OFFICE OF THE STATE AUDITOR

PERFORMANCE AUDIT

of the

STATE CONSTRUCTION PROCESS
and the
STATE CONSTRUCTION OFFICE
Within
THE DEPARTMENT OF ADMINISTRATION

DECEMBER 2002

STATE OF NORTH CAROLINA
Office of the State Auditor

Ralph Campbell, Jr.
State Auditor

2 S. Salisbury Street
20601 Mail Service Center
Raleigh, NC 27699-0601
Telephone: (919) 807-7500
Fax: (919) 807-7647
Internet http://www.osa.state.nc.us

December 17, 2002

The Honorable Michael F. Easley, Governor
Secretary Gwynn T. Swinson
Department of Administration
Members of the North Carolina General Assembly

Ladies and Gentlemen:

We are pleased to submit this performance audit of the State Construction Office (SCO) within the Department of Administration.

This report consists of an executive summary and operational findings and recommendations that contain program overview information. The objectives of the audit were to: 1) examine SCO's project management function, 2) review SCO's role in Higher Education Bond projects and other decentralized projects, 3) examine SCO's implementation of and compliance with polices on use of Historically Underutilized Businesses, 4) review current organizational structure and staffing levels, and 5) review SCO's administrative functions and internal controls for compliance with laws and regulations. The Secretary of the Department of Administration has reviewed a draft copy of this report. Her written comments are included as Appendix I, page 121.

We wish to express our appreciation to Secretary Swinson and her staff for the courtesy, cooperation, and assistance provided us during this effort.

Respectfully submitted,

Ralph Campbell, Jr.
State Auditor

TABLE OF CONTENTS

State Parking Lot Construction

EXECUTIVE SUMMARY

Program Description

The State Construction Office (SCO) within the Department of Administration is charged with implementing, managing, and coordinating the State's capital improvement program under the rules and regulations established by the State Building Commission (Commission). A number of other State agencies also have oversight and / or regulatory responsibilities for specific portions or areas of State construction projects (see page 10). At 6/30/02, there were 1,316 on-going projects with a total value of $4.6 billion; 640 of those were in the construction phase, with 676 in the design phase. Of the total projects, 196 were Community College projects, 525 were University projects, and 595 were State agency projects.

Conclusions in Brief

Many of the recommendations contained in this report, if implemented, would have a significant effect on the costs of State construction projects. There are several recommendations for which we cannot attach a specific savings amount. There are others for which we can only offer a range of potential savings since the actual savings would depend on the specifics of each future project. Finally, the report also contains several recommendations that would require the State to spend additional funds, mostly for increased staffing at SCO. Many of the recommendations are interrelated. At best, we can only project a range of savings between $150 to $400 million if these recommendations are implemented. Recommendations that would results in savings are:

- Better quality designs could reduce the number of change orders needed, thereby reducing the amount of contingency used for changes to project scope and reducing the total project costs.
- The appropriate choice of a construction management option could result in fewer construction errors and resulting change orders and improve completion times, thereby avoiding unnecessary costs.
- Decreasing plan review time would allow projects to start sooner; increasing SCO oversight and coordination of decentralized projects would help keep projects on time. These changes would require more staff and the implementation of an "express review" option. They would work to reduce the amount of inflation over the life of a project by reducing the amount of time required to complete projects.
- By accurately evaluating the performance of designers and contractors on a timely basis, the State Building Commission can disqualify those whose poor performance added time and costs to projects, thereby saving State funds.
- Involvement of facilities maintenance staffs in the plan review stage could prevent potential on-going maintenance problems, thereby reducing maintenance costs and time, as well as working to standardize State building infrastructure.

Other recommendations would improve SCO's procedures and enhance its performance.

- Obtaining necessary funding to complete development of INTERSCOPE, SCO's interactive information and workflow management system, would better serve SCO clients and improve oversight of state construction projects.
- Having all legislatively exempted construction projects periodically report their status to SCO would improve information flow and work to maintain consistency of the State's capital improvement program.

EXECUTIVE SUMMARY

- Continuing to work with the HUB Advisory Committee to refine Historically Underutilized Businesses recruitment efforts should result in increased HUB participation on State construction projects.
- Developing workload measures and time reporting by function will allow SCO management to better determine staffing needs and provide documentation for staffing requests.

Specific Findings **Page**

Objective 1: Project Management

Objective 2: Bond / Decentralized Projects

Objective 3: Use of HUBs

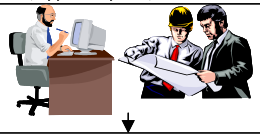
Objective 4: Organization and Staffing

Objective 5: Internal Controls

NC's CONSTRUCTION PROCESS

STATE BUILDING COMMISSION
Directs State's Capital Improvement Program

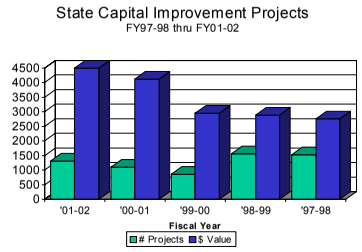
STATE CONSTRUCTION OFFICE
Reviews, approves plans; monitors construction



CONSTRUCTION INDUSTRY (including HUBs)
Build, repair, renovate State buildings

STATE CONSTRUCTION OFFICE

- Implements, manages, coordinates Capital Improvement Program
  - Contract Administration
  - Design Review
  - Construction
  - Consulting Services
  - FCAP



FY01-02: $4.6 billion, 1,316 projects

MAJOR CONCLUSIONS:

1: Project Management

Changes to project management could significantly reduce the cost of construction projects.

2. Decentralized Projects

Decentralization impedes consistency and information flow.

3: Organization / Staffing

SCO staffing may be inadequate.

MAJOR RECOMMENDATIONS:

1

Implement an "express review" option.

a) Reduce review time
- ❑ Start projects sooner
- ❑ Reduce inflation creep

b) Improve design quality.
- ❑ Reduce # of change orders
- ❑ Reduce contingency $ used.

c) Involve facilities maintenance staff in review process
- ❑ Prevent maintenance problems
- ❑ Lower maintenance costs
- ❑ Help standardize infrastructure systems

2

Increase SCO oversight and coordination.

a) Require periodic status reports to SCO for all decentralized programs
- ❑ Improves information flow
- ❑ Helps maintain program consistency
- ❑ Helps control time and scope creep
- ❑ Helps control costs

3

Develop workload and performance measures.

a) Re-examine professional salaries
- ❑ Fund prior upgrade
- ❑ Seek permission to pay overtime

b) Use workload data to identify / justify staffing needs
- ❑ Document time by function

AGENCY RESPONSE:

Exploring "express review," ways to improve process

Will implement changes directed by General Assembly

Defining workload measures; pursuing upgrade funding

(This page left blank intentionally.)

AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

North Carolina General Statutes (GS) 147-64.6 empowers the State Auditor to conduct performance audits of any State agency or program, as well as local entities receiving State and federal funds. Performance audits are reviews of activities and operations to determine whether resources are being used economically, efficiently, and effectively and / or to examine program results.

This audit of the state construction process and the **State Construction Office (SCO),** within the Department of Administration, was undertaken at the discretion of the State Auditor. The audit sought to answer a number of questions relative to the state construction process and SCO's operation. Questions included:

- Other than the State Construction Office, what state agencies have regulatory / oversight responsibilities for state construction projects?
- What is the State Building Commission's role?
- What are the steps a state construction project goes though?
- How many projects is the State Construction Office overseeing?
- What procedures and technology are in place for tracking projects?
- Does SCO oversee all state construction projects, including the Higher Education Bond projects?
- What role should SCO play in decentralized projects?
- Does the State Construction Office effectively promote policies on the use of Historically Underutilized Businesses?
- What can be done to improve SCO's operations in this area?
- Does the State Construction Office have adequate procedures to track the productivity of its workforce?
- Is SCO's staffing level adequate for the work it is assigned?
- Is SCO competitive with other agencies and the private sector in compensation for the professional employees it needs?
- Is the State Construction Office adequately complying with applicable state regulations?

These questions lead to the development of the following objectives for the audit:

- Examine SCO's project management function, including identification of the number and type of projects handled, procedures used, responsibility of other state agencies, etc.
- Review SCO's role in the Higher Education Bond projects and other decentralized projects.
- Review SCO's implementation of and compliance with policies on use of Historically Underutilized Businesses.
- Review the current organizational structure and staffing levels to determine sufficiency in performing required functions.
- Review SCO's administrative functions, specifically internal controls for compliance with laws and regulations.

During the period May 2001 through August 2002, we conducted the fieldwork for the audit. The scope of the audit encompassed all operations of the State Construction Office, as well as review of the responsibilities of the State Building Commission, other state agencies with regulatory responsibility for state construction projects, and the

Higher Education Bond procedures as they related to SCO's duties and responsibilities. To achieve the audit objectives, we employed various auditing techniques that adhere to generally accepted auditing standards as promulgated in ***Government Auditing Standards*** issued by the Comptroller General of the United States. These techniques included:

- Review of existing General Statutes, as well as federal regulations and North Carolina Administrative Codes relating to SCO function;
- Review of policies and procedures established by the State Building Commission and the State Construction Office's internal procedures for each function;
- Review of internal reports and documentation at the State Construction Office;
- Interviews with State Building Commission members and surveys of State agency Capital Project Coordinators;
- Interviews with key personnel within the State Construction Office, the Department of Administration, and other state agencies with regulatory responsibilities for construction projects;
- Analysis of financial and statistical data relevant to state construction projects, including Higher Education Bond projects;
- Surveys of and interviews with various construction industry professionals, as well as conduct of four regional public meetings to discuss the state construction process;
- Survey of other states relative to procedures for their capital improvement programs; and
- Site visits to state construction projects and interviews with SCO clients.

This report contains the results of the audit including conclusions and recommendations. Specific recommendations aimed at improving the operations of the program in terms of economy, efficiency, and effectiveness are reported. Because of the test nature and other inherent limitations of an audit, together with the limitations of any system of internal and management controls, this audit would not necessarily disclose all weaknesses in the systems or lack of compliance. Also, projections of any of the results contained in this report to future periods is subject to the risk that procedures may become inadequate due to changes in conditions and / or personnel, or that the effectiveness of the design and operation of the procedures may deteriorate.

FINDINGS AND RECOMMENDATIONS

This section of the report details the individual findings and recommendations for each of the major objectives of the audit. To assist the reader, we have listed under the objectives the relevant questions we sought to answer during the audit.

Performance audits, by nature, focus on areas where improvements can be made to increase the effectiveness and efficiency of the operation under audit. **The identification of areas for improvement should not be taken to mean that the staff has not performed its duties or provided the State with needed services within the existing resource constraints.** The findings and recommendations contained in this report should be viewed in that light.

In fact, the State Construction Office has accomplished a number of significant achievements over the last ten years. Appendix H, page 117, contains a description of SCO's major achievements and awards. SCO's achievements include:

- Has contracted, reviewed, approved, and monitored construction on 6,400 projects worth $9.3 billion since 1988;
- Successfully administered approximately $185 million worth of major construction projects in the downtown government complex;
- Reviewed, approved, and monitored approximately $311 million worth of Higher Education Bond projects to date;
- Successfully administered $254 million worth of prison facility construction;
- Assessed security needs for the downtown government complex after the September 11, 2001 terrorist attack;
- Saved the State approximately $1.5 million by coordinating Y2K efforts for State agencies and universities;
- Implemented the Facilities Condition Assessment Program;
- Provided natural disaster assessment and assistance to FEMA, NC Division of Emergency Management, and other State and local agencies;
- Implemented life cycle cost analysis procedures for State owned facilities as mandated by the General Assembly;
- Developed initial guidelines for minority participation in State construction projects in 1989 that were modified in 2001; and
- Is overseeing the Energy Conservation Pilot Program for State building projects.

Objective 1: *To examine SCO's project management function, including identification of the number and type of projects handled, procedures used, responsibility of other state agencies, etc.*

To achieve this objective, we reviewed relevant North Carolina General Statutes, applicable federal regulations, and the North Carolina Administrative Code. From this review, we identified the various state agencies that have regulatory or oversight responsibility for state construction and renovation projects, concentrating on the State Construction Office (SCO). We then examined internal reports and documentation of state capital improvement projects and SCO's use of technology to track projects. We also reviewed the existing policies and procedures in use by SCO, as well as flowcharts of the process used to approve and track capital improvement projects.

Conclusion: **The State Building Commission is charged with developing procedures to direct and guide the State's capital facilities development and management program. The State Construction Office (SCO) within the Department of Administration is charged with implementing, managing, and coordinating the State's capital improvement program under the rules and regulations established by the Commission. There are other state agencies in addition to SCO that have some design / regulatory responsibilities for State building construction and / or renovation projects. SCO's major role is to examine and approve plans and specifications and oversee the construction process for most State-owned buildings, repairs, alterations, additions, and / or improvements. However, the General Assembly has exempted most university, community college, university medical facilities, local school systems, and correctional facilities from the Commission / SCO's direct oversight. Additionally, the owner has significant control over the scheduling and funding for projects.**

As of June 30, 2002, there were 1,316 on-going capital improvement projects valued at $4.6 billion, with 595 ($940 million value) directly under the Commission's purview. Examination of SCO's procedures showed that SCO's design review tracking system reflects a larger backlog of untimely plan reviews than it actually has. Additionally, due to budget constraints, SCO has only been able to develop and implement parts of an interactive web-accessible database that would better serve its clients and improve construction oversight. A review of project files showed that agency personnel had not submitted to SCO required evaluations of designers and contractors, with 68% of designer and 93% of contractor evaluations either never submitted or submitted late. The project files review also showed that SCO staff approved 21% of project change orders even though the designer did not identify the party requesting the change order as required by Commission regulations. Lastly, we noted that facilities management personnel were generally not involved in the plan review process.

Since the State does not have a standard for infrastructure systems (heating/cooling, lights, etc), these decisions are left to the owner. Many times this results in unforeseen maintenance problems and / or additional maintenance costs once the facility is constructed and turned over to the facilities maintenance personnel for on-going maintenance.

Overview:

Other than the State Construction Office, what state agencies have regulatory / oversight responsibilities for state construction projects?

The **State Construction Office** (SCO), a division of the Department of Administration, serves as staff to the **State Building Commission**. SCO is charged with implementing, managing, and coordinating the State's capital improvement program (GS 143-31.1 and GS 143-341) under the rules and regulations as established by the State Building Commission. However, there are a number of other State agencies that have oversight and / or regulatory responsibilities for specific portions or areas of state construction projects. See Exhibit 1, page 10.

To better understand the role of the State Construction Office, we gathered information on the role of each of the agencies in the state construction process (see page 107 for summary of comments from public meetings and meetings with professional groups). We also gathered data relative to SCO's role in the Higher Education Bond projects (see page 61 for summary data on those projects). While this information is presented in the report to inform the reader, audit efforts concentrated on the State Construction Office and its responsibilities in the process.

What is the State Building Commission's role?

The State Building Commission is charged with developing procedures to direct and guide the State's capital facilities development and management program, generally called the *Capital Improvement Program*. The majority of state construction projects fall under the oversight of the Commission. However, there are some significant exceptions

Exhibit 1
State Agencies With Design / Regulatory Responsibilities
For State Building Construction And / or Renovation

***Department of Administration*, State Construction Office—the entity audited**

Department of Insurance, State Property Fire Insurance Fund *(see footnote below)
Review of plans and specifications for buildings/structures and parking facilities; review and approval of sprinkler plans.

***Office of the Governor*, State Telecommunications Services**
Review of plans and specifications for telecommunication services.

***Department of Health and Human Resources*, Division of Facility Services, Construction Section**
Review of plans and specifications for licensed state-owned hospitals (more than 2 beds); review of plans and specifications for capital expenditures/improvements.

Department of Labor
Elevator and Amusement Device Section--Review of plans and specifications for elevators, dumbwaiters, escalators, moving walks, etc.
Boiler and Pressure Vessel Division--Review of plans and specifications for boilers and pressure vessels.

***Department of Agriculture*, Plant Industry, Standards Division**
Review of specifications for anhydrous ammonia containers and LP gas installations.

Department of Environment and Natural Resources
Health Services Division--Review of specifications for new construction and renovation where lodging is provided and food/drink is prepared; construction, renovation, or alteration of public water systems, swimming pools; hazardous waste management and solid waste disposal facilities; impounding 100+ acres of basin or stream flow by excavation.
Land Resources Division--Earth moving (grading, filling, excavating, etc.) of 1+ acre during construction.
Environmental Management Division--Treatment works or disposal system that would discharge into surface waters.
Coastal Management Division--Major development within the 20 counties of the coastal zone.

***Department of Cultural Resources*, Division of Archives and History**
Review of plans and specifications for any project that may have effect on properties listed in the National Register of Historic Places; any ground disturbance in areas that have not been previously disturbed.

***Information gathered from the public meetings during this audit indicated that DOI was understaffed in this division. While we did not audit DOI, we did learn that it has a limited number of inspectors who are responsible for state-owned construction projects, as well as other projects, across the State.**

Source: Summarized by the Office of the State Auditor

to this rule. See discussion on page 24. SCO will assist any entity on projects not under Commission oversight if requested, including those that do not go through the formal bid process.

The Commission members, appointed by the Governor and the General Assembly, serve three year staggered terms and are required to meet at least quarterly. The duties and responsibilities of the Commission include:

- Adoption of rules for establishing procedures and criteria for designer selection,
- Adoption of rules for coordination of the plan review, approval, and permit processes,
- Adoption of rules for establishing post-occupancy evaluation, inspections, and preventative maintenance,
- Development of procedures for evaluating designers and contractors,
- Continuous study of and recommendation of ways to improve the State's facility development program,
- Review of the State's provision for ensuring health and safety of employees involved in capital improvement projects,
- Authorization for a State agency, local governmental unit, or other entity subject to GS 143-129 to use an alternative method for contracting.

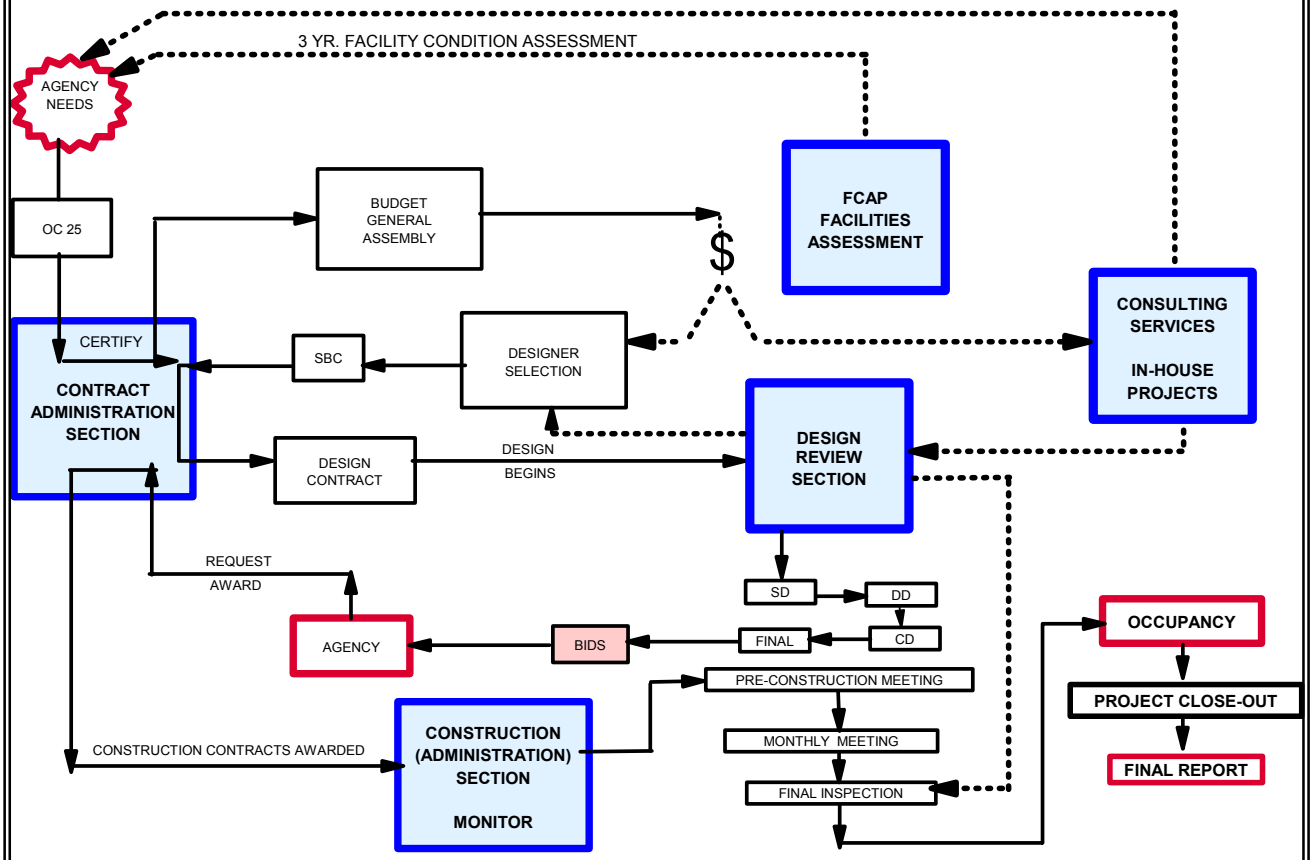
What are the steps a state construction project goes through?

Exhibit 2, page 12, shows an overview of the steps involved in the approval of a capital improvement project[1]. Detailed flowcharts for each type of design review are included in Appendix A, page 55. Specifically, SCO is directed by the State Building Commission to examine and approve plans and specifications for all building, repairs, alterations, additions, and / or improvements for most State owned buildings. However, the owner agency has significant control over the schedule and funding for the project. SCO is further authorized to assist State agencies in the preparation of appropriation requests for new construction and renovation of state buildings. SCO is also directed to assist agencies in preparation of project scope, cost estimates, and coordination of project design and bid specifications.

In performing its duties, SCO certifies that requested funding is sufficient to cover the defined project scope, building programs, site development, detailed design, construction, equipment, and comprehensive scheduling. One of SCO's major functions is the detailed review of project plans at several points during the design phase. These reviews are coordinated with the reviews and inspections conducted by the other State agencies with design / regulatory responsibilities. (See page 10 for list of other agencies.) SCO also supervises the letting of contracts for design, construction, and renovations of capital projects, and has responsibility for conducting informal monthly inspections and participating in the final inspection.

[1] The *State Construction Manual* defines a *state capital improvement project* as the construction of and any alteration, renovation, or addition to State buildings for which State funds are used and which is required by statute to be publicly advertised.

EXHIBIT 2
Steps in the Approval of a Capital Improvement Project



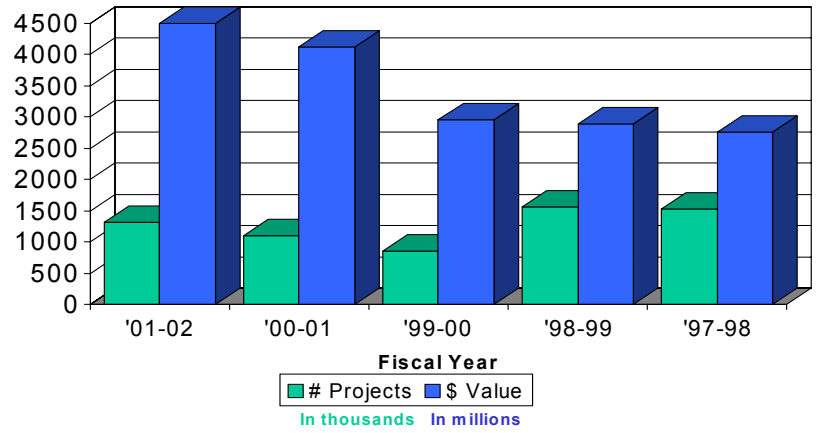
Legend: SBC - State Building Commission
OC-25 - Proposed Capital Improvement Project Document
FCAP - Facilities Condition Assessment Program
SD - Schematic Design
DD - Design Development
CD - Construction Documents
Final - Final Plans

Source: State Construction Office

How many projects is the State Construction Office overseeing?

Exhibit 3 shows the number of capital improvement projects and their value for fiscal years 1997-98 through 2001-02. As of June 30, 2002, there were 1,316 on-going capital improvement projects with a projected value of $4.6 billion, with 595 of those valued at just under $1 billion directly under the Commission's purview. Table 1 details the breakdown by owner type and project phase for these projects.

Exhibit 3
State Capital Improvement Projects
FY97-98 through FY01-02



Source: State Construction Office records

TABLE 1
Distribution of Capital Improvement Projects
As of June 30, 2002

	Design		Construction		Total	
	#	Value	#	Value	#	Value
Community Colleges	93	$ 309,589,875	102	$ 238,252,651	**195**	**$ 547,842,526**
Construction Manager At Risk	1	$ 9,470,000	0	$ 0	**1**	**$ 9,470,000**
Universities	268	$1,427,188,298	239	$1,218,839,141	**507**	**$2,646,027,439**
Construction Manager At Risk	17	$ 436,339,546	1	$ 10,753,306	**18**	**$ 447,092,852**
State Building Commission (all other State projects)	297	$ 568,253,377	298	$ 372,060,859	**595**	**$ 940,314,236**
Total	676	$2,750,841,096	640	$1,839,905,957	**1316**	**$4,590,747,053**

Source: State Building Commission Minutes, June 2002

What procedures and technology are in place for tracking projects?

SCO is charged with implementing the policies and procedures developed by the State Building Commission. These are contained in the *State Construction Manual*. SCO maintains a number of different databases containing information relative to construction projects. The major database is INTERSCOPE which is being designed to be web-accessible by all SCO clients.

Specific findings and recommendations for the project management function follow.

SCO'S DESIGN REVIEW TRACKING SYSTEM DOES NOT ACCURATELY COMPUTE THE BACKLOG.

SCO has no formal, written standards for determining timely plan review. Nor were we able to locate any industry standards. Based on history, SCO has determined that it takes 3-5 weeks to review schematic design drawings, 4-6 weeks for design development documents, 6-8 weeks for the construction documents, and 1-2 weeks for final review. Using these deadlines, SCO should be able to determine whether design review is being conducted in a timely manner. Examination of SCO's design review tracking system report showing backlog revealed that the instrument had logic errors in the calculations. The report showed monthly plans received, plans reviewed, and plans in-house. The number of plans in-house is reported as "backlog", even though many of these plans had not exceeded the informal deadlines. Table 2, page 15, shows a sample "backlog" report. Additionally, staff was unable to explain how the backlog numbers were generated. While we were able to determine that SCO had a number of projects in the process of design review, we were unable to determine the magnitude of the design review backlog.

RECOMMENDATION

SCO should formalize its review deadlines and develop design review performance standards for all reviewers based on those deadlines. Additionally, SCO should correct the backlog calculations to redefine the backlog.

TABLE 2
Sample of "Backlog" Report
Total Design Submittals Received and Reviewed from July 1, 2000 to June 30, 2001

	Schematic Design		Design Development		Construction Document		Final Checkout 1		Final Checkout 2		Monthly Total		
	Project Rev.	Log-in No.	Project Rev.	Log-in No.	Project Rev.	Log-in No.	Project Rev.	Log-in No.	Project Rev.	Log-in No.	Rev.	Rec.	Back Log
Jul-00	3	6	8	11	6	16	16	16	7	4	53	40	20
Aug-00	6	5	17	15	27	30	19	23	6	7	80	75	30
Sep-00	8	6	10	7	8	26	21	17	10	12	68	57	33
Oct-00	5	7	10	12	37	23	19	15	10	16	73	81	51
Nov-00	6	5	9	11	31	27	10	18	8	4	65	64	37
Dec-00	4	3	8	9	12	9	26	28	6	8	57	56	33
Jan-01	4	9	19	13	17	24	23	31	8	7	84	71	30
Feb-01	3	12	9	11	25	26	22	21	6	7	77	65	37
Mar-01	10	2	11	10	29	21	24	25	11	11	69	85	38
Apr-01	1	10	8	16	14	10	5	23	9	11	70	37	30
May-01	12	4	18	11	27	23	24	15	9	6	59	90	26
Jun-01	7	6	10	6	14	10	19	24	9	9	55	59	22
TOTAL	**69**	**75**	**137**	**132**	**247**	**245**	**228**	**256**	**99**	**102**	**810**	**780**	

Source: State Construction

SCO'S DESIGN REVIEW TIMES EXCEED INFORMAL DEADLINES.

Based on the size and complexity of construction projects, the Design Review section performs schematic, design development, construction document reviews, and final plan reviews. SCO reviews plans on a first-in, first-out basis. As noted on page 14, SCO has informal estimates of the time required to perform each phase review. We examined a sample of 40 projects to determine whether SCO was meeting its informal deadlines, noting the date each design plan was received by SCO, the time needed to review the plan, and the date the notification letter was sent indicating the review was complete. However, we did not document the size, dollar amount, complexity of the construction project, or examine the quantity or quality of the review comments associated with each review phase for the projects. This would need to be done by SCO management to determine causes for exceeding the established deadlines. As shown in Table 3, a large number of design reviews were beyond SCO informal deadlines for the different phases even though only 27.5% of the projects reviewed exceeded 105 total review days.

TABLE 3
Summary of Results of Design Review Sample

Design Phase	Maximum Informal Deadline	Sample Range of Days	# of Projects Beyond Informal Deadline	% of Projects Beyond Informal Deadline
Schematic Design	25 Days	6 – 48 Days	4 of 40	10%
Design Development	30 Days	6 – 91 Days	8 of 40	20%
Construction Documents	40 Days	2 – 104 Days	18 of 40	45%
Final Review	10 Days	1 – 27 Days	18 of 40	45%
Total Reviews	105 Days	8 –192 Days	11 of 40	27.5%

Source: OSA Analysis

We learned during the audit that several local government entities and municipalities in the State use an "express" plan review process. These entities are offering the express plan review as an optional service at a set hourly fee. Basically, the express review provides an accelerated review process to accommodate clients following a fast-track construction project schedule, thus allowing construction to begin sooner. This service is heavily dependent on the completeness of plans and associated documents submitted for review. The express review process can be accomplished in several ways. First, the designer could pre-schedule an express review after normal working hours. The staff would be paid overtime using the fees paid by the designer for the express review. (See discussion on salaries, page 48.) A second method using this concept would be to allow scheduling specific projects ahead of others with the review done during normal working hours.[2] Fees collected could supplement funding for needed SCO staff. To achieve maximum efficiency, an express plan review process would require the agreement and cooperation of all the agencies having regulatory review responsibilities in a construction project, as well as the owners and the architectural and engineering industry.

RECOMMENDATION

SCO management should determine whether the informal deadlines need to be adjusted. Further, management should explore the feasibility of implementing an express plan review process for state construction projects. Lastly, Department and SCO management should identify any legislative changes needed to allow implementation of an express review process. If the Secretary decides to pursue an express review process, then she should request from the General Assembly the necessary legislative changes.

SCO HAS INADEQUATE TECHNOLOGY AND DATABASES CONTAIN INVALID / INCOMPLETE DATA.

In 1999, SCO converted from a mainframe system to a new database, INTERSCOPE (Internet State Construction Office Project Environment) because the existing system was not Y2K compatible. INTERSCOPE, an information and workflow management system, was to be designed as an interactive website interface database containing all information relating to capital improvement projects that pass through the State Construction Office. The system was to help streamline the business operations of SCO by allowing electronic submission of forms and to ease the paperwork demands of the agencies, Capital Project Coordinators, designers, and contractors who interact with SCO.

[2] The Department of Insurance has recently implemented a form of express review called Independent Design Assessment. DOI will contract with code certified architects to review the plans prior to submittal to DOI to ensure that the plans are code compliant. This should reduce the number of comments from DOI and speed up the DOI review portion of state construction projects.

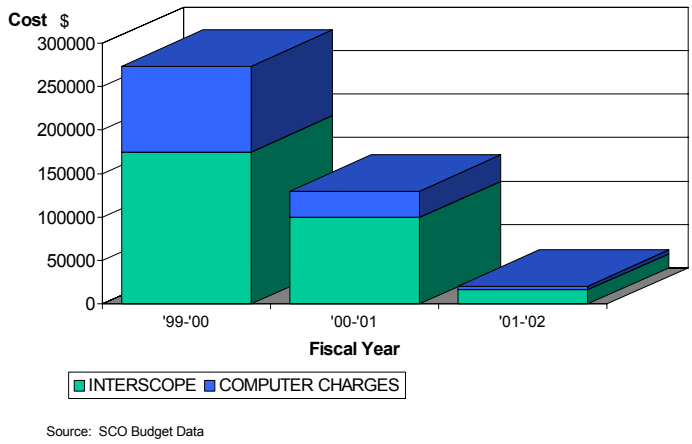
During the conversion process, various project information being transferred from the old system was lost and was not recoverable. See Table 4. In addition, fiscal year 1999-00 budgetary constraints prevented the contractor from completing the software development. Database integration, adaptability, online documents, user modification, storage of images, and secure accessibility through website applications were never fully implemented. Software development problems continue to contribute to on-going slow computer operation and system crashes.

TABLE 4
INTERSCOPE Database Information

# of Projects	Description
6011	Total files on database since 8/95
488	Unknown status activity
1170	Missing project monitor information
16	Reflect $0 for original contract amounts
4215	No information for original contract amounts
29	Reflect $0 for current contract amounts
4962	No information for current contract amounts
1693	Reflect $0 for total contract amount
336	No information for total contract amounts

Source: SCO Database Records

Exhibit 4
State Construction Office
Technology Expenditures



Source: SCO Budget Data

Senate Bill 914 authorized $112,358 for new technology needs in December 2001. SCO used approximately $26,603 to upgrade personal computers in April 2002. SCO has also hired a computer consulting firm for $12,800 to evaluate INTERSCOPE to determine the time and costs associated with fully implementing the system. Exhibit 4 shows total expenditures related to technology services for fiscal years 1999-00 through 2001-02.

RECOMMENDATION

SCO management should identify all capital improvement projects that are still on-going from 1999 and verify that INTERSCOPE contains accurate and complete data for those projects, correcting as necessary. Efforts should continue to fully develop INTERSCOPE to better serve SCO clients and improve oversight of state construction projects. Once the consultant's evaluation is completed, Department management should request funding to complete INTERSCOPE development. Efforts to upgrade personal computers for the staff should also continue.

THE CURRENT CONTRACTOR / DESIGNER EVALUATION PROCESS IS NOT EFFECTIVE.

GS 143-135.27 requires evaluations of both contractors and designers for state construction projects. According to the policy[3] adopted by the State Building Commission, the Capital Project Coordinator (CPC) at the owner agency is responsible for completing and submitting an evaluation of the contractor(s) ". . . *within 60 days of the* ***project's final acceptance****."* The CPC is also responsible for evaluating the designer within 60 days of the ***project's final report***. SCO considers the "final acceptance" date to be the final inspection date and the "final report" date to be when the designer submits the final paperwork for the project. The final acceptance date and the final report date can be vastly different dates.

All evaluations are to be submitted to SCO for review and compilation on an individual project and cumulative basis. Per the procedures outlined in the *State Construction Manual*, if a contractor's individual project score is 2.5 or below or a cumulative score falls below 3.5 on a 5 point scale, then SCO notifies the Commission.[4] Based on these evaluations, the Commission **may** disqualify any contractor whose work has consistently been evaluated below the established rating. However, there are no procedures outlining how the Commission or SCO are to handle a ***designer*** with an individual project rating at 2.5 or below or a cumulative score below 3.5. Review of a sample of evaluation results for designers and contractors showed that the average cumulative rating for designers was 4.4 and for contractors was 4.2. See Table 5, page 19.

SCO is responsible for notifying the CPCs if evaluations have not been filed within the required period. We reviewed a sample of 359 projects for **contractor** evaluations and 306 projects for **designer** evaluations for fiscal years 1997-98 through 2001-02. Table 6 contains the results of the review. As can be seen, 334 of the contractor evaluations (93%) were either never submitted or were submitted late. For the designer evaluations, 209 (68.3%) were either never submitted or were submitted late. Part of the problem may be confusion on the part of the agency CPC's as to when an evaluation is due since there may be several "final inspections".

TABLE 6
Number of Evaluations Submitted

Evaluation Type	Project Sample Size	Not Submitted		# Submitted		# of Submitted that were Late	
		#	%	#	%	#	%
Contractor	359	269	74.9	90	25.1	65	72.2
Designer	306	130	42.5	176	57.5	79	44.9

Source: SCO Project Files

[3] *State Construction Manual*, Article 25: Final Inspection and Acceptance, Section 322 & 322-A.

[4] SCO convenes a five person panel to review the evaluation and make recommendations to the Commission.

TABLE 5
Sample of Cumulative Contractor/Designer Evaluations

CONTRACTOR	NUMBER OF EVALUATIONS	EVALUATION SCORE	DESIGNER	NUMBER OF EVALUATIONS	EVALUATION SCORE
1	4	3.78	1	3	4.83
2	18	4.08	2	2	3.60
3	34	4.44	3	2	3.88
4	3	4.07	4	6	4.55
5	9	4.42	5	4	4.76
6	15	4.19	6	2	4.40
7	5	4.10	7	8	4.31
8	3	4.60	8	11	4.44
9	6	4.63	9	2	4.80
10	5	4.13	10	1	5.00
11	11	4.43	11	1	5.00
12	16	4.64	12	8	3.57
13	9	4.15	13	6	4.53
14	3	4.30	14	8	4.65
15	3	3.53	15	4	3.53
16	2	4.30	16	8	4.09
17	2	3.88	17	2	4.38
18	3	4.00	18	4	3.25
19	3	4.17	19	19	4.87
			20	4	4.48
			21	1	4.00
			22	1	4.70
			23	9	4.18
			24	10	4.20
			25	1	4.85
			26	4	4.80
			27	3	4.20
			28	18	4.63
			29	1	4.50
			30	3	4.67
			31	10	4.61
			32	10	4.69
			33	11	4.32
TOTALS	**154**	**4.20**	**TOTALS**	**187**	**4.40**

Source: SCO evaluation files

Additionally, we found 176 contractor evaluations and 57 designer evaluations (not included in our sample) that were not properly filed. We learned that the person assigned this responsibility was on extended medical leave and no one had been given this duty in her absence (see page 47 for discussion of staffing issues).

RECOMMENDATION

The Commission should review the established evaluation criteria for appropriateness. Specific procedures should be established for handling designer individual project ratings at or below 2.5 or cumulative designer ratings at or below 3.5. A clear definition of "final acceptance" and "final report" dates should be included and used consistently by the Commission and SCO staff. SCO management should establish clear procedures for conducting and maintaining the evaluation process. Once the procedures have been clarified, the Commission should use the evaluation results to determine the continued qualification of all contractors and selection of designers for state construction work.

CHANGE ORDERS DO NOT CONSISTENTLY REFLECT WHO INITIATED CHANGES.

State construction policy requires the **project designer** to prepare project change orders in a standard format to be approved by the State Building Commission. To properly complete the change order form, the designer must designate the party responsible for initiating the change order. The change orders can be used to document who is responsible for additional costs, changes in project scope, and / or schedule changes. Discussions with designers indicated that they were reluctant to specify the party responsible for the change order because of potential legal implications. Examination of a sample of 271 project change orders for fiscal years 1996-97 through 2000-01, which included university projects, showed the 21% (56) did not stipulate the party responsible for causing the change. SCO staff had approved the change orders even though they were not completed in compliance with the established procedures. SCO's rationale was to keep the project moving even though the paperwork was not completed properly. However, omission of the party initiating the change order could affect resolution of claims in the event that there are delays in the schedule and / or cost overruns for the project.

RECOMMENDATION

The Commission and SCO should review the change order process with the Attorney General's Office to determine any legal implications with requiring identification of the party causing the change order. SCO staff should not approve change orders unless the proper change order form has been fully completed for documentation purposes.

FACILITIES MANAGEMENT PERSONNEL ARE NOT INVOLVED IN THE REVIEW OF STATE CONSTRUCTION PROJECTS.

SCO has the responsibility of reviewing and approving state construction projects for buildings in the downtown Raleigh complex. However, after the building has been constructed, the Division of Facility Management[5] becomes responsible for maintaining it. Present SCO procedures call for little, if any, Facility Management input into the construction process relating to maintenance issues. The State does not have a standard for infrastructure systems such as heating and cooling units, light structures, etc. Normally, these decisions are left up to the owner agency. As a result, when Facility Management becomes responsible for the building's maintenance, staff find unexpected maintenance problems. The infrastructure systems may be unique, requiring extra time and costs to maintain, or the layout and design of these systems may not be as efficient as they could have been, forcing Facility Management to effect changes in order to maintain the system. (This same concept is also true for decentralized projects at the university and community college systems.)

For example, SCO approved a recent construction project where the fresh air intake was located too close to the cooling system's chiller lines. When outside temperatures dropped below freezing, the fresh air coming into the building was causing the chiller lines to freeze. Facility Management has since remedied the problem by adding a type of antifreeze to the chiller lines to prevent freezing, thus increasing the cost to maintain this particular system. If Facility Management had been involved in the plan review process before construction, it is possible that it could have identified the maintenance problems before construction, thereby saving the State unnecessary maintenance time and costs.

RECOMMENDATION

The Commission and SCO management should consider modifying SCO's procedures to require involvement of facilities management personnel in the plan review process for the purpose of identifying maintenance issues before construction. This should reduce the number of maintenance problems, help to standardize the infrastructure systems for state buildings, and save the State unnecessary maintenance costs.

[5] The Department of Administration, Division of Facility Management is responsible for, approximately 133 buildings and 48 parking facilities containing over 5 billion square feet of office space in the downtown Raleigh complex. The buildings contain over 1800 individual items of building systems equipment maintained in an extensive preventive maintenance program. The Division's budget also pays the utility bills for electricity, water, sewer, natural gas, and #2 fuel oil used in these facilities. However, a number of buildings, such as the Agriculture Building, are the responsibility of the individual agency.

Construction Site at North Carolina State Fairgrounds

Objective 2: *To review SCO's role in the Higher Education Bond projects and other decentralized projects.*

To achieve this objective, we reviewed applicable General Statutes, state regulations and procedures relating to the Higher Education Bonds. Additionally we reviewed reports prepared for and by the Higher Education Oversight Committee, interviewed Oversight Committee members and project management personnel in both the University System and the Community College System, attended Oversight Committee meetings, and obtained details and schedules for bond projects by campus. Lastly, we reviewed in detail information at SCO relating to the UNC Women's and Children's Hospitals, as well as the outside consultant's report on the project.

Conclusion: **The General Assembly has taken action to exempt certain types of State construction and renovation projects from the purview of the State Building Commission and the State Construction Office. In November 1998, the University of North Carolina Health Care System was exempted. Legislation also exempts the East Carolina Medical Faculty Practice Plan projects, local education projects, and selected State prison projects. In November 2000, North Carolina voters**

approved the issuance of the North Carolina Higher Education Improvement Bonds in the amount of $2.5 billion for the University System and $600 million for the Community College System. The Higher Education Bond Oversight Committee oversees these projects.

Then in 2001, the General Assembly exempted all University System construction projects less than $2 million and all Community College System projects less than $300,000 from SCO oversight. The prevailing feeling was that these types of State construction projects could be accomplished quicker if they were managed by the owner and did not have to go through the Commission / SCO reporting process. A review of the procedures in place and project documentation shows, however, that decentralization of the oversight function has impacted information flow and has the potential for impacting consistency of the State's capital improvement program. Further, review of the University System's project database and SCO's database for university projects, shows that only 9 of the 370 projects (2.4%) are ahead of projected schedules as shown in Table 7.

TABLE 7
University Bond Projects
Major Design and Construction Milestone Summary as of 2/1/02

Total Bond Projects	# of Projects	Average # of Days Late	Average # of Days Early
Designer Selection Projected-Late	109	115	
Designer Selection Projected-Not Occurred	21	282	
Design Development Received But Late	17	116	
Design Development Due But Not Received	75	170	
Working Drawings Received But Late	16	200	
Working Drawings Due But Not Received	39	164	
Bid Date Projected But Late	6	81	
Bid Date Projected On-Time or Early	5		62
Bid Date Projected-Not Occurred	36	157	
Construction Start Projected But Late	7	61	
Construction Start Projected On-Time/Early	4		106
Construction Start Projected Not Occurred	35	207	
TOTALS	370	1553	168

Source: UNC-General Administration "Capstat" database and SCO "INTERSCOPE"

UNC-CH Construction Site

Overview:

Does SCO oversee all state construction projects, including the Higher Education Bond projects?

In 2001, the General Assembly exempted all University System construction projects estimated to cost less than $2,000,000 from SCO oversight (GS 143-31.1). The UNC Board of Governors oversees these projects. All Community College System construction projects costing less than $300,000 are also exempt from SCO oversight. The Community Colleges Board of Trustees oversees these projects. The UNC Health Care System, East Carolina Medical Faculty Practice Plan projects and local education projects are also exempt from SCO oversight (GS 116.37 and 116.40.6). Their respective Boards oversee these projects. Lastly, selected State prisons are not under the complete oversight of the Commission.

HIGHER EDUCATION BOND INFORMATION

In November 2000, North Carolina voters approved the issuance of a bond referendum called the *North Carolina Higher Education Improvement Bonds*. The general obligation bonds in the amount of $3,100,000,000 were for the purpose of providing funds, with any other available funds, to pay all or part of the cost of:

(1) Renovating laboratories, classrooms, academic buildings, and worker training facilities and providing other capital improvements at the 59 institutions of the North Carolina Community College System in order to fulfill the mission of educating students and providing worker training essential to the North Carolina economy, and to address expected large increases in student enrollment, and

(2) Renovating and replacing classrooms, laboratories, and academic buildings and providing other capital improvements at the 16 campuses of the constituent institutions, the affiliated institutions, and the Center for Public Television (UNC-TV) of the University of North Carolina System in order to meet large expected student enrollment increases, serve North Carolina by providing the education critical to the State's economy, and continue to provide UNC-TV public television to the State viewers.

TABLE 8
Time Frames for Higher Education Bond Issue

FISCAL YEAR	AGGREGATE AMOUNT	
	University System	Community College System
2000-2001	$201,600,000	$48,400,000
2001-2002	$241,900,000	$58,100,000
2002-2003	$483,900,000	$116,100,000
2003-2004	$483,900,000	$116,100,000
2004-2005	$564,500,000	$135,500,000
2005-2006	$524,200,000	$125,800,000
TOTALS	**$2,500,000,000**	**$600,000,000**

Source: GS 116D-8 and 116D-30

General Statues Chapter 116D authorizes the issuance of these bonds in the time frames as shown in Table 8. Community College projects approved for use of these bond funds are shown by school and campus in Appendix B, page 61. University projects are shown by school and campus in

Appendix C, page 75. Appendix D, page 87, contains a list of all university projects under $2,000,000.

The legislation also created the Higher Education Bond Oversight Committee (GS 116D-5), located administratively in the General Assembly. The Committee consists of 10 members appointed as provided below:

- Three members appointed by the Speaker of the House of Representatives.
- Three members appointed by the President Pro Tempore of the Senate.
- Two members appointed by the Chair of the Board of Governors of the University of North Carolina.
- Two members appointed by the Chair of the State Board of Community Colleges.

Committee members serve three year terms, continuing to serve until a successor is appointed. Vacancy are to be filled within 30 days by the officer who made the original appointment.

The Committee meets at least once a quarter upon the joint call of the co-chairs to receive information on and discuss:

- Whether expenditures of the proceeds from the bonds issued under this act are in compliance with the provisions of the act.
- Whether the awarded contracts are consistent with the budget and scope of the approved projects.
- Whether changes in construction methods could enhance cost savings and promotion of on-time completion of projects.
- Whether the bond issuances are adequately timed to reflect cash-flow requirements of the projects.

The Committee reports semiannually to the Board of Governors of the University of North Carolina, the State Board of Community Colleges, and the Joint Legislative Commission on Governmental Operations. The Committee terminates upon completion of all projects funded by bond proceeds issued under this act. Committee duties include analyzing and preparing recommendations after receiving information and reports from:

- The University Facilities Office of each institution of the University of North Carolina.
- The Facilities Office of the General Administration of the University of North Carolina.
- The State Construction Office of the Department of Administration.
- The President of each community college or the president's designee.
- The Administrative and Facilities Services Section of the North Carolina Community College System Office.
- The State Treasurer.

Specific findings and recommendations relating to SCO's role in the decentralized projects follow.

North Carolina State University Construction Site

What role should SCO play in decentralized projects?

DECENTRALIZATION OF CONSTRUCTION PROJECTS OVERSIGHT IMPEDES CONSISTENCY AND INFORMATION FLOW.

The State Building Commission was established to develop procedures to direct and guide the State's capital improvement program. The responsibility for implementing the policies and procedures adopted by the Commission is assigned to the State Construction Office. Thus, the General Assembly looks to SCO to oversee and monitor all state construction and to provide periodic updates on the projects. However, the General Assembly has enacted a number of changes to construction law that serve to decentralize the program development and oversight responsibilities vested in the Commission and SCO. These changes mean that the Commission through SCO will no longer be the sole authority on determining standards for design review, change order management, construction administration, and financial management for the State's capital improvement projects. While SCO can act in an advisory capacity on the exempted projects, its advice is not binding.

Specifically, certain university system projects, community college system projects, and university medical projects have been exempted from Commission and SCO oversight. The statutes exempting university and community college projects also established the Higher Education Oversight Commission to "guide and direct" the higher education bond projects. While the Oversight Commission is directed to make status reports to the

General Assembly, there are no established procedures for communication of project details from the higher education projects to SCO. Consequently, the decentralization offers the potential for inconsistencies in the construction process since no one entity now has the overall responsibility for the program. Any inconsistencies can erode public and industry confidence in the fairness of the State's construction procedures. (See the following section for an example of a decentralized project.)

RECOMMENDATION

The General Assembly should evaluate the effect of legislation decentralizing the oversight responsibilities for State construction projects. If the State Construction Office is to provide data on the overall State capital improvement plan, consideration should be given to requiring periodic status reports of all decentralized projects to SCO and the Commission. This change would ensure a better flow of information to the General Assembly, allowing all construction projects paid for by State funds to be reported in a consolidated format.

Auditor's Note: *Since the completion of the fieldwork, SCO and University personnel are meeting every two weeks to discuss project schedules and status.*

Overview: Example of Decentralized University Project

The University of North Carolina Hospitals (UNC-H) received approval from the General Assembly in the 1993 Session for advanced planning and design for the UNC Women's and Children's Hospitals. The scope of work involved the development of inpatient, outpatient, and support services functions for services to children, women, and patients requiring radiology services. The project planning and design originally involved a projected 368,200 gross square foot facility, and incorporated inpatient facilities for Pediatrics, Obstetrics, Gynecology, Intensive Care, and Newborn Nursery. Special ancillary procedural areas, including pediatric operation rooms, were incorporated into the project. A hospital school for sick children and other support services are also integral components of the project.

The project was divided into five sub-projects:

A) Hospital Construction,
B) Early Site Utilities,
C) Chiller Addition (completed in conjunction with construction),
D) Asbestos Abatement (completed in conjunction with utilities work), and
E) Fire Alarm System (included with electrical portion of construction).

Exhibit 5, page 32, shows the timeline for each phase of the project. The Designer was selected in December 1993 and design work began in March 1994. The design phase of

the project was estimated for completion in June 1996 but was not finalized until March 1997. Construction began on the Early Site Utilities Part B in February 1996 and was scheduled for completion in September 1996. Work on Part B did not conclude until July 1997. Appendix E, page 89, contains a more detailed analysis of the evolution of this project.

Hospital Construction, Part A, was delayed by both the late design work and Part B work. The construction for Part A began in July 1997 with an original completion date of July 2000. The hospital was granted partial utilization beneficial occupancy in December 2001; however, project construction is still on going as of August 31, 2002. Final completion of the project is now estimated to be February 2003. As shown in Table 9, there has been a 31.5% increase in the estimated cost of the project and the projected completion date has been moved up 5 years and 3 months from the original.[6]

TABLE 9
Summary of UNC Women's and Children's Hospitals Project

Date of Estimate	Source	Projected Completion	Projected Cost	Percentage Increase
8/93	UNC-H	??	$ 116,345,966 *	
11/93	OC-25	11/97	133,870,800	15.1%
5/95	CON	12/99	140,215,455	4.7%
6/02	Change Orders	2/03	153,017,391	9.1%
Total Differences		**5 yrs. 3 mths.**	**$ 36,671,425**	**31.5%**

* Includes $5,735,366 for advanced planning and design
Source: SCO records

UNC-H's original estimate for the project in August 1993 was $110,610,600 with $5,735,366 approved by the General Assembly for advance planning and design. The original form OC-25 "Proposed Capital Improvement Project" approved by SCO in November 1993 had a total estimated project cost of $133,870,800 for approximately a 387,000 gross square foot facility. See Table 10.

TABLE 10
Proposed Capital Improvement Project
UNC- H OC-25--11/03/93

Land Requirement		$15,203,500
Site Preparation:	Demolition	$868,400
	General	$830,000
Construction:	Utility Services	$3,076,000
	General Construction	$33,452,300
	Plumbing	$5,309,600
	HVAC	$7,964,500
	Electrical	$6,370,000
	Other	$2,436,700
Equipment:	Fixed	$15,963,800
	Moveable	$7,562,000
Estimated Cost		**$99,036,800**
Contingency Costs (5%)		$4,951,840
Design Fees (8%)		$8,319,091
Inflation Costs (40% x 48 months)		$21,563,100
Estimated Cost on Bid Date		**$133,870,800**

Source: SCO OC-25 document

The Department of Human Resources, Division of Facility Services, Certificate of Need Section issued a certificate of need (CON) for UNC-H in May 1995 to construct a 395,000 gross square foot facility (8,000 square feet larger than originally estimated) for a maximum capital expenditure of $140,215,455 ($6,344,655, 4.7%, higher than estimated in 1993). Data in the project files indicated that the price increase is due to bond financing not included on the original OC-25.

[6] The University System President hired PricewaterhouseCoopers Consulting Services to conduct a management assessment of this project in May 2002 because the project was so over budget on time and costs. Appendix G, page 121, contains a summary of PWC's findings from the July 15, 2002 report.

Based on change order documentation submitted to SCO by UNC-H and its contractors, contract construction costs increased approximately $12,801,915 through March 2002, as detailed in Table 11.

TABLE 11
Summary of Change Orders for UNC Women's and Children's Hospitals Project
February 1996 through March 2002

Sub-Project	Type	Original Construction Costs	Change Orders/ Amendments	Adjusted Construction Costs	Percentage Increase
A, B	Design Contract	$ 8,000,000	$ 1,571,700	$ 9,571,700	19.6%
A-D	Construction Management	1,047,031	1,381,955	2,428,986	131.9%
A	General Construction	47,584,342	3,428,778	51,013,120	7.2%
A	HVAC/Mechanical	9,688,506	1,295,236	10,983,742	13.4%
A	Electrical	11,988,630	708,194	12,696,824	5.9%
A	Plumbing	5,716,752	988,937	6,705,689	17.3%
B	General Construction	3,596,500	3,103,768	6,700,268	86.3%
C	HVAC/Mechanical	593,100	42,855	635,955	7.2%
D	General Construction	221,902	209,492	431,394	94.4%
C	Design Contract	0	71,000	71,000	100%
	Total	$88,436,763	$12,801,915	$101,238,678	14.5%

Source: SCO Project Files

The General Assembly passed legislation (GS 116-37. (j)) in November 1998 removing the State Construction Office from oversight responsibility with respect to design, construction, and renovation of buildings, utilities, and other property developments of the University of North Carolina Health Care System. This included the UNC Women's and Children's Hospitals already under construction. The legislation empowered the University of North Carolina Health Care System Board of Directors to adopt policies and procedures regarding the expenditure of public money for:

- Conducting the fee negotiations for all design contracts and supervising the letting of all construction and design contracts.
- Performing the duties of the Department of Administration, Office of State Construction and the State Building Commission under GS 133-1.1(d), Article 8 of Chapter 143 of the General Statutes, and GS 143-341(3).
- Using open-end design agreements.
- As appropriate, submitting construction documents for review and approval by the Department of Insurance and the Division of Facility Services of the Department of Health and Human Services.
- Using the standard contracts for design and construction currently in use for State capital improvement projects by the Office of State Construction.

Since that time, SCO has periodically received status reports and schedule updates on this project from UNC-H. SCO has offered advise and assistance to UNC-H as needed and requested on the project. However, SCO has not had an official oversight role in the project since the November 1998 legislation exempting the project. This project has experienced significant costs overruns and schedule delays associated with the design phase that affected the scheduling and timing of the remaining project construction work. The owner did not clearly define construction management responsibilities for the designer, the construction management firm, the prime contractors, and subcontractors. These issues raise the question of oversight of project schedules, contractor performance, communication and coordination of work schedules and financial accountability for the

hospital project. Many of these activities would normally be the responsibility of the State Construction Office.

UNC Women's and Children's Hospitals Construction Site

(This page left blank intentionally.)

EXHIBIT 5
UNC Women's and Children's Hospitals Timeline

Description	1993					1994												1995												1996												1997											
	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
HOSPITAL CONSTRUCTION PART A ACTUAL																																																				
Pre-Planning																																																				
Design																																																				
Pre-Construction																																																				
Construction																																																				
Project Closeout																																																			
SITE UTILITY PREPARATION PART B ACTUAL																																																			
Pre-Planning																																																				
Design																																																				
Pre-Construction																																																				
Construction																																				◆																
Project Closeout																																																			
CHILLER ADDITION PART C ACTUAL																																																			
Pre-Planning																																																				
Design																																																				
Pre-Construction																																																				
Construction																																																				
Project Closeout																																																			
ASBESTOS ABATEMENT PART D ACTUAL																																																			
Pre-Planning																																																				
Design																																																				
Pre-Construction																																																				
Construction																																																				
Project Closeout																																																			

◆ = Date Part B Construction Projected for Completion

Source: SCO project files summarized by OSA

Description	1998												1999												2000												2001												2002							
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
HOSPITAL CONSTRUCTION PART A ACTUAL																																																							
Pre-Planning																																																						
Design																																																							
Pre-Construction																																																						
Construction																														X																									
Project Closeout																																																						
SITE UTILITY PREPARATION PART B ACTUAL																																																						
Pre-Planning																																																						
Design																																																							
Pre-Construction																																																						
Construction																																																							
Project Closeout																																																						
CHILLER ADDITION PART C ACTUAL																																																						
Pre-Planning																																																						
Design																																																							
Pre-Construction																																																						
Construction																																																							
Project Closeout																																																						
ASBESTOS ABATEMENT PART D ACTUAL																																																						
Pre-Planning																																																						
Design																																																							
Pre-Construction																																																						
Construction																																																							
Project Closeout																																																						

X = Date Part A Construction Projected for Completion

Source: SCO project files summarized by OSA

(This page left blank intentionally.)

Objective 3: *To review SCO's implementation of and compliance with policies on use of Historically Underutilized Businesses (HUBs).*

To achieve this objective, we reviewed relevant North Carolina General Statutes, the State's Minority Business Enterprise (MBE) Guidelines, both prior to and following the passage of Senate Bill 914, and applicable policies and procedures pertaining to the responsibilities of the HUB office within the Department of Administration, SCO, and the State Building Commission. We also reviewed the responsibilities of other State agencies, including the University and the Community College Systems. We examined data in the SCO database on proposed HUB participation dollars for state construction projects. We reviewed reports used by the HUB office indicating state agencies' reported HUB dollars / usage. Additionally, we conducted four regional public meetings and had discussions with representatives from various professional groups to gather information on SCO operations, the state construction process in general, and to specifically discuss the State's HUB efforts on capital improvement projects.

Conclusion: **North Carolina has made considerable strides in recent years in contracting with Historically Underutilized Businesses (HUBs), those owned by minorities and women. In passing Senate Bill 914, "Public Construction Law Changes," the General Assembly enhanced efforts to get HUBs more involved with construction and renovation projects for State buildings. This legislation set a verifiable ten percent goal of the total value for a State construction project for participation by HUBs. Additionally, the legislation increased the responsibilities of SCO, the owner, the designer, and the contractors relating to HUB participation. SCO is now required to track the actual HUB participation against the proposed HUB participation for all construction projects and report this information to the newly formed HUB Office within the Department of Administration. Prior to SB914, SCO did not have a formal procedure in place to track payments to HUBs. SB914 also requires all bidders on a State construction project to submit documentation of a good faith effort to solicit HUB participation. The Secretary of Administration, SCO, and the HUB Office are working with construction industry personnel to refine the good faith effort points system. Lastly, the HUB Office has recently received approval to fill positions authorized by SB914. These positions are needed to implement the additional responsibilities of the HUB Office under SB914.**

Overview: The State of North Carolina has for a number of years made specific efforts to contract with those businesses owned and operated by minorities and women, now known categorically as Historically Underutilized Businesses. Executive Order #150 directed the establishment of the Minority, Women, and Disabled Business Enterprise

Program to encourage increased participation in the State's procurement process. This program was legislated in GS 143-48. Effective April 20, 1999, the Minority, Women, and Disabled Business Enterprise Program Office became known as the Historically Underutilized Business (HUB) Program Office, located within the Department of Administration. This change was made to better reflect the intent of this statewide program. The HUB Office's functions include:

- Increase the amount of goods and services acquired by the State from businesses owned and controlled by HUB's.
- Ensure absences of barriers that reduce the participation of HUB's.
- Encourage purchasing officers within State agencies, departments, and universities to identify prospective HUB vendors and service providers.

The HUB Office is responsible for compiling and reporting HUB usage statewide for procurement of needed supplies, equipment, and services, including HUB participation on construction projects. Specific duties as outlined in Senate Bill 914 include:

- Certify MBEs;
- Maintain a current list of certified MBEs and provide such list to SCO;
- Work with North Carolina trade and professional organizations to improve the ability of minority businesses to compete in State construction projects;
- Oversee the minority business program by monitoring compliance, assisting in implementing training and technical assistance programs, identifying and implementing outreach to increase utilization of minority businesses; and
- Report results of minority business utilization to the Secretary of Administration, the Governor, and the General Assembly.

In December of 2001, the General Assembly passed Senate Bill 914, "Public Construction Law Changes". This legislation requires the State ". . . to enhance and improve good faith efforts to recruit and select minority businesses for participation in public construction contracts. . ." Thus, GS 143-128.2 (a) was amended to read ". . . The State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each State building project, including building projects done by a private entity on a facility to be leased or purchased by the State . . ."

SB914 increases the responsibilities of SCO, the owner, the designer, and the contractors relating to HUB participation. Table 12, page 37, shows responsibilities prior to and after passage of SB914, based on the guidelines developed by the Secretary of the Department of Administration, SCO, and the HUB office. The HUBs are required to voluntarily seek certification, take advantage of technical assistance, and if contacted to bid, respond promptly.

TABLE 12
HUB Related Responsibilities

Entity	Prior to SB914	Under SB914
State Construction Office	• Providing construction bid information to the HUB office at least 21 days prior to bid opening • Ensuring HUB guidelines fully explained at the pre-bid conference if scheduled: and • Reviewing the apparent low bidder's proposal for compliance with HUB guidelines.	• Providing construction bid information to the HUB office at least 21 days prior to bid date • Attending scheduled pre-bid conference to clarify requirements regarding HUB participation • Reviewing the apparent low bidder's proposal for compliance with HUB guidelines • Reviewing HUB requirements at pre-construction conferences • Monitoring contractor's compliance with HUB requirements during construction • Providing statistical data and required reports to the HUB office • Resolve protest and disputes arising from plan implementation
Designer	• Designer had no responsibilities	• Attend scheduled pre-bid conference to explain minority business requirements to prospective bidders • Assist owner to identify and notify prospective minority business of potential contracting opportunities • Maintain documentation of contacts, correspondence, conversations with MBEs • Review with designer bidders proposal for using minority subcontractor; affidavit of good faith effort or affidavit of self performance before recommending of award to SCO • Review "MBE Documentation for Contract Payment" for compliance; submit with monthly pay application to owner and SCO • Document implementation of SB914 requirements • Make documentation-showing implementation of responsibilities available for review by SCO; have available to HUB office upon request.
Prime Contractor	• Attend scheduled pre-bid conference • Identify / determine work areas of a contract where MBEs may have interest in performing subcontract work • Notify certified MBE' of potential subcontracting opportunities at least 10 days prior to bid opening • Comply with contractor's requirements listed in the proposal for minority participation • Submit with bid description of portion of work to be executed by MBEs expressed as a percentage of total contract price • Upon being named apparent low bidder, Bidder to provide necessary documentation as listed in contract documents, • Advise the owner, SCO, and Governor's Special Assistant if it becomes necessary to replace an MBE. • Make a good faith effort to solicit sub-bids from MBEs if additional subcontracting opportunities become available during construction	• Submit MBE Document for Contract Payment with monthly payment application and final payment for the designer's review • Attend scheduled pre-bid conference • Identify / determine work areas of contract where MBEs may have interest in performing subcontract work • Notify certified MBE' of potential subcontracting opportunities at least 10 days prior to bid opening • Comply with contractor's requirements listed in the proposal for minority participation • Identify minority businesses utilized on project w/corresponding dollar value of bid, good faith affidavit • Make documentation showing evidence of implementation of PM, CM at Risk, and First Tier Subcontractors responsibilities for review by SCO • Upon being named low bidder, provide Affidavit of work to be executed by minority businesses or good faith effort to meet the MBE goal • Identify MBE subcontractors and schedule of work to be performed to facilitate their payment • If minority subcontractor needs to be replaced advise owner, SCO, and Director of HUB in writing and make good faith effort to replace with another minority business • Make a good faith effort to solicit sub-bids from MBEs if additional subcontracting opportunities become available during construction
Owners	• Attend scheduled pre-bid conference • Identify / determine work areas of a contract where MBEs may have interest in performing subcontract work • Notify certified MBE' of potential subcontracting opportunities at least 10 days prior to bid opening • Maintain documentation of any contacts, correspondence or conversation with MBE firms made in an attempt to meet the goal	• Develop and implement minority outreach plan • Attend scheduled pre-bid conferences • Notify certified MBE' of potential subcontracting opportunities at least 10 days prior to bid opening • Review contractor's pay applications for compliance with minority business utilization before payment • Utilize other media to inform potential minority businesses of the bid being sought • Maintain documentation of contacts, correspondence, conversations with MBEs • Review with designer bidders proposal for using minority subcontractor and affidavit of good faith effort or affidavit of self performance before recommending of award to SCO • Evaluate if good faith effort achieved before recommending of award to SCO • Make documentation showing evidence of implementation of Owner's responsibilities available for review by SCO and HUB office

Source: Guidelines for Recruitment and Selection of Minority Businesses Participation in State Construction Contracts

Specific findings and recommendations relating to the use of HUBs follow.

Does the State Construction Office effectively promote policies on the use of Historically Underutilized Businesses?

PRIOR TO SB914, SCO HAD NO FORMAL PROCEDURE IN PLACE FOR TRACKING THE PAYMENT OF HUB CONTRACTORS.

Prior to the passage of SB914, SCO's practice had been to compile the dollars designated for HUBs in the selected contractor's proposal as evidence of HUB participation. Table 13 shows the projected HUB participation rates for January 2000 through June 2002. SCO reported these numbers to the HUB Office without verifying to what extent the HUBs were actually used.

TABLE 13
Minority Business Enterprise/
Historically Underutilized Business
State Construction Project Participation (Proposed)

Period	University	Community College	Other State Agencies
1/ 2002 – 6/ 2002	10.3 %	10.4 %	14.1 %
1/ 2001 – 12/ 2001	10.3 %	7.3 %	10.2 %
1/ 2000 – 12/ 2000	11. 9 %	6.4 %	7.6 %

Source: State Construction Office Records

SB914 contains a requirement that the designer must now submit HUB payments application data to SCO. Plans are to have SCO staff compile the payment data into a database and generate monthly reports to submit to the HUB office showing the actual versus projected HUB usage. However, as of the completion of the fieldwork, SCO still could not provide actual dollars paid to HUB contractors on State construction projects due to lack of staffing. Senate Bill 914 authorized two new engineering positions to handle the additional workload requirements contained in the bill. However, mandated budget cuts have eliminated one of those positions. The second position had not been filled as of 7/31/02. This information is needed to allow the HUB office to properly monitor HUB usage and notify any agency that does not meet the goal to file a corrective action plan.

RECOMMENDATION

SCO should proceed with plans to compare the proposal projections of HUB participation to the actual use. These figures should then be reported to the HUB Office for determination of compliance with GS 143-128.2 (a). Department management should fill the remaining position authorized by SB914 as soon as possible to handle the additional HUB requirements.

THE GOOD FAITH EFFORT POINT SYSTEM MAY NEED FURTHER REVISION.

A major intent of SB914 was to increase the recruitment and selection of minority business (HUB) participation in public construction contracts. To achieve that end, the Secretary of the Department of Administration was directed to take the following actions:

- Expand scope of work that qualifies for HUBs participation to include repairs and projects developed by private interest that would be leased or purchased by the State;
- Expand HUB requirements to include local governmental units and other public and private agencies receiving state funding for projects over $100,000;
- Require a good faith effort for all public entities required to have a verifiable HUB participation percentage goal (including first tier subcontractors and replacements);
- Require bidder identification and documentation of good faith effort;
- Require public entities to implement a minority business outreach plan, attend scheduled pre-bid conferences, notify HUBs of potential contracting opportunities and utilize other media likely to inform HUBs of the bid;
- Adopt rules establishing points to be awarded for making each effort in determining a good faith effort;
- Appoint an advisory board to develop recommendations for improving minority business recruitment and utilization; and
- Require public entities to solicit minority business participation and document / record the businesses solicited and the efforts made for reporting to the HUB Office.

The Secretary of the Department of Administration, in conjunction with SCO and the HUB Office, developed the *Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts*. The guidelines contain a points system for use in determining a bidder's good faith effort. A bidder must earn at least 50 points on a predetermined list of compliance requirements before bids can be considered responsive.

Examination of the requirements and the related points shows that several are based on criteria that all qualified bidders should satisfy. (See Exhibit 6, page 40.) The remaining requirements are basic to HUB participation in that they involve getting critical information necessary for submitting feasible bids and structuring work scope that matches the abilities of HUBs to perform. Based on review of the requirements and related points and consideration of suggestions made by professional groups (see page 41), the Secretary may want to continue evaluation of the points assigned to the criteria.

RECOMMENDATION

The Secretary, SCO, and the HUB Office should consider continuing evaluation of the points system used to determine good faith effort. Consideration should be given to continued used of a committee composed of general contractors, construction managers, and HUB owners to determine the requirements and related points to use in determining good faith effort.

Exhibit 6
Point Values for Good Faith Efforts Undertaken

Item	Description	Value
1	Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.	10
2	Making the construction plans, specifications and requirements available for review by prospective minority business, or providing these documents to them at least 10 days before the bid or proposal are due.	10
3	Breaking down or combining elements of work into economically feasible units to facilitate minority participation.	15
4	Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.	10
5	Attending any prebid meetings scheduled by the public owner.	10
6	Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.	20
7	Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.	15
8	Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joining pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority business in obtaining the same unit pricing with the bidder's suppliers in order to help minority business in establishing credit.	25
9	Negotiating joint venture and partnership arrangements with minority business in order to increase opportunities for minority business participation on a public construction or repair project when possible.	20
10	Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.	20

Source: North Carolina Administrative Code, 01 NCAC 301.0102, Temporary Adoption Effective August 1, 2002

THE DEPARTMENT OF ADMINISTRATION'S HUB OFFICE LACKS ADEQUATE STAFF.

As part of the audit of the State Construction Office and its compliance with the requirements of Senate Bill 914, we reviewed the responsibilities of the Department's HUB Office. The HUB Office is required to verify applications submitted by HUBs through the Purchase and Contract Vendor Link web site. Once verified, the HUBs are added to a list of approved HUBs maintained by the HUB Office and included on the HUB Office website. Procedures require the individual HUBs to notify the HUB Office if there are any changes in status. Additionally, the HUB staff re-certifies each HUB every two years. The vendor link for the web page is still in development for certifications and re-certifications.

Currently, the HUB office is staffed by four professionals and one clerical position. SB914 authorized five additional positions; however, due to the State's budget problems, the Department has not been allowed to fill these positions. The existing staff have been required to assume the additional duties contained within SB914.

> ***Auditor's Note:*** *Since the completion of the field work, the HUB office has filled one position and received funding for 3 of 4 remaining positions.*

RECOMMENDATION

Department management should continue its efforts to fill the positions approved in SB914 as soon as possible. Purchase and Contract along with the HUB Office should complete the development of Vendor Link and establish procedures for contacting HUBs who do not have Internet access.

What can be done to improve operations in this area?

PROFESSIONAL GROUPS SUGGEST OTHER METHODS TO GET HUBs INVOLVED BE CONSIDERED.

SB914 required SCO to assume a more active role in assuring contractor knowledge of and compliance with HUB usage goals. To identify state construction issues, the Office of the State Auditor conducted four public meetings and individual meetings with professional association representatives for architects, engineers, general contractors, trades, subcontractors, and minority contractors. See Appendix F, page 107 for a summary of issues. One of the main issues discussed at these meetings was the current State guidelines for use of HUBs. Overall, the associations felt that the State was making a good effort to increase use of HUBs. Most felt that SCO was providing the necessary information relative to HUB usage. However, most felt that the State could do more to increase HUB (and other subcontractor) participation. Specific recommendations to consider included:

- ***Release retainage as each subcontractor finishes work.*** This would assist HUBs and other smaller subcontractors by improving cash flow to them. Now it can take up to 18 months for the subs to get final payments.
- ***Enforce putting retainage in interest bearing account and disbursing interest to subs at final payment.*** If there is a legal reason for holding the retainage, then allow the HUBs and other subcontractors to benefit by receiving any interest earned on the retainage until final payment.
- ***Go to a penalty / bonus clause in the contract instead of liquidated damages.*** This would eliminate the need for retainage, which would benefit all HUBs and other subcontractors by improving cash flow. It could also allow the subs to receive a percentage of any bonus for early completion.

- ***Change contract to require general contractor / construction manager to make payments to all subcontractors every two weeks.*** This would benefit HUBs and other subs by improving cash flow.
- ***Break projects into smaller pieces.*** This would allow more HUBs to bid since most cannot handle the magnitude of an entire state construction project.
- ***Require more details on affidavit of project proposals re: efforts to involve HUBs***. SB914 allows the Construction Manager to control who pre-qualifies by who they ask to bid. At present, no owner has a post-award review process in place to control this.
- ***Change the legislation to require owner, designer, and prime contractor to send out request for bids from subcontractors 21 days prior to due date.*** This would help HUBs and all subcontractors by allowing them adequate time to complete bids for state projects.
- ***Require at least a week's prior notice when subcontractors are expected to start their portion of the job.*** This would help HUBs and other subcontractors by giving them time to reassign employees from other on-going jobs.

In reviewing the temporary guidelines developed by the Secretary, SCO and the HUB Office and released on August 1, 2002, we note that many of these issues have already been addressed.

RECOMMENDATION

The General Assembly should consider the suggestions made by the professional groups for increased HUB and subcontractor participation. The Secretary of the Department of Administration and the State Construction Office should take the lead in exploring the feasibility of suggestions that are not already included in the guidelines. For areas already addressed by legislation or in the guidelines, SCO should implement procedures to assure compliance. The HUB Office should develop a method to assure that all HUBs are aware of guidelines, including those who do not have Internet access.

Objective 4: *To review the organizational structure and staffing levels to determine sufficiency in performing required functions.*

To achieve this objective, we examined organizational charts, job descriptions, OSP data for SCO positions, and the OSP salary study conducted on architect and engineering positions in State government. We also interviewed staff to determine job duties and reviewed timesheets in an effort to determine time requirements for the different functions and activities required of SCO.

Conclusion: **The State Construction Office was composed of 56 positions, with three of those working from home field offices as of June 30, 2002. Staff were divided into five functional areas: Contract Administration, Design Review, Construction Administration, Facility Condition Assessment Program, and Consulting Services. SCO does not have a system in place to measure the workloads of each of the sections. Therefore, it is difficult to determine whether SCO has adequate staff. However, management was able to determine that the Design Review staff review approximately 400 new projects each year. Given the current level of staffing in that section, it appears to be understaffed between 1.5 and 2.0 positions. Examination of turnover data shows a high turnover rate for engineering staff. Departing staff reported that a major reason for leaving was non-competitive salaries. A June 2000 salary study done by the Office of State Personnel resulted in upgrading of engineering and architectural positions. However, no funding has been available to implement the upgrades. The annual cost to SCO to upgrade these positions would be $381,600, including benefits.**

Overview: The State Construction Office is organized into five functional areas as shown in Exhibit 7, page 44. Fifty-three of SCO's 56[7] positions are stationed in Raleigh, with the other three employees working from home field offices in Leicester, Charlotte, and Wilmington. Table 14 shows staffing by section. In addition to its construction oversight responsibilities, SCO staff is also mandated (GS143-135.25) to serve as the

TABLE 14
SCO Staffing by Section
As of June 30, 2002

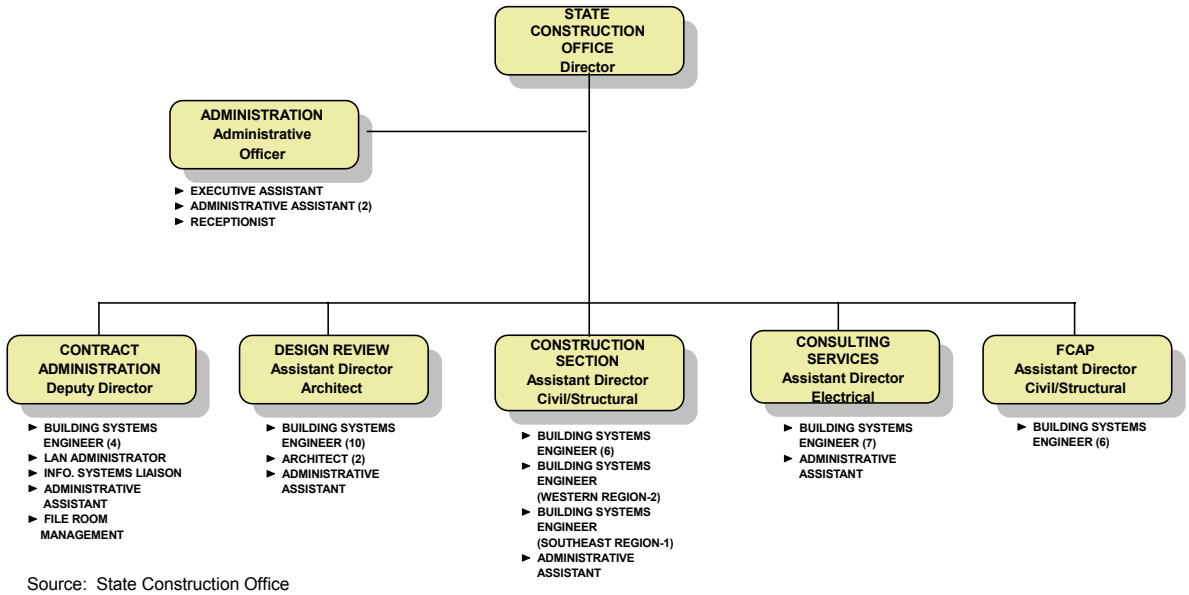
Section	Managers	Professionals	Support	Total
Division Management	2		4	6
Contract Administration	1	5	3	9
Design Review	1	12	1	14
Construction Administration	1	9	1	11
Facility Condition Assessment Program	1	6		7
Consulting Services	1	7	1	9
Totals	**7**	**39**	**10**	**56**

Source: SCO records

[7] Senate Bill 914 authorized two new engineering positions to handle the additional workload requirements contained in the bill. However, mandated budget cuts have eliminated one of those positions. The second position had not been filled as of 7/31/02 and is not included in the totals.

administrative staff for the nine member State Building Commission (Commission) whose duties and responsibilities are discussed on page 9. Specific duties assigned to each section of SCO follow.

EXHIBIT 7
State Construction Office
Organizational Chart
As of June 30, 2002



Source: State Construction Office

Contract Administration – This section is responsible for providing contract assistance to State agencies for design of capital improvement projects to include:

- Conducting project bid openings,
- Assisting in negotiation and preparation of design and construction contracts,
- Assisting in negotiation of contract amendments,
- Researching claims,
- Assisting State agencies, universities, and community colleges with advanced planning,
- Handling contractor/designer evaluations,
- Holding hearings for bid withdrawals[8], and
- Providing oversight of Historically Underutilized Businesses participation data for State construction projects.

Design Review – This section is responsible for the review and approval of plans and specifications for the construction, additions, and renovations of State owned facilities, and community colleges for projects $300,000 and above and university projects greater than $2,000,000. Review and approval occurs at the four stages of the design process:

[8] Definition of bid withdrawal is in the State Construction Manual, Section 110.3.

schematic design, design development, construction documents, and final plans. There are four review disciplines – architectural, mechanical engineering, structural engineering, and electrical engineering – each with three reviewers with the exception of architectural, which has only two positions. Historically, between 300-400 projects are reviewed annually ranging in total value between $500-$700 million. Specific duties and responsibilities include:

- Reviewing and approving project certification (sufficient scope, program, site, schedule, budget),
- Reviewing and approving project plans and specifications,
- Assisting in designer selection process,
- Researching and preparing technical guidelines and criteria,
- Attending pre-bid conferences,
- Meeting construction industry representatives and material suppliers to become familiar with new building products, systems, and methods,
- Assisting State and Federal Emergency Management, and
- Developing, maintaining, and updating construction policies and procedures.

Construction Section – This section provides construction administration for all State construction except local school building programs, informal projects,[9] Community College projects less than $300,000, University projects less than $2,000,000 and Department of Transportation's bridge, highway, and highway right-of-way projects. Specific duties include:

- Observing pre-construction conference activities designed to discuss rules of conduct, policies, coordination, and contract requirements with designers and contractors;
- Evaluating and observing projects through:
  - random site visits,
  - monthly job progress meetings,
  - special meetings for dispute resolution,
  - review of job correspondence, meeting minutes, and change orders,
- inspection of construction for design compliance,
- Attending final inspection, and
- Ensuring designer completion of occupancy certification and final project closeout.

Facility Condition Assessment Program (FCAP) – The section is composed of two three-member assessment teams that include an architect, a mechanical engineer, and an electrical engineer. These teams are responsible for assessing State-owned buildings to make recommendations on energy conservation, maintenance, and operating procedures to reduce energy consumption without adding costs. All buildings with a gross floor space larger than 3,000 square feet are included in the program. That translates into approximately 3,800 buildings across the State that must be assessed every three years[10].

[9] An "informal project" refers to any project that is under the $300,000 threshold for a state agency; these projects do not have to go through the formal bid process. While these projects can be under Commission / SCO purview, the procedures do not require them to be.

[10] As of June 30, 2002, there were approximately 12,200 State-owned buildings that qualified for this program.

The assessment for these facilities includes local roads, drives, and utility systems that directly serve the buildings in a State-owned complex. Specifically, the teams are responsible for:

- Observing and discussing deficiencies with agency's physical plant members assigned to the team,
- Preparing recommendations and cost estimates to correct deficiencies,
- Preparing draft reports and cost summaries, and
- Sending reports to the agency to assist in need prioritization and funding requests.

Consulting Services – This section is responsible for managing the construction and renovation of all Department construction projects costing over $30,000[11]. Specific duties include:

- Acting as the owning agency's representative in the construction process,
- Providing external assistance to the State Energy Office and Facility Management Services,
- Planning projects,
- Selecting designers,
- Reviewing design,
- Selecting contractors,
- Preparing and administering contracts,
- Providing technical support,
- Preparing and managing project budgets,
- Monitoring projects,
- Overseeing asbestos removal,
- Designing projects, and
- Closing out projects.

Specific findings and recommendations relating to organization and staffing follow.

[11] Projects under $30,000 are handled though Department of Administration, Division of Facility Management, with SCO assistance as needed.

Does SCO have adequate procedures to track the productivity of its workforce?

LACK OF WORKLOAD MEASURES IMPEDES SCO'S ABILITY TO DETERMINE STAFFING NEEDS.

Currently, SCO does not have a system in place that allows management to compile workload data for its employees. Review of time records showed that SCO staff use the generic Department timesheet, which requires only the reporting of total hours worked and leave taken. It does not require the reporting of each work activity and the hours associated with it. That is the type of data needed to determine workloads and justify staffing needs. SCO management is in the process of developing workload measures.

RECOMMENDATION

SCO management, in conjunction with Department personnel, should give priority to developing and implementing workload measures.[12] Once implemented, management should use the workload data to support staffing requests.

Is its staffing level adequate for the work it is assigned?

SCO DESIGN REVIEW STAFFING LEVELS APPEAR TO BE INADEQUATE.

While it is difficult to find definitive data to assess SCO staffing levels and workloads, we were able to use gross workload data supplied by SCO management to develop a rough gauge for the Design Review section. Management reports that it reviews approximately 400 new projects each year. The Design Review section of SCO has 12 professional positions and 1 manager who is available to conduct reviews approximately 50% of the time. As of June 30, 2002, four of the professional positions were vacant. Given that the total average review time is 105 days per project (see page 14), Table 15 shows that this section is between 1.5 and 2.0 positions short of adequate staffing to handle the workload when fully staffed.

[12] The General Assembly has appropriated funds to the State Information Technology Services for a study of a statewide Human Resource and Retirement System (which would include personnel, benefits, leave reporting, and payroll). This system, once designed, may provide the needed information to SCO management.

RECOMMENDATION

Department and SCO management should evaluate the need for more design reviewers. Data should be collected on workloads, as well as the average amount of leave time used by Design Review staff. Once this data is accumulated and analyzed, management should make a decision on the need for more staff.

TABLE 15
Estimated Staffing Needs for Design Review Section

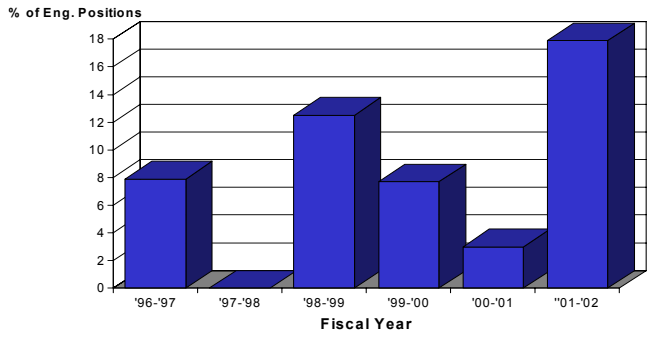
400	# new project reviewed annually
/ 12.5	Divided by # staff available for reviews
= 32	# projects per reviewer
X 105	Average total days for reviews
= 3,360	# days needed to review 400 projects
2,080	Total # hours available per employee
- 176	Average # leave hours per year
= 1,904	Average # hours available for reviews per employee
X 12.5	# staff available for reviews
= 23,800	# hours available for reviews
/ 8	# hours per day
= 2,975	# days available for reviews
- 3,360	# days needed for reviews
= (385)	# days short
X 8	# hours per day
= 3,080	# hours short
/ 1,904	Average # hours available per employee
= 1.6	Estimated Number of Employees Needed

Source: Computed by OSA

Is SCO competitive with other agencies and the private sector in compensation for the professional employees it needs?

SCO PROFESSIONAL STAFF SALARIES ARE NOT COMPETITIVE.

Exhibit 8
State Construction Office
Turnover for Engineering Staff



Source: Office of State Personnel Records

Examination of turnover data for SCO staff showed an average turnover rate of 7.9% for the fiscal years 1996-97 through 2001-02. However, the turnover rate for the engineering positions during that same period was 8.2%. Of significant concern is the 17.9% rate for fiscal year 2001-02 as shown in Exhibit 8. Departing staff reported the major reasons for leaving were due to non-competitive salaries.

Table 16 contains a comparison of architect and engineer average salary data among SCO, other State agencies, and private industry. As can be seen from the table, SCO **engineer** salaries **are** competitive with other State agencies; however, SCO **architect** salaries **are no**t. Both SCO architect and engineer salaries are far below industry salaries for similar positions. Salary information from nearby local municipalities for similar architect positions was not comparable. Engineer positions salaries for Raleigh averaged $56,971 and Durham averaged $62,343. The Office of State Personnel (OSP) last conducted a statewide salary study of engineer and architect positions in June 2000. Based on that study, OSP recommended, and the State Personnel Commission approved, upgrading these positions. However, no funding has been available to implement the upgrades since they were approved. The cost for SCO to upgrade both the engineering and architect positions would be $381,600, including the cost of benefits.

TABLE 16
Average Salary Comparison

	SCO[a]	Statewide[a]	Private Sector[b]	Nation[c]
Architects	$47,452	$51,195	$ 79,744	$56,020
Engineers	54,294	58,861	107,516	61,853

Sources: [a]NC Office of State Personnel
[b]Professional Engineers Assoc. of NC
(includes fees, bonuses and commissions)
[c]US Dept. of Labor, Bureau of Labor Statistics

RECOMMENDATION

SCO and Department management should pursue funding for the approved salary upgrades. Management should also explore alternative methods of increasing staff salaries such as the "fast track review" process discussed on page 16.

Objective 5: *To review SCO's administrative functions, specifically internal controls, for compliance with laws and regulations.*

To achieve this objective, we reviewed all applicable General Statutes, state regulations and procedures to which all state agencies are required to adhere. Additionally we reviewed Department procedures and SCO's internal policies and procedures for compliance. We also pulled samples of expenditures, examined contract files, and examined cash management policies and procedures for compliance with applicable regulations.

Conclusion: **The State Construction Office had sufficient internal controls established to assure compliance with applicable State regulations. Examination of samples of expenditures, contract files, and cash management practices showed only minor non-compliance issues. However, SCO does not have a formal, written internal policies and procedures manual. This has resulted in some confusion over daily responsibilities, varying interpretation of polices and procedures, and the inability to cross-train employees. Further, SCO could reduce operating**

costs by turning in one of the State vehicles permanently assigned to the Office. Analysis showed that it is not being driven the required minimum mileage of 1,050 miles per month.

Overview:

All State agencies must comply with State regulations regarding use of resources, such as State vehicles, cash management procedures, accounting procedures, etc. Each department is expected to adopt necessary internal policies and procedures that outline how it complies with these regulations.

Is SCO adequately complying with applicable state regulations?

In general, SCO had sufficient internal controls established and was in compliance with most state regulations. Specific findings and recommendations relating to minor non-compliance with State regulations follow.

LACK OF A FORMAL INTERNAL POLICIES AND PROCEDURES MANUAL HAMPERS SCO OPERATIONS.

Good business practices require that SCO have a formal policies and procedures manual detailing the daily activities and tasks of the staff in each section. We learned during the audit that SCO does not have a formal policies and procedures manual addressing the daily activities of the staff. Rather, section heads disseminate staff responsibilities and policies and procedures on an as need basis through verbal communication, memos, and e-mails**.** This has resulted in some confusion over daily responsibilities, varying interpretation of policies and procedures, the inability to share the responsibility of vacant positions, and the inability to cross train employees.

RECOMMENDATION

SCO management should develop and maintain a comprehensive, formal manual of written policies and procedures detailing the daily operations and processes of each section. Management should train all employees on current policies and procedures and provide staff updates on a continuing basis. Management should also develop a plan for cross training employees.

SCO IS NOT IN COMPLIANCE WITH STATE MOTOR FLEET POLICIES.

SCO has ten State Motor Fleet vehicles assigned to it for use by staff in performing monitoring and oversight functions on construction projects around the State. The State policy requires that each vehicle must be driven a minimum of 1,050 miles monthly to maintain permanent assignment to that agency. Review of the vehicle records for the ten vehicles for fiscal years 1999-00 and 2000-01 showed that four (40%) of the vehicles were under the monthly minimum mileage utilization threshold for both fiscal years (Table 17). All four vehicles were assigned to the central office location in Raleigh. We note that the total mileage for all vehicles decreased in fiscal year 2000-01. Reasons for this include reduced funding for renovation projects and a Governor's Executive Order directing State agencies to reduce mileage as much as possible due to the budget crisis. In fact, SCO management turned in one of the four vehicles in March 2002 to Motor Fleet Management. As of June 30, 2002, SCO still has nine vehicles permanently assigned. Based on our analysis of the usage data and the proximity of the Raleigh office to Motor Fleet, we believe it would be to the State's advantage for SCO to turn in at least one of the other vehicles that is not driven the minimum monthly mileage.

TABLE 17
Summary of Mileage for Agency Assigned Vehicles

		FY1999-00			FY2000-01		
VEHICLE #	WORK STATION	TOTAL MILEAGE REPORTED	AVERAGE MONTHLY MILES	OVER/ UNDER 1050 MILES	TOTAL MILEAGE REPORTED	AVERAGE MONTHLY MILES	OVER/ UNDER 1050 MILES
91530	Raleigh	17,331	1,444.25	394.25	18,248	1,520.67	470.67
71862	Raleigh	11,756	979.67	-70.33	10,090	840.83	-209.17
71880	Raleigh	16,705	1,392.08	342.08	16,915	1,409.58	359.58
91534	Wilson	30,074	2,506.17	1,456.17	27,736	2,311.33	1,261.33
91078/5296	Leicester	23,108	1,925.67	875.67	20,335	1,694.58	644.58
31904/5881	Raleigh	11,480	956.67	-93.33	10,493	874.42	-175.58
71863	Raleigh	31,850	2,654.17	1,604.17	26,354	2,196.17	1,146.17
42543	Raleigh	10,199	849.92	-200.08	** 4492	499.11	-550.89
61757	Raleigh	16,154	1,346.17	296.17	15,660	1,305.00	255.00
71142	Raleigh	10,198	849.83	-200.17	11,374	947.83	-102.17
TOTALS		**178,855**			**161,697**		

** Vehicle returned to motor pool during month of March 2002. Average monthly miles were divided by 9.

Source: SCO and Motor Fleet Records

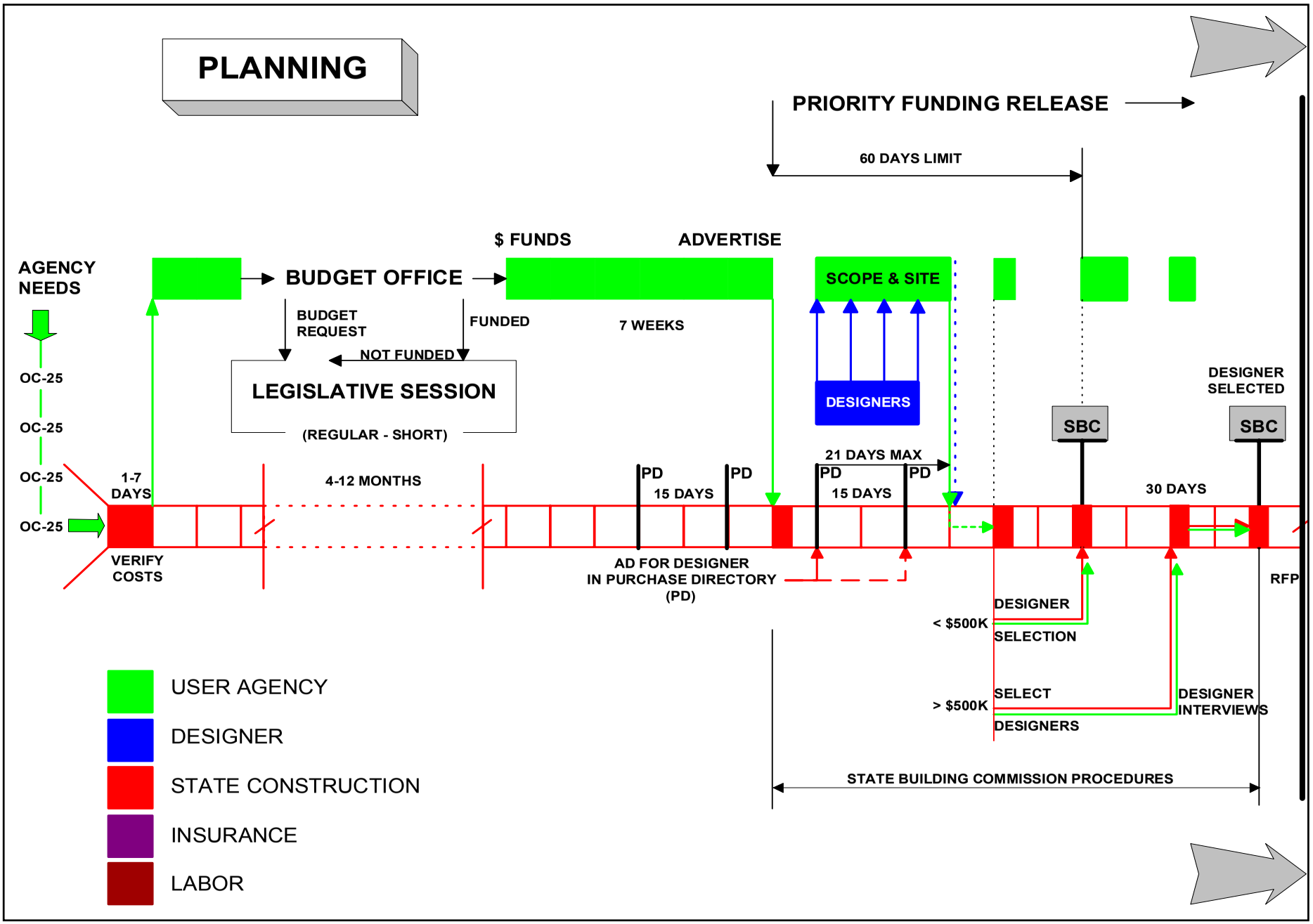
RECOMMENDATION

SCO should monitor its permanently assigned vehicle usage to ensure that the minimum mileage threshold is achieved and maintained. Further, SCO management should turn in a second vehicle to reduce costs.

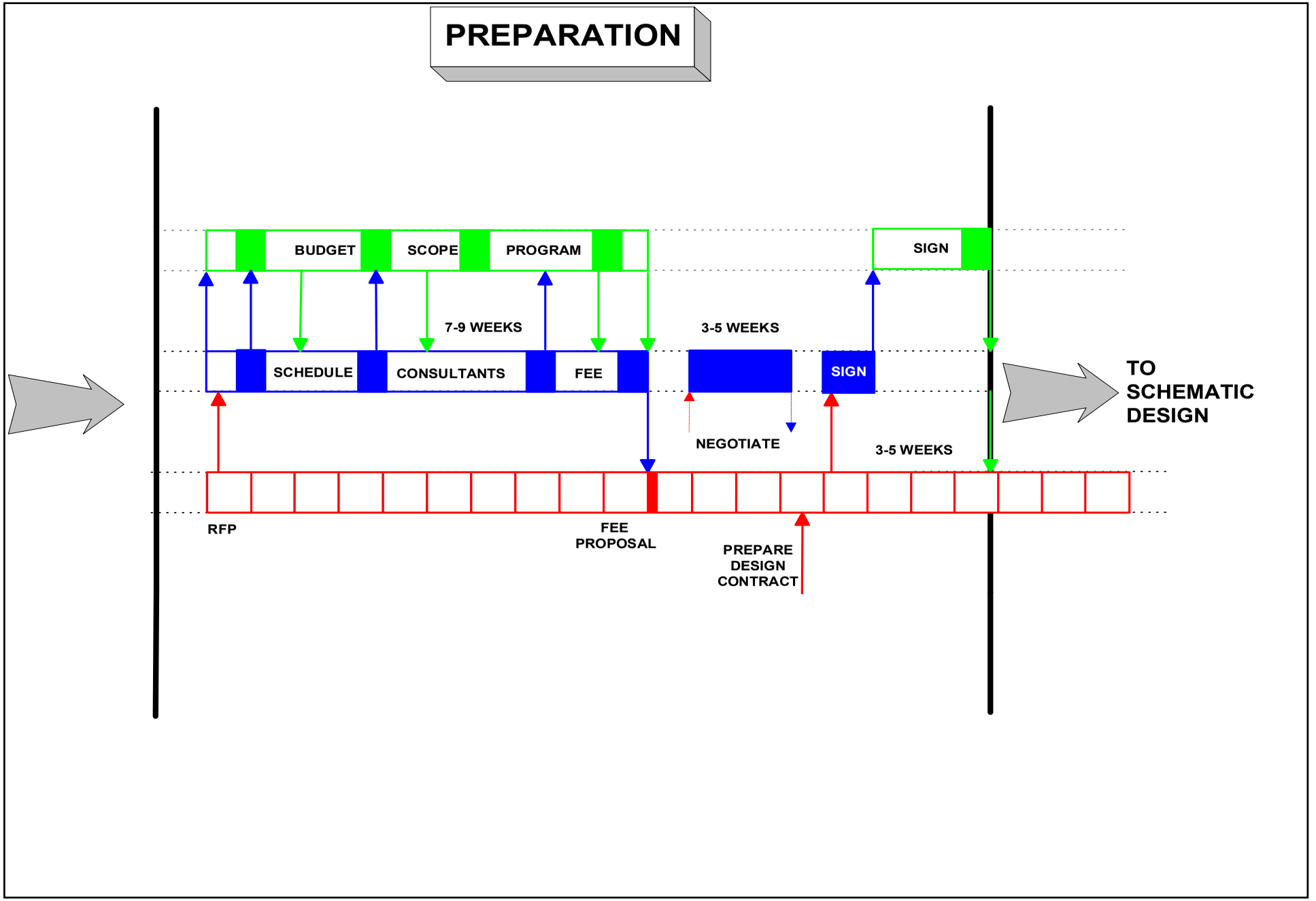
(This page left blank intentionally.)

APPENDICES

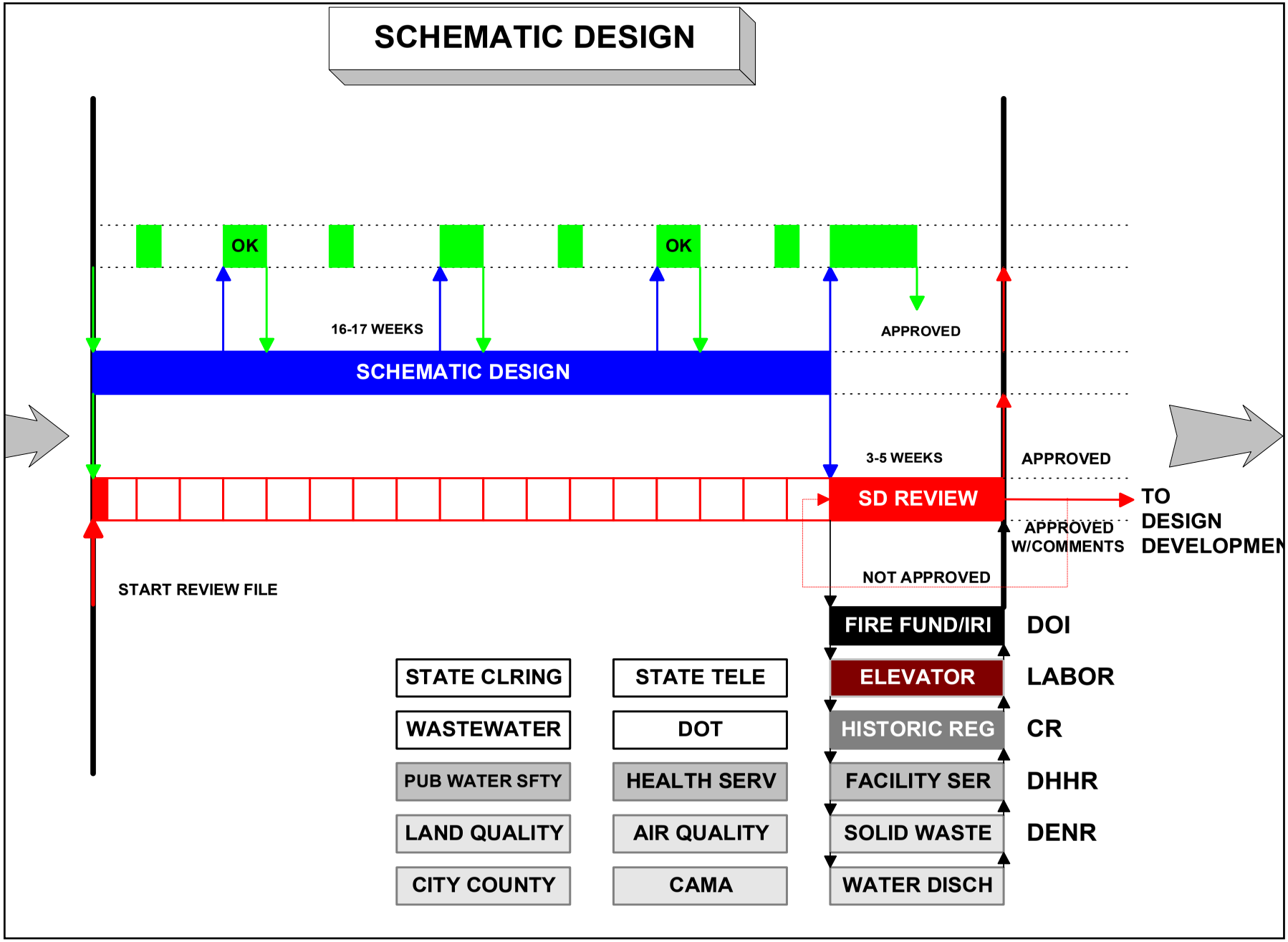
(This page left blank intentionally.)



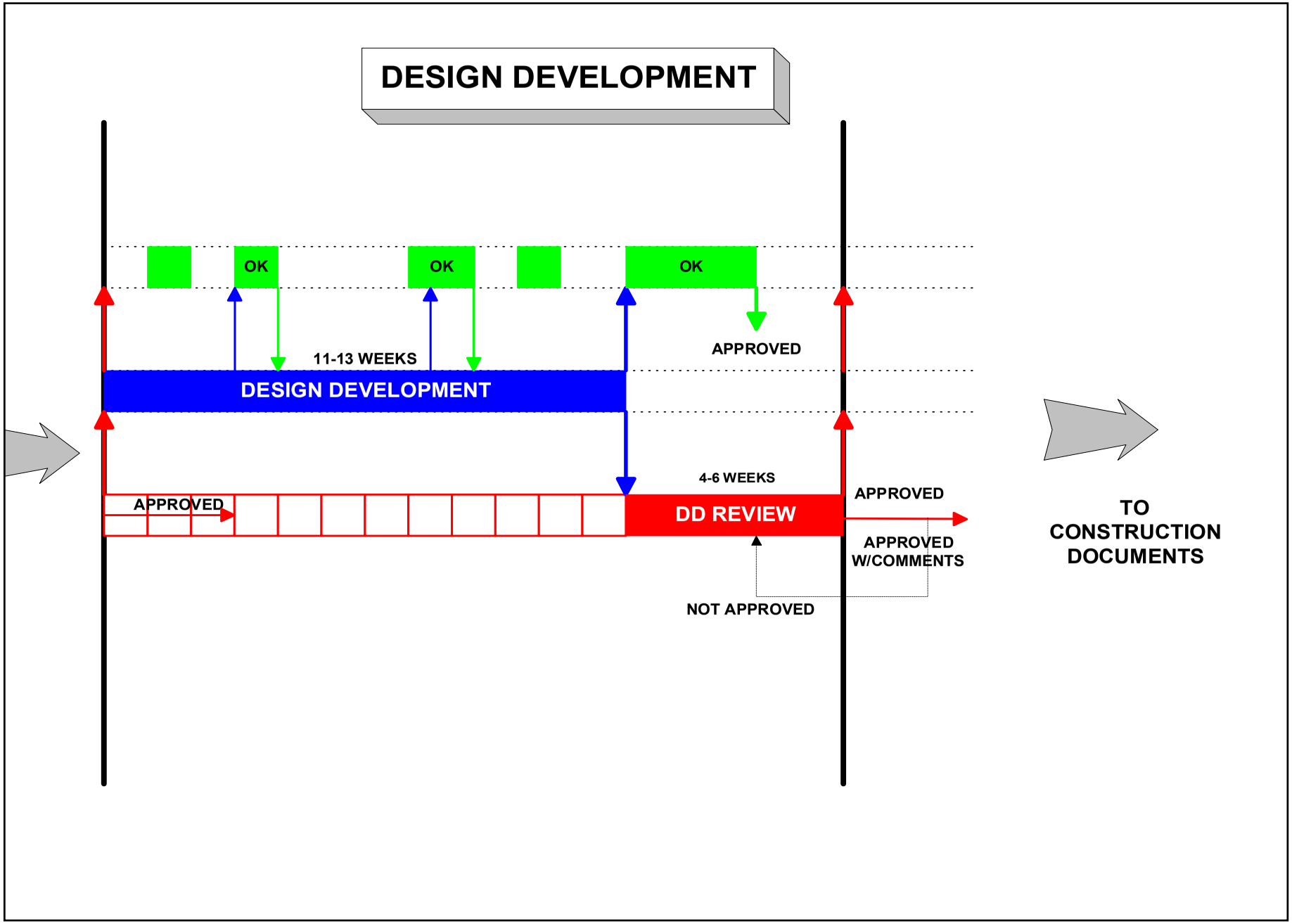
Source: State Construction Office as of July 1, 2001



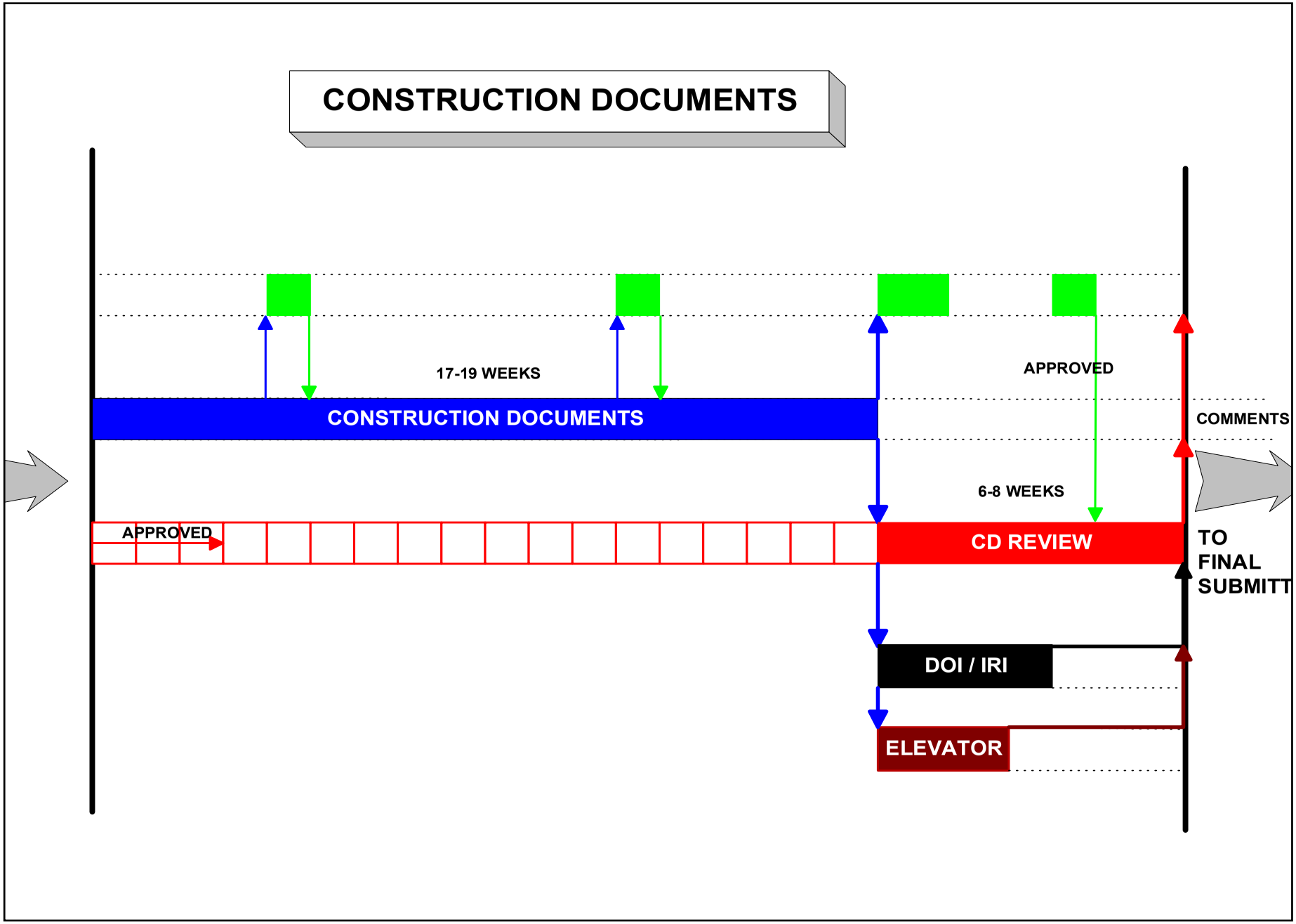
Source: State Construction Office as of July 1, 2001



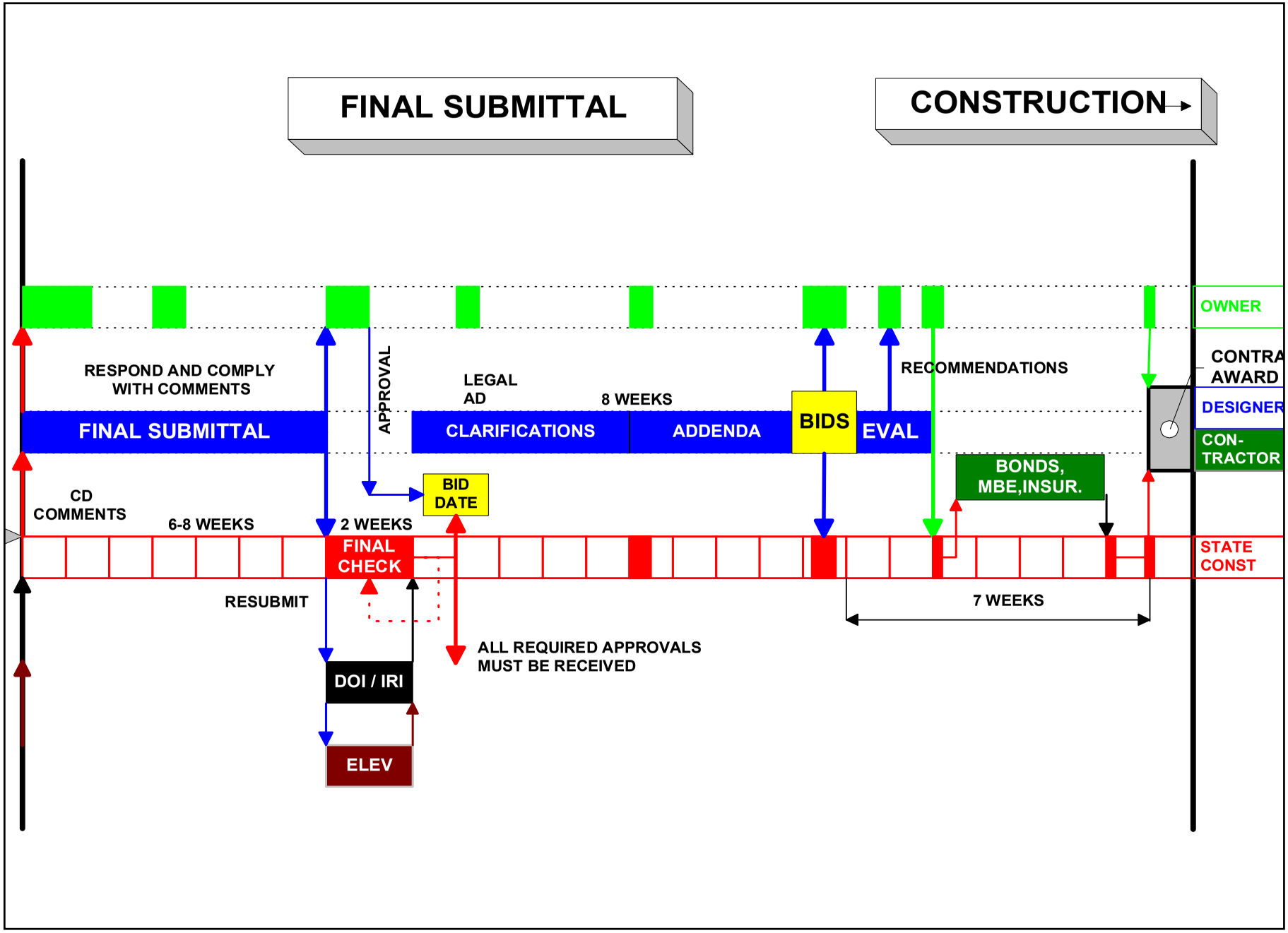
Source: State Construction Office as of July 1, 2001



Source: State Construction Office as of July 1, 2001



Source: State Construction Office as of July 1, 2001



Source: State Construction Office as of July 1, 2001

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Alamance	Renovations - Project I - Project No. 1201	$ 100,000	$ -	$ 100,000	12/01/2000	07/01/2002
Alamance	Student Services/LRC/Adm - Project No. 1129	2,000,000	4,500,000	6,500,000	01/01/2001	07/01/2003
Alamance	Renovations - Project II	127,105	-	127,105	06/01/2002	07/01/2003
Alamance	Renovations – LRC	240,000	-	240,000	02/01/2003	03/01/2004
Alamance	Renovations - Business Area	150,000	-	150,000	04/01/2003	11/01/2003
Alamance	Renovations - Student Services	240,000	-	240,000	06/01/2003	07/01/2004
Alamance	Allied Health Building - Project No. 1130	3,747,351	-	3,747,351	09/01/2003	11/01/2005
Alamance	Renovations - Project III	100,000	-	100,000	06/01/2004	01/01/2005
Alamance	Renovations - Project IV	100,000	-	100,000	06/01/2005	07/01/2006
Alamance	Renovations - Child Development Center	220,000	-	220,000	12/01/2005	07/01/2006
Alamance	Renovations - Parking Lots	150,000	-	150,000	06/01/2006	01/01/2007
Asheville	Computer Technology Center NCCCS #1097	5,000,000	-	5,000,000	11/01/2000	10/01/2003
Asheville	Hospitality Education Center NCCCS #1098	5,898,254	-	5,898,254	11/01/2000	02/01/2005
Asheville	Dental Lab Renovation NCCCS #1121	400,000	-	400,000	12/01/2000	08/01/2002
Asheville	Renovations #1 - #1137	41,000	-	41,000	12/01/2000	07/01/2001
Asheville	Corporate Technology Center Renovation #1, #1134	200,000	509,000	709,000	01/01/2001	09/01/2001
Asheville	Corporate Technology Center Renovation #2	416,351	-	416,351	01/01/2001	09/01/2002
Asheville	Small Business Center Renovation	400,000	-	400,000	01/01/2001	09/01/2002
Asheville	Renovations #2, #1137	22,176	-	22,176	01/01/2003	08/01/2003
Asheville	Fernihurst Renovation, #1158	900,000	-	900,000	09/01/2004	10/01/2005
Asheville	Birch Building Renovation	800,000	-	800,000	10/01/2004	07/01/2005
Beaufort	Law Enforcement/EMT/Fire Svc Tngfacility #1084	3,990,000	10,000	4,000,000	02/01/2001	02/01/2003
Beaufort	Renovations to Buildings 1,2,3,4 And 8	180,000	-	180,000	07/01/2002	07/01/2003
Beaufort	Cosmetology Building	900,000	-	900,000	07/01/2003	03/01/2005
Beaufort	Roof Replacement - Building No. 3	134,000	-	134,000	07/01/2003	07/01/2004
Beaufort	Classrooms (Addition To Existing Building)	1,169,045	-	1,169,045	01/01/2004	03/01/2006
Beaufort	Air Condition Shops in Building No. 4	134,399	-	134,399	07/01/2004	05/01/2005
Beaufort	Renov Space Vacated by Cosmet for Other Programs.	70,000	-	70,000	07/01/2004	05/01/2005
Beaufort	Renovations to Lower Level of Building 5	400,000	-	400,000	07/01/2004	03/01/2006
Beaufort	Re-Surface and Repair Parking Lots, Streets, and Sidewalks	91,000	-	91,000	01/01/2005	10/01/2005
Beaufort	Re-Place HVAC Units, Air-Handlers, Etc. in Buildings 1 and 2	110,000	-	110,000	01/01/2006	10/01/2006
Bladen	R&R to Bldgs,Grounds and Parking Lots	146,809	-	146,809	05/01/2001	12/01/2001
Bladen	R&R to Bldgs,Sidewalks,Parking Lots and HVAC Units	520,000	-	520,000	05/01/2001	06/01/2002
Bladen	Industrial Training Center Repair, Renovation and Expansion	664,794	-	664,794	08/01/2001	04/01/2003
Bladen	Learning Resource Center Repair, Renovation, and Expansion	990,000	-	990,000	08/01/2001	04/01/2003
Bladen	Classroom Building	2,000,000	-	2,000,000	12/01/2003	02/01/2006

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Blue Ridge	Campus Wide Wiring/Infrastructure/Distance Learning Classroom	$ 350,314	$ -	$ 350,314	03/01/2001	10/01/2001
Blue Ridge	Campus Wide Wiring/Media Ctr & Infrastructure New Phone System	536,522	-	536,522	03/01/2001	12/01/2001
Blue Ridge	Gen Renov: Bathrooms/ Handicap Access/ Energy Savings	250,224	-	250,224	04/01/2001	11/01/2001
Blue Ridge	Modifications to Thomas Auditorium	125,928	-	125,928	08/01/2001	03/01/2002
Blue Ridge	Renov to Stud Ctr/Driveways, Drainage/PE Fac? Air Handler Repl. Etc	402,969	-	402,969	07/01/2003	04/01/2004
Blue Ridge	Renovations to Two Classroom Buildings	546,458	-	546,458	07/01/2003	03/01/2005
Blue Ridge	New Vocational Training Building	1,201,077	900,000	2,101,077	07/01/2004	09/01/2006
Brunswick	Technical and Trades Building Project 914	893,291	473,945	1,367,236	02/01/2001	05/01/2002
Brunswick	Bundled R&R Projects	523,427	-	523,427	06/01/2003	07/01/2004
Caldwell	Renovations - Existing Facilities - Project #1128-A	535,000	-	535,000	01/01/2001	09/01/2002
Caldwell	Site Work - Project #1127-B	888,000	-	888,000	01/01/2001	09/01/2002
Caldwell	Renovations - Existing Facilities - Project #1128-B	1,291,000	-	1,291,000	11/01/2001	01/01/2004
Caldwell	Renovations - Existing Facilities - Project #1128-A	1,000,000	-	1,000,000	01/01/2002	03/01/2004
Caldwell	New Construction and Renovations - Project #1127 - C	1,534,710	-	1,534,710	02/01/2003	04/01/2005
Caldwell	Renovations - Existing Facilities - Project #1127-A	247,800	-	247,800	06/01/2004	02/01/2005
Caldwell	Site Preparation (Project #993)	600,000	-	600,000	09/01/2004	05/01/2006
Caldwell	Site Work and New Construction - Project #1128-C	934,831	-	934,831	09/01/2004	05/01/2006
Cape Fear	New Elevator Deferred to Other Funds - 1148	1,300,000	-	1,300,000	01/01/2001	03/01/2003
Cape Fear	Pier and Dock Replacement- Emergency - 1147	1,000,000	-	1,000,000	01/01/2001	03/01/2003
Cape Fear	Engineering Technology Building	15,845,000	-	15,845,000	05/01/2001	05/01/2004
Cape Fear	Renovations-- Emmart Bldg., Burnett Bldg., Machine Shop	2,040,957	-	2,040,957	07/01/2001	05/01/2005
Cape Fear	Information Technology Building	13,315,000	-	13,315,000	03/01/2003	03/01/2006
Cape Fear	Public Safety Training Center	3,140,000	-	3,140,000	12/01/2003	02/01/2006
Carteret	(A) Classroom Building Replacement (#1092)	3,945,724	6,000,000	9,945,724	11/01/2000	05/01/2003
Carteret	(B) Marine Education and Training Center (#1092)	1,600,000	1,500,000	3,100,000	11/01/2000	01/01/2003
Carteret	(E) Parking Lot Renovation	150,000	-	150,000	02/01/2003	05/01/2003
Carteret	(F) McGee Building Renovation-Joslyn Hall	464,051	-	464,051	03/01/2005	11/01/2006
Carteret	(G) McGee Building Renovation-Classrooms	550,000	-	550,000	03/01/2005	11/01/2006
Carteret	(C) Land Acquisition - Railroad Easement	20,000	-	20,000		
Carteret	(D) Land Acquisition - Private Dwelling	80,000	-	80,000		
Catawba	Renovations - Alex. Ctr. NCCCS #1100	1,000,000	-	1,000,000	01/01/2001	03/01/2003
Catawba	Classroom/Lab/Library Res Tech Bldg #850a	7,567,306	5,500,000	13,067,306	04/01/2001	04/01/2004
Catawba	Old Testing Center Renovations	150,000	-	150,000	11/01/2001	08/01/2002
Catawba	Renovate Interior Space	504,339	-	504,339	01/01/2002	09/01/2003
Catawba	East Wing Renovations	200,000	-	200,000	11/01/2003	09/01/2004
Catawba	Renovations - Vacated Library Space	575,000	-	575,000	11/01/2003	07/01/2005
Cent. Piedmont	Sloan-Morgan Renovation #1138	$ 5,117,142	$ -	$ 5,117,142	09/01/2000	03/01/2003
Cent. Piedmont	Information Technology Building - (1116)	17,130,960	-	17,130,960	10/01/2000	10/01/2003

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Cent. Piedmont	Northeast Campus Ph Ia - Utility Upgrade - (942)	752,000	8,500,000	9,252,000	11/01/2000	10/01/2001
Cent. Piedmont	West Campus Phase III - (1114)	3,500,000	7,881,900	11,381,900	02/01/2001	02/01/2004
Cent. Piedmont	North Campus Phase III - (1115)	17,200,000	-	17,200,000	09/01/2001	05/01/2004
Cent. Piedmont	Northeast Campus Phase II	9,570,000	-	9,570,000	03/01/2003	09/01/2005
Cent. Piedmont	Van Every Building Reconstruction	5,161,435	5,117,142	10,278,577	12/01/2003	06/01/2006
Cent. Piedmont	Belk Addition & Renovation	2,430,117	10,500,000	12,930,117	03/01/2004	03/01/2007
Cent. Piedmont	Garinger Exterior Renovation	3,000,000	-	3,000,000	09/01/2004	11/01/2006
Central Carolina	Classroom/Science Lab Bldg. (Proj.# 1106)	4,800,000	-	4,800,000	11/01/2000	04/01/2003
Central Carolina	Telecommunications Bldg. (Proj.# 1107)	700,000	2,500,000	3,200,000	11/01/2000	04/01/2003
Central Carolina	Classroom Building	3,000,000	-	3,000,000	04/01/2003	06/01/2005
Central Carolina	Renovation of Bookstore (Bundled R&R)	250,535	-	250,535	10/01/2003	09/01/2004
Central Carolina	HVAC Systems (Bundled R&R)	295,000	-	295,000	03/01/2004	02/01/2005
Central Carolina	Emergency Training Ctr	1,250,000	-	1,250,000	04/01/2004	06/01/2006
Central Carolina	Renovation of Classroom Building	394,136	-	394,136	04/01/2004	12/01/2005
Central Carolina	Renovation of Main Classroom Building	1,150,000	-	1,150,000	04/01/2004	06/01/2006
Central Carolina	Renovation of Science Building	480,718	-	480,718	04/01/2004	12/01/2005
Central Carolina	Roof Repairs (Bundled R&R)	330,000	-	330,000	04/01/2004	03/01/2005
Central Carolina	Renovation of Automotive Shop (Bundled R&R)	345,000	-	345,000	05/01/2004	04/01/2005
Central Carolina	Renovation of Continuing Education Building	580,469	-	580,469	04/01/2005	12/01/2006
Central Carolina	Undetermined	326,437	-	326,437	04/01/2005	12/01/2006
Cleveland	Classroom Building	3,887,036	1,512,964	5,400,000	01/01/2003	07/01/2005
Cleveland	Faculty Office Expansion/Remodeling	150,000	-	150,000	07/01/2003	03/01/2004
Cleveland	Re-Roofing of "B" Building	80,000	-	80,000	07/01/2003	03/01/2004
Cleveland	Replace/Modify Mechanical Systems	225,000	-	225,000	01/01/2005	09/01/2005
Cleveland	Re-Roofing of Campus Center Building	500,000	-	500,000	07/01/2005	03/01/2007
Cleveland	Undetermined Repairs/Renovations	297,104	-	297,104	01/01/2006	11/01/2006
Coastal Carolina	HVAC Repl Classroom A, Stu Svcs Ctr, L R C (1167)	607,000	-	607,000	01/01/2001	09/01/2002
Coastal Carolina	HVAC Repl-Adm, Classroom B , Hlth Occ, Fine Arts(1167)	780,000	-	780,000	01/01/2001	09/01/2002
Coastal Carolina	Health Occupation Building	6,809,588	-	6,809,588	09/01/2001	03/01/2004
Coastal Carolina	Continuing Education Building	4,681,453	-	4,681,453	11/01/2002	01/01/2005
Coastal Carolina	Fine Arts Building Addition	2,675,322	-	2,675,322	09/01/2003	11/01/2005
Coastal Carolina	Autobody Paint Shop & Cosmetology Building(S)	1,077,846	-	1,077,846	09/01/2004	11/01/2006
Coastal Carolina	Maintenance & Storage Area	857,304	-	857,304	09/01/2004	05/01/2006
Coastal Carolina	Physical Education & Fitness Center	1,688,600	-	1,688,600	09/01/2004	11/01/2006
Coastal Carolina	Replace HVAC System in Skills Building	$ 301,980	$ -	$ 301,980	09/01/2005	05/01/2007
College of the Albemarle	D. F. Walker Public School Takeover Renovation	905,612	-	905,612	12/01/2000	08/01/2002
College of the Albemarle	Vocational Training Center	500,000	-	500,000	10/01/2001	06/01/2003
College of the Albemarle	Allied Health And Wellness Center	3,616,438	1,500,000	5,116,438	05/01/2002	11/01/2004

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
College of the Albemarle	Building A Roofing, Carpeting, And Painting (Bundled)	100,000	-	100,000	06/01/2004	07/01/2005
College of the Albemarle	External Signage	50,000	-	50,000	06/01/2004	07/01/2005
College of the Albemarle	Buildings A & C Roof Repairs -1197	386,000	-	386,000	07/01/2004	03/01/2006
College of the Albemarle	Cosmetology Program Area Renovation	50,000	-	50,000	07/01/2004	03/01/2005
College of the Albemarle	Marine Science Classroom/Laboratory	50,000	-	50,000	07/01/2004	03/01/2005
College of the Albemarle	Learning Resources Center Renovation	250,000	-	250,000	03/01/2005	11/01/2006
College of the Albemarle	Student Services Area Renovation	250,000	-	250,000	03/01/2005	11/01/2006
College of the Albemarle	Community Center Repairs and Renovations	50,000	-	50,000	05/01/2005	01/01/2006
College of the Albemarle	Individual Insignificant Repairs and Renovations	42,724	-	42,724	05/01/2005	01/01/2006
College of the Albemarle	Individual Insignificant Repairs and Renovations	80,244	-	80,244	05/01/2005	01/01/2006
College of the Albemarle	Learning Resources Center Renovation	50,000	-	50,000	05/01/2005	01/01/2006
College of the Albemarle	Upgrade Science Classrooms and Laboratories	150,000	-	150,000	05/01/2005	01/01/2006
College of the Albemarle	Upgrade Parking Areas	225,000	-	225,000	06/01/2005	02/01/2006
Craven	Classroom/Library Building - 907b	2,000,000	2,000,000	4,000,000	09/01/2000	01/01/2003
Craven	Reroof Building G	250,000	-	250,000	06/01/2002	02/01/2004
Craven	Maintenance Building – 1076	325,000	-	325,000	07/01/2002	03/01/2004
Craven	Replace Chillers, Air Handlers, Small Renov. (Bundled)	384,175	-	384,175	07/01/2002	05/01/2003
Craven	Reroof Building B	250,000	-	250,000	07/01/2002	03/01/2004
Craven	Roadway & Parking – 1076	433,440	-	433,440	07/01/2002	03/01/2004
Craven	Renovate Student Lounge/Bookstore	264,000	-	264,000	07/01/2003	02/01/2005
Craven	Technology Building – 1076	3,542,293	2,000,000	5,542,293	07/01/2003	01/01/2006
Davidson	Classrooms/Laboratories/Renovations (1101)	5,795,467	500,000	6,295,467	10/01/2000	04/01/2004
Davidson	Fire Service Laboratory (1180)	325,000	-	325,000	10/01/2000	12/01/2001
Durham	Collins Bldg. Renovations - 1170	2,000,000	-	2,000,000	05/01/2001	07/01/2003
Durham	White Building Renovations - 1171	2,127,992	-	2,127,992	07/01/2001	09/01/2003
Durham	Multipurpose Classroom/ Physical Training Facility	1,000,000	-	1,000,000	09/01/2002	01/01/2005
Durham	New Student Services/Classroom Building	6,300,000	-	6,300,000	10/01/2002	05/01/2005
Durham	Satellite Campus	4,000,000	-	4,000,000	07/01/2003	05/01/2006
Edgecombe	ACT Project - Project No. 1078	6,756,814	2,443,186	9,200,000	12/01/2000	02/01/2003
Edgecombe	Various R & R Projects	500,000	-	500,000	02/01/2001	11/01/2006
Edgecombe	Various R & R Projects	757,203	-	757,203	02/01/2001	11/01/2006
Fayetteville	Spring Lake Multi-Use Educational Building (DCC #1051)	7,000,000	579,079	7,579,079	10/01/2000	04/01/2003
Fayetteville	Horticulture Complex at Cape Fear Botanical Garden	$ 2,000,000	$ -	$ 2,000,000	07/01/2001	09/01/2003
Fayetteville	Renovate Layfayette Hall Classroom Building (1132)	1,813,900	-	1,813,900	08/01/2001	10/01/2003
Fayetteville	Renovate Horace Sisk Classroom Building (DCC #1131)	1,700,073	-	1,700,073	10/01/2001	12/01/2003
Fayetteville	Virtual College Center (Dcc #1126)	6,000,000	-	6,000,000	11/01/2002	05/01/2005
Fayetteville	General Classroom Building	10,500,000	-	10,500,000	01/01/2005	01/01/2008
Fayetteville	Renovate Three Classroom Buildings	7,500,000	-	7,500,000	01/01/2006	07/01/2008

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Fayetteville	Purchase Land Along Ft Bragg Road	600,000	-	600,000		
Fayetteville	Purchase Land Along Ft Bragg Road	1,377,201	-	1,377,201		
Forsyth	Gym Renov., Rerouting Of Data Lines & Parking Lot - 1159	680,000	-	680,000	03/01/2001	12/01/2001
Forsyth	Office/Lab Renovations	240,000	-	240,000	05/01/2001	12/01/2001
Forsyth	Bundled - Piedmont Building	390,000	-	390,000	07/01/2001	04/01/2002
Forsyth	Construction - New Building #1139	7,694,774	4,865,226	12,560,000	07/01/2001	01/01/2005
Forsyth	Replace Boiler	220,000	-	220,000	07/01/2001	02/01/2002
Forsyth	Bundled - Different Renovation Projects	800,000	-	800,000	08/01/2001	05/01/2002
Forsyth	Bundled - Electrical Upfit & Aircondition Hallways	450,000	-	450,000	10/01/2001	07/01/2002
Forsyth	Bundled - Snyder & Ardmore Buildings	470,000	-	470,000	02/01/2002	11/01/2002
Forsyth	Bundled - Roof Replacements	280,000	-	280,000	02/01/2003	11/01/2003
Forsyth	Office/Lab Renovations	240,000	-	240,000	01/01/2004	08/01/2004
Forsyth	Bundled - Renovation of Space Vacated To New Bldg.	151,688	-	151,688	04/01/2004	11/01/2004
Forsyth	Construction - Parking Deck	3,154,979	1,845,021	5,000,000	04/01/2004	10/01/2006
Forsyth	Renovations	1,000,000	-	1,000,000	06/01/2004	08/01/2006
Forsyth	Construction - Addition to Greene Hall	2,555,268	-	2,555,268	08/01/2004	10/01/2006
Gaston	New Public Safety Building #1122	1,500,000	-	1,500,000	01/01/2001	03/01/2003
Gaston	Renovation - Block Gymnasium	396,044	-	396,044	03/01/2001	11/01/2002
Gaston	Renovation - Comer Building – East	1,100,000	-	1,100,000	09/01/2001	11/01/2003
Gaston	New Health Sciences Building	4,989,955	-	4,989,955	07/01/2003	09/01/2005
Gaston	Renovation - Beam Health Sciences Building	730,684	-	730,684	01/01/2005	09/01/2006
Gaston	Renovation - Craig Building	900,000	-	900,000	01/01/2005	09/01/2006
Guilford	Pub. Saf. Burn Bldg/Trng. Tower/Drv. Trk. Proj.#888??	1,500,000	2,200,000	3,700,000	02/01/2001	05/01/2002
Guilford	Classroom Building Project #1044	2,000,000	5,000,000	7,000,000	09/01/2001	07/01/2002
Guilford	Roads, Parking & Walkways Repairs	1,000,000	750,000	1,750,000	10/01/2001	12/01/2003
Guilford	Classroom Building Project #1046	4,250,000	5,000,000	9,250,000	03/01/2002	02/01/2003
Guilford	Classroom Building & Fire Suppression System	3,600,382	-	3,600,382	01/01/2003	03/01/2005
Guilford	HVAC Renovations and Energy Upgrades	1,923,774	-	1,923,774	07/01/2003	09/01/2005
Guilford	Price Campus Classroom Addition & Energy Upgrade	2,500,000	-	2,500,000	09/01/2003	11/01/2005
Guilford	Allied Health Building	10,000,000	-	10,000,000	09/01/2004	09/01/2007
Guilford	Parking Deck	$ 5,000,000	$ -	$ 5,000,000	05/01/2005	11/01/2007
Guilford	Land	1,250,000	250,000	1,500,000		
Halifax	Allied Health/Auditorium Bldg - 1090	8,273,039	-	8,273,039	10/01/2000	06/01/2003
Halifax	Repairs/Renovations – 1165	811,569	-	811,569	01/01/2001	07/01/2006
Haywood	Renovation - 200/300 Buildings #1113	2,422,402	-	2,422,402	01/01/2001	03/01/2003
Haywood	Regional High Tech. Center	217,598	-	217,598	02/01/2004	10/01/2004
Isothermal	Continuing Education Building Renovation	550,000	-	550,000	03/01/2001	12/01/2002
Isothermal	Testing/Training Center Construction	1,658,309	-	1,658,309	07/01/2001	12/01/2003

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Isothermal	Undetermined Projects	566,867	-	566,867	11/01/2004	07/01/2005
Isothermal	Undetermined Projects	566,868	-	566,868	11/01/2005	07/01/2006
James Sprunt	Campus Lighting – 1163	100,000	-	100,000	02/01/2001	09/01/2001
James Sprunt	HVAC/Roof Repair/Sidewalk Repair ADA/OSHA - 1164	300,000	-	300,000	08/01/2001	11/01/2002
James Sprunt	Technology Addition - Classroom Facilities/Laboratories	1,783,718	-	1,783,718	07/01/2002	09/01/2004
James Sprunt	Lab/Class Repairs/Elect & Technological Infrastructure	266,319	-	266,319	01/01/2004	03/01/2005
James Sprunt	Classroom Repairs/ADA Compliance	265,000	-	265,000	01/01/2005	03/01/2006
Johnston	Campus Lighting and Parking – 1176	200,000	-	200,000	02/01/2001	08/01/2001
Johnston	New Truck Driver Training / Automotive Tech. Bldg	2,299,625	-	2,299,625	03/01/2001	05/01/2003
Johnston	Renovation of Wilson, Elsie, & TDT Vacated Space	922,824	-	922,824	07/01/2001	07/01/2003
Johnston	Wilson Building Addition	3,154,788	-	3,154,788	10/01/2002	12/01/2004
Johnston	Library and Auditorium Addition	1,511,910	-	1,511,910	09/01/2003	11/01/2005
Johnston	Wilson Building Renovation	311,145	-	311,145	12/01/2003	10/01/2005
Johnston	Purchase of Building for Continuing Education Center	1,509,276	-	1,509,276	06/01/2004	08/01/2006
Johnston	Library and Auditorium Renovation	270,924	-	270,924	11/01/2004	07/01/2007
Lenoir	Adtns/Renov Health Sciences Bldg & Marquee - 1136	596,000	-	596,000	01/01/2001	09/01/2002
Lenoir	R&R Projects(Elev/Roofs/HVAC/ADA (6/01- 6/06)	928,692	-	928,692	05/01/2001	07/01/2006
Lenoir	Early Childhood & Blet Office/Classroom Buildings	1,500,000	-	1,500,000	09/01/2001	11/01/2003
Lenoir	Resurface Roads and Parking Lots	400,000	-	400,000	02/01/2002	02/01/2003
Lenoir	Classroom and Science Building	4,000,000	-	4,000,000	04/01/2002	06/01/2004
Lenoir	Renovate Industrial Classrooms and Labs	225,000	-	225,000	09/01/2003	07/01/2004
Lenoir	Add to Aviation Ctr/Cafeteria	626,314	-	626,314	05/01/2004	01/01/2006
Lenoir	Industrial/Vocational Center	2,190,044	-	2,190,044	05/01/2004	07/01/2006
Lenoir	Renovate/Add Classrooms in Administration Bldg	420,249	-	420,249	06/01/2004	02/01/2006
Lenoir	Childcare Center	650,000	-	650,000	10/01/2004	06/01/2006
Lenoir	Renovate LRC/Alumni and Foundation House	355,000	-	355,000	01/01/2005	02/01/2006
Lenoir	Expand Technology Infrastructure	500,000	-	500,000	03/01/2005	11/01/2006
Lenoir	Land Acquisition	450,000	-	450,000		
Martin	Misc. R & R (Bundled Projects) – 1178	$ 118,500	$ -	$ 118,500	04/01/2001	11/01/2001
Martin	Roof Repairs (Bundled Projects) – 1192	258,540	-	258,540	04/01/2001	01/01/2002
Martin	HVAC	750,000	-	750,000	05/01/2002	03/01/2004
Martin	Undetermined	436,856	-	436,856	01/01/2005	04/01/2006
Mayland	Avery County Project - No. 1169	1,300,000	100,000	1,400,000	03/01/2001	12/01/2002
Mayland	R&R Projects-Paving, Fire Detect., HVAC, General Repairs	200,000	-	200,000	01/01/2002	11/01/2002
Mayland	Applied Technologies Building	1,504,610	-	1,504,610	07/01/2003	09/01/2005
Mayland	Repairs/Renovations Projects	241,545	-	241,545	03/01/2004	01/01/2005
McDowell	Replace Exit Doors & Fire Alarm System - 1160	166,200	-	166,200	04/01/2001	11/01/2001
McDowell	Roof Replacement – 1161	98,000	-	98,000	06/01/2001	01/01/2002

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
McDowell	HVAC & Ventilization Upgrade	65,000	-	65,000	12/01/2001	07/01/2002
McDowell	Upgrade Paint Booth & Replace Electrical Panels	43,500	-	43,500	12/01/2001	07/01/2002
McDowell	Window & Boiler Replacements	66,000	-	66,000	12/01/2001	07/01/2002
McDowell	Classroom Building	2,138,279	-	2,138,279	11/01/2003	01/01/2006
McDowell	Renovation to Areas Vacated with Priority #1	282,588	-	282,588	10/01/2005	06/01/2006
Mitchell	Renovation of the CEC-HVAC - 1168	100,000	-	100,000	10/01/2000	09/01/2001
Mitchell	Mooresville Center 2nd Floor Addition-DCC No. 1070	216,851	550,000	766,851	11/01/2000	07/01/2002
Mitchell	Renovation of the CEC-Restrooms/Offices - 1168	150,000	-	150,000	03/01/2001	01/01/2002
Mitchell	Advanced Technology Building-Dcc No. 1091	3,178,788	-	3,178,788	04/01/2001	10/01/2004
Mitchell	Renovation of the CEC-Gen'l Bldg. Renovations - #1196	142,562	-	142,562	07/01/2001	07/01/2002
Mitchell	Renovation of the Library	415,993	-	415,993	09/01/2003	05/01/2005
Mitchell	Renovation of the Student Center	153,604	-	153,604	01/01/2004	12/01/2004
Mitchell	Renovation of Vocational Building	1,293,953	-	1,293,953	07/01/2005	09/01/2007
Montgomery	Renovations and Repairs - #1187	502,004	-	502,004	02/01/2001	03/01/2004
Nash	Aesthetic Repairs & Renovations - #1194	260,000	-	260,000	04/01/2001	01/01/2002
Nash	Environmental Repairs & Renovations - #1193	266,844	-	266,844	04/01/2001	01/01/2002
Nash	Program Specific Classroom Renovations #1203	41,000	-	41,000	06/01/2001	01/01/2002
Nash	Structural Repairs & Renovations	190,000	-	190,000	06/01/2002	01/01/2003
Nash	Infrastructure Repairs & Renovations	41,000	-	41,000	07/01/2002	02/01/2003
Nash	Science & Technology Building	3,933,237	2,525,232	6,458,469	07/01/2003	01/01/2006
Nash	Renovate Recaptured Classrooms	150,000	-	150,000	07/01/2005	07/01/2006
Nash	Land Acquisition #1141	350,000	-	350,000		
Pamlico	Purchase Buildings & Renovate	350,000	-	350,000	07/01/2001	11/01/2001
Pamlico	Repair and Renovations	233,376	-	233,376	01/01/2002	07/01/2003
Pamlico	Life Long Learning Center	1,887,555	1,264,466	3,152,021	01/01/2005	03/01/2007
Piedmont	Renovate Gym	1,447,857	305,063	1,752,920	04/01/2002	06/01/2004
Piedmont	Classrooms/Labs and Student Services/Learning Ctr.	$ 1,567,922	$ -	$ 1,567,922	09/01/2002	11/01/2004
Piedmont	Renovate Student Complex	1,405,690	-	1,405,690	03/01/2004	05/01/2006
Piedmont	Renovate Auditorium	334,476	-	334,476	05/01/2004	01/01/2006
Pitt	General Classroom Bldg - 1111 Ph1	7,603,750	-	7,603,750	11/01/2000	04/01/2003
Pitt	Parking Project - 1112 Ph1	500,000	-	500,000	11/01/2000	06/01/2002
Pitt	Bowen Farm Site Project (Planning) - 1110	150,000	1,550,000	1,700,000	08/01/2003	09/01/2004
Pitt	Construction & Automotive Complex Ph II	1,139,515	2,610,485	3,750,000	08/01/2003	10/01/2005
Pitt	Fulford Bldg Addition Ph II	4,000,000	-	4,000,000	08/01/2003	10/01/2005
Pitt	Warren Bldg Renov Ph II	3,000,000	-	3,000,000	08/01/2003	10/01/2005
Pitt	Humber Bldg Renov Ph III	500,000	-	500,000	11/01/2004	07/01/2006
Pitt	Whichard Bldg Renovation Ph III	500,000	-	500,000	11/01/2004	07/01/2006
Pitt	White Bldg Renov Ph III	632,443	-	632,443	11/01/2004	07/01/2006

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Randolph	R & R Bundle Number One - 1174	244,413	-	244,413	02/01/2001	07/01/2001
Randolph	R & R Bundle Number Two - 1174	293,396	-	293,396	06/01/2001	07/01/2002
Randolph	R & R Bundle Number Three - 1174	512,450	-	512,450	06/01/2002	07/01/2003
Randolph	Undetermined	1,344,379	-	1,344,379	05/01/2003	07/01/2005
Randolph	R & R Bundle Number Four	635,271	-	635,271	06/01/2005	07/01/2006
Richmond	HVAC Renovations In 3 Buildings #1089	800,000	-	800,000	03/01/2001	09/01/2002
Richmond	Multiple Renovations @ Less Than $100,000 Each	358,389	-	358,389	06/01/2002	06/01/2003
Richmond	Renovations to Include New HVAC And Bathroom (ADA)	90,000	-	90,000	07/01/2002	12/01/2003
Richmond	Health Sciences Building #1088	3,542,287	-	3,542,287	06/01/2003	12/01/2005
Richmond	Acquire Building In Scotland County	137,272	-	137,272		
Richmond	Purchase New Facility Near Current Building	295,672	-	295,672		
Roanoke-Chowan	Repair/Improve Campus Structural Environment	282,500	-	282,500	07/01/2001	08/01/2003
Roanoke-Chowan	Improve Campus Compliance/Safety Environment	215,600	-	215,600	02/01/2002	03/01/2005
Roanoke-Chowan	Improve Campus Learning/Working Environment	358,163	-	358,163	08/01/2002	03/01/2005
Robeson	Continuing Education Building (1109)	2,590,239	-	2,590,239	11/01/2000	02/01/2004
Robeson	Repairs to Bldgs 2, 3, 4, 5, 6, 7, 9,10, 15 (1108)	175,000	7,701	182,701	11/01/2000	09/01/2001
Robeson	Site Work	1,549,058	-	1,549,058	11/01/2000	10/01/2003
Robeson	Vehicle Bays (1109)	61,160	-	61,160	11/01/2000	07/01/2001
Robeson	Continuing Education Building	5,501,782	-	5,501,782	09/01/2001	07/01/2005
Robeson	Truck Bays	299,623	-	299,623	07/01/2003	11/01/2004
Robeson	Renovations to Bldgs 1, 9, 14	912,888	-	912,888	04/01/2004	02/01/2005
Robeson	Equipment	637,917	-	637,917	06/01/2004	01/01/2005
Robeson	Renovations to Bldgs 3, 7	285,033	-	285,033	06/01/2004	04/01/2005
Robeson	Renovations to Bldgs 4, 13	690,224	-	690,224	08/01/2004	06/01/2005
Robeson	Renovations to Bldg 2	$ 45,202	$ -	$ 45,202	10/01/2004	06/01/2005
Robeson	Undetermined	976,996	-	976,996	09/01/2005	07/01/2006
Robeson	(Pembroke Center Land Purchase) (1109)	80,000	-	80,000		
Rockingham	Spring 2001 Renovations #1156	165,000	-	165,000	11/01/2000	04/01/2001
Rockingham	Classroom/Storage Bldg. at ESTC - 1080	239,000	10,000	249,000	03/01/2001	09/01/2002
Rockingham	Lifelong Learning Center - 1079	2,400,291	10,000	2,410,291	03/01/2001	01/01/2005
Rockingham	Summer 2001 Renovations #1191	112,500	-	112,500	03/01/2001	10/01/2001
Rockingham	Fall 2001 Renovations	26,700	-	26,700	08/01/2001	02/01/2002
Rockingham	Spring 2002 Renovations	130,000	-	130,000	01/01/2002	06/01/2002
Rockingham	Summer 2002 Renovations	125,000	-	125,000	05/01/2002	09/01/2002
Rockingham	Fall 2002 Renovations	118,000	-	118,000	08/01/2002	03/01/2003
Rockingham	Spring 2003 Renovations	136,000	-	136,000	04/01/2003	11/01/2003
Rockingham	Spring 2004 Renovations	210,000	-	210,000	03/01/2004	10/01/2004
Rockingham	Summer 2004 Renovations	100,000	-	100,000	04/01/2004	11/01/2004

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Rockingham	Summer 2005 Renovations	1,054,150	-	1,054,150	04/01/2005	07/01/2006
Rowan-Cabarrus	Bldg. 100 Renovations - #1032	325,000	1,473,242	1,798,242	02/01/2001	02/01/2002
Rowan-Cabarrus	Classroom/Laboratory Building - #1185	4,357,029	3,565,141	7,922,170	04/01/2001	10/01/2003
Rowan-Cabarrus	Various Renovations	480,584	-	480,584	09/01/2001	10/01/2002
Rowan-Cabarrus	LRC & Student Support Space Expansion & Renovation	805,584	-	805,584	04/01/2003	12/01/2004
Rowan-Cabarrus	Classroom/Laboratory Building & Parking Lot	5,207,129	3,659,365	8,866,494	03/01/2004	09/01/2006
Sampson	Occupational Building #1133	3,113,820	-	3,113,820	12/01/2000	02/01/2004
Sampson	Campus Roadway Extension #983	176,000	216,075	392,075	02/01/2001	01/01/2002
Sampson	Crosswalk Replacements #1151	175,000	-	175,000	02/01/2001	01/01/2002
Sampson	North Building Hvac #1151	200,000	-	200,000	02/01/2001	01/01/2002
Sampson	Parking and Roadway Repairs #1151	100,000	-	100,000	04/01/2001	08/01/2001
Sampson	Kitchin Hall HVAC Modifications	50,000	-	50,000	02/01/2002	01/01/2003
Sampson	ADA Automatic Doors	50,000	-	50,000	04/01/2003	06/01/2003
Sampson	North/East Lighting Improvements	25,530	-	25,530	04/01/2004	08/01/2004
Sampson	Emergency Services Complex	150,000	-	150,000	09/01/2004	11/01/2005
Sampson	Undefined	100,000	-	100,000	05/01/2005	12/01/2005
Sandhills	New Student Center #940	1,500,000	5,473,000	6,973,000	10/01/2000	04/01/2003
Sandhills	Improvements/Expansion Traffic System	380,627	-	380,627	02/01/2001	06/01/2002
Sandhills	Kennedy Hall Health Sciences Renovation #1003	487,000	734,000	1,221,000	02/01/2001	05/01/2003
Sandhills	Stone 111 Renovation	100,000	-	100,000	03/01/2001	05/01/2002
Sandhills	Stone Hall Renovations (Bundled) #1154	395,000	-	395,000	03/01/2001	07/01/2002
Sandhills	Automotive Roof Recovery System	120,000	-	120,000	04/01/2001	10/01/2001
Sandhills	New Hoke County Center #813	$ 333,131	$ 1,454,994	$ 1,788,125	04/01/2001	09/01/2001
Sandhills	Technology Center #1081	3,839,710	2,160,290	6,000,000	08/01/2001	05/01/2004
Sandhills	Heutte Hall Renovation	460,290	-	460,290	01/01/2003	03/01/2005
Sandhills	Hoke Business and Technology Center	1,200,336	-	1,200,336	04/01/2003	04/01/2005
Sandhills	Undetermined	2,280,000	-	2,280,000	01/01/2004	06/01/2006
Sandhills	Blue Hall Renovation	1,500,000	-	1,500,000	06/01/2004	08/01/2006
Sandhills	Stone Hall Renovation	500,000	-	500,000	06/01/2004	02/01/2006
Sandhills	Causey Hall Renovation	500,000	-	500,000	12/01/2004	06/01/2006
South Piedmont	Continuing Education Center Renovations (#932b)	200,000	867,500	1,067,500	02/01/2001	04/01/2002
South Piedmont	Renovations to the Continuing Education Ctr - #1166	248,000	-	248,000	04/01/2001	12/01/2001
South Piedmont	Union Campus HVAC Renovations - #1179	52,000	-	52,000	05/01/2001	01/01/2002
South Piedmont	Union Campus Renovations	79,723	-	79,723	02/01/2002	10/01/2002
South Piedmont	Polkton Campus Renovations	100,000	-	100,000	03/01/2002	11/01/2002
Southeastern	Infrastructure Construction/Renovations - 1173	565,668	-	565,668	03/01/2001	10/01/2001
Southeastern	Building Renovations/Repairs - 1173	280,200	-	280,200	04/01/2001	12/01/2001
Southeastern	Instructional Space Renovations - 1173	384,000	-	384,000	04/01/2001	10/01/2001

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Southeastern	OSHA and ADA Compliance	315,000	-	315,000	06/01/2002	01/01/2003
Southeastern	Technology Building	3,721,721	-	3,721,721	10/01/2002	12/01/2004
Southeastern	Building "G" Renovation/Addition	725,215	-	725,215	02/01/2005	10/01/2006
Southeastern	Renovation/Expansion of "T" Building	750,000	-	750,000	03/01/2005	11/01/2006
Southeastern	Land Acquisition - Property Adjacent to Campus	150,000	-	150,000		
Southwestern	Roof Repairs-Several Buildings –1188	75,000	-	75,000	11/01/2000	07/01/2001
Southwestern	Continuing Ed. Dept Renovation -1188	110,000	-	110,000	03/01/2001	11/01/2001
Southwestern	Swain Ctr Renovation-Remaining Section of Building-1190	400,000	-	400,000	03/01/2001	03/01/2002
Southwestern	Parking Lots Re-Surface –1188	140,000	-	140,000	05/01/2001	01/01/2002
Southwestern	Burn Building Repairs –1189	50,000	-	50,000	06/01/2001	02/01/2002
Southwestern	Misc Renovations –1188	258,942	-	258,942	06/01/2001	02/01/2003
Southwestern	Restroom / Shower Renovation –1189	40,000	-	40,000	06/01/2001	02/01/2002
Southwestern	HVAC Replacement Upgrades 3 Buildings -1188	215,000	-	215,000	06/01/2002	02/01/2003
Southwestern	General Building-New Campus	2,944,018	2,941,510	5,885,528	08/01/2002	02/01/2005
Southwestern	Academic, Admin Building	6,232,770	4,271,584	10,504,354	07/01/2003	07/01/2006
Stanly	Western Stanly Center - Project # 903	4,226,740	300,000	4,526,740	10/01/2000	11/01/2002
Stanly	Patterson Building Roof Replace & Campus Renov. #1207	100,000	-	100,000	08/01/2001	12/01/2001
Stanly	Corporate Education/Shop Building	150,000	-	150,000	08/01/2003	01/01/2004
Stanly	Kelley Building Roof Replacement & Renovation	250,000	-	250,000	08/01/2004	12/01/2004
Stanly	Parking Lot Resurfacing	409,851	-	409,851	03/01/2005	10/01/2005
Surry	No. 947: Yadkin Center	$ 541,702	$ 2,458,298	$ 3,000,000	03/01/2001	09/01/2002
Surry	No. 1186: Parking Lot "H" Bldg **	91,883	91,881	183,764	05/01/2001	11/01/2001
Surry	No. 1123:"K" Engineering Technologies Building **	2,751,551	623,449	3,375,000	02/01/2002	04/01/2004
Surry	"V" Building 1st Floor Renovations	520,000	-	520,000	06/01/2003	03/01/2005
Surry	"E" Building PC Support Modifications	88,350	-	88,350	02/01/2004	10/01/2004
Surry	"A" Reeves Building Renovation & Expansion	467,200	312,640	779,840	06/01/2004	06/01/2006
Surry	"D" Multi-Story Classroom Bldg & Entrance Sign	3,241,025	2,533,185	5,774,210	06/01/2004	10/01/2006
Surry	Parking Lot "A" Bldg **	60,000	46,896	106,896	09/01/2004	06/01/2005
Surry	"C" Building Renovations (Elev, Bookstore,Etc.)	172,584	-	172,584	02/01/2005	10/01/2005
Surry	"T" Sciences Building Renovation & Lab Upgrade	434,567	-	434,567	05/01/2005	02/01/2007
Surry	"R" Learn Resources Ctr (HVAC, NCIH Room, Etc.)	50,516	39,483	89,999	12/01/2005	10/01/2006
Surry	"P" Gymnasium Bldg HVAC & Seating Upgrade	100,000	78,160	178,160	01/01/2006	11/01/2006
Surry	Undetermined	923,449	643,608	1,567,057	06/01/2006	07/01/2008
Surry	"H" Richards Building 1st Floor C.E. Modifications	40,000	31,264	71,264	10/01/2006	06/01/2007
Textile School	R&R (Project Bundled) - 1175	29,447	-	29,447	11/01/2000	06/01/2001
Textile School	Capital Construction Project 905 Id 6800100905a	750,000	2,437,200	3,187,200	11/01/2001	05/01/2002
Tri-County	Lighted Parking/Concrete Sidewalks #1202	43,597	-	43,597	04/01/2001	12/01/2001
Tri-County	Addition/Renovation -Enloe Building	891,527	-	891,527	07/01/2001	03/01/2003

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS

College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Tri-County	Land Acquisition - Enloe Building Area	125,294	-	125,294		
Vance-Granville	Classroom/Instructional Facility #1093	6,250,000	-	6,250,000	01/01/2001	07/01/2003
Vance-Granville	Classroom/Instructional Facility #1096	1,512,000	-	1,512,000	03/01/2001	07/01/2004
Vance-Granville	Phase 1 R&R/Construction Projects #1157	191,680	-	191,680	05/01/2001	10/01/2001
Vance-Granville	Phase II R&R/Construction Projects #1198	660,000	-	660,000	03/01/2003	12/01/2003
Vance-Granville	Classroom/Instructional Facility #1095	1,919,250	-	1,919,250	05/01/2003	07/01/2005
Vance-Granville	Main Campus Misc Construction	1,191,886	-	1,191,886	08/01/2003	06/01/2006
Vance-Granville	Classroom/Instructional Facility #1094	2,518,000	-	2,518,000	10/01/2003	12/01/2005
Vance-Granville	Franklin Misc Construction	450,022	-	450,022	07/01/2004	05/01/2006
Vance-Granville	Granville Misc Construction	1,361,202	-	1,361,202	07/01/2004	05/01/2006
Vance-Granville	Warren Campus Misc Construction	403,271	-	403,271	07/01/2004	05/01/2006
Vance-Granville	Phase III R&R/Construction Projects	330,000	-	330,000	01/01/2005	10/01/2005
Vance-Granville	Phase IV R&R/Construction Projects	283,135	-	283,135	07/01/2005	04/01/2006
Wake	Ada & Code Compliance Renovations	430,000	-	430,000	12/01/2000	11/01/2001
Wake	Reroofing - Ready Hall	350,000	-	350,000	12/01/2000	10/01/2001
Wake	Heavy Equipment Laboratory	3,000,000	-	3,000,000	01/01/2001	03/01/2003
Wake	Reroofing - Lemay Hall	180,000	-	180,000	02/01/2001	10/01/2001
Wake	N.E. Campus Development & Bldg. Const.	24,171,451	-	24,171,451	03/01/2001	07/01/2005
Wake	Resurfacing & Paving Pking. Areas & Walk	$ 240,000	$ -	$ 240,000	04/01/2001	12/01/2001
Wake	Renovation & Repair Health Education Facility	230,000	-	230,000	05/01/2001	01/01/2002
Wake	Law Enforcement Center	3,000,000	-	3,000,000	06/01/2001	08/01/2003
Wake	R&R Main Campus Classrooms, Labs & Offices	817,938	-	817,938	01/01/2002	09/01/2003
Wake	Reroofing - Technical Education Bldg.	215,000	-	215,000	02/01/2002	10/01/2002
Wake	Mechanical Systems & Controls	400,000	-	400,000	05/01/2002	03/01/2003
Wayne	Childcare Center/Lab (1104)	400,049	200,000	600,049	11/01/2000	07/01/2002
Wayne	Miscellaneous R&R (Bundled) - 1162	912,357	-	912,357	01/01/2001	07/01/2003
Wayne	Building 1 - Gym & Renov.	3,678,423	-	3,678,423	02/01/2001	06/01/2004
Wayne	Building 2 -Student Activities & Renov.	2,937,894	-	2,937,894	05/01/2004	06/01/2005
Wayne	Building 3 - Class/Bus. & Ind. Ctr.	3,561,683	-	3,561,683	05/01/2005	06/01/2006
Wayne	Land Acquisition	1,500,000	-	1,500,000		
Western Piedmont	Lighting Retrofits 1117	205,000	-	205,000	02/01/2001	07/01/2001
Western Piedmont	HVAC Renovations 1118	245,000	-	245,000	04/01/2001	11/01/2001
Western Piedmont	Renovation of C, F & J Buildings	50,000	-	50,000	07/01/2001	02/01/2002
Western Piedmont	Resurface Parking Lots & Roads	300,000	-	300,000	02/01/2002	11/01/2002
Western Piedmont	Upgrade Fire Alarm System	75,000	-	75,000	04/01/2002	11/01/2002
Western Piedmont	Upgrade Science Labs	50,000	-	50,000	06/01/2002	01/01/2003
Western Piedmont	Repair Sidewalks / Handrails	45,000	-	45,000	09/01/2002	04/01/2003
Western Piedmont	Replace Chiller	80,000	-	80,000	02/01/2003	09/01/2003

LIST OF COMMUNITY COLLEGE CONSTRUCTION AND RENOVATION PROJECTS						
College	Project Name - (Project No. if assigned)	Total Bond Funds	Other Funds Authorized	Total Project Funds	Original Project Start Date	Original Estimated Completion Date
Western Piedmont	Ada Signage	5,000	-	5,000	05/01/2003	12/01/2003
Western Piedmont	Replace Boiler	30,000	-	30,000	05/01/2003	12/01/2003
Western Piedmont	Allied Health / Child Care Facility	3,858,649	-	3,858,649	09/01/2003	11/01/2005
Western Piedmont	Undetermined	401,274	-	401,274	05/01/2004	02/01/2005
Wilkes	Energy Conservation Upgrades - #1183	165,000	-	165,000	02/01/2001	12/01/2004
Wilkes	Sidewalk/Step/Street/Parking Lot Replace/Paving - #1184	140,000	-	140,000	04/01/2001	06/01/2006
Wilkes	General Campus Renovations - #1182	306,817	-	306,817	05/01/2001	06/01/2004
Wilkes	Science Lab, ADA and Admin. Office Renovations	400,000	-	400,000	06/01/2001	06/01/2005
Wilkes	Walker Center Renovations - #1181	275,000	-	275,000	06/01/2001	10/01/2001
Wilkes	Greenhouse Renovations	77,000	-	77,000	07/01/2001	06/01/2005
Wilkes	Alleghany Center Relocation and Renovation	83,995	33,995	117,990	09/01/2001	04/01/2002
Wilkes	Ashe Center Lab and Classroom Space	671,077	539,471	1,210,548	01/01/2002	09/01/2003
Wilkes	Technology Center	2,686,596	-	2,686,596	09/01/2003	11/01/2005
Wilkes	Roof Replacement - Thompson Hall	350,000	-	350,000	10/01/2004	06/01/2006
Wilkes	Roof Replacements - Beacon, Hayes And Lovette Halls	235,000	-	235,000	02/01/2005	06/01/2006
Wilson	Renovation Project - Year 2001 #1149	336,540	-	336,540	01/01/2001	12/01/2001
Wilson	Community/Business Center #1150	$ 1,307,508	$ -	$ 1,307,508	03/01/2001	05/01/2003
Wilson	Renovation Project - Year 2002	225,000	-	225,000	01/01/2002	01/01/2003
Wilson	Renovation Project - Year 2003	275,000	-	275,000	01/01/2003	01/01/2004
Wilson	Technology Center/Student Union	3,277,095	722,905	4,000,000	09/01/2003	11/01/2005
Wilson	Renovation Project - Year 2004	230,000	-	230,000	01/01/2004	01/01/2005
Wilson	Police Academy Center	305,311	260,394	565,705	09/01/2004	05/01/2006
Wilson	Renovation Project - Year 2005	291,996	-	291,996	01/01/2005	01/01/2006

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
APPALACHIAN	CENTRAL LIBRARY COMPLEX	$ 47,586,800
APPALACHIAN	SCIENCE BUILDING- COMPLETE INTERIOR LABS AND ACADEMIC SPACE	1,260,000
APPALACHIAN	RANKIN SCIENCE BUILDING- CR	11,157,000
APPALACHIAN	LIVING AND LEARNING CENTER- ACADEMIC PORTION	4,022,800
APPALACHIAN	VISUAL ARTS CENTER/OUTREACH CENTER- R	4,374,700
APPALACHIAN	SMITH-WRIGHT HALL CLASSROOM BUILDING- CR	1,636,100
APPALACHIAN	FOUNDERS HALL- CR	1,044,100
APPALACHIAN	WALKER HALL CLASSROOM BUILDING- CR	1,733,800
APPALACHIAN	BB DOUGHERTY HALL- CR	1,000,000
APPALACHIAN	WATER SYSTEM IMPROVEMENTS	2,866,200
APPALACHIAN	LAND ACQUISITION	829,300
APPALACHIAN	TRANSFERRED FUNDS- RANKIN SCIENCE BUILDING	5,056,500
APPALACHIAN	TECHNOLOGY INFRASTRUCTURE EXPANSION	4,838,900
	TOTAL	$ **87,406,200**
EAST CAROLINA	SCIENCE LABORATORIES AND TECHNOLOGY BUILDING- REPLACEMENT FOR FLANAGAN	$ 55,125,300
EAST CAROLINA	FLANAGAN BUILDING- RENOVATION AND CONVERSION FOR GENERAL ACADEMIC USE	13,421,300
EAST CAROLINA	NURSING, ALLIED HEALTH AND DEVELOPMENTAL EVALUATION CLINIC- REPLACE RIVERS AND BELK,RELOCATE TO MEDICAL	46,882,500
EAST CAROLINA	OLD NURSING BUILDING- EXPANSION AND RENOVATION	14,685,500
EAST CAROLINA	BELK BUILDING- CR AND CONVERSION TO GENERAL ACADEMIC	7,791,300
EAST CAROLINA	CLASSROOM IMPROVEMENTS- TECHNOLOGY UPGRADES AND RENOVATION	3,648,400
EAST CAROLINA	ACADEMICS SPACE REQUIREMENTS- TEACHING LABS	5,250,000
EAST CAROLINA	MEDICAL SCHOOL- ADDITION OF LIBRARY AND STUDY SPACE	12,600,000
EAST CAROLINA	OLD CAFETERIA OFFICE BUILDING- CR FOR STUDENT SERVICES, ACADEMIC USE	4,442,100
EAST CAROLINA	INFRASTRUCTURE- REPAIRS AND EXPANSION	16,291,100
EAST CAROLINA	CAMPUS COMPUTING CENTER- CR	1,785,000
EAST CAROLINA	LAND ACQUISITION	7,879,400
EAST CAROLINA	TECHNOLOGY INFRASTRUCTURE EXPANSION	807,600
	TOTAL	$ **190,609,500**
ELIZABETH CITY	LANE HALL CLASSROOM BUILDING- CR	$ 2,360,600
ELIZABETH CITY	TRIGG HALL CLASSROOM BUILDING- CR	2,109,000

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
ELIZABETH CITY	JOHNSON HALL CLASSROOM BUILDING- CR	$ 3,156,300
ELIZABETH CITY	WILLIAMS HALL CLASSROOM BUILDING- CR	2,822,700
ELIZABETH CITY	LESTER HALL CLASSROOM BUILDING- PR	250,000
ELIZABETH CITY	WHITE GRADUATE CENTER AND CONTINUING EDUCATION BUILDING- CR	1,514,000
ELIZABETH CITY	WILKINS LABORATORY BUILDING- CR	451,800
ELIZABETH CITY	MITCHELL-LEWIS RESIDENCE HALL- CR	2,123,700
ELIZABETH CITY	WAMACK RESIDENCE HALL- CR	3,334,300
ELIZABETH CITY	DOLES RESIDENCE HALL- CR	1,722,500
ELIZABETH CITY	RESIDENCE HALL FOR 200 STUDENTS- REPLACE SYMERA HALL	5,510,000
ELIZABETH CITY	CENTRAL CHILLER PLANT	1,400,000
ELIZABETH CITY	STUDENT CENTER	8,778,300
ELIZABETH CITY	PHYSICAL EDUCATION FACILITIES	1,447,500
ELIZABETH CITY	CAMPUS INFRASTRCUTURE IMPROVEMENTS	3,405,300
ELIZABETH CITY	ELECTRICAL DISTRIBUTION SYSTEM UPGRADE	1,225,000
ELIZABETH CITY	ENERGY MANAGEMENT SYSTEM IMPROVEMENTS	886,400
ELIZABETH CITY	TECHNOLOGY INFRASTRUCTURE EXPANSION	3,149,400
ELIZABETH CITY	LAND ACQUISITION	650,000
	TOTAL	**$ 46,296,800**
FAYETTEVILLE STATE	RESIDENCE HALL FOR 275 STUDENTS	$ 6,872,300
FAYETTEVILLE STATE	LYONS SCIENCE AND LABORATORY BUILDING- CR AND ADDITION	15,146,900
FAYETTEVILLE STATE	SCIENCE ANNEX- CR	1,740,500
FAYETTEVILLE STATE	CONTINUING EDUCATION CENTER- CR	432,600
FAYETTEVILLE STATE	TAYLOR SOCIAL SCIENCE CLASSROOM BUILDING- CR	884,300
FAYETTEVILLE STATE	CHARLES CHESTNUTT LIBRARY- CR	875,900
FAYETTEVILLE STATE	WILLIAM COLLINS BUILDING- CR	640,600
FAYETTEVILLE STATE	SEABROOK AUDITORIUM- CR	6,325,000
FAYETTEVILLE STATE	TAYLOR GYMNASIUM- CONVERSION FOR ACADEMIC USE	3,360,000
FAYETTEVILLE STATE	LILLY GYMNASIUM- CR, CONVERSION FOR STUDENT SERVICES	3,256,400
FAYETTEVILLE STATE	COOK DINING HALL- CR, CONVERSION FOR ACADEMIC USE AND STUDENT SERVICES	1,773,500
FAYETTEVILLE STATE	STUDENT RESIDENCE HALLS- FIRE SAFETY IMPROVEMENTS	611,700
FAYETTEVILLE STATE	CAMPUS INFRASTRUCTURE IMPROVEMENTS	1,435,000

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
FAYETTEVILLE STATE	SPAULDING (OLD IMFIRMARY)- CR AND CONVERSION FOR PUBLIC SAFETY FACILITIES	$ 1,029,100
FAYETTEVILLE STATE	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,137,600
FAYETTEVILLE STATE	TRANSFERRED FUNDS- SEABROOK AUDITORIUM	500,000
	TOTAL	$ **46,021,400**
A AND T	CLASSROOM AND LABORATORY COMPLEX	$ 29,920,700
A AND T	CHEMISTRY LAB- REPLACE FOR HINES HALL	21,831,600
A AND T	HARRISON AUDITORIUM- CR	2,895,200
A AND T	CURTIS RESIDENCE HALL- REPLACEMENT	3,723,500
A AND T	SCOTT RESIDENCE HALL- REPLACEMENT	26,253,300
A AND T	GAMBLE RESIDENCE HALL- REPLACEMENT	1,552,000
A AND T	NEW STUDENT HOUSING	1,897,900
A AND T	HOLLAND RESIDENCE HALL- CR	856,800
A AND T	MORRISON RESIDENCE HALL- CR	3,701,100
A AND T	ZOE BARBEE RESIDENCE HALL- CR	3,693,800
A AND T	HAZARDOUS MATERIALS AND WASTE STORAGE FACILITY	1,575,000
A AND T	SCHOOL OF AGRICULTURE FACILITIES- IMPROVEMENTS	1,832,700
A AND T	BARNES HALL LABORATORY- CR	5,550,100
A AND T	GRAHAM HALL ENGINEERING LABORATORY- CR	5,782,200
A AND T	CORBETT INTRAMURAL CENTER- ADDITION	7,035,000
A AND T	REPLACEMENT OF STEAM LINES AND ACCESS HOLES	1,568,300
A AND T	ELECTRICAL DISTRIBUTION SYSTEM- UPGRADE AND EXPANSION	2,256,800
A AND T	CENTRAL COOLING PLANT- PHASE I	9,430,700
A AND T	CHERRY HALL LABORATORY BUILDING- CR	8,438,200
A AND T	DUDLEY, GIBBS, MOORE CLASSROOM BUILDINGS- CR	4,797,100
A AND T	LAND ACQUISITION	6,300,000
A AND T	TECHNOLOGY INFRASTRUCTURE EXPANSION	2,921,700
A AND T	TRANSFERRED FUNDS- CAMPUS SECURITY IMPROVEMENTS	828,716
A AND T	TRANSFERRED FUNDS- CLASSROOM AND LABORATORY COMPLEX	7,157,675
	TOTAL	**$ 161,800,091**
CENTRAL	SCIENCE COMPLEX- REPLACEMENT OF ROBINSON, HUBBARD, AND LEE	$ 36,780,000
CENTRAL	FARRISON-NEWTON BUILDING- CR OF CLASSROOM BUILDING	7,048,700

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
CENTRAL	STUDENT HOUSING- REPLACEMENT	$ 1,556,600
CENTRAL	BAYNES RESIDENCE HALL- REPLACEMENT	15,091,100
CENTRAL	RUSH RESIDENCE HALL- CR	2,089,400
CENTRAL	EAGLESON RESIDENCE HALL- CR	6,869,500
CENTRAL	SHEPARD RESIDENCE HALL- CR	4,357,800
CENTRAL	LATHAM RESIDENCE HALL- CR	3,411,600
CENTRAL	MCLEAN RESIDENCE HALL- CR	305,800
CENTRAL	PEARSON CAFETERIA- CR	1,263,600
CENTRAL	STUDENT RESIDENCE HALLS- FIRE SAFETY AND SECURITY IMPROVEMENTS	1,541,000
CENTRAL	TURNER LAW SCHOOL- CR	7,028,800
CENTRAL	SHEPARD LIBRARY- CR	4,374,800
CENTRAL	OLD SENIOR DORM- CONVERSION TO ACADEMIC USE	2,130,700
CENTRAL	ALEXANDER DUNN BUILDING- CR	1,779,300
CENTRAL	CAMPUS INFRASTRUCTURE IMPROVEMENTS	10,263,800
CENTRAL	HOEY BUILDING- CR	2,867,700
CENTRAL	CODE COMPLIANCE CORRECTIONS OF BUILDINGS NOT SCHEDULED FOR COMPLIANCE MODIFICATIONS	3,675,000
CENTRAL	LAND ACQUISITION	4,000,000
CENTRAL	RENOVATION OF EXISTING SPACE FOR PUBLIC SAFETY FACILITY	840,000
CENTRAL	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,422,000
CENTRAL	TRANSFERRED FUNDS- B N DUKE AUDITORIUM ADDITION	740,000
CENTRAL	TRANSFERRED FUNDS- HEALTH AND SAFETY REPAIRS AND RENOVATIONS	1,809,003
	TOTAL	$ **121,246,203**
NC STATE	UNDERGRADUATE SCIENCE TEACHING LAB- PHASE I	$ 30,215,400
NC STATE	WITHERS HALL- CONVERSION FROM LAB TO GENERAL ACADEMIC USE	11,480,400
NC STATE	COLLEGE OF ENGINEERING COMPLEX- PHASE I	32,806,500
NC STATE	COLLEGE OF VETERINARY MEDICINE- RESEARCH ADDITION AND RENOVATION OF LABS AND ACADEMIC SPACE	20,180,000
NC STATE	COLLEGE OF ENGINEERING COMPLEX- PHASE II	46,565,200
NC STATE	DAVID CLARK LABORATORY- CR AND ADDITION	11,555,800
NC STATE	UNDERGRADUATE SCIENCE TEACHING LAB- PHASE II	12,197,000
NC STATE	SOUTH GARDNER HALL LABORATORY BUILDING- CR	15,214,500
NC STATE	1911 CLASSROOM BUILDING- CR	6,972,000

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
NC STATE	PARK SHOPS- CR AND USE CONVERSION FOR GENERAL ACADEMIC USE	$ 6,310,700
NC STATE	RIDDICK LAB- CR AND CONVERSION FROM LAB TO CLASSROOM BUILDING	26,020,900
NC STATE	HARRELSON CLASSROOM BUILDING- CR	13,608,500
NC STATE	CLARK HALL- CONVERSION FROM INFIRMARY TO STUDENT AND FACULTY SUPPORT SERVICES	2,415,000
NC STATE	SCHAUB FOOD SCIENCE BUILDING- CR	10,515,500
NC STATE	WILLIAMS HALL LABORATORY BUILDING- CR	12,865,500
NC STATE	POLK HALL LABORATORY BUILDING- CR	15,053,000
NC STATE	LEAZAR HALL LABORATORY BUILDING- CR	8,361,100
NC STATE	DANIELS HALL LABORATORY BUILDING- PHASE I- CR	7,864,500
NC STATE	JORDAN HALL LAB AND CLASSROOM BUILDING- ADDITION	13,553,300
NC STATE	LIBRARY- ADDITION	9,193,900
NC STATE	SUPPORT SERVICES CENTER- TO RELOCATE VARIOUS CAMPUS SERVICES	10,335,800
NC STATE	FIELD RESEARCH LABORATORIES AND OUTLYING RESEARCH FACILITIES- PHASE I	2,500,000
NC STATE	HORTICULTURE CLASSROOM AT ARBORETUM EDUCATION CENTER	500,000
NC STATE	RESEARCH LABORATORY SPACE- PHASE I	18,900,000
NC STATE	PUBLIC SAFETY FACILITY	4,704,000
NC STATE	COLLEGE OF VETERINARY MEDICINE- MECHANICAL AND ELECTRICAL SYSTEM IMPROVEMENTS	21,000,000
NC STATE	TECHNOLOGY INFRASTRUCTURE EXPANSION	2,424,100
NC STATE	CHILLED WATER CENTRAL PLANT- NORTH CAMPUS	41,769,000
NC STATE	CHILLED WATER BRICKYARD LOOP EXTENSION AND COOLING TOWER	2,913,800
NC STATE	STEAM DISTRIBUTION AND CAPACITY IMPROVEMENTS- SULLIVAN DRIVE AREA	3,244,100
NC STATE	MAIN CAMPUS INFRASTRUCTURE- INCLUDING WATER SYSTEM	9,330,700
NC STATE	COLLEGE OF VETERINARY MEDICINE- INFRASTRUCTURE	5,300,000
NC STATE	CENTENNIAL CAMPUS- INFRASTRUCTURE	11,338,500
NC STATE	LAND ACQUISITION	2,100,000
NC STATE	TRANSFERRED FUNDS- COLLEGE OF VETERINARY MEDICINE	675,000
NC STATE	TRANSFERRED FUNDS- COLLEGE OF ENGINEERING COMPLEX, PLANNING	3,200,000
NC STATE	TRANSFERRED FUNDS- MEAT PROCESSING LABORATORY	4,853,755
NC STATE	TRANSFERRED FUNDS- RESEARCH AND TEACHING FEED MILL	2,582,000
NC STATE	TRANSFERRED FUNDS- UNDERGRADUATE SCIENCE TEACHING LAB- PHASE I	4,586,000
	TOTAL	$ **465,205,455**

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
SCHOOL OF THE ARTS	BASIC PERFORMANCE AND EDUCATION COMPLEX	$ 19,130,700
SCHOOL OF THE ARTS	STEVENS CENTER- COMPREHENSIVE MODERNIZATION AND MAJOR RENOVATIONS	4,434,500
SCHOOL OF THE ARTS	FILM ARCHIVES BUILDING	2,250,000
SCHOOL OF THE ARTS	STUDENT SERVICES SUPPORT COMPLEX	2,500,000
SCHOOL OF THE ARTS	DANCE COSTUME SHOP- CR	420,000
SCHOOL OF THE ARTS	WORKPLACE BUILDING #2- CR	1,350,000
SCHOOL OF THE ARTS	CRAWFORD HALL AND RECITAL HALL- CR	499,900
SCHOOL OF THE ARTS	RESIDENCE HALL	1,832,100
SCHOOL OF THE ARTS	GRAY CLASSROOM BUILDING- PR	1,787,700
SCHOOL OF THE ARTS	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,862,300
SCHOOL OF THE ARTS	RENOVATION OF DEMILLE THEATRE	2,330,300
SCHOOL OF THE ARTS	LAND ACQUISITION	4,150,000
	TOTAL	$ **42,547,500**
ASHEVILLE	MATH AND SCIENCE BUILDING- REPLACEMENT OF RHODES AND ROBINSON	$ 22,203,200
ASHEVILLE	HIGHSMITH CENTER- CR AND ADDITION	11,522,000
ASHEVILLE	CARMICHAEL HALL CLASSROOM BUILDING- CR	5,524,200
ASHEVILLE	ZAGEIR HALL CLASSROOM BUILDING- PR	2,569,100
ASHEVILLE	CAMPUS PRIMARY ELECTRICAL DISTRIBUTION SYSTEM UPGRADE AND IMPROVEMENTS	1,023,800
ASHEVILLE	RELOCATE PHYSICAL PLANT FACILITIES	6,318,900
ASHEVILLE	TECHNOLOGY INFRASTRUCTURE EXPANSION	751,200
ASHEVILLE	TRANSFERRED FUNDS- HIGHSMITH CENTER	356,800
ASHEVILLE	TRANSFERRED FUNDS- JUSTICE GYM	195,000
	TOTAL	$ **50,464,200**
CHAPEL HILL	SCIENCE COMPLEX- PHASE I	$ 55,012,500
CHAPEL HILL	SCIENCE COMPLEX- PHASE II	33,437,500
CHAPEL HILL	MURPHEY HALL CLASSROOM BUILDING- CR	6,723,500
CHAPEL HILL	SCHOOL OF MEDICINE- MEDICAL RESEARCH BUILDING- CR OF CLASSROOM AND LABORATORY SPACE	12,895,000
CHAPEL HILL	NEW WEST CLASSROOM BUILDING- CR	4,500,000
CHAPEL HILL	STEELE BUILDING- CR AND CONVERSION OF ADMIN. BUILDING TO CLASSROOM	3,428,600
CHAPEL HILL	SAUNDERS HALL CLASSROOM BUILDING- CR	4,194,100
CHAPEL HILL	PEABODY HALL CLASSROOM BUILDING- CR	8,509,800

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
CHAPEL HILL	MEMORIAL HALL- CR AND ADDITION	$ 9,000,000
CHAPEL HILL	SMITH HALL- CR	1,355,200
CHAPEL HILL	HEALTH SCIENCE LIBRARY- CR	11,000,000
CHAPEL HILL	INSTITUTE OF MARINE SCIENCES MOREHEAD CITY- CR AND CONVERSION FROM LAB TO CLASSROOM	1,833,300
CHAPEL HILL	SCHOOL OF DENTISTRY BUILDING- CR AND CONVERSION FROM OPERATORY TO GENERAL ACADEMIC USE	8,397,100
CHAPEL HILL	ROSENAU HALL LABORATORY BUILDING- CR	9,000,000
CHAPEL HILL	BRAUER HALL- CR OF DENTAL CLINIC	13,415,400
CHAPEL HILL	BURNETT WOMACK BUILDING RESEARCH LABORATORY- CR	24,848,000
CHAPEL HILL	BERRYHILL HALL LABORATORY BUILDING- CR	10,700,000
CHAPEL HILL	BEARD HALL CLASSROOM AND LABORATORY BUILDING- CR	3,500,000
CHAPEL HILL	HAMILTON HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,539,000
CHAPEL HILL	GERRARD HALL CLASSROOM BUILDING- CR	1,350,000
CHAPEL HILL	CALDWELL AND HOWELL HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,732,000
CHAPEL HILL	COKER AND MITCHELL HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,718,000
CHAPEL HILL	HANES AND MANNING HALLS AND ALUMNI BUILDING- CR OF CLASSROOMS AND LECTURE HALLS	2,233,000
CHAPEL HILL	WOOLLEN AND FETZER- CR OF CLASSROOMS AND LECTURE HALLS	1,598,000
CHAPEL HILL	GREENLAW HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,825,000
CHAPEL HILL	PHILLIPS HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,450,000
CHAPEL HILL	HILL AND DAVIE HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,949,000
CHAPEL HILL	TEACHING RESEARCH BUILDING- SCHOOL OF PUBLIC HEALTH PROJECT SUPPLEMENT	13,382,900
CHAPEL HILL	CARRINGTON HALL- ADDITION FOR SCHOOL OF NURSING PROJECT SUPPLEMENT	10,082,100
CHAPEL HILL	MEDICAL BIOMOLECULAR RESEARCH BUILDING	26,718,000
CHAPEL HILL	COMMUNITY HEALTH BUILDING- CONSOLIDATION OF PROGRAMS	18,340,000
CHAPEL HILL	ACADEMIC FACILITIES TO CONSOLIDATE INTERNATIONAL EDUCATION PROGRAMS	20,000,000
CHAPEL HILL	COLLEGE OF ARTS AND SCIENCES- DIGITAL MULTIMEDIA INSTRUCTIONAL CENTER AND MUSIC LIBRARY	20,150,000
CHAPEL HILL	SCHOOL OF MEDICINE- BIOINFORMATICS BUILDING- SUPPLEMENT FOR APPROPRIATED ACTIVITY	2,000,000
CHAPEL HILL	PHYSICAL PLANT SUPPORT FACILITIES	7,875,000
CHAPEL HILL	STUDENT SERVICES BUILDING- CONSOLIDATION OF SERVICES (ADVISING, FINANCIAL AID, REGISTRATION, HOUSING)	27,000,000
CHAPEL HILL	STORM DRAINAGE IMPROVEMENTS	10,500,000
CHAPEL HILL	COGENERATION FACILITY- BACK PRESSURE TURBINE GENERATOR	2,625,000
CHAPEL HILL	STEAM DISTRIBUTION SYSTEM REPLACEMENT	6,300,000

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
CHAPEL HILL	UPGRADE CAMPUS ENERGY MANAGEMENT AND CONTROL SYSTEM	$ 3,682,600
CHAPEL HILL	CAMPUS FIBER OPTICS NETWORK	17,533,500
CHAPEL HILL	ELECTRICAL SYSTEMS IMPROVEMENTS	8,400,000
CHAPEL HILL	INFRASTRUCTURE IMPROVEMENTS- MAIN CAMPUS	32,298,000
CHAPEL HILL	TECHNOLOGY INFRASTRUCTURE EXPANSION	9,165,000
CHAPEL HILL	LAND ACQUISITION	8,000,000
CHAPEL HILL	440 WEST FRANKLIN STREET- CR AND CONVERSION FOR INFORMATION TECHNOLOGY AND DATA PROCESSING	9,170,000
CHAPEL HILL	WILSON HALL LABORATORY- CR	8,920,000
CHAPEL HILL	TRANSFERRED FUNDS- CAROLINA LIVING AND LEARNING CENTER	1,154,275
CHAPEL HILL	TRANSFERRED FUNDS- MEMORIAL HALL	200,000
CHAPEL HILL	TRANSFERRED FUNDS- R B HOUSE LIBRARY	9,898,700
	TOTAL	$ **510,539,075**
CHARLOTTE	ACADEMIC FACILITIES- HUMANITIES	$ 16,167,000
CHARLOTTE	SCIENCE AND TECHNOLOGY BUILDING	33,207,000
CHARLOTTE	CLASSROOM AND OFFICE BUILDING	26,102,500
CHARLOTTE	COLLEGE OF EDUCATION BUILDING	24,654,500
CHARLOTTE	COLLEGE OF NURSING AND HEALTH PROFESSIONS BUILDING	34,125,000
CHARLOTTE	GRADUATE ENGINEERING COMPLEX	14,700,000
CHARLOTTE	RESEARCH FACILITY AND LABORATORY- PHASE I	8,400,000
CHARLOTTE	CENTRAL HEATING AND PLANT IMPROVEMENTS- UPGRADE AND MODERNIZATION	2,826,200
CHARLOTTE	ROWE CLASSROOM BUILDING- CR	4,306,500
CHARLOTTE	MCENIRY CLASSROOM BUILDING- CR	3,433,000
CHARLOTTE	PHYSICAL PLANT AND CAMPUS PUBLIC SAFETY FACILITIES	5,515,000
CHARLOTTE	CHILLER REPLACEMENT	1,824,200
CHARLOTTE	TECHNOLOGY INFRASTRUCTURE EXPANSION	3,345,500
CHARLOTTE	TRANSFERRED FUNDS- ACADEMIC FACILITIES- HUMANITIES	9,243,365
CHARLOTTE	TRANSFERRED FUNDS- SCIENCE AND TECHNOLOGY BUILDING	2,183,736
	TOTAL	$ **190,033,501**
GREENSBORO	SCIENCE INSTRUCTIONAL BUILDING- REPLACEMENT OF PETTY SCIENCE BUILDING	$ 38,412,200
GREENSBORO	PETTY BUILDING- CR FOR CLASSROOM USE	16,272,300
GREENSBORO	BROWN CLASSROOM BUILDING- CR	6,493,900

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
GREENSBORO	MCIVER CLASSROOM BUILDING- REPLACEMENT	$ 21,636,500
GREENSBORO	AYCOCK AUDITORIUM- CR	17,163,000
GREENSBORO	STONE CLASSROOM BUILDING- CR	8,930,400
GREENSBORO	MEETING/SEMINAR/OFFICE SPACE- ALUMNI HOUSE- CODE COMPLIANCE AND BUILDING SYSTEM REPLACEMENTS	3,258,000
GREENSBORO	HEATING PLANT CAPACITY EXPANSION AND ENERGY EFFICIENCY IMPROVEMENTS	4,851,300
GREENSBORO	FORNEY CLASSROOM BUILDING- CR	3,565,400
GREENSBORO	MCNUTT CLASSROOM BUILDING- CR	2,724,000
GREENSBORO	ELECTRIC POWER DISTRIBUTION- CAPACITY EXPANSION AND UPGRADE	4,091,000
GREENSBORO	RESEARCH SPACE- PHASE I	5,250,000
GREENSBORO	MCIVER CHILLER PLANT EXPANSION AND IMPROVEMENTS	9,373,800
GREENSBORO	INFRASTRUCTURE- NORTHEAST QUADRANT	6,825,200
GREENSBORO	TECHNOLOGY INFRASTRUCTURE EXPANSION	4,101,300
GREENSBORO	LAND ACQUISITION	7,000,000
GREENSBORO	TRANSFERRED FUNDS- SCIENCE INSTRUCTIONAL BUILDING	6,059,955
	TOTAL	$ **166,008,255**
PEMBROKE	SCIENCE BUILDING	$ 9,408,000
PEMBROKE	OXENDINE SCIENCE BUILDING- CR	8,032,600
PEMBROKE	LOCKLEAR HALL CLASSROOM BUILDING- CR	2,000,000
PEMBROKE	D F LOWRY CLASSROOM BUILDING- CR AND ADDITION	1,950,500
PEMBROKE	BUSINESS ADMINISTRATION BUILDING- CR	1,059,800
PEMBROKE	MOORE CLASSROOM HALL- CR	2,639,700
PEMBROKE	RESIDENCE/DINING HALL- REPLACEMENT OF JACOBS AND WELLONS HALLS	7,700,300
PEMBROKE	WEST RESIDENCE HALL- CR	977,300
PEMBROKE	JONES PHYSICAL EDUCATION COMPLEX- CR	8,243,700
PEMBROKE	REPLACE PHYSICAL PLANT COMPLEX	5,656,000
PEMBROKE	RENOVATION OF FORMER PHYSICAL PLANT FACILITY TO RELOCATE AUXILIARY SERVICES COMPLEX AND STUDENT BOOKSTORE	2,696,000
PEMBROKE	CAMPUSWIDE INFRASTRUCTURE IMPROVEMENTS	1,996,600
PEMBROKE	CAMPUS WATER DISTRIBUTION UPGRADES	525,000
PEMBROKE	PRIMARY ELECTRICAL DISTRIBUTION UPGRADES	945,000
PEMBROKE	TECHNOLOGY INFRASTRUCTURE EXPANSION	2,798,500

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
PEMBROKE	TRANSFERRED FUNDS- ECONOMIC FORUM BUILDING	$ 244,600
	TOTAL	$ **56,873,600**
WILMINGTON	SCHOOL OF EDUCATION BUILDING	$ 18,725,000
WILMINGTON	ACADEMIC AND CLASSROOM FACILITIES	33,032,100
WILMINGTON	GENERAL CLASSROOM BUILDING	12,647,000
WILMINGTON	KING HALL CLASSROOM BUILDING- CR	2,697,400
WILMINGTON	HOGGARD HALL CLASSROOM BUILDING- CR	3,550,400
WILMINGTON	ALDERMAN HALL CLASSROOM BUILDING- CR	2,940,800
WILMINGTON	WESTSIDE HALL CLASSROOM BUILDING- CR	2,687,300
WILMINGTON	KENAN HALL CLASSROOM BUILDING- CR	3,056,600
WILMINGTON	HINTON JAMES HALL CLASSROOM BUILDING- CR	1,468,000
WILMINGTON	FRIDAY HALL LABORATORY BUILDING- CR	7,693,400
WILMINGTON	KENAN AUDITORIUM- CR	3,095,300
WILMINGTON	MARINE SCIENCES RESEARCH CENTER OPERATIONS FACILITY	2,929,600
WILMINGTON	ACADEMIC SUPPORT FACILITIES AND COMPUTING CENTER	4,585,900
WILMINGTON	INFRASTRUCTURE EXPANSION	1,775,000
WILMINGTON	LAND ACQUISITION	2,100,000
WILMINGTON	PRIMARY ELECTRICAL DISTRIBUTION SYSTEM IMPROVEMENTS	2,238,200
WILMINGTON	TECHNOLOGY INFRASTRUCTURE EXPANSION	2,949,000
WILMINGTON	TRANSFERRED FUNDS- SCHOOL OF EDUCATION BUILDING- PLANNING	1,030,800
	TOTAL	$ **109,201,800**
WESTERN CAROLINA	ACADEMIC FACILITIES- HUMANITIES AND FINE ARTS	$ 26,030,700
WESTERN CAROLINA	STILLWELL LAB BUILDING- CR	15,057,500
WESTERN CAROLINA	MCKEE CLASSROOM BUILDING-CR	5,289,700
WESTERN CAROLINA	BIRD BUILDING- RENOVATION AND CONVERSION FOR STUDENT HEALTH CENTER	1,836,500
WESTERN CAROLINA	OLD STUDENT HEALTH CENTER- CONVERSION TO RESIDENTIAL AND ACADEMIC SPACE	1,887,100
WESTERN CAROLINA	BREESE GYMNASIUM- CONVERSION TO ACADEMIC USE	1,161,300
WESTERN CAROLINA	HOUSING FACILITY FOR 300 STUDENTS	15,204,600
WESTERN CAROLINA	CHILLER REPLACEMENT AND CFC RETROFIT	1,489,600
WESTERN CAROLINA	INFRASTRUCTURE IMPROVEMENTS (STEAM AND ELECTRICAL)	10,639,000
WESTERN CAROLINA	KILLIAN CLINIC ANNEX- CR	3,129,900

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES		
SCHOOL	**PROJECT**	**AMOUNT**
WESTERN CAROLINA	KILLIAN EDUCATION AND ALLIED PROFESSIONS BUILDING- PR	$ 1,546,300
WESTERN CAROLINA	FORSYTH CLASSROOM AND COMPUTER LABS BUILDING- CR	7,064,000
WESTERN CAROLINA	LAND ACQUISITION	3,093,000
WESTERN CAROLINA	TECHNOLOGY INFRASTRUCTURE EXPANSION	5,018,600
WESTERN CAROLINA	TRANSFERRED FUNDS- ACADEMIC FACILITIES- HUMANITIES AND FINE ARTS	1,888,944
	TOTAL	$ **100,336,744**
WINSTON-SALEM	COMPUTER SCIENCE FACILITY- REPLACEMENT AND CONSOLIDATION	$ 11,643,300
WINSTON-SALEM	CAROLINA HALL- RENOVATION AND CONVERSION FROM COMPUTER CENTER TO CLASSROOMS	4,270,700
WINSTON-SALEM	PHYSICAL AND LIFE SCIENCES BUILDING- REPLACEMENT OF HILL HALL	12,109,500
WINSTON-SALEM	ANDERSON CENTER- CR AND CHANGE OF USE FOR EARLY CHILDHOOD/HGERONTOLOGY PROGRAMS	6,917,900
WINSTON-SALEM	HEALTH CENTER BUILDING AND OLD NURSING BUILDING- CR FOR STUDENT HEALTH	2,265,900
WINSTON-SALEM	REPLACE UNDERGROUND STEAM AND HOT WATER PIPING	1,249,500
WINSTON-SALEM	CHILLED WATER LOOP SYSTEM	435,000
WINSTON-SALEM	INFRASTRUCTURE IMPROVEMENTS	1,708,300
WINSTON-SALEM	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,676,100
WINSTON-SALEM	TRANSFERRED FUNDS- F L ATKINS	4,159,840
WINSTON-SALEM	TRANSFERRED FUNDS- COMPUTER SCIENCE FACILITY- PLANNING	350,541
	TOTAL	$ **46,786,581**
AFFILIATES	UNC CENTER FOR PUBLIC TELEVISION- DIGITAL CONVERSION	$ 64,995,000
AFFILIATES	UNC CENTER FOR PUBLIC TELEVISION- MOBILE SATELLITE UPLINK	895,600
AFFILIATES	NC SCHOOL OF SCIENCE AND MATH- CR OF BRYAN CENTER	3,172,600
AFFILIATES	NC SCHOOL OF SCIENCE AND MATH- CR OF ROYALL OUTREACH CENTER	1,990,400
AFFILIATES	NC ARBORETUM IN ASHEVILLE- IMPROVEMENTS TO FACILITIES AND INFRASTRUCTURE	9,331,700
	TOTAL	**$ 80,385,300**
GENERAL ADMINISTRATION	RESERVE FOR REPAIRS AND RENOVATIONS AND COST OVERRUNS	$ 25,186,595
GENERAL ADMINISTRATION	TRANSFERRED FUNDS- RESERVE FOR LAND ACQUISITION	3,051,200
	GRAND TOTAL	**$2,500,000,000**
Source: Legislation Session 1999 - SB912 Session Law 2000-3		

(This page left blank intentionally.)

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES PROJECTS LESS THAN $2,000,000		
SCHOOL	**PROJECT**	**AMOUNT**
APPALACHIAN	SCIENCE BUILDING- COMPLETE INTERIOR LABS AND ACADEMIC SPACE	$ 1,260,000
APPALACHIAN	SMITH-WRIGHT HALL CLASSROOM BUILDING- CR	1,636,100
APPALACHIAN	FOUNDERS HALL- CR	1,044,100
APPALACHIAN	WALKER HALL CLASSROOM BUILDING- CR	1,733,800
APPALACHIAN	BB DOUGHERTY HALL- CR	1,000,000
APPALACHIAN Total		**$ 6,674,000**
EAST CAROLINA	CAMPUS COMPUTING CENTER- CR	$ 1,785,000
EAST CAROLINA	TECHNOLOGY INFRASTRUCTURE EXPANSION	807,600
EAST CAROLINA Total		**$ 2,592,600**
ELIZABETH CITY	LESTER HALL CLASSROOM BUILDING- PR	$ 250,000
ELIZABETH CITY	WHITE GRADUATE CENTER AND CONTINUING EDUCATION BUILDING- CR	1,514,000
ELIZABETH CITY	WILKINS LABORATORY BUILDING- CR	451,800
ELIZABETH CITY	DOLES RESIDENCE HALL- CR	1,722,500
ELIZABETH CITY	CENTRAL CHILLER PLANT	1,400,000
ELIZABETH CITY	PHYSICAL EDUCATION FACILITIES	1,447,500
ELIZABETH CITY	ELECTRICAL DISTRIBUTION SYSTEM UPGRADE	1,225,000
ELIZABETH CITY	ENERGY MANAGEMENT SYSTEM IMPROVEMENTS	886,400
ELIZABETH CITY Total		**$ 8,897,200**
FAYETTEVILLE STATE	SCIENCE ANNEX- CR	$ 1,740,500
FAYETTEVILLE STATE	CONTINUING EDUCATION CENTER- CR	432,600
FAYETTEVILLE STATE	TAYLOR SOCIAL SCIENCE CLASSROOM BUILDING- CR	884,300
FAYETTEVILLE STATE	CHARLES CHESTNUTT LIBRARY- CR	875,900
FAYETTEVILLE STATE	WILLIAM COLLINS BUILDING- CR	640,600
FAYETTEVILLE STATE	COOK DINING HALL- CR, CONVERSION FOR ACADEMIC USE AND STUDENT SERVICES	1,773,500
FAYETTEVILLE STATE	STUDENT RESIDENCE HALLS- FIRE SAFETY IMPROVEMENTS	611,700
FAYETTEVILLE STATE	CAMPUS INFRASTRUCTURE IMPROVEMENTS	1,435,000
FAYETTEVILLE STATE	SPAULDING (OLD IMFIRMARY)- CR AND CONVERSION FOR PUBLIC SAFETY FACILITIES	1,029,100
FAYETTEVILLE STATE	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,137,600
FAYETTEVILLE STATE Total		**$ 10,560,800**

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES PROJECTS LESS THAN $2,000,000		
SCHOOL	**PROJECT**	**AMOUNT**
A AND T	GAMBLE RESIDENCE HALL- REPLACEMENT	$ 1,552,000
A AND T	NEW STUDENT HOUSING	1,897,900
A AND T	HOLLAND RESIDENCE HALL- CR	856,800
A AND T	HAZARDOUS MATERIALS AND WASTE STORAGE FACILITY	1,575,000
A AND T	SCHOOL OF AGRICULTURE FACILITIES- IMPROVEMENTS	1,832,700
A AND T	REPLACEMENT OF STEAM LINES AND ACCESS HOLES	1,568,300
A AND T Total		**$ 9,282,700**
CENTRAL	STUDENT HOUSING- REPLACEMENT	$ 1,556,600
CENTRAL	MCLEAN RESIDENCE HALL- CR	305,800
CENTRAL	PEARSON CAFETERIA- CR	1,263,600
CENTRAL	STUDENT RESIDENCE HALLS- FIRE SAFETY AND SECURITY IMPROVEMENTS	1,541,000
CENTRAL	ALEXANDER DUNN BUILDING- CR	1,779,300
CENTRAL	RENOVATION OF EXISTING SPACE FOR PUBLIC SAFETY FACILITY	840,000
CENTRAL	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,422,000
CENTRAL Total		**$ 8,708,300**
NC STATE	HORTICULTURE CLASSROOM AT ARBORETUM EDUCATION CENTER	$ 500,000
NC STATE Total		**$ 500,000**
SCHOOL OF THE ARTS	DANCE COSTUME SHOP- CR	$ 420,000
SCHOOL OF THE ARTS	WORKPLACE BUILDING #2- CR	1,350,000
SCHOOL OF THE ARTS	CRAWFORD HALL AND RECITAL HALL- CR	499,900
SCHOOL OF THE ARTS	RESIDENCE HALL	1,832,100
SCHOOL OF THE ARTS	GRAY CLASSROOM BUILDING- PR	1,787,700
SCHOOL OF THE ARTS	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,862,300
SCHOOL OF THE ARTS Total		**$ 7,752,000**
ASHEVILLE	CAMPUS PRIMARY ELECTRICAL DISTRIBUTION SYSTEM UPGRADE AND IMPROVEMENTS	$ 1,023,800
ASHEVILLE	TECHNOLOGY INFRASTRUCTURE EXPANSION	751,200
ASHEVILLE Total		**$ 1,775,000**
CHAPEL HILL	SMITH HALL- CR	$ 1,355,200
CHAPEL HILL	INSTITUTE OF MARINE SCIENCES MOREHEAD CITY- CR AND CONVERSION FROM LAB TO CLASSROOM	1,833,300
CHAPEL HILL	HAMILTON HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,539,000
CHAPEL HILL	GERRARD HALL CLASSROOM BUILDING- CR	$ 1,350,000

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES PROJECTS LESS THAN $2,000,000		
SCHOOL	**PROJECT**	**AMOUNT**
CHAPEL HILL	CALDWELL AND HOWELL HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,732,000
CHAPEL HILL	COKER AND MITCHELL HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,718,000
CHAPEL HILL	WOOLLEN AND FETZER- CR OF CLASSROOMS AND LECTURE HALLS	1,598,000
CHAPEL HILL	GREENLAW HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,825,000
CHAPEL HILL	PHILLIPS HALL- CR OF CLASSROOMS AND LECTURE HALLS	1,450,000
CHAPEL HILL	SCHOOL OF MEDICINE- BIOINFORMATICS BUILDING- SUPPLEMENT FOR APPROPRIATED ACTIVITY	2,000,000
CHAPEL HILL	HILL AND DAVIE HALLS- CR OF CLASSROOMS AND LECTURE HALLS	1,949,000
CHAPEL HILL Total		**$ 18,349,500**
CHARLOTTE	CHILLER REPLACEMENT	$ 1,824,200
CHARLOTTE Total		**$ 1,824,200**
PEMBROKE	LOCKLEAR HALL CLASSROOM BUILDING- CR	$ 2,000,000
PEMBROKE	D F LOWRY CLASSROOM BUILDING- CR AND ADDITION	1,950,500
PEMBROKE	BUSINESS ADMINISTRATION BUILDING- CR	1,059,800
PEMBROKE	WEST RESIDENCE HALL- CR	977,300
PEMBROKE	CAMPUSWIDE INFRASTRUCTURE IMPROVEMENTS	1,996,600
PEMBROKE	CAMPUS WATER DISTRIBUTION UPGRADES	525,000
PEMBROKE	PRIMARY ELECTRICAL DISTRIBUTION UPGRADES	945,000
PEMBROKE Total		**$ 9,454,200**
WILMINGTON	HINTON JAMES HALL CLASSROOM BUILDING- CR	$ 1,468,000
WILMINGTON	INFRASTRUCTURE EXPANSION	1,775,000
WILMINGTON Total		**$ 3,243,000**
WESTERN CAROLINA	BIRD BUILDING- RENOVATION AND CONVERSION FOR STUDENT HEALTH CENTER	$ 1,836,500
WESTERN CAROLINA	OLD STUDENT HEALTH CENTER- CONVERSION TO RESIDENTIAL AND ACADEMIC SPACE	1,887,100
WESTERN CAROLINA	BREESE GYMNASIUM- CONVERSION TO ACADEMIC USE	1,161,300
WESTERN CAROLINA	CHILLER REPLACEMENT AND CFC RETROFIT	1,489,600
WESTERN CAROLINA	KILLIAN EDUCATION AND ALLIED PROFESSIONS BUILDING- PR	1,546,300
WESTERN CAROLINA Total		**$ 7,920,800**
WINSTON-SALEM	REPLACE UNDERGROUND STEAM AND HOT WATER PIPING	$ 1,249,500
WINSTON-SALEM	CHILLED WATER LOOP SYSTEM	435,000
WINSTON-SALEM	INFRASTRUCTURE IMPROVEMENTS	$ 1,708,300

ALLOCATION OF UNIVERSITY IMPROVEMENT GENERAL OBLIGATION BONDS AND NOTES
PROJECTS LESS THAN $2,000,000

SCHOOL	PROJECT	AMOUNT
WINSTON-SALEM	TECHNOLOGY INFRASTRUCTURE EXPANSION	1,676,100
WINSTON-SALEM Total		**$ 5,068,900**
AFFILIATES	UNC CENTER FOR PUBLIC TELEVISION- MOBILE SATELLITE UPLINK	$ 895,600
AFFILIATES	NC SCHOOL OF SCIENCE AND MATH- CR OF ROYALL OUTREACH CENTER	1,990,400
AFFILIATES Total		**$ 2,886,000**
Grand Total	**83 Projects**	**$105,489,200**

PR=Partial Renovation

CR=Complete Renovation

Source: UNC-General Administration

CON Schedule		**Pre-planning**				
Part A Schedule		**Pre-planning**				
Part A Actual		**Pre-planning**				
Part B Schedule						
Part B Actual						
Timeline	**July 1993**	**Aug 1993**	**Sept 1993**	**Oct 1993**	**Nov 1993**	**Dec 1993**
Milestones and Other Important Dates		**08/05/1993**: UNC receives approval from General Assembly in 1993 session (HB 578) for advanced planning for hospital. Request for advertisement for designer.			**11/02/1993**: OC-25 received by SCO; total estimated cost $133,870,800 **11/03/1993**: OC-25 approved by SCO **11/14/1993**: Designer selected	
Correspondence		1	0	0	1	2

CON Schedule	Pre-planning			Design		
Part A Schedule	Pre-planning			Design		
Part A Actual	Pre-planning			Design		
Part B Schedule						
Part B Actual						
Timeline	**Jan 1994**	**Feb 1994**	**Mar 1994**	**Apr 1994**	**May 1994**	**June 1994**
Milestones and Other Important Dates	**01/14/1994**: Design fee proposal submitted to SCO		**03/29/1994**: Design Agreement between UNCH and HKS for $8,000,000		**05/27/1994**: Design contract signed by HKS	**06/14/1994**: Design contract signed by UNCH
Correspondence	1	0	6	0	0	0

CON Schedule	Design					
Part A Schedule	Design					
Part A Actual	Design					
Part B Schedule						
Part B Actual						
Timeline	**July 1994**	**Aug 1994**	**Sept 1994**	**Oct 1994**	**Nov 1994**	**Dec 1994**
Milestones and Other Important Dates	**07/28/1994**: HKS notifies UNCH that programming is taking longer than expected **07/29/1994**: Design Programming submittal due	**08/22/1994**: Design contract w/signatures received at SCO **08/23/1994**: Design Amendment #1 for $35,000	**09/22/1994**: William Moore submits proposal for Asbestos Abatement (Part D)			
Correspondence	1	1	1	0	0	2

CON Schedule	Design					
Part A Schedule	Design					
Part A Actual	Design					
Part B Schedule						
Part B Actual						
Timeline	**Jan 1995**	**Feb 1995**	**Mar 1995**	**Apr 1995**	**May 1995**	**June 1995**
Milestones and Other Important Dates	**01/02/1995**: Schematic submittal due	**02/03/1995**: Schematic Design received at SCO	**03/06/1995**: DFS submits Schematic Design review comments to UNC Design/Construction **03/13/1995**: DOI submits Schematic Design review comments to HKS **03/20/1995**: HKS approves William Moore's proposed asbestos work	**04/19/1995**: SCO approves Schematic Design subject to incorporation of comments **04/26/1995**: Design Amendment #2 for $32,000	**05/02/1995**: DFS issues Certificate of Need to UNCH	**06/02/1995**: UNCH approves Schematic Design
Correspondence	2	4	7	3	9	4

CON Schedule	Design					
Part A Schedule	Design					
Part A Actual	Design					
Part B Schedule						Pre-Construction
Part B Actual		Design				Pre-Construction
Timeline	**July 1995**	**Aug 1995**	**Sept 1995**	**Oct 1995**	**Nov 1995**	**Dec 1995**
Milestones and Other Important Dates	**07/03/1995**: Design Development submittal due **07/07/1995**: Design Development received at SCO **07/27/1995**: SCO Design Review notifies SCO Contract Administration that project will be broken out into separate projects (Part A & B)	**08/08/1995**: DOI notifies HKS that Design Development has been reviewed **08/14/1995**: DFS notifies UNC Design/Construction that architectural portion of DD reviewed **08/22/1995**: SCO denies approval of Design Development	**09/15/1995**: Part B Site Utilities Construction Documents received at SCO	**10/12/1995**: SCO approves Part B Site Utilities Construction Documents **10/19/1995**: Part B Site Utilities Final Plans received at SCO	**11/09/1995**: Part B Site Utilities approved for bid	**12/29/1995**: Construction bids opened for Part B Site Utilities
Correspondence	7	19	6	14	5	0

CON Schedule	Design					
Part A Schedule	Design					
Part A Actual	Design					
Part B Schedule	Pre-Construction	Construction				
Part B Actual	Pre-Construction	Construction				
Timeline	**Jan 1996**	**Feb 1996**	**Mar 1996**	**Apr 1996**	**May 1996**	**June 1996**
Milestones and Other Important Dates	**01/02/1996**: SCO receives Part B Site Utilities Certified Bid Tabulation **01/03/1996**: SCO issues Part B Site Utilities Construction Award Letter **01/04/1996**: Part B Site Utilities Construction Contract Document-General $3,596,500 **01/10/1996**: SCO approves Design Development **01/11/1996**: UNCH requests SCO advertise for engineering services for Chiller Addition **01/17/1996**: Milestone's Proposal for Critical Path Method consulting services **01/18/1996**: Part B Pre-Construction Conference **01/22/199**6: UNCH approves Design Development phase **01/29/1996**: Notice to Proceed for Part B Site Utilities	**02/21/1996**: Part C Designer selected		**04/03/1996**: Part D Construction Documents received at SCO **04/11/1996**: Part D Construction Document review complete **04/19/1996**: Construction Document submittal due	**05/08/1996**: Part C Design Agreement between UNCH and Dewberry & Davis for $71,000 **05/13/1996**: Letter requesting application for "Authorization to use Alternative Contracting Method". Requesting single prime award. **05/14/1996**: UNCH requests extension of Designer's contract from $5,492,000 to $8,067,000 **05/21/1996**: Construction Documents received at SCO **05/24/1996**: Owner approves Part B Change Order G-1 for $136,784; 21 days added to contract completion	**06/14/1996**: Part C Schematic submittal due **06/17/1996**: Part C Design Development received at SCO 0**6/18/1996**: DOI notifies HKS that working drawings have been reviewed
Correspondence	9	1	2	5	9	6

CON Schedule	Pre-Construction		Construction			
Part A Schedule	Gap in scheduled activities due to Part A Design Overrun and Part B Construction Extension					
Part A Actual	Design Overrun					
Part B Schedule	Construction			Construction Contract Extended		
Part B Actual	Construction					
Timeline	**July 1996**	**Aug 1996**	**Sept 1996**	**Oct 1996**	**Nov 1996**	**Dec 1996**
Milestones and Other Important Dates	**07/01/1996**: Estimated Bid Date (Part A) **07/08/1996**: DOI notifies Dewberry & Davis that Schematic Design reviewed **07/09/1996**: Part D Bid Opening **07/16/1996**: DFS reviews architectural portion of final working drawings, conditions must be met before approval **07/16/1996**: SCO approves Part C Design Development **07/19/1996**: Part C Design Development submittal due **07/23/1996**: Application to use Alternative Contracting Method not approved, requested single prime	**08/02/1996**: SCO notifies HKS that Construction Document phase is complete **08/05/1996**: Owner approves Part B Change Order G-2 for $398,450 **08/12/1996**: Part D Asbestos Abatement Contract signed-General $221,902 **08/13/1996**: UNCH approves Schematic Design. Proceeding directly to Construction Documents is acceptable to owner. **08/21/1996**: DFS reviews final working drawings for engineering content, not approved	**09/03/1996**: DOL has reviewed plans and specification for elevators and dumbwaiters, approved for bid **09/03/1996**: Owner approves Part B Change Order G-3 for $1,061,141; 34 days added to contract completion **09/03/1996**: Part C Construction Document submittal due **09/09/1996**: Part B Site Utilities originally scheduled construction completion **09/27/1996**: Final Plans received at SCO 09/30/1996: Part D Construction Start	**10/15/1996**: Application to use Alternative Contracting Method approved; requested single prime bid, multi prime award **10/23/1996**: Owner approves Part B Change Order G-4 for $92,891; 10 days added to contract completion **10/28/1996**: Part C Construction Documents received at SCO **10/31/1996**: Part C Estimated Bid Date	**11/13/1996**: DOI approves revised working plans **11/14/1996**: UNCH approves Construction Documents **11/19/1996**: Protech informs William Moore that they are working under protest **11/30/1996**: Part D original completion date	**12/02/1996**: SCO notifies Dewberry & Davis that Construction Document phase complete **12/02/1996**: DOI notifies Dewberry & Davis that Construction Documents reviewed **12/10/1996**: Turner Construction submits proposal for Construction Management **12/13/1996**: Owner approves Part D Change Order G-2 for $13838; 6 days added to contract completion **12/16/1996**: Project approved for bid subject to approval from other regulatory agencies
Correspondence	7	10	8	8	8	8

CON Schedule	Construction					
Part A Schedule	Gap in scheduled activities due to Part A Design Overrun and Part B Construction Extension					
Part A Actual	Design Overrun				Pre-Construction	
Part B Schedule	Construction Contract Extended					
Part B Actual	Construction					
Timeline	**Jan 1997**	**Feb 1997**	**Mar 1997**	**Apr 1997**	**May 1997**	**June 1997**
Milestones and Other Important Dates	**01/07/1997**: IRI notifies HKS that Construction Documents are satisfactory for insurance purposes **01/08/1997**: Owner approves Part D Change Order G-1 for $12,410; 10 days added to contract completion **01/09/1997**: Owner approves Part B Change Order G-5 for $499,172; 46 days added to contract completion **01/09/1997**: Owner approves Part D Change Order G-3 for $21,366, G-4 for $6,620 and G-5 for $8,960; 26 days added to contract completion **01/15/1997**: CRZ notifies primes that all work is to be completed no later than 04/01/1997 in order to allow site to be cleared for construction **01/15/1997**: Owner approves Part D Change Order G-6 for $25,746, G-7 for $66,725 and G-8 for $1,080; 30 days added to contract completion **01/21/1997**: Resubmittal of Final Plans received at SCO **01/27/1997**: Part C Final Plans received at SCO **01/30/1997**: Part C approved for Bid	**02/13/1997**: Owner approves Part B Change Order G-6 for $210,702; 90 days added to contract completion **02/25/1997**: Part C Bid Opening	**03/12/1997**: Letter Agreement between UNCH and Turner Construction for Construction Management Services-$1,047,031 **03/20/1997**: SCO issues Part C Award Letter **03/20/1997**: Part C Chiller Addition Construction Contract Documents-Electrical $131,705 **03/24/1997**: Owner approves Part B Change Order G-7 for $200,952; 50 days added to contract completion **03/26/1997**: Addendum #1 to Bidding Documents **03/26/1997**: Project approved for bid **03/28/1997**: Part C Chiller Addition Construction Contract Document-Mechanical $$593,100	**04/03/1997**: Addendum #2 to Bidding Documents **04/10/1997**: Construction bids opened for Part A **04/10/1997**: UNCH notified that original designer overstated Asbestos Containing Material **04/11/1997**: DFS approves architectural portion of Revised Final Working Drawings **04/15/1997**: UNCH informs William Moore of intent to dismiss him as designer **04/24/1997**: DOI issue Electrical Certificate of Completion for Part B Site Utilities	**05/05/1997**: Owner approves Part D Change Order G-9 for $92,800 **05/07/1997**: SCO receives Part A Certified Bid Tabulation **05/14/1997**: Part C Pre-Construction conference **05/27/1997**: Part C Construction start date **05/30/1997**: SCO issues Part A Construction Award Letter	**06/02/1997**: Part A Construction Contract Documents General $47,584,342; Mechanical $5,716,752; Electrical $9,688,506; Plumbing $11,988,630 **06/04/1997**: Authorize funds increase by $4,953,750 **06/09/1997**: Owner approves Part B Change Order G-8 for $222,858; 49 days added to contract completion **06/18/1997**: Attorney General approves project **06/26/1997**: Part A Pre-Construction Conference & Notice to Proceed **06/30/1997**: Part A Construction Start Date
Correspondence	10	7	10	18	8	11

CON Schedule	Construction					
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual	Project Close-Out					
Timeline	**July 1997**	**Aug 1997**	**Sept 1997**	**Oct 1997**	**Nov 1997**	**Dec 1997**
Milestones and Other Important Dates	**07/01/1997**: Part B Site Utilities Inspection & Acceptance **07/01/1997**: Part D Asbestos Abatement Inspection and Acceptance **07/17/1997**: Owner approves Part B Change Order G-9 for $228,321; 51 days added to contract completion **07/21/1997**: Design Amendment #3 for $60,140 **07/30/1997**: SCO issues Part B Site Utilities Project Acceptance Approval **07/30/1997**: SCO issues Part D Asbestos Abatement Project Acceptance Approval	**08/07/1997**: DFS approves engineering portion of Revised Final Working Drawings **08/22/1997**: Demolition delayed past 08/18/1997 start date	**09/24/1997**: Part C original completion date	**10/10/1997**: Owner approves Part C Change Order H-2 for $1,825; 129 days added to contract completion **10/20/1997**: DFS receives 2nd Revised Final Working Drawings **10/20/1997**: Owner approves Part C credit Change Order H-1 for $10,080	**11/03/1997**: Letter to clarify Pay Application Process	**12/18/1997**: Owner approves Part A Change Order G-1 for $208,258.12 **12/18/1997**: Owner approves Part C Change Order H-3 for $1,566 and H-4 for $22,819 **12/23/1997**: Owner approves Part A Change Order H-1 for $259,551 and credit Change Order E-1 for ($28,226)
Correspondence	9	9	12	11	7	13

CON Schedule	Construction					
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual	Project Close-Out					
Timeline	**Jan 1998**	**Feb 1998**	**Mar 1998**	**Apr 1998**	**May 1998**	**June 1998**
Milestones and Other Important Dates	**01/13/1998**: Owner approves Part C Change Order H-5 for $8,969 **01/29/1998**: Owner approves Part A Change Order P-1 for $13,174 **01/30/1998**: Monthly meetings begin to underscore communication problems		**03/04/1998**: Owner approves Part A Change Order G-2 for $35,612.88 **03/09/1998**: Design Amendment #4 for $75,000 **03/13/1998**: Owner approves Part A Change Order G-3 for $250,000 **03/21/1998**: Owner approves Part A No-Cost Change Order E-2 **03/24/1998**: Owner approves Part A No-Cost Change Order P-2, Change Order P-3 for $64,338 and P-4 for $100,000 **03/26/1998**: Design Amendment #5 for $20,400	**04/28/1998**: Owner approves Part A Change Order G-4 for $7,744 **04/30/1998**: Owner approves Part A Change Order P-5 for $28,864 and No-Cost Change Order H-2	**05/05/1998**: Owner approves Part A Change Order G-5 for $256,165 **05/05/1998**: Owner approves Part C Change Order H-6 for $10,364	**06/02/1998**: Owner approves Part A Change Order H-3 for $12,627, H-4 for 100,000, H-5 for 81,787 and No-Cost Change Order E-3 **06/18/1998**: Design Amendment #6 for $18,000
Correspondence	13	9	25	16	12	12

CON Schedule	Construction					
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual	Project Close-Out					
Timeline	**July 1998**	**Aug 1998**	**Sept 1998**	**Oct 1998**	**Nov 1998**	**Dec 1998**
Milestones and Other Important Dates			**09/10/1998**: Design Amendment #7 for $5,418 **09/11/1998**: Owner approves Change Order G-6 for $121,024 and No-Cost Change Order G-7; 36 days added to General contract completion **09/23/1998**: Owner approves Part A Change Order G-8 for $119,810 **09/23/1998**: Owner approves Part B Change Order G-10 for $52,486 **09/28/1998**: Owner approves Part A Change Order H-6 for $162,313	**10/12/1998**: Owner approves Part A Change Order P-7 for $160,071 **10/26/1998**: Owner approves Part A Change Order G-9 for $209,015 and E-4 for $142,253; 36 days added to Electrical contract completion	**11/01/1998**: Effective date of Senate Bill 1366 Section 11.8 exempting UNCH from SCO oversight	**12/10/1998**: Owner approves Part A Change Order P-6 for $25,386, credit Change Order P-7 for ($100,000), and P-8 for $209,248; 36 days added to Mechanical and Plumbing contract completion **12/10/1998**: Owner approves Part A credit Change Order H-7 for ($100,000), No-Cost Change Order H-8, and Change Order H-9 for $43,058 **12/10/1998**: Owner approves Part C Change Order H-7 for $7,392 **12/17/1998**: Owner approves Part A Change Order G-11 for $218,511
Correspondence	15	15	7	12	12	15

CON Schedule	Construction					
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual	Project Close-Out					
Timeline	**Jan 1999**	**Feb 1999**	**Mar 1999**	**Apr 1999**	**May 1999**	**June 1999**
Milestones and Other Important Dates	**01/04/1999**: Owner approves Part A credit Change Order G-10 for ($250,000) **01/15/1999**: Owner approves Part A Change Order G-12 for 280,911 **01/22/1999**: Owner approves Part A Change Order G-13 for 87,656 and E-5 for $114,446	**02/09/1999**: Design Amendment #8 for $45,520 **02/19/1999**: Owner approves Part A Change Order G-14 for $90,209	**03/08/1999**: Design Amendment #9 $7,634 **03/23/1999**: Owner approves Part A Change Order E-7 for $123,000 **03/30/1999**: Owner approves Part A Change Order E-6 for $70	**04/19/1999**: Part C Inspection and Acceptance **04/26/1999**: Owner approves Part A Change Order G-15 for $232,938, credit Change Order G-16 for ($49,896) and Change Order G-17 for $276,961	**05/05/1999**: Owner approves Part A Change Order H-10 for $94,712 **05/06/1999**: Owner approves Part A Change Order G-18 for 247,707 **05/19/1999**: Part C Chiller Addition accepted into state inventory **05/20/1999**: Owner approves Part A Change Order E-9 for $160,256 **05/21/1999**: UNCH request designer of record to be present at monthly meeting to answer contractor questions	**06/13/1999**: Owner approves Part A credit Change Order E-8 for ($7,410)
Correspondence	2	12	6	4	16	8

CON Schedule	Construction			Project Close-Out		
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual	Project Close-Out					
Timeline	July 1999	Aug 1999	Sept 1999	Oct 1999	Nov 1999	Dec 1999
Milestones and Other Important Dates	**07/07/1999**: Owner approves Part A Change Order P-10 for $82,652 and H-11 for $164,652 **07/26/1999**: Owner approves Part A credit Change Order H-12 for ($208,296) **07/29/1999**: Beneficial Occupancy of new portion of Gravely Tunnel	**08/09/1999**: UNCH willing to consider no-cost time extension to accommodate desire to avoid liquidated damages **08/11/1999**: Owner approves Part A Change Order G-19 for $65,328 **08/12/1999**: Meeting between owner and contractors-issues about getting credit change orders processed quickly since contingency funds are running out **08/17/1999**: Owner approves Part A Change Order G-20 for $28,963 **08/24/1999**: Owner approves Part A Change Order G-21 for $48,593, P-11 for $161,601, P-12 for $114,515, P-13 for $89,413, H-13 for $115,523, and H-14 for $161,550	**09/20/1999**: Final Payment Notice on Part B Site Utilities, in process of closing out **09/24/1999**: Memo confirming Asst. Attorney General Jeff Parson's visit to construction site concerning possible legal action that could be taken by not allowing contractors to begin work on Phase II while completing Phase I	**10/21/1999**: Owner approves Part A credit Change Order G-22 for ($97,514)and credit Change Order P-14 for ($15,436) **10/21/1999**: Owner approves Part A No-Cost Change Order H-15 and Change Order H-16 for $56,143	**11/04/1999**: HKS recommends retainage be held on future pay applications due to contractors' work not being completed satisfactorily **11/08/1999**: Owner approves Part A Change Order G-23 for $72,846, G-24 for $14,987, credit Change Order G-25 for ($2,321), G-26 for $243,912 and E-10 for $34,547 **11/11/1999**: Owner approves Part D credit Change Order G-10A for ($40,053) **11/16/1999**: Owner approves Part A credit Change Order E-11 for ($720,000) **11/29/1999**: Punchlist for new linen/loading dock **11/30/1999**: Owner approves Part A Change Order G-27 for $14,324 and H-17 for $4,056	
Correspondence	5	21	12	15	28	26

CON Schedule						
Part A Schedule	Construction					
Part A Actual	Construction					
Part B Schedule						
Part B Actual						
Timeline	**Jan 2000**	**Feb 2000**	**Mar 2000**	**Apr 2000**	**May 2000**	**June 2000**
Milestones and Other Important Dates	**01/14/2000**: Owner approves Part A Change Order G-28 for $202,259 and No-Cost Change Order G-29; 209 days added to General contract completion **01/17/2000**: Project approval authorization for Beneficial Occupancy of new linen/loading dock	**02/10/2000**: UNCH notifies HKS to take steps to insure sufficient funds remain in project to complete all work **02/14/2000**: Owner approves Part A credit Change Order P-15 for ($17,558)	**03/09/2000**: Owner approves Part A No-Cost Change Order P-16, Change Order P-17 for $15,410 and H-19 for $4,862; 209 days added to Plumbing contract completion **03/16/2000**: Owner approves Part A Change Order G-30 for $57,406, E-12 for $11,417 and No-Cost Change Order E-13; 209 days added to Electrical contract completion **03/30/2000**: HKS requests surety companies visit work site		**05/02/2000**: Owner approves Part A Change Order G-31 for $35,216, P-18 for $40,484, H-18 for $100,000 and E-14 for $260,237; 209 days added to Mechanical contract completion **05/11/2000**: Approval of Beneficial Occupancy of linen rooms at loading dock **05/12/2000**: DOI issues Electrical Certificate of Completion for linen area **05/22/2000**: Owner approves Part A Change Order G-32 for $72,737	**06/12/2000**: Owner approves Part A Change Order G-33 for $16,308, P-19 for $13,468 and H-20 for $31,371 **06/19/2000**: Beneficial Occupancy for emergency generator and fuel tank enclosure **06/21/2000**: Owner approves Part A Change Order H-21 for $123,089 **06/26/2000**: Surety companies notified of late schedule **06/30/2000**: Begin withholding liquidated damages **06/29/2000**: Part A originally scheduled construction completion **06/30/2000**: UNCH gives notice of potential default due to non-performance
Correspondence	26	21	24	26	22	46

CON Schedule						
Part A Schedule	Construction Contract Extended					
Part A Actual	Construction					
Part B Schedule						
Part B Actual						
Timeline	**July 2000**	**Aug 2000**	**Sept 2000**	**Oct 2000**	**Nov 2000**	**Dec 2000**
Milestones and Other Important Dates	**07/05/2000**: Contract completion date extended from 03/01/2001 to 03/19/2001 due to weather **07/07/2000**: Owner approves Part A Change Order E-15 for $43,406, E-16 for $95,652 and E-17 for $55,116 **07/25/2000**: UNCH requests HKS to notify all prime contractors not to submit written verified claims until final payment is made on their contracts **07/28/2000**: Design Amendment #10 for $161,043	**08/11/2000**: Design Amendment #11 for $61,800 **08/29/2000**: Owner approves Part A No-Cost Change Orders G-34, P-20 and H-22; Design Amendment #12 for $375,750; 18 days added to General, Mechanical and Plumbing contract completion	**09/13/2000**: Surety companies notified of late schedule and withholding of funding **09/26/2000**: Owner approves Part A Change Order G-35 for $3,830	**10/02/2000**: Owner approves Part A Change Order G-36 for $19,481 **10/13/2000**: Owner approves Part A Change Order G-37 for $3,148 and E-18 for $43,715; 18 days added to Electrical contract completion **10/18/2000**: Owner approves Part A Change Order H-23 for $14,700 and H-24 for $1,493	**11/02/2000**: Informal hearing regarding withholding of liquidated damages **11/09/2000**: UNCH notifies HKS to delete scope of electrical work, UNCH forces will complete	**12/07/2000**: Owner approves Part A Change Order G-38 for $57,809 and E-19 for $85,458
Correspondence	47	25	57	34	43	9

CON Schedule						
Part A Schedule	Construction Contract Extended					
Part A Actual	Construction			Construction Overrun		
Part B Schedule						
Part B Actual						
Timeline	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	June 2001
Milestones and Other Important Dates	**01/10/2001**: Result of informal hearing-UNCH should refund withholdings for liquidated damages. If progress falls below 2% completion per month, UNCH may resume withholdings.	**02/08/2001**: Owner approves Part A credit Change Order P-21 for ($906), Change Order H-25 for $69,208 and E-20 for $11,897 **02/19/2001**: Owner approves Part A Change Order G-39 for $22,391	**03/01/2001**: Owner approves Part A Change Order G-40 for $28,434 **03/02/2001**: Design Amendment #13 for $375,750 **03/19/2001**: Revised Contract Completion date **03/20/2001**: Owner approves Part A Change Order G-41 for $78,295 **03/21/2001**: Owner approves Part A Change Order G-42 for $20,275 and H-26 for $2,837 **03/27/2001**: Owner approves Part A Change Order P-22 for $4,213	**04/16/2001**: Owner approves Part A Change Order E-21 for $73,994 **04/26/2001**: UNCH submits plan of action for completion of tower portion (Phase I) of project	**05/14/2001**: Owner approves Part A Change Order G-43 for $18,548 **05/23/2001**: HKS notifies contractors of schedule slippage, actual completion date moved from 05/23/2001 to 07/18/2001 **05/25/2001**: Owner approves Part A Change Order G-44 for $20,832 **05/30/2001**: Prime contractors instructed by owner to include premium time for all PC work in lieu of added days	**06/11/2001**: HKS notifies surety companies that contractors have failed to perform under terms of contract **06/20/2001**: Owner approves Part A Change Order E-22 for $222,177 and E-23 for $14,831
Correspondence	17	13	20	33	37	42

CON Schedule						
Part A Schedule						
Part A Actual	Construction Overrun					
Part B Schedule						
Part B Actual						
Timeline	**July 2001**	**Aug 2001**	**Sept 2001**	**Oct 2001**	**Nov 2001**	**Dec 2001**
Milestones and Other Important Dates	**07/06/2001**: UNCH resumes withholding liquidated damages from pay applications **07/18/2001**: Owner is prepared to perform or have performed punchlists for floors 5-7, primes have 15 days to complete	**08/06/2001**: HKS notifies surety companies that contractors have been served an Article 28 letter for floors 5-7 **08/15/2001**: Owner is prepared to perform or have performed punchlists for floors 2-4, cost will be deducted from contract **08/30/2001**: Media Event/Employee Sneak Preview	**09/08/2001**: Dedication ceremony	**10/09/2001**: Design Amendment #14 for $298,256 **10/16/2001**: Owner notifies designer to instruct Ellis-Don to remove Cleveland Construction from floors 2-7, owner will have work performed by other forces **10/26/2001**: HKS notifies surety companies that contractors have been served an Article 28 letter for the basement, ground, and 1st floor **10/30/2001**: HKS notifies contractors that access to project will be restricted. All punchlist items must be completed by 11/06/2001. Further access will be allowed by permission.	**11/02/2001**: Cleveland Construction allowed back in building. **11/05/2001**: All primes and subs restricted to basement after 6pm. Allowed on upper floors by permission only.	**12/11/2001**: Part A Inspection for Beneficial Occupancy **12/13/2001**: Owner approves Part A Change Order G-46 for $32,411 and G-47 for $7,644 **12/17/2001**: Part A Certificate of Electrical Completion **12/21/2001**: DFS advises UNCH that building is approved for licensure occupancy **12/21/2001**: Part A Certificate of Substantial Completion/Beneficial Occupancy
Correspondence	31	59	51	75	45	16

CON Schedule			
Part A Schedule			
Part A Actual	Construction Overrun		
Part B Schedule			
Part B Actual			
Timeline	**Jan 2002**	**Feb 2002**	**Mar 2002**
Milestones and Other Important Dates	**01/30/2002**: Owner approves Part A Change Order E-24 for $15,703	**02/14/2002**: Owner requests primes to begin Phase II of project as of 03/16/2002 **02/21/2002**: Owner approves Part A credit Change Order E-25 for ($44,345)	**03/06/2002**: Construction Management Letter Agreement Amendment #1 for $438,533 **03/22/2002**: Construction Management Letter Agreement Amendment #2 for $943,422
Correspondence	22	13	
Source: Compiled by OSA from SCO records			

Summary of Issues Identified in Public Meetings and Meetings with Professional Groups

To identify issues surrounding the State construction process and the procedures used by the State Construction Office, the Office of the State Auditor held a series of four public meetings across the State. Meetings were held in Durham, Greenville, Huntersville, and Marion. Members of the construction industry were invited to discuss with a panel composed of personnel from the Auditor's Office, the Department of Administration, the Department of Insurance, the Labor Department, and the State Construction Office any issues or concerns surrounding:

1. **SB914 Changes**
   - Communication of changes
   - Rules for pre-qualification of contactors; criteria for selection
   - Use of single prime vs. multiple primes; costs
   - Construction manager at risk process
   - Accuracy of project cost projections

2. **Process for plan reviews**
   - Purpose of reviews
   - Sequence of reviews
   - Schedules for design phase of projects
   - Coordination of reviews between SCO and DOI; timeframes

3. **Contract questions**
   - Include DOL-OSHA requirements
   - Include design work fees, payment schedules
   - Specify use of formal Notification of Changes
   - Require recovery schedules if project falls behind schedule

4. **Inspection and close out issues**
   - Number, type of inspections required
   - Require close out within 45 days
   - Look at State's ability to enforce contract requirements
   - Strict enforcement of liquidated damages provisions

5. **Use of HUBs**
   - SB914 HUB requirements
   - Data collection / analysis
   - State's role in use of HUBs
   - Innovations that may help HUBs

Subsequent to those meetings, the panel members met to discuss the issues raised during the public meetings and to offer suggestions addressing them.

Additionally, the Auditor's staff met with representatives from the American Institute of Architects-North Carolina, the NC Association of Plumbing, Heating, Cooling Contractors, Inc., the Carolina Association of Minority Contractors, the NC Association of Electrical Contractors, the Professional Engineers of NC, and the American Subcontractors Association of the Carolinas. Each of these discussions covered the broad issues outlined above. The following is a summary of the major points from all these sources.

SB914 Changes:

- SCO has done a good job providing information and guidance on new construction law changes.
- Local governments and designers seem to be interpreting changes differently than SCO; concern that language not consistent for local government
- Question of whether SB914 language allows landscape architects to legally do things they are not qualified to do.
- Construction manager at risk confusing; not sure of role, breadth of authority, how SCO is involved.
- Using out of state employees not prohibited by 914.
- CM at risk forces bid shopping; no uniformity, especially for pre-qualification by CM; could impact liability and costs; pre-qualification said to be at owners discretion.
- University and municipal owners seem to be more interested in developing guidelines and documenting compliance with little focus on whether the guidelines result in HUBs getting more work.
- Contractors saying that it requires too much paperwork and they have problems getting data from subs.
- No substance in good faith criteria; gives points for things that don't get HUBs involved
- Nothing in 914 addresses private universities receiving state $; concern that privates won't use HUBs unless forced
- Projects broken into smaller pieces provide more HUB opportunities but the current bidding process and late contractor payments affect HUBs' ability to obtain and complete construction projects.
- Holding retainage hurts HUBs; cash flow critical
- Hold primes to schedule so don't squeeze subs; notify subs timely when expected to start their portion of job, not day before

Design Review Process:

- Incomplete and late design submittals by designers, understaffed SCO and DOI review sections and owner requested changes contribute to extended design review.
- SCO has problem keeping qualified staff because of low pay and heavy workloads; also issues with DOI.
- Answer is more realistic time budgets for the planning stages of the projects.
- Designers often ask mechanical contractors to do final drawings for their segments of projects
- Universities will require designer to design for a particular brand of equipment; SCO tries to control this so bids fair to all.

- SCO provides liaison between designers and owners, role needed
- Major issue: need more consistency in reviews, all reviews should be based on guidelines
- SCO has done good job on parts of construction manual; on web
- There are redundancies in review process; comments from DOI, SCO, DFS may counteract each other, who to listen to, how many times to redo?
- More duplication seems to be between DOI and local reviewers.
- Way to expedite reviews might be to explore an "express review" process such as is being used by Wake and Mecklenburg counties.

Contract Questions:

- Major issue: Engineers' professional code says they can't participate in bidding for jobs; State's procurement statutes require bid then selection of "most qualified"
- Need to accelerate bid process, awarding of contract; could take up to 3 months
- Requests for bid specifications not always clear
- Amendments being sent out on day bid is due
- When a $ limit is set on a project first, this may result in professionals doing research on a method (and charging for that research) even though there is only money to do it a certain way— SB914 options for new construction methods
- Many of the innovative designs cost money up front but save money in the long run
- On informal projects, owners accept low bid knowing its too low; that will allow change orders, force price up; accepting realistic bids from start would save $
- Renovation project harder; not sure what "existing conditions" will have to deal with; contingency $ now set at 5%; should be 10% for renovations
- SCO needs to change the contract to include requirements for recovery schedules for projects and formal notification of changes
- Recovery plan is very useful if used correctly to force party who caused delay to come into schedule
- Not sure any retainage needed since all contractors must be bonded
- Would get better price if didn't hold retainage because takes so long to get final payments Subcontractors pay requirements need to be enforced and sanctions applied for non-compliance; State should be serious about enforcing liquidated damages.
- Contractors don't think State is serious about current liquidated damages clause.
- State should consider including a second set of liquidated damages in contracts.

Inspection and close out issues:

- SCO's lack of final report submission deadlines, final inspection deadlines and adequate monitoring staff results in lengthy project close outs and contractor exposure to forced extended warranties.
- Most of extended time to close out because it takes architects/engineers so long to complete the final report
- Contracts should require the contractor to submit all documents within a specified time frame for close out—maybe 45 to 60 days after the final inspection.
- SCO normally has representative at all construction meetings
- Projects should be closed out when owner takes occupancy
- Most time reason state doesn't enforce liquidated damages is because of owner interference
- If contract requires substantial liquidated damages, then that cost is added to bid
- Major issue: subs charged prorated share of liquidated damages even if they did nothing wrong
- SCO should use contractor evaluations to keep "bad" contractors from bidding; allow subs to evaluate gen. / prime / designer
- SCO has process for "blacklisting" a contractor that does not perform to standards; but rarely used

The following were possible solutions offered by these groups:

- Require prequalification for all subs who might work on jobs; allow first tier or main sub to hire from approved list.
- Need to scope out smaller packages to allow HUBs to bid; require prime /CM to pass on supplier costs (for bulk purchases) to subs so HUBs can compete on price; require "good faith" report from all contractors who bid, not just selected contractor
- Contractor selection should be based on qualification, not on cost, so no one should quote fees until after the selection.
- Require CM submit HUB plan prior to selection; make it part of screening process
- Require more details on Affidavit C of what actually done to involve HUBs
- Mandatory code courses for industry professionals as way of minimizing number of design review comments; licensing boards should be training their members regarding specific areas like code changes.
- Use military model. Let owner agency coordinate all reviews at set points. Plans sent in and reviewed by all at same time; comments consolidated; Owner coordinates joint meeting with all reviewers and designer where questions/issues discussed and decided on same day. Allows designer to know in advance how many review trips to plan and cost.
- Have all subs evaluate gen./ prime/ designer for each job, use evaluations to weed out bad contractors.

- Require person who does final inspection to be the same person who did the periodic inspections.
- Prohibit any contractor who has “bad” rating from bidding for set period of time—maybe 3 years
- Make designer responsible for assuring project done as designed; add sanctions to contract; relieve some of workload for SCO.
- Go to penalty / bonus clause in contract instead of liquidated damages; develop way to penalize party who caused delay in closeout
- Enforcement of the contract provisions should rest with the designer.
- Release retainage as each trade finishes its work.

Source: Compiled by OSA

(This page left blank intentionally.)

Summary Of PricewaterhouseCoopers Findings On UNC Women's and Children's Hospitals Project

Project variances, costs overruns, and project delays on hospital projects are not uncommon due to their inherent complexity

- Hospital projects require a high level of coordination among designers and contractors during planning and construction, and invariably changing technologies, changing hospital leadership, and changing service needs increase hospital construction costs over estimates – especially estimates that are several years old.

- PWC's experience has shown that construction overruns between 5% - 10% would be within the normal and expected range for hospital projects of the size and complexity of the Women's & Children's Hospitals.

- Delays are also not uncommon for hospitals. In most instances, hospital project delays result from time extensions necessary to complete owner-requested changes.

Several areas of the project were significantly over budget, contributing to the $25 million variance.

- Consultant fees increased 58% due to extended Contract Administration costs and the addition of an unbudgeted Contract Manager to supplement Plant Engineering staff

- Construction contract costs increased 26% due to higher than expected construction bids; an estimated $9 million in change orders, and $6 million in self performed work.

- Equipment costs have not increased, but documentation of remaining expenditures is incomplete and decentralized.

- Financing costs increased 150% from the estimated $6 million in financing costs for the planned $81 million bond issuance. This increase is due to the increase in the bond amount and an estimated $5 million in additional capitalized interest expenses due to the delay in project completion. While part of the Project variance, total bond financing costs did not change and the interest would have been paid by the Hospital in any event. These costs are not considered a Project cost overrun.

Planning and Design Issues contributed to the cost overruns and the time delays

Initial Construction Budget

- Records did not indicate that the 100% CD final cost estimate was conducted by a third-party cost estimator, but was an update of a previous DD cost estimate. The overheated market conditions in 1997 do not appear to be taken into account the construction budgets.

Initial Phasing Plan

- The "suggested" phasing plan provided by the designer appears to be the cause of significant project dispute.

- Time delays due to phasing interpretations led to significant project completion extensions, impacting both project closeout and consulting service costs.

Initial Estimate of Construction Duration

- Immediate past experience with Neurosciences building would suggest the Women's and Children's Hospitals would require 4+ years to complete.

- Prior hospital experience with a multi-prime contract, and the complex program requirements of the Women's and Children's Hospitals, would also indicate a project duration of greater than three years.

Site Coordination and Change Orders

- A review of large (greater than $50 thousand) Proposed Changes by Estimate Technology and validated by PWC's review indicates a high level of coordination issues with existing site conditions.

The Multi-Prime Contract also contributed to the project cost overruns and time delays

Multi-Prime Contract

- Multi-Prime contracts place significant risk on the owner due to higher level of oversight and contractor coordination.

- Multi-prime contractors have varying incentives to meet schedule milestones and limited incentive to resolve intra-team issues, and difficulty to work as a team may arise because of potential claim disputes.

- Multi-prime contracts require full-time project management expertise to oversee construction and manage outstanding issues to their conclusion.

- Single-prime or Contractor-at-risk are preferred delivery methods and are now approved by the state.

Construction Administration

- Limited continuous, dedicated project management oversight from planning through occupancy, necessary to effectively manage complex multi-prime project team.

- Construction administration responsibility for $140 million project placed on Plant Engineering Director with limited project management support. A dedicated staff of full-time internal construction managers or a full-time external construction manager would have served the hospital well on this complex and critical project.

- Role of existing external Construction Manger limited to extension of staff for under-staffed Plant Engineering group instead of full construction management responsibility for monitoring all construction activities on behalf of the owner.

Contractor Execution of Multi-Prime Contract

- Records indicate numerous work coordination issues among contractors, probably due to limited intra-team accountability characteristic of multi-prime contracts.

- Although efforts were made to work as a team initially, limited schedule coordination led to issues regarding non-conforming work.

- Failure to protect work, failure to supervise sub-contractors, and failed inspections also contributed to project delays.

Source: PricewaterhouseCoopers Consulting, University of North Carolina Health Care System, “Management Assessment of Women’s and Children’s Hospitals Project. July 15, 2002”

(This page left blank intentionally.)

ACCOMPLISHMENTS OF THE STATE CONSTRUCTION OFFICE

Major Projects
The State Construction Office, in a dual role, over the last ten years, successfully administered approximately $185 million in contracts for the construction of major projects in the government complex. Major projects included: New Public Education Building, New Revenue Building, Govt. Complex Boiler Plant, Old Education Bldg. Renovation, Old Revenue Bldg. Renovation, Multi-Level Parking Deck #75, Multi-Level Parking Deck #76, and Museum of Natural Science.

Implementation of the Facilities Condition Assessment Program
In 1987, the Dept. of Administration was authorized by the General Assembly to conduct an operations and maintenance study of all State buildings. In 1988-89, Phase 1 and Phase 2 reports were issued which recommended a "Facility Condition Assessment Program". This started in 1990 with a manager and 3 team members, employed by the State Construction Office. A second team was added in 1993. All buildings 3,000 sq. ft. and over, plus infrastructure items, are assessed on a 3-year repeating cycle, and reports are issued with recommendations for correction of deficiencies, with cost estimates and priorities. Energy assessments are also provided for state facilities with this staff. Other States have adopted similar programs based on the North Carolina model.

Natural Disaster Assessments
Assistance from staff of the SCO has been provided to the Division of Emergency Management, FEMA, and other agencies on numerous occasions following natural disasters in N. C. This included assistance with damage assessment, debris removal, demolition, and/or installing infrastructure for temporary housing sites, in order to help local and state agencies recover and be reimbursed for eligible expenses. Major events when this occurred include Hurricane Hugo in 1989, Hurricane Fran in 1996, Western Floods of 1998, and Hurricane Floyd in 1999. Extensive staff involvement occurred, and the restoration of temporary housing sites following Hurricane Floyd is still ongoing.

Y2K
The State Construction Office served as the coordinator between state agencies and universities and the Statewide Year 2000 office to ensure that all essential state-owned facilities and building systems would be Y2K-compliant at critical dates near the beginning of 2000. The State Construction Office saved the State approximately $1.5 million in consulting fees by coordinating this work using in-house staff. There were no system failures as a result of this effort with a smooth transition into the year 2000.

Security Upgrades
The State Construction Office staff administered the assessment, report preparation and distribution, and the implementation of recommendations, relating to security improvements to the buildings and grounds for the downtown government complex as a result of the September 11, 2001, terrorist attacks. The implementation of these measures is continuing, using a limited source of funds.

Life Cycle Cost Analysis

The State Construction Office implemented a life cycle cost analysis manual for State owned facilities in 1986. The Legislature mandated that all buildings constructed for the State, 40,000 square feet or larger, be designed on the basis of life-cycle cost. The manual was updated in 2001, when the Legislature changed the requirement to facilities, 20,000 square feet or larger. The goal is to ensure that designers maximize the long-term benefits to the State, within the confines of capital appropriation, since the cost imposed on the State over the life of any building far exceeds the initial construction investment.

Awards

Sir Walter Raleigh Awards – given by the City of Raleigh Appearance Commission:

- Governmental Complex Boiler Plant, 1992
- Heck Andrews House, 2000
- Museum of Natural Science, 2000
- Dorton Arena, 2001

The American Institute of Architects, Charlotte Section, NC Chapter, Honor Award

- NC Department of Revenue Building, 1988

Precast/Prestressed Concrete Institute, Design Award

- Department of Administration, Deck I, 1992

State Capital Foundation, Certificate of Appreciation

- State Capital Restoration, 2000

Capital Area Preservation Anthemion Award

- L.L. Polk House, 2002

Guidelines for Recruitment and Section of Minority Business for Participation in State Construction Contracts

In 1989, the State adopted a verified ten percent (10%) goal for participation by minority business in the total value of work for each state construction project. The State Construction Office assumed the responsibility to develop, establish, and implement the State's guidelines for participation of minority businesses in state construction projects. These guidelines and policies were successfully used until Legislative revisions were adopted in 2001 that transferred much of the responsibility to the HUB office. Since 1989, the State has achieved 10% participation, thereby meeting the goal established by the Legislature. The program instituted by the State Construction Office was never challenged in court and the guidelines are still in effect providing a sound and solid approach to allow all the businesses in the State to participate in the State Capital Improvement program.

Construction of State Prison Facilities

In 1993, the General Assembly transferred the responsibility for the Prison Bond Construction program to the State Construction Office. The State Construction Office had authority to contract for and supervise all aspects of administration, technical assistance, design and construction of prison facilities. The program initially started with $87.5 million in bond funds and in subsequent years, additional projects were funded under the supervision of the State Construction Office. Overall, the State Construction Office, administered $254 million in construction, which involved 60 projects statewide

and 200 individual contracts. Projects were completed on time and within budget meeting the program needs of the Department of Correction.

State Construction Conference
For the last 21 years, the State Construction Office has hosted and coordinated the annual State Construction Conference. The purpose of the conference is to provide information about the state's construction process and promote a better understanding of the state's capital improvement program. The conference began with less than 200 in attendance and has maximized attendance with over 600 attending the annual conference.

InterSCOPE
InterSCOPE is the State Construction Office's project and workflow tracking database. Development began in 1997, to replace the former, non-Y2K compliant database. Enhancements due to changes in technology continue. A contractor is currently performing a technical analysis of the system to plan for the implementation of further development. The basic system developed was found to be very sound and has an excellent configuration with the flexibility to change databases as required.

The 2000 Education Bond Program
The 2000 Education Bond program was begun in November 2000 with $3.1 Billion dollars to be allocated as $2.5 Billion to the University System and $600 million to the Community College System over a six year period. The bond program is entering the third year of the six year program with the State Construction Office having reviewed, approved and monitored projects totaling approximately $311 million expended to date of the $900 million currently under contract.

Project Totals
Since 1988, the State Construction Office has contracted, reviewed, approved and monitored construction on 6,400 projects worth $9,334,286,000. (Not adjusted for inflation).

Pilot Green Building Projects

The State Construction Office is overseeing the Energy Conservation Pilot Program. The program requires a minimum of 10 state building projects be designed, constructed and evaluated according to The High Performance Guidelines: *Triangle Region Public Facilities, Version 2.0*. This program will have long term benefits to the State through the establishment of energy efficient and environmental friendly design of State facilities.

Source: Department of Administration, State Construction Office

(This page left blank intentionally.)

North Carolina
Department of Administration

Michael F. Easley, Governor — Gwynn T. Swinson, Secretary

December 6, 2002

Honorable Ralph Campbell
Office of the State Auditor
20601 Mail Service Center
Raleigh, North Carolina 27699-0601

Dear Mr. Campbell:

We have reviewed the findings, conclusions, and recommendations that resulted from your audit of the North Carolina State Construction Office (SCO). You will find our response attached.

The Department of Administration places great value in the opinions of our customers and stakeholders. Therefore, our management team reviewed the audit report with open minds and in a spirit of collaboration between two State agencies. Notwithstanding any differences of opinion, we have declined to take exception to any specific findings or conclusions in the report. We have focused instead on how each of your recommendations can help us improve SCO's overall operation.

We believe our reply demonstrates a high level of action and accountability. In the attached State Construction Office Response to Performance Audit Recommendations, you will find over 80 individual action items that we believe will address each recommendation in a positive and business oriented manner.

We believe that the ultimate value of an audit is reflected in the audit team's objective review of SCO's operations and in the future improvement of business practices pursuant to the final report. You and your staff have done a very thorough job of reviewing the State Construction Office with objectivity, professionalism, and expertise. The Department of Administration's management team will now do our part by transforming the audit recommendations into results.

Thank you for the opportunity to work with your agency on improving our customer services and business practices. We look forward to future collaborative efforts between our agencies. We would appreciate you forwarding us any additional comments you may receive so that we may also use them as a basis for improvement as well.

Mailing Address:
1301 Mail Service Center
Raleigh, N.C. 27699-1301

Telephone (919) 807-2425
Fax (919) 733-9571
State Courier #51-01-00
e-mail: Gwynn.Swinson@ncmail.net

Location:
116 West Jones Street
Raleigh, North Carolina

An Equal Opportunity/Affirmative Action Employer

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

(This page left blank intentionally.)

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

State Construction Office
Response to Performance Audit Recommendations

Purpose

- To provide a written response to the recommendations contained in the final draft of the Performance Audit Report.

General Comments

- The State Construction Office ("SCO") welcomes the opportunity to improve by using the audit results to increase efficiency and effectiveness of the program.
- Many of the responses are contingent upon the actions of the State Building Commission, an entity independent from the State Construction Office. As such, prudent management dictates that certain options be delayed until appropriate decisions are made by the State Building Commission (SBC).
- Some responses are contingent upon the actions of the General Assembly, the State Budget Office, OSP, or the DOA Human Resources Management Division.
- The SCO will submit a monthly report on accomplishments toward these goals to the Department of Administration's senior management team.

Recommendations and Responses

Objective 1: To examine SCO's project management function, including identification of the number and type of projects handled, procedures used, responsibility of other state agencies, etc.

SCO's DESIGN REVIEW TRACKING SYSTEM DOES NOT ACCURATELY COMPUTE THE BACKLOG.

1. Recommendation: SCO should formalize its review deadlines and develop design review performance standards for all reviewers based on those deadlines. Additionally, SCO should correct the backlog calculations to redefine the backlog.

Response:

Formalize review deadlines

- ✓ On 11/4/02, obtained copy of historical data reflecting projects and actual completion times and began the review process, which is ongoing.
- By 1/1/03, analyze historical data to determine past completion time statistics.
- By 3/1/03, define an interim review schedule timeline.
- By 4/1/03 request additional staff, if any, to allow the SCO to comply with the review schedule timeline.
- By 7/1/03, add formal schedule to the State Construction Manual.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

Develop individual design review performance standards

- By 12/20/02, develop definition of a good standard, ie: schedule times, quality, consistency.
- By 4/1/03, develop draft standards.
- By 10/1/03, test the standards.
- By 12/1/03, finalize the standards.
- By 2/1/04, incorporate standards into the Policy and Procedures manual.

Correct backlog calculations

- ✓ On 10/29/02, defined "backlog."
  - ✓ Backlog is defined as "projects that have exceeded pre-defined review schedule timelines."
- ✓ On 11/4/02, obtained information on backlog reports included in auditors report
  - ✓ On 11/1/02, reviewed information in auditor's report with Mr. Farouq of SCO.
  - ✓ On 11/4/02, obtained data for analysis of information on backlogs (see recommendation #1).
- By 2/1/03, analyze information in auditor's report and recommend modifications.
- By 4/1/03, modify project status/tracking system to include revised backlog calculations.

SCO'S DESIGN REVIEW TIMES EXCEED INFORMAL DEADLINES

2. Recommendation: SCO management should determine whether the informal deadlines need to be adjusted. Further, management should explore the feasibility of implementing an express plan review process for state construction projects. Lastly, Department and SCO management should identify any legislative changes needed to allow implementation of an express review process. If the Secretary decides to pursue an express review process, then she should request from the General Assembly the necessary legislative changes.

Response:

- ✓ Informal deadlines are addressed in response to recommendation #1.
- By 12/20/02, query other states and county/local governments on use of express plan reviews.
- By 1/15/03, analyze data received from other states and county/local governments relating to express plan reviews.
- By 4/15/03, determine feasibility and applicability of SCO use of express plan reviews.
- By 7/15/03, if express plan reviews are found to be feasible and applicable then determine criteria for express plan reviews.
- By 8/15/03, if express plan reviews are found to be feasible and applicable, and if legislative change is needed, then submit requested changes to General Government Subcommittee.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

SCO HAS INADEQUATE TECHNOLOGY AND DATABASES CONTAIN INVALID/INCOMPLETE DATA.

3. Recommendation: SCO management should identify all capital improvement projects that are still on-going from 1999 and verify that INTERSCOPE contains accurate and complete data for those projects, correcting as necessary. Efforts should continue to fully develop INTERSCOPE to better serve SCO clients and improve oversight of state construction projects. Once the consultant's evaluation is completed, Department management should request funding to complete INTERSCOPE development. Efforts to upgrade personal computers for the staff should also continue.

Response:

- ✓ On 10/15/92, determined schedule for INTERSCOPE implementation. (DF2)
- ✓ On 10/15/02, defined process for finding errors.
  - ✓ Errors in the current database will be found by continual review of data, as projects proceed, by all data entry and management personnel.
- ➢ Starting 12/1/02, provide monthly INTERSCOPE status reports to divisional management.

THE CURRENT CONTRACTOR/DESIGNER EVALUATION PROCESS IS NOT EFFECTIVE.

4. Recommendation: The Commission should review the established evaluation criteria for appropriateness. Specific procedures should be established for handling designer individual project ratings at or below 2.5 or cumulative designer rating at or below 3.5. A clear definition of "final acceptance" and "final report' dates should be included and used consistently by the Commission and SCO staff. SCO management should establish clear procedures for conducting and maintaining the evaluation process. Once the procedures have been clarified the Commission should use the evaluation results to determine the continued qualification of all contractor and selection of designers for state construction work.

Response:

- ✓ On 10/16/02, obtained documentation on change in evaluation procedures for design and contract that was submitted to the Commission. Obtained copy of revised contractor evaluation procedures dated May 22, 2001. (DF3)
- ✓ On 10/16/02, obtained documentation that the Commission Subcommittee met and revised the form. Obtained copy of SBC May 22, 2001, minutes reflecting submission of procedures. (DF5)
- ✓ On 11/6/02, obtained documentation that the revised form was presented to the full Commission for consideration.
  - ✓ On 10/16/02, obtained copy of SBC June 27, 2001, minutes reflecting submission of procedures and approval from SBC for modified procedures to go through rule making process. (DF4)

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

- ✓ On 11/6/02, obtained documentation that contractor evaluation procedures have been submitted to DOA General Counsel for rulemaking. (DF7)

- By 12/12/02, obtain approval from General Counsel on evaluation rules.
- By 1/31/03 present recommendation #4 to the Commission for action.
  - SBC should review the established evaluation criteria for appropriateness.
  - SBC should define a procedure for handling designer individual project ratings at or below 2.5 and cumulative ratings at or below 3.5.
  - SBC should define final acceptance date.
  - SBC should define final report date.
  - SBC should define procedures for conducting the evaluation process.
  - SBC should define procedures for maintaining the evaluation process.
  - SBC should use evaluation results to determine continued qualification of all contractor and selection of designers.
- Monthly after 1/31/03, track the progress of the Commission in responding to recommendation #4.
- By 1/31/03, the SCO should offer staff assistance, by name or title, to the SBC to assist in responding to recommendation #4.
- Monthly, starting December 1, 2002, review INTERSCOPE for delinquent designer and contractor evaluations. See INTERSCOPE schedule in response to recommendation #3.

CHANGE ORDERS DO NOT CONSISTENTLY REFLECT WHO INITIATED CHANGES.

5. Recommendation: The Commission and SCO should review the change order process with the Attorney General's Office to determine any legal implications with requiring identification of the party causing the change order. SCO staff should not approve change orders unless the proper change order form has been fully completed for documentation purposes.

Response:

- By 1/31/03, present recommendation #5 to the SBC and appropriate legal counsel for action.
- By 1/31/03, the SCO will offer staff assistance, by name or title, to the SBC to assist in responding to recommendation #5.
- Monthly after 1/31/03, track the progress of the SBC in responding to recommendation #5.

FACILITY MANAGEMENT PERSONNEL ARE NOT INVOLVED IN THE REVIEW OF STATE CONSTRUCTION PROJECTS.

6. Recommendation: The Commission and SCO management should consider modifying SCO's procedures to require involvement of facilities management personnel in the plan review process for the purpose of identifying maintenance issues before construction. This should reduce the number of maintenance problems, help to

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

standardize the infrastructure systems for state buildings, and save the State unnecessary maintenance costs.

Response:

- ✓ On 11/4/02 requested clarification from the Auditor on the following question: "In recommendation #6 it is proposed that the SCO involve facilities management personnel in the plan review process. Is the intent to involve DOA facilities management in the review process or all facility management entities in the review process of their related plan reviews?"
  - ✓ On 11/4/02, sent e-mail to Spencer Phillips regarding follow up on informal response stating that intent was for all facilities management entities to be involved. (DF8)
  - ✓ On 11/4/02, received clarification from Janet Hayes, Auditor's Office, stating that it was their intent to include all facilities management entities. (DF8)
- ➢ By 1/15/03, draft a procedure for "facilities management" involvement in the plan review process to ensure that maintenance related issues have been considered.
- ➢ By 3/15/03, finalize a procedure for "facilities management" involvement in the plan review process to ensure that maintenance related issues have been considered.
- ➢ By 6/30/03, present the facilities management plan review process to the SBC for consideration.

Objective 2: To review SCO's role in the Higher Education Bond projects and other decentralized projects..

DECENTRALIZATION OF CONSTRUCTION PROJECTS OVERSIGHT IMPEDES CONSISTENCY AND INFORMATION FLOW.

7. Recommendation: The General Assembly should evaluate the effect of legislation decentralizing the oversight responsibilities for state construction projects. If the State Construction Office is to provide data on the overall State capital improvement plan, consideration should be given to requiring periodic status reports of all decentralized projects to SCO and the Commission. This change would ensure a better flow of information to the General Assembly, allowing all construction projects paid for by State funds to be reported in a consolidated format.

Response:

- ✓ On 11/4/02, requested clarification on which legislative entity should receive this recommendation.
  - ✓ On 10/14/032, sent E-mail to Marilyn Chism. (DF#1)
  - ✓ On 11/04/02, sent e-mail to Auditor's Office requesting clarification on which legislative entity should receive this recommendation. (DF8)
  - ✓ On 11/04/02, received e-mail from Auditors Office stating that they submit report to General Government. (DF8)
- ➢ By 4/1/03, forward recommendation #7 to the Joint General Government Committee.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

- Monthly after 4/1/03, track the progress of the legislature in responding to recommendation #7.

Objective 3: To review SCO's implementation of and compliance with policies on use of Historically Underutilized Businesses (HUBs).

PRIOR TO SB914, SCO HAD NO FORMAL PROCEDURE IN PLACE FOR TRACKING THE PAYMENT OF HUB CONTRACTORS

8. Recommendation: SCO should proceed with plans to compare the proposal projections of HUB participation to the actual use. These figures should then be reported to the HUB Office for determination of compliance with GS 143-128.2 (a).

Response:

- ✓ On 11/8/02, obtained documentation that the HUB participation database was established and date of database establishment. Database was established on 9/30/02. (DF14)
  - ✓ On 11/8/02, obtained sample copy of the type of data or printout of data from the HUB participation database. (DF15)
- ✓ On 11/7/02, asked HUB Office the specific date of the HUB participation quarterly reports. HUB responded that participation quarterly reports are to be sent in 30 days after end of quarter (DF11)
- By 1/30/03, start quarterly HUB participation reports to the HUB Office.
- By 4/30/03, Quarterly HUB participation report to the HUB Office.
- By 7/30/03, Quarterly HUB participation report to the HUB Office.

THE GOOD FAITH EFFORT POINT SYSTEM MAY NEED FURTHER REVISION.

9. Recommendation: The Secretary, SCO, and the HUB Office should consider continuing evaluation of the points system used to determine good faith effort. Consideration should be given to continued use of a committee composed of general contractors, construction managers, and HUB owners to determine the requirements and related points to use in determining good faith effort.

Response:

- By 01/31/03, the Secretary, SCO and HUB Office will establish a committee or advisory board comprised of general contractors, construction managers, HUB coordinators and HUB owners to review and evaluate the GFE points.
  - The Secretary, SCO and HUB Office will continue evaluating the Good Faith Efforts (GFE) Point System as recommended. In evaluating the GFE points, the committee or advisory board will look at patterns and trends of good faith efforts that are typical used by the contracting community to determine and re-evaluate if the GFE points need to be re-assigned or re-distributed.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

- By 09/01/03 the GFE point review committee or advisory board shall report to the Secretary on findings and make recommendations, if any, on changing the GFE points.

THE DEPARTMENT OF ADMINISTRATION'S HUB OFFICE LACKS ADEQUATE STAFF.

10. Recommendation: Department management should continue its efforts to fill the positions approved in SB914 as soon as possible. Purchase and Contract along with the HUB Office should complete the development of Vendor Link and establish procedures for contracting HUBs who do not have Internet access.

Response:

Filling of Positions

- ✓ Auditor's reports stated one clerical position filled whereas of this report two were filled.
- ✓ On 11/19/02, extended offer for HUB Outreach Specialist Position #138.
- ✓ On 11/19/02, interviews completed for HUB Compliance Position #139.
- By 12/16/02, extend offer for HUB Compliance Position #139.
- ✓ On 11/05/02, advertised for Statistician position #145.
- ✓ On 11/19/02, Statistician Position #145 closed.
- By 12/20/02, Statistician position #145 offer extended.
- By 1/24/03 have all HUB positions filled.

Development of IT HUB Reporting System and Enhancement of Vendor Link

- On 5/8/02, the HUB Office formed a Working committee comprised of representatives from the DOA HUB Office, State Construction Office, MIS, DOT, municipalities, minority trade association, local unit of government association, university system and community college system developed system requirements the HUB Reporting System and enhancements to Vendor Link, vendor database.
- Bu 12/10/02, commence testing for new IT system for HUB Reporting.
- By 01/06/03, target rollout of the new IT system for HUB Reporting IT system for state agencies and public entities.
- By 12/10/03, commence testing for Vendor Link enhancements.
- By 01/06/03, target rollout date for Vendor Link enhancements.

PROFESSIONAL GROUPS SUGGEST OTHER METHODS TO GET HUBs INVOLVED BE CONSIDERED.

11. Recommendation: The General Assembly should consider the suggestions made by the professional groups for increased HUB and subcontractor participation. The Secretary of the Department of Administration and the State Construction Office should take the lead in exploring the feasibility of suggestions that are not already included in the guidelines. For areas already addressed by legislation or in the guidelines, SCO should implement procedures to assure compliance. The HUB Office should develop a method to assure that all HUBs are aware of guidelines, including those who do not have Internet access.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

Response:

- By 7/1/03, the SCO, with input from other entities, will determine the feasibility of the suggestions made by the professional groups relating to increased HUB participation.
- By 10/1/03, the HUB Office will work with SCO to inform the contracting community, HUB and general contractors of these suggestions, new guidelines and/or procedures.
  - To facilitate providing outreach to HUB owners who do not have access to the Internet, the HUB Office will consider methods of outreach such as Statewide Information Sessions, Information Sessions located in Raleigh and teleconferencing.
  - The HUB Office and SCO will incorporate the training and/or dissemination of this information into on-going activities already conducted or provided by our offices, such as the State Construction Annual Conference, HUB Vendor Orientation Sessions, "How to do business with the State" workshops, etc.
  - HUB Office will utilize the Minority Business Enterprise (MBE) programs and minority business resource organization as conduits to get information to MBE and HUB firms certified with their respective organizations.

Objective 4: To review the organizational structure and staffing levels to determine sufficiency in performing required functions.

LACK OF WORKLOAD MEASURES IMPEDES SCO'S ABILITY TO DETERMINE STAFFING NEEDS.

12. Recommendation: SCO management, in conjunction with Department personnel, should give priority to developing and implementing workload measures. Once implemented, management should use the workload data to support staffing requests.

Response:

- ✓ On 11/4/02, the SCO managers were charged with defining workload measures and setting schedules for implementation.
- By 4/1/03, define workload measures.
- By 9/1/03 validate and test workload measures.
- By 11/1/03, modify workload measures.
- By 1/5/04 implement workload measures.

SCO DESIGN REVIEW STAFFING LEVELS APPEAR TO BE INADEQUATE.

13. Recommendation: Department and SCO management should evaluate the need for more design reviewers. Data should be collected on workloads, as well as the average amount of leave time used by Design Review staff. Once this data is accumulated and analyzed, management should make a decision on the need for more staff.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

Response:

- By 12/20/02, ensure that all data is being entered correctly and completely and start six-month collection of data needed for analysis.
- By 6/30/03, assess correct data input and initial results. Verify that project load and staffing are considered.
- By 12/31/03 incorporate standards into the Policy and Procedures manual and implement new standards and measures.

SCO PROFESSIONAL STAFF SALARIES ARE NOT COMPETITIVE.

14. Recommendation: SCO and Department management should pursue funding for the approved salary upgrades. Management should also explore alternative methods of increasing staff salaries such as the "fast track review" process discussed on page 16 (of the audit report).

Response:

- ✓ On 11/7/02 documented previous attempts at upgrading salary (DF9).
  - By 12/1/02, resubmit request to upgrade salaries to the Office of State Budget and Management and the General Assembly's Fiscal Research Division.
  - By 6/1/03, the SCO, in conjunction with the DOA HRM, OSP, and OSBM, will recommend alternative methods of increasing staff salaries including change in responsibilities and market conditions.

Objective 5: To review SCO's administrative functions, specifically internal controls, for compliance with laws and regulations.

LACK OF A FORMAL INTERNAL POLICIES AND PROCEDURES MANUAL HAMPERS SCO OPERATIONS.

15. Recommendation: SCO management should develop and maintain a comprehensive, formal manual of written policies and procedures detailing the daily operations and processes of each section. Management should train all employees on current policies and procedures and provide staff updates on a continuing basis. Management should also develop a plan for cross training employees.

Response:

- ✓ On 11/6/02, a team of DOA employees from the SCO was charged with developing a procedures manual and section timelines developed (DF10).
- ✓ On 11/6/02, an employee was assigned the primary responsibility for the coordination and oversight of policies and procedures development and maintenance.
- By 2/1/04, develop a comprehensive procedures manual for the SCO.
- By 3/1/04, all SCO employees will be trained on new policies and procedures.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

- Once the policies and procedures manual is completed, the State Construction Office will conduct an annual review of the manual to ensure applicability and reliability of information.
- By 5/1/03, positions for potential cross training will be identified.
- By 7/1/03, specific functions for the persons to be cross-trained will be identified and cross training will begin.
- By 12/31/03, managers will certified that the cross trainees are proficient in the relative tasks.
- By 12/31/03, a system will be in place to continually cross train employees and verify proficiency.

SCO IS NOT IN COMPLIANCE WITH STATE MOTOR FLEET POLICIES.

16. Recommendation: SCO should monitor its permanently assigned vehicle usage to ensure that the minimum mileage threshold is achieved and maintained. Further, SCO management should turn in a second vehicle to reduce costs.

Response:

- ✓ On 10/16/02, received report from MFM on miles used by SCO in various vehicles (DF12)
- ✓ On 10/16/02, clarified MFM policies with Danny Willis of MFM. Mr. Willis stated that if vehicles were not driven the minimum mileage agencies must justify, via memorandum to MFM, reasoning to retain the vehicle.
- ✓ On 11/6/02, analyzed current use of MFM vehicles by SCO and determined that only one vehicle (61757) out of nine fell short of the minimum mileage. (DF12)
- ✓ On 11/6/02, requested that SCO provide justification to MFM for retaining the vehicle thus complying with MFM policies. (DF13)
- By 12/20/02 SCO will provide justification to MFM for retaining vehicle number 61757.

The response from the Department of Administration has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

DISTRIBUTION OF AUDIT REPORT

In accordance with G.S. § 147-64.5 and G.S. § 147-64.6(c)(14), copies of this report have been distributed to the public officials listed below. Additional copies are provided to other legislators, state officials, the press, and the general public upon request.

EXECUTIVE BRANCH

The Honorable Michael F. Easley	Governor of North Carolina
The Honorable Beverly M. Perdue	Lieutenant Governor of North Carolina
The Honorable Richard H. Moore	State Treasurer
The Honorable Roy A. Cooper, III	Attorney General
Mr. David T. McCoy	State Budget Officer
Mr. Robert L. Powell	State Controller
Ms. Gwynn T. Swinson	Secretary, Department of Administration

LEGISLATIVE BRANCH

Appointees to the Joint Legislative Commission on Governmental Operations

Senator Marc Basnight, Co-Chairman	Representative James B. Black, Co-Chairman
Senator Charlie Albertson	Representative Martha B. Alexander
Senator Frank W. Ballance, Jr.	Representative Flossie Boyd-McIntyre
Senator Charles Carter	Representative E. Nelson Cole
Senator Kever M. Clark	Representative James W. Crawford, Jr.
Senator Daniel G. Clodfelter	Representative William T. Culpepper, III
Senator Walter H. Dalton	Representative W. Pete Cunningham
Senator James Forrester	Representative Beverly M. Earle
Senator Linda Garrou	Representative Ruth M. Easterling
Senator Wilbur P. Gulley	Representative Stanley H. Fox
Senator Kay R. Hagan	Representative R. Phillip Haire
Senator David W. Hoyle	Representative Dewey L. Hill
Senator Ellie Kinnaird	Representative Mary L. Jarrell
Senator Howard N. Lee	Representative Maggie Jeffus
Senator Jeanne H. Lucas	Representative Edd Nye
Senator R. L. Martin	Representative Warren C. Oldham
Senator William N. Martin	Representative William C. Owens, Jr.
Senator Stephen M. Metcalf	Representative E. David Redwine
Senator Fountain Odom	Representative R. Eugene Rogers
Senator Aaron W. Plyler	Representative Drew P. Saunders
Senator Eric M. Reeves	Representative Wilma M. Sherrill
Senator Dan Robinson	Representative Ronald L. Smith
Senator Larry Shaw	Representative Gregg Thompson
Senator Robert G. Shaw	Representative Joe P. Tolson
Senator R. C. Soles, Jr.	Representative Russell E. Tucker
Senator Ed N. Warren	Representative Thomas E. Wright
Senator David F. Weinstein	Representative Douglas Y. Yongue
Senator Allen H. Wellons	

DISTRIBUTION OF AUDIT REPORT (CONCLUDED)

Other Legislative Officials

Representative Philip A. Baddour, Jr.	Majority Leader of the N. C. House of Representatives
Senator Anthony E. Rand	Majority Leader of the N. C. Senate
Senator Patrick J. Ballantine	Minority Leader of the N. C. Senate
Representative N. Leo Daughtry	Minority Leader of the N. C. House of Representatives
Representative Joe Hackney	N. C. House Speaker Pro-Tem
Mr. James D. Johnson	Director, Fiscal Research Division

December 17, 2002

ORDERING INFORMATION

Copies of this report may be obtained by contacting the:

Office of the State Auditor
State of North Carolina
2 South Salisbury Street
20601 Mail Service Center
Raleigh, North Carolina 27699-0601

Internet: http://www.ncauditor.net

Telephone: 919/807-7500

Facsimile: 919/807-7647