

26-01-Building Design and Construction

Fund/Agency: 001/26	Office of Capital Facilities	
Personnel Services	\$1,625,457	<div style="text-align: center;"> <p>CAPS Percentage of Agency Total</p> <p>8.0%</p> <p>92.0%</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>■ Building Design and Construction</p> <p>■ All Other Agency CAPS</p> </div> </div>
Operating Expenses	\$102,173	
Recovered Costs	(\$1,063,467)	
Capital Equipment	\$6,777	
Total CAPS Cost:	\$670,940	
Federal Revenue	\$0	
State Revenue	\$0	
User Fee Revenue	\$0	
Other Revenue	\$0	
Total Revenue:	\$0	
Net CAPS Cost:	\$670,940	
Positions/SYE involved in the delivery of this CAPS	29/28.8	

► CAPS Summary

Building Design and Construction services are provided to effectively plan for and manage the construction of major buildings. This CAPS area includes the site selection, land acquisition, surveying, planning and zoning process, design process, administration of consultant contracts, bidding for construction, and construction management for outside construction contracts. The major building projects are proactively managed to ensure that high quality, cost effective, buildings are designed and constructed in a timely manner within the established funding limitations. Staff ensures that all code and regulatory requirements are appropriately addressed in the design documents and in the construction process. Design and construction of building projects totaling in excess of \$157 million have been implemented since 1997.

Major building projects are required to support County needs related to libraries, public safety, criminal justice, human services, community development, community centers, transportation, vehicle services, waste water treatment and solid waste collection. Funding for these building projects is provided through a variety of sources including various bond referenda, general funds, enterprise funds, and special revenue funds.

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Recent initiatives being undertaken in the Building Design and Construction CAPS area include implementation of a rigorous Value Engineering (VE) review program that has resulted in an estimated savings of \$6.6 million for the eight projects that have been reviewed under the VE program. VE review is mandated for projects over \$5 million in total cost; however, some major building projects that cost less than \$5 million will also be reviewed under the VE program. Another initiative that has been implemented in this CAPS area is the Commissioning of the Heating, Ventilation and Air Conditioning (HVAC) systems. The HVAC Commissioning process verifies that the complex electronic controls that are installed as part of the HVAC systems are actually installed and functioning as required by the HVAC designer. The Commissioning process contributes to significant life cycle energy cost savings by ensuring that HVAC systems are achieving a comfortable building environment in the most cost effective method possible, as contemplated in the HVAC system design.

The Leadership in Environmental and Energy Design's (LEED's) Green Building Program is another initiative that is being undertaken in this CAPS area. This initiative strives to achieve more environmentally sensitive building designs including minimizing the life cycle building costs associated with energy consumption. Other goals include minimizing land disturbance and stormwater runoff impacts, utilization of recycled products in new construction, and recycling of demolished materials, where applicable. The Green Building concepts will be implemented on the design of two pilot projects that will be initiated in FY 2002. The use of Computer Aided Drafting (CAD) systems is also being mandated on all building designs to promote efficiency and consistency in the design process, the plan revision process, and the archiving of as-built building drawings. Also, public-private partnerships have been implemented on specific projects where this arrangement will provide a more cost effective and/or timely process for construction of a major building project. A public-private partnership has been successfully implemented on the South County Center and on the Burke Volunteer Fire Station projects, and a similar partnership is currently being negotiated on the Police Forensics Facility.

A significant issue in this CAPS area is the need to provide renovations and expansions to a number of older buildings, including libraries, fire stations and police stations. A significant number of County buildings will require renovation and/or expansion in order to meet growing demand for services and the current program requirements of the using agencies. Building renovations will also be required to replace major building systems that have reached the end of their useful life, and to accommodate current state of the art building systems such as technology infrastructure, energy management and controls systems, and high-efficiency building equipment. Also, the lack of suitable facility sites throughout the County is leading to a significant escalation in the land acquisition costs for projects that have not already been sited. In the future it will become necessary to place greater emphasis on the adaptive reuse of existing buildings. Adaptive reuse has been successfully implemented on the Police Academy building and the Police operations facility at Pine Ridge.

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► Method of Service Provision

Normal working hours are 8:00 a.m. to 4:30 p.m., Monday through Friday. Depending on workload, evening and weekend work may be required.

In-house staff performs planning, budgeting, and contract management. Building design services are provided using outside consultants. Survey work may be performed by in-house staff or by outside consultants. Land acquisition is performed totally by in-house staff, except that outside title companies are used to verify property ownership, and independent appraisers are used to determine fair market value of the required land rights. Construction services are provided by outside construction contractors through the competitive bid process. In-house inspectors provide construction inspections, except that independent testing and inspection firms provide special inspection services, as required by Office of Building Code Services. The Administrative Support Branch provides purchasing, accounting, and budgeting services.

► Performance/Workload Related Data

Title	FY 1998 Actual	FY 1999 Actual	FY 2000 Actual	FY 2001 Estimate*	FY 2002 Estimate
Output:					
Projects completed	3	2	8	4	8
Projects completed on time	3	2	6	3	6
Projects completed within budget	2	2	8	3	7
Efficiency:					
Engineering design costs as a percent of total project costs for building construction	9.2%	14.0%	9.5%	9%	14%
Service Quality:					
Percent of projects completed on time	100%	100%	75%	75%	75%
Percent of projects completed within budget	67%	100%	100%	75%	88%
Outcome:					
Contract Cost Growth	6.9%	3.2%	3.1%	7.4%	6%

*Figures represent actual data for FY 2001.