

**State of Nevada
Dept. of Information Technology**

Information Technology Services

***Cost Allocation
&
Rate Development***

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Why DoIT Bills for Services ?

- NRS 242 created the Department of Information Technology (DoIT) for the purpose of providing Information Services for State agencies
- NRS 242.211: “DoIT shall operate as an Internal Service Fund (ISF)”
- All DoIT costs shall be recovered from fees charged for services provided to other agencies
- DoIT is not budgeted “General Fund” money

Why DoIT Bills For Services ?

(Continued)

- Agencies using DoIT services shall pay DoIT for those services
- Some State agencies receive Federal matching funds in addition to State “General Funds”
- This provides agencies the ability to increase their “buying” power by using Federal matching funds to pay for services provided by DoIT

Internal Services Fund – Rules

- Rate Development Methodology MUST comply with 2 CFR 225 - Cost Principles for State, Local, and Indian Tribal Governments [aka: Federal Office of Management and Budget (OMB) Circular A-87]
 - Defines allowable direct and indirect costs
 - Same “service” rate for each customer
 - Maximum of 60 days of operating costs authorized in Reserve

Rate Model Development Concept

- Determine “Unit of Measure” for each service (e.g. Hourly, Minutes, Number of Lines, etc.)
- Compute “Total Budget Cost” to provide each service (Cost Allocation Methodology)
- Estimate “Total Annual Demand” for each service (Utilization)
- Rate = Total Budget Cost/Utilization
(Price/Unit)

Rate Model Methodology Goals

- Total cost of each service represents ONLY:
 - Direct costs of providing that service
 - Fair share of “indirect/overhead” costs
- Service rates SHOULD:
 - Be sufficient to recoup all of DoIT’s annual costs
 - Not result in inflated Reserves
 - Be stable and consistent from year to year
 - Account for total expected utilization of the service
- No rate adjustments required mid-year
- Comply with Federal Guidelines

DoIT Budget Accounts (B/A) & Services

- Each B/A has a budget and authorized Reserve
- Organizational Structure
 - 1365: Application Design & Development
 - IT Labor: Programmers and DBAs
 - 1370: Planning and Research
 - Provides IT planning services
 - 1373: Director's Office
 - Management, departmental fiscal services, and personnel services

DoIT Budget Accounts (B/A) & Services

(Continued)

- **Organizational Structure** (Continued)
 - 1385: **Computing**
 - Mainframe operations, internet/server support, & WEB hosting
 - 1386: **Communication & Network Engineering**
 - Data Communications and Wide Area Network
 - 1387: **Telecommunications**
 - Voice transport and telephone equipment
 - 1388: **Network Transport Services**
 - Communications transport circuits, facilities & microwave system
 - 1389: **Security**
 - State information security program

DoIT Services - Billable Units

- Hourly – Programmers and DBA
- CPU Minutes – Most mainframe services
- Unit/Day – Tape & Disk Storage
- Number of Transactions – Tape & Disk I/O
- Unit/Month – Servers Hosted, E-mail Accounts, Phone Lines, Voice Mail, DS1 Circuits, etc.
- Per Minute – Long Distance
- Unit/Year – Rack & Channel Rent
- Monthly Tier – SilverNet (WAN), Data Base Hosting, WEB Application Hosting Service
- Assessments (FTE Based) – Infrastructure, Security, and Planning

TIER Rate Services

- Wide Area Network (SilverNet)
 - Utilization is gigabits of traffic
 - TIERS assigned based on historical data

Tier Ranges (Gigabits of Traffic)		
0	5 gigabits	Tier 1
5.01 gigabits	10 gigabits	Tier 2
10.01 gigabits	20 gigabits	Tier 3
20.01 gigabits	40 gigabits	Tier 4
40.01 gigabits	80 gigabits	Tier 5
80.01 gigabits	160 gigabits	Tier 6
160.01 gigabits	320 gigabits	Tier 7
320.01 gigabits	640 gigabits	Tier 8
640.01 gigabits	1280 gigabits	Tier 9

TIER Rate Services

(Continued)

- **Data Base Hosting**
 - Agency data stored on DoIT's server
 - Server located in DoIT computer facility
 - Utilization is megabytes of storage used
 - TIERS assigned based on historical data

Tier Ranges (Megabytes of Storage)		
0	50	Tier 1
50	100	Tier 2
100	500	Tier 3
500	1000	Tier 4
1000	2000	Tier 5

TIER Rate Services

(Continued)

- **WEB Services**
 - WEB site or WEB application hosting
 - Utilization in bytes transferred or received
 - TIERS assigned based on historical data

Tier Ranges (Utilization in bytes)		
0	10,000,000	Tier 1
10,000,000	100,000,000	Tier 2
100,000,000	1,000,000,000	Tier 3
1,000,000,000	10,000,000,000	Tier 4
10,000,000,000	1,000,000,000,000	Tier 5

Assessments

- Services support most State agencies
- Services are difficult to quantify
- Benefiting agencies billed based on FTE
- Specific Services:
 - Planning and Research
 - Security

Assessments

(Continued)

- **Specific Services (continued)**
 - **Infrastructure**
 - Enterprise wide support
 - Help Desk
 - Capacity Planning
 - State Web Portal
 - Web Page Development
 - State “800” Number
 - State On-Line Phone Book
 - State Phone Operators
 - Centralized DNS Servers

Cost Allocation Methodology

- Review each DoIT B/A's budget to determine allowable costs for rate development purposes.
- Allocate direct costs to specific “functions” supporting a “service” within the B/A
- Allocate indirect or overhead costs across ALL “functions” based on accepted methodology:
 - Percent of total department budget
 - Percent of total department FTE

Cost Allocation Terms

- **Direct Costs:** DoIT budget costs directly supporting a service which is allowed by 2 CFR 225
 - Salary of personnel providing the service
 - Travel and training for personnel providing the service
 - Rent and utilities supporting the service
 - Non capital purchases of materials and/or services supporting the DoIT service
- **Indirect/Overhead Costs:** DoIT budget costs not directly supporting a service which is allowed by 2 CFR 225
 - DoIT Fiscal staff costs (salaries, rent, equipment, etc)
 - Management costs (salaries, travel, training, etc)

Cost Allocation Terms

(Continued)

DoIT budget direct and indirect costs authorized and/or not authorized by 2 CFR 225 included in rates charged for services. Applies to State agencies that pay for a portion of those services with federal funds (e.g. Welfare and Medicaid federal, matching funds, federal highway funds, etc).

ALLOWED COSTS

- Salary
- Travel
- Training
- Minor equipment
- Utilities
- Rent
- Operating supplies
- Data processing costs

DISALLOWED COSTS

- Capital investment cost
(equipment and/or software with a unit cost of \$5,000 or more)
- Repayment of debt used to purchase capital investment items
- Reserve

Cost Allocation Terms

(Continued)

- **Reserve:** DoIT budget cost authorized by 2 CRF 225 to support up to 60 days of operating expenses. This becomes the next fiscal year's balance carried forwarded and/or emergency operations funds
 - DoIT's source of cash to start a new fiscal year
 - Billing cycle: 1 ½ month delay
- **Estimated Balance Carried Forwarded:** The projected "cash" on-hand at the end of the fiscal year that will be available to use during the next fiscal year. This is computed during the Legislative session and used to determine if a cost adjustment to the rate model is necessary.

Cost Allocation Terms

(Continued)

- **Cost Adjustments:** DoIT non-budgeted costs authorized by 2 CFR 225 to be included in rates charged for services provided to State agencies that pay for a portion of those services with federal funds (e.g. Welfare and Medicaid federal matching funds, federal highway funds, etc).
 - Depreciation on capital investment items
 - Reserve Adjustments: an increase or decrease included in the total cost of a service to achieve the 60 day Reserve target by the end of the fiscal year. Any adjustment is based on estimated balance carried forward.
 - Depreciation Adjustment: depreciation in excess of capital equipment purchases

Rate Development Process

Total Cost of Services

- Use software package “CAP 95” to allocate costs to “functions” and “services”
- Each DoIT position’s salary and benefit costs are allocated to functional areas – EXCEL spreadsheet
- Allocated salaries (CAT 01) input into CAP 95
- All expenses (CAT 02, 03, etc) from DoIT’s budget input into CAP 95
- Depreciation expenses for capital purchases are input into CAP 95

Rate Development Process

Total Cost of Services

(Continued)

- Costs are allocated to functions:
 - Same Ratio as Salaries
 - Designated Percentage
 - By Actual Dollar Values
- **Exceptions – Costs Excluded:**
 - Costs of Capital Expenditures (>\$5K)
 - General Fund Payback
 - Debt Services
 - Principal Payment on a Capital Equipment Loan
 - Reserve

Rate Development Process

Total Cost of Services

(Continued)

- “Functional Costs” are distributed across “services”
 - Percentage or Ratio
- CAP 95 computes total costs (direct and indirect) allocated to each DoIT service
- CAP 95 Reports identify source, by B/A, of costs included for each service

Rate Development Process

Service Utilizations

- During the budget development process, State agencies use “DoIT Schedules” in the Nevada Executive Budget Systems (NEBS) to estimate their future requirements for DoIT services
- Projected utilization for each service is provided to DoIT by the Budget Office from NEBS
- DoIT managers review, validate and update utilization projections with the Budget Office and customer agencies
 - Provides DoIT information on changes in capacity to DoIT infrastructure which could impact DoIT’s budgets

Rate Development Process

Service Utilizations

(Continued)

- Customer agencies update their utilization projections for DoIT services in NEBS after DoIT's review
- Non-state agency utilization projections are incorporated
 - Boards and Commissions
 - Counties
 - Federal agencies
 - Private entities
- Total projected utilizations for each service for the year are computed

Rate Development Process

Rate Computations

- Service Rate:

Rate = Total Cost for Service/Projected Utilization

- Some rates are converted to a “Tier” or “Band of Level of Service” structure

- Assessments:

Monthly Assessment = Total Cost/Total FTE

- Based on total FTE of agencies receiving benefit of the service

User Agencies' Budgets

- Customers identify requirements (NEBS)
- Customers input projected utilization (NEBS)
- Customer utilizations provided to the Budget Office
- DoIT determines total cost for each service
- DoIT Computes Rates
Rate = Total Cost/Total Projected Utilization

User Agencies' Budgets

(Continued)

- DoIT computed rates are provided to the Budget Office
- Budget Office determines dollar amount to include in agencies' budgets to pay for projected DoIT services

Customer budget = Projected Utilization * Rate

Possible Rate Adjustments

- Budget Office compares total revenue generated by customer budgets using DoIT computed rates to DoIT budgeted costs
 - Excess variance: Rates may need to be revised
- Other reasons for rate adjustments
 - Depreciation in excess of capital purchased and loan repayments
 - Proposed prior fiscal year “carry forward balance” difference from Reserve

Rate Computation - Example

- DoIT's Cost of Service – Programmer/Developer
 - Payroll Costs: \$650,000
 - Operating Expenses: \$6,000
 - Training: \$5,000
 - Information Services: \$5,100
 - Director's Assessment: \$90,000
 - Depreciation: \$1,000
 - Total Cost of Service: **\$757,100**
- Agencies' Utilization:
 - B/A 1320: 400 Hrs
 - B/A 1363: 6,600 Hrs
 - B/A 3178: 1,900 Hrs
 - B/A 4682: 1,050 Hrs
 - Total Projected Utilization: **9,950 Hrs**
- Rate = Cost/Utilization:
 - \$757,100/9950Hrs = **\$76.09/Hr**

Agency Budgets – Example

(Utilization * Rate = Budgeted Amount)

- B/A 1320
 - CAT 26 - G/L: 7510 (400 Hrs*\$76.09): \$30,436
- B/A 1363
 - CAT 26 - G/L: 7510 (6,600 Hrs*\$76.09): \$502,194
- B/A 3178
 - CAT 26 - G/L: 7510 (1,900 Hrs*\$76.09): \$144,571
- B/A 4682
 - CAT 26 – G/L: 7510 (1,050 Hrs*\$76.09): \$79,895
- Total G/L 7510: \$757,098
- Total DoIT Cost Service: \$757,100

Budget Execution Issues

- Customer agencies under utilize a service
 - Many of DoIT's costs are fixed
 - Revenue shortage – not sufficient to cover costs
 - Potential for mid-year rate adjustment
 - Possible negative impact on customers meeting projected utilizations – budget shortfall
 - Under utilized capacity increases the cost to users

Budget Execution Issues

(Continued)

- Customer Agency – Delay in Paying Bills
 - Most services are billed the month after the service is provided
 - Bills out mid-month
 - A few services are billed annually
 - Assessments are billed quarterly
 - Annually if total less than \$1,000
 - Otherwise quarterly - 1st month of quarter
 - Impacts DoIT's cash flow
 - Impacts DoIT's spending plan
 - Revenues – DoIT's only source of funding
 - Reserves limited to 60 days

Rate Development Timeline

- NLT June 1, Even Numbered Years – YYYYEven
 - DoIT customer agencies submit projected utilizations for review, validation, and revision
- NLT July 31, YYYYEven
 - DoIT advises agencies and Budget Office of required utilization adjustments
- September 1, YYYYEven
 - Agency budgets and utilizations recorded in NEBS
- Between Sept 1 & Dec 31, YYYYEven
 - DoIT continues to review agencies' utilization
 - DoIT and Budget Office reviews DoIT's budget
 - Budget Office works with DoIT customer agencies to adjust utilization if required

Rate Development Timeline

(Continued)

- December 15, YYEVEN
 - Develop initial biennium rates based on DoIT's Governor Recommended Budget and agencies' utilization in NEBS
- February, YYODD
 - Legislature meets and reviews ALL budgets
- May 31, YYODD
 - Develop Legislatively Approved biennium DoIT rates based on DoIT's Legislative Approved budget and agencies' Legislative Approved utilizations
- July 1, YYODD and YYY EVEN
 - Start billing customers based on Legislative Approved rates

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Questions ?