State of Illinois - IT Transformation
IT Financial Management Future
State Recommendations

April 20, 2016
**Table of Contents**

<table>
<thead>
<tr>
<th>IT Finance Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current State Findings (Summary)</td>
</tr>
<tr>
<td><strong>Future State Recommendations</strong></td>
</tr>
<tr>
<td>• Summary</td>
</tr>
<tr>
<td>• Funding Model</td>
</tr>
<tr>
<td>• Budgeting</td>
</tr>
<tr>
<td>• Procurement</td>
</tr>
<tr>
<td>• Financial Management, Monitoring and Reporting</td>
</tr>
<tr>
<td>Implementation Timeline</td>
</tr>
</tbody>
</table>
A structured methodology was applied to developing strategies to enhance the State’s IT financial health.

**IT Finance Framework Overview**

**IT Finance Framework**

- Monitoring and reporting protocols, with emphasis on clarity and traceability of spend
- Management of expenditures according to agencies and spend category
- Spending for goods and services across agencies along with and how goods/services are purchased
- Funding sources, strategies, and variability that shapes IT operations and services, inclusive of charging for IT services
- Methods and processes for IT financial planning and budgeting across the state

**Monitoring & Reporting**

**Funding Model**

**Budgeting**

**Procurement**

**Financial Management**

**Deloitte**
IT Finance Current State - Summary

The State’s approach to IT financial management is outdated and reactionary, as a result, IT spend is neither strategic nor focused.

Key Observations

There is no centralized funding source for IT services, agencies are each responsible for their IT needs. Due in part to overhead BCCS has high rates.

Budgeting processes vary across agencies with little attention given to alignment with IT strategy.

Agencies use 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 IT.

The State lacks standard IT monitoring and reporting, despite statewide efforts to enhance transparency and accountability.
Future State Recommendations
Future State Summary of Recommendations

Below are recommendations that will strengthen the overall financial management of DoIT.

<table>
<thead>
<tr>
<th>Recommendation Category</th>
<th>Select Recommendations (Overview)</th>
</tr>
</thead>
</table>
| Redesign Funding Model  | 1. Move from the currently complex IT funding model to a more unified and holistic funding approach  
2. Utilize operations appropriation to provide for overhead, incentivize use of new services, and establish a cash-reserve  
3. Update statewide cost allocation plan in response to a new IT operating model  
4. Develop approach to fund capital investments in the short and long terms  
5. Develop new revenue streams and enhance innovation  
6. Realign cost model to new modes of IT service delivery at DoIT  
7. Initiate short term IT finance operating model tactics  
8. Define and document processes that will align the setting of rates with overall DoIT strategy  
9. Allow for visibility and transparency of rates/costs by restructuring the billing process to assist agencies with cost recovery  
10. Ensure successful payment for DoIT services |
| Establish IT Budgeting Process | 1. Establish an enterprise-wide IT budgeting process  
2. Align budgeting process with DoIT priorities as well as include materials and training to help agencies accurately describe their IT needs  
3. Design budgeting process that is inclusive and drives innovation  
4. Include personnel in the budgeting process that understand both technology and finance  
5. Encourage collaboration in the budgeting process and safeguard against agencies seeing IT as a utility that is unnecessary  
6. Assess budgeting approach and make changes |
| Rethink IT Procurement | 1. Migrate all IT contracts to DoIT management and oversight  
2. Consolidate licenses management  
3. Build alerts into procurement that allow for tagging of purchases and contracts to support spend management  
4. Establish approach to regularly review and benchmark contracts  
5. Establish robust IT procurement organization within DoIT  
6. Use functionality of new procurement system BidBuy to automate all processes  
7. Use governance defined standards to derive purchasing behavior  
8. Ensure communication between DoIT (IT procurement) and customers, both internal and external, is efficient and regular  
9. Establish and implement vendor management strategy for all third-party providers of IT goods and services |
| Strengthen Financial Management and Monitoring | 1. Obtain access to agencies’ accounting systems to review IT spend  
2. Establish new IT object codes that better define services being offered or goods purchased  
3. Understand reporting needs of agencies for their cost allocation reports and assist the agency with completion of the reports  
4. In addition to monthly bills that indicate detailed agency usage and corresponding costs, DoIT should publish an annual report listing agency usage and corresponding costs. |
Funding Model
**Funding Model**

### Desired Future State
- DoIT has clarity on total IT budget and funding sources
- There is a clear strategy in funding IT/DoIT overhead costs
- DoIT has an approach for capital funding and strategy to make regular capital purchases
- The State and DoIT has additional funding streams outside of state appropriations or agency grant/contract funding
- DoIT has competitive service rates
- Service rates encourage customers to use new technologies
- DoIT’s service rates and costs are transparent

### Potential Approach
- Move from the currently complex IT funding model to a more unified and holistic funding approach
- Utilize operations appropriation to provide for overhead, incentivize use of new services, and establish a cash-reserve
- Update statewide cost allocation plan in response to a new IT operating model
- Develop approach to fund capital investments in the short and long terms
- Develop new revenue streams and enhance innovation
- Realign cost model to new modes of IT service delivery at DoIT
- Initiate short term IT finance operating model tactics
- Define and document processes that will align the setting of rates with overall DoIT strategy
- Allow for visibility and transparency of rates/costs by restructuring the billing process to assist agencies with cost recovery
- Ensure successful payment for DoIT services

### Resource Requirement
- **Program Manager (2)** – Oversee process, Lead working group sessions, Development of overall funding model
- **Data Gathering Analyst** – Manage data gathering for all efforts
- **Spend and Cost Analyst** – Analyze IT spend and cost drivers
- **Funding Analyst** – Determine allocation of funding
- **Research Analyst** – Completes research and develops best practices of other methods and tools used by other states to support overall funding model

### Recommended Prioritization
- **Immediate**
  - April – July ‘16
  - Initiate IGAs between DoIT and agencies
  - Capture and document fund flow
  - Develop strategy for and request seed funding
  - Determine new services that will be implemented immediately

- **Short-Term**
  - July ‘16 – July ‘17
  - Work with GOMB and agencies to identify IT spend
  - Choose strategy for overhead costs
  - Track DoIT personnel time at project level
  - Develop plan for new services
  - Develop strategy for supplemental funding

- **Long-Term**
  - July ‘17 and Beyond
  - Assess overhead approach effectiveness
  - Evaluate capital funding strategy
  - Implement new services with new rate structure and assess the next fiscal year
  - Implement new billing system
A new funding model for the State will help encourage IT innovation and increase transparency of IT.

**Current State Funding Model/Chargeback**

- Agencies
- Telecom
- Technology
- CRF (Funding Account for Telecom)
- BCCS
- SSRF (Funding Account for Technology)
- Delinquent Payment
- Two Bills
- Payment and Funding

**Future State Funding Model/Chargeback**

- Federal
- State
- Agency
- Other
- Capital Funding
- State Overhead Appropriation
- DoIT
  - Enterprise Services
  - Cluster Services (COEs)
  - Agency Services
- Service Charging
- DoIT Technology Management Fund
- Overhead Charging
- Overall IT Spending Authority
- Cost Allocation
Funds Flow

1. The State needs to move from its currently complex IT funding model to a more unified and holistic funding approach

   1. Document Funds Flow: Identify and document IT funds flow, to fully capture total current IT spend
      a. Build an approach to gather agency level IT funding streams and tools
      b. Use funds flow information to define comprehensive future state funding

   2. Build Time Tracking Mechanisms: Track IT personnel time to enable allocation of personnel costs
      a. Develop interim approach to capturing agency IT Staff time (Note: current eTime project should be re-commissioned to better meet future state needs)
      b. Build a time tracking system that allows for appropriate levels of detail in time tracking, project based time tracking and WBS level time allocation

3. Address Unique Agency Funding Constraints: Determine strategy for particular agencies who utilize non-appropriated and non-traditional sources of IT funds (ex. DOC utilizes a percent of inmates commissary monies to fund IT efforts)

4. Obtain Seed Funding: Request seed funding to both help mitigate initial cash flow issues and make critically needed investments
   a. Confirm uses for seed funding including: capital purchases, FY18 payroll, increased contract load, and payment obligations
   b. Determine amount of seed funding based on uses
   c. Repay seed funding over period of time that allows DoIT to stabilize financial operations

2. Utilize operations appropriation to provide for overhead, incentivize use of new services, and establish a cash-reserve

   1. Use Appropriation for Overhead Costs: Consider using state appropriation to provide for overhead costs and minimize the current rate burden passed on to agencies
      a. Define areas of overhead suitable for appropriations funding and amount of funding needed—See slide 18 for DoIT cost model wireframe
      b. Consider one of three options to covering overhead costs—See slide 12 for three options as well as the corresponding advantages and disadvantages
      c. Combine with operations appropriation request

   2. Use Appropriation to Incentivize Shift to New Technologies: Utilize State Appropriation to incentivize rates of key new technologies and services; thereby, incentivizing agencies to move from legacy technologies that may be more costly to the state over time.
      a. Determine which services to incentivize
      b. Decide amount of subsidy
      c. Make operations appropriation request of GOMB

3. Use Appropriation to Establish Cash-Reserve: Request a state appropriation that may be used as a cash reserve, which can carried across fiscal years to maintain stable operations and adequate cash flow.
The Finance Working Group recommended a blended approach of operations appropriations and agency chargebacks to cover DoIT’s overhead costs.

**Operations Appropriation**

<table>
<thead>
<tr>
<th>Operations Appropriation</th>
<th>Blended Mix</th>
<th>Fully Burdened Service Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund overhead costs solely through state appropriation</td>
<td>Fund overhead costs through a mixture of state appropriation funding and service fees</td>
<td>Fund overhead costs through service fees</td>
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</tbody>
</table>

**Advantages**

- Reduces overhead costs to agencies, and creates perception of state investment in agency role in IT Transformation
- Allows for more market pricing on services
- Allows for accountability of overhead costs
- Minimizes overhead costs to agencies

**Disadvantages**

- Creates a visible target for cuts during budget reductions
- If overhead is efficient, cuts risks reducing service quality and agency perceptions of DoIT effectiveness
- Creates risk of limited funding if there is not a budget or appropriation is reduced
- Creates risk of a lag in federal reimbursement for some programs

- Reduces dependency on sometime unreliable appropriated funds
- Agencies view state as collaborative partner in the delivery of IT services
- Reduces overhead costs to agencies
- Allows for some market pricing on services

- Less volatility for overhead funding as overhead is covered by rates
- Agencies pay the true costs of IT services
- Less complex funding to administer as this is already an activity the DoIT will take on

- Agencies may bare the full load of IT overhead costs and overall services
- Service rates appear very expensive compared to commercial rates due to significant overhead burden

Working Group Recommendation
Allocation and Funding Innovation

3. Update statewide cost allocation plan in response to a new IT operating model

1. Determine Impacts of New Model on Rates: Obtain federal approvals for all new spending and allocation methods
   a. Communicate the State’s new funding and service approach to federal agencies as appropriate
   b. Document impacts in SWICAP

2. Seek Opportunities For Additional Federal Funding: Partner with agencies to identify potential federal funding for statewide IT initiatives (Ex. Security funding through IEMA)

4. Develop approach to fund capital investments in the short and long terms

1. Fund Capital Expenditures: Obtain and sustain funding for needed capital investments and refreshes
   a. Develop interim approach to drive modernization of state’s most needed assets (DoIT leaders have already requested this funding for FY17)
   b. Develop long-term funding structure for modernization of state’s assets beyond FY17
      1. Designate specific service revenue to be allocated toward modernization
      2. Request an appropriation can be allocated to capital investments
   c. Employ methods used by other states to supplement funding for capital purchases—See next slide. (Note: The Finance Working Group noted that some of these approaches have been tried in the past but that with appropriate funding and new leadership the state should explore these options again)
   d. Determine financial management practices and processes for bond funding of IT assets

5. Develop new revenue streams and enhance innovation

1. Create New Revenue Opportunities: Introduce new opportunities for funding that can be reinvested into DoIT, encourage innovation, and/or lower chargeback rates
   a. Better leverage under-used IT assets (i.e. Dark Fiber)
   b. Develop strategy for additional new revenue opportunities

2. Fund Innovation: Develop and steward specific funding stream that allocates resources toward IT innovation. Consider utilizing investment funds to pilot programs or try new technologies.
# Alternative Funding Options

To support investment in critical systems and services, other states use alternative funding models to supplement their financial models. The Finance working group recommended bond funding and investment funding most highly.

<table>
<thead>
<tr>
<th>Alternative Models</th>
<th>Description</th>
<th>Example(s)</th>
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</table>
| Bond Funding¹                       | Issuing project bonds through the state’s bond authority to fund IT procurements | ▪ General obligation bonds  
▪ Revenue bonds  
▪ State of Oklahoma used bond funds to finance a new data center  
▪ Commonwealth of Virginia used bond funds to rebuild its statewide emergency radio system |
| Investment Funds                    | Pools of money established for funding pilot programs, trying new technologies or supporting projects with short payback periods. Savings generated from funded projects can be used to replenish the investment fund | ▪ Enterprise “venture capital” seed money  
▪ Accumulation of funds for replacement of systems over the period of their life cycle  
▪ State of Michigan has an IT investment fund (OpenMichigan) as part of its overall IT funding ($47M over 5 years) |
| User-fee Revenue                    | Adding fees to a citizen for state transactions (e.g., court, licensing)     | ▪ State of Iowa charges convenience fees for a number of e-government applications available through the state’s web portal  
▪ State of New Jersey adds a surcharge to telephone bills to fund the statewide 9-1-1 system |
| Flexible Budgeting and Appropriations Strategies | Gain additional funding for IT projects or increase flexibility in the use of existing IT funds | ▪ Using uncommitted year-end funds for technology projects  
▪ Reallocating savings realized from previously implemented technology projects to fund other technology projects  
▪ State of Maryland established Major IT Development Fund for IT development projects as a non-lapsing, interest bearing fund ($16M in FY14) |

¹ See appendix for list of projects deemed bondable.

Source: “Innovative Funding for State IT: Models, Trends & Perspectives.” NASCIO.
Service Delivery Alignment

Realign cost model to new modes of IT service delivery at DoIT

1. Update model to account for new services in the short term
   a. Determine timing for rollout of new services, concurrent with service catalog
   b. Update FY17 costs model
2. Redesign Cost Model for DoIT Service delivery model in the long term
   a. Define charging approach for central services as well as for Centers of Excellence and agency incubators
      i. Determine approach to charging for cross-agency/cross-cluster services exploring:
         i. Agency to agency IGAs for service in CoE and incubator delivery models
         ii. Agency specific statutory authority to charge for services, particularly for agency COEs and incubators
         iii. A model where DoIT reimburses agencies for services
   b. Redefine rates as services are consolidated and agencies are on-boarded
   c. Define cadence of rate changes during onboarding
Service Charging

1. Begin to build out finance operating model to support transformed IT environment
   a. Develop IGAs between agency and DoIT that will pay DoIT staff (agency staff) and support operating costs in the short term
   b. Create new pay codes from DoIT Technology Management Fund that pay all DoIT staff
   c. Align pay schedules for all DoIT employees
   d. Identify IGA agency fringe costs and approach to treating fringe
   e. Shift payroll and funding obligations to DoIT Technology Management Fund

2. Define and document processes that will align rate setting with overall DoIT strategy
   a. Develop Transparent Service Rate Setting Process: Utilize newly established governance oversight, with agency representation, to analyze and set rates.
      i. In short term maintain current operations and rates (IGAs and between DoIT and agencies)
      ii. For future, design inclusive process to develop rates
         1. Revise service rates
         2. Define and document rate setting principles; move close to market based pricing, where possible
         3. Develop baseline costs for IT asset and services spend and conduct annual benchmark study to compare central prices to those of outside services providers to maximize competitiveness

   iv. Project service demand and fluctuations to guard against shortfalls.
   v. Define rates for services
   vi. Publish rate changes internally to DoIT staff and externally to key stakeholders.

2. Build Service Cost Structure for Maintenance
   1. Develop list and age of assets as well as a list of needed investments
   2. Prioritize assets and needed investments
   3. Continue to incorporate depreciation into service rates to cover maintenance and periodic refreshes
   4. Evaluate options regarding levying an additional fee to cover maintenance
   5. Develop refresh investment cycle
There are five key ‘influencers’ in determining the chargeback model. Funding mechanisms can be viewed along a continuum of visibility into costs.

**Influencers**
- **Management Philosophy**: Cost efficiency balance with improved service and quality
- **Org. Maturity**: Implementation phase, stabilization phase, operations phase
- **Type of Services**: Transactional, consultative, strategic
- **Level of Effort**: Time/effort to develop, complexity of administration
- **Performance Management**: Planning and budgeting, cost management, performance reporting

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### OVERVIEW

<table>
<thead>
<tr>
<th><strong>No Charge</strong></th>
<th><strong>Allocation</strong></th>
<th><strong>Cost Related Price</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The cost of providing service is included as a component of “central” or overhead and no attempt is made to recover costs</td>
<td>The total cost of service (budget or actual) is allocated to customers based on a driver (e.g., revenue, headcount, number of transactions) that is intended to approximate usage</td>
<td>Customers are charged a price (based on budget, actual, or market) per transaction/event or actual activity</td>
</tr>
</tbody>
</table>

### PROS

- The easiest mechanism to administer and communicate
- Minimal conflict with customers
- Increased visibility into cost of providing service
- Some ability to influence cost, behavior, and accountability

### CONS

- Cost may not match the value of the services delivered
- Budget may not be flexible to change as demands change
- The customer may have difficulty predicting the amount of the chargeback
- The method of allocation may result in perceived inequality

### APPRAOCH

<table>
<thead>
<tr>
<th><strong>1. No Allocation</strong></th>
<th><strong>2. Flat Rate</strong></th>
<th><strong>3. Budgeted Rate</strong></th>
<th><strong>4. Budgeted Rate w/ Penalties</strong></th>
<th><strong>5. Activity Based Costing</strong></th>
<th><strong>6. Full Direct Charging</strong></th>
<th><strong>7. Market Based</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>No allocation to business units, with costs recorded below the operating margin</td>
<td>Based upon one metric (e.g., revenue or headcount) but not necessarily the cost driver</td>
<td>Based upon a metric that approximates the distribution of cost</td>
<td>Similar to Budgeted Rate allocation, but includes penalties to drive behavior</td>
<td>Based on per-unit pricing of services developed for aggregation of associated costs (labor, systems, overhead, etc.)</td>
<td>Directly identified at time of use and charged to each business unit per transaction</td>
<td>Market rate based allocation Costs defined for service time and actual volumes</td>
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</table>

### Cost Detail Visibility / Level of Effort

<table>
<thead>
<tr>
<th>Less Detail/Effort</th>
<th>More Detail/Effort</th>
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</thead>
<tbody>
<tr>
<td>Planning and budgeting, cost management, performance reporting</td>
<td>Planning and budgeting, cost management, performance reporting</td>
</tr>
</tbody>
</table>

### Performance Management

**Management Philosophy**: Cost efficiency balance with improved service and quality

**Org. Maturity**: Implementation phase, stabilization phase, operations phase

**Type of Services**: Transactional, consultative, strategic

**Level of Effort**: Time/effort to develop, complexity of administration

**Performance Management**: Planning and budgeting, cost management, performance reporting
Service Charging Maturation

The role of each influencer on the future state financial model, cannot be understated.

Similar to the current state, the recommended method for funding becomes 6, Full Direct Charging. The future state recommendation is a maturation of this model.
Overhead costs that are charged to the State as a whole (personnel and non-personnel)

Expenses directly incurred by the Agency that cannot be traced to a single activity

Expenses directly incurred by the Agency that can be traced to a specific activity

Personnel

Non-Personnel

Management Labor

Service Labor

Other Labor

Training

Facilities

Technology

Contracts

Other

Service A

Service B

Service C

Service D

Service E

Service F

Service G

Service H

Service I
Billing

Allow for visibility and transparency of rates/costs by restructuring billing processes in the long term

1. In short term, maintain current billing process
2. Implement One Billing System: Consolidate two antiquated billing systems into one for both technology and telecom
   a. Develop new billing format and process
      i. Work with agencies to determine level of detail required for cost allocation reports
      ii. Determine inputs of current system and where information is captured
      iii. Design bill that lists usage of service, correlated cost, and overhead costs, if any
         (Note: Some agencies would like more bills to divide costs within the agencies, so the one bill will need to be detailed to see the organizational level spend.)
   b. Consolidate billing systems
      i. Define system requirements
      ii. Identify Commercial-Off-The-Shelf (COTS) billing product
      iii. Implement new billing system

Ensure successful payment for DoIT services

1. Mitigate late or non-payments: Work with delinquent agencies to reduce delinquency and close gaps
   1. Create payment plans for agencies that currently outstanding.
   2. Work with GOMB to define forward looking payment plans for typically delinquent agencies
      (Note: GOMB has directed agencies to pay outside vendors before paying state agencies that provide services)
   3. Develop enforcement mechanisms
Budgeting
## Budgeting

### Desired Future State

- The State has an IT budgeting process that aligns funding to priorities
- The process is designed to consider broad perspectives on needs and allocates dollars appropriately
- The budget process encourages collaboration and stewardship of IT resources

### Potential Approach

- Design a new budgeting model that aligns with strategic plans and governance principles
- Build an interim budgeting process to gather information during FY17
- Design templates and tools for all agencies to use during budgeting process
- Train agencies on IT budgeting approach
- Implement on-going budgeting process
- Assess budgeting approach and make changes

### Resource Requirements

- **Program Manager** – Oversees process, Lead working group sessions, Lead training sessions
- **Budgeting Analyst** – Manage data gathering, Develop tools and templates (all support materials), Assist with training

### Recommended Prioritization

#### Immediate

- Collaborate with GOMB to identify FY17 and FY18 IT budget needs across the State
- Finalize design for FY17 budgeting process and develop a set of materials for agencies to use in budgeting process

**April – July ’16**

#### Short-Term

- Develop IT budget template
- Develop IT training materials
- Agency CIOs converse with agency leadership and program directors about IT needs and budgets
- Begin budgeting process for FY19

**July ’16 – July ’17**

#### Long-Term

- Assess budgeting process and consolidate steps where necessary

**July ’17 and Beyond**
DoIT Budgeting Process – Multiyear Approach

Implementing a new budgeting model will require a multiyear approach as key activities are scheduled to be performed during the next three years.

- Focus on data gathering to get a comprehensive understanding on how agencies are budgeting for and spending on IT. The data gathering process should prioritize:
  - Capturing the right information at the right level
  - Having actionable processes and appropriate resources for analyzing data received
  - Having pragmatic approach to decision making
- Develop IT budget templates and tools for agencies to use with GOMB
- Train agencies on budget templates

<table>
<thead>
<tr>
<th>FY17</th>
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<tbody>
<tr>
<td>Design collaborative budgeting process utilizing governance principles</td>
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<tr>
<td>Assess IT budget templates</td>
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<tr>
<td>Develop training materials for agencies</td>
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<tr>
<td>Train agencies on budgeting approach</td>
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<table>
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<tr>
<th>FY18</th>
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<tbody>
<tr>
<td>Implement new budget process</td>
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<tr>
<td>Assess budgeting approach</td>
</tr>
<tr>
<td>Revise and consolidate budgeting process based on assessment</td>
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Deloitte.

Data Gathering Request: University of Utah IT Assessment

Please provide documentation supporting the following data:

1. **GENERAL FINANCIAL DATA**
   - Operating and Capital Expenses: Total IT OpEx and CapEx for FY14. 3-5 year OpEx and CapEx spend (Enterprise Wide and division breakdown)
   - Category Spend: FY13 and FY14 IT spend by category (e.g., employees, hardware, software, contractors), data dump from ERP, Purchase Cards, budgeting application, purchasing and procurement.
   - Planned spend by FY15
   - Unit/Division Level IT spending plans
   - Cost Allocation: Existing cost allocation models and methodology
   - Funding Models: Existing funding models and methodology, funding levels by unit
   - Budgeting: Documentation describing approach to financial planning and budgeting for IT (both for capital and operating budgets)
   - Chargeback: Existing chargeback models, methodology and rates. Service based costing if available
   - Previous or Ongoing Cost Savings or Service Improvement Efforts: Information on current or past cost savings, IT consolidation/shared services, purchasing and procurement improvements, spend reduction efforts.

2. **IT GOVERNANCE DATA**
   - Structures: Any documents discussing existing governance practices, structures, operating procedures, and any reports on effectiveness
   - Portfolio: Any documentation describing the existing IT portfolio, IT portfolio management practices, IT investment strategies, and thresholds for spend/approvals
   - Regulatory Structure: Any documentation describing the existing regulatory structure governing IT (statutes, rules, policies, governing language) include policies on budgeting and financing, project management, data gathering, analysis, retention and sharing, discovery, archiving, privacy, security, purchasing and procurement
   - Administrative Rules: Any documentation describing the existing administrative rules governing IT, include policies on budgeting and financing, project management, data gathering, analysis, retention and sharing, discovery, archiving, privacy, security, purchasing and procurement. Any documentation describing authorities/organizations responsible for making administrative rules
   - Strategic Plans: Central and/or unit level plans (if online a link is sufficient), documentation regarding strategic planning approach (both for IT and the larger enterprise)
   - IT Projects: Inventory and costs for all open IT projects (including capital and expense projects), duration of projects, include information about planned versus actual cost, any reports on project management effectiveness or practices

3. **IT ORGANIZATIONAL MODEL DATA**
   - IT Organizational Structure: Organization charts, staffing models, performance reports, career paths or career ladders if available
   - FTE Data: Number of IT FTEs by unit and location, if possible include functional role, title, full time/part time, attrition rates, skills assessments and reports
   - Resources: IT headcount and costs by resource type, role, and location
   - Training: Information on existing training requirements and programs, links to Learning Management Systems and or information about available courses and metrics regarding use
   - Contractors: Number of IT Staff Augmentation Contractors by function and location. If possible include information about services provided/functional role, salary/contract cost per contractor, time at organization, title, full time/part time, any associated reports
DoIT Budget Process

Establish an enterprise-wide IT budgeting process.

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<tr>
<th>Apr</th>
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<th>Jul</th>
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<th>Sep</th>
<th>October</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announcement of DoIT Priorities</td>
<td>Distribute Agencies’ Most Recent FY Usages, Charges, and Assumptions</td>
<td>Release IT Budget Template</td>
<td>Agency CIO Budget Discussions</td>
<td>Agencies Return Completed IT Budget</td>
<td>DoIT Studies</td>
<td>Agencies IT Budget</td>
<td>DoIT/Agencies Conversation</td>
<td>Agency IT Budget Revisions</td>
<td>DoIT Finalizes IT Budget</td>
</tr>
</tbody>
</table>

Key Date

Note: Budget legislation begins after Governor’s budget address in early Feb.
**DoIT Budget Process - Recommendations**

Align budgeting process with DoIT priorities and include materials and training to help agencies accurately describe their IT needs.

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**Recommendations**

1. Align enterprise-wide IT budgeting process with DoIT priorities and governance efforts
2. Provide agency with materials that will help them accurately forecast costs of services needed
3. Standardize IT budget information needed and requested by DoIT, to ease budget analysis
4. Train CIOs and CFOs on IT budget template, to improve accuracy of what is submitted

**Note:** Budget legislation begins after Governor’s budget address in early Feb.
DoIT Budget Process - Recommendations

The State’s IT budget process should be inclusive and drive collaboration. Additionally, reviewers of agency budgets should include personnel that understand technology and finance.

Note: Budget legislation begins after Governor’s budget address in early Feb.

5. Encourage Cluster and Agency CIOs to have exhaustive conversations with agency leadership and program director to understand needs and opportunities for innovation.

6. Include both technology and financial leaders in review of agency budget. This will help with understanding of technological and budgetary needs for agencies.

**Recommendations**
The IT budget process should encourage collaboration and safeguard against agencies seeing IT as a utility that can be easily cut.

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<tr>
<th>Apr</th>
<th>May</th>
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<tr>
<td>Announcement of DoIT Priorities</td>
<td>Distribute Agencies’ Most Recent FY Usages, Charges, and Assumptions</td>
<td>Release IT Budget Template</td>
<td>Agency CIO Budget Discussions</td>
<td>Budget Training</td>
<td>Agencies Return Completed IT Budget</td>
<td>DoIT Studies Agencies IT Budget</td>
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**Recommendations**

7. Identify opportunities for agencies to collaborate and make the requests for collaboration during DoIT/Agency conversations

8. Work with GOMB to steward IT funds after statewide budget instructions are released

9. Assess budgeting process and consolidate steps where possible

Note: Budget legislation begins after Governor’s budget address in early Feb.
Procurement
## Procurement

### Desired Future State

- DoIT is primary owner of IT related contracts
- DoIT has appropriate resources to support IT procurement
- DoIT has increased ownership of the IT procurement process
- The IT procurement process is streamlined, effective, and metric driven
- There is transparency in the procurement process

### Potential Approach

- Migrate IT contracts to DoIT ownership
- Establish robust IT procurement organizational model that eliminates multiple step hand off and creates specialists with expertise
- Utilize automated functionality of BidBuy
- Drive sourcing and purchasing through defined standards and specs
- Develop KPIs for procurement process
- Establish regularly used communication channels with agencies
- Create vendor management strategy

### Resource Requirement

- **Program Manager** – Oversee process, Lead working group sessions
- **Data Gathering Analyst** – Manage contract data gathering, Support Program Manager Admin Needs
- **Contract Review Team** – Assesses contracts for migration

### Recommended Prioritization

**Immediate**

- April – July '16
- Include contracts and licensing responsibility within IGAs between DoIT and agencies
- Gather data on contracts/licenses and begin migration process
- Communicate changes to vendors

**Short-Term**

- July ’16 – July ’17
- Train staff to use BidBuy
- Converse with potential new IT procurement staff from agencies and refine IT procurement organization structure
- Define standards and specs that will be used to drive sourcing and purchasing
- Develop vendor management strategy

**Long-Term**

- July ’17 and Beyond
- Assess IT sourcing and overall IT procurement strategy and utilize spend management process/recommendations to drive down costs

*Indicates Key Fundamental for Future State Success*
Procurement Recommendations

The IT procurement organization and processes should be enhanced to meet the needs of agencies and the broader principles of DoIT.

**Organization**
- Recruit and hire appropriate resources to support larger volume of IT procurement transactions
- Reduce hand offs in the model by streamlining and clarifying roles and responsibilities
- Build expertise in category management in alignment with leading practices
- Use cross training to reduce risks of single point of knowledge/single point of failure

**Process and Technology**
- Clarify roles and responsibilities for IT procurement between CPO, SPO, BOSS, and DoIT
- Redevelop overall IT procurement process in alignment with governance principles
- Use governance defined standards to drive purchasing behavior
- Develop procurement checklist for end users that includes accounting for maintenance, licensing, training, installations, etc. so that unnecessary additional procurements are not required
- Standardize processes by type of purchase, for supplier, sub-award, and contract type
- Use functionality of new procurement system, BidBuy, to automate all processes
- Use BidBuy as primary source to track, manage, and evaluate procurement
- Develop KPIs for procurement process

**Transparency and Vendor Management**
- Ensure communication between DoIT (IT procurement) and customers, both internal and external, is efficient and regular—See Customer Engagement Section of the Future State Technology Playbook
- Establish and implement vendor management strategy for all third-party providers of IT goods and services

Note: The State is exploring changes to its enterprise-wide procurement process, which will impact the IT procurement process.
Financial Management, Monitoring, and Reporting
Financial Management, Monitoring, and Reporting

**Desired Future State**
- A central IT organization that has the ability to easily review IT spend then make needed changes when necessary
- IT spend is appropriately categorized
- A central organization that ensures compliance and mitigates risk
- A central IT organization that is transparent about its services and costs

**Potential Approach**
- Inventory financial tracking tools or systems for IT spend and request access
- Establish new IT Detailed Object Codes
- Work with agencies to understand needs and programs and anticipate required upscale/downscale in required resources
- Determine different agency cost allocation requirements and assist with completion
- Produces detailed annual report that includes usage and corresponding costs

**Resource Requirement**
- **Program Manager** – Oversee process, Lead working group sessions
- **Data Gathering Analyst** – Manage data gathering for all efforts, Completes research on object codes for other states, Supports admin needs of program manager

**Recommended Prioritization**
- **Immediate** (April – July ‘16)
  - Identify various tracking tools used by agencies and obtain access
  - Analyze FY15 IT spend by agencies
  - Converse with agencies about services they will need, so DoIT secure appropriate resources and monitor effectively

- **Short-Term** (July ‘16 – July ‘17)
  - Converse with agencies about cost allocations documents and the level of details needed to support completion
  - Develop strategy regarding publishing annual usage and corresponding costs

- **Long-Term** (July ‘17 and Beyond)
  - Utilize ERP system to monitor and track IT spend
  - Work with the Comptroller to change IT object codes
  - Train IT staff on new Detailed Object Codes

*Indicates Key Fundamental for Future State Success*
Financial Management, Monitoring, and Reporting

DoIT will enhance its approach to monitoring and reporting by updating its spend tracking capabilities and producing reports that give more insight into its costs structure.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
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<tbody>
<tr>
<td><strong>Financial Management and Monitoring</strong></td>
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</table>
| ▪ Obtain access to agencies’ financial systems to review IT spend | ▪ Agencies currently use various financial tracking systems  
▪ DoIT should will need access to systems to monitor what is being spent on IT to better develop its offerings |
| ▪ Establish new IT Detailed Object Codes that better define services being offered or goods purchased | ▪ The State’s Detailed Object Codes have not been changed since the 1980s and do not reflect the types of IT goods and services that are currently purchased |
| ▪ Explore restructuring of service centers and corresponding cost codes to determine consolidation possibilities | ▪ Increase accuracy in understanding of IT billing and spend |
| ▪ Hold regular business reviews with each cluster and DoIT | ▪ Confirm overall fiscal fluidity |
| **Risk Mitigation** | |
| ▪ Implement service demand management through the Service Governance process to facilitate proactive rate development | ▪ DoIT does not currently have transparency into needs for new services or potential spikes in demand |
| **Reporting** | |
| ▪ Understand reporting needs of agencies for their cost allocation reports | ▪ Agencies must complete to remain compliant with federal requirements.  
▪ DoIT billing needs to be at a level that can ease reporting burdens of agencies |
| ▪ Publish an annual report listing agency usage and costs | ▪ Increase transparency regarding DoIT |
Monitoring and Reporting

With better monitoring and reporting capabilities, DoIT will improve transparency around the delivery of IT services.

<table>
<thead>
<tr>
<th>Capability</th>
<th>Typical Maturity Dimensions</th>
<th>Stage 1 Passive</th>
<th>Stage 2 Reactive</th>
<th>Stage 3 Basic</th>
<th>Stage 4 Adaptive</th>
<th>Stage 5 Proactive</th>
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<tbody>
<tr>
<td>Monitoring</td>
<td>▪ Real time knowledge of spend&lt;br&gt;▪ Established KPIs&lt;br&gt;▪ Understanding of IT asset mapping</td>
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<tr>
<td>Control Activities</td>
<td>▪ Clear knowledge of costs associated with control activities&lt;br&gt;</td>
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<td>▪ Vendors are compliant and effectively managed</td>
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<td>Risk Assessment</td>
<td>▪ Ability to clearly identify risk across agencies&lt;br&gt; ▪ Clear risk mitigation processes and procedures&lt;br&gt; ▪ Follow up on identified risks</td>
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<td>Information and Communication</td>
<td>▪ Clear communication channels across agencies&lt;br&gt; ▪ Ability to forecast results and plan accordingly across agencies</td>
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DoIT monitors IT Spend and has basic KPIs
DoIT tracks and mitigates risk as well has strategy to manage vendors
DoIT has procedures that monitor and mitigate risks
DoIT regularly communicates with agencies and vendors regarding rates or any other pertinent information

Current State <br> Future State
# Implementation Timeline

## Phase 1 - Administrative Consolidation
- Define IT spend through data gathering and analysis
- Define future vision for funding model
- Define agency level IT budgets and spending
- Identify IT spending that is classified in other ways (general administrative etc.)
- Capture costs of necessary administrative supports to consolidation
- Analyze FY15 IT spend by agencies
- Gather data on contracts/licenses

## Stage 2 - Detailed Design
- Implement DoIT funding model
- Initiate IGAs between DoIT and agencies
- Capture and document fund flow
- Develop strategy for and request seed funding
- Determine rates for new services that will be implemented immediately
- Work with GOMB and agencies to identify IT spend
- Choose strategy for overhead costs
- Build tool to track DoIT personnel time (until ERP is live)
- Develop plan for new services and rates
- Develop strategy for supplemental funding
- Assess overhead approach effectiveness
- Evaluate capital funding strategy
- Implement new services with new rate structure and assess the next fiscal year
- Implement new billing process and system
- Develop unified budgeting process for DoIT
- Collaborate with GOMB to identify FY17 and FY18 IT budget needs
- Finalize design for FY17 budgeting process
- Develop IT budget template for agencies to use
- Develop IT training materials
- Agency CIOs converse with agency leadership about IT needs and budgets
- Begin new budgeting process
- Assess budgeting process and consolidate steps where necessary
- Implement procurement strategy for DoIT contracts and licenses
- Document contracts/licensing responsibility within (DoIT/agencies) IGAs
- Communicate changes to vendors
- Train staff to use BidBuy
- Refine IT procurement organization structure and identify IT procurement staff
- Define standards and specs that will be used to drive sourcing and purchasing
- Develop vendor management strategy
- Assess IT sourcing and overall IT procurement strategy
- Track financial performance of DoIT
- Identify various tracking tools used by agencies and obtain access to IT spend
- Develop strategy regarding publishing annual usage and corresponding costs
- Utilize ERP system to monitor and track IT spend
- Work with Comptroller office to change IT object codes
- Train IT staff on new object codes
- Cut over to future state model

## Stage 3 - Implementation
- Note: Months 1-3 consisted of documenting current state findings and drafting future state recommendations.