an IT Service Management (ITSM) Ecosystem addressing portions of the business drivers mentioned above. The remaining tools and linkages are required to realize the full benefits of the tool suite. Here is a summary of OIT's current challenges, and Playbook Initiatives, tied to delivery of the IT Service Management ecosystem.

OIT Priority	FY14 Playbook Initiative	*Current Challenge*	Future State – Outcomes and Benefits for Agency Customers
Customer Service	Establish consistent agency strategic and IT budget planning.	*Segregated tools and processes to support State agency strategic planning for IT.*	Linked tools and processes make IT budgeting easier, standardized, and transparent across State agencies.
	Align OIT performance measures with customer performance measures.	*OIT does not effectively measure end-user experience.*	Integrated and cross-referenced data creates more dynamic measurements for both OIT and State agency customers.
	Improve transparency and understanding of OIT services and billing.	*No single repository for data; inability to quickly respond to requests; inability for user to generate reports automatically; manual process.*	Automated process with clear measures and Agency-definable dashboards and reports. Single data repository links financial data to assets and services and to State agency programs.
	Mature OIT resource management process, ensuring clear roles, responsibilities, and tools.	*Agency resources completing tasks seen as OIT.*	Fully automated OIT Service Catalog gives State agencies knowledge of OIT services and capabilities allowing OIT to share with State agencies the responsibility for designing IT solutions.

Service Excellence	Solidify role of Agency IT Director as Business Relationship Manager, with the appropriate information to support role.	*OIT is reactive to new requirements rather than forecasting and anticipating OIT customers' needs.*	ITSM ecosystem provides linkage between all IT Assets (process, knowledge, people, information, applications, infrastructure, or financial capital) and creates the ability to forecast and plan given an accurate view of reality, capacity, and demand. OIT ITSM tool suite connects applications to State agency strategy and OIT resource allocation.
	Establish End User Client Experience Team.	*OIT implements technical solutions and strategy without complete understanding of the State agency landscape and daily operation.*	Increased OIT responsiveness to customer needs and input for individual State agency programs and for Statewide initiatives.
	Define and implement OIT internal system architecture, tools and interfaces.	*Centralized, consolidated enterprise computing solutions in process. Many IT environments remain in silos.*	Central to the ITSM ecosystem, the configuration management database (CMDB) provides real-time, on demand exposure to the most critical IT objects and relationships to OIT and State agency customers. The CMDB streamlines the execution of essential services and maintenance, enforcement of regulations, and adoption of changes.
	Define, deploy, and improve end-to-end Service Delivery Management across OIT.	*OIT systems to support increased capability exist, yet are not fully linked together or deployed as enterprise solutions.*	OIT systems integrated across various OIT processes enabling OIT to perform services with a standardized customer experience, streamlined timelines, and transparency.
	Mature service operational processes to enterprise IT levels: change management, incident and problem management, service desk and network management automation, and self-service.	*End-to-End OIT Service Delivery Management processes are inadequately defined and deployed in support of State agency customer services.*	Full communication between OIT divisions and OIT customers, allows for continuous inflow of reliable data to help OIT improve or maintain processes, and to delivery improved services.
Innovation	Increase mobile and online	*Current online solutions*	OIT services available across the

	solutions to enhance service delivery.	*for IT support lack complete visibility, cohesion, and common strategy.*	State, for IT staff as well as agency customers, anytime, anywhere through mobile and online options, and the self-service portal.
Trusted Partnership	Operationalize the Vendor Management Office function and the commensurate improvement in OIT offering of managed services and OIT leadership and management of service delivery.	*Vendor relationships are inconsistently managed, and contracts take too long to negotiate and complete.*	The Vendor Management Office streamlines vendor selection, procurement, signing, and management, and ensures consistent process and standards across OIT and its State agency customers.
	OIT partners create, propose and deliver market-leading innovative enterprise solutions.	*OIT systems to support increased capability exist, yet are not fully linked together or deployed as enterprise solutions.*	The StoreFront will be the gateway for State agencies and State employees to access OIT Services, especially the self-service portal. The ITSM ecosystem links systems and solutions

OIT Actions to Date

Some ITSM Ecosystem components have already been implemented with success and benefits to the Agency customers. The complete ecosystem, along with all linkages and integration, provides the State agencies with the full benefits of IT Service Management and Service Delivery.

IT Service Management (ITSM) Ecosystem Components

Component	Function of Component	Current Status	Next Steps
Service Desk	Customer Incident and Problem Management	**_Tool Purchased_** – Mature Process and Usage	Integrate with ITSM Ecosystem
	Customer Service Request Management	**_Tool Purchased_** – Requires Configuration and Activation	Integrate with ITSM Ecosystem
	Customer Program Change Management	**_Tool Purchased_** – Requires Configuration and Activation	Integrate with ITSM Ecosystem
	Configuration Management Database (CMDB)	**_Tool Purchased_** – Requires Configuration and Activation, and Database population	Integrate with ITSM Ecosystem
StoreFront	Customer-facing Web Portal (OIT's front door)	**_Tool Purchased_** – Implementing Pilot	Integrate with ITSM Ecosystem
Service Catalog	Customer-facing service offerings	**_Tool Not Purchased_**	**_Purchase Tool_** – Configure Tool and Integrate with ITSM Ecosystem
Clarity	OIT Project Management	**_Tool Purchased_** – Gaining Maturity	Integrate with ITSM Ecosystem
	OIT Resource Allocation – Create Customer Visibility into Resource Assignments and Forecasts	**_Tool Purchased_** – Implementing Tool and Process	Integrate with ITSM Ecosystem
	OIT Service Management – Create Customer Visibility into OIT Services	**_Tool Not Purchased_**	**_Purchase Tool_** – Configure Tool and Integrate with ITSM Ecosystem
Asset Management	Customer asset tracking, reporting, and change management	**_Main Tool Purchased_** – Requires Linkage and Interface Tool Purchase	**_Purchase Tool_** – Configure Tool and Integrate with ITSM Ecosystem
Client Management	Customer asset discovery, software delivery, remote control	**_Tool Not Purchased_**	**_Purchase Tool_** – Configure Tool and Integrate with ITSM Ecosystem
Network Management System	Enables mission thread visibility for OIT and customer	**_Tool Not Purchased_**	**_Purchase Tool_** – Configure Tool and Integrate with ITSM Ecosystem

OIT respectfully requests $3,455,000 Reappropriated Funds in FY 2014-15 for software, licensing, training, and professional services. OIT will spend $1,585,000 in operating dollars to purchase software, maintenance, and licenses for four critical IT Service Management Ecosystem components. OIT will spend $1,870,000 in personal services dollars to implement, configure, and integrate these components into a cohesive, industry-standard system.

OIT further requests $645,000 in FY 2015-16 to complete implementation and pay for software maintenance and licensing. Of the total, OIT will spend $345,000 to purchase additional software licenses and $300,000 in personal services dollars completing the configuration and implementation of these components. $345.000 would be required in FY2015-17 and ongoing, for software maintenance and licensing.

ITSM Ecosystem Full Implementation Roadmap

Like any organic ecosystem, the full implementation of the ITSM Ecosystem will be evolutionary. Initial steps include purchasing remaining components, fully configuring the new components, and populating data from across the enterprise. These tools will pave the road toward linking existing disparate IT systems together, link financial information directly to services, and improve overall service delivery.

From on-boarding a new employee and setting up their PC, to upgrading mainframe systems, and implementing innovative cloud-based and mobile technology, OIT provides many different services to State agencies and citizens across Colorado. Here are examples of how establishing the ITSM Ecosystem will improve OIT's ability to manage over 2,000 user support requests per day and 1,787 IT projects (61 of which are major, multi-year investments).

Customer Benefit	How ITSM Helps
Cutting the time to provide routine services (such as new employee computer setup) from weeks to days, or even hours.	One request through OIT Storefront automatically routes to multiple functional groups, initiates work assignments, procurements, approvals, etc. No paper forms passing from team to team. Tasks performed in parallel.
Reducing application outages and thus improving staff productivity by automating and combining IT system monitoring processes, moving from a reactive position to a proactive, preventative mode of application and infrastructure management.	Individual applications are monitored by a single system, configured to automatically alert staff when thresholds are reached. Ability to deploy fixes, security patches, etc., across multiple systems to prevent potential problems.
Enhancing the security of the s]State's critical data and other IT assets.	Apply safeguards consistently across multiple applications, databases, infrastructure components, and desktop computers. Maintain common logs of data access for quicker and more consistent response to audits and other information requests.
Clearer description of ongoing OIT expenses, resource allocation, common policy billing, asset management, and service delivery with improved	Consistent, automated processes and formats for collecting data across multiple systems. On-demand reporting and visibility into real-time operations.

visibility into OIT processes and information.	
OIT staff no longer performs manual, repetitive tasks and can focus on customer support, complex development projects, performance tuning, process enhancements, etc.	Automated data collection and report generation, less system-by-system manual intervention, scheduled delivery of regular reports

There are 12 functional components of the ITSM Ecosystem. OIT currently owns eight of these, so the remaining four (plus one remaining module for an existing component) will be purchased at an estimated cost of $1,135,000. The existing eight components require upgrades and additional modules to fully integrate into the ITSM Ecosystem, estimated to cost $300,000. Consulting services from the various component vendors will support the deployment of new products and integration of all components into the ITSM Ecosystem, estimated at $1,870,000. OIT further requests $645,000 ($345,000 operating and $300,000 personal services) in FY 2015-16, and $345,000 ongoing, for software maintenance and licensing.

Projected Cost
The Office of Information Technology requests $3,455,000 Reappropriated Funds in FY 2014-15 for software, licensing, training, and professional services. OIT further requests $645,000 in FY 2015-16 of which $345,000 will be for ongoing, for software maintenance and licensing.

Attachment 1 provides an overview of ITSM. Attachments 2 and 3 provide Architectural Diagrams and System Linkages for the ITSM Ecosystem and the OIT StoreFront components. Attachment 4 outlines detailed costs and the three year roadmap for the ITSM Ecosystem.

Consequences If Not Approved
- OIT will lack ready answers to customer requests to provide clear and current details around ongoing OIT expenses, resource allocation, common policy billing, asset management, and service delivery.
- OIT resources will be dedicated to existing duties, and will be unable to address significant additional State agency needs for support, and service improvements without additional FTE or professional services funding.
- Without an integrated and cohesive IT Service Management Infrastructure, OIT cannot realize improvement in its service delivery. It is significantly difficult to expand or add new services. OIT is reactive versus proactive.
- Existing service delivery is unacceptable to the State agency customers. Customer satisfaction level will degrade without automated improvements to both processes and tools, and delivery of accurate measurements.
- OIT will not realize its mission of delivering consolidated effective, efficiency, and elegant IT services.

Alternatives Considered
Status Quo – OIT continues on its current course with isolated implementations of various tools as required. There are minimal, if any, savings associated with consolidated solutions and increased efficiency. Agency customers must continue to track IT assets, resources, and costs with limited information available from OIT systems.

Purchase Separate Systems as Required, Link Manually – OIT implements individual aspects of the ITSM Ecosystem. It would take manual intervention to build, maintain, and update the Configuration Management Database. Overall the expense will be higher as OIT pays for modules and systems individually and lacks systems to integrate or coordinate information. Service Desk configuration and overall ITSM improvements would progress slowly with implementations occurring over 4 to 6 years rather than 2 to 3 years. Agency customers will wait twice as long to receive improved management information and IT service delivery.

Anticipated Outcomes:

Key Outcomes from the Proposed Solution

- Enterprise-class visibility into critical systems, work flows, and IT assets.
- Improve OIT's capability to continuously introduce new or enhanced IT services.
- Reduce, and avoid, risk associated with supporting IT services.
- Effectively dispose of IT services to meet business needs.
- Increase visibility into IT services and the value of the current offerings.
- Increase transparency of OIT in terms of resource coordination, strategy planning, and management visibility.
- Increase the information required to support business decisions:
    - What is going on?
    - What needs to change?
    - What does the future look like?
    - How does OIT help the customer transition from the current state to the future state?
    - How do OIT and the customer know the change has been successful?
- 95 percent of vendor contracts will have standard terms and conditions improving efficiency and streamlining interactions with vendors and with customers. *Today: baseline measure is 10 percent of vendor contracts.*
- 90 percent of contracts will be executed in less than 45 days. *Today: baseline measure is 90 to 180 days.*
- 25 percent increase in systems evaluated and monitored for network and security threats, thereby eliminating down time and potential business impact. *Today: Fewer than 25 percent of OIT applications. This would double those monitored today.*
- 100 percent of all new systems will be security and data compliant. *Today: 50 percent of new systems are fully analyzed for security and data compliance.*
- Improved reporting will provide intelligence around processes currently not available, improving management and decision-making around support and delivery of services.
- Improved access to OIT and customer data through real-time, customizable reporting tools.
- Reduce State agency customer time required managing IT assets.
- Increase OIT Productivity by 15 percent given reductions in system outages and downtime.
    - Industry standard projects a 17 percent time saving spent on support and maintenance activities given ITSM CMDB implementation.
    - Redirect four OIT developers from Tier 2 Service Desk troubleshooting to actual development and problem prevention activities.
- Increase by 90 percent the total number of IT service requests including "total cost of ownership" information, thereby enabling improved business decisions as to value added by the service.

- 100 percent visibility into unplanned changes creating a 20 percent reduction in system downtime and critical business systems availability to State agencies and Colorado residents.
- 100 percent visibility into mission thread connectivity of the Colorado State Network and OIT State agency systems reducing response time to network outages.
- 100 percent visibility into State IT assets, connectivity, and lifecycle status.
- 100 percent improvement in "new hire" first day requirements for system access, equipment, and IT services availability.
- 25 percent reduction in State agency customer time spent requesting OIT services through the use of OIT Service Catalog and the Self-Service Portal for standard changes and requests.
- 25 percent reduction in State agency customer time spent during software upgrades, replacements, and maintenance.
- 45 percent reduction in OIT time required to perform IT asset installs, moves, changes, and answer other customer requests.

Enhanced IT Service Management Processes and Measures
The table below references the improved volume of measures available upon implementation of the ITSM Ecosystem. OIT will collaborate with State agency customers to build metrics and dashboards utilizing these available measures. See Attachment 5 for a detailed list of these measures.

ITSM Process	No. of Measures Today	No. of Measures After Implementation
Incident Management and Service Desk	12	13
Configuration Management	0	9
Change Management	5	13
Problem Management	1	6
Release Management	2	14
Availability Management	4	9
Capacity Management	3	10
Resource Management	3	12
Service Catalog	2	5
Asset Discovery	5	15
Network Management	6	12
Service Level Management	2	26
IT Service Continuity	2	9
Financial Management	3	9
Total	50	162

Initial ITSM Ecosystem Implementation – FY 2014-15
There are 12 functional components of the ITSM Ecosystem. OIT currently owns eight of these, so the remaining four (plus one remaining module for an existing component) will be purchased at an estimated cost of $1,135,000. The existing eight components require upgrades and additional modules to fully integrate into the ITSM Ecosystem, estimated to cost $300,000. Consulting services from the various component vendors will support the deployment of new products and integration of all components into the ITSM Ecosystem, estimated at $1,870,000.

New Purchases	$1,135,000
Upgrades	$450,000
Professional Services	$1,870,000
TOTAL	**$3,455,000**

Ongoing Support & Maintenance – FY 2015-16
OIT further requests $645,000 ($345,000 operating and $300,000 personal services) in FY 2015-16, and $345,000 ongoing, for software maintenance and licensing.

Attachment 4 details the cost estimates per component.

Department Allocations
Cost allocations per department were based on the total percentage of IT funding levels housed within each department. To that end each department's percentage of IT funding from FY 2013-14 was reviewed and each department was assessed an equivalent percentage of the cost of this item.

Department	FY15 Allocation	FY16 Est Allocation
Agriculture	$27,883	$5,205
Corrections	$253,643	$47,352
Governor's Office	$52,575	$9,815
Healthcare Policy and Finance	$42,312	$7,899
Higher Education	$13,654	$2,549
Human Services	$1,140,874	$212,985
Labor and Employment	$247,392	$46,185
Local Affairs	$20,194	$3,770
Military and Veterans Affairs	$9,363	$1,748
Natural Resources	$223,097	$41,649
Personnel and Administration	$61,971	$11,569
Public Health and Environment	$184,110	$34,371
Public Safety	$282,334	$52,708
Regulatory Agencies	$67,870	$12,670
Revenue	$450,217	$84,049
Transportation	$377,512	$70,476
Total	**$3,455,000**	**$645,000**

Attachment 1 – IT Service Management (ITSM) Overview

IT Service Management (ITSM)

ITSM is a customer centric IT management discipline
- Start with the customer or business needs when designing IT services.
- Focus on business process when designing, managing and supporting the delivery of IT services.
- Focus on structuring interactions between IT personnel and business customers and users.

The Information Technology Infrastructure Library (ITIL)

- A globally recognized set of best practices for IT Service Management (ITSM).
- Through a set of customizable principles and processes, ITIL describes effective and efficient ways to implement ITSM solutions over the service lifecycle.
- Establishes a common language across functions and organizational levels.
- Incorporates processes, technical tools and functions, and service delivery lifecycle.

Organizations have moved to adopt ITIL in an effort to improve service, control costs, and provide the audit trails required by regulatory environments.

ITSM Core principles

ITIL principles to ensure consistency, repeatability, standards and enable scalability of IT processes include:
- a. Value to the Customer
    - i. Strategize and design service to provide value in a customer centric way that meets customer priorities and goals.
- b. Cross-Functional Integration
    - i. Service integration across agencies: across customer organizations and across IT groups.
    - ii. Process and workflow integration across the service management lifecycle (Strategy-->Design-->Transition--> Operations)
- c. Graduated Continuous Improvement
    - i. Identify qualitative and quantitative measures to apply incremental improvements that continually align and re-align the IT service(s) to changing customer needs.

ITSM Glossary of Terms

| Term	Definition
Asset	Any resource or capability. The assets of a service provider include anything that could contribute to the delivery of a service. Assets can be one of the following types: management, organization, process, knowledge, people, information, applications, infrastructure or financial capital.
Asset Management	A generic activity or process responsible for tracking and reporting the value and ownership of assets through their lifecycle.
Availability Management	The process responsible for ensuring that IT services meet the current and future availability needs of the business in a cost-effective and timely manner. Availability management defines, analyses, plans, measures and improves all aspects of the availability of IT services, and ensures that all IT infrastructures, processes, tools, roles etc. are appropriate for the agreed service level targets for availability.
Capacity Management	The process responsible for ensuring that the capacity of IT services and the IT infrastructure is able to meet agreed capacity- and performance-related requirements in

	a cost-effective and timely manner. Capacity management considers all resources required to deliver an IT service, and is concerned with meeting both the current and future capacity and performance needs of the business. Capacity management includes three sub-processes: business capacity management, service capacity management, and component capacity management.
Change Management	The process responsible for controlling the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services.
Configuration Management Data Base	A database used to store configuration records throughout their lifecycle. The configuration management database stores attributes of configuration items, and relationships with other configuration items.
Configuration Management System	A set of tools, data and information that is used to support service asset and configuration management. The CMS is part of an overall service knowledge management system and includes tools for collecting, storing, managing, updating, analyzing and presenting data about all configuration items and their relationships. The CMS may also include information about incidents, problems, known errors, changes and releases.
Financial Management	The function and processes responsible for managing an IT service provider's budgeting, accounting and charging requirements. Financial management for IT services secures an appropriate level of funding to design, develop and deliver services that meet the strategy of the organization in a cost-effective manner.
Incident Management	The process responsible for managing the lifecycle of all incidents. Incident management ensures that normal service operation is restored as quickly as possible and the business impact is minimized.
IT Infrastructure	All of the hardware, software, networks, facilities etc. that are required to develop, test, deliver, monitor, control or support applications and IT services. The term includes all of the information technology but not the associated people, processes and documentation.
IT Operations Management	The function within an IT service provider that performs the daily activities needed to manage IT services and the supporting IT infrastructure. IT operations management includes IT operations control and facilities management.
IT Service Continuity Management	The process responsible for managing risks that could seriously affect IT services. IT service continuity management ensures that the IT service provider can always provide minimum agreed service levels, by reducing the risk to an acceptable level and planning for the recovery of IT services. IT service continuity management supports business continuity management.
IT Service Management	The implementation and management of quality IT services that meet the needs of the business. IT service management is performed by IT service providers through an appropriate mix of people, process and information technology.
Problem Management	The process responsible for managing the lifecycle of all problems. Problem management proactively prevents incidents from happening and minimizes the impact of incidents that cannot be prevented.
Release Management	The process responsible for planning, scheduling and controlling the build, test and deployment of releases, and for delivering new functionality required by the business while protecting the integrity of existing services.
Request Management	The request fulfillment process, usually in conjunction with the service desk, manages Service requests. Service requests may be linked to a request for change as part of fulfilling the request.

|	
Resource Management	The process responsible for managing the assets of a service provider, including anything that could contribute to the delivery of a service. Assets can be one of the following types: management, organization, process, knowledge, people, information, applications, infrastructure or financial capital.
Service Catalog	A database or structured document with information about all live IT services, including those available for deployment. The service catalog is part of the service portfolio and contains information about two types of IT service: customer-facing services that are visible to the business; and supporting services required by the service provider to deliver customer-facing services.
Service Desk	The single point of contact between the service provider and the users. A typical service desk manages incidents and service requests, and also handles communication with the users.
Service Level Management	The process responsible for negotiating achievable service level agreements and ensuring that these are met. It is responsible for ensuring that all IT service management processes, operational level agreements and underpinning contracts are appropriate for the agreed service level targets. Service level management monitors and reports on service levels, holds regular service reviews with customers, and identifies required improvements.
Service Request	A service request from a user for something to be provided – for example, a request for information or advice; to reset a password; or to install a workstation for a new user.
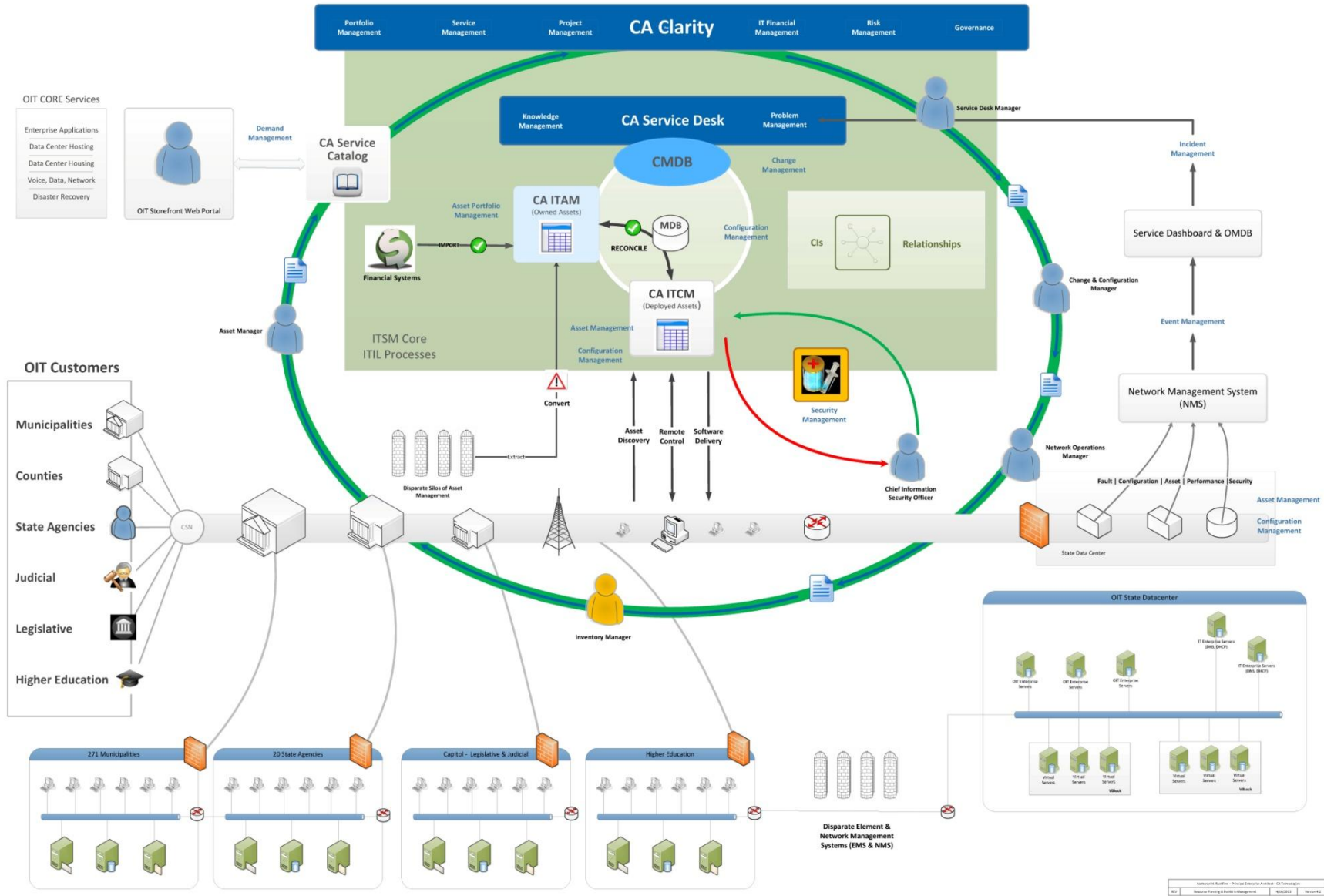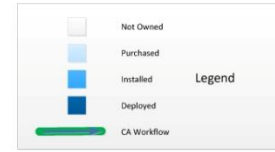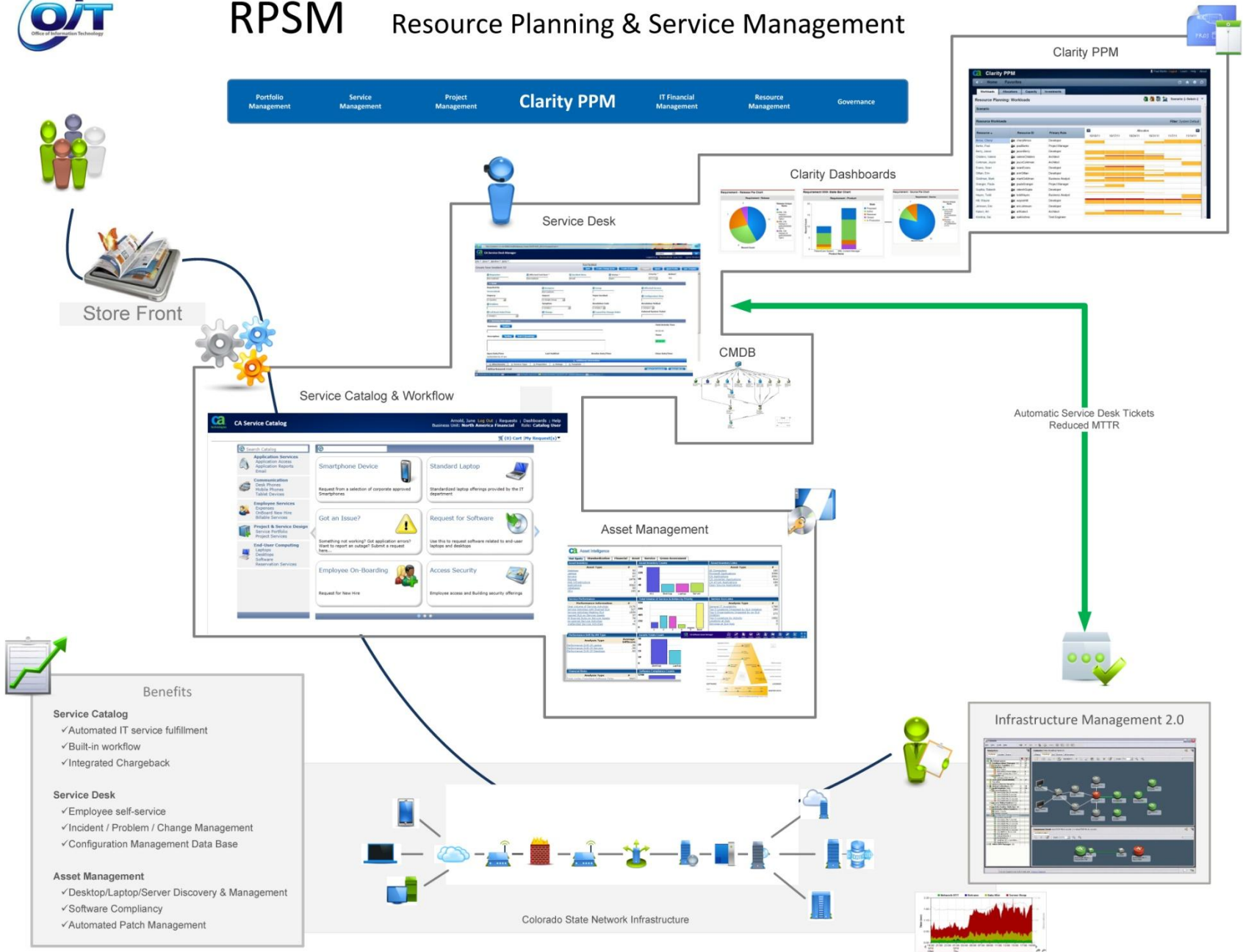
Attachment 4 – ITSM Ecosystem Detailed Costs

Component	Function of Component	Current Status	FY14 Next Steps	FY14 Personal Services	FY15 Next Steps	FY15 Operating	FY15 Personal Services	FY16 Next Steps	FY16 Operating (Ongoing)	FY16 Personal Services
Clarity	Project Management	Gaining Maturity	Implement process	$0	Stabilize process; develop Portfolio Management	$0	$0	Stabilize Portfolio Management; mature program	$0	$0
	Resource Allocation	Implementation in Process	Develop process and partial rollout	$200,000	Integrate with new ecosystem components; stabilize process	$0	$0	Mature program	$0	$0
	Service Management	Not yet implemented; needs remainder of ecosystem	Service definition and status reporting	$0	Implement process; align services across OIT	$175,000	$200,000	Stabilize processes; mature program	$0	$0
Storefront	Web Portal (OIT's front door)	Implemented 6/30/13; will gain maturity over FY14 but requires remainder of ecosystem to fully develop	Google, Service Desk, SalesForce integration	$100,000	Implement process; continually define, refine, and enhance StoreFront	$0	$0	Stabilize process; StoreFront life cycle maturity; continual svc improve	$0	$0

Component	Function of Component	Current Status	FY14 Next Steps	FY14 Personal Services	FY15 Next Steps	FY15 Operating	FY15 Personal Services	FY16 Next Steps	FY16 Operating (Ongoing)	FY16 Personal Services
Service Catalog	Customer-facing service offerings	High level understanding of needs - requires funding	Architect decisions; coordinate with agencies on requirements	$0	Implement process; continually define, refine, and enhance Service Catalog	$160,000	$200,000	Stabilize process; Service Catalog life cycle maturity; continual svc improve	$40,000	$0
Service Desk	Incident and Problem Management	Mature but needs integration work to support remainder of ecosystem build-out	Process rework to enable integration; complete IA for SD licenses	$350,000	Integrate with other ecosystem components; implement process	$100,000	$120,000	Stabilize processes; mature program	$30,000	$200,000
	Request Management	Software owned - not fully implemented - dependent on remainder of ecosystem build-out	Populate, consolidate data, document process		Integrate with other ecosystem components; implement process		$200,000	Stabilize processes; mature program		
	Change Management	Software owned - not fully implemented - dependent on remainder of ecosystem build-out	Populate, consolidate data, document process		Integrate with other ecosystem components; implement process		$200,000	Stabilize processes; mature program		
	CMDB	Software owned - not populated - dependent on remainder of ecosystem build-out	Populate, consolidate data, document process		Integrate with other ecosystem components; implement process	$200,000	$200,000	Stabilize processes; mature program		

Component	Function of Component	Current Status	FY14 Next Steps	FY14 Personal Services	FY15 Next Steps	FY15 Operating	FY15 Personal Services	FY16 Next Steps	FY16 Operating (Ongoing)	FY16 Personal Services
Asset Management	Asset tracking, reporting and change management	Owned and partially implemented - dependent on remainder of ecosystem build-out	Define process; build out with manual data	$0	Configure tool; implement process	$150,000	$100,000	Stabilize processes; mature program	$75,000	$100,000
Client Management	Asset discovery, SW delivery, Remote Control	High level understanding of needs - requires funding	Define process; define requirements with OIT & agencies	$0	Implement tool; roll out with agencies; clarify processes	$350,000	$300,000	Stabilize processes; mature program	$80,000	$0
Network Management System	Enables mission thread visibility throughout lifecycle	Small pilot solution was highly effective showing the customer experience and critical paths - high level understanding of needs - requires funding	Use pilot to define enterprise solution	$0	Implement Enterprise life cycle program - solid budget development	$450,000	$350,000	Stabilize processes; mature program	$120,000	$0
		Total Operating				$1,585,000			$345,000	
		Total Professional Services		$650,000			$1,870,000			$300,000

Attachment 5 – IT Service Management Measurements – Now and Future

Type	Description	Availability
Configuration Management	• Frequency and number of Configuration Management Data Base (CMDB) errors	Future
Configuration Management	• Duration that the CMDB has been consistently up-to-date	Future
Configuration Management	• Frequency of unregistered Configuration Incidents (CIs)	Future
Configuration Management	• Number and severity of breaches in Service Level Agreements (SLAs) caused by inaccurate CMDB information	Future
Configuration Management	• Frequency and impact of incidents affecting the configuration management system	Future
Configuration Management	• Number of occasions where distributed and remote software is at the wrong level	Future
Configuration Management	• Frequency and duration of bottlenecks caused by configuration management activity being too slow	Future
Configuration Management	• Timeliness of management reports	Future
Configuration Management	• Reduction if system outages due to CMDB information	Future
Incident Management & Service Desk	• Number of calls received	Now - Manual - disparate systems, moving to Single Phone Option for Service Desk
Incident Management & Service Desk	• Number of calls missed	Now - Manual - disparate systems, moving to Single Phone Option for Service Desk
Incident Management & Service Desk	• Average duration of calls	Now - Manual - disparate systems, moving to Single Phone Option for Service Desk
Incident Management & Service Desk	• Number of calls logged	Now - Manual - disparate systems, moving to Single Phone Option for Service Desk
Incident Management & Service Desk	• Percentage number of incidents compared to incoming calls	Now - Partially (minus DOC)
Incident Management & Service Desk	• Percentage of repeat calls for the same incident	Future
Incident Management & Service Desk	• Percentage of incidents resolved by help desk - first level	Now
Incident Management & Service Desk	• Percentage of operations support requests closed	Now

Incident Management & Service Desk	• Mean time to achieve incident resolution	Now
Incident Management & Service Desk	• Number of tickets by Tier	Now
Incident Management & Service Desk	• Results of customer satisfaction surveys	Now
Incident Management & Service Desk	• Number of complaints and/or letters of praise	Now - manual
Incident Management & Service Desk	• Results of audits	Now - manual
Problem Management	• Percentage of incidents defined as problems	Future
Problem Management	• Number of problems logged	Future
Problem Management	• Percentage of problems escalated	Future
Problem Management	• Number of problems fixed	Future
Problem Management	• Resolution times with respect to service level requirements	Future
Problem Management	• Number of problems outstanding	Future
Change Management	• Total number of Request for Change (RFCs) raised	Now - Partially
Change Management	• Percentage for each category	Future
Change Management	• Percentage of urgent changes	Future
Change Management	• Number of successful changes	Now - Partially
Change Management	• Number of changes backed out	Now - Partially
Change Management	• Number of failed changes	Now - Partially
Change Management	• Total Number of Emergency Requests	Future
Change Management	• Total Number of Requests by workgroup	Future
Change Management	• Number of Requests with Changes to Implementation Date	Future
Change Management	• Total Number of Changes by Priority	Future

Change Management	• Number of Incidents attributed to Changes	Future
Change Management	• Number of unplanned Changes	Future
Change Management	• Backlog of changes by CI/priority	Now - Partially
Release Management	• Number of RFCs raised	Now - Partially
Release Management	• Percentage of urgent releases	Now - Partially
Release Management	• Number of changes made by Release Team	Future
Release Management	• Ratio of delta and package releases	Future
Release Management	• Number of successful software installations	Future
Release Management	• Percentage of installations performed to time	Future
Release Management	• Number of builds/distributions aborted during process	Future
Release Management	• Number of failed or backed out implementations plus builds rolled back after implementation	Future
Release Management	• Number of software builds from sources other than the Definitive Software Library (DSL)	Future
Release Management	• Number of unlicensed and/or unauthorized versions that have been detected within the organization	Future
Release Management	• Resource costs per release	Future
Release Management	• Service time lost due to Release activity	Future
Release Management	• Number of times the DSL is out of step with the CMDB	Future
Release Management	• Number of detected viruses within the organization	Future
Availability Management	• Agreed service hours, per service	Now - partially
Availability Management	• Total down time per service	Now
Availability Management	• Detection elapsed time per incident	Future
Availability Management	• Response times per incident	Now
Availability Management	• Time taken to repair per incident	Future
Availability	• Actual availability compared with SLA	Now

Management	requirements	
Availability Management	• Reliability - compared to expectations	Future
Availability Management	• Maintainability - compared to expectations	Future
Availability Management	• Serviceability - supplier performance compared with contractual conditions.	Future
Capacity Management	• Processor usage by workload and application	Future
Capacity Management	• Relative resource consumption	Future
Capacity Management	• Min/max transactions per second	Future
Capacity Management	• On-line response times and trends	Future
Capacity Management	• Utilization statistics	Future
Capacity Management	• Business usage trends	Future
Capacity Management	• Processor and I/O usage trends	Future
Capacity Management	• Network usage trends	Future
Capacity Management	• Workload trends and forecasts	Future
Capacity Management	• Growth forecasts	Future
IT Service Continuity Management	• Historical data on incidents, problems, emergencies and disasters	Now - manual
IT Service Continuity Management	• Number and details of changes that require updates to the contingency plan	Now - Partially
IT Service Continuity Management	• Percentage of changes that have caused major issues	Future
IT Service Continuity Management	• CI details including dependencies, relationships and criticality	Future
IT Service Continuity Management	• Security data and requirements	Now
IT Service Continuity Management	• Analysis of services	Future
IT Service Continuity	• Test output	Now - Partially

Management		
IT Service Continuity Management	• SLA review information	Future
IT Service Continuity Management	• Contract review details	Now - Partially
Financial Management	• Percentage of CIs with incorrect financial data	Now - Partially
Financial Management	• Percentage of cost predictions that are incorrect	Now
Financial Management	• Percentage of change management decisions where cost impact is omitted	Future
Financial Management	• Staff time spent on costing activities	Future
Financial Management	• Software/hardware overheads in collecting data for cost management	Future
Financial Management	• Actual costs against budgeted costs	Now - Partially
Financial Management	• Software license fees vs. available licenses	Now - Partially
Financial Management	• Performance of suppliers	Now - Partially
Financial Management	• Percentage of total IT costs not accounted for	Now - Partially
Service Level Management	• Number of occasions when agreed service levels are not provided	Now
Service Level Management	• Service reviews with customers are regular and constructive	Future
Service Level Management	• The elapsed time to follow up and resolve issues	Future
Service Level Management	• Shortfalls in service level management are reducing over time	Future
Service Level Management	• Service reports are produced and distributed on time, and to right people	Future
Service Level Management	Manage quantity and quality of IT service needed:	
Service Level Management	• Percentage reduction in SLA targets missed	Future
Service Level Management	• Percentage reduction in SLA targets threatened	Future
Service Level Management	• Percentage increase in Customer perception of SLA achievements via CSS responses	Future
Service Level Management	• Percentage reduction in SLA breaches caused because of third party support contracts (Underpinning Contracts)	Future
Service Level	• Percentage reduction in SLA breaches caused	Future

Management	because of internal Operational Level Agreements (OLA's).	
Service Level Management	Deliver service as previously agreed at affordable costs:	Future
Service Level Management	• Total number and percentage increase in fully documented SLAs in place	Future
Service Level Management	• Percentage increase of SLAs agreed against operational services being run	Future
Service Level Management	• Percentage increase in completeness of Service Catalogue versus operational services	Future
Service Level Management	• Percentage improvement in the Service Delivery costs	Future
Service Level Management	• Percentage reduction in the cost of monitoring and reporting of SLAs	Future
Service Level Management	• Percentage increase in the speed and accuracy of developing SLAs.	Future
Service Level Management	Manage business interface:	
Service Level Management	• Increased percentage of Services covered by SLAs	Future
Service Level Management	• Documented and agreed SLM processes and procedures are in place	Future
Service Level Management	• Reduction in the time to respond to and implement SLA requests	Future
Service Level Management	• Increased percentage of SLA reviews completed on time	Future
Service Level Management	• Reduction in the percentage of outstanding SLAs for annual renegotiation	Future
Service Level Management	• Reduction in the percentage of SLAs requiring Changes (for example targets not attainable; Changes in usage levels)	Future
Service Level Management	• Percentage increase in the number of OLA's and third Party contracts in place	Future
Service Level Management	• Documentary evidence that issues raised at service and SLA reviews are being followed up and resolved (e.g. via the CSIP)?	Future
Service Level Management	• Reduction in the number and severity of SLA breaches	Future
Service Level Management	• Effective review and follow-up of all SLA, OLA and underpinning contract breaches	Future
Service Catalog	• Increased percentage of services delivered by self-service	Future
Service Catalog	• Number of services offered through online portal	Future
Service Catalog	• Reduction in time to deliver service through efficient use of catalog	Future
Service Catalog	• Increased efficiency of IT resources assigned to	Future

	deliver services through clear work flow	
Service Catalog	• Increased percentage of services delivered by self-service	Future
Service Catalog	• Customer satisfaction percentage on survey	Future