The Information Technology Lifecycle and Funding

Agencies should apply the following guidance on the information technology lifecycle and funding as they develop the three-year rolling IT strategic budget. This budget should clearly illustrate the delineation between run activities (OpEx) and grow/transform projects which can be comprised of preliminary project activities (OpEx); App Dev, configuration, and deployment (CapEx or OpEx); and post implementation project activities (OpEx). OpEx and CapEx are terms often used in IT literature.

IT Project Phases and Readiness

To be eligible to receive funding, IT projects must satisfy the following readiness criteria:

- Identification of the specific objective(s) to be achieved by the IT project.
- Validation of the technological feasibility of the IT project.
- Demonstration of the intention, ability, and presence of effort necessary to complete the project.

Tasks and activities common to IT project process can be grouped into three phases:

1. Preliminary Project Phase (Concept, Initiate, and Plan): includes conceptualization and evaluation of alternatives, the determination of appropriate products, and the selection of alternatives for the development of the system. These activities are generally considered operating expenditures.

2. Application Development and Deployment Phase (Build and Execute): includes design and configuration of software and interfaces, coding, installation of hardware, including testing, as well as training for developers on the software that may be under development. This phase may be funded using operating or capital funds; however, most expenditures associated with IT projects that are appropriate capital expenditures occur during the Development phase.

3. Post Implementation/Operations Phase (Monitor and Close): includes end user training and software maintenance and routine upgrades. These activities are generally considered operating expenditures.

Operating IT Expenditures and Selected Project Expenditures

Operating funds should be used for day-to-day operations, maintenance, and grow/transform projects that are below the dollar threshold for consideration for capital funding. Agencies should consider an IT project as a potential capital expenditure only when the cost of application development is at least $1 million. It is also used for those grow/transform activities (project activities) related to planning and post-implementation, including project and change

management, and end user training. Operating funds should also be used for patches and upgrades that are minor in nature.

Operating Activities and Expenditures[1]
• Strategic planning
• Project-related research and planning*
• Request for Information (RFI), Request for Quotation (RFQ), and Request for Proposal (RFP) development and award*
• Data conversion post implementation (not required for system to be operational)
• Project-related user training and change management
• Post-implementation operating and maintenance costs
• Ongoing training and change management
• Day-to-day operating and maintenance costs
• Service management
• Day-to-day internal and/or contracted IT services (e.g., desktop and network support)
• Minor upgrades and patches, minor configuration, and security management
• Software licenses for premise-based and cloud-based products post-implementation, including annual licensing and subscription-based software
• Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) charges
• Software licensing for both standard off-the-shelf and post-implementation commercial off the shelf (COTS) products that have been customized
• Development of applications of a small size (<$1 million)
• End of life or replacement of hardware equipment (computers, peripherals, etc.)

*In selected circumstances, these activities may be allowable for capital funding.

Run cost modeling should be included for both existing IT systems or programs, and new IT projects upon go live. When the projections are made at the time of an initial funding request for a new service or proposed project, it should include a baseline and downside/upside projections (e.g. +/-20%). IT project sponsors and managers are expected to carefully research operating cost models and utilization patterns to ensure as accurate a forecast as possible for inclusion in the funding requests. Operating cost modeling for existing services should be based on historical trends.

[1] Operating expenditures may be captured in the following expense account codes: 510055 IT & Network personal Services, 521052 IT Items <$1,000 - No Asset Tag, 521053 IT Equipt <$1,000 - Asset Tagged, 521054 IT Equip - Centralized <$1,000, 524062 SW Perpetual License <$1,000, 524063 Term Software License, 524065 Hosting Services (IAAS & SAAS), 524067 Network / Comm Services – Reg, 524068, 524068 Network/Comm Services - Unreg, 526067 IT Cabling, Equip Srvc, & Rpr, 526068 IT Equip - Cent Repair, 526069 Mainframe Hardware Maintenance, 526070 Software Maintenance, 526071 Mainframe Proprietary SW Maint, 527753 ISTV - Enterprise Computer Svc, 537151 IT Equip, End User, 537153 Info Tech Equip – Centralized, 537155 SW Perpetual License >=$1000, 537157 Mainframe proprietary software, 537158 IT Dev - Proprietary / Mnfrm SW, 537159, Network / Comm Equip – Wireless, 537161 Network/Comm Equip – Wired. Minor development (e.g. minor upgrades) may be included in DEV expense account codes shown with Capital expenditures in the next table.

Chargeback or Internal Service Activity (ISA) Models for Run Costs

Chargeback models apply to operating budget expenditures that are charged to another agency or to another division within an agency (internal service activity or ISA). Agencies should illustrate the chargeback model as part of their funding request and it should include total cost of ownership in the methodology. This includes personnel or personal services, licenses, overhead, maintenance, and replacement/future development costs. If the full "rate" is not paid by the service recipient, the planned subsidy amount and funding source should be expressly identified.

Capital Budget IT Project Expenditures

Appropriate capital IT project expenditures include systems developed for internal use, whether built by agency personnel or contracted through a third-party, that have a useful life of five or more years. Capital IT expenditures include off-the-shelf software, provided it was tailored or customized to a specific agency function or purpose. Likewise, it includes related hardware, such as computers, servers, peripherals, and network equipment. Agencies should consider an IT project as a potential capital expenditure only when the cost of application development is at least $1 million.

For new and replacement systems, capital expenditures usually occur after the preliminary project phase is completed and when management implicitly or explicitly authorizes funding of the project (i.e., management has demonstrated a commitment to purchase).

System upgrades with a useful life of five or more years may be considered a capital project when they add significant functionality or are necessary to postpone obsolescence. Agencies should ensure that the postponement of obsolescence is generated by the upgrade, not simply by ongoing maintenance or the maintenance component of the upgrade. For example, a system upgrade that included technical upgrades, security enhancements, and significant additions of functionality would be considered an appropriate capital expenditure while an upgrade that included only routine technical and/or security improvements would be an appropriate operating expenditure. Likewise, an upgrade that involved re-platforming an existing system even without enhancing functionality would clearly postpone obsolescence and, therefore, be an appropriate capital expenditure.

Capital Budget IT Project Activities/Expenditures*[2]
• Application development, configuration, or deployment
• Software licenses for commercial off-the-shelf products that have been modified for internal use (purchased during the development phase)
• Software licenses for cloud based products provided the agency has a contractual right to take possession of the software and it is feasible for agency to run the software on its own hardware
• Software licenses for cloud-based products related to application build
• Integrations (bringing together multiple systems to function as one)
• Data conversion required to make the system operational
• Hardware and peripherals needed to operate the system

** Operating budget funds have been and are used to pay these types of expenses if the project is not funded in the capital budget.*

Chargeback (ISA) Models Related to New Projects and Services

For a new project that will encompass a rated service or operate as a chargeback service, rate modeling should be included with the initial capital budget request. This model should forecast baseline run costs and utilization and should include downside/upside projections (e.g. +-20%). IT project sponsors and managers are expected to carefully research operating cost models and utilization rates to ensure as accurate a forecast as possible for inclusion in the budget materials. Agencies planning a rated service should also include a competitive analysis including why the agency should provide the service versus an external provider, and identify the most comparable market rates for the service.

Debt Funding of Capital IT Project Expenditures

In recent capital biennia, the State of Ohio has utilized Certificates of Participation (COPs) as its primary funding vehicle for major enterprise-wide and agency-specific IT projects.[3] The State utilizes COPs to finance the application development and deployment (including project management) phase of large IT systems of statewide benefit and importance. This also includes the initial purchase of hardware and related equipment that have a useful life of at least five years and are necessary to bring the system up to its intended use.[4] Debt funding generally may not be used to cover expenses of State employees involved in development of an IT project.

To offset the fixed, upfront financing costs, COPs funded IT projects should be of a substantial cost with a targeted minimum of about $5 million. The amortization period or 'term' of the COPs

[2] Capital Expenditures are reflected in DEV and capital expense account codes: 510056 IT DEV - IT / Network Services, 521055 IT Dev - Office / IT / Othr Suppls, 524061 IT Dev -Ntwk / Comm IT Svc & Equip, 524064 IT Dev - Term / Perpetual Sw Lic, 524066 IT Dev - Hstng Svc (IAAS / SAAS), 526072 IT Dev - Equip / SW / Mnfrm Maint, 537152 IT Dev - End User Equip, 537154 IT Dev - Equip – Centralized, 537156 IT Dev - SW Prpetual Lic > =$1000, 537160 IT Dev - Ntwk / Comm EQ - Wireless, 537162 IT Dev - Ntwk / Comm Equip – Wired, 577050 Pur Pers Svcs - IT / Telecom (CAP), 577051 IT / Ntwk Perpetual Sw LIC (CAP), 577052 Info Tech & Comm Equip (CAP)

[3] COPs are fixed income securities, like bonds. COPs proceeds are held by a trustee bank and expenditures are not subject to appropriation. Debt service is paid by the benefiting state agency pursuant to a lease agreement.

[4] IT project components eligible for COPs financing are set forth in OBM's Allowable Capital Expenditures .

must be equal to or less than the life of the financed IT system or asset and generally range from no less than 5 years to 10 years.

The authority to issue COPs for an IT project must be specifically provided for by law and include a description of the purpose and components of the project to be financed and a maximum proceeds or issuance amount. Whenever possible, agency requests for COPs financed IT project funding should be integrated within the agency's capital budget request. Although COPs proceeds are not appropriated, agencies are strongly encouraged to track COPs spending using the 577 expense account codes.