

THE AMERICAN  
INSTITUTE OF  
ARCHITECTS

SELECTING ARCHITECTS AND ENGINEERS  
FOR PUBLIC BUILDING PROJECTS:  
AN ANALYSIS AND COMPARISON OF  
THE MARYLAND AND FLORIDA SYSTEMS

EXECUTIVE SUMMARY AND CONCLUSIONS

## Executive Summary

---

### Introduction

Design professionals play a critical role in the public building process. The quality of the design services provided by the architect or engineer is the single most important factor in determining the overall construction costs and life-cycle costs of a building. Since design services represent only a small percentage of the initial construction budget, it is in the best interest of the taxpayer to insure that the most qualified firms are selected for public projects.

Recognizing the need for a qualification-based approach to procuring design services, the U.S. Congress established as federal law in 1972 (P.L. 92-582, commonly referred to as the “Brooks Act”) the requirement that architects and engineers be selected for projects on the basis of their qualifications subject to negotiation of fair and reasonable compensation. Most states and numerous local jurisdictions also use Brooks Act procedures relying on the traditional selection method of negotiating a contract with the firm most qualified to provide the services. Should negotiation fail between the public owner and the highest-ranked firm, negotiations are terminated with that firm. Negotiations then take place with the second-most-qualified firm and so on down the line in order of their ranking until an agreement is reached.

### A/E Selection in Maryland and Florida

This study compares the experience of Maryland’s Department of General Services, which selects architects and engineers (A/Es) on the basis of price and other factors, with that of Florida’s Department of General Services and State University System, which emphasize technical qualifications in the selection process and, thereafter, negotiate a “fair and reasonable” fee. A study of the Maryland public building procurement process was prompted by Maryland’s advocacy of price competition in the A/E selection process and the belief of Maryland officials that a system based on price and other factors is more cost-effective than the traditional qualifications-based system. Florida, which uses the traditional Brooks Act approach, was selected for comparison with Maryland because, until price enters the process in Maryland, the A/E selection procedures in both states are similar.

Maryland. The 1974 law governing the selection of architects and engineers in Maryland requires that both price and professional qualifications be considered during the A/E selection process. The process involves the following key steps: 1) the state develops a comprehensive project program that provides A/Es with “a clear understanding of the problem and the requested solution”; 2) a request for professional services is published in the Maryland Register; 3) those judges most qualified on the basis of Standard Form (SF) 254 and 255 submissions (forms setting forth the A/Es’ qualifications) are placed on a short list and asked to submit price and technical proposals; 4) price and technical proposals are evaluated and firms are ranked; and 5) an award is made with “neither the

price proposal nor the technical proposal becoming the sole criterion for selection.” The law applies only to projects with estimated design services over \$50,000.

Florida. The method of procuring architectural and engineering services in Florida is governed by the 1973 Consultants’ Competitive Negotiation Act. The act establishes a qualifications-based system of selecting A/E services that involves the following steps: 1) public announcement of projects requiring A/E services, including general descriptions of the projects; 2) selection of a short-list of firms based on the submitted SF 254 forms and Professional Qualifications Supplement; 3) interviewing and final ranking of at least three firms based on the A/Es’ understanding of the specific project requirements and the A/Es’ approach and method; and 4) negotiation of a fair and reasonable fee with the selected A/E.

### Conclusions

The following conclusions are based on an analysis of information and data supplied by the Maryland Department of General Services, Florida’s Department of General Services and the State University System of Florida. (The Maryland Department of General Services handles both general public building construction and university system construction.)

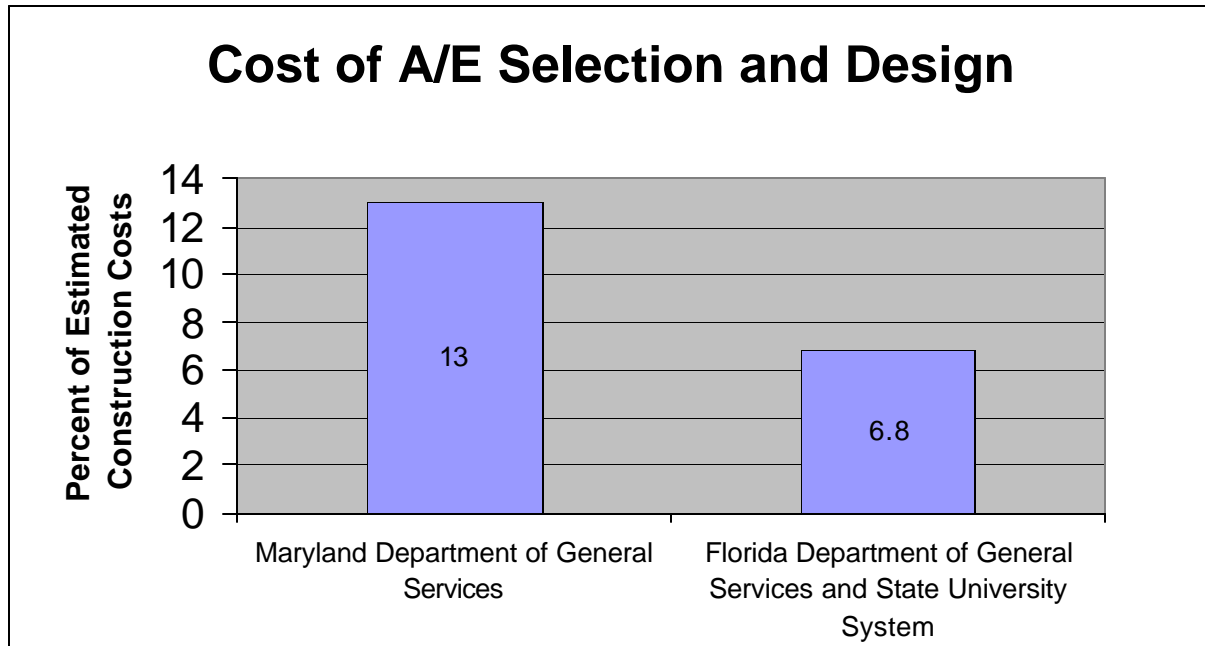
1. Maryland’s A/E selection process is significantly more time-consuming and expensive than Florida’s. In Maryland, the necessity of preparing detailed programs on which A/Es can base price proposals results in added expense to the state in the form of administrative staff, time delays and consultant costs. These additional system costs are unique to the Maryland process.

Total cost of the A/E portion of Maryland’s capital construction process average 13 percent of estimated construction costs. Total costs in Florida average 6.7 percent of estimated construction costs for the Florida Department of General Services and 7.3 percent for the State University System. A/E fees are lower in Maryland than in Florida; however, the added costs of the Maryland process far outweigh the savings in A/E fees that result from a process in which the state develops detailed programs and A/E selections are made on the basis of both price and technical competence.<sup>1</sup>

---

<sup>1</sup> Development of detailed programs in Maryland is done in-house or by consultants prior to the A/E selection process. In Florida, programs are developed jointly by the state and the selected A/Es.

The following chart shows the comparative costs of the A/E portion of the capital construction process in Maryland and Florida.



The Maryland A/E selections system, because of its requirement that competing firms submit elaborate technical proposals accompanied by fixed prices, also results in extraordinary cost to the A/E firms that compete but are not awarded contracts. Although not direct costs to the state, as operating expenses of the firms, those costs are eventually passed on to consumers of A/E services.

- a. Maryland's A/E selection process requires a significantly larger administrative staff and budget than Florida's. The increased administrative costs in Maryland result from the necessity of preparing detailed programs on which A/Es can submit price proposals.

Since Maryland's law requiring selection based on price and technical proposals went into effect, there has been an 11.6 percent increase in personnel and a 17.9 percent increase in the budget (in constant dollars) of the DGS Office of Engineering and Construction, which participates in the A/E selection and capital construction process. In 1983, with a total of 96 personnel and a budget of \$2.5 million, the Maryland DGS' Office of Engineering and Construction administered a capital construction program that averages \$65 million in estimated construction costs annually.<sup>2</sup>

<sup>2</sup> This figure represents the average annual dollar value in estimated construction costs of projects for which A/E selections were made between 1975 and 1983. At any one time, the state agency would be administering projects in all phases of the planning; design and

In comparison, the Florida Department of General Services, which, like the Maryland DGS, administers procurements for many state agencies, had a total of 51 personnel and an annual budget of \$1.6 million in 1983 to handle a capital construction program that averages over \$100 million.<sup>3</sup> In the 1975-83 period, the Maryland DGS awarded 174 A/E contracts on projects worth a total of \$518 million in estimated construction costs; in the same time period the Florida DGS awarded 1,166 contracts on projects totaling \$875 million in estimated construction costs.

Florida's State University System, unlike Maryland's university system, administers its capital construction program independently. The size of Florida's University System program (\$64 million) is roughly the same as the Maryland DGS' program, but the administrative staff and budget of Florida's University System is only one-tenth the size of Maryland's. In the period between 1980 (when the University System began procuring A/E services independently) and 1983, the State University System of Florida awarded 74 A/E contracts on projects totaling \$191 million in estimated construction costs.

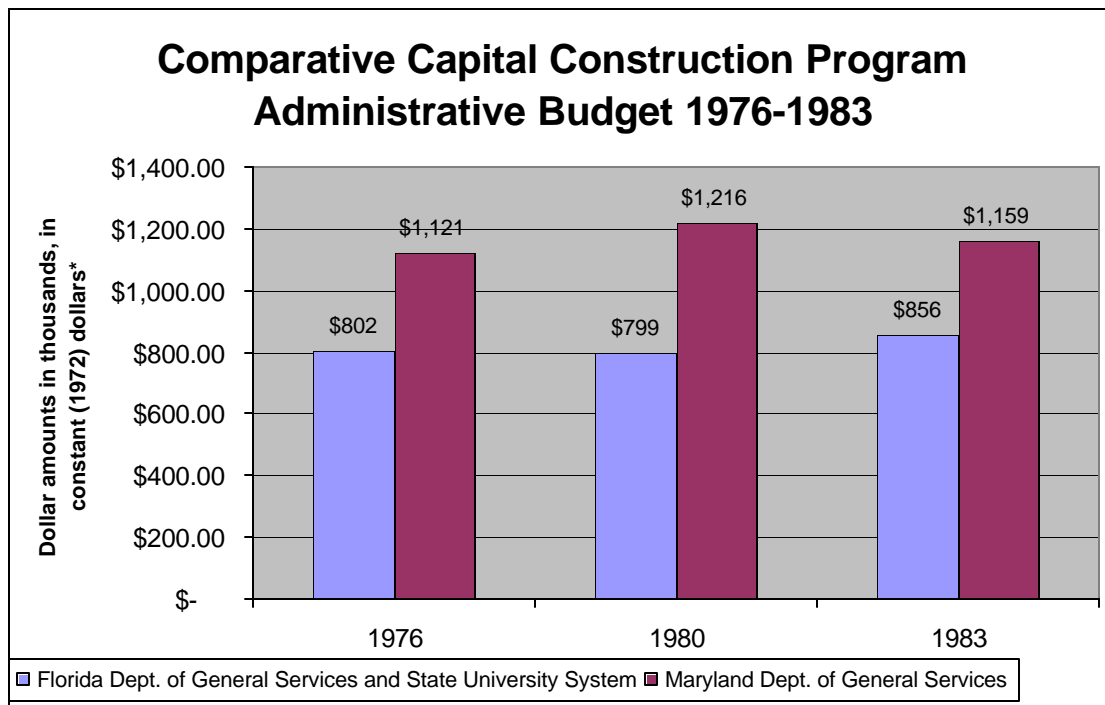
In terms of the effectiveness of administration, both the Maryland and Florida A/E procurement processes appear to be open and well-managed.

The chart on the next page illustrates the administrative budget of Maryland's and Florida's capital construction programs.

---

construction process, and the total estimated construction costs of all of those projects would be much greater.

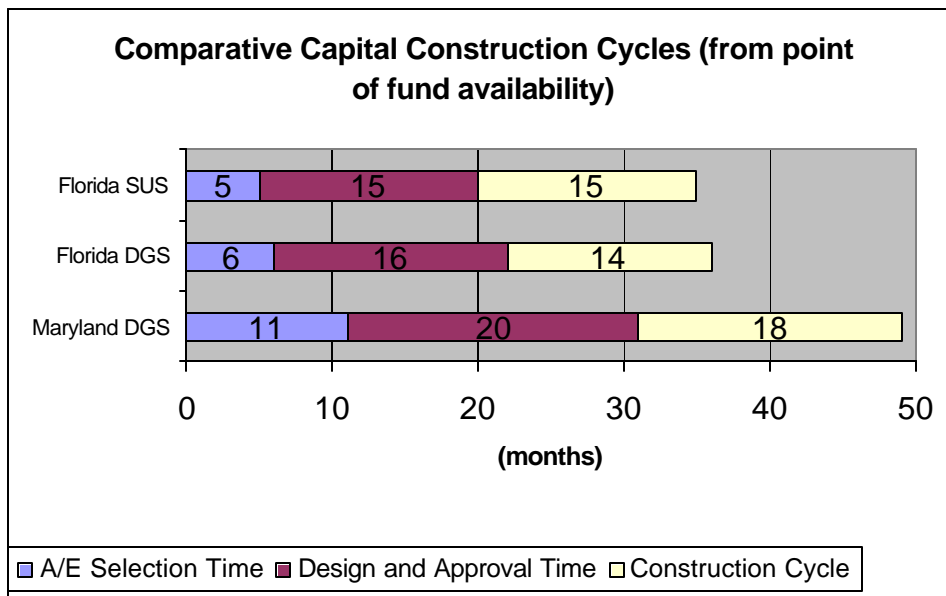
<sup>3</sup> This figure represents the average annual dollar value in estimated construction costs of projects for which A/E selections were made between 1975 and 1983. At any one time, the state agency would be administering projects in all phases of the planning; design and construction process, and the total estimated construction costs of all of those projects would be much greater.



- b. Maryland's A/E selection process takes considerably longer to complete than Florida's. The total delay relating to the A/E portion of the capital construction process in Maryland is almost 10 months. The delay occurs while the detailed program descriptions are being prepared, during the actual selection process and during the design and approval phase.

The Maryland Department of General Services completes the A/E portion of the capital construction process, from the point that funds are approved to the beginning of the actual construction cycle, in 31 months. The same steps are completed in 22 months by the Florida Department of General Services and in 20 months by the State University System of Florida. From the point that funds are approved in Maryland, it takes 11 months to prepare program descriptions and select the A/E.

The comparative capital construction cycles in Maryland and Florida are detailed in the following chart.



2. Florida selects A/Es on the basis of technical competence; contrary to Maryland law, price appears to be the dominant selection factor in Maryland. In Florida's traditional qualifications-based selection process, initial A/E selection is made on the basis of demonstrated qualifications and competence. The agencies then negotiate an equitable fee with the most qualified firm, relying heavily on fee schedules.

By law, Maryland considers both price and technical competence in the award of state contracts, but it appears that price is becoming the dominant factor. Of the last 40 projects awarded by the Maryland Department of General Services prior to June 1983, 33 (83%) went to the firm with the lowest price proposal.

3. User agencies in both states are generally pleased with their state's A/E selection process, but A/Es in Maryland are resentful of the system. Most A/Es who design state projects in Maryland dislike the system, which they feel rewards them inadequately. Accordingly, Maryland state projects are not attractive to many firms, who view them as work of last resort.

User agencies in both states are generally pleased with both the A/E selection system and the A/Es' work.

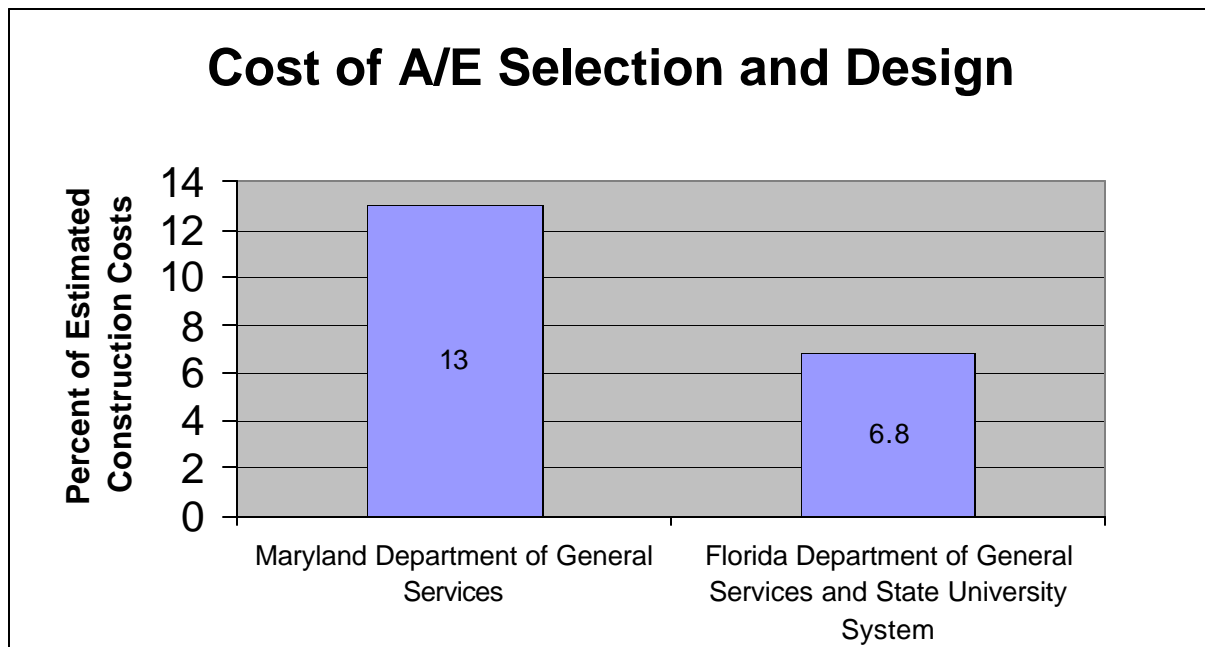
## CONCLUSIONS: A/E SELECTIONS IN MARYLAND AND FLORIDA

---

1. Maryland's A/E selection process is significantly more time-consuming and expensive than Florida's. In Maryland, the necessity of preparing detailed programs on which A/Es can base price proposals results in added expense to the state in the form of administrative staff, time delays and consultant costs. These additional system costs are unique to the Maryland process.

Total cost of the A/E portion of Maryland's capital construction process average 13 percent of estimated construction costs. Total costs in Florida average 6.7 percent of estimated construction costs for the Florida Department of General Services and 7.3 percent for the State University System. A/E fees are lower in Maryland than in Florida; however, the added costs of the Maryland process far outweigh the savings in A/E fees that result from a process in which the state develops detailed programs and A/E selections are made on the basis of both price and technical competence.

The following chart shows the comparative costs of the A/E portion of the capital construction process in Maryland and Florida.





The Maryland A/E selection system, because of its requirement that competing firms submit elaborate technical proposals accompanied by fixed prices, also results in extraordinary cost to the A/E firms that compete but are not awarded contracts. Although not direct costs to the state, as operating expenses of the firms, those costs are eventually passed on to consumers of A/E services.

- a. Maryland's A/E selection process requires a significantly larger administrative staff and budget than Florida's. The increased administrative costs in Maryland result from the necessity of preparing detailed programs on which A/Es can submit proposals.

Since Maryland's law requiring selection based on price and technical proposals went into effect, there has been an 11.6 percent increase in the budget (in constant dollars) of the DGS Office of Engineering and Construction which participated in the A/E selection and capital construction process. In 1983, with a total of 96 personnel and a budget of \$2.5 million, the Maryland DGS' Office of Engineering and Construction administered a capital construction program that averages \$65 million<sup>4</sup> in estimated construction costs annually. In comparison, the Florida Department of General Services which, like the Maryland DGS, administers procurements for many state agencies had a total of 51 personnel and an annual budget of \$1.6 million in 1983 to handle a capital construction program that averages over \$100 million.<sup>5</sup> In the 1975-83 period, the Maryland DGS awarded 174 A/E contracts on projects worth a total of \$518 million in estimated construction costs; in the same time period the Florida DGS awarded 1,166 contracts on projects totaling \$875 million in estimated construction costs.

Florida's State University System, unlike Maryland's university system, administers its capitol construction program independently. The size of Florida's University System program (\$64 million) is roughly the same as the Maryland DGS' program, but the administrative staff and budget of Florida's University System is only one-tenth the size of Maryland's. In the period between 1980 (when the University System began procuring A/E services independently) and 1983, the State University System of Florida awarded 74 A/E contracts on projects totaling \$191 million in estimated construction costs.

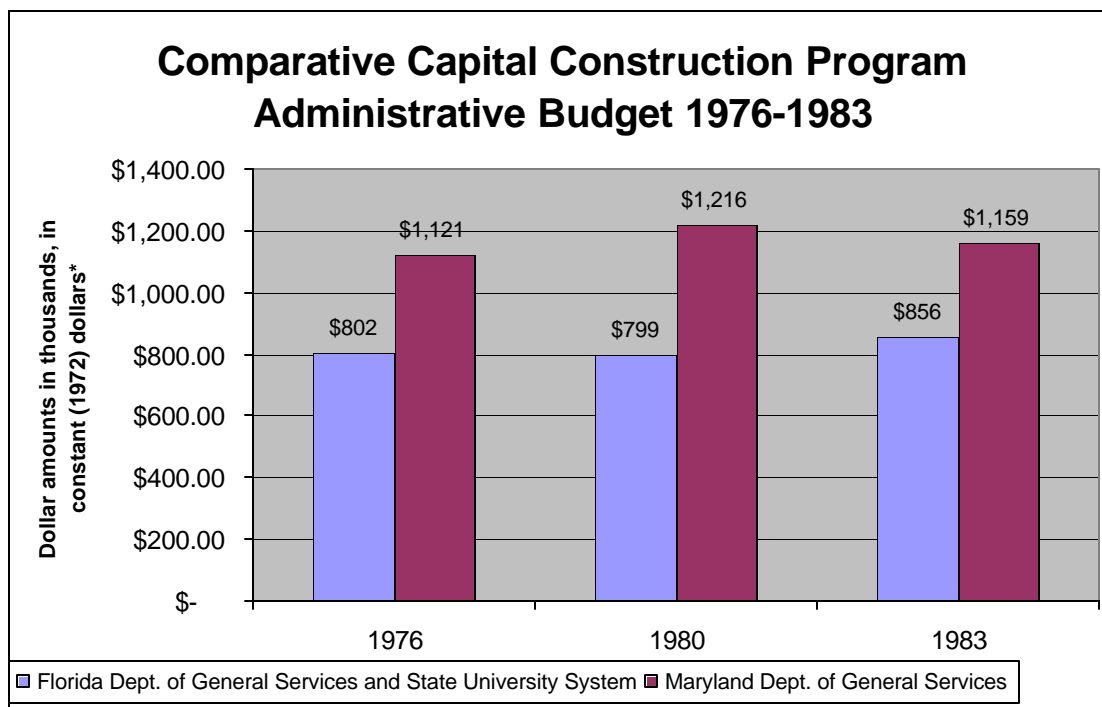
---

<sup>4</sup> This figure represents the average annual dollar value in estimated construction costs of projects for which A/E selections were made between 1975 and 1983. At any one time, the state agency would be administering projects in all phases of the planning; design and construction process, and the total estimated construction costs of all of those projects would be much greater.

<sup>5</sup> This figure represents the average annual dollar value in estimated construction costs of projects for which A/E selections were made between 1975 and 1983. At any one time, the state agency would be administering projects in all phases of the planning; design and construction process, and the total estimated construction costs of all of those projects would be much greater.

In terms of the effectiveness of administration, both the Maryland and Florida A/E procurement processes appear to be open and well-managed.

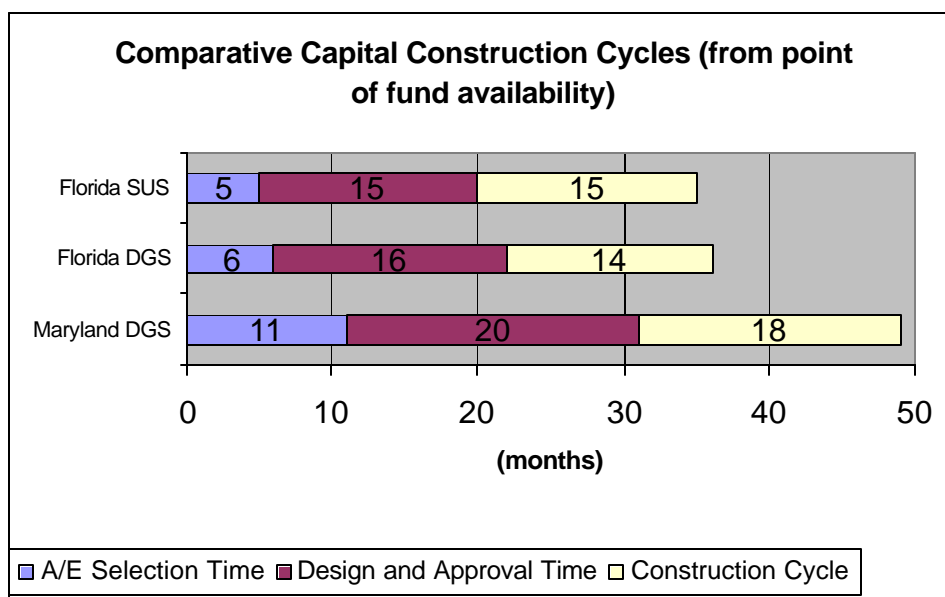
The following chart illustrates the administrative budget of Maryland's and Florida's capital construction programs.



- b. Maryland's A/E selection process takes considerably longer to complete than Florida's. The total delay relating to the A/E portion of the capital construction process in Maryland is almost 10 months. The delay occurs while the detailed program descriptions are being prepared, during the actual selection process and during the design and approval phase.

The Maryland Department of General Services completes the A/E portion of the capital construction process, from the point that funds are approved to the beginning of the actual construction cycle, in 31 months. The same steps are completed in 22 months by the Florida Department of General Services and in 20 months by the State University System of Florida. From the point that funds are approved in Maryland, it takes 11 months to prepare program descriptions and select the A/E.

The comparative capital construction cycles in Maryland and Florida are detailed in the following chart.



2. Florida selects A/Es on the basis of technical competence; contrary to Maryland law, price appears to be the dominant selection factor in Maryland. In Florida's traditional qualifications-based selection process, initial A/E selection is made on the basis of demonstrated qualifications and competence. The agencies then negotiate an equitable fee with the most qualified firm, relying heavily on fee schedules.

By law, Maryland considers both price and technical competence in the award of state contracts, but it appears that price is becoming the dominant factor. Of the last 40 projects awarded by the Maryland Department of General Services prior to June 1983, 33 (83%) went to the firm with the lowest price proposal.

3. User agencies in both states are generally pleased with their state's A/E selection process, but A/Es in Maryland are resentful of the system. Most A/Es who design state projects in Maryland dislike the system, which they feel rewards them inadequately. Accordingly, Maryland state projects are not attractive to many firms, who view them as work of last resort.

User agencies in both states are generally pleased with both the A/E selection system and the A/Es' work.