Deloitte.

State of Illinois
Department of Innovation and Technology
Current State Assessment

March 9, 2016

Contents

Deloitte.

Executive Summary

The IT Imperative: Accelerating Illinois Modernization

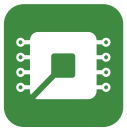
In 2015, the State of Illinois selected Deloitte to assist in design and implementation of a comprehensive IT service delivery model. Supported by new legislation and new leadership team, a new vision drives the imperative for change.

With a new strategy and approach to executing the strategy, the State is seeking to:

Leverage and build upon any previously completed work in order to prioritize progress

Understand and proactively address the risks of a transformation effort of this magnitude to mitigate risks wherever possible

Attract high quality and contemporary talent by supporting training and outreach activities across the State



Be pragmatic and consider the constraints of the agencies involved

Strengthen stewardship by unifying central and local technology resources to achieve more with every dollar spent on IT

Advance a high performance culture by delivering a high-quality platform of core IT services as well as innovative services

Deloitte.

IT Landscape for the State of Illinois

There are **1650** employees performing IT related work. **23%** of the workforce is currently eligible to retire

Inclusive of Salaries and Benefits the State has **$778M** in IT Spend. **42%** of the IT spend is done by BCCS

Password resets accounted for **56%** of all tickets in the ticketing system

Nearly **70%** of help desk callers were either satisfied or very satisfied

There are **~2,800** applications covering **16** functional areas. **~200** applications used for accounts receivable/payable, GL, and payments

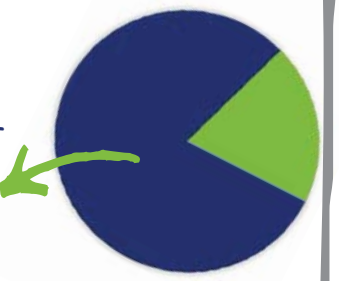
20% *of the State's IT workforce have management roles vs. a typical benchmark of* ***11%***

The State's average span of control is **1:3.8** **versus a benchmark standard of** **1:7**

82% of applications built in house, **8%** are off the shelf, and **10%** are unknown/other

32% of the state's IT spend is on personnel costs

In FY15 the State made **$222M** in IT purchases...



...**80%** was through master contracts

131,000

Phone calls answered in 2015 by help desk

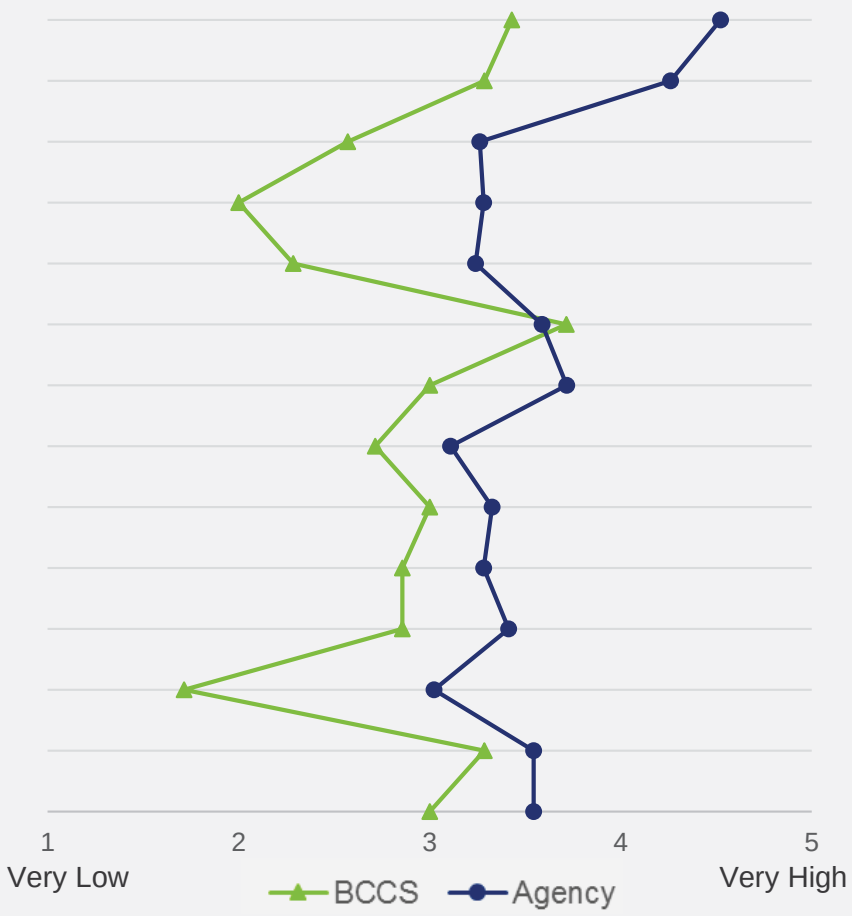
This means an average of **30** calls per day for each of the **18** staff

Deloitte.

Perception of IT Services – BCCS vs. Agency

The perception of IT services provided from BCCS and within the agencies follows the same pattern - the lowest score for both being in “overall perception of sufficiency of IT personnel.”

1. Overall level of IT understanding of your agency’s strategic priorities?
2. Overall quality of IT relationship with agency?
3. Overall clarity of IT governance groups?
4. Overall effectiveness of IT governance?
5. Overall ability to successfully deliver projects on time and budget?
6. Overall quality of infrastructure services?
7. Overall quality of application development and maintenance services?
8. Overall effectiveness of enterprise architecture and standards at agency?
9. Overall level of customer satisfaction with services?
10. Overall clarity of services offered?
11. Overall value of services offered?
12. Overall perception of sufficiency of IT personnel?
13. Overall perception of quality of IT personnel?
14. Overall effectiveness of IT organizational structure?

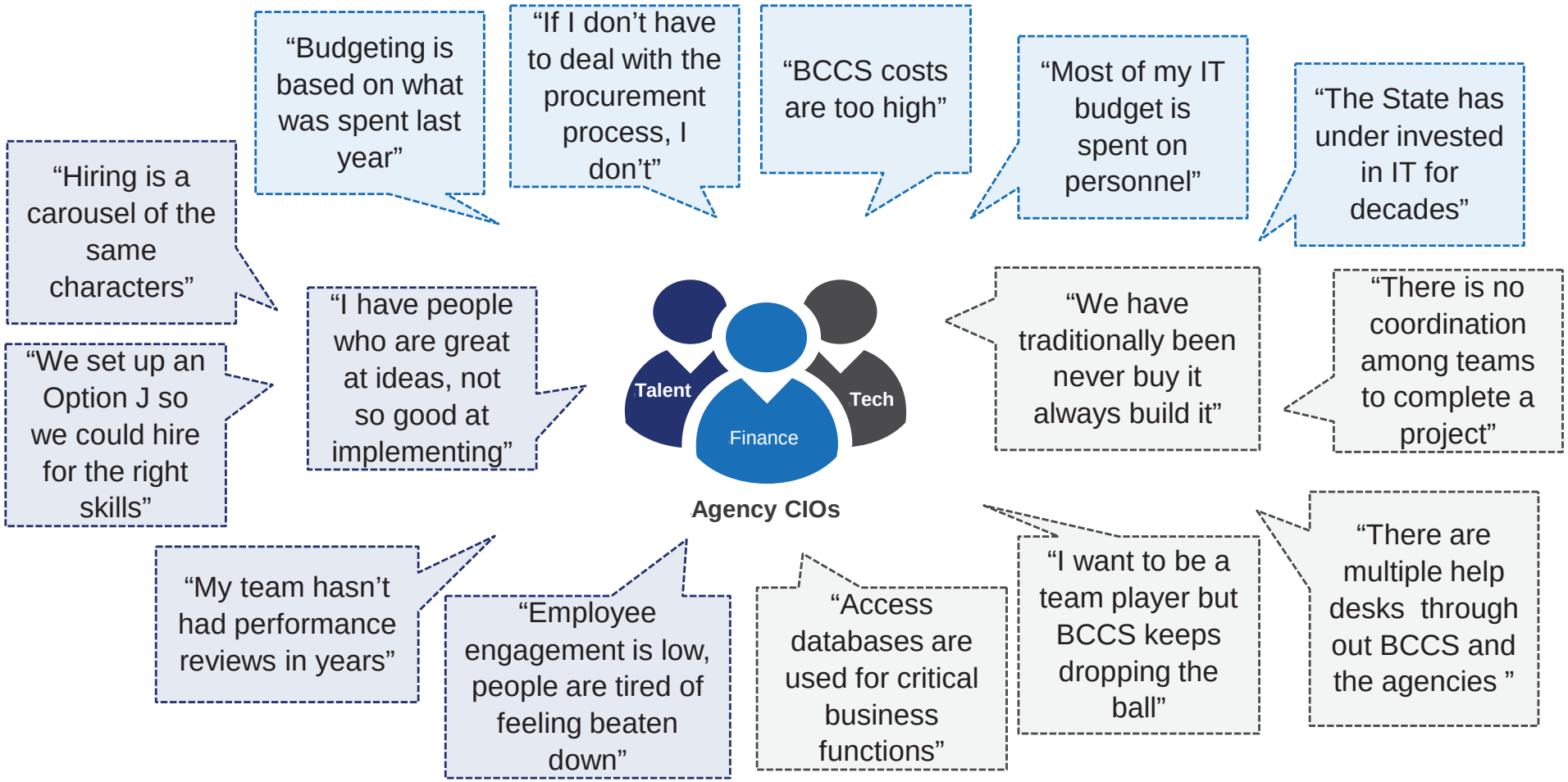


*35 surveys

Deloitte.

Agency Needs – What We heard

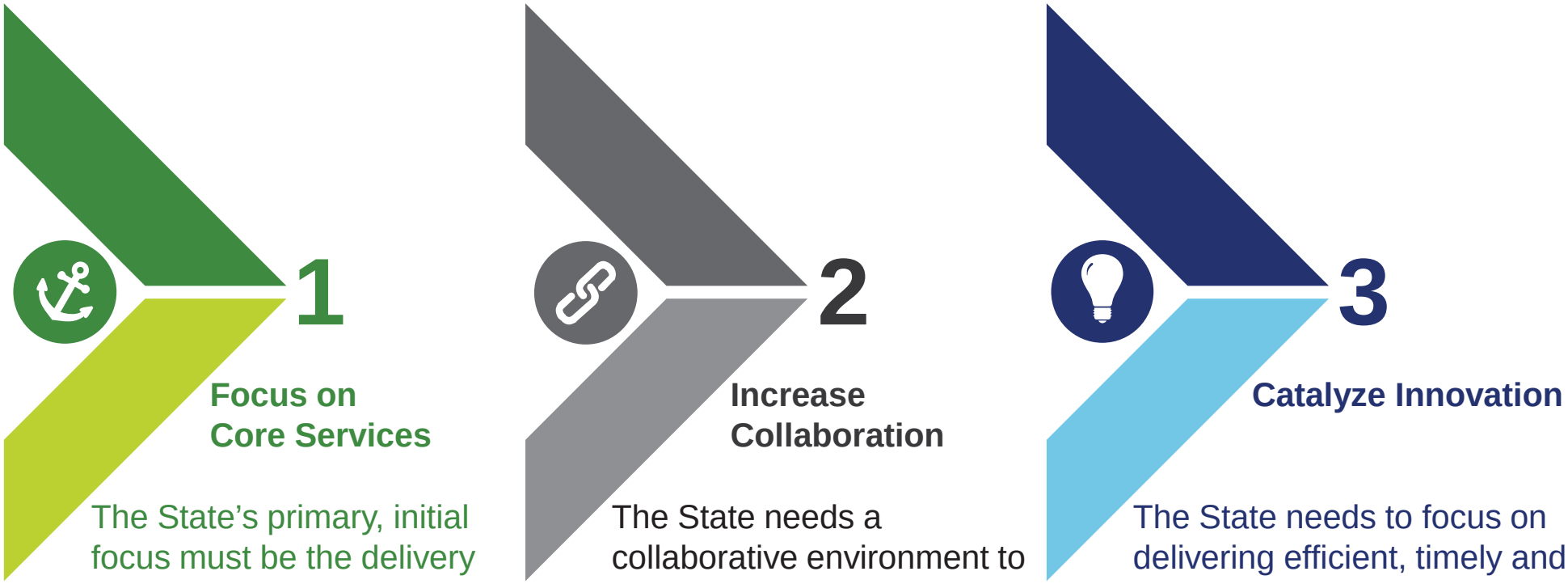
Insights from CIO interviews revealed core themes around employee engagement, the budgeting process, and silos around services which impact the State's IT Organization.



Deloitte.

The Change Imperative

For the State to meet the needs of its stakeholders and adapt to the rapidly changing nature of technology, it will require an overhaul of its IT operating model.



1 Focus on Core Services

The State's primary, initial focus must be the delivery of reliable, cost effective core infrastructure and services

- Reduce risk
- Improve customer service
- Accommodate stakeholder needs

2 Increase Collaboration

The State needs a collaborative environment to improve overall IT effectiveness

- Strategic alignment
- Enterprise architecture
- Common priorities
- Efficient sourcing

3 Catalyze Innovation

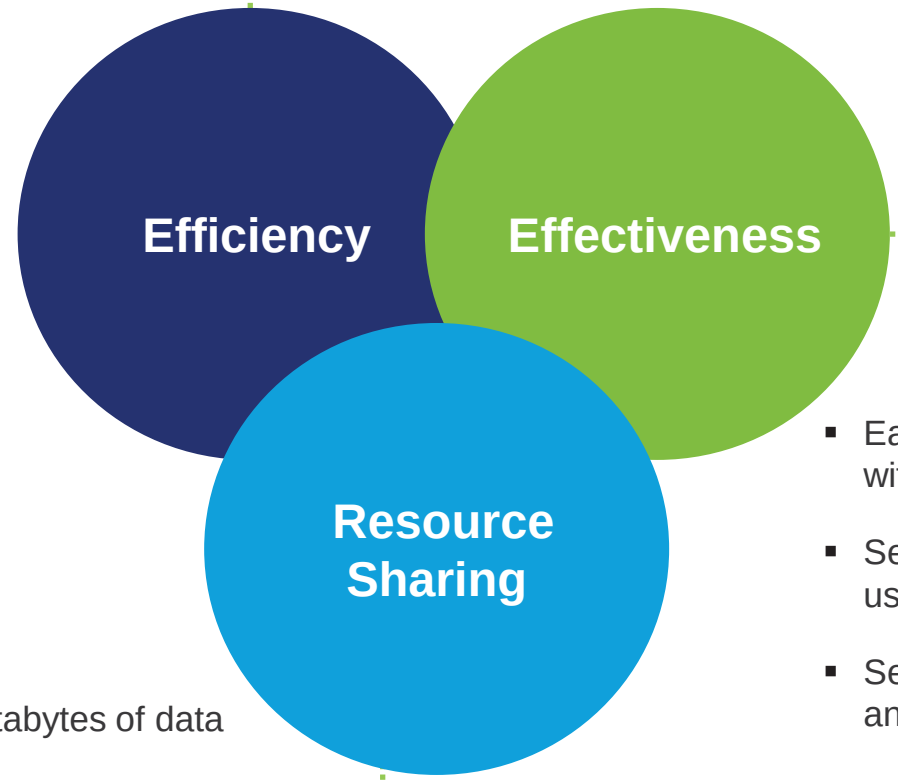
The State needs to focus on delivering efficient, timely and innovative IT services while eliminating 40 years of technology debt and becoming a technology leader

- Data sharing
- Responsive services
- Seamless user experience

Deloitte.

IT Transformation Benefits

The following three key types of benefits will result from the implementation of the IT Transformation project.



- Workforce productivity through mobile solutions
- Greater IT agility
- Optimized IT spend and ROI focused results

- Ease of doing business in and with the State
- Seamless citizen engagement using any device
- Secure employee, dependent and customer data

- Unleashing value from petabytes of data
- Reduced dependence on redundant and duplicative systems and processes
- Strategic allocation of scarce human and financial resources

Deloitte.

Introduction

Strategic Initiatives

IT Transformation is a critical piece supporting the overall strategic initiatives at the State.

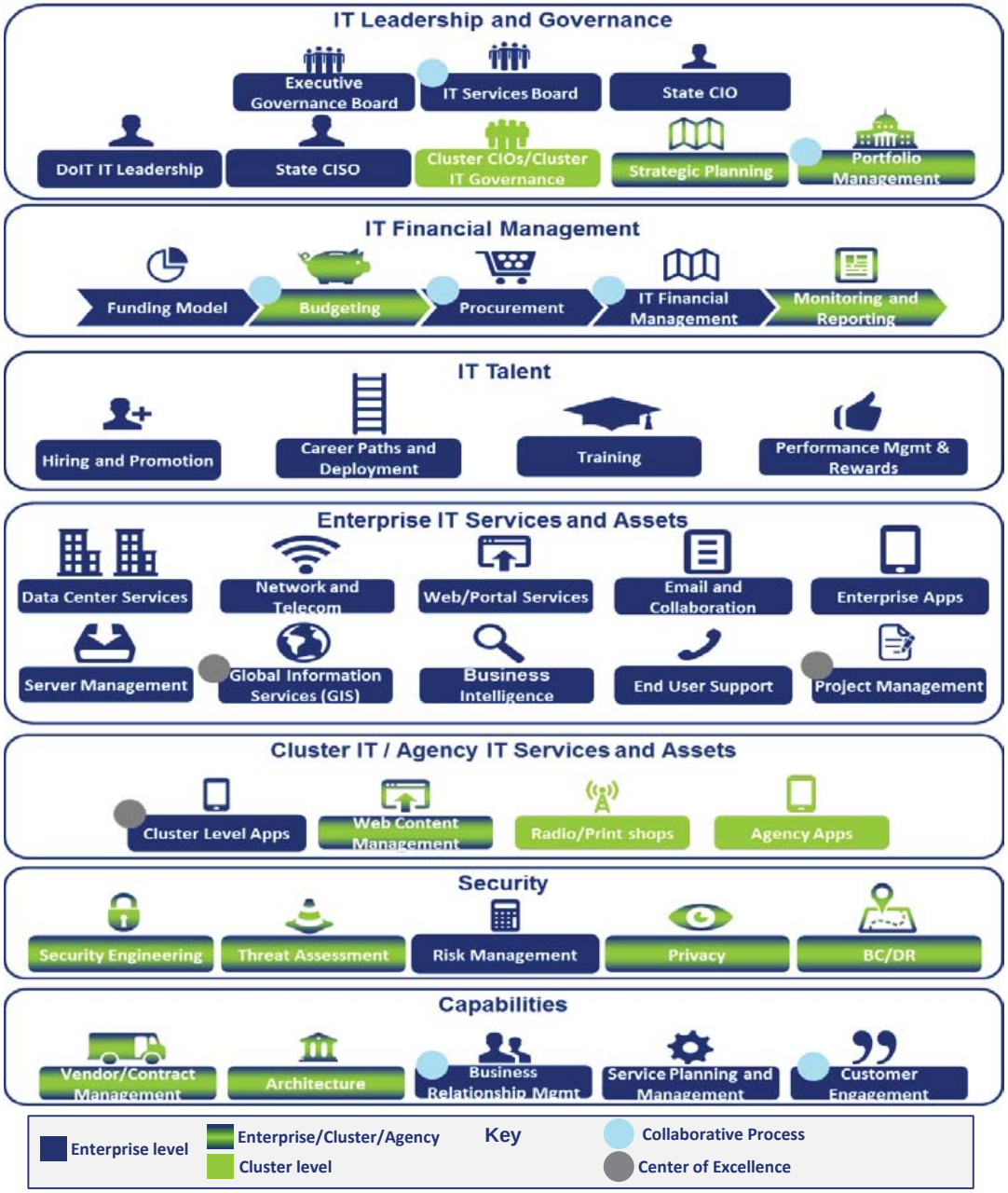
State-wide IT Priorities	Top IT Projects
1. Improve operations to become a world class Technology Shop (C+ to A)	1. Collaboration tool upgrades, including Jabber (DONE) 2. Common Web Catalog for State Services (DONE) 3. CIO Council Working Groups – Cross State Collaboration 4. Establishing High-Functioning Office of the CIO to lead IT across State 5. LEAN – Service Delivery Management Improvements 6. Improved Governance Process 7. Multi-step RFP for IT Solution Providers 8. Establish BYOD for state employees (DONE)
2. Strengthen Cyber Security to mitigate risk	1. Cyber Security Training Program for all employees 2. PII Security Solutions for Applications - Qradar 3. Single Sign-on Strategy/ Implementation 4. Common Cyber Security Framework for all agencies 5. Automated password rest with FIM
3. Transform and streamline statewide IT Operations	**1. IT Transformation** 2. Hybrid Cloud Strategy / Implementation 3. Centrex to VOIP migration 4. Establish Enterprise Architecture 5. ICN Buildout & Expansion 6. Office 365 Pilot and service deployment 7. Server / Storage Virtualization 8. Service Management System Upgrade to Remedy 9
4. Implement statewide unified ERP system	1. ERP Implementation 2. eProcurement 3. Complete App Rationalization and Publish Future State 4. MobileFIRST pilots with EPA Agriculture, EPA Emissions, DCFS, Illinois.gov 5. Establish Data Analytics tools, structures, and team across various clusters

Transformation is part of a bold set of strategic initiatives

Deloitte.

IT Transformation Framework

Deloitte's IT Transformation Framework enables a way to systematically evaluate the State.



- The framework focuses on the major dimensions of the IT environment, including: leadership and governance, finance and operating model, technology assets and services, IT talent, and enabling capabilities
- The framework enables a detailed evaluation of the current state against leading practices both within each component and across the IT organization as a whole
- The framework sets the stage for a comprehensive set of future state recommendations that are consistent with the State's vision and objectives

Deloitte.

Current State Assessment Vision and Objectives

Through this initiative, the State seeks to transform its IT Operating Model and align governance, finance, talent, infrastructure, applications and services.

IT Vision

- A place where constituents can easily engage with the State across multiple mediums, especially mobile
- An environment where data is secure and IT systems are protected from threats
- An innovative technology environment with next-generation platforms and systems – free of technical debt
- An environment where IT spend and cost structures are in balance and aligned with the value delivered
- A place where agencies and central IT are aligned and freely share information – free from fragmentation and fragility of IT

Objectives

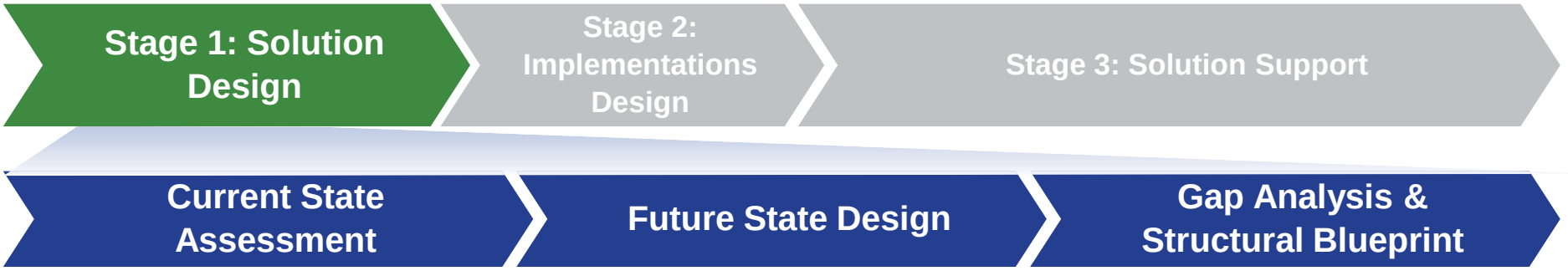
- Enable high quality and consistent services to all agencies
- Clarify responsibilities within IT and improve speed of delivery
- Reduce duplication / redundancy and leverage enterprise applications and technology assets
- Provide agencies with foundational services so agencies can focus on services that most enable agencies / benefit customers
- Strengthen IT governance across areas such as portfolio management, finance, etc.

Through IT Transformation, a plan will be created to achieve these objectives and position the State to meet future vision.

Deloitte.

Project Approach

Our three-phased project approach addresses each project thread concurrently, while also taking into account other core aspects of the IT Transformation framework.



- Conduct stakeholder survey and interview sessions
- Collect documentation from BCCS and agencies
- Review data and document findings
- Prepare Interim Report

- Identify benchmarking universe and metrics
- Conduct benchmarking research and interviews
- Compile benchmarking data and analyze results

- Develop future state guiding principles and IT operating model vision
- Draft recommendations
- Review and validate recommendations
- Prepare and socialize final report and roadmap

Deloitte.

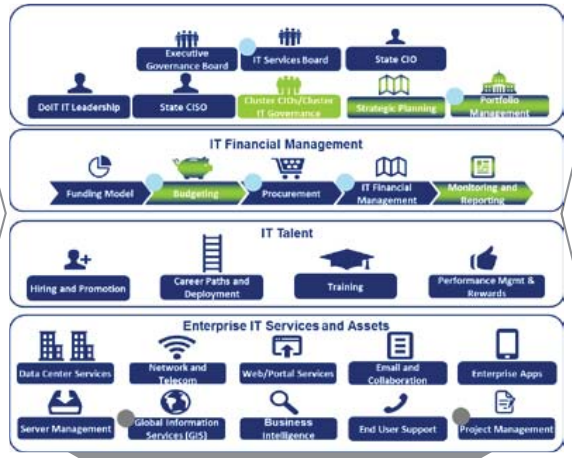
Current State Assessment Activities

To frame our understanding of the current state IT environment, key data was collected, reviewed and analyzed from a number of sources.

Stakeholder Interviews

Over 50 unique stakeholders were interviewed in over 40 individual and group sessions

- CIOs and staff across agencies
- Directors, managers and staff from BCCS and CMS across
  - Procurement
  - Strategic Projects
  - Information Security
  - Legal
- Outside stakeholders, including consultants and vendors



Documentation Request

Over 40 documents were collected from 38+ agencies and organizations

- Agencies were asked to complete inventories detailing applications, servers, storage, and staffing
- Agencies were asked to provide existing documentation such as help desk metrics, organizational charts, and network diagrams
- Financial and staff data was collected from agencies and BCCS
- Received mixed quality of data especially related to Finance

Current State Assessment of the IT Environment

A Note on Data Quality and Analysis: Deloitte requested an extensive list of data from the State upon commencement of the IT Transformation program. As will become evident from this document, the State's siloed IT environment makes gathering data cumbersome and in some cases data does not exist—information is simply native knowledge. Where necessary, when data quality was low, Deloitte made informed assumptions in order to complete analysis. Analysis with particularly low quality or inconsistent data is demarked with a symbol.

Deloitte.

Current State IT Assessment

This assessment details the themes and data findings derived from the Current State Assessment phase of the project.

Executive Summary

- High-level overview of the project and the document, allowing the reader to obtain the purpose and significant themes of the IT Transformation and this deliverable further detailed in the remainder of the document

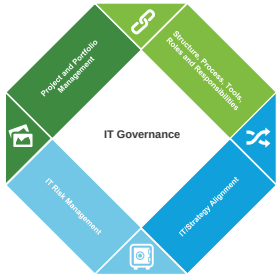
Introduction

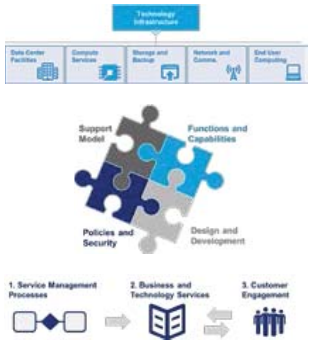
- Introduces the project vision, objectives, methodology, Deloitte's approach to the project and to preparing this deliverable, as well as the structure of this document

Current State Findings

- This section provides Deloitte's detailed findings for each thread, including observations and supporting data, organized according to the key components of each thread

Governance	Talent	Finance	Technology/Apps/ITSM





Appendices

- The Appendix contains:
  - State of Illinois Interview & Data Collection Inventory
  - Families and Functions Framework
  - Agency Budgets
  - Results of the Engagement Survey

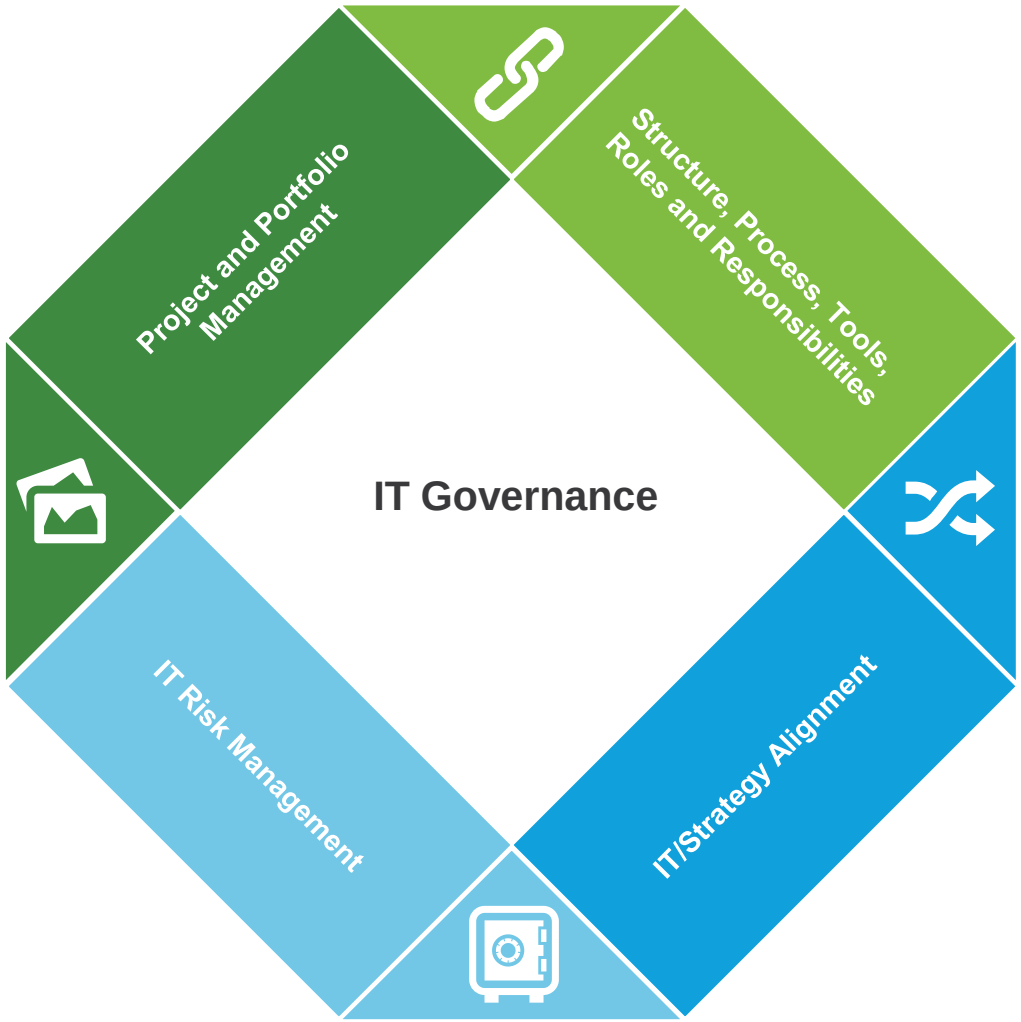
Deloitte.

Current State Findings

IT Governance

IT Governance Overview

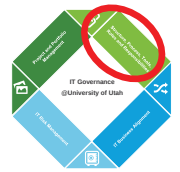
In alignment with the project scope, we have reviewed elements of the IT Governance layers of the IT Transformation framework in our analysis.



- **Structure, Process, Tools and Roles and Responsibilities:** Review of the methods and processes for making decisions and determining IT standards and strategic direction
- **IT/Strategy Alignment:** Review of the methods and processes for aligning IT strategy and funding with business and strategic priorities
- **IT Risk Management:** Review of the methods and processes in place for identifying and mitigating IT risks
- **Project and Portfolio Management:** Review of the methods and processes for managing an IT portfolio and defining and delivering projects

Deloitte.

Structures, Processes, Tools, and Standards



In comparison to the size and scale of IT, governance is minimal in terms of the existing structures, processes, tools and standards.

Structure

- The State does **not have a IT governance structure** to support effective decision making for IT
- Decisions are typically made by individual agencies, resulting in **limited coordination, resource sharing, and consistency**
- BCCS does not have a structure in place to gather requirements for or to make **enterprise wide decisions**
- The State CIO has not until recently had the **responsibility or authority** for IT across the State
- The **CIO Council is a brand new advisory/networking group** which has been in existence for 1 year

Process

- The State does not have an enterprise wide annual, or even ad hoc, process to **identify IT needs** or **align needs to strategy**
- The current BCCS process for prioritizing requests is done with mid-level resources in absence of a true framework or in alignment to a State strategy
- Priorities are identified within **siloed agencies and results in siloed IT solutions**
- The **budgeting process reinforces IT fragmentation**
- The State does not have a process by which **IT standards** are created, ratified, rolled out, and enforced

Tools

- The State does not have a **framework to inform how IT decisions** are made and who makes them, nor does it have a set of thresholds that determines the levels at which (business unit, agency, enterprise wide) IT decisions should be made
- There are multiple templates and tools to capture project requests and data at the statewide and agency level but those have not historically driven collaborative management or decision making or facilitate shared outcomes
- **IT at the State is not data driven**; it does not have a consistent process for managing and overseeing projects and for tracking project metrics

Standards

- The State **culture rejects the use of enterprise standards**, and as a result it does not have a robust set of IT standards or policies that are well understood and implemented
- Decentralization of IT has a led to a **set of de facto technology standards driven by agencies**
- A lack of standards means the State is **losing the opportunity to reduce risk and to aggregate IT spend**

Deloitte.

IT/Strategy Alignment

The current mechanisms for developing IT strategy do not necessarily result in alignment between IT investments and agency needs.

Business and IT Strategy

- Current IT strategic planning processes are **fragmented across agencies** making it hard to holistically support the mission with IT strategy
- Definition of IT strategy happens at the **agency,** but there is no mechanism to ensure that IT is well aligned with the State's strategy as a whole, some agencies have no IT strategies at all
- Strategy in the current state does not consider bandwidth and prioritization of initiatives – the State does not have the process or initiatives to establish priorities
- The State does not have a mechanism to **evaluate the impact of IT investments** on supporting strategic goals
- The **CIO has not historically been a cabinet-level position**, resulting in a variety of executive-level experiences with IT processes and skills

Prioritization and Funding

- The State does not have a transparent process with which to **prioritize IT investments**
- Lack of processes and strategy amplifies issues with **CIO turnover**
- The State has a difficult time **estimating true project costs** and has historically underfunded IT projects as a result
- IT prioritization is buried within the overall budgeting process for agencies, **inhibiting collaboration** on developing IT priorities or pursuing joint opportunities
- The reactive nature of IT services at the State also makes it difficult to see beyond **immediate fires** in order to establish and pursue **longer term strategic priorities**
- The State has not until recently had an **enterprise wide technology roadmap** to help direct the establishment of priorities
- Currently the State has initiated dozens of mega-projects underway to support 40 years of reducing technical debt, but does not necessarily have the resources to effectively deliver them

Deloitte.

Enterprise IT Risk Management

Consistent with other areas, the State's approach to managing enterprise IT risk is fragmented.

Broader than cyber security, IT risks includes security, but also legal, privacy, data, availability, delivery, human resource, and financial factors.

Roles and Responsibilities

- IT Security is moving to a more unified risk management approach under the appointment of **the Chief Information Security Officer**, but other areas of risk are not overseen as effectively
- With few project managers, and limited staff in IT audit roles, risk management is an **ancillary** duty to other staff activities
- The State's silos mean **different people are ultimately responsible for risk**, not all of whom understand the true impacts of IT risks

Process

- The State does **not have a unified process** of identifying, assessing, and planning for IT risks or determining the dependencies between risks
- A lack of a unified IT risk management approach means that the State has a difficult time **monitoring** risks
- Lack of clear roles and responsibilities means that it is unclear how **information** about risks should be escalated and to whom

Tools

- The State does not have a standard **template or tracker** to capture and monitor IT risks either within or across agencies
- The State does not have a consistent approach to **communicating** risks with the broader IT community
- The State does not have a consolidated **knowledge repository** in which it can store information about risk needs, actions, and mitigation strategies

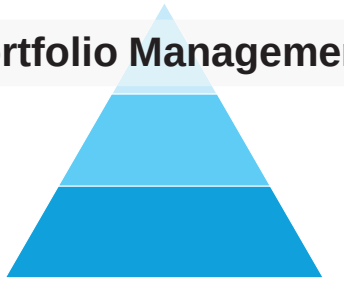
Continuous Improvement

- The lack of a unified process around risk management means that the State does not have a mechanism to communicate solutions or lessons learned more broadly; **knowledge sharing is ad hoc**
- This is particularly true across projects owned by various business units, where **continuity** across project teams is minimal

Deloitte.

Portfolio and Project Management

The State's capabilities around project and portfolio management are limited.



Portfolio Management

- The State does not have an approach to comprehensively manage **IT investments** and funding decisions as a portfolio; the current portfolio approach is very narrow and tactical
- The State does not have an effective **mechanism to allow it to prioritize programs** and projects from either a resource or a funding perspective
- A lack of portfolio capability inhibits the State's ability to take a **long term perspective** on its IT strategy or project pursuits, creating a perspective that is reactive and short sighted

Program Management

- The State's siloed operating environment makes it very difficult to **plan and sequence projects** programmatically and address the interdependencies and complexities of its operating environment, resulting in outages at critical times or go-lives that are very disruptive
- Lack of a programmatic view of projects makes it difficult to manage IT resources effectively.
- While **the State is understaffed** when it comes to IT, the siloed nature of its IT budget and human capital prevents any **reallocation of resources** to areas of extreme need
- Silos also make it difficult to communicate about and report on IT effectively to stakeholders in a way that the right people are properly informed at the right time

Project Management

- The State does not have a standard project management methodology or templates that all staff, regardless of IT unit, can use to implement projects consistently
- **Less than 5%** of the State IT staff are officially performing project management as a primary or secondary function, though the State pursues **hundreds of projects each year**
- **Lack of prioritization means** agencies manage a proliferation of small projects that consume resources and hinder the ability to address strategic projects
- Many staff with project management responsibility have limited **bandwidth or skill sets**

Deloitte.

IT Governance – Key Observation Recap

The State's IT governance is lacking, inhibiting comprehensive oversight of or collaboration on its $778M annual IT investment.

Key Observations

Lack of enterprise wide structures or processes to facilitate decision making across the state's entire IT portfolio

Lack of process to align IT priorities to business needs and strategies

Few controls on IT spending resulting in dispersed IT financial management

Limited coordination or broad oversight of IT risks outside of IT security

Limited portfolio, program or project management capabilities, and few project management resources

Deloitte.

IT Finance

IT Finance Framework Overview

A structured methodology was applied to evaluating each component of the State of Illinois' IT Financial Management.

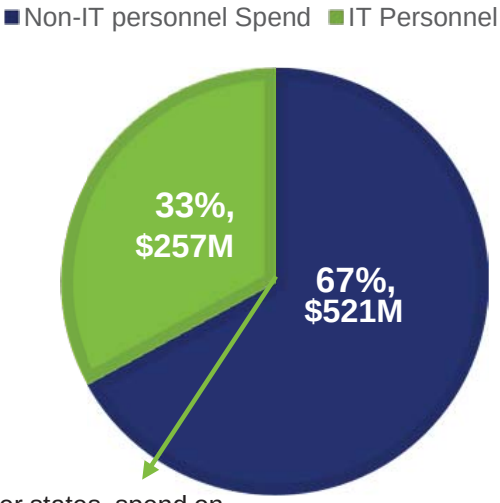
IT Finance Framework

Deloitte.

Finance Overview

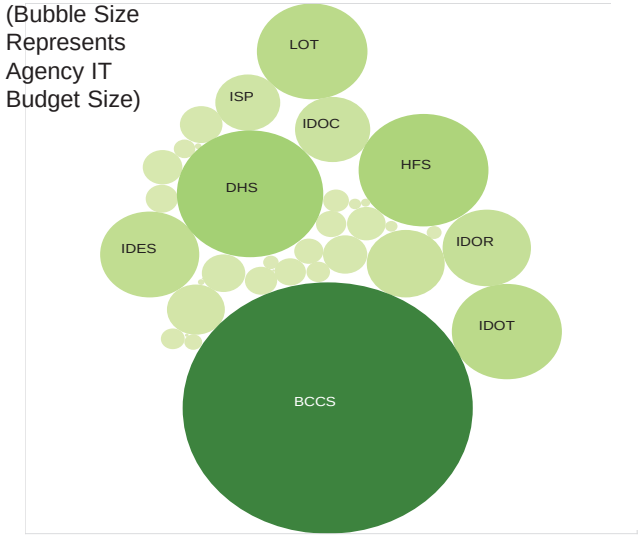
The State underinvests in IT resources and lacks a strategic approach to its current spend.

SOI IT Spend

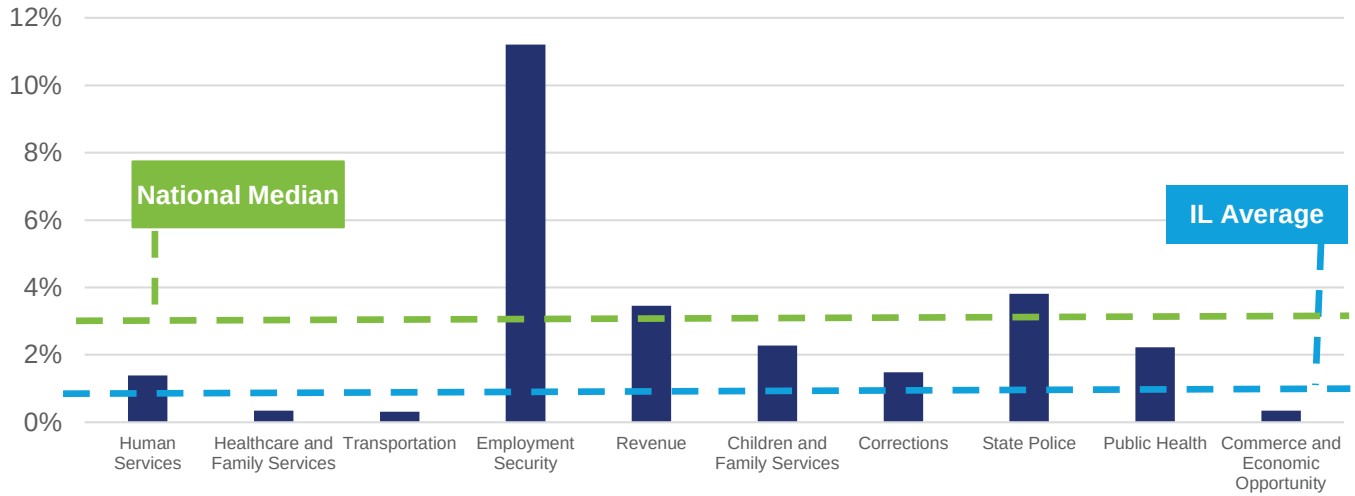


In other states, spend on personnel is typically ~40%

Agency IT Spend



IT Budget as Percent of Operating Budget[1]



Finance Metrics

- Total IT spend:$778M[2]
- Avg. agency IT spend: ~$20M
- Avg. IT spend on personnel: ~$8M
- Avg. % of budget spent on staff: 54%
- Master contract transactions: 623
- IT master contract spend: $178M
- Vendors under master contracts: 97
- Avg. agency IT spend as % of budget: 1.25%
- National median for IT budget as percent of operating budget: 3.6%

[1]Agencies represented have the 10 largest IT budgets

[2]Total spend is for agencies within scope of this project. See Appendix for Agencies considered in scope.

IT Finance – Best Practices

The State has the opportunity to improve in key financial management best practices.

Best Practice	Goal	Current State
Planning	IT funding and financial management is a collaborative process that aims to enable and support strategic initiatives	▪ There is no centralized IT funding source, as a result there is minimal agency collaboration around IT priorities and strategic initiatives. ▪ Although there is no central funding model, agencies and the State have not historically has success with shared initiatives ▪ There is limited strategic input to budgeting as agencies and BCCS base budgets on prior year spend that governs spending authority
Execution	Resources are directed and used towards intended allocations	▪ The BCCS and agency budgeting processes are reactionary and, as such, investment into new technology is often overlooked. ▪ Procurement processes are cumbersome and cause of dissatisfaction for agencies; to avoid the process agencies take advantage of master contracts
Accountability	IT spend is well documented and supported through tracking processes and analytics	▪ Procurement processes are currently reliant on paper-based workflows, there is no clear way of tracking and reporting to agencies ▪ BCCS tracks what is spent, however, this is more challenging for agencies ▪ Lack of analytics on what services are needed and how the services are performed for agencies ▪ Monitoring ROI or impact of spend is not done at agency or BCCS levels
Transparency	The utilization of what and how IT resources were used are easily reported and communicated	▪ Lack of planning creates opacity in overall IT budgeting processes ▪ Procurement is transparent or easily trackable for BCCS nor agencies ▪ Reports of agencies' IT spend with BCCS is accessible, but agency IT spend outside of BCCS is not easily available ▪ Risk does not appear to be systematically identified, communicated and/or mitigated across agencies or within BCCS

Deloitte.

Funding Sources

The State does not have a consistent approach to funding IT, contributing to the agency perception of IT as a utility rather than a strategic partner.

Sample Agency IT Funding Sources

Agency	Federal Funds	State Funds	Fees
Agriculture	✓	✓	
Central Management Services (BCCS)			✓
Children & Family Services	✓	✓	✓
Corrections		✓	
Emergency Management	✓	✓	
Employment Security	✓	✓	✓
Environmental Protection	✓	✓	✓
Financial and Professional Regulation		✓	
Healthcare and Family Services	✓	✓	
Human Services	✓	✓	✓
Insurance			✓
Lottery			✓
Office of Management and Budget		✓	
Public Health	✓	✓	✓
Revenue		✓	✓
State Police		✓	✓
Student Assistance Commission	✓	✓	✓
Transportation	✓	✓	✓
Workers Compensation	✓		✓

Source: Agency Interviews

Key Observations

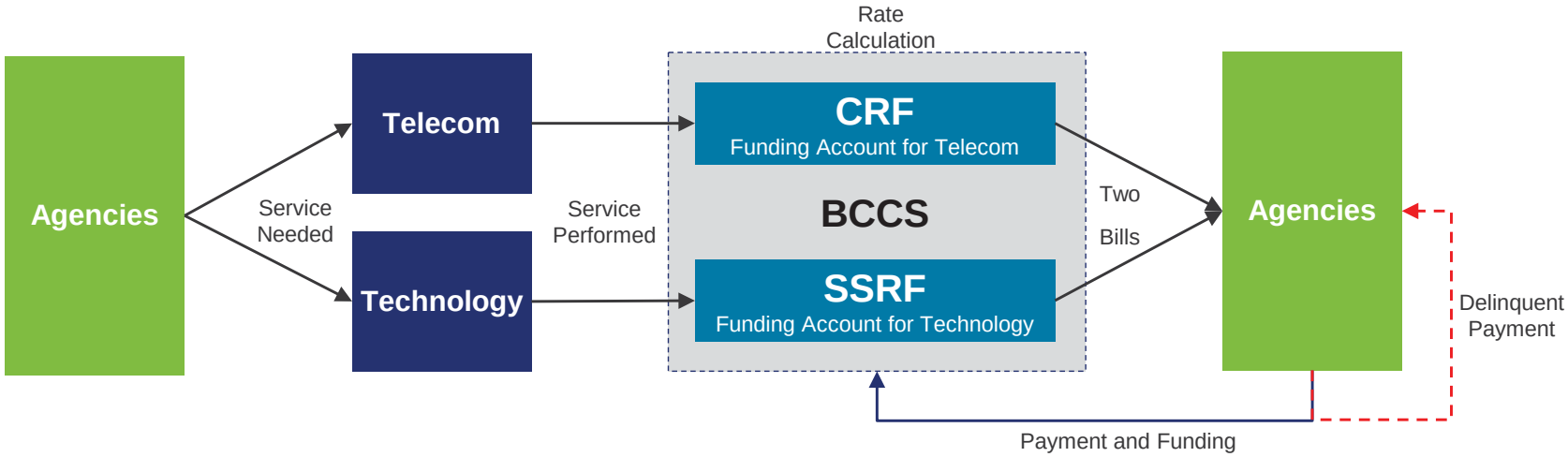
- There are **three main sources of funding** for IT: federal grants, state funding, and fees generated through programs
- **53%** of sampled agencies utilize federal funds, **74%** utilize state funds, and **74%** utilize fees
- There is **no centralized funding source for IT** priorities as agencies are responsible for funding their IT needs
- **Minimal collaboration between agencies** due to nonexistent centralized funding model
- There is **no funding source to incentivize IT innovation**, rather all funding is allocated toward basic execution of programs
- **BCCS**, the primary provider of the state's IT Infrastructure needs, is **funded entirely through chargebacks** to agencies; whereas other state IT organizations use between **15% and 45%** chargebacks to fund services
- BCCS has **two funding sources**, one for telecom (CRF) and one for technology (SSRF)

Deloitte.

Chargeback Themes and Overview

BCCS is funded through an immature chargeback approach.

Chargeback Process (Illustrative)



BCCS Role and Perspective

- All BCCS services correspond with a direct service rate. All costs must be recovered through the service rate.
- Rates are analyzed at least biannually and may change based on analysis. When rates change, BCCS communicates the rationale of the rate change along with supporting modeling documentation. Agency level budgeting occurs annually, so rate changes may create challenges
- While agencies are billed monthly, and BCCS is funded primarily through chargebacks, some agencies do not pay their invoices; BCCS has outstanding receivables of more than $10M

Agency Role and Perspective

- Agencies perceive the BCCS rates as expensive, this is large part due to overhead costs that average 48%
- Agencies believe BCCS can improve its communication processes
- Few agencies outside of BCCS use chargeback as a means of funding IT

Deloitte.

Rates Comparison

Comparing BCCS' top revenue generating services to other states suggests an opportunity to redefine the rate structures and funding model for IT.

Cross-State Rate Analysis

Comparison Services	Illinois Rate	Massachusetts Rate	Utah Rate
End User Support	$52 device/month	N/A	$0.03 per minute
LAN	$38 device/month	$54 mailbox/month	$45.74 device/month
Email (PIM)	$12.50 mailbox/month	$4.26 mailbox/month	$6.1 mailbox/month
Storage	$0.9 gb/month	$4,920 gb/month	$0.22 gb/month

While there are several challenges with conducting a rate analysis across states…

- States bundle and offer services in a variety of methods, making one-to-one comparisons difficult
- States offer a variety of services and products which differ dramatically from one another
- Several years ago, the State of Illinois attempted a cross-state rate analysis and found these same issues
- States have a variety of rates and service levels

… the rate analysis shows several areas for potential improvement to service rates.

- For certain commodity services like email, BCCS rates are nearly double those of other states
- Some states price services or make them free to incent adoption, such as MA with end user support costs
- Certain states include necessary services, such as disaster recovery, bundled with other services to reduce risk

Notes: State comparison based on similar state size and availability of information; All rates are based on current, publicly available information via state websites; Services were matched across states directionally; Services chosen based on most used services by charges and client request

Deloitte.

Budgeting – Overview and Themes

The IT Budgeting process lacks structure and consistency across agencies, contributing to a lack of enterprise-wide IT strategy.

Standard Budgeting Practice

Activity	Outcome
1 Identify business objectives	*List of business objectives* 
2 Develop strategic plan	*Strategy toward achieving business objectives* 
3 Align operations and special projects to support strategic plan	*Align operations and projects to support strategy* 
4 Consolidate operating plans and special projects – rationalize costs as needed	*Finalized list of operating plans and projects* 
5 Develop overall budget and supporting documentation (e.g., business cases) as needed	*Finalized budget for approval* 

Current State Agency IT Budgeting Practice

- Most agencies **lack an overarching IT strategy** to drive budget decisions
- Budgeting **processes differ significantly** across agencies
- Most agencies **form budgets using spend from the prior year**, resulting in a lack of strategic thinking or forward-looking investments
- Incremental processes mean **investment into new technology and innovation is overlooked** in favor of 'keeping the lights on'
- CIOs and IT **leaders have varying experiences with strategic planning** aligned budgeting processes
- Agency **leaders feel hindered by budget uncertainty**
- The State **does not have a uniform budgeting tools** and templates
- Agencies use **varying methods for tracking budget spend** and there is an **overall lack of revising forecasts**.

Deloitte.

Procurement – Overview and Themes

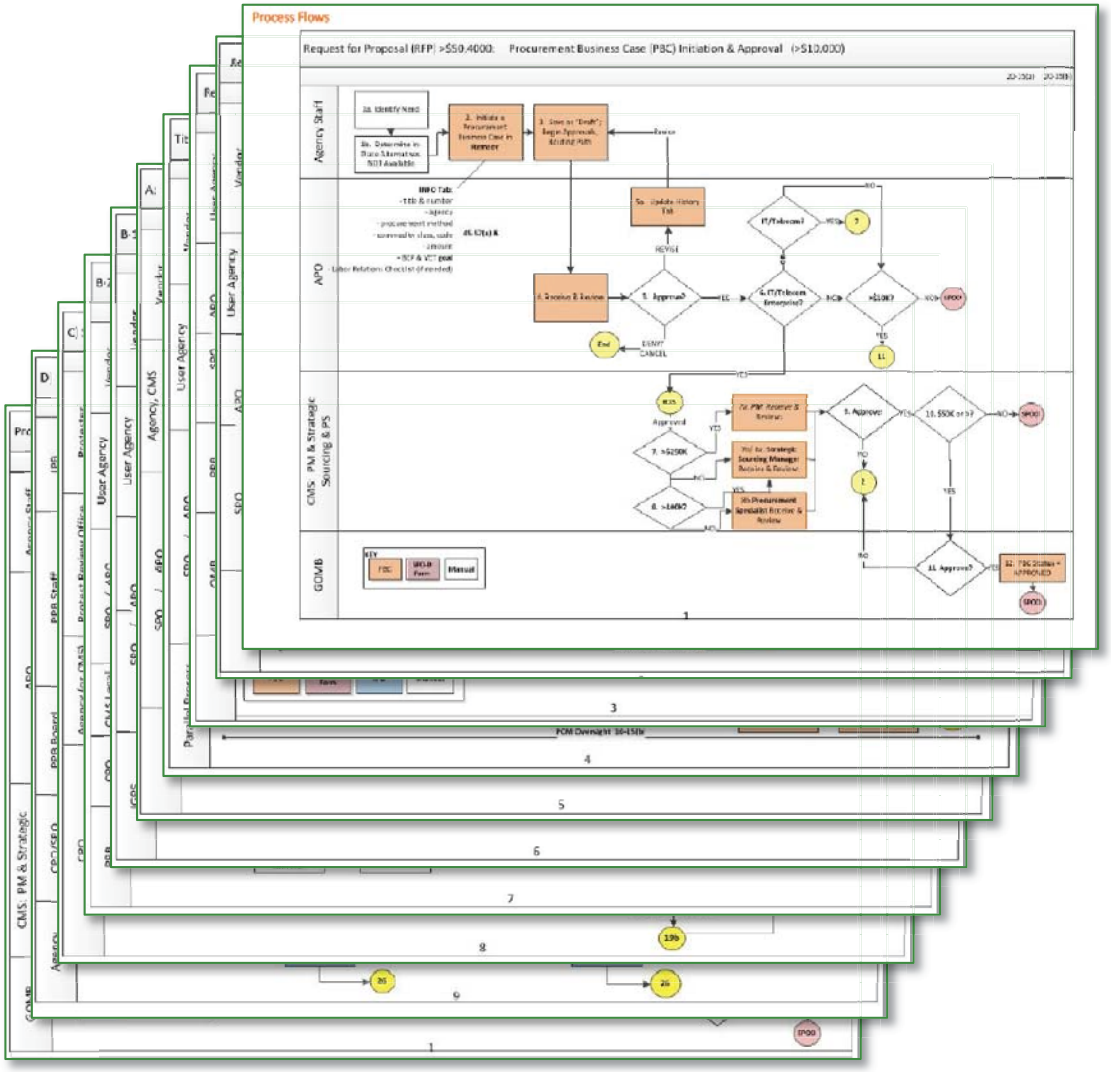
IT procurement processes, consistent with enterprise-wide procurement, aim to reduce fraud, waste and abuse, but have become inefficient and burdensome.

BCCS Perspective	Agency Perspective
Process	
▪ An overabundance of checks in the procurement process were intended to limit fraud, waste and abuse, but leads to significant delays in delivering services ▪ Many workflows within BCCS are paper based	▪ The IT procurement process does not match the complexity and fast-paced nature in which agencies need to operate today ▪ Process is not transparent and easily trackable
Master Contracts	
▪ Master contracts allow BCCS to utilize existing vendors who can provide approved services and products ▪ No easy way of tracking what is being purchased	▪ Master contracts allow agencies to quickly fill IT needs ▪ Agencies are drawn to master contracts because they are more efficient to use than going out on their own
Purchasing Thresholds	
▪ Approvals are necessary but can often be redundant ▪ Purchasing thresholds help provide checks in agency processes, but only for those purchases BCCS sees	▪ Fewer approvals needed for purchases less than $50,400 allows agencies to obtain technology services more efficiently
Procurement Organization	
▪ Procurement staff focus on process rather than outcomes ▪ The State has invested in a new IT procurement role that will work across agencies and coordinate IT procurements, which should help reduce redundancy	▪ Purchasing specialists are not knowledgeable on IT needs and, therefore, cannot advise on what is best ▪ For fear of procurement violations, agencies rarely engage with the vendor community leading to an inability to track market changes or inform procurement strategies

Procurement – Process Flow

The procurement process is highly complex, leading to confusion and delay in acquiring technology and executing projects.

Procurement Process Flows



Key Observations

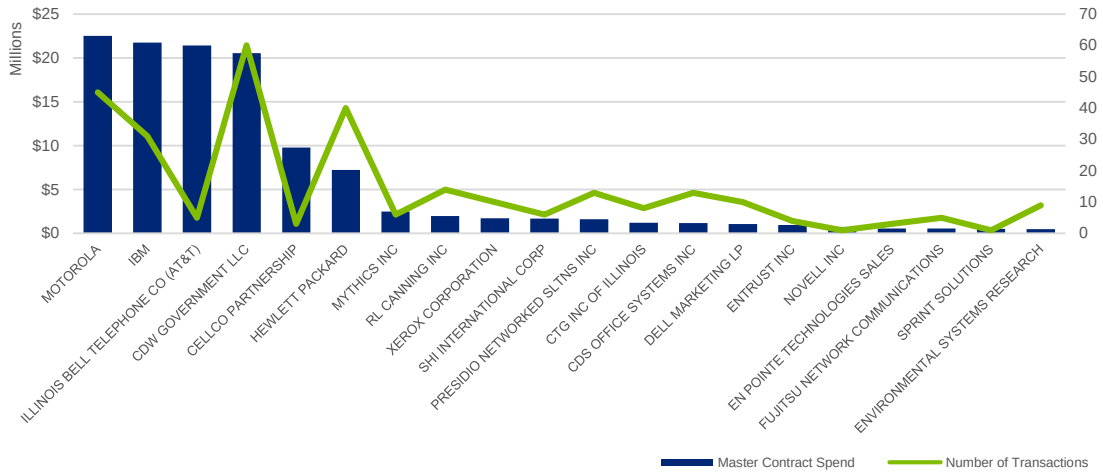
- **40+ individual process flows** were recently documented to capture the complexity of the purchasing environment
- **Longest single process has 65 steps**
- **Agencies require training** on how to properly submit requests
- A **lack of agreed upon templates** unnecessarily prolongs procurement
- **Paper-driven processes** outside of CMS are delaying approvals
- **Duplicative processes** exist to allow different groups to approve purchases, including:
  - **Inputting the same information** into the PBC, SPOD, and, as it pertains to equipment or commodities, IGPS
  - Multiple forms to track and monitor requests throughout the procurement process
  - Approval processes provide **unnecessary checks** on purchases

Deloitte.

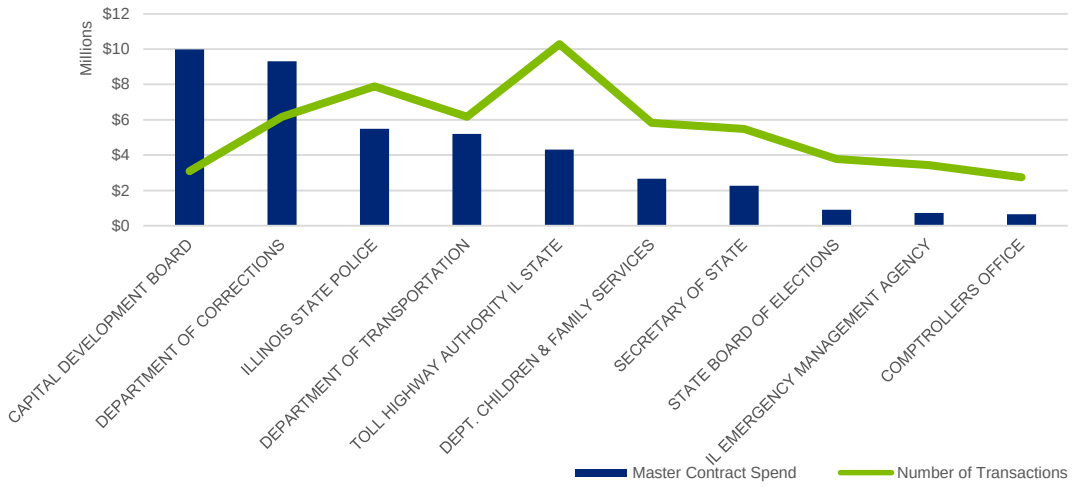
IT Procurement – Master Contracts

Master contracts are the preferred method for IT procurement as it avoids an otherwise cumbersome procurement process.

Master Contract Transaction Total and Volume by Vendor



Top 10 Agencies Spend and Volume of Transactions



Key Observations

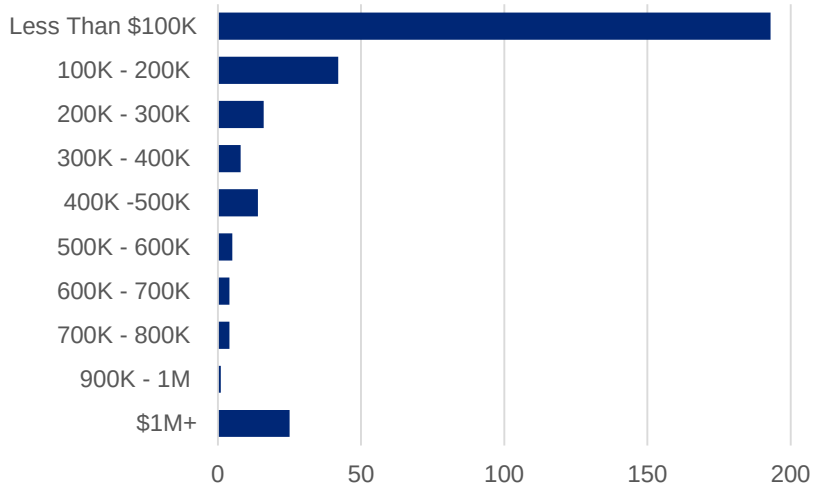
- In FY15, there were more than **310 transactions** and **~$123M spend** utilizing IT/Telecom master contracts
- The State spent **~$96M with its top five vendors**
- The State generally does not encourage competition between companies with similar services to obtain better rates
  - CDW and CDS are both technology resellers similar in size, but spend with each company is distinctly different, **~$20M and ~$1M** respectively
- The top 10 spending agencies (excluding CMS/BCCS) represent **34%** of all money spent through IT/Telecom master contracts and **51%** of the transactions
  - CMS/BCCS alone represents **64%** of all money spent and **31%** of the transactions

Source: Based on BCCS Master Contract Transaction Data

IT Procurement– Master Contracts

Master Contracts account for a majority of transactions and ease the procurement process for agencies.

Contract Transaction Spend Frequency

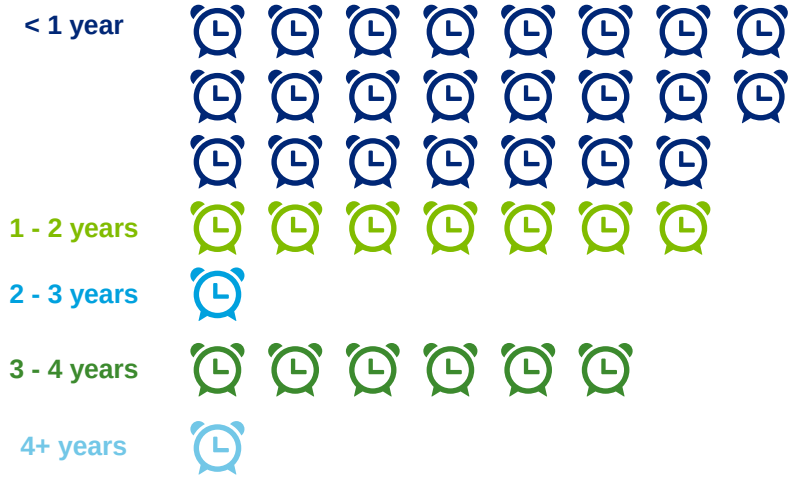


Key Observations

- Agencies have a high volume of transactions on master contracts with relatively small spending amounts, working as master contracts are intended
- Of the **316 IT procurement transactions** from master contracts, **193 were less than $100K** with 129 less than $10K
- Excluding CMS/BCCS, the **average number of IT/Telecom master contract transactions by agencies is 6**, further indicating this procurement method is well used

Source: FY17 Planning Document

Number of Contracts by Expiration Date



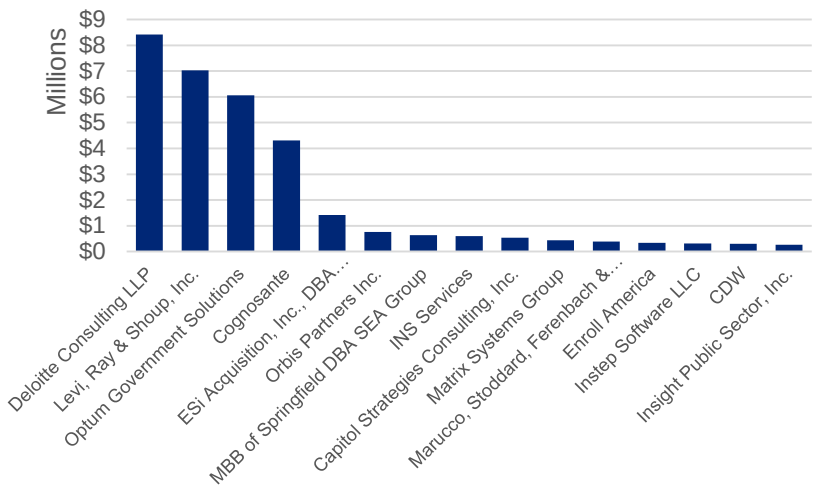
Key Observations

- The State has approximately **23 contracts expiring within one year** and 20 expiring before July 1, 2016
- In the next two months, **four significant contracts for desktops, laptops and cellphones** will expire

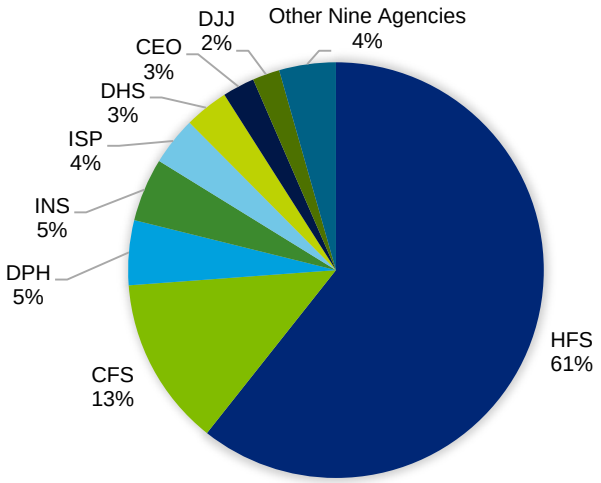
IT Procurement– Other Contracts

The State's procurement spend on other contracts is focused on professional services.

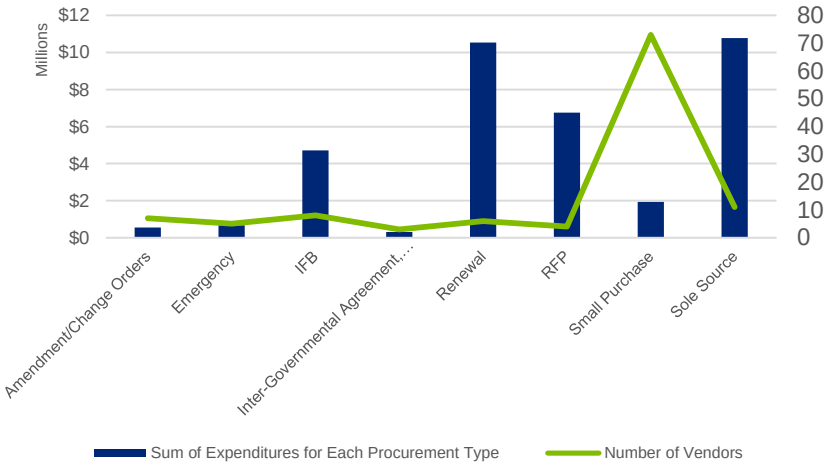
Top Non Master Contract Vendors



Percentage of Spend by Agency



Procurement Type by Spend and # of Vendors



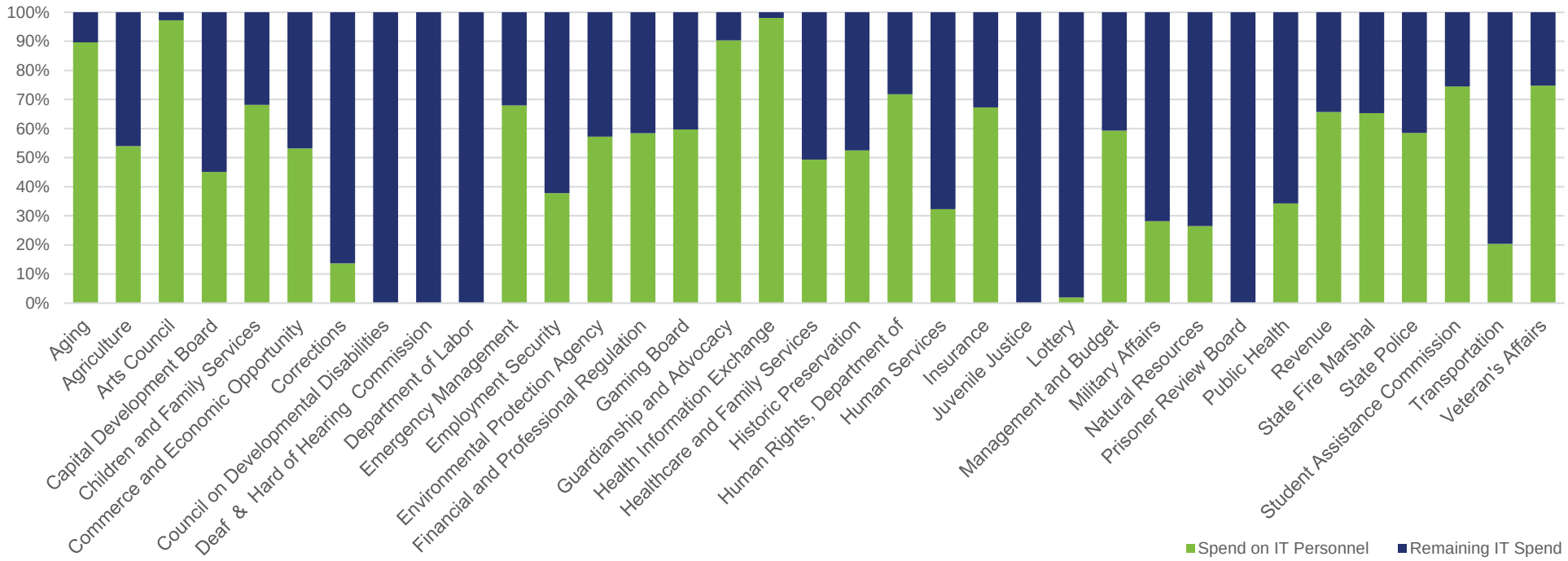
Key Observations

- Procurement through **other contracting vehicles is 23% of all procurement spend** ($159M)
- Professional services account for **~$27.5M (76%)** of spending on other contract vehicles
- HFS and CFS have the largest spend on IT goods and services not procured through master contracts.
- Combined **HFS, CFS, and DPH spend approximately four times** more than all other agencies
- **Sole Source procurements account for the largest spend (~$11M)** through 11 unique vendors

Financial Management

The State's average agency spend is ~$20M, with some agencies spending significantly on IT personnel while others have little to no personnel at all.

Agency IT Spend



Key Observations

- **DHS and DHFS are the two largest agency IT budgets, with more than $130M combined IT spend**
- BCCS has **~$325M in IT spend**, **42%** of the State's IT spend
- **For ~60% agencies** IT personnel accounts for **50% or greater** of their IT budgets, the remaining agencies have few to no resources creating a lumpy environment when it comes to resources
- The State on the whole is spending under benchmark when it comes to resourcing (33% in the State versus 40% at the benchmark)

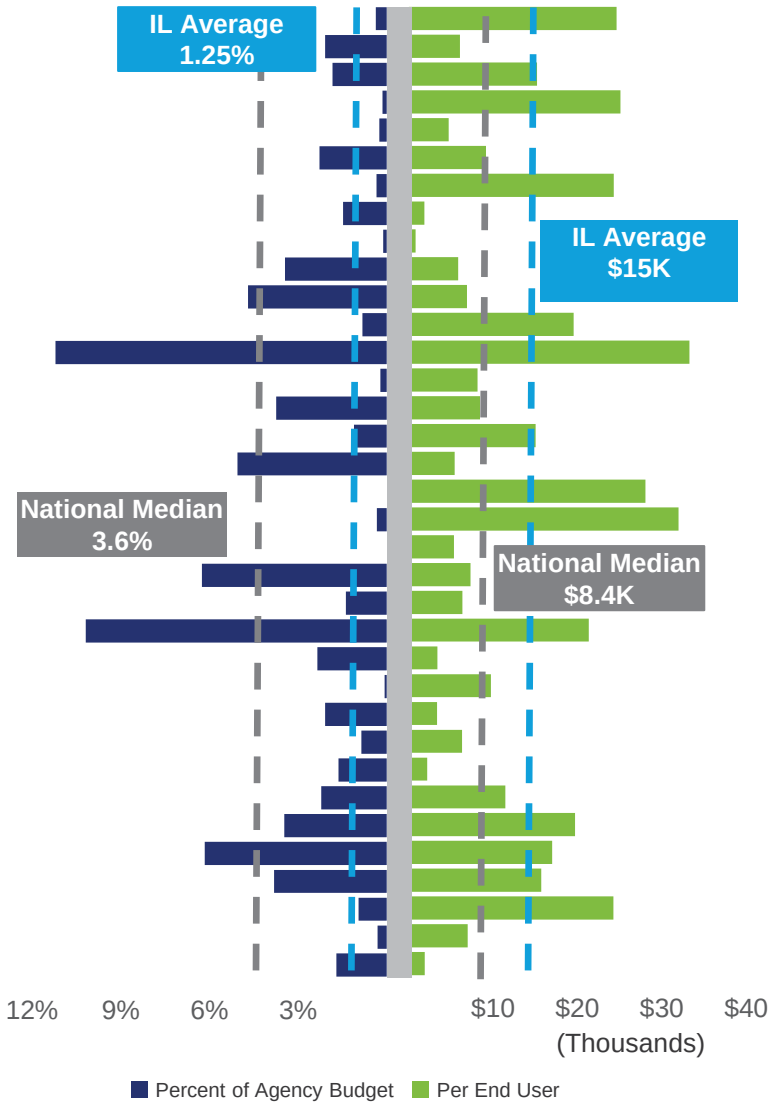
Source: FY17 Planning Document

*CMS/BCCS not shown

Financial Management

The State lacks tools to properly track and monitor IT spend, particularly across agencies. The current funding approach creates 'haves and have nots' when it comes to IT spend.

Agency IT Spend



Aging
Agriculture
Arts Council
Capital Development Board
Central Management Services
Children and Family Services
Commerce and Economic Opportunity
Corrections
Council on Developmental Disabilities
Deaf & Hard of Hearing Commission
Department of Labor
Emergency Management
Employment Security
Environmental Protection Agency
Financial and Professional Regulation
Gaming Board
Guardianship and Advocacy
Health Information Exchange
Healthcare and Family Services
Historic Preservation
Human Rights, Department of
Human Services
Insurance
Juvenile Justice
Management and Budget
Military Affairs
Natural Resources
Prisoner Review Board
Public Health
Revenue
State Fire Marshal
State Police
Student Assistance Commission
Transportation
Veteran's Affairs

Source: FY17 Planning Document

[1] http://www.governing.com/gov-data/public-workforce-salaries/states-most-government-workers-public-employees-by-job-type.html
[2] The department of Lottery is not shown as it is a significant outlier

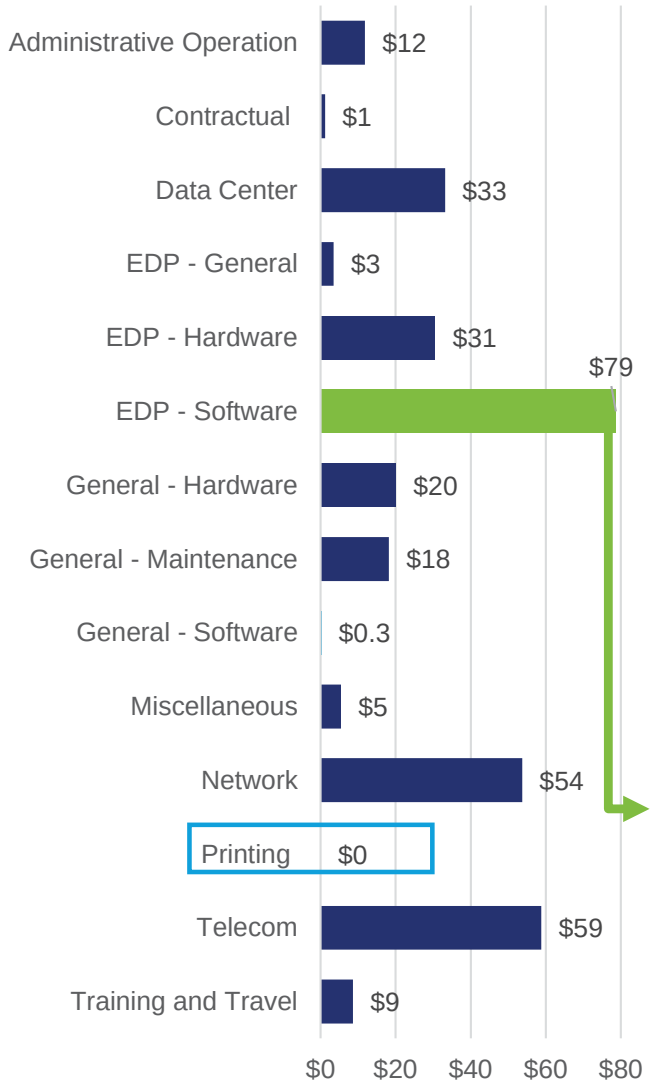
Key Observations

- Many agencies **do not have a process to track what is spent on IT;** therefore management of IT is limited
- The combined average for IT spend as a percent of agency budget is low (**1.25%**), which indicates underinvestment in IT by the State
- The State average for IT spend per end user is **~$15K** versus a national median of **$8.4K** while it may seem that the state is over spending per user, the state of IL has one of the lowest number of government employees per capita rates in the country[1], thus, the gap reflects the fact that the **cost burden for the IT environment is inflexible** and not necessarily aligned to use of technology
- The State cannot scale costs down even as it scales down other operating elements

BCCS Spend – FY14 and FY15

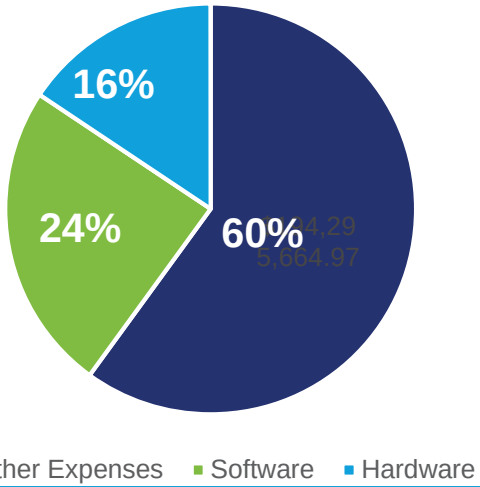
Tracking spend within BCCS is a challenge as purchases are allocated across a 70+ different object codes or are misclassified.

BCCS Spend by Object

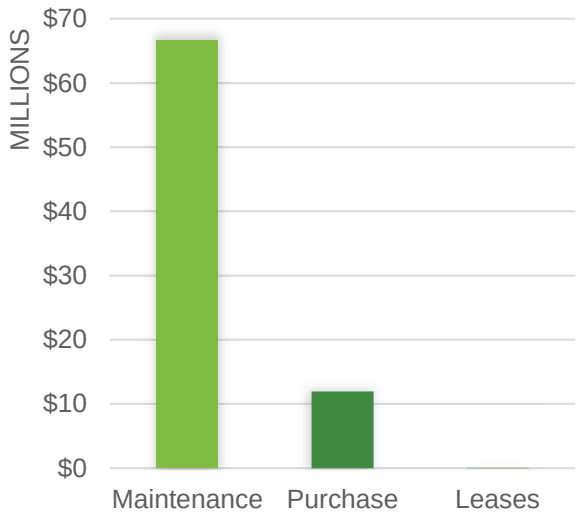


Source: BCCS Actuals (Excludes Personnel)

% Spend on Hardware/Software



Spend Breakdown on EDP Software



Key Observations

- BCCS has **75 categories for spend**; however, the expenditures are often categorized incorrectly and hard to track
- The object code for printing accounts has **~$5K** in spend, yet there is more than **~$1.2M in known printing spend**
- Total spend on hardware and software is ~**40% (~$130M)** of all BCCS spend
- Maintenance represents $66M in EDP – Software spend due to legacy systems that are costly to maintain
- Of the **~$59M** spent on Telecom, **~$19.5M is spent on cellular** related charges
- Network related work accounts for **~$54M** in spend, with **labor and materials for fiber optic construction representing ~$10M**

Monitoring and Reporting

The State lacks standard IT monitoring and reporting across all agencies, often relying on the experience of the agency CIO to implement controls.

Limited use of KPIs to monitor budgets and spend more effectively

Lack of KPIs means the State does not often know ROI of investments

Capabilities for tracking IT assets are mixed across agencies

Capability	Typical Maturity Dimensions	Stage 1 Passive	Stage 2 Reactive	Stage 3 Basic	Stage 4 Adaptive	Stage 5 Proactive
Monitoring	▪ Real time knowledge of spend ▪ Established and consistent KPIs across IT groups ▪ Understanding of IT asset mapping	●	Some agencies monitor spend, but fails to adjust the actions based on revised forecasts			
Control Activities	▪ Clear procedures to proactively track, mitigate, and eliminate risk ▪ Clear knowledge of costs associated with control activities ▪ Vendors are compliant and effectively managed	●	Lack of standard financial management systems means it is cumbersome for agencies to track costs and agencies do not manage the same vendors collaboratively			
Risk Assessment	▪ Ability to clearly identify risk across agencies ▪ Clear risk mitigation processes and procedures ▪ Follow up on identified risks		●	Risk identification across agencies is difficult without real-time reporting; financial risks are currently managed through cumbersome approval processes		
Information and Communication	▪ Clear communication channels across agencies ▪ Ability to forecast results and plan accordingly across agencies		●	Cross-agency communication occurring ad hoc and currently being improved; results forecasting not occurring		

● Current State

Deloitte.

IT Finance- Key Observation Summary

The State's approach to IT financial management is outdates and reactionary, as a result IT spend is neither strategic nor focused.

Key Observations

- There is no centralized funding source for IT services as agencies are responsible for their IT needs. BCCS approach to charging for services makes for high rates.
- Budgeting processes vary across agencies with little attention given to alignment with IT strategy
- Agencies utilize master contracts to avoid an otherwise cumbersome and ineffective procurement process
- The State's IT spend as a percent of agency budget is 1.25%, suggesting the State underinvests in its IT capabilities
- The State lacks standard IT monitoring and reporting, despite statewide efforts to enhance transparency and accountability

Deloitte.

IT Talent

IT Talent Framework Overview

A structured methodology was applied to evaluating each component of the State of Illinois' IT Human Capital Management Process.

Review of methods and processes for developing employees throughout their careers and providing resources where needed across an organization

Review of methods and processes for providing employees with ongoing learning and development opportunities to enable continuous performance improvement

Review of methods and processes for advertising openings, attracting top candidates, and filling positions

Review of methods and processes for evaluating and rating employees in a consistent and equitable manner and ensuring effective recognition

Deloitte.

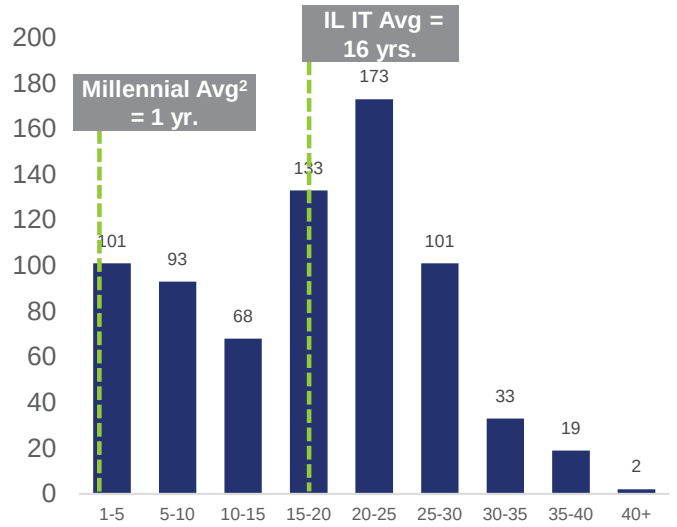
Current State Summary

Key Staffing Statistics

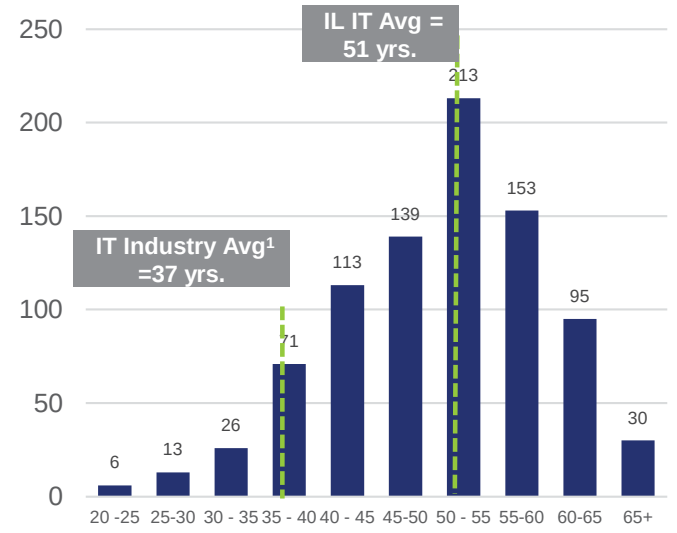
Total IT employees (incl. support functions)	1,645
IT staff % of total State staff	3.1%
IT staff per user	1:31
Average age	51 years
Average tenure	16 years
Average salary	$92,196[3]
No. of distinct IT job titles	86[4]

Top 5 IT Job Titles	% IT Staff
Information Systems Analyst 2	30%
Information Systems Analyst 1	16%
Public Service Administrator	12%
Information Service Specialists 2	8%
Senior Public Service Administrator	5%

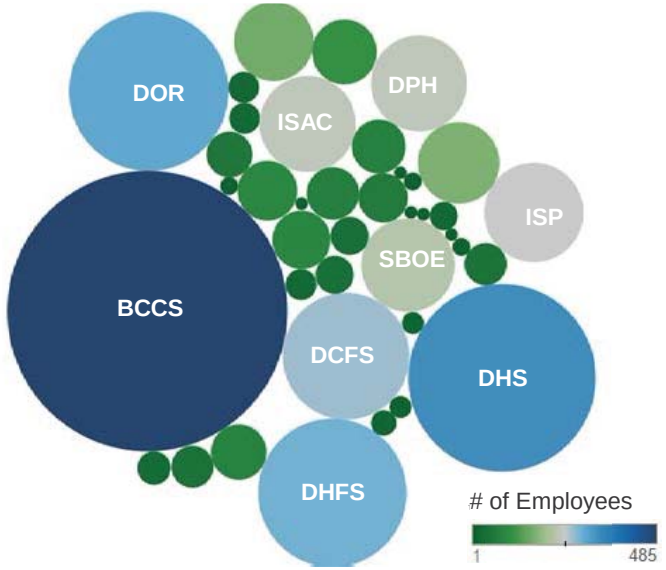
Tenure Distribution



Age Distribution



IT Employees by Agency



Key Observations

- The State IT workforce is on average **14 years older than the IT industry average**
- The State is **hiring relatively few staff to replace retiring staff**, nor is it bringing in leading edge skills or innovative thinking to advance capacity
- **46 of 86 (53%) individual IT Job Titles have 2 or less employees** - variation that results in role confusion and overlap of functional duties

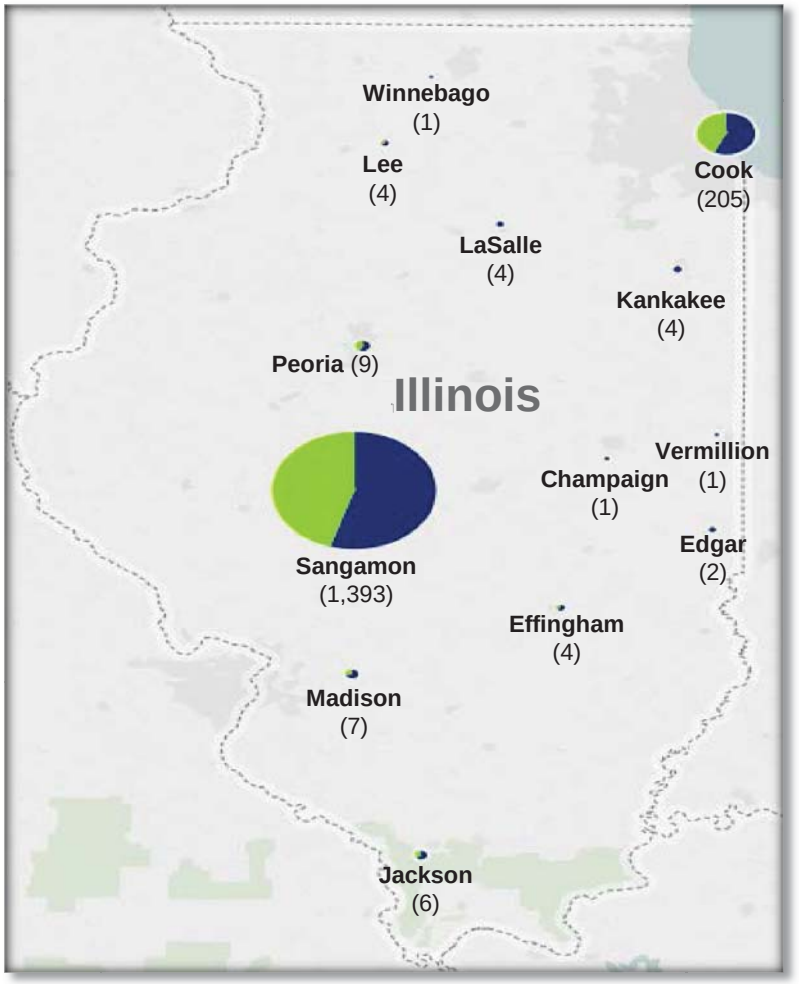
[1] Bureau of Labor Statistics as published in Forbes, March 2013; [2] Journal of Technology; [3]Does not include overhead; [4]Does not include titles for vacant positions

Deloitte.

Geography Analysis

The IT Workforce is distributed between 13 locations in the State with the majority in two counties.

IL State Map by Planned Retirement and Location Size



Criteria	Sangamon	Cook	Other[1]
% Employees at Location	85%	12%	3%
Average Age	51	54	49
% Management (Includes supervisors)	19%	29%	8%
Top Job Family	App Support/Dev	Management	Data Network

52% *BCCS representation in 'Other' Counties*

46% *Employees in Sangamon and Cook eligible for Retirement by 2020*

Key Findings

- **97% of all IT employees** work in either Cook County or Sangamon County, network staff roles require remote location work
- **Cook County has the highest ratio of managers to staff** reinforcing cultural gaps between the two geographies
- Currently there are **four locations with less than two IT employees**

[1]Agencies included in "Other": BCCS, IDOT, DOVA, DCFS, DHFS, DHS, DOR, DOL

Career Path and Retirement

A large retiring population and stagnant talent pool is positioning the State to be significantly impacted by massive and imminent change.

Top 5 Positions by Probable Retirement Year

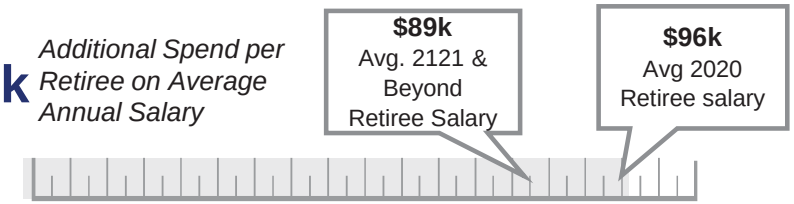
	Information Systems Analyst 2	Information Systems Analyst 1	Public Service Administrator	Information Service Specialists 2	Senior Public Service Administrator
2015	58	29	35	13	13
2016	42	17	32	12	7
2017	27	14	6	4	6
2018	42	9	16	4	5
2019	33	9	25	4	5
2020	22	13	11	2	1

Legend: Low — High

Key Findings

- Manager roles (PSA & SPSA) are among the top 5 job titles retiring in the next 5 years indicating a **future leadership gap** and potential strategic staffing opportunity
- On average, employees scheduled to retire by 2020 make more than their counterparts in the same job, **regardless of performance or skill level,** due to tenure and seniority

$7k *Additional Spend per Retiree on Average Annual Salary*



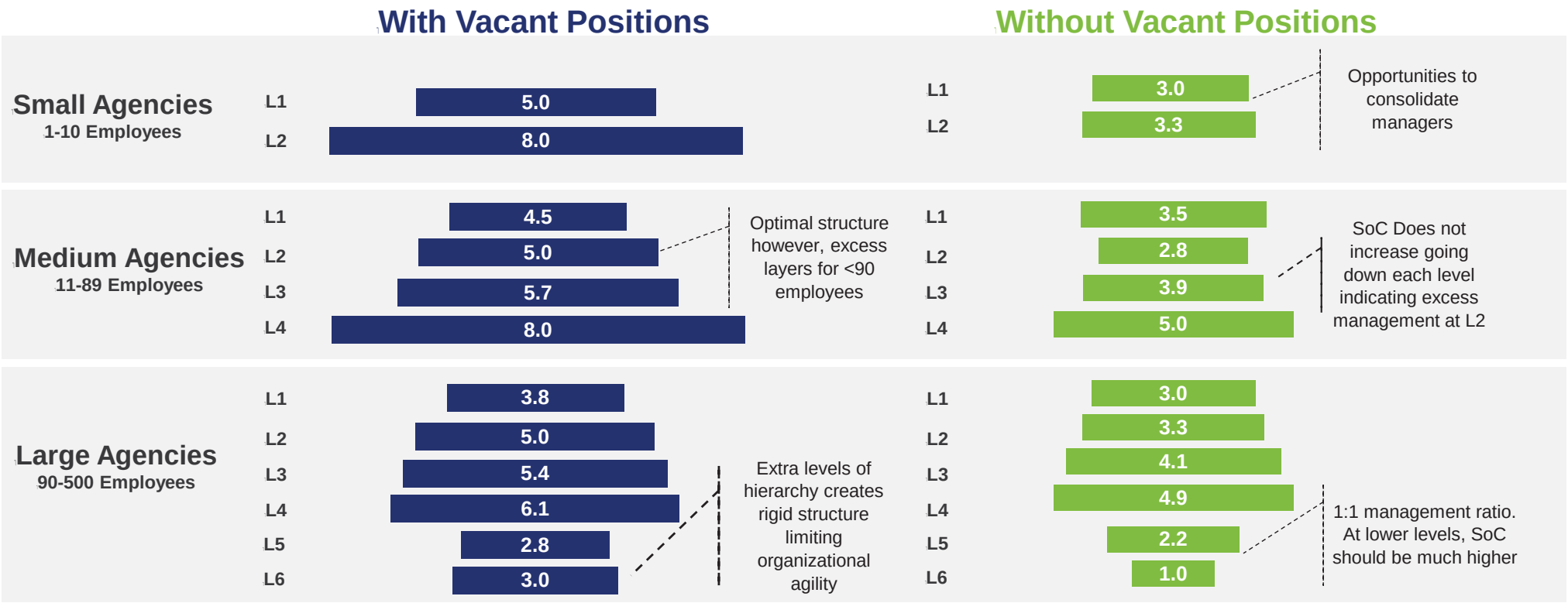
- By 2016, **~375 current employees** are scheduled to retire representing **23% of the current IT employees**

% IT Staff Retirement – Eligible 2015

Deloitte.

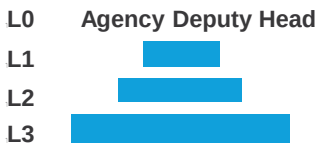
Agency Span of Control (SoC)

A SoC analysis (ratio of managers to employees) for six sample agencies revealed a surplus of managers and a pipeline gap at entry and lower level roles.



Note: Management includes managers and working supervisors with job titles Public Service Administrator and Senior Public Service Administrator

Optimal Span of Control Distribution



General Observations

1:4.2 *Management to staff ratio (w/out Vacancy)*

1:3.8 *Total Avg. SoC (w/out Vacancy)*

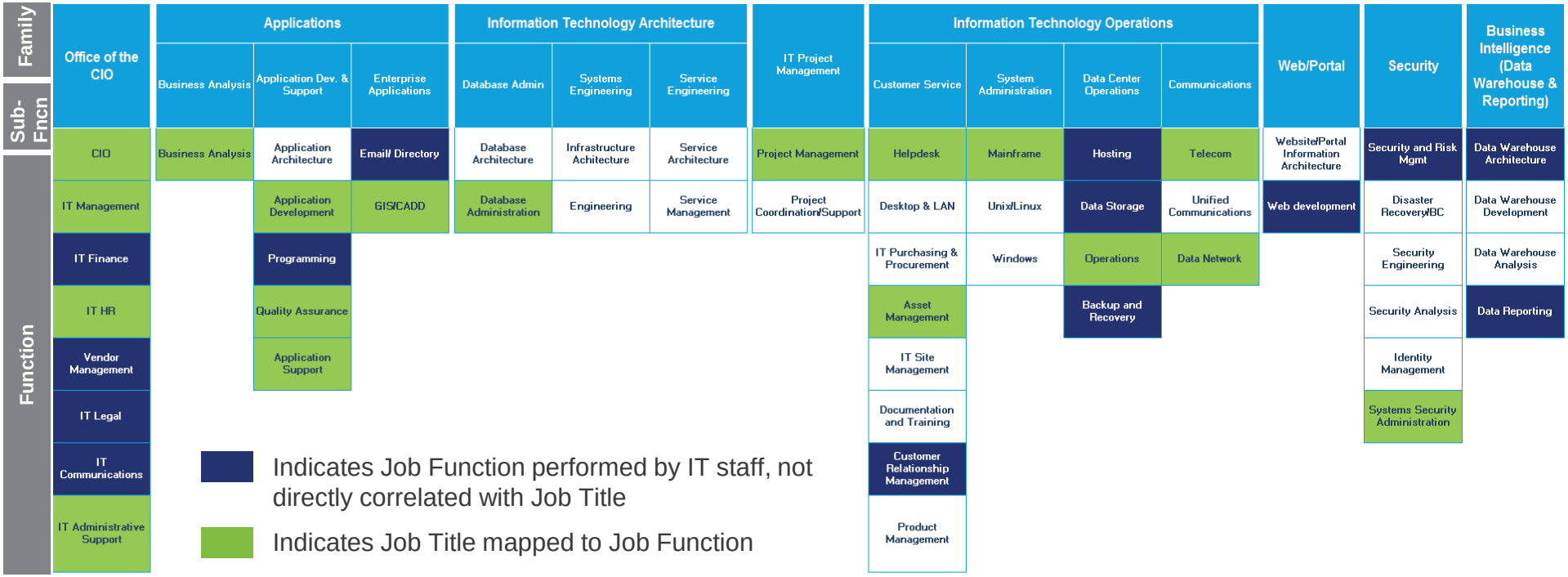
1:7 *Industry Avg. SoC*

Key Findings

- Due to funded headcount reductions and pipeline challenges, **open positions are not backfilled** leaving gaps at lower levels and skewing SoC ratios
- Manager surplus creates a **rigid, hierarchical structure** requiring employees to increase their workload ultimately **inhibiting organizational agility**

Job Families and Functions

Deloitte mapped State job titles and codes to industry standard job families and functions and evaluated alignment of staff to common IT job duties



Key Findings

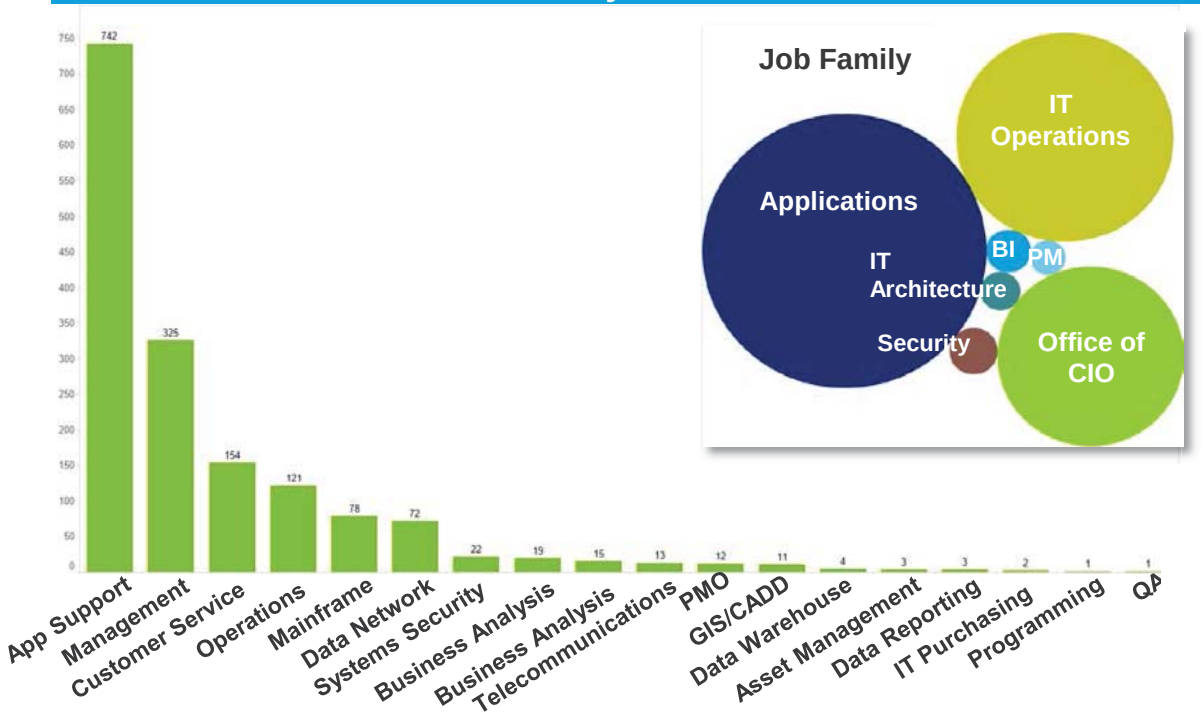
- The State's current titling scheme encapsulates very few of todays common job families and functions (green)
- The State currently has job titles that are agnostic to work performed and do not relate to industry standard job titles (dark blue), making recruiting and talent management difficult
- The State is missing many key functions (white) typical in today's modern IT environment
- Many agency IT organizations are small and have staff that wear "multiple hats" and perform many different IT functions
- Many managers are working managers but it is a challenge to discern specifically what type of work they manage

Deloitte.

Functional Alignment

~60% of the State's IT workforce aligned to application development or management functions

Distribution by Job Functions



Sample Information System Analyst 1 & 2 Job Title Mapping

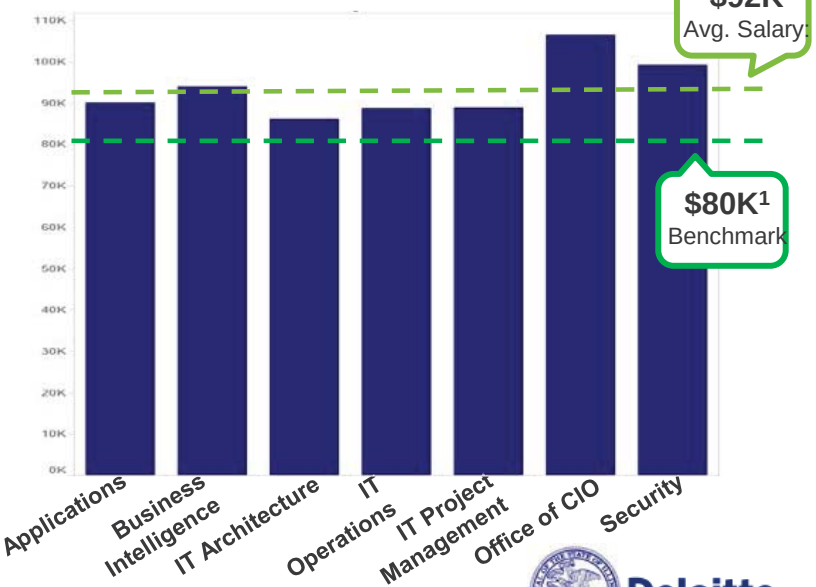
Job titles do not correlate to functional responsibilities - therefore one job title can represent several job families and functions

Job Family	Job Function	#EEs
Applications	Application Support / Dev	316
	Programming	1
Business Intelligence	Business Analysis	8
	Data Warehouse Architecture	4
IT Architecture	Database Administration	6
IT Operations	Help Desk	21
	Data Network	56
	Mainframe	36
	Operations	24

Key Findings

- Most job functions are **below the average salary line except for BI, Security, and Office of CIO** which includes all managers, and Supporting functions (e.g., Legal, HR, Finance)
- There is **minimal variation in salaries** across job functions
- Pay for State IT employees is **~15% higher than the benchmark** for IT Jobs in Springfield, IL

Average Salary by Job Function



[1]Source: Computer Economics IT Salary Report 2016

Job Function Distribution by Agency

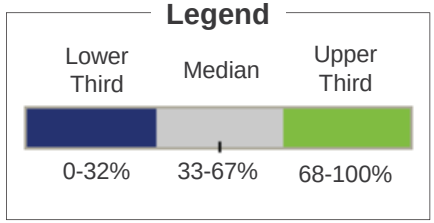
A dispersed operating environment has resulted in the need for each agency to have its own IT FTEs across many duplicative functions.

Job Family By Agency
(Data Shown For Agencies With >5 IT Employees)

Agency	Applications	BI	IT Architecture	Operations	Project Mgmt.	Office of CIO	Security	Total
BCCS	17.63%			56.56%		24.30%	1.51%	100.00%
Healthcare and Family Services, De..	70.95%		0.48%	8.57%		18.57%	1.43%	100.00%
Revenue, Department of	72.44%			10.26%		12.18%	5.13%	100.00%
Human Services, Department of	64.39%	3.79%	4.55%	5.30%	1.52%	20.45%		100.00%
Children & Family Services, Depart..	28.87%	4.12%		53.61%		13.40%		100.00%
Transportation, Department of	84.75%					15.25%		100.00%
Employment Security, Department ..	43.86%	3.51%			7.02%	45.61%		100.00%
State Police	64.91%			21.05%		14.04%		100.00%
Education, State Board of	78.43%		3.92%	7.84%	7.84%	1.96%		100.00%
Public Health, Department of	50.00%			15.00%		35.00%		100.00%
Student Assistance Commission, Il..	33.33%		7.69%	35.90%	2.56%	15.38%	5.13%	100.00%
State Retirement Systems	65.38%		7.69%	15.38%		11.54%		100.00%
Commerce and Economic Opportu..	59.09%	13.64%	4.55%			18.18%	4.55%	100.00%
Aging, Department of	90.48%				4.76%	4.76%		100.00%
Corrections, Department of	47.06%			35.29%		17.65%		100.00%
Environmental Protection Agency	82.35%					17.65%		100.00%
Insurance, Department of	5.88%			70.59%		23.53%		100.00%
Emergency Management Agency, Il..	40.00%	20.00%		26.67%		13.33%		100.00%
Financial and Professional Regulati..	25.00%			25.00%		50.00%		100.00%
Veterans' Affairs, Department of	45.45%			54.55%				100.00%
Criminal Justice Information Autho..	11.11%			66.67%		22.22%		100.00%
Natural Resources, Department of	33.33%	11.11%				55.56%		100.00%
Capital Development Board	62.50%			25.00%		12.50%		100.00%
Workers' Compensation Commissi..	28.57%					71.43%		100.00%
Agriculture, Department of	66.67%					33.33%		100.00%
Gaming Board, Illinois	50.00%			33.33%			16.67%	100.00%
State Fire Marshal, Office of the	66.67%					33.33%		100.00%
Lottery, Department of	80.00%			20.00%				100.00%

Key Findings

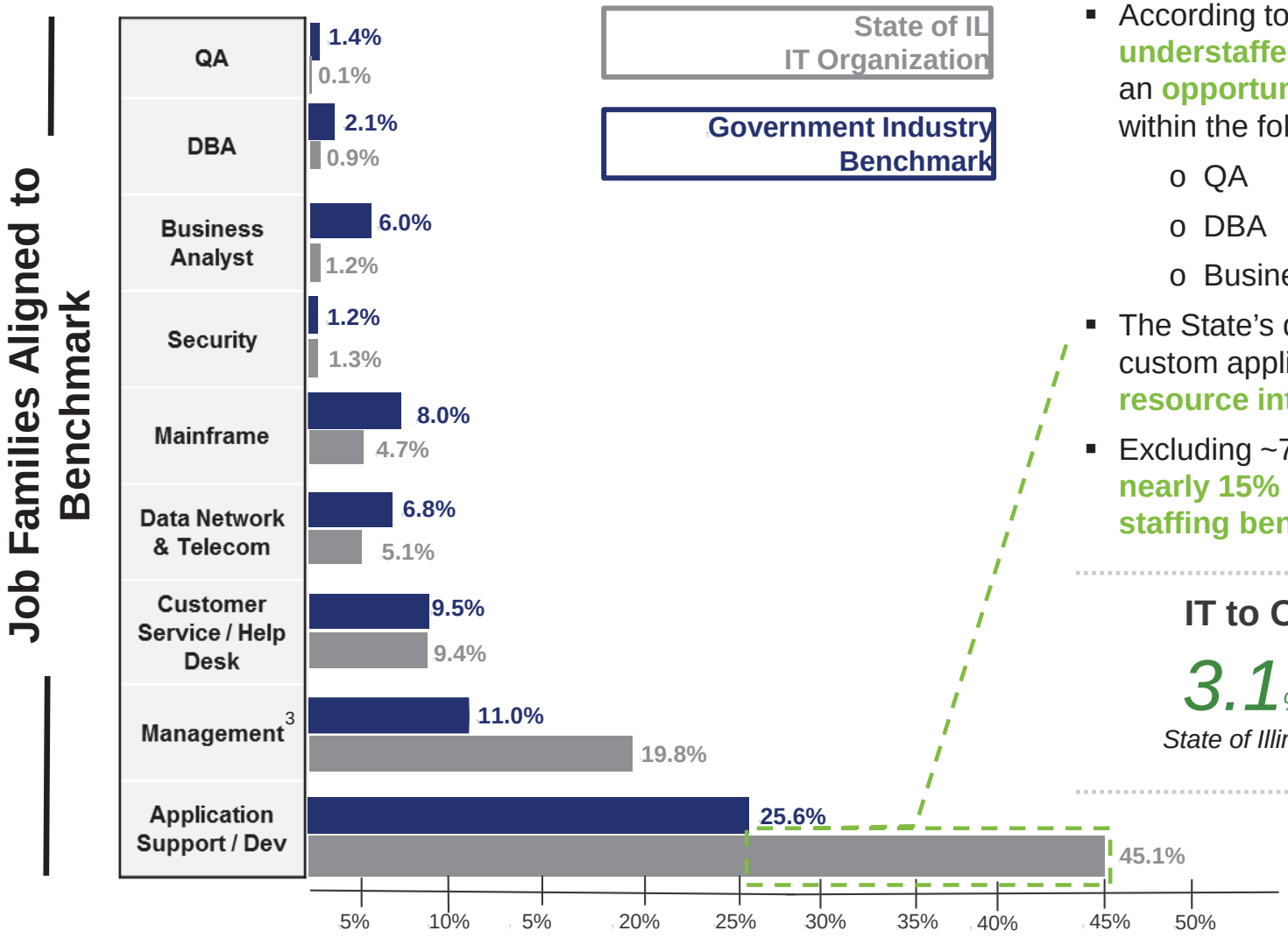
- Nearly all agencies have applications staff, a majority have IT administrative and leadership (Office of the CIO) staff
- Surprisingly, though many agencies have consolidated infrastructure, they still have operations focused staff
- BCCS has significant capabilities gaps that are common to other agencies as well in **project management, business intelligence and IT architecture**



Family and Function Analysis

Comparing the State's IT Staff Mix to Industry benchmarks reveals key gaps in the State's IT workforce capabilities.

IT Staff Mix: State of IL[1] vs. Industry Benchmarks



[1]Only functions with Benchmark comparisons shown [2]Source: Computer Economics, Inc. 2015
[3] Management indicates all PSA and SPSA Job Titles, including Supervisory roles

Key Findings

- According to benchmarks, the State is **understaffed in several areas** providing an **opportunity to build capabilities** within the following job functions:
  - o QA
  - o DBA
  - o Business Analyst
- The State's decentralized and highly custom application environment is **very resource intensive to support**
- Excluding ~700 vacancies, **the State is nearly 15% off the typical state IT staffing benchmark**

IT to Overall Staff Ratio

3.1% *State of Illinois* → **3.6%** *Benchmark*

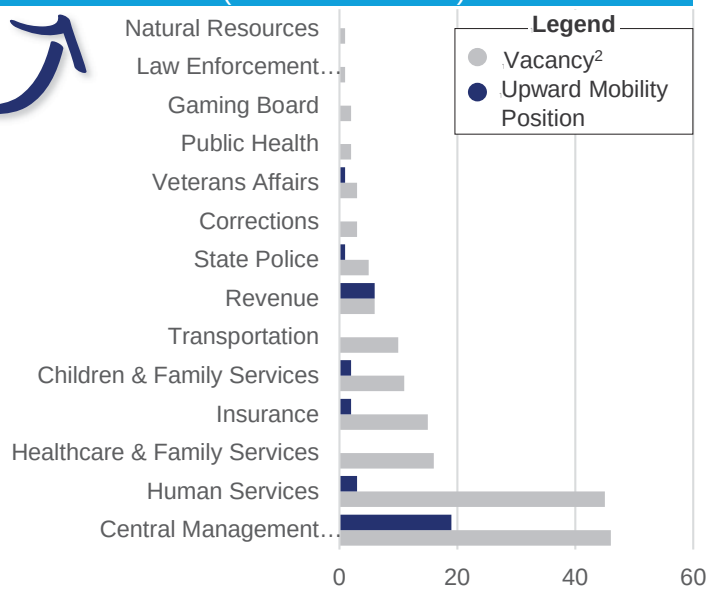
Deloitte.

Career Mobility and Internship Programs

Currently, the State has four structured programs for career mobility and internships, however, most of these programs are underutilized by agency leadership or not used at all.

	INTERNSHIPS		APPRENCTICESHIPS	
	Graduate Public Service Internship (GPSI)	**Dunn Fellowship**	**Information Services Intern**	**Upward Mobility**
Target Pop.	Current Graduate Students	Undergraduate College Graduates	State Employees	Employees in an AFSCME represented bargaining unit
Currently Used?	Y	Y	Y	Y
Owner	University of Illinois	State	State	State
Timeline	21 Months	12 Months	6-12 Months (24 Months max)	n/a

2015 Job Postings by Agency
(Select Job Titles[1])



Key Findings

- The Upward Mobility Program provides **coaching, job training, and education tuition support** for employees looking to grow in IT
- Agencies who did use interns reported an **intern to employee conversion rate of <1%** due to hiring restrictions

[1]Searched titles include: Data Processing Administration Specialist, Data Processing Specialist, Data Processing Technician, Information Services Specialist 1, Information Services Specialist 2, Information Systems Analyst 1, Information Systems Analyst 2, Information Systems Analyst 3, IT Technical Associate and Technical Manager III.
[2]Does not include Rutan Exempt positions

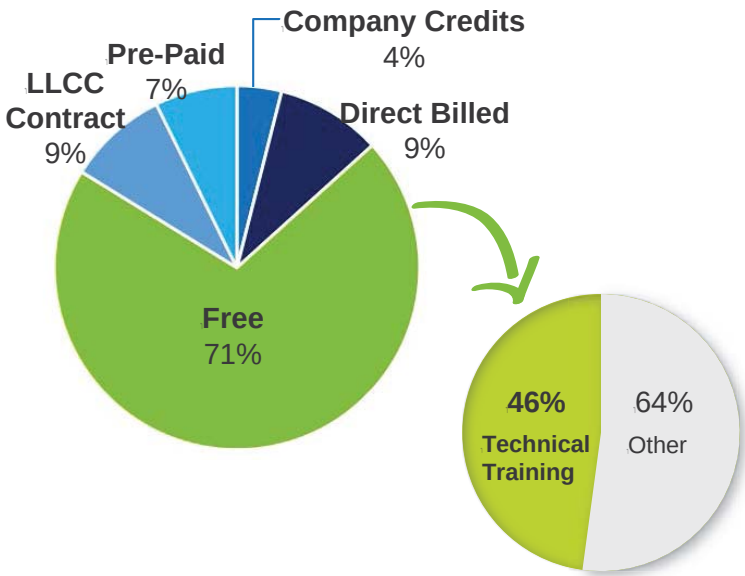
BCCS Training

In addition to a lack of new talent, skills of existing staff are not kept up to date through training. BCCS is one of the few agencies providing IT training, spending $410K in FY15.

BCCS Training Data*

Training Requests
2014- 2015

Payment Methods

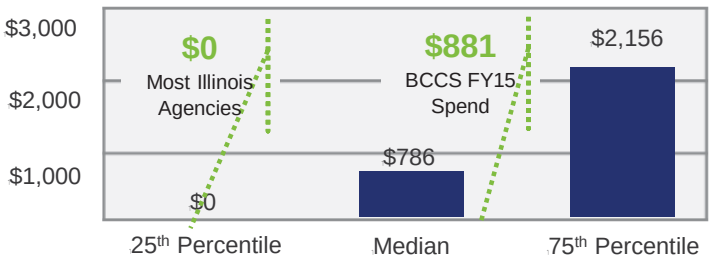


*Source: BCCS Training Requests 2014 & 2015

Key Takeaways

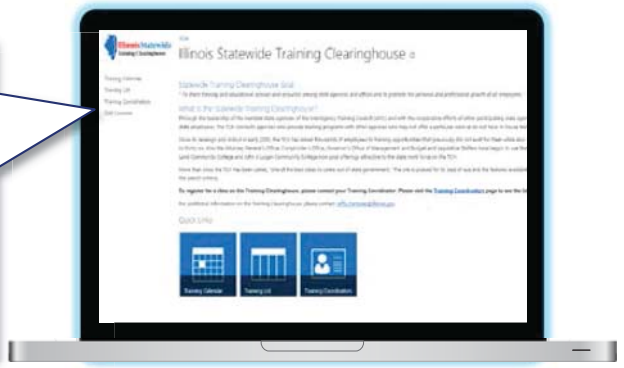
- **Free training accounted for 71% of training requests** in 2014 and 2015
- A majority of agencies have little to no IT training budgets or training plans
- Consistent with other talent management elements, the **State's approach to training is decentralized**
- Several **training requests made for basic skills** (e.g., writing, Microsoft Suite, programming languages) indicating the workforce may not be properly skilled
- **$4,900** spent on purchase of **online access to unlimited courses** for an unlimited number of employees[1] in addition to the Training Clearing House

Annual Training Allocation per IT Employee: Government Agencies[2]



[2]Source: Computer Economics 2015
[1]Source: BCCS FY15 actual spend

The recently updated Training Clearing House currently offers **44 free soft-skill training courses for employees across agencies** The catalogue covers many of the courses requested by agencies e.g., MSFT Suite, leadership, etc.



Agency Hiring Models

Another challenge to recruiting is the variance in hiring models as, across the 38 agencies, there are four distinct hiring models based on personnel code rules and labor agreements.

	Standard Coded Agencies	Non-Coded with Other Types of Labor Agreements	Non-Coded with Labor Agreements	Agencies without labor Agreements
Guiding Regulations	▪ Personnel Code ▪ Rutan Decision ▪ Veterans Preference	▪ Rutan Decision ▪ Veterans Preference	▪ Rutan Decision ▪ Veterans Preference	▪ Positions exempt if under one of eight jurisdictions including the State Board Of Education[1]
Special Considerations	▪ Box 19 exceptions ▪ Upward mobility employees	▪ Recognized specific job titles in each agency, does not include IT Job Titles		▪ N/A

[1] Jurisdictions include Lieutenant Governor, Secretary Of State, State Treasurer, State Comptroller, Clerk Of The Supreme Court, Attorney General, and State Board Of Elections

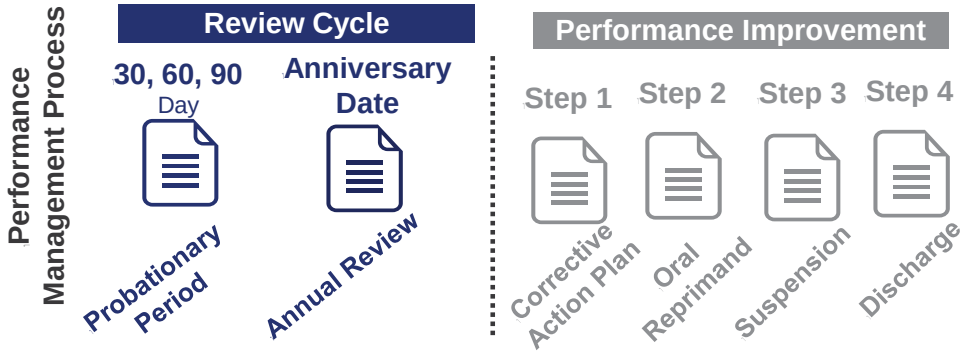
Deloitte.

Performance Management

Performance management is a rote, labor driven process, not tied to actual performance and does not help measure overall workforce performance.

Process

- Performance Management is managed through a centralized process with a very structured approach that begins when an employee is hired and continues through annual reviews



- Documenting poor performance is labor intensive and includes Quarterly Evaluations for those officially on performance improvement plans, dis-incentivizing managers to rate employees accurately

Performance Measurement

- The current Performance Management Process **does not engage employees** or increase employee ownership over performance and expectations
- State established expectations **are not tied to performance for union positions** allowing employees to receive step increases irrespective of performance
- Manager Performance Management follows the same process, however, they do not receive merit increases. Some agencies report **managers are not receiving increases in 10+ years.**
- The current process allows for IT professionals to be evaluated in the context of their specific agency, but there is **no comprehensive understanding of IT staff performance across agencies**, nor a complete picture of IT staff performance

Impact

Lack of Consistent Measurement

By not tracking against KPIs, agency IT staff priorities become unfocused

Cyclical Employee Impact

Lack of action against low performers demotivates high performers, and decreases overall morale

Inefficient Use of Resources

Employees spend time supplementing work of poor performers detracting from core responsibilities

Deloitte.

Rewards

Although agencies do not have a structured, formal approach to Rewards, each agency has its own way of rewarding employees despite several organizational challenges.

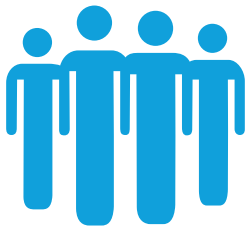
Recognition Program

BCCS is one of the few agencies with a formal Quarterly Recognition program. Recipients receive a trophy and public recognition.

Tuition Reimbursement

A formal Tuition Reimbursement Program currently exists, however usage is low due to lack of available funds

Employee Engagement



Centers of Excellence

Agencies like IDOT have employee-led working groups for high performing individuals. These CoEs are responsible for setting working standards, and developing foundational standards

Key Findings

- There is no formal approach to employee rewards, however each of the agency CIOs have found **ways to encourage top performers.** Examples include:
  - Closer parking
  - Window seats
  - Larger cube space
- **Mentoring and publicly verbal positive reinforcement** are also broadly used across agencies
- Rigid structure around **employee hours inhibits celebrations** as core focus is on completing increased workload due to lack of headcount
- Financial rewards were once considered, but several **labor regulations** ultimately brought the initiative to a close
- A current challenge is the **contrary messaging to employees** that budgets are tight while costs are allocated to celebrations

Deloitte.

IT Talent Key Observation Summary

The State's approach to IT Talent Management is a mix between centralized and decentralized processes, creating an inconsistent talent strategy.

Key Observations

The mix of ambiguous career paths, multiple management layers, and retirement eligible staff have created a rigid hierarchical structure

Staff have limited access to consistent learning opportunities, which has resulted in a workforce that is unequipped to meet future state changes

Decrease in new talent at lower levels due to reductions in headcount budget as well as inflexible hiring processes has led to current staffing needs of ~700 vacancies

Technology Infrastructure

Technology Infrastructure Framework

The following framework was used to evaluate the current state of technology at the State of Illinois.

Technology Infrastructure

Data Center Facilities

- Data Center Tiers
- Technology Rooms
- Command/ Network Operations Center
- Resiliency
- Space/Power Capacity
- Physical Access

Compute Services

- Hardware and Devices
- Architecture Model (ex: physical vs. virtual)
- Support Model
- Operating Systems
- Policies and Security

Storage and Backup

- Storage Tiers
- Database Utilization
- NAS, SAN, Tape Topology
- Data Replication
- Storage Resource Mgmt
- Backup and Disaster Recovery

Network and Comms.

- Devices
- Network Topology
- Architecture
- Type (X Area Network)
- Protocols
- Transmission Media (copper, wireless, etc.)
- Audio / Video
- VOIP
- Land Lines
- Voicemail

End User Computing

- Hardware
- Remote desktop support
- OS image support
- Application packaging and distribution
- Email / Messaging
- Mobility / BYOD
- Anti-virus / security

Deloitte.

IT Consolidation

The following are agencies, boards and commissions that have been consolidated.

Agencies Status of Consolidation		
Agency	**Entity**	**Consolidated**
Aging, Department of	Agency	Yes
Agriculture, Department of	Agency	Yes
Central Management Services	Agency	Yes
Commerce and Economic Opportunity, Department of	Agency	Yes
Corrections, Department of	Agency	Yes
Deaf and Hard of Hearing Commission, Illinois	Agency	Yes
Employment Security, Department of	Agency	Yes
Environmental Protection Agency	Agency	Yes
Environmental Protection Agency - Pollution Control Board	Agency	Yes
Financial and Professional Regulation, Department of	Agency	Yes
Healthcare and Family Services, Department of	Agency	Yes
Historic Preservation Agency	Agency	Yes
Human Services, Department of	Agency	Yes
Illinois Health Information Exchange Authority	Agency	Yes
Insurance, Department of	Agency	Yes
Labor Relations Board, Illinois	Agency	Yes
Lottery, Department of	Agency	Yes
Natural Resources, Department of	Agency	Yes
Public Health, Department of	Agency	Yes
Revenue - Liquor Control Commission, Illinois	Agency	Yes
Revenue, Department of	Agency	Yes
Transportation, Department of	Agency	Yes

Key Observations

- These agencies have been previously consolidated and the infrastructure is primarily in the BCCS data center
- The application development and support functions are still delivered through the agencies' IT departments

Source: Agency Consolidation.xls

IT Consolidation (continued)

The following agencies, boards and commissions are supported and managed by BCCS but the infrastructure is not yet consolidated.

Agencies Status of Consolidation			
Agency	**Entity**	**Consolidated**	**Supported/Managed**
Arts Council, Illinois	Agency	No	Yes
Capital Development Board	Board	No	Yes
Civil Service Commission	Commission	No	Yes
Community College Board, Illinois	Board	No	Yes
Comprehensive Health Insurance Plan	Agency	No	Yes
Council on Dev Disabilities, Illinois	Agency	No	Yes
Criminal Justice Information Authority	Agency	No	Yes
Educational Labor Relations Board, Illinois	Board	No	Yes
Emergency Management Agency, Illinois	Agency	No	Yes
Executive Ethics Commission	Commission	No	Yes
Executive Inspector General, Office of the	Agency	No	Yes
Guardianship and Advocacy Commission	Commission	No	Yes
Human Rights, Department of	Agency	No	Yes
Illinois Independent Tax Tribunal	Agency	No	Yes
Illinois Power Agency	Agency	No	Yes
Labor, Department of	Agency	No	Yes
Law Enforcement Training and Standards Board	Board	No	Yes
Prisoner Review Board	Board	No	Yes
Procurement Policy Board	Board	No	Yes
Property Tax Appeal Board	Board	No	Yes
Racing Board, Illinois	Agency	No	Yes
State Fire Marshal, Office of the	Agency	No	Yes
Student Assistance Commission, Illinois	Commission	No	Yes
Veterans' Affairs, Department of	Agency	No	Yes
Workers' Compensation Commission, Illinois	Commission	No	Yes

Source: Agency Consolidation.xls

Deloitte.

IT Consolidation (continued)

The following are agencies and boards that consolidation status is neither managed or supported.

Agencies Status of Consolidation			
Agency	**Entity**	**Consolidated**	**Supported/Managed**
Children & Family Services, Department of	Agency	No	No
Education, State Board of	Agency	No	No
Elections, State Board of	Board	No	No
Finance Authority, Illinois	Agency	No	No
Gaming Board, Illinois	Board	No	No
Illinois State Police	Agency	No	No
Joint Committee on Administrative Rules	Agency	No	No
Military Affairs, Department of	Agency	No	No
Office of Management and Budget	Agency	No	No
State's Attorney Appellate Prosecutor	Agency	No	No

Source: Agency Consolidation.xls

Key Observations

- These agencies and boards will need to be scheduled for consolidation including analysis of their infrastructure and applications to understand the steps necessary to complete the transition
- The Illinois State Police will most likely remain separate from an infrastructure perspective (as of now their infrastructure is in a locked cage in the main data center because of security requirements
- There may be others in this category (i.e. State's Attorney Appellate Prosecutor and the Gaming Board) that may have unique security and privacy requirements for a consolidation

Deloitte.

Facilities Overview

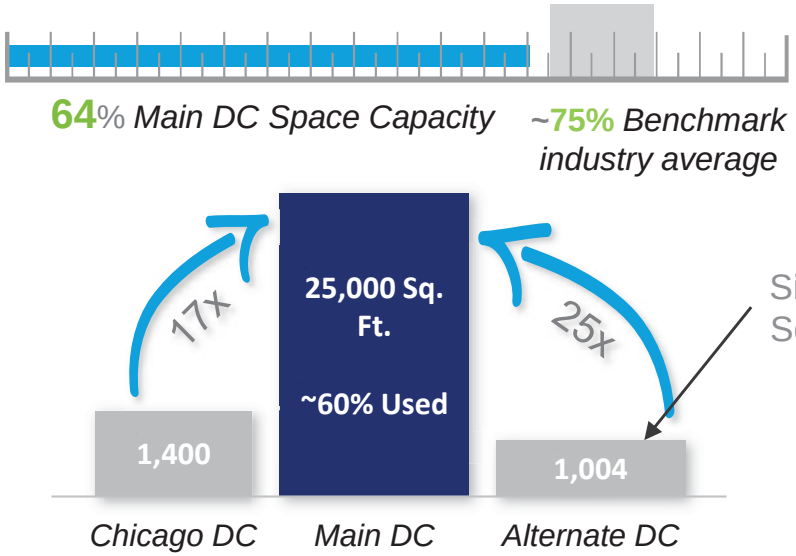
Data Center Information

The State has geographically dispersed data centers throughout Illinois. Additionally*, there are:

- Co-located equipment for **ISP** and **DCFS**
- **3** data center-like facilities centers, owned by **IEMA** *(2)* and **DVA** *(1)*;
- Potential tech rooms at **ICCB** and **SFM**

There are many strategic priorities including creating "cloud first" and Microsoft O365 which the infrastructure teams are working to implement.

Main Data Center Statistics



Main Data Center Highlights:

- **3** PRD mainframes *(4099 MIPS)*; **1** for DR
- **~3,500** midrange servers
- **~500** other server components captured
- **3** water chillers used to feed **20** A/C units

Areas to address:

- Power generators date back to **1979**
- **0** available physical space at the alt. data center

*Additional information on infrastructure can be found on slide 71.

Technology asset information is based on meetings with infrastructure teams, Infrastructure inventory from Remedy, and multiple agency meetings, other facilities may exist that are not captured here

Deloitte.

File and Print

File and Print Overview

~11M

Estimated number of images printed per month centrally

~4M

Estimated number of images / month at DES alone

Central Printing

Many agencies print operations have been consolidated into BCCS...

...However, a few agencies still maintain large print operations

The State performs most of the file and print activities centrally in the data center

- A number of agencies have already been consolidated (ex: HFS, DHS, DPH, DOC, DOT , AGR)

There are a few agencies with sizable print operations outside of BCCS:

- **DES** and **DCFS** identified as having file and print
- **DOR** partially consolidated – running 2 printers

Central Printing

3M

Although declining for multiple years, central printing has recently spiked due to events such as: ACA and CCMS

Contracted Support

- **Xerox** is the main vendor due to both cost and location (ops support physically located in Springfield)
- Response time **~4** hours which meets the current needs

Operational Staff

- **~9** staff work on central printing operations
- Currently there are **2** shifts working **5** days a week
- There are ~**4-5** employees outside CMS supporting **DOR**

Current capacity:

- There is adequate space available at the central print facilities to absorb agency print operations
- Power is adequate to support additional operations; however, additional power feeds may need to be run
- Staff levels are adequate to support current central print operations; however, additional staff and/or shifts would be needed to support any material print increases

Deloitte.

Servers and Mainframes

Servers by Location

Key Metrics:

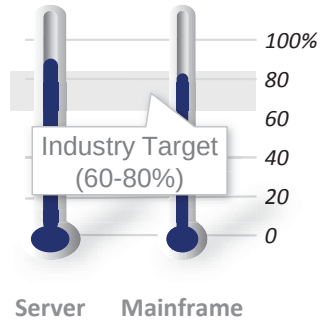
- The 3 data centers contain **~80%** of all servers
- The remaining **20%** of servers are spread across **235** unique addresses in **102** cities
- **224** (of 235) addresses have less than **10** servers

21% of the servers are spread thinly across various locations

General Compute

The State's average server utilization is over **80%**.

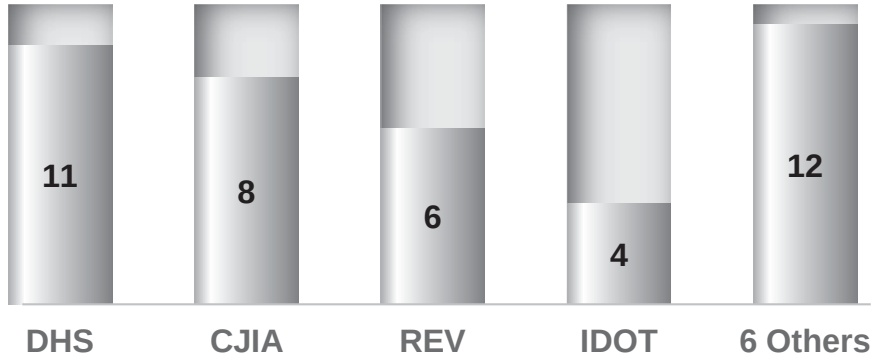
The push for server virtualization will increase utilization.



~4,500
Servers Captured in the inventory

99%
Servers managed by BCCS

Agency Owned Servers

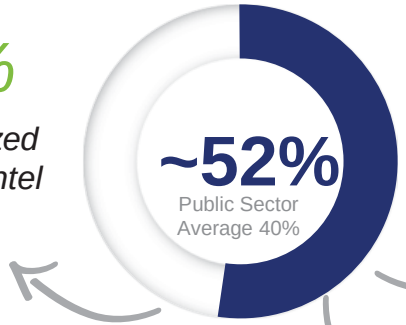


Servers owned outside BCCS make up **1%** of the total servers. They are owned by **10** agencies

Deloitte.

Operating Systems

Server Virtualization



+20%
Of non-virtualized servers are Wintel

~60%
Virtualized in Main Data Center

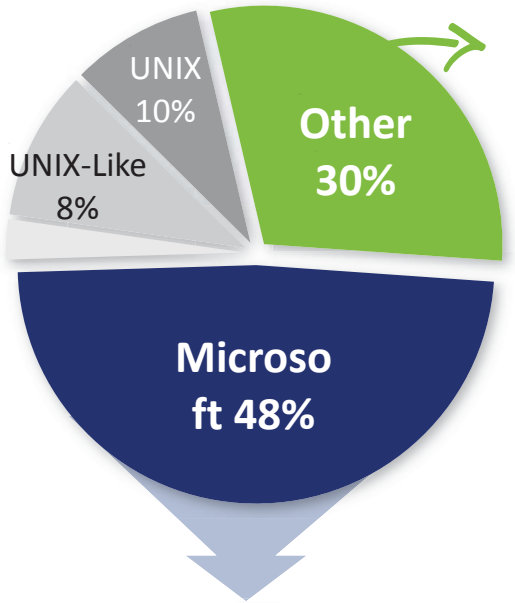
~68%
OS are primarily Microsoft or UNIX/UNIX-Like

3:1
Virtual ratio of Microsoft in DC

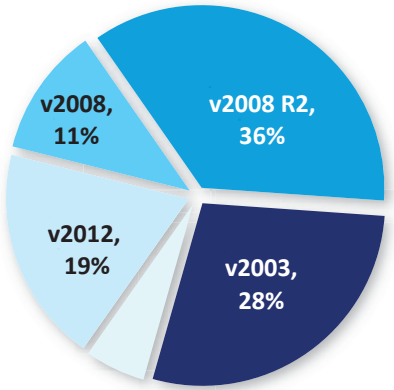
- There is a near **1:1** ratio of physical to virtual servers based on the inventory data received
- Reducing physical servers will have an immediate effect on maintenance and power costs. By increasing the ratio to 2:1, the State could see annual savings of approximately:

$500K in HW $250K in power/cooling.

Servers by OS



30% of "Other" OS creates added effort for support



Microsoft by Version

Microsoft v2003 was out of support as of July 2015

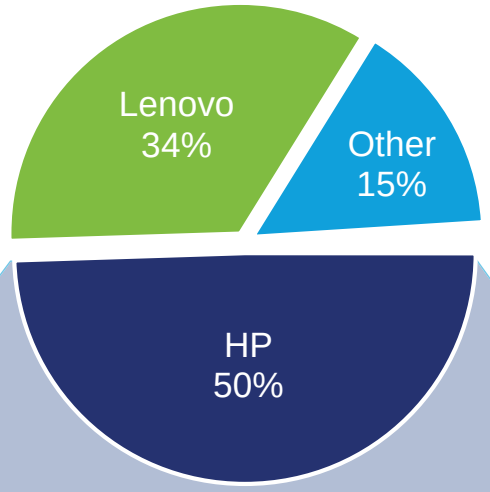
Deloitte.

Hardware

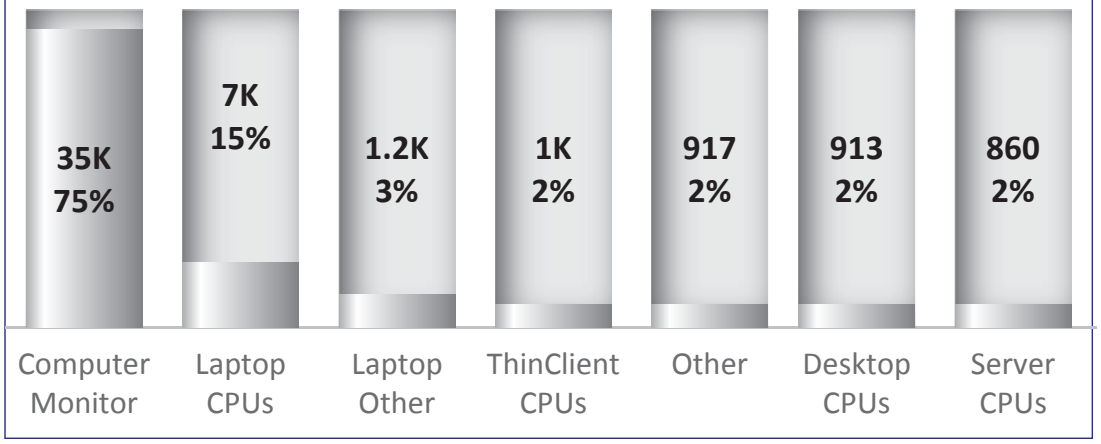
Hardware Inventory

96K

Items captured in the Inventory



HP Component Details



The State's ratio of hardware to people is inline with industry benchmarks.

+50,000 employees across agencies

1.22
People per Monitor

*170
People per Printer

~12
People per Server CPU

**Metric is under reported as not all assets are tracked*

At **50%** HP is by far the most frequently used manufacturer of HW and server CPUs.

Maintaining a HW/SW standardization will lead to ease of support and purchase efficiency

78% of servers in the inventory did not have a manufacturer listed, suggesting the current asset inventory approach may not be effective

Deloitte.

Storage and Backup

Storage Overview

Currently there are **2** staff for storage and **2** staff for backup in the data center (low compared to benchmark of 1 staff per 250 TB's SAN – Gartner)

There are concerns around the ability to meet the demand (capacity and resourcing) for storage given the continual increased need for storage

~80%
of capacity used

Est. **4** **Petabytes**
of storage capacity reported

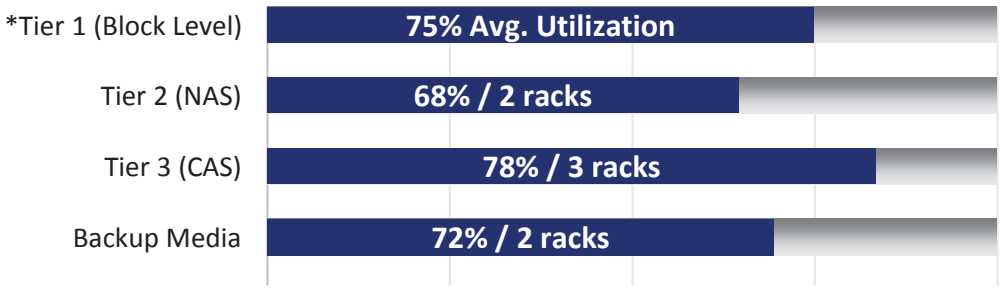
EMC used as vendor for storage *(Clarion for SAN / Isilon for NAS / Centera for CAS)*

Critical Backup Data is replicated to the Alternate Data Center and all data is classified / considered sensitive

Although data tiers are established, comprehensive retention policies are not used

There are few processes around capacity planning or utilization reporting

Utilization by Tier



12 *Tier 1 Racks across 3 arrays*

Older and less reliable tape backups were recently sunset freeing up space in the main data center

Storage rates have caused some agencies to look for other options which may not include backup/recovery or DR

Many agencies forego disaster recovery options because of the cost. Policies need to be implemented to shore up Agency DR risks

2 backup solutions are in place today, IBM TSM Tivoli and Avamar. The current desire is to consolidate under Avamar which should help reduce storage costs

Deloitte.

Network

Network Device Inventory

361 switches account for the largest percentage of all captured network equipment– the low number could mean additional switches are not reported in the inventory

Cisco (primary) and Fujitsu reported as major **hardware** providers of network equipment

Observations

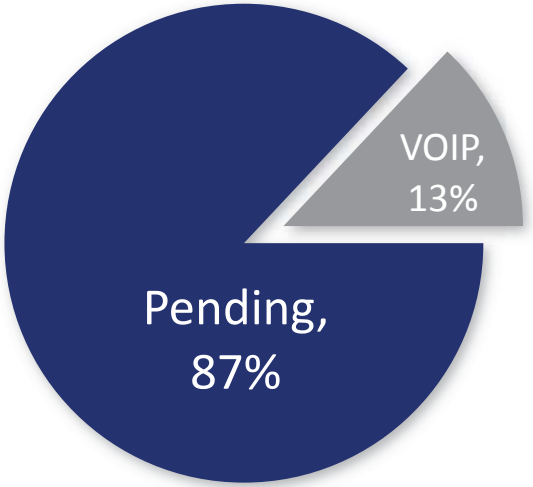
ICN owns the network up to building for the agencies and inside the building for those consolidated agencies

Custom apps with high transaction turn-around was an issue during last migration, specifically around identifying the bandwidth available and future bandwidth needed

Metrics from January 2016

Communications

VOIP Conversion



An initiative is underway to utilize VOIP and migrate off Centrex **(1.5-2 years)**; however, the rollout has yet to reach critical mass (13% to date)

Agencies expressed concerns with VOIP quality and are looking to other alternatives to avoid telecom service issues

Netech is the VoIP vendor; a **Cisco** platform for the VoIP service, routers and LAN switching

Communications

Of the estimated **32K** phone lines, **87%** utilize traditional lines; **4K** converted to Voice-over-IP

Video conferencing is available throughout central management services, offering video collaboration across teams in disparate geographies

WebEx used for virtual meetings – available to those on Illinois.gov

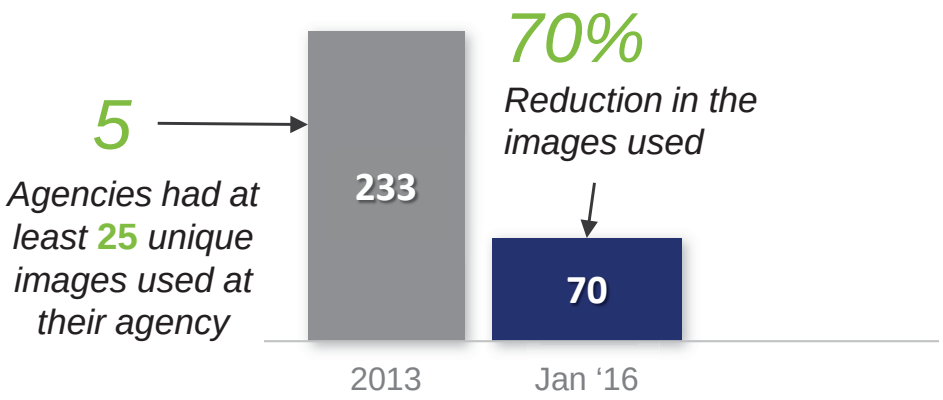
Other communication methods are available; however, they have been slow to be adopted on a large scale across the agencies

Jabber (Cisco) is available for instant messaging and collaboration to anyone on Illinois.gov but it is not a highly utilized service

Deloitte.

End User Computing

Standard Images



10 known in-flight projects focused on End User Computing – one being an initiative to standardize and overall reduce the number of computing images

An initiative is set to begin that will utilize Microsoft's System Center Configuration Manager to help manage dispersed end users desktops and laptops

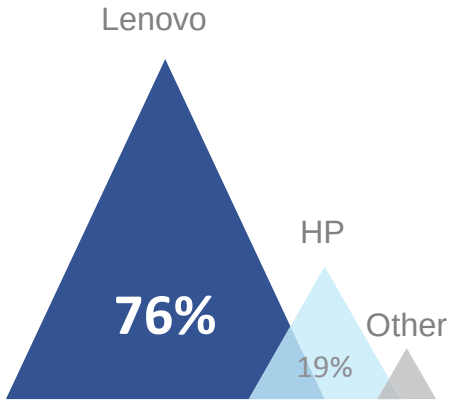
~300
Unique Cities with End User Computing

~700
Unique Addresses with End User Computing

Laptops/Desktops by Make

32K+

Lenovo is by far the most numerous maker of end user devices. Standard hardware along with a standard image provides improved support efficiency



Device Details per User

.84 (IL) vs. **.85 (Ave.)**
user / PC
(43K Laptop/Desktops)

.3% (IL) vs **2.2% (Ave.)**
users w/ tablets
(163 Tablets)

Key Ratios for EUC

(80 front line staff)

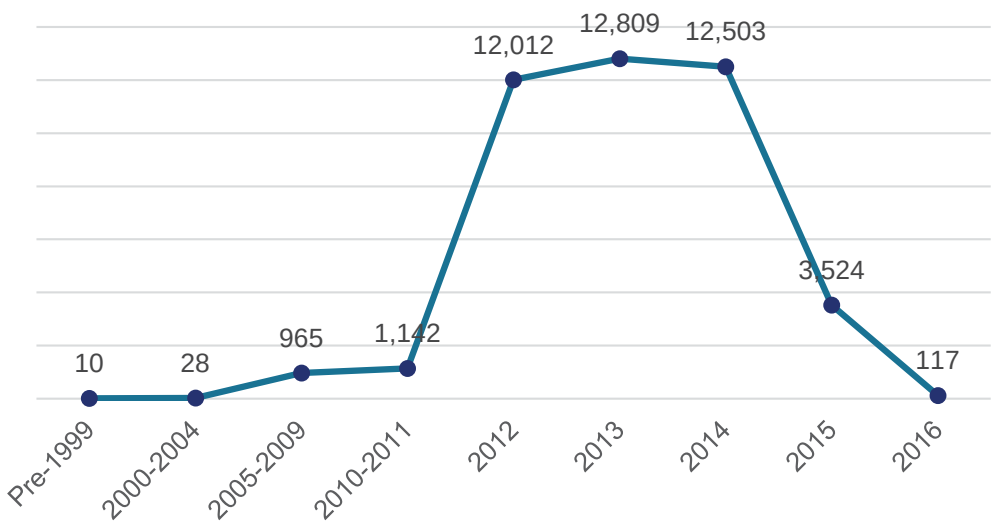
~21 (IL) vs. ***~9.4 (Ave.)***
IT FTEs / EUC Staff

~538 (IL) vs. ***~257 (Ave.)***
Devices / EUC Staff

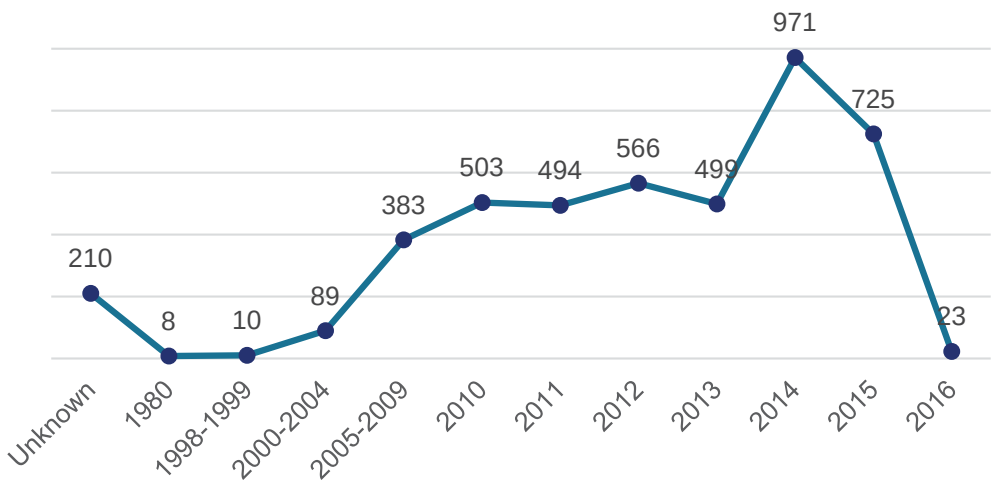
Deloitte.

Asset Lifecycle

Laptops/Desktops by Installation Year



Servers by Installation Year



Laptops / Desktops:

- **87%** of the active Laptops/Desktops were installed between 2012 and 2014, setting up an acquisition spike – at an estimated 5 year cycle, the next wave will be begin around 2017
- **10** Laptops/Desktops in existence today were purchased in the 1990s

Servers:

- **18** servers in existence today were installed before 2000
- **84%** servers in existence were installed after 2009

Server age is more evenly distributed when compared to Laptops/Desktops; however, there was a spike in 2014

Older and non-standard servers contribute to lengthy consolidation timeframes

Since consolidation, servers are usually refreshed when they come out of maintenance; however, there are still many Compaq boxes in use that are unsupported from a maintenance perspective

Deloitte.

Key Observation Summary

A number of technology themes emerged through data gathering and individual agency interviews.

Key Observations
A lack of infrastructure / enterprise architecture standards has resulted in a proliferation of different designs and solutions that must be maintained
Most technology refreshes are done in large batches based mainly on available funding which sets up potentially large future spikes in technology needs
There is a lack of DR for many applications because the chargeback is separate and agencies have the option to not pay for the services
Infrastructure services (servers, storage, etc.) are delivered by siloed teams rather than as a comprehensive solution which causes delays in deployments
The technology teams have over 100 projects which may result in churn on several projects rather than progress on the high priority projects

Deloitte.

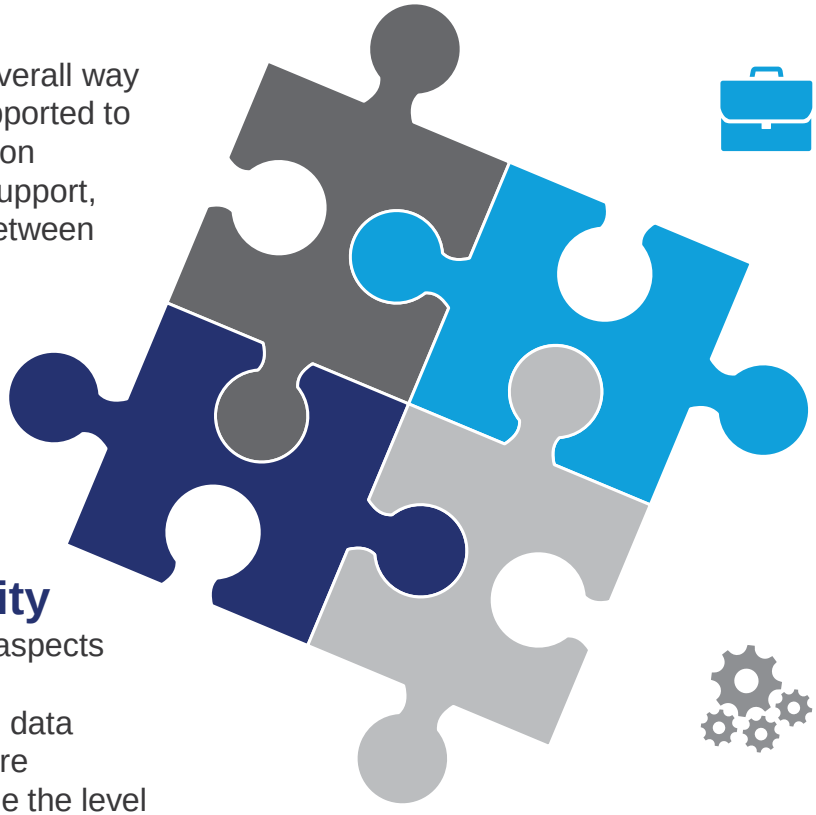
Applications

Application Framework Overview

The following framework was used to evaluate the current state of applications at the State of Illinois.

Support Model

This dimension looks at the overall way the application portfolio is supported to "keep the lights on," focusing on aspects such as: who owns support, how support is coordinated between teams, etc.



Functions and Capabilities

This dimension looks at what level 1 functions exist (ex: Finance, HR, Technology, Supply Chain), and, within each function, what level 2 capabilities are enabled by the application within the portfolio.

Policies and Security

This dimension looks at how aspects such as application security (authentication, authorization, data sensitivity) and permissions are managed in order to determine the level of risk present.

Design and Development

This dimension looks at the architecture and design standards that underlie the overall application portfolio (ex: languages), as well as, the software development methodology and model used.

Deloitte.

Functions / Capabilities Overview

~2,800 Applications

...included in the initial inventory – **425** possible Databases

54 Agencies

...with applications identified in the inventory

16 Functional Areas

...covered by the applications

45 Capability Areas

...enabled within the application inventory

Capabilities - TOP 10 (by app #)		
Data Collection/Reporting	11%	(322)
Accounting	7%	(190)
Program / Service Delivery	5%	(152)
Employee Management	5%	(134)
Licensing and Permitting	5%	(131)
Inventory Management	4%	(126)
Compliance Monitoring	4%	(120)
Case Management	4%	(110)
Information Publishing	4%	(105)
Enterprise Content Management	3%	(92)

- **+300** applications used data capture or reporting
- **~200** applications used for Accounts Receivable/Payable, GL, payments, etc.

Functional Areas		
★Information Management	18%	(494)
★HR / Talent	10%	(285)
★Asset Management	9%	(255)
Regulatory Enforcement	9%	(251)
Unknown	9%	(239)
Government Service Delivery	8%	(230)
★Finance	8%	(226)
Constituent Management	7%	(207)
Public Information Management	6%	(181)
★Technology Management	5%	(130)
Constituent Financial Assistance	3%	(91)
★Supply Chain	3%	(91)
★Other Administration	2%	(50)
Constituent Revenue Collection	1%	(40)
★Public Assets	1%	(19)
★Government Affairs	1%	(18)

Includes ~425 entries in the inventory that may in fact be databases

Key Observations:

Application development and licensing has been distributed which has led to a large volume of applications supporting common business capabilities with a lot of duplication

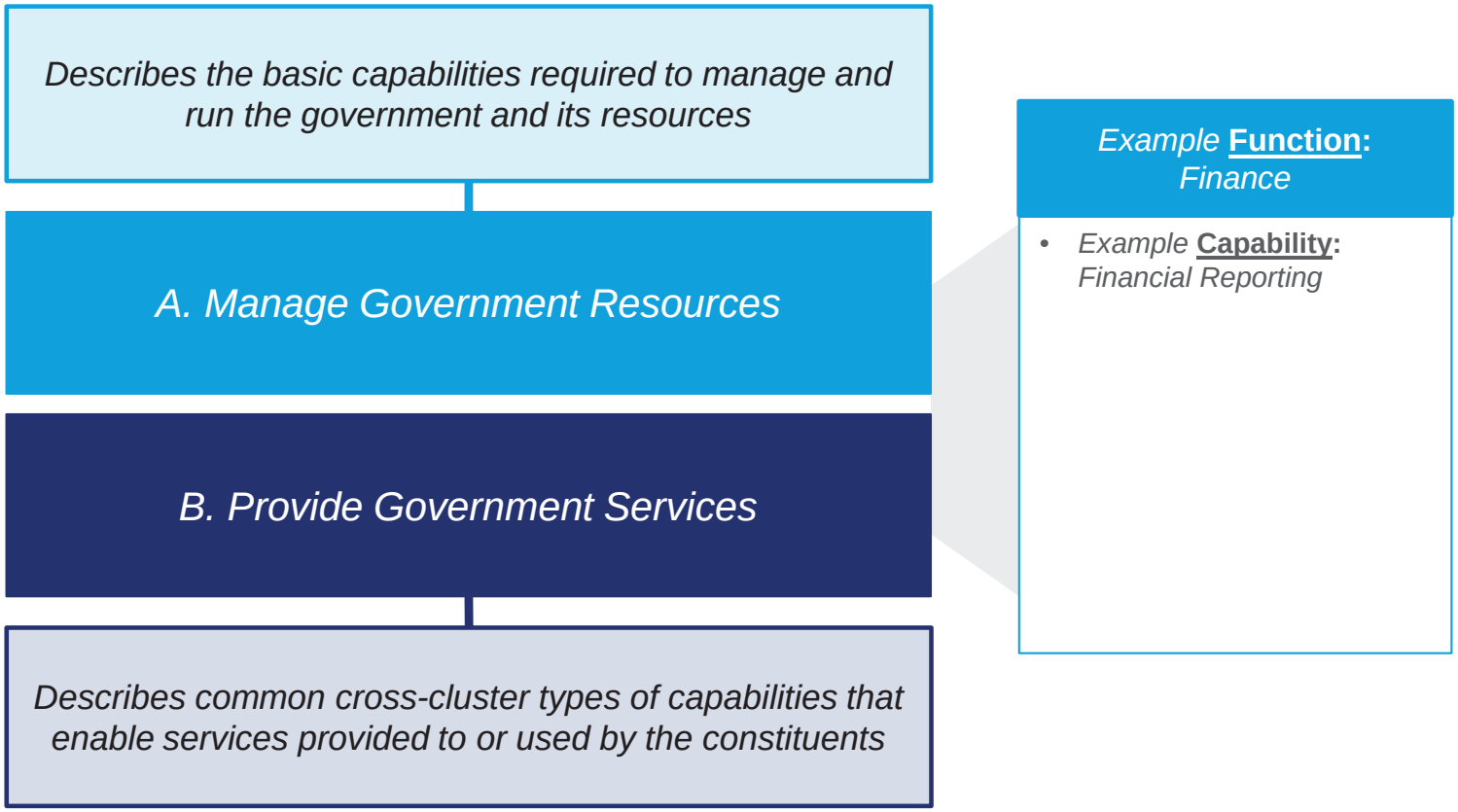
While agencies may have nuances in the way they delivery services / programs, many of the back-office processes should be fairly standard (★ = possible areas)

Areas with common business processes should be reviewed to identify opportunities for consolidation

Deloitte.

Functions / Capabilities Domain Areas

The diagram below highlights the domain areas that encompass the functions and capabilities.



Deloitte.

Application Details

Manage Government Resources	
A.1 HR / Talent	
Employee Management	104
Recruiting and Hiring	15
Talent / Performance Management	6
Training and Development	35
Workforce Management	71
A.2 Finance	
Accounting	168
Budgeting and Forecasting	9
Financial Reporting	21
A.3 Supply Chain	
Contract Management	16
Procurement	53
A.4 Government Affairs	
Government Relations	4
Enterprise Risk Management	12
Government Policy Management	4

Manage Government Resources Cont‘	
A.5 Other Administration	
Printing and Postal Services	30
Workplace Management	13
A.6 Asset Management	
Asset Management and Maintenance	25
Inventory Management	92
Physical Security	15
Survey and Mapping (GIS)	78
A.7 Information Management	
Business Intelligence	38
Data Collection, Management, and Reporting	230
Data Interoperability	39
Enterprise Content Management	83
A.8 Technology Management	
IT Security	49
IT Service Management	10
Software Management	16
Technology Operations	47

Deloitte.

Application Details

Provide Government Services	
B1. Constituent Management	
Case Management	100
Customer Relationship Management	35
Insurance and Claims Management	54
B.2 Constituent Financial Assistance	
Financial Aid	61
Subsidies	20
B.3 Constituent Revenue Collection	
Fee Collection	19
Tax Collection	20
B.4 Public Information Management	
Collaboration	45
Communication	25
Information Publishing	103

Provide Government Services	
B.5 Government Service Delivery	
Portfolio, Project, and Work Order Mgmt.	55
Program / Service Delivery	127
B.6 Public Assets	
Event Registration	6
Resource Booking	10
B.7 Regulatory Enforcement	
Compliance Monitoring	103
Licensing, Permitting, Certification	116
Unknown	
Not Enough Information	200

Deloitte.

Design Standards

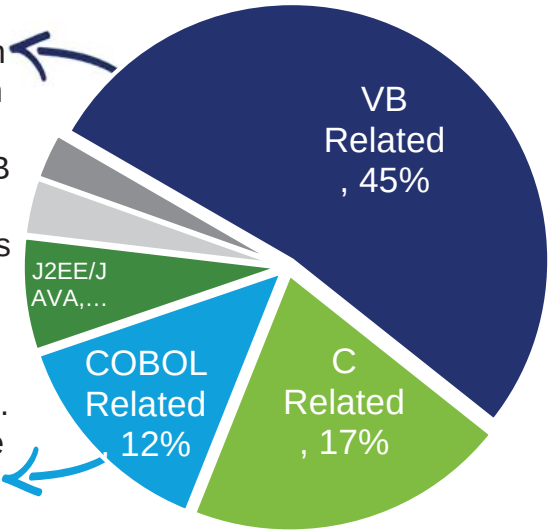
Applications by Language

~45%

Many applications are in Visual Basic and use an Access reporting tool. While easy to create, VB programs are seldom extensible to other areas

>12%

A number of languages . Legacy products require specialized integration approaches and have limited interoperability



Represents only the ~1,200 applications with a language identified. ~1130 are listed as "Unknown"

A lack of architecture standards has caused numerous languages to be used, increasing the difficulty of maintenance and the complexity of support processes

Agencies have reported a lack of interoperability between applications, causing situations where application teams are asked for the same data multiple times

Observations

There is no separation of application development and application support which makes it difficult to plan development hours since support is usually unknown

A recent state-wide survey pointed to a lack of guidelines and development standards around 3 key areas:

- Applications
- Web
- Forms

There is a lack of a standard development methodology used across all agencies. Some agencies use waterfall, some agile, and many others are somewhere in between which has led to an inconsistent delivery of application capabilities

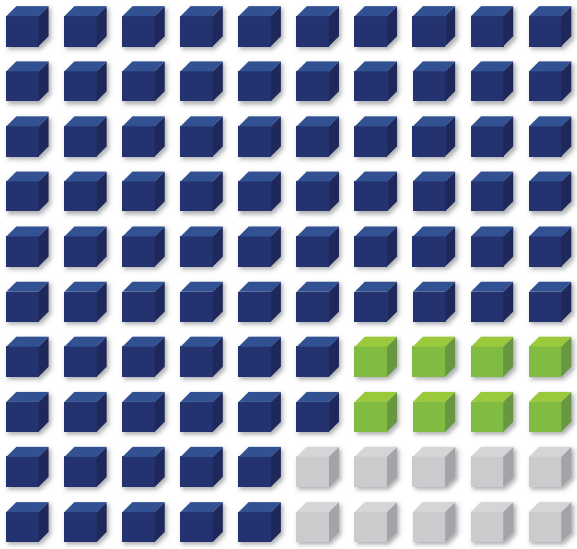
Some agencies expressed a lack of any common application development methodology and perform development in an ad-hoc manner

The lack of standardized methodologies translates into increased support effort which ultimately takes development resources away from development to support the existing application sets

Deloitte.

Development Model

Application Footprint



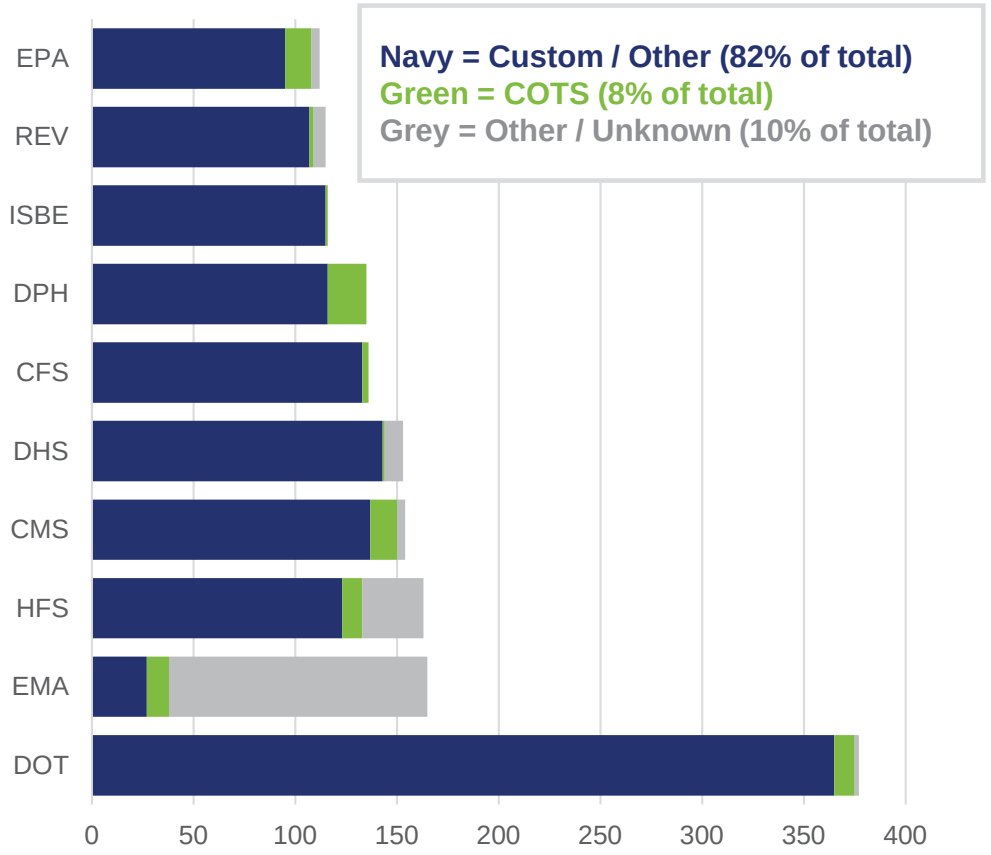
82%
Custom applications built in house

8%
Commercial Off-the-Shelf applications

10%
Unknown or other

- **~10:1** ratio of custom to COTS
- **~2000** custom apps, mostly around Finance and Information Management functions

Applications by Agency (top 10)



A 'Do it Yourself' mentality exists within the agencies which has led to a number of custom applications which require specialized skills to build and are costly to maintain

Decentralized application support has caused an "application sprawl," spreading app support teams very thin

Deloitte.

Commercial Off-the-Shelf (COTS) Applications

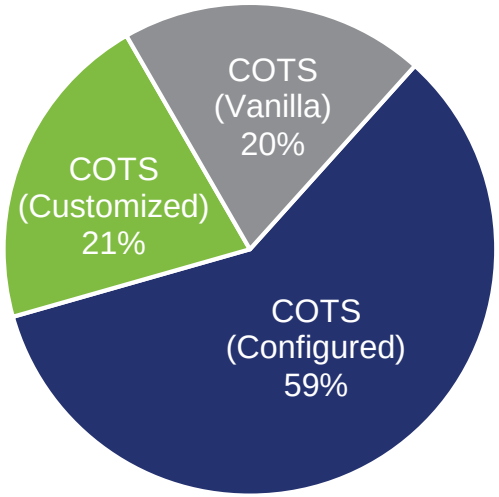
COTS by Type

185

Commercial off-the-shelf applications (8% of total applications identified)

39%

Commercial off-the-shelf applications in 5 Agencies



(COTS is 8% of all apps)

Agencies with COTS apps

Agency	% COTS at Agency	% of all COTS Apps
NIU	100%	4%
SAD	88%	23%
MSA	61%	8%
GAC	50%	3%
IFA	50%	2%
Remaining 22	N/A	61%

Key Observations

Few agencies leverage Commercial off-the-shelf applications, a legacy of build verse buy strategy

- Only **5** agencies (NIU, SAD, GAC, MSA, IFA) have over 50% of their applications as COTS – this makes up only 3% of all applications listed in inventory
- **41** of **54** agencies have less than **10%** of their applications are COTS
- The agency with the most applications (DOT) has **3%** of their applications are COTS

For the COTS applications that are in place, most appear to be easily extendable to other agencies (provided business processes match and licensing) because of little customization

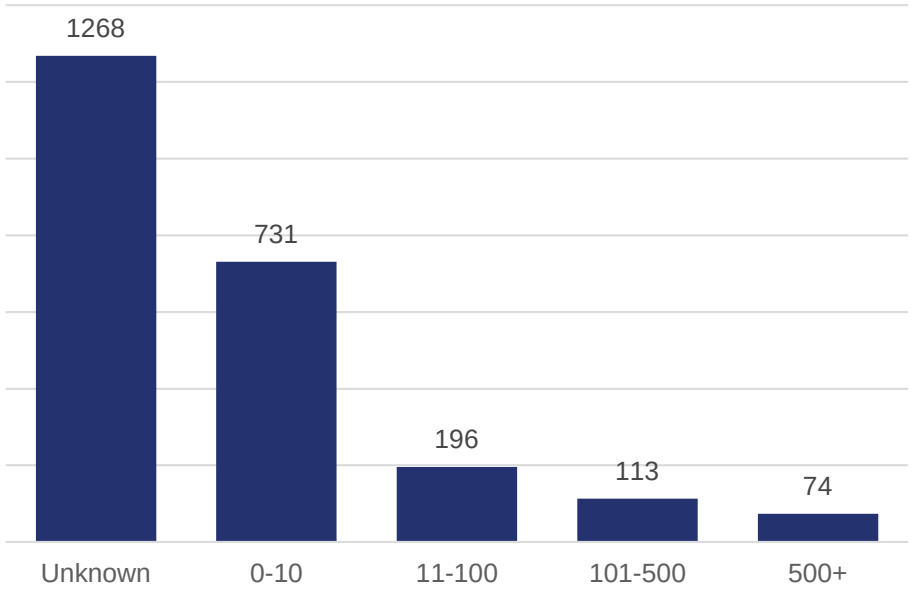
- **~80%** of COTS (**146** apps) listed as either little customization or configured – only **20%** listed customization in the inventory

At a high level, there does not appear to be many duplicate COTS applications (based on review of application names) which minimizes the opportunity for easy rationalization

Deloitte.

Support Model

Applications by User Base



**Known databases listed in inventory NOT INCLUDED*

~92%

Apps with 10 or fewer users are built in-house

~2x

As many apps with 10 or less user than the other identified groups

~3:1

Ratio of applications to Users

Overall, application support teams are spread thin supporting applications with small user populations

Interview Observations

Today, some tier 1 and all tier 2 application support is performed at the agency level

- All agencies confirmed some sort of support provided at the agency level
- All agencies do not distinguish roles between application development and application support

Application support teams are isolated pockets of knowledge and deep 'agency specific' expertise

Institutional knowledge is relied upon to know what platform or technology infrastructure applications are utilizing

There is no central tool or supporting processes for managing the portfolio of applications which makes it difficult to manage pipeline, upgrade cycles or predict support effort

Application support generally requires the end-user know who to call or the ticket can be transferred multiple times before ending up in with the person who has the knowledge to fix the incident

Deloitte.

Policies and Security

Information removed for security reasons

Applications by Authorization Method

Data Sensitivity

Key Observation Summary

Based on individual agency interviews, data gathering, and analysis of the existing application inventory, a number of consistent themes emerged.

Key Observations

A build first strategy has resulted in a large application footprint to support common business capabilities, many supporting small user populations or built on non-enterprise platforms (ex: Access)

Application support teams are distributed among the agencies, resulting in isolated pockets of knowledge and narrow ‘agency specific’ data

A significant portion of critical applications are built on legacy platforms, hindering the use of current technologies without a conversion

There is a lack of a standard development methodology used across all agencies leading to inconsistent delivery of application capabilities

Deloitte.

Service Management

Service Management Framework

The service management framework covers the process, service, and engagement model, along with the interactions between each area.

Service Management Processes

Service Management processes support the services provided to the business and focus on areas such as Service Operations, Service Transition, etc.

Business and Technology Services

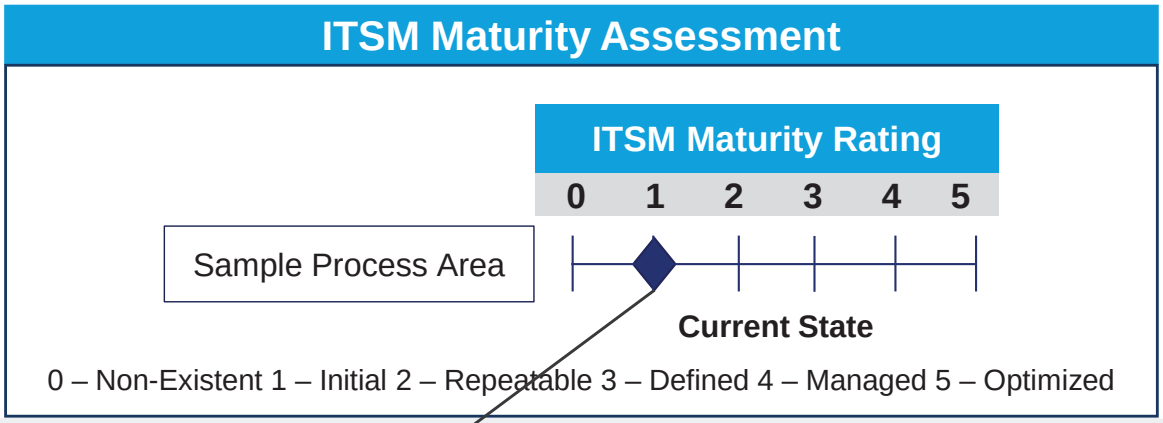
Services are listed in a service catalog and contain pertinent details for each service provided, such as: Description of the service, Chargeback Information, SLAs.

Customer Engagement

Customer Engagement facilitates effective delivery of IT services to the end-users and covers the structure, processes, decision rights, channels and indicators aligned with the strategy of the agencies to meet the customer needs.

Process Maturity Model Introduction

To evaluate IT Service Management, each process within the model was assigned a maturity rating based on the following definitions.



Sample Process Maturity Rating

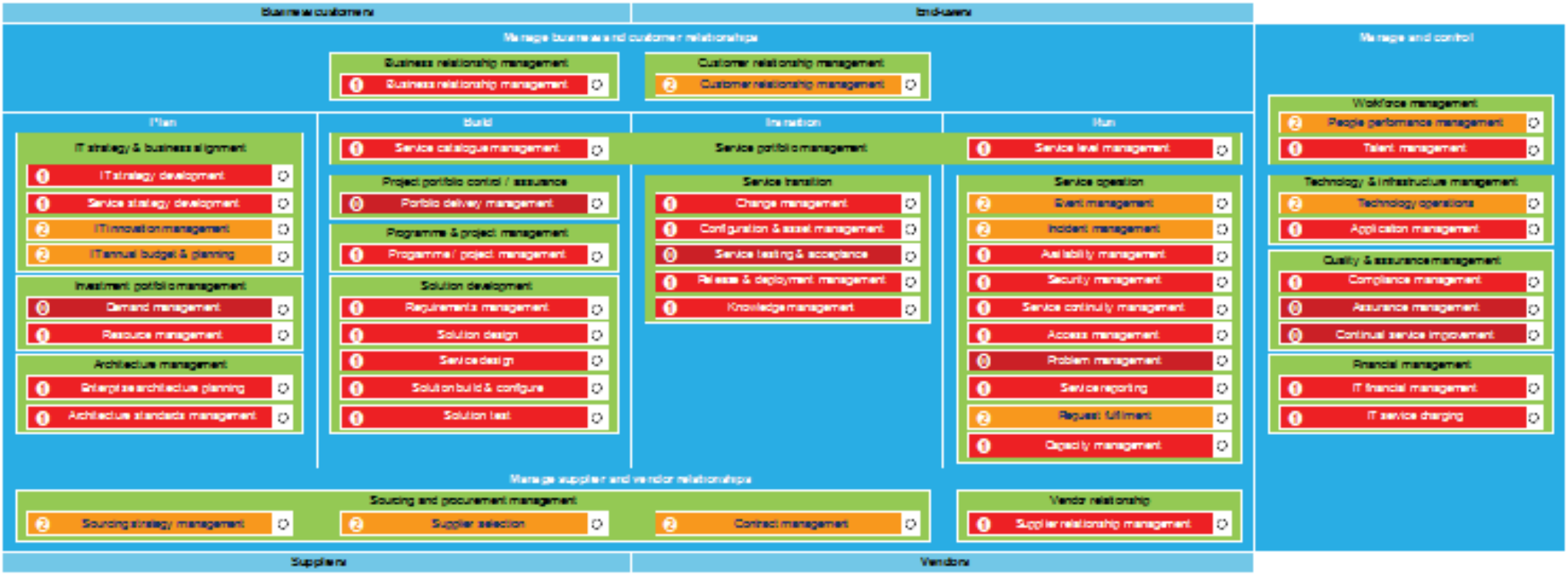
Legend: ◆ Sample Current State Rating

0: Non-Existent	1: Initial	2: Repeatable	3: Defined	4: Managed	5: Optimized
	◆				
The capability does not currently exist	*The capability is ad hoc and does not meet current or future needs*	*The capability meets basic needs, but does not meet future needs*	*The capability meets current needs and provides a solid future foundation*	*The capability exceeds future needs and has mechanisms in place to ensure continued best practices are used*	*The capability leads the industry and/or is particularly innovative*

Deloitte.

ITSM Maturity Assessment Summary

While there are pockets of IT across the State engaged in IT Service Management activities, overall there is a significant lack of maturity within BCCS and across the agencies.



Capability key:

- 0 Non-existent
- 1 Initial
- 2 Repeatable
- 3 Defined
- 4 Managed
- 5 Optimized

Icon Key:

- ○ Not Outsourced
- ◔ 25% Outsourced
- ◑ 50% Outsourced
- ◕ 75% Outsourced
- ● Fully Outsourced

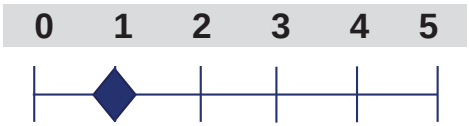
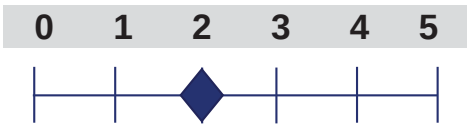
Highlighting this lack of maturity is the decentralized and fragmented end-user support services that are provided across BCCS and the Agencies:

- There are too many handoffs to get tasks completed because of work silos
- There is a lack of process definition and standardization
- There is little to no measurement of service performance

Deloitte.

Manage Business and Customer Relationships

BCCS and the agencies lack the key processes and organizational structures to drive a true service-based model.

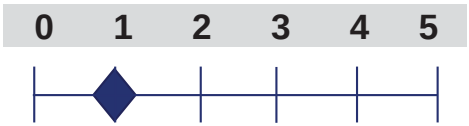
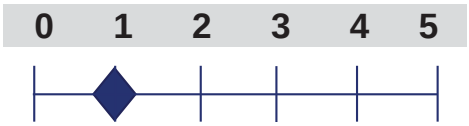
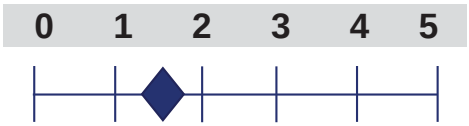
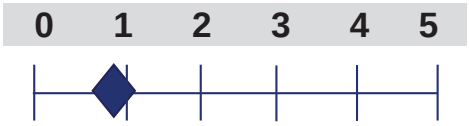
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Manage Business and Customer Relationships	**Business Relationship Management**	Business Relationship Management		▪ BCCS IT staff have very close relationships with their business counterparts; however, there is no defined interaction model between IT and the agencies ▪ There are no 'Line of Business' like roles established that are responsible for helping the agencies with service requirements/needs for the agency ▪ There is a service request process; however, agencies often submit requests directly to the group they believe will complete their request rather than working through a formal Business Relationship model
	Customer Relationship Management (CRM)	Customer Relationship Management		▪ There is a dedicated team (two resources and one manager) responsible for CRM ▪ There is no documented process for CRM; the team is relatively new and using mostly ad-hoc processes ▪ There are no measurements although the team is beginning to work through the LEAN process to develop service targets ▪ A CRM tool is in place today (MS Dynamics); however, it is used primarily as a contact list rather than tracking customer interactions and services ▪ There is no connection between MS Dynamics and Remedy as a tracking tool

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Plan

The State is making strides towards developing processes for aligning technology strategy with the State's goals and objectives.

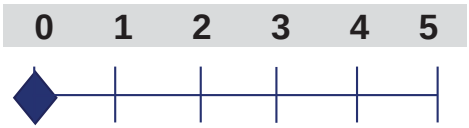
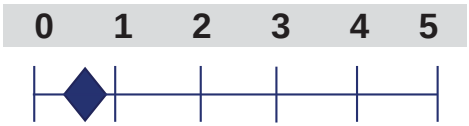
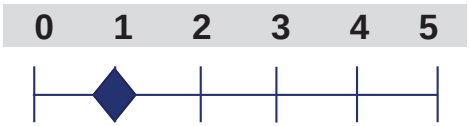
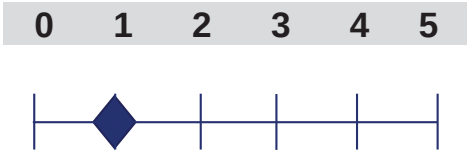
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Plan	**IT Strategy and Business Alignment**	IT Strategy Development		▪ There is no state-wide IT strategic planning process; the current BCCS leadership team is putting steps in place to develop these processes with the IT Transformation program ▪ Agencies also do not have strategic planning efforts tied to the State's objectives and many do not have plans tied to agency plans ▪ See the IT Governance section for more information
		Service Strategy Development		▪ No state-wide process exists to determine what services are needed or demand for current services ▪ BCCS and agencies offer duplicative/competing services - Application development, and support, incident support, LAN support and request provisioning
		IT Innovation Management		▪ Innovation management for IT does not occur in any formalized process for the State ▪ Innovation has not been a high priority in the past; a lack of modern core infrastructure and services makes being a technology leader difficult ▪ The State does not have a process for defining innovation or prioritizing
		IT Annual Budgeting and Planning		▪ See the IT Governance section for more information

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Plan (continued)

The State is making strides towards developing processes for aligning technology strategy with the State's goals and objectives.

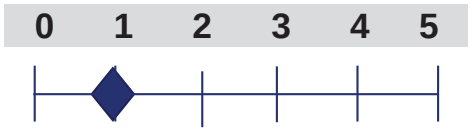
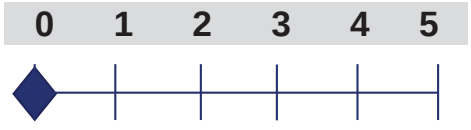
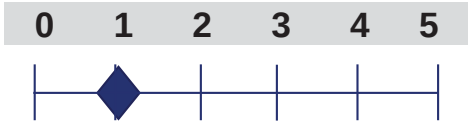
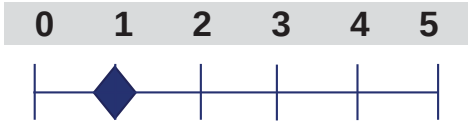
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Plan	Investment Portfolio Management	Demand Management		▪ There is no state-wide process for forecasting demand for IT services for the agencies ▪ Demand is estimated on an ad-hoc basis and actions are taken to fulfill demand as capacity allows, sometimes resulting in lengthy backlogs
		Resource Management		▪ Planning for services and resources does not occur in a structured manner within BCCS ▪ BCCS and agencies do not communicate about upcoming technical or resource needs; which leads to last minute requests from agencies that BCCS cannot accommodate with existing resource levels
	Architecture Management	Enterprise Architecture Planning		▪ While an Enterprise Architecture position exists in BCCS, there is no state-wide view of an enterprise architecture, nor is there planning for the alignment of technologies across the State ▪ The lack of standards inhibits the opportunity for reuse
		Architecture Standards Planning		▪ BCCS does not have the authority to put forth architecture standards across technologies which has resulted in varying architectures internally and across agencies ▪ The agencies are not required to follow standards ▪ BCCS is often unaware of agency solutions

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Build

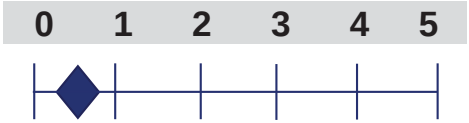
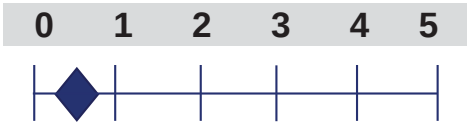
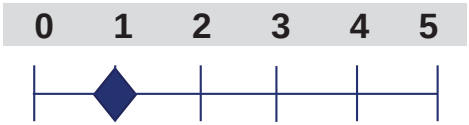
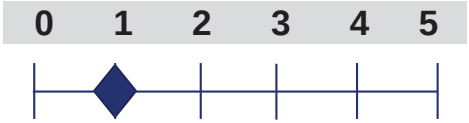
Agencies are wary of moving to services delivered by BCCS because they appear overpriced and have not been updated to reflect the demand.

Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Build	**Service Portfolio Management**	Service Catalog Management		▪ There is a service catalog; however, there are no processes to update and maintain the catalog ▪ The service catalog lacks critical details that other states use to describe services (e.g. service owner, service targets) ▪ Agencies think services from BCCS are overpriced and not delivered with quality
	Project Portfolio Control / Assurance	Portfolio Delivery Management		▪ There is no formal of alignment of portfolios of services and no standardized process for reviewing portfolio performance and delivery ▪ See the IT Governance section for more information
	Program and Project Management	Program / Project Management		▪ Various sets of project templates and methodologies exist across the agencies and BCCS; projects generally rely on vendors for managing projects ▪ Many staff take on the role of project managers without training because of a lack of qualified project managers ▪ See IT Governance section for more information
	Solution Development	Requirements Management		▪ There is no central repository for requirements management and traceability besides SharePoint ▪ There are no standard processes for requirements gathering across the agencies or within BCCS and no sharing of requirements leading to duplicative services

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Build (continued)

Agencies are wary of moving to services delivered by BCCS because they appear overpriced and have not been updated to reflect the demand.

Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Build	**Solution Development**	Solution Design		▪ There is no cross agency coordination of solution designs ▪ There are currently no standards for solution designs in BCCS or in the agencies although the Architecture team recognizes that standards need to be established and are planning to develop them in the future
		Service Design		▪ Service teams define IT solutions in terms of technical features, not value to the State ▪ Services are not designed to deliver specified service levels (availability, restore time, etc.) ▪ There are no tiered options offered for service levels
		Solution Build and Configure		▪ There are no standards for solution build and configure although most new development is utilizing .NET and Java ▪ There is a large effort to re-platform mainframe code across BCCS and the agencies
		Solution Test		▪ There is no centralized testing organization or standard testing methodology used in BCCS or the agencies ▪ Test methodology is ad hoc, not independently enforced, and usually included as part of a project deployment

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Transition

A lack of standardized processes for changes and asset management result in inconsistent delivery of services across BCCS and the agencies.

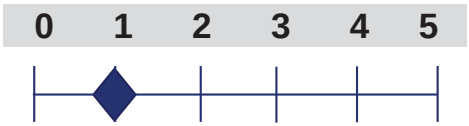
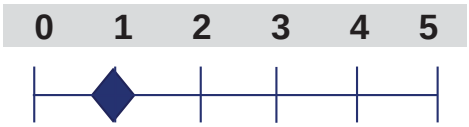
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Transition	**Service Transition**	Change Management	0 1 2 3 4 5 	▪ There is no standard change management process across the BCCS organization ▪ Change management relies on institutional rather than documented system knowledge ▪ There are relatively few unplanned outages caused by the implementation of changes which indicates that the lack of process is covered through institutional knowledge of system interactions
		Configuration and Asset Management	0 1 2 3 4 5 	▪ There is no centralized asset management tool to track the relationship of Configuration Items – Remedy is used for asset tracking but does not include correlation and relationships ▪ There is no standardized process for tracking and updating assets in the BCCS organization
		Service Testing and Acceptance	0 1 2 3 4 5 	▪ BCCS has an premeditated approach to planning and deploying services, but there is no standard process followed ▪ In general, acceptance testing is informal, that can cause service issues to be discovered after releasing the service to production

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Transition (continued)

A lack of standardized processes for release and deployment and knowledge management result in inconsistent delivery of services across BCCS.

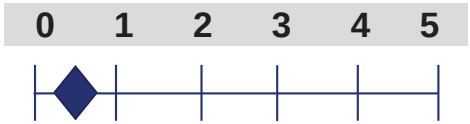
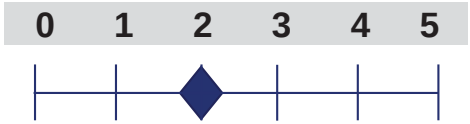
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Transition	**Service Transition**	Release and Deployment Management		▪ There is no standard release and deployment process documented, nor are there process owners identified to refine the process ▪ Releases are implemented on a project by project basis with the plans for the release dependent on the project team for planning the activities and back-out plans ▪ There are cases where the agencies were unaware of release made by BCCS that caused issues with the agencies
		Knowledge Management		▪ Individual support desks around BCCS and the agencies maintain SharePoint sites or wikis for gathering and sharing knowledge, but with multiple tools and separate instances implemented in BCCS and the agencies. There is no standardized process for writing and maintaining knowledge articles ▪ In addition to a lack of standardized processes there is a lack of resources assigned as knowledge champions to monitor the knowledge base ▪ Neither BCCS nor the agencies utilize a centralized knowledge management tool with external articles to promote self-service and internal articles for knowledge sharing

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Run

Overall, IT departments do not proactively apply processes to improve the quality of IT delivery to users.

Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Run	**Service Portfolio Management**	Service Level Management		▪ There are no documented service level metrics established as targets for service delivery ▪ Application and infrastructure services operate without formal SLA commitments or regular reporting of service metrics ▪ There is no concept of measuring services or service delivery to understand how effective the organization is or whether management needs to be aware of service delivery issues
	Service Operation	Event Management		▪ BCCS utilizes tools for infrastructure, network and telecommunications to monitor systems and alert when incidents occur ▪ There is no standard process for creating, updating and maintaining events - activities are largely performed based on individual expertise ▪ Updates are made reactively to notify after an incident occurs, and there is little to no proactive event monitoring and correlation with other related operational processes, such as incident management ▪ Metrics for the process are unclear and are not tracked or reported ▪ There is no link between event management and incident management

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Run (continued)

Overall, IT departments do not proactively apply processes to improve the quality of IT delivery to users.

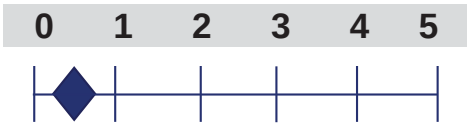
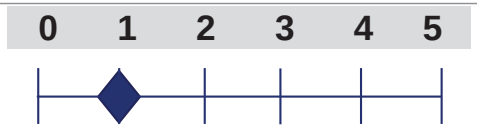
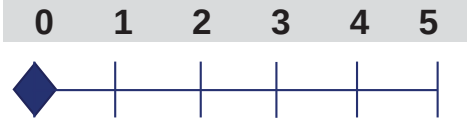
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Run	**Service Operation**	Incident Management	0 1 2 3 4 5	▪ While incident management occurs across BCCS and the agencies, the processes vary widely and users sometimes circumvent the help desk which prevents an accurate logging of incidents. ▪ Within the network team, incident processes are documented and executed following a standard process. ▪ Some incident statistics are captured at BCCS (MTTR, First Call Resolution, etc.); however, they are not standardized (when captured) and are tracked infrequently at the agencies ▪ Many tools are used from excel spreadsheets to Remedy for incident management, making it less efficient to transfer service desk incidents ▪ Incidents are bounced around from person to person until it can be resolved ▪ Tickets are closed before incidents are resolved and the end-user confirms the issue is resolved
		Availability Management	0 1 2 3 4 5	▪ There is no regular tracking and reporting of the availability of major systems within BCCS, nor is there a process for maintaining and improving availability ▪ Roles are not defined, staff are not tracking availability and react when an outage occurs

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Run (continued)

Overall, IT departments do not proactively apply processes to improve the quality of IT delivery to users.

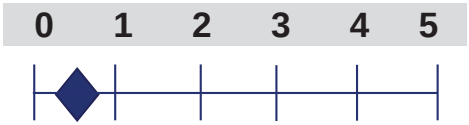
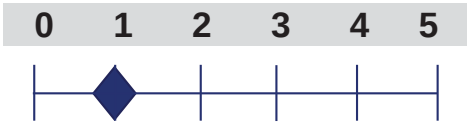
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Run	**Service Operation**	Security Management		▪ The new CISO (August 2015) recently developed a plan for improvements to the security capabilities ▪ Improvements are recommended across the entire security domain with a defined set of projects ▪ There is limited staff in place to execute security management effectively
		Service Continuity Management		▪ There are continuity practices for the mainframe; however, little to no DR planning for mid-range. ▪ Only 20% of applications participate in disaster recovery capabilities (agencies elect DR services; however, many forego because of the cost) ▪ There is no business impact to evaluate the most critical applications that may need DR ▪ A disaster recovery plan is tested on a regular basis for the applications that participate in this capability
		Access Management		▪ The State has single sign-on; however, agencies struggle to manage access for those applications outside of single sign-on and have challenges quickly revoking/changing access ▪ Physical security access is managed very closely across BCCS and all of the agencies; each agency manages their own physical security
		Problem Management		▪ BCCS and the agencies do not have problem management processes in place ▪ Problem management is hampered by the lack of technology to identify common incidents

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Run (continued)

Overall, IT departments do not proactively apply processes to improve the quality of IT delivery to users.

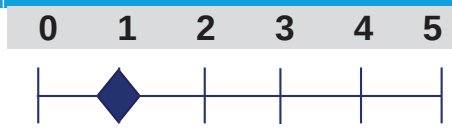
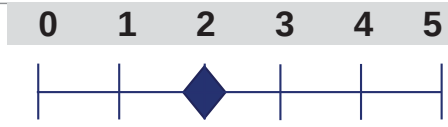
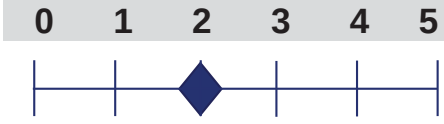
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Run	**Service Operation**	Service Reporting		▪ Certain service related metrics are reported internally; however, reporting is ad-hoc and frequently does not reach the customers ▪ The lack of visibility into service performance frustrates users and is a reason why the users complain about the high price for services ▪ BCCS does not communicate proactively with customers about services
		Request Fulfilment		▪ There are no standard processes for fulfilling IT services across BCCS and the agencies ▪ Staff use institutional knowledge and experience to fulfill requests which causes inconsistency in how services are delivered and the quality of services for end-users ▪ Requests bounce between teams and staff until the correct person is assigned the ticket
		Capacity Management		▪ Comprehensive capacity planning does not occur within BCCS; instead capacity is delivered though reactive responses to identification of needs for additional storage or server capacity or reliance on vendors to suggest new purchases ▪ There are no processes established for managing capacity, with threshold management and forecasting of future needs

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Manage Supplier and Vendor Relationships

External services and vendor relations are seen as transactional rather than strategic, with minimal IT supplier, license, or contract management.

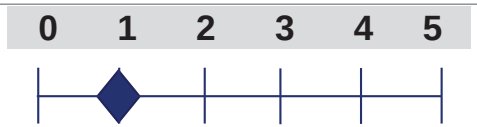
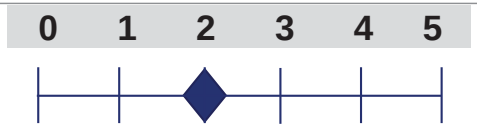
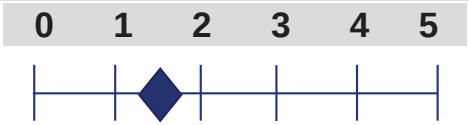
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Manage Supplier and Vendor Relationships	Sourcing and Procurement Management	Supplier Selection		▪ See the IT Finance section for more information
		Contract Management		▪ See the IT Finance section for more information
		Sourcing Strategy Management		▪ See the IT Finance section for more information
	Vendor Relationship	Supplier Relationship Management		▪ See the IT Finance section for more information

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Manage and Control

Very limited processes and controls exist for the management of the IT workforce, quality and assurance, and financials across the State.

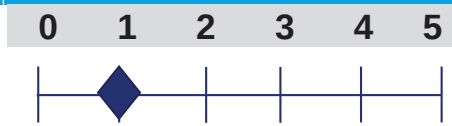
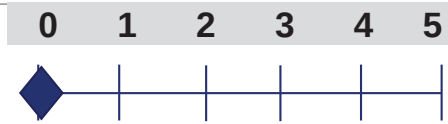
Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Manage and Control	Workforce Management	People Performance Management		▪ See the IT Talent section for more information
		Talent Management		▪ See pages the IT Talent section for more information
	Technology and Infrastructure Management	Technology Operations		▪ Operations management is a mature discipline in the BCCS data centers, with formal operations scheduling and production control activities over administrative systems ▪ Critical infrastructure roles in place; however, in many cases there is no delineation between build and run and many handoffs occur
		Application Management		▪ An initiative has recently begun to develop an application architecture across the State's agencies ▪ An application rationalization effort has also recently begun to look for opportunities to consolidate application processing for the IT Transformation program ▪ 2800 "applications" were mapped to business capabilities

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Manage and Control (continued)

Very limited processes and controls exist for the management of the IT workforce, quality and assurance, and financials across the State.

Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Manage and Control	Quality and Assurance Management	Compliance Management		▪ There are processes in place to make certain policies are adhered to and that the IT organization follows the compliance standards ▪ Regular audits occur to validate compliance management and make certain gaps are addressed immediately
		Assurance Management		▪ The State's IT organization does not have dedicated resources focused on Assurance Management ▪ The activities for Assurance Management are covered by other groups with most of the responsibility falling under the prevue of the CISO
		Continual Service Improvement		▪ From the data reported, no continual service improvement function or processes exist BCCS or the agencies ▪ Given the lack of service reporting service improvements are difficult to identify

0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Manage and Control (continued)

Very limited processes and controls exist for the management of the IT workforce, quality and assurance, and financials across the State.

Domain	Capability	Process	ITSM Maturity Rating	Key Observations
Manage and Control	**Financial Management**	IT Financial Management	0 1 2 3 4 5 	▪ See the IT Finance section for more information
		IT Service Charging	0 1 2 3 4 5 	▪ There is a chargeback model in place for services delivered by BCCS ▪ Agencies feel that the cost of services delivered by BCCS are too high, because they are not aware of the administrative overhead included in the cost of services

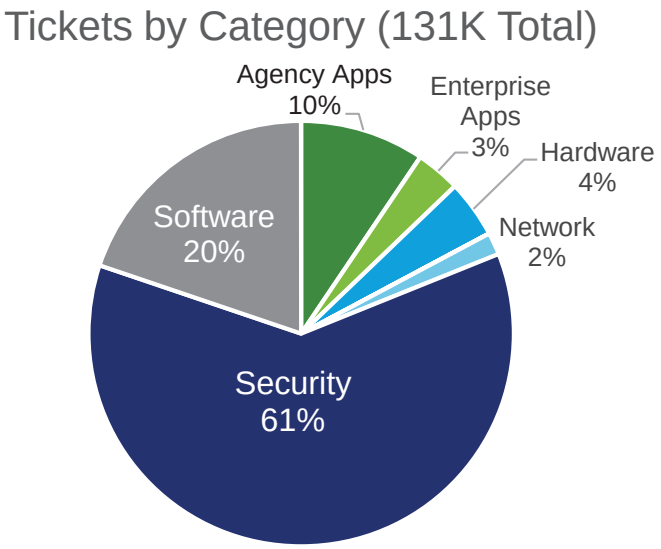
0 – Non-Existent 1 – Initial 2 – Repeatable 3 – Defined 4 – Managed 5 – Optimized

Deloitte.

Service Operation Metrics

The help desk is responsible for addressing and transferring various incidents and requests from both consolidated and managed agencies

Help Desk Tickets



80% of incident request come in via phone; **16%** via email; **5%** via web – based on last 7 months

61% of the tickets opened by the help desk are related to security – **56%** alone account for Password resets which could mean policies need to be reviewed or additional technology enhancements (single sign-on) should be explored

With only **18 staff** supporting the help desk, a significant amount of time is spent answering phone calls

Service Operation Key Metrics

Metric	Illinois	*Benchmark
Average Speed of Answer	2:37 Minutes	21 - 30 seconds
Abandonment Rate	14%	4 - 5%
First Call Resolution Rate	69%	68 - 73%

*Benchmarks based on Robert Half survey

155,000 calls were received in 2015 – **14%** of which went unanswered – the average abandoned call staying on the line over **4.5** minutes

A number of the service operation metrics are below industry benchmarks which aligns with service satisfaction surveys

Most Service Level metrics used by the State are not published on a regular basis – metrics in the Service Catalog are generic and not at realistic levels or levels that can be easily benchmarked (ex: support is 24x7x365)

Deloitte.

Service Catalog Details

A large number of services provided to date fall within a small number of categories.

Level 1 — Service Category

6 Total Service Categories
- 4 within Information Technology:
  - o *Applications, Customer Support, Hosting, and Security*
- 2 within Telecommunications
  - *Network and Voice*

Level 2 — Service Type

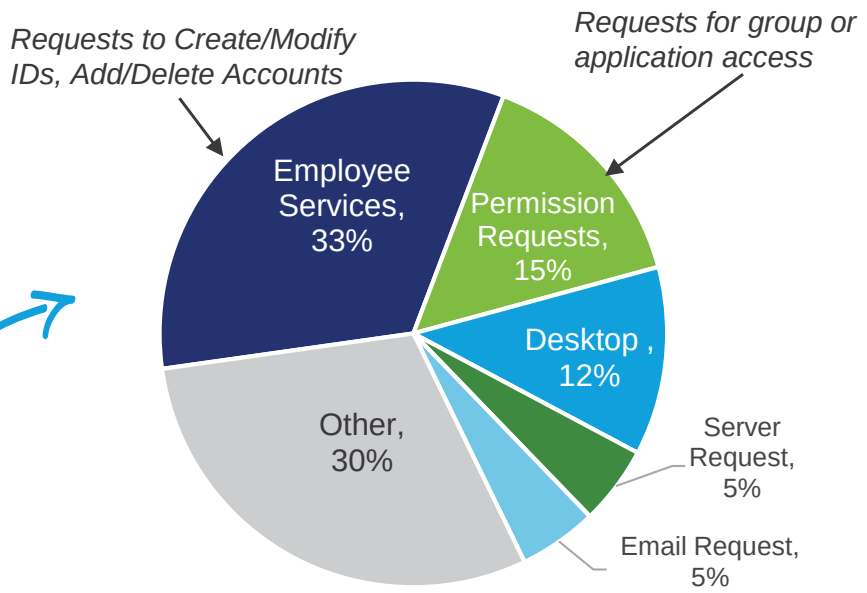
42 total Services Provided
- 22 within Information Technology
- 20 within Telecommunications

Level 3 — Individual Service

Individual Services are not listed within Illinois service catalog

Example: Add X service, modify Y service

Request Fulfillment by Type



Key Observations

- Individual services are not listed in the posted service catalog which leaves out valuable details for users to know what they can request within each service type.
- The services in the service catalog do not directly tie to the service request tracking which makes it difficult to evaluate service performance and adjust service / support levels to demand
- BCCS also offers a set of services that do not necessarily seem to relate to IT

Deloitte.

Comparison vs other states

The State's service catalog captures information that is similar to those of other states however, there are a number of information gaps.

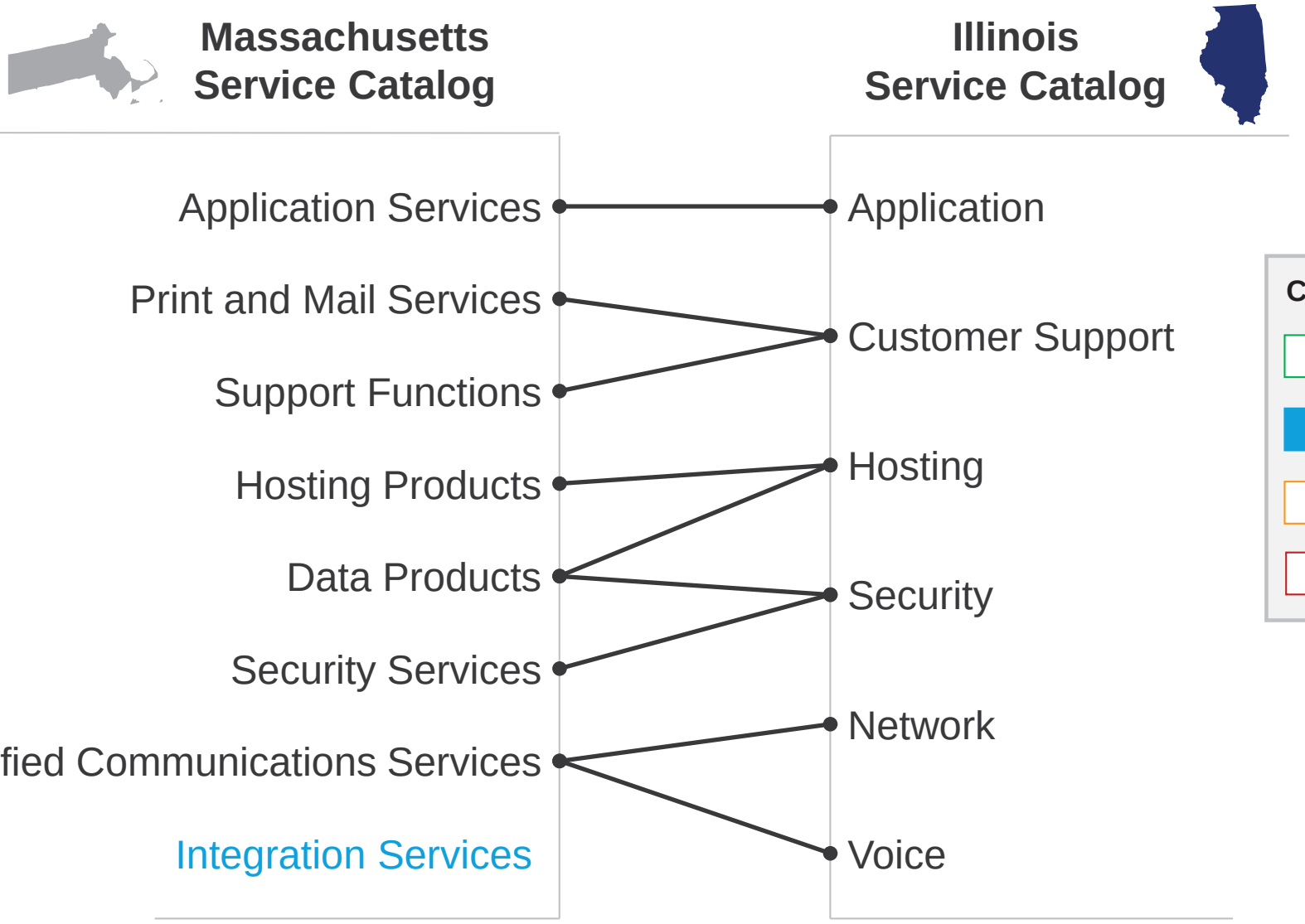
		IL	MA	PA	*MI	LA
Catalog Overview	Model	Decent.	Federated	Federated	Unified	Unified
	Service Categories	6	8	5	14	14
	Service Types	42	43	41	101	75
	Consistency through catalog	Yes	Yes	Yes	Yes	Yes
Service Details Provided	Offering description provided	Yes	Yes	Yes	Yes	Yes
	In/out scope items listed	Yes	Yes	Yes	Yes	Yes
	Ordering instructions, prerequisites, dependencies, exclusions, etc.	-	Partial	-	Yes	Yes
	Service owner identified	-	Yes	-	Yes	-
	Individual service requests listed	-	Yes	-	Yes	Yes
	Service Targets / Metrics listed	-	Yes	Yes	Yes	Yes
	Service reports listed	-	Yes	-	-	Yes
	Chargeback rates listed	Yes	Yes	-	Yes	Yes
	Chargeback Methodology provided	-	Yes	-	Yes	-
	Customizations and service options listed	Partial	-	-	-	Partial
	Use Case / Customer profiles provided	-	-	-	Yes	-
	Responsibilities (of customer / provider)	Partial	Yes	-	-	Yes

*Includes Tech., Management, and Budget Services

Deloitte.

Catalog – “Category” Comparison

The categories in the service catalog match well when compared with catalogs in similar states.



Catalog – “Service Type” Comparison

There are several gaps in the type of information captured for each service when compared with catalogs in similar states.

Massachusetts Service Catalog

Illinois Service Catalog

Massachusetts Service Catalog	Illinois Service Catalog
Offering Description	Offering Description
Chargeback Information	Rates
Individual Service Requests	
Service Targets / Metrics	What to Expect
Customer Responsibilities	How you can help *(more FYIs / Tips)*
Reporting	

Comparison

- Identical Match
- Mostly Similar
- Partially Similar
- Not Similar

Other Data (Best Practices)

- Service Owner / Contact
- Explicit Agency / Central Mgmt. Responsibilities
- Typical customer profile / use cases for the service
- Ordering instructions, prerequisites, and Restrictions
- Functional / Technical Specs
- Dependencies
- Optional customizations
- Optional Service Levels (gold, sliver, bronze)
- Pricing Methodology

Deloitte.

Customer Engagement Approach

BCCS Customer Engagement is currently an informal process, and an approach has not been established or standardized across agencies to help address customer needs.

People

- Most departments do not have resources dedicated to customer engagement or relationship management
- For the the departments that do, the scope of responsiblilites is typically focused more on communication and less on understanding service demand, addressing business requirements / priorities, etc.

Process

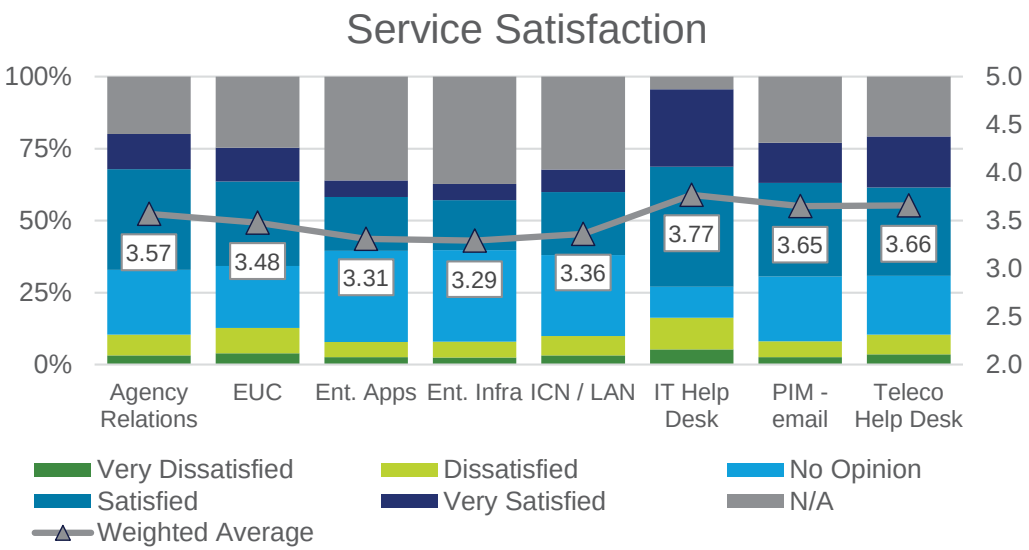
- Few departments use a formalized proactive process to gather information, requirements, or collaborate on solutions
- In the departments that have a customer engagement approach, there are some defined processes to support the efforts

Technology

- MS Dynamics is used; however, no single tool is used across the Departments to conduct intake and prioritize requests from the agencies
- Infrequent surveys are sent out to monitor customer satisfaction with helpdesk services

Customer Satisfaction Survey Results

CMS issued a satisfaction survey in 2015 to gather feedback about BCCS. The survey results were consistent with Deloitte's agency interview findings.



* Public Sector Industry average is 4.7 according to HDI 2013

Survey Statistics

- **12,125** responses from 61 different agencies
  - *30% from DHS; 9% from DCFS; 6% from Corrections; 6% from HFS*
- **+1,800** write-in comments, common themes:

Communications

- Better dissemination of service information needed
- Lack of communication schedules

Applications

- Deficient Security
- Limitations on access, usability, functionality
- Dated technology

Services

- Unpredictable turnaround
- Lack of End User training
- Cumbersome ordering
- Qs around service vs. value

Observations

Overall, IT customer satisfaction is **low** compared to other government service desk satisfaction ratings*

IT Help Desk has the highest satisfaction in its grouping and by far the highest number of responses (~96%)

Ease to acquire has both the most low scores (very or dissatisfied) and the least high scores (very or satisfied)

Key Observation Summary

Though evaluating the service management related processes, services, and interactions, a number of key themes emerged.

Key Observations
The lack of overall process standardization across the State has resulted in inconsistent service delivery
The lack of a common set of Service Management tools and technology has made it difficult to accurately track and successfully deliver services
The lack of a consolidated organization has resulted in “shoulder tapping” and users informally contacting their “expert” staff member for requests or incidents which has created imbalances in workload among staff
There are no standard measurements of service delivery which make it challenging for management to understand the quality and quantity of the services delivered

Deloitte.