ETC Rate Model
In 2013/15, ETS adopted a new rate development process that enables the successive refinement of budget planning and rate development. Our objectives included: Rates that represent the true cost of delivering a service, business within a business, transparent rates scrutinized internally and externally, and the successive refinement of budget planning and rate development.

Table of Contents
I. Service rates
II. Hourly rates
III. Passthrough
IV. Assessments
V. Assumptions
VI. Service Line Descriptions

I. SERVICE RATES

What goes into a service rate?
• Administrative Overhead
• Internal Indirect Costs
• External Indirect/Direct Costs
• Hours per unit if applicable

Administrative Overhead

1. ETS Administrative Overhead costs are distributed to the service areas based on:
   a) headcount
   b) expense in proportion to the pre-overhead costs of deliverables, excluding passthroughs, of a budget unit
   c) Other custom spreads based on expense as defined above within a subset of the budget unit or by product sets. Costs within the various service areas should not be spread through administrative overhead

2. DAS Operating transfers are charged to ETS. Such transfers are allocated to ETS service areas based on an analysis of percent of services consumed by each area.

3. ETS floor space and building rent are applied at different rates based on whether the area is designated for computing or non-computing. The computing area consists of the raised floor (15,691 sq. ft.) and infrastructure areas (10,635 sq. ft.). These areas are allocated to the service areas and a rate applied. The remaining non-computing floor space (office areas, hallways, conference rooms, etc.) (19,475 sq. ft.) is allocated based on occupancy.

---

1 The raised floor space of 15,691 includes the occupied areas by domain infrastructure and common areas within the raised floor area, such as aisles.
The State Data Center is a self support building and all facilities-related expenses (repairs, maintenance, yard service, etc.) are paid solely by ETS. Rent calculations for the raised floor and infrastructure area are based on the following square footage occupied by specific domains:

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Occupied Raised Floor and Warehouse Space Footprint (in square feet)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Systems</td>
<td>3,420</td>
<td>31.2%</td>
</tr>
<tr>
<td>Distributed Systems</td>
<td>3,905</td>
<td>35.6%</td>
</tr>
<tr>
<td>Mainframe System</td>
<td>120</td>
<td>1.1%</td>
</tr>
<tr>
<td>Midrange Systems</td>
<td>348</td>
<td>3.2%</td>
</tr>
<tr>
<td>Voice</td>
<td>1,296</td>
<td>11.8%</td>
</tr>
<tr>
<td>Network</td>
<td>1,797</td>
<td>16.4%</td>
</tr>
<tr>
<td>Security</td>
<td>70</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,956</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4. In general, administrative support provided by executive management, Plans and Controls, Service Solutions, Engineering, Production Services and Security is part of the ETS overhead. These services includes, but is not limited to:

- Development and monitoring of ETS strategy
- Customer relationship management
- Staff Supervision
- Administrative duties including front desk, iLearn, ETS calendar, and personnel data management.
- Accounting oversight to ensure appropriate tracking of expenses
- Internal financial reporting, including budget projections and coordination
- Business planning
- Supplier Management
- Contract Management
- Procurement Development and Coordination
- Contract negotiation and facilitation
- Receivable and payable services, including network and voice billing
- ETS Project management
- Strategic and Business Improvement Coordination
- Business Process Architecture & Engineering
ENTERPRISE TECHNOLOGY SERVICES
FY 2013-2015 RATE MODEL METHODOLOGY

- Account Management, including relationship management and self service web marketing
- Security Standards
- Policy Coordination and Facilitation
- Data center floor space for ETS equipment, network and security connections, and warehousing. Co-location is not part of overhead
- Asset management
- Capacity management
- Change management
- Configuration management
- Incident and Problem management
- Service Continuity Management
- Create/Design a NEW service offering
- Consulting – Subject Matter Expert
- Incident Response – Service Disruption
- Incident Response – Degraded Service
- Termination of Service
- Efficiency Efforts such as consolidation

Note: Service Disruptions (non-billable):

If customer submits a ticket as a service disruption and it is later discovered that it is not a service disruption then the time spent diagnosing the problem is billable.

**Internal Indirect Costs**

Internal costs originating in other groups within the organization that are not directly billable to customers’ contracts. Includes support services and provider’s use of its own products. An example of this would be computing selling Security or Storage an operating instance on a server in order to support their infrastructure and the tools they use to provide their services. The cost of the computing service then flows through the rates charged by Storage and Security.

**External Indirect Costs**

A cost that is not directly associated with a specific product or service and generally benefits the provider group as a whole and is amortized across the whole portfolio. Includes, compensation, facilities, utilities, telecom, supplies, training, travel, licensing, maintenance, and depreciation and interest on capital owned assets.

**External Direct Costs**

A cost which is directly associated with a specific product or service, such that the money will not be spent if the deliverable is not approved.

**Hours per Unit**
Billable hours can be built into service rates by the following methods:

- Billable Hours per Unit or
- Total Billable hours for all forecasted units in pessimistic or
- Percent of total billable hours for max headcount in pessimistic

II. HOURLY RATES

ETS adopted a modified version of hourly rates during FY 2011-13. With the implementation of the Fullcost tool, the use of hourly rates to appropriately allocate costs associated with service delivery was expanded, both internally and externally for FY 2013-15. All hourly rates are billed at either base/generalist $95, specialist $175, or expert rates $200. These rates were derived by estimating the personal service and overhead costs needed to deliver services in Production Control, Hosting, and Engineering/Solutions. Personal service costs vary within each category so blended hourly rates were adopted. High level service categories for external hourly rates include:

- Set-up
- Modification of an existing service
- Production services
- User Support
- Project Management
- Specialized Consulting
- Custom Application Development

Set-up
(Billed as Specialist)

Initial purchase or new occurrence of an existing service offering such as deployment of a router to a remote site, standard configuration of an LPAR or a new server, and VPN configuration. This type of work includes:

- Requirements gathering
- Design
- Configuration
- Coordination
- Deployment
- Testing/Verification
- Establish monitoring systems with procedures to meet customer requirements

Modification of Services
(Billed as Specialist)

Modifies or enhances an existing service from the standard service offering. This type of work includes:

- Add storage
- Increase bandwidth
• Add processor or memory
• Modify firewall rules
• Customer application integration

Production Services
(Billed as Base/Generalist*)

Production Services provide a variety of customer support services including, batch scheduling, operator support services and job processing. This type of work includes:
• Batch schedule creation and modification
• Customer requested server reboots
• Tape mounts, printer adds, telnet updates, data uploads/downloads
• Submit and monitor batch jobs on demand and execute and monitor scheduled jobs, includes taking client defined actions upon failure/completion
• Software Librarian management

*The hours billed will be a fixed amount per customer based on forecasted usage, subject to review in six months.

Mainframe User Support
(Generally billed as Specialist)

Mainframe provides support of user application interfaces to other subsystems within and outside of the mainframe. This type of work includes:
• DB2 to CICS applications/batch applications/Websphere applications/distributed applications (such as Cold Fusion and others)
• CICS to: Batch applications/DB2 services/Web Interface/applications in other CICS regions/applications on other systems
• Batch processing/Scheduling/diagnostics/connecting to other systems (FTP for example)
  o Terminal/Printer connections to applications within the mainframe
  o Disk and Tape resource usage required by applications

Project Management
(Billed as Expert Time)

Project management at ETS in modeled after the Project Management Body of Knowledge (PMBOK) for consistency with other management standards and includes the following process groups:

1. Initiating
2. Planning
3. Executing
4. Monitoring and Controlling
5. Closing

Specialized Consulting  
(Billed as Expert Time)

Engineering and solutions architecture provide customized solutions to meet customer’s requirements and to document customer supplied questions. Some examples of this type of work include:
- Firewall configuration advice or design work
- Capacity studies
- Performance assessments such as Voice and existing applications
- White Paper
- Disaster Recovery Plans
- Security analysis study
- Audit response
- One or more high level designs in response to customer requirements with everything the customer needs to make a decision
- Hardware and/or software installed in the intended environment including documentation and brokerage of lifecycle services. Scope includes new solutions, parallel environments (development, test, etc.), enhancements, and perfective/adaptive maintenance.
- Solution such as providing a documented solution for enhanced FTI data storage.

Custom Application Development  
(Billed as Base/Generalist)

Application Delivery provides application development or customization of purchased applications. The hourly rate applies for customers excluding DAS unless requests exceed what was built in the assessment. Some examples of would include:
- Software development
- User documentation to detail how end users would navigate the system
- Data cleanup of existing data to be migrated to application
- Migration of existing data into application
- Custom report writing for retrieving specific or statistical information from the data stored with the application
- Disaster recovery or continuation of application performance in the event of a natural or human-induced disaster
- Performance tuning of the application
III. PASSTHROUGH

Passthrough is a charge that is incurred by ETS then passed on to the customer on a dollar – dollar basis. Passthrough costs are not included in service rates. See service area descriptions for details on passthrough items.

A 5% administrative fee is assessed for all passthrough.

IV. ASSESSMENTS

During 2011/13, ETS inherited several new service lines due to the DAS re-organization. These services will continue to be based on an assessment model for 2013/15. These services include:

Application Service Delivery: Application Delivery provides application development or customization of purchased applications to enable agencies to meet short-term needs and support future growth. This service accelerates the delivery of high quality business applications on standard technology platforms with fewer defects, less rework and lower costs over the lifetime of the application.

Technology Support Center: TSC offers resources to securely and reliably connect people to information. These include desktop and mobile computing, telephones, SmartPhones, and other workplace technologies that support your business. The combination of flexible technology choices and standard deployments enables us to meet the varying needs of government customers.

Oregon E-Government Program: The E-Government Program supports the business of Oregon government on the Internet. Its service portfolio includes, but is not limited to: Oregon.gov support, web hosting, advanced Web publishing tools, secure e-commerce payment processor, an intranet portal, multi-agency web portals, enterprise collaboration platform, and an interactive open data portal.

The existing services identified above are provided at no cost to agencies. These services are funded by the self-funding contract. New services are funded in one of three ways:

- Developed using portal funds at no cost to the agency or public.
- Developed using portal funds at no cost to the agency but does include a small fee per transaction. Typically three-fourths of these applications are Government to Business applications.
- Developed using agency funds. An agency may choose to purchase the development of a new service.

Assessment costs for the enterprise-scale E-Government contract are limited to positions which provide oversight to insure customer responsiveness, contract performance oversight, support to the legislative mandated E-Government Portal Advisory Board and compliance with financial and internet security requirements.
V. **ASSUMPTIONS**

- **Personal Services:** ETS uses DAS guidelines for forecasting personnel costs in the FY 2013-15 biennium. The forecast assumes: (a) no furloughs will be scheduled for FY 2013-15; (b) the freeze on cost of living and Step salary increases is removed; and (c) PERS charges will be rising.

- **Cost Projections:** 5% annual increase for maintenance renewals

- **Staffing Plan:** Unless other information was available, the following assumptions for staff time were used:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work hours per biennium</td>
<td>4160 (40 hr x 52 wk x 2)</td>
</tr>
<tr>
<td>Less Governor’s Day</td>
<td>-16 (1 day per year)</td>
</tr>
<tr>
<td>Less Personal Days</td>
<td>-48 (3 days per year)</td>
</tr>
<tr>
<td>Less Holidays</td>
<td>-144 (9 days per year)</td>
</tr>
<tr>
<td>Less Vacation</td>
<td>-240 (10 hrs p/mo after 5 yrs)</td>
</tr>
<tr>
<td>Less Training Time</td>
<td>-40 (minimum per DAS policy)</td>
</tr>
<tr>
<td>Biennial hours at work</td>
<td>3672</td>
</tr>
<tr>
<td>Estimated # of days`</td>
<td>459 (3672 hrs/8 hrs/day)</td>
</tr>
<tr>
<td>Less paid break time</td>
<td>229.5 (.5 hrs/day x 459 days)</td>
</tr>
<tr>
<td>Biennial hours available for work</td>
<td>3442.5</td>
</tr>
</tbody>
</table>

On average, a DAS employee used 81 hours sick leave in 2010 or 162 hrs for biennium.

VI. **SERVICE LINE DESCRIPTIONS**

### MAINFRAME COMPUTING

**SERVICE AREA DESCRIPTION:**
The Mainframe system collects computer processing data every time a user logs into the computer, executes a job, runs reports, or does queries with online files. Usage information is assigned to an agency based on where the usage information resides, application name, or user name. The unit of measure for mainframe computing is the Computer Processing Unit (CPU) minute, usage data is reported daily. In addition to traditional mainframe computing there is processing in the zVM environment. Mainframe computing provides for the following catalog items:

- External and internal sales
  - Batch Processing – CPU minute
  - CICS Processing – CPU minute
  - DB2 Processing – CPU minute
  - TSO Processing – CPU minute
  - Disaster Recovery test environment – Per day
  - zVM Guest Instance – Per month (This is not a current offering, only supports OLIS and will not be on the rate sheet.)
  - zLinux is not a strategic platform for FY 13-15. Existing customers will still have the ability to use the platform. zLinux will be the same rate as Distributed Systems’
ENTERPRISE TECHNOLOGY SERVICES
FY 2013-2015 RATE MODEL METHODOLOGY

Dedicated Operating System, Linux rate. zLinux runs in the mainframe environment, but the billing unit calculations are separate from the mainframe systems environment.

Internal only sales
- Mainframe Hardware – cost pooled across all externally sold units

METHODOLOGY:
1. Rates are determined by dividing the estimated program costs by the forecasted unit counts to be sold to determine a cost per CPU minute.

2. DB2 for Mainframe rates were created by dividing the total cost of DB2 divided by average usage by customer by month. The average usage was generated by taking a years' worth of usage data and dividing by 12 by customer.

3. In FY 11-13 there was a single CPU/minute rate for all processing on the mainframe for FY 13-15 there are multiple categories of CPU minutes that represent different workloads on the mainframe. The multiple categories were created to allow for more accurate spreading of costs and to ensure that customers using specific features were bearing those costs.

4. In FY 13-15 there are no anticipated hardware upgrades.

5. Mainframe software that was part of the initial migration to ETS is considered part of the Mainframe rates and not passed through. Maintenance, support or upgrade costs for these software licenses are considered part of the Mainframe rates. In cases where agency-purchased software can be identified to certain agencies or if 2 or less customers are using a specific software, those maintenance, support or upgrade costs may be passed through to agencies using that software, those costs will be excluded from rates.

6. New software licenses purchased on behalf of one or more specific user agencies are considered pass through expenses to the customer agency(s). If all Mainframe user agencies can access the new software licenses, then the purchase becomes part of the Mainframe rates.

7. Mainframe catalog items include staffing, overhead, network costs, and storage costs.

8. Cost pools were used to allocate specific costs to appropriate services.

DISTRIBUTED SERVICES SYSTEMS

SERVICE AREA DESCRIPTION:
Distributed Services Systems represents the Windows/Linux based computer processing servers. The systems can be standalone or in a shared environment. Key strategies in this environment are:
a. Virtualization wherever possible because of cost efficiencies, lower power and footprint requirements, higher availability and improved disaster recovery restoration
b. Ensure server size is appropriate for requirements and usage
c. Centralization and elimination of remote servers where possible
d. Reduce power utilization
e. Drive application compatibility with ETS standards

To achieve this objective, the distributed server rates will be distinguished by the local and remote environments and by physical and virtual servers. The definition of remote is any server under ETS’s responsibility that is physically not in ETS managed data center floor space.

**Service**

Virtual Operating System, Windows: A virtual Windows OS Instance on a virtual server under ETS’s responsibility that is in ETS managed data center floor space.

Dedicated Operating System, Windows: A Windows OS Instance on a physical server under ETS’s responsibility that is in ETS managed data center floor space.

Virtual Operating System, Linux: A Linux OS Instance on a virtual server under ETS’s responsibility that is in ETS managed data center floor space.

Dedicated Operating System, Linux: A Linux OS Instance on a physical server under ETS’s responsibility that is in ETS managed data center floor space.

Remote Host, physical: Windows Host OS Instance on a physical server under ETS’s responsibility that is NOT in ETS managed data center floor space.

Remote Windows, Virtual: A Windows OS Instance on a virtual server under ETS’s responsibility that is NOT in ETS managed data center floor space.

Remote Linux, Virtual: A Linux OS Instance on a virtual server under ETS’s responsibility that is NOT in ETS managed data center floor space.

System CPU Resource Allocation: The number of CPU server cores associated with a server instance in increments of 1 cpu core.

System Memory Resource Allocation: The amount of memory associated with a server instance in increments of 1 GB RAM.

DBMS, Oracle Service: Use of an Oracle Database environment in increments of 1 CPU includes computer resources.

DBMS, SQL Service: Use of an SQL Database environment in increments of 1 CPU, includes computer resources.
Server Load Balancing Service:  Additional support services required to create and maintain a load balanced configuration on multiple servers. Charged per server.

Server Clustering Services:  Additional support services required to create and maintain a server cluster.  Charged per server.

Web hosting services standard: Use of a Standard Web hosting environment.

NAS Storage Unit:  Use of a NAS file instance. The rate is under reevaluation due to changes in infrastructure costs.

Methodology:

Usage forecasts were based on historical information and growth percentages.  Costs were cost pooled to reflect the cost to support each service.  These costs include Personal Service, hardware/software, and maintenance.

CO-LOCATION

Data Center Floor Space / Square Foot, Data Center
This service provides datacenter floor space for location of computing equipment.  The standard unit for this service is square foot in a conventional data center. The service includes HVAC, fire detection and prevention, uninterruptable power supplies, emergency generators, secure facilities, and 24X7 remote surveillance and environmental monitoring.  This service includes the immediate escalation of incidents related to the physical asset in accordance with procedures provided by the Customer. It does not provide monitoring of the operation of the software running on the co-located equipment.

Customer must purchase network port(s) as needed.

Appliance Support Services / Appliance Service Unit  Ongoing oversight of the operation of non-standard assets owned by others including coordination of subcontract for services such as specialized space, network connectivity, operator services, and Technologist services.  Appliance service unit = 2 rack units.

MIDRANGE SYSTEMS

SERVICE AREA DESCRIPTION:
“Midrange Systems” are systems that run in the UNIX (“AIX”) or IBM System (“iSeries”) environment.  Rates in Midrange Systems include those for hosted computing as well as for specific services including managed database environments, web application servers, and SFTP services.  Services include:
System Utilization, iSeries
System Utilization, UNIX
Application Server Services, Oracle on UNIX
Application Server Service, Web Sphere or Cold Fusion on UNIX
DBMS Service, DB2 on UNIX
DBMS Service, Oracle on UNIX
DBMS Service, Sybase on UNIX
Virtual Operating System Services, iSeries
Virtual Operating System Services, UNIX
Secure File Transfer Service, UNIX
Web Hosting Service, UNIX

METHODOLOGIES:

Rates for UNIX and iSeries hosted computing are charged as follows:

“UNIX/iSeries Instance per Month” is the rate per operating system instance

“UNIX/iSeries Resource per Month” is the rate for CPU or RAM. One resource unit is 0.1 CPU or 4 GB of RAM. These can be charged in fractional units. For instance: 2 GB of RAM is ½ unit.

Methodologies for services hosted on Midrange Systems are as follows:

SFTP (secure file transfer) is charged per GB of data stored on the SFTP server per month.

Web hosting Service is charged per MB transferred in a month.

WebSphere Application Service is charged per MB transferred in a month.

Oracle Application Service, Oracle DBMS, Sybase DBMS, and DB2 DBMS are charged as follows:

1. The cost for the computing environment that supports the service is calculated using the methodology for UNIX Instance and UNIX Resource.
2. A number of units of the service equivalent to the UNIX Resources are assigned to the service.
3. Customers are charged for the portion of the environment that they used in a month based on measured utilization.

Usage projections were derived from measured utilization of the services with the following growth projections based on past growth:

iSeries: 10% CPU, 20% RAM growth over the biennium with the exception of ODVA which has not grown in utilization.
UNIX: projected 10% growth over the biennium (approximately 5%/year) based on past performance.

Future utilization numbers were estimated using actual utilization as measured in April 2011. Growth projections were derived from the past performance using utilization number from the opening of the State Data Center.

---

**DISASTER RECOVERY**

**SERVICE AREA DESCRIPTION AND METHODOLOGY:**
Enterprise Technology Services uses a statewide price agreement for disaster recovery services. ETS worked with agencies to identify what services the agency requires. Coverage will be included in administrative overhead and will include the core charges, network connectivity charge and one (1) FTE. Agency specific charges will be charged back to the agency on a monthly pass through basis.

---

**STORAGE SYSTEMS**

**SERVICE AREA DESCRIPTION:**
Data storage is located in two environments: disk storage and disk backup. Disk storage can be local attached storage (within the server) or it can be attached to the Storage Area Network (SAN). Disk backup is an on-site and off-site copy.

When storage is allocated for a device shared by multiple customers, the storage charges will be allocated to those customers on the percent utilized of the total allocated storage.

Distributed Systems customers will be charged for allocated usage attached to the SAN when the usage is known. When usage is not known, it will be assumed 80GB to be charged at the Local Attached Windows/Linux Rate.

Midrange Systems customers will be charged for allocated usage at either a Tier 1 or Tier 2 rate.

Mainframe Systems customers will be charged for allocated usage at the Tier 1 Mainframe rate.

Characteristics of Disk tiered storage are:

- **Disk, Tier 1, Mainframe:** Highest performing disk storage, fibre connected, fibre channel disk. Disk storage is internal to the Hitachi VSP. All components are fully redundant. This is dedicated SAN disk storage formatted specifically for the Mainframe.
- **Disk, Tier 1, UNIX:** Highest performing disk storage, fibre connected, fibre channel disk. Disk storage is internal to the Hitachi VSP. All components are fully redundant. It is

---

H:\WEBSITE 2013 AUGUST ON updates\ETS_2013-15_Rate_Methodology_Final.docx
suitable for high transaction databases that run in the UNIX environment. This is dedicated SAN disk storage specifically for the UNIX.

**Disk, Tier1, Windows/Linux**: Highest performing disk storage, fibre connected, fibre channel disk. Disk storage is internal to the Hitachi VSP. All components are fully redundant. It is suitable for high transaction databases and or applications that run in the X86 environment.

**Disk, Tier2, UNIX**: High performing storage, fibre connected, fibre channel disk. Storage is external behind the Hitachi VSP with redundant major components. It is suitable for all but the highest performance requirements and is a cost-effective solution for average volume and reporting application requirements that run in the UNIX environment. This is dedicated SAN disk storage specifically for the UNIX.

**Disk, Tier2, Windows/Linux**: High performing storage, fibre connected, fibre channel disk. Storage is external behind the Hitachi VSP with redundant major components. It is suitable for all but the highest performance requirements and is a cost-effective solution for average volume and reporting application requirements that run in the Windows Server environment.

**Disk, Tier 3, Windows/Linux**: Standard performing storage, fibre connected, SATA disk. Storage is external behind the Hitachi VSP with redundant major components. It is suitable for reporting and historical data that run in the Windows environment.

**Local Attached Windows/Linux**: Local attached (non SAN) disk storage for the Windows/Linux server and iSeries environments.

**Backup, Tier 4**: On- and off-site disk backup. Daily back-ups are stored on disk for Distributed, and Unix environments. Back-ups are retained on-site for 30 to 60 days while a second copy of the backup is stored off site for 30 days. Agencies can request different retention periods if required.

Backup, I Series: The i-series environment backs up to tape with a local copy stored onsite and a second set sent to an offsite secure storage location.

**Tape, Mainframe Service**: The Mainframe environment utilizes a VTS (Virtual Tape System) and data is backed up on tape and sent to an offsite secure storage location on a daily basis.

Disaster Recovery Disk Replication – Rate and service definition under re-evaluation. TBD

**METHODOLOGY:**

1. Rates are determined by dividing the estimated program costs by the estimated units. Expenses were allocated across the tiers based on the actual cost to provide each storage service. Estimated units were based on historical data and the percent of growth over time.

2. Encryption Rate for SAN disk and backup cannot be established at this time due to a limitation of the existing SAN Storage hardware, a need to define agency storage encryption requirements, and inadequate resources to fund tape encryption, purchase encryption...
licenses, and upgrade the USP. When these limitations are resolved, an encryption rate for SAN disk and backup may be established.

Four years of monthly storage and billing reports, by agency, were used to trend and forecast number of units.
PRODUCTION SERVICES

SERVICE AREA DESCRIPTION:

Production Services maintains a 24x7x365 physical presence at the State Data Center. Services provided include:

- Batch Scheduling - Schedule creation and modification for batch job processing.
- Process On Demand Jobs - Submit and monitor batch jobs on demand; take client defined action upon job failure/completion.
- Process Scheduled Jobs - Execute and monitor scheduled jobs; take client defined action upon job failure/completion.
- Software Librarian - Perform Agency compiles and promote Agency application software into production.
- Operator Support Services - Complete tape mounts, printer adds, telnet updates, data uploads/downloads and preparation for delivery (CD). Release held output to print. Create View Direct report definitions and run sweep jobs on request. Take and process calls for Agency service desks during the off hours. Issue raised floor access badges.
- Monitoring - Includes monitoring system messages for warnings/alerts and taking client defined action for items such as: the ATL, building alarms, Windows/Linux Computer Services, Network, Security, Storage, Mainframe, Midrange, SDC building security, and special applications.

METHODOLOGY:

Allocation of program costs is based on personnel required to deliver the service.

In the FY13-15 Biennium, rates will be based on a monthly usage assessment. Analysis was completed to determine the number of staff hours spent on the above services by agency. The hours were tallied by agency for the biennium (24 months) and then divided by 24. The unit is referred to as a coverage unit in the rate sheet. The result is the monthly assessment which contains the personnel costs of the supporting staff including staff salaries, benefits and overhead. The number of hourly units will be locked per month and we will review number of units in six months.

ENTERPRISE SERVICES

SERVICE AREA DESCRIPTION: Service offerings that provide statewide solutions.

- Enterprise email: Enterprise email services enable the sending, receiving and reviewing of emails from Outlook clients, web browsers or mobile devices. It incorporates calendaring and instant messaging within the email system and removes mailbox limitations. The service is based on number of mailbox accounts. Each account includes:
ENTERPRISE TECHNOLOGY SERVICES
FY 2013-2015 RATE MODEL METHODOLOGY

- A state.or.us email address for each mailbox account
- Archiving, search and discovery capabilities based on a customer determined retention and customizable retention period
- Effectively unlimited email storage to prevent denial of service attacks and to provide easier mailbox management for users
- Ability to access emails through Outlook Client, web browser and/or mobile devices depending on the needs of the customer
- Calendaring with the ability to share calendaring information with other enterprise email system customers
- Instant messaging (IM) tool with messages stored in the email system. At the discretion of the customer, IM can be used across customer agencies using the enterprise email system

**Computer lab services:** provide a fully equipped site at DAS East (1225 Ferry St., Salem) for customers to use to meet short term desktop computing needs such as training. The lab rental includes Windows-based computers and presentation tools. The base service includes:

- 17 computers with Windows 7 including the most current service packs and updates, MS Office 2007, Acrobat Reader, Internet Explorer, Hyperion System 11, Passport Mainframe
- A secured network with access to the internet.
- Projector, Smartboard, podium, flipcharts, laser jet printer
- Speaker phone
- Basic office supplies.

**NETWORK SERVICES**

**SERVICE AREA DESCRIPTION:**
Management of the State’s network backbone and contracts for telecommunications.

Network services have several separate charges:

- **State Network Access Charge.** This rate covers the basic network access to the internet including management, monitoring, remote routers, switches and equipment upgrades. Charges are based on the bandwidth of the services provided to the customer. For 2013/15 there are four rates grouped by the bandwidth size:
  - Less than 1 Mb -
  - 1 – 9 megabits
  - 10 – 99 megabits
  - 100 – 999 megabits
  - 1 Gb and up
ENTERPRISE TECHNOLOGY SERVICES  
FY 2013-2015 RATE MODEL METHODOLOGY

- Consumer Grade High Speed Wireless – Use of wireless internet by means of asymmetrical circuits. Rate based on market comparison for 2013/15. Monthly fee is billed per wireless building connection regardless of redundant links.

- **Local Area Network (LAN) & Wireless (WLAN) Services** –(also referred to as wireless access points)
  - Charges are based on the number of switches (per 12 port) or wireless access points (per 8 port) serving the agency. LAN services include the purchase, administration and management of the Local Area network switching. This provides network connectivity between the point of demarcation at the agency site to desktops, printers and other computing devices. This service does not include cabling.
  - Network Load Balancing - Load Balancing optimizes application performance and availability. Using health and performance checks, a Load Balancer distributes traffic among servers for efficient use of server resources and provides server failover for high-availability.

- **Wireless PTP Service**: Sites in which there is a core network connection to a specific building and satellite (wireless) connections to other buildings within the vicinity. State Data Center will establish configuration standards for the wireless connections and the agencies will be responsible for the wireless infrastructure, installation and maintenance. The core bandwidth connection charges will be apportioned based on the bandwidth required by the agencies in the vicinity connected to the Wireless WAN service.

- **Network Pass-Through**. Network connectivity charges, includes transport costs, taxes, interlata charges, installation and domain registrations. These are charged by the telecommunications vendors and passed on to the customer. A five (5) percent charge is added on to cover the managing network telecommunications service contracts, attorney general fees associated with these contracts, and personal services to provision the services.

**VOICE SERVICES**

**SERVICE AREA DESCRIPTION:**

While customized solutions may be designed to meet customer needs, the base service includes:

1. Telephone equipment, dial tone, and installation
2. Secure phone system
3. Phone feature training

Optional choices for this service include:

1. Custom scripts for call routing.
2. Conferencing
3. Toll Free service
4. Remote call forwarding
5. Long distance
6. Calling cards
7. International calling
8. Phone headsets
9. Call center equipment and services
10. Onsite custom usage reporting system
11. Directory listings
12. Call trace coordination
13. Call rerouting

Service rates billed by usage include:

- **Voice Flat Rate (handsets):** This rate is charged per telephone set with one line. A telephone set with multiple lines would be counted as multiple phone sets.
- **ACD Agent** – Automated Call Distribution is billed per agent per month
- **FaxServer Services** – Billed per Enterprise FAX Server
- **Voice Pass-Through Charges:** This rate is passed through dollar-for-dollar by the vendor on services ordered by the agency. Expenses include long distance, calling cards, TSOs, 800 numbers, repair tickets, voice trunking and directory listings.

**METHODOLOGY:**
Rates are determined by dividing the estimate program costs by the estimated units. Expenses were allocated across the tiers based on the actual cost to provide the service. Estimated units were based on historical data and the percent of growth over time.

**SECURITY**

**SERVICE AREA DESCRIPTION:**
Security Services provides network security for the state network, including operating, updating, maintaining the equipment, and making configuration changes at the request of our customers.

Security services have several separate charges:

- **Network Encryption Service (Formerly Site-to-Site Virtual Private Network (VPN)/Remote Firewall Services)** can be requested by customers who desire an additional layer of security and/or encryption between a remote office and other locations. This service is charged on a per site basis. Expenses associated with this service include the VPN equipment, software, maintenance, network management and equipment upgrades.
  - Customers who manage their own firewall and network often can provide End Point Encryption service in their environment. In this case we would only have to provide half of the encryption service, the portion that resides at the SDC, to
create an encrypted network tunnel. Under these circumstances we would charge half the posted rate.

- **End User VPN Service:** (Client Based VPN Charges) are when customers require VPN connections to ETS VPN concentrator in which ETS does not manage the hardware at the remote site.

- **Mail Hub Service** includes email address book synch, routing of email between state email systems and the internet. This also includes high-level spam/virus protection.

Two years of usage reports by agency were used to trend and forecast number of units sold. Mail Hub Services uses the number of e-mail user accounts per customer.

### REQUEST FULFILLMENT CRITERIA

Enterprise Technology Services (ETS) request fulfillment process starts when a customer identifies a need and notifies ETS that ETS services are necessary. ETS works with the customer to determine configuration requirements; then ETS architects a solution and builds a solution.

As many of these solutions include several ETS services, billing may begin at different times for the services that are required for a specific solution. Billing starts at the stage each resource or service can or is used by the customer. There are three main types of service:

- **Allocation** – Billing begins at the point resources are allocated to and available for use by the customer. This includes SAN storage. At the beginning of the delivery phase, the “start billing date” will be populated to commence in two weeks. It is conceivable that services may overlap while the customer is testing the new system. During this period, the customer will be charged for both services.

- **Usage** – Billing occurs when the customer uses the service. This includes mainframe, tape storage, and long distance and 800 voice services.

- **Asset Based** – Billing begins with asset-based services when the asset(s) configuration is complete and the asset(s) or service the asset(s) provide are available for customer use. This includes telephone and network services and distributed and Midrange servers.

As ETS provides the infrastructure on which customers run applications, application development projects are frequently in the development phase when ETS begins billing. In the least complex of circumstances it can be hours or a few days from the time ETS hands over a service to a customer to the point at which a customer can complete any work they need to perform and complete the project with the application moving from development to production status. In the most complex of circumstances it can take a customer months or even years from the point at which ETS hands over a service until an application moves from development to production status.

Once a service is available to a customer, further configuration changes may be required. As a service provider, ETS classifies these changes as operational in nature when compared with the customer perspective they may be considered development work.
AGENCY REQUESTS AND GROWTH

All ETS services include standard on-going maintenance appropriate for that service including break-fix and scheduled equipment lifecycle replacement based on available funding.

Service requests, upgrades and agency requests for equipment lifecycle replacement outside of funded schedules for labor, equipment and software are not included in ETS LAB limitation for FY 2013-15. Any of these requests made by the agency may require further documentation or presentation in support of ETS limitation increases by the agency to an E-Board or Ways and Means joint committee.

Equipment costs and software normally included in rates for new services offerings and growth will be included in rates and the costs spreads across all users of the service for computing and storage services. Agency specific software will be charged to the agency on a pass-through basis. In the event actual requests exceed projections for a specific service area, ETS costs incurred may be dealt with on a case by case basis in a different manner including chargeback on a pass-through basis or deferral until a future budget period.

New agency sites or moves of existing sites which require new network or voice equipment are the responsibility of the agency and all associated costs will be billed on a pass-through basis back to the agency.

Out of schedule equipment lifecycle replacement requests made by the agency will be deferred until the funded schedule or charged back to the agency on a pass-through basis.

Labor for new requests, upgrades and other agency requests outside of standard maintenance are billable to the agency at the appropriate hourly rate.

VENDOR MANAGED SERVICES

ETS may utilize vendor managed services in order to fulfill service requests beyond our current service offerings (non-standard services) or as a resource management option to fill standard service requests for hosting, storage, network and security. The rates charged to our customers will depend on whether the service requested is an ETS standard service offering or a non-standard service offering:

- **Standard service offerings will be charged to the customer at the current ETS rate incorporating all components of the service, including computing, storage, network, security, and billable hours. Billable hours will be based on the Service Solutions chart that estimate the # of hours required to build out a simple, moderate, or complex environment.**
- **Non-standard service offerings for services that the ETS does not currently offer a solution, will be billed on a passthrough basis.**
- **Exceptions to a. and b. above require review by the Architecture Review Board and Plans and Controls Finance for approval.**