Capital Budgeting in the States: Paths to Success

February 1992

National Association of State Budget Officers

Table of Contents

Table of Contents

Acknowledgements

This project reflects the time, effort, and commitment from members of the National Association of State Budget Officers. Stacey Sheffrin served as staff analyst for this project and Laura Shaw produced the report using Ventura Publisher 2.0 and Microsoft Excel 3.0.

Several members took the lead in sections of this report. Neil Bergsman, Maryland; Ric Brown, Virginia; Michael O'Keefe, Rhode Island; Sheila Peterson, North Dakota; Larry Seale, Washington; and Mike Stormes, Arkansas were especially helpful in this project.

Introduction

Background

Research efforts of the National Association of State Budget Officers have focused primarily on operating budgets. Paul Timmreck, while serving as President during 1990-91, initiated this project to provide budget offices with useful information on capital budgeting. This report represents an initial effort to provide comparative analysis on capital budgeting practices by the states. Although this report does not result in one "model capital process," its objective is to highlight desirable practices that can be used by all states.

Part One

Part One summarizes the results from the survey sent to all states in 1991. The survey covers an array of topics including defining capital expenditures, the capital budgeting process, estimating costs, setting priorities, managing assets, financing projects, and managing debt. Good practices are highlighted at the end of each section.

Part Two

Part Two reviews various issues common to all states and illustrates their impact through the use of specific state examples. The topics covered in this part include protecting maintenance funds in a world of competing demands and the strengths and weaknesses in states' capital budgeting processes. States included in the case studies represent a diversity of approaches in capital budgeting and financing.

Summary

Good Practices In Capital Budgeting

- Establish a clear definition of expenditures within the capital budget.
- Define maintenance expenditures and provide for adequate funding of maintenance in statute.
- Include specific operating costs for each capital project.
- Ensure that effective legislative involvement occurs throughout the capital budgeting process.
- Strengthen the review of the years beyond the budget year in long-range capital plans.
- Identify the criteria used in selecting capital projects.
- Define all program outcomes for capital investments.
- Evaluate cost estimating methods to measure their validity.
- Establish a tracking system to keep projects on schedule and within budget.
- Define the factors to consider in decisions to own or lease.
- Develop a clear debt policy.
- Review cost-benefit comparisons for private sector participation in capital projects.
- Maintain an updated inventory system of capital assets.

Capital Budgeting In the States

Section 1

Defining Capital Expenditures and Protecting Maintenance Funds: Tables 1-3

Almost all states define the types of expenditures allowed in capital budgets. As Table 1 shows, most definitions are broad and include such items as construction, improvements, land acquisition, site improvements, and major renovations. Some definitions specify the anticipated useful life of a project while others include certain equipment purchases. Table 2 shows that most states include capital planning activities within their capital budgets. About half the states have a minimum expenditure requirement for their capital budgets. The minimums range from a low of $1,000 to a high of $250,000 with $25,000 being the most frequent minimum for capital budget expenditures.

Treatment of maintenance expenditures in capital budgets also varies across states as illustrated in Table 3. In about half the states, maintenance is included in the operating budget. Other states, including Alaska, Colorado, and Ohio, differentiate between deferred maintenance as a capital expenditure and ongoing maintenance as an operating expenditure. Other approaches used by states include appropriating a reserve maintenance fund in Virginia, authorizing a formula for building renewal funds in Arizona, and appropriating a portion of a building's value for maintenance in Idaho.

Good Practices

- **Establish a clear definition of expenditures within the capital budget.** In developing or refining capital expenditure definitions, states should consider the implications of minimum requirements and types of expenditures such as equipment and planning studies. Certain activities, such as leasing, may fall within the operating budget though be viewed as debt by rating agencies in their credit analysis.

- **Define maintenance expenditures and provide for adequate funding of maintenance in statute.**
  Maintenance funds are often sacrificed for budget balancing purposes. Some approaches to preserving maintenance funds look good in theory, but not in practice. States use approaches such as budgeting a percentage of the building valuation for critical maintenance as in Idaho and conducting an annual inventory of maintenance needs in Florida. A more detailed account of how a few states attempt to preserve maintenance funds is discussed in Section 1 of the case studies in this report.

Table 1
Defining Capital Expenditures

State	How Do You Define Capital Expenditures?
Alabama	Renovations, repairs, major maintenance, new construction, land purchases, and equipment.
Alaska	Asset with an anticipated life exceeding one year and a cost exceeding $25,000.
Arizona	Building renewal, land acquisition, infrastructure, and capital projects.
Arkansas	No specific definition.
California	Facilities improvements. Includes related planning and fixed equipment costs.
Colorado	Purchase of land; purchase, construction or demolition of buildings; purchase and installation of equipment.
Connecticut	Expenditures that result in acquisition or additions to fixed assets.
Delaware	Includes major equipment acquisitions if at least 10 years.
Florida	Real property, including additions, replacements, major repairs, and renovations which extends useful life.
Georgia	Purchases of land, construction of new facility, replacement/major renovation, and site improvements.
Hawaii	Permanent, non-recurring expenditures on new, or improvements to existing facilities.
Idaho	Construction, remodeling, and maintenance of buildings and other structures.
Illinois	Repair, maintenance, renovation, remodeling, rehabilitation of existing facilities; construction of new facilities.
Indiana	Construction, rehabilitation, repair, purchase and sale of land, equipment, and grants to municipalities.
Iowa	Construction, renovation, or improvement of buildings or grounds exceeding $50,000.
Kansas	New construction, remodeling, razing, rehabilitation, and repair.
Kentucky	Capital construction above $200,000 and major equipment above $50,000.
Louisiana	Acquiring land, buildings, equipment or for permanent improvement.
Maine	Renovations, repairs, major maintenance, new construction, land purchases and equipment.
Maryland	Acquisitions with a 15 year life, excluding vehicles and supplies.
Massachusetts	No response.
Michigan	Planning, acquisition, construction of buildings and equipment and remodeling, repair.
Minnesota	Acquisition, construction, original furnishings and equipment, renovations, and major repair.
Mississippi	Includes planning, design, land/building acquisition, demolition, new construction, furnishings, equipment.
Missouri	Includes construction, acquisition of real property, demolition, restoration, rehabilitation, equipment purchase.
Montana	Building and construction defined in statute.
Nebraska	No specific definition.
Nevada	No response.
New Hampshire	Assets with useful life of 5 years and cost exceeding $30,000.
New Jersey	Acquisition of land, construction, repairs, equipment above $50,000, long-term leases.
New Mexico	Renovation and repairs, new construction, land acquisition, vehicles, and equipment.
New York	Acquisition, construction, demolition of fixed asset, major repair/renovation, preliminary studies and equipment.
North Carolina	Renovations, major repairs, deferred maintenance, new construction, land, and major equipment.
North Dakota	No specific definition.
Ohio	Renovations, new construction, land purchases and equipment.
Oklahoma	Purchase of land and buildings. Construction or major repair, major purchase of equipment.
Oregon	Improvements which prolong the life or add value to the property.
Pennsylvania	Construction, renovations, improvements, equipment, furnishings, land acquisition. Estimated life above 5 yr.
Rhode Island	Construction, renovation, repair, rehabilitation, land acquisition, buildings and equipment.
South Carolina	Capital expenditures over $25,000 according to GAAP definition.
South Dakota	No specific definition.
Tennessee	Renovation, maintenance of certain size, additions, new facilities.
Texas	Renovation, major repairs, new construction, land, equipment purchases.
Utah	Long-term asset costing more than $1,000.
Vermont	New construction, land acquisition, major maintenance and repairs above $25,000.
Virginia	Real property acquisition, improvements of $250,000+, new construction of $250,000+,stand alone equipment.
Washington	Design, construction, renovation, and acquisition of long-term assets.
West Virginia	Includes buildings and/or land with appropriation in effect for 3 years.
Wisconsin	Includes land, buildings, facilities, equipment, as well as remodeling, reconstruction, and maintenance.
Wyoming	New construction, acquisition of land, reconstruction, major improvements above $10,000 for 10 years.
DC	Permanent improvement to a fixed asset with useful life exceeding 3 years.

Table 2
Capital Versus Operating Budgets

State	Capital Planning in Capital Budget	Minimum Size For Capital Budget	Definition For Capital
Alabama	N	N	Y
Alaska	Y	$25,000	Y
Arizona	N	N	Y
Arkansas	N	N	N
California	Y	N	Y
Colorado	Y	Over capital outlay limit	Y
Connecticut	Y	N	Y
Delaware	Y	N	Y
Florida	Y	N	Y
Georgia	Y	N	Y
Hawaii	Y	N	Y
Idaho	Y	$15,000	Y
Illinois	N	$25,000	Y
Indiana	N	N	Y
Iowa	Y	$25,000	Y
Kansas	N	N	Y
Kentucky	Y	N	Y
Louisiana	Y	$50,000	Y
Maine	N	N	Y
Maryland	N	$100,000	Y
Massachusetts	No response	No response	No response
Michigan	Y	$50,000	Y
Minnesota	N	N	Y
Mississippi	Y	$150,000	Y
Missouri	Y	Repair $2500	Y
Montana	Y	$25,000	Y
Nebraska	Y	N	N
Nevada	No response	No response	No response
New Hampshire	Y	$30,000	Y
New Jersey	Y	$50,000	Y
New Mexico	Y	$100,000	Y
New York	Y	N	Y
North Carolina	Y	$50,000	Y
North Dakota	Y	N	N
Ohio	Y	N	Y
Oklahoma	N	N	Y
Oregon	Y	Construct.$100,000	Y
Pennsylvania	Y	$100,000	Y
Rhode Island	N	N	Y
South Carolina	Y	$25,000	Y
South Dakota	N	N	N
Tennessee	Y	Maint $100,000	Y
Texas	Y	N	Y
Utah	Y	$1,000	Y
Vermont	Y	$25,000	Y
Virginia	Y/N	N	Y
Washington	Y	N	Y
West Virginia	N	N	Y
Wisconsin	Y	$5,000	Y
Wyoming	Y	Y	Y
DC	Y	$250,000	Y
	Y=35	Y=23	Y=45

Table 3
Treatment of Maintenance

State	How Is Maintenance Treated In The Capital Budget?
Alabama	Renovation and repair are capital items; maintenance is operating.
Alaska	Renovation, repair, deferred maintenance are capital items; general maintenance is operating.
Arizona	Routine maintenance excluded. Building renewal funds appropriated by formula in statute.
Arkansas	Treated like any other request.
California	In operating budget.
Colorado	Deferred maintenance in capital; routine maintenance in operating.
Connecticut	In operating budget.
Delaware	Deferred building maintenance addressed.
Florida	An annual inventory of state-owned buildings conducted to determine maintenance need.
Georgia	Included if relatively substantial cost, not recurring, and increases useful life.
Hawaii	In operating budget.
Idaho	Critical maintenance budgeted at 1% of building valuation.
Illinois	In operating budget.
Indiana	In operating budget.
Iowa	Deferred maintenance in capital.
Kansas	Largely financed from dedicated funds.
Kentucky	Minor maintenance below $200,000 funded from pool of state funds.
Louisiana	In operating budget.
Maine	Included in operating budget.
Maryland	Included if over $100,000, 15 year life.
Massachusetts	No response.
Michigan	Lump sum maintenance appropriation.
Minnesota	Major maintenance in capital budget; recurring maintenance in operating budget.
Mississippi	Maintenance projects generally not recommended.
Missouri	Ongoing maintenance to preserve a facility in operating; other maintenance & repair above minimum in capital.
Montana	Major maintenance included.
Nebraska	Renovation and repair are capital items; maintenance is operating.
Nevada	No response.
New Hampshire	Deferred maintenance in capital; usual maintenance in operating budget.
New Jersey	Maintenance above $50,000 in capital.
New Mexico	In operating budget. In future, may plan to fund preventive maintenance in capital.
New York	In operating budget.
North Carolina	In operating budget.
North Dakota	In operating budget.
Ohio	Deferred maintenance in capital; routine maintenance in operating.
Oklahoma	In operating budget.
Oregon	Routine maintenance excluded.
Pennsylvania	In operating budget.
Rhode Island	In operating budget.
South Carolina	According to need.
South Dakota	In operating budget.
Tennessee	Major maintenance above $50,000 included.
Texas	In operating budget.
Utah	In operating budget.
Vermont	Major maintenance and repair in capital; general maintenance in operating budget.
Virginia	Maintenance reserve appropriation provided.
Washington	Renovation and major repairs are capital items; maintenance is operating.
West Virginia	In operating budget.
Wisconsin	Funding provided.
Wyoming	In operating budget.
DC	N/A

Section 2

Organization of the Capital Planning Process: Tables 4-6

The capital budgeting process usually starts with budget instructions issued to agencies. The time-line from the initial instructions until the appropriation varies from six months to two years, with an average time-line of about one year. As Table 4 shows, in addition to state agencies, some states also allow non-profit agencies, boards and commissions, and elected officials to make requests for capital projects. States are about evenly divided between having a separate capital document and combining capital and operating expenditures in one document. The types of documents vary across states with project descriptions, multi-year planning documents, and portions of the operating budget serving as capital documents.

With the many actors involved in the capital process, some states - more than one-third - have established joint legislative boards or commissions to oversee the process as shown in Table 5. Some boards are established with specific missions, such as developing and implementing a long-range planning process as in Kentucky.

Capital planning in most states is a multi-year process. Table 5 shows that in about two-thirds of the states, the capital budget extends from three to ten years, with five years the most frequent time-span for capital plans. In about half the states with long range capital budgets, the budgets are passed into law. In most cases, the long-range budget is amended through annual appropriations. Often the budget office provides an overall coordinating role for the long-range plan. Although many states have long-range plans, estimates for the out-year costs provide a general trend for the project and are not as detailed as the current year estimate.

The coordination of the capital and operating budget is a significant feature of the capital budgeting process. Table 6 demonstrates that coordination occurs in many states by including the impact on the operating budget as part of every capital request. Budget analysts provide a key role in coordinating operating and capital budgets. Other approaches to coordinating operating and capital budgets include a program planning process in higher education used in Colorado and a strategic planning process that fosters communication between those involved in the operating and capital budgeting decisions in Delaware.

Good Practices

- **Include specific operating costs for each capital project.**
  Although most states require that operating costs accompany capital project requests, there should be an enforcement mechanism that requires agencies to develop operating cost estimates over several years. The agencies' operating budget request should reflect the impact of the capital projects over the several year period.

- **Ensure that effective legislative involvement occurs throughout the capital budgeting process.**
  Some states have established specific oversight boards to help foster communication between the legislative and executive branches. In other states, such as Maryland, state officials informally maintain good communication channels with the legislature.

- **Strengthen the review of the years beyond the budget year in long-range capital plans.**
  Although most states have long-range capital plans, the years beyond the budget year are often scrutinized much less than the budget year. More scrutiny of long-range costs would help to assess the financial commitments on both the operating and capital budgets.

Table 4
Organization of the Capital Budget

State	Legal Authority	Who Makes Requests	Documents Produced
Alabama	Statute	A	Governor's Executive Budget
Alaska	Statute	A	Project Description and Justification
Arizona	Statute	A,E	Capital Improvement Plan
Arkansas	Appropriations by Agency/Project	A	Biennial Budget Manual
California	Annual Budget Acts	A,E	Budget Change Proposals Budget Estimates
Colorado	Statute	A	Project Request, Prioritized Summary 10 Yr.
Connecticut	Statutes, Special & Public Acts	A	Annual Capital Budget
Delaware	State Code	A,E	CIP Project Description, Operating Budget
Florida	Statute	A	Agency Capital Improvement Prg., Gov. Capital Imp Prg.
Georgia	State Code	A	Governor's Annual Budget Report, Amended
Hawaii	Revised Statutes	A,E	Multi-Yr. Program Financial Plan, Executive Budget
Idaho	State Code	A	6 Yr. Plan Produced by Division of Public Works
Illinois	Appropriations & Bond Auth. Bills	A,B,E	Capital Budget
Indiana	Statute	A,H	State Budget Committee Recommendations
Iowa	State Code	A	Operating Budget
Kansas	No requirement for Governor	A	Governor's Budget Report
Kentucky	State Revised Statutes	A	Executive Branch Budget
Louisiana	Statute	A,E	Capital Outlay Act and 5 yr. Budget Plan
Maine	Annual Budget Acts	A	Capital Budget
Maryland	State Law and Appropriations	A,E,P	Budget & 5 Yr. Capital Improvement Program
Massachusetts	No response	No response	No response
Michigan	Annual Appropriations	A,H	Annual Budget Document
Minnesota	Statute	A,H,E	Capital Budget Recommendations
Mississippi	No response	A	Governor's 5 yr. Capital Improvement Plan
Missouri	Statute	A	Governor's Executive Budget
Montana	State Code	A,H	Capital Construction Program, Major Maintenance Plan
Nebraska	Statute	A,H	Governor's Executive Budget
Nevada	No response	No response	No response
New Hampshire	Statute	A	Governor's Executive Budget
New Jersey	State Budget Law	A,P	Governor's Budget Rec & Capital Improvement Plan
New Mexico	Statute	A,E,H	Capital Improvement Plan and Forms
New York	State Finance Law	A,PA	Capital Projects Bill, 5 Yr. Capital Plan
North Carolina	Appropriation	A	Capital Improvement Document
North Dakota	Agency's appropriation	A	Capital Construction Form
Ohio	Statute	A,E,P	Governor's 6 Year Capital Improvement Plan
Oklahoma	Statute	A	State Finance Forms
Oregon	Legislative	A	Budget Overview, 6-Yr. Plan, Project Description
Pennsylvania	Constitution	A	Governor's Executive Budget
Rhode Island	Statute	A	Capital Development Budget/Operating Budget
South Carolina	No overall authority	A	Annual Permanent Improvement Plans
South Dakota	Individual bills	A	No capital budget
Tennessee	Division of Budget	A	Budget, Project Description, Project Summary
Texas	Part of appropriations process	A	Budget Requests-Construction Schedules
Utah	Statute	A	Budget Documents, 5 Yr. Plan
Vermont	Statute	A	Capital Budget Recommendations
Virginia	Appropriation Act	A	Budget Bill & Budget Document
Washington	Legislature	A	Capital 6 yr. Program, Appropriation Bill
West Virginia	Statute/Case by case	A	No response
Wisconsin	Statute	A	Capital Budget Recommendations
Wyoming	Statute	A	Capital Outlay Budget Request
DC	Home Rule Act	A,E	Capital Budget & Capital Improvement Plan

Key: A=Agencies B=Boards E=Elected Officials H=Higher Education P=Private Organizations PA=Public Authorities

Table 5
Organization of Capital Budget: Part 2

State	Joint Boards for Capital Review	Time-Line for Capital Process	Span of Long-Range Capital Budget
Alabama	N	No response	N
Alaska	N	10 months	6 years
Arizona	N	1 1/3 years	5 years
Arkansas	N	6 months	N
California	Y	1 1/2 years	5 years
Colorado	Y	1 year	3 years
Connecticut	Y	1 year	N
Delaware	N	1 year	3 years
Florida	N	1 year	5 years
Georgia	N	1 year	3 years
Hawaii	N	9-10 months	6 years
Idaho	Y	8 months	6 years
Illinois	N	1 year	5 years
Indiana	Y	10-12 months	N
Iowa	N	1 year	5 years
Kansas	Y	1 year	5 years
Kentucky	Y	8 months	N
Louisiana	N	1 year	5 years
Maine	Y	10 months	5 years
Maryland	Y	9 months	5 years
Massachusetts	No response	No response	No response
Michigan	Y	9 months	5 years
Minnesota	N	6 months	5 years
Mississippi	N	9 months	5 years
Missouri	Y	1 year+	N
Montana	N	1 year	6 years
Nebraska	N	No response	N
Nevada	No response	No response	No response
New Hampshire	Y	9 months	6 years
New Jersey	Y	1 1/3 years	7 years
New Mexico	Y	9 months-1 year	5 years
New York	N	10 months	5 years
North Carolina	N	1 1/2 years	N
North Dakota	N	1 year	N
Ohio	N	1 year	6 years
Oklahoma	N	14 months	3-5 years
Oregon	Y	1 1/2 years	N
Pennsylvania	N	10 months	5 years
Rhode Island	N	No response	6 years
South Carolina	Y	Determined by Legislature	N
South Dakota	N	N/A	N
Tennessee	Y	1 year	5 years
Texas	N	2 years	N
Utah	Y	1 1/2 years	5 years
Vermont	N	6 months	5-10 years
Virginia	N	1 1/2 years	N
Washington	N	1 year+	6 years
West Virginia	N	1 year	N
Wisconsin	Y	1 1/2 years	4 years
Wyoming	Y	10 months	N
DC	N	1 1/2 years	6 years

Y=20

Table 6
Capital Budgeting Coordinated with Operating

State	How Is Capital Budgeting Coordinated With The Operating Budget?
Alabama	Combined in one appropriation bill.
Alaska	Combined in one appropriation bill.
Arizona	Capital project requests must include impact on operating budget.
Arkansas	Agency anticipates impact on operating budget from capital requests.
California	Through verbal communication, sharing of plans, and system data reports.
Colorado	Higher education has program planning process that links operating budget to capital.
Connecticut	Through analysis by budget and capital analysts.
Delaware	Strategic planning process serves in promoting communication.
Florida	Plans include impact of capital project on operating budget.
Georgia	Developed simultaneously; included in one appropriation bill.
Hawaii	Capital projects include impact on operating costs.
Idaho	By governor's budget analyst.
Illinois	Through budget office instructions and cooperation of budget analysts.
Indiana	Combined in one appropriation bill.
Iowa	Both operating and capital developed simultaneously; impact of operations taken into account.
Kansas	Budget analyst review of capital request includes impact on operating budget.
Kentucky	Prepared simultaneously with operating budget.
Louisiana	Budget analysts review capital budget requests.
Maine	Same process as operating budget except for General Fund and Highway Bond Projects.
Maryland	Through capital/operating coordinator. Impact on operating budget part of capital budget presentation.
Massachusetts	No response.
Michigan	Component of total budget process.
Minnesota	Capital requests must include impact on operating budget.
Mississippi	Match capital recommendations to agency's operating mission; project change in operating costs.
Missouri	Capital budget analyst coordinates analysis with operating budget analyst.
Montana	Budget office reviews capital projects and coordinates with operating.
Nebraska	Capital projects include impact on operating costs.
Nevada	No response.
New Hampshire	Budget Office reviews capital projects and coordinates with operating.
New Jersey	Through staff interaction and by management review.
New Mexico	Capital budget includes operating budget impacts and operating budget references capital projects.
New York	Capital budget requests must include impact on operating costs.
North Carolina	Through capital and operating budget analysts.
North Dakota	In the same budget, different line items.
Ohio	Capital bill is one year after the budget bill. Analysts review capital request for impact on operating budget.
Oklahoma	Estimated operating costs calculated.
Oregon	Capital budgeting is mostly independent and reviewed after the operating budget.
Pennsylvania	Capital and operating budgets are both developed by the Office of the Budget.
Rhode Island	Agencies must include impact on operating.
South Carolina	Capital plans include 5 year operating expenditures.
South Dakota	Bond payments included in operating budget.
Tennessee	Architectural staff meets with budget analysts and departments to review capital and operating.
Texas	Part of the operating budget.
Utah	Through Office of Planning and Budget.
Vermont	Developed at the same time; impact from capital projects must be included in operating budget.
Virginia	Developed at same time. Capital requests must include impact on operating budget.
Washington	Debt service part of operating budget, otherwise separate.
West Virginia	No response.
Wisconsin	Periodic review with budget office and facilities management.
Wyoming	Operating and/or maintenance expenses referenced in capital request.
DC	Agency directors request projects in support of long-term operating plans.

Section 3

Capital Project Selection, Cost Estimating, and Project Tracking: Tables 7-13

A central component of the capital budgeting process is establishing priorities within the extensive array of proposed projects. With scarce resources and limits on financing options in many states, establishing a set of priorities is a crucial task. Some states first look at the capacity for financing projects from either debt or cash limits over a several year time period and then set priorities.

As Table 7 shows, more than one-third of the states set priorities on a functional basis, such as higher education, natural resources, and local government assistance. Other states use an approach based on emergency, legal, and health reasons. Priorities are ranked by categories such as health and safety, critical maintenance, improvements, and new construction in states such as Virginia, New Hampshire, and Montana. Arizona specifies the use of a formal ranking system to establish priorities in addition to viewing the projects within the political and economic context.

Other approaches to setting priorities include approving projects with a cost savings component as presented in Table 8. When projects are approved with a cost-savings component, often the monitoring of the cost savings is informal. About two-thirds of the states include emergency requests within the capital budget process.

After establishing priorities, states are interested in ensuring that program objectives are met through the project requests. Table 9 shows how some states formalize the review through audits and written justifications, such as in New Jersey, while other reviews are ongoing though less formal.

In carrying out the priorities established in the capital plan, a successful outcome often rests upon the accuracy of cost estimates. Table 10 illustrates the variety of methods states use to develop cost estimates. Architects, engineers, and consultants often provide cost data. In most cases, either the requesting agency or a general services or public works agency is responsible for the review and/or development of the estimates. Techniques include value engineering, life-cycle cost analysis, construction and material indices, and square footage estimates. Almost all states use cost standards according to a particular type of building and space utilization standards to estimate costs as displayed in Table 11. In about half the states, cost options and life-cycle costs are used in cost estimating.

Table 12 shows that in most states future operating costs are projected and often compared to current operating expenses. Projected future costs, however, do not necessarily have any claim on future appropriations.

Table 13 presents the variety of methods states use to track projects once they are underway. Monitoring during the process occurs in the budget office as well as in agencies. Some states, such as Kentucky and Virginia, require an annual or semi-annual progress report for legislative review. A formal tracking system as part of the accounting system is being developed in New Jersey. Other states have a decentralized tracking system within the specific agency overseeing the project.

Good Practices

- **Identify the criteria used in selecting capital projects.**
  States often determine their needs on a functional basis such as higher education and aid to localities. While the functional approach is used for needs assessment over time, emergency or health and safety criteria often determine immediate project selection. States should have some method to integrate needs assessment with project selection. What constitutes an emergency or health reason should be clearly defined. In reviewing the process for project selection, states should assess how actual project selection compares to the priority list.

- **Define all program outcomes for capital investments.**
  Reviews of project requests often do not explicitly link the program objective to the project in question. Projects may be approved that meet financial criteria, but do not meet the objectives of the program.

- **Evaluate cost estimating methods to measure their validity.**
  Even though the expertise for estimating methods is often with the architects and engineers outside of the budget department, budget analysts should be able to understand the underlying assumptions and methods used in the cost estimates in order to thoroughly review project requests.

- **Establish a tracking system to keep projects on schedule and within budget.**
  The tracking system should be ongoing and should serve as an early warning device for projects that are exceeding projections for both cost and time.

Table 7
Setting Project Priorities

State	Do You Set Priorities on a Functional Basis?
Alabama	Needs assessment.
Alaska	Functional areas.
Arizona	Based on an evaluation system.
Arkansas	Prioritized by law and then according to need.
California	Urgency- fire & life safety code violations, health issues.
Colorado	Needs assessment, project by project.
Connecticut	Functional areas.
Delaware	Functional areas, gubernatorial issues/funding availability.
Florida	Functional areas.
Georgia	Functional areas.
Hawaii	Functional areas.
Idaho	According to need.
Illinois	No.
Indiana	Project by project basis.
Iowa	Functional areas.
Kansas	Within dedicated funds for each functional area.
Kentucky	Life safety projects and maintenance receive priority over new construction.
Louisiana	Functional areas.
Maine	According to need.
Maryland	Functional areas.
Massachusetts	No response.
Michigan	Functional areas.
Minnesota	Project by project in the context of review guidelines.
Mississippi	Functional areas.
Missouri	Each project evaluated on merits. Agencies with dedicated funds have more leeway.
Montana	Health & safety, critical maintenance, general maintenance, renovations, improvements, new construction.
Nebraska	Agencies and universities set priorities.
Nevada	No response.
New Hampshire	Priority categories are health and safety, critical maintenance, maintenance, and new construction.
New Jersey	Functional areas. Agencies set priorities in requests. Governor's policies used as guideline.
New Mexico	Priorities based on urgency - life & safety and critical maintenance.
New York	Budget Division analysis of critical needs.
North Carolina	Budget office analysis and review; governor.
North Dakota	By budget office.
Ohio	Urgency, life-health-safety projects, rehabilitation, new construction, depending on funding availability.
Oklahoma	Functional areas and by legislatively determined priorities.
Oregon	Functional areas.
Pennsylvania	Functional areas.
Rhode Island	Functional areas, health and safety, and policy staff input.
South Carolina	Project by project or immediate need.
South Dakota	No response.
Tennessee	Project by project, prior years' funding and planning considered.
Texas	Requesting agency sets priorities within its request. Legislature determines priorities between agencies.
Utah	No.
Vermont	Assess based on merit, financial returns, and statutory mandates.
Virginia	Major repairs, legal/judicial mandates, life safety codes, improvements, new construction, expansions.
Washington	Functional areas. Historical spending and/or identified needs.
West Virginia	No response.
Wisconsin	Evaluation of needs.
Wyoming	Perceived need.
DC	Functional areas.

Table 8
Project Characteristics

State	Approve Projects with a Cost Savings Component	Separate Planning & Construction	Include Emergency Requests in Capital Budget
Alabama	N	N	N
Alaska	Y	Varies	Y
Arizona	Y	Y	Y
Arkansas	N	Y	N
California	Y	Y	N
Colorado	Y	Sometimes	Y
Connecticut	Y	Y	Y
Delaware	Y	Y	Y/Life,safety
Florida	N	Sometimes	N
Georgia	Y	Usually	Y
Hawaii	Y	Y	Y
Idaho	N	Y	Y
Illinois	Y	Often	Seldom
Indiana	Y	Y	Y
Iowa	N	Y	N
Kansas	Y	Y	Y
Kentucky	Y	Sometimes	Y
Louisiana	Y	Y	Y
Maine	Y	Y	Y
Maryland	Y	Y	Y
Massachusetts	No response	No response	No response
Michigan	N	Y	Y
Minnesota	Y	Y	Y
Missississpi	Usually	N	Y
Missouri	Y	Sometimes	Y
Montana	Y	Y	Y
Nebraska	N	N	N
Nevada	No response	No response	No response
New Hampshire	No response	No response	No response
New Jersey	Y	Y	Y
New Mexico	Y	Y	Y
New York	Y	Y	Y
North Carolina	Y	Y	Y
North Dakota	N	N	N
Ohio	Y	Sometimes	Y
Oklahoma	Y	Y	Y
Oregon	N	Y	N
Pennsylvania	Y	N	N
Rhode Island	Y	Y	N
South Carolina	Y	Y	Y
South Dakota	N/A	Often	N/A
Tennessee	Y	Y	Y
Texas	Y	N	N
Utah	N	Y	Y/Consultants
Vermont	Y	Y	Y
Virginia	N	Y	Y
Washington	N	Y(Major projects)	Y
West Virginia	N	N	N
Wisconsin	Y	Y	Y
Wyoming	Y	Y	Y
DC	Y	Y	Y
	Y= 33	Y= 32	Y= 34

Table 9
Program Objectives Met Through Project Requests

State	How Do You Ensure That Program Objectives Are Met Through Project Requests?
Alabama	There is no formal process in place.
Alaska	No process currently exists for measurement.
Arizona	Administration Department analyzes project requests in terms of program objectives and fiscal impact.
Arkansas	Monitoring by Office of the Budget.
California	Through management coordination and communication.
Colorado	There is no formal process in place.
Connecticut	Through agency reports after construction.
Delaware	No response.
Florida	Through a review of release requests.
Georgia	Budget analysts screen requests.
Hawaii	Budget and Finance analyzes request and evaluates project.
Idaho	First planning phase determines program needs.
Illinois	Bureau of Budget review.
Indiana	Varies with project.
Iowa	Monitored by departments.
Kansas	Budget analysts make sure that program objectives are met.
Kentucky	Require written justification.
Louisiana	Budget analysts review requests.
Maine	Department of Administration and Control Projects.
Maryland	Review and analysis by the Department of Budget and Fiscal Planning.
Massachusetts	No response.
Michigan	A project program statement is reviewed before architecture plans are initiated.
Minnesota	No formal process exists.
Mississippi	By performing two separate reviews per account.
Missouri	Requests must explain how program objectives are met. Requests and objectives are thoroughly reviewed.
Montana	Arch. & Eng. reviews and prioritizes requests; budget office reviews; and Gov. recommends action to Leg.
Nebraska	No formal process, but Budget Office conducts analysis as needed.
Nevada	No response.
New Hampshire	Budget Office review.
New Jersey	Budget office conducts analysis, audits, studies.
New Mexico	Analyst reviews requests. Agencies starting to implement management system through goals and objectives.
New York	Through annual budget request-budget recommendation process by budget staff.
North Carolina	Office of State Budget and Management reviews and analyzes requests.
North Dakota	No response.
Ohio	Office of Budget and Management and legislative reviews.
Oklahoma	No response.
Oregon	No response.
Pennsylvania	No response.
Rhode Island	Budget analysts and policy staff review.
South Carolina	Review by engineers, Legislative Council, State Reorg. Commission, and agency's internal auditors.
South Dakota	No response.
Tennessee	Through team and committee work.
Texas	Legislative Budget Office reviews analyses.
Utah	Through analysis.
Vermont	No formal process.
Virginia	No formal process exists.
Washington	Review by program analysts and technical budget staff.
West Virginia	No response.
Wisconsin	Review by program analysts.
Wyoming	Through informal assessment.
DC	Project objectives are matched with long-term comprehensive plan objectives during evaluation.

Table 10
Estimating Project Cost

State	How Do You Estimate The Cost Of Capital Projects?
Alabama	By agencies with assistance of architects and engineers.
Alaska	Based upon past history and/or engineering estimates.
Arizona	Agencies prepare estimates and Facility Management Division verifies costs using reports and standards.
Arkansas	Cost estimates submitted by agencies and reviewed by Building Services Agency and Budget Office.
California	Cost estimates based on time and materials and are updated after preliminary plans and drawings.
Colorado	Usually square foot estimates with percentages for fees, contingency etc.
Connecticut	Cost estimates are prepared by the Department of Public Works and the requesting agency.
Delaware	Estimated both as one-time appropriation and phased in based on size/unique aspects of project.
Florida	Determined by agency based on national figures and revised by recommendations by Dept. General Serv.
Georgia	Estimates prepared by agencies, by business managers or architects/engineers depending on project.
Hawaii	By user agency.
Idaho	Estimates from agency staff often from a study prepared by architect prior to budget request.
Illinois	Central construction agency makes estimates.
Indiana	Primarily by entities submitting project requests.
Iowa	Quote from outside source.
Kansas	By agencies, architects and Division of Architectural Services using construction and material indices.
Kentucky	Division of Engineering projects most costs.
Louisiana	By staff architects and engineers.
Maine	By staff and Department of Administration architects and engineers.
Maryland	Department of General Services reviews and modifies agency estimate based on comparable projects.
Massachusetts	No response.
Michigan	As a function of average square foot costs, in the planning phase based on arch. planning documents.
Minnesota	Requesting agency either in-house or by consultants.
Mississippi	By using standard industry finance procedures.
Missouri	Agency engineers and architects use standard industry estimating procedures. Div.of Design & Construct reviews.
Montana	Cost guides generally provide the cost basis. Estimates vary from unit costs to square foot costs.
Nebraska	By agencies, with assistance of consultants if necessary.
Nevada	No response.
New Hampshire	Governor selects projects to be formally estimated.
New Jersey	Most agencies develop estimates with Division of Building and Construction or through own staff.
New Mexico	By agencies, assisted by cost estimators, architects, and engineers.
New York	Design-construction agencies provide preliminary estimates based on surveys and review of facilities.
North Carolina	Office of State Construction estimates must accompany all requests.
North Dakota	Agencies prepare estimates with architects and engineers.
Ohio	Initially by agencies with input from Division of Public Works and architects.
Oklahoma	Initially by agencies, potential vendors, architects, engineers. Reviewed by construct staff and State Finance.
Oregon	By consultant professional cost estimators.
Pennsylvania	Using agencies use various methods such as cost standards and agency architects/engineers staff.
Rhode Island	Most agencies develop estimates through own staff.
South Carolina	By agency with assistance of architects and engineers.
South Dakota	By architectural and engineering estimates of project.
Tennessee	By departments, consultants, capital projects and Finance and Administration staff.
Texas	Requesting agencies submit project analyses to legislative and executive budget offices.
Utah	Professional consultants project costs.
Vermont	By state engineers and consultant engineers.
Virginia	Requesting agency develops the estimate and Departments of Budget and General Services review it.
Washington	Life cycle cost analysis/value engineering basis for estimates/professional estimators.
West Virginia	Architects/engineers, consultants and specialists prepare estimates.
Wisconsin	Estimates based on historical data on past projects, national estimating guides.
Wyoming	Estimates prepared both in-house and externally.
DC	By cost estimators and the Department of Public Works.

Table 11
Cost Estimating Methods
What Are The Methods Used To Estimate Costs?

State	Methods Used: Cost Standards Building Type	Space Utilization Standards	Cost Options	Life-Cycle Costs
Alabama	Y	Y	Y	Y
Alaska	Y	Y	Y	Y
Arizona	Y	Y	N	Y
Arkansas	Agencies may use	Agencies may use	Agencies may use	N
California	Y	Y	Y	Y
Colorado	N	Y	Sometimes	Required/Not Enforced
Connecticut	Y	Y	Y	Y
Delaware	Y	Y	Y	Y
Florida	Y	Y	N	Y
Georgia	Y	Y	Sometimes	Y
Hawaii	Y	Y	N	N
Idaho	Y	Y	N	Y
Illinois	Y	Y	Sometimes	Y
Indiana	N	Y	Y	N
Iowa	Y	Y	Y	N
Kansas	N	Y	Y	Y
Kentucky	Y	Y	N	N
Louisiana	Y	Y	Y	Y
Maine	Y	Y	Y	Y
Maryland	Y	Y	Y	N
Massachusetts	No response	No response	No response	No response
Michigan	Y	Y	Y	Y
Minnesota	N	N	N	N
Mississippi	Y	Y	Y	N
Missouri	Y	Y	Y	Y
Montana	Y	N	N	N
Nebraska	Y	N	N	N
Nevada	No response	No response	No response	No response
New Hampshire	Y	Y	Y	Y
New Jersey	Y	Y	Y	N
New Mexico	Y	Y	Sometimes	Sometimes
New York	Y	Y	Y	N
North Carolina	Y	Y	Y	Y
North Dakota	Agencies may use	Agencies may use	Usually not	N
Ohio	Y	Y	Sometimes	N
Oklahoma	Y	Y	Y	YN
Oregon	Y	Y	Y	Y
Pennsylvania	Y	Y	Y	Sometimes
Rhode Island	N	Y	N	N
South Carolina	N	N	N	Y
South Dakota	N/A	Y	N/A	N/A
Tennessee	Y	Y	Y	Y
Texas	Y	Y	Y	Y
Utah	Y	Y	Y	Y
Vermont	Y	Y	Y	N
Virginia	Y	Y	Y	Y
Washington	N	Y	N	Y
West Virginia	N	N	N	N
Wisconsin	Y	Y	Y	Y
Wyoming	Y	Y	Y	N
DC	Y	Y	Y	N
	Y= 38	Y= 42	Y=29	Y=25

Table 12
Cost Estimating Methods: Part 2
What Are The Methods Used To Estimate Costs?

State	Project Future Operating Costs	Claims on Future Appropriations
Alabama	N	Y
Alaska	Y	Y
Arizona	N	N
Arkansas	N	N
California	Y	Y
Colorado	Y	Y
Connecticut	Y	N
Delaware	Y	Y
Florida	Y	N
Georgia	Y	Y
Hawaii	Y	Y
Idaho	N	N
Illinois	Y	N
Indiana	Y	N
Iowa	Y	N
Kansas	Y	Y
Kentucky	Y	N
Louisiana	Y	Y
Maine	Y	Y
Maryland	Y	Y
Massachusetts	No response	No response
Michigan	Y	Y
Minnesota	Y	N
Mississippi	Y	Y
Missouri	Y	Y
Montana	Y	N
Nebraska	N	N
Nevada	No response	No response
New Hampshire	Y	Y
New Jersey	Y	Y
New Mexico	Y	N
New York	Y	N
North Carolina	Y	N
North Dakota	Y	N
Ohio	Y	N
Oklahoma	Y	N
Oregon	Y	Y
Pennsylvania	Y	N
Rhode Island	Y	N
South Carolina	Y	N
South Dakota	N/A	N
Tennessee	Y	N
Texas	Y	N
Utah	Y	N
Vermont	Y	N
Virginia	Y	N
Washington	Y	N
West Virginia	Y	N
Wisconsin	Y	Y
Wyoming	Y	N
DC	Y	Y
	Y=43	Y=19

Table 13
Formal Reporting System To Track Capital Projects

State	Do You Have A Formal Reporting System To Track Capital Projects?
Alabama	No formal system.
Alaska	Agencies and the budget office complete a capital authorization status report.
Arizona	Projects reviewed by legislature.
Arkansas	No formal system.
California	State Public Works Board and Joint Legislative Budget Committee.
Colorado	Dept. of Administration reviews some contracts and verifies fund availability.
Connecticut	No formal system.
Delaware	Development Office/Dept. of Adm. Services approves expenditures, construction, and monitors progress.
Florida	Governor's Budget Office and agency provide an annual analysis on progress of project at various phases.
Georgia	Each agency has tracking process.
Hawaii	Planning, design, and project coordinator branches of agency.
Idaho	Division of Public Works tracks projects.
Illinois	No formal system.
Indiana	Entity receiving appropriations has major tracking responsibility. Public Works Division also tracks projects.
Iowa	Agencies gather information and Legislative Capital Projects Committee reviews it.
Kansas	Governor's budget report includes descriptions of all projects. Architectural Services tracks all projects.
Kentucky	Governor's Office for Policy and Management prepares annual report for legislature.
Louisiana	Office of Facility Planning and Control oversees project.
Maine	Agencies and Department of Administration track projects.
Maryland	General services and budget office update database.
Massachusetts	No response.
Michigan	Department of Management and Budget reviews architectural plans, monitors appropriations.
Minnesota	Division of Building and Construction prepares quarterly status reports.
Mississippi	Bureau of Buildings tracks projects.
Missouri	Computerized information system provides information on each project.
Montana	Architecture and Engineering administers all projects; budget office tracks appropriations.
Nebraska	Quarterly status reports are prepared.
Nevada	No response.
New Hampshire	Agencies prepare status reports.
New Jersey	A formal project tracking system is being developed.
New Mexico	Capital project monitoring system tracks funds expended and progress to date on a semi-annual basis.
New York	The design-construction agencies monitor design and construction, the client agency reviews.
North Carolina	Office of State Budget and Management and State Construction oversee fiscal and quality assurance.
North Dakota	No formal system.
Ohio	Office of Budget and Management with State Controlling Board approve all releases of capital funds.
Oklahoma	Office of Public Affairs and Office of State Finance administer funds and reports.
Oregon	Management by agency, design review by Capitol Planning Commission.
Pennsylvania	Office of the Budget maintains a status report.
Rhode Island	Building Code Commission and departments track progress.
South Carolina	State Engineers Office assist in bidding, planning and approval.
South Dakota	State Engineers Office and Commissioner of Administration monitor projects.
Tennessee	Project management and monitoring by Capital Projects Management and Finance and Administration.
Texas	Requesting agency oversees the project.
Utah	Div. of Facilities Construction and Mngt., Div. of Water Resources, and Dept. of Transportation track projects.
Vermont	Department of State Buildings tracks costs.
Virginia	Agency and Dept. of General Services prepare a progress report on semi-annual basis for legislature.
Washington	Executive and legislature review, reporting system in development.
West Virginia	No formal system.
Wisconsin	Division of State Facilities Management.
Wyoming	No formal system.
DC	Implementer tracks status, user does site visits, financial officer executes budget action and financing.

Section 4

Capital Financing: Tables 14-17

After priorities are established, states look at how to finance a project. States' financing options are often dependent upon legal limits on debt levels or the ability to incur debt. Other restrictions include scarcity of general revenues as well as policy decisions to maintain certain debt levels in light of bond ratings.

As Table 14 shows, states often look at the amount of general fund resources available for projects through an analysis of funding availability. In some cases capital allocation is derived from the total revenues available less operating requirements. Due to severe fiscal constraints, some states have virtually eliminated the use of general funds for capital projects in recent years.

For states that have an option to debt finance, the issue of whether to fund a project through cash or bonds arises. Table 14 illustrates how decisions on project financing depend on such factors as funding availability, the size of the project, the type and life of the project, tax laws, and the likelihood of voter approval for the project.

Another financing decision states face is whether to own or lease a facility. Most of the states that have a policy regarding this decision compare the life-cycle costs of the two options in deciding whether to own or to lease. Most states do not explicitly consider the impact on the local property tax base in the decision.

In addition to general obligation bonds, states also include revenue bonds in the regular capital budget process. From a debt perspective, coordinating various debt issues would provide a state with a better picture of total debt. For states that debt finance, there is often the need to finance a project on an interim basis until the bonds can be issued. Table 15 shows that about half the states use treasury loans as an interim form of financing. Other interim financing options used by the states include special funds, pooled investments in California, bond anticipation notes, and master note financing in Kentucky.

In funding capital projects through debt financing, debt service expense becomes a fixed cost in the operating budget and, if excessive, can limit future options. States build discipline into their debt financing decisions through such means as user fee financing whenever possible as shown in

Table 16. About half the states have the users of approved facilities participate in paying for debt service. Some states require private sector participation in certain capital projects. The types of projects most likely to have private sector participation include economic development projects and build-to-suit projects with an option to buy. About half the states compare debt service expense with the net operating impact and changes in revenues and expenditures of the projects funded.

States make decisions on the amount of general funds to allocate for debt service based on available revenues as well as statutory/constitutional debt limits. As Table 17 shows, about two-thirds of the states have limits on the amount of debt service or authorized debt. The limits vary across states, with a range from no general obligation debt to fifteen percent of available revenues for debt service. Limits on authorized debt also range from no allowable debt to a dollar amount such as $500,000 or percentage of income or revenues. Other limits are waived with the requisite voter approval. Limits on revenue bonds are less frequent and when they exist, the limits tend to be dependent on various issuing authorities. As an approach to setting targets for debt, about half of the states start the capital budget process with amounts based on funding sources such as total general obligation bonds, total debt service appropriation, and total cash appropriation for capital projects.

Good Practices

- **Define the factors to consider in decisions of whether to own or lease.**
  Factors to consider include life-cycle costs and the impact on local property taxes.

- **Develop a clear debt policy.**
  With the trend towards more of state expenditures in the entitlement or mandatory category, states limit their flexibility when debt service exceeds a comfortable portion of their operating budget. The debt service limits states set for themselves should be viewed in light of anticipated overall growth in the states' revenues.

- **Review cost-benefit comparisons for private sector participation in capital projects.**
  Opportunities to involve the private sector would help target the specific benefits and costs of a project.

Table 14
Project Financing

State	Amount of General Fund Dollars Used	Use of Bonds Vs. Cash	Policy Own Vs. Lease
Alabama	Economic and political considerations	Project size	Y
Alaska	Available revenue minus operating	Nature of project, availability of funding	Y
Arizona	Economic and political considerations	Constitutional limit	Y
Arkansas	Financing structure, mechanism in law	Legal provisions, availability of bond finance	Y
California	Statute/constitutional limits	Potential for voter approval, asset life, cash	Y
Colorado	Transfers from general fund in statute	Legislation	N
Connecticut	No response	Size of request	Y
Delaware	Economic conditions, funds available	Federal tax laws, project scope, private involvement	Y
Florida	At least 5% of general fund growth	Type of project	Y
Georgia	Projected revenue minus operating	No set policy	N
Hawaii	Availability of funds	Nature of project, available funds, debt limits	N
Idaho	Surplus funds when available	Need, political appeal, available cash	N
Illinois	Prior years, condition revenues	Bondability guidelines	Y
Indiana	Type of project and availability of funds	Availability of funds, statutory authority	N
Iowa	Governor's recommendation	Governor's recommendation	N
Kansas	Debt service commit, stat transfer highways	Availability of funds, benefit spread	N
Kentucky	Relative need versus dollars available	Available cash, debt ceiling, life-cycle of project	N
Louisiana	Little general fund used	Expected life of project	N
Maine	Debt service commitment	Size of project	N
Maryland	Availability of funds, type of project	Availability of funds, project type	N
Massachusetts	No response	No response	No response
Michigan	Project size-under $5 million	Project size	N
Minnesota	Judgement call	Bondability constraints	N
Mississippi	No general fund	All projects use bonds	Y
Missouri	Financial health of state/other priorities	Available funds/amount of state debt	N
Montana	No general fund/Leg. may add general fund	Size of project	N
Nebraska	Availability of funds, project type	Availability of funds, project type	N
Nevada	No response	No response	No response
New Hampshire	Debt service only	Economic situation, life of project	Y
New Jersey	Consider mandated costs and revenue proj.	Cost, size, purpose of project	N
New Mexico	Availability of funds	In process of review	N
New York	General fund "last in" source	Type of project	N
North Carolina	Projected general fund balance	Revenues produced and leg. approved G.O. bonds	N
North Dakota	Needs vs. funds	Availability of funds	N
Ohio	Funds available, type of project	Project type and size	N
Oklahoma	Funds available	Amount of project, project type	N
Oregon	No response	Cash availability	Y
Pennsylvania	Projects usually financed with bonds	Special fund agencies with dedicated revenues	N
Rhode Island	Funds available	Most projects bond financed	N
South Carolina	Allowable debt service	Availability of funds	N
South Dakota	N/A	Cash availability	Y
Tennessee	Cash available after operating	Cash availability	Y
Texas	Legislative priorities	Legislative priorities	Y
Utah	Executive decision	Executive decision	Y
Vermont	Rarely use general funds	Bonding guidelines and tax laws	N
Virginia	Judgement call	Financial feasibility, availability of revenues	N
Washington	Funds available	Funding source	N
West Virginia	Estimated cost	Legislative authorization	N
Wisconsin	Priorities of Governor, Legislature, & Comm.	Building commission action	Y
Wyoming	Gubernatorial/legislative priorities	Availability of funds	N
DC	Repairs not qualifying for bonds	Type of project	Y Y=18

Table 15
Project Financing: Part 2

State	Use Of Treasury Loans	Include Revenue Bonds In Capital Process	Interim Financing Methods
Alabama	N	Y	N
Alaska	Y	Y	General fund
Arizona	N	N	N
Arkansas	N	Y	N
California	Y	Y	Planning funds,pooled invest.
Colorado	Y	Y	N
Connecticut	Y	Y	Bond Anticipation Notes
Delaware	No response	N	Local school funds
Florida	N	Y	General fund, special taxes(Education)
Georgia	N	Y	N
Hawaii	Y	Y	Treasury loans/BANs
Idaho	Y	Y	Permanent Building Fund, GA
Illinois	N	N	N
Indiana	N	N	N
Iowa	N	Y	Internal funds
Kansas	Y	Y	N
Kentucky	Y	Y	Master note financing,adv, receiv
Louisiana	Y	Y	Loans
Maine	Y	Y	Bond Anticipation Notes
Maryland	Y	Y	Adv funds consol. bond proceeds
Massachusetts	No response	No response	No response
Michigan	Y	Y	General fund
Minnesota	Y	N	N
Mississippi	N	N	N
Missouri	N	Y	N
Montana	N	Y	Cash
Nebraska	N	Y	N
Nevada	No response	No response	No response
New Hampshire	N	Y	General fund
New Jersey	Y	N	N
New Mexico	N	Y	N
New York	Y	Y	Tax. rate loan, commercial paper
North Carolina	N	Y	N
North Dakota	N	N	N
Ohio	N	Y	N
Oklahoma	N	Y	N
Oregon	N	Y	Internal loans
Pennsylvania	N	N	Bond Anticipation Notes
Rhode Island	Y	N	Bond Anticipation Notes/general fund
South Carolina	Y	Y	Bond Anticipation Notes
South Dakota	N/A	N/A	N/A
Tennessee	Y	Y	N
Texas	N	Y	N
Utah	Y	Y	Cash flow Treasurer
Vermont	Y	N	Bond Anticipation Notes/general fund
Virginia	Y	Y	Being developed
Washington	N	Y	N
West Virginia	Y	Y	Treasury loans, notes
Wisconsin	Y	Y	N
Wyoming	N	Y	N
D.C.	Y	N	General fund pooled cash
	Y=24	Y=36	

Table 16
Debt Service

State	Users Pay Debt Service	Compare Debt Service to Revenues & Expend.	User Fee Financing	Private Sector Participation
Alabama	Sometimes	Y/N	Sometimes	Y/N
Alaska	Y	N	Y	Y
Arizona	Y	Y	Y	N
Arkansas	Y	N	Y	N
California	Y	Y	Y	Y
Colorado	Y	No response	Y	Y
Connecticut	N	No response	Y	YN
Delaware	Y	Y	Y	N
Florida	Y	N	Y	N
Georgia	N	N	Sometimes	N
Hawaii	Y	Y	Y	Y
Idaho	Sometimes	Y	Sometimes	N
Illinois	N	Y/N	Y	N
Indiana	N	Y	N	N
Iowa	Y	Y	Y	N
Kansas	Y	N	Y	N
Kentucky	Y	N	Y	Y
Louisiana	Sometimes	N	Y	N
Maine	Sometimes	Y	Sometimes	N
Maryland	N	N	Y	Sometimes
Massachusetts	No response	No response	No response	No response
Michigan	Y	N	Y	N
Minnesota	Sometimes	Y	Sometimes	Sometimes
Mississippi	Y	Y	Y	N
Missouri	N	Y	N	N
Montana	Sometimes	Y	Y	Sometimes
Nebraska	Y	N	Y	N
Nevada	No response	No response	No response	No response
New Hampshire	Y	Y	Y	Y
New Jersey	N	N	N	N
New Mexico	N	N	N	N
New York	N	N	N	N
North Carolina	N	N	Y	N
North Dakota	Y	N	Y	Y
Ohio	N	N	N	Sometimes
Oklahoma	Y	Y	Y	Y
Oregon	Y	Y	Y	N
Pennsylvania	N	N	N	N
Rhode Island	N	Y	Y	N
South Carolina	Y	Y	Y	N
South Dakota	Project by project	Project by project	Project by project	Project by project
Tennessee	Y	Y	Y	Y
Texas	N	Y	Y	N
Utah	N	Y	Y	N
Vermont	Y	Y	N	Sometimes
Virginia	Y	Y	Y	N
Washington	Y	N	Y	N
West Virginia	Y	Y	Y	N
Wisconsin	Y	Y	Y	N
Wyoming	Y	Y	Y	N
DC	N	Y	N	Y
	Y=26	Y=26	Y=34	Y=10

Table 17
Debt Management

State	Policy to Limit Debt Service	Policy to Limit Authorized Debt	Moody's G.O. Rating
Alabama	N	N	Aa
Alaska	Based on oil revenues	N	Aa
Arizona	N	G.O. debt limit of $350,000	No G.O.debt
Arkansas	N	N	Aa
California	N	N	Aaa
Colorado	No general obligation debt allowed	No G.O. debt allowed	No G.O.debt
Connecticut	N	N	Aa
Delaware	15% of general fund	5% of revenue	Aa
Florida	N	50% of tax revenue preceding 2 yr.	Aa
Georgia	Y	Y	Aaa
Hawaii	15% of revenues	Y	Aa
Idaho	N	N	No G.O.debt
Illinois	N	N	Aa1
Indiana	N	No. G.O. debt allowed	No G.O.debt
Iowa	N	G.O. bond limit of $250,000	No G.O.debt
Kansas	N	$1 million limit w/o voters	No G.O.debt
Kentucky	N	G.O. bonds $500,000	Aa
Louisiana	10% of 3 yr. av revenues Bond & Redempt Fund	2 times 3 yr. av. bond revenues & redempt. funds	Baa1
Maine	N	N/General Fund\$150 million on revenue bonds	Aa1
Maryland	8% of available revenues	G.O. debt at 3.2% of income	Aaa
Massachusetts	No response	No response	Baa
Michigan	N	Cap on bonds	A1
Minnesota	3% of general fund unrestricted receipts	N	Aa
Mississippi	5-8%	1.5 times lg. revenue preceding 4 yr.	Aa
Missouri	N	State constitution and statute	Aaa
Montana	N	N	Aa
Nebraska	N	N	No G.O.debt
Nevada	No response	No response	Aa
New Hampshire	N-Informal	10% of general fund revenue	Aa
New Jersey	N	N/G.O. Y/Revenues based on issuing authority	Aaa
New Mexico	1% of taxable property subject to property tax	Y	Aa
New York	N	Statutory limits G.O. bonds	A
North Carolina	N	Voter approval	Aaa
North Dakota	N	N	Aa
Ohio	5% of annual general fund expenditures	Legislative approval	Aa
Oklahoma	N	N	Aa
Oregon	N	Determined by Treasurer/Legislature	Aa
Pennsylvania	N	N	A1
Rhode Island	N	G.O. bonds must be approved by voters	Aa
South Carolina	5% of prior year's revenues	Function of debt service	Aaa
South Dakota	N/A	N/A	No G.O.debt
Tennessee	Y	150% of revenues from previous year	Aaa
Texas	N	No response	Aa
Utah	N	Based on total assessed value of property	Aaa
Vermont	N	Debt Affordability Committee reviews debt	Aa
Virginia	N	1.15% times average annual revenues	Aaa
Washington	7% of revenues	Legislative approval	Aa
West Virginia	N	N	A1
Wisconsin	3 to 4% of revenues	Y	Aa
Wyoming	1% of assessed value of taxable property	1% of assessed value of taxable property	No G.O.debt
DC	14%	N	Baa

Source: Moody's Municipal Credit Report, November 12, 1991.

Section 5

Asset Management: Tables 18-19

States often use inventory systems to track the status of existing capital assets. As Table 18 shows, almost all states maintain a data base inventory for capital assets. In about one-third of the states, the inventory systems assess the condition of facilities, while about two-thirds of the states use building maintenance standards. The frequency of updating data bases ranges from continuously to every three years.

Some states charge rent to departments in order to finance maintenance and improvements to facilities. In about two-thirds of the states, departments are charged rent and the rent is used for building maintenance. Other funding mechanisms available for maintenance include building renewal funds, dedicated building funds, maintenance reserves, and revolving funds in addition to general funds as shown in Table 19. In about two-thirds of the states the current priority in appropriations is for maintenance rather than new construction.

Good Practices

- **Maintain an updated inventory system of capital assets.** States should review the adequacy of the information and include the condition of the facilities.

Table 18
Asset Management

State	Data Base Inventory	How Often Data Updated	Priority Between Maint & New Facilities	Charge Rent To Departments
Alabama	N	N/A	Based on need	Y
Alaska	Y	Now current	Maintenance	N
Arizona	Y	Yearly	Maintenance	Y
Arkansas	Y	Kept by Bldg. Services	Based on need	Y
California	Y	Ongoing	Maintenance	Y
Colorado	N	N/A	Project by project	N
Connecticut	Y	Yearly	Maintenance	N
Delaware	Y	Yearly	Maintenance	N
Florida	Y	Yearly	Maintenance	Y
Georgia	N	N/A	New buildings	Y
Hawaii	Y	Continuous	Within available funds	N
Idaho	Y	Yearly	Maintenance	Y
Illinois	Y	Constant	Half appropriation	N
Indiana	Y	Ongoing	Depends	N
Iowa	N	N/A	New buildings	N
Kansas	Y	Yearly	Maintenance	Y
Kentucky	Y	Continuous	Maintenance	Y
Louisiana	Y	No response	Maintenance	Y
Maine	Y	Yearly	Maintenance	Other than general fund
Maryland	N	Every 3 yr.	Depends	Y
Massachusetts	No response	No response	No response	No response
Michigan	Y	Depends on staff	Maintenance	Y
Minnesota	N	N/A	New construction	Y/N
Missississpi	Y	Every 2 yr.	Depends on future impact	Y
Missouri	Y	Yearly	Maintenance	Y
Montana	Y	No response	Maintenance	Y
Nebraska	N	N/A	Based on need.	Y
Nevada	No response	No response	No response	No response
New Hampshire	N	N/A	Maintenance	Y
New Jersey	Y	Periodically	Maintenance	N
New Mexico	Y	No response	Based on need	N
New York	Y	Every 2 yr.	Maintenance	Y
North Carolina	Y	Every 3 yr.	Depends	N
North Dakota	Y	Yearly	Maintenance	Y
Ohio	Y	Yearly	Maintenance	Other than general fund
Oklahoma	Y	Yearly	No response	Y
Oregon	Y	Being developed	Maintenance	Y
Pennsylvania	Y	Yearly	Not established	N
Rhode Island	Y	Developing/Continuous	Based on need	Y
South Carolina	Y	As needed	Depends	Y
South Dakota	Y	No response	Maintenance	Y
Tennessee	Y	In process	No response	Y
Texas	Y	Continuous	Maintenance	N
Utah	Y	Yearly	Maintenance	Y
Vermont	N	N/A	Need based	Other than general fund
Virginia	Y	No response	Maintenance	Y
Washington	N	N/A	New construction	Depends
West Virginia	N	N/A	Equal	Y
Wisconsin	Y	Yearly	Maintenance	Y
Wyoming	Y	Monthly	Maintenance	N
DC	Y	N/A	Maintenance	N
	Y=38			Y=29

Table 19
Asset Management: Part 2

State	Other Mechanisms For Maintenance
Alabama	Budget & revolving funds through rent
Alaska	N
Arizona	Building renewal funds
Arkansas	Y
California	N
Colorado	N
Connecticut	N
Delaware	N
Florida	General fund
Georgia	Continuation and improvement funds
Hawaii	Hospital, airport
Idaho	Operating budget
Illinois	N
Indiana	Y
Iowa	N
Kansas	Dedicated Building Funds
Kentucky	General fund
Louisiana	Operating budget
Maine	Operating budget, Dedicated Build. Funds
Maryland	N
Massachusetts	No response
Michigan	N
Minnesota	Pooled account for asset preservation
Mississippi	Y
Missouri	N
Montana	Operating budget
Nebraska	N
Nevada	No response
New Hampshire	Operating budget
New Jersey	N
New Mexico	Operating budget
New York	N
North Carolina	N
North Dakota	N
Ohio	Operating budget
Oklahoma	Y
Oregon	N
Pennsylvania	N
Rhode Island	N
South Carolina	N
South Dakota	General fund and other appropriations
Tennessee	Revolving fund through rent
Texas	N
Utah	N
Vermont	N
Virginia	Maintenance reserve
Washington	General fund
West Virginia	N
Wisconsin	Y
Wyoming	N
DC	N

Case Studies in Selected States

Section 1

Defining Capital Expenditures and Protecting Maintenance Funds

- **Question: How do you define or breakout your categories of capital expenditures (e.g., renovation, maintenance, construction, planning)? What do you include as "capital" expenditures? Are you satisfied with your definition? Why or why not?**

Arizona

There are two types of capital appropriations. The first is a statutorily prescribed "building renewal" formula and the other type covers all other appropriations in our Capital Outlay Act. "Building renewal" is defined in A.R.S. 41-790 to mean:

Major activities that involve the repair or reworking of a building, including the upgrading of systems which result in maintaining a building's expected useful life. Building renewal does not include new construction, landscaping and area beautification, infrastructure replacement or repairs, routine maintenance, new paving resurfacing of an area that was not capitalized as part of the original cost of the building, or demolition and removal of a building.

The other type of capital appropriation includes renovation projects, major systems replacement, design and/ or engineering fees, land acquisition, and new construction.

Operating budget agencies may expend resources for items related to capital facilities. Minor renovations, relocations, remodeling, paving, general maintenance, statewide capital planning and inspections, and emergency infrastructure repairs are usually expended against the operating budget.

Since legislative enactment of the building renewal formula in 1986, the formula has never been fully funded. For example, while the total state general fund appropriation in the Capital Outlay Act for FY1992 is $4.0 million, the general funds "building renewal" formula allocation alone is targeted to be $22.9 million. Accordingly, there are both insufficient general fund appropriations to finance capital projects and no clear definition of capital projects (other than building renewal).

Indiana	Capital budgets include preventive maintenance, repair and rehabilitation, and construction. Preventive maintenance is defined as expenditures for the normal/routine upkeep of existing structures. Repair and rehabilitation refers to infrequent upkeep or upgrading existing structures which may result in a change in the function of an asset. Construction refers to expenditures resulting in a new fixed asset.
Kansas	There are four main capital improvement categories: rehabilitation and repair, remodeling, new construction, and razing. Debt service, regardless of the nature of the project, is treated as a separate category. Rehabilitation and repair includes all maintenance (major and emergency), restoration, replacement of fixed equipment, energy conservation, code compliance, re-roofing, and program requirements. Remodeling includes all major projects that substantially change the structure and use of existing facilities. New construction includes all new construction and building additions. Razing includes the demolition of existing facilities. Debt service, consistent with GAAP accounting principles, includes only the principal portion of the debt service payment for a project.
Rhode Island	Maintenance is defined as all repair and renovation activities that do not alter the asset's original purpose or expected useful life, while capital is defined as all activities associated with construction. Capital includes renovations and repairs which alter the asset's original intended use or useful life.

- **Question: Most budget officials recognize the need for repair and maintenance activities. Often, however, funds get diverted to other operating expenses or to remodeling, renovations, or construction projects. Have you addressed this issue in your state? To what effect?**

Arizona	Many of our facilities have structural and mechanical problems which cannot be addressed due to the lack of renewal and maintenance funds. To a large extent, preventive maintenance is not done on a routine basis. All of our available funds are used to fix problems once they become emergencies. The "building renewal" formula was an attempt to address the concerns of budget officials and facility managers in the area of maintenance and repair, however, funds were not provided. The state's facility managers have done an outstanding job in fixing the building inventory on "less than shoestring budgets" in the last five years.

Indiana

The necessity to improve the method for determining funding levels for repair and rehabilitation led the Higher Education Commission, the State Budget Agency, and public institutions, with the support of the General Assembly, to study the condition of facilities and alternative public policies towards improving the conditions. A number of funding formulas used in other states were evaluated and changes were made in the way in which Indiana's public institutions report facilities inventory data to the Commission. The formula recommended for use in Indiana public higher education derives from Michigan's formula. The basic premises are as follows:

- The formula should be based on construction costs;
- The formula should reflect current year building valuation;
- The formula should recognize that as a general policy fewer resources should be directed to building renewal than the cost of building replacement;
- The formula should recognize that older buildings require proportionately more renewal funds than younger buildings and;
- The formula should reflect the effects of building renewal projects already accomplished.

Kansas

The definition for rehabilitation still has some "gray" areas as to whether this type of work should be included in capital improvements or the operating budget. For example, maintenance undertaken by the Department of Transportation, whether done with in-house staff or by contract, is reported in the operating budget, whereas maintenance for other agencies is reported as a capital improvement. There does not appear to be any overriding concerns about the definition of maintenance.

Maintenance funds are protected for certain facilities through the use of dedicated sources of revenue derived from a property tax levy. Universities, state hospitals, state mental retardation institutions, youth centers, the School for the Visually Handicapped, and the School for the Deaf are included. In some years, correctional facilities have shared in the levy for state hospitals and related facilities, but now they have a dedicated portion of lottery and racing receipts. The Governor proposed to the 1991 legislature to dedicate another portion of lottery and racing receipts to a new fund, named the General Facilities Building Fund, to provide a stable source of financing for facilities belonging to other agencies such as the Department of Administration, Department of Agriculture, Adjutant General, Department of Wildlife and Parks, State Fair, Kansas Bureau of Investigation, and Insurance Department.

Rhode Island

Repairs and renovations have usually been in the capital budget, with only minor repairs and preventive maintenance financed in the operating budget. This policy resulted in postponing many repairs until they approached crisis proportions. Repairs at this stage became more costly and diverted attention from establishing an ongoing inventory of repair needs. Furthermore, with bond funds being project specific, the state did not have the capacity to address emerging maintenance problems. Instead, items would generally be placed on hold for a subsequent bond issue.

In recognition of this problem, asset protection legislation was enacted that dedicated a portion of lottery receipts for asset protection activities. While reserving operating revenues for ongoing asset protection was a giant step forward, two issues plagued the program: (1) the lack of an inventory on the general condition of state assets precluded any needs evaluation process; and (2) the pressure to include remodelling which exceeded normal asset protection as an eligible activity. The asset protection program, which took effect July 1, 1986, survived until FY 1991 when, with a $250 million state deficit, the reserved funding for asset protection was suspended.

Coincidentally, this state was in the midst of the FY 1991-2 biennial capital budget process. In recognition of both asset protection requirements identified by agencies in their capital budget requests and the suspension of asset protection funding over the two ensuring years, a $19.5 million two-year bonded asset protection program was presented to and approved by the voters in November 1990. As opposed to previous bonded maintenance, this issue is not project specific and therefore provides flexibility to intervene in unanticipated, priority situations.

At this juncture, maintenance/asset protection activities will continue to be proposed for bonding. Accordingly, state agencies are required to identify their current and projected asset protection needs as a distinct element of the FY 1993-4 biennial capital budget. Along with setting priorities, maintenance needs must be identified as: (1) backlog requirements - needs as of FY 1992 and, (2) prospective requirements - needs projected yearly from FY 1993 to FY 1997.

In summary, in an attempt to provide a continuous stream of operating funds for repair and renovations, statutory language was established specifying the proportion of receipts to be available for asset protection. This statutory language has been suspended, and to fill the financing void asset protection has been financed with general obligation bonds.

Section 2

Organization of the Capital Planning Process

- **Summary**

A capital budget begins with the state budget office preparing guidelines, forms, instructions, and procedures that are then provided to the individual state agencies to complete. State agencies request the capital improvement and construction budget for their agencies. Whether the capital budget is for only the budget period or if it is a six to ten year plan, the list of capital needs is generated at the state agency level. Generally speaking, a capital budget is done separately from the operating budget. Some states, however, submit both the operating and capital budget to the legislature at the same time while others actually submit the two budgets to the legislature at different times.

Capital budgets include both renovations to existing buildings and new construction. New construction and improvements to existing buildings are usually all part of the same priority listing. Some states require agencies to plan fifteen years down the road although a shorter plan is actually submitted to the state budget office. Generally, state's with annual sessions look at needs five years down the road; those with biennial budgets look at three biennia or six years total.

In states where substantial planning is done, long-range plans do guide future years significantly. In states where documentation for the years outside the budget process is minimal, plans generally do not guide the future. States with well-established capital budgets require thorough documentation on the program need of the building, the use of the building, size, and structure.

Some of the elements that make capital budgets work include a clear understanding of the philosophy and the principles that are the framework of a capital budget. Without a clear understanding of the principles, the process becomes haphazard and much more political. Thorough documentation, planning, and needs analysis are a must. This includes taking a tough stance on requiring agencies to document the need for the project. Expertise on capital construction is also needed. Whether the expertise of engineers, architects, and cost estimators is a part of the budget office, part of a general services department, or contracted out, it is a necessary element of success. The expertise to evaluate projects and set priorities for the capital budget must be available to the budget office.

Finally, the states most satisfied with their capital budgeting process have some method of keeping legislatures informed on the capital budget needs of the state. Some states have a formal committee made up of individuals who are in charge of financing projects, supervising construction of projects, or budgeting for the state. Committees include both the executive branch and legislative branch. States that have a committee in place report that it lends credibility to the capital budget process, it tends to take politics out of the decision making process, and that it is perceived as a fair and equitable approach for setting capital priorities for the state. In states that did not have a formal committee or commission to evaluate the capital budget, the budget office or the person in charge of the capital budget always kept key legislators informed.

- **Question: How does your state generate a list of capital improvements and capital construction needs?**

Kansas	Statute requires agencies to submit five-year facilities plans each year, encompassing the forthcoming budget year and four succeeding budget years.
Maryland	Agencies submit requests for consideration. The capital budgeting process runs parallel to the budget process but is separate from it. Forms are provided to the agencies to make their requests.
Minnesota	State agencies submit their requests on capital needs. The capital budget guidelines, forms, and procedures are sent to the state agencies by the budget office. The capital budget is a separate document from the operating budget and it is presented to the legislature at a separate time. In fact, the budget office is attempting to change the timing of the operations and capital budgets so that one year of the biennium, (the first year) operating budgets would be passed by the legislature and the second year of the biennium (when only minor changes need to be made to the operating budgets), the capital budget would be passed. The state of Minnesota is on a biennial budget system but its legislature does meet every year. When both budgets are considered during the same legislative session, the capital budget does not receive a thorough hearing. Doing the capital budget on the off year of the operating budget would allow legislators the opportunity to do site visits. In research conducted, about half the states did capital budgets and operating budgets at the same time and the other half did them at different times.

Virginia	A list of capital projects is generated by soliciting request forms from all state agencies and institutions of higher education.

- **Question: Are capital improvements to existing buildings separated from new construction needs?**

Maryland	Major renovations are handled the same as new construction. A separate facility renewal item in the capital budget handles projects between $100,000 and $1,000,000.
Minnesota	Improvements and new construction needs compete for the same capital expenditure dollars.
Virginia	They are evaluated in the same manner based on the programmatic merit. Renovations compete with new construction for funding in the same plan.

- **Question: How does your state approach multi-year planning for major capital improvements and new construction?**

Maryland	The agency's request includes its needs or anticipated needs over the next five years. The plan the agency submits reflects the way it would like to see renovations and new construction handled for their agency. That may not necessarily be what the Capital Budget Office recommends; some projects may be moved up, some may be moved back.
Minnesota	While state agencies do submit a six-year plan, the out-years (those years beyond the actual budgeting period), are really only "wish" lists and are not based on solid needs and thorough analysis.
Virginia	Agencies are required to be thinking of construction and renovation plans ten to fifteen years hence, though they submit a six-year plan to the state budget office. The state of Virginia is on a biennial budget, so the six-year plan covers three biennia. Although the plans beyond six years are not submitted to the budget office, budget analysts visit each agency and talk about what the agency is looking at seven to fifteen years down the road. Every two years the six-year plan is updated by the state agency.

- **Question: How much do your long-range plans guide future years?**

Kansas	The plans submitted are generally a guide to the future; however, the scope and cost of projects will change significantly from the time they first appear in the plan to the time a decision is made to fund them.
Maryland	About 70 percent of the requests anticipated for the second year of the five-year plan will actually be part of the budget process the following year. The other 30 percent could change for reasons such as delays in design or other types of delays for scheduled building or renovations; discovery of new needs; requests for projects that had been turned down by the legislature and are requested again; or perhaps the legislature had appropriated planning funds for a project that was not in the five-year plan for the budget year. If the legislature appropriated planning funds, then the capital project would be scheduled sooner.
Minnesota	Those years that are not actually in the budget itself do not have the same level of documentation and needs analysis as occurs in the budget year.
Virginia	Plans are constantly being updated because of changing needs. In fact, the program is in a state of flux right now, because Virginia has always operated its capital construction budget on a pay-as-you-go basis. The state has done no borrowing for buildings since 1978, with the exception of revenue producing types of projects in higher education and a few prison sites through the Public Building Authority. As a general rule, renovations and new construction have been done completely on a cash basis. Because there was no need for debt financing, there was not a great deal of emphasis on the six-year plan. However, beginning with its next biennium, the state is looking at a six-year debt financing instrument in order to manage capital renovations and new construction. There is not much detail beyond the current two years. Beyond two years, agencies aggregate the number of square footage and apply a general cost per square foot. Virginia requires by statute that a preplanning study precede any construction. Generally, the preplanning study is funded in the biennium prior to construction. If the legislature did not fund the preplanning study, the department that wants to build during the next biennium needs to find the money on its own to do the study. The preplanning study actually means that about 20 percent of the planning is done, and the agency is ready to move into the design phase. The preplanning study results in a much more accurate estimate.

- **Question: What are the elements in your process that make it work?**

Kansas	The system works primarily because of the working relationships of the participants and not because any specific set of procedures are followed. It is uncertain to what extent the system needs to be made more formal. As discussed elsewhere, the review of projects in greater depth probably is of more concern.
Maryland	The process needs to begin with the debt affordability process. There is a Debt Affordability Committee that has built up credibility over time and determines how much bonding can be expected in the next five years. The State takes the five-year plan seriously. In other words, it sticks to it unless there is a compelling reason to deviate from it. The Governor backs the long-range plan which gives the plan additional integrity. The state requires agencies to document the proposed project - what it is for, how big it is, why it is needed; descriptions and justifications are required, even for those not scheduled to be built for five years. By the time the project moves up to the year it might be built, there should be a full program description, including architectural specifications and other justification to ensure that it is indeed a necessary renovation or construction project. By the time it is moving into being on line as a project, everyone should have a clear idea of the project needs. Enough work needs to have been done by the state agency so a very accurate cost estimate can be made.
Minnesota	There is a need to distinguish between the political aspects of capital budgeting and the managerial aspects of capital budgeting. In the state of Minnesota, a 60 percent majority vote is required in order to bond. Since it is very rare for one party to control a 60 percent majority in both the House and Senate, projects are traded for votes. Therefore, it is very difficult to take politics out of the capital budget. However, the budget office is considering an approach to get more background information on capital projects by requiring that a study be done before a project can be considered. Analysis of what the facility is needed for, who it would be used by, and its function would allow for more equity and less politics in the decision process. The Executive Branch is increasing its attention on preserving existing capital assets outside the politics of the bonding bill.

Virginia

A substantial amount of planning goes into a project before it becomes part of the Governor's recommendation and is submitted to the legislature. That planning is done at the program level to determine how that particular renovation or construction would serve the needs of the clients and what the project will cost.

The Department of Planning and Budget is responsible for putting together all the Governor's recommendations for a budget, including capital construction. The Department of General Services is the agency that is responsible for cost estimating. The two departments work very closely together to coordinate and project costs that are then included in any budget recommendation.

Virginia is in a state of flux. Before, the cost of estimating and budget analysis was based more on how much it would cost to build a particular building requested by an agency. The analysis is moving to a more analytical approach. The first determination will be if the building is needed; and if a building is needed, what type of building would be most suitable rather than focusing on cost estimates for whatever type of building had been requested.

There are a number of budget sections; for example, one on education, one on human services, and one on general government. The budget analysts who deal with the operations of the department within their section also deal with the capital budget. The education analyst, for example, would coordinate all the capital construction projects that were in education budgets. Budget analysts can call on the Department of General Services for expertise in the technical issues about the project. Once each section has prepared its capital construction list, the budget analysts recommend statewide priorities.

- **Question: What are the elements you would like to change?**

Maryland

Rapid growth and changes have made the development of a long-range plan for prison and juvenile facilities difficult. There has been improvement, however, in projecting needs in the corrections area.

One improvement to the process would be to make a more critical analysis of the projects planned for four and five years out, rather than waiting until the projects are in the budget year. More justification in the plan at an earlier stage would improve the plan and would minimize the changes.

Minnesota

The state of Minnesota is looking at a major revamping of its capital budgeting to include several things:

- 1) better information in all six years of the plan, and
- 2) de-politicizing the capital budget process, or at least forcing a more thorough review.

Virginia

The budget office is very involved in the execution, the actual construction, and monitoring construction and should perhaps try to play a less prominent role. In higher education, certified engineers and architects on the teaching staff now have oversight of managing project construction. Most state agencies and institutions, however, do not have that expertise, so it falls to the budget office to be involved in the execution of projects. The budget office is attempting, however, to designate and disperse that type of responsibility to the state agencies whenever possible.

- **Question: What advice would you give to a state that has never done a capital budget? How would you recommend they proceed to organize a capital budget, and what steps do you recommend a state take to do its first capital budget?**

Maryland

One suggestion is the need to educate agencies into the capital budgeting culture. Agencies tend to be more absorbed in their immediate budget needs rather than taking time to plan five years out. Agencies really need to plan; they must think about the missions of the agency, the overall view of the agency, and their needs. Agencies must explain in great detail, in nontechnical language, why a request is needed, who will benefit from it, and how it will be utilized.

Staffing is very important. It is difficult for the budget staff, who are concerned with operating budgets in the short-term, to be concerned also with capital budgeting in the long-term. A state needs an adequate staff dedicated to reviewing capital projects, who have the best interests of the state as a whole in mind.

Minnesota

One recommendation is to have a clear philosophy, a very clear definition and understanding of the principles on which a state's capital budget is based. Without guidelines or general principles, making decisions can be quite difficult. Another suggestion is clearly defining what is a capital improvement versus what is a maintenance type expenditure which should appear in the operating line item. Without a clear definition of what should be bonded, it may be easy to build up debt for ongoing operating expenses.

	The guidelines may in fact restrain bonding; for example, the guideline in Minnesota is that no more than 3 percent of the general fund can be used for debt service. However, guidelines make one stop and think about prioritizing projects and getting the most for the money. Another suggestion is to gain an understanding of how the legislature is going to process the capital budget. Knowing how the legislature will deal with a capital budget means one can plan to meet the information needs of the legislature.
Virginia	One suggestion is to separate the financing phase and the construction phase because they are not similar; totally different expertise is needed in both areas.

- **Question: Do you have an oversight committee?**

Maryland	The state of Maryland does not have a review board. It has budget hearings where an agency has an opportunity to explain its capital budget request, and generally the legislative staff is there. On occasion, there is a legislator present, but that is fairly rare. The Deputy Budget Secretary for Capital Programs puts a lot of effort into informally keeping key legislators abreast of capital budgeting needs. During the legislative session when projects and budgets are making their way through the budget process, there is daily contact with the legislators. The legislature tends to focus mainly on the budget year requests rather than the years beyond the budget when making its decisions.
Minnesota	The state of Minnesota does not have an oversight committee, but the legislature is considering establishing a joint committee where both political parties and the legislative and executive branches would be represented. This committee could set out the basic parameters to follow in the capital budget and provide oversight to the capital budget process.
Virginia	Virginia does not have an oversight committee. The previous Governor had a cabinet level committee to review various capital outlay requests, but that no longer exists. That committee was made up of the Secretary of Finance, Secretary of Education, Secretary of Health and Human Services, and three others appointed by the Governor. There were no legislators on this particular oversight committee. The committee was chaired by the Governor's Chief of Staff.

The oversight committee can be useful in helping to iron out questions of equity. When the budget office makes its recommendations, it generally looks at setting priorities based on absolute program needs, while the legislature tends to focus more on specific districts. When the oversight committee was optional, it helped to structure the Governor's recommendations so that it did meet program needs, but also equitably dispersed funds to localities. An oversight committee may allow the state to benefit from a more diversified view, rather than the straight budget analyst view of program needs.

Section 3

Capital Project Selection

- **Question: How do you establish priorities for selecting capital projects?**

Kansas

Agencies are required, as part of the submission of their five-year facilities plans, to indicate the priority of projects based on safety considerations, adherence to program requirements, conformance with codes, and so forth. There are few formal guidelines or definitions that agencies are directed to follow. On the negative side, the depth of analysis is not as great as it should be because of time considerations and the complexity of cost estimates and benefit/cost evaluations. On the positive side, the process generally produces rational results, and with a few exceptions, has not been a source of discord among project selectors. The experience of the agency representatives who develop requests helps to make the process work.

Virginia

- **Overview**

The process for selecting capital outlay projects for funding takes about twenty months. In December of even-numbered years, the Department of Planning and Budget provides agencies with instructions for developing their capital budget proposals. It is not until July of the following even-numbered year that projects receive funding.

Agencies submit their capital budget proposals to the Department of Planning and Budget in February of odd-number years. The capital budget proposal sets forth the agency's capital project needs in priority order and relates these needs to the agency's programs and services. The proposal consists of three parts — a six year plan, a maintenance reserve plan and individual capital project requests.

- **Six Year Plan**
  The six year plan covers a period of three biennia (currently: 1992-94, 1994-96, 1996-98). This listing summarizes the agency's needs for the next three biennia in priority order within each biennia.

- **Maintenance Reserve Plan**
  The maintenance reserve plan identifies all maintenance projects, regardless of anticipated funding source, for the biennium. Maintenance projects cost between $25,000 and $500,000 and are aimed at maintaining or extending the useful life of an existing facility. They are not intended to enhance, upgrade or otherwise improve plant, property or equipment, unless such work is incidental to the main purpose of the project.

  The maintenance reserve review has two steps. The first step is for the Department of General Services to validate that requested projects meet the criteria for maintenance reserve projects, as previously specified. At this step, the Department of Planning and Budget only provides input on an exception basis, after the Department of General Services' determination of valid maintenance projects.

  The second step is to develop funding recommendations for maintenance reserve accounts. Agencies' maintenance reserve needs are almost always greater than the amount of funds available and in some cases, these needs exceed the agency's ability to effectively address them within a given biennium. Therefore, maintenance reserve funding is usually allocated by formula. The Department of Planning and Budget is responsible for developing the maintenance reserve funding allocations for non-higher education agencies, while the State Council for Higher Education in Virginia is responsible for the institutions of higher education.

  Final maintenance reserve funding recommendations are based on these formula allocations and on the input of the individual budget sections in the Department of Planning and Budget. In some cases, adjustments are made to the formula allocations to take unique needs into consideration. In addition, individual projects are prioritized within the maintenance reserve plan so that agencies can stay within funding constraints.

- **Capital Project Request**
  A capital project request must be prepared for each project listed in the first biennium of the six year plan, except the maintenance reserve plan. The primary purpose of this request it to provide a carefully reasoned explanation of activities. It must also provide a description of the project. Finally, the request must contain an estimated cost and the anticipated impact the completed project will have on the agency's operating budget.

  Between February and April of each odd-numbered year, the Governor's Secretaries and the Department of Planning and Budget conduct a preliminary review of the major capital project requests. A major capital project is:

  - New construction or acquisition of a facility larger than 20,000 square feet or costing greater than $1 million or;
  - Improvements to existing facilities costing more than $500,000.

  The preliminary review identifies those major projects that are considered to have merit without consideration of a source of funding. For a project to be considered as having merit it must meet one of the following criteria.

  - First Priority: Requests for major repairs to existing structures that are necessary for the continued use of the facility and that are not normally considered in Maintenance Reserve.
  - Second Priority: Requests associated with legal or judicial mandates requiring new construction or requests to supplement projects under construction.
  - Third Priority: Requests associated with standards and certification requirements of existing facilities (e.g., life safety code requirements, space guidelines deficiencies).
  - Fourth Priority: Requests associated with improvements to existing facilities (renovations,restorations, relocations).
  - Fifth Priority: Request associated with new construction that are in accordance with the mission and service delivery functions of the requesting agency.

- **Preplanning Studies**
  For major projects determined to have merit as a result of the preliminary review, preplanning studies must be prepared. In these cases, the information contained in the capital project request justified the need for the project and provided an initial estimate of the project's cost. The preplanning study presents more detailed architectural, engineering and technical information associated with the project, confirms the technical feasibility of the project and refines the project's cost. Agencies may use up to $50,000 from operating expense appropriations to fund a preplanning study.

  Agencies prepare preplanning studies between April and September of odd-numbered years and submit them to the Department of General Services. By November, the Department of General Services reviews the preplanning studies and provides recommendations to the Department of Planning and Budget on the technical aspects of the project (including a revised cost estimate).

  Once the major projects have been reviewed for programmatic and technical merit, the Governor's Secretaries and the Department of Planning and Budget conduct a similar preliminary review on the projects of lesser magnitude between April and September. The same criteria for determining merit is applied to these projects.

- **Final Decisions**
  The next part of the review process is to combine the two categories of projects into a single priority listing: within each Secretarial area and statewide. From this comprehensive listing, projects with top priority will be selected for funding in the 1992-94 biennium. Less urgent projects will become the foundation for the development of the six-year capital outlay plan for 1994-2000. The priority categories used to make the preliminary decisions are also used for this determination. In addition, the urgency of the project (from the statewide policy perspective) is considered.

  Once the programmatic and technical review is complete, the next stage in the development of a capital budget is to establish criteria for how the various types of projects will be financed. Virginia traditionally has financed capital projects on a pay-as-you-go basis. This funding method has created competition for resources between the operating and capital budgets. As a result, limited funding has been available for capital projects and has restricted funding to only the most urgently needed projects.

Section 4

Capital Financing

- **Summary**

There is a diverse range in how states finance capital projects. This section focuses on two questions. How does a state determine the overall size of its capital budget (particularly the bond-funded capital program)? How does a state decide which fund source to use for a particular project (particularly bond proceeds versus current revenues)?

Some states have very formal and sophisticated processes for deciding on a total level of debt. In others, debt authorization is less formal. Two or three states are looking at ways to implement debt management systems. Some states, like Virginia, are contemplating an expanded general obligation (G.O.) bond program and states like Illinois are reigning in debt authorizations. In general, states that actively manage their debt seem to look to debt service as a proportion of revenues, debt outstanding per capita, and debt outstanding as a proportion of personal income as measures of debt capacity.

In some states, dedicated revenues provide an important source of capital funds. This has an important effect on the capital budget process. Projects eligible for dedicated funds are then considered separately from (and often preferentially to) projects that have to compete for non-dedicated funds. States are more nearly uniform in how they allocate cash for capital spending. When cash is available, it tends to be used for smaller and shorter-lived projects, and for maintenance and renovation projects.

There is much variation in the sorts of costs that states allow for bond funds. Many states have strict bondability requirements, with criteria relating to the nature of the expense, the life of the project, and the amount. In other states, guidelines are less formal, or virtually non-existent.

- **Question: How is the overall size of the capital budget determined? Is there any process for determining the amount of G.O. debt, revenue debt, and operating funds to be authorized?**

California

Historically, capital funding in California has proceeded on an ad-hoc basis. Bond authorizations must be approved by the voters; they may get on the ballot through the legislative process or by initiative. Typically, bond issues are proposed for a variety of projects such as higher education, health care, housing, child care, and prisons.

The state has a Special Account for Capital Outlays (SAFCO) which is funded from offshore oil royalties. This account is used to fund "one time" capital expenditures such as upgrades to aging state hospitals, flood control, and water projects. The account is not generally used for general state facilities such as universities and prisons. A modest amount of general funds is budgeted for deferred maintenance and small capital projects under $500,000. The state has a wide variety of special funds available for capital expenditures.

In addition, California has a lease revenue bond program. Higher education facilities, prisons, state office buildings, and courts are financed by revenue bonds, backed up by lease payments of the using agencies. The state does not consider these obligations part of its debt burden, since rental would have to be paid whether it is being paid to the state or to a private landlord. Authorizations of lease revenue bonds require legislative approval, but do not go before the voters. Projects are budgeted on an ad-hoc basis, and the total program is generally much smaller than the general obligation (G.O.) bond program.

In 1990, nearly $10 billion in G.O. bond issues appeared on the ballot, about one-third of it through initiative. Although only $900 million for school construction passed, this level of proposals caused some alarm within the legislature and the administration. As a result, the Department of Finance has prepared a ten-year study of capital resources and needs. The study proposes a ten-year capital spending plan limiting debt service to 5 percent of general funds. Taking other available revenues into account, this resulted in a recommended $50 billion program over the ten years. In tandem with this recommendation is a proposal to transfer responsibility for $10 billion of school and jail construction to local governments.

Kentucky

Kentucky's capital program is financed from current revenues and revenue debt of special authorities. The state has not issued state general obligation debt since 1965 (the constitution gives the state G.O. debt authority, but requires any authorization of G.O. debt over $500,000 to go to the voters). The cash-funded portion of the capital budget increases incrementally from year to year as part of the biennial budget process. It is used primarily to finance maintenance, renovations, and small projects.

The overall amount of revenue debt to be authorized is based on a "semi-formal" process. The State Economist (who heads the Office of Financial Management and Economic Analysis), estimates the state's capacity for new debt. The estimate is based on projected revenues over the repayment period. The same office approves and manages the debt issuances of the various authorities, and therefore acts as the central control agency.

Agencies request projects for the biennium which are analyzed and the most worthy are included in the recommended budget and assigned a fund source. Kentucky law requires line-item budgeting of projects over $200,000. There are no lump-sum appropriations and funds may not be transferred from one project to another once funds are appropriated.

Some of the authorities have caps on the overall amount of debt they may authorize, but these caps generally are not the operative constraints. In the event they become problematic, legislation to raise the cap is generally successful.

The operative limit on the size of the capital budget is the estimate of overall capacity for new debt and the availability of other revenues.

Illinois

Illinois' capital budget is funded primarily from two sources: G.O. bonds and "Build Illinois" sales tax revenue bonds.

The Governor annually recommends a level of new G.O. debt. In making this recommendation, the Governor considers measures of debt burden (debt outstanding per capita, debt service as a share of general fund appropriations, and G.O. debt outstanding as a share of state personal income), rating agency perspectives, and the state's overall fiscal position. Ultimately, the recommended level is a judgement involving subjective, political, and fiscal considerations.

The "Build Illinois" program was enacted in 1985. Bonds are issued each year based on cash flow projections. Illinois also authorizes about $70 million annually in a revenue bond program for local civic centers. The bonds are backed by state general funds and are subject to appropriation.

Kansas

Financing is decided by project on the basis of cash available, the urgency of completion, the reliability of the revenue source for debt service, the estimated useful life of the facility, the extent to which it adds to the financial liability of the state, and the long-term effect it has on the budget.

Decisions whether to lease or purchase are made mostly on the basis of long-term cost comparisons. Recent decisions have been made to purchase facilities that for some years had been leased. The rising cost of continuing the lease simply made it financially prudent to consider purchase of the facilities.

Maryland

Maryland has a formal process established in law for setting the amount of G.O. debt to be authorized each year. The law establishes a Capital Debt Affordability Committee, chaired by the State Treasurer and including the Comptroller, the Budget Secretary, the Transportation Secretary, and a public member.

In making its determinations, the Committee strives to account for the same factors used by rating agencies in determining the state's bond rating. In particular, the Committee seeks to keep state tax-support debt outstanding under 3.2 percent of state personal income and to keep debt service under 8 percent of available revenues.

State tax-supported debt in Maryland includes G.O. debt, revenue bond debt of the Department of Transportation, the Maryland Stadium Authority, and capital leases. Until recently, the debt affordability process took the planned level of transportation revenue debt and other types of tax-supported debt as a "given," and G.O. debt was planned within the remaining capacity. More recently there has been concern about the transportation program and other calls on state resources "crowding out" the traditional G.O. bond program.

The amount recommended by the Committee becomes the ceiling for the Governor's proposed budget and for the General Assembly's authorization.

State general funds are used for items where the use of tax-exempt funds are restricted by federal tax laws. This principally means loan programs for housing, economic development, and certain environmental loan funds. If funds are available, general funds also are used for state construction projects and capital grants in exactly the same way as bond proceeds. The amount depends entirely on the amount available in the annual budget process. The state strives to use annual surpluses and other "one-time" revenues for capital projects and other "one-time" expenditures.

Non tax-supported revenue debt (primarily in higher education, environmental programs, and other loan programs) are budgeted and issued according to the need and capacity of the issuing agency.

There is a central reporting process for the Treasurer and the budget department to keep track of agency revenue debt.

Virginia

Historically, Virginia has financed capital spending on a pay-as-you-go basis. Biennial budgets through 1989 have generally included $125 million to $200 million in capital spending, with the specific amount depending on the availability of funds and the competition with other initiatives as part of the regular budget process.

Since 1989, lottery revenues have been earmarked for capital projects. State law required these lottery receipts to be allocated as they were received: the budget could not anticipate lottery revenues. As a result, budgets have included some general funds for maintenance reserve and critical infrastructure projects. Other projects were placed on a prioritized list, and were funded in priority order as lottery revenues materialized.

In the recent downturn, lottery funds were diverted to support the commonwealth's operating budget, resulting in the cancellation of capital projects. This experience has led the Department of Planning and Budget to study the commonwealth's capital needs and resources.

The study calculated debt capacity for Virginia by looking at debt service per capita and as a percentage of personal income. These ratios were compared with the same measures for other AAA rated states. Based on the results of this study, the Governor has now committed to a six-year capital plan.

The Commonwealth also has a Virginia Public Building Authority which finances state office buildings and new prison construction. The Authority's revenue bonds are backed up by the lease payments of the using agencies. Projects financed through the authority are budgeted on a project-by-project basis. The Authority's debt ceiling is increased by the legislature for each new project.

Washington

Washington limits G.O. debt to the level where debt service (excluding debt service supported by project revenues) equals 7 percent of general funds. The Office of Financial Management conducts a study of projected debt service over the life of state bonds, to calculate the amount of bonds that may be authorized each year. In addition to the debt-financed program, some capital spending is financed from dedicated revenues. For example, K-12 school construction is financed from timber receipts.

The state makes extensive use of capital leases and certificates of participation as alternative financing mechanisms. The state organizes and manages the financing of equipment and real property through a master lease purchase acquisition program. Lease development for privately owned buildings with leases exceeding five years or have a purchase option are evaluated in the capital budget request. Lease development projects are funded from operating funds only.

- **Question: Often states have to make decisions on whether to finance a project from operating funds or bond proceeds. What guidelines or practices do you use to make these decisions. Do you have specific bondability guidelines that you use in your state?**

California

Cash is frequently used for projects if there is a dedicated fund source, and for deferred maintenance and small projects. California uses bonds for costs associated with projects with a twenty-year useful life or longer. Associated costs may include planning, administrative expenses, equipment and start-up costs. (Note: legislation is pending to limit administrative costs financed by bonds to 2 percent of the project. The Administration opposes this legislation due to the cost that would be shifted to the operating budget).

Financing by the Lease Revenue Bond Program is generally limited to construction costs.

Kansas

There are no specific bondability guidelines in the state. The authority to finance projects through bonds issued by the Kansas Development Finance Authority is an integral part of the budget process, from the Governor's recommendation through legislative approval, followed by a specific request from the Secretary of Administration. For all practical purposes, Kansas is not a state that issues general obligation bonds, although local units of government can issue them.

Kentucky

In Kentucky, cash is generally used for small projects (under $200,000) and maintenance and renovation projects. Debt is used to finance large projects (including major renovations), and projects that produce a revenue stream. In the case of particular projects and particular years, the decision to finance with cash or bonds will depend in part on the availability of funds.

Illinois	Illinois appropriates a small amount of general funds for short-lived projects. Bondability guidelines require bond-funded projects to have a useful life at least equal to the life of the bond (15-20 years), to increase the value of a property, and to cost at least $25,000. Bond funds are used for acquisition, construction, design, and new equipment.
Maryland	The decision to use current revenues or bond proceeds depends mostly on the availability of general funds in a given year. If general funds are available, the state strives to use current revenues for facility renewal and capital maintenance, capital equipment, and smaller projects. The state adheres strictly to bondability guidelines which are intended to assure that assets purchased with bond proceeds have a useful life equal to at least the 15-year life of the bonds.
Virginia	Virginia has traditionally relied on current revenues for most capital spending. The capital plan is just now being formulated so it is too early to know the exact magnitude of the dollars involved. However, the overall size of the plan will surely consider Virginia's debt capacity and ability to issue tax supported debt.
Washington	Washington currently has no guidelines or criteria for the use of bond funds. Bond proceeds are sometimes used for salaries and small projects (i.e. in the thousands of dollars).

Section 5

Asset Management

- **Summary**

Maintenance of facilities is a difficult issue. Buildings are often constructed with limited budgets and have materials and systems that demand considerable attention and resources. Maintenance needs are often in competition for funds otherwise needed to meet an agency's mission. Determining the right amount of funds to be dedicated to maintenance of facilities is made even more difficult by the lack of information regarding the size and quantity of space owned and leased by state agencies, not to mention issues of age, condition, and maintenance history.

States have attempted to identify needs by:

- Establishing separate capital and maintenance requests in the budget process.
- Developing dedicated resources to support maintenance.

- Using formulas to establish permanent renovation pools and setting up special appropriations to maintain, repair, and replace roofs, and for heating and air conditioning systems.
- Placing responsibility for maintenance outside of the state by leasing space.

In the overall maintenance program there is the need to establish a list of projects with legitimate cost estimates and a reasonable schedule including realistic priorities. Maintenance needs based on facts are more easily appropriated, whereas programs rooted in ratios, historical expenditure patterns, educated guesses, and similar subjective processes are often left without funds.

The failure to understand the total assets and condition of property can be traced to two primary causes:

» Asset information is collected for financial/accounting purposes and not for budgeting purposes.

» In an attempt to centralize the process, efforts are made to standardize a system that cannot meet the legitimate and different needs of agencies. For example, higher education facilities are analyzed for their ability to provide adequate education and lab space and may not relate to mechanical or equipment or circulation space. Department of Corrections may need extremely detailed maintenance programs to facilitate performing maintenance through the use of untrained inmate labor.

The key to successful maintenance programs is to identify common elements of information that all systems should provide, gather only that information electronically from agency capital management programs on a periodic basis, and let the agencies move forward to procure systems or use common systems in a way that facilitates their individual needs. What is needed is to find more efficient ways to identify maintenance needs, establish costs, and evaluate priorities first at an agency level and then at a statewide level. Armed with this data, capital analysts can equitably evaluate how to allocate available resources.

- **Question: How do you keep up to date on your state's capital assets? How does the information help you to maintain your state's capital stock?**

Arizona

Arizona has a maintenance program that uses a formula to provide the amount needed on maintenance each year. The Facilities and Management Division uses the *Sherman-Durgess Program* designed by two professors in Michigan.

Input for the computer program is the age, size, and replacement value of the facility. This information is run through a formula. The output is the amount that should be spent on maintenance each year, approximately 1 percent of the replacement value.

This program was installed in 1985. In 1991, the formula showed a need to appropriate $6.8 million, though $807,000 was appropriated.

California

California uses a basic preventive maintenance computer program. The program has been in use for two years in Sacramento and for one year in both Los Angeles and San Diego. Additional capital asset inventory information was added in order to maintain a centralized capital asset inventory. It took three years to develop and to input the information for this centralized system. Though some information on the system is not currently needed, the information could be used for maintenance in the future.

Once data was centralized, the program became insufficient and is now being modified to meet the state's needs.

Idaho

Idaho has a centralized maintenance system. Officials in the Public Works Division do not recommend designing your own system since there are many available vendors.

The capital asset inventory consists of The Bureau of Risk management computerized list of replacement values of all the state facilities and is not used for budgeting or capital management.

Illinois

Illinois implements a two-stage program to provide funding for maintenance and renovation work. Essentially, projects less than $25,000 are funded by agencies in separate appropriations in the operating budget and larger projects are funded by the capital budget.

Although there are safeguards within a budget to protect maintenance funds (a restriction to move no more than 2 percent of any line item to another appropriation) maintenance funds continue to be a target during budget cutting exercises. Priorities are set by agencies and the actual list of projects is determined by the capital budget office with help from public works professionals.

The Illinois inventory data is not being used to manage maintenance or to assist in the development of the capital budget, as was the original intention.

Kansas

Capital asset management varies in this state. Some agencies, such as the Board of Regents for the Universities and the Department of Transportation, have well-developed inventory systems. Others are not well developed.

The type of information maintained by the Regents institutions allows them, by means of a formula adopted from the State of Indiana, to determine an appropriate amount of funds for maintenance that would preserve the useful life of a facility to a predetermined age. The system, after several years of development, never has been completely implemented.

Wisconsin

Wisconsin has a computerized maintenance program and several other programs for maintenance. Agencies evaluation of their facilities showed that preventive maintenance was needed. Funds were appropriated for agencies/institutions to help them train in preventive maintenance.

Wisconsin has three other programs. First, there are two engineers in the division who work strictly with roof maintenance in the spring and the fall. The engineers use a checkbook to pay for minor projects. Second, there is one person who only does masonry inspections.

The third program is a road program that costs $1 million a year. This program is for preventive road maintenance and includes patching sidewalks and roads. The state bought the patching equipment and uses inmate labor.