

# Service Centers

## Computing Service Centers (CSC)

### **Methodology:**

There are five Computing Service Centers (CSC):

1. Climate and Global Dynamics Division (CGD)
2. Atmospheric Chemistry Division (ACD)
3. High Altitude Observatory (HAO)
4. Mesoscale and Microscale Meteorology Division (MMM)
5. Research Applications Laboratory (RAL)

Computing service centers were established within the framework of "Service Centers" in OMB Circular A-122. The goal is to distribute scientific computing support costs to a laboratory's/division's program in an equitable and efficient way. In the absence of a computing system that can automatically track the hours of use at each workstation by project, work-time hours, which are readily available, will be used as the allocation base. This is done because the costs of laboratory/division computing systems are believed to be more directly a function of the time spent by individuals in their research and administrative activities.

### **Definitions:**

**CSC Rate:** Charge per work-time hour required to cover the operating costs of the laboratory/division computing service center, based on estimated number of hours worked in a laboratory/division.

**Laboratory/Division Computing System:** A networked system or set of sub-systems (multiple servers and/or centralized printers) that supports generally the laboratory's/division's science programs, and also typically serves all or some activities in administration including Bid & Proposal activity. This system is the core infrastructure of a laboratory's/division's computing support for its staff. The costs of this system do not include the costs of the desktop tools of the end-users of the system, e.g., workstations, terminals, PCs, and their associated printers and software costs.

**Equipment Depreciation:** Depreciated costs of the acquisitions of servers, printers, and other system hardware costing \$5,000 or more. This equipment is acquired using UCAR's debt-financed funding established for the acquisition of general purpose equipment. This depreciation expense currently applies to some of the CSCs. A CSC may also incur its fair share allocation of bond

interest expense, bond issuance costs and bond administrative costs, such as trustee fees. Direct equipment purchases are not allowed within the CSC, according to government regulations concerning Specialized Service Centers.

**Indirect Costs Applied:** The overhead rate applied to modified total direct costs.

**Materials and Supplies:** Consumables such as printer paper, toner, disks, cartridges and other items associated directly with the system, and other small items that are widely used, purchased in bulk quantities for laboratory/division staff, and costly to charge by transaction to individual programs.

Networked items costing below \$5,000 each, includes gateway servers, wiring, routers, other network peripherals and system upgrades. This also includes file and data servers, and associated upgrade costs for equipment used by multiple fund sources and programs, as long as the networked items cost less than \$5,000.

Printers for multiple users costing below \$5,000 include high-speed printers and color printers accessible to scientific and administrative staff generally.

Computers, printers, and supplies used by computing system staff.

**Operating Budget:** Costs of the laboratory/division computing support function, including system staff, materials, supplies, purchase services, travel and depreciated equipment acquisition costs.

***Costs that are NOT INCLUDED in the operating costs of a laboratory/division computing service center are illustrated by the following:***

- *Salary and Benefit costs of software engineers and other computer specialists who are assigned specifically to selected research and facility projects.*
- *Time spent by system administrators outside of general system functions.*
- *Costs of workstations, terminals, personal computers, software, and attached printers assigned to individuals who are not part of the laboratory/division computer system support staff. These individual assignments fall in the category of direct programs or in the indirect, administrative budget.*
- *Software or software licenses bought for individual workstations or PCs, which are charged to the fund sources supporting the individual or programs using the software, including administration.*
- *Stand-alone computing systems that serve only one program or fund source.*

**Purchased Services:** Services acquired to support the system or network, Ethernet services, e-mail service, and Internet access.

Software and site licenses that are purchased to support all or most staff and which are therefore not susceptible to charging directly to each program on a transaction basis or according to degree of use.

Maintenance and repair costs for system hardware and software. Includes maintenance contracts that support all or most staff and which are therefore not susceptible to charging directly to each program on a transaction basis or according to degree of use.

Training for system administration personnel.

**System Staff Costs:** Salaries and Benefits of personnel whose functions are to maintain the network server or other general use servers (utilized by multiple programs) and provide general computing support to laboratory/division staff. Examples are System Administrators, and other centralized computing staff (including non-technical staff) that support the system administrator, or whose functions include maintaining and supporting the laboratory's/division's system(s).

**Travel:** Travel costs of personnel who maintain the laboratory/division computing system.

**Variances:** Represents the difference between CSC cost recovery (revenues) and operating expenses. Laboratory/divisional CSC variances are monitored monthly by the Budget & Planning Office and are subject to review by an internal management committee called the Business Management Working Group (BMW). Reference 'Sample Analysis' below. CSC fiscal year end variances are carried forward into the following fiscal year.

**Work-time Labor Hours:** Represents the allocation base used to distribute the CSC operating costs to laboratory/division programs, projects, and administrative activities. Work-time labor hours are defined as the hours directly charged to laboratory/division activities by laboratory/division staff except those assigned to computing system support. These hours do not include holiday, vacation, sick leave, and other non-work time hours. The allocation base may also include hours from other non-facility laboratory/division personnel needing to charge outside their home laboratory/division for collaborative activities.

**Calculation:**

$$\text{CSC Rate} = \frac{\text{Operating Budget}}{\text{Labor Hours}}$$