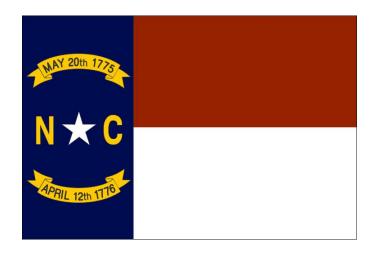
Interim Information Technology Services Rates Report



Report to the Joint Legislative Oversight Committee on Information Technology

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INFORMATION TECHNOLOGY INTERNAL SERVICE FUND/RATE SETTING

"SECTION 7.2.(c) Rate Setting. – By October 31, 2014, the State Chief Information Officer shall establish consistent, fully transparent, easily understandable rates that reflect industry standards for each service for which any agency is charged. A detailed written report explaining the rate structure shall be submitted to the Joint Legislative Commission on Governmental Operations, the Chairs of the Joint Legislative Oversight Committee on Information Technology, the House Appropriations Subcommittee on Information Technology, and the Fiscal Research Division. An interim written report shall be submitted by September 1, 2014. Overhead charges to agencies shall be consistently applied and shall reflect industry standards for the particular service. Rate increases shall require the approval of OSBM and consultation with the Joint Legislative Commission on Governmental Operations. Rate reductions may be implemented following notification of OSBM.

"SECTION 7.2.(c1) By October 31, 2014, the State Chief Information Officer shall establish rates for use of the Criminal Justice Law Enforcement Automated Data System (CJLEADS) by federal and private entities and users outside the State. These rates shall be reported to the Joint Legislative Oversight Committee on Information Technology."

Introduction

The Office of Information Technology Services (OITS) Shared Services Division (SSD) is funded through a fee-for-service, not-for-profit model that provides a wide array of technology services to state agencies, public schools, community colleges, universities, and local governments. The goal is full cost recovery through a charge-back model, with excess collections being returned to the agencies or government entities. Table 1 summarizes percentage of services provided at the agency and state entity level.¹

Organization	Related Percentage of Services Consumed
State Agencies	90 %
Local Government	4 %
UNC/Community Colleges/Public School Systems	3 %
State/Local Boards & Commissions	2 %
Private Organizations	1 %
Hospitals/Federal Government	<1 %

Figure 1

¹ As reported in Grant Thornton, LLP, Shared Service Rate Methodology Review Final Report, August 2014



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OITS and the Office of State Budget and Management (OSBM) have agreed to freeze rates for the past three years, due in part to a lack of confidence in SSD's budget and cost transparency, as well as in the rate setting process used in previous years. The goal of this report is to provide an intermediate status on OITS's efforts to revamp the budgeting and rate-setting processes, provide clarity, and implement a consistent and explainable methodology by October 31, 2014.

All initiatives and changes discussed in this report are applicable to rates that will be for the FY15-17 timeframe.

Background

SSD's rate-setting process has been described for many years as "broken" and "not transparent." To help identify issues and chart a path forward, OSBM and OITS co-sponsored a third-party validation effort. Through a competitive bidding process, Grant Thornton LLP (GT) was hired to provide assistance and validation. As the OITS, OSBM, and GT team began to analyze the pieces that make up rates, it became clear that previous rate-setting methodologies did not adequately identify costs associated with delivering a service. This was due to a number of factors:

1. Cross-Charging: SSD cost centers included in their budgets "intra-agency cross charges," which created complexity and confusion. Delivery of a service (i.e., e-mail) often requires other SSD technologies (i.e. servers for the e-mail platform). The costs were accounted for in both cost centers, then cross-billed. The server group recovered costs from the e-mail group via an actual SSD-to-SSD billing. This led to an over-inflation of the estimated amount SSD spends on Shared Services. The table below identifies costs when cross-charges are removed.

Fiscal Year	al Costs in eral Ledger (\$M)	Inte	ernal Billings (\$M)	ransfer to eneral Fund (\$M)	Bas	se Costs (\$M)
2014-2015	\$ 178.0	\$	13.0		\$	165.0
2013-2014	\$ 173.0	\$	13.3		\$	159.7
2012-2013	\$ 193.5	\$	12.8	\$ 14.0	\$	166.7
2011-2012	\$ 187.3	\$	13.0		\$	174.3

Figure 2: Year-Over-Year Base Costs (Cross-billing removed) Red=estimate

2. Overhead confusion: over the years, there have been multiple uses, definitions, and interpretations of the term "overhead." To further complicate matters, often different types of overhead were allocated differently across services or cost centers. Overhead has included some or all of: SCIO staff, OITS administration, Finance, Human Resources, Service Desk, Provisioning Teams, layers of management, data center operations, facilities, billing services, customer relationship management, and many others. While these are all costs that are



indirect to specific services and need to be accounted for, moving forward they will be clearly identified, and each area will have a recommended funding or allocation methodology.

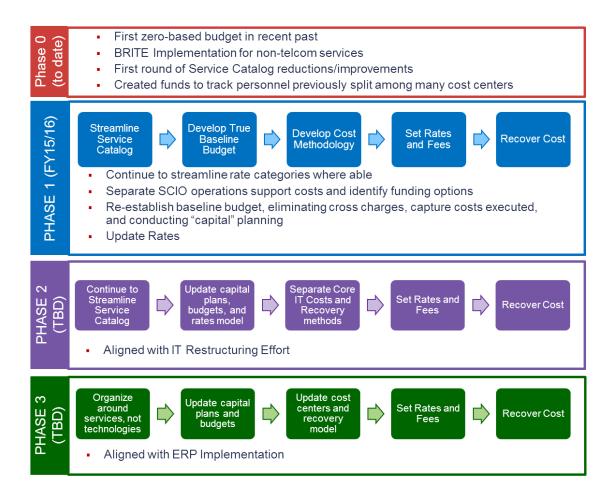
At OITS's request, Grant Thornton consultants conducted an industry benchmark analysis (Appendix A) on overhead costs for technology/data center companies, commonly known in private industry as General and Administrative (G&A) costs. Best benchmarking efforts put most company's G&A costs in the 10-20%, while OITS has consistently operated in the 7-10%, with 2013/14 G&A equivalent at 7.3%.

- 3. Personnel accounting: to account for personnel who performed multiple functions across multiple cost centers/service areas, SSD had allocated pieces of people in multiple locations within the state's payroll and human resources tracking system, known as BEACON (Building Enterprise Access for NC's Core Operation Needs). It was not unusual for a provisioning staff member to be "hard-coded" into BEACON as 0.2 to one area, 0.4 to another, 0.1 to a third, and 0.3 to a fourth. This made personnel extremely difficult to track and have visibility on their allocations. In FY14/15, OITS has simplified this and created "shared direct" cost centers to track budget in areas where multiple cost centers are served by a group of people, functions, or costs. In the updated methodology, these costs will be allocated via a causal driver.
- 4. Circular nature of rates: in the "old" way of budgeting, and the mixture of budgeting and cost recovery, rates became circular. E-mail provides a simple example. To set rates for the service, the E-mail lead needed to know the server rate to include that cost in the e-mail budget. But the server rate is dependent on server personnel having e-mail, so the server budget requires the e-mail rate. In a perfect scenario, across all 300 rates, rates and costs would have to be incrementally updated multiple times until a balance is achieved. The reality is best-guess estimates. The updated process will fix this problem.
- 5. IT Facilities and Equipment (IT F&E): Information technology requires continuous lifecycle management of hardware, software, and other equipment. Some SSD service areas have attempted to spread IT F&E cost recovery across multiple years; however, areas were inconsistent in their application of that type of plan. Additionally, OITS never set up a separate fund to track the money, so the money went to the cash account and led to poor tracking of funds available for refreshes.



Roadmap

OITS has created a phased approach to improving the rate setting and methodology, as can be seen in the graphic below. This report will focus on Phase 1 and walk through each step.



Phase I

Step 1: Streamline Service Catalog

SSD is planning to reduce the current service catalog as we are able for the FY15-17 biennium and beyond. Service category updates are a natural result of changing technologies, modernizing services,



and moving towards a customer-facing model over the next few years. Telephony and Voice are largely pass-through and will remain as-is for this phase, while initiatives for service catalog reduction might include collapsing rates based on server type (physical vs. virtual), public vs. private storage, virtual vs. open system tape storage, tiered services, etc. Potential risks stem from the fact that any changes to the service catalog require updates to the North Carolina Accounting System (NCAS), Computing Services billing systems, Telecommunications billing systems, Accounts Receivable tracking, and Budget and Reporting Information Technology Expenditures (BRITE) tools.

Step 2: Develop True Baseline Budget

In the past, OITS has attempted to develop budgets, cost and allocation methodologies, and rates/fees as part of the same process. Moving forward, the budgeting effort will be related to, but separate from the rates/cost recovery effort both in process and in responsibility. The first step is creation of a clean and understandable budget generated by the Services division, with assistance from the financial division, that is free from cross-charges and internal allocations. The cost allocation methodology and rate setting will follow, generated by the financial division.

Specific to the FY15-17 budgeting process, OITS is working with agencies to verify as-is consumption and potential demand changes and verify and document resources and costs associated with the predicted demand. Operational budgets have been clarified, with "Shared Direct" costs clearly identified and tracked. Shared Direct costs are costs that directly support multiple services within a fund, with examples being the provisioning team who provisions all types of servers, and the manager of the hosting team that manages all aspects of the hosting portfolio.

OITS will also capture and validate costs in areas that used to be lumped into the over-used and misused term "overhead." The current plan is to clearly identify expected costs in the following areas:

- SCIO and direct staff
- OITS Support Functions (Human Resources, Finance, Facilities, etc.)
- Shared Services Direct Support (Help Desk, Customer support, etc.)²
- SSD Services (historical and typical rate-based services)
- IT F&E costs

Finally, the plan is to incorporate IT F&E funding requirements into budgets, but to track them separately from budgeted operational costs. IT F&E in this instance refers to hardware purchases and/or upgrades that are over \$5,000 and are tracked and depreciated in the annual financial reports.

² Shared Services Direct Support includes services that directly relate to operating an information technology services organization but do not have a rate associated with them. They contrast with "Operations Support," which are indirect costs of operating the organization



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Step 3: Develop Cost Methodology

As mentioned in the previous section, OITS has traditionally combined budgeting and cost methodology in one step. For FY15-17, OITS is clearly separating those efforts. After demand predictions and cost in each area to support that demand have been captured, a cost allocation methodology will be applied as the next step before creating rates. Although the specific methodology has not been finalized, the goal is to allocate costs in a fair and consistent manner. The effort to do this is best seen in an example.

As part of the budgeting effort, assume that the budget for Cost Center X includes personnel costs, maintenance costs, hardware refresh (IT F&E costs), and Shared Direct costs internal to that cost center. That is the cost center's total budget to support both internal (SSD) and external demand.

After budgets are complete for all cost centers, an allocation methodology will be applied to do the following:

- Identify what percentage of Cost Center X's budget supports internal vs. external consumers
- Allocate internal costs to those internal services
- Allocate Shared Direct costs for Cost Center X to the cost center's services via a causal driver
- Allocate Shared Services Direct Support costs across cost centers via a causal driver
- (If not appropriated) Allocate OITS Ops Support costs across cost centers via a causal driver
- (If not appropriated) Allocate SCIO and direct staff costs across cost centers via a causal driver

Step 4: Set Rates and Fees

After all costs have been allocated across service areas, OITS finance department will set rates according to the below formula. Once initial rates are calculated, the finance department and Grant Thornton associates will work with SSD business owners to validate rates. They will compare initial rates to industry standards and delta from prior years, and the package presented to OSBM will include those benchmarks. It is important to note that OITS expects that rates will look significantly different from years past due to three years' worth of frozen rates.

$$Rate = \frac{Cost\ Center\ Direct\ Budget + Allocations}{Predicted\ External\ Demand}$$

Step 5: Recover Costs

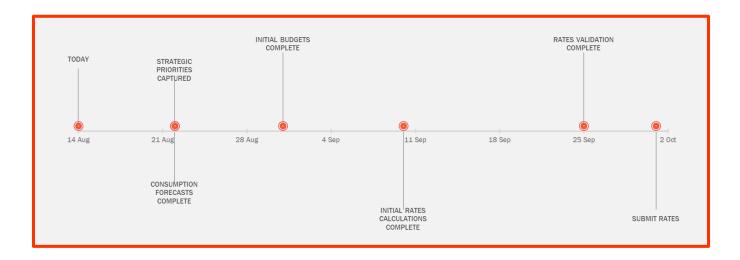
Once rates are approved and execution of FY15/16 begins, OITS finance division and service owners will review recovery profile each month, predict the expected recovery amount for remaining months, and adjust spending accordingly. This has become common practice at OITS and will not change with



updated rates. With cost center budgets under the control of the cost center managers, OITS will also focus on managing the budget to tie spending with the achievement of effective and efficient services for consumers.

Variables in predictions, modeling, costs, and unforeseen projects or events cause cost recovery to be an inexact science. Since recovery amounts will often not be exactly as predicted to cover predicted costs, SSD will mitigate by managing spend as the year goes along. Other mitigation options include ability to balance across cost centers and calculate recovery at the aggregate level, or basing rates on something other than demand (i.e. industry standard). Absent those mitigations, as mentioned, OITS will monitor spending and adjust as necessary, and throughout these efforts, OITS will maintain close coordination with OSBM to ensure OSBM understands current status and what OITS is attempting to accomplish.

Timeline (2014)



Key Decisions and Implementation Considerations for Phase I

OITS and OSBM met to discuss funding options for each type of cost incurred by OITS as part of the shared service. They also met with IT Oversight Committee Chairs and have agreed on the following design principles to accomplish Phase I:

1. SCIO and direct staff (approx. \$2.0M FY13/14) – will pursue appropriation for these costs.³

³ Delta between current appropriation (since the IT fund currently pays a portion of the SCIO and support functions through allocations) and future appropriation will be determined prior to submission of FY15-17 appropriation request.



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- 2. OITS support functions (approx. \$9.6M FY13/14) will pursue an agency subscription rate to cover these costs. The recovery methodology is yet to be determined but could be based on number of state employees, amount of IT spend, or amount of SSD spend, and will be set annually.
- 3. Shared services direct support functions (approx. \$7.7M FY13/14) will recover by adding them to the rates.
- 4. Recovering services (approx. \$136.4M FY13/14) will recover by establishing and collecting rates.
- 5. IT F&M costs (approx. \$4.0 FY13/14) OITS will work with OSBM to create a Type II Fund to collect, track, and account for IT F&E collections. OITS will maintain a multi-year spend plan for those funds. Collections will be made as part of the rates according to end-of-life predictions and industry knowledge of refresh cycles.
- 6. Identify and review all current Memoranda of Understanding (MOUs) and one-off agreements and address ones that are outside the proposed rate structure by July 2015. OITS has agreed to provide a detailed impact analysis prior to executing any cancellations or modifications.

Phases II and III

The major goal for Phase II, which will be aligned with the IT Restructuring effort, is to separate core IT costs and recovery methods and align with future expansion or extension of the BRITE capability. There is a clear need for a core IT capability in the state that provides such things as a network backbone, computers, productivity applications, and authentication (actual list will be determined during Phase II). OITS will look at how the state charges for and pays for this core capability.

The goal of Phase III, which will be aligned with the state's future Enterprise Resource Planning (ERP) implementation, is a fully mature, integrated capability that reflects service offerings and bundles. A major part of this initiative is for OITS to deliver customer-facing services instead of delivering standalone service technologies. An example would be for OITS to offer a Consumer Platform service that provides computing devices, network capability, mobile support, operating system, common productivity tools, etc., and includes storage, backup, application hosting, and enterprise exchange. The current accounting structure makes combining services in this way extremely difficult, which is why this effort is best aligned with the ERP initiative.



Appendix A – General and Administrative Costs

Industry Benchmark Analysis by Grant Thornton LLP, August 2014

In researching industry data for overhead rates, Grant Thornton immediately found a need to differentiate between "overhead" and "general and administrative (G&A)" costs. This is the terminology used in business. The simplest explanation is that G&A costs refer to those indirect costs that apply to an entire operation (examples would be executive management, accounting, legal, HR, etc.), while overhead costs are indirect costs that apply only to a portion of the operations. Examples of overhead would be manufacturing overhead, material handling overhead, etc. For SSD, an example of "G&A" would likely be all the cost centers in fund code 7100, ITS Administration, and an example of "overhead" would be cost center 7228-35000 (ES Administration) which applies only to fund 7228 (IT Business Applications).

Even with this clarification, there is not much information available on rates that various businesses or even industries use, probably because executives might not want to share this information with their competition. In various examples on websites, G&A rates ranged from 5% to 20%.

Grant Thornton U.S. conducts many surveys, including an annual survey of companies involved in government contracting. This survey has more information on specific G&A rates than most websites. The data presented by Grant Thornton in its 2012 report is based on companies allocating their G&A pools two different ways: one based on rates applied to total cost input (TCI) and another based on value-added cost input (VACI). TCI is total costs excluding G&A expenses, while VACI is total costs excluding G&A expenses, materials, and subcontracts. It appears that SSD would be most comparable to TCI rates. Here is the survey data for five years:

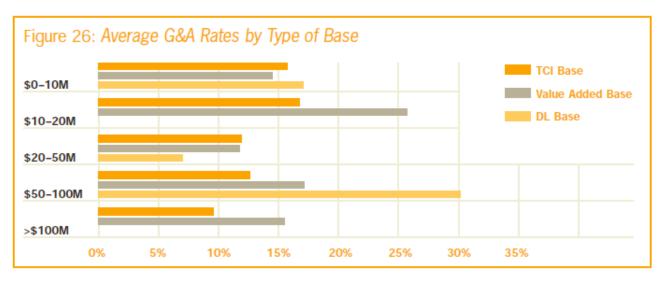
Average G&A rates by allocation base for government contractors

	Year of Survey							
Allocation Base	2012	2011	2010	2009	2008			
TCI	12.0%	13.5%	13.0%	13.0%	11.0%			
VACI	15.0%	15.4%	15.5%	15.0%	15.0%			

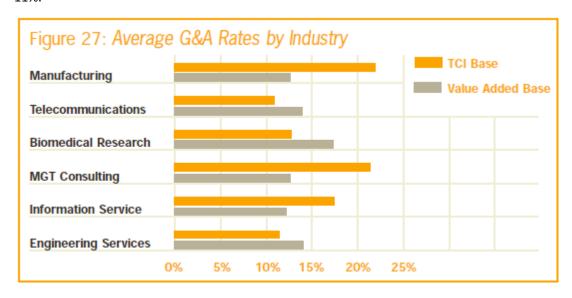
Grant Thornton's survey notes that government contractors are usually trying to maintain competitive G&A rates because the government clearly wants companies to minimize costs in G&A pools. As a result, the rates reported in the survey might be somewhat lower than rates for other companies which are not involved in government contracting.

In an earlier survey, Grant Thornton provided more detailed information about G&A rates that is relevant to SSD. In Figure 26 from that survey, we see that G&A rates varied by the size of the companies, ranging from a high of 17% for companies of \$10 - \$20 million (TCI base) to a low of 9% for companies larger than \$100 million.





Also of interest to SSD is a comparison of G&A rates by industry, Figure 27. Here we see that the Information Service industry had a G&A rate of 17-18% (TCI base), third highest of the six industries listed. Telecom was the lowest at 11%.



While none of this information gives us a single comprehensive view of "standard" G&A rates to which SSD could compare itself, it seems reasonable to state that the benchmark range would be 10-20%.

