

**A PROCUREMENT DISPARITY STUDY OF  
THE COMMONWEALTH OF VIRGINIA**

*Final Report*

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## ***EXECUTIVE SUMMARY***

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## **EXECUTIVE SUMMARY**

This chapter presents an executive summary of the findings, recommendations, and conclusions resulting from the disparity study conducted for the Commonwealth of Virginia related to procurement of construction, architecture and engineering services, professional services, other services, and goods and supplies. The study covered state procurements over a five-year period from 7/1/97 through 6/30/02 (FY 98 – FY 02).

### **Statistical Analyses Findings**

The following subsection presents findings based on the review in Chapters 4.0 and 7.0. It should be noted that the utilization numbers do not include Virginia Department of Transportation highway construction. That data are presented in a separate report.

#### **FINDING 1: Disparity in M/WBE Utilization**

M/WBE utilization by the Commonwealth was very low during the study period at 1.27 percent of total spending over the study period (see **Exhibit 1**). By way of comparison,

- the State of Maryland spent 17 percent with M/WBEs in 2001;
- the State of Texas spent 13 percent with M/WBEs in 2003;
- the State of Florida spent 11.8 percent with M/WBEs from FY 1997 to FY 2001; and
- the State of North Carolina spent 7.4 percent with M/WBEs in construction from 1998 to 2002.<sup>1</sup>

Moreover, a significant portion of M/WBE spending was with firms owned by nonminority women. Total Commonwealth spending with minority-owned firms was less than 0.44 percent of total spending (about \$38.9 million). In fact, Commonwealth spending with MBEs as a percentage of total spending is one of the lowest recorded in over 100 studies conducted by MGT.

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<sup>1</sup> Maryland: NERA, *Utilization of Minority Business Enterprises by the State of Maryland*, 2001; Texas: Texas HUB Office, *Historically Underutilized Business (Hub) Annual Report Received For Fiscal Year 2003*; North Carolina: MGT, *Disparity Study for the North Carolina Department of Administration*, 2003; Florida: State of Florida, Office of Supplier Diversity, *Annual Report FY 2000-2001*.

Some local agencies spent considerably more with minority- and woman-owned firms than did the Commonwealth. For example, from 1998 to 2002 the City of Charlotte spent \$91.8 million with MBE prime contractors in construction alone while the Commonwealth spent \$34.8 million with MBE prime contractors over the same time period.<sup>2</sup> The Port Authority of New York and New Jersey awarded \$284 million in contracts with small and M/WBE firms in 2001 alone, several times Commonwealth annual M/WBE spending over the five-year study period, which averaged about \$77.7 million.<sup>3</sup>

The Commonwealth utilized only 261 minority firms outside of construction over the study period, at an average of about \$26,000 per firm per year. This low M/WBE utilization by the Commonwealth in turn contributed to low M/WBE availability, as measured by the number of M/WBE vendors registered and utilized by the Commonwealth. Relative M/WBE availability ranged between 1.45 percent and 8.15 percent, depending on procurement category (see **Exhibit 1**). Even where disparity was not that substantial, as in other services, relative M/WBE availability was very low.

It is also possible that the limited number of active local M/WBE programs has contributed to the low availability identified through this study. Maryland and North Carolina, for example, have significantly more local (city, county, and special district) M/WBE programs than are located in the state of Virginia. Actually, a number of large counties (e.g., Cook County, Illinois; Dade County, Florida; Harris County, Texas; Palm Beach County, Florida; Fulton County, Georgia) throughout the country have more locally-based programs than does Virginia.

Low M/WBE utilization resulted in substantial disparity for the following underutilized groups in the Commonwealth work type categories (see **Exhibit 1**):

- Construction prime contracting – African American, Asian American, Native American, and nonminority women.
- Construction subcontracting - African American, Hispanic American, Asian American, Native American, and nonminority women.
- Architecture and engineering services - African American, Hispanic American, Asian American, Native American, and nonminority women.
- Professional services - Hispanic American, Asian American, Native American, and nonminority women.
- Other services – Native American.
- Goods and Supplies - African American, Hispanic American, and Native American.

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<sup>2</sup> MGT, *City of Charlotte Disparity Study*, 2003.

<sup>3</sup> Port Authority of New York and New Jersey, Press Release No. 48-2002, *Port Authority Announces 17 Percent Increase in Contracts Awarded to Minority/Women-Owned and Small Businesses*, April 23, 2002.

**EXHIBIT 1**  
**COMMONWEALTH OF VIRGINIA**  
**SUMMARY OF DISPARITY ANALYSIS FOR EACH**  
**BUSINESS CATEGORY BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**

Business Category by M/WBE Classification	% of Contract Dollars <sup>1</sup>	% of Available Firms <sup>2</sup>	Disparity Index <sup>3</sup>	Disparate Impact of Utilization	Significance of Proportions <sup>4</sup>
<b>Construction Prime Contractors</b>					
African Americans	0.03%	1.07%	3.12	* Underutilization	-70.73 *
Hispanic Americans	0.29%	0.26%	113.27	Overutilization	0.79
Asian Americans	0.00%	0.28%	0.00	* Underutilization	0.00
Native Americans	0.00%	0.10%	0.00	* Underutilization	0.00
Nonminority Women	1.17%	2.70%	43.26	* Underutilization	-17.76 *
Nonminority Firms	98.51%	95.60%	103.04	Overutilization	29.93 *
<b>Construction Subcontractors</b>					
African Americans	0.22%	5.03%	4.37	* Underutilization	-241.64 *
Hispanic Americans	1.21%	3.73%	32.38	* Underutilization	-54.32 *
Asian Americans	0.03%	2.02%	1.38	* Underutilization	-280.73 *
Native Americans	0.00%	0.82%	0.00	* Underutilization	0.00
Nonminority Women	1.07%	5.95%	17.96	* Underutilization	-111.73 *
Nonminority Firms	97.48%	82.46%	118.22	Overutilization	225.33 *
<b>Architecture and Engineering</b>					
African Americans	0.01%	0.98%	0.62	* Underutilization	-71.14 *
Hispanic Americans	0.01%	0.64%	1.05	* Underutilization	-44.33 *
Asian Americans	0.06%	2.01%	2.93	* Underutilization	-46.10 *
Native Americans	0.00%	0.21%	0.00	* Underutilization	0.00
Nonminority Women	0.45%	4.30%	10.42	* Underutilization	-33.02 *
Nonminority Firms	99.48%	91.85%	108.30	Overutilization	60.70 *
<b>Professional Services</b>					
African Americans	0.30%	0.33%	91.51	Underutilization	-0.87
Hispanic Americans	0.00%	0.12%	2.69	* Underutilization	-35.61 *
Asian Americans	0.28%	0.39%	72.09	* Underutilization	-3.50 *
Native Americans	0.00%	0.03%	0.61	* Underutilization	-38.14 *
Nonminority Women	0.12%	1.54%	7.99	* Underutilization	-69.09 *
Nonminority Firms	99.30%	97.60%	101.74	Overutilization	34.77 *
<b>Other Services</b>					
African Americans	0.48%	0.27%	176.53	Overutilization	6.68 *
Hispanic Americans	0.25%	0.06%	419.24	Overutilization	8.55 *
Asian Americans	0.13%	0.09%	145.74	Overutilization	2.54 *
Native Americans	0.00%	0.02%	4.12	* Underutilization	-14.94 *
Nonminority Women	1.29%	1.07%	121.42	Overutilization	4.50 *
Nonminority Firms	97.84%	98.49%	99.34	Underutilization	-9.97 *
<b>Goods and Supplies</b>					
African Americans	0.04%	0.17%	23.34	* Underutilization	-14.97 *
Hispanic Americans	0.05%	0.06%	79.21	* Underutilization	-1.28
Asian Americans	0.15%	0.13%	108.25	Overutilization	0.66
Native Americans	0.01%	0.03%	35.48	* Underutilization	-4.33 *
Nonminority Women	0.99%	1.05%	93.61	Underutilization	-1.54
Nonminority Firms	98.77%	98.55%	100.22	Overutilization	4.55 *

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

<sup>4</sup> The significance of proportions test examines if there is a statistical difference between utilization and availability. The test statistics are computed by taking the difference between utilization and availability and dividing by the square root of availability, times one minus availability divided by the available firms. If the test statistics are greater than two, overutilization is assumed. Conversely, if the test statistics are less than -2, underutilization is assumed.

M/WBE utilization was also low when smaller contracts were analyzed separately from larger contracts. Disparities in M/WBE revenue were also apparent when firm characteristics (e.g., management experience, owner education) were statistically controlled for in the disparity analysis.

## **FINDING 2: Private Sector Utilization and Disparity**

Using records from Reed Construction Data, low levels of M/WBE utilization were found in the private sector commercial construction in Virginia. A statistical analysis of self-employment data for the State of Virginia also found disparities in entry into self-employment and earnings from self-employment after using statistical controls for other factors shaping self-employment, such as education, net worth, and age.

### **Recommendations and Commendations**

The following subsection presents recommendations based on Chapter 8.0.

#### **Purchasing Recommendations**

- **Contract Sizing.** The Commonwealth should concentrate its efforts into issuing contracts in smaller dollar amounts, thus expanding the opportunities that smaller M/WBE firms have to do business with the Virginia. One method of debundling in construction is through the use of multiprime construction contracts in which a construction project is divided into several prime contracts that are then managed by a construction manager at risk who can rotate contracting opportunities over the duration of the activity. Using a request for proposal process provides the flexibility for including M/WBE participation in construction manager requirements and selection.
- **Small Purchases.** Additional measures can be taken to increase M/WBE participation in informal purchases. First, the use of new M/WBE vendors can be an element in buyer evaluations. Second, the Commonwealth should publish data on buyer use of M/WBE vendors in informal purchases. This data could include statistics on median M/WBE dollar utilization, high levels of M/WBE utilization, and the number of M/WBEs utilized by buyers.
- **Prompt Payment.** Small and M/WBE vendors still have problems with prompt payment. Certain subcontractors that work on an early phase in a project, such as grading, can suffer from retainage withheld on long lasting projects. Prompt payment policy should be adjusted for these concerns. Mobilization payments is one vehicle to address this issue.

**M/WBE Program Recommendations**

- **M/WBE Certification.** The Commonwealth should move towards a unified certification application with other agencies in the state and mid-Atlantic area. The M/WBE Office should increase the number of site visits as supplements to desk audits in the M/WBE certification process.
- **M/WBE Goals.** This report provides evidence supporting the establishment of a moderate program to promote M/WBE utilization. This conclusion is based on disparity in current M/WBE utilization, strong disparities in private sector utilization in construction and in business formation. The Commonwealth should tailor its minority participation programs to remedy the specific disparity determined above. These aspirational goals should be addressed primarily by good faith efforts requirements, breaking up large contracts, M/WBE participation in a Small Business Enterprise (SBE) program (discussed below), and similar techniques. Any race-conscious program elements should be implemented along the lines suggested by the US DOT DBE program.

The report provides an initial starting point for M/WBE goals. These M/WBE goals by business category are annual goals, not rigidly set project goals. Each project should be reviewed individually for establishing project-specific M/WBE goals. Each year the goals should be adjusted according to the utilization of M/WBEs by business category by race- and gender-neutral means, gradually reducing the race and/or gender goal and increasing the neutral goal. The ultimate objective is to eliminate the need for a race- and/or gender-based program and replace it completely with the race- and gender-neutral options. The program should be time limited, and graduation criteria established for each participant. The burden of compliance with M/WBE goals should not fall disproportionately on a few departments, absent some business reason for uneven distribution of M/WBE spending by department. The Commonwealth should also develop detailed guides for good faith efforts to be undertaken by prime contractors in dealing with M/WBE subcontractors in construction.

Because of the very low levels of utilization in state procurement the Commonwealth should also consider the occasional use of M/WBE bid preferences and set-asides. These more aggressive techniques should be used as a supplement to the other programmatic initiatives discussed in these recommendations.

- **Small Business Program.** Virginia should institute a SBE program. A strong SBE program is at the center of maintaining a narrowly tailored program to promote M/WBE utilization. As the first element of a new SBE program, the Commonwealth should establish a consistent SBE definition. At present the definitions of small

businesses differ between the DBA, the model supplier diversity program, and eVA. The Commonwealth should also consider race-neutral small business set-asides as are used by the federal government, New Jersey, Florida, and other government agencies.

- **HUBZone Program.** Another variant of an SBE program is incentives for SBEs located in distressed areas. For example, under the 1997 Small Business Reauthorization Act, the federal government started the federal HUBZone program. A HUBZone firm is a small business that is: (1) owned and controlled by U.S. citizens; (2) has at least 35 percent of its employees who reside in a HUBZone; and (3) has its principal place of business located in a HUBZone.<sup>4</sup> HUBZone programs can serve as a vehicle for encouraging M/WBE contract utilization.
- **Commercial Antidiscrimination Rules.** Virginia should be commended for having a general commercial nondiscrimination statute. These rules can be strengthened with stronger enforcement provisions.

### **Business Development Recommendations**

- **Bonding.** Lack of bonding is often cited by small construction firms as the reason for not pursuing government contracting opportunities. A small business surety assistance program should provide technical assistance to small firms, track subcontractor utilization by ethnicity, coordinate existing financial as well as management and technical assistance resources, and provide for quality surety companies to participate in the bonding program.

One element in the Commonwealth crafting such a bonding program would simply be to encourage and coordinate contractor use of the U.S. Small Business Administration Office of Surety Guarantees which can guarantee bid, performance and payment bonds for contracts up to \$2 million, for small contractors who cannot obtain surety bonds through normal commercial channels.

- **Access to Capital.** The Commonwealth should be commended for its efforts to improve the access to capital to small firms and M/WBEs. These efforts include the PACE program of the VDMBE office and the efforts of the VDBA. Some examples of other lending assistance programs include Linked Deposit Programs, Contract Financing, Equity Participation Investment Programs, Long-Term Guaranty Programs, Loan Mobilization Programs, Franchise Ownership Assistance, and Contractor Insurance Programs.

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<sup>4</sup> 13 C.F.R. 126.200 (1999). The State of California provides a 5 percent preference for a business work site located in state enterprise zones and an additional 1-4 percent preference (not to exceed \$50,000 on goods and services contracts in excess of \$100,000) for hiring from within the enterprise zone. Cal Code Sec 4530 et seq. Minnesota's bid preferences are limited to small businesses operating in high unemployment areas.

- **Management and Technical Services.** The Commonwealth should be commended for its current attempts to strengthen its efforts in providing management and technical services to M/WBE firms in securing contracts with Virginia agencies through the VDMBE and the VDBA.

These efforts could be strengthened by contracting with an outside management and technical assistance provider to provide needed technical services, particularly in the area of loans and bonding. Such a contract should be structured to include providing incentives to produce results, such as the number of M/WBEs being registered as qualified vendors with the Commonwealth and the number of M/WBEs graduating from subcontract work to prime contracts.

### **VDMBE Office Recommendations**

- **M/WBE Program Data Management.** The Commonwealth should require that all contractors maintain data on all subcontractors contacted and utilized on a Virginia project. This list includes all subcontractors utilized (minority, women, and nonminority), the total amount paid, and the race/ethnicity/gender of the owner. These data should be submitted to the Commonwealth before the prime contractor's final payment for services.
- **M/WBE/SBE Outreach.** The Commonwealth should be commended for workshops and seminars, newsletters, MBE media alert, the networking calendar, and placing the M/WBE list on the Commonwealth Web site to assist prime contractors in identifying potential M/WBE subcontractors. Commonwealth outreach efforts can be strengthened by partnering with federal procurement efforts to market to M/WBE firms in the region and crafting outreach efforts to match the M/WBE firm experience with government contracting.
- **VDMBE Web site.** The Commonwealth should consider putting the following information on their M/WBE Web sites: bid tabulations, status of certification applications, how to do business data, direct links to on-line purchasing manuals, capacity and experience data on certified firms, and forecasts of business opportunities to M/WBE vendors. More detail should be provided in the FAQ section of the VDMBE Web site to answer routine vendor questions.
- **VDMBE Office.** A revised M/WBE program is a more complex and challenging program than the existing M/WBE program. Thus far the VDMBE office has been funded primarily by the supportive services contract for VDOT. The supportive services contract should be a separate function, possibly contracted out to an outside vendor and the VDMBE should receive adequate and independent funding, at least equal to its current budget.
- **Balanced Scorecard.** Finally, the VDMBE office should develop measures to gauge the effectiveness of efforts. These measures

should be integrated into a “balanced scorecard.” The balanced scorecard model of management engineering seeks to align an organization with its strategy by identifying key initiatives necessary to realize that strategy and mobilize the organization’s staff. Using measures and targets, the scorecard creates feedback loops that evaluate an agency’s progress against that strategy.

**Conclusions**

Utilization of minority firms by the Commonwealth was very low during the study period both in relative and absolute terms. Utilization of minority firms was low relative to conservative estimates of minority business availability, and relative to utilization by other states and public agencies. Disparities were also evident after controlling for the size of contract and firm characteristics. Utilization of minority firms in private sector commercial construction was even lower. These facts stand out more sharply given that the mid-Atlantic region of the United States is one of the strongest areas in the country for minority firms, a market characteristic driven primarily by federal procurement and strong M/WBE programs in neighboring state and local governments. Given this set of facts, disparities in M/WBE utilization can be addressed with a comprehensive package of initiatives such as those outlined above.

## ***1.0 INTRODUCTION***

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## **1.0 INTRODUCTION**

In April 2003, MGT of America, Inc. (MGT) began work on a disparity study for the Commonwealth of Virginia. The results of this study are found in this report. Throughout the chapters that follow, MGT presents its findings, analyses, and recommendations. First, however, this chapter provides a background for the study, the scope of services we were asked to perform, the major tasks undertaken, and an overview of the organization of the report.

### **1.1 Background**

The Commonwealth of Virginia (Commonwealth) commissioned MGT to conduct a disparity study. This study covered five fiscal years, beginning July 1, 1998, through June 30, 2002, and is a second-generation study. This is the first Disparity Study conducted for the Commonwealth of Virginia.

### **1.2 Scope of Services**

The scope of services required by the Commonwealth in conducting the disparity study included:

- conducting a detailed legal review of *Croson* and other relevant court cases with emphasis on program and methodological requirements;
- reviewing the Commonwealth's procurement policies, procedures, and programs;
- analyzing the effectiveness of race- and gender-based and race- and gender-neutral programs;
- conducting market area analyses of the Commonwealth's procurement of goods and services;
- conducting utilization analyses of minority, women, and nonminority firms in the Commonwealth's procurement of goods and services;

- determining the availability of qualified minority and women-owned firms;
- analyzing the utilization and availability data for determination of disparity;
- analyzing the results of a telephone survey, personal interviews, and focus groups;
- conducting a multivariate (regression) analysis; and
- identifying narrowly tailored race- and gender-based and race- and gender-neutral remedies.

### **1.3 Major Tasks**

In conducting the study and preparing our recommendations, MGT followed a carefully designed work plan that allowed study team members to fully analyze availability, utilization, and disparity with regard to minority, women, and nonminority firms. The final work plan consisted of 15 major tasks:

- Conduct Detailed Legal Review
- Finalize Work Plan
- Review Policies, Procedures, and Programs
- Conduct Data Collection
- Conduct Market Area Analyses
- Conduct Utilization Analyses
- Determine the Availability of Qualified Firms
- Analyze the Utilization and Availability Data
- Conduct a Telephone Survey of Vendors
- Conduct the Regression Analysis
- Conduct Disparity Analyses
- Collect and Analyze Anecdotal Information
- Review Race- and Gender-Neutral Remedies
- Identify Narrowly Tailored Remedies
- Prepare a Final Report.

The study team used a variety of procedures to collect data, which included:

- review and analysis of the Commonwealth's records and databases;
- review and analysis of documents and reports;
- interviews with members from a broad spectrum of the business community; and
- interviews with the Commonwealth's staff.

## **1.4 Organization of the Report**

The following chapters of this report are designed to give the reader a comprehensive overview of the Commonwealth's procurement practices; past and present patterns of minority, women, and nonminority availability and utilization; and a broad understanding of the environment in which the Commonwealth operates. This report contains the following chapters:

- Chapter 2.0—an in-depth legal analysis of relevant court cases.
- Chapter 3.0—a review of procurement policies and procedures, and programs.
- Chapter 4.0—the methodology employed in conducting and analyzing the utilization and availability of minority, women, and nonminority businesses in procurement.
- Chapter 5.0—an analysis of the levels of disparity for minority, women, and nonminority prime contractors and subcontractors, a multivariate analysis.
- Chapter 6.0—an analysis of anecdotal data collected from a telephone survey, personal interviews, and focus groups.
- Chapter 7.0—an analysis of private sector utilization and disparity.
- Chapter 8.0—summary of the overall report, conclusions, and recommendations.<sup>1</sup>

The appendices include:

Appendix A: Account Codes and Work Type Codes

Appendix B: Trade Associations and Agencies Contacted for Vendor Lists

Appendix C: Verification Letter and Report

Appendix D: Construction Contracts

Appendix E: Construction Subcontracts

Appendix F: Architecture and Engineering Payments

Appendix G: Professional Services Payments

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<sup>1</sup> Chapter 8.0 is designed to provide a summary of the overall report, conclusions drawn from the study, and MGT's recommendations. Chapter 8.0 serves as an Executive Summary for the study.

- Appendix H: Other Services Payments
- Appendix I: Goods and Supplies Payments
- Appendix J: Phone Survey Response Frequencies
- Appendix K: Vendor Interview Guide and Affidavit
- Appendix L: PUMS Regression Analysis

## **2.0 LEGAL REVIEW**

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## 2.0 LEGAL REVIEW

### 2.1 Introduction

This chapter provides legal background for the report. The material that follows in this chapter in no sense constitutes legal advice to the Commonwealth of Virginia on minority business programs, affirmative action, or any other matter. Instead, the chapter merely provides a context for the statistical and anecdotal analysis that follows in the subsequent chapters of this report.

As is the case today with many laws involving federal and state action, affirmative action law is an evolving area of jurisprudence. Since the United States Supreme Court's decision in the *Croson*<sup>1</sup> case, governmental entities have struggled to establish and maintain affirmative action programs to eliminate discriminatory practices while complying with the guidelines issued by the Supreme Court. The *Croson* decision and lower court cases that followed have set forth the legal standards that should be the basis for a well-designed program. This review identifies and analyzes those standards, and summarizes how courts evaluate the constitutionality of race- and gender-specific programs. Particular emphasis will be placed on decisions in the Fourth Circuit, the recent decisions upholding the federal Department of Transportation (DOT) disadvantaged business enterprise (DBE) programs, and legal issues involving Small Business Enterprise (SBE) programs. There have not been a large number of M/WBE cases in the Fourth Circuit.<sup>2</sup> Consequently there is also extensive discussion of cases from other circuits. Finally, the U.S. Supreme Court recently issued two major decisions on affirmative action: *Gratz v. Bollinger* and *Grutter v. Bollinger*.<sup>3</sup> Both *Gratz* and *Grutter* addressed the use of race as a factor in university

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<sup>1</sup> *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

<sup>2</sup> The primary case involving M/WBE issues is *Associated Utility Contractors v. Baltimore*, 8 F.Supp.2d 613 (D MD 2000).

<sup>3</sup> *Gratz v. Bollinger*, 000 U.S. 02-516 (2003) and *Grutter v. Bollinger*, 000 U.S. 02-241 (2003).

admissions and not minority contracting. Nevertheless, several aspects of *Gratz* and *Grutter* that are relevant to minority contracting litigation will be noted.

The fundamental requirements necessary for the maintenance of a permissible affirmative action program involving the procurement of goods or services by governmental entities are summarized as follows:

- A remedial race-conscious program is subject to strict judicial scrutiny under the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.
- Strict scrutiny has two basic components: compelling governmental interest and narrow tailoring.
- To survive the strict scrutiny standard, remedial race-conscious programs must be based on a compelling governmental interest.
- Compelling interest means that the government has to demonstrate that there is a problem that requires remedial attention.
- There must be a “strong basis in the evidence” for the compelling governmental interest.
- The evidentiary foundation must be reviewed as part of the implementing jurisdiction's decision-making process for it to be relevant in any subsequent legal challenge.
- Statistical evidence of discrimination is essential; anecdotal evidence is permissible and complementary to statistical evidence.
- The subsequent program(s) arising from the compelling governmental interest(s) must be narrowly tailored to remedy the identified discrimination.
- Narrow tailoring means that the remedy needs to fit the problem.
- A lesser standard, intermediate judicial scrutiny, is applicable when analyzing programs that establish gender preferences.
- To survive the intermediate scrutiny standard, the remedial gender conscious program must serve important governmental objectives and be substantially related to the achievement of those objectives.

## **2.2 City of Richmond v. J.A. Croson Company**

In 1983, the Richmond City Council adopted a Minority Business Utilization Plan (the Plan) following a public hearing in which seven citizens testified about historical societal discrimination. In adopting the Plan, the Council also relied on a study that indicated that “while the general population of Richmond was 50 percent African American, only 0.67 percent of the city’s prime construction contracts had been awarded to minority businesses in the five-year period from 1978 to 1983.”<sup>4</sup> The evidence before the Council established that a variety of state and local contractor associations had little or no minority business membership. The Council also relied on statements by a Council member whose opinion was that “the general conduct of the construction industry in this area, the state, and around the nation, is one in which race discrimination and exclusion on the basis of race is widespread.”<sup>5</sup> There was, however, no direct evidence of race discrimination on the part of the city in its contracting activities or evidence that the city’s prime contractors had discriminated against minority-owned subcontractors.<sup>6</sup>

The Plan required the city’s prime contractors to subcontract at least 30 percent of the dollar amount of each contract to one or more minority-owned business enterprises (MBEs). The Plan did not establish any geographic limits for eligibility. Therefore, an otherwise qualified MBE from anywhere in the United States could benefit from the 30 percent set-aside.

J.A. Croson Company, a non-MBE mechanical plumbing and heating contractor, filed a lawsuit against the City of Richmond alleging that the Plan was unconstitutional and violative of the Equal Protection Clause of the Fourteenth Amendment. After the district court and circuit court upheld the Plan, the Supreme Court vacated the decisions of the

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<sup>4</sup> *Croson*, 488 U.S. at 479-80.

<sup>5</sup> *Id.* at 480.

<sup>6</sup> *Id.*

lower courts and remanded the case for further consideration in light of its decision in *Wygant v. Jackson Board of Education*.<sup>7</sup>

On remand, a divided United States Court of Appeals for the Fourth Circuit refused to uphold the Richmond Plan. The court held that “findings of societal discrimination will not suffice [to support a race-based plan]; the findings must concern prior discrimination by the governmental unit involved.”<sup>8</sup> The court further held that the Plan was not narrowly tailored to accomplish a remedial purpose. The 30 percent set-aside requirement of the Plan was held to be chosen arbitrarily and not sufficiently related to the number of minority subcontractors in Richmond or any other relevant number.<sup>9</sup> As a result, the Fourth Circuit struck down the Richmond Plan<sup>10</sup> and the Supreme Court affirmed this decision.<sup>11</sup>

## **2.3 Standards of Review for Race-Specific and Gender-Specific Programs**

### **2.3.1 Race-Specific Programs**

In *Croson*, the Supreme Court determined that strict scrutiny is the appropriate standard of judicial review for race-conscious affirmative action programs. The Court concluded that a race-conscious program must be based on a compelling governmental interest; and the program must be narrowly tailored to achieve its objective. Ordinarily, courts will find a governmental classification constitutional if it has a “rational basis” to a legitimate governmental interest or purpose.<sup>12</sup> Further, a race-neutral law does not violate the Equal Protection Clause solely because it has (for example) a racially disproportionate impact.<sup>13</sup> Because the affirmative action plan adopted by the City of Richmond denied

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<sup>7</sup> *City of Richmond v. J.A. Croson Co.*, 478 U.S. 1016 (1986); *Wygant v. Jackson Board of Education*, 476 U.S. 267(1986).

<sup>8</sup> *City of Richmond v. J.A. Croson Co.*, 822 F.2d 1355, 1358 (4<sup>th</sup> Cir. 1987).

<sup>9</sup> *Id.* at 1360.

<sup>10</sup> *Id.* at 1362.

<sup>11</sup> *Croson*, 478 U.S. at 511.

<sup>12</sup> *United States v. Carolene Products Co.*, 304 U.S. 144, 152-53 n.4 (1938).

<sup>13</sup> *Washington v. Davis*, 426 U.S. 229, 239 (1976).

certain citizens the opportunity to compete for a fixed percentage of public contracts based solely on their race, the Court determined that a strict scrutiny standard of review must be applied.<sup>14</sup> This standard requires a firm evidentiary basis for concluding that the underrepresentation of minorities is a product of past discrimination.<sup>15</sup>

### **2.3.2 Gender-Specific Programs**

The Supreme Court has never directly addressed the issue of a gender-based classification in the context of woman-owned business enterprise (WBE) programs. *Croson* was limited to the review of an MBE plan. In general, in evaluating gender-based classifications that operate to the advantage of women, the Court has used "intermediate scrutiny," which is a lower standard of review less stringent than the strict scrutiny test employed to analyze race-based classifications. This analysis requires the governmental organization to demonstrate an important governmental objective and develop a program that bears a direct and substantial relation to achieving that objective.<sup>16</sup> Some federal courts have required that classification based on gender satisfy an "exceedingly persuasive justification" test.<sup>17</sup>

Several courts, including the Maryland district court in *Associated Utility Contractors v. Baltimore*, have employed the intermediate scrutiny standard in reviewing WBE programs, but struck down the programs nevertheless.<sup>18</sup> The one exception was in *Coral*

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<sup>14</sup> *City of Richmond v. J.A. Croson Co.*, 478 U.S. 1016 (1986); *Wygant v. Jackson Board of Education*, 476 U.S. 267 (1986).

<sup>15</sup> *Croson*, 478 U.S. at 472.

<sup>16</sup> *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982); *Craig v. Boren*, 429 U.S. 190, 211 (1976) (Powell, J. concurring).

<sup>17</sup> *United States v. Virginia Military Institute*, 116 S.Ct. 2264 (1996). *Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982), as well as *Associated General Contractors of California v. City and County of San Francisco*, 813 F. 2d. (9th Cir. 1987) and *Michigan Road Builders Ass'n., Inc. v. Milliken*, 834 F. 2d. 583 (6th Cir. 1987).

<sup>18</sup> See, e.g., *Associated Utility Contractors v. Baltimore*, 83 F.Supp2d 613 (D Md 2000) (citing *U.S. v. Virginia*, 518 U.S. 515 (1996)); *Scott v. City of Jackson*, 199 F.3d 206, 215, n. 9 (1999); *Arrow Supply v. Detroit*, 826 F. Supp. 1072 (ED Mich 1993). *Engineering Contractors v. Dade County*, 122 F.3d 895 (11<sup>th</sup> Cir 1997). See, e.g., *Builders Association of Greater Chicago v. County of Cook*, 2001 U.S. App. LEXIS 15066 (7<sup>th</sup> Cir 2001).

*Construction v. King County*, where the court upheld a WBE program under the intermediate scrutiny standard.<sup>19</sup> But even under intermediate scrutiny, the court in *Coral Construction* noted that some degree of discrimination must be demonstrated in a particular industry before a gender-specific remedy may be instituted in that industry: "The mere recitation of a benign, compensatory purpose will not automatically shield a gender-specific program from constitutional scrutiny."<sup>20</sup>

#### **2.4 To Withstand Strict Scrutiny an MBE Program Must Be Based on a Compelling Governmental Interest such as Remedying Discrimination**

Under strict scrutiny, a race-conscious affirmative action program must be based on a "compelling governmental interest" and must be "narrowly tailored" to achieve that interest.

In general, it is settled law that:

*In practice, the interest that is alleged in support of racial preferences is almost always the same—remedying past or present discrimination. That interest is widely accepted as compelling. . . . [T]he true test of an affirmative action program is usually not the nature of the government's interest, but rather the adequacy of the evidence of discrimination offered to show that interest.*<sup>21</sup>

The courts have identified two factors necessary to establish a compelling governmental interest. First, there needs to be identified discrimination in the local relevant market. As the Court of Appeals in the D.C. Circuit noted in *O'Donnell*, "The District [Washington, D.C.] cannot simply rely on broad expressions of purpose or general allegations of historical or societal racism. Rather, its legislation must rest on evidence at least approaching a *prima facie* case of racial discrimination in the relevant industry."<sup>22</sup> The

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<sup>19</sup> *Coral Construction v. King County*, 961 F.2d 910 (9<sup>th</sup> Cir 1991), cert. denied, 112 S. Ct. 875 (1992).

<sup>20</sup> *Id.* at 932.

<sup>21</sup> *Engineering Contractors Ass'n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 906 (11<sup>th</sup> Cir. 1997) (*Engineering Contractors II*) (citing *Ensley Branch NAACP v. Seibels*, 31 F.3d 1548, 1564 (11<sup>th</sup> Cir. 1994) (citations and internal quotation marks omitted)). *Maryland Troopers Ass'n, Inc. v. Evans*, 993 F.2d 1072, 1076 (4<sup>th</sup> Cir. 1993).

<sup>22</sup> *O'Donnell v. District of Columbia*, 963 F.2d 420 (DC Cir 1992).

second factor necessary to show a compelling governmental interest is “the governmental actor enacting the set-aside program must have somehow perpetuated the discrimination to be remedied by the program.”<sup>23</sup>

Recently, the U.S. Supreme Court in *Grutter* stated that “student body diversity is a compelling state interest that can justify using race in university admissions.”<sup>24</sup> Until *Grutter* it was unclear whether diversity could constitute a compelling interest within the meaning of the 14<sup>th</sup> Amendment. At the same time it is not clear at this juncture in what sense “diversity” could constitute a compelling interest for an M/WBE program.

#### **2.4.1 Federally Funded Projects**

Federal DBE programs are now governed by the constitutional standards set in the 1995 Supreme Court case of *Adarand Constructors, Inc. v. Peña*.<sup>25</sup> The *Adarand* ruling overturned the constitutional test in *Fullilove v. Klutznick*<sup>26</sup> for federal DBE programs. The Supreme Court in *Adarand* decided that federal DBE programs should be examined by the same strict scrutiny standard used for state and local programs.<sup>27</sup> In January 1999, the United States Department of Transportation (USDOT) published its final DBE rule in Title 49, Code of Federal Regulations, Part 26 (49 CFR 26) that addressed the Clinton Administration’s affirmative action review and the *Adarand* decisions.

In the latest round of the *Adarand* litigation, the Court of Appeals in the Tenth Circuit upheld the revised USDOT DBE program as modified by the new regulations in 49 CFR 26.

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<sup>23</sup> *Coral Construction* at 500-501.

<sup>24</sup> *Grutter v. Bollinger*, 000 U.S. 02-241 (2003).

<sup>25</sup> *Adarand v. Peña*, 790 F.Supp. 240, 16 F.3d 1537 (10th Cir. 1996), cert. granted, 63 U.S.L.W. 3213 (U.S. Oct. 4, 1996) (No. 63-12), 115 S.Ct. 2097 (1995).

<sup>26</sup> *Fullilove v. Klutznick*, 100 S.Ct. 2758 (1980).

<sup>27</sup> Upon remand the District Court ruled in favor of *Adarand*. The District Court found that while there was a compelling government interest for the program, the program was not narrowly tailored. In March of 1999 the Tenth Circuit vacated the District Court ruling as moot because *Adarand* had become certified as a DBE. In January of 2000 the U.S. Supreme Court vacated the Appeals Court decision on mootness and remanded the case for a ruling on the merits of *Adarand v. Slater*, 120 S.Ct. 722 (2000).

The Tenth Circuit found in *Adarand v. Slater*,<sup>28</sup> as has every other court considering the matter, that Congress did have a compelling interest for the DBE program. The ruling noted two barriers that demonstrated a link between “public funds for construction contracts and the channeling of those funds due to private discrimination”: (1) discriminatory barriers to the formation of DBE subcontractors; and (2) barriers to fair competition between minority and nonminority subcontractors.<sup>29</sup> The first barrier was supported by evidence of behavior by prime contractors, unions, lenders, and bonding companies. Evidence for the second barrier showed that “informal, racially exclusionary business networks dominate the subcontracting construction industry” exemplified by family-run firms with long-standing relationships with majority subcontractors. The court also noted evidence that when DBE programs are discontinued, DBE contracting participation falls sharply. The Court stated that while this evidence “standing alone is not dispositive, it strongly supports the government's claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination.”<sup>30</sup>

Several related points were made recently in *Gross Seed v. Nebraska Department of Roads*<sup>31</sup> that are similar to *Adarand v. Slater*. On compelling interest, the court said it is not going to “second guess” Congressional findings in this area. In addition, the court upheld the view that Congress has considerably more power to correct racial discrimination than do state and local government (a point also made by Justice O’Connor in *Croson*). Moreover, the court stated that the Constitution imposes different requirements when a state implements a federal M/WBE program, as opposed to when a state or locality initiates its own M/WBE program. One consequence of this view is that as a recipient of federal DOT

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<sup>28</sup> *Adarand v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir 2000). On appeal the Supreme Court dismissed the writ of certiorari as improvidently granted. *Adarand Constructors, Inc. v. Mineta*, 534 U.S. 103 (2001) (per curiam).

<sup>29</sup> *Adarand v. Slater*, at 13.

<sup>30</sup> *Adarand v. Slater*, at 18.

<sup>31</sup> *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002). See also *Sherbrooke Turf v. Minnesota*, 2001 U.S. Dist. LEXIS 19565 (D Minn 2001).

funds, a state DOT need not independently prove that the federal DBE program satisfies the strict scrutiny standard, provided a sufficient factual predicate has been provided by Congress.<sup>32</sup>

**2.4.2 A Strong Evidentiary Basis Must Exist That Specifically Identifies and Demonstrates the Discrimination to be Remedied by the M/WBE Program**

Although the Supreme Court in *Croson* did not specifically define the methodology that should be used to establish the evidentiary basis required by strict scrutiny, the Court did outline governing principles. Lower courts have expanded the Supreme Court's *Croson* guidelines and have applied or distinguished these principles when asked to decide the constitutionality of state, county, and city programs that seek to enhance opportunities for minorities and women. It is important to point out, however, that a number of courts have stated—including most recently the Court of Appeals in the 10<sup>th</sup> Circuit—that the “Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination.”<sup>33</sup>

**2.4.2.1 Postenactment Evidence**

The Supreme Court in *Croson* found pre-enactment evidence of discrimination insufficient to justify the program. The defendant in *Croson* did not seek to defend its program based on post-enactment evidence. However, following *Croson* a number of circuits did defend the use of post-enactment evidence to support the establishment of a local public affirmative action program.<sup>34</sup> Some cases required pre-enactment and post-enactment evidence.<sup>35</sup>

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<sup>32</sup> *Gross Seed v. Nebraska Department of Roads*, at 15. See also *Milwaukee County Pavers v. Feidler*, 922 F.2d 429, 423 (7<sup>th</sup> Cir 1991).

<sup>33</sup> *Concrete Works v. Denver IV*, 2003 US App Lexis 2396 (10<sup>th</sup> Cir 2003), quoting *Concrete Works v. Denver II*, 6 F.3d at 1522.

<sup>34</sup> See, e.g., *Engineering Contractors v. Dade County*, 122 F.3d 895 (11<sup>th</sup> Cir 1997); *Contractors Assn v. Philadelphia*, 6 F.3d 990 (2d Cir 1993); *Concrete Works v. The City and County of Denver*, 36 F.3d 1513 (10<sup>th</sup> Cir 1994)

<sup>35</sup> See, e.g., *Coral Construction v. King County*, 941 F.2d 910 (1991).

The Supreme Court case in *Shaw v. Hunt*<sup>36</sup> raised anew the issue of post-enactment evidence in defending local public sector affirmative action programs. *Shaw* involved the use of racial factors in drawing voting districts in North Carolina. In *Shaw* the Supreme Court rejected the use of reports providing evidence of discrimination in North Carolina because the reports were not developed before the voting districts were designed. Thus what was critical was whether the legislative body believed that discrimination existed before the districts were drafted.<sup>37</sup>

Following the *Shaw* decision, two district courts rejected the use of post-enactment evidence in the evaluation of the constitutionality of local minority business programs.<sup>38</sup> In *Associated Utility Contractors v. Baltimore*, the City of Baltimore had enacted a minority business ordinance in 1986. Following *Croson*, the City held public hearings and adopted a new ordinance that readopted the original goals of the earlier ordinance. Although an annual review of the program was required by the ordinance, the same goals were readopted without dispute in every subsequent year. The City of Baltimore had never conducted a disparity study, nor maintained data upon which a disparity study could be conducted. There were earlier decisions in the Fourth Circuit permitting consideration of post-enactment evidence in the judicial review of affirmative action programs<sup>39</sup> but the court in *Associate Utility Contractors* deemed those decisions as being before the clarification provided by the Supreme Court in *Shaw*. Consequently, the district court in *Associated Utility Contractors* did not admit the post-enactment evidence submitted by the City.<sup>40</sup>

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<sup>36</sup> *Shaw v. Hunt*, 517 U.S. 899 (1996).

<sup>37</sup> *Shaw v. Hunt*, 517 U.S. 899, 910 (1996).

<sup>38</sup> *Associated Utility Contractors v. Baltimore*, 83 F.Supp.2d 613 (D Md 2000); *West Tenn ABC v. Memphis City Schools*, 64 F.Supp.2d 714 (WD Tenn 1999).

<sup>39</sup> See, e.g., *Poderbesky v. Kirwan*, 38 F.3d 147 (4<sup>th</sup> Cir 1994); *Maryland Troopers Assn. v. Evans*, 993 F.2d 1072 (4<sup>th</sup> Cir 1993)

<sup>40</sup> *Concrete Works v. Denver IV* did not expressly take up the postenactment evidence issue. However, the court did note the key relevance of evidence on nongoal projects and marketplace discrimination as opposed to evidence from the M/WBE program itself. *Concrete Works v. Denver IV*, 84.

In *West Tennessee ABC v. Memphis City Schools* the court stated, "The holdings of *Wygant*, *Croson*, and *Shaw* collectively suggest that the court's task is not to determine if there is now a compelling interest to justify race-based remedial action; its task is to determine if the defendants, at the time they adopted race-based plans, had a compelling interest to act on the basis."<sup>41</sup>

## **2.5 Evidence of Significant Statistical Disparities Between Minorities Utilized and Qualified Minorities Available May Satisfy Strict Scrutiny and Justify a Narrowly Tailored M/WBE Program**

Regarding statistical evidence to support a race-conscious program, the Supreme Court in *Croson* stated that "where gross statistical disparities can be shown, they alone in a proper case may constitute *prima facie* proof of a pattern or practice of discrimination."<sup>42</sup> But the statistics may not compare the general population to prime construction contracts awarded to MBEs. The Court objected to this comparison since the proper statistical evaluation would compare the percentage of MBEs in the relevant market that are qualified to undertake City subcontracting work with the percentage of total City construction dollars that are presently awarded to minority subcontractors.<sup>43</sup>

To measure disparity in utilization, courts have accepted the standard disparity index.<sup>44</sup> The Supreme Court in *Croson* recognized the use of statistical comparison to measure disparity by comparing the number of available M/WBEs qualified to perform certain contracts with the amount of City construction dollars that were actually being awarded to M/WBEs in order to demonstrate discrimination in the local construction industry.<sup>45</sup>

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<sup>41</sup> *West Tennessee ABC v. Memphis City Schools*, 64 F. Supp.2d 714, 718 (WD Tenn 1999).

<sup>42</sup> *Croson*, 488 U.S. at 501, quoting *Hazelwood School Division v. United States*, 433 U.S. 299, 307-308 (1977).

<sup>43</sup> *Croson*, 488 U.S. at 501.

<sup>44</sup> See, e.g., *Cone Corp. v. Hillsborough County*, 908 F.2d 909, 916 (11<sup>th</sup> Cir 1990); *O'Donnell Construction v. District of Columbia*, 963 F.2d 420, 426 (DC 1992)

<sup>45</sup> *Croson*, 488 U.S. at 503-504.

The Ninth Circuit concluded, “In our recent decision [*Coral Construction*] we emphasized that such statistical disparities are ‘an invaluable tool’ in demonstrating the discrimination necessary to establish a compelling interest.”<sup>46</sup> Several other U.S. courts of appeal have recognized the use of disparity indices or similar measures to examine the utilization of minorities or women in a particular industry.<sup>47</sup>

### **2.5.1 Relevant Time Frame for Statistical Analysis**

To demonstrate an evidentiary basis for enacting a race- or gender-conscious program and to satisfy *Croson’s* compelling interest prong, governmental entities must present evidence of underutilization of M/WBEs that would give rise to an inference of discrimination in public contracting.<sup>48</sup>

A number of studies have been criticized because of infirmities in the underlying data. Also, it is not clear how many years must be reviewed. There is some judicial opinion that two years is inadequate.<sup>49</sup> In *Arrow Supply v. City of Detroit*<sup>50</sup> the program was struck down in part because of incomplete collection of utilization data. In *Arrow* the district court criticized the study prepared by the defendant’s expert for a “small sample taken (on an unknown basis) of a vast group of undisclosed size.”<sup>51</sup>

In *Engineering Contractors* the district court criticized the factual predicate for relying on release of lien data to measure subcontractor utilization. The district court argued that the release of lien data included prime contractors acting as subcontractors on their own

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<sup>46</sup> *Associated General Contractors of California, Inc.*, 950 F.2d at 1414 (citing *Coral Construction Co.*, 941 F.2d at 918; see also, *Croson*, 488 U.S. at 509).

<sup>47</sup> *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1523 n.10 (10<sup>th</sup> Cir. 1994) (recognizing disparity index to demonstrate underutilization); *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990, 1005 (3<sup>rd</sup> Cir. 1993) (relying on disparity indices); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 915-16 (11<sup>th</sup> Cir. 1990) (employing similar statistical analyses).

<sup>48</sup> *Croson*, 488 U.S. at 509.

<sup>49</sup> *Phillips & Jordan v. Watts*, 13 F.Supp. 1308, 1315 (ND Fla 1998) (data aggregated for two years). See also *AGC v. Columbus*, 936 F. Supp. 1363 (SD Ohio 1996) (vacated on procedural grounds).

<sup>50</sup> *Arrow Supply v. Detroit*, 826 F. Supp. 1072 (ED Mich 1993).

<sup>51</sup> *Arrow Supply*, at 1080.

projects, and that the sales data for firms filing a contractor's release of lien included sales from anywhere in the United States.<sup>52</sup>

### **2.5.2 Determining Availability**

One of the most important elements of the disparity index is the determination of “availability”—the number of qualified minority contractors willing and able to perform a particular service for the municipality. In *Croson*, the Court stated:

*Where there is a significant statistical disparity between the number of qualified minority contractors **willing and able** to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise.<sup>53</sup> (emphasis added)*

An accurate determination of availability is necessary so that the legislative body may “determine the precise scope of the injury it seeks to remedy” by its program.<sup>54</sup> Following *Croson*'s statements on availability, lower courts have decided how legislative bodies may determine the precise scope of the injury sought to be remedied by an MBE program. Availability statistics must be collected accurately and evaluated carefully. If the availability determination is too narrow, potential discrimination will be understated or dismissed. If the availability determination is too broad, discrimination will be exaggerated. However, as will be seen below, the federal courts have not consistently favored one data source or universal technique for measuring M/WBE availability.

### **2.5.3 Racial Classifications**

In determining availability, a threshold issue is the appropriate racial groups to consider.<sup>55</sup> In *Croson*, the Supreme Court criticized the City of Richmond's inclusion of “Spanish-speaking, Oriental, Indian, Eskimo, or Aleut persons” in the City's affirmative action program.<sup>56</sup> These groups had not previously participated in city contracting, and “the

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<sup>52</sup> *Engineering Contractors v. Dade County*, at 1567, n158

<sup>53</sup> *Id.*, 488 U.S. at 509

<sup>54</sup> *Id.*, 488 U.S. at 498.

<sup>55</sup> Racial groups, as the term is used herein, includes both racial and ethnic categories.

<sup>56</sup> *Id.*, 488 U.S. at 506.

random inclusion of racial groups that, as a practical matter, may never have suffered from discrimination in the construction industry in Richmond suggests that perhaps the City's purpose was not in fact to remedy past discrimination."<sup>57</sup> To properly evaluate availability, data must be gathered for each racial group.

Several subsequent cases have dropped specific groups for lack of evidence. For example, in *Association for Fairness in Business v. New Jersey* the court stated, "In addition, the set-aside program is over-inclusive as between minority business enterprises. New Jersey has offered no evidence of discrimination against companies run by individuals of Native American, Native Alaskan, Hawaiian, or Portuguese decent."<sup>58</sup>

#### **2.5.4 Relevant Market Area**

Another central issue in availability analysis is the definition of the relevant market area. Specifically, the question is whether the relevant market area should be defined as the area from which a specific percentage of purchases is made, the area in which a specific percentage of willing and able contractors is located, or if the area is a fixed geopolitical boundary. If the relevant market area is not properly defined, it can artificially inflate or deflate M/WBE availability. The Supreme Court has not yet established how the relevant market area should be defined. However, some courts of appeal have done so, including the Tenth Circuit in *Concrete Works*.<sup>59</sup> *Concrete Works of Colorado*, a non-M/WBE construction company, argued that *Croson* precluded consideration of discrimination evidence from the six-county Denver Metropolitan Statistical Area (MSA), and, therefore,

Denver should be confined to the use of data within the City and County of Denver alone. However, the Tenth Circuit, interpreting *Croson*, concluded, "The relevant area in which to

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<sup>57</sup> *Id.*

<sup>58</sup> *Assn for Fairness in Business v. New Jersey*, 82 F.Supp. 2d 353, 362 (D NJ 2000). See also *Northeastern Florida AGC v. Jacksonville*, 2123 S.Ct. 2297 (1993).

<sup>59</sup> *Concrete Works of Colorado, Inc. v. City and County of Denver*, 36 F.3d 1513, 1520 (10<sup>th</sup> Cir. 1994).

measure discrimination . . . is the local construction market, but that is not necessarily confined by jurisdictional boundaries.”<sup>60</sup> The Court further stated:

*It is important that the pertinent data closely relate to the jurisdictional area of the municipality whose program we scrutinize, but here Denver’s contracting activity, insofar as construction work is concerned, is closely related to the Denver MSA.*<sup>61</sup>

The Tenth Circuit ruled that over 80 percent of Denver’s Department of Public Works construction and design contracts were awarded to firms located within the Denver MSA; therefore, the appropriate market area should be the Denver MSA—not the City and County of Denver alone.<sup>62</sup> Accordingly, data from the Denver MSA was “adequately particularized for strict scrutiny purposes.”<sup>63</sup> In *Concrete Works*, the Court accepted data concerning only construction and construction-related services in determining the relevant market area.

### **2.5.5 Firm Qualifications**

Another availability consideration is whether the M/WBE firms considered are qualified to perform the required services. In *Croson*, the Supreme Court noted that although gross statistical disparities may demonstrate *prima facie* proof of discrimination, “when special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value.”<sup>64</sup> The Court, however, did not define the appropriate mechanism for determining whether a firm is qualified.

Nevertheless, considering firm qualifications is important not only to assess whether M/WBEs in the relevant market area are capable of providing the goods and services required, but it also ensures proper comparison between the number of qualified M/WBEs

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<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> *Croson*, 488 U.S. 469, 501, citing *Hazelwood*, 433 U.S. at 308, n.13.

and the total number of similarly qualified contractors in the relevant market area.<sup>65</sup> In short, proper comparisons are necessary to ensure the integrity of the statistical analysis.

One element of qualifications is that courts have generally ruled that it is necessary to examine prime contractors and subcontractors separately.<sup>66</sup> The district court decision in *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*<sup>67</sup> required that prime contractors be counted from the list of prequalified firms. It should be noted that during the appellate review, the Third Circuit did state that “the issue of qualifications can be approached at different levels of specificity, however, and some consideration of the practicality of various approaches is required.”<sup>68</sup>

### **2.5.6 Willing**

*Croson* requires that in order to be considered available a firm must not only be qualified to provide the required services but also be willing to provide the required services. An inference of discriminatory exclusion arises when there is significant statistical disparity between the number of qualified MBEs and MBEs actually engaged by the locality.<sup>69</sup> In this context, it can be a difficult task to determine whether a business is willing. Courts reviewing this issue have looked favorably on including businesses in the availability pool that may not be on a governmental entity’s certification list. In *Concrete Works*, Denver presented evidence as part of its availability analysis indicating that while most MBEs and WBEs had never participated in city contracts, “almost all firms contacted indicated that they were interested in City work.”<sup>70</sup>

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<sup>65</sup> *Hazelwood School Dist.*, 433 U.S. 299.

<sup>66</sup> *Scott v. City of Jackson*, 199 F.3d at 218 (1999).

<sup>67</sup> 893 F.Supp. 419 (ED Pa 1995).

<sup>68</sup> *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3<sup>rd</sup> Cir 1996).

<sup>69</sup> *Croson*, 488 U.S. at 509.

<sup>70</sup> *Concrete Works*, 36 F.3d at 1529.

In *Contractors Association of Eastern Pennsylvania, Inc.*, the Third Circuit explained, “In the absence of some reason to believe otherwise, one can normally assume that participants in a market with the ability to undertake gainful work will be ‘willing’ to undertake it.”<sup>71</sup>

*Past discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure the work. . . . [I]f there has been discrimination in City contracting, it is to be expected that African American firms may be discouraged from applying, and the low numbers [of African American firms seeking to prequalify for City-funded contracts] may tend to corroborate the existence of discrimination rather than belie it.*<sup>72</sup>

### 2.5.7 **Able**

Another availability consideration is whether the firms considered are able to perform a particular service. Those who challenge affirmative action often question whether M/WBE firms have the “capacity” to perform particular services, which focuses on the availability determination of firm size. *Concrete Works II and IV* recognized the shortcomings of such a focus.<sup>73</sup> Additionally, the court observed that when a challenger introduces credible evidence of firm capacity, “it becomes a factor that the court should consider.”<sup>74</sup> The court also acknowledged the City of Denver’s argument that “a construction firm’s precise ‘capacity’ at a given moment in time belies quantification due to the industry’s highly elastic nature.”<sup>75</sup>

In *Engineering Contractors* statistical analysis did show that firm size was a factor in explaining firm utilization. However, the trial court ruled that the remaining disparities after controlling for firm size did not provide a “strong basis in evidence” to justify a procurement preference to black firms.<sup>76</sup>

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<sup>71</sup> *Contractors Association of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 91 F.3d 586, 603 (3<sup>rd</sup> Cir. 1996).

<sup>72</sup> *Id.* at 603-04.

<sup>73</sup> *Concrete Works*, 36 F.3d at 1528-29.

<sup>74</sup> *Id.* at 1528.

<sup>75</sup> *Id.* *Concrete Works IV*, 2003 U.S App. Lexis 2396 (10<sup>th</sup> Cir 2003).

<sup>76</sup> *Concrete Works II* at 1566

On the one hand, considering a firm's size may be necessary to determine whether the firm is capable and available to provide the requested services. On the other hand, the 10<sup>th</sup> Circuit recently noted that the relevance of firm size is somewhat diminished by the practice of hiring employees.<sup>77</sup> It is a common practice among construction companies of all sizes to routinely vary the size of their employment ranks depending on the type of project being undertaken.

### **2.5.8 The Use of Various Data Sources to Measure Availability**

One area of controversy on the availability side has been the use of census data. Census data have the benefit of being accessible, comprehensive, and objective in measuring availability. In *Contractors Association of Eastern Pennsylvania*, the Third Circuit—while acknowledging some of the limitations of census data—admitted that census data could be of some value in disparity studies. In that case the City's consultant calculated a disparity using data concerning the total amount of contract dollars awarded by the City, the amount that went to MBEs, and the number of African American construction firms. The consultant combined these data with data from the Census Bureau on the number of construction firms in the Philadelphia Standard Metropolitan Statistical Area.<sup>78</sup>

Some commentators have suggested the use of bidder data to measure M/WBE availability.<sup>79</sup> It is worth noting, however, that *Croson* did not require the use of bidder data to determine availability, and no court in the Fourth Circuit has reached that conclusion either. In *Concrete Works II* the Circuit court noted that looking at bidders only has its limits. Firms that bid may not be qualified or able, and firms that do not bid may be qualified and able to undertake agency contracts.<sup>80</sup>

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<sup>77</sup> *Concrete Works IV*, 2003 U.S App. Lexis 2396 (10<sup>th</sup> Cir 2003).

<sup>78</sup> *Contractors Association of Eastern Pennsylvania, Inc., v. City of Philadelphia*, 91 F.3d at 604.

<sup>79</sup> G. LaNoe, "Who Counts? Determining the Availability of Minority Businesses for Contracting After *Croson*," 21 *Harvard Journal of Law and Public Policy* 793, 833 (1998).

<sup>80</sup> *Concrete Works v. Denver IV*, at 89-90.

Moreover, not all contracts are let by competitive bids. The use of vendor data, which is determined by identifying MBEs that have actually performed work for the governmental entity or who have expressed an interest in securing contracts by affirmatively registering with a local agency, has the advantage. This is because using vendor data excludes firms that are uninterested or unable to provide goods or services to the governmental entity, while recognizing that a broader pool of firms seeks public opportunities than simply those seeking contracts that are competitively bid.

### **2.5.9 Statistical Significance**

In *Engineering Contractors II*, the Eleventh Circuit addressed what constitutes a significant level of disparity. Generally, disparity indices of 80 percent or greater—which are close to full participation—are not considered significant.<sup>81</sup> The court referenced the Equal Employment Opportunity Commission’s disparate impact guidelines, which establish the 80 percent test as the threshold for determining a *prima facie* case of discrimination.<sup>82</sup> According to the Eleventh Circuit, no circuit that has explicitly endorsed using disparity indices has held that an index of 80 percent or greater is probative of discrimination, but they have held that indices below 80 percent indicate “significant disparities.”<sup>83</sup>

In support of the use of standard deviation analyses to test the statistical significance of disparity indices, the Eleventh Circuit observed that “social scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by

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<sup>81</sup> *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914.

<sup>82</sup> *Id.* at 914 (citing 29 C.F.R. § 1607.4D concerning the disparate impact guidelines and threshold used in employment cases).

<sup>83</sup> *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914 (referencing *Contractors Ass’n of Ea. Pa.*, 6 F.3d at 1005, crediting disparity index of 4 percent; and *Concrete Works*, 36 F.3d at 1524, crediting disparity indices ranging from 0 percent to 3.8 percent).

some other factor than chance.”<sup>84</sup> With standard deviation analyses, the reviewer can determine whether the disparities are substantial or statistically significant, which lends further statistical support to a finding of discrimination.

## **2.6 Anecdotal Evidence of the Experiences of Non-MBE, Minority, and Woman-Owned Firms May Be Used to Justify an M/WBE Program**

Most disparity studies utilize anecdotal evidence along with statistical data. The Supreme Court in *Croson* discussed the relevance of anecdotal evidence and explained: “Evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”<sup>85</sup> Although the Supreme Court in *Croson* did not expressly consider the form or level of specificity required for anecdotal evidence, the Ninth Circuit has addressed both issues.

Regarding the appropriate form of anecdotal evidence, the Ninth Circuit in *Coral Construction* noted that the record provided by King County was “considerably more extensive than that compiled by the Richmond City Council in *Croson*.”<sup>86</sup> The King County record contained affidavits of at least 57 minority or female contractors, each of whom complained in varying degrees of specificity about discrimination within the local construction industry. The *Coral Construction* court stated that the M/WBE affidavits “reflected a broad spectrum of the contracting community” and the affidavits “certainly suggested that ongoing discrimination may be occurring in much of the King County business community.”<sup>87</sup>

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<sup>84</sup> *Engineering Contractors Ass’n of South Florida, Inc.*, 122 F.3d at 914 (citing *Peightal v. Metropolitan Dade County*, 26 F.3d 1545, 1556 n.16 (11<sup>th</sup> Cir. 1994)(quoting *Waisome v. Port Authority*, 948 F.2d 1370, 1376 (2d Cir. 1991)).

<sup>85</sup> *Croson*, 488 U.S. at 509.

<sup>86</sup> *Coral Construction Co.*, 941 F.2d at 917.

<sup>87</sup> *Id.* at 917-18.

In *AGCC II*, the Ninth Circuit addressed the specificity of anecdotal evidence required by *Croson*.<sup>88</sup> The contractors contended that the City's evidence lacked the specificity required by both *Croson* and *AGCC I*. The Court held that the City's findings were based on substantially more evidence than the anecdotes in the two prior cases, and "they [were] clearly based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as significant statistical disparities in the award of contracts."<sup>89</sup> The Court also ruled that the City was under no burden to identify specific practices or policies that were discriminatory.<sup>90</sup>

Reiterating the City's perspective, the Court stated that the City "must simply demonstrate the existence of past discrimination with specificity; there is no requirement that the legislative findings specifically detail each and every instance that the legislative body had relied upon in support of its decision that affirmative action is necessary."<sup>91</sup>

Not only have courts found that a municipality does not have to specifically identify all the discriminatory practices impeding M/WBE utilization, the Circuit Court in *Concrete Works IV* also held that anecdotal evidence collected did not have to be verified. The Court stated:

*There is no merit to the [plaintiff's] argument that witnesses' accounts must be verified to provide support for Denver's burden. Anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions...Denver was not required to present corroborating evidence and [the plaintiff] was free to present its own witnesses to either refute the incidents described by Denver's witnesses or to relate their own perceptions on discrimination in the Denver construction industry.*<sup>92</sup>

Lower courts have relied on anecdotal data to demonstrate the existence of past and present discrimination. Both the Ninth and Tenth Circuits (e.g., in *AGCC II* and *Concrete*

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<sup>88</sup> *Associated General Contractors of California, Inc.*, 950 F.2d at 1414.

<sup>89</sup> *Id.* at 1416. This evidence came from ten public hearings and "numerous written submissions from the public."

<sup>90</sup> *Id.* at 1410.

<sup>91</sup> *Id.* at 1416.

<sup>92</sup> *Concrete Works IV*, at 108.

*Works IV*) have indicated that while anecdotal evidence alone is generally not sufficient to prove discrimination, the combination of specific incidents of discrimination in conjunction with significant statistical disparities satisfies the “strong-basis-in-evidence” test for establishing discrimination to justify a narrowly tailored race- and gender-conscious program.<sup>93</sup>

In *Coral Construction*, the Ninth Circuit addressed the use of anecdotal evidence alone to prove discrimination. Although King County’s anecdotal evidence was extensive, the Court noted the absence in the record of any statistical data in support of the program. Additionally, “While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a *systemic pattern of discrimination necessary for the adoption of an affirmative action plan*.”<sup>94</sup> The Court concluded that “the combination of convincing anecdotal and statistical evidence is potent.”<sup>95</sup>

## **2.7 The Governmental Entity or Agency Enacting an MBE Program Must Be Shown to Have Actively or Passively Perpetuated the Discrimination**

The Supreme Court stated in *Croson*: “It is beyond dispute that any public entity, state or federal, has a *compelling* interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of *private* prejudice.”<sup>96</sup>

*Croson* provided that the government “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.”<sup>97</sup> The government agency’s active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Finding discrimination in the portions of the private sector economy that are subjects of the disparity

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<sup>93</sup> *Coral Construction Co.*, 941 F.2d at 919; *Concrete Works IV*, at 89.

<sup>94</sup> *Coral Construction Co.*, 941 F.2d at 919 (emphasis added).

<sup>95</sup> *Id.*

<sup>96</sup> *Coral Construction Co.*, 941 F.2d at 922 (citing *Croson*, 488 U.S. at 492) (emphasis added).

<sup>97</sup> See *Richmond v. Croson*, 488 U.S. 492 (1989); see generally I. Ayres and F. Vars, “When Does Private Discrimination Justify Public Affirmative Action?” 98 *Columbia Law Review* 1577 (1998).

study can also show passive participation. In *Croson* the Court stated, "A municipality has a compelling government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality's legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program."<sup>98</sup>

The recent Court of Appeals decision in *Adarand* concluded that there was a compelling interest for a DBE program based primarily on evidence of private sector discrimination.<sup>99</sup> Subsequent lower court cases have restated that the government agency has a compelling interest in not financing private discrimination with public dollars.<sup>100</sup>

In reliance on this language in *Croson* a number of local agencies have increased their reliance on evidence of discrimination in the private sector.<sup>101</sup> The City of Atlanta, in the revisions to its program, tried to focus on evidence of discrimination in the private sector.<sup>102</sup>

This strategy has not always succeeded. In the purest case, Cook County did not produce a disparity study but instead presented anecdotal evidence that M/WBEs were not solicited for bids in the private sector. Cook County lost the case.<sup>103</sup> Similarly, evidence of private sector discrimination presented in litigation was found inadequate in the

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<sup>98</sup> *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

<sup>99</sup> *Adarand v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir 2000).

<sup>100</sup> *Drabik*, 214 F.3d at 734-35. See also *Concrete Works II*, 36 F.3d at 1529. *Coral Construction*, 941 F.2d at 916; *AGC v. New Haven*, 791 F.Supp. at 947.

<sup>101</sup> This was motivated in part by a law review article by Ian Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" *Columbia Law Review* 98 (1998) 1577.

<sup>102</sup> The new Atlanta program has the following key provisions: A prime contractor can bid a contract if it can show that in the last two years it awarded at least 34 percent of subcontracts on both private and public sector jobs to M/WBE firms; if the prime cannot satisfy the first requirement above, it must show good faith efforts; if the vendor cannot meet the goal at the end of two years, then the vendor can no longer bid on city contracts. The program also contains a mentor-protégée component. There are no set-asides or geographical preferences in the new program. Atlanta Ordinance 00-0-1859 (2001). The program has not been challenged as of this date.

<sup>103</sup> *Builders Association of Greater Chicago v. County of Cook*, 123 F. Supp. 2d 1087 (ND IL 2000).

Philadelphia, Dade County, and Fulton County cases.<sup>104</sup> However, recently in *Concrete Works IV* the Court of Appeals upheld the relevance of data from the private marketplace to the establishment of a factual predicate for M/WBE programs.<sup>105</sup> The basic issues have been as follows.

First, is it necessary to demonstrate a nexus between private and public discrimination? The Third Circuit, for example, has stated, in discussing low MBE participation in a local contractors association, that “racial discrimination can justify a race-based remedy only if the City has somehow participated in or supported that discrimination.”<sup>106</sup>

Second, is M/WBE utilization on public sector projects higher than on private sector projects simply due to the presence of an M/WBE program in the public sector, or is there evidence of private sector discrimination? This objection was raised by Judge Posner in the recent Cook County litigation.<sup>107</sup> *Concrete Works IV*, however, expressly cited evidence from contractors that were used for business with the City of Denver but were not used by the same prime contractors for private sector contracts.<sup>108</sup>

Third, the Cook County case also raised the issue, is evidence that prime contractors simply do not solicit M/WBEs as subcontractors sufficient evidence of discrimination, or is it necessary to provide evidence that there is discrimination in hiring M/WBE subcontractors?<sup>109</sup> The court argued that evidence of failure to solicit M/WBEs was not the same as evidence of being denied the opportunity to bid. The court also stated that the anecdotal testimony was sufficient only to make the case against a few prime contractors

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<sup>104</sup> *Webster v. Fulton County*, op.cit., *Contractors Assn. of Eastern Penn v. Philadelphia*, op.cit.; *Engineering Contractors Ass'n of South Florida, Inc.*, 122 F.3d at 914.

<sup>105</sup> *Concrete Works IV*, at 69

<sup>106</sup> *Contractors Ass'n of Eastern Pennsylvania v. Philadelphia*, 91 F.3d 586, 602 (3d Cir 1996); see also *Webster v. Fulton County*, 51 F. Supp. 2d 1354 (ND GA 1999).

<sup>107</sup> *Builders Ass'n of Greater Chicago v. County of Cook*, 2001 U.S. App. LEXIS 15066 (7<sup>th</sup> Cir 2001).

<sup>108</sup> *Concrete Works IV*, at 69.

<sup>109</sup> *Builder Assn of Chicago v. Cook County*, 123 F.Supp. 1087 (ND IL 2000).

and did not provide evidence of systematic bias in the industry as a whole. Nor was evidence provided that a general contractor awarded contracts to non-M/WBEs that were less qualified than M/WBEs, or that bid a higher price.

Fourth, is evidence of private sector analysis simply another form of “societal discrimination” that lacks the specificity required by *Croson*? In *Engineering Contractors* one component of the factual predicate was a study that compared entry rates into the construction business for M/WBEs and non-M/WBEs. The analysis provided evidence that minorities and women entered the construction business at (statistically significant) rates lower than would be expected, given their numerical presence in the population and human and financial capital variables. The study argued that those disparities that persisted after the appropriate statistical controls were most likely the result of current and past discrimination.<sup>110</sup> But the court criticized this material for reliance on census data and the lack of particularized evidence of active or passive discrimination by Dade County.<sup>111</sup>

Fifth, is evidence of a decline in M/WBE utilization following a change in or termination of an M/WBE program relevant to establishing a factual predicate for an M/WBE program? The Appeals Court in *Concrete Works IV* did find that such a decline in M/WBE utilization is evidence that prime contractors are not willing to use M/WBEs in the absence of legal requirements.<sup>112</sup> However, in *AGC v. Columbus* the district court noted that M/WBE utilization would have to fall below M/WBE availability in order to show that the M/WBE was not simply artificially propping up M/WBE utilization.<sup>113</sup>

Finally, is evidence of capital market discrimination relevant to determining whether or not there is private sector discrimination? Discrimination in commercial lending also adversely affects the competitiveness of M/WBEs by raising their costs. In *Concrete Works*

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<sup>110</sup> Id. at 1573

<sup>111</sup> *Engineering Contractors Ass'n of South Florida, Inc.*, 122 F.3d at 914.

<sup>112</sup> *Concrete Works IV* at 95.

<sup>113</sup> *AGC v. Columbus*, 936 F. Supp. 1363 (SD Ohio 1996) (vacated on procedural grounds).

/// Denver presented evidence of discrimination in the Denver metropolitan area commercial lending market. Denver argued that M/WBEs were denied business loans, based in part on race, and that Denver city government was a passive participant in this discrimination because Denver had placed its funds into some of those institutions. The District Court in *Concrete Works III* found the evidence of discrimination in business lending unpersuasive.<sup>114</sup> However, in *Adarand v. Slater* the Appeals Court in the Tenth Circuit favorably cited evidence of capital market discrimination as relevant to establishing the factual predicate for the federal DBE program.<sup>115</sup> And the Appeals Court in the Tenth Circuit argued again in overturning the district court decision in *Concrete Works III* that barriers to business formation were relevant to establishing a factual predicate for an M/WBE program insofar as credit market evidence demonstrated that M/WBEs are “precluded from the outset from competing for public construction contracts.”<sup>116</sup>

## **2.8 To Withstand Strict Scrutiny, an MBE Program Must Be Narrowly Tailored to Remedy Identified Discrimination**

The discussion of the compelling interest in the court cases has been extensive, but the key issue is narrow tailoring. As David Straus, a law professor at the University of Chicago, noted when the Supreme Court first ruled on *Adarand* in 1995:

*The requirement that an interest be “compelling” is seldom what defeats a statute; over the years, the Supreme Court has found an enormous range of government interests to be “Compelling.” It is the requirement that a measure be “necessary” or “narrowly tailored” that has proved difficult to satisfy. States seldom have a difficult time advancing some obviously important interest that is arguably or plausibly promoted by a challenged law. What makes strict scrutiny effective is that it is difficult to show that the measure is an especially good way of promoting that objective.*<sup>117</sup>

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<sup>114</sup> *Concrete Works III*, at 1072.

<sup>115</sup> *Adarand v. Slater*, DC No 90-K-1413 (10<sup>th</sup> Cir 2000).

<sup>116</sup> *Concrete Works IV*, at 72. Along these same lines, the Circuit Court in the Tenth Circuit also found evidence—from a regression analysis of census data—of disparities in self-employment and income from self-employment as relevant to showing barriers to M/WBE formation. *Id.* at 78.

<sup>117</sup> David Strauss, Affirmative Action and the Public Interest, *Supreme Court Review* (1995), at 29-30.

In line with this insight, the judicial review of many state and local M/WBE courts typically states that even if a compelling interest for the M/WBE program is found, the program is not narrowly tailored. This was the conclusion of the Third Circuit in *Contractors Association of Eastern Pennsylvania*.<sup>118</sup>

But at the same time, the federal courts (in *Adarand v. Slater*, *Sherbrooke Turf*, and *Gross Seed*)<sup>119</sup> have found that the new DBE program, established pursuant to the regulations (49 CFR, Part 26) issued under The Transportation Equity Act (TEA-21) (1998) is narrowly tailored to serve a compelling interest. Previously, the federal court had ruled that there was a factual predicate for the federal DOT DBE program, but the program was not narrowly tailored.<sup>120</sup> These rulings provide some guidance as to what program configurations the courts will judge to be narrowly tailored.

Courts have identified the following elements of narrow tailoring remedial race-conscious programs:<sup>121</sup>

- the utilization of race-neutral alternatives;
- the relationship between remedial goals and availability;
- program flexibility;
- the relationship between the remedies and the beneficiaries of those remedies;
- the impact on innocent third parties; and
- limited duration and/or periodic review.

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<sup>118</sup> *Contractors Association of Eastern Pennsylvania, Inc., v City of Philadelphia*, 91 F.3d at 605.

<sup>119</sup> *Adarand v. Mineta*, U.S. Supreme Court, *per curiam*, November 27, 2001; *Sherbrooke Sodding v. MDOT* (2001 US Dist Lexis 19565) (November 14, 2001); *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002).

<sup>120</sup> In 1998 in *Sherbrooke I* the Minnesota district court had ruled that while there was a compelling interest for the DBE program the program was not narrowly tailored. In 1996, before the new DBE regulations, the district court in Colorado, upon remand from the 1995 U.S. Supreme Court, had made a similar ruling in *Adarand v. Peña*.

<sup>121</sup> Pre-*Croson* case; see *U.S. v. Paradise*, 480 U.S. 149, 171 (1987).

### 2.8.1 Race-Neutral Alternatives

Concerning race-neutral alternatives, the Supreme Court in *Croson* concluded that a governmental entity must demonstrate that it has evaluated the use of race-neutral means to increase minority business participation in contracting or purchasing activities.<sup>122</sup> Typical race-neutral schemes include the elimination of prequalification requirements, breaking down the size of projects, bond guarantees programs, prompt payment ordinances, mentor-protégé programs, and outreach and instructional resources. In *Webster* the court criticized Fulton County for not considering such race-neutral alternatives in the 20 years of the program.<sup>123</sup>

In this area the courts have found the new DBE regulations to be narrowly tailored, in particular because of the emphasis that a granting agency “must meet the maximum feasible portion of [its] overall goal by using race-neutral means of facilitating DBE participation.”<sup>124</sup> Moreover, Congress explicitly considered race-neutral alternatives before adopting TEA-21.

However, strict scrutiny does not mandate that every race-neutral measure be considered and found wanting.<sup>125</sup> In *Grutter* the U.S. Supreme Court also ruled that the Michigan Law School did not have to put in place a race-neutral alternative first, or exhaust all race-neutral alternatives prior to making race a “plus” factor in law school admissions.

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<sup>122</sup> *Croson*, 488 U.S. at 507.

<sup>123</sup> *Webster*, 51 F.Supp. 2d at 1380. See also *Contractors Assn of Eastern Pennsylvania v. City of Philadelphia*, 91 F.3d at 609. *Drabik*, 214 F.3d at 738.

<sup>124</sup> *Adarand v. Slater*, at 21 [citing 49 CFR Sec 26.51(a)(2000)].

<sup>125</sup> *Coral Construction*, 941 F.2d at 923, “While strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative”; see also *AGC of California*, 950 F.2d at 1417.

### **2.8.1.1 What Constitutes a Race-Specific and Gender-Specific Business Preference Program?**

Following the termination of M/WBE programs, a variety of approaches have been used to address M/WBE underutilization. Sometimes it is not clear what constitutes a race-neutral program.

### **2.8.1.2 Racial Classifications**

Even after program termination an agency may continue to use racial classifications. So the question arises: Does the mere use of racial classifications violate race neutrality? The California Appeals Court for the Third Appellate District argued in *Connerly v. State Personnel Board*<sup>126</sup> that simply because a law is race conscious does not mean that it necessarily invites strict scrutiny. The *Connerly* court gave the example of a law prohibiting racial discrimination in employment as being race conscious but as not being subject to strict scrutiny. Nevertheless, other racial classifications standing alone might trigger strict scrutiny. For example, the *Connerly* court indicated that granting a rebuttable presumption of disadvantage to an ethnic group is still a racial preference, at least for purposes of Proposition 209, because one group must prove its disadvantage while another group does not have to provide its disadvantage.

Yet another form of racial classification is tracking M/WBE spending. (Under Virginia state law state agencies must report certain information on M/WBE utilization to the Virginia Department of Minority Business Enterprise.<sup>127</sup>) There are differences among the courts as to whether agencies can even report M/WBE spending. In *Barlow v. Davis* the California Court of Appeals upheld the governor's executive order preventing the State of California from collecting and reporting of data on M/WBE utilization. For the *Barlow* court the reporting requirement could not be severed from the affirmative action statute and was thus

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<sup>126</sup> *Connerly v. State Personnel Board*, 92 Cal. App.4<sup>th</sup> 16 (2001) relying on the U.S. Supreme Court voting rights decision in *Shaw v. Reno*, 509 U.S. 630, 647 (1993).

<sup>127</sup> Virginia Code Section 2.1-64.38.

in violation of Proposition 209.<sup>128</sup> Similarly, the *Connerly* court found that the reporting scheme for the state community college system was "entirely bound up and intermixed with the success of the preferential hiring scheme" and hence an integral part of the unconstitutional preference program.<sup>129</sup> In a non-Proposition 209 case, the federal court prohibited the City and County of Denver from reporting M/WBE spending following the decision in *Concrete Works*.<sup>130</sup> As noted earlier, this ruling was overturned by the Court of Appeals for the 10<sup>th</sup> Circuit. No other M/WBE case (outside of the Proposition 209 cases) prohibited tracking M/WBE spending following program termination. And in the settlement of some cases, tracking of M/WBE spending was in fact required.<sup>131</sup>

### **2.8.2 Relationship of Goals to Availability**

Narrow tailoring under the *Croson* standard requires that remedial goals be in line with measured availability. For example, in *Webster* the district court found that the 35 percent goal is not adequately justified, particularly given the statistically insignificant disparities.<sup>132</sup> Similarly, in *Associated Utility Contractors* the district court noted that "a percentage set-aside measure, like the M/WBE goals at issue here, can only be justified by reference to the overall availability of minority- and women-owned businesses in the relevant markets. In the absence of such figures, the 20 percent MBE and 3 percent WBE set-aside figures are arbitrary and clearly unenforceable in light of controlling Supreme Court and Fourth Circuit authority."<sup>133</sup>

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<sup>128</sup> *Barlow v. Davis*, 72 Cal. App.4<sup>th</sup> 1258, 1260 (1999).

<sup>129</sup> *Connerly v. State Personnel Board*, at 61. At the same time, in *Connerly* the California appeals court observed that tracking outcomes by race as a vehicle for detecting discrimination does not grant a preference in violation of Proposition 209.

<sup>130</sup> Order on Defendant's Post Trial Motions, *Concrete Works of Colorado v. City and County of Denver*, Civil Action No. 92-M-21, (March 29, 2000) ("The court also finds that provisions of Division 3 relating to the collection of data on MBEs and WBEs and the certification of MBEs and WBEs are not severable from the rest of Division 3 because they are linked fundamentally to the function and purpose of the unconstitutional goals program.")

<sup>131</sup> *Prior Tire v. Atlanta Public Schools*, No. 1-95-CV-825-JEC (ND GA 1997).

<sup>132</sup> *Webster*, 51 F.Supp.2d at 1379, 1381.

<sup>133</sup> *Associated Utility Contractors v. Baltimore*, 83 F.Supp2d 613, 622 (D Md 2000).

In contrast, the courts have upheld the goal setting process for the DOT DBE program. The DOT DBE regulations require that goals be based on one of several methods of measuring DBE availability.<sup>134</sup> Moreover, there are built-in mechanisms to ensure that DBE goals are not set excessively high relative to DBE availability. For example, DBE goals are not even permitted if the overall goal is met for two consecutive years by race-neutral means.<sup>135</sup> And DBE contract goals must be reduced if overall goals have been exceeded with race-conscious means for two consecutive years.<sup>136</sup>

### **2.8.3 Flexibility**

The two elements of flexibility are waivers and project goals that prevent a program from constituting a set quota. *Croson* favorably mentioned the contract-by-contract waivers in the federal DBE DOT program. Virtually all MBE programs have this waiver feature in their enabling statutes. For instance, King County's program permitted prime contractors to request a waiver of the MBE participation requirement when a non-MBE was the sole source of a good or service, or if no MBE was otherwise available or competitively priced. In addition, under the preference method, if no MBE was within 5 percent of the lowest bidder, a non-MBE was awarded the contract. Therefore, the Ninth Circuit concluded, "King County's MBE program is not facially unconstitutional for want of flexibility."<sup>137</sup>

Similarly, it is important that project goals are not rigidly set. For example, the DOT DBE program provides for the setting of aspirational, not mandatory, goals. Quotas are expressly forbidden by the DBE regulations. Recipient agencies are no longer bound to the national 10 percent goal. For example, in *Sherbrooke Turf* the state DOT had a goal of 10 percent on one project and 1.2 percent on another project. In the new DBE regulations,

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<sup>134</sup> 49 CFR, Section 26, Part 45

<sup>135</sup> 49 CFR, Section 26, Part 51(f)(3).

<sup>136</sup> 49 CFR, Section 26, Part 51(f)(4).

<sup>137</sup> *Id.* at 925.

overall goals are simply a framework for setting contract goals, if any. Goals are not required on every contract.<sup>138</sup> In fact, states are permitted to opt out of the goals (altogether nine state recipients have opted out of the program).<sup>139</sup> DBE goals are set based on local data on DBE availability.

This emphasis on flexibility was reinforced when *Grutter* and *Gratz* are put together. In *Gratz* the U.S. Supreme Court struck down the race-based undergraduate admissions system because it allocated points based on an applicant's race. This point allocation made the factor of race “decisive” and did not allow for “individualized consideration” of how the applicant might contribute to the diversity of the student body. The U.S. Supreme Court ruled that the University of Michigan undergraduate system of admissions was not narrowly tailored. In contrast, the University of Michigan Law School system of admissions was not based on points and was deemed narrowly tailored by the Court.

#### **2.8.4 Overinclusion**

Narrow tailoring also involves limiting the number and type of beneficiaries of the program. As noted above there has to be evidence of discrimination to justify a group-based remedy for a particular group.

The regulations covering certification mean that the DBE program does not provide blanket protection to minorities. And DBEs must be present in the local market. There is some suggestion from the Supreme Court in *Adarand* that individual inquiry into disadvantage may be required for narrow tailoring with reference to the personal net worth requirements in the DOT DBE regulations.<sup>140</sup>

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<sup>138</sup> 49 CFR, Section 26, Part 51(e)(2).

<sup>139</sup> See [www.osdbuweb/dot.gov/business/dbe/fhwagoal.html](http://www.osdbuweb/dot.gov/business/dbe/fhwagoal.html)

<sup>140</sup> *Adarand VII*, slip op. at 21-22.

Another aspect of the overinclusion issue is that the MBE program must be limited in its geographical scope to the boundaries of the enacting jurisdiction.<sup>141</sup> The Supreme Court in *Croson* indicates that a local agency has the power to address discrimination only within its own marketplace. One fault of the Richmond MBE programs was that minority firms were certified from around the United States.<sup>142</sup> In *Coral Construction*, the Ninth Circuit concluded that the King County MBE program failed this aspect of the narrow tailoring requirement. Specifically, the definition of MBEs eligible to benefit from the program was overbroad; it included MBEs that had no prior contact with King County provided the MBE could demonstrate that discrimination occurred "in the particular geographic areas in which it operates."<sup>143</sup> This MBE definition suggested that the program was designed to eradicate discrimination not only in King County but also in the particular area in which a nonlocal MBE conducted business. In essence, King County's program focused on the eradication of discrimination in any jurisdiction, which is outside the power of the state or local entity. Since "the County's interest is limited to the eradication of discrimination within King County, the only question that the County may ask is whether a business has been discriminated against in King County."<sup>144</sup>

In clarifying an important aspect of the narrow tailoring requirement, the court in *Croson* defined the issue of eligibility for MBE programs as one of participation, not location. For an MBE to reap the benefits of an affirmative action program, the business must have been discriminated against in the jurisdiction that established the program.<sup>145</sup> As a threshold matter, before a business can claim to have suffered discrimination, it must have

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<sup>141</sup> *Id.*

<sup>142</sup> *Croson*, 488 U.S. at 508.

<sup>143</sup> *Id.*

<sup>144</sup> *Id.*

<sup>145</sup> *Id.*

attempted to do business with the County.<sup>146</sup> It is significant that "if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business within the County."<sup>147</sup>

According to the court, the presumptive rule requires that the enacting governmental agency establish that systemic discrimination exists within its jurisdiction and that the MBE is, or attempted to become, an active participant in the agency's business community.<sup>148</sup> Since King County's definition of MBE permitted participation by those with no prior contact with King County, its program was overbroad.

### **2.8.5 Burden on Third Parties**

Narrow tailoring also necessitates limiting the burden of the program on third parties. Waivers are one tool that serves this purpose. Another tool is the good faith compliance provisions in the DBE regulations that allow prime contractors to not meet the goal if they attempted to comply in good faith.<sup>149</sup> Finally, the DOT DBE regulations seek to reduce the program burden on non-DBEs by avoiding DBE concentration in certain industries or subspecialties,<sup>150</sup> and allowing for the inclusion of nonminority DBEs in the DBE program itself.

### **2.8.6 Program Duration**

Narrow tailoring requires some form of sunset provision. In *Webster v. Fulton County* the district court noted that the program had been in place for 20 years with no contemplation of expiration.<sup>151</sup>

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<sup>146</sup> *Id.*

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> 49 CFR, Section 26, Part 53.

<sup>150</sup> 49 CFR, Section 26, Part 33.

<sup>151</sup> *Webster v. Fulton County*, 51 F.Supp. at 1382. It is interesting to note that there were no sunset provisions in the University of Michigan Law School admissions program upheld in *Grutter*.

The DOT DBE had a variety of sunset and program termination provisions. First, the program as a whole is over in 2004. Second, DBEs can participate in the program for only ten and a half years. Third, annual certification involving personal net worth and business size limitations is required to ensure continued program eligibility.<sup>152</sup> Finally, the program is terminated if it meets annual DBE goals for two years entirely through race-neutral means.

## **2.9 Small Business Procurement Preferences**

Small business procurement preferences have existed since the 1940s. The first small business program had its origins in the Smaller War Plants Corporation (SWPC) established during World War II.<sup>153</sup> The SWPC was established to channel war contracts to small businesses. In 1947, Congress passed the Armed Forces Procurement Act, declaring: "It is the policy of Congress that a fair proportion of the purchases and contracts under this chapter be placed with small business concerns."<sup>154</sup> Continuing this policy, the 1958 Small Business Act requires that government agencies award a "fair proportion" of procurement contracts to small business concerns.<sup>155</sup> The regulations are designed to implement this general policy.<sup>156</sup>

Section 8(b)(11) of the Small Business Act authorizes the SBA to set aside contracts for placement with small business concerns. The SBA has the power:

*to make studies and recommendations to the appropriate Federal agencies to insure that a fair proportion of the total purchases and contracts for property and services for the Government be placed with small-business enterprises, to insure that a fair proportion of Government contracts for research and development be placed with small-business concerns, to insure that a fair proportion of the total sales of Government property be*

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<sup>152</sup> A provision cited favorably in *Gross Seed v. Nebraska Department of Roads*, at 19.

<sup>153</sup> See, generally, Thomas J. Hasty III, "Minority Business Enterprise Development and the Small Business Administration's 8(a) Program: Past, Present, and (Is There a) Future?" *Military Law Review* 145 (Summer 1994): 1-112.

<sup>154</sup> 10 U.S.C. § 2301 (1976).

<sup>155</sup> 15 USC 631(a).

<sup>156</sup> See 32 C.F.R. §§ 1-701.1 to 1-707.7.

*made to small-business concerns, and to insure a fair and equitable share of materials, supplies, and equipment to small-business concerns.*<sup>157</sup>

Every acquisition of goods and services anticipated to be between \$2,500 and \$100,000 is set aside exclusively for small business unless the contracting officer has a reasonable expectation of fewer than two bids by small businesses.<sup>158</sup>

### **2.9.1 Challenges to Federal Small Business Procurement Programs**

There has been only one constitutional challenge to the long-standing federal SBE programs. In *J. H. Rutter Rex Manufacturing v. United States*,<sup>159</sup> a federal vendor unsuccessfully challenged the Army's small business set-aside as in violation of the due process clause of the Fifth Amendment to the U.S. Constitution, as well as the Administrative Procedures Act and the Armed Forces Procurement Act.<sup>160</sup> The vendor argued that the small business program deprived it of a property interest without due process of law because the program reduced the number of contracts on which larger vendors are able to bid.<sup>161</sup>

The federal appeals court held that there is not a constitutional right granted to private vendors to contract with the government on the basis of competitive bidding.<sup>162</sup> The court ruled, "We are unaware of a single independent source in either state or federal law which would support Rutter Rex's claim of a Fifth Amendment property entitlement to participate in

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<sup>157</sup> 15 U.S.C. § 637(b)(11).

<sup>158</sup> *Federal Acquisition Regulations* 19.502-2.

<sup>159</sup> 706 F.2d 702(5<sup>th</sup> Cir 1983), cert denied 464 U.S. 1008 (1983).

<sup>160</sup> Administrative Procedures Act, 5 U.S.C. §§ 552(a)(1)(E) (1976) and the "fair proportion" language of the Armed Forces Procurement Act, 10 U.S.C. § 2301 et seq. (1976), and the Small Business Act, 15 U.S.C. § 631 et seq. (1976).

<sup>161</sup> Congressional opponents of small business set-asides had made a similar Fifth Amendment argument in 1961-62 when legislation was introduced to repeal small business set-asides at the behest of the Association of General Contractors of America (AGCA). See Jonathon Bean, "Big Business and Affirmative Action" (2001), pages 29-31.

<sup>162</sup> See also *Ray Baillie*, 477 F.2d at 709 ("There is no constitutional duty to offer government procurement contracts for competitive bidding."); *Crown Zellerbach Corp. v. Marshall*, 441 F. Supp. 1110 (E.D.La.1977) (denying preliminary injunction requiring government to contract with firms not meeting standard for affirmative action plan).

the awarding of government contracts.”<sup>163</sup> Moreover, the appeals court responded that the “Supreme Court has long recognized the special judicial deference due administrative agencies in the area of procurement.”<sup>164</sup> The government, like private individuals and businesses, has the power “to determine those with whom it will deal, and to fix the terms and conditions upon which it will make needed purchases.”<sup>165</sup> Similarly, the Comptroller General has interpreted the Small Business Act as allowing for premium prices to be paid to small businesses.<sup>166</sup>

The court held that classifying businesses as small was not a “suspect classification” subject to strict scrutiny. Instead the court ruled:

*Since no fundamental rights are implicated, we need only determine whether the contested socioeconomic legislation rationally relates to a legitimate governmental purpose... Our previous discussion adequately demonstrates that the procurement statutes and the regulations promulgated there under are **rationally related** to the sound legislative purpose of promoting small businesses in order to contribute to the security and economic health of this Nation.*<sup>167</sup> (emphasis added)

The rational relationship test is a more relaxed standard of judicial review that holds that the courts will not “second guess” a legislative enactment if a rational basis is provided for the rule in question.

There are various dicta in subsequent U.S. Supreme Court cases also subjecting small business procurement programs to a relaxed standard of judicial review. For example, in *Adarand v. Peña*, the U.S. Supreme Court stated:

*The Government urges that “[t]he Subcontracting Compensation Clause program is . . . a program based on disadvantage, not on race,” and thus that it is subject only to **“the most relaxed judicial scrutiny.”** Brief for Respondents 26. To the extent that the statutes and regulations involved in this case are race neutral, we agree.*<sup>168</sup> (emphasis added)

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<sup>163</sup> *J. H. Rutter Rex Manufacturing*, at 713.

<sup>164</sup> *J. H. Rutter Rex Manufacturing*, at 707 [citing *Perkins v. Lukens Steel Co.*, 310 U.S. 113, 127-28 (1940)].

<sup>165</sup> See also *Perkins*, 310 U.S. at 127, 60 S. Ct. at 876.

<sup>166</sup> *Osmose Wood Preserving Co.*, 78-2 CPD Para 24 (Oct. 23, 1978).

<sup>167</sup> *J. H. Rutter Rex Manufacturing*, at 730. See also *Dandridge v. Williams*, 397 U.S. 471, 90 S. Ct. 1153, 25 L. Ed. 2d 491 (1970).

<sup>168</sup> *Adarand v. Peña*, 513 U.S. 1108 (1995).

There is one case where the Comptroller General did object to a specific set-aside (not small business set-asides in general), where a small company dominated a market because of its unique capacity to meet government needs.<sup>169</sup> In this instance the firm was small in absolute terms but not relative to other firms in its market niche.

A large number of state and local governments have maintained small business preference programs for many years.<sup>170</sup> No state or district court cases were found overturning a state and local small business reference program. One reason for the low level of litigation in this area is that there is not significant organizational opposition to SBE programs. There are no reported cases of AGC litigation against local SBE programs. And the legal foundations that have typically sued M/WBE programs have actually promoted SBE procurement preference programs as a race-neutral substitute for M/WBE programs.<sup>171</sup>

## **2.10 Conclusions**

As summarized earlier, when developing and implementing a race- or gender-conscious program, it is crucial to understand the case law that has developed in the federal courts. These cases establish specific factors that must be addressed in order for such programs to withstand judicial review. Before instituting affirmative action programs, the governmental entity involved must engage in a specific fact-finding process to compile an evidentiary foundation. It is also important to understand the kinds of evidence that will be necessary and acceptable to provide a sufficient factual predicate for a race- or gender-conscious program. Ultimately, MBE and WBE programs can withstand muster if enacting

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<sup>169</sup> *Charles Beseler*, 62 Comp Gen. 637 (1983).

<sup>170</sup> For example, Florida started a small business preference program in 1985 (FL St Sec. 287), Minnesota in 1979 (Mn Stat 137.31), New Jersey in 1993 (N.J.S.A 52:32-17).

<sup>171</sup> See, e.g., Southeastern Legal Foundation, "Race Neutral Alternatives for the City of Atlanta M/WBE Program" (July 1999) (promoting Miami's SBE goals program), [www.southeasternlegal.org/library/aa/specialreportaa](http://www.southeasternlegal.org/library/aa/specialreportaa); see also Pacific Legal Foundation, Press Release re Los Angeles County, May 2001 ("There's no problem with the county's affirmative action program in contracting to the extent its goals include greater participation of 'disadvantaged and disabled veteran-owned businesses.'") [www.pacificlegal.org/press\\_releases](http://www.pacificlegal.org/press_releases)

jurisdictions comply with the requirements outlined by the Supreme Court and other relevant lower court cases. In the most important example, the federal DBE programs have been found to be narrowly tailored. In contrast, SBE programs face negligible risk of attack on constitutional grounds.

**3.0 REVIEW OF CONTRACTING  
POLICIES, PROCEDURES, AND  
PROGRAMS**

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### **3.0 REVIEW OF CONTRACTING POLICIES, PROCEDURES, AND PROGRAMS**

This chapter focuses on policies and procedures used by the Commonwealth of Virginia to purchase goods and services. The purpose of this chapter is to provide a description of the procurement and contracting environment in which Minority and Women Business Enterprises (M/WBEs) operate; background for the data analysis; and foundations for the report recommendations. This chapter also reviews the structure and operations of the Virginia Department of Minority Business Enterprise (DMBE) and the Virginia Department of Business Assistance during the study period. In addition, this chapter discusses the race-neutral efforts the Commonwealth is currently in the process of implementing. The following areas of procurement are reviewed in this study:

- Construction;
- Architecture and Engineering;
- Professional Services;
- Other Services;
- Technology; and
- Goods and Supplies.

Section 3.1 describes the methodology used to conduct the review of contracting policies, procedures, and programs. Section 3.2 contains a summary of the authorities that govern contracting and purchasing within the Commonwealth of Virginia and a discussion of the organization of Virginia's purchasing function. Sections 3.3 through 3.8 present a brief summary of the purchasing policies and procedures of the Department of General Services. Sections 3.9 and 3.10 cover programs to assist Small, Women and Minority (SWAM) firms.

#### **3.1 Methodology**

This section will discuss the steps taken to analyze the Commonwealth's contracting and purchasing policies, procedures, and programs and evaluate the extent

to which Virginia's race- and gender-based programs, Virginia's race- and gender-neutral programs, and Virginia's certification process facilitate or hamper M/WBE participation. The focus of this review is on elements of the purchasing process, including remedial programs, that impact on M/WBE utilization. The analysis included the following steps.

- Collect, review, and summarize Virginia contracting and purchasing policies currently in use. Discuss with managers the changes that contracting and purchasing policies have undergone during the FY 1998–2002 time frame and their effects on the remedial programs.
- Develop questionnaires and conduct interviews of key Commonwealth contracting and purchasing staff and officials to determine how existing contracting and purchasing policies have been implemented. Interviews were conducted with Commonwealth management and staff regarding the application of policies, discretionary use of policies, exceptions to written policies and procedures, and the impact of policies on key users.
- Review applicable Commonwealth statutes, regulations, resolutions, and policies that guide the remedial programs. Discuss with appropriate personnel in the Commonwealth as well as program participants, the operations, policies, and procedures of the remedial programs. Discuss the changes over time of the remedial program. The policies and procedures reviewed are limited to those provided by the Commonwealth.
- Interview program participants and nonparticipants to determine whether barriers exist within Virginia's contracting and purchasing procedure and program. Interviews also were conducted with external users (M/WBE and non-M/WBE firms) to determine the impact of Virginia policies and procedures on firms doing business with Virginia or attempting to do business with Virginia. In conducting interviews with external users, the study team solicited perceptions, opinions, and facts related to access to information and application of policies, procedures, and practices that inhibit the ability of firms to participate in contracting and purchasing with Virginia. In instances where anecdotal information was provided related to policies or practices that created problems or barriers to participation, MGT conducted additional research in order to document and corroborate the anecdotal information.
- Analyze the effect of Commonwealth contracting and purchasing procedures on the utilization of program participants by the Commonwealth.

In addition to the above methodology, MGT also collected and reviewed copies of previous disparity studies conducted in the geographic region and conducted a comprehensive review of race- and gender-neutral programs.

Overall, MGT conducted 29 interviews with current and former Commonwealth staff in May 2003 through June 2003. Commonwealth documents collected and reviewed for this portion of the study are shown in **Exhibit 3-1**.

**EXHIBIT 3-1  
DOCUMENTS REVIEWED AS PART OF POLICY AND PROCEDURES REVIEW**

<b>Index</b>	<b>Description</b>
1.	Commonwealth of Virginia, <i>Agency Procurement and Surplus Property Manual</i> (September 1998) (including changes as of June 2003)
2.	Department of General Services, Division of Purchases and Supply, <i>Vendors Manual, A Vendor's Guide on How To Do Business With the Commonwealth of Virginia</i> , Revised December 1998 (including changes as of June 2003)
3.	Commonwealth of Virginia, <i>Construction and Professional Services Manual for Architects and Engineers</i> , December 1996 (Revision 1, September 30, 1998)
4.	Commonwealth of Virginia, <i>Purchasing Manual for Institutions of Higher Education and Their Vendors</i> (March 2003)
5.	Department of Information Technology, Division of Finance and Acquisition Services, <i>Procurement of Goods &amp; Services, Policy #3.01</i> (March 18, 2003)
6.	University of Virginia Diversity Procurement Program (undated)
7.	Governor's Commission on Effectiveness and Efficiency in Government, Final Report (December 12, 2002)
8.	Report of the Governor's Task Force on Procurement Assessment (February 3, 2000)
9.	A Review by the Department of Transportation of Methods and Technologies Needed to Implement Competitive Procurement by Electronic Means (as requested by Senate Joint Resolution No. 403) (November 21, 2001)
10.	Joint Legislative Audit and Review Commission of the Virginia General Assembly, <i>Review of Capital Outlay in Higher Education</i> , Senate Document No. 3 (1996 Session)
11.	DGS/DPS, <i>eVA Summary Activity</i> (March 1, 2003)
12.	Joint Legislative Audit and Review Commission of the Virginia General Assembly, <i>Minority Owned Business Participation in Commonwealth Contracts</i> , House Document No. 53 (1996)
13.	Virginia Department of Business Assistance, <i>Fiscal Year 2002 Report</i>
14.	VDMBE Certification/Re-Certification Application
15.	Supplier Diversity Model Program (July 30, 2002)
16.	Ruby Martin, Memorandum, Participation in Commonwealth Procurement Transactions by Small Businesses and Businesses Owned by Women and Minorities (August 12, 1991)

**EXHIBIT 3-1 (Continued)  
DOCUMENTS REVIEWED AS PART OF POLICY AND PROCEDURES REVIEW**

Index	Description
17.	Format for Data on Participation in Commonwealth Procurement Transactions by Small Businesses and Businesses Owned by Women and Minorities, December 1996
18.	Director, Division of Purchases and Supply , Memorandum, <i>Minority Business Plan</i> , October 27, 1999
19.	Executive Order 35, <i>Establishing the Governor's Advisory Commission on Minority Business Enterprise</i> (September 13, 2002)
20.	Executive Order 29, <i>Equal Opportunity in Commonwealth Procurement</i> (July 2, 2002)
21.	Executive Order 30, <i>Assessing Virginia's Procurement Process</i> (September 2, 1998)
22.	Virginia DBE Goal Setting Methodology (2004)
23.	Virginia Lottery SWAM-Owned Business Quarterly Utilization Report FY 2003
24.	Lottery Plan for Minority-Owned, Woman-Owned, and Small Business Participation in Lottery Procurements (undated)
25.	Virginia Commonwealth University, <i>Procedures for Utilization of Minority-Owned, Women-Owned and Small Business</i> (undated)
26.	Department of Business Assistance— <i>Workforce Services, Women &amp; Minority Owned Business</i> (June 24, 2003)
27.	Commonwealth of Virginia Department of Transportation, <i>Rules Governing Pre-qualification and Certification</i> , Form C-46, Rev. 2-99
28.	DBE Goal Setting Subcommittee, Report to the Construction Coordinating Group (CCG) June 15, 1999
29.	Virginia Department of Transportation, <i>Annual Budget Fiscal Year 2003-2004</i> (June 2003)
30.	Virginia Community College System, <i>Policy Manual</i> (July 1992) (with current revisions)
31.	<i>Buying Smarter Faster &amp; Better—VITA's Guide to Technology Procurement</i> , July 2003

### **3.2 Organization of the Virginia Purchasing Function**

#### **3.2.1 Summary of Virginia Governing Authorities**

The statutory framework for state government purchasing is contained in the *Virginia Public Procurement Act (VPPA)* adopted by the Virginia General Assembly in 1982, 43 or Title 2.2 of the *Code of Virginia*. The *VPPA* applies to every “public body,” defined to mean “any legislative, executive, or judicial body, agency, office, department, authority, post, commission, committee, institution, board or political subdivision created

by law to exercise some sovereign power or to perform some government duty.”<sup>1</sup> The *VPPA* and most rules issued by the DGS are contained in the *Agency Procurement and Surplus Property Manual (APSPM)* covering goods and nonprofessional services (excluding technology), and the *Construction and Professional Services Manual for Architects and Engineers (CPSM)*. The Virginia Community College System follows the *APSPM* and the *CPSM*.<sup>2</sup> The “Big Eight” universities (Virginia Commonwealth University, Virginia Tech, University of Virginia, James Madison, William & Mary, Virginia Military Institute, George Mason, and Old Dominion University) are subject to the *VPPA* and the *Purchasing Manual for Institutions of Higher Education and Their Vendors* that is very similar in major provisions to the procurement manuals used by the Commonwealth of Virginia.

### **3.2.2 Organization of the Virginia Purchasing Function**

The Department of General Services, Division of Purchases and Supply (DGS/DPS) is the agency responsible for the centralized purchases of materials, supplies, equipment, printing, and nonprofessional services (excluding technology goods and services) required by any Commonwealth agency. DGS/DPS may also make, amend, or repeal regulations governing the purchases of materials, supplies, equipment, printing, and nonprofessional services.

Commonwealth agencies have a general delegation for the purchases of goods and printing of up to \$50,000. Agencies have the option of DGS/DPS handling requisitions between \$5,000 and \$50,000, or handling these requisitions internally. (DGS/DPS does not handle requisitions less than \$5,000.) Agencies can request a delegated authority in writing for making purchases of goods greater than \$50,000. DGS/DPS has also delegated to agencies the authority to make bulk purchases of

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<sup>1</sup> *Code of Virginia* § 2.2-4301.

<sup>2</sup> *Virginia Community College System Policy Manual*, § 4.04.

selected goods.<sup>3</sup> The *VPPA* provides that mandatory purchases through DGS/DPS are not required for a certain set of goods, although agency purchases of such goods are still subject to the *VPPA* and the *APSPM*.<sup>4</sup> The “Big Eight” universities have delegated authority for procurement and six are not in the Commonwealth Accounting and Reporting System (CARS).

Services, construction, and information technology are handled differently from goods. Agencies have an unlimited delegation for nonprofessional services outside of telecommunications. Nonprofessional services includes all services not within the scope of the practice of accounting, actuarial services, architecture, dentistry, land surveying, landscape architecture, law, medicine, optometry, pharmacy, or professional engineering.<sup>5</sup> The Division of Engineering and Buildings, a division of the Department of General Services, sets the rules for capital outlay projects for the Commonwealth of Virginia. The Virginia Department of Transportation (VDOT) establishes its own rules for road construction. The Virginia Information Technologies Agency (VITA) has procurement responsibility for all spot purchases of automated data processing (ADP) goods and services, including telecommunications equipment and services, and the acquisition of state ADP term contracts.<sup>6</sup> Computer-related services and telecommunications equipment in excess of \$100,000 require approval by VITA. Procurement of ADP equipment and software require certification from VITA.

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<sup>3</sup> Animals and livestock, animal feed, fertilizer, perishable foods, sawdust, woodchips and bark, local option materials, agricultural poisons, live poultry, asphalt, asphaltic concrete, road oil, rock asphalt, slurry seal, borrow and soil, cement, crushed stone, lightweight aggregate, ready-mix concrete, sand and gravel, white lime, aggregate gravel, marble, seed, sod. *APSPM*, § 1.4.c.

<sup>4</sup> Materials, equipment, and supplies that are incidental to a performance of a service contract for labor; manuscripts, maps, audiovisual materials, books, pamphlets, and periodicals, for the Library of Virginia or the state-supported library; perishable articles; materials, equipment, and supplies needed by the Commonwealth Transportation Board; materials, equipment, and supplies needed by the Virginia Alcoholic Beverage Control Board; binding and rebinding of books and other literary materials by state-supported libraries; printing records of the Supreme Court; and financial services. *Code of Virginia* § 2.2-1119.

<sup>5</sup> *Code of Virginia*, § 2.2-4301.

<sup>6</sup> *APSPM*, § 1.4.b.

### **3.3 Methods of Procurement for Goods and Services**

#### **3.3.1 Introduction**

The *VPPA* provides that all public contracts with nongovernmental vendors for goods, services, insurance, or construction must be awarded via competitive bidding or competitive negotiation, unless otherwise provided for by law.<sup>7</sup> Virginia state law or state regulation provides for the following exceptions to the competitive bidding requirements:

- purchases under \$5,000;
- selected goods and services<sup>8</sup> up to and including \$50,000;
- purchases of used equipment up to and including \$50,000;
- purchases from federal and other state agencies;
- surplus property;
- purchases under \$50,000 for testing and evaluation; and
- emergency purchases.

The *VPPA* recognizes six methods of procurement:<sup>9</sup>

- small purchase procedures;
- competitive sealed bidding;
- competitive negotiation;
- sole source;
- emergency; and
- reverse auctioning<sup>10</sup>

#### **3.3.2 Small Purchases (\$0-\$50,000)**

The Commonwealth has several procurement methods for purchases under \$50,000, depending on the size of the procurement.

- For contracts for goods or nonprofessional services with an estimated cost of \$5,000 or less, purchases require only one written or telephone quotation. There are several other methods for single quote purchases:

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<sup>7</sup> The Virginia Code does allow for the use of “best value” procurement concepts for the purchase of goods and services but not construction and professional services. *Code of Virginia* § 2.2-4300.

<sup>8</sup> The general categories (with some qualifications) are: books, preprinted materials, reprints and subscriptions; prerecorded audio and video cassettes, CDs, etc.; academic/research consulting services; alcohol; honoraria, entertainment; specialized, proprietary training; royalties and film rentals; professional organization dues; writers; artists; photographers; contributions by a university; advertisements; utility charges; conference facilities; accreditation fees and academic testing services; exhibition rental fees. *APSPM*, § 1.5.b

<sup>9</sup> *Code of Virginia*, § 2.2-4303.

<sup>10</sup> HB 2192 ended the sunset provision for reverse auctioning and authorized reverse auctioning as a procurement technique for the Commonwealth.

- The Commonwealth permits the use of charge cards for purchases under \$5,000. Some agencies have authority up to \$50,000. The Commonwealth charge card, established through American Express, has the capacity to track Commonwealth charge card spending with M/WBEs. However, the American Express M/WBE list is composed of self-certified M/WBEs that includes firms owned by individuals over 65, handicapped, and some East European groups. Staff interviews indicated that some Commonwealth agencies will send the American Express report as part of their SWAM utilization numbers.
- The Commonwealth also uses blanket purchase agreements with local vendors to obtain operating supplies or services for amounts less than the single quote limit.
- Prior to July 1, 2003, for contracts for goods or nonprofessional services with an estimated cost of over \$5,000 to \$15,000, purchases required three oral quotes. The *APSPM* provided that the sources of quotations should be expanded to include a minimum of two minority and/or women-owned businesses. Effective July 1, 2003, contracts for goods or nonprofessional services with an estimated cost of over \$5,000 to \$15,000 require six oral quotes, with a minimum of four small, minority, and/or women-owned businesses solicited.
- Prior to July 1, 2003, for contracts for goods or nonprofessional services with an estimated cost of over \$15,000 to \$50,000, purchases required the solicitation of four sources by mail, fax, or electronic means. The *APSPM* provided that the sources of quotations should be expanded to include a minimum of four minority and/or women-owned businesses. Effective July 1, 2003, for contracts for goods or nonprofessional services with an estimated cost of over \$15,000 to \$50,000, purchases require the solicitation of eight sources, with a minimum of six small, minority, and/or women-owned businesses being solicited by mail, fax, or electronic means. Solicitations above \$30,000 must be posted on the DGS/DPS Web site.

### **3.3.3 Competitive Sealed Bids**

Written sealed bids are the preferred procurement method for goods or nonprofessional services where the estimated cost is expected to exceed \$50,000.<sup>11</sup> The solicitation for sealed bids must be posted on the DGS/DPS Web site at least ten days

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<sup>11</sup> *APSPM*, § 6-4.

prior to the date set for bid submission. Bid awards are made to the lowest responsive and responsible bidder.<sup>12</sup>

The *APSPM* also provides for two-step sealed bids.<sup>13</sup> In this procedure, an Invitation for Bid (IFB) is issued seeking unpriced technical proposals. In the second step an IFB seeking pricing schedules is issued to those firms that qualified in the first round.<sup>14</sup> The award is made to the lowest responsive and responsible bidder. Generally, there is no negotiation with the bidders in two-step sealed bids. Negotiations may be undertaken if conditions and procedures are described in writing prior to and included with the issuance of the IFB and the bid exceeds available funds.

### **3.3.4 Competitive Negotiation**

Competitive negotiation is a method of procurement that involves issuing a Request for Proposal (RFP) for purchases within the delegated purchasing authority of an agency.<sup>15</sup> Competitive negotiations are used for sealed solicitations outside of professional services. A notice of the RFP must be posted on the DGS/DPS Web site at least ten days prior to the date set for receipt of proposals and in a newspaper of general circulation in the area in which the contract is to be performed. Following proposal submission, selection is made of two or more qualified offerors. Negotiations are then conducted with each of the offerors. Price is considered, but does not have to be the sole determining criteria in making the award. The public opening of submissions is not required for competitive negotiations.

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<sup>12</sup> If the bid from the lowest responsible bidder exceeds available funds, the agency may negotiate with the apparent low bidder (if the solicitation contains the appropriate language). *Code of Virginia*, § 2.2-4318.

<sup>13</sup> *APSPM*, §§ 6.4-6.6.

<sup>14</sup> The two steps may also be combined in separate sealed responses submitted by the bidders at the same time. *APSPM*, § 6.6

<sup>15</sup> *Code of Virginia*, § 2.2-4303C.

**3.3.5 Emergency Procurement.**

Virginia law allows for contract award, in the case of emergency, without competitive sealed bidding or competitive negotiation; however, competition, as practicable under the circumstances, is required. For procurements over \$30,000, a notice of the emergency procurement must be posted on the DGS/DPS Web site stating the procurement was declared an emergency, what is being procured, the contractor selected, and the date on which the contract was or will be awarded.

**3.3.6 Sole Source Procurement.**

Under Virginia law a contract may be negotiated and awarded to a single source without competitive sealed bidding or competitive negotiation if it is determined that only one source is practicably available.<sup>16</sup> Again, for procurements over \$30,000, a notice must be posted on the DGS/DPS Web site. All sole source procurements in excess of \$50,000 must be approved by DGS/DPS, or \$100,000 in technology-related procurement must be approved by VITA. Universities must report quarterly their sole source purchases in excess of \$10,000 to the Secretary of Education.<sup>17</sup>

**3.3.7 Reverse Auctions**

Reverse auctioning is a procurement method in which bidders use real-time electronic bidding, with the award being made to the lowest responsive and responsible bidder. During the bidding process, bidders' offers are revealed and bidders can change their bids during the time period established for bid opening. The Commonwealth permits the purchase of goods and nonprofessional services by reverse auctioning. After

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<sup>16</sup> *Code of Virginia*, § 2.2-4303E.

<sup>17</sup> Commonwealth of Virginia, *Purchasing Manual for Institutions of Higher Education and Their Vendors* (March 2003), §2.V.

a pilot period, the Commonwealth recently removed the sunset clause on reverse auctioning and made it a permanent option for Commonwealth procurement. Nevertheless, staff interviews indicated that reverse auctioning is not yet a fully functioning feature of the Commonwealth's Internet-based procurement system, eVA (discussed below).

### **3.3.8 Cooperative Procurement.**

Although not listed as a separate method of procurement, the *VPPA* allows that state agencies may enter into a cooperative procurement agreement with other agencies, institutions, or public bodies when the value of the cooperative procurement is within the delegated authority of the issuing agency.<sup>18</sup> Such purchases have to abide by the *VPPA* and the *APSPM* (unless otherwise approved by DGS).<sup>19</sup> Cooperative procurement is not permitted on goods or services that are available on mandatory state term contracts without prior approval from DGS/DPS.

The Commonwealth does not engage in “piggy-backed” procurement at the present time. Under “piggy-backing” an agency could, subject to certain conditions and restrictions, contract with a vendor that had a contract with another agency under the same terms as that contract.<sup>20</sup>

## **3.4 E-Procurement**

The Commonwealth of Virginia established Internet-based procurement, eVA, in 2001 following an executive order in March 24, 2000. The new e-procurement system includes state agencies, local educational authorities, universities and community colleges, and local governments. The Virginia e-procurement system is an end-to-end

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<sup>18</sup> *Code of Virginia*, § 2.2-4304; *APSPM*, § 3.7.

<sup>19</sup> *Code of Virginia*, § 2.2-4304.

<sup>20</sup> Staff interviews indicate that there was some piggy-backing in Commonwealth procurement prior to 1995, which is outside of the study period for this report.

procurement system that performs on-line supplier registration, handles requisitions, offers electronic notification of suppliers, provides historical procurement information for suppliers, and updates records electronically. (Initially eVA could not process change orders; the change order functionality is now available.) Suppliers are currently responsible for a 1.0 percent fee per purchase order, capped at \$500. Vendors must enroll in the basic service and have an option to enroll in a premium service with eVA, with enrollment fees of \$25 and \$200, respectively. Enrollment in the premium service provides suppliers with “push” notification of solicitations. eVA has the capability for buyers to identify the small, female, and or minority status of vendors registered in the eVA system.

Commonwealth agencies and institutions are mandated to place all orders through eVA on mandatory use contracts to the fullest extent possible. The Commonwealth is also seeking for all optional use contracts and pricing agreement to be placed through eVA. Sheltered workshops are not on eVA at the present time. As of September 2003 there were about 175,000 orders for about \$1.133 billion.<sup>21</sup>

Over 709 catalogues are provided to buyers over the Internet via the e-Mall feature of eVA. eVA can be used to shop e-Mall catalogues up to \$30,000. The lowest priced item received as a result of an e-Mall catalog search need not be chosen if under the \$5,000 threshold. e-Mall catalog prices are also acceptable as quotes whenever a minimum of three (or four) valid responses are received as a result of the e-Mall search. e-Mall catalog responses over \$30,000 are also accepted as valid quotes.

eVA Quick Quote may also be used to solicit informal competition for small dollar a quote(s) for requirements up to \$30,000. eVA Quick Quote cannot be used to solicit competition for requirements exceeding \$30,000.

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<sup>21</sup> DGS/DPS, *eVA Summary Activity*, October 1, 2003.

### **3.5 Professional Services**

Competitive sealed bidding is not used to procure professional services. Instead, under the *VPPA* all procurement of professional services must be negotiated.<sup>22</sup>

Additional specific rules are mandated by the Commonwealth for the procurement of architectural and engineering (A&E) services. The *Construction and Professional Services Manual (CPSM)* lays out three procurement methods for A&E contracts:

- **Small Purchase Procedure.** For services with a total fee less than \$30,000 an agency can select a firm with statements of interest and qualification forms on file (less than one year old) with the agency.
- **RFP Procedure.** For services with a total fee in excess of \$30,000 an agency must use an RFP procedure. After interviews with the top three to five firms the Building Committee engages in competitive negotiations with the top ranked firm.
- **Emergency Procedure.** The agency selects a qualified firm, negotiates a fee, and awards an emergency contract.

The *CPSM* allows for A&E term contracts. A&E firms are limited to one term contract per agency.<sup>23</sup> Each project order under an A&E term contract is limited to \$100,000 and the total of project orders is limited to \$300,000. A&E term contracts are limited to one year, or when the maximum fee limit is reached, whichever is earlier.

### **3.6 Technology Procurement**

VITA's procurement methods for technology including the following:

- **RFP process (Competitive Negotiation) for technology purchases over \$50,000.** A written determination as to why competitive bidding is not practicable or fiscally advantageous must be signed by the Governor or Governor's designee. All RFPs must be posted at least 10 days prior to due date for receipt of proposals. RFPs are evaluated on "best value" evaluation factors, including total cost of ownership, performance history, proposed technical performance, the financial stability of the bidder, training costs, and other similar factors.

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<sup>22</sup> *Code of Virginia*, § 2.2-4303B.

<sup>23</sup> *CPSM*, § 409.0.

- **IFB process (Competitive Sealed Bidding) for technology purchases over \$50,000.** All IFBs must be posted at least 10 days prior to due date for receipt of proposals. IFBs are evaluated based on the requirements and specifications in the IFB. Award is made to the lowest responsive and responsible bidder. The IFB process includes a two-step IFB procedure. In the first step of this procedure bidders submit unpriced technical proposals. In the second step of this procedure bidders qualified after the first step submit a pricing schedule.
- **Reverse Auctions.** VITA may use either “lowest price” reverse auctions where product price is the only criterion, or “best value” reverse auctions where other factors, such as total cost of ownership, may be important. Bidders are invited to bid through eVA notification, or other push technology. Bidders are given a 10-day notice of reverse auction opportunities.
- **Sole source technology procurement.** Sole source procurement requires a determination in writing that only one source is practicably available. If an agency’s sole source procurement is greater than or equal to \$100,000, the CIO must approve the sole source procurement. The Technology Investment Board must approve major information technology projects, defined as projects that are either mission critical, have statewide application, or have a total estimated cost in excess of \$1 million.
- **Emergency technology procurement.** Emergency technology procurement requires a justification in writing. Emergency technology procurement is made with as much competition as is practicable.
- **Small purchase process (0-\$30,000).** At present the small purchase process for technology parallels the DGS small purchase process.
  - Purchases less than \$5,000 require one quote.
  - Purchases between \$5,000 and \$15,000 require three quotes.
  - Purchases between \$15,000 and \$30,000 require four or more quotes.

The required number of quotes may be obtained through eVA or through phone solicitations.
- **Small purchase process (\$30,001-\$50,000).** The small purchase process for technology includes the use of informal IFBs and informal RFPs:

- **Informal IFB.** Purchases between \$30,001 and \$50,000 can use a written unsealed IFB that includes a scope of work, specifications, requirements, terms, and conditions and a pricing schedule. At least four sources must be solicited and such lists are to be expanded, where practicable, to include SWAMs. All informal IFBs are to be posted on eVA, although they do not have to be posted for 10 days prior to bid opening. Awards are made to the lowest responsive and responsible bidder.
- **Informal RFP.** Purchases between \$30,001 and \$50,000 can use a written unsealed RFP that includes a statement of agency need, qualifications sought, and the basis for the evaluation of bidders. VITA attempts to include, where feasible, SWAMs in its solicitations of informal RFPs. All informal IFBs are to be posted on eVA, although they do not have to be posted for 10 days prior to bid opening. Awards are made to firms with the “best value” technology and deemed to be fully qualified. Negotiations are held with each firm selected with the best value solution.
- **Cooperative procurement.** VITA may use cooperative procurement for technology purchases where such procurement is practicable and deemed to be in the best interests of the Commonwealth. Cooperative procurement must be approved by the Chief Information Officer.

### **3.7 Construction Contracting**

In general, construction is procured by the Commonwealth through competitive sealed bids.<sup>24</sup> Minor construction, repair, and noncapital outlay projects are procured under the same rules as nonprofessional services.<sup>25</sup> Commonwealth law also permits the application of sole source and emergency procurement rules to construction. Competitive negotiations can be used for fixed price design-build or construction management contracts, or for projects for alternation, repair or renovation, or demolition when the contract is not expected to exceed \$500,000.<sup>26</sup>

Design-build is a method for procuring construction services in which selection is based on a technical proposal and negotiation with an architect-contractor team to

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<sup>24</sup> *Code of Virginia*, § 2.2-4303D; *CPSM*, § 1001.1.

<sup>25</sup> *CPSM*, § 1001.2.

<sup>26</sup> *Code of Virginia*, § 2.2-4303C; *CPSM*, § 1001.3.

design and construct a project for a fixed price. The Commonwealth approved design-build in 1986.<sup>27</sup> Commonwealth agencies and institutions have used design-build infrequently due to the high cost of preparing complex technical proposals in response to design-build solicitations.

Construction management is a method for procuring construction services in which a construction manager is chosen through professional negotiation and subcontractors are chosen through competitive bidding. Construction management has been used on a number of occasions by Commonwealth institutions of higher education.<sup>28</sup>

### **3.8 General Purchasing Provisions**

#### **3.8.1 Bonding**

Bid, payment, and performance bonds are required on all construction contracts in excess of \$100,000.<sup>29</sup> Bid bonds are limited to 5 percent of the bid amount.<sup>30</sup> Prime contractors may require payment bonds from subcontractor.<sup>31</sup> Commonwealth agencies may require bid, payment, or performance bonds for contracts for goods or services if so stipulated in the IFB or RFP. Under certain circumstances a certified check, cash escrow, personal bond, property bond, or bank or savings institution's letter of credit may be accepted in lieu of a bid, payment, or performance bond.<sup>32</sup>

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<sup>27</sup> *Code of Virginia*, § 2.2-4306.

<sup>28</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Review of Capital Outlay in Higher Education*, Senate Document No. 3 (1996 Session).

<sup>29</sup> *Code of Virginia*, § 2.2-4336.

<sup>30</sup> *Code of Virginia*, § 2.2-4336, § 2.2-4337.

<sup>31</sup> *Code of Virginia*, § 2.2-4337.

<sup>32</sup> *Code of Virginia*, § 2.2-4338.

### **3.8.2 Specifications**

The Commonwealth lists the following classes of specification in the preferred order of use: Generic (Performance and Design); Brand Name or Equal (a brand name is used to convey the general type of the product desired but does not restrict bidders to the particular brand);<sup>33</sup> Proprietary (restricts the acceptable articles to those of particular manufacturers); Vendor Assistance in Specification Preparation (advice is received from a vendor in identifying the features and characteristics needed by the agency). In the event that a vendor assists the Commonwealth with specifications, the Code directs the buyer to ensure that the specifications are not drawn to favor a particular vendor.<sup>34</sup>

### **3.8.3 Vendor Sourcing**

DGS/DPS maintains an automated list of registered vendors. All state agencies have access to the DPS Vendors List, although agencies are not required to use it. Since the institution of eVA, vendors seeking status as a regular bidder<sup>35</sup> with the Commonwealth are required to register in eVA prior to award.

The *APSPM* suggests, “Special emphasis should be placed on including Virginia vendors, small, minority and female-owned businesses on all solicitation mailing lists.”<sup>36</sup> The *APSPM* also suggests that VDMBE and Virginia Minority Suppliers Development Council (VMSDC) be consulted as sources of supplies to supplement lists from the chambers of commerce, *Thomas Register*, trade journals, and trade exhibitions.<sup>37</sup>

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<sup>33</sup> *Code of Virginia*, § 2.2-4315.

<sup>34</sup> *Code of Virginia*, § 2.2-4373.

<sup>35</sup> The Commonwealth does not rotate bidders at present but according to staff interviews DGS did rotate spot purchases before eVA was installed.

<sup>36</sup> *APSPM*, § 2.3.

<sup>37</sup> *APSPM*, § 2.6.

#### **3.8.4 Licensing and Prequalification**

For contracts of \$1,000 or more involving construction, removal, repair, or improvement of any building or structure,<sup>38</sup> a contractor is required to have the following licenses, depending on contract size or firm size within a 12-month period:<sup>39</sup>

- **Contractor License A** - If the contract is \$70,000 or more or if the contractor does \$500,000 or more business; or
- **Contractor License B** - \$7,500 - \$70,000 (\$1,000 for electrical, plumbing, and HVAC work) or if the contractor does between \$150,000 and \$500,000 in business; or
- **Contractor License C** - \$1,000 - \$7,500 or if the contractor does less than \$150,000 in business. (Class C contractors do not include electrical, plumbing, and heating, ventilation, and air conditioning (HVAC) contractors.)

In some instances the Commonwealth may prequalify firms (Qualified Contractor's Lists) or products (Qualified Products Lists).<sup>40</sup> In these instances the Commonwealth sends solicitations only to those contractors determined to be qualified. The Commonwealth is required to publicize the criteria for prequalification. VITA also utilizes the prequalification process or Request for Information (RFI) process to develop lists of prequalified firms or products available to provide certain technology goods and services.

#### **3.8.5 Mandatory and Nonmandatory Sources of Supply**

The Commonwealth of Virginia has mandatory and nonmandatory sources of supply.<sup>41</sup> Mandatory sources of supply include those in **Exhibit 3-2** below.

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<sup>38</sup> The Commonwealth requires that some contractors be registered and licensed, or hold a permit, prior to performing certain services. Those services include but are not limited to the following: Pesticide Application, Asbestos Service, Security Alarm System Installation, Fire Alarm System Installation, Private Security Services, and Treatment, Storage, Handling, Transportation, or Disposal of Hazardous Waste or Hazardous Radioactive Material. *APSPM*, § 3.4.

<sup>39</sup> *Code of Virginia*, §§ 54.1-1103 and 54.1-1115.

<sup>40</sup> *Code of Virginia*, § 2.2-4317 (covering construction).

<sup>41</sup> The Commonwealth of Virginia nonmandatory sources of supply are: optional use term contracts, surplus property, and nonprofit sheltered workshops.

**EXHIBIT 3-2  
MANDATORY SOURCES OF SUPPLY  
COMMONWEALTH OF VIRGINIA, 2003**

<b>Mandatory Sources</b>	<b>Goods and Services Covered</b>
Term contracts <sup>1</sup>	Items set by DGS/DPS
Virginia Correctional Enterprises (VCE)	Goods and Services (data entry, laundry, printing) in the VCE catalogue
Department for the Blind and Vision Impaired (DBVI)	Mattresses, pillows, writing instruments, mailing services, contract office services, mop heads & handles, spices, teas, gloves, vending stands
Virginia Distribution Center (VDC)	Need waiver to purchase staples, canned/frozen foods, janitorial supplies, paper products and other selected items from source outside of VDC
Virginia Department of Transportation (VDOT)	Vehicle fuel through state contract; related motor vehicle related supplies and repair parts from VDOT unless it is more practical to use DGS/DPS delegated authority
DGS/DPS Office of Graphic Communications	Must approve outsourcing of graphic design, desktop publishing, camera-ready artwork in excess of \$750
Virginia Information Technologies Agency	Telecommunications services
DGS/Office of Fleet Management	Purchase or lease of motor vehicles (approval required)

<sup>1</sup> State term contracts, outside of Department of Information Technology contracts for telecommunications, are optional for the "Big Eight" universities.

In its 1996 report, the Commonwealth Joint Legislative Audit and Review Commission (JLARC) found that 19 M/WBEs held 26 of the 526 (4.9%) state term contracts.<sup>42</sup>

**3.8.6. Notice of Pending Procurements.**

Virginia state law provides that "all qualified vendors have access to state business and no offeror [should] be arbitrarily or capriciously excluded."<sup>43</sup> Prior to eVA a project greater than \$15,000 had to be sent to DGS and posted in *Virginia Business*

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<sup>42</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts*, House Document No. 53 (1996), at 34.

<sup>43</sup> *Code of Virginia*, § 2.2-4300C.

*Opportunities*. Vendors could pay a \$75 fee to receive this publication on a weekly basis. The DGS/DPS now publishes *Virginia Business Opportunities (VBO)* on the Internet listing business opportunities anticipated to be over \$30,000 in value with state and some local government agencies.<sup>44</sup> Written solicitations from \$30,000 to \$50,000 must be posted for the time period established in the solicitation, for receipt of unsealed bids or proposals. IFB solicitation notices over \$50,000 must be posted on the DGS/DPS eVA Web site. In addition, notices may also be published in a newspaper of general circulation in the area in which the contract is to be performed, at least 10 days prior to the date set for receipt of bids.<sup>45</sup>

### **3.8.7 Contract Modification Restrictions**

Cumulative contract modifications to purchases made under small purchase procedures cannot exceed 25 percent of the original contract price without advance written approval of the agency head.<sup>46</sup> A fixed price contract for purchases over \$50,000 may not be increased by more than 25 percent of the original amount of the contract or \$50,000, whichever is greater, without the advance written approval of the Governor or his designee.<sup>47</sup>

### **3.8.8 Prompt Payment**

Commonwealth law provides that interest begins to accrue on amounts owed by the Commonwealth to a contractor after seven days following the payment date and on amounts owed by a prime contractor to a subcontractor.<sup>48</sup> In general the Commonwealth

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<sup>44</sup> Prior to its posting on the Internet *VBO* had a circulation of approximately 3,700 subscribers, 9 percent of which were minority firms. Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts*, House Document No. 53 (1996), at 50.

<sup>45</sup> *Code of Virginia*, § 2.2-4301.

<sup>46</sup> *Vendors Manual*, 7.17 for exceptions.

<sup>47</sup> *Code of Virginia*, § 2.2-4309A.

<sup>48</sup> A vendor must pay its subcontractors interest at a rate of 1 percent a month on the subcontractor's proportionate share of the Commonwealth payments after seven days following the payment of the vendor by the Commonwealth. *Code of Virginia*, §§ 2.2-4347 through 2.2-4354.

does not pay subcontractors directly. Staff interviews indicated that in the event of late payment of prime contractors to subcontractors, the general practice of the Commonwealth is to refer subcontractors to the issuer of the payment bond for resolution. Staff interviews also indicated that the introduction of eVA is serving to facilitate timely payment of vendors because of the use of standard templates by vendors in the eVA system.

### **3.9 Remedial Programs**

#### **3.9.1 Background**

The Commonwealth of Virginia first established the Virginia Department of Minority Business Enterprise (DMBE) program in 1981. The Commonwealth of Virginia has not had race-conscious goals, set-asides, or price preferences outside of VDOT. Virginia law has for some years provided for outreach to SWAM businesses and reporting of agency spending with SWAM firms. Section 2.2.4310B of the *Code of Virginia* requires:

*All public bodies shall establish programs consistent with this chapter to facilitate the participation of small business and business owned by women and minorities in procurement transactions. The programs established shall be in writing and shall include cooperation with the Department of Minority Business Enterprise, the United States Small Business Administration, and other public or private agencies.*

Agencies are required to establish written internal procedures to facilitate agency purchases from SWAM firms.<sup>49</sup> Executive Order 29 requires all agencies to develop supplier diversity plans. DMBE has provided a model supplier diversity plan to facilitate

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<sup>49</sup> *Code of Virginia*, § 2.2-4310B; *APSPM*, § 3.10.

agency compliance. Agencies are also instructed to maintain a listing of SWAM firms for solicitation purposes and to solicit SWAMs for sealed bids or proposals.<sup>50</sup> As noted above, the DGS requires that small purchase procedures include the solicitation of SWAMs, including four SWAMs for solicitations from over \$5,000 to \$15,000, and six SWAMs for solicitations from over \$15,000 to \$50,000.

Virginia law requires agencies to report spending with MBEs.<sup>51</sup> The 1996 JLARC audit of the DMBE program found problems in compliance with these MBE reporting requirements. JLARC found that only 40 percent of agencies had developed systematic data collection processes for reporting to DMBE. HB 2470 requires an annual report to the Governor of those agencies failing to report MBE spending.

Since 1991 the Commonwealth has had a policy promoting SWAM utilization in RFPs exceeding \$100,000 in value over the term of the contract.<sup>52</sup> Offerors are required to state their plan towards SWAM utilization and report their past utilization of SWAM vendors. The Commonwealth's plan allows for evaluation criteria on offerors' SWAM plan and practice with a weight of between 5 and 15 points (out of a possible 100 points).<sup>53</sup> A SWAM firm is not granted these extra evaluation points just for being a SWAM firm. Firms are required to report on contracts that exceed \$100,000 in gross fees a report on actual payment to SWAM firms prior to final payment to the firm.<sup>54</sup> In staff interviews no one knew of an instance where the SWAM evaluation factor determined contract award or of a firm losing a contract because of this provision.<sup>55</sup> JLARC found that the Commonwealth spent 1.7 percent of its expenditures with certified

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<sup>50</sup> *Code of Virginia*, § 2.2-4310A; *APSPM*, § 3.10b.

<sup>51</sup> *Code of Virginia*, § 2.24310B.

<sup>52</sup> Ruby Martin, Memorandum, Participation in Commonwealth Procurement Transactions by Small Businesses and Businesses Owned by Women and Minorities, August 12, 1991. Commonwealth of Virginia, *Agency Procurement and Surplus Property Manual* (September 1998), § 3.10.d; *CPSM*, § 301.4, § 406.0.

<sup>53</sup> This incentive is not found in the *Higher Education Manual*.

<sup>54</sup> *CPSM*, § 331.0.

<sup>55</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts*.

MBEs in FY 1994 and 3.5 percent with firms that JLARC identified as MBEs.<sup>56</sup> JLARC found the VDOT was the largest agency spender with minority businesses in FY 1995, spending \$13.6 million with MBEs, or 2.76 percent of VDOT expenditure.<sup>57</sup>

### **3.9.2 Department of Minority Business Enterprise**

The DMBE office currently has 13 FTEs and a budget of \$1.2 million. The DMBE office has the following divisions (the functions of these divisions are discussed in more detail below):

- Publications Division. This division produces and circulates the DMBE quarterly vendors list.
- Outreach Division. This division provides direct assistance to disadvantaged business owners, agency officials, and prime contractors.
- Service Division. This division provides management and technical assistance to minority, disadvantaged, and women-owned firms.
- PACE program. This division provides a loan guarantee program.

DMBE has satellite offices in Danville, Tidewater, Richmond, and Northern Virginia. These offices work primarily on supportive services for the VDOT DBE program, discussed below.

### **3.9.3 Virginia Department of Small Business Assistance**

The Department of Business Assistance (DBA) was started in 1996 as part of the reorganization of the Virginia Department of Economic Development. Over 90 percent of the firms that the DBA serves are small business enterprises (SBEs). The DBA has a staff of 48 FTEs and a budget in FY 2004 of \$11.9 million. The basic programs of the DBA are the Financial Service Division, Virginia Women's Enterprise Business

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<sup>56</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts*, at 11.

<sup>57</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts*, at 12.

Enterprise Certification, Workforce Training, and the Small Business Incubator. Until recently the DBA managed the Small Business Development Center (SBDC) Network for the Commonwealth. Following recent budget cuts DBA transferred the SBDC network to George Mason University. Details of these programs are discussed under business development below.

#### **3.9.4 M/WBE Certification**

The DMBE office certifies MBEs. There are approximately 2,000 MBEs in the DMBE database. Of these, 1,250 are certified. DBA began WBE certification in 1993. The DBA certified 350 WBEs in FY 2002.<sup>58</sup> Some concern was expressed by Commonwealth staff and SWAM vendors about the number of certification applications necessary for seeking public sector opportunities. The DMBE and DBA do not participate in a unified certification program, but since April 1, 2002, DMBE has accepted certification from the Small Business Administration (SBA), the Department of Transportation, and the State of Maryland.<sup>59</sup> DBA accepts other WBE certification on a case-by-case basis.

#### **3.9.5 Disadvantaged Business Enterprise Program**

VDOT runs the federally mandated Disadvantaged Business Enterprise (DBE) program for the Commonwealth. The DBE program currently has a goal of 11.94 percent. The program currently envisions achieving 2.98 percent of its DBE goal through race-neutral means. The primary race-neutral means for achieving the DBE goal are requiring prime solicitation of DBEs, disseminating information on contracting opportunities and procedures, providing technical assistance, and distributing the DBE directory. The VDOT DBE program does not use race-conscious or race-neutral set-asides.

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<sup>58</sup> VDBA, *Fiscal Year 2002 Report*.

<sup>59</sup> VDMBE, *The MBE News Observer*, Spring/Summer 2002.

The primary services available through VDOT's DBE program include Memoranda of Understanding with the DMBE and Virginia Tech to provide supportive services to DBE contractors, and a Legal and Accounting program in which VDOT pays \$1,500 of the first legal and accounting expenses of DBE contractors.

The DMBE office has the supportive services contract for the VDOT DBE program. This program has satellite offices in Danville, Tidewater, Richmond, and Northern Virginia. These programs assist DBEs with bids, reading drafts, financial paperwork, securing business with the Commonwealth, locating funding, workshops, and estimation.

The DBE program is participating in unified DBE certification. VDOT and Washington Metropolitan Airport are the lead agencies, with participation from the Virginia Department of Rail and Public Transportation and the Virginia Aviation Department. The Unified Certification Plan has been partially implemented in Virginia in the form of the completion of a unified certification application.

### **3.10 Race- and Gender-Neutral Programs**

#### **3.10.1 Small Business Enterprise**

The Commonwealth of Virginia has some incentives for small business. As noted above, the *VPPA* requires all public bodies to establish programs that facilitate the participation of SBEs as well as WBES and MBEs.<sup>60</sup> In 1984 the language was changed from "may" to "shall." There are no SBE set-asides, price preferences, or goals placed on contracts.

SBEs in the Commonwealth self-certify, but there are several definitions of SBEs used by Commonwealth agencies. For example, the model supplier diversity program

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<sup>60</sup> *Code of Virginia, § 2.2-4310B.*

defines SBEs as firms with fewer than 100 employees or less than \$1 million in gross revenue; the eVA system refers vendors to the SBA definition of SBEs; and the VDBA has yet another definition.<sup>61</sup>

### **3.10.2 Nondiscrimination in Contracting**

Since 1982 the Commonwealth of Virginia procurement statute has provided that “In the solicitation, awarding or administration of contracts, no agency shall discriminate because of the race, religion, color, sex, age, disability, or national origin of the bidder, offeror, or contractor.”<sup>62</sup>

### **3.10.3 Financial Assistance**

There are a large number of programs assisting small firms with financing in and near the State of Virginia. The Virginia Small Business Finance Authority lists 70 programs in the Capital Resource Directory on its Web site. A selection of these programs is discussed below.

DMBE has sponsored the PACE program since 2000. PACE participants must be for-profit firms located in the State of Virginia. Business owners must be U.S. citizens or permanent residents, and have a net worth of less than \$250,000 (excluding their business and personal residence).

The PACE program provides loan guarantees of up to 90 percent of the principal on the loan. The loans include lines-of-credit for accounts receivables and inventory, loans for working capital, and fixed asset purchases. The program has generally avoided

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<sup>61</sup> Supplier Diversity Model Program, July 2002. The VSBFA defines “*Small business enterprise*” as “(i) any industry for the manufacturing, processing, assembling, storing, warehousing, servicing, distributing, or selling of any products of agriculture, mining or industry or professional services; (ii) commercial enterprises making sales or providing services to industries described in clause (i) hereof; (iii) enterprises for research and development, including but not limited to scientific laboratories; or (iv) such other businesses as will be in furtherance of the public purposes of this chapter.” Chapter 28 - Virginia Small Business Financing Act - Article 1 - General Provisions, 59.1-84.1.

<sup>62</sup> *Code of Virginia*, § 2.2-4310A

contract financing. The loans are generally less than five years in maturity. Most loans are in the \$40,000 to \$60,000 range, with the largest loan to date being \$220,000. PACE has partnered with Consolidated Bank & Trust, SunTrust Virginia, Wachovia Bank, James Monroe Bank, and First Community Bank for client financing.

The Virginia Small Business Financing Authority (VSBFA) is under the DBA and provides fixed asset financing and permanent working capital. The VSBFA financed 175 businesses in FY 2002, up from 120 in FY 1999. In FY 2003 the VSBFA approved 18 female and minority loan applicants for \$569,501—5 percent of their total loan dollar volume, and 13 percent of total approved loan applications.<sup>63</sup>

The DBA provides several other loan programs, including:

- Industrial Development Revenue Bonds, providing an umbrella bond program;
- Virginia Economic Development Loan Fund, providing direct loans of up to \$1 million or 40 percent of project value;
- Loan Guaranty Program, providing a 75 percent guaranty of up to \$300,000 on a line-of-credit or a loan;
- Virginia Capital Access program, providing a loan loss reserve fund to reduce risk for lenders;
- Child Day Care Financing Program, providing micro loans to child care firms; and
- Environmental Compliance Assistance Fund, providing equipment loans of up to \$100,000 for a maximum of 10 years.

Minority Economic Development through Assisted Lending (MEDAL) of Norfolk Virginia provides business training, technical assistance, micro-loans (\$5,000-\$25,000) and follow-up counseling. The average loan size has been \$5,000-\$10,000. The program was started in 1996.

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<sup>63</sup> Virginia Small Business Finance Authority – Loans.

The SBDCs provide a Pre-Qual Loan program to assist firms with obtaining SBA loan guarantees. This program is for M/WBEs, veterans, and rural businesses. The loan funds can be used for working capital, debt payment, equipment and inventory purchases, construction, and real estate purchases.

The Commonwealth does not maintain a bonding assistance program, although certified DBEs have access to the federal U.S. Department of Transportation bonding program through the VDOT DBE program.

#### **3.10.4 Management and Technical Assistance**

There are a number of business development programs in the State of Virginia, some of which partner with the Commonwealth:

- Next Level (NxLevel) is an entrepreneurial training program supported by the Virginia SBDC Network. The U.S. Small Business Administration (SBA) and a variety of local business and academic organizations (and at one time the DBA) sponsor the SBDC Network NxLevel. The courses are for start-ups and existing businesses.
- Overall, the SBDC network counsels in the areas of business start-ups, access to capital, business planning, financial analysis, marketing, accounting, and related business services. The SBDC network operates 24 centers at the present time. In FY 2002 the SBDC network assisted over 4,885 clients and sponsored 548 training events.
- The DBA provides workforce services to SBEs, including customized recruitment and training. In FY 2003 the DBA provided workforce training for 14 MBEs and 14 WBEs.<sup>64</sup>
- DBA provides grants to small business incubators through its Virginia Small Business Incubator Grant Program. This program has provided \$3.5 million in 57 grants to help establish 20 business incubators.<sup>65</sup> The DBA estimates that 40 percent of firms in incubators are M/WBEs.
- VDOT has had a mentor-protégé program that paired DBEs with prime contractors. There has been very little interest in the program

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<sup>64</sup> Department of Business Assistance – Workforce Services, Women and Minority Owned Businesses, 6/24/2003.

<sup>65</sup> This amount was matched by \$22.8 million in federal and state funds. VDBA, Fiscal Year 2002 Report.

recently because there are no incentives for prime contractors to participate in mentoring DBEs at the present time.

- The Virginia Comprehensive Assistance Center (VA CAC) is a partnership of federal, state, and nonprofit organizations that provide business assistance in the State of Virginia. VA CAC sponsors annual conferences to educate business owners on the variety of low-cost and no-cost services available to businesses in the State of Virginia.
- The Women's Business Center of Northern Virginia provides training, one-on-one technical assistance and counseling, computers and Internet access, a resource library, networking opportunities and marketing assistance. The program is funded by the SBA Fairfax County and George Mason University Enterprise Center.
- There are three Procurement Technical Assistance Center (PTACs) in Virginia. These are the Crater Planning District Commission in Petersburg, the George Mason University Procurement Technical Assistance Program in Fairfax, and the Southwest Virginia Community College PTAP Center for Economic Development in Richlands. The PTACs focus on assisting contractors with federal and state procurement opportunities.

### **3.10.5 Outreach**

VDMBE has strategic partnerships with over 20 organizations, including minority business organizations; other federal, state, and local agencies; and private companies. These partnerships have included workshops with the SBA, SCORE, USDA, and the SBDCs on bonding, doing business with colleges, finances, and eVA. The DBA recently established a Women's Business Advisory Council to garner advice from women entrepreneurs on broadening opportunities for WBEs in Commonwealth procurement.

The 1996 JLARC report indicated that 69.0 percent of Commonwealth agencies reported participating in outreach or informational activities involving M/WBEs as required by the *Code of Virginia*.<sup>66</sup>

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<sup>66</sup> Joint Legislative Audit and Review Commission of the Virginia General Assembly, *Minority Owned Business Participation in Commonwealth Contracts* (1996), at 41.

**4.0 RELEVANT MARKET AREA,  
UTILIZATION, AND AVAILABILITY  
ANALYSES**

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## **4.0 RELEVANT MARKET AREA, UTILIZATION, AND AVAILABILITY ANALYSES**

This study for the Commonwealth of Virginia documents and analyzes the participation of minority, women, and nonminority businesses in the Commonwealth's procurements for five fiscal years (1998–2002). This chapter describes the Commonwealth's relevant market areas and analyzes the utilization and availability of minority, women, and nonminority firms. The results of the analyses ultimately determine whether minority, women, or nonminority businesses were underutilized or overutilized in these procurements.

This chapter consists of the following sections:

- 4.1 Methodology
- 4.2 Construction
- 4.3 Architecture and Engineering
- 4.4 Professional Services
- 4.5 Other Services
- 4.6 Goods and Supplies
- 4.7 Conclusions

### **4.1 Methodology**

This section presents the methodology for the collection of data and analysis of market areas, utilization, and availability of minority-, woman-, and nonminority-owned firms. The description of business categories and minority-owned business enterprise (MBE) classifications are also presented in this section, as well as the process used to determine the geographical market areas, utilization, and availability of firms. The analyses presented are for all state agencies, including universities. Highway construction activities under Virginia Department of Transportation are analyzed and presented in a separate report.

#### **4.1.1 Business Categories**

Five business categories were used to delineate the Commonwealth's relevant market areas and the utilization of MBE and nonminority firms:

- construction;
- architecture and engineering;
- professional services;
- other services; and
- goods and supplies.

Each contract awarded or vendor payment was grouped into one of the above categories using the account codes from the Commonwealth of Virginia and the universities' accounting systems. **Appendix A** provides a listing of the Account Codes and work type category. The definitions used to group the contracts and payments are as follows.

##### **Construction**

Any construction related services, including but not limited to:

- any major or heavy construction services (building construction);
- any light or maintenance construction services (e.g., carpentry, flooring, electrical work, plumbing); and
- other related construction services (e.g., grading, hauling, roofing, painting).

##### **Architecture and Engineering Services**

Any architecture or engineering services, including all firms in architectural design and engineering services, and all environmental consulting. Also included within this category are:

- inspections;
- soil testing;
- surveying; and
- materials testing

### **Professional Services**

Any services provided by a person or firm that is of a professional nature that require special licensing, educational degrees, and/or unusually highly specialized expertise, including:

- financial services;
- legal services;
- medical services; and
- advertising/marketing services.

### **Other Services**

Any service that is labor intensive and not professional or construction related, including but not limited to:

- maintenance services;
- janitorial services;
- lawn services and landscaping;
- employment services; and
- printing services.

### **Goods and Supplies**

Equipment and consumable items purchased in bulk, or a deliverable product including but not limited to:

- equipment and parts;
- chemicals; and
- paper products and or office supplies.

Contracts or payments that were classified as any of the following were excluded from this study because they are typically not competitively bid:

- administrative items such as utility payments, leases for real estate, insurance or banking transactions;
- fringe benefits such as payments for food, parking, or conference fees; and
- government entities, including nonprofit local organizations, state agencies, and federal agencies.

#### **4.1.2 MBE Classifications**

In this study, businesses classified as MBEs were firms that were at least 51 percent owned and controlled by members of one of four groups: African Americans, Hispanic Americans, Asian Americans and Native Americans. These groups were defined according to the United State Census Bureau as follows:

- **African Americans:** U.S. citizens or lawfully admitted permanent residents having an origin in any of the black racial groups of Africa.
- **Hispanic Americans:** U.S. citizens or lawfully admitted permanent residents of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese cultures or origins regardless of race.
- **Asian Americans:** U.S. citizens or lawfully admitted permanent residents who originate from the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.
- **Native Americans:** U.S. citizens or lawfully admitted permanent residents who originate from any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition.

#### **4.1.3 Collection and Management of Data**

To determine the most appropriate data for our use in the analysis of the Commonwealth's procurement activity and to identify data sources, MGT conducted interviews with key staff knowledgeable about the Commonwealth's procurement processes. The decision was made by the Commonwealth and MGT to use data from the Commonwealth's Accounting Reporting System (CARS) as the main source of data for the business categories Architecture and Engineering, Professional Services, Other Services, and Goods and Supplies. The CARS system contains procurement data—specifically payment and purchase order data—from all state agencies and most colleges and universities in Virginia. There are six colleges and universities that do not use CARS, but instead have their own independent accounting systems. MGT collected

data from the accounting systems of the following schools to achieve a complete data set to analyze.

- University of Virginia
- Radford University
- Virginia Commonwealth University
- Virginia Polytechnic Institute and State University
- College of William and Mary
- Old Dominion University

It should be noted that Old Dominion University, Virginia Commonwealth University, Virginia Military Institute, and Virginia Polytechnic Institute and State University did not provide data for fiscal year 1998 due to changes in the accounting system.

For the construction business category, the most complete source of contract data was located at the Bureau of Capital Outlay Management (BCOM). The construction analyses following this section contains only construction contracts let through BCOM. Although not all construction projects for the Commonwealth go through BCOM, BCOM was the most reliable source of contract awards available. Construction projects valued at below the BCOM threshold were not covered in the analyses of this report. BCOM oversees all building construction over \$500,000 or 5,000 square feet. The larger dollar contracts that go through BCOM were analyzed and they typically have more subcontracting activity than the smaller construction projects. The Virginia Department of Transportation (VDOT) also maintained construction data. A separate report contains the analyses of construction procurements using VDOT's contracting and subcontracting data. Subcontractor data was nonexistent for any business category, as the Commonwealth was not required to track actual subcontractor use. To resolve this issue, MGT sent verification reports to each construction vendor who won a contract through BCOM asking the contractor to list every sub they used and how much the sub was paid. VDOT maintained subcontractor data because they have specific requirements to do so by federal regulations.

**Contract and Subcontract Data Collection**

Prime construction contract data were provided electronically from BCOM to MGT. This was the source MGT used for analyses of construction procurements. The electronic database contained, but was not limited to, the following information on most (not all) contracts contained in the list:

- name of firm awarded the contract and license number;
- award amount of the contract;
- agency the contract was awarded to;
- project number;
- award date of the contract; and
- a description of the contract from which the business category of the procurement could be derived.

MGT met with several agencies and universities to obtain information on subcontracting; however, no agency or university had a way to track subcontracting. VDOT submitted to MGT an electronic copy of prime and sub contracting data to use for the VDOT analyses.

**Availability (Vendor) Data Collection**

Determining the availability of firms is a critical element in developing disparity analyses. MGT used several sets of data to determine the percentage of firms that are ready and willing to do work for the Commonwealth of Virginia.

For the purposes of this study, MGT defines prime contractors as firms that (1) have performed prime contract work for the Commonwealth in the past; (2) have bid on prime contract work for the Commonwealth in the past; or (3) are registered vendors with any of the agencies listed below. These firms are defined as available prime contractors because they have either performed, or have explicitly indicated their willingness to

perform, prime contract work for the Commonwealth. For construction subcontracting availability we used Census Bureau data.

MGT attempted to collect lists from 25 organizations that were identified as potential sources of available vendors and ethnicity information during interviews with Commonwealth personnel. A list of the 25 organizations is included in **Appendix B**. Further sources were also identified during the collection process by staff from these organizations. MGT was successful in collecting vendor information from the following sources:

- Virginia Regional Minority Supplier Development Council;
- Metropolitan Business League Minority List;
- Virginia Community Development Loan Fund;
- Association of General Contractors;
- Greater Virginia Contractors Association;
- Department of Professional and Occupational Regulation;
- Virginia Chamber of Commerce;
- Small Business Association;
- Harris Infosource Vendor Listings;
- National Indian Business Association;
- City of Richmond - Department of Economic Development; and
- National Women Business Owners Corporation.

The vendors in the CARS system provided the basis for the master vendor database, with additional vendors from the universities, and the above vendor lists appended to the Master Vendor Table if they were not already in CARS. CARS did not have the capability to track the ethnicity information of the vendor. MGT added firms from the following sources that were not already in the Master Vendor Database:

- firms that are available at the prime contract and subcontract levels;
- vendors who won contracts from the universities not using CARS;
- vendors identified from the government agency and trade associations listed earlier in the chapter;
- vendors who bid on contracts; and
- vendors who performed work at the subcontract level.

The agency, trade association, and MBE lists were used to identify the ethnicity and business category of firms already in the master vendor database. MGT also used the results of the verification reports, telephone survey, and personal interviews, which will be explained later, to identify ethnicity information. Once the data were transferred into the MGT database, the data were processed as follows:

- The county in which the vendor operated was identified by matching ZIP codes with a ZIP code database of counties. (MGT maintains a ZIP code database containing all United States ZIP codes.) For those firms without addresses and services, MGT used a CD-ROM of yellow pages and the Internet to identify vendor address and service type.
- Records not pertinent to the study were eliminated.

There were approximately 160,000 vendors in the vendor database once all of the vendor sources were combined and duplicates removed.

#### **Verification Reports**

MGT distributed letters and verification reports to each of the construction firms that were awarded contracts through BCOM for the Commonwealth. The verification reports requested that the firm verify:

- firm ethnicity and gender;
- the contract dollar amount and award date;
- services provided; and
- name, ethnicity, services provided by, and amount paid to any subcontractors.

The prime contractor was also asked to edit and correct the data included in the verification report and provide any additional subcontracting information not listed in the report. (See **Appendix C** for a copy of the request letter and verification report.)

The verification report mailout, containing 3,461 verification reports, was sent out on October 9, 2003. Approximately 362 reports were returned as undeliverable due to the company changing addresses or going out of business. Of these 3,099 reports that

assumingly made it to their destination, 1,034 were returned completed, yielding a 33 percent response rate. About 5 percent of the respondents were MBE firms.

Of the reports that were returned to MGT, there were few corrections made by the prime contracting firms. The most common change made by prime contractors was the addition of subcontractor data. For this reason, MGT is very satisfied that the data are accurate for those firms that did not return the verification reports as well.

**Data for Analysis**

The total number of records analyzed for the five-year study period is shown below in **Exhibit 4-1**. The number of records is calculated from the payment database compiled by MGT staff with cooperation from the Commonwealth. The exhibit shows the number of contracts or payments made for each of the five business categories.

**EXHIBIT 4-1  
COMMONWEALTH OF VIRGINIA  
NUMBER OF ANALYZED RECORDS  
FISCAL YEARS 1998 THROUGH 2002**

<b>Business Category</b>	<b># of Records</b>
Construction	611
Architecture & Engineering	44,762
Professional Services	1,907,089
Other Services	1,378,606
Goods & Supplies	2,278,874

Source: MGT databases of the Commonwealth's contract and payment information.

**4.1.4 Market Area Methodology**

In order to establish the appropriate geographic boundaries for the statistical analysis, market areas were determined for each of the business categories included in the study. First, the overall market area was determined and then the relevant market area was established.

**Overall Market Area**

A United States county is the geographical unit of measure selected for determining market area. The use of counties as geographical units is based on the following considerations:

- The courts have accepted counties as a standard geographical unit of analysis in conducting equal employment opportunity and disparity analysis.
- County boundaries are externally determined and, hence, are free from any researcher bias that might result from any arbitrary determinations of boundaries of geographical units of analysis.
- Census and other federal and state data are routinely collected and reported by county.

MGT determined the counties that constituted the Commonwealth of Virginia's overall market area by evaluating the total dollars expended by the Commonwealth in each business category. The results were then summarized by county according to the location of each firm that provided goods or services to the Commonwealth.

**Relevant Market Area**

The relevant market area was determined for each business category. The first step was to sum the dollars awarded in each county according to business category. The counties were sorted by the contract or payment dollar amounts awarded. Succeeding counties were added, as needed, until at least 75 percent of the total dollars was included.

The use of the "75 percent rule" for market area determination is generally accepted in antitrust cases. In another relevant case, the court accepted less than 100 percent of data when it was reasonable to assume that the missing data would not significantly change the results of the analysis.<sup>1</sup>

The data used to determine the overall and relevant market areas for the Commonwealth business categories follow:

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<sup>1</sup>James C. Jones v. New York County Human Resources Administration, 528 F.2d 696 (.2d Cir. 1976).

- number of individual firms;
- percentage of total firms;
- number of contracts let;
- percentage of total contracts let;
- contracts awarded;
- payments made; and
- percentage of total dollars.

#### **4.1.5 Utilization Methodology**

MBE and non-MBE utilization analysis includes the firms located within the relevant market areas. Construction firm utilization was derived from the BCOM data. Architecture and engineering, professional services, other services, and goods and supplies firm utilization was derived from information contained in CARS and each university not using CARS for activity occurring between July 1, 1997, and June 30, 2002. Using these data sources, MGT calculated the percentage of total dollars awarded to MBEs and non-MBEs during the relevant time period.

#### **4.1.6 Availability Methodology**

To evaluate disparate impact, if any, we must identify available MBEs in the relevant market area by each business category. This determination, referred to as *availability*, has been an issue in recent court cases. The issue is that if the availability of minority and women firms is overstated or understated, a distortion of the disparity determination will result. This distortion occurs because the quantitative measure of disparity is a direct ratio between utilization and availability.

To determine availability, several methodologies have been used, including census data, vendor data, and bidder data. The use of census data has been criticized because it does not consider whether minority and women contractors actually are willing, available, or able to perform contracts. The use of vendor data is a more appropriate methodology since it excludes firms that are uninterested or unable to provide goods and services to the jurisdiction. Vendor data are determined by identifying MBEs that have actually performed work for the locality or have expressed an interest in securing contracts. Limited bidder was available and was not used for availability

analysis. For our analysis we used vendor data as the basis of the availability component.

MGT utilized several sources, as indicated previously in this chapter, to determine prime and subcontractor availability in order to develop the appropriate availability data within the relevant market area. All of the data were then compiled into the MGT Master Vendor Database for analysis.

Before the analysis was run, the ethnicity of vendors from the availability data were weighted based on the responses of the verification reports, focus groups, phone survey, and personal interviews. This process is done to identify more accurate ethnicity information since the Commonwealth had limited ethnicity information. To weight the ethnicity, MGT used the original information received from the Commonwealth. MGT then took the vendors from the original data and updated the ethnicity field from the results of the verification reports, focus groups, personal interviews, and telephone surveys. The percentage change from an unknown ethnicity to a known ethnicity was calculated and applied to the remaining unknown ethnicities of the remaining vendors.

This methodology is one approach to identify the universe of firms that are in the Commonwealth's relevant market area and available to perform work for the Commonwealth. Using this approach, we assume that all firms in the relevant market area are ready, willing, and able to do work for the Commonwealth at the prime or sub level. For subcontractor availability, MGT used data from the Census Bureau to identify the number of firms available. This was done because most of the availability data available to MGT came from those vendors who were utilized or were on the organizational lists described previously. This represents an accurate measure of prime contractors, but not subcontractors. Subcontractors often times are not found in governmental accounting systems because they are paid by the prime contractor. For this reason, MGT needed another reliable source for this type of information. MGT used all construction vendors in the census data with the Standard Industrial Classification

(SIC) code classification of 15 or 17, which designates building construction and specialty trade contractors, to reflect subcontractor availability.

There are approximately 160,000 individual firms that comprised MGT's Master Vendor Database for all work type categories combined. A summary of the total number of firms in the database by business category and the number of firms in the relevant market area is shown in **Exhibit 4-2**. In the exhibit, firms that were available to provide goods or services in more than one business category are included in each respective business category where the firm can perform work for the Commonwealth. Therefore, the figures in **Exhibit 4-2** may be greater than the total number of individual firms in the Master Vendor Database.

**EXHIBIT 4-2  
AVAILABILITY OF FIRMS BY BUSINESS CATEGORY  
FISCAL YEARS 1998 THROUGH 2002**

<b>Business Category</b>	<b># of Total Firms</b>	<b># Relevant Market Area Firms</b>
Construction	31,546	15,539
Architecture & Engineering	5,050	3,278
Professional Services	38,053	29,308
Other Services	70,920	49,671
Goods & Supplies	79,398	51,210

Source: MGT's Master Vendor Database

## **4.2 Construction**

The Commonwealth market area for the construction business category, and the utilization and availability of minority, women, and nonminority contractors and subcontractors are examined in this section. As noted earlier VDOT highway construction data are analyzed in a separate report.

### **4.2.1 Relevant Market Area Analysis**

The Commonwealth spent approximately \$1.29 billion on construction projects over the study period, and the Commonwealth used 353 firms on 692 contracts. Approximately \$1.07 billion (83%) of the construction prime contract dollars were within the relevant market area. The average construction contract overall was \$1,866,800,

**Relevant Market Area, Utilization, and Availability Analyses**

and the average construction contract in the relevant market area was \$1,748,142. **Exhibit 4-3** shows the location of all firms used in the analysis of construction contracts, by county and dollar amount.

**EXHIBIT 4-3  
CONSTRUCTION  
RELEVANT MARKET AREA ANALYSIS  
FISCAL YEARS 1998 THROUGH 2002**

County, <sup>1</sup> State	# of Contracts	% of Contracts	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% <sup>2</sup>
<b>COMMONWEALTH OF VIRGINIA</b>	611	88.29%	299	84.70%	\$1,068,115,026.00	82.68%	82.68%
<b>RELEVANT M.A. TOTAL</b>	611	88.29%	299	84.70%	\$1,068,115,026.00	82.68%	N/A
HOWARD, MD	7	1.01%	4	1.13%	\$29,977,936.00	2.32%	85.00%
FORSYTH, NC	2	0.29%	1	0.28%	\$26,928,454.00	2.08%	87.09%
MONTGOMERY, MD	7	1.01%	6	1.70%	\$26,848,102.00	2.08%	89.17%
PROVIDENCE, RI	1	0.14%	1	0.28%	\$24,300,000.00	1.88%	91.05%
WASHINGTON, DC	5	0.72%	5	1.42%	\$21,508,514.00	1.66%	92.71%
CUMBERLAND, PA	2	0.29%	1	0.28%	\$21,480,250.00	1.66%	94.37%
FULTON, GA	1	0.14%	1	0.28%	\$19,475,000.00	1.51%	95.88%
PRINCE GEORGE'S, MD	5	0.72%	5	1.42%	\$11,207,881.00	0.87%	96.75%
CUYAHOGA, OH	1	0.14%	1	0.28%	\$10,826,205.00	0.84%	97.59%
MERCER, WV	6	0.87%	3	0.85%	\$7,121,502.00	0.55%	98.14%
ALLEGHENY, PA	1	0.14%	1	0.28%	\$3,194,000.00	0.25%	98.39%
SHELBY, TN	1	0.14%	1	0.28%	\$3,116,712.00	0.24%	98.63%
SAGINAW, MI	9	1.30%	1	0.28%	\$2,600,904.00	0.20%	98.83%
BALTIMORE, MD	1	0.14%	1	0.28%	\$1,927,000.00	0.15%	98.98%
COOK, IL	8	1.16%	2	0.57%	\$1,877,018.00	0.15%	99.12%
DELAWARE, NY	1	0.14%	1	0.28%	\$1,578,306.00	0.12%	99.25%
ANNE ARUNDEL, MD	3	0.43%	3	0.85%	\$1,560,062.00	0.12%	99.37%
ROCK ISLAND, IL	1	0.14%	1	0.28%	\$1,355,700.00	0.10%	99.47%
CALVERT, MD	2	0.29%	1	0.28%	\$1,310,000.00	0.10%	99.57%
JEFFERSON, KY	1	0.14%	1	0.28%	\$1,150,778.00	0.09%	99.66%
HALIFAX, NC	1	0.14%	1	0.28%	\$900,700.00	0.07%	99.73%
STOKES, NC	2	0.29%	1	0.28%	\$880,280.00	0.07%	99.80%
WORCESTER, MA	3	0.43%	1	0.28%	\$665,157.00	0.05%	99.85%
GRANVILLE, NC	1	0.14%	1	0.28%	\$438,542.00	0.03%	99.89%
MARTIN, NC	1	0.14%	1	0.28%	\$299,495.00	0.02%	99.91%
WILSON, NC	1	0.14%	1	0.28%	\$286,000.00	0.02%	99.93%
ERIE, NY	1	0.14%	1	0.28%	\$283,105.00	0.02%	99.95%
BAY, MI	1	0.14%	1	0.28%	\$168,500.00	0.01%	99.97%
WASHINGTON, TN	1	0.14%	1	0.28%	\$144,977.00	0.01%	99.98%
WASHINGTON, MD	1	0.14%	1	0.28%	\$95,357.00	0.01%	99.98%
QUEENS, NY	1	0.14%	1	0.28%	\$80,905.00	0.01%	99.99%
NORFOLK, MA	1	0.14%	1	0.28%	\$78,875.00	0.01%	100.00%
HAWKINS, TN	1	0.14%	1	0.28%	\$44,950.00	0.00%	100.00%
<b>Total</b>	692	100.00%	353	100.00%	\$1,291,826,193.00	100.00%	

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Counties above the line are included in the relevant market area.

<sup>2</sup> Cumulative total of percentage of dollars in market area.

The Commonwealth of Virginia comprised the relevant market area for the construction business category as shown in **Exhibit 4-3**. There were 611 contracts awarded to 299 firms in relevant market area. The construction contracts that were analyzed are shown in **Appendix D**.

#### **4.2.2 Utilization Analysis**

For firms located in the relevant market area, the following analysis was conducted:

- utilization analysis of all MBE and non-MBE prime contractors by fiscal year for the five years of the study;
- utilization analysis of the number of contracts awarded and the individual firms awarded those contracts, according to race/ethnicity/gender classifications; and
- utilization analysis of subcontractors each year of the study, according to race/ethnicity/gender classifications.

The utilization analysis of prime construction contractors in the relevant market area is shown in **Exhibit 4-4**. MBE owned firms were awarded 0.32 percent of the total dollars awarded by the Commonwealth during the review period. African American owned firms received about \$355,000 over the five years and Hispanic-American firms \$3.1 million. Nonminority women-owned firms received \$12.5 million or 1.2 percent. Native American and Asian American did not receive any contract awards during the study period.

While analyzing the construction contract dollars by year, we found that MBEs appeared to be most successful in winning contracts in the 2002 fiscal year when a Hispanic American-owned firm was awarded \$2,277,500. This determination is based on the amount of payments, not the relative percentage of prime contract dollar awards shown in **Exhibit 4-4**, where 0.52 percent of the total dollars awarded were to MBEs during this year. MBEs were not as successful in comparison to overall contract awards in other years of the study period, with none being utilized in 1998 or 2000. Nonminority women-owned firms received construction contract dollars in three of the five years of the study.

**EXHIBIT 4-4  
CONSTRUCTION  
UTILIZATION ANALYSIS OF PRIME CONTRACTORS IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
1998	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$104,750,219.00	100.00%	\$104,750,219.00
1999	\$0.00	0.00%	\$837,000.00	0.54%	\$0.00	0.00%	\$0.00	0.00%	\$837,000.00	0.54%	\$11,678,490.00	7.48%	\$143,537,184.00	91.98%	\$156,052,674.00
2000	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$146,152,841.00	100.00%	\$146,152,841.00
2001	\$355,466.00	0.16%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$355,466.00	0.16%	\$722,900.00	0.32%	\$225,758,230.00	99.52%	\$226,836,596.00
2002	\$0.00	0.00%	\$2,277,500.00	0.52%	\$0.00	0.00%	\$0.00	0.00%	\$2,277,500.00	0.52%	\$58,630.00	0.01%	\$431,986,566.00	99.46%	\$434,322,696.00
<b>Total</b>	\$355,466.00	0.03%	\$3,114,500.00	0.29%	\$0.00	0.00%	\$0.00	0.00%	\$3,469,966.00	0.32%	\$12,460,020.00	1.17%	\$1,052,185,040.00	98.51%	\$1,068,115,026.00

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**Exhibits 4-5** and **4-6** show the number of prime construction firms utilized during the study period. In **Exhibit 4-5**, we show that 611 contracts were awarded in the relevant market area with 98.5 percent of those contracts going to nonminority male owned firms. MBEs received 0.65 percent of the contract awards, and firms owned by Hispanic American firms were the more successful MBE group in terms of the number of awarded Commonwealth contracts with three of the four contracts awarded during the study period. In **Exhibit 4-6** we show that four MBE firms participated in Commonwealth construction projects at the prime contractor level. (Note: there was no MBE firm participation in the fiscal years 1998 and 2000 for construction contracts.) In comparison, 292 nonminority-owned firms and three nonminority women-owned firms were utilized during the same period.

MGT further analyzed the utilization of MBE construction firms by examining contracts in specific dollar ranges. The established ranges follow:

- contracts \$250,000 and under;
- contracts between \$250,001 and \$500,000;
- contracts between \$500,001 and \$1 million; and
- contracts over \$1 million.

**Contracts \$250,000 and Under**

The Commonwealth awarded 214 contracts between fiscal years 1998 and 2002 for prime construction contracts of \$250,000 or under. The utilization of MBE and non-MBE firms for each dollar range category is shown in **Exhibit 4-7**. As **Exhibit 4-7** illustrates, MBEs received 0.47 percent of the contracts in this category. Nonminority women-owned firms, in this dollar range received 0.93 percent of the contracts. Nonminorities received 98.60 percent of the contracts.

**EXHIBIT 4-5  
CONSTRUCTION  
PRIME CONTRACTS AWARDED IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Contracts
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	70	100.00%	70
1999	0	0.00%	2	1.44%	0	0.00%	0	0.00%	2	1.44%	2	1.44%	135	97.12%	139
2000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	102	100.00%	102
2001	1	0.92%	0	0.00%	0	0.00%	0	0.00%	1	0.92%	2	1.83%	106	97.25%	109
2002	0	0.00%	1	0.52%	0	0.00%	0	0.00%	1	0.52%	1	0.52%	189	98.95%	191
<b>Total Contracts</b>	<b>1</b>	<b>0.16%</b>	<b>3</b>	<b>0.49%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>4</b>	<b>0.65%</b>	<b>5</b>	<b>0.82%</b>	<b>602</b>	<b>98.53%</b>	<b>611</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Contracts.

**EXHIBIT 4-6  
CONSTRUCTION  
NUMBER OF INDIVIDUAL PRIME CONTRACTORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	54	100.00%	54
1999	0	0.00%	2	1.74%	0	0.00%	0	0.00%	2	1.74%	2	1.74%	111	96.52%	115
2000	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	78	100.00%	78
2001	1	1.19%	0	0.00%	0	0.00%	0	0.00%	1	1.19%	2	2.38%	81	96.43%	84
2002	0	0.00%	1	0.82%	0	0.00%	0	0.00%	1	0.82%	1	0.82%	120	98.36%	122
<b>Total Unique Vendors Over Five Years<sup>2</sup></b>	1	0.33%	3	1.00%	0	0.00%	0	0.00%	4	1.34%	3	1.00%	292	97.66%	299

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Vendors.

<sup>2</sup> The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total unique Vendors for the entire study period may not equal the sum of all years.

**EXHIBIT 4-7  
COMMONWEALTH OF VIRGINIA  
UTILIZATION OF CONSTRUCTION CONTRACTORS IN RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
BY DOLLAR CATEGORIES  
FISCAL YEARS 1998 THROUGH 2002**

Thresholds	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Contracts Awarded
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
Less than or Equal to \$250,000	0	0.00%	1	0.47%	0	0.00%	0	0.00%	1	0.47%	2	0.93%	211	98.60%	214
Between \$250,001 and \$500,000	1	0.77%	0	0.00%	0	0.00%	0	0.00%	1	0.77%	1	0.77%	128	98.46%	130
Between \$500,001 and \$1 million	0	0.00%	1	1.27%	0	0.00%	0	0.00%	1	1.27%	1	1.27%	77	97.47%	79
Greater than \$1 million	0	0.00%	1	0.53%	0	0.00%	0	0.00%	1	0.53%	1	0.53%	186	98.94%	188
<b>Total</b>	<b>1</b>	<b>0.16%</b>	<b>3</b>	<b>0.49%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>4</b>	<b>0.65%</b>	<b>5</b>	<b>0.82%</b>	<b>602</b>	<b>98.53%</b>	<b>611</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total contracts awarded annually to prime contractors.

**Contracts between \$250,001 and \$500,000**

One-hundred-thirty contracts were awarded for construction services between \$250,001 and \$500,000 in the five-year study period. MBEs received one payment in this dollar range. Hispanic American, Asian American, and Native American-owned firms did not receive an award for construction services in this dollar category. Nonminority firms won 98.5 percent of these contracts.

**Contracts between \$500,001 and \$1 million and contracts over \$1 million**

There were 79 awards for construction contracts over \$500,000, but less than \$1 million. Seventy-seven of these went to nonminority-owned firms. One Hispanic American-owned firm and one nonminority women-owned firm were awarded contracts in this range.

**Contracts over \$1 million**

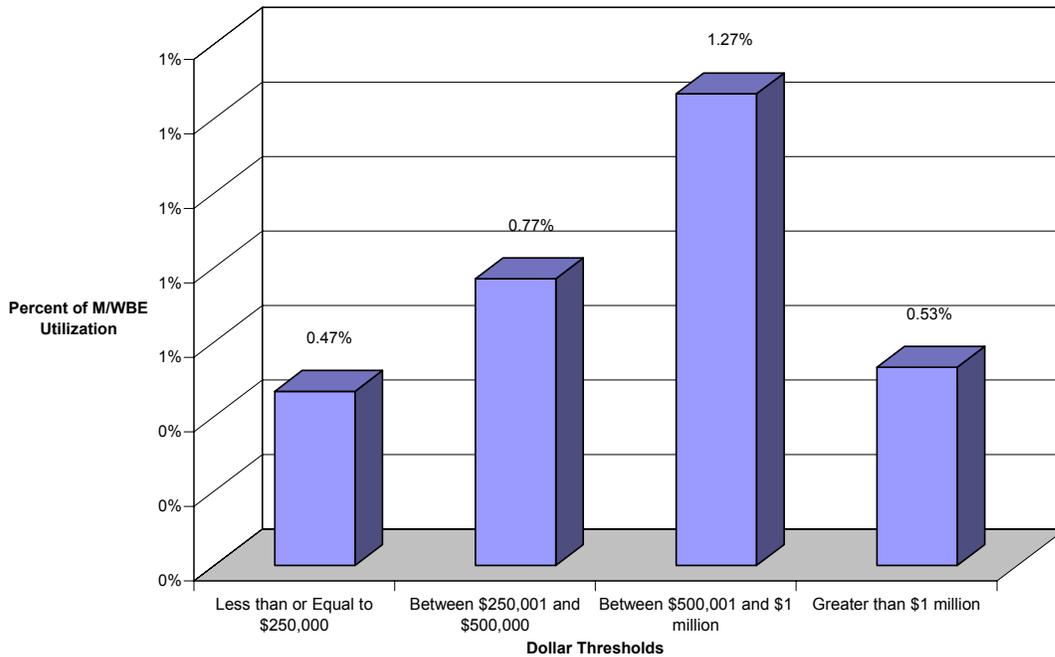
Of the 188 contracts awarded for \$1 million or more, one MBE firm received prime construction contracts. It was awarded to a Hispanic American-owned firm.

**Contract dollar ranges**

When all contract dollar groups are compared, a pattern is revealed. MBEs tend to win 0.65 percent of all construction contracts on average. **Exhibit 4-8** shows a comparison graph of the dollar ranges for the utilization of MBEs and illustrates how MBE firms fared as contract dollars rose. Overall, MBEs' share was 0.65 percent of the total contracts. MBE firms were awarded 0.47 percent of the contracts less than \$250,000. For contracts valued at \$250,001 to \$500,000, 0.77 percent of the contracts were awarded to MBEs. MBEs were most successful in the \$500,001 to \$1 million range, receiving 1.27 percent of contracts. Most construction contracts greater than \$1 million were contracted to nonminority owned firms, winning approximately 98.94 percent of the contracts.

**EXHIBIT 4-8  
COMMONWEALTH OF VIRGINIA  
UTILIZATION OF MBE PRIME CONSTRUCTION CONTRACTORS  
WITHIN CONTRACT DOLLAR RANGES  
FISCAL YEARS 1998 THROUGH 2002**

Percent of M/WBE Utilization by Dollar Threshold



**Subcontractor Analysis**

The analysis of subcontractor utilization is based on the subcontract dollars awarded within the prime contractor's relevant market area. As subcontractors, MBEs received 1.45 percent of the subcontract dollars awarded for construction procurements. During the study period, Native American-owned firms did not receive any construction subcontracts. No MBE subcontractors were used during fiscal year 1998. Of the over \$1.11 million in MBE subcontracts, firms owned by Hispanic Americans received over \$923,000. Subcontractor utilization for the Commonwealth construction awards is shown in **Exhibit 4-9** as dollar amounts paid and the percentage of subcontract dollars. Since there was no subcontractor data provided by the Commonwealth, MGT relied on

**EXHIBIT 4-9  
CONSTRUCTION  
UTILIZATION ANALYSIS OF SUBCONTRACTORS  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Males		Total Sub Dollars Awarded <sup>2</sup>
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	
1998	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$546,078.29	100.00%	\$546,078.29
1999	\$0.00	0.00%	\$6,300.00	0.07%	\$0.00	0.00%	\$0.00	0.00%	\$6,300.00	0.07%	\$3,795.00	0.04%	\$9,455,162.73	99.89%	\$9,465,257.73
2000	\$0.00	0.00%	\$4,830.00	0.09%	\$0.00	0.00%	\$0.00	0.00%	\$4,830.00	0.09%	\$95,228.00	1.84%	\$5,067,494.88	98.06%	\$5,167,552.88
2001	\$122,848.00	0.32%	\$659,410.50	1.73%	\$4,100.00	0.01%	\$0.00	0.00%	\$786,358.50	2.07%	\$293,719.12	0.77%	\$36,948,419.48	97.16%	\$38,028,497.10
2002	\$45,150.00	0.19%	\$252,865.95	1.09%	\$17,221.00	0.07%	\$0.00	0.00%	\$315,236.95	1.35%	\$425,311.45	1.83%	\$22,555,413.44	96.82%	\$23,295,961.84
<b>Total</b>	\$167,998.00	0.22%	\$923,406.45	1.21%	\$21,321.00	0.03%	\$0.00	0.00%	\$1,112,725.45	1.45%	\$818,053.57	1.07%	\$74,572,568.82	97.48%	\$76,503,347.84

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount given to prime contractors and subcontractors combined.

the verification reports to obtain sub data. The total prime contract amount from the contractors who responded to the verification report was approximately \$209 million. Of that \$209 million, about \$76 million, or 36 percent, went to subcontractors. **Appendix E** shows a list of the subcontracts that were analyzed.

The analysis of prime contracting by agency and university is displayed below in **Exhibit 4-10**. Norfolk State University had the highest MBE construction utilization percentage with almost 40 percent. All of the MBE contracting for Norfolk State University was by Hispanic American-owned firms. The highest volume agency for construction spending was the University of Virginia with almost \$221 million. This represents nearly 20 percent of the entire Commonwealth's spending in construction. The University of Virginia did not award any prime contracts to MBEs.

#### **4.2.3 Availability**

The availability of prime construction firms was derived from the list of overall firms included in MGT's database. However, the availability analysis is based only on firms that were located within the relevant market area. Therefore, the construction availability includes all firms in the jurisdiction, the Commonwealth of Virginia. As shown in **Exhibit 4-11**, less than 2 percent of prime contractors available to do business with the Commonwealth were MBEs. African American-owned firms accounted for 1 percent of the available contractors, and woman-owned firms about 2.7 percent. African American-owned firms represented 166 of the 265 identified MBEs. Additionally, there were 419 woman-owned firms. There were 16 Native American-owned prime contractors identified as being available for construction related projects. MGT used data from the Census Bureau to identify the number of firms available at the subcontract level. **Exhibit 4-12** shows that 11.59 percent of the available subcontractors are MBE-owned firms. Nonminority women-owned firms make up 5.95 percent. Nonminority-owned firms make up the remaining 82 percent of available subcontractors. Native American-owned firms had the lowest availability with 0.82 percent.

**EXHIBIT 4-10  
CONSTRUCTION  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Central Virginia Training Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,662,668.00	100.00%	\$3,662,668.00
Christopher Newport University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,350,900.00	12.70%	\$78,023,164.00	87.30%	\$89,374,064.00
College Of William & Mary	\$0.00	0.00%	\$655,000.00	2.93%	\$0.00	0.00%	\$0.00	0.00%	\$655,000.00	2.93%	\$0.00	0.00%	\$21,703,744.00	97.07%	\$22,358,744.00
Dept General Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$17,063,807.00	100.00%	\$17,063,807.00
Dept Of Conservation & Recreation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,759,027.00	100.00%	\$15,759,027.00
Dept Of Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$58,630.00	0.15%	\$38,840,966.00	99.85%	\$38,899,596.00
Dept Of Emergency Management	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$510,186.00	100.00%	\$510,186.00
Dept Of Game & Inland Fisheries	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$268,452.00	100.00%	\$268,452.00
Dept Of Juvenile Justice	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,589,929.00	100.00%	\$3,589,929.00
Dept Of Mental Health Mental Retardation Substance Abuse Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,657,319.00	100.00%	\$10,657,319.00
Dept Of Military Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,919,983.00	100.00%	\$2,919,983.00
Dept Of Visual Handicapped	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,788,350.00	100.00%	\$3,788,350.00
Frontier Cultural Museum	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$179,288.00	100.00%	\$179,288.00
George Mason University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$536,590.00	13.06%	\$3,572,826.00	86.94%	\$4,109,416.00
Gunston Hall Plantation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$105,781.00	100.00%	\$105,781.00
James Madison University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$81,805,897.00	100.00%	\$81,805,897.00
Jamestown-Yorktown Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,283,280.00	100.00%	\$10,283,280.00
Longwood College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$26,335,821.00	100.00%	\$26,335,821.00
Mary Washington College	\$0.00	0.00%	\$182,000.00	1.07%	\$0.00	0.00%	\$0.00	0.00%	\$182,000.00	1.07%	\$0.00	0.00%	\$16,873,148.00	98.93%	\$17,055,148.00
Melchers Monroe Memorial	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$768,450.00	100.00%	\$768,450.00
Norfolk State University	\$0.00	0.00%	\$2,277,500.00	39.93%	\$0.00	0.00%	\$0.00	0.00%	\$2,277,500.00	39.93%	\$0.00	0.00%	\$3,426,799.00	60.07%	\$5,704,299.00
Old Dominion University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$513,900.00	0.77%	\$66,008,192.00	99.23%	\$66,522,092.00
Piedmont Geriatric Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$647,777.00	100.00%	\$647,777.00
Radford University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$26,270,111.00	100.00%	\$26,270,111.00
Richard Bland College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$698,300.00	100.00%	\$698,300.00
Science Museum Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,079,285.00	100.00%	\$3,079,285.00
University Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$220,557,391.00	100.00%	\$220,557,391.00
University Of Virginia College At Wise	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,301,746.00	100.00%	\$11,301,746.00
University Of Virginia Medical Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,381,072.00	100.00%	\$10,381,072.00
Va DOT	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$40,940,741.00	100.00%	\$40,940,741.00

**EXHIBIT 4-10 (Continued)  
CONSTRUCTION  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Virginia Commonwealth University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$65,140,317.00	100.00%	\$65,140,317.00
Virginia Community College System	\$355,466.00	0.46%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$355,466.00	0.46%	\$0.00	0.00%	\$76,909,783.00	99.54%	\$77,265,249.00
Virginia Employment Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$126,900.00	100.00%	\$126,900.00
Virginia Institute Of Marine Science	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$986,038.00	100.00%	\$986,038.00
Virginia Military Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,779,330.00	100.00%	\$5,779,330.00
Virginia Museum Of Fine Arts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$982,751.00	100.00%	\$982,751.00
Virginia School For Deaf & Blind-Hampton	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$836,966.00	100.00%	\$836,966.00
Virginia School For Deaf & Blind-Staun	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,363,056.00	100.00%	\$1,363,056.00
Virginia State Police	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,126,704.00	100.00%	\$1,126,704.00
Virginia State University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,390,449.00	100.00%	\$18,390,449.00
Virginia Tech	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$154,322,381.00	100.00%	\$154,322,381.00
Virginia Veterans Care Center Bd Trust	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$758,340.00	100.00%	\$758,340.00
Woodrow Wilson Rehab Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,438,525.00	100.00%	\$5,438,525.00
<b>Total</b>	<b>\$355,466.00</b>	<b>0.03%</b>	<b>\$3,114,500.00</b>	<b>0.29%</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$3,469,966.00</b>	<b>0.32%</b>	<b>\$12,460,020.00</b>	<b>1.17%</b>	<b>\$1,052,185,040.00</b>	<b>98.51%</b>	<b>\$1,068,115,026.00</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount awarded/paid to prime contractors and subcontractors combined.

**EXHIBIT 4-11  
CONSTRUCTION  
AVAILABILITY OF PRIME CONTRACTORS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	166	1.07%	40	0.26%	43	0.28%	16	0.10%	265	1.71%	419	2.70%	14,855	95.60%	15,539

Source: MGT's master vendor database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-12  
CONSTRUCTION  
AVAILABILITY OF SUBCONTRACTORS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
BASED ON CENSUS DATA USING SIC CODES 15 AND 17**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	2,783	5.03%	2,064	3.73%	1,118	2.02%	452	0.82%	6,417	11.59%	3,296	5.95%	45,651	82.46%	55,364

Source: Census database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

#### **4.2.4 Analyses of Bid Data**

**Exhibit 4-13** shows bid data that MGT collected from BCOM. The exhibit illustrates the number and percentage of bids submitted over the study period. The reader is reminded that the number of bids analyzed is not inclusive of all projects where bids might have been submitted. The bid data analyzed are for those projects where bid data information could be located.

MBEs submitted 1.39 percent (10 bids) of the total construction bids submitted over the study period and won none of these bids.

Of the data analyzed, nonminority firms submitted 98 percent of the bids and were successful for all of them in the bidder files MGT collected. There were 311 unique nonminority firms that submitted bids compared to six MBE firms. Hispanic American-owned firms placed the most bids of any MBE category with six submitted by two different firms.

### **4.3 Architecture and Engineering**

This section presents the Commonwealth's relevant market area analysis for architecture and engineering awards, and the utilization and availability analysis of MBEs and non-MBEs as architecture and engineering consultants.

#### **4.3.1 Relevant Market Area Analysis**

Approximately \$1.18 billion was spent by the Commonwealth on architecture and engineering awards over the five-year study period. **Exhibit 4-14** shows the location of firms awarded architecture and engineering payments by county of domicile and dollar amount. The relevant market area for the Commonwealth architecture and engineering awards consists of the Commonwealth of Virginia, plus Dade County, Florida; Baltimore (City) Maryland; and New York County, New York. Approximately 909 million (77%) of the \$1.18 billion in total architecture and engineering awards were awarded to firms in the relevant market area. A total of 48,089 payments were awarded to 1,544 firms within the relevant market area. Overall, 59,749 payments were awarded to 1,975

**EXHIBIT 4-13  
COMMONWEALTH OF VIRGINIA  
ANALYSIS OF BID DATA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

Construction Bidders	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
Number of Bids Submitted	3	0.42%	6	0.84%	0	0.00%	1	0.14%	10	1.39%	5	0.70%	702	97.91%	717
Number of Individual Bidders	3	0.93%	2	0.62%	0	0.00%	1	0.31%	6	1.87%	4	1.25%	311	96.88%	321
Number of Bidded Contracts Awarded	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	67	100.00%	67
Dollar Amount of Bidded Contract	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$22,233,064,191.00	100.00%	\$22,233,064,191.00

Source: Commonwealth of Virginia BCOM bid tabulations from fiscal years 1998 through 2002.

Note: The number of bids shown in the tables is not inclusive of all projects for which bids were submitted during the study period. The data shown above represent only those projects on which bid information was available in the files reviewed.

**EXHIBIT 4-14  
ARCHITECTURE & ENGINEERING  
RELEVANT MARKET AREA ANALYSIS  
FISCAL YEARS 1998 THROUGH 2002**

County, <sup>1</sup> State	# of Payments	% of Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% <sup>2</sup>
<b>COMMONWEALTH OF VIRGINIA</b>	43,129	72.18%	1,512	76.56%	\$744,166,979.38	63.12%	63.12%
<b>DADE, FL</b>	427	0.71%	2	0.10%	\$62,103,977.05	5.27%	68.39%
<b>BALTIMORE (CITY), MD</b>	3,088	5.17%	17	0.86%	\$55,739,321.05	4.73%	73.11%
<b>NEW YORK, NY</b>	1,445	2.42%	13	0.66%	\$47,065,849.24	3.99%	77.11%
<b>RELEVANT M.A. TOTAL</b>	<b>48,089</b>	<b>80.49%</b>	<b>1,544</b>	<b>78.18%</b>	<b>\$909,076,126.72</b>	<b>77.11%</b>	<b>N/A</b>
PRINCE GEORGE'S, MD	1,722	2.88%	13	0.66%	\$32,606,978.76	2.77%	79.87%
MECKLENBURG, NC	545	0.91%	12	0.61%	\$23,426,123.24	1.99%	81.86%
ALLEGHENY, PA	707	1.18%	8	0.41%	\$19,075,112.11	1.62%	83.48%
WASHINGTON, DC	1,206	2.02%	29	1.47%	\$18,862,399.99	1.60%	85.08%
BALTIMORE, MD	678	1.13%	4	0.20%	\$17,916,449.10	1.52%	86.60%
MONROE, NY	424	0.71%	2	0.10%	\$17,071,389.60	1.45%	88.04%
FULTON, GA	198	0.33%	12	0.61%	\$14,522,296.46	1.23%	89.28%
COOK, IL	883	1.48%	29	1.47%	\$12,955,914.61	1.10%	90.38%
WAKE, NC	680	1.14%	4	0.20%	\$12,644,981.65	1.07%	91.45%
KING, WA	257	0.43%	3	0.15%	\$12,010,250.99	1.02%	92.47%
MIDDLESEX, MA	357	0.60%	6	0.30%	\$7,836,475.70	0.66%	93.13%
MONTGOMERY, MD	163	0.27%	20	1.01%	\$7,548,520.66	0.64%	93.77%
ESSEX, NJ	258	0.43%	5	0.25%	\$6,541,933.68	0.55%	94.33%
SAN FRANCISCO, CA	205	0.34%	3	0.15%	\$5,465,976.97	0.46%	94.79%
DALLAS, TX	47	0.08%	7	0.35%	\$5,327,687.26	0.45%	95.24%
SUFFOLK, MA	32	0.05%	6	0.30%	\$4,531,852.07	0.38%	95.63%
WESTCHESTER, NY	147	0.25%	4	0.20%	\$4,094,280.72	0.35%	95.97%
FRANKLIN, OH	43	0.07%	4	0.20%	\$3,488,416.39	0.30%	96.27%
LEON, FL	56	0.09%	2	0.10%	\$3,423,754.44	0.29%	96.56%
LOS ANGELES, CA	109	0.18%	7	0.35%	\$3,303,252.37	0.28%	96.84%
FORSYTH, NC	86	0.14%	2	0.10%	\$2,865,624.38	0.24%	97.08%
PHILADELPHIA, PA	520	0.87%	17	0.86%	\$2,629,803.97	0.22%	97.31%
FAYETTE, KY	126	0.21%	4	0.20%	\$2,411,593.34	0.20%	97.51%
HOWARD, MD	87	0.15%	5	0.25%	\$2,120,275.49	0.18%	97.69%
DAUPHIN, PA	54	0.09%	3	0.15%	\$1,910,489.82	0.16%	97.85%
MERCER, WV	24	0.04%	4	0.20%	\$1,775,440.95	0.15%	98.00%
PEORIA, IL	58	0.10%	1	0.05%	\$1,768,930.34	0.15%	98.15%
KANAWHA, WV	49	0.08%	1	0.05%	\$1,677,802.35	0.14%	98.30%
HAMILTON, OH	365	0.61%	4	0.20%	\$1,603,582.21	0.14%	98.43%
ANNE ARUNDEL, MD	28	0.05%	4	0.20%	\$1,581,404.62	0.13%	98.57%
YORK, PA	67	0.11%	1	0.05%	\$1,385,473.00	0.12%	98.68%
ALBANY, NY	303	0.51%	2	0.10%	\$1,373,933.27	0.12%	98.80%
OAKLAND, MI	22	0.04%	2	0.10%	\$1,111,862.16	0.09%	98.89%
OKLAHOMA, OK	73	0.12%	3	0.15%	\$1,086,204.89	0.09%	98.99%
TULSA, OK	41	0.07%	2	0.10%	\$1,059,704.36	0.09%	99.08%
OTHER	1,040	1.74%	196	9.92%	\$10,896,608.26	0.92%	100.00%
<b>Total</b>	<b>59,749</b>	<b>100.00%</b>	<b>1,975</b>	<b>100.00%</b>	<b>\$1,178,988,906.90</b>	<b>100.00%</b>	

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Counties above the line are included in the relevant market area.

<sup>2</sup> Cumulative total of percentage of dollars in market area.

individual firms. The architecture and engineering payments that were analyzed are included in **Appendix F**.

#### **4.3.2 Utilization Analysis**

MGT analyzed the architecture and engineering dollars awarded by the Commonwealth to MBE and non-MBE prime consultants located in the relevant market area. The utilization analysis results are presented by fiscal year, dollar amount, number of payments awarded, and individual firms according to race/ethnicity/gender classifications.

**Exhibit 4-15** presents the utilization analysis of architecture and engineering prime consultants in the Commonwealth relevant market area. MBEs were awarded 0.07 percent of the architecture and engineering payment dollars in the relevant market area. Approximately \$909 million were spent by the Commonwealth for architecture and engineering services in the relevant market area, approximately \$652,000 of which were awarded to MBEs, as shown in **Exhibit 4-15**. Nonminority-owned firms were selected for 99.5 percent of the Commonwealth architecture and engineering awards. In fiscal year 2002, the Commonwealth issued the highest dollar amount for architecture and engineering projects, yet MBEs received the least amount during that year. MBEs were most successful in winning architecture and engineering payments in fiscal year 2001. Architecture and engineering payments awarded to MBEs totaled \$201,000, or 0.11 percent of the total awards made that year.

**Exhibits 4-16** and **4-17** show the utilization by the number of payments and the number of architecture and engineering firms used during the study period. Our analysis shows that 46,746 of the 48,089 payments went to nonminority firms. Furthermore, only 14 of the 1,544 total firms used by the Commonwealth for architecture and engineering payments were MBEs. There were no Native American-owned firms utilized for architecture and engineering projects.

**EXHIBIT 4-15  
ARCHITECTURE & ENGINEERING  
UTILIZATION ANALYSIS OF PRIME CONSULTANTS IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
1998	\$4,850.00	0.00%	\$0.00	0.00%	\$56,300.00	0.06%	\$0.00	0.00%	\$61,150.00	0.06%	\$807,994.84	0.81%	\$99,400,676.83	99.13%	\$100,269,821.67
1999	\$26,622.72	0.02%	\$23,105.67	0.01%	\$102,668.40	0.06%	\$0.00	0.00%	\$152,396.79	0.09%	\$1,311,064.19	0.78%	\$166,481,289.51	99.13%	\$167,944,750.49
2000	\$8,396.76	0.01%	\$33,905.00	0.02%	\$77,427.93	0.05%	\$0.00	0.00%	\$119,729.69	0.08%	\$742,515.73	0.47%	\$158,415,668.68	99.46%	\$159,277,914.10
2001	\$9,400.00	0.01%	\$0.00	0.00%	\$192,162.91	0.10%	\$0.00	0.00%	\$201,562.91	0.11%	\$648,796.80	0.35%	\$184,711,868.61	99.54%	\$185,562,228.32
2002	\$6,145.00	0.00%	\$3,942.84	0.00%	\$107,445.27	0.04%	\$0.00	0.00%	\$117,533.11	0.04%	\$564,818.46	0.19%	\$295,339,060.57	99.77%	\$296,021,412.14
<b>Total</b>	\$55,414.48	0.01%	\$60,953.51	0.01%	\$536,004.51	0.06%	\$0.00	0.00%	\$652,372.50	0.07%	\$4,075,190.02	0.45%	\$904,348,564.20	99.48%	\$909,076,126.72

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-16  
ARCHITECTURE & ENGINEERING  
PAYMENTS AWARDED  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Contracts
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	3	0.04%	0	0.00%	22	0.26%	0	0.00%	25	0.30%	222	2.67%	8,061	97.03%	8,308
1999	14	0.14%	3	0.03%	18	0.18%	0	0.00%	35	0.35%	344	3.45%	9,598	96.20%	9,977
2000	6	0.06%	4	0.04%	27	0.27%	0	0.00%	37	0.37%	292	2.96%	9,538	96.67%	9,867
2001	5	0.05%	0	0.00%	15	0.15%	0	0.00%	20	0.20%	134	1.32%	10,023	98.49%	10,177
2002	3	0.03%	1	0.01%	9	0.09%	0	0.00%	13	0.13%	221	2.26%	9,526	97.60%	9,760
<b>Total Contracts</b>	<b>31</b>	<b>0.06%</b>	<b>8</b>	<b>0.02%</b>	<b>91</b>	<b>0.19%</b>	<b>0</b>	<b>0.00%</b>	<b>130</b>	<b>0.27%</b>	<b>1,213</b>	<b>2.52%</b>	<b>46,746</b>	<b>97.21%</b>	<b>48,089</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Payments.

**EXHIBIT 4-17  
ARCHITECTURE & ENGINEERING  
NUMBER OF INDIVIDUAL PRIME CONSULTANTS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	2	0.34%	0	0.00%	1	0.17%	0	0.00%	3	0.51%	12	2.05%	571	97.44%	586
1999	5	0.73%	2	0.29%	1	0.15%	0	0.00%	8	1.16%	17	2.47%	663	96.37%	688
2000	2	0.30%	1	0.15%	4	0.61%	0	0.00%	7	1.06%	16	2.43%	635	96.50%	658
2001	1	0.15%	0	0.00%	3	0.46%	0	0.00%	4	0.62%	13	2.00%	632	97.38%	649
2002	1	0.15%	1	0.15%	3	0.46%	0	0.00%	5	0.76%	9	1.38%	640	97.86%	654
<b>Total Unique Vendors Over Five Years</b> <sup>2</sup>	5	0.32%	3	0.19%	6	0.39%	0	0.00%	14	0.91%	32	2.07%	1,498	97.02%	1,544

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Vendors.

<sup>2</sup> The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total Vendors for the entire study period may not equal the sum of all years.

The analysis of prime contracting by agency and university is displayed below in **Exhibit 4-18**. The Department of Transportation had the highest spending on architecture and engineering projects for the five-year study period with almost \$590 million. Of that, about \$321,000 million were awarded to MBE prime consultants. The agencies and universities with the highest MBE spending by percentage typically spent less than \$50,000 total over the five years each.

#### **4.3.3 Availability**

The availability of prime and subconsultants is derived from MGT's master vendor database. **Exhibit 4-19** shows the available architecture and engineering consultants that are within the relevant market area. Approximately 3.8 percent of available architecture and engineering consultants are MBEs. There were 141 nonminority women-owned firms and seven Native American firms. Ninety-two percent of the available firms were owned by nonminority males.

### **4.4 Professional Services**

This section presents the Commonwealth relevant market area analysis for professional services payment awards, and the utilization and availability analysis of MBEs and non-MBEs as professional services consultants.

#### **4.4.1 Relevant Market Area Analysis**

Approximately \$2.5 billion were spent by the Commonwealth on professional services over the five-year study period. **Exhibit 4-20** shows the location of firms awarded professional services by County of domicile and dollar amount. The relevant market area for the Commonwealth professional services is the Commonwealth of Virginia as well as St. Louis County, Missouri; Fulton County, Georgia; Philadelphia County, Pennsylvania; Cook County, Illinois; Baltimore County, Maryland; and Baltimore (City), Maryland. Approximately \$1.9 billion (75%) of the \$2.5 billion in total

**EXHIBIT 4-18  
ARCHITECTURE & ENGINEERING  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Augusta Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$238.50	100.00%	\$0.00	0.00%	\$238.50
Blue Ridge Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$27,096.62	11.77%	\$203,201.59	88.23%	\$230,298.21
Brunswick Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$750.00	100.00%	\$750.00
Buckingham Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,000.00	100.00%	\$1,000.00
Catawba Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$41,602.20	100.00%	\$41,602.20
Central State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$188,200.34	100.00%	\$188,200.34
Central VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,825.90	1.69%	\$222,506.00	98.31%	\$226,331.90
Central Virginia Training Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,967.25	0.81%	\$361,190.07	99.19%	\$364,157.32
Chesapeake Bay Local Asst Dept	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,044.14	100.00%	\$3,044.14
Chip Oaks Plantation Farm Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$97,771.50	100.00%	\$97,771.50
Christopher Newport University	\$2,012.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,012.00	0.03%	\$0.00	0.00%	\$7,038,089.48	99.97%	\$7,040,101.48
Circuit Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$97,778.53	100.00%	\$97,778.53
Coffeewood Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$23,082.71	100.00%	\$23,082.71
Council Of Information Mgmt	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,380.00	100.00%	\$13,380.00
Dabney S. Lancaster Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,176.50	6.57%	\$130,397.63	93.43%	\$139,574.13
Danville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,988.50	2.02%	\$580,841.77	97.98%	\$592,830.27
Deep Meadow Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$833.00	2.50%	\$32,530.90	97.50%	\$33,363.90
DeJarnette Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,928.50	100.00%	\$11,928.50
Department Of Aviation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$508,607.81	100.00%	\$508,607.81
Department Of Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$213,825.53	100.00%	\$213,825.53
Department Of Forestry	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,568.00	1.87%	\$187,115.43	98.13%	\$190,683.43
Department Of General Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$120,882.72	2.08%	\$5,679,796.93	97.92%	\$5,800,679.65
Department Of Health	\$0.00	0.00%	\$0.00	0.00%	\$1,425.33	7.93%	\$0.00	0.00%	\$1,425.33	7.93%	\$0.00	0.00%	\$16,554.13	92.07%	\$17,979.46
Department Of Juvenile Justice	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,790.70	0.15%	\$3,966,500.43	99.85%	\$3,972,291.13
Department Of Military Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,244.01	0.13%	\$2,440,872.40	99.87%	\$2,444,116.41
Department Of Motor Vehicles	\$0.00	0.00%	\$0.00	0.00%	\$3,935.50	0.29%	\$0.00	0.00%	\$3,935.50	0.29%	\$0.00	0.00%	\$1,340,029.85	99.71%	\$1,343,965.35
Department Of Social Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,040.77	100.00%	\$1,040.77
Department Of State Police	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,307.36	0.69%	\$1,480,881.08	99.31%	\$1,491,188.44

**EXHIBIT 4-18 (Continued)**  
**ARCHITECTURE & ENGINEERING**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Department Of Taxation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,690.00	100.00%	\$7,690.00
Department Of The Treasury	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$620.00	100.00%	\$620.00
Department Of Transportation	\$10,872.48	0.00%	\$0.00	0.00%	\$310,804.43	0.05%	\$0.00	0.00%	\$321,676.91	0.05%	\$1,961,162.80	0.33%	\$587,707,214.56	99.61%	\$589,990,054.27
Department Of Veterans Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,935.00	1.36%	\$358,079.70	98.64%	\$363,014.70
Dept Alcoholic Beverag Control	\$0.00	0.00%	\$19,036.00	7.64%	\$0.00	0.00%	\$0.00	0.00%	\$19,036.00	7.64%	\$30,398.72	12.21%	\$199,610.39	80.15%	\$249,045.11
Dept Conservation & Recreation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$74,036.87	1.59%	\$4,585,983.09	98.41%	\$4,660,019.96
Dept Game & Inland Fisheries	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$36.00	0.00%	\$928,239.58	100.00%	\$928,275.58
Dept Ment Hlth & Ment Retard	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,252.00	0.40%	\$3,338,047.74	99.60%	\$3,351,299.74
Dept Of Agri & Cons Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$369,354.88	100.00%	\$369,354.88
Dept Of Corr Central Activities	\$6,425.00	0.08%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,425.00	0.08%	\$309,360.95	4.08%	\$7,269,281.29	95.84%	\$7,585,067.24
Dept Of Correctional Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$87,488.34	100.00%	\$87,488.34
Dept Of Criminal Justice Svcs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$122,215.24	100.00%	\$122,215.24
Dept Of Emergency Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,845.66	100.00%	\$2,845.66
Dept Of Environmental Quality	\$750.00	3.72%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$750.00	3.72%	\$0.00	0.00%	\$19,397.20	96.28%	\$20,147.20
Dept Of Health Professions	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$63,427.50	100.00%	\$63,427.50
Dept Of Historic Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,000.00	100.00%	\$5,000.00
Dept Of Housing And Comm Dev	\$650.00	1.94%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$650.00	1.94%	\$0.00	0.00%	\$32,774.43	98.06%	\$33,424.43
Dept Of Information Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$250.00	0.88%	\$28,074.40	99.12%	\$28,324.40
Dept Of Labor And Industry	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,962.11	100.00%	\$9,962.11
Dept Of Personnel And Training	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,331.91	100.00%	\$10,331.91
Dept Of Rail & Public Trans	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$165,829.85	100.00%	\$165,829.85
Dept Of Rehabilitative Service	\$0.00	0.00%	\$3,942.84	17.47%	\$0.00	0.00%	\$0.00	0.00%	\$3,942.84	17.47%	\$0.00	0.00%	\$18,624.56	82.53%	\$22,567.40
Dept. Mines, Minerals & Energy	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$910.00	0.06%	\$1,516,881.26	99.94%	\$1,517,791.26
Div Of Community Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$340.00	100.00%	\$340.00
Division Of Institutions	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,579.55	100.00%	\$15,579.55
DMHMRSAS Grants to Localities	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,097.11	100.00%	\$3,097.11
Eastern Shore Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$35,315.40	100.00%	\$35,315.40
Eastern State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,969.66	100.00%	\$10,969.66
Fluvanna Women's Corr Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$960.00	100.00%	\$960.00
Frontier Cultural Museum Of VA	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$122,076.14	100.00%	\$122,076.14

**EXHIBIT 4-18 (Continued)**  
**ARCHITECTURE & ENGINEERING**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
George Mason University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$19,389.62	0.27%	\$7,111,722.13	99.73%	\$7,131,111.75
Germanna Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,138.50	0.41%	\$753,298.22	99.59%	\$756,436.72
Greensville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,162.62	100.00%	\$1,162.62
Gunston Hall Plantation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,072.61	3.81%	\$128,187.42	96.19%	\$133,260.03
Haynesville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$577.50	100.00%	\$577.50
Hiram W. Davis Medical Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$250.00	100.00%	\$250.00
House Of Delegates	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$94,228.79	100.00%	\$94,228.79
J. Sargeant Reynolds Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$38,353.84	7.32%	\$485,774.03	92.68%	\$524,127.87
James River Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24,032.36	100.00%	\$24,032.36
Jamestown-Yorktown Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,902.91	0.09%	\$11,628,787.24	99.91%	\$11,639,690.15
John Tyler Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$44,942.26	4.67%	\$918,147.70	95.33%	\$963,089.96
Keen Mountain Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,325.00	100.00%	\$1,325.00
Library Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$96,865.04	100.00%	\$96,865.04
Longwood College	\$6,145.00	0.17%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,145.00	0.17%	\$1,020.00	0.03%	\$3,647,264.30	99.80%	\$3,654,429.30
Lord Fairfax Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$59,157.06	37.17%	\$100,009.75	62.83%	\$159,166.81
Lunenburg Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$735.00	100.00%	\$735.00
Mary Washington College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,134.95	1.68%	\$1,062,970.85	98.32%	\$1,081,105.80
Mecklenburg Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,761.25	100.00%	\$1,761.25
Melchers' Monroe Memorials	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$20,065.00	100.00%	\$20,065.00
Mountain Empire Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$30,567.75	9.19%	\$301,999.34	90.81%	\$332,567.09
New River Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,351.80	100.00%	\$14,351.80
No VA Mental Health Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$56,852.28	100.00%	\$56,852.28
No VA Trn Ctr For The Ment Ret	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$25,261.38	100.00%	\$25,261.38
Norfolk State University	\$9,400.00	0.48%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,400.00	0.48%	\$6,272.32	0.32%	\$1,929,720.35	99.19%	\$1,945,392.67
Northern VA Community College	\$0.00	0.00%	\$37,974.67	1.19%	\$0.00	0.00%	\$0.00	0.00%	\$37,974.67	1.19%	\$319,018.82	10.02%	\$2,826,391.62	88.79%	\$3,183,385.11
Nottoway Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$500.00	100.00%	\$500.00
OLD DOMINION UNIVERSITY	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$164,377.19	5.20%	\$2,996,666.88	94.80%	\$3,161,044.07
Patrick Henry Comm Coll At Mar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$256.10	100.00%	\$256.10
Paul D. Camp Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$40,494.41	8.61%	\$429,570.42	91.39%	\$470,064.83
Piedmont Geriatric Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,833.50	100.00%	\$10,833.50

**EXHIBIT 4-18 (Continued)**  
**ARCHITECTURE & ENGINEERING**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Piedmont VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,437.94	4.13%	\$242,106.62	95.87%	\$252,544.56
Powhatan Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,395.00	41.33%	\$3,400.00	58.67%	\$5,795.00
Powhatan Recpt And Class Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$571.25	100.00%	\$571.25
RADFORD UNIVERSITY	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,863,101.67	100.00%	\$3,863,101.67
Rappahannock Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$142,278.29	100.00%	\$142,278.29
Red Onion Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,999.00	100.00%	\$3,999.00
Richard Bland College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$157,846.63	100.00%	\$157,846.63
Senate	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,420.07	100.00%	\$3,420.07
Southampton Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,270.39	100.00%	\$11,270.39
Southeastern VA Tr Ctr For Men	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,515.25	100.00%	\$6,515.25
Southside VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,950.05	33.69%	\$17,618.50	66.31%	\$26,568.55
Southside VA Training Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$88,511.05	100.00%	\$88,511.05
Southwest Virginia Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$95,923.74	100.00%	\$95,923.74
Southwestern VA Ment Hlth Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,682.33	100.00%	\$2,682.33
St. Brides Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$300.00	28.24%	\$762.50	71.76%	\$1,062.50
State Corporation Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$25,039.40	100.00%	\$25,039.40
State Lottery Department	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,913.32	20.16%	\$43,225.67	79.84%	\$54,138.99
Staunton Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,436.02	100.00%	\$4,436.02
Supreme Court Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$53,241.62	100.00%	\$53,241.62
The Science Museum Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,933,684.77	100.00%	\$4,933,684.77
Thomas Nelson Comm College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$28,314.30	5.43%	\$493,099.77	94.57%	\$521,414.07
Tidewater Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$92,793.50	7.60%	\$1,128,592.54	92.40%	\$1,221,386.04
Unknown	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,618.00	100.00%	\$18,618.00
UVA	\$0.00	0.00%	\$0.00	0.00%	\$219,018.00	0.13%	\$0.00	0.00%	\$219,018.00	0.13%	\$45,299.58	0.03%	\$174,809,535.18	99.85%	\$175,073,852.76
Va Community Coll Sys- Utility	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$500.00	100.00%	\$500.00
VA Dept F/T Visual Handicapped	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$175,192.19	100.00%	\$175,192.19
VA Museum Of Natural History	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$56,811.00	100.00%	\$56,811.00
VA Sch For Deaf & Bld-Hampton	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$123,238.66	100.00%	\$123,238.66
VA Sch For Deaf & Blind-Staun	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$574,721.28	100.00%	\$574,721.28
VA Veterans' Care Ctr Bd Trust	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,687.50	100.00%	\$2,687.50

**EXHIBIT 4-18 (Continued)  
ARCHITECTURE & ENGINEERING  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>			\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
VA Western Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,759.50	2.61%	\$140,385.86	97.39%	\$144,145.36
VA Workers' Compensation Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$47,200.00	100.00%	\$47,200.00
VCU	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$107,230.34	1.05%	\$10,127,053.67	98.95%	\$10,234,284.01
Virginia Community College Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,452.00	0.38%	\$3,286,900.39	99.62%	\$3,299,352.39
Virginia Corr Enterprises	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$110,319.25	100.00%	\$110,319.25
Virginia Employment Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,782.55	100.00%	\$3,782.55
Virginia Military Institute	\$14,500.00	0.75%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,500.00	0.75%	\$0.00	0.00%	\$1,929,515.39	99.25%	\$1,944,015.39
Virginia Museum Of Fine Arts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,406,258.90	100.00%	\$1,406,258.90
Virginia Port Authority	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,584,798.37	100.00%	\$3,584,798.37
Virginia Retirement System	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,023.89	100.00%	\$2,023.89
Virginia State Bar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,980.00	100.00%	\$1,980.00
Virginia State University	\$4,660.00	0.16%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,660.00	0.16%	\$24,446.32	0.83%	\$2,900,685.73	99.01%	\$2,929,792.05
VIRGINIA TECH	\$0.00	0.00%	\$0.00	0.00%	\$821.25	0.00%	\$0.00	0.00%	\$821.25	0.00%	\$367,045.03	1.72%	\$20,915,951.29	98.27%	\$21,283,817.57
Wallen's Ridge Corr Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$335.00	100.00%	\$335.00
Western Region Corr Fld Units	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,475.90	100.00%	\$3,475.90
Western State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$41,059.95	100.00%	\$41,059.95
William & Mary	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,749.50	0.17%	\$3,463,547.95	99.83%	\$3,469,297.45
William & Mary VIMS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$521,350.47	100.00%	\$521,350.47
Woodrow Wilson Rehab Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,116,175.85	100.00%	\$2,116,175.85
Wytheville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$75,733.76	100.00%	\$75,733.76
<b>Total</b>	<b>\$55,414.48</b>	<b>0.01%</b>	<b>\$60,953.51</b>	<b>0.01%</b>	<b>\$536,004.51</b>	<b>0.06%</b>	<b>\$0.00</b>	<b>0.00%</b>	<b>\$652,372.50</b>	<b>0.07%</b>	<b>\$4,075,190.02</b>	<b>0.45%</b>	<b>\$904,348,564.20</b>	<b>99.48%</b>	<b>\$909,076,126.72</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount given to prime contractors.

**EXHIBIT 4-19  
ARCHITECTURE & ENGINEERING  
AVAILABILITY OF PRIME CONTRACTORS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	32	0.98%	21	0.64%	66	2.01%	7	0.21%	126	3.84%	141	4.30%	3,011	91.85%	3,278

Source: MGT's master vendor database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-20  
PROFESSIONAL SERVICES  
RELEVANT MARKET AREA ANALYSIS  
FISCAL YEARS 1998 THROUGH 2002**

County, <sup>1</sup> State	# of Payments	% of Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% <sup>2</sup>
<b>COMMONWEALTH OF VIRGINIA</b>	1,748,083	81.59%	25,673	74.21%	\$1,581,677,205.17	63.86%	63.86%
<b>SAINT LOUIS, MO</b>	582	0.03%	23	0.07%	\$64,083,832.69	2.59%	66.44%
<b>FULTON, GA</b>	146,167	6.82%	180	0.52%	\$58,819,853.97	2.37%	68.82%
<b>PHILADELPHIA, PA</b>	4,519	0.21%	132	0.38%	\$48,062,885.46	1.94%	70.76%
<b>COOK, IL</b>	3,618	0.17%	321	0.93%	\$46,999,790.35	1.90%	72.66%
<b>BALTIMORE, MD</b>	3,668	0.17%	84	0.24%	\$34,342,200.52	1.39%	74.04%
<b>BALTIMORE (CITY), MD</b>	12,888	0.60%	165	0.48%	\$33,592,233.83	1.36%	75.40%
<b>RELEVANT M.A. TOTAL</b>	<b>1,919,525</b>	<b>89.59%</b>	<b>26,578</b>	<b>76.82%</b>	<b>\$1,867,578,001.99</b>	<b>75.40%</b>	<b>N/A</b>
DALLAS, TX	4,577	0.21%	114	0.33%	\$31,122,505.66	1.26%	76.66%
ALAMEDA, CA	381	0.02%	52	0.15%	\$28,861,384.31	1.17%	77.82%
MONTGOMERY, PA	2,172	0.10%	38	0.11%	\$27,137,880.60	1.10%	78.92%
WILLIAMSON, TN	139	0.01%	7	0.02%	\$26,410,706.50	1.07%	79.98%
DENVER, CO	592	0.03%	39	0.11%	\$20,361,169.36	0.82%	80.80%
ALLEGHENY, PA	2,445	0.11%	110	0.32%	\$18,502,230.12	0.75%	81.55%
NEW YORK, NY	1,828	0.09%	179	0.52%	\$17,858,888.45	0.72%	82.27%
SUFFOLK, MA	1,936	0.09%	90	0.26%	\$17,531,605.82	0.71%	82.98%
BEXAR, TX	229	0.01%	19	0.05%	\$17,169,864.86	0.69%	83.67%
ORANGE, FL	511	0.02%	37	0.11%	\$16,754,459.74	0.68%	84.35%
ALBANY, NY	1,371	0.06%	14	0.04%	\$16,247,248.80	0.66%	85.01%
BUCKS, PA	3,073	0.14%	27	0.08%	\$15,844,853.17	0.64%	85.65%
SAINT LOUIS CITY (CITY), MO	2,996	0.14%	35	0.10%	\$15,538,275.99	0.63%	86.27%
JEFFERSON, KY	319	0.01%	32	0.09%	\$15,313,995.70	0.62%	86.89%
MONTGOMERY, MD	9,776	0.46%	431	1.25%	\$14,681,990.04	0.59%	87.48%
LOS ANGELES, CA	1,653	0.08%	175	0.51%	\$13,766,332.93	0.56%	88.04%
MECKLENBURG, NC	4,152	0.19%	151	0.44%	\$13,132,711.46	0.53%	88.57%
MARICOPA, AZ	639	0.03%	62	0.18%	\$12,709,903.61	0.51%	89.08%
WASHINGTON, DC	5,081	0.24%	536	1.55%	\$11,832,432.49	0.48%	89.56%
HARTFORD, CT	1,314	0.06%	23	0.07%	\$11,732,396.97	0.47%	90.03%
PASSAIC, NJ	1,739	0.08%	8	0.02%	\$11,332,703.50	0.46%	90.49%
MIDDLESEX, MA	1,621	0.08%	133	0.38%	\$11,296,490.23	0.46%	90.95%
DU PAGE, IL	1,624	0.08%	44	0.13%	\$10,689,017.00	0.43%	91.38%
MULTNOMAH, OR	256	0.01%	25	0.07%	\$10,015,637.13	0.40%	91.78%
HARRIS, TX	2,044	0.10%	71	0.21%	\$9,738,687.57	0.39%	92.18%
CHESTER, PA	40,041	1.87%	31	0.09%	\$9,388,304.24	0.38%	92.56%
HILLSBOROUGH, FL	796	0.04%	44	0.13%	\$8,456,535.77	0.34%	92.90%
SANTA CLARA, CA	23,366	1.09%	117	0.34%	\$8,354,008.98	0.34%	93.24%
SAN DIEGO, CA	638	0.03%	77	0.22%	\$7,679,176.06	0.31%	93.55%
HENNEPIN, MN	1,177	0.05%	94	0.27%	\$7,367,154.43	0.30%	93.84%
ALAMANCE, NC	10,189	0.48%	12	0.03%	\$7,210,406.48	0.29%	94.13%
WAKE, NC	462	0.02%	84	0.24%	\$7,080,844.69	0.29%	94.42%
DAUPHIN, PA	137	0.01%	12	0.03%	\$6,978,422.69	0.28%	94.70%
OTHER	93,818	4.38%	5,095	14.73%	\$131,243,436.30	5.30%	100.00%
<b>Total</b>	<b>2,142,617</b>	<b>100.00%</b>	<b>34,596</b>	<b>100.00%</b>	<b>\$2,476,919,663.64</b>	<b>100.00%</b>	

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Counties above the line are included in the relevant market area.

<sup>2</sup> Cumulative total of percentage of dollars in market area.

professional services awards were awarded to firms in the relevant market area. A total of 1.9 million payments were awarded to 26,578 firms within the relevant market area. Overall, about 2.5 million in payments were awarded to 34,596 individual firms. The list of professional service projects analyzed is included in **Appendix G**.

#### **4.4.2 Utilization Analysis**

MGT analyzed the professional services dollars awarded by the Commonwealth to MBE and non-MBE prime consultants located in the relevant market area. The utilization analysis results are presented by fiscal year, dollar amount of the payment, number of payment awarded, and individual firms according to race/ethnicity/gender classifications.

**Exhibit 4-21** presents the utilization analysis of professional services prime consultants in the Commonwealth relevant market area. MBEs received 0.58 percent of the professional services payment dollars awarded to consultants in the relevant market area. Approximately \$1.9 billion were spent by the Commonwealth for professional services in the relevant market area, approximately \$11 million of which were awarded to MBEs, as shown in **Exhibit 4-21**. Nonminority-owned firms were selected for 99.3 percent of Commonwealth professional services awards. In 2002, MBE firms received \$4.5 million of the payment dollars. Professional services payments awarded to MBE totaled 0.92 percent of the total awards made that year.

**Exhibits 4-22** and **4-23** show the utilization by the number of payments and the number of professional services firms used during the study period. Our analysis shows that 3,442 of the 1.9 million payment awards went to MBE firms. Furthermore, 45 of the 26,578 total firms used by the Commonwealth for professional services payments were MBEs.

**EXHIBIT 4-21  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS OF PRIME CONSULTANTS IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
1998	\$32,130.20	0.02%	\$829.00	0.00%	\$458,045.83	0.22%	\$2,855.00	0.00%	\$493,860.03	0.24%	\$250,872.43	0.12%	\$206,776,536.26	99.64%	\$207,521,268.72
1999	\$216,973.80	0.06%	\$14,415.15	0.00%	\$519,612.61	0.14%	\$650.00	0.00%	\$751,651.56	0.20%	\$275,249.13	0.07%	\$380,673,773.74	99.73%	\$381,700,674.43
2000	\$1,338,067.10	0.32%	\$4,173.55	0.00%	\$804,401.56	0.19%	\$0.00	0.00%	\$2,146,642.21	0.51%	\$525,530.76	0.13%	\$417,106,611.05	99.36%	\$419,778,784.02
2001	\$1,693,432.99	0.46%	\$27,419.66	0.01%	\$1,216,972.18	0.33%	\$0.00	0.00%	\$2,937,824.83	0.80%	\$568,496.36	0.15%	\$365,583,970.94	99.05%	\$369,090,292.13
2002	\$2,317,608.56	0.47%	\$14,851.76	0.00%	\$2,191,879.85	0.45%	\$0.00	0.00%	\$4,524,340.17	0.92%	\$671,251.96	0.14%	\$484,291,390.56	98.94%	\$489,486,982.69
<b>Total</b>	<b>\$5,598,212.65</b>	<b>0.30%</b>	<b>\$61,689.12</b>	<b>0.00%</b>	<b>\$5,190,912.03</b>	<b>0.28%</b>	<b>\$3,505.00</b>	<b>0.00%</b>	<b>\$10,854,318.80</b>	<b>0.58%</b>	<b>\$2,291,400.64</b>	<b>0.12%</b>	<b>\$1,854,432,282.55</b>	<b>99.30%</b>	<b>\$1,867,578,001.99</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-22  
PROFESSIONAL SERVICES  
PAYMENTS AWARDED  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Payments
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	75	0.02%	4	0.00%	103	0.03%	4	0.00%	186	0.05%	370	0.10%	353,320	99.84%	353,876
1999	90	0.02%	18	0.00%	87	0.02%	2	0.00%	197	0.05%	697	0.18%	386,474	99.77%	387,368
2000	116	0.03%	30	0.01%	226	0.07%	0	0.00%	372	0.11%	479	0.14%	343,940	99.75%	344,791
2001	240	0.06%	67	0.02%	783	0.21%	0	0.00%	1,090	0.29%	417	0.11%	378,362	99.60%	379,869
2002	281	0.06%	64	0.01%	1,252	0.28%	0	0.00%	1,597	0.35%	473	0.10%	451,551	99.54%	453,621
<b>Total Payments</b>	802	0.04%	183	0.01%	2,451	0.13%	6	0.00%	3,442	0.18%	2,436	0.13%	1,913,647	99.69%	1,919,525

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Payments.

**EXHIBIT 4-23  
PROFESSIONAL SERVICES  
NUMBER OF INDIVIDUAL PRIME CONSULTANTS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	3	0.02%	3	0.02%	7	0.06%	2	0.02%	15	0.12%	33	0.27%	12,094	99.60%	12,142
1999	11	0.08%	5	0.04%	8	0.06%	2	0.02%	26	0.20%	49	0.38%	12,939	99.42%	13,014
2000	8	0.06%	3	0.02%	7	0.06%	0	0.00%	18	0.14%	45	0.36%	12,416	99.50%	12,479
2001	8	0.06%	3	0.02%	12	0.09%	0	0.00%	23	0.18%	41	0.32%	12,664	99.50%	12,728
2002	8	0.06%	4	0.03%	10	0.08%	0	0.00%	22	0.17%	48	0.38%	12,643	99.45%	12,713
<b>Total Unique Vendors Over Five Years</b> <sup>2</sup>	18	0.07%	7	0.03%	18	0.07%	2	0.01%	45	0.17%	94	0.35%	26,439	99.48%	26,578

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Vendors.

<sup>2</sup> The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total Vendors for the entire study period may not equal the sum of all years.

The analysis of prime contracting by agency and university is displayed below in **Exhibit 4-24**. The highest utilization percentage of MBEs for professional services was by the Virginia School for the Deaf and Blind with more than 66 percent of their total professional services spending going to African American firms. The Department of Planning and Budget also spent about \$109,000 of their total \$239,000 professional services expenditures with MBE firms, all of which were with Asian American firms.

#### **4.4.3 Availability**

The availability of prime consultants is derived from MGT's master vendor database. **Exhibit 4-25** shows the available professional services consultants that are within the relevant market area. The exhibit shows the distribution of prime consultants by race, ethnicity, and gender.

MBEs made up about 0.87 percent of the available professional services prime consultants. Asian American firms made up the most with 113 of the 254 total MBEs.

### **4.5 Other Services**

The market area, utilization, and availability of MBEs and non-MBEs for the Commonwealth's other services procurements are examined in this section.

#### **4.5.1 Relevant Market Area Analysis**

**Exhibit 4-26** shows the relevant market area analysis for other services procurements by the Commonwealth. During the study period, the Commonwealth spent approximately \$2.3 billion on other services purchases. There were also five non-Virginia counties that were within the relevant market area besides the counties in the Commonwealth of Virginia. Just over 75 percent of the overall purchases were made in the Commonwealth and these counties, representing \$1.7 billion. The list of other services payments analyzed is shown in **Appendix H**.

**EXHIBIT 4-24  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Administration	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$38,642.41	100.00%	\$38,642.41
Advisory Commission Executive Mansion	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$40,827.75	100.00%	\$40,827.75
Attorney General	\$0.00	0.00%	\$24.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24.00	0.00%	\$7,881.30	0.49%	\$1,598,556.17	99.51%	\$1,606,461.47
Auditor Of Public Accounts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$138,284.81	100.00%	\$138,284.81
Augusta Correctional Center	\$8,500.00	0.68%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,500.00	0.68%	\$0.00	0.00%	\$1,240,523.05	99.32%	\$1,249,023.05
Bland Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$593,405.15	100.00%	\$593,405.15
Blue Ridge Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$136,399.16	100.00%	\$136,399.16
Brd Of VA Hig Ed Tuit Trust Fd	\$55,713.93	2.40%	\$42.36	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$55,756.29	2.40%	\$0.00	0.00%	\$2,268,529.44	97.60%	\$2,324,285.73
Brunswick Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$748,043.56	100.00%	\$748,043.56
Buckingham Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$919,621.95	100.00%	\$919,621.95
CARS 2002	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,144.00	100.00%	\$13,144.00
Catawba Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$708,337.57	100.00%	\$708,337.57
Central Region Corr Fld Unit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$328,949.94	100.00%	\$328,949.94
Central State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$762.29	0.02%	\$4,113,921.80	99.98%	\$4,114,684.09
Central VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$192,815.43	100.00%	\$192,815.43
Central Virginia Training Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,664,823.40	100.00%	\$1,664,823.40
Charitable Gaming Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,989.00	16.73%	\$9,903.02	83.27%	\$11,892.02
Chesapeake Bay Local Asst Dept	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$945,843.58	100.00%	\$945,843.58
Chip Oaks Plantation Farm Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$489.86	100.00%	\$489.86
Christopher Newport University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,831.20	1.35%	\$1,080,049.05	98.65%	\$1,094,880.25
Circuit Courts	\$16,526.70	0.02%	\$0.00	0.00%	\$109,734.00	0.13%	\$0.00	0.00%	\$126,260.70	0.15%	\$53,832.50	0.06%	\$83,747,815.10	99.79%	\$83,927,908.30
Coffeewood Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,253,158.48	100.00%	\$1,253,158.48
Combined District Courts	\$0.00	0.00%	\$0.00	0.00%	\$14,125.00	0.06%	\$0.00	0.00%	\$14,125.00	0.06%	\$3,469.50	0.01%	\$24,096,480.41	99.93%	\$24,114,074.91

**EXHIBIT 4-24 (Continued)  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Comm On VA Alcohol Saf Act Pro	\$3,000.00	0.92%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,000.00	0.92%	\$0.00	0.00%	\$323,479.73	99.08%	\$326,479.73
Commonwealth Att Serv Council	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,143.50	100.00%	\$8,143.50
Compensation Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$30,020.86	100.00%	\$30,020.86
Comprehensive Services for At-Risk Youth and Famil	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,677.47	100.00%	\$13,677.47
Council Of Information Mgmt	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,365,626.08	100.00%	\$11,365,626.08
Council On Human Rights	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,870.00	100.00%	\$7,870.00
Court Of Appeals Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,091.68	100.00%	\$5,091.68
Dabney S. Lancaster Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$30,372.27	100.00%	\$30,372.27
Danville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$23,659.11	100.00%	\$23,659.11
Deep Meadow Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,799,130.33	100.00%	\$1,799,130.33
Deerfield Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$133,780.65	100.00%	\$133,780.65
DeJarnette Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$713.26	0.69%	\$102,274.20	99.31%	\$102,987.46
Department For The Aging	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$107,453.50	100.00%	\$107,453.50
Department Of Accounts	\$31,150.08	0.79%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$31,150.08	0.79%	\$0.00	0.00%	\$3,925,852.57	99.21%	\$3,957,002.65
Department Of Aviation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$511,895.72	100.00%	\$511,895.72
Department Of Business Asst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,030,739.64	100.00%	\$1,030,739.64
Department Of Capitol Police	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$21,888.87	100.00%	\$21,888.87
Department Of Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,839,007.53	100.00%	\$10,839,007.53
Department Of Education	\$0.00	0.00%	\$14,968.64	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$14,968.64	0.03%	\$208,024.32	0.47%	\$43,998,117.99	99.50%	\$44,221,110.95
Department Of Fire Programs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$267,339.57	100.00%	\$267,339.57
Department Of Forestry	\$0.00	0.00%	\$851.20	0.69%	\$0.00	0.00%	\$0.00	0.00%	\$851.20	0.69%	\$0.00	0.00%	\$121,775.90	99.31%	\$122,627.10
Department Of General Services	\$56,088.00	2.00%	\$100.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$56,188.00	2.01%	\$2,540.00	0.09%	\$2,740,394.50	97.90%	\$2,799,122.50
Department Of Health	\$661,552.63	0.59%	\$80.00	0.00%	\$8,095.00	0.01%	\$0.00	0.00%	\$669,727.63	0.59%	\$144,759.15	0.13%	\$111,943,388.85	99.28%	\$112,757,875.63
Department Of Juvenile Justice	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$126,113.60	1.06%	\$11,809,075.25	98.94%	\$11,935,188.85
Department Of Military Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,254.16	1.22%	\$913,973.41	98.78%	\$925,227.57
Department Of Motor Vehicles	\$0.00	0.00%	\$0.00	0.00%	\$494,114.28	1.47%	\$0.00	0.00%	\$494,114.28	1.47%	\$336,354.35	1.00%	\$32,851,131.49	97.53%	\$33,681,600.12

**EXHIBIT 4-24 (Continued)**  
**PROFESSIONAL SERVICES**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Department Of Social Services	\$3,750,321.77	8.71%	\$0.00	0.00%	\$150.00	0.00%	\$0.00	0.00%	\$3,750,471.77	8.71%	\$192,357.38	0.45%	\$39,122,359.02	90.84%	\$43,065,188.17
Department Of State Police	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$680.70	0.01%	\$8,852,738.38	99.99%	\$8,853,419.08
Department Of Taxation	\$53,676.58	0.91%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$53,676.58	0.91%	\$3,524.69	0.06%	\$5,848,138.33	99.03%	\$5,905,339.60
Department Of The Treasury	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$713,985.62	100.00%	\$713,985.62
Department Of Transportation	\$0.00	0.00%	\$2,026.00	0.00%	\$3,322,076.35	2.41%	\$0.00	0.00%	\$3,324,102.35	2.41%	\$51,632.44	0.04%	\$134,445,461.68	97.55%	\$137,821,196.47
Department Of Veterans Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$27,200.86	100.00%	\$27,200.86	100.00%	\$27,200.86
Dept Alcoholic Beverag Control	\$446,592.92	3.68%	\$0.00	0.00%	\$3,667.32	0.03%	\$0.00	0.00%	\$450,260.24	3.71%	\$7,347.00	0.06%	\$11,677,230.34	96.23%	\$12,134,837.58
Dept Conservation & Recreation	\$11,565.00	1.34%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,565.00	1.34%	\$848.40	0.10%	\$850,065.20	98.56%	\$862,478.60
Dept F/T Rights Of VA W/Disab	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$585.30	0.25%	\$233,580.31	99.75%	\$234,165.61
Dept Game & Inland Fisheries	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$35.00	0.00%	\$2,232,815.37	100.00%	\$2,232,850.37
Dept Ment Hlth & Ment Retard	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,974.00	0.22%	\$7,691,374.35	99.78%	\$7,708,348.35
Dept Of Agri & Cons Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,029.50	0.36%	\$3,069,592.20	99.64%	\$3,080,621.70
Dept of Corr Central Activities	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$47,292.36	97.66%	\$1,135.00	2.34%	\$48,427.36
Dept Of Correctional Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,639,148.25	100.00%	\$1,639,148.25
Dept Of Criminal Justice Svcs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,254,163.25	100.00%	\$3,254,163.25
Dept of Education - Direct Aid to Public Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,054,917.73	100.00%	\$5,054,917.73
Dept Of Emergency Services	\$124.80	0.04%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$124.80	0.04%	\$0.00	0.00%	\$335,833.63	99.96%	\$335,958.43
Dept Of Emp Rel Counselors	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$69,985.34	100.00%	\$69,985.34
Dept Of Environmental Quality	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$644.74	0.01%	\$7,090,486.19	99.99%	\$7,091,130.93
Dept Of Health Professions	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,437.38	0.50%	\$1,491,850.23	99.50%	\$1,499,287.61
Dept Of Historic Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$35,247.98	100.00%	\$35,247.98
Dept Of Housing And Comm Dev	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$19,625.23	3.00%	\$633,693.82	97.00%	\$653,319.05
Dept Of Information Technology	\$3,903.00	0.05%	\$0.00	0.00%	\$1,890.00	0.02%	\$0.00	0.00%	\$5,793.00	0.07%	\$0.00	0.00%	\$8,198,509.78	99.93%	\$8,204,302.78
Dept Of Labor And Industry	\$0.00	0.00%	\$94.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$94.00	0.01%	\$6,209.14	0.91%	\$678,762.67	99.08%	\$685,065.81
Dept Of Medical Asst Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,965.74	0.00%	\$465,911,219.74	100.00%	\$465,915,185.48
Dept Of Minority Bus Enterpris	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,128.65	100.00%	\$13,128.65

**EXHIBIT 4-24 (Continued)**  
**PROFESSIONAL SERVICES**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Dept Of Personnel And Training	\$21,195.70	1.22%	\$504.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$21,699.70	1.25%	\$3,944.00	0.23%	\$1,705,576.47	98.52%	\$1,731,220.17
Dept Of Planning And Budget	\$0.00	0.00%	\$0.00	0.00%	\$109,330.00	45.61%	\$0.00	0.00%	\$109,330.00	45.61%	\$0.00	0.00%	\$130,374.79	54.39%	\$239,704.79
Dept Of Professional & Occ Reg	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$595.35	0.03%	\$1,808,828.04	99.97%	\$1,809,423.39
Dept Of Rail & Public Trans	\$0.00	0.00%	\$262.36	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$262.36	0.02%	\$2,495.85	0.20%	\$1,276,185.60	99.78%	\$1,278,943.81
Dept Of Rehabilitative Service	\$0.00	0.00%	\$0.00	0.00%	\$297.50	0.00%	\$0.00	0.00%	\$297.50	0.00%	\$74,227.62	0.18%	\$41,783,099.37	99.82%	\$41,857,624.49
Dept Of The St Internal Audit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,331.50	100.00%	\$7,331.50
Dept. Mines, Minerals & Energy	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$541,298.31	100.00%	\$541,298.31
Dillwyn Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,273,938.34	100.00%	\$1,273,938.34
Div Of Community Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$488.46	0.00%	\$15,069,812.01	100.00%	\$15,070,300.47
Div Of Legislative Auto Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$108,990.84	100.00%	\$108,990.84
Div Of Legislative Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$130,697.90	100.00%	\$130,697.90
Division Of Debt Collection	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$552.80	100.00%	\$552.80
Division Of Institutions	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$21.04	0.00%	\$130,477,833.60	100.00%	\$130,477,854.64
DMHMRSAS Grants to Localities	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$99,650.28	100.00%	\$99,650.28
Eastern Region Corr Fid Unit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$78.33	100.00%	\$78.33
Eastern Shore Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,906.27	100.00%	\$15,906.27
Eastern State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,115.39	0.22%	\$5,887,097.66	99.78%	\$5,900,213.05
Employee Rel & Trg Div	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$275,756.24	100.00%	\$275,756.24
Fluvanna Women's Corr Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,470,367.99	100.00%	\$12,470,367.99
Frontier Cultural Museum Of VA	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$48,710.50	100.00%	\$48,710.50
General District Courts	\$0.00	0.00%	\$0.00	0.00%	\$166,870.39	0.30%	\$0.00	0.00%	\$166,870.39	0.30%	\$737.50	0.00%	\$54,605,140.06	99.69%	\$54,772,747.95
George Mason University	\$0.00	0.00%	\$0.00	0.00%	\$10,000.00	0.06%	\$0.00	0.00%	\$10,000.00	0.06%	\$8,911.69	0.06%	\$15,834,280.64	99.88%	\$15,853,192.33
Germanna Community College	\$0.00	0.00%	\$0.00	0.00%	\$74.70	0.11%	\$0.00	0.00%	\$74.70	0.11%	\$0.00	0.00%	\$68,124.30	99.89%	\$68,199.00
Gov Employment & Training Dept	\$11,460.84	3.67%	\$0.00	0.00%	\$4,215.00	1.35%	\$0.00	0.00%	\$15,675.84	5.02%	\$15,698.00	5.02%	\$281,170.03	89.96%	\$312,543.87
Greensville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$29,868,183.75	100.00%	\$29,868,183.75
Gunston Hall Plantation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$20,743.44	100.00%	\$20,743.44

**EXHIBIT 4-24 (Continued)  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Haynesville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$726,555.82	100.00%	\$726,555.82
Health and Human Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$20,546.31	100.00%	\$20,546.31
Hiram W. Davis Medical Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,054,398.74	100.00%	\$3,054,398.74
House Of Delegates	\$438.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$438.00	0.06%	\$6,148.98	0.91%	\$669,658.55	99.03%	\$676,245.53
Independent	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,121.93	100.00%	\$12,121.93
Indian Creek Corr Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$560,122.12	100.00%	\$560,122.12
J. Sargeant Reynolds Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,633.00	5.40%	\$256,442.63	94.60%	\$271,075.63
James River Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$59,753.74	100.00%	\$59,753.74
Jamestown-Yorktown Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$562,014.96	100.00%	\$562,014.96
John Tyler Community College	\$0.00	0.00%	\$287.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$287.00	0.03%	\$75,719.83	7.79%	\$896,262.36	92.18%	\$972,269.19
Joint Comm On Health Care	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$138,957.50	100.00%	\$138,957.50
Joint Leg Audit & Review Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$365,601.00	100.00%	\$365,601.00
Judicial Inquiry And Rev Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,862.40	100.00%	\$2,862.40
Juv And Dom Relations Dist Crt	\$0.00	0.00%	\$0.00	0.00%	\$251,931.00	0.33%	\$0.00	0.00%	\$251,931.00	0.33%	\$20,042.00	0.03%	\$76,039,901.73	99.64%	\$76,311,874.73
Keen Mountain Correctional Ctr	\$46.50	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$46.50	0.00%	\$0.00	0.00%	\$1,182,478.25	100.00%	\$1,182,524.75
Library Of Virginia	\$0.00	0.00%	\$2,159.35	0.10%	\$448,958.54	21.79%	\$0.00	0.00%	\$451,117.89	21.89%	\$0.00	0.00%	\$1,609,261.22	78.11%	\$2,060,379.11
Lieutenant Governor	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$46,754.69	100.00%	\$46,754.69
Longwood College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$836.00	0.06%	\$1,469,461.54	99.94%	\$1,470,297.54
Lord Fairfax Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,840.00	1.78%	\$1,840.00	1.78%	\$585.50	0.57%	\$101,091.18	97.66%	\$103,516.68
Lunenburg Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,118,154.12	100.00%	\$2,118,154.12
Magistrates	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$67,750.87	100.00%	\$67,750.87
Marine Resources Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$79.20	0.01%	\$1,392,436.88	99.99%	\$1,392,516.08
Marion Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$219,417.30	100.00%	\$219,417.30
Mary Washington College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$582,985.35	100.00%	\$582,985.35
Mecklenburg Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,130,276.52	100.00%	\$1,130,276.52
Melchers' Monroe Memorials	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,711.82	100.00%	\$1,711.82

**EXHIBIT 4-24 (Continued)  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Motor Vehicle Dealer Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$46,899.92	100.00%	\$46,899.92
Mountain Empire Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$49,703.50	100.00%	\$49,703.50
New River Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64,487.34	100.00%	\$64,487.34
No VA Mental Health Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24,000.00	0.64%	\$3,737,645.93	99.36%	\$3,761,645.93
No VA Trn Ctr For The Ment Ret	\$0.00	0.00%	\$0.00	0.00%	\$5,900.00	1.06%	\$0.00	0.00%	\$5,900.00	1.06%	\$0.00	0.00%	\$550,733.06	98.94%	\$556,633.06
Norfolk State University	\$6,100.00	0.10%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,100.00	0.10%	\$55,768.30	0.95%	\$5,789,167.76	98.94%	\$5,851,036.06
Northern Region Corr Fld Units	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$757,837.70	100.00%	\$757,837.70
Northern VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$204.50	0.01%	\$0.00	0.00%	\$204.50	0.01%	\$11,308.70	0.80%	\$1,394,979.96	99.18%	\$1,406,493.16
Nottoway Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,955,325.98	100.00%	\$1,955,325.98
Office Of The Governor	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$75,300.06	100.00%	\$75,300.06
Old Dominion University	\$0.00	0.00%	\$0.00	0.00%	\$39,547.54	1.54%	\$1,065.00	0.04%	\$40,612.54	1.59%	\$25,950.72	1.01%	\$2,493,591.08	97.40%	\$2,560,154.34
Patrick Henry Comm Coll At Mar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,214,320.23	100.00%	\$1,214,320.23
Paul D. Camp Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$136,496.04	100.00%	\$136,496.04
Piedmont Geriatric Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,681,593.21	100.00%	\$1,681,593.21
Piedmont VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$121,373.70	100.00%	\$121,373.70
Powhatan Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,999,914.29	100.00%	\$3,999,914.29
Powhatan Recpt And Class Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$780,023.22	100.00%	\$780,023.22
Public Defender Commission	\$0.00	0.00%	\$0.00	0.00%	\$2,860.00	5.55%	\$0.00	0.00%	\$2,860.00	5.55%	\$57.00	0.11%	\$48,635.22	94.34%	\$51,552.22
RADFORD UNIVERSITY	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,437,017.33	100.00%	\$2,437,017.33
Rappahannock Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$80,002.91	100.00%	\$80,002.91
Red Onion Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,000,154.91	100.00%	\$6,000,154.91
Richard Bland College	\$0.00	0.00%	\$794.67	0.17%	\$0.00	0.00%	\$0.00	0.00%	\$794.67	0.17%	\$610.14	0.13%	\$456,610.32	99.69%	\$458,015.13
Secretary Of Administration	\$0.00	0.00%	\$170.00	0.36%	\$0.00	0.00%	\$0.00	0.00%	\$170.00	0.36%	\$0.00	0.00%	\$46,548.47	99.64%	\$46,718.47
Secretary Of Commerce & Trade	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$125,105.00	100.00%	\$125,105.00
Secretary Of Finance	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$852.49	100.00%	\$852.49
Secretary Of Natural Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$402.00	100.00%	\$402.00

**EXHIBIT 4-24 (Continued)  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Secretary Of Public Safety	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$210,168.70	100.00%	\$210,168.70
Secretary of Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$92,112.50	100.00%	\$92,112.50
Secretary Of The Commonwealth	\$0.00	0.00%	\$164.72	0.31%	\$0.00	0.00%	\$0.00	0.00%	\$164.72	0.31%	\$0.00	0.00%	\$52,719.92	99.69%	\$52,884.64
Senate	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$121,542.09	100.00%	\$121,542.09
Southampton Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$173,304.00	100.00%	\$173,304.00
Southampton Reception & Class	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$23,434.69	100.00%	\$23,434.69
Southeastern VA Tr Ctr For Men	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,095,873.19	100.00%	\$2,095,873.19
Southern VA Mental Health Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$318,746.50	100.00%	\$318,746.50
Southside VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$33,041.08	100.00%	\$33,041.08
Southside VA Training Center	\$0.00	0.00%	\$8,068.91	6.36%	\$0.00	0.00%	\$0.00	0.00%	\$8,068.91	6.36%	\$0.00	0.00%	\$118,711.43	93.64%	\$126,780.34
Southwest Virginia Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$184,966.51	100.00%	\$184,966.51
Southwestern VA Ment Hlth Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,427,231.04	100.00%	\$1,427,231.04
Southwestern VA Training Ctr	\$0.00	0.00%	\$218.26	0.05%	\$0.00	0.00%	\$0.00	0.00%	\$218.26	0.05%	\$0.00	0.00%	\$401,267.97	99.95%	\$401,486.23
St Council Of Higher Education	\$0.00	0.00%	\$0.00	0.00%	\$35,647.41	5.38%	\$0.00	0.00%	\$35,647.41	5.38%	\$1,885.00	0.28%	\$624,913.22	94.33%	\$662,445.63
St. Brides Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$81,514.43	100.00%	\$81,514.43
State Board Of Bar Examiners	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,088,946.50	100.00%	\$1,088,946.50
State Board Of Elections	\$0.00	0.00%	\$0.00	0.00%	\$270.00	0.05%	\$0.00	0.00%	\$270.00	0.05%	\$0.00	0.00%	\$554,898.56	99.95%	\$555,168.56
State Corporation Commission	\$0.00	0.00%	\$0.00	0.00%	\$138,628.00	0.68%	\$0.00	0.00%	\$138,628.00	0.68%	\$134,361.00	0.66%	\$20,055,620.48	98.66%	\$20,328,609.48
State Lottery Department	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,107.90	0.01%	\$108,757,788.06	99.99%	\$108,764,895.96
State Milk Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,490.54	100.00%	\$1,490.54
Staunton Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$615,921.68	100.00%	\$615,921.68
Supreme Court Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$33,088.00	5.04%	\$623,149.74	94.96%	\$656,237.74
Sussex 1 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,322,410.52	100.00%	\$6,322,410.52
Sussex 2 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,283,708.26	100.00%	\$4,283,708.26
Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,592,389.44	100.00%	\$13,592,389.44

**EXHIBIT 4-24 (Continued)  
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FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
The Science Museum Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,204.89	100.00%	\$13,204.89
Thomas Nelson Comm College	\$0.00	0.00%	\$0.00	0.00%	\$1,527.50	0.71%	\$0.00	0.00%	\$1,527.50	0.71%	\$0.00	0.00%	\$212,802.76	99.29%	\$214,330.26
Tidewater Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$632,246.52	100.00%	\$632,246.52
Treasury Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$556,370.31	100.00%	\$556,370.31
Unknown	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,749,430.60	100.00%	\$8,749,430.60
UVA	\$0.00	0.00%	\$30,520.00	0.12%	\$0.00	0.00%	\$0.00	0.00%	\$30,520.00	0.12%	\$65,469.00	0.27%	\$24,472,048.94	99.61%	\$24,568,037.94
VA Bd For People With Disabil	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$119,751.40	100.00%	\$119,751.40
Va Community Coll Sys- Utility	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,924,752.65	100.00%	\$2,924,752.65
VA Crim Sentencing Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$17,512.19	100.00%	\$17,512.19
VA Dep F/T Deaf & Hard Of Hear	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,147.43	0.35%	\$331,267.34	99.65%	\$332,414.77
VA Dept F/T Visual Handicapped	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,231.27	0.10%	\$1,222,842.83	99.90%	\$1,224,074.10
VA Highlands Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$51,103.39	100.00%	\$51,103.39
VA Housing Study Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,462.50	100.00%	\$4,462.50
VA Museum Of Natural History	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$49,528.37	100.00%	\$49,528.37
VA Rehab Center For The Blind	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$26,558.46	100.00%	\$26,558.46
VA Sch For Deaf & Bld-Hampton	\$99,409.93	6.54%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$99,409.93	6.54%	\$90,589.90	5.96%	\$1,329,929.89	87.50%	\$1,519,929.72
VA Sch For Deaf & Blind-Staun	\$332,218.84	66.81%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$332,218.84	66.81%	\$0.00	0.00%	\$165,044.70	33.19%	\$497,263.54
VA Veterans' Care Ctr Bd Trust	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$28,508.32	100.00%	\$28,508.32
VA Western Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$600.00	0.27%	\$600.00	0.27%	\$50.00	0.02%	\$224,762.53	99.71%	\$225,412.53
VA Workers' Compensation Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,511,273.71	100.00%	\$1,511,273.71
VCU	\$13,371.00	0.02%	\$0.00	0.00%	\$19,798.00	0.03%	\$0.00	0.00%	\$33,169.00	0.05%	\$151,256.16	0.21%	\$71,226,746.65	99.74%	\$71,411,171.81
Virginia Code Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,930.00	100.00%	\$6,930.00
Virginia Comm For The Arts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,254.86	100.00%	\$7,254.86
Virginia Commission On Youth	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,000.00	100.00%	\$10,000.00
Virginia Community College Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,694,275.80	100.00%	\$2,694,275.80

**EXHIBIT 4-24 (Continued)  
PROFESSIONAL SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Virginia Corr Center For Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,131,602.81	100.00%	\$2,131,602.81
Virginia Corr Enterprises	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$75.00	0.07%	\$104,265.82	99.93%	\$104,340.82
Virginia Employment Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,218.17	0.07%	\$1,802,640.11	99.93%	\$1,803,858.28
Virginia Military Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$784,330.58	100.00%	\$784,330.58
Virginia Museum Of Fine Arts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$264,295.23	100.00%	\$264,295.23
Virginia Parole Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,971.28	100.00%	\$7,971.28
Virginia Port Authority	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,433,824.64	100.00%	\$1,433,824.64
Virginia Racing Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$30,297.85	4.78%	\$603,634.76	95.22%	\$633,932.61
Virginia Retirement System	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,086.35	0.01%	\$8,950,765.99	99.99%	\$8,951,852.34
Virginia State Bar	\$0.00	0.00%	\$105.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$105.00	0.00%	\$454.95	0.00%	\$9,810,173.12	99.99%	\$9,810,733.07
Virginia State Crime Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$38,500.00	100.00%	\$38,500.00
Virginia State University	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,858,176.39	100.00%	\$1,858,176.39
VIRGINIA TECH	\$15,256.43	0.07%	\$248.65	0.00%	\$1,000.00	0.00%	\$0.00	0.00%	\$16,505.08	0.07%	\$132,856.63	0.58%	\$22,685,441.05	99.35%	\$22,834,802.76
Wallen's Ridge Corr Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,824,809.78	100.00%	\$3,824,809.78
Western Region Corr Fld Units	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$551,007.61	100.00%	\$551,007.61
Western State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,895,259.32	100.00%	\$1,895,259.32
William & Mary	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$87.50	0.01%	\$1,577,823.85	99.99%	\$1,577,911.35
William & Mary VIMS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$185.00	0.14%	\$130,987.84	99.86%	\$131,172.84
Woodrow Wilson Rehab Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,385,611.47	100.00%	\$6,385,611.47
Wytheville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$265.63	0.54%	\$48,900.34	99.46%	\$49,165.97
<b>Total</b>	<b>\$5,598,212.65</b>	<b>0.30%</b>	<b>\$61,689.12</b>	<b>0.00%</b>	<b>\$5,190,912.03</b>	<b>0.28%</b>	<b>\$3,505.00</b>	<b>0.00%</b>	<b>\$10,854,318.80</b>	<b>0.58%</b>	<b>\$2,291,400.64</b>	<b>0.12%</b>	<b>\$1,854,432,282.55</b>	<b>99.30%</b>	<b>\$1,867,578,001.99</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount given to prime contractors.

**EXHIBIT 4-25  
PROFESSIONAL SERVICES  
AVAILABILITY OF PRIME CONSULTANTS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	96	0.33%	36	0.12%	113	0.39%	9	0.03%	254	0.87%	450	1.54%	28,604	97.60%	29,308

Source: MGT's master vendor database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-26  
OTHER SERVICES  
RELEVANT MARKET AREA ANALYSIS  
FISCAL YEARS 1998 THROUGH 2002**

County, <sup>1</sup> State	# of Payments	% of Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% <sup>2</sup>
<b>COMMONWEALTH OF VIRGINIA</b>	1,268,719	70.73%	44,237	65.08%	\$1,390,165,212.92	60.85%	60.85%
FULTON, GA	16,199	0.90%	442	0.65%	\$178,037,903.66	7.79%	68.64%
WASHINGTON, DC	7,900	0.44%	708	1.04%	\$49,363,059.13	2.16%	70.81%
BALTIMORE (CITY), MD	18,089	1.01%	391	0.58%	\$43,707,462.98	1.91%	72.72%
ESSEX, NJ	17,427	0.97%	195	0.29%	\$34,945,281.90	1.53%	74.25%
COOK, IL	20,270	1.13%	981	1.44%	\$30,132,300.99	1.32%	75.57%
<b>RELEVANT M.A. TOTAL</b>	<b>1,348,604</b>	<b>75.19%</b>	<b>46,954</b>	<b>69.07%</b>	<b>\$1,726,351,221.58</b>	<b>75.57%</b>	<b>N/A</b>
DALLAS, TX	15,726	0.88%	317	0.47%	\$27,564,386.13	1.21%	76.77%
PHILADELPHIA, PA	23,437	1.31%	355	0.52%	\$20,508,093.02	0.90%	77.67%
DU PAGE, IL	17,605	0.98%	144	0.21%	\$19,173,689.92	0.84%	78.51%
KNOX, TN	8,901	0.50%	81	0.12%	\$18,839,847.61	0.82%	79.34%
JEFFERSON, KY	25,006	1.39%	83	0.12%	\$18,515,244.64	0.81%	80.15%
WASHTENAW, MI	1,703	0.09%	63	0.09%	\$15,262,073.30	0.67%	80.81%
HARRIS, TX	1,090	0.06%	136	0.20%	\$14,697,154.93	0.64%	81.46%
DENVER, CO	793	0.04%	87	0.13%	\$14,141,378.83	0.62%	82.08%
MONTGOMERY, MD	7,345	0.41%	657	0.97%	\$13,384,608.22	0.59%	82.66%
MECKLENBURG, NC	13,376	0.75%	463	0.68%	\$12,565,843.04	0.55%	83.21%
MILWAUKEE, WI	26,108	1.46%	113	0.17%	\$12,339,613.78	0.54%	83.75%
BALTIMORE, MD	3,414	0.19%	207	0.30%	\$12,282,893.36	0.54%	84.29%
SANTA CLARA, CA	2,103	0.12%	215	0.32%	\$11,286,246.79	0.49%	84.78%
HARNETT, NC	830	0.05%	7	0.01%	\$10,925,230.43	0.48%	85.26%
MIDDLESEX, MA	3,641	0.20%	348	0.51%	\$10,485,906.50	0.46%	85.72%
ALLEGHENY, PA	12,087	0.67%	303	0.45%	\$10,358,651.98	0.45%	86.17%
SAN FRANCISCO, CA	3,516	0.20%	140	0.21%	\$9,564,340.82	0.42%	86.59%
ORANGE, CA	2,303	0.13%	230	0.34%	\$9,317,113.61	0.41%	87.00%
MONROE, NY	13,271	0.74%	83	0.12%	\$9,095,428.91	0.40%	87.40%
MARICOPA, AZ	1,311	0.07%	137	0.20%	\$8,808,555.92	0.39%	87.78%
NEW YORK, NY	4,996	0.28%	590	0.87%	\$8,506,816.36	0.37%	88.16%
PRINCE GEORGE'S, MD	10,589	0.59%	382	0.56%	\$8,271,692.83	0.36%	88.52%
ADAMS, PA	333	0.02%	16	0.02%	\$8,019,313.19	0.35%	88.87%
UNION, NJ	5,091	0.28%	41	0.06%	\$6,767,020.45	0.30%	89.17%
GUILFORD, NC	2,172	0.12%	179	0.26%	\$6,448,686.55	0.28%	89.45%
GREENVILLE, SC	7,022	0.39%	31	0.05%	\$6,076,829.76	0.27%	89.71%
TRAVIS, TX	841	0.05%	84	0.12%	\$6,044,424.26	0.26%	89.98%
POLK, FL	817	0.05%	9	0.01%	\$5,974,882.91	0.26%	90.24%
DURHAM, NC	17,284	0.96%	79	0.12%	\$5,618,020.68	0.25%	90.49%
HUNTERDON, NJ	131	0.01%	19	0.03%	\$5,561,424.16	0.24%	90.73%
ALAMEDA, CA	650	0.04%	136	0.20%	\$5,390,270.02	0.24%	90.97%
OAKLAND, MI	5,126	0.29%	74	0.11%	\$5,385,814.66	0.24%	91.20%
DAVIDSON, TN	2,249	0.13%	117	0.17%	\$4,900,729.63	0.21%	91.42%
OTHER	204,152	11.38%	15,097	22.21%	\$196,092,126.23	8.58%	100.00%
<b>Total</b>	<b>1,793,623</b>	<b>100.00%</b>	<b>67,977</b>	<b>100.00%</b>	<b>\$2,284,525,575.01</b>	<b>100.00%</b>	

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Counties above the line are included in the relevant market area.

<sup>2</sup> Cumulative total of percentage of dollars in market area.

**4.5.2 Utilization Analysis**

This section presents the utilization analysis of other services vendors, which includes an analysis of the number of payments made and the number of individual firms by race/ethnicity/gender classifications. The utilization analysis is presented in **Exhibit 4-27**. As the exhibit shows, MBEs received 0.86 percent of the other services procurements made by the Commonwealth during the study period. This represented \$14.8 million dollars out of over \$1.7 billion in other services spending.

Of the MBE firms that provided other services to the Commonwealth, African American-owned firms received the most dollars with 0.48 percent. Asian American, Hispanic American, and Native American-owned firms received less than 0.25 percent of purchase dollars each. **Exhibit 4-28** shows the number of other services procurements made to firms in the relevant market area over the five-year period. It can be seen that African American-owned firms received the majority of MBE payments with 4,610, or 0.34 percent of all the other service awards. MBEs were more successful in winning other services payments in fiscal years 2001 and 2002. Other services projects awarded to MBEs totaled 0.49 percent of the total awards made during those years.

**Exhibit 4-29** shows the utilization by the number of other services firms used during the study period. Our analysis shows 120 of the 46,954 total firms used by the Commonwealth for other services were MBEs.

**EXHIBIT 4-27  
OTHER SERVICES  
UTILIZATION ANALYSIS OF PRIME CONSULTANTS IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
1998	\$272,099.01	0.13%	\$369,297.08	0.18%	\$174,260.94	0.09%	\$2,511.26	0.00%	\$818,168.29	0.40%	\$3,277,884.36	1.61%	\$198,890,859.52	97.98%	\$202,986,912.17
1999	\$1,300,844.64	0.49%	\$640,702.48	0.24%	\$72,452.00	0.03%	\$1,435.88	0.00%	\$2,015,435.00	0.76%	\$3,620,229.73	1.37%	\$258,440,098.72	97.87%	\$264,075,763.45
2000	\$2,059,670.09	0.75%	\$438,980.23	0.16%	\$538,597.80	0.20%	\$9,330.00	0.00%	\$3,046,578.12	1.11%	\$4,074,859.10	1.48%	\$267,683,259.90	97.41%	\$274,804,697.12
2001	\$2,291,290.51	0.61%	\$1,967,979.12	0.52%	\$993,315.57	0.26%	\$1,036.00	0.00%	\$5,253,621.20	1.40%	\$3,521,031.78	0.94%	\$366,742,881.07	97.66%	\$375,517,534.05
2002	\$2,297,717.59	0.38%	\$954,340.64	0.16%	\$500,680.64	0.08%	\$7.12	0.00%	\$3,752,745.99	0.62%	\$7,829,419.93	1.29%	\$597,384,148.87	98.10%	\$608,966,314.79
<b>Total</b>	<b>\$8,221,621.84</b>	<b>0.48%</b>	<b>\$4,371,299.55</b>	<b>0.25%</b>	<b>\$2,279,306.95</b>	<b>0.13%</b>	<b>\$14,320.26</b>	<b>0.00%</b>	<b>\$14,886,548.60</b>	<b>0.86%</b>	<b>\$22,323,424.90</b>	<b>1.29%</b>	<b>\$1,689,141,248.08</b>	<b>97.84%</b>	<b>\$1,726,351,221.58</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-28  
OTHER SERVICES  
NUMBER OF PAYMENTS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Payments
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	727	0.27%	88	0.03%	66	0.02%	7	0.00%	888	0.33%	5,628	2.09%	263,241	97.58%	269,757
1999	936	0.31%	156	0.05%	43	0.01%	4	0.00%	1,139	0.38%	5,982	2.00%	291,421	97.61%	298,542
2000	1,087	0.40%	197	0.07%	49	0.02%	9	0.00%	1,342	0.50%	5,093	1.89%	263,625	97.62%	270,060
2001	913	0.36%	620	0.24%	80	0.03%	7	0.00%	1,620	0.64%	5,746	2.25%	247,731	97.11%	255,097
2002	947	0.37%	536	0.21%	132	0.05%	1	0.00%	1,616	0.63%	5,970	2.34%	247,562	97.03%	255,148
<b>Total Payments</b>	4,610	0.34%	1,597	0.12%	370	0.03%	28	0.00%	6,605	0.49%	28,419	2.11%	1,313,580	97.40%	1,348,604

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Payments.

**EXHIBIT 4-29  
OTHER SERVICES  
NUMBER OF INDIVIDUAL PRIME CONSULTANTS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	28	0.16%	5	0.03%	9	0.05%	1	0.01%	43	0.24%	149	0.83%	17,868	98.94%	18,060
1999	43	0.23%	10	0.05%	13	0.07%	3	0.02%	69	0.37%	178	0.94%	18,617	98.69%	18,864
2000	35	0.19%	8	0.04%	7	0.04%	3	0.02%	53	0.29%	168	0.93%	17,769	98.77%	17,990
2001	39	0.21%	9	0.05%	10	0.05%	4	0.02%	62	0.34%	175	0.96%	17,960	98.70%	18,197
2002	43	0.24%	9	0.05%	8	0.04%	1	0.01%	61	0.34%	177	0.98%	17,781	98.68%	18,019
<b>Total Unique Vendors Over Five Years</b> <sup>2</sup>	65	0.14%	17	0.04%	30	0.06%	8	0.02%	120	0.26%	307	0.65%	46,527	99.09%	46,954

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Vendors.

<sup>2</sup> The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total Vendors for the entire study period may not equal the sum of all years.

The analysis of prime contracting by agency and university is displayed below in **Exhibit 4-30**. The Eastern State Hospital was the agency with the highest MBE utilization for other services with 33 percent. Almost all of the work was done by Hispanic American-owned firms. The Department of Environmental Quality also had a relatively high utilization of MBE firms considering the dollar volume the department spends. Of the \$11 million spent by the department, about 21 percent went to MBE firms, mostly distributed to Hispanic American-owned firms.

#### **4.5.3 Availability**

**Exhibit 4-31** shows the relative distribution of available other services vendors. In the exhibit, we show that MBEs represented 0.44 percent of the available vendors. Firms owned by nonminority women accounted for 1.07 percent of available vendors. The majority of other services vendors were non-minorities (98.5% of total vendors).

### **4.6 Goods and Supplies**

This section presents our analysis of the goods and supplies procurements for the Commonwealth during the study period. The market area and utilization of MBEs and non-MBEs are examined in this section.

#### **4.6.1 Relevant Market Area Analysis**

Approximately \$4.4 billion were spent by the Commonwealth on goods and supplies procurements. This amount represents 3.4 million payments made to 72,548 vendors. The relevant market area represented 75 percent of the overall dollars, or \$3.28 billion. Forty percent of the dollars were made to vendors in the Commonwealth of Virginia. In addition to the Commonwealth, 24 other counties were determined to be in the relevant market area. **Exhibit 4-32** shows the location of all firms by County and dollar amount. A list of goods and supplies payments analyzed is included in **Appendix I**.

**EXHIBIT 4-30  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Administration	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,076.15	100.00%	\$12,076.15
Advisory Commission Executive Mansion	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,757.35	100.00%	\$2,757.35
Attorney General	\$0.00	0.00%	\$19.75	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$19.75	0.00%	\$1,939.90	0.27%	\$716,480.23	99.73%	\$718,439.88
Auditor Of Public Accounts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$97,696.87	100.00%	\$97,696.87
Augusta Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$227,945.65	100.00%	\$227,945.65
Bland Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$49.49	0.03%	\$146,794.86	99.97%	\$146,844.35
Blue Ridge Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,796.25	0.22%	\$1,257,274.99	99.78%	\$1,260,071.24
Brd Of VA Hig Ed Tuit Trust Fd	\$17,500.00	2.19%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$17,500.00	2.19%	\$0.00	0.00%	\$782,414.14	97.81%	\$799,914.14
Brunswick Correctional Center	\$263.65	0.16%	\$0.00	0.00%	\$0.00	0.00%	\$30.00	0.02%	\$293.65	0.18%	\$10,994.18	6.76%	\$151,406.45	93.06%	\$162,694.28
Buckingham Correctional Center	\$4,018.00	1.85%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,018.00	1.85%	\$0.00	0.00%	\$213,504.81	98.15%	\$217,522.81
CARS 2002	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,290.38	100.00%	\$10,290.38
Catawba Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,050.70	0.30%	\$999,162.16	99.70%	\$1,002,212.86
Central Appropriations	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$176.80	100.00%	\$176.80
Central Region Corr Fld Unit	\$18.50	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18.50	0.01%	\$559.40	0.42%	\$131,817.85	99.56%	\$132,395.75
Central State Hospital	\$643.51	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$643.51	0.06%	\$982.50	0.09%	\$1,093,156.41	99.85%	\$1,094,782.42
Central VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3.20	0.00%	\$725,815.40	100.00%	\$725,818.60
Central Virginia Training Ctr	\$1,070.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,070.00	0.06%	\$10,190.17	0.61%	\$1,648,337.81	99.32%	\$1,659,597.98
Charitable Gaming Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3.00	0.00%	\$154,200.24	100.00%	\$154,203.24
Chesapeake Bay Local Asst Dept	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$159.00	0.40%	\$39,222.43	99.60%	\$39,381.43
Chip Oaks Plantation Farm Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$31,772.37	100.00%	\$31,772.37
Christopher Newport University	\$77,942.16	1.44%	\$9,634.90	0.18%	\$0.00	0.00%	\$0.00	0.00%	\$87,577.06	1.61%	\$76,990.12	1.42%	\$5,258,741.27	96.97%	\$5,423,308.45
Circuit Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,364,013.65	10.10%	\$21,031,209.47	89.90%	\$23,395,223.12
Coffeewood Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$749.20	0.20%	\$375,724.40	99.80%	\$376,473.60
Combined District Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,851.36	1.09%	\$350,490.78	98.91%	\$354,342.14
Comm On VA Alcohol Saf Act Pro	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$127,023.46	100.00%	\$127,023.46

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FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Commerce and Trade	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$190.00	100.00%	\$190.00
Commission On Local Government	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8.25	0.18%	\$4,528.93	99.82%	\$4,537.18
Commonwealth Att Serv Council	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$33,210.40	100.00%	\$33,210.40
Compensation Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$643.75	2.09%	\$30,194.03	97.91%	\$30,837.78
Council Of Information Mgmt	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$933,664.35	100.00%	\$933,664.35
Council On Human Rights	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24,321.93	100.00%	\$24,321.93
Court Of Appeals Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,975.70	2.56%	\$75,260.16	97.44%	\$77,235.86
Dabney S. Lancaster Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$335.00	0.07%	\$456,911.48	99.93%	\$457,246.48
Danville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,507,793.27	100.00%	\$1,507,793.27
Deep Meadow Correctional Ctr	\$0.00	0.00%	\$325.00	0.28%	\$0.00	0.00%	\$0.00	0.00%	\$325.00	0.28%	\$686.05	0.59%	\$115,091.05	99.13%	\$116,102.10
Deerfield Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,557.74	2.29%	\$109,258.24	97.71%	\$111,815.98
DeJarnette Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$22.50	0.02%	\$92,193.08	99.98%	\$92,215.58
Department For The Aging	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$41,059.67	10.99%	\$332,624.93	89.01%	\$373,684.60
Department Of Accounts	\$0.04	0.00%	\$0.01	0.00%	\$0.02	0.00%	\$0.00	0.00%	\$0.07	0.00%	\$102,739.24	41.88%	\$142,582.56	58.12%	\$245,321.87
Department Of Aviation	\$22,869.34	1.19%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$22,869.34	1.19%	\$2,868.45	0.15%	\$1,902,404.49	98.67%	\$1,928,142.28
Department Of Business Asst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,264.85	1.20%	\$432,598.87	98.80%	\$437,863.72
Department Of Capitol Police	\$1,525.00	0.87%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,525.00	0.87%	\$0.00	0.00%	\$173,757.82	99.13%	\$175,282.82
Department Of Corrections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,779.94	1.16%	\$408,614.59	98.84%	\$413,394.53
Department Of Education	\$0.00	0.00%	\$1,962.08	0.04%	\$530.26	0.01%	\$0.00	0.00%	\$2,492.34	0.06%	\$5,794.96	0.13%	\$4,491,369.63	99.82%	\$4,499,656.93
Department Of Fire Programs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,683.70	1.65%	\$397,931.46	98.35%	\$404,615.16
Department Of Forestry	\$120.00	0.00%	\$145,488.24	3.84%	\$0.00	0.00%	\$0.00	0.00%	\$145,608.24	3.85%	\$5,580.10	0.15%	\$3,634,088.45	96.01%	\$3,785,276.79
Department Of General Services	\$149,223.36	1.13%	\$658.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$149,881.36	1.13%	\$196,247.12	1.48%	\$12,876,593.37	97.38%	\$13,222,721.85
Department Of Health	\$1,200,195.73	3.49%	\$39,286.13	0.11%	\$218.07	0.00%	\$50.00	0.00%	\$1,239,749.93	3.60%	\$118,010.08	0.34%	\$33,056,570.98	96.05%	\$34,414,330.99
Department Of Juvenile Justice	\$36,268.59	0.12%	\$549.36	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$36,817.95	0.12%	\$25,162.55	0.09%	\$29,518,163.41	99.79%	\$29,580,143.91

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
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Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Department Of Military Affairs	\$6,632.70	0.06%	\$281,082.81	2.58%	\$0.00	0.00%	\$0.00	0.00%	\$287,715.51	2.65%	\$499,867.38	4.60%	\$10,089,608.46	92.76%	\$10,877,191.35
Department Of Motor Vehicles	\$418,556.56	2.01%	\$44,900.31	0.22%	\$18,238.20	0.09%	\$0.00	0.00%	\$481,695.07	2.31%	\$182,197.47	0.87%	\$20,165,164.03	96.81%	\$20,829,056.57
Department Of Social Services	\$325,890.10	3.46%	\$1,043.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$326,933.10	3.47%	\$40,644.53	0.43%	\$9,048,604.35	96.10%	\$9,416,181.98
Department Of State Police	\$2,253.00	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,253.00	0.02%	\$24,787.17	0.21%	\$11,922,216.23	99.77%	\$11,949,256.40
Department Of Taxation	\$5,597.26	0.01%	\$0.00	0.00%	\$38,937.00	0.04%	\$0.00	0.00%	\$44,534.26	0.05%	\$121,144.55	0.13%	\$94,401,095.44	99.82%	\$94,566,774.25
Department Of The Treasury	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$327.25	0.07%	\$458,793.97	99.93%	\$459,121.22
Department Of Transportation	\$998,152.96	0.52%	\$83,460.68	0.04%	\$1,157,344.38	0.61%	\$0.00	0.00%	\$2,238,958.02	1.18%	\$2,635,381.55	1.38%	\$185,562,787.27	97.44%	\$190,437,126.84
Department Of Veterans Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$98,184.85	100.00%	\$98,184.85
Dept Alcoholic Beverag Control	\$14,149.50	0.42%	\$19,885.01	0.58%	\$0.00	0.00%	\$0.00	0.00%	\$34,034.51	1.00%	\$49,553.49	1.46%	\$3,316,212.96	97.54%	\$3,399,800.96
Dept Conservation & Recreation	\$16,600.00	0.20%	\$0.00	0.00%	\$0.00	0.00%	\$300.00	0.00%	\$16,900.00	0.21%	\$62,369.55	0.77%	\$8,031,231.15	99.02%	\$8,110,500.70
Dept F/T Rights Of VA W/Disab	\$65.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$65.00	0.06%	\$1,079.32	0.99%	\$108,067.63	98.95%	\$109,211.95
Dept Game & Inland Fisheries	\$0.00	0.00%	\$0.00	0.00%	\$662.60	0.01%	\$0.00	0.00%	\$662.60	0.01%	\$807,509.76	9.77%	\$7,458,142.03	90.22%	\$8,266,314.39
Dept Ment Hlth & Ment Retard	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$77,924.71	1.88%	\$4,078,004.56	98.12%	\$4,155,929.27
Dept Of Agri & Cons Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,115.50	0.31%	\$3,896,921.04	99.69%	\$3,909,036.54
Dept of Corr Central Activities	\$2,475.00	0.18%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,475.00	0.18%	\$286,239.19	20.76%	\$1,089,844.43	79.06%	\$1,378,558.62
Dept Of Correctional Education	\$0.00	0.00%	\$86.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$86.00	0.01%	\$193,731.10	26.67%	\$532,580.89	73.32%	\$726,397.99
Dept Of Criminal Justice Svcs	\$0.00	0.00%	\$2,085.00	0.03%	\$96,006.62	1.16%	\$75.00	0.00%	\$98,166.62	1.18%	\$1,138.42	0.01%	\$8,203,620.47	98.80%	\$8,302,925.51
Dept of Education - Direct Aid to Public Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$669,028.90	100.00%	\$669,028.90
Dept Of Emergency Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,197.15	0.56%	\$1,094,515.69	99.44%	\$1,100,712.84
Dept Of Emp Rel Counselors	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$427.00	0.56%	\$75,418.04	99.44%	\$75,845.04
Dept Of Environmental Quality	\$341.50	0.00%	\$2,078,525.07	19.45%	\$159,339.98	1.49%	\$0.00	0.00%	\$2,238,206.55	20.95%	\$112,619.78	1.05%	\$8,334,707.71	78.00%	\$10,685,534.04
Dept Of Health Professions	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,409.13	0.06%	\$5,741,259.83	99.94%	\$5,744,668.96
Dept Of Historic Resources	\$185.56	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$185.56	0.02%	\$100,319.08	9.60%	\$944,758.52	90.38%	\$1,045,263.16
Dept Of Housing And Comm Dev	\$56,977.00	2.18%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$56,977.00	2.18%	\$17,649.63	0.68%	\$2,535,163.34	97.14%	\$2,609,789.97
Dept Of Information Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5.00	0.00%	\$38,386,392.05	100.00%	\$38,386,392.05
Dept Of Labor And Industry	\$2,606.05	0.78%	\$0.00	0.00%	\$2,703.75	0.81%	\$0.00	0.00%	\$5,309.80	1.58%	\$7,432.90	2.22%	\$322,819.37	96.20%	\$335,562.07

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Dept Of Medical Asst Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$246.85	0.01%	\$3,720,195.82	99.99%	\$3,720,442.67
Dept Of Minority Bus Enterpris	\$9,772.20	6.73%	\$0.00	0.00%	\$6,880.00	4.74%	\$0.00	0.00%	\$16,652.20	11.46%	\$55.75	0.04%	\$128,544.78	88.50%	\$145,252.73
Dept Of Personnel And Training	\$0.00	0.00%	\$2,563.88	0.32%	\$0.00	0.00%	\$0.00	0.00%	\$2,563.88	0.32%	\$4,063.03	0.50%	\$799,350.08	99.18%	\$805,976.99
Dept Of Planning And Budget	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$68,117.80	100.00%	\$68,117.80
Dept Of Professional & Occ Reg	\$0.00	0.00%	\$14,993.00	1.97%	\$0.00	0.00%	\$0.00	0.00%	\$14,993.00	1.97%	\$2,422.90	0.32%	\$743,128.35	97.71%	\$760,544.25
Dept Of Rail & Public Trans	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$252.23	0.30%	\$83,934.24	99.70%	\$84,186.47
Dept Of Rehabilitative Service	\$1,544,347.38	13.21%	\$0.00	0.00%	\$57.00	0.00%	\$874.00	0.01%	\$1,545,278.38	13.22%	\$1,490,262.99	12.75%	\$8,655,630.46	74.04%	\$11,691,171.83
Dept Of The St Internal Audit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,749.81	100.00%	\$16,749.81
Dept. Mines, Minerals & Energy	\$4,874.85	0.03%	\$50.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,924.85	0.03%	\$78,181.21	0.46%	\$17,023,496.01	99.51%	\$17,106,602.07
Dillwyn Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$432.44	0.18%	\$237,404.56	99.82%	\$237,837.00
Div Of Community Corrections	\$14,584.32	0.93%	\$7,596.51	0.48%	\$0.00	0.00%	\$0.00	0.00%	\$22,180.83	1.41%	\$19,718.17	1.25%	\$1,533,841.99	97.34%	\$1,575,740.99
Div Of Legislative Auto Sys	\$0.00	0.00%	\$42.36	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$42.36	0.00%	\$2,403.33	0.06%	\$3,957,395.70	99.94%	\$3,959,841.39
Div Of Legislative Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$870.16	0.18%	\$483,784.84	99.82%	\$484,655.00
Division Of Debt Collection	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,159.24	100.00%	\$1,159.24
Division Of Institutions	\$0.00	0.00%	\$5,410.54	0.39%	\$0.00	0.00%	\$0.00	0.00%	\$5,410.54	0.39%	\$7,120.59	0.51%	\$1,383,647.81	99.10%	\$1,396,178.94
DMHMRSAS Grants to Localities	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3.00	100.00%	\$3.00
Eastern Region Corr Fld Unit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$464.79	3.89%	\$11,486.43	96.11%	\$11,951.22
Eastern Shore Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,452.80	0.93%	\$154,267.52	99.07%	\$155,720.32
Eastern State Hospital	\$7.27	0.00%	\$1,383,258.90	32.80%	\$12,591.77	0.30%	\$0.00	0.00%	\$1,395,857.94	33.09%	\$19,695.34	0.47%	\$2,802,330.79	66.44%	\$4,217,884.07
Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,141.18	100.00%	\$4,141.18
Employee Rel & Trg Div	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$183.00	0.02%	\$743,335.77	99.98%	\$743,518.77
Fluvanna Women's Corr Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$225.00	0.08%	\$277,927.48	99.92%	\$278,152.48
Frontier Cultural Museum Of VA	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$574,456.36	100.00%	\$574,456.36
General District Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$52,959.53	4.57%	\$1,106,177.86	95.43%	\$1,159,137.39
George Mason University	\$59,894.00	0.14%	\$89,927.50	0.21%	\$182,729.73	0.43%	\$2,035.00	0.00%	\$334,586.23	0.78%	\$506,229.27	1.18%	\$41,990,342.53	98.04%	\$42,831,158.03

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Germanna Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$252,447.08	20.01%	\$1,008,908.04	79.99%	\$1,261,355.12
Gov Employment & Training Dept	\$717.95	1.18%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$717.95	1.18%	\$0.00	0.00%	\$59,870.95	98.82%	\$60,588.90
Greensville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$9.90	0.00%	\$0.00	0.00%	\$9.90	0.00%	\$8,004.59	1.31%	\$603,063.43	98.69%	\$611,077.92
Gunston Hall Plantation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$307.34	0.18%	\$167,431.44	99.82%	\$167,738.78
Haynesville Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$29,132.00	14.10%	\$177,416.32	85.90%	\$206,548.32
Health and Human Resources	\$0.00	0.00%	\$791.72	1.00%	\$0.00	0.00%	\$0.00	0.00%	\$791.72	1.00%	\$10.00	0.01%	\$77,997.00	98.98%	\$78,798.72
Hiram W. Davis Medical Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$566.10	0.22%	\$259,275.32	99.78%	\$259,841.42
House Of Delegates	\$0.00	0.00%	\$210.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$210.00	0.01%	\$5,062.60	0.32%	\$1,552,727.56	99.66%	\$1,558,000.16
Independent	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$46,197.25	100.00%	\$46,197.25
Indian Creek Corr Center	\$5,000.00	1.46%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,000.00	1.46%	\$16,238.64	4.76%	\$320,247.24	93.78%	\$341,485.88
Interstate Organization Contribution	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,011.11	100.00%	\$1,011.11
J. Sargeant Reynolds Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,235.60	0.82%	\$1,599,558.31	99.18%	\$1,612,793.91
James River Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,367.40	0.90%	\$368,818.26	99.10%	\$372,185.66
Jamestown-Yorktown Foundation	\$5,550.00	0.14%	\$250.00	0.01%	\$0.00	0.00%	\$525.00	0.01%	\$6,325.00	0.16%	\$18,032.65	0.45%	\$4,020,712.40	99.40%	\$4,045,070.05
John Tyler Community College	\$300.00	0.01%	\$477.08	0.02%	\$9.36	0.00%	\$0.00	0.00%	\$786.44	0.03%	\$49,669.44	1.82%	\$2,685,965.22	98.16%	\$2,736,421.10
Joint Comm On Health Care	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$205.60	0.45%	\$45,205.00	99.55%	\$45,410.60
Joint Comm on Techn & Science	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,155.48	100.00%	\$2,155.48
Joint Leg Audit & Review Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,828.60	1.55%	\$116,399.75	98.45%	\$118,228.35
Judicial Inquiry And Rev Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$20,487.28	100.00%	\$20,487.28
Juv And Dom Relations Dist Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,138.05	1.85%	\$537,521.60	98.15%	\$547,659.65
Keen Mountain Correctional Ctr	\$12.50	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12.50	0.01%	\$22.50	0.01%	\$151,490.93	99.98%	\$151,525.93
Legislative	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,460.25	100.00%	\$1,460.25
Library Of Virginia	\$4.15	0.00%	\$390.00	0.02%	\$6,565.34	0.35%	\$0.00	0.00%	\$6,959.49	0.38%	\$27,173.68	1.47%	\$1,819,259.00	98.16%	\$1,853,392.17
Lieutenant Governor	\$67.50	0.62%	\$20.00	0.18%	\$0.00	0.00%	\$0.00	0.00%	\$87.50	0.80%	\$10.00	0.09%	\$10,824.93	99.11%	\$10,922.43
Longwood College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$37,247.10	0.17%	\$22,213,446.33	99.83%	\$22,250,693.43

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Lord Fairfax Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,000.00	0.07%	\$1,000.00	0.07%	\$3,610.79	0.25%	\$1,455,977.89	99.68%	\$1,460,588.68
Lunenburg Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,602.60	1.75%	\$145,936.28	98.25%	\$148,538.88
Magistrates	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$178.50	0.21%	\$85,882.18	99.79%	\$86,060.68
Marine Resources Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$244,573.10	12.04%	\$1,786,996.98	87.96%	\$2,031,570.08
Marion Correctional Center	\$25.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$25.00	0.01%	\$103.12	0.04%	\$245,082.50	99.95%	\$245,210.62
Mary Washington College	\$1,750.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,750.00	0.01%	\$19,808.85	0.17%	\$11,751,210.06	99.82%	\$11,772,768.91
Mecklenburg Correctional Ctr	\$74.50	0.07%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$74.50	0.07%	\$62.32	0.06%	\$112,882.19	99.88%	\$113,019.01
Melchers' Monroe Memorials	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$404,645.68	100.00%	\$404,645.68
Motor Vehicle Dealer Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$147,098.28	100.00%	\$147,098.28
Mountain Empire Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$302.30	0.05%	\$630,025.54	99.95%	\$630,327.84
New River Community College	\$1,534.22	0.08%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,534.22	0.08%	\$698.83	0.04%	\$1,844,210.46	99.88%	\$1,846,443.51
No VA Mental Health Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7.12	0.00%	\$7.12	0.00%	\$594.58	0.03%	\$2,287,549.33	99.97%	\$2,288,151.03
No VA Trn Ctr For The Ment Ret	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$777,888.97	100.00%	\$777,888.97
Norfolk State University	\$883,848.97	11.61%	\$495.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$884,343.97	11.61%	\$100,466.91	1.32%	\$6,630,525.09	87.07%	\$7,615,335.97
Northern Region Corr Fld Units	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$359.90	0.13%	\$279,914.28	99.87%	\$280,274.18
Northern VA Community College	\$630.00	0.00%	\$0.00	0.00%	\$1,393.76	0.01%	\$0.00	0.00%	\$2,023.76	0.02%	\$703,396.05	5.46%	\$12,186,067.06	94.53%	\$12,891,486.87
Nottoway Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,714.14	0.25%	\$688,672.98	99.75%	\$690,387.12
Office Of The Governor	\$513.60	0.14%	\$1,912.80	0.52%	\$0.00	0.00%	\$0.00	0.00%	\$2,426.40	0.66%	\$362.99	0.10%	\$366,810.04	99.25%	\$369,599.43
Old Dominion University	\$1,706.60	0.02%	\$2,250.00	0.02%	\$1,483.19	0.02%	\$0.00	0.00%	\$5,439.79	0.06%	\$121,631.78	1.33%	\$8,999,210.55	98.61%	\$9,126,282.12
Patrick Henry Comm Coll At Mar	\$3,756.94	0.35%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,756.94	0.35%	\$1,713.68	0.16%	\$1,054,561.57	99.48%	\$1,060,032.19
Paul D. Camp Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,275.98	0.61%	\$530,667.61	99.39%	\$533,943.59
Piedmont Geriatric Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$526,530.00	100.00%	\$526,530.00
Piedmont VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$17,195.15	2.33%	\$720,570.35	97.67%	\$737,765.50
Powhatan Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,587.40	0.65%	\$241,923.79	99.35%	\$243,511.19
Powhatan Recpt And Class Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,181.44	15.78%	\$6,306.59	84.22%	\$7,488.03
Public Defender Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,780.91	1.11%	\$248,152.48	98.89%	\$250,933.39

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
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IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
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FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
RADFORD UNIVERSITY	\$493.18	0.01%	\$0.00	0.00%	\$15.00	0.00%	\$0.00	0.00%	\$508.18	0.01%	\$38,874.00	0.59%	\$6,572,417.83	99.40%	\$6,611,800.01
Rappahannock Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,885.04	0.57%	\$1,030,526.16	99.43%	\$1,036,411.20
Red Onion Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,306.49	4.01%	\$79,232.17	95.99%	\$82,538.66
Richard Bland College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$13,347.28	2.16%	\$604,344.30	97.84%	\$617,691.58
Secretary Of Administration	\$146.27	0.25%	\$161.00	0.28%	\$0.00	0.00%	\$0.00	0.00%	\$307.27	0.53%	\$51.16	0.09%	\$57,697.56	99.38%	\$58,055.99
Secretary Of Commerce & Trade	\$0.00	0.00%	\$42.36	0.15%	\$0.00	0.00%	\$0.00	0.00%	\$42.36	0.15%	\$218.95	0.79%	\$27,407.39	99.06%	\$27,668.70
Secretary Of Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,057.50	100.00%	\$15,057.50
Secretary Of Finance	\$0.00	0.00%	\$297.08	3.49%	\$0.00	0.00%	\$0.00	0.00%	\$297.08	3.49%	\$0.00	0.00%	\$8,226.50	96.51%	\$8,523.58
Secretary Of Natural Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,731.88	100.00%	\$5,731.88
Secretary Of Public Safety	\$0.00	0.00%	\$189.72	0.81%	\$0.00	0.00%	\$0.00	0.00%	\$189.72	0.81%	\$0.00	0.00%	\$23,101.48	99.19%	\$23,291.20
Secretary of Technology	\$0.00	0.00%	\$561.80	0.93%	\$0.00	0.00%	\$0.00	0.00%	\$561.80	0.93%	\$260.00	0.43%	\$59,872.50	98.65%	\$60,694.30
Secretary Of The Commonwealth	\$748.00	0.42%	\$4,037.86	2.27%	\$0.00	0.00%	\$0.00	0.00%	\$4,785.86	2.69%	\$0.00	0.00%	\$173,235.44	97.31%	\$178,021.30
Secretary Of Transportation	\$55.00	0.71%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$55.00	0.71%	\$0.00	0.00%	\$7,712.43	99.29%	\$7,767.43
Senate	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,588.74	0.56%	\$1,340,401.92	99.44%	\$1,347,990.66
Southampton Correctional Ctr	\$2,498.00	0.25%	\$3,585.00	0.35%	\$0.00	0.00%	\$350.00	0.03%	\$6,433.00	0.63%	\$11,615.64	1.14%	\$998,673.21	98.22%	\$1,016,721.85
Southampton Intensive Treat Ct	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,470.00	100.00%	\$1,470.00
Southampton Reception & Class	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,038.97	0.87%	\$117,750.08	99.13%	\$118,789.05
Southeastern VA Tr Ctr For Men	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,988.82	0.29%	\$1,695,725.07	99.71%	\$1,700,713.89
Southern VA Mental Health Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14.78	0.00%	\$693,539.22	100.00%	\$693,554.00
Southside VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,857.00	0.86%	\$558,097.07	99.14%	\$562,954.07
Southside VA Training Center	\$74.04	0.00%	\$0.00	0.00%	\$4,527.00	0.17%	\$518.96	0.02%	\$5,120.00	0.20%	\$15,272.12	0.59%	\$2,578,906.21	99.22%	\$2,599,298.33
Southwest Virginia Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,460,843.20	100.00%	\$2,460,843.20
Southwestern VA Ment Hlth Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$620,347.19	100.00%	\$620,347.19
Southwestern VA Training Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$169.10	0.02%	\$1,112,501.33	99.98%	\$1,112,670.43
St Council Of Higher Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,761.00	1.51%	\$507,495.28	98.49%	\$515,256.28
St. Brides Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$40,823.59	10.45%	\$349,798.86	89.55%	\$390,622.45

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
State Board Of Bar Examiners	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$186.90	0.19%	\$98,393.83	99.81%	\$98,580.73
State Board Of Elections	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$648,771.49	100.00%	\$648,771.49
State Corporation Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,391.27	0.19%	\$8,008,862.76	99.81%	\$8,024,254.03
State Lottery Department	\$0.00	0.00%	\$8,431.41	0.13%	\$0.00	0.00%	\$0.00	0.00%	\$8,431.41	0.13%	\$6,701.89	0.10%	\$6,390,284.65	99.76%	\$6,405,417.95
State Milk Commission	\$0.00	0.00%	\$40.00	0.18%	\$0.00	0.00%	\$0.00	0.00%	\$40.00	0.18%	\$0.00	0.00%	\$22,608.31	99.82%	\$22,648.31
Staunton Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$162,063.57	100.00%	\$162,063.57
Supreme Court Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$955.00	0.05%	\$1,937,651.19	99.95%	\$1,938,606.19
Sussex 1 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,499.10	0.91%	\$490,010.93	99.09%	\$494,510.03
Sussex 2 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$25.00	0.01%	\$0.00	0.00%	\$25.00	0.01%	\$2,552.33	0.61%	\$416,941.69	99.39%	\$419,519.02
Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,654.51	100.00%	\$1,654.51
The Science Museum Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,694.00	0.23%	\$3,296,434.23	99.77%	\$3,304,128.23
Thomas Nelson Comm College	\$0.00	0.00%	\$0.00	0.00%	\$2,434.50	0.14%	\$0.00	0.00%	\$2,434.50	0.14%	\$2,764.27	0.16%	\$1,687,251.19	99.69%	\$1,692,449.96
Tidewater Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64,393.87	0.96%	\$6,617,529.38	99.04%	\$6,681,923.25
Treasury Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$19,617.95	100.00%	\$19,617.95
Unknown	\$3,755.00	0.75%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,755.00	0.75%	\$9,635.03	1.93%	\$484,729.28	97.31%	\$498,119.31
UVA	\$9,565.20	0.00%	\$12,070.00	0.00%	\$554,328.76	0.08%	\$0.00	0.00%	\$575,963.96	0.09%	\$7,411,038.56	1.12%	\$655,309,767.38	98.80%	\$663,296,769.90
VA Bd For People With Disabil	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$583.99	0.19%	\$304,994.73	99.81%	\$305,578.72
VA Commission on Inter-governmental Cooperation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$473.73	100.00%	\$473.73
Va Community Coll Sys- Utility	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,211.27	100.00%	\$7,211.27
VA Crim Sentencing Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$232,867.63	100.00%	\$232,867.63
VA Dep F/T Deaf & Hard Of Hear	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$630.12	0.04%	\$1,480,809.52	99.96%	\$1,481,439.64
VA Dept F/T Visual Handicapped	\$1,394.76	0.07%	\$4,384.80	0.21%	\$0.00	0.00%	\$7.00	0.00%	\$5,786.56	0.28%	\$70,883.58	3.47%	\$1,966,251.91	96.25%	\$2,042,922.05
VA Highlands Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$152,674.78	100.00%	\$152,674.78
VA Housing Study Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$86,006.80	100.00%	\$86,006.80
VA Museum Of Natural History	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,478,042.75	100.00%	\$1,478,042.75

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
VA Rehab Center For The Blind	\$150.00	0.07%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$150.00	0.07%	\$0.00	0.00%	\$205,622.97	99.93%	\$205,772.97
VA Sch For Deaf & Bld-Hampton	\$5,529.17	1.26%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,529.17	1.26%	\$56,251.90	12.81%	\$377,326.73	85.93%	\$439,107.80
VA Sch For Deaf & Blind-Staun	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$33,143.81	5.92%	\$526,667.11	94.08%	\$559,810.92
VA Veterans' Care Ctr Bd Trust	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,113.03	2.54%	\$426,648.89	97.46%	\$437,761.92
VA Western Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,617.50	0.82%	\$1,290,465.23	99.18%	\$1,301,082.73
VA Workers' Compensation Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,373.18	0.13%	\$1,053,644.81	99.87%	\$1,055,017.99
VCU	\$1,961,281.04	1.69%	\$90,302.38	0.08%	\$2,357.00	0.00%	\$0.00	0.00%	\$2,053,940.42	1.77%	\$1,398,903.72	1.21%	\$112,418,369.01	97.02%	\$115,871,213.15
Virginia Code Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$208.00	1.22%	\$16,905.82	98.78%	\$17,113.82
Virginia Comm For The Arts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$273.00	0.26%	\$103,001.61	99.74%	\$103,274.61
Virginia Commission On Youth	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$38,629.03	100.00%	\$38,629.03
Virginia Community College Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,514.01	0.38%	\$393,904.21	99.62%	\$395,418.22
Virginia Corr Center For Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$869.40	0.47%	\$185,527.69	99.53%	\$186,397.09
Virginia Corr Enterprises	\$10,148.00	0.25%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,148.00	0.25%	\$108,898.76	2.73%	\$3,866,115.80	97.01%	\$3,985,162.56
Virginia Employment Commission	\$89,060.49	0.95%	\$26,865.50	0.29%	\$0.00	0.00%	\$0.00	0.00%	\$115,925.99	1.24%	\$259,519.65	2.78%	\$8,957,495.00	95.98%	\$9,332,940.64
Virginia Liaison Office	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,925.69	100.00%	\$11,925.69
Virginia Military Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,654.84	0.14%	\$1,838,405.71	99.86%	\$1,841,060.55
Virginia Museum Of Fine Arts	\$13,801.37	0.10%	\$0.00	0.00%	\$0.00	0.00%	\$43.18	0.00%	\$13,844.55	0.10%	\$5,517.90	0.04%	\$14,207,499.57	99.86%	\$14,226,862.02
Virginia Parole Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12.75	0.37%	\$3,398.05	99.63%	\$3,410.80
Virginia Port Authority	\$5,717.45	0.26%	\$700.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$6,417.45	0.29%	\$280.00	0.01%	\$2,183,645.95	99.69%	\$2,190,343.40
Virginia Racing Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,388.00	1.41%	\$167,363.42	98.59%	\$169,751.42

**EXHIBIT 4-30 (Continued)  
OTHER SERVICES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Virginia Retirement System	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$496.50	0.02%	\$2,880,650.22	99.98%	\$2,881,146.72
Virginia State Bar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$514.25	0.02%	\$2,216,576.77	99.98%	\$2,217,091.02
Virginia State Crime Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,754.47	100.00%	\$14,754.47
Virginia State University	\$187,738.65	3.34%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$187,738.65	3.34%	\$46,234.97	0.82%	\$5,389,200.73	95.84%	\$5,623,174.35
VIRGINIA TECH	\$321.48	0.00%	\$0.00	0.00%	\$29,918.76	0.06%	\$8,505.00	0.02%	\$38,745.24	0.08%	\$69,517.10	0.15%	\$47,728,628.05	99.77%	\$47,836,890.39
Wallen's Ridge Corr Center	\$12.25	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12.25	0.02%	\$406.30	0.51%	\$78,510.06	99.47%	\$78,928.61
Western Region Corr Fld Units	\$11,030.15	2.15%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,030.15	2.15%	\$3,184.60	0.62%	\$498,774.08	97.23%	\$512,988.83
Western State Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,858.07	0.58%	\$1,004,950.74	99.42%	\$1,010,808.81
William & Mary	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$401,531.23	1.63%	\$24,168,917.72	98.37%	\$24,570,448.95
William & Mary VIMS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,971.53	0.54%	\$2,768,760.10	99.46%	\$2,783,731.63
Woodrow Wilson Rehab Center	\$16,990.32	0.22%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,990.32	0.22%	\$1,151.26	0.01%	\$7,851,134.43	99.77%	\$7,869,276.01
Wytheville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,075.00	0.17%	\$1,841,658.21	99.83%	\$1,844,733.21
<b>Total</b>	<b>\$8,221,621.84</b>	<b>0.48%</b>	<b>\$4,371,299.55</b>	<b>0.25%</b>	<b>\$2,279,306.95</b>	<b>0.13%</b>	<b>\$14,320.26</b>	<b>0.00%</b>	<b>\$14,886,548.60</b>	<b>0.86%</b>	<b>\$22,323,424.90</b>	<b>1.29%</b>	<b>\$1,689,141,248.08</b>	<b>97.84%</b>	<b>\$1,726,351,221.58</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount given to prime contractors.

**EXHIBIT 4-31  
OTHER SERVICES  
AVAILABILITY OF PRIME VENDORS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	134	0.27%	30	0.06%	45	0.09%	10	0.02%	219	0.44%	529	1.07%	48,923	98.49%	49,671

Source: MGT's master vendor database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-32  
GOODS AND SUPPLIES  
RELEVANT MARKET AREA ANALYSIS  
FISCAL YEARS 1998 THROUGH 2002**

County, <sup>1</sup> State	# of Payments	% of Payments	# of Vendors	% of Vendors	Dollars	% of Dollars	Cum% <sup>2</sup>
COMMONWEALTH OF VIRGINIA	1,598,337	47.28%	34,817	47.99%	\$1,764,093,026.58	40.42%	40.42%
SANTA CLARA, CA	9,291	0.27%	505	0.70%	\$234,373,530.02	5.37%	45.79%
MECKLENBURG, NC	59,153	1.75%	614	0.85%	\$138,205,879.34	3.17%	48.95%
COOK, IL	115,238	3.41%	1,610	2.22%	\$137,600,408.45	3.15%	52.11%
FULTON, GA	50,922	1.51%	607	0.84%	\$102,379,463.70	2.35%	54.45%
ALLEGHENY, PA	102,725	3.04%	444	0.61%	\$102,080,862.52	2.34%	56.79%
DU PAGE, IL	122,076	3.61%	223	0.31%	\$73,178,792.38	1.68%	58.47%
MONTGOMERY, MD	32,558	0.96%	764	1.05%	\$66,410,153.98	1.52%	59.99%
BALTIMORE (CITY), MD	55,243	1.63%	451	0.62%	\$65,918,672.61	1.51%	61.50%
PHILADELPHIA, PA	30,937	0.92%	489	0.67%	\$64,268,468.80	1.47%	62.97%
SAINT LOUIS CITY (CITY), MO	50,927	1.51%	161	0.22%	\$50,532,989.06	1.16%	64.13%
CHESTER, PA	14,158	0.42%	153	0.21%	\$46,769,861.88	1.07%	65.20%
DALLAS, TX	22,213	0.66%	480	0.66%	\$46,183,155.94	1.06%	66.26%
ESSEX, NJ	17,938	0.53%	282	0.39%	\$46,026,160.02	1.05%	67.31%
TRAVIS, TX	10,715	0.32%	150	0.21%	\$43,539,466.85	1.00%	68.31%
JOHNSON, KY	374	0.01%	1	0.00%	\$36,848,996.58	0.84%	69.15%
LOS ANGELES, CA	36,162	1.07%	1,164	1.60%	\$33,349,894.27	0.76%	69.92%
MILWAUKEE, WI	7,627	0.23%	186	0.26%	\$32,303,825.53	0.74%	70.66%
WASHINGTON, DC	9,069	0.27%	749	1.03%	\$30,657,479.15	0.70%	71.36%
MARICOPA, AZ	6,986	0.21%	291	0.40%	\$30,652,265.93	0.70%	72.06%
MIDDLESEX, MA	18,744	0.55%	616	0.85%	\$28,785,347.21	0.66%	72.72%
ANNE ARUNDEL, MD	4,228	0.13%	177	0.24%	\$28,011,434.43	0.64%	73.36%
ERIE, NY	28,390	0.84%	171	0.24%	\$26,217,631.54	0.60%	73.96%
ORANGE, CA	9,676	0.29%	522	0.72%	\$25,281,672.65	0.58%	74.54%
CAMDEN, NJ	3,841	0.11%	65	0.09%	\$25,180,078.12	0.58%	75.12%
<b>RELEVANT M.A. TOTAL</b>	<b>2,417,528</b>	<b>71.51%</b>	<b>45,692</b>	<b>62.98%</b>	<b>\$3,278,849,517.54</b>	<b>75.12%</b>	<b>N/A</b>
HOWARD, MD	6,340	0.19%	192	0.26%	\$23,125,939.17	0.53%	75.65%
LAKE, IL	47,316	1.40%	183	0.25%	\$22,799,346.59	0.52%	76.17%
DAUPHIN, PA	1,529	0.05%	47	0.06%	\$22,243,154.92	0.51%	76.68%
SUFFOLK, MA	14,316	0.42%	270	0.37%	\$22,151,737.25	0.51%	77.19%
NEW HAVEN, CT	4,283	0.13%	147	0.20%	\$20,989,199.37	0.48%	77.67%
SAN DIEGO, CA	22,409	0.66%	483	0.67%	\$20,239,714.47	0.46%	78.13%
GUILFORD, NC	12,700	0.38%	205	0.28%	\$20,088,903.22	0.46%	78.60%
SUFFOLK, NY	66,165	1.96%	237	0.33%	\$17,181,751.21	0.39%	78.99%
MONTGOMERY, PA	7,390	0.22%	230	0.32%	\$16,754,705.55	0.38%	79.37%
HARRIS, TX	8,183	0.24%	243	0.33%	\$16,010,007.41	0.37%	79.74%
PRINCE GEORGE'S, MD	18,895	0.56%	371	0.51%	\$15,670,557.82	0.36%	80.10%
HENNEPIN, MN	17,364	0.51%	441	0.61%	\$15,664,253.04	0.36%	80.46%
HAMILTON, OH	6,650	0.20%	232	0.32%	\$15,335,115.02	0.35%	80.81%
KENT, RI	312	0.01%	14	0.02%	\$15,161,052.61	0.35%	81.16%
NASSAU, NY	12,918	0.38%	296	0.41%	\$14,926,977.10	0.34%	81.50%
OTHER	716,621	21.20%	23,265	32.07%	\$807,568,939.69	18.50%	100.00%
<b>Total</b>	<b>3,380,919</b>	<b>100.00%</b>	<b>72,548</b>	<b>100.00%</b>	<b>\$4,364,760,871.98</b>	<b>100.00%</b>	

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Counties above the line are included in the relevant market area.

<sup>2</sup> Cumulative total of percentage of dollars in market area

**4.6.2 Utilization Analysis**

This section discusses the analysis of the utilization of goods and supplies vendors located in the relevant market areas by the Commonwealth during the study period. This analysis consists of an examination of the dollar amounts associated with goods and supplies payments, by race/ethnicity/gender classifications, between the fiscal years of 1998 and 2002. **Exhibit 4-33** presents the utilization analysis of MBEs in the relevant market areas. As the exhibit shows, about 0.24 percent of the goods and supplies purchases made during the study period were with MBE firms. In dollar terms, nonminority-owned goods and supplies vendors received approximately \$3.3 billion in business from the Commonwealth compared to \$8.0 million in business conducted with MBEs.

The total number of goods and supplies payments made to firms in the relevant market area is shown in **Exhibit 4-34**. MBE vendors received 0.28 percent of these payments. Nonminority women received 32,791 or 1.36 percent of the total goods and supplies payments.

**Exhibits 4-34** and **4-35** show the utilization by the number of payments and the number of goods and supplies firms used during the study period. Our analysis shows that 2.38 million of the 2.42 million in payments went to nonminority firms. Furthermore, 82 of the 45,692 total firms used by the Commonwealth for goods and supplies payments were MBEs.

**EXHIBIT 4-33  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS OF VENDORS IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
1998	\$195,530.42	0.04%	\$261,457.50	0.05%	\$14,587.97	0.00%	\$87,682.70	0.02%	\$559,258.59	0.11%	\$5,456,772.61	1.06%	\$507,539,130.91	98.83%	\$513,555,162.11
1999	\$292,202.05	0.05%	\$162,805.00	0.03%	\$500,610.18	0.08%	\$74,917.58	0.01%	\$1,030,534.81	0.17%	\$6,448,716.85	1.07%	\$594,236,966.79	98.76%	\$601,716,218.45
2000	\$276,747.66	0.04%	\$934,255.00	0.15%	\$2,235,220.16	0.36%	\$40,139.42	0.01%	\$3,486,362.24	0.56%	\$7,068,646.31	1.13%	\$616,168,673.95	98.32%	\$626,723,682.50
2001	\$192,005.16	0.02%	\$63,815.22	0.01%	\$1,224,455.56	0.15%	\$95,701.60	0.01%	\$1,575,977.54	0.20%	\$8,508,399.65	1.06%	\$792,968,890.77	98.74%	\$803,053,267.96
2002	\$373,720.59	0.05%	\$99,068.19	0.01%	\$807,372.29	0.11%	\$65,068.76	0.01%	\$1,345,229.83	0.18%	\$4,824,023.36	0.66%	\$727,631,933.33	99.16%	\$733,801,186.52
<b>Total</b>	<b>\$1,330,205.88</b>	<b>0.04%</b>	<b>\$1,521,400.91</b>	<b>0.05%</b>	<b>\$4,782,246.16</b>	<b>0.15%</b>	<b>\$363,510.06</b>	<b>0.01%</b>	<b>\$7,997,363.01</b>	<b>0.24%</b>	<b>\$32,306,558.78</b>	<b>0.99%</b>	<b>\$3,238,545,595.75</b>	<b>98.77%</b>	<b>\$3,278,849,517.54</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 4-34  
GOODS AND SUPPLIES  
NUMBER OF PAYMENTS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Payments
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	1,282	0.29%	89	0.02%	14	0.00%	61	0.01%	1,446	0.33%	6,941	1.58%	430,552	98.09%	438,939
1999	1,234	0.23%	36	0.01%	233	0.04%	37	0.01%	1,540	0.28%	7,298	1.34%	534,145	98.37%	542,983
2000	1,098	0.22%	17	0.00%	228	0.05%	34	0.01%	1,377	0.27%	6,286	1.25%	493,936	98.47%	501,599
2001	697	0.14%	47	0.01%	204	0.04%	33	0.01%	981	0.20%	5,964	1.22%	482,257	98.58%	489,202
2002	1,261	0.28%	36	0.01%	135	0.03%	15	0.00%	1,447	0.33%	6,302	1.42%	437,056	98.26%	444,805
<b>Total Payments</b>	<b>5,572</b>	<b>0.23%</b>	<b>225</b>	<b>0.01%</b>	<b>814</b>	<b>0.03%</b>	<b>180</b>	<b>0.01%</b>	<b>6,791</b>	<b>0.28%</b>	<b>32,791</b>	<b>1.36%</b>	<b>2,377,946</b>	<b>98.36%</b>	<b>2,417,528</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Payments.

**EXHIBIT 4-35  
GOODS AND SUPPLIES  
NUMBER OF INDIVIDUAL PRIME VENDORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Fiscal Year	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
1998	17	0.09%	2	0.01%	5	0.03%	6	0.03%	30	0.17%	139	0.77%	17,860	99.06%	18,029
1999	18	0.09%	2	0.01%	14	0.07%	3	0.01%	37	0.18%	157	0.75%	20,620	99.07%	20,814
2000	16	0.08%	5	0.03%	10	0.05%	4	0.02%	35	0.18%	158	0.81%	19,343	99.01%	19,536
2001	15	0.08%	8	0.04%	13	0.07%	3	0.02%	39	0.20%	150	0.79%	18,883	99.01%	19,072
2002	14	0.08%	9	0.05%	7	0.04%	4	0.02%	34	0.19%	150	0.82%	18,081	98.99%	18,265
<b>Total Vendors Vendors Over Five Years<sup>2</sup></b>	31	0.07%	12	0.03%	30	0.07%	9	0.02%	82	0.18%	268	0.59%	45,342	99.23%	45,692

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Vendors.

<sup>2</sup> The Total Vendors counts a vendor only once for each year the firm receives work. Since a Vendor could be used in multiple years, the total Vendors for the entire study period may not equal the sum of all years.

The analysis of prime contracting by agency and university is displayed below in **Exhibit 4-36**. Few agencies or universities purchased goods from MBE-owned firms over the study period. The exhibit shows of the 231 agencies listed, only two of them had utilization percentages greater than 10 percent. In fact, 110 agencies and/or universities had 100 percent nonminority utilization.

#### **4.6.3 Availability**

**Exhibit 4-37** shows the availability of goods and supplies vendors. Approximately 0.40 percent of the vendors available to do business with the Commonwealth were owned by MBEs. The majority of the MBE firms were African-owned firms. African American-owned firms represented 0.17 percent of the total vendors, and nonminority woman-owned firms represented 1.05 percent of total vendors.

#### **4.7 Conclusions**

**Exhibits 4-38** through **4-40** provide a summary of the utilization and availability of MBEs by Business Category from fiscal years 1998 to 2002. The availability and utilization are displayed for each of the race/ethnicity/gender categories by business type. **Exhibit 4-38** shows the utilization as a percentage of total market area dollars, **Exhibit 4-39** shows the utilization in terms of actual market area dollars, and **Exhibit 4-40** shows the availability percentages.

For construction contracts, the dollar amounts awarded to MBEs were much less than those of nonminority-owned firms. As noted earlier in this chapter, 0.32 percent of the total dollars awarded for prime construction projects went to MBEs. The utilization of MBE firms as construction subcontractors was 1.5 percent of the total construction contract dollars.

**EXHIBIT 4-36  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Administration	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,574.09	100.00%	\$4,574.09
Advisory Commission Executive Mansion	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$92,863.31	100.00%	\$92,863.31
Attorney General	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,215.78	1.12%	\$1,081,102.53	98.88%	\$1,093,318.31
Auditor Of Public Accounts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,013.10	0.22%	\$1,377,014.87	99.78%	\$1,380,027.97
Augusta Correctional Center	\$4,313.50	0.21%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,313.50	0.21%	\$20,473.46	0.98%	\$2,061,679.07	98.81%	\$2,086,466.03
Bland Correctional Center	\$4,919.40	0.10%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,919.40	0.10%	\$11,442.63	0.23%	\$4,883,002.60	99.67%	\$4,899,364.63
Blue Ridge Community College	\$4,499.02	0.22%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,499.02	0.22%	\$248.80	0.01%	\$2,038,864.38	99.77%	\$2,043,612.20
Brd Of VA Hig Ed Tuit Trust Fd	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$252,696.23	100.00%	\$252,696.23
Brunswick Correctional Center	\$8,741.60	0.35%	\$0.00	0.00%	\$0.00	0.00%	\$2,043.92	0.08%	\$10,785.52	0.43%	\$83,892.51	3.33%	\$2,421,454.76	96.24%	\$2,516,132.79
Buckingham Correctional Center	\$2,443.50	0.09%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,443.50	0.09%	\$46,812.22	1.78%	\$2,582,753.21	98.13%	\$2,632,008.93
CARS 2002	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,264.75	100.00%	\$16,264.75
Catawba Hospital	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,949.34	0.05%	\$3,928,981.58	99.95%	\$3,930,930.92
Central Appropriations	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,516.20	100.00%	\$12,516.20
Central Region Corr Fld Unit	\$28,385.40	1.19%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$28,385.40	1.19%	\$43,291.54	1.82%	\$2,310,856.97	96.99%	\$2,382,533.91
Central State Hospital	\$6,937.59	0.25%	\$280.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$7,217.59	0.26%	\$32,957.63	1.17%	\$2,765,087.40	98.57%	\$2,805,262.62
Central VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$207.05	0.01%	\$2,731,935.26	99.99%	\$2,732,142.31
Central Virginia Training Ctr	\$11,620.93	0.08%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,620.93	0.08%	\$12,688.12	0.09%	\$14,807,862.78	99.84%	\$14,832,171.83
Charitable Gaming Commission	\$328.24	0.15%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$328.24	0.15%	\$8,862.04	4.07%	\$208,725.51	95.78%	\$217,915.79
Chesapeake Bay Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,219.00	100.00%	\$1,219.00
Chesapeake Bay Local Asst Dept	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24.75	0.02%	\$116,206.36	99.98%	\$116,231.11
Chip Oaks Plantation Farm Foundation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$67,109.70	100.00%	\$67,109.70
Christopher Newport University	\$7,321.02	0.05%	\$0.00	0.00%	\$20,011.99	0.13%	\$0.00	0.00%	\$27,333.01	0.17%	\$138,673.11	0.88%	\$15,572,242.21	98.95%	\$15,738,248.33
Circuit Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,463.40	0.02%	\$9,379,557.15	99.98%	\$9,381,020.55
Coffeewood Correctional Center	\$9,748.12	0.32%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,748.12	0.32%	\$81,683.86	2.70%	\$2,932,538.72	96.98%	\$3,023,970.70
Combined District Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,770.60	0.20%	\$2,853,167.76	99.80%	\$2,858,938.36
Comm On VA Alcohol Saf Act Pro	\$3,813.62	1.60%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,813.62	1.60%	\$0.00	0.00%	\$234,077.36	98.40%	\$237,890.98

**EXHIBIT 4-36 (Continued)  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Commerce and Trade	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$578.28	100.00%	\$578.28
Commission On Local Government	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$36,954.09	100.00%	\$36,954.09
Commonwealth Att Serv Council	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$129,920.74	100.00%	\$129,920.74
Compensation Board	\$524.69	0.24%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$524.69	0.24%	\$301.47	0.14%	\$221,663.41	99.63%	\$222,489.57
Comprehensive Services for At-Risk Youth	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$233.50	100.00%	\$233.50
Council Of Information Mgmt	\$0.00	0.00%	\$0.00	0.00%	\$1,513.00	0.16%	\$0.00	0.00%	\$1,513.00	0.16%	\$83.25	0.01%	\$930,336.01	99.83%	\$931,932.26
Council On Human Rights	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$28,535.19	100.00%	\$28,535.19
Court Of Appeals Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,738.09	1.83%	\$575,276.76	98.17%	\$586,014.85
Dabney S. Lancaster Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,434.89	0.23%	\$1,036,854.83	99.77%	\$1,039,289.72
Danville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,051.05	0.23%	\$3,074,590.50	99.77%	\$3,081,641.55
Deep Meadow Correctional Ctr	\$1,065.74	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,065.74	0.03%	\$77,034.70	2.53%	\$2,972,040.66	97.44%	\$3,050,141.10
Deerfield Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,698.60	0.34%	\$4,698.60	0.34%	\$12,555.89	0.92%	\$1,352,801.19	98.74%	\$1,370,055.68
DeJamette Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,841.03	2.07%	\$511,893.40	97.93%	\$522,734.43
Department For The Aging	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$166.87	0.05%	\$318,732.18	99.95%	\$318,899.05
Department Of Accounts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,750.25	1.03%	\$1,134,400.41	98.97%	\$1,146,150.66
Department Of Aviation	\$0.00	0.00%	\$0.00	0.00%	\$6,299.00	0.61%	\$0.00	0.00%	\$6,299.00	0.61%	\$7,268.29	0.70%	\$1,023,073.29	98.69%	\$1,036,640.58
Department Of Business Asst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$660,694.16	100.00%	\$660,694.16
Department Of Capitol Police	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$31,983.41	6.44%	\$464,656.09	93.56%	\$496,639.50
Department Of Corrections	\$0.00	0.00%	\$0.00	0.00%	\$93.75	0.00%	\$0.00	0.00%	\$93.75	0.00%	\$172,404.45	3.45%	\$4,831,757.69	96.55%	\$5,004,255.89
Department Of Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,274.16	0.03%	\$24,972,262.28	99.97%	\$24,978,536.44
Department Of Fire Programs	\$1,223.34	0.16%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,223.34	0.16%	\$157.86	0.02%	\$769,748.52	99.82%	\$771,129.72
Department Of Forestry	\$23,575.00	0.30%	\$1,151.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$24,726.00	0.32%	\$53,958.70	0.70%	\$7,668,850.37	98.98%	\$7,747,535.07
Department Of General Services	\$1,052.50	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,052.50	0.00%	\$1,433,157.79	1.02%	\$139,671,642.55	98.98%	\$141,105,852.84
Department Of Health	\$10,008.85	0.01%	\$1,656.72	0.00%	\$126,800.15	0.12%	\$2,297.56	0.00%	\$140,763.28	0.13%	\$903,440.35	0.85%	\$104,683,519.67	99.01%	\$105,727,723.30
Department Of Juvenile Justice	\$127,299.64	0.61%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$127,299.64	0.61%	\$225,052.38	1.07%	\$20,627,664.51	98.32%	\$20,980,016.53
Department Of Military Affairs	\$390.81	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$390.81	0.00%	\$651,446.79	7.88%	\$7,616,635.35	92.12%	\$8,268,472.95

**EXHIBIT 4-36 (Continued)  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Department Of Motor Vehicles	\$0.00	0.00%	\$0.00	0.00%	\$62,784.00	0.19%	\$0.00	0.00%	\$62,784.00	0.19%	\$250,191.68	0.77%	\$32,146,450.61	99.04%	\$32,459,426.29
Department Of Social Services	\$28,394.60	0.07%	\$7,367.99	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$35,762.59	0.08%	\$72,172.91	0.17%	\$42,919,576.21	99.75%	\$43,027,511.71
Department Of State Police	\$145,598.10	0.22%	\$0.00	0.00%	\$3,489.58	0.01%	\$0.00	0.00%	\$149,087.68	0.22%	\$745,507.58	1.12%	\$65,567,833.52	98.65%	\$66,462,428.78
Department Of Taxation	\$12,537.46	0.31%	\$0.00	0.00%	\$185,492.15	4.55%	\$0.00	0.00%	\$198,029.61	4.86%	\$245,675.86	6.03%	\$3,632,852.55	89.12%	\$4,076,558.02
Department Of The Treasury	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,199.25	0.06%	\$3,572,767.35	99.94%	\$3,574,966.60
Department Of Transportation	\$28,583.51	0.01%	\$880,291.36	0.37%	\$14,884.93	0.01%	\$7,373.25	0.00%	\$931,133.05	0.39%	\$1,622,512.36	0.68%	\$237,759,278.81	98.94%	\$240,312,924.22
Department Of Veterans Affairs	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$302,516.16	100.00%	\$302,516.16
Dept Alcoholic Beverag Control	\$11,423.75	0.05%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,423.75	0.05%	\$1,261,752.64	5.16%	\$23,168,405.75	94.79%	\$24,441,582.14
Dept Conservation & Recreation	\$17,942.24	0.21%	\$0.00	0.00%	\$3,500.00	0.04%	\$0.00	0.00%	\$21,442.24	0.25%	\$255,624.44	2.93%	\$8,447,828.80	96.82%	\$8,724,895.48
Dept F/T Rights Of VA W/Disab	\$0.00	0.00%	\$490.00	0.41%	\$0.00	0.00%	\$0.00	0.00%	\$490.00	0.41%	\$9,201.52	7.69%	\$110,040.01	91.91%	\$119,731.53
Dept Game & Inland Fisheries	\$0.00	0.00%	\$0.00	0.00%	\$90,661.40	0.68%	\$0.00	0.00%	\$90,661.40	0.68%	\$246,193.15	1.86%	\$12,928,562.89	97.46%	\$13,265,417.44
Dept Ment Hlth & Ment Retard	\$0.00	0.00%	\$0.00	0.00%	\$4,538.72	0.10%	\$0.00	0.00%	\$4,538.72	0.10%	\$0.00	0.00%	\$4,654,239.87	99.90%	\$4,658,778.59
Dept Of Agri & Cons Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,250.07	0.38%	\$2,710,818.80	99.62%	\$2,721,068.87
Dept Of Corr Central Activities	\$29,998.00	0.53%	\$0.00	0.00%	\$0.00	0.00%	\$6,000.00	0.11%	\$35,998.00	0.64%	\$167,325.45	2.97%	\$5,424,778.67	96.39%	\$5,628,102.12
Dept Of Correctional Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$42,606.32	0.42%	\$10,161,453.64	99.58%	\$10,204,059.96
Dept Of Criminal Justice Svcs	\$1,105.72	0.01%	\$0.00	0.00%	\$4,442.00	0.04%	\$852.00	0.01%	\$6,399.72	0.06%	\$25,060.42	0.23%	\$11,052,884.44	99.72%	\$11,084,344.58
Dept Of Emergency Services	\$15,716.39	0.74%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,716.39	0.74%	\$14,768.50	0.70%	\$2,093,839.24	98.56%	\$2,124,324.13
Dept Of Emp Rel Counselors	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$765.25	0.80%	\$95,346.02	99.20%	\$96,111.27
Dept Of Environmental Quality	\$3,138.99	0.03%	\$0.00	0.00%	\$377.20	0.00%	\$3,052.74	0.03%	\$6,568.93	0.07%	\$162,938.23	1.76%	\$9,097,748.77	98.17%	\$9,267,255.93
Dept Of Health Professions	\$129.31	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$129.31	0.01%	\$2,042.02	0.15%	\$1,364,549.66	99.84%	\$1,366,720.99
Dept Of Historic Resources	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,852.06	1.37%	\$636,838.62	98.63%	\$645,690.68
Dept Of Housing And Comm Dev	\$3,006.51	0.23%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,006.51	0.23%	\$16,977.14	1.32%	\$1,261,642.96	98.44%	\$1,281,626.61
Dept Of Information Technology	\$10,090.00	0.03%	\$13,715.00	0.04%	\$0.00	0.00%	\$0.00	0.00%	\$23,805.00	0.07%	\$36,881.40	0.11%	\$32,130,134.84	99.81%	\$32,190,821.24
Dept Of Labor And Industry	\$95,909.18	6.15%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$95,909.18	6.15%	\$8,041.88	0.52%	\$1,454,623.62	93.33%	\$1,558,574.68
Dept Of Medical Asst Services	\$0.00	0.00%	\$0.00	0.00%	\$9,675.00	0.17%	\$0.00	0.00%	\$9,675.00	0.17%	\$17,019.71	0.30%	\$5,677,899.75	99.53%	\$5,704,594.46
Dept Of Minority Bus Enterpris	\$484.30	0.30%	\$0.00	0.00%	\$995.75	0.62%	\$0.00	0.00%	\$1,480.05	0.93%	\$0.00	0.00%	\$158,048.39	99.07%	\$159,528.44

**EXHIBIT 4-36 (Continued)  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Dept Of Personnel And Training	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$125.00	0.01%	\$1,514,525.34	99.99%	\$1,514,650.34
Dept Of Planning And Budget	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$135.50	0.05%	\$283,581.39	99.95%	\$283,716.89
Dept Of Professional & Occ Reg	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,623.63	0.20%	\$1,800,794.24	99.80%	\$1,804,417.87
Dept Of Rail & Public Trans	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,149,529.36	100.00%	\$18,149,529.36
Dept Of Rehabilitative Service	\$347.70	0.00%	\$67,369.00	0.52%	\$36,618.89	0.28%	\$10,819.00	0.08%	\$115,154.59	0.90%	\$68,653.87	0.53%	\$12,678,965.42	98.57%	\$12,862,773.88
Dept Of The St Internal Audit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$58,987.95	100.00%	\$58,987.95
Dept. Mines, Minerals & Energy	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,071,707.33	100.00%	\$4,071,707.33
Dillwyn Correctional Center	\$64.35	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$64.35	0.00%	\$42,484.90	2.47%	\$1,676,556.50	97.52%	\$1,719,105.75
Div Of Community Corrections	\$129.24	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,473.14	0.11%	\$8,602.38	0.11%	\$169,100.52	2.17%	\$7,631,467.82	97.72%	\$7,809,170.72
Div Of Legislative Auto Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$612.08	0.06%	\$1,047,902.85	99.94%	\$1,048,514.93
Div Of Legislative Services	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$50.52	0.01%	\$514,842.52	99.99%	\$514,893.04
Division Of Debt Collection	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$522.25	2.52%	\$20,183.98	97.48%	\$20,706.23
Division Of Institutions	\$129.24	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$129.24	0.00%	\$150,276.40	0.81%	\$18,425,851.92	99.19%	\$18,576,257.56
Eastern Region Corr Fld Unit	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,209.22	3.40%	\$34,404.85	96.60%	\$35,614.07
Eastern Shore Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,110.28	1.39%	\$644,155.80	98.61%	\$653,266.08
Eastern State Hospital	\$4,054.20	0.02%	\$0.00	0.00%	\$22,189.60	0.11%	\$0.00	0.00%	\$26,243.80	0.13%	\$76,519.76	0.39%	\$19,699,779.35	99.48%	\$19,802,542.91
Education	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$876.66	100.00%	\$876.66
Employee Rel & Trg Div	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$173,240.78	10.88%	\$1,419,481.92	89.12%	\$1,592,722.70
Fluvanna Women's Corr Ctr	\$384.03	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$384.03	0.01%	\$170,414.83	6.54%	\$2,436,149.84	93.45%	\$2,606,948.70
Frontier Cultural Museum Of VA	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,820.00	0.39%	\$469,821.32	99.61%	\$471,641.32
General District Courts	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$164,392.96	1.90%	\$8,490,102.29	98.10%	\$8,654,495.25
George Mason University	\$14,916.62	0.03%	\$81,490.85	0.14%	\$45,520.40	0.08%	\$31,513.03	0.05%	\$173,440.90	0.30%	\$268,390.06	0.47%	\$57,037,093.15	99.23%	\$57,478,924.11
Germanna Community College	\$11,696.40	0.61%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$11,696.40	0.61%	\$4,928.91	0.26%	\$1,905,024.59	99.13%	\$1,921,649.90
Gov Employment & Training Dept	\$1,202.66	0.13%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,202.66	0.13%	\$126.18	0.01%	\$908,188.19	99.85%	\$909,517.03
Greensville Correctional Ctr	\$16,817.42	0.28%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$16,817.42	0.28%	\$28,629.00	0.47%	\$5,993,580.90	99.25%	\$6,039,027.32
Gunston Hall Plantation	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$103,139.14	100.00%	\$103,139.14

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GOODS AND SUPPLIES  
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Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Haynesville Correctional Ctr	\$3,884.40	0.14%	\$0.00	0.00%	\$0.00	0.00%	\$8,518.00	0.31%	\$12,402.40	0.45%	\$46,837.82	1.68%	\$2,722,260.25	97.87%	\$2,781,500.47
Health and Human Resources	\$3,846.93	5.99%	\$0.00	0.00%	\$2,387.83	3.72%	\$0.00	0.00%	\$6,234.76	9.71%	\$241.25	0.38%	\$57,745.65	89.92%	\$64,221.66
Hiram W. Davis Medical Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,998.96	0.01%	\$42,689,831.27	99.99%	\$42,694,830.23
House Of Delegates	\$0.00	0.00%	\$0.00	0.00%	\$249.00	0.01%	\$0.00	0.00%	\$249.00	0.01%	\$4,465.50	0.15%	\$3,016,163.69	99.84%	\$3,020,878.19
Independent	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,655.06	100.00%	\$6,655.06
Indian Creek Corr Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$111,605.60	4.52%	\$111,605.60	4.52%	\$85,218.12	3.45%	\$2,270,066.32	92.02%	\$2,466,890.04
Interstate Organization Contribution	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$181.94	100.00%	\$181.94
J. Sargeant Reynolds Comm Coll	\$2,946.51	0.07%	\$0.00	0.00%	\$931.22	0.02%	\$0.00	0.00%	\$3,877.73	0.10%	\$15,383.04	0.39%	\$3,923,275.49	99.51%	\$3,942,536.26
James River Correctional Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,452.63	0.07%	\$8,896,206.46	99.93%	\$8,902,659.09
Jamestown-Yorktown Foundation	\$37,664.00	1.24%	\$66,923.60	2.21%	\$0.00	0.00%	\$0.00	0.00%	\$104,587.60	3.46%	\$4,748.72	0.16%	\$2,917,290.27	96.39%	\$3,026,626.59
John Tyler Community College	\$0.00	0.00%	\$0.00	0.00%	\$10,431.20	0.15%	\$0.00	0.00%	\$10,431.20	0.15%	\$2,410.22	0.03%	\$7,131,920.50	99.82%	\$7,144,761.92
Joint Comm On Health Care	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$31,934.23	100.00%	\$31,934.23
Joint Comm on Techn & Science	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,195.55	100.00%	\$15,195.55
Joint Leg Audit & Review Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$609.75	0.34%	\$179,470.10	99.66%	\$180,079.85
Judicial Inquiry And Rev Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$27,490.67	100.00%	\$27,490.67
Juv And Dom Relations Dist Crt	\$5,538.41	0.14%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,538.41	0.14%	\$99,821.86	2.52%	\$3,851,771.99	97.34%	\$3,957,132.26
Keen Mountain Correctional Ctr	\$1,131.60	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,131.60	0.06%	\$68,817.77	3.42%	\$1,939,953.70	96.52%	\$2,009,903.07
Legislative	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$65.57	100.00%	\$65.57
Library Of Virginia	\$6,955.95	0.15%	\$0.00	0.00%	\$25,726.00	0.57%	\$0.00	0.00%	\$32,681.95	0.72%	\$307,210.04	6.78%	\$4,189,400.00	92.50%	\$4,529,291.99
Lieutenant Governor	\$275.47	1.11%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$275.47	1.11%	\$68.25	0.28%	\$24,455.79	98.61%	\$24,799.51
Longwood College	\$4,112.50	0.04%	\$762.00	0.01%	\$6,924.00	0.06%	\$0.00	0.00%	\$11,798.50	0.11%	\$5,380.35	0.05%	\$11,170,835.48	99.85%	\$11,188,014.33
Lord Fairfax Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,475.00	0.16%	\$3,475.00	0.16%	\$18,472.43	0.87%	\$2,108,956.31	98.97%	\$2,130,903.74
Lunenburg Correctional Center	\$10,003.96	0.46%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,003.96	0.46%	\$34,436.23	1.60%	\$2,109,290.54	97.94%	\$2,153,730.73
Magistrates	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,838.09	0.87%	\$1,125,731.27	99.13%	\$1,135,569.36
Marine Resources Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$135,179.79	1.67%	\$7,972,710.26	98.33%	\$8,107,890.05
Marion Correctional Center	\$725.40	0.08%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$725.40	0.08%	\$26,301.94	2.96%	\$860,858.27	96.96%	\$887,885.61

**EXHIBIT 4-36 (Continued)  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Mary Washington College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$24,267.44	0.22%	\$10,864,954.98	99.78%	\$10,889,222.42
Mecklenburg Correctional Ctr	\$18,868.10	0.98%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,868.10	0.98%	\$45,891.03	2.40%	\$1,851,075.80	96.62%	\$1,915,834.93
Melchers' Monroe Memorials	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$105,406.15	100.00%	\$105,406.15
Motor Vehicle Dealer Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$59,000.96	100.00%	\$59,000.96
Mountain Empire Community Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$551.25	0.03%	\$2,127,015.98	99.97%	\$2,127,567.23
New River Community College	\$3,806.95	0.12%	\$0.00	0.00%	\$17,077.50	0.55%	\$0.00	0.00%	\$20,884.45	0.67%	\$29.50	0.00%	\$3,096,091.86	99.33%	\$3,117,005.81
No VA Mental Health Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$9,477.67	0.19%	\$9,477.67	0.19%	\$24,932.10	0.50%	\$4,947,889.38	99.31%	\$4,982,299.15
No VA Trn Ctr For The Ment Ret	\$0.00	0.00%	\$0.00	0.00%	\$25,000.00	0.42%	\$0.00	0.00%	\$25,000.00	0.42%	\$784.07	0.01%	\$5,878,762.08	99.56%	\$5,904,546.15
Norfolk State University	\$350.00	0.00%	\$6,491.60	0.04%	\$43,458.15	0.27%	\$0.00	0.00%	\$50,299.75	0.31%	\$238,780.86	1.47%	\$15,936,134.83	98.22%	\$16,225,215.44
Northern Region Corr Fld Units	\$7,018.90	0.25%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,018.90	0.25%	\$76,152.19	2.71%	\$2,725,136.80	97.04%	\$2,808,307.89
Northern VA Community College	\$11,071.00	0.05%	\$47,339.77	0.23%	\$48,748.31	0.24%	\$68,761.64	0.33%	\$175,920.72	0.85%	\$61,199.81	0.30%	\$20,403,946.66	98.85%	\$20,641,067.19
Nottoway Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$151,975.60	4.27%	\$3,406,196.27	95.73%	\$3,558,171.87
Office Of The Governor	\$14,353.46	1.39%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,353.46	1.39%	\$5,166.70	0.50%	\$1,015,161.62	98.11%	\$1,034,681.78
Old Dominion University	\$6,150.00	0.04%	\$0.00	0.00%	\$1,751.00	0.01%	\$0.00	0.00%	\$7,901.00	0.05%	\$236,265.01	1.45%	\$16,054,237.98	98.50%	\$16,298,403.99
Patrick Henry Comm Coll At Mar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,061.59	0.04%	\$2,484,027.58	99.96%	\$2,485,089.17
Paul D. Camp Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$12,419.47	0.95%	\$1,301,501.33	99.05%	\$1,313,920.80
Piedmont Geriatric Hospital	\$8,998.76	0.25%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,998.76	0.25%	\$899.10	0.02%	\$3,659,670.72	99.73%	\$3,669,568.58
Piedmont VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$18,974.75	1.30%	\$1,441,074.44	98.70%	\$1,460,049.19
Powhatan Correctional Center	\$14,729.69	0.25%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,729.69	0.25%	\$101,573.80	1.71%	\$5,836,763.43	98.05%	\$5,953,066.92
Powhatan Recpt And Class Ctr	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$28,539.20	4.51%	\$603,918.83	95.49%	\$632,458.03
Public Defender Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,982.25	0.23%	\$860,517.96	99.77%	\$862,500.21
RADFORD UNIVERSITY	\$120,284.28	0.50%	\$0.00	0.00%	\$980.00	0.00%	\$0.00	0.00%	\$121,264.28	0.50%	\$58,983.80	0.24%	\$24,012,649.45	99.25%	\$24,192,897.53
Rappahannock Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,481.37	0.44%	\$1,235,434.23	99.56%	\$1,240,915.60
Red Onion Correctional Center	\$370.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$370.00	0.01%	\$225,937.32	5.16%	\$4,155,623.55	94.84%	\$4,381,930.87
Richard Bland College	\$5,937.00	0.27%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,937.00	0.27%	\$8,337.90	0.38%	\$2,191,022.53	99.35%	\$2,205,297.43
Secretary Of Administration	\$23,252.48	5.56%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$23,252.48	5.56%	\$3,993.50	0.95%	\$391,239.26	93.49%	\$418,485.24

**EXHIBIT 4-36 (Continued)  
GOODS AND SUPPLIES  
UTILIZATION ANALYSIS BY DEPARTMENT  
IN THE RELEVANT MARKET AREA  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Secretary Of Commerce & Trade	\$939.87	3.34%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$939.87	3.34%	\$235.75	0.84%	\$26,924.24	95.82%	\$28,099.86
Secretary Of Education	\$764.54	2.13%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$764.54	2.13%	\$273.00	0.76%	\$34,938.40	97.12%	\$35,975.94
Secretary Of Finance	\$262.23	1.04%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$262.23	1.04%	\$0.00	0.00%	\$25,047.54	98.96%	\$25,309.77
Secretary Of Natural Resources	\$270.53	1.94%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$270.53	1.94%	\$156.50	1.12%	\$13,491.64	96.93%	\$13,918.67
Secretary Of Public Safety	\$3,342.83	9.21%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,342.83	9.21%	\$407.45	1.12%	\$32,560.75	89.67%	\$36,311.03
Secretary of Technology	\$1,696.70	3.75%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,696.70	3.75%	\$0.00	0.00%	\$43,573.76	96.25%	\$45,270.46
Secretary Of The Commonwealth	\$6,568.79	2.47%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,568.79	2.47%	\$272.00	0.10%	\$259,127.45	97.43%	\$265,968.24
Secretary Of Transportation	\$641.68	6.26%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$641.68	6.26%	\$68.25	0.67%	\$9,543.23	93.08%	\$10,253.16
Senate	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$442.50	0.02%	\$2,903,144.08	99.98%	\$2,903,586.58
Southampton Correctional Ctr	\$1,342.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$1,780.40	0.04%	\$3,122.40	0.06%	\$111,261.16	2.22%	\$4,887,628.54	97.71%	\$5,002,012.10
Southampton Intensive Treat Ct	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$10,210.20	100.00%	\$10,210.20
Southampton Reception & Class	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$4,485.08	1.04%	\$4,485.08	1.04%	\$18,909.65	4.40%	\$406,540.62	94.56%	\$429,935.35
Southeastern VA Tr Ctr For Men	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$7,947.15	0.25%	\$3,182,193.73	99.75%	\$3,190,140.88
Southern VA Mental Health Inst	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,562.00	0.14%	\$1,118,793.77	99.86%	\$1,120,355.77
Southside VA Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,547.38	0.11%	\$2,313,948.62	99.89%	\$2,316,496.00
Southside VA Training Center	\$2,394.08	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$1,974.02	0.02%	\$4,368.10	0.04%	\$54,834.62	0.49%	\$11,032,533.89	99.47%	\$11,091,736.61
Southwest Virginia Comm Coll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,139.57	0.04%	\$3,153,635.99	99.96%	\$3,154,775.56
Southwestern VA Ment Hlth Inst	\$6,363.00	0.06%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,363.00	0.06%	\$780.39	0.01%	\$10,889,989.44	99.93%	\$10,897,132.83
Southwestern VA Training Ctr	\$0.00	0.00%	\$194.26	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$194.26	0.01%	\$2,535.73	0.11%	\$2,250,251.07	99.88%	\$2,252,981.06
St Council Of Higher Education	\$0.00	0.00%	\$0.00	0.00%	\$14,082.57	4.00%	\$0.00	0.00%	\$14,082.57	4.00%	\$0.00	0.00%	\$337,684.75	96.00%	\$351,767.32
St. Brides Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$44,860.20	1.84%	\$44,860.20	1.84%	\$93,027.04	3.81%	\$2,304,011.31	94.35%	\$2,441,898.55
State Board Of Bar Examiners	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$519.25	0.96%	\$53,617.74	99.04%	\$54,136.99
State Board Of Elections	\$22.50	0.00%	\$0.00	0.00%	\$782,978.70	60.41%	\$177.00	0.01%	\$783,178.20	60.43%	\$1,399.00	0.11%	\$511,532.97	39.47%	\$1,296,110.17
State Corporation Commission	\$81.66	0.00%	\$0.00	0.00%	\$12,602.00	0.12%	\$12,099.81	0.12%	\$24,783.47	0.24%	\$144,443.62	1.42%	\$10,023,071.04	98.34%	\$10,192,298.13
State Lottery Department	\$1,595.00	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,595.00	0.02%	\$96,162.46	0.93%	\$10,203,401.49	99.05%	\$10,301,158.95
State Milk Commission	\$0.00	0.00%	\$0.00	0.00%	\$277.00	0.56%	\$0.00	0.00%	\$277.00	0.56%	\$58.00	0.12%	\$49,260.25	99.32%	\$49,595.25

**EXHIBIT 4-36 (Continued)**  
**GOODS AND SUPPLIES**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
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**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Staunton Correctional Center	\$3,380.00	0.24%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,380.00	0.24%	\$25,265.24	1.79%	\$1,382,018.48	97.97%	\$1,410,663.72
Supreme Court Of Virginia	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$734.14	0.02%	\$3,677,463.47	99.98%	\$3,678,197.61
Sussex 1 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$174.50	0.01%	\$174.50	0.01%	\$128,318.71	5.89%	\$2,051,056.95	94.10%	\$2,179,550.16
Sussex 2 Correctional Center	\$0.00	0.00%	\$0.00	0.00%	\$6,590.05	0.16%	\$0.00	0.00%	\$6,590.05	0.16%	\$191,549.67	4.60%	\$3,968,280.28	95.24%	\$4,166,420.00
Technology	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$579.17	100.00%	\$579.17
The Science Museum Of Virginia	\$76.66	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$76.66	0.00%	\$10,238.65	0.64%	\$1,592,184.38	99.36%	\$1,602,499.69
Thomas Nelson Comm College	\$577.00	0.01%	\$0.00	0.00%	\$1,567.40	0.04%	\$9,600.00	0.22%	\$11,744.40	0.27%	\$33,693.39	0.78%	\$4,264,600.32	98.95%	\$4,310,038.11
Tidewater Community College	\$5,223.58	0.05%	\$2,726.00	0.03%	\$0.00	0.00%	\$0.00	0.00%	\$7,949.58	0.08%	\$53,339.35	0.54%	\$9,793,625.17	99.38%	\$9,854,914.10
Treasury Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$659.93	100.00%	\$659.93
Unknown	\$8,085.27	0.54%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,085.27	0.54%	\$6,813.48	0.46%	\$1,480,772.82	99.00%	\$1,495,671.57
UVA	\$22,264.18	0.00%	\$342,787.50	0.03%	\$355,230.00	0.03%	\$1,011.70	0.00%	\$721,293.38	0.06%	\$14,631,259.64	1.13%	\$1,275,811,826.16	98.81%	\$1,291,164,379.18
VA Bd For People With Disabil	\$1,049.71	1.39%	\$0.00	0.00%	\$3,014.00	3.99%	\$0.00	0.00%	\$4,063.71	5.38%	\$0.00	0.00%	\$71,488.98	94.62%	\$75,552.69
Va Community Coll Sys- Utility	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,363,518.76	100.00%	\$1,363,518.76
VA Crim Sentencing Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$27.84	0.01%	\$352,101.97	99.99%	\$352,129.81
VA Dep F/T Deaf & Hard Of Hear	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,443.20	0.33%	\$733,117.51	99.67%	\$735,560.71
VA Dept F/T Visual Handicapped	\$0.00	0.00%	\$364.26	0.00%	\$5,073.00	0.05%	\$864.00	0.01%	\$6,301.26	0.06%	\$88,480.59	0.86%	\$10,173,773.68	99.08%	\$10,268,555.53
VA Highlands Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,318.88	0.16%	\$819,361.01	99.84%	\$820,679.89
VA Housing Study Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$3,873.88	100.00%	\$3,873.88
VA Museum Of Natural History	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$194.36	0.08%	\$242,102.01	99.92%	\$242,296.37
VA Rehab Center For The Blind	\$5,382.44	2.16%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,382.44	2.16%	\$1,713.05	0.69%	\$242,061.34	97.15%	\$249,156.83
VA Sch For Deaf & Bld-Hampton	\$260.00	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$260.00	0.01%	\$48,767.49	2.16%	\$2,213,070.00	97.83%	\$2,262,097.49
VA Sch For Deaf & Blind-Staun	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,770.70	0.17%	\$1,584,998.46	99.83%	\$1,587,769.16
VA Veterans' Care Ctr Bd Trust	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,102.50	0.76%	\$144,427.65	99.24%	\$145,530.15
VA Western Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$6,933.00	0.16%	\$6,933.00	0.16%	\$14,006.29	0.33%	\$4,216,172.78	99.51%	\$4,237,112.07
VA Workers' Compensation Comm	\$0.00	0.00%	\$0.00	0.00%	\$633.00	0.03%	\$0.00	0.00%	\$633.00	0.03%	\$7,443.30	0.38%	\$1,976,152.22	99.59%	\$1,984,228.52
VCU	\$156,048.14	0.13%	\$0.00	0.00%	\$2,628,999.60	2.26%	\$0.00	0.00%	\$2,785,047.74	2.39%	\$1,597,503.63	1.37%	\$112,037,057.91	96.24%	\$116,419,609.28

**EXHIBIT 4-36 (Continued)**  
**GOODS AND SUPPLIES**  
**UTILIZATION ANALYSIS BY DEPARTMENT**  
**IN THE RELEVANT MARKET AREA**  
**DOLLARS AND PERCENTAGE OF TOTAL DOLLARS AWARDED**  
**BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**  
**FISCAL YEARS 1998 THROUGH 2002**

Agency Name	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
Virginia Code Commission	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$835,004.41	100.00%	\$835,004.41
Virginia Comm For The Arts	\$14,954.86	41.40%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$14,954.86	41.40%	\$24.75	0.07%	\$21,143.05	58.53%	\$36,122.66
Virginia Commission On Youth	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$19,836.75	100.00%	\$19,836.75
Virginia Community College Sys	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$1,402.92	0.01%	\$12,276,243.87	99.99%	\$12,277,646.79
Virginia Corr Center For Women	\$532.80	0.02%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$532.80	0.02%	\$64,154.86	2.94%	\$2,114,113.04	97.03%	\$2,178,800.70
Virginia Corr Enterprises	\$135.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$135.00	0.00%	\$409,912.32	0.73%	\$55,841,750.19	99.27%	\$56,251,797.51
Virginia Employment Commission	\$610.00	0.00%	\$0.00	0.00%	\$2,690.00	0.02%	\$0.00	0.00%	\$3,300.00	0.02%	\$29,268.25	0.19%	\$15,135,253.47	99.79%	\$15,167,821.72
Virginia Liaison Office	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$8,388.61	100.00%	\$8,388.61
Virginia Military Institute	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$20,350.09	0.20%	\$10,113,989.51	99.80%	\$10,134,339.60
Virginia Museum Of Fine Arts	\$15,517.58	0.67%	\$0.00	0.00%	\$0.00	0.00%	\$189.00	0.01%	\$15,706.58	0.68%	\$2,006.96	0.09%	\$2,291,026.72	99.23%	\$2,308,740.26
Virginia Parole Board	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$63,431.78	100.00%	\$63,431.78
Virginia Port Authority	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$940.63	0.02%	\$5,952,089.55	99.98%	\$5,953,030.18
Virginia Racing Commission	\$2,462.69	0.71%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,462.69	0.71%	\$28,757.55	8.32%	\$314,296.57	90.96%	\$345,516.81
Virginia Retirement System	\$0.00	0.00%	\$0.00	0.00%	\$21,752.46	0.70%	\$0.00	0.00%	\$21,752.46	0.70%	\$68.00	0.00%	\$3,065,013.72	99.29%	\$3,086,834.18
Virginia State Bar	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$440.75	0.07%	\$668,698.76	99.93%	\$669,139.51
Virginia State Crime Comm	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$65,741.27	100.00%	\$65,741.27
Virginia State University	\$18,656.09	0.10%	\$0.00	0.00%	\$71,952.00	0.37%	\$0.00	0.00%	\$90,608.09	0.47%	\$174,646.90	0.90%	\$19,213,968.74	98.64%	\$19,479,223.73
VIRGINIA TECH	\$3,418.44	0.00%	\$0.00	0.00%	\$51,252.66	0.02%	\$400.20	0.00%	\$55,071.30	0.03%	\$769,005.88	0.37%	\$207,933,630.05	99.61%	\$208,757,707.23
Wallen's Ridge Corr Center	\$383.20	0.01%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$383.20	0.01%	\$227,239.77	5.52%	\$3,890,078.07	94.47%	\$4,117,701.04
Western Region Corr Fld Units	\$5,475.65	0.21%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$5,475.65	0.21%	\$37,758.12	1.42%	\$2,608,556.00	98.37%	\$2,651,789.77
Western State Hospital	\$15,139.00	0.13%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$15,139.00	0.13%	\$61,914.40	0.52%	\$11,814,115.73	99.35%	\$11,891,169.13
William & Mary	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$98,520.40	0.32%	\$30,558,083.83	99.68%	\$30,656,604.23
William & Mary VIMS	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$23,852.07	0.33%	\$7,272,144.12	99.67%	\$7,295,996.19
Woodrow Wilson Rehab Center	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$73,984.17	1.02%	\$7,153,512.04	98.98%	\$7,227,496.21
Wytheville Community College	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$2,572.95	0.16%	\$1,560,988.85	99.84%	\$1,563,561.80
<b>Total</b>	<b>\$1,330,205.88</b>	<b>0.04%</b>	<b>\$1,521,400.91</b>	<b>0.05%</b>	<b>\$4,782,246.16</b>	<b>0.15%</b>	<b>\$363,510.06</b>	<b>0.01%</b>	<b>\$7,997,363.01</b>	<b>0.24%</b>	<b>\$32,306,558.78</b>	<b>0.99%</b>	<b>\$3,238,545,595.75</b>	<b>98.77%</b>	<b>\$3,278,849,517.54</b>

Source: Commonwealth provided and MGT developed contract and vendor databases from fiscal years 1998 to 2002.

<sup>1</sup> Percentage of Total Dollars Awarded.

<sup>2</sup> The Total Dollars Awarded is the actual amount given to prime contractors.

**EXHIBIT 4-37  
GOODS AND SUPPLIES  
AVAILABILITY OF PRIME VENDORS  
BY RACE/ETHNICITY/GENDER CLASSIFICATIONS  
FISCAL YEARS 1998 THROUGH 2002**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	89	0.17%	30	0.06%	69	0.13%	16	0.03%	204	0.40%	539	1.05%	50,467	98.55%	51,210

Source: MGT's master vendor database.

<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**EXHIBIT 4-38  
SUMMARY OF UTILIZATION PERCENTAGE OF DOLLARS  
MBE AND NON-MBE FIRMS  
BY BUSINESS CATEGORY  
STUDY YEARS 1998 THROUGH 2002**

<b>Business Category by M/WBE Classification</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
Construction Prime Contractors	0.03%	0.29%	0.00%	0.00%	1.17%	98.51%
Construction Sub Contractors	0.22%	1.21%	0.03%	0.00%	1.07%	97.48%
A & E Prime Consultants	0.01%	0.01%	0.06%	0.00%	0.45%	99.48%
Professional Services Prime Consultants	0.30%	0.00%	0.28%	0.00%	0.12%	99.30%
Other Services Vendors	0.48%	0.25%	0.13%	0.00%	1.29%	97.84%
Goods & Supplies Vendors	0.04%	0.05%	0.15%	0.01%	0.99%	98.77%

Source: Chapter 4.0, Analysis Results

**EXHIBIT 4-39  
SUMMARY OF UTILIZATION DOLLARS  
MBE AND NON-MBE FIRMS  
BY BUSINESS CATEGORY  
STUDY YEARS 1998 THROUGH 2002**

<b>Business Category by M/WBE Classification</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
Construction Prime Contractors	\$355,466.00	\$3,114,500.00	\$0.00	\$0.00	\$12,460,020.00	\$1,052,185,040.00
Construction Sub Contractors	\$167,998.00	\$923,406.45	\$21,321.00	\$0.00	\$818,053.57	\$74,572,568.82
A & E Prime Consultants	\$55,414.48	\$60,953.51	\$536,004.51	\$0.00	\$4,075,190.02	\$904,348,564.20
Professional Services Prime Consultants	\$5,598,212.65	\$61,689.12	\$5,190,912.03	\$3,505.00	\$2,291,400.64	\$1,854,432,282.55
Other Services Vendors	\$8,221,621.84	\$4,371,299.55	\$2,279,306.95	\$14,320.26	\$22,323,424.90	\$1,689,141,248.08
Goods & Supplies Vendors	\$1,330,205.88	\$1,521,400.91	\$4,782,246.16	\$363,510.06	\$32,306,558.78	\$3,238,545,595.75

Source: Chapter 4.0, Analysis Results

**EXHIBIT 4-40  
SUMMARY OF AVAILABILITY  
MBE AND NON-MBE VENDORS  
BY BUSINESS CATEGORY  
STUDY YEARS 1998 THROUGH 2002**

<b>Business Category by M/WBE Classification</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
Construction Prime Contractors	1.07%	0.26%	0.28%	0.10%	2.70%	95.60%
Construction Sub Contractors	5.03%	3.73%	2.02%	0.82%	5.95%	82.46%
A & E Prime Consultants	0.98%	0.64%	2.01%	0.21%	4.30%	91.85%
Professional Services Prime Consultants	0.33%	0.12%	0.39%	0.03%	1.54%	97.60%
Other Services Vendors	0.27%	0.06%	0.09%	0.02%	1.07%	98.49%
Goods & Supplies Vendors	0.17%	0.06%	0.13%	0.03%	1.05%	98.55%

Source: Chapter 4.0, Analysis Results

Architecture and engineering payments were awarded mostly to nonminority firms. Less than 1 percent of the prime payment dollar amount was awarded to MBEs. However, MBEs represented 4 percent of the available vendors to provide architecture and engineering services.

Professional services had similar utilization. Approximately 0.6 percent of the payment dollar amount was awarded to MBEs. About 0.87 percent of the available vendors to provide professional services were MBEs.

MBEs were as successful as other services and goods and supplies vendors relative to the availability of firms in those respective business categories. For other services, MBEs were awarded 0.86 percent of the procurement dollars while representing 0.44 percent of the available vendors. In the goods and supplies business category, MBEs consist of about 0.40 percent of the available vendors but were awarded 0.24 percent of the total dollars in this category.

The utilization and availability data presented in these exhibits are further analyzed in Chapter 5.0 of this report.

## **5.0 DISPARITY ANALYSIS**

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## **5.0 DISPARITY ANALYSIS**

This chapter examines the issue of disparity within each business category of procurement. Disparity, in this context, is the analysis of the differences between the utilization of minority business enterprises (MBEs) and the availability of those firms. Accordingly, MGT used disparity indices to examine whether MBEs received a proportional share of dollars based on the availability of MBEs in the relevant market area.

This chapter consists of three sections:

- Section 5.1 describes the methodology used by MGT to test for the presence or absence of disparity in each of the business categories. The development and use of the disparity indices as well as corresponding t-tests are included in this section.
- Section 5.2 applies the disparity indices and t-tests to the business categories and determines the presence or absence of disparity in the Commonwealth of Virginia procurement activity.
- Section 5.3 provides the multivariate regression analysis.

### **5.1 Methodology**

MGT used the availability and utilization information presented in Chapter 4.0 of this report as the basis to determine if MBEs received a proportional share of contract awards and other procurements by the Commonwealth of Virginia. This determination is made primarily through the disparity index calculation that compares the availability of firms with the utilization of those firms. The disparity index also provides a value that can be given a commonly accepted substantive interpretation.

The underlying assumption of this approach is that, absent discrimination, the proportion of dollars received by a particular MBE group should approximate that group's proportion of the relevant population of vendors. To determine if disparity exists for

MBEs or non-MBEs within a specific business category, MGT compared the utilization of each group to its respective availability within each of the relevant market areas.

**5.1.1 Disparity Index**

The disparity index is used to measure the difference between utilization and availability. Several post-*Croson* cases, most notably *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, support the use of disparity indices for determining disparity within the marketplace.<sup>1</sup>

Although a variety of similar indices could be utilized, the index used must be easily calculable, readily interpreted, and universally comparable. MGT pioneered the use of disparity indices as a method of determining the degree of disparity between utilization and availability.

For this study, the ratio of the percentage of utilization to the percentage of availability multiplied by 100 serves as our measure of choice, as shown in the formula:

$$(1) \text{ Disparity Index} = \frac{\%U_{m_1p_1}}{\%A_{m_1p_1}} \times 100$$

Where:  $U_{m_1p_1}$  = utilization of MBE<sub>1</sub> for procurement<sub>1</sub>  
 $A_{m_1p_1}$  = availability of MBE<sub>1</sub> for procurement<sub>1</sub>

Due to the mathematical properties involved in the calculations, a disparity index value of 0.00 indicates zero utilization. An index of 100 indicates parity between utilization and availability. Firms within a business category are considered underutilized if the disparity indices are less than 100, and overutilized if the indices are above 100.

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<sup>1</sup> *Contractors Association of Eastern Pennsylvania, Inc. v City of Philadelphia*, 91 F 3d at 603.

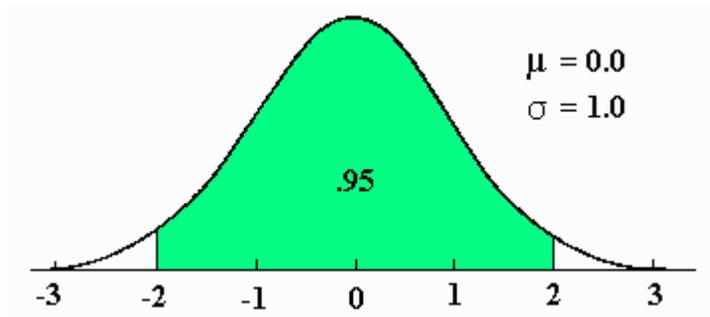
There is no standardized measure to evaluate levels of underutilization or overutilization within a procurement context. But, a tool is needed to determine which occurrences—particularly when there is underutilization—indicate the presence of factors other than those occurring during the normal course of business. Our rule of thumb is that a disparity index of less than 80 indicates that the level of disparity warrants further investigation. The disparity index threshold of 80 is based on the Equal Employment Opportunity Commission’s (EEOC) adopted “80 percent rule” in the *Uniform Guidelines on Employee Selection Procedures*. In the context of employment discrimination, a disparity ratio below 80 indicates a substantial level of disparity demonstrating adverse or disparate impact. The Supreme Court accepted the use of the 80 percent rule in *Connecticut v. Teal (Teal)*, 457 U.S. 440 (1982). In *Teal* and other affirmative action cases, the terms “adverse impact,” “disparate impact,” and “discriminatory impact” are used interchangeably. Thus, MGT’s designation of disparity is founded on a Supreme Court decision.

### **5.1.2 T-Test**

In addition to the disparity index, MGT conducted t-tests to determine if statistically significant differences existed between utilization and availability in terms of contract or payment dollars or number of firms. The t-test determines if the relationship between availability and utilization (suggested by the disparity index value) supports a conclusion of disparity. In other words, the results of the t-test allow us to conclude if the relationships between availability and utilization are strong enough to state, with a high degree of confidence, that the results found in the disparity index represent real disparity.

The t value indicates whether or not the results found in the disparity index are what one would ordinarily expect to find given the attributes of the sampling distribution. Given

the large sample sizes involved, the t distribution approaches a normal distribution. Because of the statistical properties of the normal distribution, 95 percent of all cases can be found within two standard deviations of the mean. Since t values can be positive or negative, it is necessary to determine the critical region of the distribution on each end of the distribution.



Based on the properties of the normal distribution, the critical values are  $+1.96$  and  $-1.96$  (the calculated values  $\pm$  two standard deviations of the mean). Any t value found between these critical t values is not significant enough for us to conclude that there is disparity. For a conclusion of "statistical significance" to be reached, the t value must be either greater than  $+1.96$  or less than  $-1.96$ . When such a t value is present, we can say with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present.

The previous discussion means that any t value less than or equal to  $-1.96$  indicates that firms in a business category are underutilized in terms of contract dollars or contracts awarded. The relationship is said to be statistically significant. In other words, the fact that the t value is so extreme means that we can be sufficiently confident that the underutilization is severe enough to be considered a real phenomenon and not just a statistical artifact of the sampling distribution. In some cases, disparity is indicated by the disparity index but cannot be tested with a t-test due to the mathematical constraint of division by zero. This will occur when there is zero utilization because the utilization

percentage is the denominator in the final calculation for the t-test value. Although these cases cannot be tested to be statistically significant, the existence of disparity can be inferred due to the prima facie evidence of zero utilization levels.

## **5.2 Disparity Indices and T-Test Results**

Tables showing disparity indices and t-test results for construction, architecture and engineering, professional services, other services, and goods and supplies are analyzed in this section. The tables are based on the utilization and availability of MBEs and non-MBEs in the Commonwealth of Virginia relevant market areas as shown in Chapter 4.0.

### **5.2.1 Construction**

**Exhibit 5-1** shows that MBEs were generally underutilized in construction contracting during the study period based on the availability of those firms in the relevant market area. Over the five-year study period, Hispanic American-owned firms were overutilized. In 1998, 2000, and 2001, all MBEs were substantially underutilized for construction prime contracts. During fiscal year 1999, Hispanic American- and nonminority women-owned firms were overutilized. Hispanic American-owned firms have been overutilized in two of the five years of the study. The disparity index for nonminority firms over the five-year study period was 103.04, which indicates overall overutilization for this category of firms.

The t-test results shown in **Exhibit 5-2** for the construction business category indicate that the findings of underutilization of African American and nonminority women-owned firms and the overutilization of nonminority firms were statistically significant. In the case of African American, nonminority women and nonminority firms, the t-tests indicate that other factors beyond normal occurrence must be considered as reasons for the respective underutilization and overutilization.

**EXHIBIT 5-1  
DISPARITY ANALYSIS OF CONSTRUCTION PRIME CONTRACTORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Contract Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.00%	1.07%	0.00	* Underutilization
Hispanic Americans	0.00%	0.26%	0.00	* Underutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	0.00%	2.70%	0.00	* Underutilization
Nonminority Firms	100.00%	95.60%	104.60	Overutilization
<b>Fiscal Year 1999</b>				
African Americans	0.00%	1.07%	0.00	* Underutilization
Hispanic Americans	0.54%	0.26%	208.36	Overutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	7.48%	2.70%	277.54	Overutilization
Nonminority Firms	91.98%	95.60%	96.22	Underutilization
<b>Fiscal Year 2000</b>				
African Americans	0.00%	1.07%	0.00	* Underutilization
Hispanic Americans	0.00%	0.26%	0.00	* Underutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	0.00%	2.70%	0.00	* Underutilization
Nonminority Firms	100.00%	95.60%	104.60	Overutilization
<b>Fiscal Year 2001</b>				
African Americans	0.16%	1.07%	14.67	* Underutilization
Hispanic Americans	0.00%	0.26%	0.00	* Underutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	0.32%	2.70%	11.82	* Underutilization
Nonminority Firms	99.52%	95.60%	104.11	Overutilization
<b>Fiscal Year 2002</b>				
African Americans	0.00%	1.07%	0.00	* Underutilization
Hispanic Americans	0.52%	0.26%	203.71	Overutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	0.01%	2.70%	0.50	* Underutilization
Nonminority Firms	99.46%	95.60%	104.04	Overutilization
<b>All Fiscal Years</b>				
African Americans	0.03%	1.07%	3.12	* Underutilization
Hispanic Americans	0.29%	0.26%	113.27	Overutilization
Asian Americans	0.00%	0.28%	0.00	* Underutilization
Native Americans	0.00%	0.10%	0.00	* Underutilization
Nonminority Women	1.17%	2.70%	43.26	* Underutilization
Nonminority Firms	98.51%	95.60%	103.04	Overutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-2  
CONSTRUCTION  
T-TEST RESULTS FOR PRIME CONTRACTORS**

<b>MBE Classification</b>	<b>Contract Dollars<sup>1</sup></b>	<b>T Value for Contract Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.03%	-14.03 *	1.07%	-70.73 *
Hispanic Americans	0.29%	0.16	0.26%	0.79
Asian Americans	0.00%	0.00	0.28%	0.00
Native Americans	0.00%	0.00	0.10%	0.00
Nonminority Women	1.17%	-3.52 *	2.70%	-17.76 *
Nonminority Firms	98.51%	5.94 *	95.60%	29.93 *

<sup>1</sup> Percentage of related prime contract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

**Exhibit 5-3** shows that all MBE subcontractors were underutilized during every year of the study period. However, firms owned by nonminorities were overutilized in all five years, and overutilized overall. The exhibit shows that the underutilization of every MBE category was substantial every year as well. The t-test results shown in **Exhibit 5-4** indicate that the underutilization of all MBEs were statistically significant, which means that results for this group were outside the realm of expectancy from a statistical standpoint. Nonminority-owned firms' overutilization was statistically significant as well.

**EXHIBIT 5-3  
DISPARITY ANALYSIS OF CONSTRUCTION SUBCONTRACTORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Subcontract Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.00%	5.03%	0.00	* Underutilization
Hispanic Americans	0.00%	3.73%	0.00	* Underutilization
Asian Americans	0.00%	2.02%	0.00	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	0.00%	5.95%	0.00	* Underutilization
Nonminority	100.00%	82.46%	121.28	Overutilization
<b>Fiscal Year 1999</b>				
African Americans	0.00%	5.03%	0.00	* Underutilization
Hispanic Americans	0.07%	3.73%	1.79	* Underutilization
Asian Americans	0.00%	2.02%	0.00	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	0.04%	5.95%	0.67	* Underutilization
Nonminority	99.89%	82.46%	121.15	Overutilization
<b>Fiscal Year 2000</b>				
African Americans	0.00%	5.03%	0.00	* Underutilization
Hispanic Americans	0.09%	3.73%	2.51	* Underutilization
Asian Americans	0.00%	2.02%	0.00	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	1.84%	5.95%	30.95	* Underutilization
Nonminority	98.06%	82.46%	118.93	Overutilization
<b>Fiscal Year 2001</b>				
African Americans	0.32%	5.03%	6.43	* Underutilization
Hispanic Americans	1.73%	3.73%	46.51	* Underutilization
Asian Americans	0.01%	2.02%	0.53	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	0.77%	5.95%	12.97	* Underutilization
Nonminority	97.16%	82.46%	117.83	Overutilization
<b>Fiscal Year 2002</b>				
African Americans	0.19%	5.03%	3.86	* Underutilization
Hispanic Americans	1.09%	3.73%	29.12	* Underutilization
Asian Americans	0.07%	2.02%	3.66	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	1.83%	5.95%	30.67	* Underutilization
Nonminority	96.82%	82.46%	117.42	Overutilization
<b>All Fiscal Years</b>				
African Americans	0.22%	5.03%	4.37	* Underutilization
Hispanic Americans	1.21%	3.73%	32.38	* Underutilization
Asian Americans	0.03%	2.02%	1.38	* Underutilization
Native Americans	0.00%	0.82%	0.00	* Underutilization
Nonminority Women	1.07%	5.95%	17.96	* Underutilization
Nonminority	97.48%	82.46%	118.22	Overutilization

<sup>1</sup> The percentage of subcontract dollars is taken from the subcontract utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available subcontractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-4  
CONSTRUCTION  
T-TEST RESULTS FOR SUBCONTRACTORS**

<b>MBE Classification</b>	<b>Contract Dollars<sup>1</sup></b>	<b>T Value for Contract Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.22%	-28.55 *	5.03%	-241.64 *
Hispanic Americans	1.21%	-6.42 *	3.73%	-54.32 *
Asian Americans	0.03%	-33.17 *	2.02%	-280.73 *
Native Americans	0.00%	0.00	0.82%	0.00
Nonminority Women	1.07%	-13.20 *	5.95%	-111.73 *
Nonminority Firms	97.48%	26.62 *	82.46%	225.33 *

<sup>1</sup> Percentage of related subcontract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

**5.2.2 Architecture and Engineering**

In **Exhibit 5-5**, we show the disparity indices for architecture and engineering consultants. All MBE firms were substantially underutilized as architecture and engineering consultants for the five-year period. Nonminority-owned firms were overutilized every year and overall. The corresponding t-tests for the architecture and engineering contracts, shown in **Exhibit 5-6**, indicate that the respective findings of underutilization for MBE firms was statistically significant as well as the overutilization of non-MBE firms.

**EXHIBIT 5-5  
DISPARITY ANALYSIS OF ARCHITECTURE AND ENGINEERING CONSULTANTS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Contract Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.00%	0.98%	0.50	* Underutilization
Hispanic Americans	0.00%	0.64%	0.00	* Underutilization
Asian Americans	0.06%	2.01%	2.79	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.81%	4.30%	18.73	* Underutilization
Nonminority Firms	99.13%	91.85%	107.92	Overutilization
<b>Fiscal Year 1999</b>				
African Americans	0.02%	0.98%	1.62	* Underutilization
Hispanic Americans	0.01%	0.64%	2.15	* Underutilization
Asian Americans	0.06%	2.01%	3.04	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.78%	4.30%	18.15	* Underutilization
Nonminority Firms	99.13%	91.85%	107.92	Overutilization
<b>Fiscal Year 2000</b>				
African Americans	0.01%	0.98%	0.54	* Underutilization
Hispanic Americans	0.02%	0.64%	3.32	* Underutilization
Asian Americans	0.05%	2.01%	2.41	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.47%	4.30%	10.84	* Underutilization
Nonminority Firms	99.46%	91.85%	108.28	Overutilization
<b>Fiscal Year 2001</b>				
African Americans	0.01%	0.98%	0.52	* Underutilization
Hispanic Americans	0.00%	0.64%	0.00	* Underutilization
Asian Americans	0.10%	2.01%	5.14	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.35%	4.30%	8.13	* Underutilization
Nonminority Firms	99.54%	91.85%	108.37	Overutilization
<b>Fiscal Year 2002</b>				
African Americans	0.00%	0.98%	0.21	* Underutilization
Hispanic Americans	0.00%	0.64%	0.21	* Underutilization
Asian Americans	0.04%	2.01%	1.80	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.19%	4.30%	4.44	* Underutilization
Nonminority Firms	99.77%	91.85%	108.62	Overutilization
<b>All Fiscal Years</b>				
African Americans	0.01%	0.98%	0.62	* Underutilization
Hispanic Americans	0.01%	0.64%	1.05	* Underutilization
Asian Americans	0.06%	2.01%	2.93	* Underutilization
Native Americans	0.00%	0.21%	0.00	* Underutilization
Nonminority Women	0.45%	4.30%	10.42	* Underutilization
Nonminority Firms	99.48%	91.85%	108.30	Overutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-6  
ARCHITECTURE AND ENGINEERING  
T-TEST RESULTS FOR PRIME CONSULTANTS**

<b>MBE Classification</b>	<b>Contract Dollars<sup>1</sup></b>	<b>T Value for Contract Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.01%	-272.49 *	0.98%	-71.14 *
Hispanic Americans	0.01%	-169.78 *	0.64%	-44.33 *
Asian Americans	0.06%	-176.56 *	2.01%	-46.10 *
Native Americans	0.00%	0.00	0.21%	0.00
Nonminority Women	0.45%	-126.48 *	4.30%	-33.02 *
Nonminority Firms	99.48%	232.48 *	91.85%	60.70 *

<sup>1</sup> Percentage of related prime contract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

**5.2.3 Professional Services**

In **Exhibit 5-7**, we show the disparity indices for professional services consultants. Hispanic American, Asian American, and Native American firms were substantially underutilized overall as professional services consultants for the five-year period. Nonminority firms were overutilized in every year of the study. African American-owned firms were overutilized in 2001 and 2002. The corresponding t-tests for the professional services contracts, shown in **Exhibit 5-8**, indicate that the respective findings of underutilization and were statistically significant.

**EXHIBIT 5-7  
DISPARITY ANALYSIS OF PROFESSIONAL SERVICES CONSULTANTS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Payment Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.02%	0.33%	4.73	* Underutilization
Hispanic Americans	0.00%	0.12%	0.33	* Underutilization
Asian Americans	0.22%	0.39%	57.25	* Underutilization
Native Americans	0.00%	0.03%	4.48	* Underutilization
Nonminority Women	0.12%	1.54%	7.87	* Underutilization
Nonminority Firms	99.64%	97.60%	102.09	Overutilization
<b>Fiscal Year 1999</b>				
African Americans	0.06%	0.33%	17.35	* Underutilization
Hispanic Americans	0.00%	0.12%	3.07	* Underutilization
Asian Americans	0.14%	0.39%	35.31	* Underutilization
Native Americans	0.00%	0.03%	0.55	* Underutilization
Nonminority Women	0.07%	1.54%	4.70	* Underutilization
Nonminority Firms	99.73%	97.60%	102.19	Overutilization
<b>Fiscal Year 2000</b>				
African Americans	0.32%	0.33%	97.31	Underutilization
Hispanic Americans	0.00%	0.12%	0.81	* Underutilization
Asian Americans	0.19%	0.39%	49.70	* Underutilization
Native Americans	0.00%	0.03%	0.00	* Underutilization
Nonminority Women	0.13%	1.54%	8.15	* Underutilization
Nonminority Firms	99.36%	97.60%	101.81	Overutilization
<b>Fiscal Year 2001</b>				
African Americans	0.46%	0.33%	140.07	Overutilization
Hispanic Americans	0.01%	0.12%	6.05	* Underutilization
Asian Americans	0.33%	0.39%	85.52	Underutilization
Native Americans	0.00%	0.03%	0.00	* Underutilization
Nonminority Women	0.15%	1.54%	10.03	* Underutilization
Nonminority Firms	99.05%	97.60%	101.49	Overutilization
<b>Fiscal Year 2002</b>				
African Americans	0.47%	0.33%	144.55	Overutilization
Hispanic Americans	0.00%	0.12%	2.47	* Underutilization
Asian Americans	0.45%	0.39%	116.14	Overutilization
Native Americans	0.00%	0.03%	0.00	* Underutilization
Nonminority Women	0.14%	1.54%	8.93	* Underutilization
Nonminority Firms	98.94%	97.60%	101.37	Overutilization
<b>All Fiscal Years</b>				
African Americans	0.30%	0.33%	91.51	Underutilization
Hispanic Americans	0.00%	0.12%	2.69	* Underutilization
Asian Americans	0.28%	0.39%	72.09	* Underutilization
Native Americans	0.00%	0.03%	0.61	* Underutilization
Nonminority Women	0.12%	1.54%	7.99	* Underutilization
Nonminority Firms	99.30%	97.60%	101.74	Overutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-8  
PROFESSIONAL SERVICES  
T-TEST RESULTS FOR PRIME CONSULTANTS**

<b>MBE Classification</b>	<b>Contract Dollars<sup>1</sup></b>	<b>T Value for Contract Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.30%	-7.04 *	0.33%	-0.87
Hispanic Americans	0.00%	-288.15 *	0.12%	-35.61 *
Asian Americans	0.28%	-28.32 *	0.39%	-3.50 *
Native Americans	0.00%	-308.66 *	0.03%	-38.14 *
Nonminority Women	0.12%	-559.13 *	1.54%	-69.09 *
Nonminority Firms	99.30%	281.42 *	97.60%	34.77 *

<sup>1</sup> Percentage of related prime contract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

#### **5.2.4 Other Services**

All MBEs except Native American-owned firms were overutilized as other services vendors based on the disparity indices shown in **Exhibit 5-9**. Conversely, non-MBEs were underutilized as indicated by the disparity index. Native American-owned firms were substantially underutilized overall. The results of the t-test indicate that the underutilization of Native American- and nonminority-owned firms, shown in **Exhibit 5-10**, is statistically significant. There was also statistical significance to the overutilization of Hispanic and African American-owned firms.

**EXHIBIT 5-9  
DISPARITY ANALYSIS OF OTHER SERVICES VENDORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Payment Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.13%	0.27%	49.69	* Underutilization
Hispanic Americans	0.18%	0.06%	301.22	Overutilization
Asian Americans	0.09%	0.09%	94.76	Underutilization
Native Americans	0.00%	0.02%	6.15	* Underutilization
Nonminority Women	1.61%	1.07%	151.63	Overutilization
Nonminority Firms	97.98%	98.49%	99.48	Underutilization
<b>Fiscal Year 1999</b>				
African Americans	0.49%	0.27%	182.60	Overutilization
Hispanic Americans	0.24%	0.06%	401.71	Overutilization
Asian Americans	0.03%	0.09%	30.28	* Underutilization
Native Americans	0.00%	0.02%	2.70	* Underutilization
Nonminority Women	1.37%	1.07%	128.72	Overutilization
Nonminority Firms	97.87%	98.49%	99.36	Underutilization
<b>Fiscal Year 2000</b>				
African Americans	0.75%	0.27%	277.83	Overutilization
Hispanic Americans	0.16%	0.06%	264.49	Overutilization
Asian Americans	0.20%	0.09%	216.34	Overutilization
Native Americans	0.00%	0.02%	16.86	* Underutilization
Nonminority Women	1.48%	1.07%	139.23	Overutilization
Nonminority Firms	97.41%	98.49%	98.90	Underutilization
<b>Fiscal Year 2001</b>				
African Americans	0.61%	0.27%	226.18	Overutilization
Hispanic Americans	0.52%	0.06%	867.70	Overutilization
Asian Americans	0.26%	0.09%	291.98	Overutilization
Native Americans	0.00%	0.02%	1.37	* Underutilization
Nonminority Women	0.94%	1.07%	88.04	Underutilization
Nonminority Firms	97.66%	98.49%	99.16	Underutilization
<b>Fiscal Year 2002</b>				
African Americans	0.38%	0.27%	139.86	Overutilization
Hispanic Americans	0.16%	0.06%	259.47	Overutilization
Asian Americans	0.08%	0.09%	90.75	Underutilization
Native Americans	0.00%	0.02%	0.01	* Underutilization
Nonminority Women	1.29%	1.07%	120.72	Overutilization
Nonminority Firms	98.10%	98.49%	99.60	Underutilization
<b>All Fiscal Years</b>				
African Americans	0.48%	0.27%	176.53	Overutilization
Hispanic Americans	0.25%	0.06%	419.24	Overutilization
Asian Americans	0.13%	0.09%	145.74	Overutilization
Native Americans	0.00%	0.02%	4.12	* Underutilization
Nonminority Women	1.29%	1.07%	121.42	Overutilization
Nonminority Firms	97.84%	98.49%	99.34	Underutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-10  
OTHER SERVICES  
T-TEST RESULTS FOR OTHER SERVICES FIRMS**

<b>MBE Classification</b>	<b>Payment Dollars<sup>1</sup></b>	<b>T Value for Payment Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.48%	34.83 *	0.27%	6.68 *
Hispanic Americans	0.25%	44.55 *	0.06%	8.55 *
Asian Americans	0.13%	13.25 *	0.09%	2.54 *
Native Americans	0.00%	-77.83 *	0.02%	-14.94 *
Nonminority Women	1.29%	23.45 *	1.07%	4.50 *
Nonminority Firms	97.84%	-51.94 *	98.49%	-9.97 *

<sup>1</sup> Percentage of related prime contract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

### **5.2.5 Goods and Supplies**

As goods and supplies vendors, African American, Hispanic American, and Native American firms were substantially underutilized. Firms owned by nonminorities were overutilized in each year and also on an overall basis. The disparity indices are presented in **Exhibit 5-11**.

**Exhibit 5-12** shows the t-test results for goods and supplies vendors. The results suggest that the underutilization is statistically significant in the MBE categories and overutilization is statistically significant in nonminority firms.

### **5.3 Multivariate Regression Analysis**

Do minority and woman-owned firms tend to earn significantly less revenue than firms owned by nonminority males? If "yes" are their lower revenues due to their race or gender status or to other factors?

Case law and social science research provide some guidance for addressing these questions. From research literature, in addition to race and gender, we know that other factors, such as firm capacity, owner experience, and education bear a relation to a firm's gross revenues. When multiple factors come into play, sometimes a multivariate statistical analysis can improve our understanding of more complex relationships among

factors affecting company earnings. In this study, we employ linear regression to analyze variables, including race and gender, that can affect a firm's success.

**EXHIBIT 5-11  
DISPARITY ANALYSIS OF GOODS AND SUPPLIES VENDORS  
IN THE RELEVANT MARKET AREA  
BY RACE/ETHNICITY/GENDER CLASSIFICATION  
FISCAL YEARS 1998 THROUGH 2002**

<b>MBE Classification</b>	<b>% of Contract Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>
<b>Fiscal Year 1998</b>				
African Americans	0.04%	0.17%	21.91	* Underutilization
Hispanic Americans	0.05%	0.06%	86.91	Underutilization
Asian Americans	0.00%	0.13%	2.11	* Underutilization
Native Americans	0.02%	0.03%	54.65	* Underutilization
Nonminority Women	1.06%	1.05%	100.95	Overutilization
Nonminority Firms	98.83%	98.55%	100.28	Overutilization
<b>Fiscal Year 1999</b>				
African Americans	0.05%	0.17%	27.94	* Underutilization
Hispanic Americans	0.03%	0.06%	46.19	* Underutilization
Asian Americans	0.08%	0.13%	61.75	* Underutilization
Native Americans	0.01%	0.03%	39.85	* Underutilization
Nonminority Women	1.07%	1.05%	101.82	Overutilization
Nonminority Firms	98.76%	98.55%	100.21	Overutilization
<b>Fiscal Year 2000</b>				
African Americans	0.04%	0.17%	25.41	* Underutilization
Hispanic Americans	0.15%	0.06%	254.46	Overutilization
Asian Americans	0.36%	0.13%	264.70	Overutilization
Native Americans	0.01%	0.03%	20.50	* Underutilization
Nonminority Women	1.13%	1.05%	107.16	Overutilization
Nonminority Firms	98.32%	98.55%	99.76	Underutilization
<b>Fiscal Year 2001</b>				
African Americans	0.02%	0.17%	13.76	* Underutilization
Hispanic Americans	0.01%	0.06%	13.56	* Underutilization
Asian Americans	0.15%	0.13%	113.16	Overutilization
Native Americans	0.01%	0.03%	38.14	* Underutilization
Nonminority Women	1.06%	1.05%	100.66	Overutilization
Nonminority Firms	98.74%	98.55%	100.20	Overutilization
<b>Fiscal Year 2002</b>				
African Americans	0.05%	0.17%	29.30	* Underutilization
Hispanic Americans	0.01%	0.06%	23.05	* Underutilization
Asian Americans	0.11%	0.13%	81.66	Underutilization
Native Americans	0.01%	0.03%	28.38	* Underutilization
Nonminority Women	0.66%	1.05%	62.46	* Underutilization
Nonminority Firms	99.16%	98.55%	100.62	Overutilization
<b>All Fiscal Years</b>				
African Americans	0.04%	0.17%	23.34	* Underutilization
Hispanic Americans	0.05%	0.06%	79.21	* Underutilization
Asian Americans	0.15%	0.13%	108.25	Overutilization
Native Americans	0.01%	0.03%	35.48	* Underutilization
Nonminority Women	0.99%	1.05%	93.61	Underutilization
Nonminority Firms	98.77%	98.55%	100.22	Overutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**EXHIBIT 5-12  
GOODS AND SUPPLIES  
T-TEST RESULTS FOR MATERIALS AND SUPPLIES FIRMS**

<b>MBE Classification</b>	<b>Contract Dollars<sup>1</sup></b>	<b>T Value for Contract Dollars</b>	<b>% of Available Firms<sup>2</sup></b>	<b>T Value for Available Firms</b>
African Americans	0.04%	-102.86 *	0.17%	-14.97 *
Hispanic Americans	0.05%	-8.80 *	0.06%	-1.28
Asian Americans	0.15%	4.53 *	0.13%	0.66
Native Americans	0.01%	-29.77 *	0.03%	-4.33 *
Nonminority Women	0.99%	-10.58 *	1.05%	-1.54
Nonminority Firms	98.77%	31.28 *	98.55%	4.55 *

<sup>1</sup> Percentage of related prime contract dollars awarded to firms within the relevant market area.

<sup>2</sup> Percentage of available firms in the relevant market area.

\* Statistically significant at the 0.05 level

**5.3.1 An Overview of Multivariate Regression and Description of the Analytical Model**

The goal of this analysis was to examine the influence of selected company and business characteristics—especially owner race and gender—on 2002 gross revenues reported by 564 companies that participated in a phone survey administered in October 2003. A statistical regression model was used to examine the relationships between company gross revenues and the presence or absence of “selected company characteristics.” For this study “gross revenue” was the “dependent variable,” or the variable to be “explained” by the presence, absence, or strength of the “selected characteristic” variables, known as “independent” or “explanatory” variables.

Since disparity analysis is an established domain of research, the selection of independent variables for this study was made with reference to an extensive review of literature on disparity analysis. Most economic studies of discrimination are based on a seminal work, “The Economics of Discrimination” by Gary Becker, a Nobel Prize recipient.<sup>2</sup> Becker was the first to define discrimination in financial and economic terms.

<sup>2</sup> Becker, Gary. 1971, second edition. “The Economics of Discrimination.” The University of Chicago Press, Chicago, p. 167.

Since Becker, labor economists and statistical researchers including Blinder and Oaxaca, Corcoran and Duncan, Gwaltney and Long, Reimers, Saunders, Darity and Myers, Hanushek, Hirsch, Topel and Blau, and others, have employed company earnings, or revenue, as the dependent variable in race and gender discrimination analysis.<sup>3</sup> Comparable worth studies have also utilized regression models with gross revenues as the dependent variable for policy analysis<sup>4</sup> and the U.S. Department of Commerce employs regression analysis (included in 48 CFR 19) to establish price evaluation adjustments for small disadvantaged businesses in federal procurement programs.<sup>5</sup> In each approach "gross revenue" is an analog of both firm capacity as well as an estimate of utilization (e.g., mean share of contracting dollars).

### ***The Regression Model Variables***

Bates<sup>6</sup> used at least five general determinants, including firm "capacity," managerial ability, manager/owner experience, and demographic characteristics such as race and gender to statistically explain variations among the "gross revenues" of firms. These are elaborated below in terms of the dependent/independent variable relationship regression seeks to resolve.

### ***Dependent Variable***

For this analysis the dependent variable (the variable to be explained by the independent variables in the model) was defined as "firm 2002 gross revenues." Ideally, this variable is measured as the exact dollar figure for gross revenues. However, years of experience in conducting information and opinion surveys with companies indicate

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<sup>3</sup> "Race and Gender Discrimination Across Urban Labor Markets," 1996. Ed. Susan Schmitz. Garland Publishers, New York, New York, p. 184.

<sup>4</sup> Gunderson, Morley. 1994. "Male-Female Wage Differentials and Policy Responses." In "Equal Employment Opportunity: Labor Market Discrimination and Public Policy," pp. 207 - 227.

<sup>5</sup> "Federal Acquisition Regulations for Small Disadvantaged Businesses; Notice and Rules." June 30, 1998. Memorandum for Office of Federal Procurement Policy, Economic and Statistics Administration, Department of Commerce.

<sup>6</sup> Bates, Timothy. "The Declining Status of Minorities in the New York City Construction Industry." Reprinted from *Economic Development Quarterly*, Vol. 12., No. 1, February 1998, pp. 88-100.

that firms tend to be resistive to the idea of releasing precise dollar figures, but more responsive when inquiries about earnings are presented as a dollar range. Accordingly, to encourage greater participation in this study's on-line survey, 10 company gross revenue categories were defined, ranging from Category 1, "less than \$100,000" to Category 10, "more than \$10 million." For the regression analysis, the rank of each revenue category (1 through 10) was used as the revenue data observations for each firm.

***Independent (Characteristic) Variables***

The independent (i.e., explanatory) variables were those characteristics hypothesized as contributing to the variation in the dependent variable (2002 gross revenues). For this study, independent variables included:

- *Number of full-time employees*—The more employees a company has, the greater product volume it is likely to have to generate higher revenues.
- *Owner's years of experience*—The longer a company owner has been in a particular business, the more likely it is that the owner has knowledge of how to acquire contracts and the skills and experience to be successful in business.
- *Percentage of revenues earned in private sector*—Since vendor selection for public projects, large or small, is based usually on a prescribed vendor list maintained by the contracting public sector agency, it has been found that companies with a greater percentage of earnings from the private sector are likely to earn less revenue overall than companies that also do business frequently with the public sector.
- *Owner's level of education*—The research literature consistently reports a positive relationship between education and level of income.
- *Age of Company*—It is argued that a company's longevity is an indicator of both success and owner managerial ability.
- *Race/Ethnic group/gender of firm owners*—The proposition to be tested was whether there is a statistically significant relationship between race/ethnicity/gender of minority firm owners and firm revenue. In the analysis, the category Nonminority Male served as a reference group against which all other race and gender groups were compared.

Finally, since companies tend to be organized around a business concentration (e.g., Construction, Specialty Trades, Professional Services, Other Services, and Goods and Supplies), type of business was introduced as a moderator variable to determine if the model, given adequate sample size, behaved differently as a predictor of gross revenue when respondents' line of business was considered.

Participants' responses to the survey provided the data to examine the relative importance of these factors. The operational relationship between these constructs (i.e., firm capacity, capability, experience, race, and gender) and measures derived from survey items is presented in **Exhibit 5-13**.

**EXHIBIT 5-13  
MODEL CONSTRUCTS, VARIABLES, AND MEASURES**

<b>Model Constructs</b>	<b>Variables</b>	<b>Measures</b>
<i>Capacity</i>	Number of Employees	Number of Full-time and Part-time Employees reported
	Private Contracting	% Total Revenue from Private Sources
<i>Owner's Managerial Ability</i>	Owner's Education	Level of Education (from "some high school" to "postgraduate degree")
	Owner's Experience	Years of Experience
	Company Age	2003 minus Reported "year of establishment"
<i>Demographics</i>	MBE Groups	African American-, Hispanic American-, Asian American-, Native American-, Nonminority Woman- and Nonminority Male-owned Firms,
	Sex of Company Owner	Sex of Company Majority Owner or Shareholder

Inclusion of the race/gender variable for individual MBE groups—African Americans, Hispanic Americans, Asian Americans and Native Americans—permitted examination of the influence of minority status on the dependent variable, revenue, both by individual group and as a general category (i.e., MBE), controlling for the effects of the other independent variables.

### ***Exploring Variable Relationships: How Regression Analysis Works***

Multiple regression analysis permits simultaneous examination not only of the effects on the dependent variable of **all** independent variables in the multivariate model, but also the effect of each, unique variable (i.e., “controlling” for the effects of the other independent variables in the equation). The effect of each predictor (independent) variable on the dependent variable is expressed as the magnitude of the change in the dependent variable (y) for each unit change in the independent variable (x) plus an “error term.” Since the independent variable is never a perfect predictor of the dependent variable—that is, X is expressed as an imperfect predictor of Y such that one unit change in X **never** leads to one unit change in Y—the “error term,”  $\epsilon$ , is postulated to acknowledge the residual change in the value of Y that X cannot explain.

The goal in sound regression modeling, therefore, is to minimize residual values associated with the independent variables and to maximize their explanatory power. In other words, a good model that seeks to explain what causes revenue earnings, in this case, will hypothesize a combination of independent variables, based on solid research findings established in research, having sufficient explanatory power to account for case-by-case differences in company revenue, while minimizing that portion of variation in revenue values that the independent variable cannot explain (i.e., minimizing the difference between Y values predicted by the X’s in the model and *actual* Y values).

### ***Assessing the General Model and the Effect of Individual Independent Variables***

There are several statistical litmus tests in regression analysis to assess a model’s explanatory power. For example, one can refer to the model’s goodness of fit, also known as the coefficient of determination. Put simply, the coefficient of determination for a model assesses the degree to which the model maximizes the explanatory power of the independent variables and minimizes prediction error relative to the dependent

variable; that is, the degree to which the model maximizes the closeness of actual dependent variable values and the dependent variable values predicted by the regression model. The coefficient of determination (measured in regression as  $R^2$ ) permits us to make a judgment about the combined effect on the dependent variable of all the independent variables in a model.

### ***Assessing Variables in the Model***

As suggested earlier, in a model with multiple independent, or predictor, variables, the effect of each individual independent variable is expressed as the expected change in the dependent variable (y) for each unit change in the independent variable (x), holding constant (or controlling for) the values of all the other independent variables (i.e., the effect on Y of the other X's in the equation). When X and Y values are plotted on a graph, linear regression attempts to find a straight line of best fit (also known as the least-squares line) that minimizes the differences between actual Y and predicted Y values as a function of X. The slope of this line represents the statistical relationship between the predicted values of Y based on X. The point at which this regression line crosses the Y axis (otherwise known as the constant) represents the predicted value of Y when  $X = 0$ . If the effect of X on Y is determined to be statistically significant (e.g., a significance level of  $p < 0.05$  asserts that the calculated relationship between X and Y could occur due to chance only 5 times in 100), it can be asserted that X may indeed play a role in determining the value of Y (in the case of this study, company revenues). For example, if the slope coefficient of the variable representing one of the specific racial groups is determined to be statistically significant, then, all other things being equal, the hypothesis that race of the owner of a firm affects the annual revenue of the firm has only a 5 percent chance of being false. In disparity research, theory asserts that the

negative effect of race on revenue earnings associated with being a minority-owned business is likely a product of discrimination.

### **5.3.2 Multivariate Regression Model**

Mathematically, the multivariate linear regression model is expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \varepsilon$$

Where: Y = annual firm gross revenues.

$\beta_0$  = the constant, representing the value of Y when  $X_1 = 0$

$\beta_1$  = coefficient representing the magnitude of  $X_1$ 's effect on Y

$X_1$  = the independent variables, such as capacity.

experience, managerial ability, race and gender.

$\varepsilon$  = the error term, representing the variance in Y unexplained by  $X_i$

This equation describes the hypothesized relationship between the dependent variable and the independent variables and was used to test the hypothesis that there is no difference in 2002 revenue earnings for MBE firms when compared with nonminority male-owned firms. Traditionally, the hypothesis of no difference (known as the null hypothesis) is represented as:

$$H_0 : Y_1 = Y_2$$

We can reject the null hypothesis if the analysis indicates that race and gender have been found to affect firm revenue (i. e,  $H_1 : Y_1 \neq Y_2$ , the alternate hypothesis). Results are statistically significant if it is determined that the probability of achieving this difference due to chance was less than 5 in 100 (i.e.,  $p < .05$ ).

### **5.3.3 Multivariate Regression Model Results**

The regression model tested the effects of selected demographic and business characteristic variables on revenue earnings for firms that participated in the study.

Results are reported in **Exhibit 5-14** followed by a brief discussion of findings.

**EXHIBIT 5-14  
COMMONWEALTH OF VIRGINIA  
RESULTS OF TELEPHONE SURVEY REGRESSION ANALYSIS**

Variable*	Unstandardized		Standardized		
	B	Std. Error	Beta	t	Sig.
Constant**	74.251	15.998		4.641	.000
MBE	-.970	.327	-.124	-2.967	.003
African American	-1.463	.376	-.236	-3.895	.000
Asian American	-1.656	.475	-.317	-3.484	.001
Nonminority Women	-.794	.330	-.149	-2.407	.017
Length of establishment**	-.035	.008	-.193	-4.383	.000
Number of Employees**	.010	.001	.314	7.651	.000
Private Sector Revenue**	.003	.002	.071	1.759	.079
Owner's Education**	.204	.106	.077	1.916	.056
Owner's Experience**	.016	.011	.061	1.434	.152

\* In general, multivariate analyses stratified by race/ethnicity for Hispanic American- and Native American-owned firm respondents contained too few observations to permit conclusive judgments regarding any of the independent variable effects on company revenues. Survey subsample sizes by race/ethnic/sex were as follows: Nonminority Male, n = 77; Nonminority Women, n = 154; African American, n = 173; Hispanic American, n = 47; Asian American, n = 76; Native American, n = 16.

\*\* Constant and partial coefficient values were derived from the General Model, predicting revenue for two gross race/ethnicity/gender categories, MBEs and Nonminority Males, in conjunction with the other independent variables in the model—Number of Company Employees, Owner's Years of Experience, Owner's Level of Education, Company Age, and Percent of the Company's Revenue from the Private Sector. Other coefficient values were derived substituting individual race/ethnic/gender categories for the inclusive MBE category in the general model.

## Results

- The regression analysis which included the independent variables of a firm—age of company, owner education level, number of employees, percent of revenue from private sector, and owner experience for industry groupings—had an R square of .18, indicating that the independent variables explained only 18 percent of the variations in firm revenue categories.
- When the model compared MBE firms to nonminority male firm revenues in conjunction with the effects of the other model variables (i.e, age of company, owner education level, number of employees, percent of revenue from private sector, and owner experience), the model's ability to "explain revenue" increased only slightly to 21.5 percent.
- When analyses were stratified by MBE firm ownership category for nonminority women, African Americans and Asian Americans, respectively, the explanatory power of the model increased significantly: Asian Americans, 26 percent; nonminority women, 28 percent; African Americans, .33 percent. These increases can be attributed exclusively to the substitution of the specific race category for the more global MBE category, supporting the hypothesis that differences in the revenue of firms is due to the race/gender status of the firm.

- The unstandardized beta coefficient for the MBE variable was  $-.970$ , indicating that the revenue category of MBE firms was almost one category lower than for nonminority male firms.
- The unstandardized beta coefficient for African American firms was  $-1.463$ , and for Asian Americans,  $-1.656$ , indicating that these firms had annual revenues that were roughly one-and-a-half revenue categories lower than for firms owned by nonminority males.
- The unstandardized beta coefficient for the nonminority women variable was  $-.794$ , indicating that these firms had annual incomes that were nearly one revenue category lower than for their nonminority male counterparts.
- The unstandardized beta coefficients for firms owned by Native Americans and Hispanic Americans were not interpretable due to small numbers for those firms in the respondent sample. Consequently, no conclusion could be asserted as to whether revenues of those firms were adversely affected by their minority status.

### **Results by Race and by Business Type**

In general, a race-by-business category stratification reduced subsample sizes in all but one race by business type categories, such that a valid statistical analysis could not be undertaken. There was a sufficient response rate to permit the analysis for the Goods and Supplies category, comparing revenue for MBEs, as a whole, with revenue for nonminority males. In this category, the unstandardized beta coefficient for MBE status was  $-.396$ , indicating that when the effect of the other nonracial variables affecting revenue was controlled, the status of being an MBE reduced revenue, when compared to nonminority male owned firms, by more than one-third a revenue category.

In conclusion, after statistical adjustments were made for variables such as age of company, education level of owner, number of employees, percentage of revenue from private sector and owner experience, the finding of a consistent and negative relationship between MBE status and revenue supports the hypothesis that lower revenue is due to the minority status of the firms. These analyses, while not proving that discrimination caused the lower annual revenues, certainly supports the idea that

discrimination was a significant factor. Therefore, the null hypothesis that there is no difference between the MBE and nonminority firm groups' gross revenues as a function of race, when controlling for demographic and firm characteristics, was rejected.

#### **5.4 Conclusions**

This chapter used disparity indices to compare the availability and utilization findings from Chapter 4.0. The disparity indices for each of the business categories indicate whether there is the presence of disparity for each ethnic or gender group, and the ensuing t-test depicts the statistical significance of these disparity results.

**Exhibit 5-15** summarizes the findings of underutilization of businesses by their respective categories. The underutilization was statistically significant for the following categories:

- African American and nonminority women-owned construction prime contractors;
- African American, Hispanic American, Asian American, nonminority women, and Native American -owned construction subcontractors;
- African American, Hispanic American, Asian American, nonminority women, and Native American owned architecture and engineering prime consultants;
- Hispanic American, Asian American, nonminority women, and Native American owned professional services prime consultants;
- Native American and nonminority other services firms; and
- African American, Hispanic American, and Native American owned goods and supplies vendors.

**EXHIBIT 5-15  
SUMMARY OF UNDERUTILIZATION**

<b>Business Category</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
Construction Prime Contractors	Yes	No	Yes	Yes	Yes	No
Construction Subcontractors	Yes	Yes	Yes	Yes	Yes	No
Architecture & Engineering	Yes	Yes	Yes	Yes	Yes	No
Professional Services	No	Yes	Yes	Yes	Yes	No
Other Services	No	No	No	Yes	No	Yes
Goods & Supplies	Yes	Yes	No	Yes	Yes	No

The multivariate regression analyses strongly support the above findings of disparity for the different MBE groups and provide strong evidence that the disparity is due, in part, to a firm's race and/or gender status.

The regression analyses explained from 32 to almost 50 percent of the variation in the dependent variable observations, depending on the variables included in each analysis, indicating that the models were providing statistically reliable findings. After adjusting for impact of non-MBE factors, such as number of employees, age of company, owner's experience, and owner's education level, the analyses showed that MBE firms had significantly lower 2002 revenues than similar nonminority male firms. The consistency of the lower 2002 revenues of MBE firms for both the all-industries analyses and for African American and nonminority women firms among the different industry grouping analyses further strengthens the evidence that the disparities are due, at least in part, to the race and/or gender status of the firms.

Unfortunately, the number of Native American, Hispanic American, and Asian American firms in the sample were not sufficiently large to produce statistically reliable findings. However, when their firms were included in the analyses involving all MBEs, they had lower 2002 revenues even after adjusting for other non-MBE factors.

## **6.0 ANECDOTAL ANALYSIS**

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## **6.0 ANECDOTAL ANALYSIS**

This chapter describes the results of the analysis of anecdotal information for the Commonwealth of Virginia Disparity Study. The collection and analysis of anecdotal data are performed to determine whether underutilization of minority and women owned firms is the result of objective, nonbiased bidding and purchasing procedures or the result of discriminatory practices. Anecdotal evidence is designed to explain and interpret statistical findings. Courts have ruled that the combination of disparity findings and anecdotal evidence provides the best evidence demonstrating the existence of historical discriminatory practices, if any. Unlike other chapters in this report, anecdotal analysis does not rely solely on quantitative data. Anecdotal analysis also utilizes qualitative data to describe the context of the examined environment as well as the climate in which all businesses and other relevant entities applicable to our study operate.

The following sections present the approach MGT used in the collection of anecdotal data, the methods employed in the collection of those data, and the quantitative and qualitative results of the data collected. This chapter is organized into the following sections:

- 6.1 Methodology
- 6.2 Vendor Telephone Survey Demographics
- 6.3 Personal Interviews and Focus Groups Demographics
- 6.4 Findings

### **6.1 Methodology**

MGT used a variety of methods to collect anecdotal data from individuals representing firms in the study market area owned by minorities, nonminority women,

and nonminority men. Specifically, three activities were conducted to obtain anecdotal information for the study:

- Vendor Telephone Survey
- Personal Interviews
- Focus Groups

Each of the three information gathering methods has its own advantages and disadvantages, but by combining several methodologies, MGT is able to describe a more complete picture of the “real world” of the participants studied. For instance, the vendor telephone survey features the use of a structured interview guide that provides the advantage of:

- gathering a wide range of data from a broad base of the business community;
- providing information from those who may be reluctant to have their observations attributed directly to them; and
- allowing the respondent to make comments that will not be challenged by peers or panelists as in the case of focus groups.

However, a telephone survey does not allow for the in-depth exploration of issues as they are raised. The personal interviews, which consist of one-on-one interviews using a structured interview instrument, offer the advantage of:

- hearing from people who are reluctant to speak in front of groups or whose schedule does not allow them to attend meetings; and
- providing opportunities to fully explore the concerns, experiences, and issues of the interviewees.

Personal interviews, however, have a disadvantage in that individuals are generally free from having their comments challenged by peers or panelists as in the case of focus groups. Focus group sessions offer the advantage of group consensus building in response to questions regarding major issues, practices, and experiences. Individuals tend to exercise care in making statements when they know their peers may challenge them. At the same time, patterns of experience and opinions can be quickly established

or refuted through group discussion. Focus groups, however, do not permit in-depth exploration of the individual experiences. Focus groups are ineffective in obtaining information from those who are reluctant to speak in group meetings.

**6.1.1 Vendor Telephone Survey**

MGT conducted a telephone survey during October of 2003, soliciting the participation of firms that had done or attempted to do business with the Commonwealth of Virginia. Two major goals of the survey included determining the nature of firms' business experiences and exploring their perceptions of discriminatory practices they might have encountered since 1998 when attempting to conduct business.

Survey participation was solicited by mail based on vendor information provided by the Commonwealth of Virginia, followed by contact by phone, in which participants completed the survey. In all, there were 564 surveys in which respondents indicated their race/gender/ethnicity, and 541 in which business type was indicated (**Exhibit 6-1**).

**EXHIBIT 6-1  
COMPLETED SURVEYS BY WORK TYPE**

<b>Work Type</b>	<b># of Completed Surveys</b>
Building Construction	24
Specialty Trade	56
Professional Services	292
General/Personal Services	70
Supplies & Equipment	99
<b>Total</b>	<b>541</b>

Source: MGT Telephone Survey of Businesses, October 2003.

Section 6.2 reports survey results as percentages by race/ethnicity/gender. The telephone survey instrument and response frequencies to the survey are presented in

**Appendix J.**

### **6.1.2 Personal Interviews**

MGT conducted personal interviews with the vendors using an interview guide that covered a range of questions concerning a firm's experiences conducting business with the Commonwealth, experiences in the private sector, and the firm's business operations. See **Appendix K** for a copy of the interview guide and affidavit.

In collecting anecdotal evidence relevant to the existence of discriminatory practices, the interviewers were objective in identifying the participants, drafting interview questions, asking questions during the interviews, and eliciting follow-up responses from individuals. The interviewers made no attempt to prompt or guide the testimony or responses of individuals. For personal interviews, the firms were selected from the master vendor database.

MGT scheduled 108 personal interviews and completed 85. The results of these interviews are included in the interview findings. The companies interviewed represent a cross section of firms in all work type categories and ethnicities. The majority of the interviews were held in the owners' offices and ranged in length from 30 minutes to an hour and 30 minutes. Before each interview, business owners were informed that their responses to the questionnaire would be confidential and would not be distributed to any other person or firm with their identity revealed except if legal action were filed, in which case all documentation would be provided to the court.

### **6.1.3 Focus Groups**

MGT conducted three focus groups: two with minority-owned firms and one with nonminority male-owned firms. These began with dinner at 5:30 PM, and the actual focus group was conducted from approximately 6:00 to 7:30 PM. A total of 18 firms were represented at the focus groups (13 minority firms and 5 nonminority male-owned firms). Each participant was requested to complete a profile of his or her firm similar to that

solicited from the one-on-one interview protocol, although not all did. The focus groups were held in Richmond, Virginia Beach, and Crystal City.

## **6.2 Vendor Telephone Survey Demographics**

This section reports a demographic and business profile of respondents of the vendor telephone survey.

### **6.2.1 Respondent Profile**

**Exhibit 6-2** reports a business and demographic profile of survey participants. In terms of respondents' business lines, of 541 respondents who indicated business line, 4 percent were involved in Building Construction, 10 percent in Specialty Trades, 54 percent in Professional Services, 13 percent in General/Personal Services, and 18 percent in Supplies and Equipment.

Over half of respondents (55%) indicated they had established their business within the past 10 years; another 27 percent between 1984 and 1993; and the remaining 18 percent had been established more than 20 years.

The majority of respondents' businesses, 71 percent, were organized as corporations, and nearly one-sixth (15%) were sole proprietors. The majority of firms were small businesses, with 63 percent reporting employing 10 or fewer employees and one-fifth (20%) reporting 11 to 30 employees. Larger companies (more than 30 employees) made up 18 percent of the sample. Over a fifth of the sample (22%) reported 2002 revenue of \$100,000 or less; 24 percent reported 2002 revenue between \$100,000 and \$500,000; over a quarter (28%) earned between \$500,000 and \$2 million, and 26 percent earned \$2 million or more in 2002 revenue. Overall, in 2002 businesses earned most of their income from the public sector (52%).

**EXHIBIT 6-2  
COMMONWEALTH OF VIRGINIA  
VENDOR TELEPHONE SURVEY  
SELECTED DEMOGRAPHICS BY BUSINESS OWNER  
RACE/ETHNICITY AND GENDER**

<b>QUESTION</b>	<b>African American</b>	<b>Asian American</b>	<b>Hispanic American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Total M/WBE</b>	<b>Nonminority Male</b>	<b>TOTAL</b>
<i>Length of establishment</i>								<i>n=538</i>
1973 or earlier	1%	0%	2%	19%	10%	5%	27%	8%
1974 to 1983	6%	5%	4%	0%	14%	8%	24%	10%
1984 to 1993	27%	25%	28%	13%	29%	27%	25%	27%
1994 to 2003	66%	70%	66%	69%	46%	60%	24%	55%
<i>Organizational structure of company</i>								<i>n=538</i>
Sole Proprietorship	23%	13%	2%	13%	13%	15%	15%	15%
Partnership	1%	0%	0%	0%	1%	1%	1%	1%
Corporation	66%	72%	85%	80%	72%	71%	68%	71%
Limited Liability Partnership	1%	0%	0%	0%	0%	0%	1%	0%
Limited Liability Corporation	9%	14%	9%	7%	14%	11%	12%	11%
Other	1%	0%	4%	0%	1%	1%	3%	1%
<i>Company's primary line of business</i>								<i>n=541</i>
Building Construction	6%	1%	4%	13%	4%	5%	4%	4%
Specialty Trades	13%	3%	4%	19%	13%	11%	8%	10%
Professional Services	52%	80%	74%	38%	52%	58%	27%	54%
General/Personal Services	22%	11%	4%	6%	8%	13%	11%	13%
Supplies & Equipment	7%	5%	13%	25%	23%	13%	51%	18%
<i>Number of full-time employees</i>								<i>n=531</i>
1 - 3 employees	38%	38%	36%	25%	31%	35%	18%	33%
4 - 10 employees	29%	26%	28%	38%	29%	29%	34%	30%
11 - 30 employees	16%	16%	19%	19%	22%	19%	26%	20%
31 or more employees	17%	19%	17%	19%	17%	18%	22%	18%

Source: MGT Telephone Survey of Businesses, October 2003.

**EXHIBIT 6-2 (Continued)**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**SELECTED DEMOGRAPHICS BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Gross Revenues</i>								<i>n=543</i>
Up to \$50,000	16%	13%	6%	6%	6%	11%	4%	10%
\$50,001 to \$100,000	16%	11%	9%	19%	14%	14%	0%	12%
\$100,001 to \$300,000	14%	13%	30%	19%	17%	17%	16%	16%
\$300,001 to \$500,000	9%	11%	6%	13%	9%	9%	4%	8%
\$500,001 to \$1 million	10%	18%	21%	13%	12%	13%	19%	14%
\$1,000,001 to \$2 million	9%	12%	11%	0%	19%	13%	21%	14%
\$2,000,001 to \$5 million	16%	16%	9%	13%	18%	15%	25%	17%
\$5,000,001 to \$10 million	6%	1%	4%	6%	3%	4%	3%	4%
More than \$10 million	5%	5%	4%	13%	3%	5%	9%	5%
<i>Mean percentage of gross revenues earned from private and public sector business in 2002</i>								<i>n=509</i>
Public Sector	45%	54%	44%	56%	56%	50%	63%	52%
Private Sector	55%	46%	56%	44%	44%	50%	37%	48%

Source: MGT Telephone Survey of Businesses, October 2003.

When survey results were examined by race/ethnicity and gender of business owner,<sup>1</sup> findings were as follows.

- Although, on the whole, Professional Services firms represented slightly more than half of the sample (54%), nonminority male-owned firms were half as likely as M/WBEs to be engaged in Professional Services (27% vs. 58%) and four times as likely to be engaged in Supplies & Equipment (51% vs. 13%).
- More than a quarter of all nonminority male firms (27%) had been in business more than 30 years, compared with 5 percent for M/WBEs.
- Respondent firms owned by nonminority males tended to have more employees than minority- and woman-owned firms, with 22 percent reporting more than 30 employees. Just over a sixth of M/WBE firms (18%) reported more than 30 employees.
- More than one-half of firms (58%) owned by nonminority males earned more than \$1 million in 2002, compared with over a third of minority firms (37%). On the other hand, only 4 percent of nonminority male firms earned \$100,000 or less in 2002, compared with a quarter of M/WBE firms (25%). African Americans were most frequently represented in this lowest category of revenue earnings, with nearly one-third of all African American firms (32%) reporting revenue of \$100,000 or less in 2002.
- The percentage of 2002 revenue earned in the public sector did vary as a function of race/gender category. Whereas nearly two-thirds of nonminority male-owned firm revenue was earned from the public sector (63%), M/WBE firms earned half of their revenue from the public sector.
- Overall, minority- and women-owned firms responding to this survey tended to be smaller, to have earned less revenue, and to have been in business for a shorter period of time than nonminority male-owned firms.

Other survey questions gathered information on business owner gender and race/ethnicity, the results of which are reported in **Exhibit 6-3** and summarized below.

- More than two-fifths of all firms sampled for this study were owned by women (44%) and almost three-quarters (73%) were certified as M/WBEs or DBEs. Although the owner's highest level of education varied widely across subgroups, overall, a majority of the sample (78%) reported having earned a college degree or postgraduate degree.

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<sup>1</sup> Due to small sample sizes for Hispanic American, Asian American, and Native American categories, conclusions in this narrative should be treated as tentative, and for the sake of discussion only.

- Nonminority male firm owners reported having more years of experience in their fields than did minority and women business owners, with 47 percent of firms owned by nonminority males reporting 30 or more years experience, as compared with 22 percent of M/WBE firms.
- The percentage of 2002 revenue earned from Commonwealth of Virginia agencies did vary greatly as a function of race/gender category. Compared to M/WBE firms, nonminority males were more than twice as likely to earn revenue from the Commonwealth agencies (65% vs. 31%, respectively).

### **6.3 Personal Interviews and Focus Groups Demographics**

#### **Business Characteristics**

The interview instrument and focus group registration form included questions designed to establish a business profile for each business participating in the process. The information gathered included the primary line of business, number of years each firm has been in business, organizational structure, gross revenues, and firm size. Please note that not all participants answered every question.

#### **Primary Line of Business**

**Exhibit 6-4** summarizes demographic data on M/WBEs' primary line of business. The categories are construction; architecture and engineering; professional services, which include services that require an advanced degree or special training; other services, which include security, equipment repair, and janitorial; and goods and supplies. In addition to the information above, the chart also reflects the number and percentage of businesses in each category by ethnicity.

**EXHIBIT 6-3**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**SELECTED DEMOGRAPHICS BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Company certified as MBE, WBE, or DBE?</i>								<i>n=502</i>
Yes	84%	76%	87%	57%	74%	79%	34%	73%
No	16%	24%	13%	43%	26%	21%	66%	27%
<i>Gender of Company owner</i>								<i>n=539</i>
Female	25%	36%	17%	44%	100%	52%	0%	44%
Male	75%	64%	83%	56%	0%	48%	100%	56%
<i>Owner's highest level of education</i>								<i>n=535</i>
Some High School	1%	0%	0%	0%	0%	0%	4%	1%
High School Graduate	4%	0%	4%	6%	14%	7%	5%	7%
Trade or Technical Education	2%	0%	6%	6%	1%	2%	1%	2%
Some College	12%	0%	13%	25%	12%	10%	20%	12%
College Graduate	44%	36%	26%	31%	35%	38%	36%	37%
Postgraduate Degree	37%	64%	51%	31%	38%	43%	34%	41%
<i>Owner's years of experience</i>								<i>n=537</i>
Less than 10 years	9%	11%	4%	13%	10%	9%	8%	9%
11 to 15 years	25%	24%	26%	13%	19%	22%	9%	20%
16 to 20 years	17%	29%	15%	25%	22%	21%	19%	20%
21 to 29 years	22%	20%	28%	38%	29%	25%	17%	24%
30 to 35 years	17%	12%	21%	6%	14%	15%	25%	17%
More than 35 years	10%	4%	6%	6%	6%	7%	22%	9%
<i>Percentage Revenue from State Business</i>								<i>n=527</i>
	22%	27%	28%	50%	43%	31%	65%	36%

Source: MGT Telephone Survey of Businesses, October 2003.

**EXHIBIT 6-4  
COMMONWEALTH OF VIRGINIA  
PERSONAL INTERVIEWS AND FOCUS GROUPS  
BUSINESS TYPE BY ETHNICITY**

<b>Business Category</b>	<b>African American</b>	<b>Hispanic</b>	<b>Asian American</b>	<b>Native American</b>	<b>Nonminority Woman</b>	<b>Nonminority Male</b>	<b>Total</b>	<b>Percent of Total</b>
Construction	4				3	7	14	14.43%
Architecture and Engineering					1	1	2	2.06%
Professional Services	4	2	4	1	4	4	19	19.59%
Other Services	2			1	5	8	16	16.49%
Good and Supplies	1				17	28	46	47.42%
<b>Total</b>	<b>11</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>30</b>	<b>48</b>	<b>97</b>	<b>100.00%</b>
<b>Percent of Total</b>	<b>11.34%</b>	<b>2.06%</b>	<b>4.12%</b>	<b>2.06%</b>	<b>30.93%</b>	<b>49.48%</b>	<b>100.00%</b>	

Source: Personal interviews and focus group participants.

As shown in **Exhibit 6-4**, of the firms participating, 14 percent were in the construction category; two percent were in architectural and engineering, 19 percent were in professional services; 16 percent were in the other services category; and 47 percent were in the goods and supplies category.

### **Years in Business**

Seventy percent of the African American-owned firms participating were established between 1980 and 2003 as shown in **Exhibit 6-5**. Only three African American-owned firms (30%) were established before 1980. Of the participating Hispanic-, Asian American-, and Native American-owned firms, all have been established since 1980. Seventy percent of the participating WBE firms were established between 1980 and 2003. The majority of nonminority male firms were established after 1980 (60%), although nonminority males have the highest percentage of firms established prior to 1980 of any group. Minority- and women-owned firms have established their business in more recent years compared with nonminority male-owned firms.

### **Organizational Structure**

Across ethnicity and gender the vast majority of participants are structured as a corporation as shown in **Exhibit 6-6**. Nonminority women-owned firms had a higher percentage of sole proprietors than did nonminority males.

### **Gross Revenues**

Information concerning gross revenues is also summarized in **Exhibit 6-6**. Of the African American-owned firms interviewed, one firm had gross revenues over \$5 million, three firms were in the \$1 million to \$3 million range, and two grossed less than \$500,000. The majority of nonminority women-owned firms had gross revenues less than \$3 million (68%). In contrast, 18 (45%) nonminority male-owned firms had gross revenues in excess of \$3 million.

**EXHIBIT 6-5  
COMMONWEALTH OF VIRGINIA  
PERSONAL INTERVIEWS AND FOCUS GROUPS  
YEAR BUSINESS ESTABLISHED**

Years	African American		Hispanic American		Asian American		Native American		Nonminority Women		Nonminority Male	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Prior to 1940	1	10.00%							2	6.67%	5	10.42%
1940-49									1	3.33%	2	4.17%
1950-59									2	6.67%	1	2.08%
1960-69									1	3.33%	4	8.33%
1970-75									1	3.33%	2	4.17%
1976-79	2	20.00%							2	6.67%	5	10.42%
1980-85	2	20.00%	1	50.00%					5	16.67%	6	12.50%
1986-89	1	10.00%			1	25.00%	1	50.00%	3	10.00%	3	6.25%
1990-95	1	10.00%			1	25.00%	1	50.00%	8	26.67%	6	12.50%
1996-99	1	10.00%	1	50.00%	1	25.00%			1	3.33%	6	12.50%
2000-2003	2	20.00%			1	25.00%			4	13.33%	8	16.67%
<b>Total Responding</b>	<b>10</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>4</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>30</b>	<b>100.00%</b>	<b>48</b>	<b>100.00%</b>

Source: Personal interviews and focus group participants.

**EXHIBIT 6-6  
COMMONWEALTH OF VIRGINIA  
PERSONAL INTERVIEWS AND FOCUS GROUPS  
SELECTED DEMOGRAPHICS**

Category	African American		Hispanic American		Asian American		Native American		Nonminority Women		Nonminority Male	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
<b>Organizational Structure</b>												
Sole Proprietorship		0.00%		0.00%		0.00%	1	50.00%	5	16.67%	1	2.08%
Partnership		0.00%		0.00%		0.00%		0.00%		0.00%	2	4.17%
Corporation	11	100.00%	2	100.00%	4	100.00%	1	50.00%	25	83.33%	44	91.67%
Other		0.00%		0.00%		0.00%		0.00%		0.00%	1	2.08%
<b>Total Responding</b>	<b>11</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>4</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>30</b>	<b>100.00%</b>	<b>48</b>	<b>100.00%</b>
<b>Gross Revenues</b>												
Less than \$100,000		0.00%		0.00%		0.00%		0.00%	1	3.57%		0.00%
\$100,001 to \$500,000	2	33.33%		0.00%		0.00%		0.00%	5	17.86%	7	17.50%
\$500,001 to \$1 million		0.00%		0.00%	1	33.33%	1	50.00%	6	21.43%	6	15.00%
\$1,000,001 to \$3 million	3	50.00%		0.00%	2	66.67%	1	50.00%	7	25.00%	9	22.50%
\$3,000,001 to \$5 million		0.00%	1	100.00%		0.00%		0.00%	4	14.29%	5	12.50%
\$5,000,001 to \$10 million	1	16.67%		0.00%		0.00%		0.00%	3	10.71%	4	10.00%
More than \$10 million		0.00%		0.00%		0.00%		0.00%	2	7.14%	9	22.50%
<b>Total Responding</b>	<b>6</b>	<b>100.00%</b>	<b>1</b>	<b>100.00%</b>	<b>3</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>28</b>	<b>100.00%</b>	<b>40</b>	<b>100.00%</b>
<b>Number of Employees</b>												
0		0.00%		0.00%		0.00%		0.00%	1	3.33%	2	4.17%
1 - 10	4	36.36%		0.00%	1	25.00%		0.00%	14	46.67%	15	31.25%
11 - 50	6	54.55%	2	100.00%	3	75.00%	2	100.00%	11	36.67%	22	45.83%
51 - 75	1	9.09%		0.00%		0.00%		0.00%	2	6.67%	1	2.08%
Over 75		0.00%		0.00%		0.00%		0.00%	2	6.67%	8	16.67%
<b>Total Responding</b>	<b>11</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>4</b>	<b>100.00%</b>	<b>2</b>	<b>100.00%</b>	<b>30</b>	<b>100.00%</b>	<b>48</b>	<b>100.00%</b>

Source: Personal interviews and focus group participants.

## **Firm Size**

Ten of the 11 African American firms participating had fewer than 50 employees as shown in **Exhibit 6-6**. The Hispanic American, Asian American, and Native American firms all had fewer than 50 employees. Of the women-owned firms, 47 percent had between 1 and 10 employees. Thirty-seven percent of the WBEs had between 11 and 50 employees, with four firms having more than 50 employees. Eighty-one percent of nonminority male-owned firms had fewer than 50 employees.

## **6.4 Findings**

In this section, we present our findings based on anecdotal data collected for this study. The findings are presented in five sections:

- 6.4.1 Loans, Bonds, and Insurance Experience
- 6.4.2 Public and Private Sector Work Experience
- 6.4.3 Work Experience with the Commonwealth of Virginia
- 6.4.4 Discriminatory Experiences
- 6.4.5 Perceptions of Business Attitudes, Business Practices, and M/WBEs

### **6.4.1 Loans, Bonds, and Insurance Experience**

Survey respondents were asked if they had applied for a business start-up loan, operating capital loan, performance bond, bid bond, equipment loan, commercial liability insurance, and professional liability insurance. In addition, for those who did apply, they were asked if they were approved or not. The percentages shown in **Exhibit 6-7** are of total responses in that subgroup.

**EXHIBIT 6-7  
COMMONWEALTH OF VIRGINIA  
VENDOR TELEPHONE SURVEY  
EXPERIENCE WITH LOANS, BONDS, AND INSURANCE  
SINCE 1998 BY BUSINESS OWNER  
RACE/ETHNICITY AND GENDER\***

<b>QUESTION</b>	<b>African American</b>	<b>Asian American</b>	<b>Hispanic American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Total M/WBE</b>	<b>Nonminority Male</b>	<b>Total</b>
<i>Business start-up loan</i>								<i>n=55</i>
Applied	15%	24%	15%	13%	5%	12%	1%	10%
Approved	5%	20%	15%	7%	2%	5%	0%	3%
<i>Operating capital loan</i>								<i>n=111</i>
Applied	20%	32%	55%	11%	12%	19%	2%	12%
Approved	7%	24%	45%	7%	11%	12%	2%	8%
<i>Performance bond</i>								<i>n=75</i>
Applied	13%	28%	9%	15%	10%	12%	2%	8%
Approved	10%	28%	6%	15%	9%	11%	2%	7%
<i>Bid bond</i>								<i>n=82</i>
Applied	15%	20%	12%	7%	10%	13%	4%	9%
Approved	10%	20%	12%	7%	9%	10%	4%	7%
<i>Equipment loan</i>								<i>n=97</i>
Applied	14%	16%	24%	22%	13%	15%	4%	11%
Approved	9%	16%	21%	22%	13%	12%	4%	9%
<i>Commercial liability insurance</i>								<i>n=343</i>
Applied	52%	184%	103%	33%	40%	55%	13%	38%
Approved	51%	180%	100%	33%	40%	54%	13%	38%
<i>Professional liability insurance</i>								<i>n=231</i>
Applied	33%	156%	79%	19%	26%	38%	7%	26%
Approved	33%	148%	79%	15%	26%	37%	7%	25%

Source: MGT Telephone Survey of Businesses, October 2003.

\* Percentages shown are of the total respondents in each subcategory (i.e., 15% of the African American respondents applied for a loan).

From **Exhibit 6-7**, the following observations can be made:

- Only 10 percent of respondents have applied for a business start-up loan. However, M/WBE firms were much more likely to apply for a business start-up loan than were nonminority male-owned firms (12% vs. 1%, respectively). Fifteen percent of the African American-owned firms applied for start-up loans compared with 5 percent of nonminority women-owned firms and 1 percent of nonminority male-owned firms.
- Overall, for the bond, loan, and insurance categories, nonminority male-owned firms tended to apply for bonds, loans, and insurance at a much lower rate than did M/WBEs.
- The greatest disparity between nonminority males and M/WBE approval rates was in the loan category, with African American-owned firms having the least success in all categories of loan application.

The vendors who participated in the interviews and focus groups identified the following as barriers to their growth and success:

- cash flow and cash management
- securing bonding
- building relationships with primes and owners
- holding of retainage
- building capacity
- developing an experienced workforce
- slow pay
- paperwork and bureaucracy

Nonminority-owned prime contractors in some instances confirmed the experiences cited by minority- and women-owned firms.

#### **6.4.2 Public and Private Sector Work Experience**

Surveyed firms were asked about their work experience in the public and private sectors. **Exhibit 6-8** provides information on the percentage of firms that worked as a prime contractor; the number of times firms bid as subcontractor or subconsultant; the number of times firms were asked by a prime to be a subcontractor; and the number of times firms were hired by a prime as a subcontractor. The results are presented by race/ethnicity and gender. The following general observations can be made.

**EXHIBIT 6-8**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**WORK EXPERIENCE BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Number of Times as Prime Contractor since 1998</i>								<i>n=507</i>
Never	39%	48%	39%	50%	38%	41%	60%	43%
1 to 10 times	27%	30%	28%	21%	27%	28%	13%	26%
11 to 100 times	32%	21%	28%	14%	27%	27%	21%	26%
More than 100 times	2%	1%	4%	14%	8%	4%	6%	5%
<i>Number of times bid as a subcontractor or subconsultant</i>								<i>n=507</i>
Never	32%	30%	22%	36%	36%	32%	69%	36%
1 to 10 times	39%	36%	37%	14%	35%	36%	13%	33%
11 to 99 times	25%	31%	30%	29%	22%	26%	14%	24%
More than 100 times	4%	3%	11%	21%	8%	6%	5%	6%
<i>Number of times asked to be a subcontractor or subconsultant</i>								<i>n=505</i>
Never	35%	34%	29%	36%	42%	36%	67%	40%
1 to 10 times	45%	39%	31%	36%	29%	37%	16%	34%
11 to 99 times	18%	24%	36%	7%	22%	22%	11%	21%
More than 100 times	2%	3%	4%	21%	7%	5%	6%	5%
<i>Number of times hired as a subcontractor or subconsultant</i>								<i>n=506</i>
Never	40%	32%	22%	14%	44%	37%	73%	42%
1 to 10 times	45%	50%	42%	57%	33%	42%	14%	39%
11 to 99 times	13%	14%	29%	14%	15%	16%	8%	15%
More than 100 times	2%	4%	7%	14%	8%	5%	5%	5%

Source: MGT Telephone Survey of Businesses, October 2003.

- In general, nonminority male-owned firms were more likely than minority-owned firms to have never served as a prime contractor (60% vs. 41%, respectively). Surprisingly, within M/WBE groups, nonminority women and Native Americans reported a slightly higher rate of having “served more than 100 times as a prime contractor” than did nonminority males (although small subsample sizes for the latter group make the assertion of a trend questionable).
- On the whole, nonminority male-owned firms were two times more likely to have never bid as a subcontractor or subconsultant than were M/WBE-owned firms. A slightly lower percentage of nonminority male-owned firms (5%) reported having submitted more than 100 bids when compared with M/WBE firms (6%), with African American (4%) and Asian American (3%) firms reporting lower rates in this category than the M/WBE average (6%).
- When nonminority male-owned firms were compared with minority-owned firms, the percentage of those who had never been asked to serve as a subcontractor varied greatly (67% vs. 36%). Although African American- and Asian American-owned firms tended to have been asked more frequently in the categories “1 to 10 times” and “11 to 99 times,” nonminority women-owned firms were slightly more likely to have been asked “more than 100 times” than were nonminority male-owned firms (6% vs. 5%).
- Nonminority male-owned firms were no more likely to have been hired as a subcontractor or subconsultant “more than 100 times” than were M/WBEs (5% vs. 5%, respectively), although the rate at which nonminority male-owned firms were “never hired” was nearly twice that of M/WBEs (73% and 37%, respectively).

Firms indicating they had served either as a prime contractor or as a prime consultant since 1998 reported the frequency of their use of subcontractors or subconsultants, in general, and their utilization of M/WBEs for state and private sector projects, in particular. Firms participating in the survey were also asked to rate their experience with subcontractors or subconsultants by race/ethnicity and gender categories. **Exhibit 6-9** indicates the percentage of usage of subcontractors or subconsultants by primes, and their experience with them in two categories (“Excellent/Good” and “Fair/Poor”).

**EXHIBIT 6-9**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**EXPERIENCE WITH SUBCONTRACTORS AND SUBCONSULTANTS BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Has Your Company Used Subcontractors or Subconsultants since 1998?</i>								
								<i>n=321</i>
Yes	65%	69%	74%	67%	71%	68%	39%	66%
No	35%	31%	26%	33%	29%	32%	61%	34%
<i>Used M/WBEs for Commonwealth of Virginia Projects since 1998</i>								
								<i>n=111</i>
Very Often	36%	24%	22%	17%	15%	22%	0%	21%
Sometimes	32%	12%	6%	17%	18%	17%	38%	19%
Seldom	9%	6%	0%	33%	13%	10%	50%	13%
Never	23%	59%	72%	33%	55%	50%	13%	48%
<i>Used M/WBEs for Private Projects since 1998</i>								
								<i>n=180</i>
Very Often	52%	52%	45%	50%	34%	45%	10%	43%
Sometimes	27%	22%	27%	17%	29%	26%	30%	27%
Seldom	10%	13%	0%	33%	14%	11%	40%	13%
Never	11%	13%	27%	0%	23%	17%	20%	17%
<i>Rate Experience with Minority Men and Women Subs</i>								
								<i>n=177</i>
Excellent/Good	87%	92%	94%	100%	90%	90%	89%	90%
Fair/Poor	13%	8%	6%	0%	10%	10%	11%	10%
<i>Rate Experience with Nonminority Women Subs</i>								
								<i>n=144</i>
Excellent/Good	82%	94%	94%	100%	91%	89%	100%	90%
Fair/Poor	18%	6%	6%	0%	9%	11%	0%	10%
<i>Rate Experience with Nonminority Male Subs</i>								
								<i>n=174</i>
Excellent/Good	80%	92%	89%	80%	85%	85%	90%	85%
Fair/Poor	20%	8%	11%	20%	15%	15%	10%	15%

Source: MGT Survey of Businesses, October 2003.

- Overall, nearly two-fifths of nonminority male primes (39%) reported using subcontractors or subconsultants compared with a little more than two-thirds of M/WBE firms' utilization of subs (68%).
- M/WBE respondents reported utilizing M/WBEs “very often” as subcontractors or subconsultants for both state and private projects at a higher rate than did nonminority male-owned firms (state projects: 22% vs. 0%, respectively; private projects: 45% vs. 10%, respectively); and half of the M/WBE sample reported they had “never used” M/WBE subs, compared with 13 percent of nonminority firms.
- M/WBE firms reported “excellent/good” experiences with three categories of subs—nonminority males, nonminority women, and minorities—at roughly equivalent rates (85%, 89% and 90%, respectively). Nonminority male-owned firms were more likely to report “excellent/good” experiences with nonminority male firm subs and nonminority women-owned firm subs (90% and 100%, respectively) than were M/WBEs (85% and 89%, respectively).

As shown in **Exhibit 6-10**, more than four-fifths of subs sampled (81%) rated their experience with primes as excellent or good. Some situations confronted by firms in the public and private sectors may have influenced their experiences with primes. **Exhibit 6-10** also shows the percentage of firms, compared with their total sample representation that as prospective subcontractors or subconsultants reported problematic treatment by prime contractors. For example:

- Nearly one-sixth of subcontractors sampled provided a bid to a prime, but received no response (15%).
- One-sixth of subcontractors sampled indicated they had completed a job, but that payment was substantially delayed (16%), and 7 percent indicated they were never paid.
- One-sixth of subcontractors sampled indicated they had been pressured by primes to lower their quote or bid (16%).

The rates of response for the two general categories—M/WBEs and nonminority male-owned firms—were dramatically disparate for all problem categories. For example:

- Nearly a quarter (24%) of M/WBE subcontractors were pressured to lower their bid compared to only 3 percent of nonminority male subcontractors.
- Slightly more than a quarter (26%) of M/WBE subcontractors were delayed payment after job completion, while only 2 percent of nonminority male subcontractors experienced the same treatment.

**EXHIBIT 6-10**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**EXPERIENCE WITH PRIME CONTRACTORS BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total MWBE	Nonminority Male	Total
<i>Rate experience with primes since 1998</i>								<i>n=296</i>
Excellent/Good	76%	84%	83%	75%	85%	81%	83%	81%
Fair/Poor	24%	16%	17%	25%	15%	19%	17%	19%
<i>Prime never responded to sub bid/quote</i>	22%	64%	55%	15%	17%	23%	3%	<i>n=136</i> 15%
<i>Asked to be a "front" for Nonminority Firm</i>	10%	44%	24%	4%	6%	10%	0%	<i>n=57</i> 6%
<i>Pressured to lower bid</i>	25%	80%	52%	15%	15%	24%	3%	<i>n=144</i> 16%
<i>Paid less than negotiated contract amount</i>	11%	48%	36%	11%	7%	12%	2%	<i>n=74</i> 8%
<i>Dropped after prime received contract</i>	12%	40%	18%	11%	7%	11%	1%	<i>n=66</i> 7%
<i>Delayed payment after job completion</i>	26%	68%	58%	26%	18%	26%	2%	<i>n=149</i> 16%
<i>Completed job, never paid</i>	11%	40%	15%	15%	8%	11%	1%	<i>n=66</i> 7%
<i>Did other or less work than agreed</i>	16%	52%	27%	15%	10%	15%	1%	<i>n=89</i> 10%
<i>Held to higher standards than other subs</i>	15%	28%	12%	11%	6%	11%	1%	<i>n=62</i> 7%

Source: MGT Telephone Survey of Businesses, October 2003.

Among individual minority groups of adequate sample size, African American-owned firms tended to perceive that they were held to a higher standard than were other groups, and that they were more likely to have been “pressured to lower their bid.”

Participants in the personal interviews and focus groups shared the following comments regarding practices of prime contractors:

- “Primes prefer dealing with certain types of subs.” *Asian American service firm*
- “If there is a stipulation for M/WBE subs, it forces the prime to use an M/WBE.” *Asian American service firm*
- “Primes have used my resume during the bid process, then eliminate that component.” *Nonminority women service firm*
- “Contractors will work with whoever they feel comfortable with.” *Nonminority women supplier of goods*
- “Primes use minority subs to buy supplies, not as a subcontractor.” *Nonminority male contractor*
- “Large primes do not contact minorities for quotes.” *African American contractor*
- “Nonminority primes use minority subcontractors as a pass through; it is not legitimate.” *African American contractor*
- “Primes will use M/WBEs that are not even in that line of business as a pass through; for example, a graphic design firm as a construction subcontractor.” *African American service firm*
- “Primes are completely free to do what they want to with sub. Traditionally they tend to work closer with some rather than others. That is routine.” *Nonminority male contractor*
- “Primes will pass work through a ‘shell’ minority contractor.” *Nonminority male contractor*
- “Prime bundled the participation goal after selection, despite using our credentials in the bid. Prime claimed we were unsuccessful in meeting mutually agreed upon scope of services (scope and price).” *African American service firm*
- “Primes do not want to assist someone who may one day be in competition with them.” *African American service firm*

### **6.4.3 Work Experience with the Commonwealth of Virginia**

**Exhibit 6-11** reports participants' observations regarding their experiences in working with the Commonwealth of Virginia since 1998.

- Almost all of nonminority male-owned firms indicated they had never bid as a prime contractor for Commonwealth construction work, compared with more than four-fifths of M/WBEs (92% vs. 82%, respectively).
- Of all categories, Asian American firms were least likely to have bid as primes for Commonwealth construction work.
- Nonminority male-owned prime contractors were less likely to have been awarded construction work than were M/WBEs (2% vs. 9%, respectively). Among M/WBEs of adequate sample size, Asian American and African American firms were least likely to have been awarded as primes for state construction work (4% and 5%, respectively).
- As for firms that were awarded Commonwealth work as subcontractors, nonminority male-owned firms were more likely to have never worked as subs than were M/WBEs (96% and 90%, respectively).

Respondents indicated that a number of factors have affected their ability to conduct business in the Commonwealth of Virginia. The five most common factors included: "limited time to prepare a bid or quote" (M/WBEs as a group, 8%; nonminority male owned firms, 4%); "limited information received on pending projects" (M/WBEs as a group, 6%; nonminority male-owned firms, 4%); eVA system (M/WBEs as a group, 4%; nonminority male-owned firms, 6%); "contract too expensive to bid" (M/WBEs as a group, 6%; nonminority male-owned firms, 1%); and the size of the contract (M/WBEs as a group, 6%; nonminority male-owned firms, 1%). African Americans and Native Americans perceived these factors as barriers at a higher rate than did other groups, a pattern that held for almost all "barrier" categories. In contrast, Asian Americans reported no barriers to obtaining work.

During the personal interviews and focus groups, vendors cited examples of challenges in doing business with the Commonwealth. The factors that prevented them

**EXHIBIT 6-11  
COMMONWEALTH OF VIRGINIA  
VENDOR TELEPHONE SURVEY  
EXPERIENCE WITH STATE AGENCIES BY BUSINESS OWNER  
RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Submitted bids for Commonwealth of Virginia construction work as prime since 1998?</i>								<i>n=254</i>
<i>Never</i>	84%	96%	78%	70%	79%	82%	92%	84%
<i>1 to 10 times</i>	7%	0%	9%	0%	11%	7%	6%	7%
<i>11 to 100 times</i>	8%	4%	13%	30%	10%	10%	2%	8%
<i>More than 100 times</i>	1%	0%	0%	0%	0%	0%	0%	0%
<i>Submitted bids for Commonwealth of Virginia construction work as sub since 1998?</i>								<i>n=255</i>
<i>Never</i>	87%	96%	74%	80%	81%	84%	96%	86%
<i>1 to 10 times</i>	9%	4%	13%	10%	8%	9%	2%	7%
<i>11 to 100 times</i>	4%	0%	13%	10%	4%	5%	0%	4%
<i>More than 100 times</i>	0%	0%	0%	0%	7%	2%	2%	2%
<i>Awarded Commonwealth of Virginia construction work as prime since 1998?</i>								<i>n=252</i>
<i>Never</i>	95%	96%	91%	89%	86%	91%	98%	92%
<i>1 to 10 times</i>	3%	4%	4%	11%	10%	6%	2%	5%
<i>11 to 100 times</i>	1%	0%	4%	0%	3%	2%	0%	2%
<i>More than 100 times</i>	1%	0%	0%	0%	1%	1%	0%	1%
<i>Awarded Commonwealth of Virginia construction work as sub since 1998?</i>								<i>n=251</i>
<i>Never</i>	89%	100%	83%	89%	89%	90%	96%	91%
<i>1 to 10 times</i>	5%	0%	9%	0%	1%	3%	2%	3%
<i>11 to 100 times</i>	5%	0%	9%	11%	7%	6%	2%	5%
<i>More than 100 times</i>	0%	0%	0%	0%	3%	1%	0%	1%

**EXHIBIT 6-11 (Continued)**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**EXPERIENCE WITH STATE AGENCIES BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

<b>QUESTION</b>	<b>African American</b>	<b>Asian American</b>	<b>Hispanic American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Total M/WBE</b>	<b>Nonminority Male</b>	<b>Total</b>
<i>Barriers to obtaining work</i>								
<i>Prequalification requirements (n=25)</i>	8%	0%	4%	13%	5%	5%	0%	5%
<i>Performance bond requirements (n=27)</i>	8%	0%	2%	25%	5%	6%	1%	5%
<i>Financing (n=21)</i>	7%	0%	0%	13%	4%	4%	1%	4%
<i>Insurance requirements (n=14)</i>	3%	0%	0%	0%	3%	2%	4%	3%
<i>Bid specifications too rigid (n=26)</i>	4%	0%	2%	19%	8%	5%	3%	5%
<i>Limited time to prepare a bid package/quote (n=38)</i>	7%	0%	9%	25%	10%	8%	4%	7%
<i>Limited info received on pending projects (n=33)</i>	7%	0%	6%	13%	8%	6%	4%	6%
<i>Limited knowledge of contracting procedures (n=17)</i>	3%	0%	2%	0%	5%	3%	4%	3%
<i>Lack of experience (n=14)</i>	2%	0%	2%	0%	6%	3%	0%	3%
<i>Lack of personnel (n=15)</i>	3%	0%	2%	0%	5%	3%	1%	3%
<i>Contract too large (n=27)</i>	8%	0%	4%	6%	6%	6%	1%	5%
<i>Contract too expensive to bid (n=31)</i>	7%	0%	6%	19%	8%	6%	1%	6%
<i>Prequalifications limit the competition? (n=32)</i>	8%	0%	9%	19%	8%	7%	0%	6%
<i>eVA System (Virginia Internet based purchasing system)? (n=22)</i>	3%	0%	0%	13%	6%	4%	6%	4%

Source: MGT Telephone Survey of Businesses, October 2003.

from bidding on Commonwealth projects include financing and bonding requirements, bid or RFP specifications, and the size of projects.

The majority of participants felt that the Commonwealth staff were courteous and responsive when they had questions for them. Some participants did not like that they had to use eVA and that if they did get a contract with the Commonwealth through eVA, they had to pay a one percent fee.

### **Financing and Bonding**

Examples of financing and bonding requirements interfering with a firm's ability to bid on a Commonwealth project are highlighted in the quotes below. These are responses to the question, "What factors interfere with your ability to bid on Commonwealth projects?"

- "Insurance requirements may be over \$2 million and small businesses don't have that capacity" – *Asian American service firm*
- "Bonding limitations" – *Nonminority male contractor*
- "Bonding capacity and financing." *Nonminority male contractor*
- "Bonding." *African American contractor*
- "Bonding requirements." *Nonminority male supplier of goods*
- "We are a young company and the bonding process is difficult. More notice is necessary to help with bid bond process and design process." *Nonminority women supplier of goods*
- "Terms and Conditions are outrageous, unlimited liability. No leverage for a vendor." *Nonminority male supplier of goods*

### **Bid or RFP Specifications**

Some vendors commented on bid and RFP specifications as being a barrier to providing a bid on Commonwealth projects, as highlighted below:

- "Recent bid requirement required statewide coverage and bidders were scored on their ability to achieve that. Because of our size, we did not score high to keep the contract" *Nonminority male-owned service firm*
- "The State does not always make RFP clear as to what they want." *Nonminority male service firm*

- “The way their contract is worded. They always have to make an amendment to the contract to read the contract will not exceed a certain dollar amount, including damages.” *Nonminority male supplier of goods*
- “The information contained in the information packet has been too vague.” *Nonminority male supplier of goods*
- “Confusing specifications, too general, bad interpretations of what the customer is looking for. Also, inadequate time to respond to RFP.” *Nonminority women supplier of goods*
- “They change the rules in the middle of the game. For example, they changed the rules on the pricing formula and favored statewide over regional.” *Nonminority male service firm*
- “The requirement that a vendor have a contractor’s license when it is not required for that line of business is a problem.” *Nonminority male service provider*
- “Sometimes the specifications are written for XYZ brand, but you can’t buy that brand unless you are an authorized distributor (it does not say ‘or equal’).” *Nonminority supplier of goods*

### **Size of Projects**

The size of projects was also cited as a barrier to bidding on Commonwealth projects. The quotes below highlight this:

- “The bundling of all State agencies into one contract for services.” *Nonminority women service firm*
- “The jobs are too big.” *African American service firm*
- “The Commonwealth’s bundling of projects makes them out of reach of small businesses.” *African American professional service firm*
- “Size – projects are too large.” *Native American service firm*
- “The bundling of projects tends to be out of reach of small businesses.” *African American service firm*

### **6.4.4 Discriminatory Experiences**

**Exhibit 6-12** shows respondent perceptions of discriminatory experiences by the owner’s race, ethnicity, or gender. Nearly a third (30%) of those who responded to these items indicated that they had experienced discrimination because of race, ethnicity, or gender on one or more occasions (8% very often, 13% sometimes, and 9% seldom).

**EXHIBIT 6-12  
COMMONWEALTH OF VIRGINIA  
VENDOR TELEPHONE SURVEY  
EXPERIENCE WITH DISCRIMINATION BY BUSINESS OWNER  
RACE/ETHNICITY AND GENDER**

Demographic	Race/Ethnicity							Total
	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	
Sample n = 543								
<b>Part A: Frequency of Discrimination<sup>1</sup></b>								
Experienced discrimination due to race, ethnicity, or gender of the owner since 1998?								
Yes, very often	15%	8%	9%	13%	2%	9%	0%	8%
Yes, sometimes	22%	17%	17%	13%	5%	15%	0%	13%
Yes, seldom	11%	9%	9%	6%	9%	10%	3%	9%
Never	39%	58%	51%	63%	73%	56%	90%	60%
Don't know	11%	5%	11%	0%	7%	8%	5%	8%
Total number of respondents	173	76	47	16	154	466	77	543
Number who experienced discrimination	n=170	n=74	n=45	n=15	n=149	n=453	n=75	n=528
<b>Part B: Profile of Discrimination<sup>2</sup></b>								
Nature of Occurrence	n=48	n=9	n=9	n=2	n=18	n=82	n=1	n=87
Verbal comments	28	5	7	1	9	50	1	51
Written statements	1	0	1	0	2	4	0	4
Actions taken	19	4	1	1	7	32	0	32
Basis of discrimination	n=52	n=14	n=6	n=4	n=20	n=96	n=1	n=97
Owner's Race/Ethnicity	33	8	2	1	4	48	0	48
Owner's Sex	10	4	0	2	14	30	1	31
Time in Business	9	2	4	1	2	18	0	18
Time of occurrence	n=43	n=13	n=9	n=2	n=18	n=85	n=0	n=85
Precontract	32	12	8	1	10	63	0	63
Postcontract	11	1	1	1	8	22	0	22

Source: MGT Telephone Survey of Businesses, October 2003

<sup>1</sup> Part A Total reports responses as a percentage of the race/ethnicity/gender subsample by profile item.

<sup>2</sup> Part B reports response frequency by profile item.

Three-fifths (60%) reported they had not experienced discrimination, and only 8 percent indicated they did not know. More than one-third of M/WBE owners who responded to this portion of the survey reported experiencing discrimination on at least an occasional basis (34%), with nearly half of African Americans reporting having experienced discrimination at least occasionally (48%).

Firms also responded to more detailed requests for information about their experiences, inquiring as to type, basis, and time frame. These results are summarized in Part B of **Exhibit 6-12** as the response frequency for each item. Because of relatively small cell sizes for some response categories, it is inadvisable to assert trends from data in these categories, although some straightforward observations may be made:

- The most frequent form of discrimination reported by respondents was in the form of discriminatory “verbal comments” (51) followed by “actions taken” (32) and “written statements” (4).
- Of subsamples of adequate size, African Americans cited the highest frequency of occurrences, by far, with respect to both discriminatory actions and comments.
- The most frequent basis of discrimination perceived by respondents was the owner’s race/ethnicity (48 responses), with African Americans citing about two-thirds of those occurrences (33 of 48).
- When it occurred, discrimination tended to take place in the precontract stage (63 times) rather than at postcontract award (22).

#### **6.4.5 Perceptions of Business Attitudes, Business Practices, and M/WBEs**

Survey participants were asked to respond to a number of items regarding business attitudes and practices as they affected minority and nonminority businesses, reported in **Exhibit 6-13**. For most items, it is fair to say that the views of M/WBE firm respondents and nonminority male firm respondents were in clear opposition.

- Nearly three-quarters of M/WBEs (73%) and more than four-fifths of African Americans (81%) who responded agreed that there was an informal network of prime and subcontractors in the Commonwealth of Virginia, compared with two-fifths of nonminority male-owned firm respondents (43%).

**EXHIBIT 6-13**  
**COMMONWEALTH OF VIRGINIA**  
**VENDOR TELEPHONE SURVEY**  
**BUSINESS ATTITUDES AND PRACTICES BY BUSINESS OWNER**  
**RACE/ETHNICITY AND GENDER**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	Total
<i>Informal network of prime and subcontractors in Virginia</i>								
								<i>n=408</i>
Strongly agree/agree	81%	63%	70%	93%	66%	73%	43%	71%
Disagree/strongly disagree	7%	11%	6%	0%	8%	8%	11%	8%
Neutral/do not know	12%	27%	24%	7%	26%	19%	46%	22%
<i>This network excluded company from bidding or winning a contract in public and sectors</i>								
								<i>n=418</i>
Strongly agree/agree	61%	44%	53%	50%	31%	48%	16%	44%
Disagree/strongly disagree	20%	35%	26%	36%	47%	32%	52%	34%
Neutral/do not know	19%	20%	21%	14%	22%	20%	32%	22%
<i>Informal network has greater adverse effect on M/WBE owned firms than on others.</i>								
								<i>n=426</i>
Strongly agree/agree	84%	60%	57%	71%	48%	67%	28%	63%
Disagree/strongly disagree	6%	16%	8%	7%	23%	13%	30%	15%
Neutral/do not know	9%	25%	35%	21%	30%	21%	42%	23%
<i>Double standards in qualifications/performance make it more difficult for M/WBE businesses to win bids and contracts.</i>								
								<i>n=439</i>
Strongly agree/agree	77%	51%	71%	33%	48%	62%	23%	58%
Disagree/strongly disagree	11%	32%	12%	53%	33%	22%	36%	24%
Neutral/do not know	12%	17%	17%	13%	19%	16%	41%	18%
<i>Primes sometimes drop M/WBE subs after winning the contract</i>								
								<i>n=375</i>
Strongly agree/agree	51%	56%	57%	60%	36%	48%	23%	46%
Disagree/strongly disagree	12%	29%	23%	7%	29%	20%	23%	21%
Neutral/do not know	37%	15%	20%	33%	36%	31%	54%	34%
<i>M/WBE firms are viewed as less competent than nonminority firms</i>								
								<i>n=460</i>
Strongly agree/agree	79%	57%	73%	53%	49%	65%	17%	59%
Disagree/strongly disagree	12%	29%	17%	33%	35%	23%	54%	27%
Neutral/do not know	9%	14%	10%	13%	16%	12%	30%	14%
<i>Some nonminority firms change their bids when not required to hire M/WBEs.</i>								
								<i>n=383</i>
Strongly agree/agree	63%	65%	64%	77%	50%	60%	23%	57%
Disagree/strongly disagree	9%	19%	11%	8%	12%	12%	29%	13%
Neutral/do not know	28%	16%	25%	15%	38%	28%	49%	30%

Source: MGT Survey of Businesses, October 2003.

- Nearly half of M/WBE respondents (48%) believed this informal network excluded them from bidding or winning contracts in the private and public sectors, compared with only one-sixth (16%) of nonminority male-owned firms.
- M/WBE owners were much more likely to perceive the “adverse effects” of the “informal network” than were nonminority male-owned firm respondents (67% vs. 28%, respectively).
- More than three-fifths of M/WBE respondents (62%) believed that M/WBEs were victimized in both the private and public sectors by “double standards,” compared with nearly a quarter (23%) of nonminority male-owned firm respondents.
- Almost half of M/WBE respondents (48%) agreed that it was a common practice for an M/WBE firm to be dropped by a prime after winning a contract, as did nearly a quarter of nonminority male-owned firm respondents (23%).
- More than three-fifths of M/WBE respondents (65%) and nearly four-fifths of African American respondents (79%) agreed with the statement that M/WBEs are viewed as less competent than nonminority firms. Slightly more than one-sixth of nonminority male-owned firm respondents (17%) agreed with this statement.
- Three-fifths of M/WBE respondents (60%) and nearly one quarter of nonminority male-owned firm respondents (23%) agreed with the statement, “Some nonminority firms change their bidding procedures when not required to hire M/WBEs.”
- It is worth noting that among all groups, African Americans perceived these negative practices, attitudes, and their effects at a much higher rate than did other groups.

During the personal interviews and focus groups, some vendors felt that there was an informal network that gave an advantage to certain vendors, both in doing business with the Commonwealth and prime contractors, as provided below.

- “It is performance driven. We have a group of subs we know will get the job done and we simply contact them without a question...just a preference.” *Nonminority male contractor*
- “Product issue – there is a ‘buddy system’ that they will only allow certain products, thus excluding our products or other quality products.” *Nonminority male supplier of goods*
- “It is a local problem because of who knows who.” *Nonminority male service firm*

- “Agencies tend to go with those that they have worked with before.” *Nonminority women supplier of goods*
- “State agencies do business with ‘people they like’ even if the company has misrepresented itself. There is favoritism all the way up to the Governor’s cabinet.” *Nonminority male service firm*
- “The State tends to go back to the same providers.” *Nonminority female service firm*
- “Some companies have a relationship with the State.” *African American contractor*
- “The agencies are going to continue to use who they have always used and will call if anything is left.” *African American contractor*
- “Based on who the Facility Manager (decision maker) has done business with before.” *African American contractor*
- “It is who you know and who knows you.” *African American service firm*
- “There is an unspoken word in meetings. The same groups get together and you know that something is going on.” *Nonminority women service firm*
- “There is a bias toward companies that are already there. It is hard to break into the network.” *Asian American service firm*
- “Go with what they are used to.” *Nonminority women supplier of goods*
- “People work with people they know – long-term relationships.” *African American service firm*
- “Relationships probably impact selection and this may end up costing the state additional money.” *Native American service firm*
- “Absolutely, there is a good ol’ boy network, especially in the Richmond area.” *Nonminority male service firm*

**7.0 PRIVATE SECTOR  
UTILIZATION AND DISPARITY  
ANALYSES**

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## **7.0 PRIVATE SECTOR UTILIZATION AND DISPARITY ANALYSES**

This chapter analyzes the utilization and availability of minority, women, and nonminority firms in the private commercial (nonresidential) construction in the Commonwealth of Virginia. The results of the analyses are to determine whether minority, women, or nonminority businesses were underutilized or overutilized in private sector commercial construction. This chapter also provides analyses to assess the effect of race and gender, in conjunction with other demographic and economic variables, on (1) the likelihood an individual will be self-employed; and (2) individuals' earnings. Respectively, these analyses employ binary logistic regression and linear regression analysis using the Public Use Microdata Samples (PUMS) data from the 2000 Census of Population and Housing.

This chapter consists of the following sections:

- 7.1 Private Sector Construction Analyses
- 7.2 PUMS Analyses

### **7.1 Private Sector Construction Analyses**

#### **7.1.1 Methodology**

This section presents the methodology for the collection of data and analysis of market areas, utilization, and availability of minority-, woman-, and nonminority-owned firms. The description of business categories and minority-business enterprise (MBE) classifications are also presented in this section, as well as the process used to determine the geographical market areas, utilization, and availability of firms.

**Private Sector Analysis**

*Croson* provided that the government “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.”<sup>1</sup> The government agency's active or passive participation in discriminatory practices in the marketplace may show the compelling interest. Finding discrimination in the portions of the private sector economy that are subjects of the disparity study can also show passive participation. In *Croson*, the Court stated, “A municipality has a compelling government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality's legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program.”<sup>2</sup> The recent Court of Appeals decision in *Adarand* concluded that there was a compelling interest for a DBE program based primarily on evidence of private sector discrimination.<sup>3</sup>

The goal of this section is to evaluate the presence or absence of passive discrimination in the private sector. Whatever disparity analysis that is sufficient to prove public discrimination should be sufficient when applied to private data to provide an estimate of the magnitude of private discrimination.<sup>4</sup> Thus the following questions are addressed:

- Are there disparities in utilization of MBEs as prime contractors on commercial private sector construction projects?
- Are more MBE prime contractors used on Commonwealth of Virginia projects than on private sector commercial projects?

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<sup>1</sup> See *Richmond v. Croson*, 488 U.S. 492 (1989).

<sup>2</sup> *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

<sup>3</sup> *Adarand v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir 2000).

<sup>4</sup> I. Ayres and F. Vars, “When Does Private Discrimination Justify Public Affirmative Action?” 98 *Columbia Law Review* 1577 (1998).

### **7.1.2 Collection and Management of Data**

To determine the most appropriate data for our use in the analysis of the Virginia procurement activity and to identify data sources for the private sector construction analysis, MGT investigated two sources of data: Reed Construction Data (RCD) (formerly *Construction Management Data*) and *F.W. Dodge*. This chapter reports results from RCD data because it was the most complete data source for the analysis.

RCD was founded in 1975 as *Construction Management Data* and is currently owned by Reed Business Information. RCD is a source for construction project information throughout the United States. RCD engages in primary data collection on construction projects through telephone calls, site visits, and review of government data sources, such as building permit data. RCD information is essentially a marketing database used for sales leads and market analysis for the construction industry. RCD data follow construction projects through various stages of construction, from planning to subcontractor awards. RCD provides data on both General Construction and Civil Engineering.

Data were provided by RCD to MGT for the entire Commonwealth of Virginia covering the period from July 1998 through December 2002. Each electronic list provided by RCD contained, but was not limited to, the following information on most (not all) contracts contained in the list:

- **Project ID** - 9-digit nonunique number
- **Project Name** - e.g., description of what was being built
- **Project Address**
- **Project Nature** – Public Sector, Private Sector
- **Company Name**
- **Company Address**
- **Bid Value** – Dollar figures
- **Contract Date** – Date of contract award.

RCD classified the data as prime contractor and subcontract on public and private sector contracts. Please note that the RCD data do not contain information about a

vendor's ethnicity. MGT used several sources, including past Virginia disparity study databases and various agency lists to identify the ethnicity of the firms utilized in the private sector commercial market in the best possible manner. RCD claims 95 percent accuracy in the database.

There were 621 total private sector records in the RCD database. There was no contract dollar value amount in 416 records (67.0%). The dollar value was not provided in some records since contractors would not always provide the contract dollar information to RDC. There were no private sector subcontractor records in the RCD database. Consequently, disparity analysis of the utilization of MBE construction subcontractors on private sector commercial projects will not be addressed.

### **7.1.3 Availability (Vendor) Data Collection**

MGT calculated MBE availability for construction in the Commonwealth of Virginia using census data; specifically, SIC code 15 (Building Construction).

### **Market Area Methodology**

The analysis of the private sector was conducted for the Commonwealth of Virginia.

### **Business Categories and MBE Classifications**

This chapter studies only construction, the area for which there is the most extensive data on private sector activity and the focus of the most controversy in socioeconomic procurement preference programs. MBE classification is the same as for the analysis in Chapter 4.0.

### **7.1.4 Utilization Analysis**

This section presents the utilization of MBE and non-MBE firms for construction services for the Commonwealth of Virginia.

**Exhibit 7-1** shows the utilization of prime contractors. As the exhibit shows, there were \$262 million in prime commercial construction contracts in the four-and-a-half year period within Virginia. The average contract size was \$1.3 million. Of the total dollars spent, MBE firms received none of the prime commercial construction contracts.

**Exhibit 7-2** provides data on private commercial MBE prime contractor utilization by the number of contracts and number of unique vendors in the Commonwealth of Virginia. In the RCD data, no African American, Hispanic American, Asian American, or Native American firms received prime private sector contracts.

#### **7.1.5 Availability Analysis**

This section discusses the availability of prime contractors, according to race/ethnicity/gender categories. The availability of MBE and non-MBE firms was determined from census data. **Exhibit 7-3** displays availability statistics for prime contractors.

As **Exhibit 7-3** shows, nonminority male-owned firms comprised the majority of available prime contractor construction firms, according to census data. MBEs constituted 7.56 percent of the prime contractor vendor data. Among the MBE groups, the breakdown was:

- African American firms, 1.10 percent;
- Hispanic American firms, 1.26 percent;
- Asian American firms, 0.65 percent;
- Native American firms, 0.22 percent; and
- Nonminority women firms, 4.33 percent.

**EXHIBIT 7-1  
COMMONWEALTH OF VIRGINIA  
RCD PRIVATE SECTOR DATA  
UTILIZATION ANALYSIS OF PRIME CONTRACTORS  
DOLLARS AND PERCENTAGE OF TOTAL DOLLARS  
BY RACE/ETHNICITY/GENDER CLASSIFICATION**

	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Dollars Awarded
	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$	% <sup>1</sup>	\$
<b>Total</b>	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$641,717.00	0.24%	\$261,510,335.00	99.76%	\$262,152,052.00

Source: Reed Construction Data Construction Records.  
<sup>1</sup> Percentage of total dollars awarded annually to prime contractors.

**EXHIBIT 7-2  
COMMONWEALTH OF VIRGINIA  
RCD PRIVATE SECTOR DATA  
UTILIZATION ANALYSIS OF CONTRACTS  
NUMBER OF CONTRACTS AND UNIQUE CONTRACTORS**

Number of Contracts Let by Race/Ethnicity/Gender Classification

	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Contracts
	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#	% <sup>1</sup>	#
<b>Total Contracts</b>	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	0.98%	203	99.02%	205

Number of Vendors by Race/Ethnicity/Gender Classification

	African Americans		Hispanic Americans		Asian Americans		Native Americans		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Vendors
	#	% <sup>2</sup>	#	% <sup>2</sup>	#	% <sup>2</sup>	#	% <sup>2</sup>	#	% <sup>2</sup>	#	% <sup>2</sup>	#	% <sup>2</sup>	#
<b>Total Vendors</b>	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	0.63%	159	99.38%	160

Source: Reed Construction Data Construction Records.  
<sup>1</sup> Percentage of total contracts.  
<sup>2</sup> Percentage of total vendors.

**EXHIBIT 7-3  
COMMONWEALTH OF VIRGINIA  
AVAILABILITY OF PRIME CONTRACTORS  
BASED ON CENSUS DATA USING SIC 15**

	African Americans <sup>1</sup>		Hispanic Americans <sup>1</sup>		Asian Americans <sup>1</sup>		Native Americans <sup>1</sup>		MBE Subtotal		Nonminority Women		Nonminority Firms		Total Firms
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Total</b>	49	1.10%	56	1.26%	29	0.65%	10	0.22%	144	3.23%	193	4.33%	4,121	92.44%	4,458

Source: Census database.  
<sup>1</sup> Minority male and female firms are included in their respective minority classifications.

**7.1.6 Disparity Analysis**

Disparity is determined by comparing the percentage of utilization to the percentage of availability. Once compared, a disparity index was established that indicates if MBEs were underutilized or overutilized.

**Exhibit 7-4** shows the disparity indices for prime construction contracts, based on census availability. Overall, according to the disparity indices, all MBE groups were substantially underutilized in the private sector prime contractor commercial construction in the Commonwealth of Virginia. Moreover:

- African American firms were not utilized as prime contractors.
- Hispanic American firms were not utilized as prime contractors.
- Asian American firms were not utilized as prime contractors.
- Native American firms were not utilized as prime contractors.
- Nonminority women firms were underutilized, with a disparity index of 5.65.
- Nonminority male firms were overutilized.

**EXHIBIT 7-4  
COMMONWEALTH OF VIRGINIA  
DISPARITY ANALYSIS OF PRIVATE SECTOR PRIME CONTRACTORS  
BASED ON CENSUS DATA**

MBE Classification	% of Contract Dollars <sup>1</sup>	% of Available Firms <sup>2</sup>	Disparity Index <sup>3</sup>	Disparate Impact of Utilization
African Americans	0.00%	1.10%	0.00	* Underutilization
Hispanic Americans	0.00%	1.26%	0.00	* Underutilization
Asian Americans	0.00%	0.65%	0.00	* Underutilization
Native Americans	0.00%	0.22%	0.00	* Underutilization
Nonminority Women	0.24%	4.33%	5.65	* Underutilization
Nonminority Firms	99.76%	92.44%	107.91	Overutilization

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100.

\* An asterisk is used to indicate a substantial level of disparity - index below 80.00.

**7.1.7 Comparison of Commonwealth of Virginia and Private Sector Utilization of MBE Contractors**

The utilization of MBE contractors between the Commonwealth of Virginia and the private construction contracts in the RCD database differed significantly. The Commonwealth of Virginia used seven MBE contractors for prime contracting, whereas the private sector used no MBE prime contractors (**Exhibit 7-2**). The Commonwealth of Virginia and the private sector did not use the same MBE firms for private commercial construction. However, the Commonwealth of Virginia and the private commercial construction sector did utilize 25 of the same nonminority firms as prime contractors.

**7.1.8 Conclusions**

**Exhibit 7-5** provides a summary of the utilization of MBEs in private commercial construction in the Commonwealth of Virginia in comparison with MBE utilization by the Commonwealth of Virginia. The utilization of MBE firms was lower in the private commercial construction sector (0.00%) than by the Commonwealth of Virginia (0.32%). Furthermore, the Commonwealth of Virginia awarded significantly higher total dollars amount (\$3,469,966) to MBE firms than did the private commercial construction sector (\$0.00). This evidence is consistent with anecdotal comments from MBEs (Chapter 6.0) that utilization of MBEs as prime contractors will be substantially below reasonable measures of MBE availability in the absence of MBE program goals.

**EXHIBIT 7-5  
COMPARISON OF MBE UTILIZATION PERCENTAGE OF DOLLARS  
PRIVATE COMMERCIAL CONSTRUCTION  
AND COMMONWEALTH OF VIRGINIA**

<b>Business Category/Data Source</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Subtotal MBEs</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
<b>Prime Contractors</b>							
Commonwealth of Virginia Construction Prime Contractors	0.03%	0.29%	0.00%	0.00%	0.32%	1.17%	98.51%
Private Construction Prime Contractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.00%	0.24 %	99.76%

Source: Chapter 4.0 analyses and RCD data.

## 7.2 PUMS Analyses

In this section, two analyses are undertaken to assess the effect of race and gender, in conjunction with other demographic and economic variables, on (1) the likelihood an individual will be self-employed; and (2) individuals' earnings. Respectively, these analyses employ binary logistic regression and linear regression analysis using the Public Use Microdata Samples (PUMS) data from the 2000 Census of Population and Housing. **Exhibit 7-6** presents general data for individuals self-employed in construction, derived from the 2000 Census.

**EXHIBIT 7-6  
PERCENTAGE SELF-EMPLOYED/1999 EARNINGS BY  
RACE/GENDER/ETHNICITY CATEGORY**

<b>Race/Ethnicity/Sex Category</b>	<b>Percentage of Population Self-Employed</b>	<b>1999 Census Sample n</b>	<b>1999 Mean Earnings</b>
African American	11.80%	134	\$36,259.70
Hispanic American	6.44%	73	\$48,334.25
Asian American	26.21%	38	\$46,034.21
Native American	20.69%	18	\$24,066.67
Nonminority Women	12.83%	108	\$38,260.19
Nonminority Males	24.31%	1837	\$47,442.53
<b>Total</b>	20.26%	2208	\$46,129.40

Source: PUMS Virginia five percent sample data from 2000 *Census of Population*.

The following narrative contains four subsections.

- 7.2.1 Explanation of statistics and data used
- 7.2.2 Binary logistic regression model and results
- 7.2.3 Linear regression model and results
- 7.2.4 Conclusions

### **7.2.1 Explanation of Statistics and Data to Answer Two Research Questions**

**Question 1: Are African Americans, Hispanics, Asians, Native Americans, and Women less likely than nonminority males to be self-employed?**

We are able to answer this question using a binary logistic regression. Binary logistic regression can determine a relationship between a single categorical variable—

for example, a response variable (“yes,” category 1; “no,” category 2)—and a set of characteristics that are hypothesized to influence the “yes” or “no” value of the categorical variable. This type of regression can produce estimates that illustrate the extent to which a characteristic can increase or decrease the likelihood that the categorical variable will be a “yes” or a “no.” For instance, statisticians would use binary logistic regression to estimate the probability that an individual will participate in the labor force, or will retire this year, or will contract a certain kind of disease. The common factor with each of these variables is that they can be categorized by a response of “yes” (for example, “will retire this year”) or “no” (“will not retire this year”). Furthermore, binary logistic regression can be used to calculate the extent to which the above-mentioned influencing characteristics are related positively or negatively to the “yes/”no” categorical variable (for example, one’s level of educational attainment is related positively to salary).

Mathematically, the binary logistics regression is expressed as:

$$\ln (\pi/1-\pi) = \alpha + \beta_i X_i + \varepsilon_i$$

Where the ratio,  $(\pi/1-\pi)$  represents the ratio, or probability of being self-employed.

- $\alpha$  = a constant value
- $\beta_i$  = coefficient corresponding to independent variables
- $X$  = selected individual characteristic variables, such as age, marital status, education, race, and gender
- $\varepsilon_i$  = an error or residual term to capture the variation in the variables

In the case of factors influencing the likelihood of self-employment, binary logistic regression is used to examine the relationship between self-employment (yes/no) and the influence of socioeconomic and demographic characteristics selected for their potential to influence the likelihood of self-employment. To derive a set of variables known to predict employment status (self-employed; not self-employed), we relied on the 2000 Census of Population and Housing’s 5 percent Public Use Microdata Samples

(PUMS). From this Census data, labor force participants were selected according to the following criteria:

- Resident of the Commonwealth of Virginia
- Working in the construction industry
- Full-time worker (more than 35 hours a week)
- 18 years of age or older
- Employee of the private sector

When individuals who did not meet these criteria were eliminated from the sample, the sample size was 11,033 individuals for whom the PUMS data could provide considerable demographic and economic information. Logistic regression was used to explore demographic and economic variables in terms of the likelihood of being self-employed (yes) or not self-employed (no).

**Question 2: Does race/gender have an impact on the earnings of individuals engaged in construction?**

To answer this question, we examined whether or not self-employed minority and women entrepreneurs in the constructions industry received earnings comparable to earnings of their nonminority male counterparts, when the effect of demographic and economic characteristics was “neutralized.” In the case of linear regression, the variable of interest, earnings, is continuous rather than categorical, as in the case of binary logistic regression.

A full discussion of the general model for linear regression was presented in Chapter 5.0 where it was applied to analyze results of the vendor telephone survey. Mathematically, the multivariate linear regression model is expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \dots + \varepsilon$$

Where: Y = annual firm gross revenues.

$\beta_0$  = the constant, representing the value of Y when  $X_i = 0$

$\beta_1$  = coefficient representing the magnitude of  $X_1$ 's effect on Y

$X_i$  = the independent variables, such as capacity.

experience, managerial ability, race and gender.

$\varepsilon$  = the error term, representing the variance in Y unexplained by  $X_i$

This analysis used linear regression to test the influence on earnings (Y) of the same demographic and economic variables used in the binary logistics analysis with regard to the self-employed/not-self-employed analysis (i.e.,  $\beta_1 X_i$ ). Linear regression was employed because it permits an estimate of the effect that a set of observable characteristics (such as age and education) has on the variable of interest (the dependent variable, earnings). This analysis permitted a comparison of earnings for minorities and women with reference to earnings for nonminority males, after controlling for observable factors such as age and education. That is, we were able to examine the likelihood of self-employment for individuals who have similar education levels, are of similar ages, do business in the same geographic area, and other similarities.

For this analysis, when the earnings analysis was restricted to those who were self-employed in construction, the sample size was 2,100.

**7.2.2 “Are African Americans, Hispanics, Asians, Native Americans, and Women less likely than nonminority males to be self-employed?”  
Binary logistic regression model and results**

This analysis examined the influence of economic and demographic factors, especially race and gender, on the probability of individual self-employment. The probability of self-employment was assumed to be a function of the following:

- *Race and Sex.* Gender- and race-effect research indicates that race and sex are related to the likelihood of being self-employed. Self-employment, it is assumed, depends in part on one’s capacity to mobilize sufficient capital to start up and maintain a business. Historically, racial and ethnic minorities and women have not had the same convenient access to capital and other resources afforded to nonminority males.
- *Human Capital* refers, in this case, to an individual’s educational attainment, and the assumption, also borne out by research, that self-employed individuals tend to attain a higher level of education, which, it is assumed, further influences their business acumen and ability.

- *Availability of Capital.* For this analysis, availability of capital included such variables as household income, home ownership, and residual income, such as income from assets. The premise, supported in research, is that individuals with more asset capability are able to mobilize these assets in service to self-employment, and that their ability to obtain additional capital from lending institutions, for example, is often a function of securing funds with their assets

Other variables included in the analysis were: marital status (shown by research to have a positive influence on self-employment), number of individuals living in a household who are over the age of 65, and number of children who are living in a household under the age of 18.

The binary logistic regression analysis provided estimates of the relationship between the variables described above and the probability of a person being self-employed in the construction industry. The results of this analysis permitted an estimate of the odds that an individual would be self-employed, or not, given these variables. To determine the effect of minority status on the probability of being self-employed, the analysis also included five minority indicator variables: African Americans, Hispanic Americans, Asian Americans, Native Americans, and nonminority women. The estimated odds ratios on these minority variables are presented in **Exhibit 7-7**.<sup>5</sup> In this table, the odds ratios are presented by minority group to represent the odds or probability that an individual will be self-employed, holding all other variables constant.

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<sup>5</sup> Full regression results on all the variables are presented in Appendix L.

**EXHIBIT 7-7  
SELF-EMPLOYMENT “ODDS RATIOS” OF MINORITY GROUPS RELATIVE TO  
NONMINORITY MALES AFTER CONTROLLING FOR  
SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS**

Race/Ethnic Group	Odds Coefficients	Odds Ratio Inverse
African American	<b>0.687</b>	<b>1.456</b>
Hispanic American	<b>0.485</b>	<b>2.062</b>
Asian American	1.539	0.650
Native American	1.378	0.726
Nonminority Women	<b>0.415</b>	<b>2.410</b>

Source: PUMS data from 2000 *Census of Population* and MGT of America, Inc., calculations using SPSS.  
Note: **Bold** indicates that the estimated “odds ratio” for the group was statistically significant.

The results indicate the following:

- Holding all other variables constant, a nonminority male in the construction industry was one-and-a-half times as likely to be self-employed as an African American; twice as likely as a Hispanic American, and nearly two-and-a-half times as likely as a Nonminority Woman (see **Exhibit 7-7**, Odds Ratio Inverse).
- On the other hand, Asian Americans and Native Americans are roughly one-and-a-half times more likely to be self-employed as a nonminority male, holding all other factors constant.

**Estimating Potential Availability of Self-Employed Minorities in the Absence of Discrimination**

Drawing on the preceding discussion, a disparity study explores the possibility that differences in the likelihood of self-employment are due, at least in part, to racial, ethnic, and/or gender differences of those who have sought to establish businesses in the construction industry in the Commonwealth of Virginia. To address this question, we examined demographic and economic data provided by the 2000 Census report, to assess whether or not discrimination might be a partial explanation for these differences.

The methodology was based on an assumption that differences in self-employment rates between nonminority males and minority self-employed consisted of two categories: (1) differences attributable to individual characteristics (e.g., education

level attained); and (2) differences attributable to discrimination. (Of course, differences due to discrimination were not measured in the 2000 Census data). This procedure consisted of three steps:

- To establish a baseline of coefficients and mean values for demographic and economic variables (e.g., education level) in the model for which racial or gender discrimination was not a factor, the logistic regression self-employment model described in section 7.2.1 was employed to determine variable mean values for nonminority males in the sample.
- Next, the same model was applied in an analysis for each race/gender group to determine variable coefficients and mean variable values for each of these groups.
- Finally, to enable the assessment of the effect of individual characteristics differences for each race group, the variable coefficients obtained in step 2 were applied to the mean values for each variable obtained in step 1 for nonminority males, as an analog of “differences due to individual characteristics.”

When values for all three equations were run (i.e., for each group, the sum of the values of each variable mean value multiplied by its variable coefficient), the resulting sums for each of the three categories yielded the following: (1) an analog of self-employment rates for nonminority males (i.e., the baseline value, absent discrimination); (2) an analog of differences in individual characteristics by race and sex ; and (3) an analog of differences attributable to membership in a minority race/ethnic/gender group. When all three sets of operations were derived, a discrimination differential was calculated as follows:

SE Analog (nonminority males) – SE Analog(race coefficients X nonminority mean values) = Differences due to individual differences.

SE Analog (nonminority males) – SE Analog(race/ethnicity/gender) = Minority status differences

Differences due to individual differences - Minority status differences = Differences due to discrimination.

The quantification of differences due to discrimination permitted the calculation of a “discrimination differential” for each minority category. To assess availability of vendors

by minority group in the absence of discrimination, this differential value was used to adjust the actual availability of self-employed vendors in construction to yield a potential availability figure that corrects availability for the effect of discrimination. The results of this analysis are reported in **Exhibit 7-8**.

**EXHIBIT 7-8  
ACTUAL AVAILABILITY OF SELF-EMPLOYED VENDORS  
IN CONSTRUCTION BY RACE AND SEX VERSUS  
POTENTIAL AVAILABILITY (ABSENT DISCRIMINATION)**

<b>Minority Status</b>	<b>% Self Employed</b>	<b>1999 Census Sample n</b>	<b>Discrimination Differential Factor</b>	<b>% Self-Employed, Absent Discrimination</b>	<b>Revised Sample n, Absent Discrimination</b>	<b>n Change, Absent Discrimination</b>
African American	11.80%	134	0.152	13.59%	152	18
Hispanic American	6.44%	73	0.268	8.16%	79	6
Asian American	26.21%	38	-0.013	NC	NC	NC
Native American	20.69%	18	0.17	24.20%	22	4
Nonminority Women	12.83%	108	-0.0368	NC	NC	NC

NC = no change

From this exhibit, we are drawn to the conclusion that if discriminatory practices were removed from the construction marketplace, participation of African Americans, Hispanic Americans, and Native Americans who are self-employed in construction would increase significantly. For self-employed Asian Americans, there appeared to be no discrimination due to race (indicated by the negative direction and magnitude of the “discrimination differential factor”). A similar conclusion would appear to hold for self-employed, nonminority women in construction for discrimination effects due to sex of owner, although we see from **Exhibit 7-6** differences between nonminority male mean earnings (\$47,442.53) and mean earnings for nonminority women (\$38,260.19) that women earned only 81 cents on the dollar earned by nonminority males in construction, a finding that was corroborated statistically by the analysis

of self-employment earnings (See **Exhibit 7-9**: statistically-significant, unstandardized  $B = -.184$  for nonminority women).

**7.2.3 “Does race/gender have an impact on the earnings of individuals engaged in construction?” Linear regression model and results.**

Linear regression analysis was used to examine the influence that selected demographic and economic variables—such as race and gender—had on earnings for self-employed individuals (i.e., 1999 earnings, the variable to be explained).

**Dependent Variable: 1999 Earnings**

The earnings category was chosen over other census income variables because it included only earnings from employment. (By contrast, the 2000 PUMS Census also defined ‘total income’ as a person’s total earnings during the year 1999, including other sources of unearned income, such as retirement income and social security income, which could have potentially confounded the analysis).

**Independent Variables: Selected demographic and economic indicators**

In regression analysis, independent variables represent factors that are hypothesized to have an explanatory effect on the dependent variable (earnings). In addition to variables mentioned in the preceding analysis of self-employment likelihood (race/ethnicity, gender, marital status), in this analysis other variables of interest included the following:

- *Ability to speak English well.* Research findings suggest a positive relationship between earnings and English-speaking ability.
- *Disability.* Research indicates a negative relationship exists between disability and earnings.
- *Age.* Age is used as an analog of experience, such that age is associated positively with earnings for self-employed individuals.
- *Owner’s level of education.* The research literature consistently reports a positive relationship between education attainment and earnings.

**Results of the linear regression analysis**

The linear regression model estimated the effects of selected demographic and economic variables on self-employment earnings. The results are reported in **Exhibit 7-9** followed by a brief discussion of the findings.

**EXHIBIT 7-9  
THE COMMONWEALTH OF VIRGINIA DISPARITY STUDY  
RESULTS OF REGRESSION ANALYSIS**

Variable	Unstandardized	
	B	Std. Error
Constant	9.800	.085
African American*	-.198	.070
Asian American	-.101	.127
Hispanic-American	.129	.093
Native American*	-.452	.183
Nonminority Women*	-.184	.077
Married (1=yes)*	.231	.039
English Ability (well=1)*	.375	.154
Disability (1=yes)*	-.138	.047
Age*	.006	.002
Some College (1=yes)	.067	.039
College Graduate (1=yes)*	.451	.063
More than College (1=yes)*	.416	.103

Source: PUMS data from 2000 *Census of Population* and MGT of America, Inc. calculations using SPSS.

Note: \* Statistically significant at  $p \leq .05$ .

The dependent variable is the natural logarithm of earnings. This is done to estimate percent changes in earnings caused by changes in the independent variables.

**General Results**

From **Exhibit 7-9** we derived Equations 1 and 2, stated below and followed by selected findings:

**Equation 1: Earnings as a function of race/ethnicity and other explanatory variables**

$$\ln(\text{earnings}) = 9.800 - .198\text{AfricanAmerican} - .101\text{AsianAmerican} + .129\text{Hispanic} - .452\text{NativeAmerican} + .231\text{Married} + .375\text{English} - .138\text{Disable} + .067\text{Somecollege} + .451\text{colleged} + .416\text{Gradeduc}$$

From Equation 1, we drew the following conclusions:

- Holding all other variables constant, a self-employed African American male in construction will earn 19.8 percent less than his nonminority male counterpart. (To appreciate the statistically additive effect of other negatively associated factors, an African American Male who is also disabled will earn 33.6 percent less than a nondisabled nonminority male.)<sup>6</sup>
- Unexpectedly, “Hispanicity” was associated positively with earnings in construction: That is, a Hispanic male earns 12 percent more than a nonminority male. (It is important to note, however, that in the 2000 PUMS data an individual could opt to consider oneself both Hispanic and White, thus confounding the “separation” and its effect.)

**Equation 2: Earnings as a function of sex and other explanatory variables**

$$\ln(\text{earnings}) = 9.938 - .184\text{sex} + .239\text{Married} - .105\text{Disable} + .086\text{Somecollege} + .461\text{colleged} + .476\text{Gradeduc}$$

- A nonminority woman earns 18.4 percent less than a nonminority male, holding all other variables constant.
- For both equations, education has a positive effect on earnings. In our analysis an individual who has a college degree will earn more than an individual who does not have a college degree.

Using the 2000 PUMS data, an analysis of race and gender contrasts was conducted with respect to their effect on earnings. For the most part there was a consistent trend of a negative race/gender effect on earnings, especially for African Americans and Native Americans.

- When results for African American males and Native American males versus nonminority males were analyzed, African American males and Native American males earned 26.8 percent and 59.5 percent less, respectively, than their nonminority male counterparts.
- When compared with nonminority males, nonminority women earned 17.2 percent less than their nonminority counterparts.

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<sup>6</sup> Subsample sizes by race/ethnicity for Asian Americans and Native Americans were too small to permit reliable interpretation.

#### **7.2.4 Conclusions**

From both analyses in this section, it can be asserted that race/gender effects are associated negatively with both the rate of self-employment in construction and self-employment earnings for African Americans and nonminority women,<sup>7</sup> when compared with rates for nonminority males, and when the effect of other important demographic and economic variables was “neutralized.” These findings are consistent not only with results from the telephone survey of vendors and information provided by MBEs in focus groups (reported in Chapter 6.0), but are supported logically if one accepts two propositions: (1) The ability to mobilize resources to build one’s business is, in part, a function of race/gender differences in historical access to capital and asset-building; and (2) Discrimination against MBEs in terms of conferring business opportunity in both the private and public sectors is real, continuing, and profound.

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<sup>7</sup> Insufficient sample sizes for Asian Americans and Native Americans did not permit a statistically valid conclusion for those groups.

**8.0 FINDINGS AND  
CONCLUSIONS**

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## **8.0 FINDINGS AND CONCLUSIONS**

This chapter presents the findings and conclusions resulting from the disparity study conducted for the Commonwealth of Virginia related to procurement of construction, architecture and engineering services, professional services, other services, and goods and supplies. As a leader in the field, MGT has been careful to always remain cognizant of the applicable case law in this evolving area of jurisprudence. As such, the overriding concern of MGT during this study was strict adherence to the specific dictates the courts have required where racial, ethnic, or gender preferences are used by state and local governments in their decision-making process. As detailed in Chapter 2.0 of our study, in the *Croson* decision the United States Supreme Court extended strict judicial scrutiny to state and local affirmative action programs that use racial or ethnic criteria as a basis for decision-making.

More important for the purposes of our study, the courts have also indicated that for a race-based or gender-based preference program to be maintained there must be a clear evidentiary foundation established for the continuation of the programs. Generally, this evidence should also have been reviewed as part of the implementing jurisdiction's decision-making process in order for it to be relevant in any subsequent legal action. Thus, MGT presents our summary of findings and conclusions to the Commonwealth for your deliberative review and discussion. Recommendations for addressing the findings presented in this chapter follow in Chapter 9.0.

### **8.1 Objective and Design of the Study**

The principal objective of this study was to determine the amount of minority and nonminority woman business participation that exists in the procurement of construction,

services, and goods and supplies, and to determine if the evidence supports affirmative action under the applicable legal standards. First and foremost, our study sought to address the following issue:

- Is there a disparity between (a) the number of M/WBE firms that are qualified to perform contracts with the Commonwealth; and (b) the utilization by the Commonwealth of these firms in contracting and procurement?

If, and only if, a disparity is found, MGT then moves forward to ascertain from the accumulated data the following issues:

- Is any such disparity the product of past race, ethnic, or gender discrimination or is the apparent discrimination attributable to other race-neutral factors?
- Based on the nature and extent of the discrimination, can such disparity be ameliorated through nonrace, nonethnic, or nongender criteria available to all vendors?
- If it is determined that the appropriate remedy involves the utilization of racial, ethnic, or gender criteria in decision-making, how should the program be structured to remedy the effects of past discrimination while staying within constitutional guidelines?

Four major requirements set forth in the *Croson* decision guided the study.

- **Strict Scrutiny** - A majority of the Justices on the Supreme Court agreed that MBE plans that rely on race-based remedies are subject to a strict scrutiny standard of review. Thus, the basis for an MBE plan and the proposed remedies must be factual, and the link between its scope and that factual basis must be demonstrated.
- **Discrimination particularly linked to the market area of the implementing agency** - The City of Richmond attempted to rely on general findings of societal discrimination to support the need for its affirmative action plan. The Court did not accept this evidence. The Court required specific proof of the nature and extent of the discrimination against minority-owned businesses within Richmond's local market area to support imposition of a local race-based remedy. *The required study must evaluate who is or has been qualified to perform government contracts, who is and was selected to do the work, and the disparity between the two.*
- **Race-neutral remedies** - In *Croson* the Court required that the enacting governmental organization evaluate race-neutral solutions before it may adopt a more stringent measure such as a set-aside plan based on race.

- **Carefully tailored plan not of infinite duration** - Based on this standard of review, the plan must be carefully tailored to remedy the effects of past discrimination in the governmental organization's jurisdiction and must be in place only for the amount of time required to reverse the effects of such discrimination.

Examination of post-*Croson* decisions provides us with not only more clarity on the lower courts' application of *Croson*, but also provides some guiding principles. Several principles have emerged, or in some instances been reconfirmed, as follows.

- The absence of a complete factual predicate study adopted by the relevant agency can lead to the judicial suspension of an M/WBE program.<sup>1</sup>
- Relying exclusively on either anecdotal evidence or statistical deviations alone to prove discrimination will not suffice in the post-*Croson* era.<sup>2</sup>
- Post-*Croson* disparity studies based exclusively on numerical "head counting" without reference to qualifications will not be sufficient to prove discrimination.<sup>3</sup>
- There seems to be more focus on anecdotal evidence of specific discrimination in some recent court decisions. The collection and analysis of such anecdotal evidence should include holding public meetings within the community, interviewing both minority and nonminority business associations and representatives, and conducting surveys of both minority and nonminority governmental personnel and business representatives. The specificity and verification of examples of past discrimination are important components of a disparity study.<sup>4</sup>
- Recent developments in court cases involving federal DBE programs provide important insight on the design of local M/WBE programs. In January 1999, the United States Department of Transportation (USDOT) published its final DBE rule in Title 49, Code of Federal Regulations, Part 26 (49 CFR 26). In the latest round of the DBE litigation, the courts found the new DBE regulations to be narrowly tailored.<sup>5</sup>
- Analysis of disparities in the private sector can serve as a key element of the factual predicate supporting an M/WBE program. In *Croson*, the court stated, "A municipality has a compelling

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<sup>1</sup> See, e.g., *Scott v Jackson*, 1999 U.S. App. LEXIS 33621 *Bilbo Freight Lines v. Morales*, CA No. H-93-3808 (SD Texas 1996); *Associated Utility Contractors v. Baltimore*, Civil No. AMD 98-4060, \_\_\_F.3d\_\_(D.Md. 2000).

<sup>2</sup> *Coral Construction Company, et al. v. King County*, 961 F.2d 910 (9th Cir. 1991).

<sup>3</sup> *AGC v. Drabik*, 214 F.3d 730, 762 (6<sup>th</sup> Cir 2000).

<sup>4</sup> *AGC v. Columbus*, 936 F. Supp. 1363 (SD Ohio 1996), overturned on procedural grounds.

<sup>5</sup> *Adarand v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir 2000), *Sherbrooke Sodding v. MDOT* (2001 US Dist Lexis 19565) (November 14, 2001), *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002), *Western States Paving v. Washington DOT*, Case No. C00-5204-RBL (WA 2003).

government interest in redressing not only discrimination committed by the municipality itself, but also discrimination committed by private parties within the municipality's legislative jurisdiction, so long as the municipality in some way participated in the discrimination to be remedied by the program.”<sup>6</sup> In *Concrete Works IV* the Court of Appeals upheld the relevance of data from the private marketplace to the establishment of a factual predicate for M/WBE programs.<sup>7</sup>

Within the context of the above requirements, MGT designed its study to meet the following conditions:

- an in-depth review of the Commonwealth’s contracting, purchasing, and M/WBE statutes, policies, procedures, and practices;
- a qualitative analysis of evidence as to whether there exists a history or pattern of behavior demonstrating that the Commonwealth has declined or refused to award contracts to minorities or women that cannot be explained by any nonracial or nongender factors;
- a rigorous review of the Commonwealth’s contracting records and files;
- specific identification of firms by name, address, and types of services that are ready, willing, and able to conduct business with the Commonwealth;
- personal interviews with Commonwealth staff, M/WBEs, prime contractors, and subcontractors;
- identification of specific problems that affect both minority-owned and nonminority women-owned business enterprises and other firms in their attempts to obtain Commonwealth contracts and subcontracts;
- presentation of data on disparities, if any, in the private sector commercial construction market;
- identification of those race- and gender-neutral remedies for each identified problem; and
- identification of narrowly tailored race- and gender-specific remedies to correct specific problems.

## **8.2 Statistical Analyses Findings**

The following subsection presents findings and recommendations based on the review presented in Chapters 4.0 and 7.0.

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<sup>6</sup> *Croson*, 488 U.S. 46, 109 S.Ct. at 720-21, 744-45.

<sup>7</sup> *Concrete Works IV*, at 69.

**FINDING 8-1: Relevant Market**

The relevant market area where at least 75 percent of the dollars were spent during the five-year period for each work type category is:

- **Construction** – the Commonwealth of Virginia.
- **Architecture and engineering services** - the Commonwealth of Virginia; Dade County, Florida, Baltimore (City), Maryland; and New York County, New York.
- **Professional services** - the Commonwealth of Virginia; Saint Louis County, Missouri; Fulton County, Georgia; Philadelphia County, Pennsylvania; Cook County, Illinois; Baltimore County, Maryland; and Baltimore (City), Maryland.
- **Other services** – the Commonwealth of Virginia; Fulton County, Georgia; Washington D.C.; Baltimore (City), Maryland; Essex County, New Jersey; and Cook County, Illinois.
- **Goods and supplies** – the Commonwealth of Virginia; Santa Clara County, California; Mecklenburg County, North Carolina; Cook County, Illinois; Fulton County, Georgia; Allegheny County, Pennsylvania; Du Page County, Illinois; Montgomery County, Maryland; Baltimore (City), Maryland; Philadelphia County, Pennsylvania; St. Louis (City) Missouri; Chester County, Pennsylvania; Dallas County, Texas; Essex County, New Jersey; Travis County, Texas; Johnson County, Kentucky; Los Angeles County, California; Milwaukee County, Wisconsin; Washington D.C.; Manicopa County, Arizona; Middlesex County, Massachusetts; Anne Arundel County, Maryland; Erie County, New York; Orange County, California; and Camden County, New Jersey.

**FINDING 8-2: Disparity in M/WBE Utilization**

M/WBE utilization by the Commonwealth was very low during the study period, ranging from 0.70 percent to 2.52 percent, depending on procurement category (see **Exhibit 8-1**). By way of comparison,

- the State of Maryland spent 17 percent with M/WBEs in 2001;
- the State of Texas spent 13 percent with M/WBEs in 2003;
- the State of North Carolina spent 7.4 percent with M/WBEs in construction from 1998 to 2002; and
- the State of Florida spent 11.8 percent with M/WBEs from FY 1997 to FY 2001.<sup>8</sup>

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<sup>8</sup> Maryland: NERA, *Utilization of Minority Business Enterprises by the State of Maryland*, 2001; Texas: Texas HUB Office, *Historically Underutilized Business (Hub) Annual Report Received for Fiscal Year 2003*; North Carolina: MGT, *Disparity Study for the North Carolina Department of Administration*, 2003; Florida: State of Florida, Office of Supplier Diversity, *Annual Report FY 2000-2001*.

Moreover, a significant portion of M/WBE spending was with firms owned by nonminority women. Total Commonwealth spending with minority owned firms outside of construction was less than 0.44 percent of total spending (about \$34.4 million); total Commonwealth spending with minority owned firms in the construction payments data was less than 0.4 percent of total spending (about \$4.5 million).

Some local agencies spent considerably more with MBEs than did the Commonwealth. For example, from 1998 to 2002 the City of Charlotte spent \$91.8 million with MBE prime contractors in construction alone while the Commonwealth spent \$34.8 million with MBE prime contractors over the same time period.<sup>9</sup> The Port Authority of New York and New Jersey awarded \$284 million in contracts with small and M/WBE firms in 2001.<sup>10</sup>

The Commonwealth utilized only 261 minority firms outside of construction over the study period, at an average of about \$26,000 per firm per year. This low M/WBE utilization by the Commonwealth in turn contributed to low M/WBE availability, as measured by the number of M/WBE vendors registered and utilized by the Commonwealth. Relative M/WBE availability ranged between 1.45 percent and 8.15 percent, depending on procurement category (see **Exhibit 8-1**). By way of contrast, a study of construction for the State of North Carolina found M/WBE availability in construction of 14.36 percent.<sup>11</sup> A study of the State of Maryland found overall M/WBE availability of 26.9 percent.<sup>12</sup>

Substantial disparity exists for the following underutilized groups in the Commonwealth work type categories (see **Exhibit 8-1**):

- Construction prime contracting – African American, Asian American, Native American, and nonminority women.
- Construction subcontracting - African American, Hispanic American, Asian American, Native American, and nonminority women.
- Architecture and engineering services - African American, Hispanic American, Asian American, Native American, and nonminority women.
- Professional services - Hispanic American, Asian American, Native American, and nonminority women.
- Other services – Native American.
- Goods and Supplies - African American, Hispanic American, and Native American.

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<sup>9</sup> MGT, *City of Charlotte Disparity Study*, 2003.

<sup>10</sup> Port Authority of New York and New Jersey, Press Release No. 48-2002, *Port Authority Announces 17 Percent Increase In Contracts Awarded To Minority/Women-Owned and Small Businesses*, April 23, 2002.

<sup>11</sup> MGT, *North Carolina Department of Administration, Disparity Study*, 2003.

<sup>12</sup> MGT, *North Carolina Department of Administration, Disparity Study*, 2003. NERA, *Utilization of Minority Business Enterprises by the State of Maryland*, 2001.

**EXHIBIT 8-1  
COMMONWEALTH OF VIRGINIA  
SUMMARY OF DISPARITY ANALYSIS FOR EACH  
BUSINESS CATEGORY BY RACE/ETHNICITY/GENDER CLASSIFICATIONS**

<b>Business Category by M/WBE Classification</b>	<b>% of Dollars<sup>1</sup></b>	<b>% of Available Firms<sup>2</sup></b>	<b>Disparity Index<sup>3</sup></b>	<b>Disparate Impact of Utilization</b>	<b>Significance of Proportions<sup>4</sup></b>
<b>Construction Prime Contractors</b>					
African Americans	0.03%	1.07%	3.12	* Underutilization	-70.73 *
Hispanic Americans	0.29%	0.26%	113.27	Overutilization	0.79
Asian Americans	0.00%	0.28%	0.00	* Underutilization	0.00
Native Americans	0.00%	0.10%	0.00	* Underutilization	0.00
Nonminority Women	1.17%	2.70%	43.26	* Underutilization	-17.76 *
Nonminority Firms	98.51%	95.60%	103.04	Overutilization	29.93 *
<b>Construction Sub Contractors</b>					
African Americans	0.22%	5.03%	4.37	* Underutilization	-241.64 *
Hispanic Americans	1.21%	3.73%	32.38	* Underutilization	-54.32 *
Asian Americans	0.03%	2.02%	1.38	* Underutilization	-280.73 *
Native Americans	0.00%	0.82%	0.00	* Underutilization	0.00
Nonminority Women	1.07%	5.95%	17.96	* Underutilization	-111.73 *
Nonminority Firms	97.48%	82.46%	118.22	Overutilization	225.33 *
<b>Architecture &amp; Engineering Prime Consultants</b>					
African Americans	0.01%	0.98%	0.62	* Underutilization	-71.14 *
Hispanic Americans	0.01%	0.64%	1.05	* Underutilization	-44.33 *
Asian Americans	0.06%	2.01%	2.93	* Underutilization	-46.10 *
Native Americans	0.00%	0.21%	0.00	* Underutilization	0.00
Nonminority Women	0.45%	4.30%	10.42	* Underutilization	-33.02 *
Nonminority Firms	99.48%	91.85%	108.30	Overutilization	60.70 *
<b>Professional Services Prime Consultants</b>					
African Americans	0.30%	0.33%	91.51	Underutilization	-0.87
Hispanic Americans	0.00%	0.12%	2.69	* Underutilization	-35.61 *
Asian Americans	0.28%	0.39%	72.09	* Underutilization	-3.50 *
Native Americans	0.00%	0.03%	0.61	* Underutilization	-38.14 *
Nonminority Women	0.12%	1.54%	7.99	* Underutilization	-69.09 *
Nonminority Firms	99.30%	97.60%	101.74	Overutilization	34.77 *
<b>Other Services Prime Contractors</b>					
African Americans	0.48%	0.27%	176.53	Overutilization	6.68 *
Hispanic Americans	0.25%	0.06%	419.24	Overutilization	8.55 *
Asian Americans	0.13%	0.09%	145.74	Overutilization	2.54 *
Native Americans	0.00%	0.02%	4.12	* Underutilization	-14.94 *
Nonminority Women	1.29%	1.07%	121.42	Overutilization	4.50 *
Nonminority Firms	97.84%	98.49%	99.34	Underutilization	-9.97 *
<b>Goods &amp; Supplies Prime Contractors</b>					
African Americans	0.04%	0.17%	23.34	* Underutilization	-14.97 *
Hispanic Americans	0.05%	0.06%	79.21	* Underutilization	-1.28
Asian Americans	0.15%	0.13%	108.25	Overutilization	0.66
Native Americans	0.01%	0.03%	35.48	* Underutilization	-4.33 *
Nonminority Women	0.99%	1.05%	93.61	Underutilization	-1.54
Nonminority Firms	98.77%	98.55%	100.22	Overutilization	4.55 *

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors is taken from the availability exhibit previously shown in Chapter 4.0.

<sup>3</sup> The disparity index is the ratio of % utilization to % availability times 100. An asterisk is used to indicate a substantial level of disparity - index below 80.00.

<sup>4</sup> The significance of proportions test examines if there is a statistical difference between utilization and availability. The test statistics are computed by taking the difference between utilization and availability and dividing by the square root of availability, times one minus availability divided by the available firms. If the test statistics are greater than two, overutilization is assumed. Conversely, if the test statistics are less than -2, underutilization is assumed.

### **FINDING 8-3: Regression Analysis**

As an aggregated group, M/WBE firms responding to the phone survey earned less revenue in 2002 than did non-M/WBE firms. Analysis of the effect on reported company earnings of variables representing firm capacity, managerial ability and experience, and race/gender/ethnicity revealed that for some minority groups the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. This is consistent with evidence provided in the report of low levels of MBE utilization (below 0.5%) even on contracts less than \$250,000 in value.

### **FINDING 8-4: Private Sector Utilization and Disparity**

Using records from Reed Construction Data, low levels of M/WBE utilization were found in the private sector commercial construction in Virginia (**Exhibit 8-2**). From 1998 to 2002, one nonminority woman-owned firm was awarded two prime commercial construction contracts worth \$641,717 (0.24%). Over the same time period, seven M/WBE construction firms were awarded nine prime construction contracts worth \$15.9 million (1.49) by the Commonwealth.

Substantial disparity existed for all M/WBEs in the commercial private sector construction from 1998 to 2002.

## **8.3 Anecdotal Evidence Findings**

The following subsection presents findings based on the review presented in Chapter 6.0.

### **FINDING 8-6: Experience with Prime Contractors**

Some subcontractors reported having been pressured to lower bids (24% of M/WBEs) and many reported delays in payment from primes (26% of M/WBEs). These findings from the survey were also supported by anecdotal comments made in the personal interviews and focus groups.

### **FINDING 8-7: Using M/WBEs as “shell”**

During the interviews and focus groups there were allegations that prime contractors utilize M/WBE firms as a “shell” or “pass through.” There were examples given of utilizing a graphics design M/WBE firm as subcontractor for a construction project. Another example given was utilizing an M/WBE as a pass-through to get money to the subcontractor the prime wanted to hire.

### **FINDING 8-8: Barriers to doing work with the Commonwealth**

The five most common factors that affected a firm's ability to contract with the Commonwealth included “limited time to prepare a bid or quote” (M/WBEs as a group, 8%; nonminority male-owned firms, 4%); “limited information received on pending projects” (M/WBEs as a group, 6%; nonminority male-owned firms, 4%); eVA system (M/WBEs as a group, 4%; nonminority male-owned firms, 6%); “contract too expensive to bid” (M/WBEs as a group, 6%; nonminority male-owned firms, 1%); and the size of the

**EXHIBIT 8-2  
M/WBE CONSTRUCTION  
UTILIZATION PERCENTAGE OF DOLLARS  
VIRGINIA PRIVATE SECTOR  
CALENDAR YEARS 1998 THROUGH 2002**

<b>Business Category/Data Source</b>	<b>African American</b>	<b>Hispanic American</b>	<b>Asian American</b>	<b>Native American</b>	<b>Subtotal MBEs</b>	<b>Nonminority Women</b>	<b>Nonminority Firms</b>
<b>Prime Contractors</b>							
Commonwealth of Virginia Construction Prime Contractors	0.03%	0.29%	0.00%	0.00%	0.32%	1.17%	98.51%
Private Construction Prime Contractors (Reed Construction)	0.00%	0.00%	0.00%	0.00%	0.00%	0.24 %	99.76%

Source: Chapter 7.0 analyses.

contract (M/WBEs as a group, 6%; nonminority male-owned firms, 1%). These findings were also supported with comments made in the personal interviews and focus group participants.

#### ***8.4 Conclusions***

Utilization of minority firms by the Commonwealth was very low during the study period both in relative and absolute terms. Utilization of minority firms was low relative to conservative estimate of minority business availability, and relative to utilization by other states and public agencies. Disparities were also evident after controlling for the size of contract and firm characteristics. Utilization of minority firms in private sector commercial construction was even lower. These facts stand out more sharply given that the mid-Atlantic region of the United States is one of the strongest areas in the country for minority firms, a market characteristic driven primarily by federal procurement and strong M/WBE programs in neighboring state and local governments.

## **9.0 RECOMMENDATIONS**

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## **9.0 RECOMMENDATIONS**

This chapter presents recommendations and commendations resulting from the disparity study conducted for the Commonwealth of Virginia related to procurement of construction, architecture and engineering services, professional services, other services, and goods. The following recommendations are grounded in an exhaustive review of other M/WBE programs around the United States and the extensive case review of these programs and their accompanying statutes and regulations. The recommendations are crafted to simultaneously address the substantial shortfalls in M/WBE utilization by the Commonwealth while employing insights from other M/WBE programs around the country and satisfying the constraints imposed by recent case law governing M/WBE programs. The commendations acknowledge those positive efforts by the Commonwealth towards inclusion of M/WBEs in Commonwealth spending with outside vendors.

### **9.1 Recommendations and Commendations**

#### **9.1.1 Purchasing Recommendations**

##### **RECOMMENDATION 9-1: Contract Sizing**

Contract size and performance bonds were the issues mentioned most in surveys of and interviews with M/WBEs as barriers to utilization by the Commonwealth. The Commonwealth should concentrate its efforts on issuing contracts in smaller dollar amounts, thus expanding the opportunities that smaller M/WBE firms have to do business with the Virginia. As recommended in the OMB Contract Bundling Report, the Commonwealth should consider limiting the use of contract bundling to those instances where there are considerable and measurable benefits such as decreased time in acquisition, at least 10 percent in cost savings, or improved contract terms and conditions.<sup>1</sup>

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<sup>1</sup> Office of Management and Budget, "Contract Bundling—A Strategy for Increasing Federal Contracting Opportunities for Small Business" (October 2002).

**RECOMMENDATION 9-2: Construction Management and Request for Proposals**

One method of debundling in construction is through the use of multiprime construction contracts in which a construction project is divided into several prime contracts that are then managed by a construction manager at risk. For example, this approach has been used on projects where each prime contractor is responsible for installation and repair in particular areas. The construction manager is responsible for obtaining materials at volume discounts based upon total agency purchases. If one contractor defaults, a change order is issued to another prime contractor working in an adjacent area. The construction manager at risk is responsible for cost overruns that result from prime contractor default.

Construction management also facilitates the rotation of contracts within an area of work. For example, if several subcontractors have the capacity of bidding on an extended work activity (e.g., concrete flat work, traffic control, hauling), the construction manager can rotate contracting opportunities over the duration of the activity.

Using a request for proposal process can provide the flexibility for including M/WBE participation in prime contractor requirements and selection. One of the nonfinancial criteria can be the proposer's approach and past history with M/WBE subcontractor utilization as well as women and minority workforce participation. A number of universities around the country, the Charlotte-Mecklenburg School System, and the Tri-County Metropolitan Transportation District of Oregon have had a successful experience with this approach.<sup>2</sup>

**RECOMMENDATION 9-3: Term Contracts**

The Commonwealth should consider instituting a policy of encouraging purchasing staff to use M/WBEs that are on Commonwealth state contracts and identified as such when the Commonwealth uses state term contracts in purchasing. A number of states (Florida, New York, and North Carolina) indicate the M/WBE status of firms holding term contracts.

**COMMENDATION AND RECOMMENDATION 9-4: eVA**

eVA has been an important step in the technical evolution of e-procurement in the Commonwealth. However, eVA is potentially a two-edged sword for M/WBE vendors. On the one hand it opens up wider markets to M/WBE firms. On the other hand, eVA fees can discourage participation by newer and smaller firms in the eVA system. The survey did not, however, find strong sentiment from M/WBEs that eVA constituted a barrier to M/WBE utilization. The Commonwealth should be commended for its outreach and training sessions on eVA targeting small and M/WBE firms. At the same time, the Commonwealth should consider an alternative fee structure or fee moratoria for small and M/WBE firms.

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<sup>2</sup> Federal Transit Administration, *Lessons Learned #45*, May 2002).  
[www.fta.dot.gov/library/program/11/man/1145.html](http://www.fta.dot.gov/library/program/11/man/1145.html)

## **COMMENDATION AND RECOMMENDATION 9-5: Small Purchases**

Securing small purchases through informal procurement methods is an area in which buyers can become particularly comfortable with incumbent vendors. The Commonwealth should be commended for provisions requiring the solicitation of small and M/WBE firms for small purchases. Additional measures can be taken to increase M/WBE participation in informal purchases. First, the use of new M/WBE vendors can be an element in buyer evaluations. Second, taking a cue from “social norms marketing,” the Commonwealth should publish data on buyer use of M/WBE vendors in informal purchases. These data should include statistics on median M/WBE dollar utilization by individual buyers, high levels of M/WBE utilization by individual buyers, and the number of M/WBEs utilized by buyers. Many buyers may think they are performing adequately and may not realize the possibilities and acceptable norms of buyer behavior in the area of small informal purchases.

## **COMMENDATION and RECOMMENDATION 9-6: Prompt Payment**

Virginia should be commended for having a prompt payment statute. Nevertheless, small and M/WBE vendors still have problems with prompt payment. Certain subcontractors that work on an early phase in a project, such as grading, can suffer from retainage withheld on long-lasting projects. Prompt payment policy should be adjusted for these concerns. Mobilization payments is one vehicle to address this issue. For example, in 2000, the City of Chicago revised its M/WBE ordinance to allow the city to make advance payments of 10 percent of the total contract value, up to a maximum of \$200,000.

### **9.1.2 M/WBE Program Recommendations**

## **RECOMMENDATION 9-7: M/WBE Certification**

The Commonwealth should move towards a unified certification application with other agencies in Virginia and the Mid-Atlantic area. Different agencies may maintain different criteria for certification. Nevertheless, one package of materials should be sufficient for a certification application. A unified certification application has been developed among agencies in New York City, Dallas, Memphis, Chicago, Jacksonville, and other areas.

The automation of Commonwealth procurement should be paralleled by automation of M/WBE certification. The M/WBE certification application is available on-line at the VDMBE Web site, but this is still not an automated process. The City of Chicago, for example, utilizes on-line certification to reduce paper work. The Chicago system allows the flagging of applicants who have not submitted all of their paperwork. The M/WBE department also provides a 60-day guarantee of certification if all the paperwork is submitted.

The other area of certification that merits additional attention by the Commonwealth is the anecdotal testimony from vendors and Commonwealth staff about the persistence of “fronts” (firms representing themselves as M/WBEs without satisfying the necessary requirements). In response to these concerns the M/WBE Office should increase the number of site visits as supplements to desk audits in the M/WBE certification process. Enforcement is also essential. In the City of Chicago, for example, vendors who misrepresent M/WBE participation are prevented from doing business with the city for up to three years.

**RECOMMENDATION 9-8: Narrowly Tailored S/M/WBE Program**

Recent developments in court cases involving federal DBE programs provide important insight on the design of local M/WBE programs. In January 1999, the United States Department of Transportation (USDOT) published its final DBE rule in Title 49, Code of Federal Regulations, Part 26 (49 CFR 26). In the latest round of the DBE litigation, the courts found the new DBE regulations to be narrowly tailored.<sup>3</sup> The federal DBE program has the features in **Exhibit 9-1** that contribute to this characterization as being narrowly tailored remedial procurement preference program. As can be seen from **Exhibit 9-1**, the DOT regulations provide a variety of measures that put race- and gender-neutral techniques first and then use race- and gender-conscious project goals as a supplemental device when race- and gender-neutral techniques are found inadequate to reduce disparity in DBE (or M/WBE) utilization. The Commonwealth should consider the adoption of these features in any new narrowly tailored M/WBE program.

**EXHIBIT 9-1  
NARROWLY TAILORED M/WBE/DBE PROGRAM FEATURES**

Narrowly Tailored Goal-Setting Features	DBE Regulations
The Commonwealth should not use quotas	49 CFR 26(43)(a)
The Commonwealth should use race- or gender-conscious set-asides only in extreme cases	49 CFR 26(43)(b)
The Commonwealth should meet the maximum amount of M/WBE goals through race-neutral means	49 CFR 26(51)(a)
The Commonwealth should use contract goals only where race-neutral means are not sufficient	49 CFR 26(51)(d)
The Commonwealth should use goals only where there are subcontracting possibilities	49 CFR 26(51)(e)(1)
If the Commonwealth estimates that it can meet the entire goal with race-neutral means then the Commonwealth should not use contract goals	49 CFR 26(51)(f)(1)
If it is determined that the Commonwealth is exceeding its goal, then the Commonwealth should reduce the use of contract goals	49 CFR 26(51)(f)(2)
If the Commonwealth exceeds goals with race-neutral means for two years then the Commonwealth should not set contract goals the next year	49 CFR 26(51)(f)(3)
If the Commonwealth exceeds goals with contract goals for two years then the Commonwealth should reduce use of contract goals the next year	49 CFR 26(51)(f)(4)
If the Commonwealth uses goals then the Commonwealth should award only to firms that made good faith efforts	49 CFR 26(53)(a)
The Commonwealth should give bidders an opportunity to cure defects in good faith efforts	49 CFR 26(53)(d)

<sup>3</sup> *Adarand v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir 2000), *Sherbrooke Sodding v. MDOT* (2001 US Dist Lexis 19565) (November 14, 2001), *Gross Seed v. Nebraska Department of Roads*, Case No. 4:00CV3073 (NB 2002), *Western States Paving v. Washington DOT*, Case No. C00-5204-RBL (WA 2003).

## RECOMMENDATION 9-9: M/WBE Goals

This report provides evidence supporting the establishment of a moderate program to promote M/WBE utilization. This conclusion is based on disparity in current M/WBE utilization, significant disparities in private sector utilization in construction, and evidence of discrimination in business formation and compensation from self-employment. The Commonwealth should tailor its minority participation programs to remedy the specific disparity determined above. These aspirational goals should be addressed primarily by good faith efforts requirements, breaking up large contracts, M/WBE participation in a Small Business Enterprise (SBE) program (discussed below), and similar techniques. Any race-conscious program elements should be implemented along the lines suggested by the USDOT DBE program (**Exhibit 9-1** above).

**Exhibit 9-2** provides guidance on setting initial annual goals for a M/WBE program. These M/WBE goals by business category are annual goals, not rigidly set project goals. Each project should be reviewed individually for establishing project-specific M/WBE goals. Each year the goals should be adjusted according to the utilization of M/WBEs by business category by race- and gender-neutral means, gradually reducing the race and/or gender conscious goal and increasing the race- and gender-neutral goal. The ultimate objective is to eliminate the need for a race- and/or gender-based program and replace it completely with the race- and gender-neutral options.

These goals are based on census measures of relative M/WBE availability. The motivation for the use of census data, as opposed to the vendor data used to measure disparity, is that the significant differences in the measure of relative availability may reflect the fact that M/WBEs are dissuaded from pursuing opportunities with the Commonwealth because of perceptions of Commonwealth procurement as a relatively closed system. These census-based M/WBE goals are arguably still conservative.<sup>4</sup>

In the course of implementing such a race-conscious goal program, the following should also be considered.

- On an annual basis, the Commonwealth should review its budget and establish annual goals, in dollars and percentages, consistent with M/WBE availability, for each M/WBE group that has demonstrated significant disparity.
- Annual goals for each ethnic group and women should reflect M/WBE availability as referenced in this report. The purpose of annual participation goals is to assist the Commonwealth in monitoring the success of the remedial program. Currently, the Commonwealth does not have a method of measuring where the M/WBE participation level is on the continuum between the current level of disparity and full participation (disparity index of 100).

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<sup>4</sup> For example, a study of construction for the State of North Carolina found M/WBE availability in construction of 14.36%. MGT, *North Carolina Department of Administration, Disparity Study*, 2003. A study of the State of Maryland found overall M/WBE availability of 26.9 percent. NERA, *Utilization of Minority Business Enterprises by the the State of Maryland*, 2001.

**EXHIBIT 9-2  
RECOMMENDED RACE- AND GENDER-SPECIFIC AND NEUTRAL GOALS FOR  
EACH BUSINESS CATEGORY BY RACE/ETHNIC/GENDER CLASSIFICATION  
BASED ON CENSUS AVAILABILITY**

<b>Business Category by M/WBE Classification</b>	<b>% of Available Firms<sup>1</sup></b>	<b>Disparity Index Goal - 80.0</b>	<b>Race/Gender Neutral Results</b>	<b>Race/Gender Conscious Goal</b>
<b>Construction Prime Contractors</b>				
African Americans	3.56%	2.85%	0.03%	2.82%
Hispanic Americans	1.47%	1.18%	0.29%	0.89%
Asian Americans	0.64%	0.51%	0.00%	0.51%
Native Americans	0.27%	0.22%	0.00%	0.22%
Nonminority Women	5.56%	4.44%	1.17%	3.28%
<b>Construction Sub Contractors</b>				
African Americans	5.03%	4.02%	0.22%	3.80%
Hispanic Americans	3.73%	2.98%	1.21%	1.78%
Asian Americans	2.02%	1.62%	0.03%	1.59%
Native Americans	0.82%	0.65%	0.00%	0.65%
Nonminority Women	5.95%	4.76%	1.07%	3.69%
<b>Architecture &amp; Engineering and Professional Services Prime Consultants<sup>3</sup></b>				
African Americans	4.97%	3.97%	0.30%	3.67%
Hispanic Americans	2.48%	1.98%	0.00%	1.98%
Asian Americans	4.97%	3.98%	0.28%	3.70%
Native Americans	0.22%	0.17%	0.00%	0.17%
Nonminority Women	16.04%	12.83%	0.12%	12.71%
<b>Other Services Prime Contractors</b>				
African Americans	8.52%	6.82%	0.48%	6.34%
Hispanic Americans	2.51%	2.01%	0.25%	1.76%
Asian Americans	4.30%	3.44%	0.13%	3.31%
Native Americans	0.25%	0.20%	0.00%	0.20%
Nonminority Women	21.72%	17.38%	1.29%	16.09%
<b>Goods &amp; Supplies Prime Contractors</b>				
African Americans	4.23%	3.38%	0.04%	3.34%
Hispanic Americans	1.51%	1.21%	0.05%	1.17%
Asian Americans	5.08%	4.06%	0.15%	3.92%
Native Americans	0.32%	0.26%	0.01%	0.25%
Nonminority Women	17.33%	13.86%	0.99%	12.88%

<sup>1</sup> The percentage of dollars is taken from the prime utilization exhibit previously shown in Chapter 4.0.

<sup>2</sup> The percentage of available contractors was taken from census data.

<sup>3</sup> Due to census availability not being disaggregated by A & E and Professional Services, they are combined.

- The program should be time limited, and graduation criteria established for each participant.
- The Commonwealth should continue to concentrate primarily on the scope of all race- and gender-specific programs to firms that are located in the relevant market area for specific business categories.
- The burden of compliance with M/WBE goals should not fall disproportionately on a few departments, absent some business reason for uneven distribution of M/WBE spending by department.

**RECOMMENDATION 9-10: Good Faith Efforts and M/WBE Construction Subcontracting**

The Commonwealth should develop detailed guides for good faith efforts to be undertaken by prime contractors in dealing with M/WBE subcontractors in construction. One example is that developed by the State of North Carolina in **Exhibit 9-3** below. North Carolina requires a minimum of 50 points in good faith efforts, although 10 of these points are met by attending mandatory pre-bid conferences.

**EXHIBIT 9-3  
STATE OF NORTH CAROLINA  
POINT VALUES FOR GOOD FAITH EFFORTS UNDERTAKEN TO PROMOTE  
M/WBE UTILIZATION**

<b>Good Faith Efforts</b>	<b>Point Values</b>
Attending any pre-bid meetings scheduled by the public owner.	10
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
Making the construction plans, specifications, and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.	10
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
Breaking down or combining elements of work into economically feasible units to facilitate minority participation.	15
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
Providing assistance in getting required bonding or insurance, or providing alternatives to bonding or insurance for subcontractors.	20
Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.	20

**EXHIBIT 9-3 (Continued)  
STATE OF NORTH CAROLINA  
POINT VALUES FOR GOOD FAITH EFFORTS UNDERTAKEN TO PROMOTE  
M/WBE UTILIZATION**

Good Faith Efforts	Point Values
Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.	20
Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.	25

Source: Official North Carolina Administrative Code, 301.0102—Good Faith Efforts

**RECOMMENDATION 9-11: Bid Preferences and Set-Asides**

M/WBE utilization by the Commonwealth is low both in comparison to availability and to other states. Because of the very low levels of utilization in state procurement, the Commonwealth should consider the occasional use of M/WBE bid preferences and set-asides. At present the Commonwealth does not have any laws providing for bid preferences or set-asides for M/WBEs. These more aggressive techniques should be used as a supplement to the other programmatic initiatives discussed in these recommendations. Some types of aggressive procurement measures that have been used by other agencies include:

- **Quick Bid Program.** A Quick Bid program is typically for contracts less than \$500,000. In this program the agency solicits bids via telephone and fax from a minimum of six contractors on a rotating basis. The period between bid, award, and contract start is generally not more than six weeks.
- **Mandatory Joint Ventures.** Mandatory joint ventures are a procurement method in which there is a special set-aside for a joint venture in which the MBE/WBE interest is no less than 20 percent of either the participation or risk/profit of the project.
- **Direct Sole Source M/WBE Negotiation.** This is a sole source negotiation in instances where there is a very small group of pre-qualified M/WBEs in specific professional service specialty being procured.
- **Price Preferences.** In this procurement method the agency provides a price preference of up to 10 percent to M/WBEs for commodity and service procurements of less than a certain dollar figure.

**RECOMMENDATION 9-12: Promoting M/WBE Collaboration**

M/WBE capacity can be increased by joint ventures among M/WBEs. For example, in Oregon the Northeast Urban Trucking Consortium, a consortium of seven M/WBE independent trucking firms with 15 trucks, joined together to win a \$2 million trucking contract.

**RECOMMENDATION 9-13: Small Business Enterprise Program**

The Commonwealth should institute an SBE program. A strong SBE program is at the center of maintaining a narrowly tailored program to promote M/WBE utilization. As the first element of a new SBE program, the Commonwealth should establish a consistent SBE definition. At present the definition of small businesses differs between the VBA, the model supplier diversity program, and eVA. A starting point for a SBE definition is to use a percentage of the SBA's definition of a small business. A considerable amount of analysis has gone into the SBA definition, but the SBA SBE definition tends to be large because of the size of federal contracts. The City and County of Denver and the City of Charlotte, among other agencies, have adopted the percentage of SBA definition as their definition of an SBE.

Further guidance on SBE programs can come from features of the City of Charlotte SBE program, including:

- setting SBE goals on formal and informal contracts;
- setting department goals for SBE utilization;
- requiring good faith negotiations by bidders with SBEs;
- mandating SBE outreach and good faith efforts by bidders;
- making SBE utilization part of department performance review;
- rejecting bids for bidder noncompliance with the SBE program;
- encouraging the female and minority participation in the SBE program; and
- imposing mandatory subcontracting clauses where such clauses would be consistent with industry practice and would promote SBE utilization.<sup>5</sup>

The Commonwealth should also consider race-neutral small business set-asides as are used by the federal government, New Jersey, Florida, and other government agencies. For the federal government every acquisition of goods and services anticipated to be between \$2,500 and \$100,000 is set aside exclusively for small businesses unless the

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<sup>5</sup> San Diego as part of its Subcontractor Outreach Program (SCOPE) has mandatory outreach, mandatory use of subcontractors, and mandatory submission of an outreach document. Whether a contract has subcontracting is determined by the engineer on the project.

contracting officer has a reasonable expectation of less than two bids by small businesses.<sup>6</sup>

Another variant of an SBE program is incentives for SBEs located in distressed areas. For example, under the 1997 Small Business Reauthorization Act, the federal government started the federal HUBZone program. A HUBZone firm is a small business that is: (1) owned and controlled by U.S. citizens; (2) has at least 35 percent of its employees who reside in a HUBZone; and (3) has its principal place of business located in a HUBZone.<sup>7</sup> HUBZone programs can serve as a vehicle for encouraging M/WBE contract utilization. Nationally there are 4,743 female and minority HUBZone firms, 58.2 percent of total HUBZone firms.<sup>8</sup> In Virginia there are 202 women and minority HUBZone firms, 59.7 percent of total HUBZone firms in the state. Of those women and minority HUBZone firms, 109 are in construction. In the Virginia, Washington, D.C., and Maryland areas there are 527 women and minority HUBZone firms, 65.3 percent of the total number of HUBZone firms.

#### **COMMENDATION AND RECOMMENDATION 9-14: Commercial Antidiscrimination Rules**

The Commonwealth should be commended for having a general commercial nondiscrimination statute. Some courts have noted that putting in place antidiscrimination rules is an important element of race-neutral alternatives.<sup>9</sup> Nationally, some agencies have adopted requirements to ensure that their procurement and their prime contractor procurement were not discriminatory (e.g., San Diego, Seattle, Columbia, S.C., and Charlotte, N.C.).

A complete antidiscrimination policy would provide for:

- a mechanism whereby complaints may be filed against firms that have discriminated in the marketplace;
- due process, in terms of an investigation by agency staff;
- a hearing process before an independent hearing examiner;
- an appeals process to the agency manager and ultimately to a court;
- a mechanism whereby complaints may be filed against firms that may have discriminated in the marketplace; and
- imposition of sanctions, including:
  - disqualification for up to five years from bidding with the agency;
  - termination of all existing contracts; and
  - referral for prosecution for fraud.

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<sup>6</sup> *Federal Acquisition Regulations* 19.502-2.

<sup>7</sup> 13 C.F.R. 126.200 (1999). The State of California provides a 5 percent preference for a business work site located in state enterprise zones and an additional 1-4 percent preference (not to exceed \$50,000 on goods and services contracts in excess of \$100,000) for hiring from within the enterprise zone. Cal Code Sec 4530 et seq. Minnesota's bid preferences are limited to small businesses operating in high unemployment areas.

<sup>8</sup> Based on the SBA pro-net database located at <http://pro-net.sba.gov/pro-net/search.html>.

<sup>9</sup> *Engineering Contractors v. Dade County*, 943 F.Supp 1546 (SD Fla 1996).

**RECOMMENDATION 9-15: Bonding**

Lack of bonding is often cited by small construction firms as the reason for not pursuing government contracting opportunities. Many M/WBEs have worked in residential or private construction that does not always require bonding, or as subcontractors who were bonded under the prime contractor. A small business surety assistance program should provide technical assistance to small firms, track subcontractor utilization by ethnicity, coordinate existing financial as well as management and technical assistance resources, and provide for quality surety companies to participate in the bonding program.

Some examples of bonding programs from other agencies include:

- The State of Maryland, through its Surety Bonding Program, assists small contractors in bonding with government and public utility contracts that require bid, performance, and payment bonds. Maryland Small Business Development Financing Authority (MSBDFA) has the authority to directly issue bid, performance, or payment bonds up to \$750,000. MSBDFA can also guarantee up to 90 percent of a surety's losses on bid, performance, or payment bonds up to \$900,000. This assistance is available to firms that have been denied bonds, but have not defaulted on loans or financial assistance from MSBDFA.
- The North Carolina Department of Transportation (NCDOT), through its supportive services contract, has funded a DBE Pilot Bonding Assistance Program since 2000. The bonding program is open to any DBE that holds or is in the process of obtaining a NCDOT contract. The program is for bid, payment, and performance bonds of up to \$1 million. The program is administered through the US DOT Office of Small and Disadvantaged Business Utilization, the Minority Business Resource Center, and participating sureties.
- The Contractor Assistance Program (CAP) in the Lambert Airport Expansion in St. Louis assesses bonding readiness by evaluating the company's bond history, recent gross receipts, financial wherewithal, banking ties, and past job performance. CAP's bonding specialist then focuses assistance in areas of company weaknesses as well as bond applications, a firm's financial controls, and reporting tools.
- Allegheny County, Pennsylvania, has a bonding program in which participants are preapproved for up to \$100,000 in bonding on a maximum of two projects within the County. Approved firms must attend monthly business development sessions covering financial management, taxes, marketing, and credit management. Firms are allowed to participate in the program for up to 18 months. Amwest Surety Insurance Company issues the bonds. Allegheny County guarantees the bonds through the Industrial Development Authority and Community Development Block Grant (CDBG) funds.

One element in the Commonwealth crafting such a bonding program would simply be to encourage and coordinate contractor use of the U.S. Small Business Administration Office of Surety Guarantees, which can guarantee bid, performance, and payment bonds for contracts up to \$2 million for small contractors who cannot obtain surety bonds through normal commercial channels.

**COMMENDATION and RECOMMENDATION 9-16: Access to Capital**

The Commonwealth should be commended for its efforts to improve the access to capital to SWAMs. These efforts include the PACE program of the VDMBE office and the efforts of the DBA (both described in Chapter 3.0).

Some examples of lending assistance programs from other agencies follow.

- There are a number of areas where local government bodies participate in linked deposit programs. Linked deposit programs are essentially a vehicle for providing lower interest rates on loans for small and minority business, nonprofits, and housing development. Agencies use linked deposit programs to subsidize lower rates for business and housing loans by accepting a lower rate on their deposits with participating financial institutions. For example, the New York State Linked Deposit program provides two-year financing at reduced rates to small and minority businesses. The New York State Linked Deposit program makes loans of up to \$10 million to certified M/WBEs and SBEs that have been awarded agency contracts. To participate, service businesses must have fewer than 100 employees and not be dominant in their field of operation. Businesses in economic development zones, highly distressed areas, and defense and certified M/WBEs are eligible for 3 percent interest rate reduction. The program has been in place for ten years.<sup>10</sup>
- The MSBDFA provides financing for M/WBEs in the form of a:
  - Contract Financing Program, which provides loan guarantees and direct working capital and equipment loans to socially or economically disadvantaged businesses that have been awarded public contracts;
  - Equity Participation Investment Program, which provides direct loans, equity investments and loan guarantees to socially or economically disadvantaged-owned businesses in franchising, in technology-based industries, and for business acquisition; and
  - Long-Term Guaranty Program, which provides loan guarantees and interest rate subsidies.
- The State of Florida has a loan mobilization program in which minority firms that land a state contract can qualify for a state-

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<sup>10</sup> Montgomery County, Maryland, and Chicago are other agencies with notable linked deposit programs.

backed loan of between \$5,000 and \$250,000 to be used on the project. Florida also has a program to aid franchise ownership. Agencies have collaborated with the Emerging Market program in the International Franchise Association to assist minority franchise ownership.

- The Port Authority of New York and New Jersey uses a Contractor Insurance Program (CIP), a form of wrap-up insurance under which the Port Authority provides various insurance coverages to approved on-site contractors and subcontractors for construction contracts. In particular, the Port Authority buys and pays the premiums on public liability insurance (\$25 million per occurrence), builders risk insurance (\$50 million per occurrence), and workers' compensation and employers liability insurance. In general, the CIP can reduce an owner's project costs by an average of 1 to 2 percent compared to traditional contractor procured insurance programs. The Port Authority CIP does help alleviate barriers from insurance costs to M/WBE participation in Port Authority construction projects.

#### **RECOMMENDATION 9-17: Management and Technical Services**

The Commonwealth should be commended for its current attempts to strengthen its efforts in providing management and technical services to M/WBE firms in securing contracts with Virginia agencies through the VDMBE and the VDBA.

These efforts could be strengthened by contracting with an outside management and technical assistance provider to provide needed technical services, particularly in the area of loans and bonding. Such a contract should be structured to include providing incentives to produce results, such as the number of M/WBEs being registered as qualified vendors with the Commonwealth and the number of M/WBEs graduating from subcontract work to prime contracts. For example, the Port Authority of New York and New Jersey has a three-year fee-for-service contract with the Regional Alliance capped at \$275,000.<sup>11</sup> Previously, the contract was a flat grant, but it was changed to a fee-for-service arrangement to reward creativity with money. The Regional Alliance also supports the Loaned Executive Assistance Program (LEAP) that provides hands-on consultants to evaluate the ability of small firms to undertake agency contracts and recommend needed changes. Similarly, the State of Phoenix tracks its management and technical assistance to determine if training results in contract award.

#### **COMMENDATION and RECOMMENDATION 9-18: M/WBE Program Data Management**

It is imperative for the Commonwealth to closely monitor the utilization of all businesses by race, ethnicity, and gender to determine whether the small contractors program over time has the potential to eliminate race and gender disparities without specific race and gender goals.

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<sup>11</sup> The Regional Alliance was started in 1989. For general background on the Regional Alliance see Timothy Bates, "Case Studies of State Minority Business Assistance Programs," report for the U.S. MBDA, September 1993.

The Commonwealth is still behind in its tracking of M/WBE spending. Virginia should review the development of the Web-based HUBSCO system in North Carolina to track spending with M/WBEs across all state agencies, colleges, and universities.

The Commonwealth should require that all contractors maintain data on all subcontractors utilized on a Virginia project. This list includes all subcontractors utilized (minority, women, and nonminority), the total amount paid, and the race/ethnicity/gender of the owner. These data should be submitted to the Commonwealth before the prime contractor's final payment for services.

It is also equally important to identify, for future availability analysis, the number of construction subcontractors available. Because the Commonwealth does not collect these data, it is limited in the type of availability analysis it can conduct. In order for the Commonwealth to accurately monitor a small contractors program and assist in future availability analyses, the Commonwealth should require all contractors to submit a list of all subcontractors contacted in preparation of their bid package. The list of potential subcontractors should include the proposed service, bid amount, and the race/ethnicity/gender of the business owner(s). The data will allow the Commonwealth to accurately identify the number of actual subcontractors available. These data should be analyzed and reviewed periodically (at least annually), and the SBE program adjusted accordingly.

**COMMENDATION and RECOMMENDATION 9-19: M/WBE/SBE Outreach**

The Commonwealth should be commended for workshops and seminars, newsletters, MBE media alert, the networking calendar, and placing the M/WBE list on the Commonwealth Web site to assist prime contractors in identifying potential M/WBE subcontractors.

Nevertheless, there are a significant number of large M/WBEs in Virginia and neighboring states. According to census data there were 14,323 minority firms and 20,794 women-owned firms with paid employees in Virginia alone in 1997, 11.1 percent and 16.1 percent of all firms in the state, respectively. In construction there were 1,591 women-owned firms with paid employees, and 1,171 minority-owned firms with paid employees, 8.0 percent and 8.6 percent of total construction firms. The Commonwealth used only 283 M/WBEs in the construction payments data, about 1.8 percent of the total number of firms utilized by the Commonwealth. Moreover, the Mid-Atlantic states constitute one of the largest pools of M/WBEs in the country. In Region III of the SBA (Virginia, Maryland, Delaware, West Virginia, and Washington, D.C.) there were 1,655 8(a) firms that had over \$1.2 billion in contract actions in FY 2000.<sup>12</sup>

There are several vehicles by which Commonwealth outreach efforts can be strengthened.

- The VDMBE Office should partner with federal procurement efforts to market to M/WBE firms in the region.

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<sup>12</sup> SBA, "The Report to the U.S. Congress on the Minority Small Business and Capital Ownership Development Program for the Fiscal Year 2000" (2001).

- Agencies can feature M/WBEs in employee newsletter to promote firm awareness.
- The effectiveness of M/WBE outreach can be improved by classifying businesses into three categories:
  - Category A: Firms that are new to government contracting. These firms should be directed to the Procurement Technical Assistance Center (PTAC), the Small Business Development Center (SBDC), and the Minority Business Development Center (MBDC). VDMBE should not duplicate PTAC, SBDC, or MBDC services.
  - Category B: Firms that are familiar with government contracting in general but not with the particular agency. These firms should be handled via an enhanced Web site that answers routine questions and quarterly group seminars.
  - Category C: Firms that already have government contracts and are looking for more specific assistance. Some agencies allow for new businesses to have 15-minute presentations of corporate capabilities to program managers. The Commonwealth can also provide unsuccessful bidders with feedback and brief M/WBEs on quality assurance standards.

**COMMENDATION and RECOMMENDATION 9-20: VDMBE Web site**

VDMBE should be commended for the information that is on the Web site, including agency description, certification and recertification applications, information on the PACE program, and a database of M/WBE vendors. Other agencies have put the following information on their M/WBE Web sites: bid tabulations, status of certification applications, how to do business data, direct links to on-line purchasing manuals, capacity and experience data on certified firms, and forecasts of business opportunities to M/WBE vendors. More detail should also be provided in the FAQ section of the VDMBE Web site to answer routine vendor questions.

The VDMBE office should review some of the novel forms of outreach on the Internet employed by other agencies across the nation. For example, the Illinois Department of Transportation (IDOT) established a *Contractor Marketplace* electronic bulletin board that allows prime and subcontractors to post information on bid opportunities and solicitations of M/WBE subcontractors.<sup>13</sup> IDOT is planning to give subcontractors and suppliers the ability to transmit quotes to prime contractors in specific work categories. The IDOT *Contractor Marketplace* also posts a *Small Contracts List* and *Pay Items* on-line. This procedure facilitates contractor identification of bid opportunities from the detailed Pay Item reports. Likewise, the Regional Alliance of Small Contractors Opportunities Clearinghouse in New York provides a Web-based forum for small contractors to interact with large construction firms and public development agencies.

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<sup>13</sup> <http://www.dot.state.il.us/const/wrkat.html>.

**RECOMMENDATION 9-21: VDMBE Office**

A revised M/WBE program is a more complex and challenging program than the prior M/WBE program, for several reasons. First, the Commonwealth should reject bids for noncompliance with the new M/WBE program, indicating that the program does have “teeth.” Second, the new M/WBE program will require training of staff in procurement. Third, the Commonwealth should add several new business development initiatives. Fourth, certification audits should be increased. The VDMBE Office should be staffed to meet these new responsibilities.

Thus far the VDMBE Office has been funded primarily by the supportive services contract for VDOT. The supportive services contract should be a separate function, possibly contracted out to an outside vendor, and the VDMBE should receive adequate and independent funding, at least equal to its current budget.

Finally, the VDMBE Office should develop measures to gauge the effectiveness of efforts. Possible measures include:

- number of new certified firms;
- growth in percentage utilization by the Commonwealth;
- number of firms that receive bonding;
- number of firms that successfully graduate from the M/WBE program;
- percentage of M/WBE utilization in informal contracts;
- growth in the number of M/WBEs utilized by the Commonwealth;
- number of joint ventures involving M/WBEs;
- procurement card utilization of M/WBEs; and
- largest contract won by an M/WBE.

These measures should be integrated into a “balanced scorecard.” The balanced scorecard model of management engineering seeks to align an organization with its strategy by identifying key initiatives necessary to realize that strategy and mobilize the organization’s staff. Using measures and targets, the scorecard creates feedback loops that evaluate an agency’s progress against that strategy.

The scorecard for the public sector is composed of five perspectives: the value/benefit perspective, the customer perspective, the financial perspective, the internal process perspective, and the human resource/learning perspective. A scorecard can then be constructed as follows in **Exhibit 9-4**.

**EXHIBIT 9-4  
SAMPLE BALANCED SCORECARD**

<b>Perspective</b>	<b>Goal</b>	<b>Measure</b>	<b>Target</b>	<b>Initiative</b>
Value/Benefit				
Customer				
Financial				
Internal Process				
HR/Learning				

## ***APPENDICES***

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***APPENDIX A:***  
***ACCOUNT CODES AND WORK***  
***TYPE CODES***

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**APPENDIX A  
ACCOUNT CODES AND WORK TYPE CODES**

**CARS ACCOUNT CODES**

ObjCode	Work Type	Description
1209	OS	Charge Card Purchase of Contractual Services
1211	OS	Express Services
1212	OS	Outbound Freight Services
1213	OS	Messenger Services
1215	OS	Printing Services
1217	OS	Telecommunications Services (Non-State)
1219	OS	Inbound Freight Services
1231	PS	Clinic Services
1232	PS	Dental Services
1234	PS	Medical Services
1235	PS	Nursing Home Services
1241	PS	Auditing Services
1242	PS	Fiscal Services
1243	PS	Attorney Services
1244	PS	Management Services
1245	PS	Personnel Development Services
1246	PS	Public Information and Public Relations Services
1247	PS	Legal Services
1248	OS	Media Services
1251	OS	Custodial Services
1252	C	Electrical Repair and Maintenance Services
1253	OS	Equipment Repair and Maintenance Services
1254	OS	Extermination/Vector Control Services
1255	C	Highway Repair and Maintenance Services
1256	C	Mechanical Repair and Maintenance Services
1257	C	Plant Repair and Maintenance Services
1258	OS	Reclamation Services
1259	OS	Vehicle Repair and Maintenance Services
1261	A & E	Architectural and Engineering Services
1262	OS	Aviation Services
1263	OS	Clerical Services
1264	OS	Food and Dietary Services
1265	OS	Laundry and Linen Services
1266	OS	Manual Labor Services
1267	OS	Production Services
1268	OS	Skilled Services
1272	PS	Information Mgmt. Program Design & Development
1274	PS	Computer Hardware Maintenance Services
1275	PS	Computer Software Maintenance Services
1277	PS	Computer Operating Services (Non-State)
1279	GS	Computer Software Costs
1309	GS	Charge Card Purchase of Supplies and Materials
1311	GS	Apparel Supplies
1312	GS	Office Supplies

**CARS ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
1313	GS	Stationery and Forms
1321	GS	Coal
1322	GS	Gas
1323	GS	Gasoline
1324	GS	Oil
1325	GS	Steam
1326	GS	Wood Fuels
1333	GS	Manufacturing Supplies
1334	GS	Merchandise
1335	GS	Packaging and Shipping Supplies
1341	GS	Laboratory
1342	GS	Medical and Dental Supplies
1343	GS	Field Supplies
1344	GS	Pharmaceutical
1351	C	Building Repair and Maintenance Materials
1352	GS	Custodial Repair and Maintenance Materials
1353	C	Electrical Repair and Maintenance Materials
1354	C	Mechanical Repair and Maintenance Materials
1355	GS	Vehicle Repair and Maintenance Materials
1361	GS	Clothing Supplies
1362	GS	Food and Dietary Supplies
1363	GS	Food Service Supplies
1364	GS	Laundry and Linen Supplies
1365	GS	Personal Care Supplies
1371	GS	Agricultural Supplies
1372	GS	Architectural and Engineering Supplies
1373	GS	Computer Operating Supplies
1374	GS	Educational Supplies
1375	GS	Fish and Wildlife Supplies
1376	GS	Law Enforcement Supplies
1377	GS	Photographic Supplies
1378	GS	Recreational Supplies
1561	GS	Computer Purchases Peripheral Installment Purchases
1562	PS	Computer Processor Installment Purchases
1563	PS	Computer Software Installment Purchases
1564	GS	Equipment Installment Purchases
1565	MFD	Building Installment Purchases
1566	MFD	Land Installment Purchases
2111	MFD	Acquisition
2112	MFD	Acquisition
2113	MFD	Acquisition
2121	GS	Animals
2122	GS	Minerals
2123	GS	Plants
2131	C	Site Improvements

**CARS ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2132	C	Site Preparation
2133	MFD	Utilities
2209	GS	Charge Card Purchase of Equipment
2211	GS	Computer Peripheral Equipment
2212	GS	Computer Processor Equipment
2218	GS	Computer Equipment Improvements
2221	GS	College Library Books
2222	GS	Educational Equipment
2223	GS	Exhibit Equipment
2224	GS	Reference Equipment
2228	GS	Educational and Cultural Equipment Improvements
2231	GS	Electronic Equipment
2232	GS	Photographic Equipment
2233	GS	Voice and Data Transmission Equipment
2238	GS	Electronic and Photographic Equipment Improvements
2241	GS	Laboratory Equipment
2242	GS	Medical and Dental Equipment
2243	GS	Field Equipment
2248	GS	Medical and Laboratory Equipment Improvements
2251	GS	Agricultural Vehicular Equipment
2252	GS	Aircraft Equipment
2253	GS	Construction Equipment
2254	GS	Motor Vehicle Equipment
2255	GS	Power Repair and Maintenance Equipment
2256	GS	Watercraft Equipment
2258	GS	Motorized Equipment Improvements
2261	GS	Office Appurtenances
2262	GS	Office Furniture
2263	GS	Office Incidentals
2264	GS	Office Machines
2268	GS	Office Equipment Improvements
2271	GS	Household Equipment
2272	GS	Law Enforcement Equipment
2273	GS	Manufacturing Equipment
2274	GS	Non-Power Repair and Maintenance Equipment
2275	GS	Recreational Equipment
2278	GS	Specific Use Equipment Improvements
2281	GS	Built-in Equipment
2282	GS	Fixtures
2283	GS	Mechanical Equipment
2288	GS	Stationary Equipment Improvements
2311	C	Acquistion
2312	C	Acquisition
2313	C	Acquistion
2314	C	Acquistion
2321	C	Construction - Bridges

**CARS ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2322	C	Construction - Buildings
2323	C	Construction - Highways
2324	C	Construction - Water Ports
2327	C	Construction - Bridges and Highways Improvements
2328	C	Construction - Building Improvements
1205	PS	Seat Management Services
1233	PS	Hospital Services
1236	PS	XRAY and Lab Services
2213	GS	Personal Computing Systems and Components
2214	GS	Mainframe Comouters and Components
2215	GS	Network Servers
2216	GS	Network Components
2217	GS	Other Computer Equipment

**GEORGE MASON ACCOUNT CODES**

OBJECT, CODE	Work Type	DESCRIPTION
3110	OS	EXPRESS SERVICES
3111	OS	EXPRESS SERVICES-CR
3120	OS	OUTBOUND FREIGHT
3130	OS	MESSENGER SERVICES
3140	MFD	METERED MAIL
3141	MFD	METERED MAIL - CR
3142	OS	DROP SHIP
3143	OS	DROP SHIP-CR
3144	MFD	BULK MAIL
3148	MFD	OTHER MAIL
3150	OS	PRINTING SERVICES
3151	GS	BINDING LIB BOOKS
3152	MFD	PRINTING ROYALTIES
3153	OS	EMBROIDERY/SCREENING
3160	OS	TELECOMM SVS DIT
3170	OS	TELECOM SVS NONSTATE
3171	GS	MOBILE PHONES
3172	MFD	VOICE MAIL SERVICES
3173	OS	PBX MAINTENANCE SVCS
3175	PS	PBX NETWORK SERVICES
3176	OS	VIDEO CABLE TV SVCS
3177	MFD	LONG DISTANCE TELE
3180	OS	TELECOM SVS STATE
3190	OS	INBOUND FREIGHT
3210	MFD	DUES-PROFESS'L ORG
3211	MFD	LICENSE FEES
3212	MFD	DUES-COMMUNITY ORG
3220	GS	PUBLICATION SUBSCRIP
3225	MFD	EMPLOYEE TUIT REIMB
3340	PS	HEALTH PROF SERVICES
3360	PS	X-RAY & LAB SERVICES
3410	PS	AUDITING SERVICES
3420	PS	FISCAL SERVICES
3421	OS	COLLECTION SERVICES
3422	MFD	CREDIT CARD FEES
3430	PS	ATTORNEY SERVICES
3440	PS	MGMNT DEVELOP SERV
3441	PS	ACADEMIC CONSULTING
3442	PS	RESEARCH CONSULTING
3443	PS	NONACADEMIC CONSULT
3450	PS	PERSONNEL MGMT SERV
3460	PS	PUB INFO&PUB REL SV
3461	MFD	ICA GUARANTEES

**GEORGE MASON ACCOUNT CODES (Continued)**

OBJECT CODE	Work Type	DESCRIPTION
3462	MFD	ENTRY FEES
3470	PS	LEGAL SERVICES
3471	OS	PATENT SERVICES
3480	PS	MEDIA SERVICES
3481	MFD	CLASSIFIED ADS
3510	OS	CUSTODIAL SERV
3511	OS	GROUND MAINTENANCE
3520	C	ELEC REPAIR & MAINT
3530	OS	EQUIP REPAIR & MAINT
3540	OS	EXTERMINATION
3550	C	ROAD REPAIR & MAINT
3560	OS	MECH REPAIR & MAINT
3570	OS	PLANT REPAIR & MAINT
3590	OS	VEH REPAIR & MAINT
3610	AE	ARCH & ENGR SERVICE
3630	OS	TEMP PERSONNEL
3640	OS	FOOD SERVICE
3650	OS	LAUNDRY&DRY CLEANING
3660	OS	MANUAL LABOR SERVICE
3670	OS	FILM PROCESSING
3680	OS	NON-GMU SKILLED SERV
3681	OS	GMU PHOTOCOPYING
3682	OS	GMU SKILLED SERVICES
3683	MFD	STATE SUBRECIPIENT
3684	OS	SKILL SERV-SPEC PROJ
3685	OS	CONTRACTED MGMT
3686	C	SUBCONTRACTORS GT25K
3687	OS	MOVING SERVICES
3688	OS	SECURITY SERVICES
3689	OS	ARTIST/ATHL OFFICIAL
3690	MFD	STATE SUBRECIP GT25K
3710	PS	INFO MGMT PROG(DIT)
3720	PS	INFO MGMT PROG-OTHER
3730	PS	INFO MGMT PROG-STATE
3740	PS	COMP REPAIR AND MAIN
3750	PS	COMPU SOFTWARE MAINT
3770	OS	COMPU OPER SV-OTHER
3780	OS	COMPU OPER SV-STATE
3790	GS	COMPU SOFTWARE COSTS
3810	OS	MOVING & RELOCATION
3811	OS	RELOC-COMMON CARRIER
3820	MFD	TRAVEL-PERS VEHICLE
3821	GS	PERS VEH - CANDIDATE
3830	MFD	FARES-PUB CARRIERS
3831	MFD	VEHICLE RENTAL

**GEORGE MASON ACCOUNT CODES (Continued)**

OBJECT, CODE	Work Type	DESCRIPTION
3832	MFD	FARES-CANDIDATE
3840	MFD	TRAVEL-STATE VEH
3841	MFD	VAN CREDITS
3842	MFD	FLEET CREDITS
3850	MFD	LODGING, MEALS
3851	MFD	LODGING-CANDIDATE
3852	MFD	PARKING FEES & TOLLS
3870	MFD	MEALS-W2
3880	MFD	SUBSISTENCE-BUSINESS
3881	MFD	MEALS-CANDIDATE
3890	MFD	DOMESTIC CONV&EMPL TR
3891	MFD	FOREIGN CONV&EMPL TR
3892	MFD	GMU-SPONSORED CONF
3893	MFD	EMPLOYEE TRAIN TRVL
3970	MFD	LATE PYM-CONTR SERV
3999	MFD	RECOV-CONT SERVICES
4090	GS	CHG CRD-SUPPLIES
4110	GS	EMPLOYEE CLOTHING
4120	GS	OFFICE SUPPLIES
4121	GS	OFFICE SUPPLIES-CR
4122	GS	EQUIPMENT <\$1000
4123	GS	COMPUTER EQUIP \$1-2K
4124	GS	OTHER EQUIP \$1-2K
4125	GS	BOOKS
4126	GS	FURNITURE <\$2000
4130	GS	STATIONERY/FORMS
4210	GS	COAL OR COKE
4220	MFD	GAS-NAT/PROPANE
4230	GS	GAS-VEHICLES/EQUIP
4240	GS	FUEL OIL
4340	GS	MERCHANDISE-RESALE
4410	GS	LAB SUPPLIES
4420	GS	MEDICAL SUPPLIES
4510	OS	BLDG REP & MAINT MAT
4520	GS	INDUSTRIAL CHEMICALS
4521	GS	CUSTODIAL MATERIALS
4530	GS	ELECT REP & MAINT MAT
4540	GS	MECH REP & MAINT MAT
4550	GS	VEH REP & MAINT MAT
4620	GS	FOOD SUPPLIES
4630	GS	FOOD SERV SUPPLIES
4640	GS	LAUNDRY & LINEN SUPP
4641	GS	LAUND & CLEANING SUP
4710	GS	GROUND MAINT MATER
4720	GS	ARCH & ENG SUPP

**GEORGE MASON ACCOUNT CODES (Continued)**

OBJECT, CODE	Work Type	DESCRIPTION
4730	GS	COMPU OPER SUPPLIES
4740	GS	EDUCAT/RESEARCH SUPP
4760	GS	LAW ENFORCE SUPPLIES
4770	GS	PHOTOGRAPHIC SUPP
4780	GS	RECREATIONAL SUPP
4781	GS	ATHLETIC CLOTHING
4782	GS	STUDENT EVNT SUPPLY
4815	GS	FURN & EQUIP LT1000
4820	GS	LAB EQUIP LT1000
4825	GS	TOOLS & EQUIP LT1000
4830	GS	MECHAN. EQUIP LT1000
4835	GS	COMPUTER EQUIP LT1000
4840	GS	EDUCAT EQUIP LT1000
4845	GS	LAW ENFOR. EQ LT1000
4850	GS	PHOTOGRAP EQP LT1000
4855	GS	RECREATION EQ LT1000
4970	MFD	LATE PYM-SUPP & MAT
5160	MFD	INSURANCE-PROPERTY
5210	GS	L/P COMPU-PERIPHERAL
5240	GS	L/P OTHER EQUIP PRIN
5241	GS	L/P OTHER EQUIP INT
5250	GS	L/P STRUCTURES
5310	GS	RENT COMPU PERIPH
5315	GS	RENT MICROCOMPUTER
5330	GS	RENT COMPU SOFTWARE
5340	GS	RENTAL-EQUIPMENT
5341	GS	PAGER RENTALS
5350	GS	RENTAL-STRUCTURES
5355	MFD	S/T FACILITY RENTAL
5410	MFD	ALLOC PHYPLANT-GAS
5413	OS	ALLOC PHY PL-REP&MNT
5414	MFD	APA CHARGES
5420	C	ELECTRICL SERV
5430	OS	TRASH REMOVAL
5431	OS	RECYCLING SVC CHGS
5440	OS	WATER & SEWAGE
5511	MFD	INSURANCE - GEN LIAB
5512	MFD	INTL STU INSUR PREM
5530	PS	MEDICAL-MALPRACTICE
5550	MFD	INSURANCE-WORK COMP
5615	GS	MICROCOMPU INST PUR
5630	GS	COMPU SFTWR INST PUR
5640	GS	EQUIP INST PURCHASE
5970	MFD	LATE PYM-CONTIN SERV
5990	MFD	DONATION-LOCAL ONLY

**GEORGE MASON ACCOUNT CODES (Continued)**

OBJECT, CODE	Work Type	DESCRIPTION
6000	GS	BUDGET POOL-EQUIP
6030	GS	SIGN EQUIPMENT
6110	GS	COMPU PERIPHERAL EQ
6115	GS	MICROCOMPUTER EQUIP
6120	GS	COMPU PROCESSOR EQP
6180	GS	COMPU EQP IMPROVEMNT
6210	OS	LIB-TREATI&MONOG-NEW
6211	GS	LIB-T&M-MICROFRM-NEW
6212	GS	LIB-SERIALS&CONT-NEW
6213	GS	LIB-S&C-MICROFRM-NEW
6214	OS	LIB-T&M-SUPPLEMENT
6215	GS	LIB-T&M-MICRFRM-SUPP
6216	OS	LIB-S&C-SUPPLEMENT
6217	GS	LIB-S&C-MICRFRM-SUPP
6218	GS	LIB-AUDIO-VISUAL
6219	GS	LIB-ELECT PUBS&DBASE
6220	GS	EDUC & TEACH EQUIP
6240	GS	REFERENCE EQUIPMENT
6310	GS	ELECTRONIC EQUIPMENT
6320	GS	PHOTOGRAPHIC EQUIP
6330	GS	VOICE/DATA TRANS EQP
6380	MFD	VOICE/DATA TRN IMPRV
6410	GS	LAB EQUIPMENT
6540	GS	MOTOR VEHICLES
6550	GS	PWR MACHINERY & TOOLS
6551	GS	LAWN MAINT EQUIPMENT
6560	GS	WATERCRAFT & EQUIP
6610	GS	CARPET DRAPES APPURT
6620	GS	OFFICE FURNITURE
6640	GS	OFFICE MACHINES
6710	GS	HOUSEHLD EQUIPMENT
6720	GS	LAW ENFORCE EQUIP
6750	GS	RECREATION EQUIPMENT
6820	GS	FIXTURES
6830	GS	MECHANICAL EQUIPMENT
7110	C	CONSTRUCTION-BUILDGS
7111	MFD	UTILITIES
7115	C	RENOVATION-BUILDINGS
7120	GS	CONSTR-FIXED EQUIP
7130	C	CONSTR-SEP CONTRCT
7131	MFD	UTIL-SEP CONTRACT
7135	C	RENOV-SEP CONTRACT
7155	C	RENOV-SEP CONTRACT
7180	AE	SITE PREPARATION
7210	C	CONSTR-BASIC CON FEE

**GEORGE MASON ACCOUNT CODES (Continued)**

OBJECT CODE	Work Type	DESCRIPTION
7211	MFD	UTIL-BASIC CON FEE
7215	MFD	RENOV-BASIC CON FEE
7230	AE	CONSTR-SPEC ENG
7235	AE	RENOV-SPEC ENG
7310	OS	CONSTR-REPRODUCTION
7315	OS	RENOV-REPRODUCTION
7330	GS	CONSTR-PROF ESTIMAT
7340	PS	CONSTR-ADVERTISING
7350	MFD	CONSTR-TRAVEL
7490	AE	SITE IMPROVEMNTS
7520	C	CONSTR-ELECT DISTR
7540	MFD	CONSTR-WATER DISTR
7545	MFD	RENOV-WATER DISTR
7550	C	CONSTR-HEAT DISTR
7560	C	CONSTR-ROADS,WALKS
7565	C	RENOV-ROADS,WALKS
7640	OS	EQUIP MAINTENANCE
7741	MFD	REV BOND INT POST 92
7751	MFD	REV BOND PRIN POST92
7760	AE	CONSTR-MATER TESTING
7765	C	RENOV-MATER TESTING
7785	MFD	RENOV-TEL/CABLE CHG
7811	GS	COMPUTER PERIPH EQP
7812	GS	COMPUTER PROC EQUIP
7813	GS	COMPUTER SOFTWARE
7822	GS	EDUCATIONAL EQUIP
7831	GS	ELECTRONIC EQUIPMENT
7832	GS	PHOTOGRAPHIC EQUIP
7833	GS	VOICE/DATA TRANS EQP
7841	GS	LABORATORY EQUIPMENT
7861	GS	OFFICE APPURTENANCES
7862	GS	OFFICE FURNITURE
7871	GS	HOUSEHOLD EQUIPMENT
7875	GS	RECREATIONAL EQUIP
7881	GS	BUILT-IN EQUIPMENT
7882	GS	FIXTURES
7883	GS	MECHANICAL EQUIPMENT
7910	C	CONSTRUCTION - MISC
7915	C	RENOVATION - MISC
7950	GS	RENTAL - STRUCTURE

**OLD DOMINION ACCOUNT CODES**

ACCT CODE	Work Type	Description
2113	C	ACQ WATERWAYS & IMPROV
2111	MFD	ACQUISITION OF LAND
1521		ADP PERIPHERAL USE AGR
2251	GS	AGRIC VEHIC EQUIP \$2,000-\$4,999
2253	GS	AGRIC VEHIC EQUIP >\$5,000
1371	GS	AGRICULTURAL SUPPLIES
1331	MFD	ALCOHOL-WINE/BEER
3121	MFD	ANTICIPATION LOAN INT
1311	GS	APPAREL SUPPLIES
1372	AE	ARCH & ENGIN SUPPLIES
1261	AE	ARCH & ENGINEER SERVICES
1243	PS	ATTORNEY SERVICES
1512	MFD	AUTO LIABILITY INSUR
1413	MFD	AWARDS - (PAYROLL USE ONLY)
1351	GS	BLDG REPAIR & MAINT MTRL
1517	MFD	BOILER & MACHINERY INSUR
1535	MFD	BUILDING RENTALS
2281	GS	BUILT-IN EQUIP <\$1,999
2282	GS	BUILT-IN EQUIP >\$5,000
1341	GS	CHEMICAL SUPPLIES
1263	OS	CLERICAL SERVICES
1231	OS	CLINIC SERVICES
1321	GS	COAL
2221	GS	COLLEGE LIBRARY BOOKS
1274	PS	COMP HARDWARE MAINT SERV
1277	PS	COMP OPER SERV-NONSTATE
1276	PS	COMP OPERATING SERV-DIT
1278	PS	COMP OPERATING SERV-STATE
1373	GS	COMP OPERATING SUPPLIES
1275	PS	COMP SOFTWARE MAINT SERV
1533	GS	COMP SOFTWARE RENTALS
1278	PS	COMPUTER SERVICES COSTS
1279	PS	COMPUTER SOFTWARE DEVELOPMENT SERV
2218	GS	COMPUTER SOFTWARE PURCHASES <\$1,999
2322	C	CONSTRUCTION BUILDINGS
2254	GS	CONSTRUCTION EQUIP <\$1,999
2255	GS	CONSTRUCTION EQUIP >\$5,000
2323	C	CONSTRUCTION HIGHWAYS
1227	MFD	CONVENTION & EDUC TRAVEL
1352	GS	CUSTODIAL REP/MAINT MTRL
1251	OS	CUSTODIAL SERVICES
2211	GS	DESKTOP CLIENT COMP \$2,000-\$4,999
2211	GS	DESKTOP CLIENT COMP ETF <\$2,000

**OLD DOMINION ACCOUNT CODES (Continued)**

ACCT CODE	Work Type	Description
2211	GS	DESKTOP CLIENT COMPUTERS <\$1,999
2211	GS	DESKTOP CLIENT COMPUTERS >\$5,000
2228	GS	ED & CULT EQUIP >\$5,000
2222	GS	EDUCATIONAL EQUIPMENT \$2,000-\$4,999
2222	GS	EDUCATIONAL EQUIPMENT <\$1,999
2223	GS	EDUCATIONAL EQUIPMENT >\$5,000
2222	GS	EDUCATIONAL EQUIPMENT ETF <\$2,000
1374	GS	EDUCATIONAL SUPPLIES
2238	GS	ELEC & PHOTO EQ IMPR \$2,000-\$4,999
2238	GS	ELEC & PHOTO EQ IMPROV <\$1,999
1353	GS	ELEC REPAIR & MAINT MTRL
1252	GS	ELEC REPAIR & MAINT SERV
1542	MFD	ELECTRICAL SERVICE CHGS
2231	GS	ELECTRONIC EQUIP \$2,000-\$4,999
2231	GS	ELECTRONIC EQUIP <\$1,999
2232	GS	ELECTRONIC EQUIP >\$5,000
2231	GS	ELECTRONIC EQUIP ETF <\$2,000
1224	MFD	EMPLOYEE TRAINING COURSES/CONF
1227	MFD	EMPLOYER TRAIN-TRANS,LODGING,MEALS
1253	GS	EQUIP REPAIR & MAINT SERV
1534	GS	EQUIPMENT RENTALS
2224	GS	EXHIBIT EQUIPMENT <\$1,999
1211	OS	EXPRESS SERVICES
1254	OS	EXTERMIN/VECTOR CONT SERV
1375	GS	FISH & WILDLIFE SUPPLIES
2283	GS	FIXTURES <\$1,999
2288	GS	FIXTURES >\$5,000
1113	MFD	FOAI WAGE STATE EMPLOYEE
1264	OS	FOOD & DIETARY SERVICES
1362	GS	FOOD & DIETARY SUPP-BAKE
1362	GS	FOOD & DIETARY SUPP-GROC
1362	GS	FOOD & DIETARY SUPP-OTHER
1322	MFD	GAS - NATURAL
1323	MFD	GASOLINE
1551	MFD	GENERAL LIABILITY INSUR
1452	MFD	GRANTS TO NON-GOVT ORGNS
1255	C	HIWAY REPAIR & MAINT SERV
1115	MFD	HOSPITALIZATION INSURANCE
2271	GS	HOUSEHOLD EQUIP \$2,000-\$4,999
2271	GS	HOUSEHOLD EQUIP <\$1,999
2272	GS	HOUSEHOLD EQUIP >\$5,000
2271	GS	HOUSEHOLD EQUIP ETF <\$2,000
1271	AE	IMP DESIGN/DEVEL SERV-DIT
1219	OS	INBOUND FREIGHT SERVICES
8700	MFD	INDIREC OVERHEAD EXPENSE

**OLD DOMINION ACCOUNT CODES (Continued)**

ACCT CODE	Work Type	Description
1514	MFD	INLAND MARINE INSURANCE
1499	MFD	INTRA RECOVERY-TFER PYMTS
2241	GS	LABORATORY EQUIP <\$1,999
2242	GS	LABORATORY EQUIP >\$5,000
1341	GS	LABORATORY SUPPLIES
1536	MFD	LAND RENTALS
1397	MFD	LATE PAY - SUPP & MATR
1265	OS	LAUNDRY & LINEN SERVICES
1364	GS	LAUNDRY & LINEN SUPPLIES
2273	GS	LAW ENFORCE EQUIP <\$1,999
2274	GS	LAW ENFORCE EQUIP >\$5,000
1376	GS	LAW ENFORCEMENT SUPPLIES
1247	PS	LEGAL SERVICES-OTHER
2221	GS	LIBRARY BOOKS-SUBSCRIPT
1332	GS	LICENSE TAG
2214	GS	MAIN COMP & COMPON \$2,000-\$4,999
2214	GS	MAINFRAME COMP & COMPONENT <\$1,999
2214	GS	MAINFRAME COMP & COMPONENTS >\$5,000
1244	PS	MANAGEMENT SERVICES
1266	OS	MANUAL LABOR SERVICES
1333	GS	MANUFACTURING SUPPLIES
1515	MFD	MARINE INSURANCE
1288	MFD	MEALS-NONREPORTABLE
1354	GS	MECH REPAIR & MAINT MTRL
1256	OS	MECH REPAIR & MAINT SERV
2283	GS	MECHANICAL EQUIP \$2,000-\$4,999
2283	GS	MECHANICAL EQUIP >\$5,000
2248	GS	MED & DENTAL EQUIP <\$1,999
1248	PS	MEDIA SERVICES
1342	GS	MEDICAL & DENTAL SUPPLIES
1553	MFD	MEDICAL MALPRACTICE INSUR
1234	PS	MEDICAL SERVICES
1213	OS	MESSENGER SERVICES
2275	GS	MFG EQUIP <\$1,999
2278	GS	MFG EQUIP >\$5,000
2212	GS	MOBILE CLIENT COMP \$2,000-\$4,999
2212	GS	MOBILE CLIENT COMPUTERS <\$1,999
1552	MFD	MONEY & SECURITIES INSUR
2256	GS	MOTOR VEHIC EQUIP <\$1,999
2258	GS	MOTOR VEHIC EQUIP >\$5,000
2258	GS	MOTORIZED EQ IMP <\$1,999
1281	OS	MOVING & RELOCATION
2274	OS	NON POWER REP/MAINT <\$1,999
2261	GS	OFFICE APPURTENACES \$2,000-\$4,999
2261	GS	OFFICE APPURTENACES <\$1,999

**OLD DOMINION ACCOUNT CODES (Continued)**

ACCT CODE	Work Type	Description
2262	GS	OFFICE APPURTENACES >\$5,000
2263	GS	OFFICE APPURTENACES ETF <\$2,000
2268	GS	OFFICE EQUIP IMPROV <\$1,999
2262	GS	OFFICE FURNITURE \$2,000-\$4,999
2264	GS	OFFICE FURNITURE <\$1,999
2268	GS	OFFICE FURNITURE >\$5,000
2262	GS	OFFICE FURNITURE ETF <\$2,000
2264	GS	OFFICE MACHINES \$2,000-\$4,999
2264	GS	OFFICE MACHINES <\$1,999
1312	GS	OFFICE SUPPLIES
1324	GS	OIL
1221	MFD	ORGANIZATION MEMBERSHIPS
2217	GS	OTHER COMPUTER EQUIP <\$1,999
1245	PS	PERSONNEL MANAGEMENT SVCS
1371	OS	PESTICIDES
1313	GS	PHOTOCOPYING COSTS
2233	GS	PHOTOGRAPHIC EQUIP \$2,000-\$4,999
2233	GS	PHOTOGRAPHIC EQUIP <\$1,999
2238	GS	PHOTOGRAPHIC EQUIP >\$5,000
2232	GS	PHOTOGRAPHIC EQUIP ETF <\$2,000
1377	GS	PHOTOGRAPHIC SUPPLIES
1335	GS	PKG & SHPG SUPPLIES
1257	OS	PLANT REPAIR & MAINT SERV
1214	OS	POSTAL SERVICES & COST
2255	OS	POWER REP/MAINT EQ \$2,000-\$4,999
2255	OS	POWER REP/MAINT EQ <\$1,999
2255	OS	POWER REP/MAINT EQ >\$5,000
2255	OS	POWER REP/MAINT EQ ETF <\$2,000
1413	MFD	PREMIUMS/HONORARIUMS
1215	OS	PRINTING SERVICES
1267	OS	PRODUCTION SERVICES
1516	MFD	PROPERTY INSUR-OTHER
1246	PS	PUBLIC INFO/RELATION SERV
1222	GS	PUBLICATION SUBSCRIPTIONS
1209	MFD	PURCH CHG CRD-CONTR SERV
1309	MFD	PURCH CHG CRD-SUPP & MAT
1378	GS	RECREATIONAL SUPPLIES
2224	GS	REFERENCE EQUIP-NON LIB <\$1,999
1543	MFD	REFUSE SERVICES CHARGES
2328	C	RENOVATION EXISTING BUILD
1125	MFD	SALARIES - OVERTIME
2131	AE	SITE IMPROVEMENTS
2132	AE	SITE PREPARATIONS
1268	OS	SKILLED SERVICES

**OLD DOMINION ACCOUNT CODES (Continued)**

ACCT CODE	Work Type	Description
1139	OS	SPEC PAY FOR ACAD SVCS
2278	GS	SPECIFIC USE EQ IMP <\$1,999
1313	GS	STATIONERY & FORMS
1554	MFD	SURETY BONDS
1216	OS	TELECOM OTHR-CHGS/CREDITS
1217	OS	TELECOMM SVCS(NON-STATE)
1216	MFD	TELEPHONE SERV-DATA LINES
1216	MFD	TELEPHONE SERV-LONG DIST.
1216	GS	TELEPHONE SERVICE-EQUIP
1282	MFD	TRAVEL-PERSONAL VEHIC
1283	OS	TRAVEL-PUBLIC CARRIERS
1284	MFD	TRAVEL-STATE VEHICLE
1285	MFD	TRAVEL-SUBSIS & LODGING
1424	MFD	TUITION WAIVER-UNDERGRAD
1425	MFD	UNDERGRAD SCHOLARSHIPS
1415	MFD	UNEMPLOYMENT COMP REIMB
2133	MFD	UTILITY TRANSMISSIONS FAC
1355	OS	VEHIC REPAIR & MAINT MTRL
1259	OS	VEHIC REPAIR & MAINT SERV
2233	OS	VOICE & DATA TRANS EQ <\$1,999
2233	OS	VOICE & DATA TRANS EQ >\$5,000
2233	OS	VOICE & DATA TRANS EQ ETF <\$2,000
1145	MFD	WAGES - TEACH & RES P/T
1544	MFD	WATER & SEWER SERV CHGS
1555	MFD	WORKMENS COMPENSATION

**RADFORD ACCOUNT CODES**

ObjCode	Work Type	Description
1205	PS	Seat Management Services
1209	OS	Charge Card Purchase of Contractual Services
1211	OS	Express Services
1212	OS	Outbound Freight Services
1213	OS	Messenger Services
1215	OS	Printing Services
1217	OS	Telecommunications Services (Non-State)
1219	OS	Inbound Freight Services
1231	PS	Clinic Services
1232	PS	Dental Services
1233	PS	Hospital Services
1234	PS	Medical Services
1235	PS	Nursing Home Services
1236	PS	XRAY and Lab Services
1241	PS	Auditing Services
1242	PS	Fiscal Services
1243	PS	Attorney Services
1244	PS	Management Services
1245	PS	Personnel Development Services
1246	PS	Public Information and Public Relations Services
1247	PS	Legal Services
1248	OS	Media Services
1251	OS	Custodial Services
1252	C	Electrical Repair and Maintenance Services
1253	OS	Equipment Repair and Maintenance Services
1254	OS	Extermination/Vector Control Services
1255	C	Highway Repair and Maintenance Services
1256	C	Mechanical Repair and Maintenance Services
1257	C	Plant Repair and Maintenance Services
1258	OS	Reclamation Services
1259	OS	Vehicle Repair and Maintenance Services
1261	A & E	Architectural and Engineering Services
1262	OS	Aviation Services
1263	OS	Clerical Services
1264	OS	Food and Dietary Services
1265	OS	Laundry and Linen Services
1266	OS	Manual Labor Services
1267	OS	Production Services
1268	OS	Skilled Services
1272	PS	Information Mgmt. Program Design & Development
1274	PS	Computer Hardware Maintenance Services
1275	PS	Computer Software Maintenance Services
1277	PS	Computer Operating Services (Non-State)

**RADFORD ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
1279	GS	Computer Software Costs
1309	GS	Charge Card Purchase of Supplies and Materials
1311	GS	Apparel Supplies
1312	GS	Office Supplies
1313	GS	Stationery and Forms
1321	GS	Coal
1322	GS	Gas
1323	GS	Gasoline
1324	GS	Oil
1325	GS	Steam
1326	GS	Wood Fuels
1333	GS	Manufacturing Supplies
1334	GS	Merchandise
1335	GS	Packaging and Shipping Supplies
1341	GS	Laboratory
1342	GS	Medical and Dental Supplies
1343	GS	Field Supplies
1344	GS	Pharmaceutical
1351	C	Building Repair and Maintenance Materials
1352	GS	Custodial Repair and Maintenance Materials
1353	C	Electrical Repair and Maintenance Materials
1354	C	Mechanical Repair and Maintenance Materials
1355	GS	Vehicle Repair and Maintenance Materials
1361	GS	Clothing Supplies
1362	GS	Food and Dietary Supplies
1363	GS	Food Service Supplies
1364	GS	Laundry and Linen Supplies
1365	GS	Personal Care Supplies
1371	GS	Agricultural Supplies
1372	GS	Architectural and Engineering Supplies
1373	GS	Computer Operating Supplies
1374	GS	Educational Supplies
1375	GS	Fish and Wildlife Supplies
1376	GS	Law Enforcement Supplies
1377	GS	Photographic Supplies
1378	GS	Recreational Supplies
1561	GS	Computer Purchases Peripheral Installment Purchases
1562	PS	Computer Processor Installment Purchases
1563	PS	Computer Software Installment Purchases
1564	GS	Equipment Installment Purchases
1565	MFD	Building Installment Purchases
1566	MFD	Land Installment Purchases
2111	MFD	Acquisition
2112	MFD	Acquisition
2113	MFD	Acquisition

**RADFORD ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2121	GS	Animals
2122	GS	Minerals
2123	GS	Plants
2131	C	Site Improvements
2132	C	Site Preparation
2133	MFD	Utilities
2209	GS	Charge Card Purchase of Equipment
2211	GS	Computer Peripheral Equipment
2212	GS	Computer Processor Equipment
2213	GS	Personal Computing Systems and Components
2214	GS	Mainframe Comouters and Components
2215	GS	Network Servers
2216	GS	Network Components
2217	GS	Other Computer Equipment
2218	GS	Computer Equipment Improvements
2221	GS	College Library Books
2222	GS	Educational Equipment
2223	GS	Exhibit Equipment
2224	GS	Reference Equipment
2228	GS	Educational and Cultural Equipment Improvements
2231	GS	Electronic Equipment
2232	GS	Photographic Equipment
2233	GS	Voice and Data Transmission Equipment
2238	GS	Electronic and Photographic Equipment Improvements
2241	GS	Laboratory Equipment
2242	GS	Medical and Dental Equipment
2243	GS	Field Equipment
2248	GS	Medical and Laboratory Equipment Improvements
2251	GS	Agricultural Vehicular Equipment
2252	GS	Aircraft Equipment
2253	GS	Construction Equipment
2254	GS	Motor Vehicle Equipment
2255	GS	Power Repair and Maintenance Equipment
2256	GS	Watercraft Equipment
2258	GS	Motorized Equipment Improvements
2261	GS	Office Appurtenances
2262	GS	Office Furniture
2263	GS	Office Incidentals
2264	GS	Office Machines
2268	GS	Office Equipment Improvements
2271	GS	Household Equipment
2272	GS	Law Enforcement Equipment
2273	GS	Manufacturing Equipment
2274	GS	Non-Power Repair and Maintenance Equipment
2275	GS	Recreational Equipment

**RADFORD ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2278	GS	Specific Use Equipment Improvements
2281	GS	Built-in Equipment
2282	GS	Fixtures
2283	GS	Mechanical Equipment
2288	GS	Stationary Equipment Improvements
2311	C	Acquisition
2312	C	Acquisition
2313	C	Acquisition
2314	C	Acquisition
2321	C	Construction - Bridges
2322	C	Construction - Buildings
2323	C	Construction - Highways
2324	C	Construction - Water Ports
2327	C	Construction - Bridges and Highways Improvements
2328	C	Construction - Building Improvements

**UNIVERSITY OF VIRGINIA ACCOUNT CODES**

ObjCode	Work Type	Description
1205	PS	Seat Management Services
1209	OS	Charge Card Purchase of Contractual Services
1211	OS	Express Services
1212	OS	Outbound Freight Services
1213	OS	Messenger Services
1215	OS	Printing Services
1217	OS	Telecommunications Services (Non-State)
1219	OS	Inbound Freight Services
1231	PS	Clinic Services
1232	PS	Dental Services
1233	PS	Hospital Services
1234	PS	Medical Services
1235	PS	Nursing Home Services
1236	PS	XRAY and Lab Services
1241	PS	Auditing Services
1242	PS	Fiscal Services
1243	PS	Attorney Services
1244	PS	Management Services
1245	PS	Personnel Development Services
1246	PS	Public Information and Public Relations Services
1247	PS	Legal Services
1248	OS	Media Services
1251	OS	Custodial Services
1252	C	Electrical Repair and Maintenance Services
1253	OS	Equipment Repair and Maintenance Services
1254	OS	Extermination/Vector Control Services
1255	C	Highway Repair and Maintenance Services
1256	C	Mechanical Repair and Maintenance Services
1257	C	Plant Repair and Maintenance Services
1258	OS	Reclamation Services
1259	OS	Vehicle Repair and Maintenance Services
1261	A & E	Architectural and Engineering Services
1262	OS	Aviation Services
1263	OS	Clerical Services
1264	OS	Food and Dietary Services
1265	OS	Laundry and Linen Services
1266	OS	Manual Labor Services
1267	OS	Production Services
1268	OS	Skilled Services
1272	PS	Information Mgmt. Program Design & Development
1274	PS	Computer Hardware Maintenance Services
1275	PS	Computer Software Maintenance Services
1277	PS	Computer Operating Services (Non-State)

**UNIVERSITY OF VIRGINIA ACCOUNT CODES(Continued)**

ObjCode	Work Type	Description
1279	GS	Computer Software Costs
1309	GS	Charge Card Purchase of Supplies and Materials
1311	GS	Apparel Supplies
1312	GS	Office Supplies
1313	GS	Stationery and Forms
1321	GS	Coal
1322	GS	Gas
1323	GS	Gasoline
1324	GS	Oil
1325	GS	Steam
1326	GS	Wood Fuels
1333	GS	Manufacturing Supplies
1334	GS	Merchandise
1335	GS	Packaging and Shipping Supplies
1341	GS	Laboratory
1342	GS	Medical and Dental Supplies
1343	GS	Field Supplies
1344	GS	Pharmaceutical
1351	C	Building Repair and Maintenance Materials
1352	GS	Custodial Repair and Maintenance Materials
1353	C	Electrical Repair and Maintenance Materials
1354	C	Mechanical Repair and Maintenance Materials
1355	GS	Vehicle Repair and Maintenance Materials
1361	GS	Clothing Supplies
1362	GS	Food and Dietary Supplies
1363	GS	Food Service Supplies
1364	GS	Laundry and Linen Supplies
1365	GS	Personal Care Supplies
1371	GS	Agricultural Supplies
1372	GS	Architectural and Engineering Supplies
1373	GS	Computer Operating Supplies
1374	GS	Educational Supplies
1375	GS	Fish and Wildlife Supplies
1376	GS	Law Enforcement Supplies
1377	GS	Photographic Supplies
1378	GS	Recreational Supplies
1561	GS	Computer Purchases Peripheral Installment Purchases
1562	PS	Computer Processor Installment Purchases
1563	PS	Computer Software Installment Purchases
1564	GS	Equipment Installment Purchases
1565	MFD	Building Installment Purchases
1566	MFD	Land Installment Purchases
2111	MFD	Acquistion
2112	MFD	Acquistion
2113	MFD	Acquistion

**UNIVERSITY OF VIRGINIA ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2121	GS	Animals
2122	GS	Minerals
2123	GS	Plants
2131	C	Site Improvements
2132	C	Site Preparation
2133	MFD	Utilities
2209	GS	Charge Card Purchase of Equipment
2211	GS	Computer Peripheral Equipment
2212	GS	Computer Processor Equipment
2213	GS	Personal Computing Systems and Components
2214	GS	Mainframe Comouters and Components
2215	GS	Network Servers
2216	GS	Network Components
2217	GS	Other Computer Equipment
2218	GS	Computer Equipment Improvements
2221	GS	College Library Books
2222	GS	Educational Equipment
2223	GS	Exhibit Equipment
2224	GS	Reference Equipment
2228	GS	Educational and Cultural Equipment Improvements
2231	GS	Electronic Equipment
2232	GS	Photographic Equipment
2233	GS	Voice and Data Transmission Equipment
2238	GS	Electronic and Photographic Equipment Improvements
2241	GS	Laboratory Equipment
2242	GS	Medical and Dental Equipment
2243	GS	Field Equipment
2248	GS	Medical and Laboratory Equipment Improvements
2251	GS	Agricultural Vehicular Equipment
2252	GS	Aircraft Equipment
2253	GS	Construction Equipment
2254	GS	Motor Vehicle Equipment
2255	GS	Power Repair and Maintenance Equipment
2256	GS	Watercraft Equipment
2258	GS	Motorized Equipment Improvements
2261	GS	Office Appurtenances
2262	GS	Office Furniture
2263	GS	Office Incidentals
2264	GS	Office Machines
2268	GS	Office Equipment Improvements
2271	GS	Household Equipment
2272	GS	Law Enforcement Equipment
2273	GS	Manufacturing Equipment
2274	GS	Non-Power Repair and Maintenance Equipment
2275	GS	Recreational Equipment

**UNIVERSITY OF VIRGINIA ACCOUNT CODES (Continued)**

ObjCode	Work Type	Description
2278	GS	Specific Use Equipment Improvements
2281	GS	Built-in Equipment
2282	GS	Fixtures
2283	GS	Mechanical Equipment
2288	GS	Stationary Equipment Improvements
2311	C	Acquisition
2312	C	Acquisition
2313	C	Acquisition
2314	C	Acquisition
2321	C	Construction - Bridges
2322	C	Construction - Buildings
2323	C	Construction - Highways
2324	C	Construction - Water Ports
2327	C	Construction - Bridges and Highways Improvements
2328	C	Construction - Building Improvements

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES**

CODE	MGT Work Type	DESCRIPTION
1100	OS	PERSONAL SERVICE EXPENSE
1120	MFD	SALARIES-FACULTY EMPLOYEE
1121	MFD	SALARIES-ADMIN FACULTY
1122	MFD	TERM ANNUAL LEAVE-ADMIN FACULTY
1123	MFD	TERM HOLIDAY LEAVE-ADMIN FACULTY
1125	MFD	P/T INSTRUCTIONAL FACULTY
1126	PS	FACULTY SALARY-TEACH & RESEARCH
1127	MFD	TERM ANNUAL LEAVE INSTRUCT FACULTY
1129	MFD	TERM HOLIDAY LEAVE INSTRUCT FACULTY
1130	MFD	SALARIES-CLASSIFIED
1131	MFD	CLASSIFIED SALARIES
1132	MFD	TERM ANNUAL LEAVE-CLASSIFIED
1133	MFD	TERM RETIREMENT SICK
1134	MFD	TERM SICK PAY
1135	MFD	TERM HOLIDAY & COMP LEAVE CLASS
1137	MFD	EMPLOYEE SUGGESTION
1138	MFD	SALARIED EMPLOYEE-OVERTIME
1139	MFD	WAGES, HOURLY & HOURLY OT
1141	MFD	WAGES HOURLY
1142	MFD	WAGES-GRAD ASSISTANT
1143	MFD	HOURLY WAGES OVERTIME
1144	MFD	WAGE&TAX FELLOWSHIP-STUDENT
1145	MFD	WAGES-TEACH & RESEARCH-PT
1146	MFD	WAGES WORK STUDY STUDENT
1147	MFD	VIRGINIA WORK-STUDY PROGRAM
1148	MFD	HOUSESTAFF-TAXABLE
1149	MFD	HOUSESTAFF-NONTAXABLE
1153	MFD	VSDP BENEFIT PAYMENT
1154	MFD	SPECIAL PER DIEM PAYMENTS
1156	MFD	WTA-Federal Old-Age Insurance for Salaried State Employees
1157	MFD	WTA-Medical/Hospitalization Insurance
1158	MFD	WTA-Group Life Insurance
1159	MFD	WTA-Early Retirement Payments
1160	MFD	WTA-Payments for Transitional Severance Benefits
1161	MFD	WTA-Salaries, Annual Leave Balances
1162	MFD	WTA-Salaries, Sick Leave Balances
1163	MFD	WTA-Salaries, Compensatory Leave Balances
1164	MFD	WTA-Unemployment Compensation Awards
1168	MFD	SALARY ALLOCATION
1170	MFD	SALARY SAVINGS
1171	MFD	SALARY SAVINGS FACULTY
1172	MFD	SALARY SAVINGS CLASS
1180	MFD	EMPLOYEE BENEFITS

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1181	MFD	RETIREMENT CONTRIBUTION
1182	MFD	OASDI TAX
1183	MFD	FED OA INSURANCE HOURLY
1184	MFD	GROUP INSURANCE
1185	MFD	MED & HOSPITAL INSURANCE
1186	MFD	FRINGE BENEFIT PERM EMPLOYEE-FACULTY
1187	MFD	FRINGE BENEFIT PERM EMPLOYEE-CLASS
1188	MFD	FRINGE BENEFITS-HOURLY
1189	MFD	FRINGE BENEFITS-HOUSE STAFF
1190	MFD	FACULTY EARLY RETIREMENT
1191	MFD	FRINGE SAVINGS
1192	MFD	RETIRE HEALTH CARE CREDIT
1193	MFD	TIAA-CREF CONTRIBUTION
1194	MFD	OTHER FRINGE BENEFIT
1195	MFD	VSDP CONTRIBUTION
1196	MFD	RET DEF CONTRIBUTION
1197	MFD	DEF COMPENSATION MATCH
1209	MFD	CHARGE CARD CONTRACT
1210	OS	COMMUNICATION SERVICE
1211	OS	EXPRESS SERVICES
1212	MFD	MEDIA SERVICES
1213	OS	MESSENGER SERVICES
1215	OS	PRINTING SERVICES
1217	OS	PRINT SHOP CHARGES
1218	OS	OUTBOUND FREIGHT SERVICES
1219	OS	INBOUND FREIGHT SERVICES
1220	OS	EMPLOYEE DEVELOPMENT SERVICES
1221	MFD	ORGANIZATIONAL MEMBERSHIP
1222	GS	BOOKS/SUBSCRIPTIONS-NON LIBRARY
1224	MFD	EMPLOYEE TRAINING COURSE/CONF
1225	MFD	EMPLOYEE TUITION REIMBURSEMENT
1226	MFD	EMPLOYEE TRAINING COUNSEL SERVICES
1227	MFD	EMPLOYEE TRAINING-TRANS, LMI
1228	MFD	EMPLOYEE TRAINING COURSE/CONF-IT
1230	PS	HEALTH CARE SERVICES
1231	OS	CLINIC SERVICES
1232	OS	DENTAL SERVICES
1233	PS	HOSPITAL SERVICES
1234	PS	HEALTH PROFESSIONAL SERVICES
1236	OS	LAB & X-RAY SERVICES
1237	MFD	FAMILY PRACTICE SPECIAL PAY
1238	MFD	PAYMENT TO TEST INDIVIDUALS
1240	PS	MANAGEMENT & INFORMATION SERVICES
1241	PS	AUDITING SERVICES
1243	PS	ATTORNEY SERVICES

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1244	PS	MANAGEMENT & CONSULTING SERVICES
1245	OS	PERSONNEL MANAGEMENT SERVICES
1246	PS	PUBLIC INFO-RELATIONS SERVICES
1247	MFD	INVESTMENT COUNSEL
1248	PS	LEGAL SERVICES
1250	OS	REPAIR & MAINTENANCE SERVICE
1251	OS	CUSTODIAL SERVICES
1252	OS	ELECTRICAL REPAIR & MAINTENANCE
1253	OS	EQUIPMENT REPAIR & MAINTENANCE
1254	OS	EXTERMINATION/CONTROL
1256	OS	MECHANICAL REPAIR & MAINTENANCE
1257	C	PLANT REPAIR & MAINTENANCE
1258	AE	BIOMED ENGINEER SHOP
1259	OS	MOTOR VEHICLE REPAIR/MAINTENANCE
1260	OS	SUPPORT SERVICES
1261	AE	ARCHITECTURAL & ENGINEERING SERVICES
1263	OS	CLERICAL CONTRACTUAL
1264	MFD	FOOD SERVICES CONTRACTUAL
1265	OS	LAUNDRY & LINEN SERVICES
1268	OS	SKILLED SERVICES
1269	MFD	MEDIA PRODUCTION CHARGE
1270	OS	TECHNICAL SERVICES
1271	PS	INFO MANAGEMENT PROGRAM DEVELOPMENT (DIT)
1272	PS	INFO MANAGEMENT PROGRAM DEVELOPMENT (NO STATE)
1273	PS	INFO MANAGEMENT PROGRAM DEVELOPMENT (STATE)
1274	GS	COMPUTER HARDWARE MAINTENANCE
1275	PS	COMPUTER SOFTWARE MAINTENANCE
1276	PS	COMPUTER OPERATIONS SERVICES (DIT)
1277	PS	COMPUTER OPERATIONS SERVICES (NONSTATE)
1278	PS	COMPUTER OPERATIONS SERVICES (STATE)
1280	MFD	TRAVEL
1281	MFD	FACULTY/STAFF MOVING/RELOCATION
1282	MFD	MILEAGE-PERSONAL VEHICLE
1283	MFD	TRAVEL-PUBLIC CARRIER
1284	MFD	MILEAGE-STATE VEHICLE
1285	MFD	SUBSISTENCE & LODGING
1286	MFD	TRAVEL-SUPPLEMENT & AID
1287	MFD	SUBSISTENCE-IRS REPORTABLE
1288	MFD	SUBSISTENCE-BUS-NOT REPORTABLE
1289	MFD	FARES-TRAVEL AGENCIES
1293	MFD	TRAINEE TRAVEL SPONSORED PROGRAM
1294	MFD	ALCOHOL BEVERAGE-REPORTABLE
1295	MFD	ALCOHOL BEVERAGE-NOT REPORTABLE
1296	MFD	ENTERTAINMENT
1297	MFD	CIVIC/SOCIAL CLUBS

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1300	GS	SUPPLIES & MATERIALS
1309	GS	CHARGE CARD SUPPLIES
1310	GS	ADMINISTRATIVE SUPPLIES
1311	GS	EMPLOYEE CLOTHING
1312	GS	OFFICE SUPPLIES
1313	GS	STATIONERY & FORMS
1320	GS	ENERGY SUPPLIES
1323	GS	GAS-VEHICLES & EQUIPMENT
1330	GS	MANUFACTURING & MERCHANDISE SUPPLIES
1333	GS	MANUFACTURING SUPPLIES
1335	OS	PACKAGING & SHIPPING
1340	GS	MEDICAL & LAB SUPPLIES
1341	GS	LABORATORY SUPPLIES
1342	GS	MEDICAL & DENTAL SUPPLIES
1343	GS	RADIOACTIVE MATERIAL
1350	GS	REPAIR & MAINTENANCE SUPPLIES
1351	C	BUILDING REPAIR & MAINTENANCE
1352	OS	CUSTODIAL REPAIR & MAINTENANCE
1353	GS	ELEC REPAIR & MAINTENANCE MATERIALS
1354	OS	MECHANICAL REPAIR & MAINTENANCE
1355	OS	VEHICLE REPAIR/MAINTENANCE MATERIALS
1360	GS	RESIDENTIAL SUPPLIES
1361	GS	PATIENT CLOTHING
1362	GS	FOOD & DIETARY SUPPLIES
1363	GS	FOOD SERVICE SUPPLIES
1364	GS	LAUNDRY & LINEN SUPPLIES
1370	GS	SPECIFIC USE SUPPLIES
1371	GS	AGRICULTURAL SUPPLIES
1373	GS	COMPUTER OPERATIONS SUPPLIES
1374	GS	EDUCATIONAL SUPPLIES
1376	GS	LAW ENFORCEMENT SUPPLIES
1377	GS	PHOTOGRAPHY SUPPLIES
1378	GS	RECREATIONAL SUPPLIES
1379	MFD	XMAS EXPENDITURES
1380	MFD	MERCHANDISE FOR RESALE
1381	MFD	MERCHANDISE FOR RESALE
1382	GS	PURCHASES-MEDICAL SUPPLIES
1383	GS	PURCHASES-TEXT NEW
1384	GS	PURCHASES-GENERAL 20
1385	GS	PURCHASES-GENERAL 40
1386	GS	PURCHASES-SPECIAL ORDER
1387	GS	PURCHASES-TEXT USED
1388	GS	PURCHASES-TEXT TRADE
1389	GS	PURCHASES-CONSIGNMENT
1391	GS	PURCHASES-GIFT ITEM

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1392	GS	PURCHASES-ART SUPPLIES
1393	GS	PURCHASES-SCHOOL SUPPLIES
1394	GS	PURCHASES-SUNDRY
1395	GS	PURCHASES-CANDY
1396	MFD	BANK CHARGES
1400	MFD	TRANSFER PAYMENTS
1410	MFD	CONTRIBUTIONS AND AWARDS
1412	MFD	CONTRIBUTIONS
1413	MFD	HONORARIA/AWARDS-SVC
1414	MFD	SSL EFT AWARDS
1415	MFD	AWARD/PRIZES NO SERVICES
1416	MFD	TEST INDIVIDUAL PAYMENTS
1421	MFD	GRADUATE STIPEND
1422	MFD	STUDENT LOANS
1423	MFD	TUITION & TRAIN AIDS
1424	MFD	TUITION WAIVER-EMPLOYEE UNDERGRADUATE
1425	MFD	UNDERGRADUATE STIPEND
1426	MFD	GRAD TUITION & FEE AWARD
1427	MFD	UNDERGRAD TUITION & FEE AWARD
1428	MFD	WAIVER OF FEES
1429	MFD	TUITION WAIVER-EMPLOYEE GRAD
1450	MFD	GRANTS TO OTHER ORGANIZATIONS
1451	MFD	SUBGRANT TO OTHER STATE
1452	MFD	SUBGRANTS TO NONSTATE
1470	MFD	OTHER TRANSFER PAYMENTS
1471	MFD	INSURANCE CLAIM-UNIVERSITY
1472	MFD	ROYALTY PAY EXTERNAL
1475	MFD	UNEMPLOYMENT COMP REIMBURSEMENT
1476	MFD	WORKER'S COMP AWARDS
1500	MFD	CONTINUOUS CHARGES
1510	MFD	INSURANCE-FIXED ASSET
1512	MFD	INSURANCE-MOTOR VEHICLE
1514	MFD	INSURANCE-INLAND MARINE
1515	MFD	INSURANCE-MARINE
1516	MFD	INSURANCE-PROPERTY
1517	MFD	INSURANCE-BOILER
1520	MFD	LEASE-PURCHASE AGREEMENT
1521	MFD	LEASE/PURCHASE COMPUTER PERIPHERALS
1522	MFD	LEASE/PURCHASE COMPUTER CENTER
1523	MFD	LEASE/PURCHASE COMPUTER SOFTWARE
1524	MFD	LEASE/PURCHASE OTHER EQUIPMENT
1525	MFD	LEASE/PURCHASE PLANT USE
1526	MFD	LEASE/PURCHASE PROPERTY USE
1527	MFD	LEASE/PURCHASE LAND & BUILDING
1530	MFD	RENT

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1531	GS	RENT COMPUTER PERIPHERALS
1532	GS	RENT COMPUTER PROCESSOR
1533	GS	RENT COMPUTER SOFTWARE
1534	GS	RENT EQUIPMENT
1535	MFD	RENT-STRUCTURES
1536	MFD	RENT-LAND
1537	MFD	RENT-OTHER COSTS
1538	MFD	RENT LAND & BLDG COM
1550	MFD	INSURANCE-OPERATIONS
1551	MFD	INS-GENERAL LIABILITY
1552	MFD	INS-MONEY & SECURITIES
1553	MFD	INS-MED MALPRACTICE
1554	MFD	INS-SURETY BONDS
1555	MFD	INS-WORKERS COMPENSATION
1556	MFD	INSURANCE-GROUP LIFE
1558	MFD	INS-PROF LIABILITY
1563	PS	ATHLETIC PROMOTION
1564	PS	ATHLETIC RECRUITING
1566	GS	ATHLETIC CLOTHING
1567	PS	ATHLETIC SCOUTING
1571	GS	INSTALLMENT PURCHASE COMPUTER PERIPHERALS
1572	GS	INSTALLMENT PURCHASE COMPUTER PROCESSOR
1573	GS	INSTALLMENT PURCHASE COMPUTER SOFTWARE
1574	GS	INSTALLMENT PURCHASE EQUIPMENT
1575	GS	INSTALLMENT PURCHASE STRUCTURE
1576	MFD	INSTALLMENT PURCHASE LAND
1600	PS	AGENCY SERVICES
1620	MFD	ENERGY
1622	GS	NATURAL GAS
1624	GS	FUEL OIL
1641	MFD	AGENCY SERVICE CHARGE
1642	OS	ELECTRICAL SERVICE
1643	OS	REFUSE SERVICE CHARGE
1644	OS	WATER & SEWAGE SVC C
1705	MFD	SECURITY SERVICES
1710	MFD	POSTAL SERVICES
1711	MFD	POSTAGE-FIRST CLASS
1712	MFD	POSTAGE-FLATS
1713	MFD	POSTAGE-PARCEL/BOOK
1714	MFD	POSTAGE-ACCOUNTABLE
1715	MFD	POSTAGE
1716	MFD	POSTAGE
1717	MFD	POSTAGE-OTHER
1718	MFD	POSTAGE-BUS REPLY
1719	MFD	POSTAGE-BULK MAIL

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
1731	MFD	TELE CENTREX EXPENSE
1733	MFD	TELE CIRCUITS EXPENSE
1734	MFD	TELE LONG DISTANCE
1735	GS	TELE EQUIPMENT EXPENSE
1736	OS	TELE EQUIPMENT MAINTENANCE
1737	MFD	TELE OTHER EXPENSE
1738	MFD	TELE-PAYMENT TO DIT
1739	MFD	TELE-PAYMENT 3RD PARTY
1742	MFD	NON EAGLE TELE HOSPITAL
1743	OS	TELE INSTALLATION
1746	PS	DATA INSTALLATION
1751	MFD	ALLOCATE COMPUTER CHARGES
1752	MFD	ALLOCATE INTERNAL PARKING
1765	MFD	INTERNAL SERVICE CHARGE
1771	MFD	LIBRARY CHARGES
1781	MFD	GRANT ADMIN ALLOWANCE
1900	MFD	OTHER OPERATING EXPENSE
1910	MFD	LATE PAY-OTHER CHARGES
1911	MFD	LATE PAY-CONTRACTUAL
1912	MFD	LATE PAY-SUPPLIES & MATERIALS
1913	MFD	LATE PAY-CONTINGENCY CHARGES
1914	MFD	LATE PAY-PROPERTY & IMPROVEMENTS
1915	MFD	LATE PAY-EQUIPMENT
1916	MFD	LATE PAY-PLANT & IMPROVEMENTS
1919	MFD	BAD DEBT EXPENSE
1921	MFD	BAD DEBT - TRAVEL
1925	MFD	FINES & PENALTIES
1991	MFD	CONTINGENCIES-UNIVERSITY
1992	MFD	CONTINGENCIES-EXEC
1993	MFD	BUDGET SAVINGS
1995	MFD	BUDGET REALLOCATION
1999	MFD	EXT AGENCY PURCHASES
2000	MFD	CAPITAL OUTLAY EXPENSES
2100	MFD	PROPERTY & IMPROVEMENTS
2110	MFD	ACQUISITION-PROPERTY
2111	MFD	LAND ACQUISITION
2120	GS	NATURAL RESOURCES
2130	C	SITE DEVELOPMENT
2131	C	SITE IMPROVEMENTS
2133	MFD	UTILITIES
2200	GS	EQUIPMENT
2205	GS	HEETF EQUIPMENT
2209	GS	CHARGE CARD EQUIPMENT
2210	GS	COMPUTER EQUIPMENT
2211	GS	PERSONAL COMPUTING SYSTEMS & COMPONENTS

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
2212	GS	MAINFRAME COMPUTERS AND COMPONENTS
2215	GS	NETWORK SERVERS
2216	GS	NETWORK COMPONENTS
2217	GS	COMPUTER SOFTWARE
2218	GS	OTHER COMPUTER EQUIPMENT
2220	GS	EDUCATION & CULTURAL EQUIPMENT
2222	GS	EDUCATION & TEACH EQUIPMENT
2223	GS	EXHIBIT EQUIPMENT
2224	GS	OTHER REFERENCE EQUIPMENT
2225	GS	MUSICAL INSTRUMENTS
2226	GS	EDUC EQUIPMENT-ARTS
2230	GS	ELECTRONIC/PHOTO EQUIPMENT
2231	GS	ELECTRONIC EQUIPMENT
2232	GS	PHOTOGRAPHIC EQUIPMENT
2233	GS	VOICE/DATA TRANS EQUIPMENT
2238	GS	ELEC/PHOTO EQUIPMENT IMPROVEMENTS
2240	GS	MEDICAL & LAB EQUIPMENT
2241	GS	LABORATORY EQUIPMENT
2242	GS	MEDICAL & DENTAL EQUIPMENT
2250	GS	MOTORIZED EQUIPMENT
2251	GS	AGRICULTURAL EQUIPMENT
2254	OS	MOTOR VEHICLES
2256	GS	WATERCRAFT EQUIPMENT
2260	GS	OFFICE EQUIPMENT
2261	GS	OFFICE APPURTENANCES
2262	GS	OFFICE FURNITURE
2263	GS	OFFICE INCIDENTALS
2264	GS	OFFICE MACHINES
2268	GS	OFFICE EQUIP-IMPROVEMENTS
2270	GS	SPECIFIC USE EQUIPMENT
2271	GS	HOUSEHOLD EQUIPMENT
2272	GS	LAW ENFORCEMENT EQUIPMENT
2274	OS	NON POWER REPAIR & MAINTENANCE
2275	GS	RECREATION EQUIPMENT
2278	GS	SPEC USE EQUIPMENT IMPROVEMENTS
2280	GS	STATIONARY EQUIPMENT
2281	GS	FIXED EQUIPMENT
2282	GS	FIXTURES
2283	GS	MECHANICAL EQUIPMENT
2288	GS	STATIONARY EQUIPMENT-IMPROVEMENTS
2291	GS	LIBRARY-BOOKS, SUBSCRIPTIONS
2300	C	PLANT & IMPROVEMENTS
2320	C	CONST PLANT & IMPROVEMENTS
2321	C	CONT AMEND-CONST BUILDING
2322	C	CONSTRUCTION-BUILDING

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
2324	C	CONTINGENCY-BLDG CONSTRUCTION
2327	C	CONT AMENT-CONSTRUCTION RENOVATION
2328	C	CONST-BLDG IMPROVEMENTS
2329	MFD	OTHER PROJECT EXPENSES
2330	AE	ARCHITECTURAL & ENGINEERING
2331	MFD	BASIC CONTRACT FEE
2332	AE	CONTRACT AMENDMENTS (A/E)
2333	AE	SEPARATE CONT (A/E)
2334	AE	A & E REIMBURSABLE
2335	AE	EXTRA SERVICES (A/E)
2400	GS	EXPENDABLE-EQUIPMENT
2409	GS	CHARGE CARD EXP EQUIPMENT
2410	GS	EXPENDABLE-COMPUTER EQUIPMENT
2411	GS	COMP-COMP PERIPHERAL
2412	GS	COMP-COMP PROCESSOR
2417	GS	COMP-COMP SOFTWARE
2418	GS	EXPENDABLE-COMPUTER EQUIPMENT IMPROVEMENTS
2420	GS	ED-ED&CULT EQUIPMENT
2422	GS	ED-ED&TEACH EQUIPMENT
2423	GS	EXHIBIT-EXHIBIT EQUIPMENT
2424	GS	OTHER-OTHER REF EQUIPMENT
2425	GS	MUSIC-MUSIC INSTRUMENT
2426	GS	ED-ED EQUIPMENT-ARTS
2430	GS	EXPENDABLE - ELECTRIC&PHOTO EQUIPMENT
2431	GS	ELECTRONIC-ELECTRONIC EQUIPMENT
2432	GS	PHOTO-PHOTO EQUIPMENT
2433	GS	VOICE-VOICE&DATA EQUIPMENT
2438	OS	EXPENDABLE - ELECTRIC &PHOTO IMPROVEMENTS
2440	GS	MED-MED&LAB EQUIPMENT
2441	GS	LAB-LAB EQUIPMENT
2442	GS	MED-MED&DENTAL EQUIPMENT
2450	GS	MOTORIZED-MOTORIZED EQUIPMENT
2451	GS	EXPENDABLE-AGRICULTURAL EQUIP
2454	GS	MOTOR-MOTOR VEHICLES
2456	GS	WATERCRAFT-WATERCRAFT EQUIPMENT
2460	GS	OFFICE-OFFICE EQUIPMENT
2461	GS	OFFICE-OFFICE APPURT
2462	GS	OFFICE-OFFICE FURNITURE
2463	GS	OFFICE-OFFICE INCIDENTALS
2464	GS	OFFICE-OFFICE MACHINE
2468	GS	OFF-OFF EQUIP IMPROVEMENTS
2470	GS	SPEC-SPEC USE EQUIPMENT
2471	GS	EXPENDABLE-HOUSEHOLD EQUIPMENT
2472	GS	LAW-LAW ENFORCEMENT EQUIPMENT
2475	GS	RECREATION-RECREATION EQUIPMENT

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
2480	GS	STATIONARY-STATIONARY EQUIPMENT
2481	GS	FIXED-FIXED EQUIPMENT
2482	GS	FIXTURES-FIXTURES
2483	GS	MECHANICAL-MECHANICAL EQUIPMENT
2488	GS	STATIONARY-STATIONARY IMPROVEMENTS
2680	MFD	CORRECT ACCT
3100	MFD	OBLIGATIONS-BONDS & LOANS
3110	MFD	BONDS
3111	MFD	BOND ISSUANCE EXPENSE
3112	MFD	BOND ISSUANCE FEES
3113	MFD	GEN OBLIGATION BOND FINANCING
3114	MFD	GEN OBLIGATION BOND INTEREST RETIREMENT
3115	MFD	REVENUE BOND FINANCING
3116	MFD	REV BOND INTEREST RETIREMENT
3117	MFD	REV BOND PRINCIPAL RETIREMENT
3120	MFD	LOANS-AGENCY
3121	MFD	LOAN INTEREST RETIREMENT-AGENCY
3130	MFD	LOANS-STATE
3131	MFD	LOAN INTEREST RETIREMENT-STATE
3160	MFD	ANTICIPATION LOAN PRINCIPAL RETIREMENT
3170	MFD	GEN OBLIGATION BOND PRINCIPAL RETIREMENT
3200	MFD	SECURITIES
3201	MFD	REALIZED LOSSES
3202	MFD	SALE OF SECURITIES
4901	OS	INTRA AGENCY RECOVERY PERSONAL SERVICES
4902	MFD	INTRA AGENCY RECOVERY CONTRACTUAL
4903	GS	INTRA AGENCY RECOVERY SUPPLIES
4904	MFD	INTRA AGENCY RECOVERY TRANSFERS
4905	MFD	INTRA AGENCY RECOVERY CONTINUOUS
4906	MFD	INTRA AGENCY RECOVERY PROPERTY
4907	GS	INTRA AGENCY RECOVERY EQUIPMENT
4909	MFD	INTRA AGENCY RECOVERY OBLIGATIONS
4912	MFD	ISA IDT-FR STATE AUXILIARY
4913	MFD	ISA IDT-FR LOCAL AUXILIARY
4914	MFD	ISA IDT-FR UNIV FUND
4921	MFD	RECOVERY FROM EDUC&GEN
4922	MFD	RECOVERY FROM OVERHEAD
4923	MFD	RECOVERY FROM AUXILIARY
4924	MFD	RECOVERY FROM UNIVERSITY FUND
4925	MFD	RECOVERY FROM SPONSORED PRO
4926	MFD	RECOVERY FR NONSTATE OR UN
4927	MFD	RECOVERY FROM PLANT
4928	MFD	RECOVERY FROM MCV HOSPITAL
4929	MFD	RECOVERY FR MCVH CAP OUTLAY
4931	MFD	RECOVERY FR OTHER STATE

**VIRGINIA COMMONWEALTH UNIVERSITY ACCOUNT CODES (Continued)**

CODE	MGT Work Type	DESCRIPTION
4932	MFD	RECOVERY FR LOCAL AUXILIARY
4941	MFD	RECOVERY COST OF MERCHANDISE
4942	MFD	RECOVERY INSURANCE
4952	MFD	INTER-AGENCY RECOVERY CONTRA
4954	MFD	INTER-AGENCY RECOVERY CONTINGENCY
4955	MFD	INTER-AGENCY RECOVERY PROP
4956	GS	INTER-AGENCY EQUIP-EQUIP
4958	MFD	INTER-AGENCY RECOVERY-OBLIGATIONS
4961	MFD	RECOVERY POOL VEHICLE
4964	MFD	RECOVERY GAS
4973	GS	AUX ENTERPRISE SUPPLIES-SUPPLIES&MERCHANDISE
4974	MFD	AUX ENTERPRISE RECOVERY-TRANSFER
4975	MFD	AUX ENTERPRISE RECOVERY-CONTINGENCY
4977	GS	AUX ENTERPRISE EQUIP-EQUIPMENT
4979	MFD	AUX ENTERPRISE RECOVERY-OBLIGATIONS
4999	MFD	RECOVERIES-OFFSET
8700	MFD	FAC/ADMIN COST ALLOCATION
8710	MFD	FAC/ADMIN COSTS
8711	MFD	FAC/ADMIN COST-GRANT
8712	MFD	FAC/ADMIN COST-AUXILIARY
9703	MFD	EXPEND TRANSFER S/L 3
9704	MFD	EXPEND TRANSFER S/L 4
9706	MFD	EXPEND TRANSFER S/L 6
9800	MFD	MANDATORY TRANSFERS
9811	MFD	REV BOND INTEREST RETIREMENT
9815	MFD	REV BOND PRINCIPAL RETIREMENT
9831	MFD	INSTITUTIONAL MATCHING FUNDS
9841	MFD	AUX ENTERPRISE-INTEREST RETIREMENT
9845	MFD	AUX ENTERPRISE -PRINCIPAL RETIREMENT
9900	MFD	NON-MANDATORY TRANSFER
9907	MFD	NON-MANDATORY TRANSFER-CAP OUTLAY PROJECTS
9911	MFD	NON-MANDATORY TRANSFER - S/L 1
9921	MFD	NON-MANDATORY TRANSFER - S/L 2
9931	MFD	NON-MANDATORY TRANSFER - S/L 3
9941	MFD	NON-MANDATORY TRANSFER - S/L 4
9942	MFD	NON-MANDATORY TRANSFER-UNIVERSITY FEE
9943	MFD	NON-MANDATORY TRANSFER-CENTRAL SUM
9944	MFD	NON-MANDATORY TRANSFER-SCHOOL OF MEDICINE
9945	MFD	NON-MANDATORY TRANSFER-A.D. WILLIAMS
9951	MFD	NON-MANDATORY TRANSFER - S/L 5
9961	MFD	NON-MANDATORY TRANSFER - S/L 6
9971	MFD	NON-MANDATORY TRANSFER - S/L 7
9981	MFD	NON-MANDATORY TRANSFER - S/L 8

**VIRGINIA MILITARY INSTITUTE ACCOUNT CODES**

OBJECT CODE	WorkType	OBJECT_DESCR
5300	OS	Nonpersonal Svcs Budget
5301	GS	Supplies-Charge Card
5302	GS	Apparel Supplies
5304	GS	Office Supplies
5305	GS	Supplies-Non Charge Card
5306	GS	Stationary & Forms
5308	GS	Gas
5310	GS	Gasoline
5312	GS	Oil
5314	GS	License Tags
5316	GS	Manufacturing Supply
5318	GS	Merchandise for Resale
5322	GS	Laboratory Supplies
5324	GS	Medical-Dental Supplies
5328	GS	Field Supplies
5330	GS	Bldg Repair & Maint Materials
5332	GS	Custodial Rep & Maint Materials
5334	GS	Elec Repair & Maint Materials
5336	GS	Mechanical Rep & Maint Materials
5338	GS	Vehicle Rep & Maint Materials
5340	GS	Food & Dietary Supply
5344	GS	Laundry-Linen Supply
5346	GS	Agricultural Supply
5350	GS	ADP Supplies
5352	GS	Educational Supplies
5354	GS	Law Enforcement Supply
5356	GS	Photographic Supply
5358	GS	Recreational Supply
5500	MFD	Contractual Svcs-Budget
5501	MFD	Contractual Svcs-Charge Card
5502	OS	Express Service
5503	OS	Media Service
5504	OS	Messenger Service
5505	MFD	Contractual Svcs-Local Fund
5506	OS	Postal Service
5507	OS	Printing Services
5508	OS	Telecom Svcs-Non-State
5510	OS	Telcom Svcs-DIT
5511	OS	Direct Mail Services
5512	OS	Organizational Membership
5513	MFD	Employee Training-Travel
5514	OS	Publication Subscriptions
5515	MFD	Employee Tuition Reimbursement

**VIRGINIA MILITARY INSTITUTE ACCOUNT CODES (Continued)**

OBJECT CODE	WorkType	OBJECT_DESCR
5516	MFD	Employee Training-Fees
5517	MFD	Employee Trning-Consulting Svcs
5524	PS	Medical Services
5528	PS	Auditing Services
5530	MFD	Fiscal Services
5532	PS	Attorney Services
5534	PS	Management Services
5535	MFD	Bank Card Charges
5538	OS	Pub Info & PR Services
5542	OS	Custodial Services
5544	C	Elec Rep & Maint Svc
5546	OS	Equip Rep & Maint Svc
5548	OS	Exterminate Control Svc
5552	OS	Mech Rep & Maint Svc
5554	OS	Plant Rep & Maint Svc
5556	OS	Vehicle Rep & Maint Svc
5558	AE	Architect & Engineer Svc
5560	OS	Clerical Services
5562	OS	Food & Dietary Service
5564	OS	Laundry & Linen Service
5566	OS	Manual Labor Service
5568	OS	Production Service
5569	MFD	Home Game Expense
5570	OS	Skilled Services
5571	OS	Officials-Referees
5574	OS	ADP Hardware Maint Svc
5576	PS	Computer Software Maint
5578	MFD	ADP Oper Svc Non-State
5582	PS	Compt Software Developmt Costs
5585	MFD	Contract Svcs-Oth-Athletics
5590	OS	Rec-Contractual Svcs
5600	GS	Equipment-Budget
5601	GS	Equipment-Charge Card
5602	GS	Personal Computer & Components
5604	GS	Mainframe Computer & Component
5605	GS	Equipment-Non Charge
5606	MFD	Deleted by DPT 7/1/02
5608	GS	College Library Books
5610	GS	Educational Equipment
5612	GS	Exhibit Equipment
5614	GS	Reference Equipment
5616	GS	Educ & Cultural Equipment
5618	GS	Electronic Equipment
5620	GS	Photographic Equipment
5622	GS	Voice-DA Trans Equipment

**VIRGINIA MILITARY INSTITUTE ACCOUNT CODES (Continued)**

OBJECT CODE	WorkType	OBJECT DESCR
5624	GS	Electronic & Photo Equipment
5626	GS	Laboratory Equipment
5632	GS	Agricult Vehicular Equipmt
5634	GS	Construction Equipment
5636	GS	Motor Vehicle Equipment
5638	GS	Power Rep & Maint Equipment
5642	GS	Office Appurtenances
5644	GS	Office Furniture
5646	GS	Office Incidentals
5648	GS	Office Machines
5652	GS	Household Equipment
5654	GS	Law Enforcement Equipment
5656	GS	Nonpower Rep & Maint Equip
5658	GS	Recreation Equipment
5660	GS	Specific Use Equip Improvements
5662	GS	Build-In Equipment
5664	GS	Fixtures
5666	GS	Mechanical Equipment
5704	C	Site Improvements
5708	MFD	Utilities
5801	MFD	Individual Claimes & Settlemts
5802	MFD	Misc Payroll Expense
5804	MFD	Guarantees
5805	MFD	Transfer Payments-Local
5806	MFD	Premiums (Awds/Honorarium/Prizes)
5808	MFD	Unemploy Comp Reimbursement
5814	MFD	Undergraduate Scholarships
5816	MFD	Pmts in Lieu of Taxes
5818	MFD	Grants to Intergovt Organizations
5820	MFD	Grants to Nongovt Organizations
5832	GS	Computer Software Cap Lease
5840	GS	Computer Peripheral Rentals
5844	GS	Computer Software Rentals
5846	GS	Equipment Rentals
5848	GS	Buidings Rentals
5860	OS	Agency Service Charges
5862	OS	Electrical Service Charges
5864	OS	Refuse Service Charge
5866	OS	Water & Sewer Svc Charges
5870	MFD	General Liability Insurance
5872	MFD	Medical Malpractice
5874	MFD	Workers' Compensation
5875	OS	Misc-Athletics

**VIRGINIA TECH ACCOUNT CODES**

Object Code	WorkType	Object Code Description	Description
12090	MFD	Charge Card Purchases-Services	CAR RENTAL
1211	OS	Freight and Express Services	Supplies
12110	OS	Freight and Express Services	Shipping charges
1211M	GS	Office, Lab Equip moving	services
1211U	OS	Freight - Unallowable	SHIPPING CHARGES
1212	OS	Outbound Freight Services	supplies
12120	OS	Outbound Freight Services	supplies
1212U	OS	Outbound Freight Serv - Unallowable	Freight
1213	OS	Messenger Services	Services
12130	OS	Messenger Services	Shipping charges
12135	OS	Overnight Messenger Services	service
1214	MFD	Postal Services	
12140	MFD	Postal Services	PO BOX RENTAL
1215	OS	Printing & Engraving Services	Services
12150	OS	Printing Services	
12151	OS	Engraving Services	service
12152	OS	Copy Centers	various fund 440698
12153	GS	Satelite Copiers	mail
12154	GS	Satelite Printers	flyers
1215U	GS	Printing & Engraving - Unallowable	BOOKMARKS
1216	GS	Telecommunications Services (DIT)	Reimbursement for telephone service
12160	GS	Telecommunications Services (DIT)	Blanket Order for Cellular Telephone Equipment and
1217	MFD	Telecommunications (Non-State)	service
12170	GS	Telecommunications (Non-State)	PHONE
12171	GS	Fixed Phones (Non-State)	CUSTOM VOICE BLACK PHONE
12172	GS	Cellular phones/pagers (Non-State)	Blanket Order for Cellular Telephone Equipment and
1217U	GS	Telecomm (Non-State) - Unallowable	Blanket Order for Cellular Telephone Equipment and
1218	MFD	Telecommunications Services (State)	Modem Charges
12180	OS	Other Telecom Services (State)	Blanket Order for Cellular Telephone Equipment and
12181	GS	Fixed phones	Blanket Order for Cellular Telephone Equipment and
12182	GS	Cellular phones/pagers	Blanket Order for Cellular Telephone Equipment and
12183	GS	Video Telecommunication Services	supplies
1218U	GS	Telecomm Serv (State) - Unallowable	cell phone
1219	OS	Inbound Freight Services	
12190	OS	Inbound Freight Services	
1221	MFD	Organization Memberships	Services
12210	MFD	Organization Memberships	CSSBO MEMBERSHIP FEE
12211	MFD	Entry Fees	REGISTRATION
12212	MFD	Memberships-Taxable	MEMBERSHIP
1221U	MFD	Org. Memberships - Unallowable	draft - M0167315
1222	GS	Publication Subscriptions	supplies
12220	GS	Publication Subscriptions	CREDIT
12221	MFD	Electronic Subscriptions	ENROLLMENT FEES

**Appendix A: Account Codes and Work Type Codes**

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
1222U	GS	Publication Subscriptions-Unallowab	subscription
1223	MFD	Convention and Educational Travel	Registration
12250	MFD	Employee Tuition Reimbursement	supplies
12260	MFD	Employee Training Consulting Servs	
12310	OS	Clinic Services	service
12320	MFD	Error Account	staples
12340	PS	Medical Provider Services	MEDICAID PAYMENTS FOR 98,99,00,01
12341	PS	Medical - Eye Care	supplies
12360	PS	X-Ray and Laboratory Services	service
12361	PS	Medical - Drug Testing	Alcohol and Controlled Substance Abuse Testing
12410	PS	Auditing Services	supplies
12420	OS	Fiscal Services	Blanket Order for Billing Services
12421	MFD	Service Charges	
12422	PS	Investment Management Services	salaries
12424	OS	Receipt Processing Services	Temporary Employment Services
12425	OS	Property Management Services	Services
1244	PS	Management, Consulting & Expert Ser	supplies
12440	PS	Other Mgmt. & Expert Services	director support
12441	PS	Consulting Services	BO for Hazardous Materials Abatement Services
12442	MFD	Referees and Game Officials	processing
12443	OS	Photographic Services	photo processing
12444	OS	Artistic Services	supplies
12445	GS	Ed. Conference Equipment Setup	reimbursement
12446	PS	Videotaping/Audiotaping Services	COURSE-VIDEOTAPING/AUDIOTAPING
12447	OS	Musical Services	moving piano
12448	MFD	Ed. Conference Satellite Services	training materials
12449	MFD	Ed. Conference Telecomm. Services	service
1244A	PS	Analytical Services	BO for Hazardous Materials Abatement Services
1244U	PS	Expert Services - Unallowable	supplies
1245	PS	Personnel Development Services	tickets to "Annie"
12450	OS	Other Personnel Dev. Services	deposit
12452	OS	Cont. Ed. Pgm. Certificate Framing	supplies
12453	MFD	Other Cont. Educ. Services	WORKSHOP
1246	PS	Public Relations Services	Advertising
12460	OS	Other Public Relations Services	SERVICE
12461	OS	Direct Mail Marketing Services	service
12462	GS	Promotional Brochures	service
12463	GS	Promotional Flyers	SUPPLIES
12464	GS	Promotional Letters	mailing labels
12465	OS	Other Promotional Services	supplies
12466	GS	Promotional Posters	service
12468	OS	External Mailing List Rental	MAILING LISTS
1246A	OS	Media Advertising	ADVERTISING
1246B	GS	Promotional 1st Class Postage	
1246M	PS	Promotional Media/Photo services	Ad

**Appendix A: Account Codes and Work Type Codes**

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
1246U	PS	Public Rel Serv - Unallowable	Advertisement
12470	PS	Legal Services	LEGAL SERVICES
1248	OS	Media Services	membership directory
12480	OS	Media Services	Blanket Order for Advertising Services
1248U	OS	Media Serv - Unallowable	Advertisements
1251	OS	Custodial Services	service
12510	OS	Custodial Services	service
1252	OS	Electrical Repair and Maintenance	supplies
12520	OS	Electrical Repair and Maintenance	SERVICE
12521	GS	Replacement Lighting	Supplies
12522	OS	Alarm Maintenance	BO for Simplex Fire Alarm Equipment
1253	GS	Equipment Repair and Maintenance	supplies
12530	OS	Gen. Equip. Repair & Maint	BioMaintenance 2PM Performance Agreement on a
12531	GS	Lab equip/instruments Repair	service
12532	OS	Electronic equip. Repair & Maint	supplies
12540	OS	Extermination/Vector Control	SERVICE
12550	C	Highway Repair and Maintenance	SERVICE
1256	OS	Mechanical Repair and Maintenance	Services
12560	OS	Mechanical Repair and Maintenance	Service Contract
1257	C	Plant Repair and Maintenance	Carpentry Services
12570	C	Plant Repair and Maintenance	Paint, Furnish labor and materials necessary for
12580	MFD	Nat Resource Reclamation Services	supplies
1259	GS	Vehicle Repair and Maintenance	supplies
12590	OS	Vehicle Repair and Maintenance	service
12610	AE	Architectural and Engineering	BO for Geo-Tech, Construction Material Testing
12620	GS	Aviation - Survey, Monitoring, etc	SUPPLIES
1263	OS	Clerical Services	Ad
12630	OS	Clerical Services	Services rendered
1264	MFD	Food Prep and Dietary Services	African American Student Dev
12640	MFD	Food Prep and Dietary Services	CATERING
12641	GS	Refreshment Breaks - Food Prep.	supplies
12642	MFD	Breakfasts - Food Prep.	CATERING
12643	MFD	Lunches - Food Prep.	
12644	MFD	Dinners - Food Prep.	BANQUET CHARGES
12645	GS	Banquets - Food Prep.	
12646	GS	Socials/Receptions - Food Prep.	supplies
12647	MFD	Conference Guest Food Prep.	COMMODITY FROM GEN. ACCTG. ENC.
12648	MFD	Other Food Prep. Services	FOOD
1264U	MFD	Food Prep. Serv. - Unallowable	Blanket order for catering services
1265	OS	Laundry and Linen Services	Rental of Linens & Towels
12650	OS	Laundry and Linen Services	service
1266	OS	Manual Labor Services	Temporary Employment Services
12660	OS	Manual Labor Services	Blanket order for Temporary Employment Services
12661	OS	Contract Labor	Blanket order for Housekeeping Services
1267	OS	Production Services	Services
12670	OS	Production Services	service
12671	GS	Fabrication Services	cylinder
1267U	OS	Prod Serv - Unallowable	supplies/service
12710	PS	Information Mgt Design/Develop. DIT	service
12720	PS	Information Mgt Design/Dev Non-Stat	service

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
12730	PS	Information Mgt Design/Dev. (State)	supplies
1274	OS	Computer Hardware Maintenance Ser.	Services
12740	OS	Computer Hardware Maintenance Ser.	Hardware Maintenance, Printer, Canon NP 700
12750	PS	ADP Software Maintenance Services	Software Maintenance, Norton Antivirus
12760	OS	Computer Operating Services (DIT)	supplies
12770	OS	Computer Operating Serv (Non-State)	Blanket Order for CIS/Lexis-Nexis Academic Sub.
12780	OS	Computer Operating Services (State)	supplies
1279	PS	Computer Software Development Serv.	supplies
12790	PS	Computer Software Development Serv.	disk drive
12810	OS	Moving and Relocation Services	Blanket Order for Household Goods Moving Services
1282	MFD	Travel, Personal Vehicles	Cellular Telephone Equipment and Service
12820	MFD	Travel, Personal Vehicles	reimbursement
1283	MFD	Travel, Public Carriers	Busses for 14 passengers
12830	MFD	Other Travel, Public Carriers	
12831	OS	Air Travel, Public Carriers	Air Travel
12839	MFD	Courtesy Cars	service
1283U	MFD	Trav Publ Carr - Unallowable	rented van
1284	MFD	Travel, State Vehicles	rental
12840	MFD	Travel, State Vehicles	service
1285	MFD	Travel, Subsistence and Lodging	Supplies
12850	MFD	Travel, Subsistence and Lodging	Lodging
12851	MFD	Ed. Conference Participant Lodging	room rental
12852	MFD	Ed. Conference Guest Registration	draft - M0169913
12854	MFD	Ed.Conf. Outside Instructor Lodging	LODGING
12855	MFD	Ed. Conference Ground Transport.	
1285R	MFD	Recruiting Travel	rental car
1285U	MFD	Trav Subs/Lodging - Unallowable	Catering services
12870	MFD	Travel, Taxable Business Meal Reimb	FOOD
12880	MFD	Travel, Non-Taxable Meal Reimb	workshop expenses
1288U	MFD	Non-taxable Meal Reim - Unallowable	supplies
12890	MFD	Employee Training and Conference	REGISTRATION
12891	MFD	Ed. Conference Participant Lodging	Conference
12892	MFD	Ed. Conference Guest Registration	Seminar
12893	MFD	Ed. Conference Faculty Lodging	lodging
12894	MFD	Ed.Conf. Outside Instructor Lodging	
12895	MFD	Ed. Conference Ground Transport.	Speaker Fee
12897	MFD	Registration Fees-Employee Training	ROOM RENTAL DEPOSIT FOR PHYTOPHTORA
12899	PS	On-Campus Educational Services	tutor meeting
1289U	MFD	Conv. and Education - Unallowable	REGISTRATION FEE
1292	OS	Other Outside Recoveries-Services	maclinkplus delux upgrade
12920	OS	Other Outside Recoveries - Services	
12970	MFD	Late Payment Penalties-Services	
12980	PS	Inter-Agency Recoveries-Services	overpayment
1299	MFD	Intra-Agency Recoveries-Services	funds
12990	MFD	Intra-Agency Recoveries-Services	refund for fair
12995	MFD	Conferences - Assoc. Pass Through	revenue
13090	GS	Charge Card Purchases-Supplies	supplies
1311	GS	Apparel Supplies	Supplies
13110	GS	General Apparel Supplies	Prescription safety glasses-K Warwick
13111	GS	Uniforms	Shirts-Medium per attached specifications

**Appendix A: Account Codes and Work Type Codes**

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
13112	GS	Uniform Accessories	SUPPLIES
1312	GS	Office Supplies	Supplies
13120	GS	Office Supplies - Gen.	Blanket order for Office Supplies
13121	GS	Office Furniture < \$500	SUPPLIES
13122	GS	Other Furniture <\$500	CHAIRS
13123	GS	Equipment Costing < \$2000	Furniture, Proposal #41339 dated 4/22/02, Project
1312U	GS	Office Supplies - Unallowable	supplies
1313	GS	Stationary and Forms	Supplies
13130	GS	Stationary & Forms - Gen.	service
1313U	GS	Stationary & Forms - Unallowable	PAPER
1331	MFD	Alcoholic Beverages	Miller Lite
13310	MFD	Alcoholic Beverages	VARIOUS ABC
13320	GS	License Tags and Decals	VEHICLE TAGS
1333	GS	Manufacturing Supplies	supplies
13330	GS	Manufacturing Supplies	supplies
1334	MFD	Merchandise for Resale	office supplies
13340	MFD	Merchandise for Resale	Blanket order for White Shirts
13341	GS	Food Service Merchandizing Supplies	Food and Food Related Supplies
13350	GS	Packaging & Shipping Supplies	Blanket order for Office Supplies
1341	GS	Laboratory Supplies	supplies
13410	GS	Other Laboratory supplies	KM8 Kit, FD 40-3
13411	GS	Chemicals	Laboratory Apparatus & Supplies
13412	GS	Glassware	supplies
13413	GS	Personal protective wear	supplies
13414	GS	Safety/First aid	
13416	GS	Lab Animals	supplies
13417	GS	Gas cylinder demurrage charges	Compressed Gas Cylinders
13418	GS	Instrument supplies/parts	supplies
13419	GS	Lab Plants	COMMODITY FROM GEN. ACCTG. ENC.
1341U	GS	Lab Supplies - Unallowable	refrigerator
1342	GS	Medical & Dental Supplies	supplies
13420	GS	Medical and Dental Supplies	supplies
1343	GS	Field Work Supplies	Supplies
13430	GS	Field Work Supplies	supplies
1351	GS	Building Repair & Maint Materials	parts
13510	GS	Building Repair & Maint Materials	supplies
1351U	GS	Building R&M Materials-Unallowable	STREAMERS FOR GRADUATION
1352	GS	Custodial Repair & Maint Materials	Supplies
13520	GS	Other Custodial Supplies	supplies
13521	GS	Food Service Cleaning Supplies	Supplies
1353	GS	Elec. Repair & Maint Materials	Supplies
13530	GS	Electrical Repair & Maint Materials	supplies
13531	GS	Electronic Repair & Maint Materials	supplies
1354	GS	Mechanical Repair & Maint Materials	Supplies
13540	GS	Mechanical Repair & Maint Materials	credit memo
1355	GS	Vehicle Repair & Maint Materials	supplies
13550	GS	Vehicle Repair & Maint Materials	service
1362	GS	Food and Dietary Supplies	Blanket Order for Pre Mix Beverages
13620	GS	Food and Dietary Supplies	supplies
1362U	GS	Food Supplies - Unallowable	Blanket order for catering services

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
1363	GS	Food Service Supplies	
13630	GS	Meal Decor & other Meal Supplies	FOOD ITEMS
13631	GS	Supplies Used in Food Service	supplies
13632	GS	Supplies Used in Food Preparation	
13633	GS	Non-Disposable Small Ware Supplies	supplies
1363U	GS	Food Serv Supplies - Unallowable	Supplies
1364	GS	Laundry and Linen Supplies	Mattresses, reburished
13640	GS	Laundry and Linen Supplies	Protective Mattress Covers, Zipper, 36" x 80"
13650	GS	Personal Care Supplies	Supplies
1371	GS	Agricultural Supplies	Supplies
13710	GS	Agricultural Supplies	supplies
1371A	GS	Alfalfa Seed	supplies
1371B	GS	Barley Seed	Small Grain Seed per attached specifications
1371C	GS	Clover Seed	supplies
1371D	GS	Corn Seed	Seed Corn, Pioneer 31R88
1371E	GS	Fescue Seed	supplies
1371F	GS	Orchard Grass Seed	supplies
1371H	GS	Rye Seed	fertilizer
1371I	GS	Baler Twine	TWINE
1371J	GS	Fencing	Fence Posts, 3" - 4" x 7'
1371K	GS	Fertilizer	supplies
1371L	GS	Field Tools	supplies
1371M	GS	Gravel	supplies
1371N	PS	Hay Preservatives	MATERIALS
1371P	GS	Lime	supplies
1371Q	MFD	Miscellaneous	supplies
1371R	GS	Liquid Nitrogen	Liquid Nitrogen Fertilizer
1371S	GS	Pesticides	Pesticide, Alachlor/Partner 65DF (13, 25 lb bags)
1371T	GS	Plastic Wrap	supplies
1371V	GS	Safety Apparel	safety supplies
1371W	GS	Shop Supplies	supplies
1371X	GS	Shop Tools	SUPLIES
1371Y	GS	Silo Covers	MATERIALS
1371Z	GS	Feed Corn	supplies
13720	AE	Architectural & Engineering	supplies
1373	GS	Computer Operating Supplies	Supplies
13730	GS	Computer Operating Supplies	supplies
13731	GS	Workstation supplies	supplies
13732	GS	Personal software	service
13733	GS	Server software	supplies
1374	GS	Educational Supplies	Supplies
13740	GS	Gen. Educational Supplies	supplies
13741	GS	Ed. Program Duplication/Copying	supplies
13742	GS	Ed. Program Notebooks	Blanket order for Office Supplies
13743	GS	Ed. Program Notebook Inserts	supplies

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
13744	GS	Ed. Program Covers (silk screen)	training materials
13745	GS	Ed. Program Folios	SUPPLIES
13746	GS	Ed. Program Dividers	supplies
13747	GS	Ed. Program Texts	supplies
13749	GS	Ed. Program Tent Cards	Supplies
1374A	GS	Ed. Program Agenda/Syllabus	supplies
1374C	GS	Ed. Program Pens and Pencils	Supplies
1374D	GS	Ed. Prgm. Medical/Lab Supplies	0-205-08136-3 PH Molecular Model Set for
1374E	GS	Ed. Program Test Instruments	Questionnaire
1374F	GS	Ed. Program Film/photographs	supplies
1374G	GS	Ed. Program DP Supplies	printer
1374H	GS	Ed. Program small equipment	supplies
1374J	GS	Ed. Program Banners/Exhibits	supplies
1374K	GS	Ed. Program Lab Support Supplies	supplies
1374L	GS	Home Game Supplies	supplies
1374R	GS	Research reference supplies	supplies
1374U	GS	Educ Supplies - Unallowable	Supplies
1375	GS	Fish & Wildlife Supplies	Supplies
13750	GS	Fish & Wildlife Supplies	supplies
13760	GS	Law Enforcement Supplies	supplies
1377	GS	Photographic Supplies	Supplies
13770	GS	Photographic Supplies	supplies
1378	GS	Recreational/Promotional Supplies	VESTS
13780	GS	Other Promotional Supplies	Softballs
13781	GS	Promotional Gifts	supplies
13782	GS	Promotional Flowers/Decorations	
13783	MFD	CE Guest/Companion Programs	SUPPLIES
13784	GS	Play & Practice Equipment	Balance Beam Scale
13970	MFD	Late Payment Penalties-Supplies	LATE FEE
13990	MFD	Intra-Agency Recoveries-Supplies	petty cash refund
14110	MFD	Individual Claims & Settlements	CRIMINAL HISTORY CK - PHYLENIA FRENCH
14111	MFD	Interstate Tax Agreements	Distance Tax
14113	MFD	Arbitrage Rebate	
1413	GS	Honarariums and Premiums	student teacher supervision pyt
14130	MFD	Honorariums	cash advance
14131	MFD	Conference Outside Speaker Fee	college bound program t-shirts
14132	MFD	Premiums	reimbursement
14133	GS	Awards	plaque
14135	MFD	COTA Awards	cota
1413U	MFD	Honorariums - Unallowable	SUBJECT PAYMENTS
1415	MFD	Unemployment Compensation Reimb.	
14150	MFD	Unemployment Compensation Reimb.	
14170	MFD	Income Assistance Payments	utility
1418	MFD	PPT/TFT Unemployment Comp.	
14180	MFD	PPT/TFT Unemployment Comp.	

**Appendix A: Account Codes and Work Type Codes**

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
14990	MFD	Intra-Agency Recoveries-Awards	unused funds - Fall 2001
15310	GS	Computer Rentals (not mainframe)	supplies
1532	GS	Computer Processor Rentals	Copier Maintenance
15320	GS	Computer Processor Rentals	Rental, Computer Pentium III
15330	OS	Computer Software Rentals	LICENSE FEE
1534	GS	Equipment Rentals	EXHIBITOR FEE
15340	GS	Other Equipment Rentals	
15341	GS	Audio-Visual Equip. Rental	movie
1534U	GS	Equip Rent - Unallowable	rental
15351	GS	Meeting Facilities Rentals	supplies
15358	OS	Mini-storage Unit Rentals	SPACE RENTAL
1535U	MFD	Bldg Rent - Unallowable	Facility rental
1536	MFD	Land Rentals	conference room & lunch for combined class
15360	MFD	Land Rentals	lease
15370	MFD	Land and Building Rentals	Storage box
1537U	MFD	Land & Bldg Rent - Unallowable	RENT LAND
15640	GS	Equipment Installment Purchases	supplies
15970	MFD	Late Payment Penalties-Cont Chgs	
16000	MFD	Current Student Org Charges	catering expenses
17000	MFD	Theatre Contracts	TUITION
19004	GS	Altertec	Foreign Wire-118235
19007	MFD	Arizona State University	COMMODITY FROM GEN. ACCTG. ENC.
19011	PS	Benton & Associates	COMMODITY FROM GEN. ACCTG. ENC.
19011A	PS	Benton and Associates	COMMODITY FROM GEN. ACCTG. ENC.
19011B	PS	Benton and Associates	COMMODITY FROM GEN. ACCTG. ENC.
19015	PS	Caribbean Ag Res&Dev Ins-CARDI	wire - M0473028
19016	PS	Carpco, Inc.	
19018	MFD	College of William & Mary	COMMODITY FROM GEN. ACCTG. ENC.
19018A	MFD	College of William & Mary	COMMODITY FROM GEN. ACCTG. ENC.
19018B	MFD	College of William & Mary	COMMODITY FROM GEN. ACCTG. ENC.
19019	MFD	Colorado State University	COMMODITY FROM GEN. ACCTG. ENC.
19020	MFD	Columbia University	COMMODITY FROM GEN. ACCTG. ENC.
19022	PS	Conservation International	COMMODITY FROM GEN. ACCTG. ENC.
19023	PS	Consortium-Int'l Crop Protect	COMMODITY FROM GEN. ACCTG. ENC.
19024	MFD	Cornell University	COMMODITY FROM GEN. ACCTG. ENC.
19025	OS	Defense Research Agency	COMMODITY FROM GEN. ACCTG. ENC.
19027	PS	EsculelaAgriPanamer(Zamorano)	wire - M0301810
19030	MFD	Florida Atlantic University	COMMODITY FROM GEN. ACCTG. ENC.
19033	MFD	George Mason University	COMMODITY FROM GEN. ACCTG. ENC.
19033A	MFD	George Mason University	COMMODITY FROM GEN. ACCTG. ENC.
19033B	MFD	George Mason University	COMMODITY FROM GEN. ACCTG. ENC.
19035	PS	GEXPRONT	COMMODITY FROM GEN. ACCTG. ENC.
19041	PS	Hughes Associates, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19041A	PS	Hughes Associates, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19041B	PS	Hughes Associates, Inc.	COMMODITY FROM GEN. ACCTG. ENC.

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
19042	PS	Inst De Ciencia Y Tech Agri	wire - M0333916
19043	MFD	Institute d'Economie Rurale	wire - M0473037
19044	PS	Inst. for Biotech. Info,LLC	COMMODITY FROM GEN. ACCTG. ENC.
19047	OS	ISRA	wire 0 M0281040
19050	MFD	Kansas State University	COMMODITY FROM GEN. ACCTG. ENC.
19050A	MFD	Kansas State University	COMMODITY FROM GEN. ACCTG. ENC.
19050B	MFD	Kansas State University	COMMODITY FROM GEN. ACCTG. ENC.
19051	MFD	Lincoln University	COMMODITY FROM GEN. ACCTG. ENC.
19052	OS	UT - Battelle, LLC.	COMMODITY FROM GEN. ACCTG. ENC.
19053	MFD	Makerere University	wire - M0480432
19054	OS	Marine Biological Laboratory	COMMODITY FROM GEN. ACCTG. ENC.
19055	MFD	Mathematica Policy Res Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19056	OS	Michael Baker, Jr. Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19057	MFD	Michigan State University	COMMODITY FROM GEN. ACCTG. ENC.
19059	MFD	Missouri Botanical Garden	COMMODITY FROM GEN. ACCTG. ENC.
19060	MFD	Montana State University	COMMODITY FROM GEN. ACCTG. ENC.
19061	MFD	Montgomery County Schools	COMMODITY FROM GEN. ACCTG. ENC.
19062	MFD	Morgan State University	COMMODITY FROM GEN. ACCTG. ENC.
19063	MFD	National Agricultural Library	COMMODITY FROM GEN. ACCTG. ENC.
19064	MFD	National Research Center-Egypt	COMMODITY FROM GEN. ACCTG. ENC.
19070	MFD	North Carolina A&T State Univ.	COMMODITY FROM GEN. ACCTG. ENC.
19071	MFD	North Carolina State Univ	COMMODITY FROM GEN. ACCTG. ENC.
19072	MFD	Northeast Louisiana University	COMMODITY FROM GEN. ACCTG. ENC.
19073	OS	Star Mountain Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19074	MFD	Ohio State University	COMMODITY FROM GEN. ACCTG. ENC.
19075	MFD	Oklahoma State University	COMMODITY FROM GEN. ACCTG. ENC.
19075A	MFD	Oklahoma State University	COMMODITY FROM GEN. ACCTG. ENC.
19075B	MFD	Oklahoma State University	service
19076	MFD	Old Dominion Univ. Res Found.	COMMODITY FROM GEN. ACCTG. ENC.
19078	OS	PB Farradyne, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19079	MFD	Pennsylvania (Penn) State Univ	COMMODITY FROM GEN. ACCTG. ENC.
19080	PS	Personal Comp Resource(PCR)Inc	COMMODITY FROM GEN. ACCTG. ENC.
19081	MFD	Philippine Rice Research Inst	wire - M0471385
19084	MFD	Purdue University	COMMODITY FROM GEN. ACCTG. ENC.
19085	MFD	Radford University	COMMODITY FROM GEN. ACCTG. ENC.
19087	MFD	Rutgers University	COMMODITY FROM GEN. ACCTG. ENC.
19088	OS	Science Appl. Intl Corp (SAIC)	COMMODITY FROM GEN. ACCTG. ENC.
19092	MFD	SUNY-Binghamton, NY	COMMODITY FROM GEN. ACCTG. ENC.
19093	MFD	Texas A & M University	COMMODITY FROM GEN. ACCTG. ENC.
19096	MFD	U. S. Geological Survey (USGS)	COMMODITY FROM GEN. ACCTG. ENC.
19100	MFD	University of Alaska-Fairbanks	COMMODITY FROM GEN. ACCTG. ENC.
19102	MFD	University of Arkansas	COMMODITY FROM GEN. ACCTG. ENC.
19104	MFD	University of Georgia	COMMODITY FROM GEN. ACCTG. ENC.
19105	MFD	Univ of Georgia Res Foundation	COMMODITY FROM GEN. ACCTG. ENC.
19107	MFD	Univ of Illinois-Carbondale	COMMODITY FROM GEN. ACCTG. ENC.

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
19108	MFD	University of Kentucky	COMMODITY FROM GEN. ACCTG. ENC.
19109	MFD	Univ of Kentucky Research Corp	COMMODITY FROM GEN. ACCTG. ENC.
19113	MFD	Univ of Maryland-College Park	COMMODITY FROM GEN. ACCTG. ENC.
19114	MFD	University of Minnesota	COMMODITY FROM GEN. ACCTG. ENC.
19115	MFD	University of Missouri	COMMODITY FROM GEN. ACCTG. ENC.
19116	MFD	University of Missouri-Rolla	COMMODITY FROM GEN. ACCTG. ENC.
19119	MFD	University of New Hampshire	COMMODITY FROM GEN. ACCTG. ENC.
19121	MFD	University of Tennessee	COMMODITY FROM GEN. ACCTG. ENC.
19122	MFD	University of Utah	Services
19123	MFD	University of Virginia	COMMODITY FROM GEN. ACCTG. ENC.
19125	MFD	University of Wisconsin	COMMODITY FROM GEN. ACCTG. ENC.
19126	MFD	Univ of Wisconsin-Madison	
19128	MFD	USDA-Agri Research Ser. (ARS)	COMMODITY FROM GEN. ACCTG. ENC.
19134	MFD	USDA-Forest Service (FS)	COMMODITY FROM GEN. ACCTG. ENC.
19138	MFD	Utah State University	COMMODITY FROM GEN. ACCTG. ENC.
19139	OS	Vatell, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19140	MFD	Virginia Commonwealth Univ	COMMODITY FROM GEN. ACCTG. ENC.
19144	MFD	Weizmann Institute of Science	COMMODITY FROM GEN. ACCTG. ENC.
19146	MFD	West Virginia University	COMMODITY FROM GEN. ACCTG. ENC.
19148	OS	Westat, Inc.(was COMSIS Corp.)	COMMODITY FROM GEN. ACCTG. ENC.
19158	MFD	Auburn University	COMMODITY FROM GEN. ACCTG. ENC.
19160	OS	King and Associates	COMMODITY FROM GEN. ACCTG. ENC.
19166	MFD	US Dept Agriculture (USDA)	COMMODITY FROM GEN. ACCTG. ENC.
19166A	MFD	US Dept. Agriculture (USDA)	COMMODITY FROM GEN. ACCTG. ENC.
19173	MFD	Univ of Southampton	COMMODITY FROM GEN. ACCTG. ENC.
19174	MFD	James Madison University	COMMODITY FROM GEN. ACCTG. ENC.
19181	PS	Drittes Physikalisch	COMMODITY FROM GEN. ACCTG. ENC.
19182	MFD	University of Hawaii	COMMODITY FROM GEN. ACCTG. ENC.
19183	MFD	L'viv Inst Crop & Animal Husbandry	wire transfer - M0009238
19184	OS	Odessa State Ag Inst	wire - M0012650
19185	MFD	L'viv Oblast Plant Pro Station	wire - M0010253
19188	MFD	VA Dept Ag&Con Services	services
19190	MFD	Portland State University	COMMODITY FROM GEN. ACCTG. ENC.
19191	MFD	Res Fnd-State Univ NY	COMMODITY FROM GEN. ACCTG. ENC.
19195	PS	MA Mental Health Res Corp	COMMODITY FROM GEN. ACCTG. ENC.
19197	MFD	University of New Mexico	COMMODITY FROM GEN. ACCTG. ENC.
19198	OS	JW Jones Eco Res Ctr	COMMODITY FROM GEN. ACCTG. ENC.
19199	MFD	Alabama A&M University	COMMODITY FROM GEN. ACCTG. ENC.
19200	MFD	Duke University	COMMODITY FROM GEN. ACCTG. ENC.
19201	MFD	Oregon State University	COMMODITY FROM GEN. ACCTG. ENC.
19202	MFD	Univ of Dayton Res Inst	COMMODITY FROM GEN. ACCTG. ENC.
19204	MFD	Dnipropetrovsk State Ag Univ	Foreign Wire - 004130
19205	MFD	Ukranian Academy of Agr.	wire-M0010657
19206	OS	John Herbst & Associates	COMMODITY FROM GEN. ACCTG. ENC.
19207	PS	Corporacion INIAP	wire - M0479394

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
19208	MFD	Universidad Valle de Guatemala	wire - M0395115
19209	PS	Harrison Partners	COMMODITY FROM GEN. ACCTG. ENC.
19211	MFD	ACDI/VOCA	COMMODITY FROM GEN. ACCTG. ENC.
19213	MFD	University of Connecticut	COMMODITY FROM GEN. ACCTG. ENC.
19214	MFD	University of Nebraska	COMMODITY FROM GEN. ACCTG. ENC.
19215	MFD	California State Polytech Inst	COMMODITY FROM GEN. ACCTG. ENC.
19216	MFD	Waste Policy Institute	COMMODITY FROM GEN. ACCTG. ENC.
19217	PS	Int Ctr-Insect Physiology & Ecology	wire - M0475617
19218	MFD	George Washington Univ.	COMMODITY FROM GEN. ACCTG. ENC.
19219	MFD	UNC Highway Safety Rsch. Ctr.	COMMODITY FROM GEN. ACCTG. ENC.
19221	MFD	Va. Institute for Marine Sciences	COMMODITY FROM GEN. ACCTG. ENC.
19221A	MFD	VA Inst. for Marine Sciences	COMMODITY FROM GEN. ACCTG. ENC.
19223	MFD	Iowa State Univ.	COMMODITY FROM GEN. ACCTG. ENC.
19224	PS	GeoSyntec Consultants	COMMODITY FROM GEN. ACCTG. ENC.
19225	MFD	The Nature Conservancy	COMMODITY FROM GEN. ACCTG. ENC.
19226	PS	H & H Forest Mgmt., Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19227	MFD	UVA Inst. for Environ. Negotiations	COMMODITY FROM GEN. ACCTG. ENC.
19228	MFD	University of Missouri-Columbia	COMMODITY FROM GEN. ACCTG. ENC.
19229	MFD	Rensselaer Polytechnic Inst. (RPI)	SERVICES
19230	GS	Faraway Farms	COMMODITY FROM GEN. ACCTG. ENC.
19231	OS	Sharfield, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19232	PS	Brickland Associates	COMMODITY FROM GEN. ACCTG. ENC.
19233	GS	Green Valley Farms	COMMODITY FROM GEN. ACCTG. ENC.
19234	PS	Hyman Associated Co.	COMMODITY FROM GEN. ACCTG. ENC.
19235	MFD	University of Iowa	COMMODITY FROM GEN. ACCTG. ENC.
19236	PS	DLCO (Desert Locust Control Org.)	wire - M0352438
19237	PS	Whitescarver, Hurd,& Obenchain, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19238	PS	G3 Systems, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19241	MFD	Frito-Lay, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19242	PS	Visual Science Studio	COMMODITY FROM GEN. ACCTG. ENC.
19244	MFD	Clemson University	COMMODITY FROM GEN. ACCTG. ENC.
19245	MFD	State University of NY, Stony Brook	COMMODITY FROM GEN. ACCTG. ENC.
19245A	MFD	State University of NY, Stony Brook	COMMODITY FROM GEN. ACCTG. ENC.
19246	MFD	VA Transportation Research Council	COMMODITY FROM GEN. ACCTG. ENC.
19247	MFD	Georgia Tech	COMMODITY FROM GEN. ACCTG. ENC.
19248	GS	Blue Ridge Beverage	COMMODITY FROM GEN. ACCTG. ENC.
19250	PS	Interactive Designs and Dev, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19269	MFD	Ohio State Univ. Research Fdn.	COMMODITY FROM GEN. ACCTG. ENC.
19270	MFD	Medical Univ. of South Carolina	COMMODITY FROM GEN. ACCTG. ENC.
19271	PS	Inst Nat de la Recherche Agron	wire - M0328984
19272	MFD	National Agricultural Rch Inst	cashiers check - M335988929
19273	C	Premier Millwork & Lumber	COMMODITY FROM GEN. ACCTG. ENC.
19274	GS	Kay Gee Plastics	COMMODITY FROM GEN. ACCTG. ENC.
19275	MFD	Univ. of Cincinnati	COMMODITY FROM GEN. ACCTG. ENC.
19276	MFD	Washington State University	COMMODITY FROM GEN. ACCTG. ENC.

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
19277	PS	Comprehensice Computer Solutions	COMMODITY FROM GEN. ACCTG. ENC.
19278	OS	Mitretek Systems, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19279	OS	ShenTel Service Company	COMMODITY FROM GEN. ACCTG. ENC.
19280	MFD	Institute for Global Risk Research	COMMODITY FROM GEN. ACCTG. ENC.
19281	MFD	Univ of Puerto Rico-Mayaguez Campus	
19282	PS	The Law Office of William C Siegel	COMMODITY FROM GEN. ACCTG. ENC.
19283	MFD	Brown University	COMMODITY FROM GEN. ACCTG. ENC.
19284	MFD	Westwood Middle School	COMMODITY FROM GEN. ACCTG. ENC.
19285	MFD	Virginia Beach City Public Schools	COMMODITY FROM GEN. ACCTG. ENC.
19286	GS	Comware Computers	COMMODITY FROM GEN. ACCTG. ENC.
19287	OS	Responsive Management	COMMODITY FROM GEN. ACCTG. ENC.
19288	MFD	Virginia Union University	COMMODITY FROM GEN. ACCTG. ENC.
19289	MFD	Elizabeth City State University	COMMODITY FROM GEN. ACCTG. ENC.
19290	OS	Pesticides Risk Observatory-Sahel	wire - M0416811
19292	PS	Direction de la Protection de Veget	wire - M0456890
19295	MFD	Fort Valley State University	COMMODITY FROM GEN. ACCTG. ENC.
19296	MFD	University of Rhode Island	COMMODITY FROM GEN. ACCTG. ENC.
19297	PS	Ducks Unlimited, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19298	MFD	Innovatek, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19299	PS	USDA-FS-Southern Research Station	
19300	MFD	University of Florida	COMMODITY FROM GEN. ACCTG. ENC.
19305	AE	Engineering Concepts, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19306	MFD	Institut du Sahel	wire M0010394
19307	MFD	University of South Dakota	COMMODITY FROM GEN. ACCTG. ENC.
19308	GS	Dynamic Structures & Materials, LLC	COMMODITY FROM GEN. ACCTG. ENC.
19309	MFD	Norwegian University	COMMODITY FROM GEN. ACCTG. ENC.
19310	MFD	Munich Wildlife Society	COMMODITY FROM GEN. ACCTG. ENC.
19311	OS	InterAlpine / MSI - Foothill	COMMODITY FROM GEN. ACCTG. ENC.
19314	MFD	University of Pennsylvania	COMMODITY FROM GEN. ACCTG. ENC.
19315	PS	Walter Hearn Associates	COMMODITY FROM GEN. ACCTG. ENC.
19316	OS	O'Keefe & Company, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19318	MFD	Univ of Illinois-Urbana Champaign	COMMODITY FROM GEN. ACCTG. ENC.
19319	MFD	University of Toledo	COMMODITY FROM GEN. ACCTG. ENC.
19320	MFD	West VA Div of Natural Resources	COMMODITY FROM GEN. ACCTG. ENC.
19321	MFD	St. Cloud State University	COMMODITY FROM GEN. ACCTG. ENC.
19322	MFD	University of Rochester	COMMODITY FROM GEN. ACCTG. ENC.
19323	MFD	Florida A & M University	COMMODITY FROM GEN. ACCTG. ENC.
19325	C	Weir International Mining Consultan	COMMODITY FROM GEN. ACCTG. ENC.
19326	MFD	University of California Davis	COMMODITY FROM GEN. ACCTG. ENC.
19327	MFD	Quantum Research Corporation	COMMODITY FROM GEN. ACCTG. ENC.
19328	OS	Digital Signal Processing	COMMODITY FROM GEN. ACCTG. ENC.
19331	OS	New River Woodworks LLC.	COMMODITY FROM GEN. ACCTG. ENC.
19332	MFD	Univ of Maryland Eastern Shore	COMMODITY FROM GEN. ACCTG. ENC.
19333	AE	Journey Designs, L.L.C.	COMMODITY FROM GEN. ACCTG. ENC.
19334	PS	Design Research Associates, Inc.	COMMODITY FROM GEN. ACCTG. ENC.

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	Work Type	Object Code Description	Description
19335	MFD	National Research Council of Canada	COMMODITY FROM GEN. ACCTG. ENC.
19336	PS	Meeker & Associates Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19337	MFD	University of Michigan	COMMODITY FROM GEN. ACCTG. ENC.
19338	PS	CARE International Au Mali	wire - M0475426
19339	MFD	Universidad de Buenos Aires	wire - M0269202
19340	MFD	University of Massachusetts	COMMODITY FROM GEN. ACCTG. ENC.
19341	OS	Spectrum's Edge, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19342	PS	Resources Consultants, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19343	MFD	Purdue Research Foundation	COMMODITY FROM GEN. ACCTG. ENC.
19345	MFD	Laboratoire Central Veterinaire	wire - M0467659
19346	PS	Booz - Allen & Hamilton Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19347	MFD	East Carolina University	COMMODITY FROM GEN. ACCTG. ENC.
19348	PS	CDRM, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19349	PS	Meta Group Consulting	COMMODITY FROM GEN. ACCTG. ENC.
19354	MFD	University of Wyoming	COMMODITY FROM GEN. ACCTG. ENC.
19355	MFD	Northern Illinois University	COMMODITY FROM GEN. ACCTG. ENC.
19356	OS	Newport News Shipbldg & Dry Dock Co	COMMODITY FROM GEN. ACCTG. ENC.
19357	MFD	Northeastern University	COMMODITY FROM GEN. ACCTG. ENC.
19358	MFD	University of Detroit Mercy	COMMODITY FROM GEN. ACCTG. ENC.
19359	OS	TransCore, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19360	GS	Zetas Earth Technologies	wire - M0340999
19361	PS	Boston Medical Center	COMMODITY FROM GEN. ACCTG. ENC.
19362	PS	Building Technology, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19363	MFD	American Society for Eng Education	COMMODITY FROM GEN. ACCTG. ENC.
19364	PS	Inst of Electrical & Electronic Eng	SERVICES
19365	OS	Melyvn Green and Associates, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19367	MFD	University of Waterloo	COMMODITY FROM GEN. ACCTG. ENC.
19369	PS	BAE Control Systems	COMMODITY FROM GEN. ACCTG. ENC.
19371	GS	Kinetic Ceramics, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19372	PS	Ecole Polytechnique Federale De Lau	wire - M0374452
19373	MFD	National Agricultural Rch Org	wire - M0439691
19374	MFD	Carnegie Mellon University	COMMODITY FROM GEN. ACCTG. ENC.
19376	MFD	Stockholm University	wire - M0415868
19377	MFD	Arkansas State Univ	COMMODITY FROM GEN. ACCTG. ENC.
19378	MFD	Drexel University	COMMODITY FROM GEN. ACCTG. ENC.
19380	MFD	Louisian State University	COMMODITY FROM GEN. ACCTG. ENC.
19381	AE	HDR Engineering, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19382	PS	Rockwell Scientific Co LLC	COMMODITY FROM GEN. ACCTG. ENC.
19383	MFD	University of Michigan	COMMODITY FROM GEN. ACCTG. ENC.
19384	MFD	Lehigh University	COMMODITY FROM GEN. ACCTG. ENC.
19385	AE	Veridian Engineering	COMMODITY FROM GEN. ACCTG. ENC.
19386	MFD	Budapest Univ of Tech & Econ	COMMODITY FROM GEN. ACCTG. ENC.
19387	PS	Wilbur Smith Associates	COMMODITY FROM GEN. ACCTG. ENC.
19388	MFD	The Cleveland Clinic Foundation	COMMODITY FROM GEN. ACCTG. ENC.
19390	OS	MapTech	COMMODITY FROM GEN. ACCTG. ENC.

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
19391	PS	CS Technologies	COMMODITY FROM GEN. ACCTG. ENC.
19392	MFD	Rockefeller University	COMMODITY FROM GEN. ACCTG. ENC.
19393	MFD	Logistics Management Institute	COMMODITY FROM GEN. ACCTG. ENC.
19395	OS	NFO WorldGroup	COMMODITY FROM GEN. ACCTG. ENC.
19396	PS	TriData Corporation	COMMODITY FROM GEN. ACCTG. ENC.
19398	GS	Appalachian Resources, LLC	COMMODITY FROM GEN. ACCTG. ENC.
19399	MFD	Cave Spring Junior High School	COMMODITY FROM GEN. ACCTG. ENC.
19401	MFD	National Urban League, Inc.	COMMODITY FROM GEN. ACCTG. ENC.
19404	MFD	Villanova University	COMMODITY FROM GEN. ACCTG. ENC.
19406	MFD	Thomas Jefferson University	COMMODITY FROM GEN. ACCTG. ENC.
19408	MFD	Ctr for Adv of Nat Disc Using Light	COMMODITY FROM GEN. ACCTG. ENC.
19411	PS	Schulman, Ronca, & Bucuvalas	COMMODITY FROM GEN. ACCTG. ENC.
19412	MFD	Univ of Okla Health Sci Ctr	COMMODITY FROM GEN. ACCTG. ENC.
19415	OS	ISIS Labs, LLC	COMMODITY FROM GEN. ACCTG. ENC.
19416	PS	Inst Biol Ctrl Chinese Acad Ag Sci	wire - M0463835
19418	PS	Biol Consulting Serv of N Fla Inc	COMMODITY FROM GEN. ACCTG. ENC.
19423	PS	Fundacao Floresta Tropical	wire - M0476236
20001	MFD	College of William & Mary	COMMODITY FROM GEN. ACCTG. ENC.
20002	MFD	George Mason University	COMMODITY FROM GEN. ACCTG. ENC.
20005	MFD	Radford University	COMMODITY FROM GEN. ACCTG. ENC.
20006	MFD	University of Virginia	COMMODITY FROM GEN. ACCTG. ENC.
20007	MFD	Virginia Commonwealth University	COMMODITY FROM GEN. ACCTG. ENC.
20008	MFD	Virginia State University	COMMODITY FROM GEN. ACCTG. ENC.
20010	MFD	Mary Washington College	COMMODITY FROM GEN. ACCTG. ENC.
20011	MFD	Northern Virginia Community College	COMMODITY FROM GEN. ACCTG. ENC.
21110	MFD	Acquisition of Property-LAND	Okidata 8C Printer
22090	GS	Equipment - AMEX Card	refrig circulator digital
2211	GS	Desktop Client Computers	supplies
22110	GS	Desktop Client Computers	SLAACIV PCI board w/Virtex XCV1000 FPGA technology
2212	OS	Mobile Client Computers	laser printer
22120	OS	Mobile Client Computers	Computer, P4 1.6 GHz
22180	GS	Computer Software Purchases	
2221	GS	College Library Books	Library book
22210	GS	College Library Books	BOOKS
2222	GS	Educational Equipment	supplies
22220	GS	Educational Equipment	Audio Visual Equipment
22222	GS	Educational Equip.- Less Than \$2000	SUPPLIES
22230	GS	Exhibit Equipment	SHOWSTYLE BRIEFCASE
2224	GS	Reference Equipment	Supplies
22240	GS	Reference Equipment	REPRINTS
22280	OS	Educational & Cultural Equip Improv	Wiley Interscience Enhanced Access License for
22310	GS	Electronic Equipment	Pressure System, 32 Channel ESP Model
2232	GS	Photographic Equipment	Supplies
22320	GS	Photographic Equipment	Sony VPL-CX4 Multimedia Projector
2233	GS	Voice & Data Transmission Equipment	

**Appendix A: Account Codes and Work Type Codes**

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
22330	GS	Voice & Data Transmission Equipment	
22380	OS	Electronic & Photographic Improve	Elmo HP-400 HZ Overhead Projector
2241	GS	Laboratory Equipment	supplies
22410	GS	Laboratory Equipment	Probe, VT, 400 NB, 0095856473 1H/19F/13C/31P 5mm
2242	GS	Medical & Dental Equipment	
22420	GS	Medical & Dental Equipment	Handpiece Turbosonic, 20,000 Lagesy Phaco to
22430	GS	Field Equipment	Flipperport to include the following:
22480	OS	Medical & Laboratory Improvements	Repair Defective Control Board for Projector
22510	GS	Agricultural Vehicular Equipment	Straw Blower, B40
22520	GS	Aircraft Equipment	Fixed-wing air transport of fuel barrels from
22530	GS	Construction Equipment	Randolph 3C - Install Exhaust Fan
22540	GS	Motor Vehicle Equipment	Van, 2002 Chevrolet Express Commrci Cutaway
22550	GS	Power Repair & Maintenance Equip	Lawn Mower, Snapper, Yard Cruiser per attached
22560	GS	Watercraft Equipment	Outboard Motor, 35-40 horsepower
22580	GS	Motorized Equipment Improvements	Body, S98ABSW Spacemaker Service
22581	OS	Tractor Improvements	TIRE
22610	GS	Office Appurtenances	Carpet, furnish and install Patcraft Perception
2262	GS	Office Furniture	supplies
22620	GS	Office Furniture	Furniture, Project #02121 dated 4/9/02,
22630	GS	Office Incidentals	Blanket order for Office Supplies
22640	GS	Office Machines	Electronic Folder, FD40
22680	GS	Office Equipment Improvements	OFFICE SUPPLIES
22710	GS	Household Equipment	
22719	GS	Food Service Equipment	Electric Rotary Oven, by Hobart, Model HR7.
22720	GS	Law Enforcement Equipment	Software and updates
22730	GS	Manufacturing Equipment	Woodcutting Radial Arm Saw
22740	GS	Non-power Repair & Maint Equipment	Model 750A Kittyhawk Post Driver
22750	GS	Other Recreational Equipments	Pool Table Package includes 2 cues, triangle,
22751	GS	Sports/Athletic Equipment	Cross Trainer, Life Fitness 9100
22780	GS	Specific Use Equipment Improvements	Switchgear, pad mounted #55162R3, K8 per attached
22810	GS	Built-In Equipment	Casework, Seitz Hall Room 115 per Invitation for
22820	GS	Fixtures	Air Conditioning Unit, 6 Ton Split System A/C
22830	GS	Mechanical Equipment	Air Cooled Condensing Unit, Furnish and Install a
22880	GS	Stationary Equipment	Feed Bin, 12' Foot Diameter, 3 Rings, with
23120	MFD	Acquisition, Buildings	supplies
23130	MFD	Acquisition, Highways	
23210	C	Construction, Bridges	
23220	C	Construction, Buildings	Construct Offices 3rd & 4th Floor - Newman Library
23230	C	Construction, Highways	Installation of Control and Support Equipment on
23240	C	Construction, Water Ports	Repair of culvert due to Hurricane Floyd.
23270	C	Construction, Bridges & Hwy Improve	Confirming Payment for Compressors per invoice
2328	C	Construction, Buildings Improve	Supplies
23280	C	Construction, Buildings Improve	Catering Office Relocation - Owens
3115	MFD	Revenue Bond Financing	fees
31160	MFD	Rev Bond Interest Retirement	debt service
3916	MFD	Expenditure Control	Refund
6223	MFD	Due from Employees	Reimbursement
6350	MFD	Capital Appropriation Receivable	ELECTRIC UTILITY CONSUMPTION TAX
6400	MFD	Inventories	Tuition Payment
6600	MFD	Long-term Noncategorized	Publication
6616	MFD	Long-Term Foreign Bonds - Catg 1	UPWARD BOUND

**VIRGINIA TECH ACCOUNT CODES (Continued)**

Object Code	WorkType	Object Code Description	Description
7209	MFD	Miscellaneous Accounts Payable	
7400	MFD	Accrued Salaries	membership fee
7403	MFD	Salary Fringe Benefits Payable	optional retirement plan
7450	MFD	ASO Retirement Liability	Reimburse dining dollars
7850	MFD	Installment Purchases	installment
7900	MFD	Deferred Revenue	Refund
7915	MFD	Deferred Rev-Advance Deposit VetMed	Refund
7919	MFD	Deferred Rev - Revenue Refunds	Refund

***APPENDIX B:***

***TRADE ASSOCIATIONS AND  
AGENCIES CONTACTED FOR  
VENDOR LISTS***

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**APPENDIX B**  
**TRADE ASSOCIATIONS AND AGENCIES CONTACTED**  
**FOR VENDOR LISTS**

Asian American Society of Central Virginia  
Association of General Contractors  
Black Chamber of Commerce  
Business Development Center, Inc.  
City of Richmond - Department of Economic Development - Office of MBE  
Department of Professional and Occupational Regulation  
Greater Richmond Chamber of Commerce  
Greater Virginia Contractors Association  
Metropolitan Business League  
NAACP (Virginia State Chapter)  
National Association of Women Business Owners (NAWBO) - Richmond Chapter  
National Organization for the Advancement of Hispanics  
National Women Business Owners Corporation  
New Port News, Virginia Chapter of the Hispanic Chapter of Commerce  
Richmond Economic Development Corporation  
Small Business Association  
The Greater Richmond Partnership Inc.  
Virginia Chamber of Commerce  
Virginia Community Development Loan Fund  
Virginia Council of Indians  
Virginia Hispanic Chamber of Commerce  
Virginia Regional Minority Supplier Development Council  
Virginia Small Business Administration  
Women's Business Enterprise National Council

**APPENDIX C:**  
**VERIFICATION LETTER AND**  
**REPORT**

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## APPENDIX C



# COMMONWEALTH of VIRGINIA

Department Of Minority Business Enterprise

Mark R. Warner  
Governor

200-202 N. Ninth Street, 11<sup>th</sup> Floor  
Richmond, Virginia 23219

Edward L. Hamm, Jr.  
Director

Michael Schewel  
Secretary of Commerce and Trade

October 9, 2003

Dear Vendor:

The Commonwealth of Virginia has contracted with MGT of America, Inc., to conduct a study of the state's procurement contracts over the past five years. In order to conduct this analysis, MGT prepared verification reports for each construction contract your firm has had with the Commonwealth during that period. Please review the reports and confirm that the correct information has been collected, and please fill in any missing information. MGT is especially concerned with verifying that they have information **on all of the subcontractors** that worked for you on each contract, not just minority subs. If all the information is accurate and there is no missing information, please return the report and make note that everything is accurate.

After your review and corrections, please return the verification report to Greg Rozsa at MGT via fax, at (850) 385-4501 by 5:00 pm October 28, 2003. If you are unable to fax, you may use the enclosed return envelope to mail the reports to MGT at P.O. Box 16399, Tallahassee, Florida 32317-6399. Mailed responses must be submitted by October 24, 2003, so the report will arrive by the deadline. Questions about the verification report may also be addressed to Greg Rozsa at MGT; his telephone number is (850) 386-5822, ext. 217.

The information provided on the verification reports will be held in strictest confidence and not used for purposes outside this study. Thank you for your participation.

Sincerely,

Edward L. Hamm Jr.  
Director  
Department of Minority Business Enterprise

Attachment (Verification Report)

J:\2256 VA disp\verification reports\Verification Report Cover Letter.doc

# Commonwealth of Virginia

Please verify the contracting and subcontracting data shown and ADD any additional subcontractors and relevant information in the spaces provided. If there are any mistakes or missing information, such as award amounts/dates, please make the necessary corrections. If a subcontractor did not complete work or was replaced, please indicate the replacement subcontractor in the spaces provided. Your assistance in providing complete and accurate information is greatly appreciated.

Please return to Greg Rozsa, MGT of America, Inc., via FAX at (850) 385-4501 by 5 pm Tuesday, October 28, 2003. If you are unable to fax, please use the enclosed self-addressed stamped envelope and mail to PO Box 16399, Tallahassee, FL 32317. Please mail by Friday, October 24th so that the report will arrive by the 28th. If you have any questions, please call (850) 386-5822 Ext 217. Thank you very much for your participation.

Company Name			At Least 51% of Your Firm's Ownership Is... (Check One)	
Contact Person			<input type="checkbox"/> African American	<input type="checkbox"/> Hispanic American
Address			<input type="checkbox"/> Asian American	<input type="checkbox"/> Native American
Address 2			<input type="checkbox"/> Caucasian Male	<input type="checkbox"/> Caucasian Female
City	State	Zip	Business Category <input type="text"/> (Enter One)	
Phone	FAX		C = Construction	PS = Professional Services
Email			OS = Other Services	GS= Goods & Supplies
<input type="checkbox"/> Check if your firm is considered a Non-Profit			AE = Architecture and Engineering	

Contract #	Project #	Award Date	PO #
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Initial Award Amount	Final Contract Value	Services Provided	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Were Subcontractors Utilized on this Contract? Yes <input type="checkbox"/> No <input type="checkbox"/>			

**\*IMPORTANT: PLEASE ADD ANY SUBCONTRACTORS/SUBCONSULTANTS YOU USED ON THIS PROJECT AND THE AMOUNTS THEY WERE PAID**

Subcontractors	Ethnicity	Sub Award	Award Date	Service(s) Provided	Was Sub Replaced?
					Y or N
					Y or N
					Y or N
					Y or N

***APPENDIX D:***  
***CONSTRUCTION CONTRACTS***

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## APPENDIX D

### BCOM CONSTRUCTION CONTRACTS

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	2757	15744	FREDERICKSBURG	21-Jan-98	PREMIER CONTRACTING INC	\$17,117.00
2000	2758	16208	IMP: PAVING, WARRENTON ARMORY	31-Jan-00	JOHN LAKE PAVING CO	\$32,866.00
2000	2759	16209	NC: POWHATAN ARMORY	22-Sep-99	UNITED REFRIGERATION OF VIRGINIA INC	\$2,870,000.00
2002	2760	15163	FINAL SLUDGE EXCAVATION	22-Nov-02	SOUTHSIDE TANK SERVICES INC	\$146,685.00
2000	2761	15163	COSMOLINE CLEANUP	16-Feb-00	HOWARD BROTHERS CONTRACTOR INC	\$153,450.00
2002	2762	15163	DAM UPGRADE	16-Apr-02	HOWARD BROTHERS CONTRACTOR INC	\$196,100.00
2001	2763	15163	SLUDGE PIT #2 - EXCAVATION ONLY	07-Sep-00	L C M CORP	\$13,951.00
2001	2765	16488	SPECIAL CARE UNIT EXPANSION/WANDERGARDEN	28-Mar-01	ACORN CONSTRUCTION LTD	\$758,340.00
2000	2766	16013	IMP: INSTALL FIBER OPTIC CABLE	13-Apr-00	GTE NETWORK SERVICES	\$327,344.00
2000	2767	16134	CAMPUS INTEGRATION - DEMOLITION - ABC STORE	23-Aug-99	S B COX INC	\$36,000.00
2000	2768	16134	CAMPUS INTEGRATION PROJECT	16-Mar-00	F T EVANSINC	\$1,526,941.00
2002	2770	16737	CONTINUE RENOVATION EAST/WEST TERRACE STORMWATER/SEWER SYS	09-Jan-03	DANIEL & CO INC	\$1,189,000.00
1999	2771	15832	NEW CONST: STATE POLICE AREA OFFICE 6 - POWHATAN	07-Apr-99	HOWARD CONSTRUCTION INC	\$260,426.00
1999	2772	15832	NEW CONST: NEW AREA 7 OFFICE - PETERSBURG	01-Oct-98	POSSIE B CHENAULT INC	\$267,432.00
1999	2774	16255	UNDERGROUND STORAGE TANK REPLACEMENT ( 3 TANKS)	01-Feb-99	ENVISION ENVIRONMENTAL LLC	\$92,899.00
1999	2775	16255	UNDERGROUND STORAGE TANK REPLACEMENT (1 TANK)	01-Feb-99	SOUTHSIDE TANK SERVICES INC	\$31,043.00
2002	2776	16308	NEW CONST: MELFA AREA OFFICE RENOVATION & ADDITION	06-Jun-02	PROFICIENT CONSTRUCTION CO	\$180,000.00
2002	2777	16542	NEW CONST: DANVILLE AREA OFFICE	13-Jun-02	BREAKELL INC	\$294,904.00
2002	2778	16137	COMPUTER ROOM - CENTRAL OFFICE RENOVATION	11-Jun-02	WOODLAND CONSTRUCTION INC	\$126,900.00
1999	2779	13945	RN:MADISON BLDG, PH I UPPER/LOWER BASEMENTS & PLAZA DECK	25-Aug-98	HEYWARD & LEE CONSTRUCTION CO INC	\$2,657,000.00
2002	2780	13945	MADISON BLDG - PHASE II - ASBESTOS & BASE BLDG BUILD-OUT	31-Oct-01	UNITED REFRIGERATION OF VIRGINIA INC	\$10,377,000.00
2000	2781	16327	CONSOLIDATED LAB - Y2K EMERGENCY POWER/DISASTER RECOVERY	04-Aug-99	DYNALECTRIC CO	\$409,495.00
2000	2782	16327	MONROE - Y2K EMERGENCY POWER/DISASTER RECOVERY IMPROVEMENTS	10-Aug-99	WACO INC	\$147,573.00
2000	2783	16327	MANSION/CAPITOL - Y2K EMERGENCY POWER/DISASTER RECOVERY	20-Aug-99	MARK ELECTRIC INC	\$464,836.00
2000	2784	16333	HVAC RENOVATION OF ZINCKE BUILDING	28-Jun-00	INDUSTRIAL AIR CONDITIONING & REFRIGERATION CORP	\$470,883.00
2001	2785	16487	UPGRADE ELEVATORS - GENERAL ASSEMBLY BUILDING	12-Jul-00	VIRGINIA ELEVATOR CO INC	\$1,667,139.00
2002	2787	16780	SUPREME COURT BUILDING ELEVATORS MODERIZATION	04-Mar-03	VIRGINIA ELEVATOR CO INC	\$869,881.00
1999	2788	13903	CONSTRUCTION OF SIDEWALKS & DRAINFIELDS - BELLE ISLE STATE P	30-Jul-98	LOYKO VETTER CONSTRUCTION INC	\$48,692.00
1999	2789	13908	SEASHORE STATE PARK WATER LINE	07-Oct-98	EAST COAST UTILITY CONTRACTORS, LTD	\$227,760.00
1999	2790	13908	WESTMORELAND WATER SYSTEM	23-Sep-98	GAMMON WELL CO INC	\$107,442.00
1999	2791	13908	LAKE ANNA STATE PARK - WATER SYSTEM IMPROVEMENTS	21-Oct-98	MORAN BROTHERS EXCAVATING CO INC	\$110,973.00
1998	2793	13916	MAINTENANCE AREA RELOCATION - HUNGRY MOTHER SP	04-Mar-98	GLADE CONSTRUCTION CO INC	\$73,411.00
2000	2794	14290	PINNACLE PHASE II - SITE ACCESS & IMPROVEMENTS	01-Sep-99	PRESNER LAW GROUP PLC	\$127,757.00
1999	2795	14290	CHUB SAND HILL NATURAL AREA - SITE ACCESS & IMPROVEMENT	04-Nov-98	TAVENNER ENTERPRISES INC	\$39,800.00
1999	2796	14290	COWBANE NATURAL AREA PRESERVE - SITE ACCESS & IMPROVEMENT	30-Dec-98	PLECKER CONSTRUCTION CO INC	\$13,409.00
1999	2797	14290	BUFFALO MOUNTAIN NATURAL AREA - SITE ACCESS IMPROVEMENT	14-Apr-99	BAILEY & WELLS INC	\$74,245.00
1999	2799	14367	WATER SYSTEM PUMP HOUSE - POCAHONTAS STATE PARK	20-Apr-99	WACO INC	\$63,840.00
2000	2800	14367	PEDESTRIAN BRIDGE APPROACH - POCAHONTAS STATE PARK	17-Nov-99	POWERS PAVING INC	\$35,238.00
2000	2801	14367	POCAHONTAS HORSE CAMP STAGING AREA	06-Jan-00	SANFORD BROTHERS INC	\$60,750.00
2001	2802	14367	AMPHITHEATER STAGE LIGHTING AND SOUND - POCAHONTAS ST PK	13-Jul-00	BAY ELECTRIC CO INC	\$152,000.00
1998	2803	14410	ANDY GUEST/SHENANDOAH RIVER - MANAGER'S HOUSE	01-Apr-98	PREMIER CONTRACTING INC	\$93,611.00
1998	2804	14410	STAFF RESIDENCE, JAMES RIVER STATE PARK	13-May-98	SMITH WIMER INC	\$120,500.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	2805	14410	STAFF RESIDENCE - STAUNTON RIVER STATE PARK	29-Jul-98	A B JONESCONSTRUCTION CO INC	\$96,700.00
1998	2806	14888	TERMINAL AREA IMPROVEMENTS - KIPTOPEKE	18-Mar-98	TIDEWATER CONSTRUCTION CORP	\$2,080,471.00
2000	2807	15209	DORA JUNCTION SITE IMPROVEMENTS - NEW RIVER STATE PARK	13-Jan-00	H T BOWLING INC	\$89,950.00
2002	2808	15209	OCCONEECHEE STATE PARK - BOAT LAUNCH FACILITY PARKING LOT	05-Sep-01	J GREY WALKER CONTRACTOR INC	\$59,526.00
2002	2809	15209	CONST: BATHHOUSE - ANDY GUESS STATE PARK	18-Jun-02	POSSIE B CHENAULT INC	\$243,295.00
1999	2810	15209	UPGRADE CABINS - DOUTHAT STATE PARK	07-Oct-98	COMMONWEALTH CONTRACTING SERVICES INC	\$86,100.00
1998	2811	15209	FALSE CAPE STATE PARK PUBLIC WATER/COMFORT STATION	27-May-98	SAMCO CONSTRUCTION CO	\$243,715.00
1999	2812	15209	RENOVATE BUNKHOUSE/LODGE FACILITY	07-Jan-99	MAX CONTRACTING INC	\$612,000.00
2002	2813	15209	SMITH MOUNTAIN LAKE - BATHHOUSE	21-Jan-03	HANCOCK FUQUA ROBERTSON INC	\$217,625.00
1998	2815	15209	LAKE ANNA ST. PARK - ROAD CONSTRUCTION PH II	23-Apr-98	S W RODGERS CO INC	\$576,876.00
1998	2816	15209	MAINTENANCE AREA - ANDY GUEST/SHENANDOAH RIVER STATE PARK	17-Apr-98	PREMIER CONTRACTING INC	\$231,977.00
1999	2817	15209	PH 1 - BELLE ISLE STATE PARK, CONSTRUCTION OF VARIOUS STRUCT	30-Jul-98	LOYKO VETTER CONSTRUCTION INC	\$425,309.00
1998	2818	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK	03-Jun-98	PROCESS PIPING & WELDING INC	\$188,458.00
1998	2819	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA	08-Apr-98	J E SEARS & CO INC	\$263,089.00
1998	2820	15209	PHASE I DEVELOPMENT, JAMES RIVER - CONSTRUCT CONTACT STATION	13-May-98	SMITH WIMER INC	\$9,100.00
1999	2821	15209	SMLSP CABIN	30-Sep-98	COLEMAN ADAMS CONSTRUCTION INC	\$945,400.00
1998	2822	15209	DAY USE AREA - ANDY GUEST/SHENANDOAH RIVER STATE PARK	24-Jun-98	LOYKO VETTER CONSTRUCTION INC	\$305,006.00
1999	2823	15209	CONTACT STATION - ANDY GUEST/SHENANDOAH RIVER STATE PARK	09-Jul-98	PREMIER CONTRACTING INC	\$60,507.00
1998	2824	15209	SMITH MOUNTAIN LAKE, NEW CABINS, PHASE II	07-May-98	STREET CONSTRUCTION CO INC	\$549,675.00
1999	2825	15209	STAUNTON RIVER STATE PARK - FLOATING PIER	01-Oct-98	BOOTH & CO INC	\$99,500.00
2000	2826	15209	DORMITORY ADDITION - NATURAL TUNNEL STATE PARK	17-Nov-99	EVANS CONSTRUCTION SERVICES INC	\$398,237.00
2000	2827	15209	OCCONEECHEE STATE PARK - BOAT LAUNCH FACILITY	10-May-00	J SANDERS CONSTRUCTION CO	\$533,878.00
1999	2828	15217	CALEDON SP ADA RENOV	29-Jul-98	SPACEMAKERS INC	\$133,317.00
2000	2829	15217	DOUTHAT ADA	08-Sep-99	COMMONWEALTH CONTRACTING SERVICES INC	\$57,800.00
1999	2830	15217	FAIRY STONE ADA	25-Mar-99	CARNELL CONSTRUCTION CORP	\$11,790.00
1999	2831	15217	H. MOTHER ADA	29-Jul-98	GLADE CONSTRUCTION CO INC	\$59,300.00
1999	2832	15217	LEESYLVANIA FISHING PEIR	02-Mar-99	R & W CONSTRUCTION INC	\$138,990.00
1998	2833	15294	ANDY GUEST STATE PARK - UTILITIES & ELECTRIC SERVICE	28-May-98	EAST COAST UTILITY CONTRACTORS, LTD	\$257,690.00
1998	2834	15294	BASIC INFRASTRUCTURE, JAMES RIVER ST. PARK, WATER DISTRIBUTI	07-Apr-98	MID STATE CONSTRUCTION CO INC	\$249,200.00
1998	2835	15294	DRAINFIELDS - JAMES RIVER STATE PARKS	03-Jun-98	PROCESS PIPING & WELDING INC	\$70,194.00
1999	2836	15297	NATURAL TUNNEL STATE PARK - OBSERVATION DECK	07-Apr-99	CHAPMAN CONSTRUCTION CO INC	\$54,900.00
1999	2837	15298	POOR MOUNTAIN NATURAL AREA PRESERVE SITE ACCESS & IMPROVEMEN	17-Feb-99	BAILEY & WELLS INC	\$70,900.00
2000	2838	15303	RN VISITOR CENTER, ENVIROMENTAL EDUCATION CTR	29-Mar-00	WYANT GENERAL CONTRACTING INC	\$204,500.00
1998	2839	15536	IMP: KIPTOPEKE FERRY TERMINAL	18-Mar-98	TIDEWATER CONSTRUCTION CORP	\$1,071,759.00
1998	2840	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA	21-Jan-98	J E SEARS & CO INC	\$115,501.00
2001	2841	15739	DEPOT RELOCATION/RENOVATION - STAUNTON RIVER BATTLEFIELD	01-Aug-00	PRO CONSTRUCTION SERVICES LC	\$420,977.00
1998	2842	16160	KIPTOPEKE - REMOVE & DISPOSE OF UST AT KIPTOPEKE TERMINAL	04-Mar-98	ATLANTIC ENVIRONMENTAL	\$3,100.00
1999	2843	16204	IMP: DREDGING & ASSOCIATED IMPROVEMENTS, BEAR CREEK LAKE STA	02-Dec-98	MC GEES CRANE RENTAL INC	\$429,576.00
1999	2844	16205	WILDERNESS ROAD STATE PARK - NEW WATER SYSTEM	11-Feb-99	PETE SUMPTER GENERAL CONTRACTOR	\$25,880.00
1999	2845	16290	NATURAL TUNNEL STATE PARK - ASBESTOS & LEAD IN PAINT ABATEME	04-May-99	DREWCO ENTERPRISES INC	\$5,360.00
2000	2846	16306	IMP: SMILEY BLOCK PROPERTY BOAT RAMP ACCESS	01-Mar-00	UNDERWATER STRUCTURES INC	\$133,333.00
2000	2847	16322	MASON NECK STATE PARK - SHORELINE EROSION CONTROL	01-Sep-99	MC GEES CRANE RENTAL INC	\$242,753.00
2002	2848	16576	WILDERNESS ROAD - COMFORT STATION	07-Jan-03	CHAPMAN CONSTRUCTION CO INC	\$177,425.00
2002	2849	16576	WILDERNESS ROAD - MAINTENANCE AREA	07-Jan-03	CHAPMAN CONSTRUCTION CO INC	\$491,960.00
2002	2850	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK	28-Aug-02	EAST COAST UTILITY CONTRACTORS, LTD	\$1,667,000.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2851	15490	RN: CARTER HALL DORMITORY	26-Oct-00	UNITED REFRIGERATION OF VIRGINIA INC	\$5,232,000.00
2002	2852	15491	EMERGENCY STRUCTURAL REPAIRS - ONLY	13-Jul-01	MATHERS CONSTRUCTION CO	\$88,600.00
2000	2853	15770	REMOVE/REPLACE UNDERGROUND STORAGE TANKS - PHASE II	02-Feb-00	TYREE ORGANIZATION LTD	\$117,925.00
1999	2854	14736	RANDLOPH HALL HEATING SYSTEM CONVERSION	08-Jul-98	C B C ENTERPRISES INC	\$818,000.00
1999	2855	14736	BOTETOURT COMPLEX HEATING SYSTEM CONVERSION	01-Jul-98	BAY SIDE CONTRACTING INC	\$416,717.00
1998	2856	14736	MUSCARELLE MUSEUM HEATING CONVERSION	28-May-98	POWER MECHANICAL INC	\$41,572.00
1998	2857	14736	ROGERS HALL HEATING SYSTEM CONVERSION	28-May-98	JOHN Y WRIGHT CO INC	\$203,555.00
2002	2858	14736	LANDRUM PUMP STATION FORCE MAIN LINE	26-Feb-02	J SANDERS CONSTRUCTION CO	\$299,800.00
2001	2859	15328	RENOVATION OF FACILITIES MANAGEMENT BLDG	23-Apr-01	STRICKLAND WILSON CONSTR CO INC	\$1,211,900.00
2000	2860	15745	OLD DOMINION HALL - FLOORING REPLACEMENTS	31-Mar-00	STRICKLAND WILSON CONSTR CO INC	\$29,900.00
1998	2861	15745	FRATERNITY ROOF REPLACEMENT UNITS A-E	18-Mar-98	STATES ROOFING CORP	\$197,560.00
1998	2862	15745	FRATERNITY INTERIOR RENOVATIONS, UNIT A-E, PLANNING-ASBESTOS	22-May-98	STRICKLAND WILSON CONSTR CO INC	\$494,600.00
1998	2863	15745	FRATS INTERIOR RENOVATIONS UNITS K-M	22-May-98	STRICKLAND WILSON CONSTR CO INC	\$310,200.00
1999	2864	15745	HUNT HALL - BUILDING RENOVATIONS	20-Jan-99	MARSHALL MEREDITH CO INC	\$882,016.00
1999	2865	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO	17-Mar-99	VITERI CONSTRUCTION MGMT INC	\$655,000.00
1999	2866	15745	DORM ROOFS - LANDRUM, BROWN BRYAN AND JEFFERSON HALLS	23-Apr-99	AMERICAN SHEET METAL CORP	\$647,100.00
2000	2867	15745	RANDOLPH/PRESTON HALL STRUCTURAL REPAIRS	23-Mar-00	ARIZONA LTD	\$42,600.00
2000	2868	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS	20-Apr-00	O K JAMES CONSTRUCTION INC	\$521,432.00
2000	2869	15745	MONROE HALL RENOVATION - PHASE II	23-Mar-00	ARIZONA LTD	\$394,000.00
2001	2870	15745	YATES HALL AREA OF RESCUE ASSISTANCE	12-Apr-01	STRICKLAND WILSON CONSTR CO INC	\$42,600.00
2002	2871	15745	BROWN HALL ADA RAMP	10-Apr-02	D B ELSWICK CONSTRUCTION CO INC	\$39,974.00
2000	2872	15864	IMP: MARSHALL-WYTHE LAW LIBRARY, NORTH WING ADDITION	26-Apr-00	C B C ENTERPRISES INC	\$3,182,500.00
2000	2874	15921	IMP: RENOVATION OF WREN BUILDING	31-Aug-99	VIRTEXCO INCORP	\$2,284,818.00
1998	2875	15971	WILLIAM & MARY HALL LOWER ROOF RE-ROOFING	11-Feb-98	BLOCK ROOFING CORP	\$185,253.00
1998	2876	15971	WILLIAM & MARY HALLK - RISERS	03-Mar-98	FLOWERS SCHOOL EQUIPMENT CO INC	\$518,067.00
1999	2878	15971	WILLIAM & MARY HALL - ROOF VENTILATORS	05-May-99	JOHN Y WRIGHT CO INC	\$62,353.00
1998	2879	15971	WILLIAM & MARY HALL EXTERIOR (CONCRETE FACADE)	30-Apr-98	TOP PAINTING CO INC	\$248,975.00
2001	2880	15971	WILLIAM & MARY HALL STORM SEWER SYSTEM	19-Jul-00	STILLEY CO INC	\$62,356.00
1999	2881	15972	NEW CONST: ENVIRONMENTAL FIELD LABORATORY	30-Jun-99	VIRTEXCO INCORP	\$932,827.00
2001	2883	16131	STORM DRAINAGE - OLD CAMPUS	19-Jul-00	ULTRA SERVICES INC	\$69,900.00
2002	2884	16225	IMP: HANDICAPPED ACCESS - INSTALL RAMPS, HANDRAILS, CURBENT	12-Mar-02	J SANDERS CONSTRUCTION CO	\$114,230.00
2002	2885	16241	PHASE I - HEATING & COOLING UPGRADES	11-Nov-02	HAMPTON ROADS MECHANICAL INC	\$891,711.00
2002	2886	16241	IMP: PH II - NEW CAMPUS HEATING & COOLING PLANT/DIST. SYST	08-Jan-02	HAMPTON ROADS MECHANICAL INC	\$2,656,781.00
2001	2887	16340	BARRETT HALL RENOVATIONS PHASE II	22-Feb-01	VIRTEXCO INCORP	\$1,248,764.00
2001	2888	16340	OLD DOMINION RENOVATIONS PHASE I	21-Mar-01	O K JAMES CONSTRUCTION INC	\$687,000.00
2001	2889	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY	22-Mar-01	VIRTEXCO INCORP	\$434,523.00
2002	2890	16340	OLD DOMINION HALL RENOVATION PHASE II	02-Apr-02	MIDATLANTIC GROUP INC	\$485,500.00
2001	2891	16340	ELECTRICAL UPGRADES BROWN HALL	28-Mar-01	A M SAVEDGE CO INC	\$74,000.00
2002	2892	16340	DAWSON HALL RENONVTIONS	02-Apr-02	DAVID A NICE BUILDERS INC	\$489,100.00
2002	2893	16340	BARRETT HALL ROOF REPLACEMENT	13-Feb-03	ROOF SYSTEMS OF VA INC	\$481,560.00
1999	2894	14066	JORDAN HALL/RENOVATE LABS 3072 - 3083	09-Dec-98	MARTIN HORN INC	\$376,656.00
2000	2895	14066	CLEMONS LIBRARY - ROBERTSON MEDIA CENTER	23-Sep-99	MARTIN HORN INC	\$391,144.00
2002	2896	15598	NEW CONST: SPECIAL COLLECTIONS LIBRARY	11-Dec-01	BEERS SKANSKA INC	\$19,266,864.00
1998	2897	15795	SITWORK - STUDENT HOUSING FOR 140	04-Jun-98	DIXIE CO	\$343,795.00
1999	2898	15795	CONST: STUDENT RESIDENCE HALL	23-Feb-99	S P CAHILL & ASSOC INC	\$4,484,275.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	2899	15852	HEALTH SCIENCES LIBRARY, BASEMENT RENO/ADITION	17-Feb-99	DANIEL & CO INC	\$3,436,300.00
2000	2900	15871	PHASE 3 - GARAGE ACCESS ROAD PROJECT	09-Mar-00	DANIEL & CO INC	\$600,000.00
2000	2901	15880	IMP: CLARK HALL RENOVATION & ADDITION	15-Jun-00	BARTON MALOW CO	\$2,190,000.00
2001	2902	15880	CIVIL & SITE UTILITIES - CLARK HALL	18-Dec-00	PARHAM CONSTRUCTION CO	\$1,080,838.00
2001	2904	15880	CLARK HALL - CAST IN PLACE CONCRETE	18-Dec-00	PIEDMONT CONCRETE CONTRACTORS INC	\$687,200.00
2001	2905	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK	18-Dec-00	SULLIVAN MECHANICAL CONTRACTORS INC	\$9,057,000.00
2001	2906	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK	18-Dec-00	SULLIVAN MECHANICAL CONTRACTORS INC	\$9,057,000.00
2001	2907	15880	CHILLED WATER PLANT ELECTRICAL	13-Dec-00	DESIGN ELECTRICAL CONTRACTORS & ENGINEERS INC	\$2,959,655.00
2001	2908	15880	FIRE PROTECTION - CLARK HALL	16-Jan-01	EAST COAST FIRE PROTECTION INC	\$572,900.00
2001	2909	15880	ELEVATOR - CLARK HALL ADDITION & RENOVATION	05-Dec-00	VIRGINIA ELEVATOR CO INC	\$239,307.00
2001	2910	15880	MASONRY - CLARK HALL	06-Feb-01	BAT MASONRY CO INC	\$1,325,000.00
2001	2911	15880	ROOFING - CLARK HALL RENOVATIONS	06-Feb-01	W A LYNCH ROOFING CO INC	\$398,640.00
2001	2912	15880	RENONVATION & SITE STRUCTURAL - CLARK HALL	15-Feb-01	MARTIN HORN INC	\$1,470,298.00
2001	2913	15880	FUME HOODS & LAB CASEWORK - CLARK HALL RENOVATION	08-Feb-01	NYCOM INC	\$868,969.00
2001	2914	15880	DRYWALL PROJECT PACKAGE - CLARK HALL	20-Feb-01	PIEDMONT PLASTER & DRYWALL INC	\$1,608,400.00
2001	2915	15880	ARCHITECTURAL METAL & GLASS PACKAGE - CLARK HALL	27-Feb-01	RIVERFRONT GLASS INC	\$543,394.00
2001	2916	15880	CUSTOM CEILING PACKAGE - CLARK HALL	06-Mar-01	CEILING & FLOOR SHOP INC	\$229,567.00
2001	2917	15880	CLARK HALL - PAINTING PACKAGE	27-Feb-01	GLIDEWELL BROTHERS INC	\$273,233.00
2001	2918	15880	CLARK HALL - ACOUSTICAL CEILING PACKAGE	21-Feb-01	CEILING & FLOOR SHOP INC	\$221,477.00
2002	2919	15880	CLARK HALL RENONVATION - MILLWORK ONLY	28-Aug-01	HARRISONBURG CONSTRUCTION CO INC	\$470,675.00
2002	2920	15880	CLARK HALL RENOVATION - FLOORING ONLY	19-Sep-01	FLOOR SHOW INC	\$347,000.00
2001	2921	15880	CLARK HALL RENONVATIONS - FIREPROOFING ONLY	17-May-01	NASH CONSTRUCTION CO & ASSOC INC	\$85,100.00
2002	2922	15880	CLARK HALL ADDITION & RENOVATION - FIRE SHUTTERS	13-Feb-02	RIVANNA ASSOC INC	\$49,000.00
2002	2923	15880	CLARK HALL - SITE HARDSCAPE & GRADING	21-Mar-02	PARHAM CONSTRUCTION CO	\$184,061.00
1999	2924	15923	SCOTT STADIUM EXPANSION - CONSTRUCTION MANAGEMENT	02-Sep-98	BARTON MALOW CO	\$3,422,966.00
1998	2925	15923	C. SMITH/SCOTT STADIUM EXPANSION - GRADING	18-Mar-98	FAULCONER CONSTRUCTION CO INC	\$279,652.00
1998	2926	15923	C. SMITH/SCOTT EXPANSION - SCOREBOARD	20-May-98	MARTIN HORN INC	\$948,466.00
1999	2927	15923	SCOTT STADIUM EXPANSION- SOUTH END ZONE UTILITIES RELOCATION	30-Jul-98	FAULCONER CONSTRUCTION CO INC	\$1,223,225.00
1999	2929	15923	STADIUM EXPANSION - PRECAST CONCRETE	29-Sep-98	SHOCKEY BROTHERS INC	\$5,823,348.00
1999	2930	15923	SCOTT STADIUM EXPANSION - PERMANANT EXCAVATION SUPPORT SYSTE	07-Oct-98	SCHNABEL FOUNDATION CO	\$1,024,300.00
1999	2931	15923	SCOTT STADIUM EXPANSION - CAST-IN-PLACE CONCRETE	08-Oct-98	CLEVELAND CEMENT CONTRACTORS INC	\$10,633,100.00
1999	2932	15923	SCOTT STADIUM EXPANSION - DEMOLITION	14-Oct-98	S B COX INC	\$264,195.00
1999	2933	15923	SOUTH END ZONE (SEZ) MECHANICAL - SCOTT STADIUM EXPANSION	24-Nov-98	SOUTHERN AIR INC	\$2,671,760.00
1999	2934	15923	SEZ ELECTRICAL - SCOTT STADIUM EXPANSION	10-Dec-98	DESIGN ELECTRICAL CONTRACTORS & ENGINEERS INC	\$2,942,450.00
1999	2935	15923	SEZ FIRE PROTECTION - SCOTT STADIUM EXPANSION	25-Nov-98	CHESAPEAKE SPRINKLER CO	\$278,705.00
1999	2936	15923	SEZ MASONRY - SCOTT STADIUM EXPANSION	03-Dec-98	BAT MASONRY CO INC	\$2,768,000.00
1999	2937	15923	UTILITY DISTRIBUTION - SCOTT STADIUM EXPANSION	09-Dec-98	PARHAM CONSTRUCTION CO	\$514,023.00
1999	2938	15923	SCOTT STADIUM EXPANSION - ARCHITECTURAL PRECAST	10-Dec-98	SHOCKEY PRECAST GROUP	\$2,321,613.00
1999	2939	15923	SCOTT STADIUM EXPANSION - STRUCTURAL STEEL	10-Dec-98	JAMES RIVER IRON INC	\$2,219,500.00
1999	2940	15923	SCOTT STADIUM EXPANSION - DRYWALL	03-Dec-98	MARTIN HORN INC	\$1,679,800.00
1999	2941	15923	SCOTT STADIUM EXPANSION - CAULKING	03-Dec-98	GLIDEWELL BROTHERS INC	\$287,700.00
1999	2942	15923	ELEVATORS - C. SMITH CENTER/SCOTT STADIUM EXPANSION	24-Feb-99	VIRGINIA ELEVATOR CO INC	\$452,012.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	2943	15923	SCOTT STADIUM EXPANSION - GLASS & GLAZING	04-Dec-98	RIVERFRONT GLASS INC	\$305,786.00
1999	2945	15923	MILLWORK - C.SMITH CENTER/SCOTT STADIUM EXPANSION	04-Feb-99	HARRISONBURG CONSTRUCTION CO INC	\$479,184.00
1999	2946	15923	PAINTING & WALL COVERINGS - C.SMITH CENTER/SCOTT STADIUM EXP	04-Feb-99	GLIDEWELL BROTHERS INC	\$460,000.00
1999	2947	15923	CERAMIC TILE - C. SMITH CENTER/SCOTT STADIUM EXPANSION	18-Feb-99	DILLON STONE CORP	\$130,200.00
1999	2948	15923	PRESIDENT AND PRESS BOXES - C. SMITH CENTER/SCOTT STADIUM EX	10-Feb-99	MARTIN HORN INC	\$2,242,000.00
1999	2949	15923	SCOTTS STADIUM - SITE IMPROVEMENTS	18-Feb-99	FAULCONER CONSTRUCTION CO INC	\$4,940,262.00
1999	2950	15923	SCOTT STADIUM - MISCELLANEOUS CONTRETE	27-May-99	CLEVELAND CEMENT CONTRACTORS INC	\$487,500.00
2000	2951	15924	NEW CONST: BIOMEDICAL ENGINEERING & MEDICAL SCIENCE BLDG	17-Aug-99	BEERS SKANSKA INC	\$30,100,106.00
2000	2952	15961	NEW CONST: EAST PRECINCT CHILLER PLANT	09-Mar-00	DANIEL & CO INC	\$7,351,000.00
2000	2954	16056	IMP: JORDAN HALL 6TH FLOOR, BIOCHEMISTRY RENOVATIONS	03-Nov-99	DANIEL & CO INC	\$1,228,000.00
1999	2955	16058	ELECTRICAL CONNECTION OLSSON HALL TO ALDERMAN SUBSTATION	02-Sep-98	POSSIE B CHENAULT INC	\$487,913.00
2000	2956	16058	IMP: OLD MED SCHOOL - 5TH FLR. - PITUITARY LAB RENOVATION (	26-May-00	BEERS SKANSKA INC	\$1,701,865.00
2000	2957	16058	IMP: OLD MED SCHOOL - 5TH FLR. - NEPHROLOGY LAB RENOVATION (	26-May-00	BEERS SKANSKA INC	\$528,165.00
2000	2958	16058	BARRINGER & DAVIS WINGS - 5TH FLR - BIOMEDICAL ETHICS RENOVA	01-Jul-99	MATHERS CONSTRUCTION CO	\$392,000.00
2001	2959	16058	INSTALL 700-TON CHILLER FOR NEWCOMB CHILLED WATER LOOP	11-Oct-00	CAPITOL BOILER INC	\$690,000.00
2000	2960	16058	IMP: OLD CABELL HALL LANGUAGE LAB	11-Aug-99	MARTIN HORN INC	\$491,439.00
2001	2961	16058	OLD JORDAN HALL/RENOVATE PHARMACOLOGY LABS 5053-5058	21-Dec-00	CRENSHAW CONSTRUCTIONS CO INC	\$488,000.00
2001	2962	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERALD SCHOOL	09-Nov-00	SULLIVAN MECHANICAL CONTRACTORS INC	\$519,380.00
2002	2963	16094	NEW CONST: REPLACE OBSERVATORY HILL DINING HALL	16-Dec-02	BRANCH & ASSOC INC	\$16,047,240.00
2000	2966	16243	IMP: RENOVATE LAMBERTH FIELD RESIDENCE AREA	09-Feb-00	BEERS SKANSKA INC	\$3,080,200.00
2001	2968	16244	PRIVATE CLINICS/RENOVATE FOR ADULT SURGERY	27-Jun-01	ADOM INC	\$767,564.00
2001	2969	16277	SFC ADDITION SCHOOL OF LAW (EARLY SITE/DEMO PACKAGE)	26-Jul-00	FAULCONER CONSTRUCTION CO INC	\$305,400.00
2001	2970	16277	NEW CONST: STUDENT & FACULTY CENTER - SCHOOL OF LAW	03-Nov-00	BEERS SKANSKA INC	\$5,775,173.00
2002	2971	16280	NEW CONST: ADDTION TO NATIONAL RADIO ASTRONOMY OBSERVATORY	12-Mar-03	MARTIN HORN INC	\$6,131,001.00
2002	2972	16281	MULTIPURPOSE ARENA - PARKING GARAGE FOUNDATIONS	27-Mar-03	CLEVELAND CEMENT CONTRACTORS INC	\$1,598,200.00
2002	2973	16285	MATERIALS RESEARCH SCIENCE & ENGINEERING CENTER	03-Oct-02	BARTON MALOW CO	\$185,000.00
2002	2974	16285	CHILLED WATER PIPING IMPROVEMENTS - MATERIALS SCIENCE ENGINE	02-Dec-02	BARTON MALOW CO	\$586,400.00
1999	2975	16328	GILMER HALL FIRST FLOOR TEACHING LABS RENOVATION	29-Apr-99	CRENSHAW CONSTRUCTIONS CO INC	\$508,000.00
2001	2976	16337	IMP: RENOVATE PEABODY HALL	20-Jul-00	MARTIN HORN INC	\$1,817,510.00
2001	2977	16381	NEW CONST: RENOVATE & CONSTRUCT ADDITION TO MILLER CENTER	07-Sep-00	BEERS SKANSKA INC	\$5,236,707.00
2002	2978	16382	CONSTRUCT EMMET STREET BRIDGE	05-Dec-02	HAMMOND MITCHELL	\$2,435,660.00
2002	2979	16382	CONSTRUCT EMMET STREET BRIDGE	05-Dec-02	HAMMOND MITCHELL	\$2,435,660.00
2002	2980	16383	NEW CONST: CONSTRUCT ADDITION TO AQUATIC & FITNESS CENTER	03-Jul-02	NIELSEN BUILDERS INC	\$7,133,610.00
2001	2981	16385	NEW CONST: MONROE LANE STUDENT RESIDENCE HALL - CONSTRUCTIO	09-Mar-01	BEERS SKANSKA INC	\$5,693,707.00
2001	2982	16387	W. M. KECK CENTER FOR CELLULAR IMAGING	01-Nov-00	ADOM INC	\$358,684.00
2001	2983	16387	COBB HALL RENOVATE KAUL LAB, ROOM 1029	04-May-01	ADOM INC	\$458,535.00
2002	2984	16387	BIOCHEMISTRY: RENONVATE COMPUTATIONAL GENOMICS CENTER/6THFL	30-Aug-02	WOODLAND CONSTRUCTION INC	\$482,238.00
2001	2985	16387	IMP: UTILITY INFRASTRUCTURE UPGRADE (MULTISTORY)	02-May-01	FAULCONER CONSTRUCTION CO INC	\$679,820.00
2002	2987	16462	IMP: INSTALL FIRE SPRINKLER SYSTEM IN CHEMISTRY BUILDING	18-Jun-02	MARTIN HORN INC	\$589,109.00
2002	2989	16638	BASEBALL FIELD RENOVATIONS - CONSTRUCTION MANAGEMENT	10-Jul-01	MARTIN HORN INC	\$169,700.00
2002	2991	16638	BASEBALL FIELD RENOVATIONS - SITEWORK	20-Jul-01	MARTIN HORN INC	\$379,696.00
2002	2992	16638	BASEBALL FIELD UPGRADES - BUILDING PACKAGE	20-Jul-01	MARTIN HORN INC	\$1,443,177.00
2002	2993	16638	BASEBALL FIELD RENOVATIONS - LIGHTING PACKAGE	19-Dec-01	MARTIN HORN INC	\$374,531.00
2002	2994	16638	BASEBALL FIELD RENOVATIONS - PH 2 BUILDING PACKAGE	02-Nov-01	MARTIN HORN INC	\$229,079.00
2002	2995	16638	BASEBALL FIELD RENOVATION - SITE PACKAGE, PH 2	11-Jan-02	MARTIN HORN INC	\$60,426.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2996	16638	BASEBALL FIELD - FENCE	22-May-02	HERCULES FENCE	\$1.00
2000	2998	14815	CASSELL COLISEUM PARKING LOT	19-Apr-00	L H SAWYER PAVING CO INC	\$353,934.00
2002	2999	14815	ADD PARKING SPACES IN FOUR LOTS	07-May-02	L H SAWYER PAVING CO INC	\$174,330.00
2001	3000	15096	SOUTHGATE CENTER PROJEC T	21-Mar-01	J E JAMERSON & SONS INC	\$2,028,075.00
2002	3001	15096	STUDENT SERVICES FACILITY	29-Aug-01	ACORN CONSTRUCTION LTD	\$5,001,504.00
2001	3002	15232	NC: DRY RENDERING FACILITY	15-Nov-00	CLARK BROTHERS CO INC	\$1,516,700.00
1998	3003	15747	NEW CONST: ADVANCED COMMUNICATION & TECHNOLOGY CENTER(PLANNI	18-Mar-98	BRANCH & ASSOC INC	\$21,314,799.00
1998	3004	15800	STUDENT RESIDENCE HALL	08-Apr-98	BRANCH & ASSOC INC	\$7,659,000.00
2000	3005	15803	NEW CONST: PLAN SPECIAL PURPOSE HOUSING	19-Jan-00	BRANCH & ASSOC INC	\$8,416,500.00
1998	3006	15944	LEE HALL - SPRINKLER & FIRE ALARM INSTALLATION	29-Apr-98	VIRGINIA SPRINKLER CO INC	\$1,109,120.00
1999	3007	15944	AMBLER - JOHNSON & LEE SPRINKLERS	28-Oct-98	VIRGINIA SPRINKLER CO INC	\$1,526,510.00
2000	3008	15965	UPPER QUAD PHASE II- SHANKS HALL	24-Nov-99	J E JAMERSON & SONS INC	\$5,234,000.00
2001	3009	15965	RENOVATION OF SHULTZ HALL	01-Aug-00	U S CONSTRUCTION OF ROANOKE INC	\$918,000.00
1999	3010	15967	NEW CONST: AIRPORT PARALLEL TAXIWAY	16-Feb-99	ALLEGHENY CONSTRUCTION CO INC	\$1,093,840.00
2002	3011	16084	CONST: NEW CHEMISTRY & PHYSICS BUILDING	30-Nov-01	BRANCH & ASSOC INC	\$17,846,145.00
1999	3012	16095	DEITRICK DINING HALL RENOVATIONS - HVAC PHASE I	31-Mar-99	HARRIS GENERAL & MECHANICAL	\$1,380,280.00
2002	3013	16143	CONST: ALUMNI CENTER, CONTINUING EDUCATION CTR & HOTEL CO	13-Mar-03	BRANCH & ASSOC INC	\$31,490,700.00
2002	3014	16191	NEW CONST: REPLACEMENT DAIRY SCIENCE CENTER	27-Aug-02	J E JAMERSON & SONS INC	\$3,014,000.00
2000	3015	16191	MILKING EQUIPMENT	02-Jan-00	DAIRYMEN SPECIALTY CO INC	\$460,863.00
2002	3017	16287	WILLIAMS HALL WINDOW REPLACEMENT	05-Mar-03	APPOMATTOX GLASS & STOREFRONT INC	\$538,125.00
2002	3018	16466	CHEATHAM HALL FIRE ALARM INSTALLATION	23-Apr-02	VARNEY ELECTRIC CO INC	\$78,350.00
2002	3019	16466	FIRE ALARM - BURRUSS, DERRING, RANDOLPH & MCBRYDE HALLS	03-Dec-02	VARNEY ELECTRIC CO INC	\$815,600.00
2002	3020	16477	NEW CONST: CAREER SERVICES FACILITY	15-Oct-02	AVIS CONSTRUCTION CO INC	\$3,552,570.00
2001	3021	16480	STADIUM EXPANSION - SOUTH ENDZONE - PRECAST CONCRETE	23-Mar-01	SHOCKEY PRECAST GROUP	\$2,879,479.00
2002	3023	16483	NEW CONST: CONSTRUCT ELECTRIC SERVICE FACILITY	09-Sep-02	LIONBERGER CONSTRUCTION CO	\$1,967,500.00
2002	3025	16485	BIOINFORMATICS FACILITY - PHASE I	16-Apr-02	BRANCH & ASSOC INC	\$12,944,345.00
2002	3026	16485	BIOINFORMATICS FACILITY - PHASE II	17-Dec-02	BEERS SKANSKA INC	\$15,190,144.00
2002	3027	16486	RECREATION FIELD SUPPORT BUILDING	02-Jul-02	G & H CONTRACTING INC	\$464,235.00
2002	3028	16493	NEW CONST: CONSTRUCT GEOTECHNICAL RESEARCH LAB.	29-Jan-02	AVIS CONSTRUCTION CO INC	\$656,700.00
2002	3029	16534	NEW CONST: MICROELECTRONIC LABORATORY	05-Feb-02	ADVANCE TEC LLC	\$1,384,033.00
1999	3030	12240	WEST HOSPITAL COMPLEX REUSE: MULTISTORY RENOVATIONS	25-Nov-98	P N C CORP	\$151,133.00
1999	3031	16061	IMP: RENOVATE DIGESTIVE HEALTH CENTER	20-Oct-98	MARTIN HORN INC	\$2,610,000.00
1999	3032	16065	ADULT BONE MARROW - CRYOPRESERVATION LAB (STEM CELL)	30-Sep-98	WOODLAND CONSTRUCTION INC	\$316,000.00
1999	3033	16065	ADULT BONE MARROW - INFUSION CENTER	30-Sep-98	WOODLAND CONSTRUCTION INC	\$474,900.00
2002	3034	16246	NEUROSURGEY CLINIC RENOVATION	27-Feb-02	ARTISAN CONSTRUCTION OF AMERICA INC	\$1,050,950.00
2002	3035	16342	IMP: IMPROVE AMBULATORY CARE CLINICS	27-Jun-02	CRENSHAW CONSTRUCTIONS CO INC	\$1,921,058.00
2001	3036	16391	IMP: RENONVATE WEST COMPLEX PARKING COURT	02-May-01	FAULCONER CONSTRUCTION CO INC	\$1,536,898.00
2001	3037	16563	IMP: RENOVATE SURGERY CLINICS	27-Jun-01	ADOM INC	\$808,000.00
2002	3038	16566	IMP: RENOVATE INTENSIVE CARE UNITS	24-Aug-01	MARTIN HORN INC	\$1,512,133.00
1998	3039	15565	ADA RAMP - KILBOURNE HALL	14-Apr-98	HOLLANDS GENERAL CONTRACTORS INC	\$4,000.00
1999	3040	15565	ADA VIEWING PAD - PARADE GROUND - CURB CUTS - ADA SIGNAGE	02-Apr-99	HOLLANDS GENERAL CONTRACTORS INC	\$22,808.00
2001	3041	15565	PORTABLE ADA RAMP	10-Nov-00	MOBILITY PLUS	\$3,608.00
1999	3042	15860	RENOVATIONS TO SCOTT SHIPP HALL/ ABATEMENT DEMOLITIONS	17-Feb-99	ATLANTIC ENVIRONMENTAL	\$425,414.00
1999	3043	15860	RENOVATION OF SCOTT SHIPP HALL	06-Jun-99	THOR INC	\$4,630,000.00
2002	3044	15860	SCOTT SHIPP HALL RETAINING WALL REPLACEMENT	28-Nov-01	T MUSGROVE CONSTRUCTION CO INC	\$424,500.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	3045	16162	BARRACKS NETWORK	07-Jul-98	COMPUTER CABLING TELEPHONE SERVICE INC	\$269,000.00
1999	3046	15893	DANIEL GYM A/C - AUDIO VISUAL	28-Apr-99	UNITED REFRIGERATION OF VIRGINIA INC	\$190,320.00
2000	3047	15981	LIGHTING IMPROVEMENTS @ ROGERS STADIUM	03-Sep-99	HALL BROS ELECTRICAL CONTRACTORS INC	\$274,500.00
2000	3048	15981	TRACK RENOVATIONS & FIELD ADDITIONS	03-Sep-99	RICHARD L CROWDER CONSTRUCTION INC	\$322,000.00
2000	3049	16049	FIRE PROTECTIONS - 3 BLDGS GYM, HARRIS & HUNTER/MCDANIELS	13-Mar-00	VIRGINIA SPRINKLER CO INC	\$425,335.00
2000	3050	16049	FIRE PROTECTION SYSTEMS @ HARRIS HALL, PHASE II & III	28-Mar-00	EAST COAST FIRE PROTECTION INC	\$464,200.00
2000	3051	16049	FIRE PROTECTION SYSTEMS @ DANIEL GYM, PH II & III	28-Mar-00	EAST COAST FIRE PROTECTION INC	\$204,800.00
2002	3052	16083	RENOVATE OWENS HALL	27-Aug-02	DANIEL & CO INC	\$4,910,000.00
2002	3053	16085	RENOV JOHNSTON MEMORIAL LIBRARY	15-Oct-02	UNITED REFRIGERATION OF VIRGINIA INC	\$6,504,200.00
2001	3054	16085	REPAIR LINDSAY-MONTAGUE HALL	14-Mar-01	SRC INC	\$620,200.00
2002	3055	16085	PRE-FABRICATED TEMPORARY LIBRARY FACILITIES	18-Sep-01	NAT COM INC	\$349,009.00
2002	3056	16121	WOMEN'S SOFTBALL FIELD FACILITY	29-Jan-02	GULF SEABOARD GENERAL CONTRACTORS INC	\$436,000.00
2002	3057	16122	IMP: REPAIR DORMITORIES, PHASE II	23-Jan-02	EVEREADY MECHANICAL CORP	\$1,157,000.00
2001	3058	16227	ADA - STUDENT VILLAGE PAVILLION & STORUM HALL	23-Aug-00	BETCO CONSTRUCTION INC	\$199,185.00
2002	3059	16247	IMP: RENOVATE VIRGINIA HALL AUDITORIUM	25-Oct-01	GULF SEABOARD GENERAL CONTRACTORS INC	\$1,315,900.00
2002	3060	16465	IMP: REPAIR STEAM TUNNELS	25-Sep-02	GULF SEABOARD GENERAL CONTRACTORS INC	\$946,000.00
2002	3061	16768	ADA - UPGRADES HOME MANAGEMENT HOUSE	15-Apr-03	BROOKS & CO GENERAL CONTRACTORS INC	\$71,800.00
1998	3062	14048	LIBRARY HVAC ALTERATIONS & REPAIRS	26-Jun-98	D E KIRBY INC	\$239,500.00
1998	3063	15593	NC: CAMPUS WIDE PARKING LOT (CORPREW AVENUE)	27-May-98	ASPHALT ROADS & MATERIALS CO INC	\$112,815.00
1999	3064	15593	PARKING LOT - PRESIDENTIAL PARKWAY	19-Aug-98	APAC VIRGINIA INC	\$78,800.00
2002	3065	16086	IMP: RENOVATE COMMUNICATIONS BUILDING	05-Oct-01	SUN BAY CONTRACTING INC	\$2,277,500.00
2002	3066	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS	21-Dec-01	VIRTEXCO INCORP	\$1,539,000.00
2002	3067	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS	16-May-02	VIRTEXCO INCORP	\$1,456,684.00
1998	3068	15502	NEW CONST: DINING HALL	19-Dec-97	J E JAMERSON & SONS INC	\$7,352,600.00
1999	3069	15561	ADA- WYNNE RESTROOMS,	17-Jun-99	ANDREWS LARGE & WHIDDEN INC	\$9,880.00
2001	3070	15561	ADA- WYGAL HALL RESTROOM	13-Dec-00	ANDREWS LARGE & WHIDDEN INC	\$57,300.00
1999	3071	15996	IMP: RENOVATION & EXPANSION OF SMALL BUSINESS DEVELOP. CTR	28-Oct-98	CUSTOM SERVICES INC	\$99,750.00
2001	3072	16087	IMP: RENOVATE EAST, WEST & MAIN RUFFNER COMPLEX	28-Jul-00	KENBRIDGE CONSTRUCTION CO INC	\$8,861,000.00
1998	3073	16214	OIL TANK REPLACEMENT - 3 20,000 GALLONE FUEL OIL TANKS	20-May-98	WEL INC	\$203,350.00
1998	3074	16215	CUNNINGHAM DORMITORY ELECTRICAL UPGRADE	04-Jun-98	SOUTHERN AIR INC	\$66,000.00
1999	3076	16231	HAZARDOUS WASTE STORAGE CLEANUP	26-Feb-99	MARSHALL MILLER & ASSOC INC	\$17,871.00
2002	3077	16700	CONSTRUCT BROCK COMMONS PHASE I - UTILITIES	09-Jul-02	BOOTH & CO INC	\$325,350.00
2002	3078	16700	BROCK COMMON PHASE I - PACKAGE 2	06-Nov-02	BRANCH & ASSOC INC	\$5,457,000.00
2002	3079	16763	GRAINGER HALL RE-CONSTRUCTION	23-May-02	ENGLISH CONSTRUCTION CO INC	\$3,885,720.00
1999	3081	15754	IMP: RENOVATION OF HVAC SYSTEM, GOOLRICK HALL	24-Mar-99	WARREN E FLYNN CONSTRUCTION CO INC	\$2,567,758.00
2002	3082	15872	FITNESS CENTER	24-Feb-02	HALEY BUILDERS INC	\$3,268,250.00
2001	3083	16082	IMP: RENOVATE COMBS HALL	17-Jan-01	HALEY BUILDERS INC	\$4,509,000.00
1999	3084	16099	REPLACE TENNIS COURTS	28-Apr-99	WARREN E FLYNN CONSTRUCTION CO INC	\$852,975.00
1999	3085	16259	UNDERGROUND STORAGE TANK REPLACEMENT & REMEDIATION	25-Jun-99	ENVIRONMENTAL CONSTRUCTION & TECHNOLOGIES INC	\$182,000.00
2001	3086	16348	ROOF REPLACEMENT VA & WILLARD HALLS	27-Feb-01	CONSOLIDATED INDUSTRIAL ROOFING	\$115,265.00
2002	3087	16348	REPLACEMENT OF CHILLER - WILLARD	05-Mar-02	AMS CONTRACTORS INC	\$204,000.00
2002	3090	16626	NEW CONST: ALUMNI CENTER	11-Feb-03	SMITH MANAGEMENT CONSTRUCTION INC	\$5,355,900.00
1998	3091	15361	GIBBONS HALL RENOVATIONS, PH II	21-Jan-98	CRENSHAW CONSTRUCTIONS CO INC	\$1,144,101.00
2000	3092	15530	ASHBY HALL RENOVATION	15-Sep-99	NIELSEN BUILDERS INC	\$1,832,631.00
1998	3093	15660	CISAT ACADEMIC PHASE 2	28-May-98	NIELSEN BUILDERS INC	\$21,732,024.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	3094	15660	CISAT CAMPUS PARKING LOT - 200 SPACES	01-Jul-99	NIELSEN BUILDERS INC	\$328,117.00
2001	3095	15660	SURFACE PARKING LOTS @ CISAT PH 2	06-Jul-00	PARHAM CONSTRUCTION CO	\$310,062.00
1998	3096	15804	CONS: CISAT RESIDENCE HALL 2	25-Feb-98	NIELSEN BUILDERS INC	\$10,329,645.00
2000	3097	16050	NEW ALUMNI HOUSE	10-May-00	NIELSEN BUILDERS INC	\$2,498,462.00
2000	3098	16100	MAIN CAMPUS PARKING DECK	22-Dec-99	HOWARD SHOCKEY & SONS INC	\$5,694,127.00
2000	3099	16221	CISAT - STUDENT SERVICES BUILDING, PHASE II	10-May-00	NIELSEN BUILDERS INC	\$8,147,291.00
2000	3100	16239	CAMPUS STEAM IMPROVEMENTS - NORTH	22-Mar-00	RIDDLEBERGER BROTHERS INC	\$498,322.00
2000	3102	16239	CAMPUS STEAM IMPROVEMENTS - SOUTHEAST	16-Feb-00	RIDDLEBERGER BROTHERS INC	\$389,477.00
2002	3104	16297	CONST: PHASE 3A - CISAT ACADEMIC BUILDING	29-Jul-02	NIELSEN BUILDERS INC	\$19,164,112.00
1999	3105	16298	IMP: RENOVATION OF WARREN HALL	09-Jun-99	HARRISONBURG CONSTRUCTION CO INC	\$585,648.00
2002	3106	16334	NEW CONST: BOOKSTORE	08-Nov-01	NIELSEN BUILDERS INC	\$3,238,175.00
2002	3107	16395	IMP: BLUESTONE DORM RENOVATION, PHASE II - GIFFORD HALL	19-Jul-01	NIELSEN BUILDERS INC	\$4,096,741.00
2002	3108	16396	BRIDGEFORTH TRACK RELOCATION	29-May-02	NIELSEN BUILDERS INC	\$1,761,230.00
2002	3109	16492	BURRESS, CARRIER LIBRARY SANITARY SEWER REPLACE	25-Apr-03	PARTNERS EXCAVATING CO	\$39,532.00
2002	3110	16492	HANSON HALL SEWER RELINING	27-Mar-03	AARON J CONNER, GENERAL CONTRACTOR INC	\$16,200.00
1999	3111	15818	NEW CONST: CONSTRUCT TRACK & SOCCER FIELD, PHASE I	26-Aug-98	H T BOWLING INC	\$1,664,430.00
1999	3112	15819	RENOVATE INGLES HALL	29-Jul-98	BRANCH & ASSOC INC	\$2,867,000.00
1999	3113	15912	NEW CONST: HEALTH SERVICES ACADEMIC FACILITY	04-Mar-99	BRANCH & ASSOC INC	\$5,325,000.00
1999	3114	16067	IMP: IMPROVE ELECTRICAL DISTRIBUTION SYSTEM	26-May-99	RICHARDSONWAYLAND ELECTRICAL CORPOR	\$299,817.00
2001	3115	16068	CONST: TRACK & SOCCER FIELD, PHASE II	09-Jan-01	ALLEN R NEELY CO INC	\$2,844,404.00
2002	3117	16088	IMP: RENOVATE WALKER HALL	24-Sep-02	AVIS CONSTRUCTION CO INC	\$2,355,000.00
2002	3118	16303	DEMOLITION ONLY - PETERS HALL RENOVATION/ADDITION	25-Sep-01	HICO INC	\$257,460.00
2002	3119	16303	PHASE II - PETERS RENOVATIONS AND ADDITION	09-Jan-02	THOR INC	\$6,490,000.00
2002	3120	16627	FLOYD HALL RENOVATION	24-Apr-02	THOR INC	\$2,161,000.00
2002	3121	16661	PEERY HALL RENOVATION	18-Feb-03	J E JAMERSON & SONS INC	\$2,006,000.00
1998	3122	15369	HANDICAPPED ACCESS- HEALY HALL ELEVATOR/STAIR/COMMUNICATION	18-Mar-98	J H CONSTRUCTION CORP	\$420,405.00
2002	3123	15369	HANDICAPPED ACCESS - RESTROOMS HEALY & STRADER HALLS	30-Oct-01	UNITED REFRIGERATION OF VIRGINIA INC	\$386,070.00
2000	3124	15905	IMP: ASBESTOS IN HEALY, HARRISON HALLS & GYM - CORRECT ENVI	10-Feb-00	CUSTOM CONTRACTING INC	\$23,568.00
2000	3126	16036	BASS HALL SPRINKLERS	21-Jun-00	NICHOLS CONSTRUCTION CORP	\$79,927.00
2002	3127	16036	WINDOW REPLACEMENT - SWANSON HALL	08-Jan-03	WOODLAND CONSTRUCTION INC	\$121,000.00
2001	3128	16314	REPAIRS - MAIN HALL MASONRY	16-Nov-00	HARRISONBURG CONSTRUCTION CO INC	\$97,108.00
2002	3130	16451	IMP: INSTALL FIRE ALARMS	05-Mar-03	SIMPLEX GRINNELL LP	\$138,930.00
2002	3131	16491	IMP: INSTALL SPRINKLERS IN PRICE & CARTER HALL DORMS	19-Mar-02	SIMPLEX GRINNELL LP	\$96,048.00
2000	3132	16037	IMP: INSTALL FIRE SUPPRESSION SYSTEMS - PALMER, BUTLER, PRIC	24-Nov-99	VIRGINIA SPRINKLER CO INC	\$416,000.00
1999	3133	16037	ABATE ASBESTOS IN BUTLER HALL	03-Jun-99	ACS ENVIRONMENTAL INC	\$79,987.00
1999	3134	16229	IMP: REPLACE UNDERGROUND WATER SYSTEM	21-Jun-99	T A SHEETS MECHANICAL GENERAL CONTRACTORS INC	\$255,489.00
2002	3135	16261	CONSTRUCT ACCESS ROAD AND GATE	11-Sep-01	L E BLIZZARD GRADING INC	\$85,490.00
2000	3136	16202	IMP: RENOVATION OF BELMONT	28-Mar-00	DANIEL & CO INC	\$768,450.00
2001	3137	14692	ROOFTOP WALL ENCLOSURE	02-Aug-00	SHIRLEY CONSTRUCTION CORPORATI	\$513,900.00
1998	3138	15552	ADA - SIDEWALK REPLACEMENT (PHASE III)	28-Apr-98	MSD CONTRACTING	\$16,754.00
2001	3139	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES	08-Nov-00	S B BALLARD INC	\$10,520,385.00
2001	3140	15869	FOUNDATION PILING FOR PARKING FACILITIES ACQ & CONST	28-Sep-00	WATERFRONT MARINE CONSTRUCTION INC	\$586,596.00
2002	3141	15869	ODU-CONVOCAION CENTER NORTH PARKING LOT	06-Jun-02	BRANSCOME INC	\$334,830.00
2001	3142	15870	NEW CONST: CONVOCATION CENTER	18-Oct-00	S B BALLARD INC	\$31,230,763.00
2001	3143	15870	TEST PILES - CONVOCATION CENTER	12-Jul-00	WATERFRONT MARINE CONSTRUCTION INC	\$23,200.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	3144	15870	PRODUCTION PILING	25-Aug-00	NORTH STAR CONSTRUCTION CORP	\$797,257.00
2000	3146	16150	CONSTANT HALL (DEMOLITION & PILING) PHASE I	04-Feb-00	MCKENZIE CONSTRUCTION CORP	\$468,710.00
2001	3147	16150	CONSTANT HALL RENOVATIONS PH II	27-Sep-00	C B C ENTERPRISES INC	\$9,228,950.00
2000	3148	16164	SAILING CENTER EXPANSION	18-Nov-99	PRIORITY CONSTRUCTION CORP	\$432,000.00
2001	3149	16194	IMP: DIEHN ARTS CENTER HUMIDIFICATION	13-Jul-00	VIRTEXCO INCORP	\$37,793.00
2002	3150	16293	PHASE I - DEMOLITION AND PILING - ENGINEERING & COMPUTATIONA	03-Apr-02	WATERFRONT MARINE CONSTRUCTION INC	\$356,242.00
2002	3151	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II	01-Aug-02	HATHAWAY DUKE CONSTRUCTIO	\$10,522,000.00
2001	3152	16449	SPONG HALL WINDOW REPLACEMENT - REGULATORY COMPLAINCE	21-Mar-01	VIRTEXCO INCORP	\$282,738.00
2002	3153	16449	REGULATORY COMPLIANCE (H & PE ASBESTOS ABATEMENT)	19-Jul-01	WACO INC	\$118,840.00
2001	3154	16449	REGULATORY COMPLIANCE (AUTOCLAVE REPLACEMENT #1)	25-Nov-00	EAST COAST DISTRIBUTORS OF VA	\$0.00
2002	3155	16449	INCINERATOR REPLACEMENT	13-Mar-02	POWER MECHANICAL INC	\$31,934.00
2001	3156	16449	REGULATORY COMPLIANCE (UST REMOVAL)	17-Apr-01	AMERICAN PETROCHEM INC	\$19,475.00
2002	3157	16449	HVAC UPGRADE - EDUCATION BUILDING	09-Jan-02	BAY SIDE CONTRACTING INC	\$707,000.00
2002	3158	16449	HVAC UPGRADE - KAUFMAN HALL	15-Jan-02	DESIGN TEMPERATURE	\$113,396.00
2002	3159	16449	NIGHT LIGHTING IMPROVEMENTS	17-Dec-01	GRAYBAR ELECTRIC CO	\$179,329.00
2002	3160	16449	REGULATORY COMPLIANCE (AUTOCLAVE REPLACEMENT #2)	27-Jul-01	EAST COAST DISTRIBUTORS OF VA	\$0.00
2002	3161	16236	IMP: REPLACE HAMPTON ROADS FACILITY	18-Dec-01	R C H CORP	\$1,125,000.00
2002	3162	16536	NEW CONST: LIVESTOCK TEACHING ARENA	11-Mar-03	BLAIR CONSTRUCTION INC	\$2,188,000.00
1999	3163	15580	ADA - EGYPTIAN BUILDING - ACCESS RAMP	25-Nov-98	MAX CONTRACTING INC	\$37,200.00
1998	3164	15810	REPAIR RESIDENCE HALLS - STUDENT HOUSING PHASE II	19-Mar-98	VIKING ENTERPRISE INC	\$2,384,000.00
1999	3166	15810	STUDENT HOUSEING PH II - FAN REPLACEMENT	31-Mar-99	INDUSTRIAL AIR CONDITIONING & REFRIGERATION CORP	\$28,300.00
1998	3169	15930	NEW CONST: TRACK AND FIELD (ONLY) SPORTS BACKERS STADIUM	25-Feb-98	GULF SEABOARD GENERAL CONTRACTORS INC	\$1,809,000.00
1999	3170	15930	TRACK AND SOCCER CENTER - PHASE II	10-Feb-99	GULF SEABOARD GENERAL CONTRACTORS INC	\$770,000.00
2000	3171	15930	STADIUM PRESS BOX, SKYBOX & OFFICE, PHASE III	09-Dec-99	VIKING ENTERPRISE INC	\$1,247,200.00
2000	3173	16069	NC: VCU SPORTS MEDICINE BUILDING	01-Mar-00	HALEY BUILDERS INC	\$4,173,500.00
2000	3174	16072	GLADDING RESIDENCES DATA WIRING	13-Jun-00	METROTEC ASSOC INC	\$540,428.00
1999	3175	16073	IMP: RENOVATE SCHOOL OF DENTISTRY BUILDING	10-Mar-99	WOODLAND CONSTRUCTION INC	\$1,981,637.00
2000	3177	16090	SANGER HALL IMPROVEMENTS, PHASE II, GENERAL RENOVATION	14-Dec-99	W M JORDAN CO INC	\$8,864,000.00
2002	3178	16292	IMP: RENOVATION TO LIBRARIES	24-Oct-01	HALEY BUILDERS INC	\$2,376,000.00
2002	3179	16338	GLADDING RESIDENCE HALL ADDITION	02-Apr-02	DANIEL & CO INC	\$4,758,000.00
2002	3181	16401	STUDENT COMMONS - PHASE III	29-May-02	EVANS CONSTRUCTION SERVICES INC	\$6,909,613.00
2002	3182	16406	NEW CONST: BOWE STREET PARKING DECK	14-Aug-01	KENBRIDGE CONSTRUCTION CO INC	\$8,980,000.00
2001	3183	16467	OLIVER HALL SPRINKLER SYSTEM - LIFE SAFETY IMPROVEMENTS	28-Feb-01	VIRGINIA SPRINKLER CO INC	\$655,505.00
2002	3184	16578	CONSTRUCT ACADEMIC CAMPUS PARKING DECK IV	22-Apr-03	KENBRIDGE CONSTRUCTION CO INC	\$6,993,434.00
2002	3185	16722	NEW CONST: CONSTRUCT CENTRAL DINING FACILITY	23-Jan-03	KENBRIDGE CONSTRUCTION CO INC	\$12,632,500.00
1999	3186	15731	IMP: FIRE ALARM AND EVACUATION SYSTEM	03-Mar-99	MARK ELECTRIC INC	\$744,401.00
2001	3187	16203	IMP: ROBINSON HOUSE RENOVATIONS	17-Nov-00	SPENSIERI PAINTING CO INC	\$238,350.00
2001	3188	16248	HANDICAP ACCESSWAY: PAVE LOOP ROAD	23-Jan-01	MOFFETT PAVING & EXCAVATING	\$179,288.00
2000	3189	16077	IMP: REPLACE OUTSIDE LIGHTING	17-May-00	RUDY L HAWKINS ELECTRICAL CONTRACTOR INC	\$309,300.00
1999	3190	16078	IMP: REPAIR/REPLACE BOILER/VENTILATION SYSTEM - ERNST HALL &	02-Apr-99	EVEREADY MECHANICAL CORP	\$389,000.00
1999	3191	15887	NEW CONST: SPORTS, WELLNESS & CONVOCATION CENTER	26-Jan-99	SHIRLEY CONSTRUCTION CORPORATI	\$11,350,900.00
1999	3192	15888	NEW CONST: RESIDENCE HALL	01-Apr-99	W M JORDAN CO INC	\$9,833,025.00
2002	3193	15915	NEW CONST: PERFORMING ARTS CENTER	18-Jan-02	W M JORDAN CO INC	\$21,416,868.00
2002	3194	15915	PERFORMING ARTS - PHASE 2	04-Feb-03	W M JORDAN CO INC	\$22,197,000.00
2001	3195	16157	RENOVATE/CONSTRUCT AN ADDITION TO RATCLIFFE GYM	20-Jul-00	C B C ENTERPRISES INC	\$2,368,100.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	3196	16418	NEW CONST: CONSTRUCT RESIDENCE HALL, III	24-May-01	CONRAD BROTHERS INC	\$17,985,091.00
2001	3197	16519	IMP: TRACK COMPLEX	06-Mar-01	W M JORDAN CO INC	\$1,065,125.00
2001	3198	16520	IMP: ATHLETIC EXPANSION (IMPROVEMENTS TO RATCLIFFE HALL)	03-Nov-00	CHIANELLI BUILDING CORP	\$1,718,455.00
2002	3199	16520	TRACK COMPLEX - FOOTBALL STADIUM, PHASE II	22-Jan-03	JONES CONSTRUCTION CO	\$1,439,500.00
2001	3200	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING	12-Sep-00	QUESENBERRYS INC	\$7,393,102.00
1999	3201	15931	IMP: REPLACE WATER TANK	10-Mar-99	DANIELS PLUMBING & HEATING INC	\$212,300.00
1998	3202	15964	(SITWORK PACKAGE) ATHLETIC FACILITY & FOOTBALL FIELD	25-Mar-98	W L CONSTRUCTION & PAVING INC	\$1,429,850.00
2002	3203	15964	ATHLETIC & RECREATIONAL FIELDS - FOOTBALL STADIUM UPGRADE	17-May-02	QUESENBERRYS INC	\$415,340.00
2002	3204	15964	FOOTBALL STADIUM UPGRADE - PHASE 4: GRANDSTAND CONCRETE PAC	06-Jun-02	QUESENBERRYS INC	\$650,000.00
2002	3205	15964	PHASE 5: SPORTS LIGHTING PACKAGE - FOOTBALL STADIUM	19-Jun-02	QUESENBERRYS INC	\$154,900.00
2002	3206	15964	UVA WISE FIELDHOUSE PHASE III	11-Apr-03	QUESENBERRYS INC	\$1,046,254.00
1999	3215	15345	ARLINGTON/METRO 4TH FLOOR BUILD OUT	13-Jan-99	TWI CONSTRUCTION INC	\$440,000.00
2000	3218	15532	STUDENT UNION - REROOFING ONLY	12-Aug-99	RAYCO ROOF SERVICE INC	\$216,912.00
2001	3219	15532	STUDENT UNION 1 - PHASE IIA	18-Jan-01	PBS CONTRACTING INC	\$209,000.00
2002	3220	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS	25-Apr-02	PERIS CO INC	\$2,496,114.00
2002	3226	16123	ROOF REPLACEMENT @ STUDENT UNION I BLDG	20-Mar-02	BROTHERS CONSTRUCTION CO INC	\$215,000.00
2002	3227	16123	STUDENT UNION II ROOF REPLACEMENT	06-Nov-02	BROTHERS CONSTRUCTION CO INC	\$123,800.00
1999	3230	16223	ADA BATHROOMS - ROBINSON A & B, THOMPSON, LECTURE HALLS, WH	14-May-99	PBS CONTRACTING INC	\$327,590.00
2001	3232	16352	EARLY SITE PACKAGE - HOUSING V	30-May-01	SULLIVAN GROUP	\$81,000.00
2000	3234	14193	MEDICAL LAB. TECHNOLOGY PROGRAM & EQUIPMENT - HOSPITALITY	14-Jul-99	WOODLAND CONSTRUCTION INC	\$128,900.00
2000	3235	14470	CHRISTANNA - ECONOMIC DEVELOPMENT CENTER ALBERTA CAMPUS	02-Sep-99	KENBRIDGE CONSTRUCTION CO INC	\$1,619,360.00
2000	3236	14470	DANIEL CAMPUS - ECONOMIC DEVELOPMENT CTR KEYSVILLE CAMPUS	02-Sep-99	KENBRIDGE CONSTRUCTION CO INC	\$1,771,500.00
2001	3237	14470	DANIEL CAMPUS - ECONOMIC DEVELOPMENT CTR KEYSVILLE CAMPUS	10-Nov-00	KENBRIDGE CONSTRUCTION CO INC	\$1,761,500.00
1999	3239	15318	NC: PARKING FACILITIES; PHASE III, TNCC- 310 SPACES	06-Nov-98	BASIC CONSTRUCTION CO	\$248,800.00
1998	3240	15396	CONST: MIDLOTHIAN CAMPUS, PHASE I	09-Apr-98	KENBRIDGE CONSTRUCTION CO INC	\$10,345,200.00
2000	3241	15396	PHYSICAL PLANT BUILDING & SITE IMPROVE. JTCC - MIDIL CAMPUS	15-Sep-99	KENBRIDGE CONSTRUCTION CO INC	\$1,074,800.00
2002	3243	15505	NEW CONST: BUSINESS TECHNOLOGY CTR	24-Jul-01	THOR INC	\$2,844,000.00
2000	3244	15507	CAMPUS-WIDE RENOVATIONS - DANVILLE COMMUNITY COLLEGE	23-Jun-00	JOHN W DANIEL & CO INC	\$2,515,800.00
1999	3245	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC	28-Apr-99	RITCHIE CURBOW CONSTRUCTION CO INC	\$6,215,349.00
2001	3246	15568	PVCC- AUTOMATIC DOOR OPENERS - DICKERSON BLDG.	18-May-01	LAKESIDE ELECTRICAL & CONSTRUCTION CO INC	\$8,100.00
2001	3247	15568	SSVC - CHRISTANNA CAMPUS - RESTROOM ALTERATIONS - MAIN BLDG	16-Jan-01	SHANNON CONSTRUCTION CO INC	\$23,917.00
2001	3248	15568	SSVCC - DANIEL CAMPUS - RESTROOM ALTERATIONS - MAIN BLDG	16-Jan-01	MILLER CONSTRUCTION CO	\$25,260.00
2001	3249	15568	2 STORY ELEVATOR ADDITION - CF BLDG. NVCC - ANNANDALE	10-Jan-01	AVON CORP	\$202,918.00
1999	3251	15690	JRSCC - WESTERN CAMPUS - PHASE II	10-Mar-99	KENBRIDGE CONSTRUCTION CO INC	\$3,842,000.00
2000	3253	15900	NEW CONST: COMMUNITY & CHILD DEVELOPMENT FACILITY	19-Jun-00	JOHN W DANIEL & CO INC	\$524,750.00
2000	3254	15913	MOOMAW CENTER RENOVATION AND ADDITION - DABNEY S. LANCASTER	05-Oct-99	AVIS CONSTRUCTION CO INC	\$1,596,550.00
1999	3255	15956	PIEDMONT - RESTROOM RENOVATION	18-May-99	ASPEN INDUSTRIES LLC	\$28,000.00
2002	3256	16041	IMP: LIFE, HEALTH & SAFETY CODE RENOVATIONS- NVCC - WOODBRI	18-Jul-01	EAST COAST FIRE PROTECTION INC	\$336,910.00
1999	3257	16091	PHASE ONE PARKING LOT - TCC - VA BEACH - TECHNICAL CENTER	17-Mar-99	ASPHALT ROADS & MATERIALS CO INC	\$284,985.00
2000	3258	16091	PHASE II, ACADEMIC BLDG. SITE PREPARATION - TCC - VA BEACH	16-Nov-99	WOMACK CONTRACTORS INC	\$891,000.00
2001	3259	16091	CONST: NEW ACADEMIC BLDG. VA BEACH - TWCC - TECHNICAL CTR	19-Sep-00	MCKENZIE CONSTRUCTION CORP	\$13,948,000.00
2002	3261	16176	NEW CONST: FREDERICKSBURG AREA CAMPUS, PH II - PLANNING -GCC	18-Dec-02	KENBRIDGE CONSTRUCTION CO INC	\$4,808,000.00
2002	3262	16177	IMP: RENOVATION OF GODWIN & HOLTON HALLS, MECC	24-Oct-02	CHAPMAN CONSTRUCTION CO INC	\$1,245,000.00
2000	3263	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC	30-Mar-00	OYSTER POINT CONSTRUCTION CO	\$3,998,370.00
2001	3264	16184	IMP: VETERINARY TECHNOLOGY FACILITIES - BLDGS A & B-BRCC -	15-Nov-00	HARRISONBURG CONSTRUCTION CO INC	\$701,994.00
2002	3265	16187	WATER SYSTEM SUPPLY REPAIRS - GERMANN COMM. COLLEGE - LOCUS	23-Oct-01	JERRY L MORAN EXCAVATING INC	\$327,848.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	3266	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC	30-Jul-02	LUCAS CONSTRUCTION	\$1,625,000.00
2001	3268	16413	TNCC - CAMPUS INFRASTRUCTURE - CENTRAL PLAZA	15-May-01	PEMBROKE CONSTRUCTION CO INC	\$367,313.00
2002	3270	16440	BRCC - ROOF REPLACEMENT - A, C, D, E, F, G & CANOPY	06-Aug-02	A S PUGH OF ROANOKE INC	\$389,970.00
2002	3271	16440	DCC - BUILDING ENVELOPE REPAIRS - EIT BUILDING	26-Mar-03	JOHN W DANIEL & CO INC	\$72,217.00
2002	3272	16440	JTCC-CHESTER - ROOF REPLACEMENT - GODWIN HALL	14-Nov-02	ROOFERS EDGE INC	\$79,300.00
2002	3273	16440	LFCC - ROOF REPLACEMENT - SMITH TECHNICAL BLDG.	08-Aug-02	CONSOLIDATED INDUSTRIAL ROOFING	\$81,020.00
2002	3274	16440	NRCC - ROOF REPLACEMENT - ROOKER AND GODBEY HALLS	19-Feb-03	CONSOLIDATED INDUSTRIAL ROOFING	\$376,770.00
2002	3275	16440	ROOF REPLACEMENT - CT BLDG - NVCC - ANNANDALE	05-Nov-02	BROTHERS CONSTRUCTION CO INC	\$233,800.00
2002	3276	16440	SSVCC (C) ROOF REPLACEMENT - ADMINISTRATION BLDG.	10-Dec-02	FRANK KERBY & SONS INC	\$59,695.00
2002	3277	16440	TCC-PORTSMOUTH - ROOF REPLACEMENT & MANNING BLDGS.	12-Nov-02	SHADDEAU ROOFING & CONSTRUCTION CORP	\$133,968.00
2002	3278	16440	TCC -VA BEACH - ROOF REPLACEMENT - LYNNHAVEN & PUNGO BLDGS	22-Jan-03	FRANK KERBY & SONS INC	\$335,250.00
2002	3279	16440	TNCC - ROOF REPLACEMENT - HASTING HALL & ANNEX	19-Nov-02	SHADDEAU ROOFING & CONSTRUCTION CORP	\$164,715.00
2002	3280	16440	VHCC - ROOF REPLACEMENT - ADM, MEB & ISC BLDGS	11-Feb-03	A S PUGH OF ROANOKE INC	\$227,332.00
2002	3281	16440	WCC - ROOF REPLACEMENT - GRAYSON HALL	13-Aug-02	A S PUGH OF ROANOKE INC	\$62,037.00
2002	3283	16440	TNCC - GRIFFIN - WYTHE HALLS	30-Jan-03	A & L CONSTRUCTION INC	\$384,000.00
2002	3284	16441	VWCC - MAJOR MECHANICAL SYS., DUNCAN, CRAIG & CHAPMAN	19-Nov-02	ACORN CONSTRUCTION LTD	\$1,814,400.00
2002	3285	16441	GCC (LOCUST GROVE CAMPUS) MAIN BUILDING PH 2, REPLACE HVAC	06-Nov-02	EVEREADY MECHANICAL CORP	\$1,029,000.00
2002	3286	16441	SVVCC - HVAC RENOVATIONS - BUCHANAN, DICKENSON, KING, RUSSE	16-Oct-02	CORTE CONSTRUCTION CO INC	\$2,096,200.00
2002	3288	16444	ESCC - MAINTENANCE BUILDING	03-Oct-02	R D LAMBERT & SON INC	\$292,900.00
2002	3289	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING	05-Feb-03	LIONBERGER CONSTRUCTION CO	\$4,322,000.00
2001	3290	16508	IMP: REMOVE ASBESTOS FLOOR TILES & INSULATION - JSRCC	13-Feb-01	NATIONS ENVIRONMENTAL SERVICES INC	\$355,466.00
2002	3292	16531	EARLY SITEWORK PACKAGE - EXPANSION OF EXISTING PARKING LOT	20-Nov-02	TESSA CONSTRUCTION & TECH CO LLC	\$207,500.00
2002	3293	16533	RCC - WORKFORCE DEV. & TECH. TRAINING - WARSAW	21-Nov-02	UNITED REFRIGERATION OF VIRGINIA INC	\$767,000.00
2002	3294	16571	VWCC - EXPAND ROAD AND PARKING LOT	09-Apr-02	THOMAS BROTHERS LC	\$469,585.00
1998	3295	15951	REPLACE A/C AT MAURY HALL	06-May-98	ATLANTICO ELECTRIC INC	\$69,900.00
2002	3297	16032	BYRD HALL ROOF REPLACE & REPAIRS TO EXTERIOR	15-Jan-02	INTERNATIONAL ROOFING CORP	\$108,900.00
2002	3298	16079	IMP: REPLACE GLOUCESTER POINT BULKHEAD	07-Aug-01	CROFTON DIVING CORP	\$807,238.00
1999	3299	13317	DIASUND RESERVIOR LANDING (PART OF 04)	09-Sep-98	VIRGINIA MARINE STRUCTURES INC	\$69,655.00
2002	3300	16368	PHELPS WMA-SIGHTING-IN RANGE-FAUQUIER CO	08-Oct-02	FAUST ENVIRONMENTAL SERVICES INC	\$98,840.00
2002	3301	16368	FISHING PIER - LAKE ORANGE	18-Jun-02	PRO CONSTRUCTION SERVICES LC	\$99,957.00
1999	3303	16305	ADDITION TO ANN MASON BUILDING	09-Jun-99	PACKARD CONSTRUCTION CORP	\$105,781.00
2000	3304	15894	IMP: JAMESTOWN SETTLEMENT CAFE	16-Feb-00	TAF GROUP LTD	\$4,395,000.00
2002	3305	15894	RELOCATION ROOFTOP A/C UNITS 1 & 2 - VISITOR RECEPTION	13-May-03	EVEREADY MECHANICAL CORP	\$79,530.00
2002	3306	16026	THEATER & SPECIAL EXHIBIT GALLERY	20-Dec-01	OYSTER POINT CONSTRUCTION CO	\$5,808,750.00
2000	3307	13300	MERRYFIELD AREA-12 BAY EQUIPMENT STORAGE BLDG.	28-Oct-99	JOHN SIMPSON INC	\$406,284.00
1999	3308	13855	Franklin Area Headquarters	22-Apr-99	VIRTEXCO INCORP	\$208,500.00
2001	3309	13855	Fairfax Area Headquarters	17-Apr-01	H & H CONTRACTORS INC	\$1,425,500.00
2000	3310	13863	Richmond District Lot	28-Jul-99	BROOKS & CO GENERAL CONTRACTORS INC	\$563,700.00
1998	3312	15034	HORSE PASTURE	12-Jun-98	NICHOLS CONSTRUCTION CORP	\$176,869.00
1999	3313	15034	VOLNEY SHOP	17-Feb-99	EVANS CONSTRUCTION SERVICES INC	\$320,815.00
1999	3314	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)	09-Jun-99	BREAKELL INC	\$142,400.00
1999	3315	15653	ABINGDON STORAGE BLDG	06-Nov-98	H S WILLIAMS CO INC	\$737,500.00
1999	3316	15653	DESKINS SUPT/TMKPR	01-Mar-99	DAVIS CONSTRUCTION CO	\$187,300.00
2002	3317	15653	ESKIMO AHQ SUPERINTENDENTS/TIMEKEEPER OFFICE BLDG	26-Feb-02	BASHAM & GARCIA LLC	\$210,500.00
2000	3318	15653	EDGEHILL OFFICE BUILDING	29-Mar-00	WALTER C VIA ENTERPRISES INC	\$168,650.00
2000	3319	15653	MASSAPONAX AHQ OFFICE BLDG	20-Aug-99	POSSIE B CHENAULT INC	\$158,700.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	3320	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION	21-Aug-98	HARMAN CONSTRUCTION INC	\$742,030.00
2001	3321	15655	HARRISONBURG RESIDENCY CHEMICAL STORAGE BUILDING	09-Aug-00	SPACEMAKERS INC	\$310,700.00
1999	3322	15656	NEW WINCHESTER SUB-RESIDENCY - 7 BLDGS & SITEWORK	16-Sep-98	RICKETTS CONSTRUCTION CO INC	\$4,172,981.00
2000	3323	15656	17 SPREADER RACKS - WINCHESTER AREA HEADQUARTERS	22-Jun-00	RICKETTS CONSTRUCTION CO INC	\$135,599.00
2000	3324	15662	TROUTVILLE COMBO BUILDING	05-Apr-00	A & E INTERNATIONAL LLC	\$609,255.00
2002	3325	15662	DUMFRIES AREA HQ (NOVA DISTRICT) COMBO BLDG	29-May-02	BASHAM & GARCIA LLC	\$720,500.00
1998	3326	15662	BURNT CHIMNEY	12-Jun-98	CONSTRUCTION SERVICES OF ROANOKE INC	\$426,400.00
2001	3327	15662	VAN DORN	08-May-01	JOHN SIMPSON INC	\$905,999.00
1999	3329	15667	HAMPTON ROADS BRIDGE TUNNEL ADMIN. BLDG. ADDITION ADA	29-Oct-98	STRICKLAND WILSON CONSTR CO INC	\$253,200.00
1998	3330	15667	IMP: ADA - SALEM - ELEVATIONS ADDITIONS (3 BLDGS)	07-May-98	ACORN CONSTRUCTION LTD	\$679,500.00
1998	3337	15839	N. BRISTOL	12-Jun-98	EVANS CONSTRUCTION SERVICES INC	\$77,723.00
1998	3338	15840	FREMONT	01-May-98	EVANS CONSTRUCTION SERVICES INC	\$119,699.00
1998	3339	15840	N. BRISTOL STORAGE BLDG.	12-Jun-98	EVANS CONSTRUCTION SERVICES INC	\$158,762.00
2002	3340	15840	WARDS CORNER EQT.STORAGE BLDG.	02-Oct-01	VIRGINIA BUILDING & STRUCTURES INC	\$202,500.00
2002	3341	15840	WARDS CORNER EQT.STORAGE BLDG.	02-Oct-01	VIRGINIA BUILDING & STRUCTURES INC	\$202,500.00
1999	3342	15840	ST. STEPHENS EQPT. STOR. BLDG.	04-Sep-98	STEPHEN M NORMAN	\$131,437.00
1999	3343	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.	23-Sep-98	NORMAN CO INC GEN CONTRACTORS	\$87,752.00
1999	3344	15840	MILLBORO SPRINGS HEADQUARTERS	12-Aug-98	LOYKO VETTER CONSTRUCTION INC	\$164,468.00
1999	3345	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.	18-Dec-98	C A WEBB & SONS INC	\$93,165.00
2000	3346	15840	LEESBURG	21-Jan-00	LOYKO VETTER CONSTRUCTION INC	\$94,651.00
1999	3347	15841	NEW CONST: HILLSVILLE - RESIDENCY OFFICE BLDG.	02-Oct-98	GLADE CONSTRUCTION CO INC	\$627,891.00
1999	3348	15841	HALIFAX RESIDENCY	07-Oct-98	J E BURTON CONSTRUCTION CO INC	\$473,734.00
1998	3349	15841	NEW CONST: RESIDENCY OFFICE BLDG. - CHARLOTTESVILLE RESIDENC	11-Jun-98	J H CONSTRUCTION CORP	\$532,849.00
1998	3350	15841	LURAY RESIDENCY OFFICE BUILDING ADDITION	06-Mar-98	HARRISONBURG CONSTRUCTION CO INC	\$269,979.00
1998	3351	15842	NEW CONST: REPAIR SHOP FACILITIES - BRISTOL DISTRICT	10-Dec-97	U S CONSTRUCTION OF ROANOKE INC	\$365,086.00
1999	3352	15842	ROCKY MOUNT MAINT. SHOP	29-Jul-98	CONSTRUCTION SERVICES OF ROANOKE INC	\$727,900.00
1998	3353	15842	ASHLAND RESIDENCY SHOP	17-Apr-98	WARREN E FLYNN CONSTRUCTION CO INC	\$856,300.00
1999	3354	15842	NEW CONST: REPAIR SHOP FACILITIES - GLOUCESTER A.H.	27-Aug-98	R J STOVER & SON INC	\$277,950.00
1999	3355	15842	FLEET MANAGEMENT SHOP, NEW CONSTRUCTION -RICHMOND	03-Sep-98	EVANS CONSTRUCTION SERVICES INC	\$209,400.00
2002	3356	16129	CONST: CONSTRUCT & RENOVATE ELKO MATERIALS LAB	12-Feb-03	SOUTHWOOD BUILDERS INC	\$4,341,559.00
2001	3357	16130	CARLISLE AHQ SERVICE/WASH FAC	11-Aug-00	U S CONSTRUCTION OF ROANOKE INC	\$290,352.00
2000	3358	16130	TROUTVILLE AHQ SIGN CREW BLDG	19-Apr-00	ACORN CONSTRUCTION LTD	\$193,300.00
2002	3360	16130	HAMPDEN SYDNEY AHQ COMBO BLDG	14-Jan-02	J E SEARS & CO INC	\$435,550.00
2000	3361	16130	BON AIR AHQ CHEM STOR BLDG	10-Feb-00	SPACEMAKERS INC	\$323,600.00
2000	3362	16130	BON AIR AHQ CHEM STOR BLDG	09-Feb-00	SPACEMAKERS INC	\$323,600.00
2002	3364	16130	MIDDLESEX AHQ EQUIP STOR BLDG	19-Nov-02	NORMAN CO INC GEN CONTRACTORS	\$517,994.00
2000	3365	16130	LURAY AHQ OFFICE BLDG	17-May-00	LOYKO VETTER CONSTRUCTION INC	\$207,983.00
2000	3366	16130	MT JACKSON AHQ OFFICE BLDG	13-Oct-99	C A WEBB & SONS INC	\$246,016.00
1999	3367	16130	MOSCOW AHQ ASPHALT WORK PAD & POND	09-Mar-99	JONES & FRANK CORP	\$81,578.00
2000	3368	16130	TOM'S BROOK AREA HQ OFFICE BUILDING	13-Oct-99	C A WEBB & SONS INC	\$172,328.00
2002	3369	16130	HILLSBORO AHQ OFFICE BLDG	31-Jul-01	LOYKO VETTER CONSTRUCTION INC	\$310,650.00
2002	3372	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG	24-Jul-02	VIKING ENTERPRISE INC	\$333,425.00
2002	3374	16130	BOWERS HILL AREA - COMBO BUILDING	19-Jun-02	DOW CONSTRUCTION INC	\$714,575.00
2001	3375	16140	ABINGDON RESIDENCY OFFICE BUILDING	12-Feb-01	CORTE CONSTRUCTION CO INC	\$680,250.00
2002	3376	16140	RICHMOND DIST. TRAINING CENTER - ADDTIONS & RENOVATIONS	09-Apr-03	J W ENOCHS JR INC	\$435,624.00
2001	3377	16140	NORFOLK RESIDENCY OFFICE & SHOP	13-Dec-00	TAF GROUP LTD	\$2,490,127.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	3378	16140	SALUDA SHOP ADDITIONS/RENOV	07-Aug-02	J SANDERS CONSTRUCTION CO	\$645,800.00
2001	3379	16140	STAUNTON DISTRICT SHOP RENOVATION	06-Jul-00	LANTZ CONSTRUCTION CO	\$603,000.00
2002	3380	16140	STAUNTON - PAVING & STORM WATER MANAGEMENT	22-Jan-02	MOFFETT PAVING & EXCAVATING	\$298,555.00
2002	3381	16235	FORT BLACKMORE AHQ - NEW FACILITIES	11-Sep-02	CHAPMAN CONSTRUCTION CO INC	\$1,744,400.00
2001	3382	16235	RAPPAHANNOCK AHQ - NEW FACILITIES	25-Apr-01	LOYKO VETTER CONSTRUCTION INC	\$1,470,600.00
2002	3389	16679	NEW CONST: CONSTRUCT NORTHERN VA REPAIR SHOP	05-Mar-03	BASHAM & GARCIA LLC	\$4,743,247.00
2001	3390	16076	RENOVATE CHARLOTTESVILLE WORKSHOP OF VA INDUSTRIES FOR BLIND	09-Jan-01	DANIEL & CO INC	\$3,788,350.00
1999	3391	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18	28-Jan-99	BLAIR CONSTRUCTION INC	\$3,362,718.00
1999	3392	15184	EMERGENCY GENERATORS FOR BUILDINGS 30, 6 & 7	16-Jun-99	WACO INC	\$299,950.00
1998	3394	14676	ENERGY MANAGEMENT SYS. - PHASE I, SVMHI	20-May-98	WALLACE DAY INC	\$79,000.00
1998	3395	14676	ENERGY MANAGMENT SYS., PHASE I, SVTC	20-May-98	WALLACE DAY INC	\$219,400.00
1998	3396	15575	REPLACE UNDERGROUND STORAGE TANKS - PHASE III	30-Jun-98	BATTLE OIL CO INC	\$244,408.00
1999	3397	15575	IMP: REPLACE UST - PHASE 4	12-Aug-98	BATTLE OIL CO INC	\$155,868.00
1999	3398	15649	RENOVATE BOILERS - CATAWBA HOSPITAL (01 THRU 08)	07-Aug-98	MCGRAW MORGAN INC	\$1,079,469.00
2002	3399	15649	CSH BOILER EQUIPMENT BLDGS 1, 111 & 113	01-Aug-01	RAM SERVICES LLC	\$379,000.00
1998	3400	15649	REPLACE EXISTING CHILLER & COOLING TOWER - NVMHI	17-Jun-98	AMS CONTRACTORS INC	\$168,500.00
1998	3401	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.	24-Mar-98	BYERS MECHANICAL CONTRACTING INC	\$113,238.00
1999	3402	15649	IMP: REPLACE PLANT BOILERS, BLDG. 114 - WESTERN STATE HOSP.	24-Mar-99	POWER MECHANICAL INC	\$559,454.00
1999	3403	15649	IMP: BUILDING 46 CHILLER REPLACEMENT, CVTC	03-Mar-99	INDUSTRIAL AIR CONDITIONING & REFRIGERATION CORP	\$157,848.00
2000	3404	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC	28-Jun-00	PROCESS PIPING & WELDING INC	\$890,000.00
2001	3405	15649	IMP: RENOVATE BOILERS, ST	04-Jan-01	ROGERS PLUMBING & HEATING INC	\$347,600.00
2000	3406	15710	IMP: HANDICAPPED ACCESS, BLDGS 107, 115 & 118 - WSH	03-Nov-99	SOUTHERN AIR INC	\$1,693,000.00
2002	3407	15826	REPLACE FIRE ALARM SYSTEM - BLDG NUMBER 739-001 SVMHI	19-Jun-02	HUDSON PAYNE ELECTRONICS CORP	\$226,918.00
2000	3408	15826	UPGRADE: FIRE ALARM SECURITY AND MISC ELEC	13-Apr-00	ELECTRICAL MECHANICAL SERVICE INC	\$423,300.00
2000	3409	15827	IMP: RENOVATE HOT WATER DISTRIBUTION LINES, NVTC	20-Jan-00	PARAMOUNT MECHANICAL CORP	\$1,894,462.00
1999	3410	15827	IMP: REPLACE FAN COIL UNITS, PGH	19-Nov-98	EVEREADY MECHANICAL CORP	\$360,966.00
2000	3411	16135	REPLACE BOILER PLANT EQUIPMENT - CVTC	30-Nov-99	POWER MECHANICAL INC	\$526,737.00
2000	3412	16135	BOILER PLANT EQUIPMENT REPLACEMENT - PIEDMONT GERIATRIC HOSP	06-Apr-00	POWER MECHANICAL INC	\$449,870.00
2001	3413	16135	EASTERN STATE HOSPITAL - BOILER PLANT EQUIPMENT	12-Jul-00	POWER MECHANICAL INC	\$476,281.00
2000	3414	16156	HIRAM W. DAVIS - LIFE SAFETY CODE IMPROVEMENTS	30-May-00	ARIZONA LTD	\$212,000.00
2000	3417	15403	RN OF WATER RENO. SYSTEM	13-Apr-00	BIGGS CONSTRUCTION CO INC	\$647,777.00
2001	3418	15206	EMERGENCY GENERATOR - RDC FACILITY	25-May-01	ARIZONA LTD	\$380,000.00
2000	3419	15206	BON AIR JCC - EXPANSION SPRINKLER REPLACEMENT	08-Sep-99	VIRGINIA SPRINKLER CO INC	\$55,997.00
1999	3420	15837	RELOCATE DISCHARGE BEAUMONT JCC	02-Dec-98	INFRACORPS OF VIRGINIA INC	\$136,100.00
2002	3421	15837	BARRETT JCC - WWTP REPLACEMENT	07-May-03	GMW GENERAL CONTRACTORS INC	\$481,664.00
1998	3422	16166	REMEDIATE 2 #2 FUEL OIL STORAGE TANKS - BARRETT VA COTTAGE/D	03-Jun-98	EARTH TECH INC	\$19,198.00
1998	3423	16167	REMEDIATE LEAKING #2 FUEL OIL UST - NANSEMOND BOOT CAMP	08-May-98	EARTH TECH INC	\$21,553.00
1998	3424	16168	UST 10,000 GALLON #2 FUEL OIL STORAGE TANK - BON AIR	03-Jun-98	EARTH TECH INC	\$39,137.00
1998	3425	16183	NATURAL BRIDGE - REMEDIATE 2 UST'S - 1,000 GALLON/6,000 GALL	03-Jun-98	EARTH TECH INC	\$60,280.00
2002	3426	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL	19-Nov-02	CANAVAN & ASSOC INC	\$2,396,000.00
2002	3427	11823	GREASE COLLECTION BASIN @ BRUNSWICK CORRECTIONAL CTR	25-Sep-01	GMW GENERAL CONTRACTORS INC	\$44,500.00
2002	3428	15098	GREASE INTECEPTOR	14-Jan-03	E F BROWN CONSTRUCTION INC	\$81,700.00
2000	3429	15099	ST. BRIDES C.C. - WWTP MODIFICATIONS - PUMP STATION	04-Nov-99	QUALICON CORP	\$499,000.00
2000	3430	15099	CONST: WASTEWATER TREATMENT MODIFICATION - LAB UPGRADE	10-May-00	BRIDGEWATER CONSTRUCTION INC	\$143,053.00
2002	3431	15099	SUBSTANCE ABUSE BLDG - EGU - INDIAN CREEK	21-Feb-02	BLACKWATER ELECTRIC CO INC	\$58,630.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	3432	15196	IMP: REPLACE LOCKING SYSTEMS - BRUNSWICK CORR. CENTER	20-Aug-98	RIDLEY OWENS & ADKINS INC	\$588,777.00
1999	3433	15196	SECURITY & LOCKING IMPROVEMENT UPGRADE - POWHATAN CORR. CTR	24-Sep-98	DANIEL & CO INC	\$1,823,000.00
1999	3434	15199	WATER SYS UPGRADE-DINWIDDIE CU #27	17-Feb-99	WILLIAMS CONSTRUCTION	\$30,504.00
2001	3435	15200	UPG ELEC SVC & GENERATOR FAIRFAX UNIT 30	20-Feb-01	CORRECT CONSTRUCTION CORP	\$100,424.00
2002	3436	15200	BASKERVILLE - PHASE II - ELECTRICAL SYSTEMS RENOVATION	07-Jan-03	CORRECT CONSTRUCTION CORP	\$337,433.00
2000	3437	15399	SEWAGE PUMP STATION MODIFICATIONS - LUNENBURG	16-Dec-99	GMW GENERAL CONTRACTORS INC	\$92,925.00
2002	3438	15467	CONST: BACHELOR OFFICER QUARTERS - SUSSEX	19-Mar-03	A D WHITTAKER CONSTRUCTION INC	\$4,354,500.00
2001	3439	15665	BLAND WASTEWATER SYSTEM - PHASE 4	27-Feb-01	WILLIAM G SIMMONS CO	\$123,670.00
1998	3440	15666	SOUTHAMPTON CORRECTIONAL CENTER WATERLINE UPGRADE	12-Mar-98	T A SHEETS MECHANICAL GENERAL CONTRACTORS INC	\$306,383.00
2002	3441	15666	WATER SYSTEM IMPROVEMENTS - JRCC	08-Jan-02	M & W CONSTRUCTION CORP	\$230,000.00
2001	3442	15666	POCAHONTAS CORRECTIONAL UNIT #13 - WATER SYSTEM UPGRADE	06-Mar-01	EAST COAST UTILITY CONTRACTORS, LTD	\$167,000.00
2002	3443	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE	06-Mar-02	BREAKELL INC	\$1,711,986.00
2002	3444	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.	18-Sep-02	ANDERSON CONSTRUCTION INC	\$380,000.00
1998	3445	15675	VCCW-ELECTRICAL RENOVATIONS	11-Feb-98	DESIGN ELECTRICAL CONTRACTORS & ENGINEERS INC	\$1,781,747.00
2001	3446	15675	VCCW ELECTRICAL	22-Nov-00	M C DEAN ELECTRICAL CONTRACTING INC	\$2,201,000.00
2002	3447	15713	REPLACE ROOFS - MECKLENBURG - ADMINISTRATION, SECURITY BLDG.	16-Oct-02	OLD DOMINION ROOFING & CONSTRUCTION INC	\$304,600.00
2001	3448	15755	ST BRIDES (REPLACEMENT FACILITY)	17-Oct-00	KELLOGG BROWN & ROOT INC	\$14,600,000.00
2000	3450	15829	IMP: POWHATAN WASTEWATER UPGRADE	10-Nov-99	GMW GENERAL CONTRACTORS INC	\$469,792.00
2001	3451	15829	POWHATAN WASTEWATER TREATMENT PLANT UPGRADE - PH II	20-Jun-01	GMW GENERAL CONTRACTORS INC	\$692,494.00
1999	3452	15830	BLAND C.C. - EXPANSION OF POWER PLANT	29-Apr-99	WACO INC	\$3,657,210.00
2002	3453	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV	07-Aug-01	DELAWARE CORP	\$388,500.00
2002	3454	16105	IMP: POWHATAN ELECTRICAL SYSTEM UPGRADE	18-Sep-02	JONES CONSTRUCTION CO	\$213,581.00
1999	3455	16107	CONST: SOUTHAMPTON WATER STORAGE TANK	02-Jun-99	QUALICON CORP	\$786,000.00
2002	3456	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT	16-Apr-02	PROCESS PIPING & WELDING INC	\$1,333,358.00
2002	3457	16114	IMP: WINDOW & FRAME REPLACEMENT	29-Aug-02	CORRECT CONSTRUCTION CORP	\$226,513.00
2002	3458	16115	REPLACE STEAM LINES - JAMES RIVER CORR. CTR	05-Jun-02	QUALITY PLUS SERVICES INC	\$596,400.00
2001	3459	16115	REPLACE STEAM LINES & WATER LINES - TIDEWATER CU #22	14-Nov-00	POWER MECHANICAL INC	\$97,767.00
2002	3460	16433	EQUIPMENT: INSTALL AUGER/GRINDER COLLECTION SYSTEMS	26-Jul-02	ANDERSON CONSTRUCTION INC	\$168,400.00
2001	3461	16548	CONSTRUCT A COMPOSTING SYSTEM @ POWHATAN CORR. CTR	23-Apr-01	CORRECT CONSTRUCTION CORP	\$308,749.00
1998	1201	S5-1-97			MARVIN V TEMPLETON & SONS INC	\$585,650.35
1998	1202	S6-1-97			MARVIN V TEMPLETON & SONS INC	\$285,978.84
1998	1203	S7-1-97			SLURRY PAVERS INC	\$163,931.71
1998	1204	S8-1-97			SLURRY PAVERS INC	\$261,664.58
1998	1205	SA-2&3-97;L-A3-97			SLURRY PAVERS INC	\$1,180,148.19
1998	1247	0030-049-1958,SR21			ARCHER WESTERN CONTRACTORS LTD	\$2,311,000.00
1998	1289	CST-1-98			MAC CONSTRUCTION INC	\$543,649.85
1998	1290	0616-074-000,501			BLAKEMORE CONSTRUCTION CORP	\$151,430.00
1998	1294	0668-092-P59,N501			PATRICK CONSTRUCTION INC	\$256,525.75
1998	1295	0100-077-105,C502,B605,D607			JONES BROTHERS INC	\$10,400,661.42
1998	1296	0613-062-P70,N501			UNLIMITED EXCAVATING INC	\$84,820.95
1998	1297	0633-055-P22,M501			BISHOP & SETTLE CONSTRUCTION CO INC	\$245,163.01

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1299	0172-147-104,C501			BASIC CONSTRUCTION CO	\$2,794,708.50
1998	1300	0601-050-160,C501			J L KENT & SONS INC	\$542,145.66
1998	1301	0628-034-142,C501			APAC VIRGINIA INC	\$876,670.32
1998	1302	0621-079-136,M501;0624-079-135,M501			DICKERSON BROTHERS EXCAVATING INC	\$413,057.78
1998	1304	0811-009-171,C503			COUNTS & DOBYNS INC	\$1,775,613.90
1998	1305	0631-014-199,M501			PEARSON CONSTR INC	\$529,650.68
1998	1306	0653-031-228,M501,B630			C R MEADOR GENERAL CONTRACTOR	\$304,192.00
1998	1308	0993-044-316,M501,B638			D A BROWN INC	\$283,256.92
1998	1310	0624-013-421,C501			CLECO CORP	\$2,624,127.25
1998	1311	0739-062-224,M501			D S NASH CONSTRUCTION CO	\$332,748.31
1998	1312	0651-091-184,C501;0651-323-184,C502			BISHOP & SETTLE CONSTRUCTION CO INC	\$1,456,273.09
1998	1313	0632-050-159,M501,B614			NORTH STAR CONSTRUCTION CORP	\$418,022.00
1998	1314	0634-050-P51,N501			STANLEY CONSTRUCTION CO INC	\$327,670.80
1998	1315	0656-088-210,M503,D627			EARTHWORKS LEASING CO INC	\$405,639.98
1998	1316	0638-086-P10,N501			PATRICK CONSTRUCTION INC	\$226,458.50
1998	1317	0611-023-202,C501			GENERAL EXCAVATION INC	\$883,644.75
1998	1320	0761-058-P64,M501			BISHOP & SETTLE CONSTRUCTION CO INC	\$279,659.62
1998	1321	0695-058-P65,M501			LANCO PAVING INC	\$675,816.66
1998	1324	0700-038-P65,N502			W L CONSTRUCTION & PAVING INC	\$574,336.76
1998	1325	0617-038-P17,N504			JAMES R VANNOY & SONS CONSTRUCTION COMP	\$134,649.00
1998	1326	0638-038-P71,N501			JAMES R VANNOY & SONS CONSTRUCTION COMP	\$278,580.75
1998	1328	6058-070-E18,C501,B625,B626			JTE CIVIL INC	\$7,140,681.55
1998	1329	6058-070-E19,C501			BRANCH HIGHWAYS INC	\$4,466,757.29
1998	1330	6058-044-E14,C509,B623,B624			JTE CIVIL INC	\$6,344,506.85
1998	1331	U000-295-102,C502,D603,D604			PATRICK CONSTRUCTION INC	\$868,311.43
1998	1332	0668-009-263,M501,B640			A R COFFEY & SONS INC	\$191,646.73
1998	1334	0602-010-P61,N504			HUNTER PAVING INC	\$232,914.60
1998	1336	0733-058-P66,M501			LANCO PAVING INC	\$393,549.78
1998	1337	0664-041-P69,N501,D649			C H WHITE CONSTRUCTION CO INC	\$1,456,273.09
1998	1338	0624-004-P20,M501			RED OAK EXCAVATING INC	\$538,897.37
1998	1339	0674-026-P41,C501			BISHOP & SETTLE CONSTRUCTION CO INC	\$349,800.00
1998	1340	0626-063-P43,M501			CURTIS CONTRACTING INC	\$124,306.90

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1341	0634-063-P42,M501			EARTHWORKS LEASING CO INC	\$330,796.75
1998	1343	0198-036-102,B601			TESSA CONSTRUCTION CO	\$250,918.00
1998	1344	0621-099-175,C501			BRAVOS CONCRETE INC	\$793,982.50
1998	1345	0859-084-P25,N501			PATRICK CONSTRUCTION INC	\$388,643.18
1998	1348	0676-095-P69,N501			LITTLE HENRYS EXCAVATING & PAVING INC	\$209,148.00
1998	1349	0643-092-537,N501,B637			KEN CONSTRUCTION CO INC	\$112,973.50
1998	1350	0706-081-216,M501			PLECKER CONSTRUCTION CO INC	\$1,272,439.17
1998	1351	0631-067-P61,M502,D612			BISHOP & SETTLE CONSTRUCTION CO INC	\$220,952.50
1998	1352	6058-070-E20,C504,B619,B620,D621			BRANCH HIGHWAYS INC	\$234,002.00
1998	1353	6058-070-E21,C501			JTE CIVIL INC	\$6,417,758.55
1998	1354	6058-070-E22,C501			BRANCH HIGHWAYS INC	\$4,272,314.90
1998	1355	0058-084-E11,C501,B601			FORT CHISWELL CONSTRUCTION CORP	\$5,527,959.70
1998	1358	0652-034-224,M501			APAC VIRGINIA INC	\$777,291.98
1998	1359	0033-115-103,C501			ALLIED CONSTRUCTION CO INC	\$171,750.11
1998	1360	0301-091-104,C501			B P SHORT & SON PAVING CO INC	\$977,537.43
1998	1361	0157-043-110,C501			CENTRAL CONTRACTING CO	\$3,869,173.92
1998	1362	0288-020-105,C502			DRIGGS CORP	\$194,650.00
1998	1363	0634-091-185,M501,D644			BISHOP & SETTLE CONSTRUCTION CO INC	\$165,461.65
1998	1366	0635-014-P05,N501			PEARSON CONSTR INC	\$335,620.25
1998	1367	0771-011-238,M501,D663			A R COFFEY & SONS INC	\$144,252.90
1998	1368	0624-028-P62,N501			STANLEY CONSTRUCTION CO INC	\$198,335.44
1998	1369	0607-016-197,M501			DICKERSON BROTHERS EXCAVATING INC	\$97,895.99
1998	1372	0211-078-107,C501			GENERAL EXCAVATION INC	\$221,512.85
1998	1373	0031-047-107,C501			HENRY S BRANSCOME INC	\$760,000.00
1998	1374	0664-052-P41,N501			LITTLE HENRYS EXCAVATING & PAVING INC	\$438,617.05
1998	1375	0581-128-108,C501,B601			ALLEGHENY CONSTRUCTION CO INC	\$3,964,813.90
1998	1376	21-1014-5004			FAIRFIELD BRIDGE CO INC	\$105,397.20
1998	1377	0657-083-P46,N501;0657-083-346,B640			MAYMEAD MATERIALS INC	\$233,207.78
1998	1379	0832-083-P43,N501			LITTLE HENRYS EXCAVATING & PAVING INC	\$112,776.48
1998	1380	0700-098-247,N501,B636			NEW RIVER BRIDGE CO	\$186,011.66
1998	1382	0743-054-P13,N501			PEARSON CONSTR INC	\$189,800.60
1998	1384	0654-020-281,M501			D W LYLE CORP	\$82,714.60

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1385	0220-044-121,C501;0902-044-402,C501			D L B INC	\$821,140.55
1998	1386	34-0739-5300-C05;34-0652-5301-C04			BUCKLEY LAGES INC	\$229,749.50
1998	1387	0671-005-143,B649			FAIRFIELD BRIDGE CO INC	\$912,235.40
1998	1389	0880030306N01			R L RIDER & CO	\$275,703.75
1998	1391	0007-053-131,N501			FORT MYER CONSTRUCTION CORP	\$293,386.00
1998	1392	0658-093-141,N502			APAC VIRGINIA INC	\$271,991.00
1998	1393	0816-071-P65,N501			CREWS CONSTRUCTION CO INC	\$269,288.44
1998	1395	0855-085-257,N501			RAPPAWAN INC	\$138,905.00
1998	1397	1080-071-6206,SR01			DONALD H SELVEGE INC	\$118,434.25
1998	1398	PRMO-967-101,N506			D W MILLER INC	\$53,192.50
1998	1400	0218-089-V05,R03			NEW CONSTRUCTION INC	\$266,186.90
1998	1401	0629-023-P67,N501			RAPPAWAN INC	\$56,420.00
1998	1402	0631-093-P66,N501			GENERAL EXCAVATION INC	\$599,905.20
1998	1403	0615-035-P66,N501			C R HENDERSON CO	\$357,995.00
1998	1405	0624-070-P92,N502;0708-070-P37,N501;0787-070-5601			CARNELL CONSTRUCTION CORP	\$414,798.00
1998	1406	0688-051-155,M501			CALLAO GRADER SERVICE	\$365,082.47
1998	1407	0741030P56			R L RIDER & CO	\$378,345.10
1998	1408	0691-038-P35,N502,D643			JAMES R VANNOY & SONS CONSTRUCTION COMP	\$495,066.20
1998	1409	0642-007-P49,N501			A R COFFEY & SONS INC	\$243,130.05
1998	1410	0669-015-P43,N501,D641,N503			PEARSON CONSTR INC	\$378,852.66
1998	1411	0639-021-P47,N501			GENERAL EXCAVATION INC	\$209,295.90
1998	1412	0654-069-P93,N501			MARTINS CONSTRUCTION CORP	\$271,677.00
1998	1413	0759-002-P55,N501			ROCK & RAINES CONSTRUCTION CO INC	\$174,110.00
1998	1414	0775-009-P67,N501			J M MARTIN CONSTRUCTION INC	\$230,828.00
1998	1415	0644-069-P90,N501			MARTINS CONSTRUCTION CORP	\$534,590.00
1998	1416	0817-031-P31,N501;0602-031-P36,N501			REED EXCAVATING CONTRACTORS INC	\$328,015.27
1998	1417	0758-031-P37,N501;0810-031-P11,N502			SOWERS CONSTRUCTION CO INC	\$312,244.25
1998	1418	0641-017-P60,N502;0642-017-P35,N501			STRICKLAND CONSTRUCTION INC	\$291,727.10
1998	1419	0650-017-P33,N501;0901-017-P39,N501			STRICKLAND CONSTRUCTION INC	\$367,539.05

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1420	0705-082-P75,N501			F CLAYTON PLECKERS & SONS INC	\$226,809.00
1998	1421	0626-033-P70,N501;0659-033-P71,N501			NEKAY EARTHMOVERS INC	\$468,812.19
1998	1422	0673-033-P72,N501			ELTON CUNDIFF BULLDOZING & FARMS INC	\$177,959.15
1998	1423	0766-033-P69,N501			ELTON CUNDIFF BULLDOZING & FARMS INC	\$433,459.50
1998	1424	0620-030-297,N501			GENERAL EXCAVATION INC	\$485,474.50
1998	1425	0767-017-P18,N502;0769-017-P30,N501			STRICKLAND CONSTRUCTION INC	\$434,309.66
1998	1426	0871-071-P55,N501			CREWS CONSTRUCTION CO INC	\$146,413.24
1998	1427	0695-034-P08,N502			RAPPAWAN INC	\$334,158.65
1998	1429	0837-007-363,N501			HOWDYSHELL EXCAVATING INC	\$355,734.70
1998	1430	0621-078-P67,N501			SAMUEL JAMES CONSTRUCTION INC	\$380,217.00
1998	1431	0009-053-107,M600;0287-053-104,M600			RIVER VIEW INVESTMENTS INC	\$415,002.75
1998	1432	0061-035-105,M600,D601			HAMMOND MITCHELL	\$273,857.50
1998	1433	85-0776-5304-C03-522;85-0664-5305-C03-522;85-0653-5302-C03-522			R W HARRIS EXCAVATING INC	\$291,036.25
1998	1434	0690-039-153,N501			WILKINS CONSTRUCTION CO INC	\$189,412.00
1998	1435	7100-029-333,N501			SHIRLEY CONTRACTING INC	\$138,830.00
1998	1436	0702-85-P56,C501			RAPPAWAN INC	\$637,167.00
1998	1437	0692-034-P31,N501			PERRY ENGINEERING CO INC	\$1,238,545.40
1998	1438	0807-082-P78,N501			ECHOLS BROTHERS INC	\$332,631.15
1998	1439	0651-003-163,N501;0733-003-164,N501			ROBERTSON FOWLER CO	\$153,567.30
1998	1440	0727-081-P29,N501			A R COFFEY & SONS INC	\$337,647.65
1998	1441	1003-014-210,N501			WATTS CONTRACTORS INC	\$177,506.55
1998	1442	0771-069-194,N501			RAPPAWAN INC	\$150,125.00
1998	1443	0360-004-X15,N501			CHESAPEAKE CONTRACTORS INC	\$31,390.00
1998	1444	0060-020-X21,N501			GERALD M MOORE SON INC	\$51,268.00
1998	1445	0670-080-284,M501,D674			D A BROWN INC	\$170,529.03
1998	1446	0017-036-X28,N501			CURTIS CONTRACTING INC	\$29,668.50
1998	1447	0802-014-209,N501			PEARSON CONSTR INC	\$72,586.20
1998	1448	0729-055-P14,M501;0729-247-P14,M502			BISHOP & SETTLE CONSTRUCTION CO INC	\$210,650.86
1998	1449	MST-98-TEP-805			OGLESBY CONSTRUCTION INC	\$132,212.75
1998	1450	ST-42-98			SLURRY PAVERS INC	\$217,952.04

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1451	0360-042X21,N501			BLAKEMORE CONSTRUCTION CORP	\$24,858.00
1998	1452	0360-004-X14,N501			CHESAPEAKE CONTRACTORS INC	\$35,461.00
1998	1453	0604-020-5001			GERALD M MOORE SON INC	\$34,660.00
1998	1454	0657-007-P74,N501			F CLAYTON PLECKERS & SONS INC	\$307,129.34
1998	1456	0700-013-7187,431			LITTLE HENRYS EXCAVATING & PAVING INC	\$398,784.78
1998	1457	GR-1A-98			MAKCO INC	\$52,564.50
1998	1458	PMRC-1-98			ROADMARK CORP	\$255,600.00
1998	1459	1053-203-172,N501			D S NASH CONSTRUCTION CO	\$88,203.80
1998	1460	0694028P66			J SANDERS CONSTRUCTION CO	\$199,673.00
1998	1461	0617-084-4804,431			GLASS MACHINERY & EXCAVATION INC	\$66,760.00
1998	1462	PRM0966101			BARBOUR CO	\$254,095.93
1998	1467	0637-092-7809,431			HUNTER PAVING INC	\$220,919.00
1998	1468	0610-097-7804,431			ELK KNOB INC	\$262,638.61
1998	1469	0671-097-7807,431			ELK KNOB INC	\$217,580.46
1998	1470	ISO0968101N501			WEBSTER & WEBSTER INC	\$156,949.00
1998	1473	0081-077-6140,SR01			CLECO CORP	\$112,756.28
1998	1474	M29BRR861			LANFORD BROTHERS CO INC	\$574,336.76
1998	1475	0603-060-6298,SR01;0653-060-6271,SR01;0657-060-6114,SR01			D L B INC	\$354,857.40
1998	1477	L-31-98			SLURRY PAVERS INC	\$390,009.15
1998	1478	C3-1-98			MARVIN V TEMPLETON & SONS INC	\$43,374.87
1998	1480	M597PRB605013			IA CONSTRUCTION CORP	\$1,155,760.65
1998	1481	MSU-98-BRP-824			MTA INDUSTRIAL PAINTING CORP	\$311,888.00
1998	1482	M598PRB502993			HENRY S BRANSCOME INC	\$629,210.80
1998	1483	M598PRB601653			IA CONSTRUCTION CORP	\$551,912.00
1998	1484	M598PRH101873			SPARTAN CONSTRUCTION INC	\$552,530.30
1998	1485	M598PRH401645			E V WILLIAMS CO INC	\$1,022,574.17
1998	1486	M598PRH404645			E V WILLIAMS CO INC	\$675,805.00
1998	1487	M598SOF201903			VIRGINIA MARINE STRUCTURES INC	\$379,300.00
1998	1489	M598TEP820613			TRAFFIC MARKINGS INC	\$548,136.61
1998	1490	M598TEP818643			ROADMARK CORP	\$502,032.56
1998	1491	M598TES821645			DOREY ELECTRIC CO	\$127,516.50
1998	1492	M598TRX710275			WHIT WILLIAMS INC	\$99,610.00
1998	1494	M599BRR804			PRECON MARINE INC	\$289,337.00
1998	1496	M798BRP704			FORT MYER CONSTRUCTION CORP	\$99,645.00
1998	1497	CM798BRR707			LANFORD BROTHERS CO INC	\$162,982.00
1998	1498	0629-030-6228,SR01;0629-030-6229,SR01;0629-030-6230,SR01			RIVER VIEW INVESTMENTS INC	\$141,679.00
1998	1500	GR-8-97			MAKCO INC	\$151,369.00
1998	1501	MST-98-BRR-829			LANFORD BROTHERS CO INC	\$1,086,266.00
1998	1502	MST-98-DRP-101			D L B INC	\$56,420.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1503	MST-98-RSD-102			B B AYERS & SONS INC	\$168,992.00
1998	1504	MST-898-RSF-401			R & R FENCING INC	\$83,067.70
1998	1505	MST-98-RSL-802			VALLEY SEEDING LLC	\$176,750.00
1998	1506	SCALES8A-98			MARTINS CONSTRUCTION CORP	\$89,600.00
1998	1507	MLY-98-SLR-301			WATTS CONTRACTORS INC	\$684,938.00
1998	1508	MLY-98-SLR-501			DONALD H SELVEGE INC	\$196,983.00
1998	1509	MLY-98-SLR-401			COUNTS & DOBYNS INC	\$546,400.00
1998	1510	1713-029-4603,M503			MARTIN & GASS INC	\$2,156,463.30
1998	1511	CMA-98-GRI-112			PENN LINE SERVICE INC	\$152,752.25
1998	1512	CMA-98-GRR-101			TRANSPORTATION SAFETY CONTRACTORS OF VA	\$79,490.00
1998	1513	0065-084-1026,SR01			ELK KNOB INC	\$384,893.97
1998	1514	0871-084-6597,SR00			ELK KNOB INC	\$388,588.70
1998	1515	0609-097-6006,SR00			ELK KNOB INC	\$188,836.21
1998	1516	0687-086-6086,SR00			ELK KNOB INC	\$282,409.75
1998	1517	0620-086-6025,SR00			ELK KNOB INC	\$227,340.25
1998	1518	0460-148-1805,SR01			OVERLAY INC	\$343,171.15
1998	1519	0058-097-1005,SR01			CLECO CORP	\$228,251.04
1998	1520	04600921805-			OVERLAY INC	\$257,421.50
1998	1523	0023-084-1108,SR01			CLECO CORP	\$199,974.00
1998	1525	MCU-96-BRR-706			DONALD H SELVEGE INC	\$187,890.00
1998	1526	MCU-97-BRR-702			FORT MYER CONSTRUCTION CORP	\$246,896.50
1998	1527	MCU98BRO703			LANFORD BROTHERS CO INC	\$266,186.90
1998	1528	0691-002-6077,SR01			RIVER VIEW INVESTMENTS INC	\$168,011.62
1998	1529	0614-039-5306,S05			RIVER VIEW INVESTMENTS INC	\$175,568.00
1998	1530	PCR-7-98			D L B INC	\$415,307.00
1998	1531	PM-7A-98			ROADMARK CORP	\$311,760.84
1998	1532	BR-6-98			W H P BURLEIGH INC	\$444,690.00
1998	1533	50-1034-5302-004;50-1036-5302-004			CURTIS CONTRACTING INC	\$44,913.00
1998	1534	MFR98PRS46			APAC VIRGINIA INC	\$588,393.00
1998	1535	MFR-98-TEP-845			ROADMARK CORP	\$121,416.86
1998	1536	0045-024-1920			CLECO CORP	\$333,096.70
1998	1537	MLY-98-BRC-702			W H P BURLEIGH INC	\$472,774.50
1998	1538	0006-062-1112,SR01			LANFORD BROTHERS CO INC	\$93,598.75
1998	1539	MLY98DRP201;MLY98D RP102			DIXON CONTRACTING INC	\$204,203.00
1998	1540	MLY98DRP302;MLY98D RP402;MLY98DRP502			D L B INC	\$465,853.50
1998	1541	MLY98GRR601			MAKCO INC	\$478,325.00
1998	1542	GR-7-98			MAKCO INC	\$884,390.45
1998	1543	ML98TEP602			A ANNANDALE INC	\$320,229.85
1998	1544	1840-029-6384,SR01			RUSTLER CONSTRUCTION INC	\$252,334.84
1998	1545	0790-053-6110,SR01			BRAVOS CONCRETE INC	\$136,180.00
1998	1546	TSO4-96A-905			BROTHERS SIGNAL CO	\$3,986,390.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1547	5590-029-6069,SR01			RIVER VIEW INVESTMENTS INC	\$106,632.60
1998	1548	0050-053-1096,SR01			MARTINS CONSTRUCTION CORP	\$109,066.00
1998	1549	CMNV98GRM302			LONG FENCE CO INC	\$40,508.05
1998	1550	MR-A1-98			APAC VIRGINIA INC	\$617,010.80
1998	1551	0662-4602-S03,412			JULIUS BRANSCOME INC	\$604,364.56
1998	1552	CMNV98RNV409			FORT MYER CONSTRUCTION CORP	\$504,300.00
1998	1553	SCG-A2-98			D & F CONSTRUCTION INC	\$2,251,654.50
1998	1554	CMNV-98-RSS-105			NEW CONSTRUCTION INC	\$1,345,260.00
1998	1555	CMNV98RSS301			ARTHUR CONSTRUCTION CO INC	\$499,980.39
1998	1556	CMNV98SPR407			TAVARES CONCRETE COINC	\$174,073.00
1998	1557	BR-4-98			CORMAN CONSTRUCTION INC	\$975,546.20
1998	1558	MRC-97-TEP-807			A ANNANDALE INC	\$52,515.00
1998	1559	PRMO-964-101,N512;IRMO-964-101,N509;MRC-97-TER-806			INTERNATIONAL CONTRACTORS INC	\$164,139.57
1998	1560	0058-058-1902,SR08			LANFORD BROTHERS CO INC	\$29,898.00
1998	1561	BR-4A-98			CORMAN CONSTRUCTION INC	\$639,984.76
1998	1562	MRC-98-PMC-501			MEGA CONTRACTORS INC	\$865,713.35
1998	1563	MRC-98-PRH-504			CORMAN CONSTRUCTION INC	\$577,212.00
1998	1564	MRC-98-RSS-507			CHESAPEAKE CONTRACTORS INC	\$49,864.00
1998	1565	MRC-98-TEP-801			ROADMARK CORP	\$279,972.89
1998	1566	MRC-98-TEP-802			ROADMARK CORP	\$291,713.92
1998	1567	MRC-98-TEP-803			DENVILLE LINE PAINTING INC	\$164,476.16
1998	1569	MSA97BG601			PENN LINE SERVICE INC	\$128,483.50
1998	1570	0721-017-6439-SR01			CLECO CORP	\$112,087.78
1998	1571	0081080202SR01			W H P BURLEIGH INC	\$56,950.00
1998	1572	0081-060-8001,SR01			TESSA CONSTRUCTION CO	\$428,991.00
1998	1573	MSA-97-DRB-601			D A BROWN INC	\$125,581.00
1998	1574	0122-033-7710-A03			J & D CONSTRUCTION CO INC	\$27,115.00
1998	1575	0011-011-0030			HAMMOND MITCHELL	\$1,364,301.69
1998	1576	MSA-97-TER-881			TRAFFIC MARKINGS INC	\$362,601.45
1998	1577	0834-033-6387,SR01			LANFORD BROTHERS CO INC	\$133,950.05
1998	1578	0460-035-1083,SR01			LANFORD BROTHERS CO INC	\$581,594.82
1998	1579	0221-031-1018,SR01			TESSA CONSTRUCTION CO	\$85,772.90
1998	1580	0081-077-2006,SR02;0081-077-2007,SR02			TESSA CONSTRUCTION CO	\$312,718.80
1998	1581	0220-044-1024,SR01			LANFORD BROTHERS CO INC	\$369,569.25
1998	1582	MSA-98-PMX-403;PM-8098			ADAMS CONSTRUCTION CO	\$841,351.45
1998	1583	FE-2-98			MOUNTAIN INDUSTRIES INC	\$131,546.25
1998	1584	MSA-98-RS-401			J & P FENCE CO INC	\$136,731.25
1998	1585	MSA-98-RSS-402			H & S CONSTRUCTION CO	\$269,848.00
1998	1586	MSA-98-TEP-881			ROADMARK CORP	\$358,214.53

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	1587	MSA-97-BRO-842			TESSA CONSTRUCTION CO	\$488,274.00
1998	1588	MST-97-BRP-822			MTA INDUSTRIAL PAINTING CORP	\$285,990.00
1998	1589	MST-97-BRP-823			S & D INDUSTRIAL PAINTING INC	\$587,500.00
1998	1590	MSR-97-BRR-821			LANFORD BROTHERS CO INC	\$258,888.20
1998	1591	MST-97-BRR-824			J G CRAWFORD ENTERPRISES LTD	\$587,622.70
1998	1592	0081-007-704,M400			BLAKEMORE CONSTRUCTION CORP	\$1,238,545.40
1998	1593	MST-97-PAV-826			BLAKEMORE CONSTRUCTION CORP	\$708,456.22
1998	1594	8103037505A01			A R COFFEY & SONS INC	\$299,170.05
1998	1595	MST-98-TER-801			INTERNATIONAL CONTRACTORS INC	\$77,004.81
1998	1596	MST-98-TER-803			ACCENT STRIPE INC	\$146,918.38
1998	1597	MST-98-TER-804			BARBOUR CO	\$19,384.49
1998	1598	MST-98-TEP-806			ROADMARK CORP	\$185,160.66
1998	1599	VPI-2A-97			SIMPSON CONSTRUCTION CO INC	\$192,164.00
1998	1600	1254-044-405,N501;1266-044-406,N501;1278-044-5603;1279-044-5603			J C JOYCE TRUCKING & PAVING CO INC	\$161,412.75
1998	1601	ST-02-98			D & D CONSTRUCTION	\$253,784.00
1998	1602	0628-060-5300			FORT CHISWELL CONSTRUCTION CORP	\$107,294.00
1998	1603	STRW-98-DEMO			S B COX INC	\$594,652.00
1998	1605	0629-013-T06,N501			HUNTER PAVING INC	\$176,576.50
1998	1606	0636-013-T12,N501			MAC CONSTRUCTION INC	\$96,963.00
1998	1607	0660-013-T08,N501			MAC CONSTRUCTION INC	\$97,990.75
1998	1608	TL-43-98			BLAKEMORE CONSTRUCTION CORP	\$46,858.00
1998	1609	TS02-965-906;TS02-966906			RICHARDSONWAYLAND ELECTRICAL CORP	\$3,094,168.72
1998	2048	0646-013-7604,431			J & J CONTRACTORS INC	\$583,412.62
1998	2051	0659-086-6071,SR00			KEN CONSTRUCTION CO INC	\$130,584.00
1998	2052	0610-086-6106,SR00;0633-086-6360,SR00			KEN CONSTRUCTION CO INC	\$143,219.10
1998	2053	0611-095-6428,SR00			PATRICK CONSTRUCTION INC	\$91,850.50
1998	2054	0016-038-1004,SR00			ELK KNOB INC	\$597,992.13
1998	2055	0610-097-7701,431			J & J CONTRACTORS INC	\$179,391.00
1998	2056	0072-097-1058,SR02			PATRICK CONSTRUCTION INC	\$242,738.90
1998	2057	0522-078-1006,SR01			APAC VIRGINIA INC	\$430,595.25
1998	2058	0635-030-6901,SR01			APAC VIRGINIA INC	\$218,291.32
1998	2059	0649-056-6032,SR01			FAIRFIELD BRIDGE CO INC	\$251,254.65
1998	2060	SR-967-99			CHEMUNG CONTRACTING CORP	\$425,676.70
1998	2061	0614-002-7710,B02,C02			WILKINS CONSTRUCTION CO INC	\$681,981.00
1998	2062	0690-079-6037,SR00			BRYANT CONTRACTING INC	\$318,420.50
1998	2063	0095-089-2900,SR04			LANFORD BROTHERS CO INC	\$257,291.96

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1998	2064	0095-089-2000,6147;6154;6155;0095-089-2001,6155,SR02,SR03			MOORE BROTHERS CO INC	\$319,665.00
1998	2065	0460-067-1015,SR01			BURLEIGH CONSTRUCTION CO INC	\$773,680.40
1998	2066	MFR98PMX120			APAC VIRGINIA INC	\$991,868.05
1998	2067	0029-071-1903,SR03;0029-071-1940,SR03			LANFORD BROTHERS CO INC	\$464,062.18
1998	2068	0661-029-6095,SR01			RUSTLER CONSTRUCTION INC	\$184,886.90
1998	2069	0704-053-6066,SR01			RIVER VIEW INVESTMENTS INC	\$210,353.00
1998	2070	0626-053-6030,SR01			MOORE BROTHERS CO INC	\$447,808.72
1998	2071	0611-053-6006,SR01			GULL CORP	\$162,851.50
1998	2072	0691-029-6180,SR01			NEW CONSTRUCTION INC	\$234,002.00
1998	2073	0395-000-2004,SR01			MARTINS CONSTRUCTION CORP	\$387,516.00
1998	2074	0495-029-2007,SR02			FORT MYER CONSTRUCTION CORP	\$622,386.00
1998	2076	0611-076-6005,SR01			MARTINS CONSTRUCTION CORP	\$68,263.00
1998	2077	0066-029-2175,SR02			TESSA CONSTRUCTION CO	\$132,698.10
1998	2078	0085-026-2046,SR01;0085-026-2047,SR01			CORMAN CONSTRUCTION INC	\$820,912.20
1998	2079	0712-012-6099,SR00			PRECON MARINE INC	\$70,786.00
1998	2080	MSU-97-BRR-808			ARCHER WESTERN CONTRACTORS LTD	\$844,900.00
1998	2081	0033-082-1021,SR01;0033-082-1022,SR01			FAIRFIELD BRIDGE CO INC	\$699,965.42
1998	2351	0631-013-T07,N501			MAC CONSTRUCTION INC	\$131,186.15
1998	2355	0668-013-T09,N501			LITTLE HENRYS EXCAVATING & PAVING INC	\$141,617.63
1998	2357	0711-013-T10,N501			MAC CONSTRUCTION INC	\$325,994.00
1998	2359	0715-013-T11,N501			HUNTER PAVING INC	\$235,610.50
1998	2364	0838-013-T15,N501			HUNTER PAVING INC	\$187,742.50
1998	2389	0616-013-T40,N501			MAC CONSTRUCTION INC	\$185,481.00
1998	2446	TS01-961-906;TS01-962-906;TS01-963-906;TS01-967-907;TS01-968-906			RICHARDSONWAYLAND ELECTRICAL CORPOR	\$4,840,544.00
1998	2447	TS03-964-906			RICHARDSONWAYLAND ELECTRICAL CORPOR	\$1,202,996.16
1999	2	0674-023-P71,N501		11-Jan-99	GENERAL EXCAVATION INC	\$454,429.30
1999	75	C-11-99		13-Jan-99	W L CONSTRUCTION & PAVING INC	\$1,037,868.89
1999	79	C-11-99		03-Feb-99	W L CONSTRUCTION & PAVING INC	\$1,037,868.89
1999	90	1-B-99		26-Mar-99	W L CONSTRUCTION & PAVING INC	\$1,188,676.26
1999	100	1-D-99		09-Mar-99	MAC CONSTRUCTION INC	\$560,645.63
1999	105	1-E-99		15-Mar-99	MAYMEAD MATERIALS INC	\$827,339.42
1999	115	0849-092-555,N501		28-Jan-99	P & J CONTRACTING LLC	\$162,037.06
1999	116	1-G-99		15-Mar-99	MAYMEAD MATERIALS INC	\$1,074,464.74

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	121		1-H-99	09-Mar-99	APAC VIRGINIA INC	\$652,224.41
1999	126		1-I-99	09-Mar-99	APAC VIRGINIA INC	\$314,668.06
1999	131		1-J-99	09-Mar-99	JAMES R VANNOY & SONS CONSTRUCTION COMP	\$808,082.55
1999	144		1-A-99	10-May-99	W L CONSTRUCTION & PAVING INC	\$542,095.12
1999	149		1-C-99	10-May-99	W L CONSTRUCTION & PAVING INC	\$1,250,525.52
1999	151		1-F-99	10-May-99	W L CONSTRUCTION & PAVING INC	\$672,657.06
1999	152		1-K-99	10-May-99	W L CONSTRUCTION & PAVING INC	\$901,203.17
1999	153		1-L-99	03-May-99	W L CONSTRUCTION & PAVING INC	\$1,115,390.85
1999	159		C-21-99	13-Jan-99	WHITEHURST PAVING CO INC	\$338,681.14
1999	160		C-22-99	13-Jan-99	ADAMS CONSTRUCTION CO	\$353,348.96
1999	161		C-23-99	13-Jan-99	ADAMS CONSTRUCTION CO	\$387,421.82
1999	162		C-25-99	13-Jan-99	WHITEHURST PAVING CO INC	\$574,686.80
1999	163		C-26-99	13-Jan-99	ADAMS CONSTRUCTION CO	\$553,499.87
1999	185		S2-1-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$304,183.01
1999	186		S2-2-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$235,109.58
1999	187		S2-3-99	05-Feb-99	SLURRY PAVERS INC	\$151,044.40
1999	188		S2-4-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$281,249.66
1999	189		S2-5-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$457,214.59
1999	190		S2-6-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$1,293,021.30
1999	212		2-A-99	09-Mar-99	APAC VIRGINIA INC	\$501,321.91
1999	218		2-B-99	09-Mar-99	ADAMS CONSTRUCTION CO	\$920,556.21
1999	227		2-C-99	09-Mar-99	ADAMS CONSTRUCTION CO	\$494,993.57
1999	228		2-D-99	09-Mar-99	ADAMS CONSTRUCTION CO	\$1,465,467.82
1999	233		2-E-99	09-Mar-99	APAC VIRGINIA INC	\$1,020,372.74
1999	238		2-F-99	09-Mar-99	APAC VIRGINIA INC	\$1,177,876.89
1999	243		2-G-99	15-Mar-99	ROY N FORD CO INC	\$313,842.25
1999	248		2-H-99	09-Mar-99	APAC VIRGINIA INC	\$690,820.39
1999	264		2-L-99	09-Mar-99	ADAMS CONSTRUCTION CO	\$1,682,211.14
1999	267		2-I-99	03-May-99	ADAMS CONSTRUCTION CO	\$1,219,885.14
1999	268		2-J-99	03-May-99	ADAMS CONSTRUCTION CO	\$380,582.25
1999	269		2-K-99	03-May-99	ADAMS CONSTRUCTION CO	\$978,538.97
1999	277		C-31-99	04-Feb-99	WHITEHURST PAVING CO INC	\$702,999.65
1999	278		C-32-99	04-Feb-99	WHITEHURST PAVING CO INC	\$780,412.76
1999	279		C-33-99	04-Feb-99	WHITEHURST PAVING CO INC	\$365,381.20
1999	280		C-34-99	04-Feb-99	MARVIN V TEMPLETON & SONS INC	\$416,647.79
1999	281		C-35-99	04-Feb-99	WHITEHURST PAVING CO INC	\$730,843.65
1999	304		S3-1-99&L-31-99	05-Feb-99	MARVIN V TEMPLETON & SONS INC	\$658,165.97
1999	305		A-31-99	15-Mar-99	MARVIN V TEMPLETON & SONS INC	\$870,430.30
1999	310		A-32-99	09-Mar-99	S L WILLIAMSON CO INCORPORATED	\$872,958.11
1999	315		A-33-99	15-Mar-99	MARVIN V TEMPLETON & SONS INC	\$3,210,784.90
1999	324		A-35-99	09-Mar-99	THOMPSONS INC OF DANVILLE, VIRGINIA	\$1,799,396.20
1999	329		A-36-99	09-Mar-99	B P SHORT & SON PAVING CO INC	\$870,179.76
1999	333		A-37-99	06-May-99	M C CONSTRUCTION INC	\$1,168,664.31
1999	340		C-41-99	14-Jan-99	B P SHORT & SON PAVING CO INC	\$1,269,165.69
1999	341		C-42-99	14-Jan-99	PAYNE PAVING CO INC	\$606,304.13
1999	356		S4-1-99	05-Feb-99	SLURRY PAVERS INC	\$842,264.78

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	357	4-A-99		09-Mar-99	B P SHORT & SON PAVING CO INC	\$359,236.06
1999	363	4-B-99		15-Mar-99	J A BARKER CONSTRUCTION CO INC	\$1,054,612.46
1999	368	4-C-99		15-Mar-99	APAC VIRGINIA INC	\$65,769.50
1999	373	4-D-99		09-Mar-99	B P SHORT & SON PAVING CO INC	\$192,335.77
1999	378	4-E-99		09-Mar-99	B P SHORT & SON PAVING CO INC	\$643,440.55
1999	383	4-F-99		09-Mar-99	B P SHORT & SON PAVING CO INC	\$461,071.43
1999	388	4-G-99		09-Mar-99	B P SHORT & SON PAVING CO INC	\$575,337.95
1999	393	4-H-99		15-Mar-99	APAC VIRGINIA INC	\$329,741.00
1999	398	4-I-99		15-Mar-99	INTERSTATE CONSTRUCTION CORP	\$419,080.05
1999	403	4-J-99		15-Mar-99	MEGA CONTRACTORS INC	\$345,809.50
1999	408	4-K-99		15-Mar-99	MEGA CONTRACTORS INC	\$896,271.62
1999	413	4-L-99		24-Mar-99	LEE HY PAVING CORP	\$377,377.73
1999	418	4-M-99		24-Mar-99	LEE HY PAVING CORP	\$270,712.59
1999	423	4-N-99		24-Mar-99	LEE HY PAVING CORP	\$242,495.97
1999	428	4-O-99		24-Mar-99	LEE HY PAVING CORP	\$243,993.35
1999	436	C-51-99		13-Jan-99	WHITEHURST PAVING CO INC	\$976,255.89
1999	446	S-51-99		08-Feb-99	SLURRY PAVERS INC	\$411,708.48
1999	447	5-A-99		15-Mar-99	JA CONSTRUCTION CORP	\$2,206,637.02
1999	451	5-B-99		08-Mar-99	B P SHORT & SON PAVING CO INC	\$2,447,550.62
1999	456	5-C-99		16-Mar-99	HENRY S BRANSCOME INC	\$3,069,688.70
1999	466	5-E-99		16-Mar-99	BASIC CONSTRUCTION CO	\$2,104,853.00
1999	471	5-D-99		03-May-99	E V WILLIAMS CO INC	\$1,920,905.34
1999	486	C-61-99		14-Jan-99	PAVING CONTRACTORS INC	\$434,954.69
1999	487	C-62-99		14-Jan-99	PAVING CONTRACTORS INC	\$751,307.18
1999	500	6-D-99		16-Mar-99	HENRY S BRANSCOME INC	\$2,826,041.90
1999	505	6-A-99		16-Mar-99	VIRGINIA PAVING CO INC	\$2,053,427.88
1999	510	6-C-99		24-Mar-99	LEE HY PAVING CORP	\$1,365,203.25
1999	515	6-B-99		16-Mar-99	VIRGINIA PAVING CO INC	\$3,243,251.70
1999	522	L-61-99		27-May-99	SLURRY PAVERS INC	\$371,885.46
1999	526	L-71-99		05-Feb-99	SLURRY PAVERS INC	\$545,329.60
1999	534	S7-1-99		05-Feb-99	SLURRY PAVERS INC	\$297,239.11
1999	551	7-A-99		08-Mar-99	S L WILLIAMSON CO INCORPORATED	\$1,721,495.81
1999	555	7-B-99		08-Mar-99	S L WILLIAMSON CO INCORPORATED	\$3,169,612.16
1999	560	7-C-99		08-Mar-99	SUPERIOR PAVING CORP	\$2,157,051.63
1999	565	7-D-99		08-Mar-99	SUPERIOR PAVING CORP	\$2,466,988.80
1999	573	C-82-99		13-Jan-99	WHITEHURST PAVING CO INC	\$439,994.08
1999	574	C-81-99		13-Jan-99	WHITEHURST PAVING CO INC	\$489,958.48
1999	575	C-83-99		13-Jan-99	WHITEHURST PAVING CO INC	\$196,197.04
1999	576	C-84-99		13-Jan-99	WHITEHURST PAVING CO INC	\$259,119.88
1999	577	C-85-99		13-Jan-99	WHITEHURST PAVING CO INC	\$164,856.72
1999	600	S8-1-99		05-Feb-99	SLURRY PAVERS INC	\$449,745.89
1999	601	8-A-99		16-Mar-99	ADAMS CONSTRUCTION CO	\$1,449,757.78
1999	606	8-B-99		24-Mar-99	B & S CONTRACTING INC	\$1,060,196.25
1999	611	8-C-99		09-Mar-99	BLAKEMORE CONSTRUCTION CORP	\$798,097.08
1999	616	8-D-99		16-Mar-99	APAC VIRGINIA INC	\$1,236,515.15
1999	621	8-E-99		16-Mar-99	APAC VIRGINIA INC	\$124,011.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	626	8-F-99		09-Mar-99	BLAKEMORE CONSTRUCTION CORP	\$1,038,761.86
1999	631	8-G-99		24-Mar-99	B & S CONTRACTING INC	\$1,343,706.00
1999	636	8-H-99		16-Mar-99	ADAMS CONSTRUCTION CO	\$1,021,904.72
1999	641	8-I-99		16-Mar-99	APAC VIRGINIA INC	\$638,701.20
1999	645	CM-84-99		16-Mar-99	APAC VIRGINIA INC	\$175,073.00
1999	648	CM-85-99		16-Mar-99	APAC VIRGINIA INC	\$227,012.00
1999	658	C-A1-99		13-Jan-99	WHITEHURST PAVING CO INC	\$137,136.71
1999	665	SA-1-99&LA-1-99		05-Feb-99	SLURRY PAVERS INC	\$1,432,062.64
1999	668	A-D-99		16-Mar-99	JULIUS BRANSCOME INC	\$2,603,931.15
1999	676	A-F-99		16-Mar-99	NEWTON ASPHALT CO INC OF VIRGINIA	\$2,983,752.98
1999	682	A-G-99		16-Mar-99	VIRGINIA PAVING CO INC	\$1,907,680.90
1999	688	A-A-99		08-Mar-99	SUPERIOR PAVING CORP	\$3,121,094.35
1999	693	A-B-99		16-Mar-99	NEWTON ASPHALT CO INC OF VIRGINIA	\$3,474,426.74
1999	698	A-C-99		16-Mar-99	NEWTON ASPHALT CO INC OF VIRGINIA	\$3,677,090.01
1999	703	A-E-99		16-Mar-99	VIRGINIA PAVING CO INC	\$1,261,238.92
1999	1291	0610-098-227,M501		26-Jan-99	PATRICK CONSTRUCTION INC	\$916,984.35
1999	1292	0608-098-P93,N501		19-Mar-99	P & J CONTRACTING LLC	\$308,809.52
1999	1293	0609-013-178,M501		01-Feb-99	CLECO CORP	\$3,737,216.05
1999	1298	0609-167-180,M501;0609-001-169,M501		03-Feb-99	GERALD M MOORE SON INC	\$1,094,892.00
1999	1303	0621-079-137,M501		14-Jan-99	HOWARD BROTHERS CONTRACTOR INC	\$277,281.35
1999	1307	0657-044-295,M501		12-Jan-99	J C JOYCE TRUCKING & PAVING CO INC	\$831,697.18
1999	1309	0634-009-249,C501,D643		12-Jan-99	D L B INC	\$2,549,215.33
1999	1318	1004-225-182,C501		14-Jan-99	GENERAL EXCAVATION INC	\$474,598.90
1999	1319	0670-026-235,C501,B660		26-Jan-99	KEY CONSTRUCTION INC	\$1,212,307.00
1999	1322	0614-098-P44N501		11-Jan-99	D & D CONSTRUCTION CO	\$118,852.00
1999	1323	0647-098-P43,N501		26-Jan-99	PATRICK CONSTRUCTION INC	\$345,620.00
1999	1327	0739-077-P69,N501		11-Jan-99	SIMPSON CONSTRUCTION CO INC	\$135,950.10
1999	1333	0633-025-366,N502		04-Feb-99	LITTLE HENRYS EXCAVATING & PAVING INC	\$127,901.55
1999	1335	0604-010-176,N501,B622		12-Jan-99	ELK KNOB INC	\$87,678.38
1999	1342	0602-092-P14,N501		19-Mar-99	HUNTER PAVING INC	\$308,544.60
1999	1346	0601-077-P97,N501		21-Jan-99	WOODYARD BROTHERS INC	\$604,463.50
1999	1347	0809-042-275,C501		14-Jan-99	HOWARD BROTHERS CONTRACTOR INC	\$505,728.65
1999	1356	0685-240-256,N502		04-Feb-99	D & D CONSTRUCTION CO	\$323,644.15
1999	1357	0692-033-229,N503,B647		04-Feb-99	D A BROWN INC	\$174,738.01
1999	1364	0700-038-P65,N503		10-Mar-99	W L CONSTRUCTION & PAVING INC	\$367,137.16
1999	1365	0604-014-204,M501		11-Jan-99	PEARSON CONSTR INC	\$620,057.52
1999	1370	0611-095-P68,N501		12-Jan-99	W L CONSTRUCTION & PAVING INC	\$224,140.00
1999	1371	0522-054-113,C501		11-Jan-99	GENERAL EXCAVATION INC	\$261,324.35
1999	1378	0685-083-P48,N501		04-Feb-99	LITTLE HENRYS EXCAVATING & PAVING INC	\$148,549.30

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	1381	0015-056-102,M600		03-Feb-99	APAC VIRGINIA INC	\$499,515.58
1999	1383	0250-002-112,C501		26-Jan-99	GENERAL EXCAVATION INC	\$416,610.00
1999	1388	0627-013-P50,N502		12-Jan-99	ELK KNOB INC	\$160,023.92
1999	1390	0671-087-264,M503		19-Mar-99	B P SHORT & SON PAVING CO INC	\$429,125.60
1999	1394	0690-013-P91,N501		19-Mar-99	J & J CONTRACTORS INC	\$212,587.80
1999	1396	0288-020-105,C504		05-Feb-99	DRIGGS CORP	\$25,279,791.12
1999	1399	0632-073-194,N501,B637		04-Mar-99	RIVER VIEW INVESTMENTS INC	\$176,941.78
1999	1404	0801-013-T22,N501		08-Mar-99	MAC CONSTRUCTION INC	\$183,073.00
1999	1428	0604-045-135,N501		28-Jan-99	PLECKER CONSTRUCTION CO INC	\$249,838.50
1999	1455	0681-046-P98,N501		11-Jan-99	BISHOP & SETTLE CONSTRUCTION CO INC	\$343,145.85
1999	1463	0661-062-225,M501		19-Apr-99	D S NASH CONSTRUCTION CO	\$335,298.60
1999	1471	1001-035-7702-A05		03-Feb-99	J & D CONSTRUCTION CO INC	\$71,776.50
1999	1472	0460-035-7711-A02		15-Mar-99	REED EXCAVATING CONTRACTORS INC	\$487,718.20
1999	1476	0047-019-1029,SR01		08-Feb-99	CLECO CORP	\$67,398.00
1999	1479	0646-026-6060,SR00		04-Feb-99	WILKINS CONSTRUCTION CO INC	\$144,678.40
1999	1488	M598TEF822		01-Feb-99	B L C ENTERPRISES INC	\$194,200.00
1999	1493	M598TRX712		04-Mar-99	KENNEDY CO OF VA INC	\$187,054.00
1999	1495	M599RSR502		15-Mar-99	WOLF CONTRACTORS INC	\$539,933.40
1999	1499	GM-7-99		08-Mar-99	MAKCO INC	\$368,780.00
1999	1521	0042-010-1015,SR02		03-Feb-99	RANNY E ODELL & CO INC	\$376,486.58
1999	1522	0080-095-1111,SR00		04-Feb-99	KEN CONSTRUCTION CO INC	\$96,486.25
1999	1524	0601-086-6012,SR00		04-Feb-99	KEN CONSTRUCTION CO INC	\$79,307.50
1999	1604	0629-013-T19,N501		08-Mar-99	MAC CONSTRUCTION INC	\$138,595.90
1999	1610	0058-052-E23,C501,B632,B633,B634,B635		13-May-99	MCKINNON BRIDGE CO INC	\$16,399,646.15
1999	1611	0628-080-232,C501		13-Apr-99	A R COFFEY & SONS INC	\$547,304.01
1999	1612	0522-034-118,C501,D626		13-Apr-99	APAC VIRGINIA INC	\$1,184,102.43
1999	1613	0670-025-405,C501,B624		13-Apr-99	PATRICK CONSTRUCTION INC	\$250,160.40
1999	1614	0010-074-110,C501;0010-074-111,C501		17-May-99	BLAKEMORE CONSTRUCTION CORP	\$384,422.58
1999	1616	0011-098-1030,SR01		13-Apr-99	FORT CHISWELL CONSTRUCTION CORP	\$959,993.15
1999	1617	0636-020-280,C501		12-May-99	RICHARD L CROWDER CONSTRUCTION INC	\$1,258,173.50
1999	1618	0581-128-2818,SR02;0581-128-2819,SR02		13-Apr-99	HAMMOND MITCHELL	\$192,945.00
1999	1619	0072-025-105,M600		15-Apr-99	ELK KNOB INC	\$128,770.92
1999	1621	0612-078-6010,SR01		19-Apr-99	RIVER VIEW INVESTMENTS INC	\$150,307.25
1999	1622	0274-038-1009,SR02		15-Apr-99	ELK KNOB INC	\$535,734.98
1999	1623	0810-002-6125,SR01		15-Apr-99	RIVER VIEW INVESTMENTS INC	\$186,652.26
1999	1625	0460-092-1010,SR00		15-Apr-99	ELK KNOB INC	\$781,565.79

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	1626	0621-083-350,N501		13-Apr-99	MAC CONSTRUCTION INC	\$154,102.14
1999	1627	0663-083-P49,N501		13-Apr-99	MAC CONSTRUCTION INC	\$128,596.70
1999	1628	0620-025-414,N501		13-Apr-99	J & J CONTRACTORS INC	\$370,582.45
1999	1629	0601-005-P35,N501,D652		19-Apr-99	D S NASH CONSTRUCTION CO	\$573,314.67
1999	1630	0001-127-104,B608		18-May-99	W H P BURLEIGH INC	\$342,000.00
1999	1632	6058-058-E25,L801		21-May-99	RED OAK EXCAVATING INC	\$178,127.80
1999	1634	0685-042-260,M501,B630		29-Jun-99	ABERNATHY CONSTRUCTION CORP	\$520,024.00
1999	1635	0703-029-331,M501		03-May-99	MARTINS CONSTRUCTION CORP	\$409,267.30
1999	1637	0630-022-130,C502,B625		03-May-99	A R COFFEY & SONS INC	\$238,967.55
1999	1638	0612-029-P91,C503		01-Jun-99	D & D CONSTRUCTION CO	\$1,191,767.49
1999	1639	0615-010-P60,N502		12-May-99	D & D CONSTRUCTION CO	\$65,121.00
1999	1640	0724-062-P58,N501		03-May-99	UNLIMITED EXCAVATING INC	\$368,020.95
1999	1641	0641-029-282,C501,B618		29-Jun-99	MARTIN & GASS INC	\$4,948,962.57
1999	1642	0007-029-1035,SR03;0007-029-1043,SR01;0613-029-6111,SR03;0000-029-1042,SR02		06-May-99	CORMAN CONSTRUCTION INC	\$1,874,476.50
1999	1643	0690-053-6058,SR01		16-Jun-99	RIVER VIEW INVESTMENTS INC	\$255,420.20
1999	1645	0017-089-7813,S04		24-Jun-99	CENTURY CONCRETE INC	\$860,574.00
1999	1646	0670-005-229,C501,D650,D651		04-Jun-99	BURLEIGH CONSTRUCTION CO INC	\$586,531.15
1999	1647	0651-031-230,M501,B631		14-Jun-99	NEW RIVER BRIDGE CO	\$319,920.58
1999	1648	CR00-089-101,C502		04-Jun-99	TAVARES CONCRETE COINC	\$488,740.20
1999	1649	0085-123-8008,SR02		29-Jun-99	D W LYLE CORP	\$1,037,149.48
1999	1650	1002-317-219,C501;0662-317-224,C501;1015-317-226,C501		04-Jun-99	KEY CONSTRUCTION INC	\$759,885.54
1999	1651	0676-030-273,C502,D638		16-Jun-99	S W RODGERS CO INC	\$899,235.18
1999	1652	0639-016-117,C503		01-Jun-99	J L KENT & SONS INC	\$1,062,661.19
1999	1654	0734-005-P46,N501		16-Jun-99	J & D CONSTRUCTION CO INC	\$140,355.05
1999	1655	0779-005-P45,N501		01-Jun-99	A R COFFEY & SONS INC	\$244,719.70
1999	1656	0611-095-P70,N501		04-Jun-99	PATRICK CONSTRUCTION INC	\$212,395.32
1999	1657	0618-013-T41,N501		16-Jun-99	HUNTER PAVING INC	\$202,630.00
1999	1658	0670-010-P45,N503		16-Jun-99	D & D CONSTRUCTION CO	\$74,110.00
1999	1660	0006-037-1012,SR01		30-Jun-99	ABERNATHY CONSTRUCTION CORP	\$743,215.40
1999	1668	0030-050-120,C501		30-Jun-99	CHESAPEAKE CONTRACTORS INC	\$69,228.50
1999	1675	0600-007-P47,N504		17-May-99	F CLAYTON PLECKERS & SONS INC	\$1,651,405.20

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	2049	0501-041-1900,SR01;0058-041-1038,SR01		12-Jan-99	CLECO CORP	\$118,434.25
1999	2050	0029-071-115,SR01		11-Jan-99	CLECO CORP	\$235,998.40
1999	2075	P2-A02-98		11-Jan-99	TESSA CONSTRUCTION CO	\$664,770.00
1999	2082	1201-092-6135,SR00		25-May-99	CONCRETE INC	\$174,749.00
1999	2083	0658-047-163,N501		12-Apr-99	WOLF CONTRACTORS INC	\$58,713.50
1999	2084	WR-029-DTR		07-May-99	LCCT INC	\$37,563.75
1999	2087	0081-077-2026,SR01;0081-077-2027,SR01		17-Jun-99	CLECO CORP	\$380,504.00
1999	2089	0501-041-126,N501		30-Apr-99	LANCO PAVING INC	\$49,146.00
1999	2090	M598BRP825B		12-Apr-99	MONOKO INC	\$873,708.00
1999	2092	0688-069-P23,N501		30-Jun-99	ECHOLS BROTHERS INC	\$245,294.90
1999	2094	0083-025-1059,SR02		14-Apr-99	OVERLAY INC	\$185,715.00
1999	2095	0083-013-1908,SR01;0058-083-1049,SR01		14-Apr-99	CLECO CORP	\$193,991.16
1999	2096	0288-020-105,N509		06-Apr-99	WILLIAM T CANTRELL INC	\$3,358,064.00
1999	2097	0640-081-P13,N501		12-Apr-99	R S & L D HART INC	\$203,086.42
1999	2100	MFRGM39634		06-May-99	L S LEE INC	\$257,520.00
1999	2101	MLY98PRC403;MLY98PRC404;MLY98PRC405;MLY98PRC406		12-Apr-99	BURLEIGH CONSTRUCTION CO INC	\$332,093.50
1999	2104	0005-018-1917,SR18		17-Jun-99	WATERFRONT MARINE CONSTRUCTION INC	\$98,200.00
1999	2105	21-0661-6063;21-0661-6062		12-Apr-99	FAIRFIELD BRIDGE CO INC	\$242,844.15
1999	2107	PRMO-966-101,N512;IRMO-966-101,N508		30-Apr-99	INTERNATIONAL CONTRACTORS INC	\$249,704.07
1999	2108	CM00526A39592		19-Apr-99	MTA INDUSTRIAL PAINTING CORP	\$568,133.00
1999	2109	CMA9W739672		14-Apr-99	FORT MYER CONSTRUCTION CORP	\$1,503,646.10
1999	2110	CMA9W839672		14-Apr-99	FORT MYER CONSTRUCTION CORP	\$1,319,650.60
1999	2111	CMA9W139672		17-May-99	OLNEY MASONRY CORP	\$483,578.50
1999	2112	CMA9439672		12-Apr-99	FORT MYER CONSTRUCTION CORP	\$711,212.50
1999	2113	CMA9MR39672		25-May-99	APAC VIRGINIA INC	\$137,994.30
1999	2117	GM-8A-98		30-Apr-99	WEBSTER & WEBSTER INC	\$660,530.00
1999	2118	GM-8B-98		30-Jun-99	MAKCO INC	\$414,890.00
1999	2119	CM898GRM82345		30-Apr-99	MAKCO INC	\$225,280.00
1999	2120	GM-8D-98		30-Jun-99	MAKCO INC	\$552,940.00
1999	2121	GM-8E-98		30-Apr-99	MAKCO INC	\$483,345.00
1999	2122	0641-077-P98,N501		29-Apr-99	LEWIS CONSTRUCTION OF VIRGINIA INC	\$551,071.70
1999	2123	0684-060-P02,N502		29-Apr-99	C R HENDERSON CO	\$111,550.00
1999	2124	SCG-76A-99		12-Apr-99	FORT MYER CONSTRUCTION CORP	\$707,772.60
1999	2125	0029-056-116,N501		12-Apr-99	R L RIDER & CO	\$288,325.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
1999	2127	M499APM39715		30-Apr-99	APAC VIRGINIA INC	\$1,030,090.00
1999	2128	M499BPM39715		30-Apr-99	APAC VIRGINIA INC	\$1,073,082.50
1999	2130	CMA99W39743		12-Apr-99	MARTINS CONSTRUCTION CORP	\$229,972.70
1999	2133	SWR-029-0066		04-Jun-99	CENTURY CONCRETE INC	\$55,619.00
1999	2134	M499TE339645		30-Apr-99	A ANNANDALE INC	\$186,601.83
1999	2135	0669-080-P83,N501		30-Apr-99	REED EXCAVATING CONTRACTORS INC	\$255,085.52
1999	2136	0722-009-6126		22-Apr-99	D A BROWN INC	\$143,022.10
1999	2139	15-0680-5603		03-May-99	WATTS CONTRACTORS INC	\$174,584.00
1999	2140	0690-022-P37,N501		30-Apr-99	C R HENDERSON CO	\$121,898.00
1999	2141	MST-99-TEP-803		30-Apr-99	ACCENT STRIPE INC	\$106,161.31
1999	2144	0602-039-P52,N501		03-May-99	UNLIMITED EXCAVATING INC	\$165,136.06
1999	2148	SCG-76B-99		22-Apr-99	ARTHUR CONSTRUCTION CO INC	\$648,805.00
1999	2149	SCG-76C-99		22-Apr-99	ARTHUR CONSTRUCTION CO INC	\$403,710.00
1999	2152	PM-7A-99		14-Jun-99	ROADMARK CORP	\$228,250.63
1999	2153	M599PRH405		01-Jun-99	E V WILLIAMS CO INC	\$417,558.25
1999	2160	M699TPA39549;M699TPA39552		14-Jun-99	ROADMARK CORP	\$123,155.00
1999	2165	21-0621-6010		17-Jun-99	GULL CORP	\$142,705.50
1999	2171	0733-062-P59,N501		30-Jun-99	D S NASH CONSTRUCTION CO	\$176,629.88
1999	2172	0607-005-P40,N501		30-Jun-99	D S NASH CONSTRUCTION CO	\$327,527.36
1999	2191	M3-99-BRR-701		04-Jun-99	LANFORD BROTHERS CO INC	\$372,918.50
1999	2207	0779-062-P60,N501		30-Jun-99	D S NASH CONSTRUCTION CO	\$168,019.90
1999	2208	0663-006-P02,N501		30-Jun-99	D S NASH CONSTRUCTION CO	\$250,621.50
2000	87	PM-1A-00		10-Mar-00	W L CONSTRUCTION & PAVING INC	\$606,379.01
2000	91	PM-1B-00		10-Mar-00	W L CONSTRUCTION & PAVING INC	\$929,789.94
2000	96	PM-1C-00		10-Mar-00	W L CONSTRUCTION & PAVING INC	\$1,207,844.56
2000	101	PM-1D-00		10-Mar-00	MAC CONSTRUCTION INC	\$907,211.30
2000	106	PM-1E-00		03-Apr-00	MAYMEAD MATERIALS INC	\$763,419.82
2000	110	PM-1F-00		10-Mar-00	W L CONSTRUCTION & PAVING INC	\$1,046,893.15
2000	117	PM-1G-00		03-Apr-00	MAYMEAD MATERIALS INC	\$782,944.26
2000	122	PM-1H-00		10-Mar-00	FLOYD ASPHALT PAVING CO	\$479,672.55
2000	127	PM-1I-00		27-Mar-00	APAC VIRGINIA INC	\$783,570.04
2000	132	PM-1J-00		10-Mar-00	JAMES R VANNOY & SONS CONSTRUCTION COMP	\$1,033,454.80
2000	136	PM-1K-00		10-Mar-00	W L CONSTRUCTION & PAVING INC	\$1,047,462.30
2000	140	PM-1L-00		03-Apr-00	MAYMEAD MATERIALS INC	\$845,525.98
2000	145	ST-1A-00		03-Apr-00	W L CONSTRUCTION & PAVING INC	\$1,374,378.23
2000	150	ST-1B-00		03-Apr-00	ADAMS CONSTRUCTION CO	\$832,189.05
2000	155	ST-2A-00,ST-2B-00,ST-2D-00		19-Jan-00	ADAMS CONSTRUCTION CO	\$1,570,185.73
2000	178	ST-2E-00		19-Jan-00	WHITEHURST PAVING CO INC	\$398,420.47
2000	182	SS-2A-00		02-Feb-00	SLURRY PAVERS INC	\$58,135.09
2000	191	SS-2C-00		02-Feb-00	APAC VIRGINIA INC	\$1,216,995.74
2000	196	SS-2D-00		02-Feb-00	APAC VIRGINIA INC	\$196,363.14
2000	200	SS-2E-00		02-Feb-00	SLURRY PAVERS INC	\$364,466.21
2000	204	SS-2F-00		02-Feb-00	SLURRY PAVERS INC	\$170,389.55
2000	208	PM-2A-00		27-Mar-00	APAC VIRGINIA INC	\$743,796.73

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	213	PM-2B-00		27-Mar-00	APAC VIRGINIA INC	\$475,896.26
2000	214	PM-2L-00		30-May-00	ADAMS CONSTRUCTION CO	\$2,206,146.20
2000	219	PM-2C-00		27-Mar-00	APAC VIRGINIA INC	\$686,880.47
2000	223	PM-2D-00		27-Mar-00	APAC VIRGINIA INC	\$1,805,132.90
2000	229	PM-2E-00		27-Mar-00	APAC VIRGINIA INC	\$365,472.15
2000	234	PM-2F-00		27-Mar-00	APAC VIRGINIA INC	\$1,156,218.34
2000	239	PM-2G-00		27-Mar-00	APAC VIRGINIA INC	\$254,461.68
2000	244	PM-2H-00		27-Mar-00	APAC VIRGINIA INC	\$882,128.34
2000	249	PM-2I-00		30-May-00	ADAMS CONSTRUCTION CO	\$549,910.05
2000	253	PM-2K-00		14-Mar-00	ADAMS CONSTRUCTION CO	\$1,987,850.64
2000	260	ST-2C-00		03-Apr-00	MARVIN V TEMPLETON & SONS INC	\$780,121.05
2000	296	SS-3A-00		02-Feb-00	SLURRY PAVERS INC	\$399,632.92
2000	300	LM-3A-00		02-Feb-00	SLURRY PAVERS INC	\$220,458.20
2000	306	PM-3A-00		16-Mar-00	S L WILLIAMSON CO INCORPORATED	\$2,054,653.25
2000	311	PM-3B-00		14-Mar-00	MARVIN V TEMPLETON & SONS INC	\$4,028,909.51
2000	316	PM-3C-00		16-Mar-00	S L WILLIAMSON CO INCORPORATED	\$1,501,907.67
2000	320	PM-3D-00		27-Mar-00	APAC VIRGINIA INC	\$1,653,996.92
2000	325	PM-3E-00		27-Mar-00	APAC VIRGINIA INC	\$1,985,252.44
2000	337	ST-4A-00		19-Jan-00	B P SHORT & SON PAVING CO INC	\$1,513,735.42
2000	343	ST-4B-00		19-Jan-00	PAYNE PAVING CO INC	\$756,209.42
2000	352	SS-4A-00		02-Feb-00	SLURRY PAVERS INC	\$1,174,593.51
2000	358	PM-4A-00		27-Mar-00	B P SHORT & SON PAVING CO INC	\$1,771,325.48
2000	364	PM-4B-00		27-Mar-00	B P SHORT & SON PAVING CO INC	\$835,589.39
2000	369	PM-4C-00		14-Mar-00	MEGA CONTRACTORS INC	\$130,610.12
2000	374	PM-4D-00		27-Mar-00	B P SHORT & SON PAVING CO INC	\$249,923.58
2000	379	PM-4E-00		27-Mar-00	B P SHORT & SON PAVING CO INC	\$271,439.04
2000	384	PM-4F-00		13-Apr-00	INTERSTATE CONSTRUCTION CORP	\$319,562.96
2000	389	PM-4G-00		27-Mar-00	B P SHORT & SON PAVING CO INC	\$472,536.53
2000	394	PM-4H-00		14-Mar-00	MEGA CONTRACTORS INC	\$1,164,590.07
2000	399	PM-4I-00		06-Apr-00	BLAKEMORE CONSTRUCTION CORP	\$299,524.13
2000	404	PM-4J-00		13-Apr-00	INTERSTATE CONSTRUCTION CORP	\$556,250.60
2000	409	PM-4K-00		13-Apr-00	INTERSTATE CONSTRUCTION CORP	\$476,963.04
2000	414	PM-4L-00		14-Mar-00	LEE HY PAVING CORP	\$268,475.85
2000	419	PM-4M-00		03-Apr-00	BASIC CONSTRUCTION CO	\$263,935.28
2000	424	PM-4N-00		14-Mar-00	LEE HY PAVING CORP	\$618,282.62
2000	429	PM-4O-00		14-Mar-00	LEE HY PAVING CORP	\$606,337.98
2000	432	PM-4P-00		14-Mar-00	LEE HY PAVING CORP	\$548,854.99
2000	452	SS-5A-00		02-Feb-00	SLURRY PAVERS INC	\$707,774.53
2000	457	PM-5A-00		16-Mar-00	MEGA CONTRACTORS INC	\$2,511,168.97
2000	461	PM-5B-00		16-Mar-00	HENRY S BRANSCOME INC	\$4,553,252.42
2000	467	PM-5C-00		16-Mar-00	E V WILLIAMS CO INC	\$1,415,683.22
2000	472	PM-5D-00		03-Apr-00	BASIC CONSTRUCTION CO	\$2,542,318.77
2000	476	PM-5E-00		03-Apr-00	IA CONSTRUCTION CORP	\$3,261,996.90
2000	493	SS-6A-00		10-Feb-00	SLURRY PAVERS INC	\$176,805.78
2000	496	LM-6A-00		10-Feb-00	SLURRY PAVERS INC	\$102,854.40
2000	501	PM-6A-00		16-Mar-00	LEE HY PAVING CORP	\$2,096,054.66

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	506	PM-6B-00		28-Mar-00	APAC VIRGINIA INC	\$4,476,277.40
2000	511	PM-6C-00		28-Mar-00	BASIC CONSTRUCTION CO	\$1,560,589.65
2000	516	PM-6D-00		16-Mar-00	LEE HY PAVING CORP	\$1,254,977.08
2000	530	ST-7B-00,ST-7C-00,ST-7D-00		19-Jan-00	PAYNE PAVING CO INC	\$1,057,453.53
2000	541	SS-7-00		10-Feb-00	SLURRY PAVERS INC	\$301,132.13
2000	545	PM-7A-00		17-Mar-00	LEE HY PAVING CORP	\$1,963,120.41
2000	556	PM-7B-00		17-Mar-00	S L WILLIAMSON CO INCORPORATED	\$2,383,685.08
2000	561	PM-7C-00		17-Mar-00	SUPERIOR PAVING CORP	\$4,009,175.09
2000	566	PM-7D-00		17-Mar-00	JULIUS BRANSCOME INC	\$3,728,904.14
2000	596	SS-8A-00;LM-8A-00		10-Feb-00	SLURRY PAVERS INC	\$575,615.97
2000	602	PM-8A-00		03-Apr-00	ADAMS CONSTRUCTION CO	\$2,466,882.80
2000	607	PM-8B-00		06-Apr-00	BLAKEMORE CONSTRUCTION CORP	\$1,916,569.65
2000	612	PM-8C-00		17-Mar-00	BLAKEMORE CONSTRUCTION CORP	\$838,953.45
2000	617	PM-8D-00		06-Apr-00	BLAKEMORE CONSTRUCTION CORP	\$1,252,834.58
2000	622	PM-8E-00		03-Apr-00	APAC VIRGINIA INC	\$1,028,703.25
2000	627	PM-8F-00		06-Apr-00	BLAKEMORE CONSTRUCTION CORP	\$527,125.35
2000	632	PM-8G-00		06-Apr-00	BLAKEMORE CONSTRUCTION CORP	\$516,004.78
2000	637	PM-8H-00		03-Apr-00	APAC VIRGINIA INC	\$467,414.90
2000	660	SS-9A-00		10-Feb-00	SLURRY PAVERS INC	\$349,508.24
2000	669	PM-9A-00		17-Mar-00	VIRGINIA PAVING CO INC	\$3,754,636.50
2000	677	PM-9B-00		17-Mar-00	VIRGINIA PAVING CO INC	\$1,823,718.32
2000	683	PM-9C-00		17-Mar-00	JULIUS BRANSCOME INC	\$2,333,951.67
2000	689	PM-9D-00		17-Mar-00	VIRGINIA PAVING CO INC	\$4,609,899.52
2000	694	PM-9I-00		17-Mar-00	VIRGINIA PAVING CO INC	\$3,025,001.55
2000	699	PM-9G-00		17-Mar-00	VIRGINIA PAVING CO INC	\$4,504,871.32
2000	704	PM-9E-00		17-Mar-00	JULIUS BRANSCOME INC	\$3,202,297.68
2000	708	PM-9F-00		17-Mar-00	JULIUS BRANSCOME INC	\$1,919,240.52
2000	711	PM-9H-00		17-Mar-00	VIRGINIA PAVING CO INC	\$5,400,561.80
2000	1288	SASM-029-101,C501,D601,D602		16-Jun-00	CHERRY HILL CONSTRUCTION INC	\$7,487,570.91
2000	1464	0649-088-233,C501,D625,D626		01-Oct-99	BURLEIGH CONSTRUCTION CO INC	\$379,717.34
2000	1624	0732-007-315,M501,D680		01-Sep-99	CHARLES W BARGER & SONS CONSTRUCTION CO INC	\$739,503.12
2000	1633	0618-018-180,M501		14-Sep-99	HOWARD BROTHERS CONTRACTOR INC	\$265,554.21
2000	1636	0040-033-V11,C501,B612,D610		26-Jul-99	ALLEGHENY CONSTRUCTION CO INC	\$6,026,712.15
2000	1644	0647-029-6301,SR01		14-Jul-99	RUSTLER CONSTRUCTION INC	\$457,854.29
2000	1653	U000-266-103,C501		29-Jun-00	HAMMOND MITCHELL	\$866,526.00
2000	1659	0250-037-1027,SR01		06-Jul-99	W H P BURLEIGH INC	\$267,119.50
2000	1661	0055-030-1018,SR01		14-Jul-99	RUSTLER CONSTRUCTION INC	\$296,751.50
2000	1662	0244-000-1008,SR03		06-Jun-00	CORMAN CONSTRUCTION INC	\$1,617,387.00
2000	1663	0011-080-1001,SR01		16-Jul-99	ALLEGHENY CONSTRUCTION CO INC	\$915,837.50
2000	1664	1321-097-6095,SR00		01-Jul-99	CONCRETE INC	\$58,140.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	1665	0220-033-6382,SR01		13-Jul-99	BURLEIGH CONSTRUCTION CO INC	\$416,464.60
2000	1666	0221-031-1027,SR01		26-Aug-99	REED EXCAVATING CONTRACTORS INC	\$193,904.50
2000	1667	0250-032-101,C501		06-Aug-99	PEARSON CONSTR INC	\$276,648.27
2000	1669	0460-074-105,C501		01-Jul-99	B P SHORT & SON PAVING CO INC	\$616,729.20
2000	1671	0629-083-266,N502		26-Jul-99	C & S CONSTRUCTION & EXCAVATING INC	\$149,972.40
2000	1672	0753-044-380,C501		10-Nov-99	CARNELL CONSTRUCTION CORP	\$631,456.60
2000	1673	0419-080-115,C501		14-Dec-99	ALLEGHENY CONSTRUCTION CO INC	\$586,941.00
2000	1674	0811-009-269,M501		08-Nov-99	D A BROWN INC	\$161,009.08
2000	1676	0870-011-240,C501,B663		06-Jul-99	A R COFFEY & SONS INC	\$2,346,516.75
2000	1677	6058-058-E24,L801		01-Sep-99	GLOVER CONSTRUCTION CO INC	\$1,144,303.90
2000	1678	0060-003-1031,SR04;0060-003-1032,SR02		06-Aug-99	HAMMOND MITCHELL	\$1,993,118.25
2000	1679	5000-047-166,C501,B606,D607		30-Aug-99	JACK L MASSIE CONTRACTOR INC	\$7,448,636.94
2000	1680	0739-013-T21,B501		06-Aug-99	PATRICK CONSTRUCTION INC	\$134,404.90
2000	1682	0662-029-332,C501		16-Aug-99	JRG CONTRACTORS INC	\$388,795.00
2000	1684	0084-045-1006;0084-045-1007,SR00		16-Aug-99	ORDERS CONSTRUCTION CO INC	\$648,511.70
2000	1685	0460-092-1143,SR02		19-Jan-00	OVERLAY INC	\$27,900.00
2000	1686	0631-068-189,C501,D632		05-Aug-99	GENERAL EXCAVATION INC	\$366,582.75
2000	1687	0622-092-P40,N501		01-Sep-99	MAC CONSTRUCTION INC	\$191,105.50
2000	1688	0888-038-P79,N501		06-Aug-99	H B ROWE & CO INC	\$199,235.70
2000	1689	0648-086-P18,N502;0648-086-6139,SR00		06-Aug-99	D & D CONSTRUCTION CO	\$366,133.00
2000	1690	0646-033-135,N501,B612		06-Aug-99	DENNIS A BROWN	\$309,006.52
2000	1691	0610-040-185,M501		01-Sep-99	BISHOP & SETTLE CONSTRUCTION CO INC	\$577,023.71
2000	1692	0729-078-168,C501		30-Aug-99	R W HARRIS EXCAVATING INC	\$190,724.60
2000	1693	0648-091-188,M501		14-Sep-99	B P SHORT & SON PAVING CO INC	\$65,396.95
2000	1694	U000-134-118,C501		03-Sep-99	APAC VIRGINIA INC	\$4,170,823.78
2000	1695	0618-095-P71,N501		03-Sep-99	PATRICK CONSTRUCTION INC	\$221,814.40
2000	1696	0628-073-P47,M501,B629		01-Oct-99	KEY CONSTRUCTION INC	\$524,905.04
2000	1697	0682-041-288,C501		01-Oct-99	KEY CONSTRUCTION INC	\$377,091.50
2000	1698	0617-042-P65,M501		28-Sep-99	KEY CONSTRUCTION INC	\$654,161.30
2000	1699	0645-037-168,M501		06-Dec-99	PEARSON CONSTR INC	\$98,169.50
2000	1700	0643-029-294,C502		05-Jan-00	GOLDEN EAGLE CONSTRUCTION CO INC	\$5,994,343.40
2000	1701	0460-087-106,M501		01-Oct-99	CURTIS CONTRACTING INC	\$58,119.95
2000	1702	0675-051-144,C501		28-Sep-99	ABERNATHY CONSTRUCTION CORP	\$458,158.71
2000	1703	0605-052-P47,N501		07-Oct-99	LITTLE HENRYS EXCAVATING & PAVING INC	\$167,159.50
2000	1704	0628-086-P43,N501		28-Sep-99	W L CONSTRUCTION & PAVING INC	\$231,455.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	1705	0745-086-P42,N501		28-Sep-99	ELK KNOB INC	\$180,895.94
2000	1706	0646-083-P53,N501		01-Oct-99	P & J CONTRACTING LLC	\$88,389.97
2000	1707	0825-085-259,N501		06-Aug-99	APAC VIRGINIA INC	\$435,174.70
2000	1708	0013-065-112,C501		04-Nov-99	IA CONSTRUCTION CORP	\$202,345.85
2000	1709	0665-026-5002		17-Nov-99	B P SHORT & SON PAVING CO INC	\$341,486.00
2000	1710	0670-086-6252;0670-086-6252,SR00		08-Nov-99	PATRICK CONSTRUCTION INC	\$157,223.60
2000	1711	MST-99-BRR-819		03-Sep-99	FAIRFIELD BRIDGE CO INC	\$132,419.50
2000	1712	0649-007-361,N501		04-Jan-00	HOWDYSHHELL EXCAVATING INC	\$262,511.04
2000	1713	0223-057-1002,SR11		10-Nov-99	MTA INDUSTRIAL PAINTING CORP	\$327,800.00
2000	1715	6058-052-E26,C501		06-Dec-99	ESTES BROTHERS CONSTRUCTION INC	\$6,835,130.09
2000	1716	0643-019-P77,N501		10-Dec-99	LANCO PAVING INC	\$285,405.00
2000	1717	0658-083-366,N501		07-Dec-99	J & J CONTRACTORS INC	\$62,324.60
2000	1718	0621-013-P18,N501		05-Apr-00	MAC CONSTRUCTION INC	\$197,449.13
2000	1720	0839-092-RA		04-Jan-00	HUNTER PAVING INC	\$92,560.00
2000	1721	0613-093-178,M501		05-Jan-00	GENERAL EXCAVATION INC	\$648,118.05
2000	1722	7900-029-337,M501		14-Dec-99	CUBE CONSTRUCTION CORP	\$114,175.40
2000	1723	0636-090-163,M501		14-Dec-99	B P SHORT & SON PAVING CO INC	\$332,442.95
2000	1724	0013-001-120,C501		10-May-00	IA CONSTRUCTION CORP	\$119,814.85
2000	1725	0631-002-6027,SR01		14-Dec-99	LANFORD BROTHERS CO INC	\$121,563.19
2000	1726	U000-123-115,C501,B607,B608		18-Jan-00	BRYANT CONTRACTING INC	\$3,391,731.18
2000	1727	0626-025-415,N501		14-Dec-99	PATRICK CONSTRUCTION INC	\$352,046.25
2000	1728	0653-098-P69,N502		06-Dec-99	D & D CONSTRUCTION CO	\$189,299.00
2000	1729	6058-052-E27,C501,B625-B631		14-Apr-00	CLECO CORP	\$26,182,381.23
2000	1730	0058-095-110,C501		07-Jan-00	R S JONES & ASSOC INC	\$453,391.10
2000	1731	0360-079-1945,SR08		06-Jan-00	CLECO CORP	\$611,842.00
2000	1732	0627-044-296,M501		19-Jan-00	J C JOYCE TRUCKING & PAVING CO INC	\$897,765.27
2000	1733	1202-171-198,C501		19-Jan-00	J L KENT & SONS INC	\$320,485.00
2000	1734	0650-072-P51,M501		19-Jan-00	ALLIED CONSTRUCTION CO INC	\$142,405.71
2000	1735	0151-062-113,C501,D608		06-Jan-00	HAYMES BROTHERS INC	\$682,282.90
2000	1736	0614-016-6017,SR00		17-Apr-00	ABERNATHY CONSTRUCTION CORP	\$98,662.00
2000	1737	0622-025-436,N501		06-Jan-00	ELK KNOB INC	\$157,272.32
2000	1738	0621-083-P50,N502		06-Jan-00	LITTLE HENRYS EXCAVATING & PAVING INC	\$117,087.89
2000	1739	0604-026-5001		19-Jan-00	B P SHORT & SON PAVING CO INC	\$91,656.75
2000	1740	0801-025-440,N501		01-Feb-00	MAC CONSTRUCTION INC	\$125,976.50
2000	1741	0644-045-P20,N501		10-Mar-00	HOWDYSHHELL EXCAVATING INC	\$623,544.45
2000	1742	0228-029-104,L801		01-Feb-00	R S G LANDSCAPING & LAWN CARE INC	\$159,770.05
2000	1743	0865-007-316,M501		15-Feb-00	FAIRFIELD BRIDGE CO INC	\$877,918.00
2000	1744	0627-088-246,C501		01-Feb-00	TAVARES CONCRETE COINC	\$1,193,470.20
2000	1745	0015-058-1042,SR03		01-Feb-00	JONES BROTHERS INC	\$1,136,153.14
2000	1746	0001-042-1001,SR02		07-Feb-00	LANFORD BROTHERS CO INC	\$421,608.16
2000	1747	0739-038-P82,N501		01-Feb-00	W L CONSTRUCTION & PAVING INC	\$142,319.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	1748	0657-083-P28,N502		01-Feb-00	PATRICK CONSTRUCTION INC	\$107,489.45
2000	1749	0662-024-P61,N501		02-Feb-00	CRUMP CONSTRUCTION CO INC	\$187,230.74
2000	1750	0756-084-P35,N501		10-Feb-00	LITTLE HENRYS EXCAVATING & PAVING INC	\$255,646.35
2000	1751	0602-091-189,M501		08-Mar-00	BISHOP & SETTLE CONSTRUCTION CO INC	\$441,096.77
2000	1752	6017-099-122,C501		08-Feb-00	BASIC CONSTRUCTION CO	\$728,228.90
2000	1753	6058-071-E15,C503,B606,B607		22-May-00	HAYMES BROTHERS INC	\$19,932,099.05
2000	1755	0601-077-P97,N502		10-Mar-00	H T BOWLING INC	\$900,678.12
2000	1756	0718-083-P45,N501		10-Mar-00	PATRICK CONSTRUCTION INC	\$164,929.20
2000	1757	1001-220-275,N501		03-Apr-00	ELK KNOB INC	\$421,902.00
2000	1758	0638-069-195,N501,D626		05-Apr-00	ALLIED CONSTRUCTION CO INC	\$297,413.00
2000	1759	0056-062-1018,SR02;0056-062-1019,SR02		10-Mar-00	BURLEIGH CONSTRUCTION CO INC	\$437,552.50
2000	1761	0624-092-539,M501		06-Jun-00	KEN CONSTRUCTION CO INC	\$233,109.00
2000	1762	0010-046-112,C501		04-Apr-00	HOWARD BROTHERS CONTRACTOR INC	\$546,719.78
2000	1763	0095-076-2009,SR01;0095-076-2010,SR01		05-Jun-00	ABERNATHY CONSTRUCTION CORP	\$6,779,313.95
2000	1764	0648-003-118,C502		04-Apr-00	A R COFFEY & SONS INC	\$769,237.10
2000	1765	0616-030-625,SR01		04-Apr-00	RIVER VIEW INVESTMENTS INC	\$376,602.40
2000	1766	0011-060-1027,SR03		05-Apr-00	RANNY E ODELL & CO INC	\$675,224.35
2000	1767	U000-132-105,C501,B602		09-May-00	GENERAL EXCAVATION INC	\$3,422,456.25
2000	1768	PG00-961-101,N501		04-Apr-00	SELCO SEEDING INC	\$510,647.15
2000	1769	6029-002-132,N501		04-Apr-00	S L WILLIAMSON CO INCORPORATED	\$212,454.00
2000	1771	7460-144-V03,C501		02-May-00	WATTS CONTRACTORS INC	\$1,422,981.00
2000	1773	0611-068-178,N501		04-Apr-00	GENERAL EXCAVATION INC	\$863,987.30
2000	1774	CST-1-00		04-Apr-00	MAYMEAD MATERIALS INC	\$412,062.23
2000	1776	0844-095-284,C501		04-Apr-00	W L CONSTRUCTION & PAVING INC	\$205,626.55
2000	1777	0622-074-6014,SR00		02-May-00	ABERNATHY CONSTRUCTION CORP	\$148,033.30
2000	1779	0611-029-303,C503,C504,B607,D608,D628		29-Jun-00	MARTIN & GASS INC	\$16,400,000.00
2000	1780	0055-030-1019,SR01		02-May-00	ALLIED CONSTRUCTION CO INC	\$386,319.00
2000	1781	0649-042-P93,N501		02-May-00	HOWARD BROTHERS CONTRACTOR INC	\$169,626.91
2000	1782	0606-038-P81,N501		02-May-00	J & J CONTRACTORS INC	\$178,368.00
2000	1783	0652-083-P36,N502		02-May-00	P & J CONTRACTING LLC	\$80,559.01
2000	1784	0627-013-P71,N501		02-May-00	P & J CONTRACTING LLC	\$207,410.08
2000	1785	0788--98-246,N501		22-May-00	ELK KNOB INC	\$158,614.80
2000	1786	0833-071-P52,N502		02-May-00	CREWS CONSTRUCTION CO INC	\$323,502.25
2000	1789	0630-074-188,C502		06-Jun-00	BISHOP & SETTLE CONSTRUCTION CO INC	\$449,788.70
2000	1790	0611-029-340,M501		26-Jun-00	MERIT CONTRACTORS INC	\$139,692.50
2000	1791	0011-060-R10,M501		05-Jun-00	L H SAWYER PAVING CO INC	\$830,854.64

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	1793	U000-129-108,C501		16-Jun-00	R S JONES & ASSOC INC	\$1,641,346.45
2000	1794	GR-8-98		30-May-00	MAKCO INC	\$377,726.30
2000	1797	6058-097-114,C503		29-Jun-00	ELK KNOB INC	\$2,500,050.30
2000	1801	0685-086-6085,SR00		29-Jun-00	PATRICK CONSTRUCTION INC	\$259,638.50
2000	1802	0068-097-1128,SR02		30-Jun-00	ELK KNOB INC	\$212,527.21
2000	1803	0006-037-1033,SR01		29-Jun-00	BURLEIGH CONSTRUCTION CO INC	\$756,929.00
2000	1804	0654-052-P46,N501		30-Jun-00	ESTES BROTHERS CONSTRUCTION INC	\$236,467.20
2000	1807	0724-095-P72,N501		30-Jun-00	PATRICK CONSTRUCTION INC	\$272,968.16
2000	2085	0626-068-P93,N501		04-Nov-99	ROCK & RAINES CONSTRUCTION CO INC	\$284,929.40
2000	2088	0625-034-P33,N501		28-Mar-00	APAC VIRGINIA INC	\$191,993.75
2000	2091	M597BRL811D		05-Aug-99	SERVICE ELECTRIC CORP OF VIRGINIA	\$1,170,643.00
2000	2093	MST-99-BRR-812		30-Jul-99	HAMMOND MITCHELL	\$348,130.85
2000	2098	M599BRX806		06-Jul-99	VIRGINIA MARINE STRUCTURES INC	\$133,333.90
2000	2099	0156-074-1930,SR13		01-May-00	LANFORD BROTHERS CO INC	\$527,122.00
2000	2102	0085-012-2028,SR01;0085-012-2029,SR01		01-Jul-99	LANFORD BROTHERS CO INC	\$413,366.28
2000	2103	0044-134-117,N501		03-Aug-99	CURTIS CONTRACTING INC	\$149,799.00
2000	2106	MST-00-BRR-801		01-May-00	CLECO CORP	\$581,826.50
2000	2114	GR-9A-00		10-Feb-00	LONG FENCE CO INC	\$480,000.00
2000	2115	RS-9B-00		28-Mar-00	FORT MYER CONSTRUCTION CORP	\$1,196,489.14
2000	2131	0611-053-6099,SR01		01-Jul-99	LCCT INC	\$62,436.14
2000	2132	0611-053-6099,SR01		19-Apr-00	TESSA CONSTRUCTION CO	\$81,575.70
2000	2137	BR-4-99		21-Sep-99	SWANK ASSOCD CO INC	\$615,672.55
2000	2142	GRFD-966-950-000		03-Aug-99	KIRK NEAL INC	\$104,169.75
2000	2143	CM699PRA39737		01-Jul-99	HOWARD BROTHERS CONTRACTOR INC	\$476,486.50
2000	2145	CM13016A39789		03-Aug-99	RIVER VIEW INVESTMENTS INC	\$286,650.00
2000	2147	0638-071-366,N501		05-Apr-00	UNLIMITED EXCAVATING INC	\$269,366.00
2000	2150	1455-029-6020,SR01		14-Dec-99	LANE CONSTRUCTION CORP	\$321,267.00
2000	2151	0685-004-192,N501		30-Jul-99	SLURRY PAVERS INC	\$65,979.36
2000	2154	M599RSS102		30-Jul-99	CHESAPEAKE CONTRACTORS INC	\$62,211.00
2000	2155	CM500BBA39546		02-Jun-00	BISHOP & SETTLE CONSTRUCTION CO INC	\$464,966.91
2000	2156	1061-044-407,N501;1745-044-409,N501;1268-044-5603,C04		01-Jul-99	J C JOYCE TRUCKING & PAVING CO INC	\$77,195.00
2000	2157	0732-070-P38,N501;0753-070-P39,N501;0828-070-P06,N501;0877-070-242,N501		06-Jul-99	CARNELL CONSTRUCTION CORP	\$515,215.50
2000	2159	M499TE239711;M499TE239697		02-Jul-99	A ANNANDALE INC	\$191,314.42
2000	2162	MST-99-TEP-805		16-Jul-99	SPEIDEL CONSTRUCTION INC	\$114,137.50
2000	2163	MST-99-TER-802		26-Jul-99	BARBOUR CO	\$137,319.30

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	2164	MST-99-TEP-804		02-Jul-99	A ANNANDALE INC	\$178,615.20
2000	2166	MST-99-PAV-808		02-Jul-99	ADAMS CONSTRUCTION CO	\$1,811,871.50
2000	2167	M499TE139507;M499TE139664;M499TE139758		13-Jul-99	ROADMARK CORP	\$433,238.41
2000	2168	LY99GR1602		01-Jul-99	MAKCO INC	\$207,481.40
2000	2169	M599TRX701		30-Jul-99	VIRGINIA MARINE STRUCTURES INC	\$93,333.00
2000	2170	CM598TEO826		06-Jan-00	DOREY ELECTRIC CO	\$292,550.00
2000	2173	0632-006-198,N501		01-Jul-99	MARVIN V TEMPLETON & SONS INC	\$375,839.60
2000	2174	PM-7-99		03-Aug-99	ROADMARK CORP	\$370,980.00
2000	2175	0606-017-6267,SR01		03-Aug-99	TESSA CONSTRUCTION CO	\$214,974.35
2000	2176	CM598TRX713		05-Aug-99	MARINE CONTRACTING CORP	\$93,650.00
2000	2177	0676-081-P31,N501		06-Jul-99	A R COFFEY & SONS INC	\$502,152.75
2000	2178	MST-99-PAV-809		30-Jul-99	APAC VIRGINIA INC	\$883,047.41
2000	2179	MST-99-PAV-810		27-Sep-99	APAC VIRGINIA INC	\$1,083,659.10
2000	2180	21-0632-5001		26-Jul-99	GULL CORP	\$86,399.50
2000	2181	0626-069-P00,N501		07-Jan-00	GENERAL EXCAVATION INC	\$134,210.50
2000	2183	0013-965-103,N501		10-May-00	IA CONSTRUCTION CORP	\$894,559.70
2000	2184	0629-053-6032,SR01		28-Mar-00	MELKA MARINE INC	\$204,667.00
2000	2186	0077-098-2044,SR02;0077-098-2059,SR02		06-Jan-00	LANFORD BROTHERS CO INC	\$215,320.00
2000	2187	0006-002-1142,SR01		04-Oct-99	RIVER VIEW INVESTMENTS INC	\$120,343.60
2000	2188	M499CPA39715		06-Jul-99	DENTON CONCRETE SERVICES CO	\$613,891.00
2000	2189	M499DPA39715		06-Jul-99	DENTON CONCRETE SERVICES CO	\$818,900.00
2000	2190	P-4-99		16-Dec-99	MEGACO INC	\$261,000.00
2000	2192	1213-084-232,N501		01-Jul-99	ELK KNOB INC	\$69,500.39
2000	2193	M599GRR505		16-Jul-99	PENN LINE SERVICE INC	\$148,435.00
2000	2194	PRMO-967-101,N507;IRMO-967-101,N507		06-Aug-99	ACCENT STRIPE INC	\$156,380.00
2000	2195	0008-070-1007,SR01		06-Aug-99	D L B INC	\$189,964.70
2000	2196	0103-070-1025,SR01		03-Aug-99	TESSA CONSTRUCTION CO	\$135,495.80
2000	2198	0757-033-P86,N502		30-Jul-99	WORLEY READY MIX CONCRETE INC	\$175,741.00
2000	2199	0044-134-120,C501		03-Aug-99	MAKCO INC	\$834,776.00
2000	2200	CM599TER814		01-Dec-99	ACCENT STRIPE INC	\$517,949.40
2000	2202	0730-046-250,N501		08-Nov-99	CURTIS CONTRACTING INC	\$127,831.16
2000	2203	0754-033-280,N501		30-Jul-99	WORLEY READY MIX CONCRETE INC	\$165,210.00
2000	2204	9999-080-303,P401		06-Aug-99	ADAMS CONSTRUCTION CO	\$827,949.90
2000	2205	CM00696A39591		04-Oct-99	LANFORD BROTHERS CO INC	\$234,284.96
2000	2206	IS00-964-101,S909;PS00-964-101,S910		06-Aug-99	MOORE BROTHERS CO INC	\$440,905.75
2000	2209	MR499PRA39760		06-Aug-99	B P SHORT & SON PAVING CO INC	\$757,860.97
2000	2210	MST-99-PAV-816		06-Aug-99	APAC VIRGINIA INC	\$1,501,528.37

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	2211	MST-99-BOX-807		30-Jul-99	HOWDYSHHELL EXCAVATING INC	\$230,435.00
2000	2212	MST-99-BRR-817		04-Nov-99	LANFORD BROTHERS CO INC	\$603,219.42
2000	2213	0681-069-S01		15-Sep-99	R W HARRIS EXCAVATING INC	\$168,017.00
2000	2214	0674-093-P81,N501		15-Sep-99	R W HARRIS EXCAVATING INC	\$143,175.52
2000	2215	0612-092-5011		06-Aug-99	BAILEY & WELLS INC	\$75,320.00
2000	2216	ST-02-99		30-Jul-99	D & D CONSTRUCTION CO	\$285,535.00
2000	2217	0615-023-400		06-Aug-99	CHEMUNG CONTRACTING CORP	\$427,770.00
2000	2218	0033-063-R05,N501		03-Aug-99	CURTIS CONTRACTING INC	\$88,849.90
2000	2219	0695-030-P01,N501		03-Aug-99	GENERAL EXCAVATION INC	\$260,808.50
2000	2220	1203-288-307,N501;1204-030-308,N501		03-Aug-99	SAMUEL JAMES CONSTRUCTION INC	\$252,812.75
2000	2221	0295-043-2106,2107,SR02		10-Dec-99	FLAME ON INC	\$79,577.50
2000	2222	0713-017-321,N501;0713-017-321,D647		15-Sep-99	ELK KNOB INC	\$153,993.65
2000	2223	0640-033-278,N501;0640-033-7003,A01		01-Dec-99	H B ROWE & CO INC	\$286,228.50
2000	2224	0642-077-192,N501;0676-077-193,N501;0798-077-194,N501,D648		27-Sep-99	ELK KNOB INC	\$272,776.60
2000	2225	MST-99-BRP-813		27-Sep-99	MTA INDUSTRIAL PAINTING CORP	\$472,147.00
2000	2226	MST-99-BRP-814		01-Feb-00	S & D INDUSTRIAL PAINTING INC	\$699,000.00
2000	2227	MST-99-BRR-818		15-Sep-99	CHARLES W BARGER & SONS CONSTRUCTION CO INC	\$746,815.30
2000	2228	MST-99-BRR-806		04-Nov-99	LANFORD BROTHERS CO INC	\$601,490.62
2000	2229	MST-99-BRP-811		09-Dec-99	KLICOS PAINTING CO INC	\$525,000.00
2000	2230	M499TE939758;M499TE034203		15-Sep-99	L S LEE INC	\$274,888.00
2000	2231	0220-033-1043,SR01;0220-033-1104,SR01		21-Sep-99	LANFORD BROTHERS CO INC	\$361,226.00
2000	2232	0040-070-1037,SR01		15-Sep-99	LANFORD BROTHERS CO INC	\$194,238.19
2000	2234	0258-046-X15,N501		08-Nov-99	CURTIS CONTRACTING INC	\$47,442.90
2000	2235	1048-044-410,N501;1053-044-411,N501;1273-044-5603-C04		08-Nov-99	CARNELL CONSTRUCTION CORP	\$143,640.00
2000	2236	0753-017-184,N502		27-Sep-99	ELK KNOB INC	\$269,862.26
2000	2237	0741-017-P43,N501;0741-017-P44,N501;0948-017-P40,N501		01-Nov-99	STRICKLAND CONSTRUCTION INC	\$443,211.45

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	2238	0725-009-P68,N501,D647		09-Dec-99	PEARSON CONSTR INC	\$747,589.51
2000	2239	0100-077-1024,SR01;0100-077-1042,SR01		04-Oct-99	CLECO CORP	\$413,502.50
2000	2240	0658-042-P44,P402		01-Nov-99	APAC VIRGINIA INC	\$143,943.75
2000	2241	0360-004-X16,N501		23-Nov-99	WATTS CONTRACTORS INC	\$28,067.00
2000	2242	0085-123-1816,SR01		04-Jan-00	MBC CONSTRUCTION INC	\$97,200.00
2000	2243	9999-092-563,N501		01-Feb-00	GUARD RAIL OF ROANOKE INC	\$45,742.00
2000	2247	0618-033-175,N502		09-Dec-99	J & D CONSTRUCTION CO INC	\$255,478.50
2000	2248	SARW99DEMO;LYRW99DEMO		16-Nov-99	HICO INC	\$2,376,390.00
2000	2249	0677-028-P57,N501		04-Jan-00	STANLEY CONSTRUCTION CO INC	\$254,391.80
2000	2251	GR-9B-00		20-Mar-00	TRANSPORTATION SAFETY CONTRACTORS OF VA	\$664,492.00
2000	2252	0608-035-P70,N501		09-Mar-00	HUNTER PAVING INC	\$217,204.50
2000	2253	M299DBA39765		09-Dec-99	J & D CONSTRUCTION CO INC	\$118,426.00
2000	2254	0678-032-P55,N501		14-Dec-99	UNLIMITED EXCAVATING INC	\$268,269.00
2000	2255	CM599GRR815		05-Apr-00	MAKCO INC	\$721,209.75
2000	2256	0643-022-P32,N501		07-Jan-00	ROBERTSON FOWLER CO	\$195,123.75
2000	2257	9999-080-303,P402		28-Mar-00	ADAMS CONSTRUCTION CO	\$406,853.00
2000	2258	0221-031-1017,SR01		28-Mar-00	LANFORD BROTHERS CO INC	\$188,950.66
2000	2259	0061-035-1034,SR01		09-Mar-00	C R MEADOR GENERAL CONTRACTOR	\$120,440.00
2000	2260	0033-049-105,N501		04-Jan-00	J SANDERS CONSTRUCTION CO	\$41,136.00
2000	2261	0632-093-P17,N501		07-Jan-00	GENERAL EXCAVATION INC	\$205,505.50
2000	2262	0723-021-BI		07-Jan-00	GENERAL EXCAVATION INC	\$216,184.00
2000	2263	0611-021-BI		07-Jan-00	GENERAL EXCAVATION INC	\$143,398.30
2000	2264	0872-034-235,N501		02-Feb-00	PERRY ENGINEERING CO INC	\$162,220.40
2000	2266	0033-063-R06,N501		05-Jan-00	CURTIS CONTRACTING INC	\$29,855.00
2000	2267	CM599PRB604		07-Jan-00	IA CONSTRUCTION CORP	\$366,796.22
2000	2268	M500TRE702275		01-May-00	SERVICE ELECTRIC CORP OF VIRGINIA	\$275,675.25
2000	2269	0671-084-BI		02-Feb-00	MAKCO INC	\$25,690.00
2000	2271	CM11407A39748		18-Feb-00	MTA INDUSTRIAL PAINTING CORP	\$417,308.00
2000	2272	SCALES-8A-99		02-Feb-00	GULL CORP	\$127,077.00
2000	2273	MST-99-BRP-820		02-Feb-00	S & D INDUSTRIAL PAINTING INC	\$689,914.00
2000	2274	MST-99-BPR-821		02-Feb-00	S & D INDUSTRIAL PAINTING INC	\$291,000.00
2000	2276	0737-082-P92,N501		02-Jun-00	GENERAL EXCAVATION INC	\$392,863.35
2000	2277	M500RSX816		01-May-00	NORTH STAR CONSTRUCTION CORP	\$117,842.50
2000	2279	P-4-00		02-May-00	MTA INDUSTRIAL PAINTING CORP	\$431,054.00
2000	2281	CM399PCR39656		28-Mar-00	D L B INC	\$558,149.00
2000	2282	CM399PCR39707		28-Mar-00	WARRCO INC	\$392,634.00
2000	2283	M599TEX403		01-May-00	ARCHER WESTERN CONTRACTORS LTD	\$1,529,000.00
2000	2284	M399BRR705		10-Mar-00	J HARMAN SAUNDERS CONSTRUCTION INC	\$82,500.00
2000	2285	0608-017-P25,N501;0614-017-P45,N501		05-Apr-00	STRICKLAND CONSTRUCTION INC	\$411,315.35

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	2286	GM-2-99		29-Jun-00	GUARD RAIL OF ROANOKE INC	\$1,208,835.50
2000	2287	GM-2A-99		26-Jun-00	MAKCO INC	\$993,930.00
2000	2289	CM500PRH102		28-Mar-00	E V WILLIAMS CO INC	\$2,035,100.83
2000	2290	M500TRE708		15-Jun-00	E G MIDDLETON INC	\$197,871.00
2000	2291	0601-089-B1		07-Jun-00	VIRGINIA PAVING CO INC	\$1,037,857.55
2000	2292	GR-4A-00		01-May-00	L S LEE INC	\$385,036.00
2000	2293	0057-044-1067,SR01		28-Mar-00	LANFORD BROTHERS CO INC	\$185,602.45
2000	2294	0221-009-1041,SR01		29-Mar-00	CLECO CORP	\$166,930.00
2000	2295	0460-141-1810,SR01		29-Mar-00	CLECO CORP	\$185,359.15
2000	2296	RS-9A-00		29-Mar-00	D & F CONSTRUCTION INC	\$512,096.00
2000	2297	RS-9D-00		29-Mar-00	D & F CONSTRUCTION INC	\$465,178.00
2000	2298	RS-9E-00		02-May-00	A & M CONCRETE CORP	\$647,112.00
2000	2299	RS-9C-00		29-Mar-00	FORT MYER CONSTRUCTION CORP	\$1,141,646.52
2000	2300	1203-206-273,N502;1209-206-262,N502		01-May-00	PLECKER CONSTRUCTION CO INC	\$268,323.50
2000	2301	MST-00-RCR-501		02-May-00	GULL CORP	\$259,055.60
2000	2302	MST-99-BRR-822		01-May-00	LANFORD BROTHERS CO INC	\$1,246,634.74
2000	2303	MST-00-PAV-804		01-May-00	ADAMS CONSTRUCTION CO	\$2,745,787.77
2000	2304	PM-8J-00		02-Jun-00	APAC VIRGINIA INC	\$1,536,764.25
2000	2305	M500GRR401		01-May-00	PENN LINE SERVICE INC	\$318,765.00
2000	2306	BR-6A-99		07-Jun-00	MEGACO INC	\$386,000.00
2000	2307	PRMO-961-101,N508;RCPM-1-00		15-May-00	TRAFFIC MARKINGS INC	\$401,570.00
2000	2308	0018-022-1037,SR01		26-Apr-00	CLECO CORP	\$101,142.50
2000	2309	0501-009-1030,SR01		26-Apr-00	CLECO CORP	\$116,714.00
2000	2310	0220-044-1049,SR01;0220-044-1050,SR01		01-May-00	CLECO CORP	\$197,449.13
2000	2311	0011-011-1010,SR01		26-Apr-00	LANFORD BROTHERS CO INC	\$178,635.94
2000	2312	M400TE339645		01-May-00	A ANNANDALE INC	\$145,334.39
2000	2313	C500SOA818		02-Jun-00	OLD DOMINION DEMOLITION CORP	\$989,507.10
2000	2314	PM-8K-00		07-Jun-00	APAC VIRGINIA INC	\$2,760,622.96
2000	2315	BR-8C-00		29-Jun-00	CLECO CORP	\$655,631.05
2000	2316	BR-8A-00		05-Jun-00	LANFORD BROTHERS CO INC	\$1,206,247.12
2000	2317	0716-082-P91,N501		02-Jun-00	GENERAL EXCAVATION INC	\$307,894.20
2000	2318	CM500PRB602		15-Jun-00	IA CONSTRUCTION CORP	\$1,467,325.05
2000	2320	TP-7A-00		30-May-00	A ANNANDALE INC	\$234,368.17
2000	2321	0220-033-1088,SR01;0220-033-1089,SR01		05-Jun-00	LANFORD BROTHERS CO INC	\$248,821.50
2000	2322	M400PAB39715		02-Jun-00	DENTON CONCRETE SERVICES CO	\$867,641.00
2000	2323	0027-000-2011,SR02		29-Jun-00	FORT MYER CONSTRUCTION CORP	\$587,985.00
2000	2325	0015-032-1014,SR01		05-Jun-00	KRAHENBILL & CHISHOLM INC	\$95,185.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2000	2326	0651-009-P33,N501,D648		29-Jun-00	LAUGHON & JOHNSON INC	\$427,376.10
2000	2327	LM-6B-00		22-Jun-00	SLURRY PAVERS INC	\$243,333.16
2000	2328	0064-127-2806,SR05;0064-127-2807,SR05;0064-127-2808,SR01		22-Jun-00	MBC CONSTRUCTION INC	\$711,533.00
2000	2329	M300TEP601		30-May-00	A ANNANDALE INC	\$186,448.24
2000	2330	M400T139758;M400T139507		07-Jun-00	A ANNANDALE INC	\$236,546.64
2000	2331	M400T239711;M400T239697		02-Jun-00	TRAFFIC MARKINGS INC	\$192,259.48
2000	2332	M399PCR402;M399BRB403;M399BRB404;M399PCR405		02-Jun-00	BURLEIGH CONSTRUCTION CO INC	\$596,877.50
2000	2333	DRP-8B-00		30-May-00	D L B INC	\$73,151.00
2000	2338	M400PAC39715		05-Jun-00	DENTON CONCRETE SERVICES CO	\$1,076,973.75
2000	2339	M400PMA39715		05-Jun-00	MEGA CONTRACTORS INC	\$958,260.75
2000	2341	PG00-964-101,N501		02-Jun-00	L S LEE INC	\$95,955.00
2000	2342	TP-8A-00		02-Jun-00	TRAFFIC MARKINGS INC	\$71,652.99
2000	2343	TP-8B-00		27-Jun-00	A ANNANDALE INC	\$96,429.00
2000	2344	0058-044-1014,SR02		05-Jun-00	LANFORD BROTHERS CO INC	\$279,299.44
2000	2346	PRMO-967-101,N508		05-Jun-00	ROADMARK CORP	\$149,652.00
2000	2347	0645-013-6254,SR02		29-Jun-00	CLECO CORP	\$127,509.32
2000	2360	0682-031-P39,N501;0697-031-P41,N501		30-Jun-00	MEADE CONTRACTING CO	\$349,269.00
2001	76	ST-1A-01		16-Jan-01	W L CONSTRUCTION & PAVING INC	\$1,408,385.29
2001	84	ST-1B-01		11-Jan-01	ADAMS CONSTRUCTION CO	\$540,690.44
2001	88	SS-1A-01		26-Feb-01	MARVIN V TEMPLETON & SONS INC	\$529,943.07
2001	92	PM-1A-01		08-Mar-01	W L CONSTRUCTION & PAVING INC	\$795,370.75
2001	97	PM-1B-01		08-Mar-01	W L CONSTRUCTION & PAVING INC	\$647,042.62
2001	102	PM-1C-01		08-Mar-01	W L CONSTRUCTION & PAVING INC	\$1,404,362.59
2001	107	PM-1D-01		08-Mar-01	MAYMEAD MATERIALS INC	\$754,800.45
2001	111	PM-1E-01		08-Mar-01	MAYMEAD MATERIALS INC	\$792,901.85
2001	118	PM-1F-01		08-Mar-01	W L CONSTRUCTION & PAVING INC	\$1,094,942.08
2001	123	PM-1G-01		08-Mar-01	MAYMEAD MATERIALS INC	\$1,009,761.83
2001	128	PM-1H-01		09-Mar-01	FLOYD ASPHALT PAVING CO	\$479,774.84
2001	133	PM-1I-01		09-Mar-01	APAC VIRGINIA INC	\$511,745.43
2001	137	PM-1K-01		08-Mar-01	W L CONSTRUCTION & PAVING INC	\$852,246.66
2001	141	PM-1L-01		08-Mar-01	MAYMEAD MATERIALS INC	\$1,322,529.93
2001	146	PM-1J-01		08-Mar-01	JAMES R VANNOY & SONS CONSTRUCTION COMP	\$959,559.41
2001	156	ST-2A-01		11-Jan-01	ADAMS CONSTRUCTION CO	\$584,919.03
2001	167	ST-2B-01		11-Jan-01	ADAMS CONSTRUCTION CO	\$286,879.99
2001	170	ST-2C-01		16-Jan-01	WHITEHURST PAVING CO INC	\$905,285.33

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	174	ST-2D-01		11-Jan-01	ADAMS CONSTRUCTION CO	\$645,864.61
2001	179	ST-2E-01		16-Jan-01	WHITEHURST PAVING CO INC	\$513,139.94
2001	183	SS-2A-01		31-Jan-01	SLURRY PAVERS INC	\$95,460.92
2001	192	SS-2C-01		26-Feb-01	MARVIN V TEMPLETON & SONS INC	\$1,313,127.86
2001	197	SS-2D-01		26-Feb-01	MARVIN V TEMPLETON & SONS INC	\$291,361.30
2001	201	SS-2E-01		31-Jan-01	SLURRY PAVERS INC	\$571,723.28
2001	205	SS-2F-01		31-Jan-01	SLURRY PAVERS INC	\$108,747.94
2001	209	PM-2A-01		08-Mar-01	APAC VIRGINIA INC	\$900,833.53
2001	215	PM-2B-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$956,384.94
2001	220	PM-2C-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$777,595.36
2001	224	PM-2D-01		08-Mar-01	APAC VIRGINIA INC	\$2,491,135.02
2001	230	PM-2E-01		08-Mar-01	APAC VIRGINIA INC	\$472,422.10
2001	235	PM-2F-01		08-Mar-01	APAC VIRGINIA INC	\$1,550,836.80
2001	240	PM-2G-01		14-Mar-01	ROY N FORD CO INC	\$300,734.60
2001	245	PM-2H-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$1,028,915.34
2001	250	PM-2I-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$1,147,466.00
2001	254	PM-2J-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$484,374.90
2001	256	PM-2K-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$775,074.37
2001	261	PM-2L-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$1,921,674.05
2001	274	ST-3A-01		16-Jan-01	WHITEHURST PAVING CO INC	\$739,858.10
2001	283	ST-3B-01		16-Jan-01	WHITEHURST PAVING CO INC	\$764,246.28
2001	286	ST-3C-01		16-Jan-01	WHITEHURST PAVING CO INC	\$917,518.67
2001	290	ST-3D-01		16-Jan-01	WHITEHURST PAVING CO INC	\$1,314,182.14
2001	293	ST-3E-01		16-Jan-01	WHITEHURST PAVING CO INC	\$942,939.55
2001	297	SS-3A-01		08-Feb-01	APAC VIRGINIA INC	\$131,056.47
2001	301	LM-3A-01		31-Jan-01	SLURRY PAVERS INC	\$711,219.04
2001	307	PM-3A-01		14-Mar-01	S L WILLIAMSON CO INCORPORATED	\$1,345,668.14
2001	312	PM-3B-01		08-Mar-01	MARVIN V TEMPLETON & SONS INC	\$2,863,697.85
2001	317	PM-3C-01		14-Mar-01	S L WILLIAMSON CO INCORPORATED	\$792,713.25
2001	321	PM-3D-01		08-Mar-01	APAC VIRGINIA INC	\$1,469,877.34
2001	326	PM-3E-01		08-Mar-01	APAC VIRGINIA INC	\$2,522,828.55
2001	330	PM-3F-01		08-Mar-01	B P SHORT & SON PAVING CO INC	\$1,256,700.52
2001	338	ST-4A-01		16-Jan-01	B P SHORT & SON PAVING CO INC	\$1,635,483.97
2001	344	ST-4B-01		16-Jan-01	WHITEHURST PAVING CO INC	\$619,879.94
2001	353	SS-4A-01		31-Jan-01	SLURRY PAVERS INC	\$1,811,067.12
2001	359	PM-4A-01		21-Mar-01	B P SHORT & SON PAVING CO INC	\$1,751,276.70
2001	365	PM-4B-01		21-Mar-01	B P SHORT & SON PAVING CO INC	\$1,708,449.23
2001	370	PM-4C-01		19-Mar-01	MEGA CONTRACTORS INC	\$349,697.22
2001	375	PM-4D-01		21-Mar-01	B P SHORT & SON PAVING CO INC	\$214,719.40
2001	380	PM-4E-01		08-Mar-01	APAC VIRGINIA INC	\$458,759.84
2001	385	PM-4F-01		21-Mar-01	B P SHORT & SON PAVING CO INC	\$584,954.99
2001	390	PM-4G-01		21-Mar-01	B P SHORT & SON PAVING CO INC	\$804,635.45
2001	395	PM-4H-01		08-Mar-01	APAC VIRGINIA INC	\$1,010,711.39
2001	400	PM-4J-01		08-Mar-01	APAC VIRGINIA INC	\$243,758.33
2001	405	PM-4K-01		14-Mar-01	BLAKEMORE CONSTRUCTION CORP	\$637,958.33
2001	410	PM-4L-01		03-Apr-01	BASIC CONSTRUCTION CO	\$301,574.70

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	415	PM-4M-01		08-Mar-01	APAC VIRGINIA INC	\$907,330.55
2001	420	PM-4N-01		19-Mar-01	MEGA CONTRACTORS INC	\$615,806.47
2001	425	PM-4O-01		14-Mar-01	BLAKEMORE CONSTRUCTION CORP	\$589,459.15
2001	433	ST-5A-01		16-Jan-01	B P SHORT & SON PAVING CO INC	\$555,166.24
2001	438	ST-5B-01		16-Jan-01	WHITEHURST PAVING CO INC	\$689,260.21
2001	442	ST-5C-01		16-Jan-01	WHITEHURST PAVING CO INC	\$504,461.65
2001	448	ST-5D-01		16-Jan-01	B P SHORT & SON PAVING CO INC	\$433,166.18
2001	453	SS-5A-01		31-Jan-01	SLURRY PAVERS INC	\$753,042.06
2001	458	PM-5A-01		14-Mar-01	ROSE BROTHERS PAVING CO INC	\$2,350,894.40
2001	462	PM-5B-01		14-Mar-01	HENRY S BRANSCOME INC	\$2,928,496.35
2001	468	PM-5C-01		08-Mar-01	E V WILLIAMS CO INC	\$3,194,721.05
2001	473	PM-5D-01		14-Mar-01	HENRY S BRANSCOME INC	\$2,347,247.53
2001	477	PM-5E-01		08-Mar-01	IA CONSTRUCTION CORP	\$2,762,036.40
2001	483	ST-6A-01		26-Feb-01	PAVING CONTRACTORS INC	\$438,687.56
2001	489	ST-6B-01		26-Feb-01	PAVING CONTRACTORS INC	\$720,571.08
2001	494	LM-6A-01		31-Jan-01	SLURRY PAVERS INC	\$331,684.26
2001	497	SS-6A-01		31-Jan-01	SLURRY PAVERS INC	\$112,434.37
2001	502	PM-6A-01		08-Mar-01	VIRGINIA PAVING CO INC	\$2,340,596.45
2001	507	PM-6B-01		08-Mar-01	VIRGINIA PAVING CO INC	\$4,344,906.85
2001	512	PM-6C-01		14-Mar-01	HENRY S BRANSCOME INC	\$1,639,656.42
2001	517	PM-6D-01		08-Mar-01	LEE HY PAVING CORP	\$1,874,665.55
2001	523	ST-7A-01		11-Jan-01	PAYNE PAVING CO INC	\$742,018.19
2001	531	ST-7B-01		11-Jan-01	PAYNE PAVING CO INC	\$646,205.60
2001	535	ST-7C-01		11-Jan-01	PAYNE PAVING CO INC	\$706,856.73
2001	538	ST-7D-01		11-Jan-01	PAYNE PAVING CO INC	\$417,678.13
2001	542	SS-7-01		31-Jan-01	SLURRY PAVERS INC	\$327,679.07
2001	546	PM-7A-01		08-Mar-01	LEE HY PAVING CORP	\$2,959,427.19
2001	552	PM-7B-01		14-Mar-01	S L WILLIAMSON CO INCORPORATED	\$2,277,554.09
2001	557	PM-7C-01		14-Mar-01	SUPERIOR PAVING CORP	\$3,706,085.24
2001	562	PM-7D-01		14-Mar-01	SUPERIOR PAVING CORP	\$5,120,886.82
2001	570	ST-8A-01		16-Jan-01	WHITEHURST PAVING CO INC	\$609,153.45
2001	582	ST-8B-01		16-Jan-01	WHITEHURST PAVING CO INC	\$705,496.12
2001	586	ST-8C-01		16-Jan-01	WHITEHURST PAVING CO INC	\$214,493.48
2001	590	ST-8D-01		16-Jan-01	WHITEHURST PAVING CO INC	\$272,062.28
2001	593	ST-8E-01		16-Jan-01	WHITEHURST PAVING CO INC	\$311,258.44
2001	597	ST-8F-01		16-Jan-01	WHITEHURST PAVING CO INC	\$39,463.29
2001	603	ST-8G-01		16-Jan-01	WHITEHURST PAVING CO INC	\$37,360.99
2001	608	SS-8A-01		31-Jan-01	SLURRY PAVERS INC	\$554,158.46
2001	613	PM-8A-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$1,686,615.88
2001	618	PM-8B-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$2,194,133.38
2001	623	PM-8C-01		19-Mar-01	B & S CONTRACTING INC	\$1,316,321.49
2001	628	PM-8D-01		08-Mar-01	ADAMS CONSTRUCTION CO	\$2,796,224.84
2001	633	PM-8E-01		14-Mar-01	APAC VIRGINIA INC	\$865,831.90
2001	638	PM-8F-01		19-Mar-01	STUART M PERRY INC	\$787,760.35
2001	642	PM-8G-01		14-Mar-01	APAC VIRGINIA INC	\$612,554.65
2001	646	PM-8H-01		14-Mar-01	APAC VIRGINIA INC	\$1,706,502.80

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	649		PM-8I-01	08-Mar-01	ADAMS CONSTRUCTION CO	\$708,110.06
2001	651		PM-8J-01	19-Mar-01	B & S CONTRACTING INC	\$2,244,843.39
2001	653		PM-8K-01	19-Mar-01	B & S CONTRACTING INC	\$1,194,086.25
2001	654		PM-8L-01	14-Mar-01	APAC VIRGINIA INC	\$568,107.70
2001	655		PM-8M-01	14-Mar-01	APAC VIRGINIA INC	\$1,529,680.55
2001	656	SS-9A-01;LM-9A-01		31-Jan-01	SLURRY PAVERS INC	\$311,690.00
2001	661		PM-9D-01	14-Mar-01	JULIUS BRANSCOME INC	\$3,978,335.31
2001	670		PM-9E-01	14-Mar-01	APAC VIRGINIA INC	\$3,298,038.87
2001	678		PM-9F-01	14-Mar-01	FRANCIS O DAY CO INC	\$3,671,285.10
2001	684		PM-9G-01	08-Mar-01	VIRGINIA PAVING CO INC	\$4,052,919.05
2001	690		PM-9H-01	02-Apr-01	FORT MYER CONSTRUCTION CORP	\$1,664,323.55
2001	695		PM-9A-01	08-Mar-01	VIRGINIA PAVING CO INC	\$4,458,011.35
2001	700		PM-9B-01	08-Mar-01	VIRGINIA PAVING CO INC	\$3,685,851.70
2001	705		PM-9C-01	14-Mar-01	APAC VIRGINIA INC	\$3,658,970.05
2001	1466	0013-001-118,C501		29-Jan-01	IA CONSTRUCTION CORP	\$160,755.50
2001	1615	0606-052-125,M512		30-Jan-01	J & J CONTRACTORS INC	\$1,154,101.72
2001	1620	0288-020-105,C508,B682,B684,B685,B686,B687		14-Dec-00	VECELLIO & GROGAN INC	\$47,636,517.50
2001	1631	0005-043-105,C501		25-Sep-00	HOWARD BROTHERS CONTRACTOR INC	\$542,476.11
2001	1670	1342-042-284,C501		04-Dec-00	RICHARD L CROWDER CONSTRUCTION INC	\$527,357.10
2001	1681	0029-002-006,C501		02-Apr-01	FAULCONER CONSTRUCTION CO INC	\$1,137,964.35
2001	1714	0731-012-P41,M501		30-Nov-00	CASTLE HEIGHTS CONST CO INC	\$95,835.68
2001	1719	0643-042-289,M501		26-Oct-00	J L KENT & SONS INC	\$293,553.04
2001	1754	0604-020-158,C501		08-Mar-01	RICHARD L CROWDER CONSTRUCTION INC	\$5,740,173.00
2001	1760	0638-060-P08,N501		22-Aug-00	GLASS MACHINERY & EXCAVATION INC	\$1,309,776.90
2001	1772	6037-034-103,C501		08-Jan-01	PERRY ENGINEERING CO INC	\$2,329,738.98
2001	1775	6207-016-107,C502,B604		01-Dec-00	KEY CONSTRUCTION INC	\$4,116,318.95
2001	1778	0769-053-P64,C501		25-May-01	GOLDEN EAGLE CONSTRUCTION CO INC	\$1,303,423.83
2001	1787	6058-070-E20,C503,B631,B633		16-Jan-01	R S JONES & ASSOC INC	\$15,339,501.32
2001	1788	0675-020-144,C503		23-Aug-00	CENTRAL CONTRACTING CO	\$6,151,991.09
2001	1792	0021-098-1012,SR02		26-Oct-00	J & J CONTRACTORS INC	\$591,390.38
2001	1795	6058-071-E15,C501,B608,9,10,11		14-Aug-00	BRANCH HIGHWAYS INC	\$18,804,408.05
2001	1796	0001-020-1005,SR02		20-Feb-01	VIRGINIA MARINE STRUCTURES INC	\$194,333.00
2001	1798	0610-078-164,C501		26-Oct-00	TAVARES CONCRETE COINC	\$375,372.50
2001	1799	0654-067-P69,M501		25-Jul-00	BISHOP & SETTLE CONSTRUCTION CO INC	\$249,984.48
2001	1800	0676-063-P39,M501		01-Feb-01	STANLEY CONSTRUCTION CO INC	\$599,468.40
2001	1805	0611-085-P58,N501		02-Nov-00	GENERAL EXCAVATION INC	\$497,424.20
2001	1806	0637-085-P54,N501,D652		07-Jul-00	APAC VIRGINIA INC	\$879,911.25
2001	1808	0309-029-1050,SR01		22-Mar-01	MARTINS CONSTRUCTION CORP	\$747,831.30

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	1809	0841-058-P67,M501		28-Jul-00	KEY CONSTRUCTION INC	\$378,294.55
2001	1810	0231-056-1042,SR00		08-Jan-01	RIVER VIEW INVESTMENTS INC	\$422,667.55
2001	1812	0607-098-6006,SR01		21-Jul-00	PATRICK CONSTRUCTION INC	\$191,131.40
2001	1813	0616-095-6026,SR00		21-Jul-00	PATRICK CONSTRUCTION INC	\$82,641.60
2001	1814	0637-002-P52,N501		04-Aug-00	PEARSON CONSTR INC	\$832,001.00
2001	1815	0632-095-P36,N501		25-Sep-00	PATRICK CONSTRUCTION INC	\$257,997.20
2001	1816	7100-029-336,M501		18-Aug-00	TAVARES CONCRETE COINC	\$491,994.00
2001	1817	0003-059-1959,SR15		23-Aug-00	CORMAN CONSTRUCTION INC	\$292,250.00
2001	1818	0058-087-115,C501		14-Dec-00	E H IVES CORP	\$187,400.00
2001	1819	DT00-96A-110,N501		23-Aug-00	NEW CONSTRUCTION INC	\$388,395.10
2001	1820	0649-058-P68,M501		10-Jan-01	LANCO PAVING INC	\$505,726.45
2001	1821	0629-059-6024,SR00		09-Aug-00	WATERFRONT MARINE CONSTRUCTION INC	\$644,963.00
2001	1822	6058-071-E15,C504,B601THRUB6 05,B612,B614,B615		20-Nov-00	HAYMES BROTHERS INC	\$22,450,234.32
2001	1823	U000-126-104,C501		08-Mar-01	D L B INC	\$3,218,209.00
2001	1824	0618-028-160,C501		25-Sep-00	KEY CONSTRUCTION INC	\$518,866.00
2001	1825	0619-026-240,M501		01-Nov-00	BISHOP & SETTLE CONSTRUCTION CO INC	\$898,951.52
2001	1826	0613-007-359,M501;0871-007-317,M501,M502,B697,D686		22-Sep-00	PLECKER CONSTRUCTION CO INC	\$1,756,756.00
2001	1827	0360-049-1925,SR01		22-Sep-00	CLECO CORP	\$314,722.80
2001	1828	0287-053-R03,M501		08-Jan-01	GENERAL EXCAVATION INC	\$533,785.89
2001	1829	6460-013-118,C501		06-Oct-00	P & J CONTRACTING LLC	\$598,684.07
2001	1830	0654-083-P44,N501		22-Sep-00	PATRICK CONSTRUCTION INC	\$55,878.50
2001	1831	0640-083-P68,N501		06-Oct-00	P & J CONTRACTING LLC	\$117,618.42
2001	1832	0609-086-P47,501		25-Sep-00	D & D CONTRACTORS INC	\$147,117.80
2001	1833	0622-011-P82,N501		30-Jan-01	ALLIED CONSTRUCTION CO INC	\$768,125.00
2001	1834	0677-062-P63,N501		22-Sep-00	D S NASH CONSTRUCTION CO	\$196,569.40
2001	1835	0600-051-6017,SR00		22-Sep-00	ABERNATHY CONSTRUCTION CORP	\$638,276.80
2001	1836	0095-074-1029,SR01		06-Nov-00	CORMAN CONSTRUCTION INC	\$858,677.50
2001	1837	0844-071-223,C502		31-Jan-01	CREWS CONSTRUCTION CO INC	\$660,527.13
2001	1838	0258-145-105,C501		06-Nov-00	B P SHORT & SON PAVING CO INC	\$619,801.90
2001	1839	0703-001-206,M501		01-Nov-00	IA CONSTRUCTION CORP	\$2,015,232.80
2001	1840	U000-134-118,C503		08-Mar-01	CONTRACTORS PAVING CO INC	\$3,315,039.15
2001	1841	EDI-8A-00		14-Dec-00	HAMMOND MITCHELL	\$281,555.70
2001	1842	0618-067-168,C502		05-Mar-01	B P SHORT & SON PAVING CO INC	\$1,296,552.58
2001	1843	0785-071-P68,N501,D679;0786-071-P67,N501		27-Nov-00	NEKAY EARTHMOVERS INC	\$809,514.34
2001	1844	0606-017-195,N501		09-Nov-00	D & D CONTRACTORS INC	\$359,446.50
2001	1845	0646-083-P53,N502		01-Nov-00	P & J CONTRACTING LLC	\$112,343.81
2001	1846	0636-013-P25,N501		26-Oct-00	MAC CONSTRUCTION INC	\$171,995.00
2001	1847	0094-017-102,C501		07-Dec-00	W L CONSTRUCTION & PAVING INC	\$812,505.99

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	1848	0072-025-106,M600		14-Dec-00	J & J CONTRACTORS INC	\$191,379.40
2001	1849	U000-149-107,C501;0634-080-309,C501,D686		26-Feb-01	ALLEGHENY CONSTRUCTION CO INC	\$3,134,086.35
2001	1850	0675-255-260,C501		14-Dec-00	GULL CORP	\$669,427.94
2001	1851	0091-095-102,C505		14-Dec-00	PATRICK CONSTRUCTION INC	\$1,567,559.52
2001	1852	0647-090-165,M501		02-Apr-01	CURTIS CONTRACTING INC	\$127,464.57
2001	1853	0095-127-1822,SR01		14-Dec-00	CORMAN CONSTRUCTION INC	\$1,885,937.36
2001	1854	0501-041-127,C501		08-Jan-01	ROY N FORD CO INC	\$981,395.59
2001	1855	0086-108-105,C501,B611		02-Apr-01	W C ENGLISH INC	\$6,097,168.49
2001	1856	0673-083-378,N501		14-Dec-00	PATRICK CONSTRUCTION INC	\$109,112.60
2001	1857	0643-025-437,N501		04-Dec-00	MAC CONSTRUCTION INC	\$223,005.00
2001	1858	0674-060-P32,N502		08-Jan-01	ELK KNOB INC	\$516,770.10
2001	1859	0650-019-P18,N501		14-Dec-00	RED OAK EXCAVATING INC	\$445,873.02
2001	1860	0904-071-P35,N502		14-Dec-00	CREWS CONSTRUCTION CO INC	\$345,364.90
2001	1861	0287-053-107,M600		23-May-01	RUSTLER CONSTRUCTION INC	\$1,897,115.25
2001	1862	0657-083-P46,N501		08-Feb-01	LITTLE HENRYS EXCAVATING & PAVING INC	\$94,754.71
2001	1863	0095-029-2190,SR04		11-Jan-01	CORMAN CONSTRUCTION INC	\$1,620,376.30
2001	1864	0643-029-294,C503		08-Jan-01	TAVARES CONCRETE COINC	\$1,894,264.20
2001	1865	0615-093-173,M501		08-Feb-01	APAC VIRGINIA INC	\$204,464.40
2001	1866	0684-052-P48,N501		10-Jan-01	GLASS MACHINERY & EXCAVATION INC	\$297,089.43
2001	1868	0601-086-6013,SR00		20-Feb-01	EAGLES NEST CONSTRUCTION	\$99,569.90
2001	1869	0699-029-343,M501		20-Feb-01	MERIT CONTRACTORS INC	\$101,242.60
2001	1870	WLBO-966-WMB,L801		04-May-01	J L KENT & SONS INC	\$2,089,478.12
2001	1871	0288-964-103,L801		05-Mar-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$129,797.79
2001	1872	0008-070-108,M501		31-Jan-01	CARNELL CONSTRUCTION CORP	\$215,097.00
2001	1873	0005-018-1004		04-May-01	HOWARD BROTHERS CONTRACTOR INC	\$600,734.40
2001	1874	0001-020-1016,SR00		04-May-01	NORTH STAR CONSTRUCTION CORP	\$263,576.30
2001	1875	0624-038-146,N502		30-Jan-01	J & J CONTRACTORS INC	\$433,685.00
2001	1876	0600-098-P28,N502		20-Feb-01	PATRICK CONSTRUCTION INC	\$109,342.50
2001	1877	0664-020-P96,C501,D684		01-Feb-01	STANLEY CONSTRUCTION CO INC	\$1,729,408.96
2001	1878	0709-086-6278,SR00		20-Feb-01	PATRICK CONSTRUCTION INC	\$318,867.25
2001	1879	0669-054-6051,SR01;0692-054-6062,SR01		08-Feb-01	RIVER VIEW INVESTMENTS INC	\$441,114.30
2001	1880	0674-024-P62,N501		20-Feb-01	RED OAK EXCAVATING INC	\$212,970.08
2001	1881	0659-095-6352,SR00		26-Feb-01	PATRICK CONSTRUCTION INC	\$237,279.35
2001	1882	0755-009-P74,N501		26-Feb-01	D A BROWN INC	\$371,410.50
2001	1883	0732-071-P77,N501,D681		06-Mar-01	WHITES CONSTRUCTION CO INC	\$536,578.43
2001	1884	0604-050-176,M501		22-Mar-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$191,450.78

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	1885	0642-007-293,M502;0642-007-P93,M501		04-May-01	WILKINS CONSTRUCTION CO INC	\$2,779,855.50
2001	1886	0085-058-2007,SR01;0085-058-2008,SR01		06-Mar-01	CORMAN CONSTRUCTION INC	\$2,119,273.50
2001	1887	0728-007-P79,N501		05-Mar-01	A R COFFEY & SONS INC	\$548,828.30
2001	1889	0621-073-P85,N501		22-Mar-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$179,059.14
2001	1890	0616-013-592,N503		27-Mar-01	MAC CONSTRUCTION INC	\$186,763.11
2001	1891	0669-038-P86,N501		27-Mar-01	W L CONSTRUCTION & PAVING INC	\$677,298.00
2001	1892	0600-083-376,N501		22-Mar-01	MAC CONSTRUCTION INC	\$92,140.00
2001	1893	0221-031-1019,SR01		10-May-01	NEW RIVER BRIDGE CO	\$361,721.58
2001	1894	0250-045-115,M600		04-May-01	ORDERS CONSTRUCTION CO INC	\$673,295.85
2001	1895	1202-259-270,M501;1203-259-269,M501		10-May-01	SAGRES CONSTRUCTION CORP	\$359,295.50
2001	1896	0010-090-106,C501		25-May-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$495,886.86
2001	1897	0657-038-P85,N501		04-May-01	D & D CONTRACTORS INC	\$262,048.40
2001	1898	0694-013-732,N501		04-May-01	LITTLE HENRYS EXCAVATING & PAVING INC	\$177,047.78
2001	1899	0765-013-734,N501		30-Apr-01	J & J CONTRACTORS INC	\$209,116.00
2001	1900	0660-054-P06,N502,D636		30-Apr-01	STANLEY CONSTRUCTION CO INC	\$1,375,360.80
2001	1901	0664-031-242,N501		04-May-01	D L B INC	\$173,160.35
2001	1902	0612-021-P46,N501		30-Apr-01	PERRY ENGINEERING CO INC	\$786,276.49
2001	1905	0614-036-149,M501		28-Jun-01	HOWARD BROTHERS CONTRACTOR INC	\$154,817.22
2001	1906	0606-063-145,M501		31-May-01	HOWARD BROTHERS CONTRACTOR INC	\$311,011.62
2001	1909	6058-052-E28,C501,D655,D656,D657,D658		28-Jun-01	W L CONSTRUCTION & PAVING INC	\$10,309,461.55
2001	1910	0626-062-P42,N503		25-May-01	J & D CONSTRUCTION CO INC	\$98,130.95
2001	1911	0022-002-1010,SR02		28-Jun-01	BURLEIGH CONSTRUCTION CO INC	\$1,107,283.00
2001	1912	6019-092-116,C501		31-May-01	KEN CONSTRUCTION CO INC	\$525,013.30
2001	1913	0640-004-P87,M501		27-Jun-01	KEY CONSTRUCTION INC	\$465,204.56
2001	1916	0058-046-E05,C504,B621,B622,B623,B624,D625,D626		27-Jun-01	ABERNATHY CONSTRUCTION CORP	\$9,771,701.88
2001	1917	0627-090-P60,M501		27-Jun-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$153,484.40
2001	1918	0006-037-114,M501		29-Jun-01	APAC VIRGINIA INC	\$520,840.20
2001	1919	0670-086-6076,SR00		28-Jun-01	ELK KNOB INC	\$338,500.34
2001	1921	0693-084-P68,N503		28-Jun-01	P & J CONTRACTING LLC	\$292,966.54
2001	2086	PM-8M-00		09-Aug-00	B & S CONTRACTING INC	\$725,401.73
2001	2116	BR-8E-00		22-Aug-00	LANFORD BROTHERS CO INC	\$375,343.25
2001	2126	0064-043-2016,SR02		22-Aug-00	LANFORD BROTHERS CO INC	\$37,362.05
2001	2129	P3-053-00		31-Oct-00	MEGACO INC	\$267,642.00
2001	2138	M399TES601		01-Feb-01	KIRK NEAL INC	\$127,438.10

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2158	PCR-2-00		01-Sep-00	E C PACE CO INC	\$284,308.00
2001	2161	RICH-2000-DEMO		26-Sep-00	S B COX INC	\$868,660.00
2001	2182	BR-5M-00		05-Mar-01	FLAME ON INC	\$88,239.50
2001	2185	0050-053-1025,SR03		21-Mar-01	MARTINS CONSTRUCTION CORP	\$1,043,280.00
2001	2197	PCR-2A-00		25-Aug-00	D L B INC	\$422,137.00
2001	2201	GI-8A-01		21-Mar-01	SELCO SEEDING INC	\$477,729.80
2001	2233	BR-5Q-00		31-Oct-00	WATERFRONT MARINE CONSTRUCTION INC	\$316,420.00
2001	2244	M500BRJ819		03-Aug-00	KENNEDY CO OF VA INC	\$248,932.00
2001	2250	0673-023-P25,N502		26-Feb-01	J L KENT & SONS INC	\$354,260.50
2001	2265	0058-038-1074,SR01		05-Mar-01	LANFORD BROTHERS CO INC	\$260,977.83
2001	2270	DP-4A-00		01-Feb-01	D L B INC	\$21,560.00
2001	2275	PMR-8A-01		03-Apr-01	B & S CONTRACTING INC	\$163,479.80
2001	2278	0029-005-1940,SR01		01-Sep-00	LANFORD BROTHERS CO INC	\$307,285.00
2001	2280	BR-4-00		14-Dec-00	MBC CONSTRUCTION INC	\$370,902.45
2001	2288	PH-5A-00		14-Dec-00	DENTON CONCRETE SERVICES CO	\$384,055.00
2001	2319	CM500PRB603		07-Aug-00	IA CONSTRUCTION CORP	\$1,414,540.68
2001	2324	GR-4D-00		01-Nov-00	MAKCO INC	\$524,758.00
2001	2334	0623-008-P40,N502		13-Jul-00	PLECKER CONSTRUCTION CO INC	\$423,333.71
2001	2335	BR-8B-00		07-Aug-00	CLECO CORP	\$578,840.25
2001	2336	PM-8L-00		02-Aug-00	ADAMS CONSTRUCTION CO	\$1,159,996.23
2001	2337	0781-007-P73,N501		07-Aug-00	F CLAYTON PLECKERS & SONS INC	\$217,313.00
2001	2340	0091-086-1036,SR01		12-Jun-01	KEN CONSTRUCTION CO INC	\$143,429.80
2001	2345	P-4A-00		05-Jul-00	MTA INDUSTRIAL PAINTING CORP	\$210,834.00
2001	2348	0121-098-1034,SR01		13-Jul-00	OVERLAY INC	\$157,830.30
2001	2349	0460-092-1144,SR01		13-Jul-00	OVERLAY INC	\$295,536.50
2001	2350	DD-58-00		12-Feb-01	ULTRA SERVICES INC	\$137,669.00
2001	2352	PB-5F-00		21-Nov-00	APAC VIRGINIA INC	\$1,227,218.20
2001	2353	M600TPA39549;M600TP A39552		24-Jul-00	TRAFFIC MARKINGS INC	\$111,015.00
2001	2354	BP-6-00		27-Nov-00	K V K CONTRACTING INC	\$450,000.00
2001	2356	0600-037-BI;0666-042-BI		21-Jul-00	MEGA CONTRACTORS INC	\$131,405.00
2001	2361	RW-1-00		21-Jul-00	PATRICK CONSTRUCTION INC	\$161,063.84
2001	2362	0638-017-BI;0702-017-BI		21-Jul-00	D L B INC	\$198,913.95
2001	2363	M300BRP701B		01-Nov-00	S & D INDUSTRIAL PAINTING INC	\$868,660.00
2001	2365	0023-052- 1008,SR01;0023-052- 1009,SR01		05-Sep-00	OVERLAY INC	\$272,886.75
2001	2366	0019-092- 1063,SR01;0019-092- 1064,SR01		10-Oct-00	OVERLAY INC	\$427,782.00
2001	2367	DRP-8C-00		26-Sep-00	D L B INC	\$132,702.00
2001	2368	0629-069-P91,N501		04-Dec-00	GENERAL EXCAVATION INC	\$365,194.10

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2369	0640-045-137,N501;0641-045-P38,N501		11-Jan-01	PLECKER CONSTRUCTION CO INC	\$268,036.85
2001	2370	CM500PHC39568		30-Aug-00	DENTON CONCRETE SERVICES CO	\$1,409,499.00
2001	2371	PH-5E-00		25-Aug-00	BASIC CONSTRUCTION CO	\$1,662,710.85
2001	2373	0006-037-1002,SR01		21-Jul-00	LANFORD BROTHERS CO INC	\$83,459.40
2001	2374	M900RSB39744		28-Jul-00	SAGRES CONSTRUCTION CORP	\$181,710.50
2001	2375	0679-002-P61,N501		07-Dec-00	PEARSON CONSTR INC	\$271,024.00
2001	2376	0220-044-1053,SR01;0220-044-1054,SR01		07-Aug-00	CLECO CORP	\$395,954.40
2001	2377	0784-009-6340,SR01		21-Jul-00	LANFORD BROTHERS CO INC	\$66,122.58
2001	2378	0024-009-1024,SR01		30-Aug-00	LANFORD BROTHERS CO INC	\$146,467.64
2001	2379	DU-4A-00		30-Aug-00	B P SHORT & SON PAVING CO INC	\$864,752.72
2001	2380	M500BRR802		16-Oct-00	PRECON CONSTRUCTION CO	\$4,324,945.00
2001	2381	BR-5H-00		10-Jan-01	ENGINEERING MANAGEMENT SERVICES INC	\$4,299,740.00
2001	2383	TP-5P-01		06-Apr-01	ACCENT STRIPE INC	\$288,293.40
2001	2384	1610-046-BI		29-May-01	CURTIS CONTRACTING INC	\$354,106.40
2001	2386	M400T939506		26-Sep-00	L S LEE INC	\$234,234.34
2001	2387	0751-006-206,N501		30-Aug-00	PEARSON CONSTR INC	\$187,857.20
2001	2388	9999-092-563,N502		25-Aug-00	SELCO SEEDING INC	\$144,262.50
2001	2390	GR-7-01		22-Aug-00	MAKCO INC	\$1,657,459.70
2001	2391	M400TR39664;PRMO-964-101,N514		30-Aug-00	ACCENT STRIPE INC	\$145,287.50
2001	2392	PM-6F-00		22-Aug-00	APAC VIRGINIA INC	\$2,060,605.34
2001	2393	SR-43-01		22-Aug-00	S L WILLIAMSON CO INCORPORATED	\$708,371.35
2001	2394	CM701BOA39591		23-Aug-00	CLECO CORP	\$119,129.64
2001	2395	SR-46-01		22-Aug-00	SUPERIOR PAVING CORP	\$1,298,729.00
2001	2396	PM-7E-00		22-Aug-00	S L WILLIAMSON CO INCORPORATED	\$920,714.57
2001	2397	PM-7F-00		22-Aug-00	S L WILLIAMSON CO INCORPORATED	\$679,304.47
2001	2398	PM-7G-00		22-Aug-00	SUPERIOR PAVING CORP	\$1,105,427.74
2001	2399	PM-7H-00		22-Aug-00	SUPERIOR PAVING CORP	\$559,829.48
2001	2400	M400AGD39715		26-Sep-00	LEE HY PAVING CORP	\$162,052.40
2001	2401	M400PAE39715		26-Sep-00	E V WILLIAMS CO INC	\$363,092.75
2001	2402	0250-043-X24,N501		26-Sep-00	BLAKEMORE CONSTRUCTION CORP	\$193,472.00
2001	2403	BO-7C-01		04-Dec-00	CLECO CORP	\$323,435.00
2001	2404	0360-004-X18,N501		31-Oct-00	WATTS CONTRACTORS INC	\$41,760.87
2001	2405	BJ-6-00		08-Jan-01	C & F CONSTRUCTION CO INC	\$276,180.00
2001	2406	0626-006-P04,N501		04-Dec-00	PEARSON CONSTR INC	\$250,744.60
2001	2407	SCG-2-00		06-Oct-00	H & S CONSTRUCTION CO	\$470,813.00
2001	2408	1062-044-RA;1064-044-RA;1073-044-RA		31-Oct-00	CARNELL CONSTRUCTION CORP	\$142,154.00
2001	2409	0913-017-P36,N502		31-Oct-00	J & D CONSTRUCTION CO INC	\$364,654.50

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2410	0707-033-289,N501;0714-033-P88,N502		31-Oct-00	CARNELL CONSTRUCTION CORP	\$379,501.00
2001	2411	0029-015-1089,SR01		30-Apr-01	W H P BURLEIGH INC	\$361,375.00
2001	2412	PGOO-961-101,N502		11-Jan-01	RUTH CO	\$325,212.85
2001	2413	0791-002-P56,N501		02-Feb-01	KRAHENBILL & CHISHOLM INC	\$172,000.00
2001	2414	0698-016-P12,N501		21-Nov-00	STANLEY CONSTRUCTION CO INC	\$172,038.00
2001	2415	0707-016-P08,N501		21-Nov-00	STANLEY CONSTRUCTION CO INC	\$278,216.80
2001	2416	0066-029-SW01;0066-000-SW02;0066-029-SW03		12-Feb-01	CENTURY CONCRETE INC	\$290,820.00
2001	2417	SP-5R-01		21-Mar-01	E V WILLIAMS CO INC	\$59,653.50
2001	2418	SO-5Q-01		30-Apr-01	PRECON MARINE INC	\$510,690.00
2001	2419	SE-5B-01		14-Mar-01	DOREY ELECTRIC CO	\$1,591,630.00
2001	2420	BJ-5E-01		05-Dec-00	CLECO CORP	\$63,400.00
2001	2421	BR-2A-00		31-Oct-00	LANFORD BROTHERS CO INC	\$1,566,001.50
2001	2422	M200DUA39764		07-Dec-00	ADAMS CONSTRUCTION CO	\$413,366.28
2001	2424	PH-5T-01		12-Jun-01	COSTELLO INDUSTRIES INC	\$378,853.70
2001	2425	TP-5F-01		11-Jan-01	ROADMARK CORP	\$1,266,867.53
2001	2426	BJ-5G-01		04-Dec-00	LANFORD BROTHERS CO INC	\$858,483.18
2001	2427	MLY99PCR101;MLY99PCR102		11-Jan-01	D A BROWN INC	\$198,052.90
2001	2428	0221-031-1024,SR01		04-Dec-00	CLECO CORP	\$128,105.75
2001	2429	0801-033-P77,N501		02-Feb-01	J & D CONSTRUCTION CO INC	\$266,473.00
2001	2430	0608-032-P62,N501		04-Dec-00	PEARSON CONSTR INC	\$282,477.20
2001	2431	0737-030-P25,N501		02-Feb-01	RAPPAWAN INC	\$445,895.00
2001	2432	0605-002-P57,N501;0605-039-P54,N501		10-Jan-01	UNLIMITED EXCAVATING INC	\$290,695.25
2001	2433	DU-4B-00		07-Dec-00	CURTIS CONTRACTING INC	\$287,499.95
2001	2434	1337-074-5304		14-Mar-01	INTERSTATE CONSTRUCTION CORP	\$109,584.18
2001	2435	0725-074-5301		26-Feb-01	B P SHORT & SON PAVING CO INC	\$149,513.00
2001	2436	PA-5U-01		26-Jun-01	CURTIS CONTRACTING INC	\$96,884.15
2001	2437	BJ-5H-01		05-Mar-01	W P TAYLOR & CO INC	\$335,950.00
2001	2438	BJ-5I-01		05-Mar-01	W P TAYLOR & CO INC	\$177,908.00
2001	2439	BJ-5J-01		29-Jan-01	CORMAN CONSTRUCTION INC	\$477,040.00
2001	2441	SE-5L-01		21-Mar-01	DOREY ELECTRIC CO	\$994,000.00
2001	2442	BP-5M-01		14-Dec-00	MEGACO INC	\$1,658,500.00
2001	2443	DU-4C-00		01-Feb-01	B P SHORT & SON PAVING CO INC	\$1,815,085.53
2001	2444	CR-7B-01		07-Dec-00	COASTAL GUNITE CONSTRUCTION CO	\$330,982.00
2001	2445	0665-006-P73,N502		04-Dec-00	D S NASH CONSTRUCTION CO	\$144,740.97
2001	2449	CM300PCR39626		03-Apr-01	NASH CONSTRUCTION CO & ASSOC INC	\$390,318.60
2001	2450	0058-052-E24,N502		08-Jan-01	J B ARNOLD CO	\$149,325.82
2001	2451	1248-044-R4;1512-044-RA		01-Feb-01	J C JOYCE TRUCKING & PAVING CO INC	\$209,179.75

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2452	0631-077-P83,N501		01-Feb-01	C R HENDERSON CO	\$296,320.00
2001	2453	1108-182-161,N501		05-Mar-01	IA CONSTRUCTION CORP	\$226,872.25
2001	2454	PB-5N-01		27-Mar-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$5,466,014.05
2001	2455	0460-013-1074		10-Jan-01	CLECO CORP	\$144,968.00
2001	2456	0019-092-1030;0019-092-1031;0019-092-1032;0019-092-1042		10-Jan-01	CLECO CORP	\$111,968.00
2001	2457	0019-095-1097;0019-095-1098		10-Jan-01	CLECO CORP	\$144,130.00
2001	2458	0023-097-1015;0023-097-1016;0023-097-1065;0023-097-1066		10-Jan-01	CLECO CORP	\$50,199.00
2001	2459	MCR-8A-00		11-Jan-01	ALLIED CONSTRUCTION CO INC	\$252,901.50
2001	2460	0633-034-P36,N501		12-Feb-01	GENERAL EXCAVATION INC	\$547,289.00
2001	2461	0842-093-P86,N501		27-Mar-01	RAPPAWAN INC	\$476,718.36
2001	2462	0757-081-P92,N501		02-Apr-01	ROBERTSON FOWLER CO	\$376,013.20
2001	2463	0698-082-P05,N501		02-Apr-01	HOWDYSHHELL EXCAVATING INC	\$286,548.06
2001	2464	0698-082-P05,N501		02-Apr-01	HOWDYSHHELL EXCAVATING INC	\$286,548.06
2001	2465	M400TS39715		10-Jan-01	KIRK NEAL INC	\$161,647.00
2001	2466	BR-3D-00		10-Jan-01	J HARMAN SAUNDERS CONSTRUCTION INC	\$185,700.00
2001	2467	BW-78-01		12-Feb-01	MBC CONSTRUCTION INC	\$171,555.00
2001	2468	0220-044-1051,SR01;0220-044-1052		05-Mar-01	CLECO CORP	\$504,973.00
2001	2469	0220-044-1055,SR01;0220-044-1061,SR01		05-Mar-01	CLECO CORP	\$373,449.79
2001	2470	0122-033-1019,SR01		05-Mar-01	LANFORD BROTHERS CO INC	\$243,980.00
2001	2471	0080-013-R07,N501		01-Feb-01	J & J CONTRACTORS INC	\$94,696.75
2001	2472	0650-013-7010,A01		29-Jun-01	LITTLE HENRYS EXCAVATING & PAVING INC	\$161,989.55
2001	2473	0606-052-7102		01-Feb-01	ESTES BROTHERS CONSTRUCTION INC	\$120,333.73
2001	2474	M400TH39644		01-Feb-01	RICHARDSON WAYLAND ELECTRICAL CORP	\$299,611.00
2001	2475	0058-097-1046,SR01;0058-097-1047,SR01		05-Mar-01	CLECO CORP	\$284,366.23
2001	2477	BR-5S-01		14-May-01	MARINE CONTRACTING CORP	\$34,500.00
2001	2478	1033-088-6113;1621-088-6124		30-Apr-01	J L KENT & SONS INC	\$569,969.00
2001	2479	M401PMG39715		23-Apr-01	MEGA CONTRACTORS INC	\$311,256.50
2001	2482	0040-033-1082,SR01		08-Mar-01	LANFORD BROTHERS CO INC	\$181,425.42
2001	2483	0908-033-P86,N501		02-Apr-01	M & Y EXCAVATING INC	\$176,089.75
2001	2484	0654-070-P07,N501;0685-070-P44,N501		04-Apr-01	J & D CONSTRUCTION CO INC	\$79,400.50
2001	2486	M4013T39645		23-Apr-01	A ANNANDALE INC	\$119,271.82

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2001	2487	SR-42-01		23-Apr-01	MEGA CONTRACTORS INC	\$208,825.00
2001	2488	0627-042-BI;0600-037-B1		27-Mar-01	LEE HY PAVING CORP	\$163,811.25
2001	2489	0674-054-P32,N501		02-Apr-01	KRAHENBILL & CHISHOLM INC	\$274,263.30
2001	2490	0606-021-BI		04-Apr-01	GULL CORP	\$255,492.50
2001	2491	PMO-8A-01		02-Apr-01	BLACKROCK CONTRACTING INC	\$597,584.02
2001	2492	0703-007-392,N501;1122-202-P93,N501;1502-007-401,N501		16-May-01	B & S CONTRACTING INC	\$183,445.13
2001	2494	BR-3B-01		29-May-01	W H P BURLEIGH INC	\$735,489.00
2001	2496	M301TPA39798		03-May-01	OGLESBY CONSTRUCTION INC	\$293,438.92
2001	2497	PG00-963-101,N501		29-May-01	MAKCO INC	\$332,568.84
2001	2499	GR-6A-01		03-May-01	L S LEE INC	\$219,000.00
2001	2500	M401T239711		03-May-01	OGLESBY CONSTRUCTION INC	\$192,287.52
2001	2501	RS-9A-01		03-May-01	FMC CIVIL CONSTRUCTION L L C	\$734,237.02
2001	2502	RS-9B-01		03-May-01	FMC CIVIL CONSTRUCTION L L C	\$1,157,022.64
2001	2503	RS-9C-01		03-May-01	FMC CIVIL CONSTRUCTION L L C	\$2,195,617.60
2001	2504	TP-8B-01		03-May-01	OGLESBY CONSTRUCTION INC	\$112,648.75
2001	2505	0716-031-P87,N502;0771-031-P43,N501		29-Jun-01	STRICKLAND CONSTRUCTION INC	\$178,952.60
2001	2506	9999-080-303,P403		29-Jun-01	ADAMS CONSTRUCTION CO	\$466,547.36
2001	2511	PA-6A-01		29-May-01	SLURRY PAVERS INC	\$581,276.26
2001	2512	TR-9A-01		03-May-01	ROADMARK CORP	\$601,607.00
2001	2513	DP-3A-00		29-May-01	D L B INC	\$267,497.00
2001	2515	M301GRB39629		29-May-01	MAKCO INC	\$303,220.00
2001	2516	TP-7A-01		29-May-01	A ANNANDALE INC	\$72,784.15
2001	2518	BR-8A-01		29-May-01	LANFORD BROTHERS CO INC	\$531,585.00
2001	2520	0728-085-264,N501		29-Jun-01	ROGER M TURNER	\$329,204.00
2001	2522	0719-087-P65,N501		29-Jun-01	ROSE BROTHERS PAVING CO INC	\$68,717.00
2001	2524	TP-7B-01		29-May-01	A ANNANDALE INC	\$245,782.78
2001	2525	GI-5A-01		29-Jun-01	L S LEE INC	\$1,975,975.75
2001	2528	TP-6A-01		29-Jun-01	ROADMARK CORP	\$146,525.00
2001	2529	TE-6A-01		29-Jun-01	SURFACE PREPARATION TECHNOLOGIES INC	\$193,141.53
2001	2531	M401T139507		29-May-01	A ANNANDALE INC	\$389,275.31
2001	2532	PR-3A-01		29-May-01	SLURRY PAVERS INC	\$313,847.53
2002	77	ST-1A-02		27-Mar-02	W L CONSTRUCTION & PAVING INC	\$1,491,383.39
2002	85	ST-1B-02		27-Mar-02	ADAMS CONSTRUCTION CO	\$694,019.34
2002	89	SS-1A-02		28-Mar-02	SLURRY PAVERS INC	\$719,552.85
2002	93	PM-1A-02		22-Apr-02	ELMO GREER & SONS LLC	\$272,540.18
2002	98	PM-1B-02		17-Apr-02	W L CONSTRUCTION & PAVING INC	\$655,264.56
2002	103	PM-1C-02		17-Apr-02	W L CONSTRUCTION & PAVING INC	\$1,521,247.87
2002	108	PM-1D-02		17-Apr-02	W L CONSTRUCTION & PAVING INC	\$974,898.44
2002	112	PM-1E-02		17-Apr-02	MAYMEAD MATERIALS INC	\$543,819.25

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	119	PM-1F-02		17-Apr-02	W L CONSTRUCTION & PAVING INC	\$981,828.39
2002	124	PM-1G-02		17-Apr-02	MAYMEAD MATERIALS INC	\$1,041,061.69
2002	129	PM-1H-02		17-Apr-02	APAC VIRGINIA INC	\$400,014.58
2002	134	PM-1I-02		17-Apr-02	APAC VIRGINIA INC	\$160,168.22
2002	138	PM-1J-02		17-Apr-02	APAC VIRGINIA INC	\$693,917.66
2002	142	PM-1K-02		17-Apr-02	W L CONSTRUCTION & PAVING INC	\$790,798.43
2002	147	PM-1L-02		17-Apr-02	MAYMEAD MATERIALS INC	\$721,803.32
2002	157	ST-2A-02		03-Apr-02	ADAMS CONSTRUCTION CO	\$564,236.33
2002	168	ST-2B-02		03-Apr-02	ADAMS CONSTRUCTION CO	\$228,406.69
2002	171	ST-2D-02		03-Apr-02	ADAMS CONSTRUCTION CO	\$821,703.30
2002	175	ST-2C-02		03-Apr-02	ADAMS CONSTRUCTION CO	\$482,993.37
2002	180	ST-2E-02		03-Apr-02	ADAMS CONSTRUCTION CO	\$781,926.77
2002	193	SS-2A-02		28-Mar-02	SLURRY PAVERS INC	\$48,178.47
2002	198	SS-2C-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$832,820.14
2002	202	SS-2D-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$166,026.35
2002	206	SS-2E-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$357,659.18
2002	210	SS-2F-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$190,370.90
2002	216	PM-2A-02		17-Apr-02	APAC VIRGINIA INC	\$1,437,382.73
2002	221	PM-2B-02		17-Apr-02	APAC VIRGINIA INC	\$753,309.22
2002	225	PM-2C-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$873,677.20
2002	231	PM-2D-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,886,611.28
2002	236	PM-2E-02		17-Apr-02	APAC VIRGINIA INC	\$234,009.34
2002	241	PM-2F-02		17-Apr-02	APAC VIRGINIA INC	\$1,205,059.54
2002	246	PM-2G-02		17-Apr-02	APAC VIRGINIA INC	\$615,185.50
2002	251	PM-2H-02		17-Apr-02	APAC VIRGINIA INC	\$529,064.72
2002	255	PM-2I-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,276,265.46
2002	257	PM-2J-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$259,011.99
2002	262	PM-2K-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,849,740.35
2002	265	PM-2L-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,269,328.11
2002	275	ST-3A-02		27-Mar-02	WHITEHURST PAVING CO INC	\$715,993.25
2002	284	ST-3B-02		27-Mar-02	PAYNE PAVING CO INC	\$613,927.11
2002	287	ST-3C-02		27-Mar-02	WHITEHURST PAVING CO INC	\$968,700.15
2002	291	ST-3D-02		27-Mar-02	WHITEHURST PAVING CO INC	\$1,343,424.97
2002	294	ST-3E-02		27-Mar-02	WHITEHURST PAVING CO INC	\$1,072,444.56
2002	298	SS-3A-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$321,989.18
2002	302	LM-3A-02		28-Mar-02	SLURRY PAVERS INC	\$312,017.99
2002	318	PM-3C-02		17-Apr-02	S L WILLIAMSON CO INCORPORATED	\$1,990,208.01
2002	322	PM-3D-02		17-Apr-02	B P SHORT & SON PAVING CO INC	\$1,549,125.75
2002	327	PM-3E-02		17-Apr-02	APAC VIRGINIA INC	\$1,049,501.94
2002	331	PM-3F-02		17-Apr-02	APAC VIRGINIA INC	\$1,458,671.68
2002	339	ST-4A-02		03-Apr-02	B P SHORT & SON PAVING CO INC	\$1,622,198.92
2002	345	ST-4B-02		27-Mar-02	WHITEHURST PAVING CO INC	\$892,190.97
2002	354	SS-4A-02		28-Mar-02	SLURRY PAVERS INC	\$1,451,161.08
2002	360	PM-4A-02		17-Apr-02	B P SHORT & SON PAVING CO INC	\$1,226,977.40
2002	366	PM-4B-02		17-Apr-02	B P SHORT & SON PAVING CO INC	\$1,730,783.25
2002	371	PM-4C-02		17-Apr-02	APAC VIRGINIA INC	\$168,832.21

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	376	PM-4D-02		17-Apr-02	B P SHORT & SON PAVING CO INC	\$140,903.00
2002	381	PM-4E-02		17-Apr-02	APAC VIRGINIA INC	\$614,076.56
2002	386	PM-4F-02		17-Apr-02	B P SHORT & SON PAVING CO INC	\$567,904.90
2002	391	PM-4G-02		19-Apr-02	BLAKEMORE CONSTRUCTION CORP	\$492,042.89
2002	396	PM-4H-02		19-Apr-02	LEE HY PAVING CORP	\$276,950.24
2002	401	PM-4I-02		17-Apr-02	APAC VIRGINIA INC	\$852,927.63
2002	406	PM-4J-02		19-Apr-02	LEE HY PAVING CORP	\$584,492.47
2002	411	PM-4K-02		19-Apr-02	LEE HY PAVING CORP	\$192,208.97
2002	416	PM-4L-02		19-Apr-02	LEE HY PAVING CORP	\$176,104.96
2002	421	PM-4M-02		19-Apr-02	LEE HY PAVING CORP	\$1,366,564.62
2002	426	PM-4N-02		19-Apr-02	LEE HY PAVING CORP	\$363,139.23
2002	430	PM-4O-02		19-Apr-02	LEE HY PAVING CORP	\$528,371.40
2002	434	ST-5A-02		26-Apr-02	C LEE DAVIS INC	\$608,578.04
2002	439	ST-5B-02		25-Mar-02	PAVING CONTRACTORS INC	\$556,781.46
2002	443	ST-5C-02		27-Mar-02	WHITEHURST PAVING CO INC	\$618,552.14
2002	449	ST-5D-02		03-Apr-02	B P SHORT & SON PAVING CO INC	\$433,809.96
2002	454	SS-5A-02		28-Mar-02	SLURRY PAVERS INC	\$246,484.73
2002	459	PM-5A-02		10-Apr-02	B P SHORT & SON PAVING CO INC	\$3,499,368.20
2002	463	PM-5B-02		22-Apr-02	BRANSCOME INC	\$3,559,685.63
2002	469	PM-5C-02		18-Apr-02	APAC VIRGINIA INC	\$3,315,908.91
2002	474	PM-5D-02		17-Apr-02	BASIC CONSTRUCTION CO	\$2,246,664.36
2002	478	PM-5E-02		18-Apr-02	APAC VIRGINIA INC	\$2,999,825.35
2002	484	ST-6A-02		25-Mar-02	PAVING CONTRACTORS INC	\$382,781.16
2002	490	ST-6B-02		25-Mar-02	PAVING CONTRACTORS INC	\$523,903.27
2002	495	LM-6A-02		28-Mar-02	SLURRY PAVERS INC	\$745,152.80
2002	498	SS-6A-02		28-Mar-02	SLURRY PAVERS INC	\$126,278.94
2002	503	PM-6A-02		17-Apr-02	LEE HY PAVING CORP	\$1,922,245.70
2002	508	PM-6B-02		17-Apr-02	APAC VIRGINIA INC	\$2,544,536.91
2002	513	PM-6C-02		17-Apr-02	BASIC CONSTRUCTION CO	\$1,800,136.93
2002	518	PM-6D-02		17-Apr-02	LEE HY PAVING CORP	\$1,672,033.84
2002	520	PM-6E-02		08-Apr-02	MEGA CONTRACTORS INC	\$1,326,606.26
2002	524	ST-7A-02		27-Mar-02	PAYNE PAVING CO INC	\$778,153.20
2002	532	ST-7B-02		27-Mar-02	PAYNE PAVING CO INC	\$608,393.67
2002	536	ST-7C-02		27-Mar-02	PAYNE PAVING CO INC	\$585,983.14
2002	539	ST-7D-02		27-Mar-02	PAYNE PAVING CO INC	\$278,975.76
2002	543	SS-7A-02		28-Mar-02	SLURRY PAVERS INC	\$49,713.57
2002	547	SS-7B-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$142,008.93
2002	553	SS-7C-02		28-Mar-02	SLURRY PAVERS INC	\$321,443.38
2002	558	PM-7A-02		19-Apr-02	LEE HY PAVING CORP	\$1,651,141.66
2002	563	PM-7B-02		17-Apr-02	S L WILLIAMSON CO INCORPORATED	\$2,707,379.82
2002	567	PM-7C-02		10-Apr-02	SUPERIOR PAVING CORP	\$3,670,276.90
2002	569	PM-7D-02		19-Apr-02	JULIUS BRANSCOME INC	\$4,918,392.46
2002	571	ST-8A-02		27-Mar-02	ADAMS CONSTRUCTION CO	\$748,670.04
2002	583	ST-8B-02		27-Mar-02	WHITEHURST PAVING CO INC	\$823,461.92
2002	587	ST-8C-02		27-Mar-02	WHITEHURST PAVING CO INC	\$286,009.26
2002	591	ST-8D-02		27-Mar-02	WHITEHURST PAVING CO INC	\$431,447.38

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	594	ST-8E-02		27-Mar-02	WHITEHURST PAVING CO INC	\$332,089.70
2002	598	SS-8A-02		03-Apr-02	MARVIN V TEMPLETON & SONS INC	\$753,758.97
2002	604	PM-8A-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,462,728.18
2002	609	PM-8B-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$2,679,288.02
2002	614	PM-8C-02		18-Apr-02	B & S CONTRACTING INC	\$2,293,433.03
2002	619	PM-8D-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$2,392,891.34
2002	624	PM-8E-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$755,768.45
2002	629	PM-8F-02		10-Apr-02	STUART M PERRY INC	\$1,633,169.29
2002	634	PM-8G-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$409,050.35
2002	639	PM-8H-02		08-Apr-02	APAC VIRGINIA INC	\$1,163,312.75
2002	643	PM-8I-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$1,119,841.53
2002	647	PM-8J-02		18-Apr-02	B & S CONTRACTING INC	\$2,534,897.78
2002	650	PM-8K-02		18-Apr-02	ADAMS CONSTRUCTION CO	\$2,503,612.76
2002	652	PM-8L-02		08-Apr-02	APAC VIRGINIA INC	\$2,260,921.75
2002	657	PM-9A-02		18-Apr-02	VIRGINIA PAVING CO INC	\$3,009,010.70
2002	662	PM-9B-02		17-Apr-02	APAC VIRGINIA INC	\$1,409,181.93
2002	671	PM-9C-02		17-Apr-02	APAC VIRGINIA INC	\$1,613,730.04
2002	679	PM-9D-02		17-Apr-02	APAC VIRGINIA INC	\$1,817,055.44
2002	685	PM-9E-02		17-Apr-02	APAC VIRGINIA INC	\$3,141,078.28
2002	691	PM-9F-02		19-Apr-02	FRANCIS O DAY CO INC	\$2,499,413.86
2002	696	PM-9G-02		17-Apr-02	APAC VIRGINIA INC	\$1,584,073.36
2002	701	PM-9H-02		17-Apr-02	APAC VIRGINIA INC	\$2,999,535.31
2002	706	PM-9J-02		17-Apr-02	APAC VIRGINIA INC	\$1,630,819.18
2002	709	PM-9I-02		18-Apr-02	VIRGINIA PAVING CO INC	\$4,872,088.00
2002	1206	0061-035-1078,SR01		27-Jun-02	RANNY E ODELL & CO INC	\$573,626.95
2002	1207	0029-108-1137,SR01		29-May-02	W H P BURLEIGH INC	\$321,850.00
2002	1208	1415-015-280,C501;7460-015-125,C501		30-Apr-02	HAYMES BROTHERS INC	\$1,843,212.85
2002	1209	0617-062-253,C501		31-May-02	D S NASH CONSTRUCTION CO	\$396,567.67
2002	1210	0401-100-101,C501		19-Jun-02	RUSTLER CONSTRUCTION INC	\$1,146,808.39
2002	1211	0759-055-P29,M501		29-May-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$125,101.75
2002	1213	0005-018-1917,SR19		03-Jun-02	CROFTON DIVING CORP	\$410,235.00
2002	1214	0651-012-P85,M502		29-May-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$179,477.30
2002	1215	0609-010-P63,P401;0609-010-180,B624		31-May-02	J & J CONTRACTORS INC	\$309,500.00
2002	1217	0600-058-P70,M501,B638		02-Dec-02	D S NASH CONSTRUCTION CO	\$838,715.73
2002	1219	RW-1A-02		31-May-02	J & J CONTRACTORS INC	\$987,824.00
2002	1220	0262-007-101,L801		25-Jun-02	PLECKER CONSTRUCTION CO INC	\$186,763.82
2002	1221	0642-076-332,M501		26-Jun-02	TAVARES CONCRETE COINC	\$286,041.50
2002	1223	0618-088-6087,SR00		29-Jul-02	BURLEIGH CONSTRUCTION CO INC	\$317,148.00
2002	1224	0042-035-1012,SR01		29-Jul-02	D L B INC	\$353,641.00
2002	1226	0052-010-1013,SR00		29-Jul-02	KEN CONSTRUCTION CO INC	\$170,673.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	1227	0095-127-8023,SR02;0095-127-8020,SR04		30-Jul-02	CORMAN CONSTRUCTION INC	\$3,135,486.10
2002	1228	0639-088-245,C502		30-Jul-02	APAC VIRGINIA INC	\$8,085,236.89
2002	1229	0023-097-1072,SR00		23-Aug-02	KEN CONSTRUCTION CO INC	\$101,950.10
2002	1231	0052-098-1052,SR00		26-Aug-02	KEN CONSTRUCTION CO INC	\$182,279.10
2002	1232	0722-084-6486,SR00		23-Aug-02	CLECO CORP	\$238,371.00
2002	1233	0634-037-169,C501,B617		26-Sep-02	D W LYLE CORP	\$1,186,739.89
2002	1234	0719-071-286,C501		27-Sep-02	ROY N FORD CO INC	\$560,269.39
2002	1235	0095-088-2002,SR02;0095-088-2003,SR02		27-Sep-02	RIVER VIEW INVESTMENTS INC	\$580,409.00
2002	1236	0715-005-P52,N501		24-Oct-02	D S NASH CONSTRUCTION CO	\$316,748.30
2002	1241	0102-092-1162,SR01		29-Oct-02	ELK KNOB INC	\$145,445.62
2002	1242	0660-004-P94,M501		05-Nov-02	SHEARIN CONSTRUCTION INC	\$154,689.05
2002	1243	0785-025-P43,N501		28-Oct-02	W L CONSTRUCTION & PAVING INC	\$115,272.50
2002	1245	0605-037-166,M501		02-Dec-02	J L KENT & SONS INC	\$391,756.50
2002	1246	0311-003-107,M600		04-Dec-02	FORT CHISWELL CONSTRUCTION CORP	\$970,867.70
2002	1248	0254-007-105,M600		10-Dec-02	HAMMOND MITCHELL	\$731,911.25
2002	1249	0648-055-P61,M501		04-Dec-02	D S NASH CONSTRUCTION CO	\$356,693.42
2002	1250	0612-097-360,N502		10-Dec-02	GLASS MACHINERY & EXCAVATION INC	\$293,814.90
2002	1465	0683-007-7710,A08		07-Nov-01	D A BROWN INC	\$503,040.50
2002	1867	0665-084-6089,SR00		30-Aug-01	LYONS CONSTRUCTION CO	\$636,780.25
2002	1888	2760-029-6483,SR01		14-Nov-01	MOORE BROTHERS CO INC	\$1,395,733.00
2002	1903	0663-053-P09,C502		07-Sep-01	CUBE CONSTRUCTION CORP	\$1,349,099.50
2002	1904	0040-071-107,M501		17-Jul-01	NEKAY EARTHMOVERS INC	\$160,105.60
2002	1907	0622-083-P21		05-Jul-01	MAC CONSTRUCTION INC	\$112,817.05
2002	1908	0011-086-1001,SR02		29-Jul-02	PATRICK CONSTRUCTION INC	\$273,400.90
2002	1914	0620-088-6020,SR00		07-Nov-01	CHEMUNG CONTRACTING CORP	\$409,249.10
2002	1915	0621-053-6013,SR01		01-Nov-01	MARTINS CONSTRUCTION CORP	\$1,191,248.00
2002	1920	0684-073-199,N501		02-Jul-01	PEARSON CONSTR INC	\$164,217.90
2002	1922	0838-013-715,N502		06-Jul-01	HUNTER PAVING INC	\$205,065.50
2002	1923	0690-084-P37,N501		06-Jul-01	PATRICK CONSTRUCTION INC	\$156,071.00
2002	1924	0023-097-X32,M501		30-Jul-01	W L CONSTRUCTION & PAVING INC	\$103,655.40
2002	1925	0609-083-364,M501		11-Oct-01	PATRICK CONSTRUCTION INC	\$73,465.20
2002	1926	0011-060-1028,SR03;0011-060-1029,SR02		01-Aug-01	ELK KNOB INC	\$1,545,216.34
2002	1927	0103-070-1029,SR01		01-Aug-01	ELK KNOB INC	\$247,272.50
2002	1928	0011-085-1007,SR01		02-Aug-01	ORDERS CONSTRUCTION CO INC	\$894,908.25
2002	1929	1421-177-247,C501;1421-082-274,C502;0259-082-108,C5011		01-Aug-01	GENERAL EXCAVATION INC	\$1,802,199.24

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	1930	0728-012-P44,M501		02-Aug-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$223,253.02
2002	1931	0603-097-6090,SR00		10-Aug-01	KEN CONSTRUCTION CO INC	\$456,953.50
2002	1932	SASM-029-101,C502,D603		26-Sep-01	NEW CONSTRUCTION INC	\$11,568,412.10
2002	1933	0716-041-172,C503		03-Oct-01	WARRCO INC	\$464,702.80
2002	1934	0094-017-103,C501		30-Jul-01	W L CONSTRUCTION & PAVING INC	\$618,319.26
2002	1935	6058-058-E26,M503		07-Aug-01	RED OAK EXCAVATING INC	\$248,111.30
2002	1936	0635-072-134,N502		01-Aug-01	MEGA CONTRACTORS INC	\$329,430.75
2002	1937	0622-056-P83,N501		13-Aug-01	R W HARRIS EXCAVATING INC	\$504,044.90
2002	1938	0626-062-P42,N504		07-Aug-01	PEARSON CONSTR INC	\$122,706.25
2002	1939	0733-053-P31,C502		08-Apr-02	K B CONTRACTING LLC	\$2,272,697.85
2002	1940	0601-054-P18,N501		02-Aug-01	PEARSON CONSTR INC	\$462,371.65
2002	1941	0604-010-164,N503,B617		07-Aug-01	MILL RIDGE STRUCTURES INC	\$184,715.06
2002	1942	PM-1-01		01-Aug-01	MAYMEAD MATERIALS INC	\$109,774.10
2002	1943	BS-6-00		05-Sep-01	INTERCOASTAL DIVING INC	\$1,140,385.25
2002	1944	0662-056-182,C501		11-Sep-01	CHEMUNG CONTRACTING CORP	\$575,880.15
2002	1945	0712-095-6272,SR00		03-Oct-01	ELK KNOB INC	\$580,549.14
2002	1946	0637-002-6038,SR01		27-Aug-01	D A BROWN INC	\$258,288.50
2002	1947	0656-087-P60,N501		05-Sep-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$357,946.00
2002	1948	0601-068-P94,N501		30-Aug-01	GENERAL EXCAVATION INC	\$1,294,155.00
2002	1949	0630-032-P64,N501		27-Aug-01	D S NASH CONSTRUCTION CO	\$630,825.40
2002	1950	0705-019-221,N501		27-Aug-01	D S NASH CONSTRUCTION CO	\$172,486.10
2002	1951	0621-092-P54,N501		27-Aug-01	LITTLE HENRYS EXCAVATING & PAVING INC	\$268,083.98
2002	1952	0611-095-P06,N501		07-Sep-01	PATRICK CONSTRUCTION INC	\$278,860.00
2002	1953	0611-010-P66,N502		28-Mar-02	HUNTER PAVING INC	\$168,685.50
2002	1954	0633-040-183,M501		09-Oct-01	ROSE BROTHERS PAVING CO INC	\$385,806.35
2002	1955	0016-092-1059,SR00		11-Oct-01	PATRICK CONSTRUCTION INC	\$285,936.75
2002	1956	0003-023-107,C503		20-Dec-01	PERRY ENGINEERING CO INC	\$2,393,605.47
2002	1957	0058-041-114,C501,B606		30-Apr-02	BURLEIGH CONSTRUCTION CO INC	\$717,691.75
2002	1958	0643-030-302,C501		26-Sep-01	NEW CONSTRUCTION INC	\$915,814.00
2002	1959	0029-030-113,C501		28-Sep-01	CHEMUNG CONTRACTING CORP	\$1,648,997.61
2002	1960	0604-020-158,C504,B674		07-Nov-01	KEY CONSTRUCTION INC	\$8,017,489.20
2002	1961	6058-052-E29,C501;6058-097-E17,C501		06-Nov-01	W L CONSTRUCTION & PAVING INC	\$18,197,664.95
2002	1962	0619-026-240,M502		03-Oct-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$652,429.32
2002	1963	0646-055-P35,M502		03-Oct-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$699,570.52
2002	1964	0630-074-188,C501		26-Sep-01	HOWARD BROTHERS CONTRACTOR INC	\$536,467.27
2002	1965	0618-203-168,C501		27-Mar-02	W C ENGLISH INC	\$664,008.43
2002	1966	0717-024-P65,N501		01-Oct-01	CRUMP CONSTRUCTION CO INC	\$103,681.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	1967	0711-005-P48,N501;0771-005-P49,N501		26-Sep-01	J & D CONSTRUCTION CO INC	\$365,661.40
2002	1968	0644-081-P30,N501		26-Sep-01	A R COFFEY & SONS INC	\$1,234,305.50
2002	1969	0619-019-P58,N503		26-Sep-01	SHEARIN CONSTRUCTION INC	\$420,577.40
2002	1970	0694-024-P63,N501		26-Sep-01	WATTS CONTRACTORS INC	\$214,975.40
2002	1971	0651-083-P06,N504;0651-083-377,N501		03-Oct-01	HUNTER PAVING INC	\$244,857.00
2002	1972	0672-086-P51,N501		28-Nov-01	W L CONSTRUCTION & PAVING INC	\$221,640.00
2002	1973	0667-098-171,N501		09-Oct-01	ELK KNOB INC	\$577,034.13
2002	1974	1124-240-288,N501		03-Oct-01	D & D CONTRACTORS INC	\$255,481.00
2002	1975	0610-032-P29,N502		01-Nov-01	PEARSON CONSTR INC	\$492,440.90
2002	1976	0722-070-P41,N501		07-Nov-01	CARNELL CONSTRUCTION CORP	\$419,364.50
2002	1977	0017-036-134,M600		01-Nov-01	CLECO CORP	\$134,479.00
2002	1978	0788-095-P79,N501		14-Nov-01	PATRICK CONSTRUCTION INC	\$222,458.00
2002	1979	0666-098-P57,N501		14-Nov-01	PATRICK CONSTRUCTION INC	\$160,202.75
2002	1980	0665-052-P52,N501		01-Nov-01	ESTES BROTHERS CONSTRUCTION INC	\$437,043.01
2002	1981	0765-052-P44,N501		29-Apr-02	ESTES BROTHERS CONSTRUCTION INC	\$456,471.37
2002	1982	0628-013-P35,N501		14-Nov-01	MAC CONSTRUCTION INC	\$125,273.00
2002	1983	0638-098-P58,N501		02-May-02	PATRICK CONSTRUCTION INC	\$291,308.80
2002	1985	0629-034-P55,N501		28-Nov-01	APAC VIRGINIA INC	\$466,699.45
2002	1986	0739-071-P78,N501		03-Dec-01	ELTON CUNDIFF BULLDOZING & FARMS INC	\$159,831.05
2002	1987	0671-014-P11,N501		27-Mar-02	PEARSON CONSTR INC	\$327,816.53
2002	1988	0288-020-105,C511		11-Feb-02	CENTRAL CONTRACTING CO	\$822,786.13
2002	1989	0614-025-394,N502		28-Nov-01	MAC CONSTRUCTION INC	\$126,345.00
2002	1990	0638-097-450,C501,D648		29-Apr-02	ESTES BROTHERS CONSTRUCTION INC	\$1,143,779.43
2002	1991	0215-030-102,C501,D601		28-Mar-02	GENERAL EXCAVATION INC	\$1,084,452.25
2002	1992	0460-141-102,C501		24-Apr-02	WORLEY READY MIX CONCRETE INC	\$2,510,024.85
2002	1993	0058-012-1015,SR01;0058-012-1058,SR01		27-Mar-02	D L B INC	\$1,348,860.00
2002	1994	0637-092-6269,SR01		21-May-02	MILL RIDGE STRUCTURES INC	\$448,722.38
2002	1995	0360-067-1014,SR02;0360-067-1029,SR01;0460-067-1030,SR01		01-Mar-02	D L B INC	\$2,028,448.00
2002	1996	0640-016-6030,SR00		27-Mar-02	D L B INC	\$339,264.00
2002	1997	0625-049-6907,SR00		27-Mar-02	VIRGINIA MARINE STRUCTURES INC	\$161,385.00
2002	1998	0676-014-P60,N501		25-Mar-02	D S NASH CONSTRUCTION CO	\$396,871.15
2002	1999	0611-069-P60,N502		28-Mar-02	GENERAL EXCAVATION INC	\$917,739.75
2002	2000	0691-009-P77,N501		28-Mar-02	ELTON CUNDIFF BULLDOZING & FARMS INC	\$299,819.10

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2001	0741-017- P55,N501,D651		27-Mar-02	D L B INC	\$186,353.20
2002	2002	0671-084- P49,N501;0671-084- P45,N501		31-May-02	P & J CONTRACTING LLC	\$403,042.47
2002	2003	0625-098-P56,N501		28-Mar-02	P & J CONTRACTING LLC	\$329,307.83
2002	2004	0816-083-P86,N501		30-Apr-02	MAC CONSTRUCTION INC	\$113,677.50
2002	2005	0676-083-P84,N501		03-Apr-02	P & J CONTRACTING LLC	\$105,036.68
2002	2006	0603-048-158,C502		24-Apr-02	J L KENT & SONS INC	\$796,809.10
2002	2009	0673-004-P88,M501		24-Apr-02	RED OAK EXCAVATING INC	\$157,153.80
2002	2010	0607-073-175,M501		22-Apr-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$888,026.61
2002	2012	0718-084-P42,N501		29-Apr-02	ESTES BROTHERS CONSTRUCTION INC	\$128,484.22
2002	2013	0630-084-P43,N501		26-Apr-02	P & J CONTRACTING LLC	\$239,349.08
2002	2014	0805-083-P45,N501		26-Apr-02	P & J CONTRACTING LLC	\$92,303.38
2002	2015	0603-040-180,M501		30-Apr-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$390,855.31
2002	2016	0661-067-P70,M501		30-Apr-02	LANCO PAVING INC	\$188,683.00
2002	2017	0617-065-141,M502		05-Jun-02	APAC VIRGINIA INC	\$793,999.95
2002	2018	0607-089-223,C501		02-May-02	J L KENT & SONS INC	\$2,259,727.15
2002	2019	0621-099-181,M501		09-May-02	WOLF CONTRACTORS INC	\$376,203.30
2002	2020	0917-082- 226,M502,B678		30-Apr-02	F CLAYTON PLECKERS & SONS INC	\$929,859.13
2002	2021	0267-029-108,C501		01-May-02	NEW CONSTRUCTION INC	\$2,820,408.00
2002	2022	0643-055-P02,M504		01-May-02	LANCO PAVING INC	\$274,975.45
2002	2023	0611-068-178,N502		01-May-02	GENERAL EXCAVATION INC	\$690,243.35
2002	2025	0659-032-6050,SR01		03-Apr-02	RIVER VIEW INVESTMENTS INC	\$549,744.75
2002	2026	0601-007- 358,M501,B699		01-May-02	F CLAYTON PLECKERS & SONS INC	\$2,522,441.43
2002	2027	0629-086-6037,SR01		29-Jul-02	PATRICK CONSTRUCTION INC	\$352,315.00
2002	2028	0699-098- P21,N502,B639		10-May-02	PATRICK CONSTRUCTION INC	\$276,460.00
2002	2029	0677-038-P70,N502		02-May-02	PATRICK CONSTRUCTION INC	\$579,455.20
2002	2030	0682-083-P85,N501		02-May-02	P & J CONTRACTING LLC	\$137,000.04
2002	2031	0664-121-2236- 2237,SR01		27-Sep-02	T J CROOKS INC	\$114,332.00
2002	2032	0664-121-2236- 2237,SR01		26-Nov-02	KENNEDY CO OF VA INC	\$196,766.00
2002	2033	0661-024-P60,N501		01-May-02	D S NASH CONSTRUCTION CO	\$205,729.00
2002	2035	0609-018- 146,M501,B612		01-May-02	BRYANT CONTRACTING INC	\$558,785.45
2002	2036	0614-067-174,M501		01-May-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$174,733.49
2002	2037	6058-058- E28,C501,B649,B650		03-Apr-02	KEY CONSTRUCTION INC	\$9,778,035.11
2002	2038	9999-301- 101,M501,M502		06-May-02	LANCO PAVING INC	\$207,296.00
2002	2039	0622-035-P17,N503		01-May-02	H B ROWE & CO INC	\$599,277.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2040	0713-017-359,N501,D652		02-May-02	JAMES R VANNOY & SONS CONSTRUCTION COMP	\$138,676.50
2002	2041	0057-044-122,M600		29-Jul-02	D L B INC	\$395,440.05
2002	2042	0651-054-6906,SR01		31-May-02	ALLIED CONSTRUCTION CO INC	\$223,038.50
2002	2043	0692-084-P44,N501		02-May-02	PATRICK CONSTRUCTION INC	\$208,927.00
2002	2044	CST-1-02		03-Apr-02	MAYMEAD MATERIALS INC	\$482,146.40
2002	2045	0638-013-T31,N502		02-May-02	MAC CONSTRUCTION INC	\$87,644.00
2002	2046	0015-053-125,C501		31-May-02	GENERAL EXCAVATION INC	\$4,453,937.15
2002	2047	0609-016-188,C502		29-May-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$998,109.09
2002	2146	0147-043-1942,SR04		29-Sep-01	VIRGINIA MARINE STRUCTURES INC	\$91,700.00
2002	2245	0250-043-X23,N501		07-Sep-01	HOWARD BROTHERS CONTRACTOR INC	\$66,730.20
2002	2246	0311-080-V11,N501		31-May-02	ROBERTSON FOWLER CO	\$121,705.55
2002	2358	TA-5A-01		27-Sep-01	SURFACE PREPARATION TECHNOLOGIES INC	\$80,178.75
2002	2372	SO-5A-01		31-Oct-01	PRECON MARINE INC	\$205,120.00
2002	2382	TS-5N-01		08-Apr-02	MASTEC ITS INC	\$278,745.00
2002	2385	1829-046-RA		28-Mar-02	CURTIS CONTRACTING INC	\$86,165.88
2002	2423	0581-128-8001,SR02;0081-011-6379,SR02		30-Aug-01	LANFORD BROTHERS CO INC	\$42,930.50
2002	2440	TP-5B-01		07-Nov-01	ROADMARK CORP	\$85,543.75
2002	2448	0602-031-P36,N502;0680-031-P77,N503		06-Dec-01	STRICKLAND CONSTRUCTION INC	\$295,667.70
2002	2476	U000-134-118,L801		10-Aug-01	ECO SYSTEMS INC	\$148,890.00
2002	2480	PH-4A42-01		16-Jul-01	DENTON CONCRETE SERVICES CO	\$538,800.00
2002	2481	BP-7A-01		17-Aug-01	MTA INDUSTRIAL PAINTING CORP	\$301,040.00
2002	2485	BC-6-00		05-Jul-01	M D MILLER CO INC	\$313,987.00
2002	2493	9745-330-270,N501		26-Apr-02	D L B INC	\$373,868.00
2002	2495	BR-6-00		09-May-02	LANFORD BROTHERS CO INC	\$97,204.00
2002	2498	0064-127-2806-2807,SR06		03-Jul-01	T J CROOKS INC	\$241,580.00
2002	2507	0220-011-1083,SR01		02-Aug-01	LANFORD BROTHERS CO INC	\$411,611.95
2002	2508	0100-035-1017,SR01;0100-035-1050,SR01		02-Aug-01	LANFORD BROTHERS CO INC	\$389,286.98
2002	2509	GR-4A43-02		30-May-02	L S LEE INC	\$747,500.00
2002	2510	PH-4B43-01		16-Jul-01	DENTON CONCRETE SERVICES CO	\$465,775.00
2002	2514	NOVA-DEMO-2001		08-Apr-02	WACO INC	\$1,510,810.00
2002	2517	M302BRB403		25-Jul-02	C H WHITE CONSTRUCTION CO INC	\$131,280.00
2002	2519	0625-082-P84,N501		30-Aug-01	GENERAL EXCAVATION INC	\$777,557.10
2002	2521	STRW-01-DEMO		06-Jul-01	WACO INC	\$673,017.00
2002	2523	BR-3C-01		28-Nov-01	CALLINDERS GENERAL CONSTRUCTION	\$26,500.00
2002	2527	0682-040-194,N501		26-Apr-02	ROSE BROTHERS PAVING CO INC	\$59,771.00
2002	2530	RS-9F-01		22-Oct-01	FMC CIVIL CONSTRUCTION L L C	\$948,645.00
2002	2533	PM-6F-01		04-Sep-01	VIRGINIA PAVING CO INC	\$2,045,128.63

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2534	PB-5A-01		10-Aug-01	APAC VIRGINIA INC	\$1,129,423.90
2002	2535	PB-5B-01		01-Aug-01	IA CONSTRUCTION CORP	\$597,801.50
2002	2536	PH-5C-01		06-Sep-01	DENTON CONCRETE SERVICES CO	\$390,230.00
2002	2537	PH-5D-01		23-Apr-02	DENTON CONCRETE SERVICES CO	\$200,791.90
2002	2538	0615-002-P64,N501		06-Dec-01	UNLIMITED EXCAVATING INC	\$151,659.32
2002	2539	0019-092-20104		27-Aug-01	J & D CONSTRUCTION CO INC	\$301,135.02
2002	2540	0220-033-1029,SR01		02-Aug-01	LANFORD BROTHERS CO INC	\$194,543.51
2002	2541	0122-033-1909,SR01		08-Apr-02	KLICOS PAINTING CO INC	\$802,677.00
2002	2542	9999-060-BI		27-Aug-01	CARNELL CONSTRUCTION CORP	\$187,320.00
2002	2543	0644-030-P54,N501		29-Aug-01	GENERAL EXCAVATION INC	\$532,927.10
2002	2544	RW-1-01		10-Aug-01	PATRICK CONSTRUCTION INC	\$356,141.00
2002	2545	0066-000-2070,SR01		30-Jul-01	C & F CONSTRUCTION CO INC	\$266,110.00
2002	2546	0058-071-118,N501;0058-071-X19,N502;0029-071-X37,N501;0029-071-X36,N501		27-Jun-02	REYNOLDS ASPHALT PAVING & SEALING INC	\$68,686.00
2002	2547	1015-299-207,N501;1016-299-208,N501;1016-299-208,N502		27-Jun-02	VIRGINIA INFRASTRUCTURE INC	\$175,306.00
2002	2548	0660-003-168,N501;0615-008-127,N501		27-Aug-01	J M MARTIN CONSTRUCTION INC	\$148,070.00
2002	2549	MCR-8A-01		02-Aug-01	HAMMOND MITCHELL	\$179,544.00
2002	2550	RSF-8A-02		30-Jul-01	SELCO SEEDING INC	\$163,624.45
2002	2551	PH-5B-01		08-Apr-02	DENTON CONCRETE SERVICES CO	\$3,353,986.95
2002	2552	PB-5D-01		27-Aug-01	BASIC CONSTRUCTION CO	\$852,501.03
2002	2553	BR-5E-01		07-Sep-01	FLAME ON INC	\$73,299.60
2002	2554	PB-5E-01		15-Nov-01	B P SHORT & SON PAVING CO INC	\$2,153,730.60
2002	2555	BF-5A-01		10-Sep-01	CROFTON DIVING CORP	\$58,465.00
2002	2556	SX-5A-01		04-Sep-01	VIRGINIA MARINE STRUCTURES INC	\$87,691.00
2002	2557	PH-4C43-01		16-Jul-01	DENTON CONCRETE SERVICES CO	\$819,084.00
2002	2558	GR-7B-01		28-Sep-01	MAKCO INC	\$434,356.00
2002	2559	PH-4A074-01		10-Aug-01	DENTON CONCRETE SERVICES CO	\$708,800.00
2002	2560	DRP-8A-02		10-Aug-01	D L B INC	\$241,690.00
2002	2562	SE-5A-01		06-Nov-01	R E W CORP	\$249,300.00
2002	2563	SX-5B-01		27-Sep-01	KENNEDY CO OF VA INC	\$54,162.00
2002	2564	0052-098-1007,SR01		24-Jun-02	OVERLAY INC	\$134,559.82
2002	2565	PM-4D43-01		07-Aug-01	MEGA CONTRACTORS INC	\$326,368.00
2002	2566	0250-043-X25,N501		07-Sep-01	HOWARD BROTHERS CONTRACTOR INC	\$99,949.90
2002	2567	9999-092-563,N503		07-Aug-01	RUTH CO	\$108,438.75
2002	2568	PG00-964-101,N502		10-Aug-01	MAKCO INC	\$177,731.00
2002	2569	BR-5R-01		27-Sep-01	NORTH STAR CONSTRUCTION CORP	\$345,306.57
2002	2570	PH-5E-01		27-Aug-01	CURTIS CONTRACTING INC	\$391,087.50

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2571	BW-7A-01		27-Sep-01	RIVER VIEW INVESTMENTS INC	\$126,142.22
2002	2572	TP-5A-01		02-Oct-01	TRAFFIC LINES INC	\$98,008.50
2002	2573	RSF-8B-02		04-Sep-01	J & P FENCE CO INC	\$247,160.80
2002	2574	BR-8B-01		24-Jun-02	LANFORD BROTHERS CO INC	\$499,063.70
2002	2575	0618-021-B1		06-Sep-01	GULL CORP	\$168,191.15
2002	2576	0800-034-239,N501		04-Sep-01	PERRY ENGINEERING CO INC	\$169,142.80
2002	2577	0800-070-P14,N501;0873-070-RA		28-Nov-01	J & D CONSTRUCTION CO INC	\$249,540.25
2002	2578	0802-070-P45,N501;0804-070-P46,N501		06-Dec-01	SOWERS CONSTRUCTION CO INC	\$339,799.00
2002	2579	0658-035-P77,N501		10-May-02	C R HENDERSON CO	\$344,148.75
2002	2580	0700-017-P41,N501;0781-017-P48,N501		30-Apr-02	SOWERS CONSTRUCTION CO INC	\$306,640.00
2002	2581	GR-9A-01		02-Oct-01	LONG FENCE CO INC	\$1,361,450.95
2002	2582	0077-010-1500,SX1		10-May-02	OVERLAY INC	\$27,014.50
2002	2583	0664-069-P99,N501		01-May-02	GENERAL EXCAVATION INC	\$265,863.00
2002	2584	0663-003-RA		03-Oct-01	F CLAYTON PLECKERS & SONS INC	\$170,138.75
2002	2585	BR-8C-01		24-Jun-02	MELKA MARINE INC	\$208,363.00
2002	2586	1018-299-201,N501		11-Oct-01	PLECKER CONSTRUCTION CO INC	\$115,362.36
2002	2587	0708-082-P08,N501		03-Oct-01	HOWDYSHHELL EXCAVATING INC	\$424,696.77
2002	2588	DP-5A-01		07-Nov-01	ROSE BROTHERS PAVING CO INC	\$81,797.00
2002	2589	0785-019-P23,N501;0792-019-P22,N501		03-Oct-01	WATTS CONTRACTORS INC	\$256,317.48
2002	2590	0610-023-P12,N501		30-Aug-01	GENERAL EXCAVATION INC	\$305,928.50
2002	2591	0711-072-169,N501		28-Mar-02	MAKCO INC	\$55,385.00
2002	2592	TS-41-01		09-Oct-01	KIRK NEAL INC	\$124,628.50
2002	2593	G1-4A-01		06-Nov-01	L S LEE INC	\$368,368.68
2002	2594	PG00-961-101,P103,N503		04-Oct-01	SELCO SEEDING INC	\$283,212.45
2002	2595	MCR-8B-01		18-Apr-02	GULL CORP	\$119,814.00
2002	2596	1250-206-251,N502		28-Nov-01	F CLAYTON PLECKERS & SONS INC	\$116,210.50
2002	2597	BR-8D-01		31-May-02	HAMMOND MITCHELL	\$320,870.00
2002	2598	BR-8E-01		10-May-02	BURLEIGH CONSTRUCTION CO INC	\$411,886.00
2002	2599	GI-8A-02		06-Dec-02	MAKCO INC	\$316,918.92
2002	2600	SO-5B-01		31-Oct-01	PRECON MARINE INC	\$29,752.00
2002	2601	PC-6A-01		06-Nov-01	SLURRY PAVERS INC	\$70,904.08
2002	2602	PH-4E43-01		02-Oct-01	DENTON CONCRETE SERVICES CO	\$425,490.00
2002	2603	0693-016-P68,N501		07-Nov-01	BISHOP & SETTLE CONSTRUCTION CO INC	\$184,452.05
2002	2604	PCR-7-02		31-Oct-01	RIVER VIEW INVESTMENTS INC	\$539,595.15

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2605	0046-012-1040,SR07;0713-012-6160,SR06		18-Mar-02	LANFORD BROTHERS CO INC	\$203,760.40
2002	2606	0606-036-6028		10-Apr-02	UNDERWATER STRUCTURES INC	\$64,731.39
2002	2607	PG-5A-01		03-Apr-02	SLURRY PAVERS INC	\$83,882.95
2002	2609	GI-5B-01		06-Dec-01	KIRK NEAL INC	\$467,463.50
2002	2610	DP-5A-02		25-Jun-02	CURTIS CONTRACTING INC	\$167,994.55
2002	2611	BP-7A-03		06-Dec-02	MTA INDUSTRIAL PAINTING CORP	\$1,041,979.00
2002	2613	BR-5A-02		12-Feb-02	CAROLINA RESTORATION & WATERPROOFING INC	\$143,315.27
2002	2614	TP-7C-01		12-Dec-01	TRAFFIC MARKINGS INC	\$402,565.00
2002	2615	P-4-01		18-Jun-02	MEGACO INC	\$395,600.00
2002	2616	BO-4A-01		20-May-02	VIRGINIA MARINE STRUCTURES INC	\$222,400.00
2002	2617	PG00-968-101,N501		28-Mar-02	MAKCO INC	\$516,767.60
2002	2618	GR-6B-01B		30-Sep-02	L S LEE INC	\$399,399.00
2002	2619	SR-42A-02		25-Jun-02	MEGA CONTRACTORS INC	\$164,105.00
2002	2620	CR-7A-02		01-May-02	COASTAL GUNITE CONSTRUCTION CO	\$79,499.00
2002	2621	0729-017-P53,N501;0843-017-P60,N501;0851-017-363,N501;0882-017-P58,N501		20-May-02	SOWERS CONSTRUCTION CO INC	\$415,275.50
2002	2622	7220-290-R01,N501;1068-044-419,N501		18-Jun-02	CARNELL CONSTRUCTION CORP	\$115,885.75
2002	2623	0739-035-6060,SR01;0753-017-6483,SR01;0813-060-6910,SR01		04-Jun-02	W H P BURLEIGH INC	\$169,557.00
2002	2624	0999-044-RA;1075-044-422,N501;1086-044-423,N501		20-Jun-02	CARNELL CONSTRUCTION CORP	\$166,953.25
2002	2626	GR-5A-02		04-Jun-02	PENN LINE SERVICE INC	\$265,751.00
2002	2627	RS-4A-01		06-Feb-02	SURFACE PREPARATION TECHNOLOGIES INC	\$81,162.52
2002	2628	0021-098-26553,N501		26-Apr-02	D & D CONTRACTORS INC	\$176,392.00
2002	2629	RW-1A-01		08-Apr-02	ELK KNOB INC	\$271,792.50
2002	2632	0040-019-1020,SR01		09-May-02	LANFORD BROTHERS CO INC	\$151,809.00
2002	2633	PRMO-965-101,N507		31-May-02	ROADMARK CORP	\$69,900.00
2002	2634	0724-030-P32,N501		04-Jun-02	GENERAL EXCAVATION INC	\$230,908.15
2002	2636	RS-9A-02		02-May-02	D & F CONSTRUCTION INC	\$258,579.00
2002	2637	RS-9B-02		02-May-02	D & F CONSTRUCTION INC	\$558,229.25
2002	2638	RS-9C-02		02-May-02	D & F CONSTRUCTION INC	\$978,587.65
2002	2639	BR-8A-02		27-Aug-02	HAMMOND MITCHELL	\$575,652.30
2002	2640	DRP-8B-02		31-Oct-02	D L B INC	\$130,404.00

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2641	0011-007-X12,N501;0618-007-391,N501		27-Aug-02	PLECKER CONSTRUCTION CO INC	\$308,042.90
2002	2642	0780-081-294,N501		26-Sep-02	A R COFFEY & SONS INC	\$98,334.50
2002	2643	GR-8A-02		09-May-02	WEBSTER & WEBSTER INC	\$180,614.25
2002	2644	GR-8B-02		09-May-02	MAKCO INC	\$146,635.00
2002	2645	GR-8C-02		09-May-02	MAKCO INC	\$93,330.00
2002	2646	GR-8D-02		09-May-02	MAKCO INC	\$191,600.00
2002	2647	GR-8E-02		09-May-02	MAKCO INC	\$89,050.00
2002	2648	TP-8A-02		25-Jun-02	A ANNANDALE INC	\$123,002.53
2002	2649	BP-3G-01		18-Jun-02	MEGACO INC	\$1,197,000.00
2002	2651	0604-019-214,N503;0604-073-203,N501		31-May-02	MARVIN V TEMPLETON & SONS INC	\$602,404.02
2002	2652	0626-087-P57,N501		26-Sep-02	BISHOP & SETTLE CONSTRUCTION CO INC	\$95,056.47
2002	2654	TP-7A-02		04-Jun-02	OGLESBY CONSTRUCTION INC	\$261,024.13
2002	2655	HR-DEMO-2002		27-Aug-02	EAST COAST ABATEMENT CO INC	\$604,351.20
2002	2656	TP-6A-02		24-Jun-02	A ANNANDALE INC	\$228,520.00
2002	2657	TP-4B-02		04-Jun-02	OGLESBY CONSTRUCTION INC	\$201,813.80
2002	2659	TP-7B-02		20-Jun-02	A ANNANDALE INC	\$86,327.43
2002	2660	TP-4A-02		04-Jun-02	OGLESBY CONSTRUCTION INC	\$252,092.65
2002	2662	0058-097-1138,SR01;0058-097-1139,SR01		23-Aug-02	ELK KNOB INC	\$31,050.00
2002	2664	0023-097-1134,SR01;0023-146-1807,SR01;0023-097-1120,SR01;0023-097-1121,SR		06-Dec-02	ELK KNOB INC	\$275,869.20
2002	2665	1089-044-420,N501;1274-044-RA		12-Aug-02	J C JOYCE TRUCKING & PAVING CO INC	\$81,646.50
2002	2666	0081-060-7116,A01		28-Aug-02	ELK KNOB INC	\$96,138.05
2002	2667	TP-8B-02		24-Jun-02	A ANNANDALE INC	\$190,603.80
2002	2668	PS00-965-102,N502		12-Aug-02	KIRK NEAL INC	\$229,269.00
2002	2669	0360-041-X21,N501;0501-041-X30,N501		16-Sep-02	WATTS CONTRACTORS INC	\$52,365.00
2002	2670	0157-043-X14,N501		24-Jun-02	SLURRY PAVERS INC	\$31,210.20
2002	2671	BR-3C-02		24-Jun-02	LANFORD BROTHERS CO INC	\$333,226.86
2002	2672	0064-127-2805,SR01		28-Aug-02	FLAME ON INC	\$29,715.00
2002	2673	0029-005-1090,SR01		30-Aug-02	LANFORD BROTHERS CO INC	\$295,290.28
2002	2674	0659-012-6166,SR00		21-Aug-02	D W LYLE CORP	\$107,504.56
2002	2676	PM-4C18-02		30-Jul-02	LEE HY PAVING CORP	\$310,070.60
2002	2677	PM-4B43-02		26-Aug-02	LEE HY PAVING CORP	\$4,536,975.20

## BCOM CONSTRUCTION CONTRACTS (Continued)

FISCAL YEAR	MGT#	PROJECT NUMBER	PROJECT DESCRIPTION	EXEC DATE	VENDOR NAME	AWARD AMOUNT
2002	2679	0649-013-P37,N501		27-Aug-02	HUNTER PAVING INC	\$263,651.05
2002	2680	0081-011-2038,SR02		28-Aug-02	CLECO CORP	\$349,402.27
2002	2681	TP-9B-02		15-Nov-02	PAYNES PARKING DESIGNS INC	\$80,934.77
2002	2682	BP-8A-02		23-Aug-02	ROYAL BRIDGE INC	\$604,000.00
2002	2683	0633-008-P58,N501;0694-008-P56,N501		27-Sep-02	F CLAYTON PLECKERS & SONS INC	\$353,993.00
2002	2684	MCR-8A-02		30-Sep-02	ARTHUR CONSTRUCTION CO INC	\$203,442.50
2002	2685	BP-8B-02		06-Dec-02	MTA INDUSTRIAL PAINTING CORP	\$540,088.00
2002	2686	BP-8C-02		06-Dec-02	MTA INDUSTRIAL PAINTING CORP	\$528,000.00
2002	2687	BB-1A-02;DP-1A-02		27-Aug-02	D & D CONTRACTORS INC	\$131,122.25
2002	2688	PRMO-961-101,N511		08-Oct-02	ROADMARK CORP	\$106,635.36
2002	2689	9999-092-563,N504		21-Aug-02	SELCO SEEDING INC	\$82,000.50
2002	2690	GI-5B-02		18-Dec-02	RUTH CO	\$511,728.95
2002	2692	PG00-965-101,N501		23-Oct-02	MAKCO INC	\$398,397.00
2002	2693	GI-5C-02		18-Dec-02	RUTH CO	\$462,353.05
2002	2694	0760-080-6271,SR01		27-Sep-02	LANFORD BROTHERS CO INC	\$88,311.70
2002	2695	RS-9F-02		29-Oct-02	ARTHUR CONSTRUCTION CO INC	\$457,300.25
2002	2697	TP-9A-02		15-Nov-02	PAYNES PARKING DESIGNS INC	\$107,162.72
2002	2698	DP-3A-02		31-Oct-02	D L B INC	\$321,999.00
2002	2703	0798-054-242,N501		28-Oct-02	MEGA CONTRACTORS INC	\$348,850.00
2002	2704	0058-052-136,N501		28-Oct-02	W L CONSTRUCTION & PAVING INC	\$143,548.60
2002	2706	PCR-3A-02		06-Dec-02	D A BROWN INC	\$292,603.00
2002	2709	0460-060-1069,SR01;0460-060-1070,SR01		06-Dec-02	LANFORD BROTHERS CO INC	\$396,702.09
2002	2714	PG00-964-101,N503		06-Dec-02	L S LEE INC	\$185,185.00

***APPENDIX E:***  
**CONSTRUCTION SUBCONTRACTS**

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## APPENDIX E

### BCOM CONSTRUCTION SUBCONTRACTS

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
2760	2002	359887	BRANSCOME INC	\$15,859.50	15163	FINAL SLUDGE EXCAVATION
2769	2000	314199	SHARP TRUCKING CO INC	\$1,527.00	16254	ADAPTIVE RE-USE OF TRANSPORTATION SITE (TRACK #8)
2775	1999	192509	TATE & HILL INC	\$3,050.00	16255	UNDERGROUND STORAGE TANK REPLACEMENT (1 TANK)
2777	2002	120245	COLONIAL MECHANICAL	\$25,114.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	122185	FLOOR SHOW	\$2,538.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	142216	JUNIOR HANCOCKS BACKHOE	\$12,795.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	195138	J W SQUIRE CO INC	\$2,561.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	195543	JOHNSTON ENTERPRISES INC	\$7,900.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	207287	MCCULLOUGH'S PAINTING INC	\$7,820.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	210575	BAGBY EQUIPMENT CO INC	\$19,900.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	211445	TAYLOR INSULATING CO INC	\$3,980.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	212022	ROY N FORD CO INC	\$59,773.55	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	282042	BROWN EXTERMINATING	\$408.00	16542	NEW CONST: DANVILLE AREA OFFICE
2777	2002	291307	GUSLERS FENCING SERVICE	\$2,350.00	16542	NEW CONST: DANVILLE AREA OFFICE
2783	2000	118193	W O GRUBB	\$21,770.00	16327	MANSION/CAPITOL - Y2K EMERGENCY POWER/DISASTER RECOVERY
2783	2000	638248	BARLINE	\$54,360.00	16327	MANSION/CAPITOL - Y2K EMERGENCY POWER/DISASTER RECOVERY
2807	2000	260889	GREGORY SEEDING & LANDSCAPING INC	\$8,320.00	15209	DORA JUNCTION SITE IMPROVEMENTS - NEW RIVER STATE PARK
2813	2002	198334	VALLEY BOILER INC	\$40,412.04	15209	SMITH MOUNTAIN LAKE - BATHHOUSE
2813	2002	198416	MAYS ELECTRIC CO INC	\$15,412.00	15209	SMITH MOUNTAIN LAKE - BATHHOUSE
2813	2002	208711	RAGNAROK INC	\$3,123.75	15209	SMITH MOUNTAIN LAKE - BATHHOUSE
2813	2002	301319	FARISS SEPTIC TANK SERVICE	\$69,871.00	15209	SMITH MOUNTAIN LAKE - BATHHOUSE
2813	2002	358148	AMERICAN CUSTOM BUILDING	\$4,515.91	15209	SMITH MOUNTAIN LAKE - BATHHOUSE
2818	1998	119260	COMMERCIAL STEEL	\$1,434.00	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK
2818	1998	194074	WATSON CONSTRUCTION	\$4,045.00	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK
2818	1998	208957	C RUSSELL BURNETTE	\$4,126.00	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK
2818	1998	292000	WEBBER ELECTRIC	\$20,397.00	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK
2818	1998	336936	ENGINEERED SYSTEMS	\$7,408.01	15209	CONSTRUCT (3) COMFORT STATIONS -0 JAMES RIVER STATE PARK
2819	1998	109798	OVERHEAD DOOR CO	\$2,744.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	122185	FLOOR SHOW	\$1,088.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	130110	WOODMASTERS CABINETS	\$1,256.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	133339	PEARSON CONSTRUCTION INC	\$30,000.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	135860	WAYNE KIDD INC	\$7,650.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	150581	TALBOTT INC	\$2,136.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	150581	TALBOTT INC	\$9,450.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	155141	R R MANN FENCING	\$7,800.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	170785	NORTH BROTHERS INSUL CO	\$2,570.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
2819	1998	204402	BOHANNON ELECTRICAL HVAC	\$15,416.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	207148	RANSON ELECTRIC CO	\$30,250.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	208060	PIEDMONT METAL PRODUCTS	\$770.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	229598	CHILDRESS ELECTRICAL & PLUMBING	\$12,495.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	282420	T L NELSON CO	\$1,655.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	296416	BLUE RIDGE STONE CORP	\$2,085.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	358131	AMERICAN BUILDINGS	\$25,653.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	371765	PROFFITT LUMBER CO INC	\$1,645.50	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	372379	RESCO STEEL PRODUCTS CORP	\$560.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	390553	APPOMATTOX GLASS & STOREFRONT INC	\$694.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	390960	PROCESS PIPING & WELDING	\$5,539.72	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	391094	TOLER INSULATING CO INC	\$300.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	415747	ALL VA STATE PEST CONTROL	\$200.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2819	1998	655793	COMMONWEALTH DOOR & HDW	\$4,465.00	15209	PH I DEVELOPMENT, JAMES RIVER ST. PARK, MAINTENANCE AREA
2827	2000	91549	BUGGS ISLAND DOCK SERVICE	\$31,415.10	15209	OCCONEECHEE STATE PARK - BOAT LAUNCH FACILITY
2827	2000	245190	WATKINS ELECTRIC	\$787.75	15209	OCCONEECHEE STATE PARK - BOAT LAUNCH FACILITY
2827	2000	316329	COLONIAL CONSTRUCTION	\$3,637.98	15209	OCCONEECHEE STATE PARK - BOAT LAUNCH FACILITY
2835	1998	131057	MID STATE CONSTRUCTION	\$28,300.00	15294	DRAINFIELDS - JAMES RIVER STATE PARKS
2840	1998	135860	WAYNE KIDD INC	\$17,971.00	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA
2840	1998	207148	RANSON ELECTRIC CO	\$10,111.00	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA
2840	1998	229598	CHILDRESS ELECTRICAL & PLUMBING	\$1,450.00	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA
2840	1998	376299	VIRGINIA STEEL & BLDG SPEC	\$785.00	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA
2840	1998	678702	POWERS FENCE CO INC	\$5,012.00	15739	STAUNTON RIVER BATTLEFIELD PARK - SCHOOL GROUP PICNIC AREA
2841	2001	164990	VA CAROLINA PAVING	\$42,098.00	15739	DEPOT RELOCATION/RENOVATION - STAUNTON RIVER BATTLEFIELD
2841	2001	187990	BON AIR INTERIORS	\$17,513.00	15739	DEPOT RELOCATION/RENOVATION - STAUNTON RIVER BATTLEFIELD
2841	2001	207111	SWANSBORO MECHANICAL	\$14,780.00	15739	DEPOT RELOCATION/RENOVATION - STAUNTON RIVER BATTLEFIELD
2841	2001	211874	MINTER ELECTRIC	\$40,155.00	15739	DEPOT RELOCATION/RENOVATION - STAUNTON RIVER BATTLEFIELD
2850	2002	155932	GOLDEN RULE CONSTRUCTION	\$19,688.00	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK
2850	2002	195022	J D MILES & SONS	\$8,875.00	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK
2850	2002	200932	CENTRAL CONCRETE	\$33,339.00	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK
2850	2002	384720	ELITE FENCE	\$31,721.00	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK
2850	2002	413843	COMMERCIAL CAULKING	\$9,114.00	16765	RENOVATE SWIMMING POOL - POCAHONTAS STATE PARK
2865	1999	137709	POMPEI INC	\$40,342.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	138395	QUALITY GLASS	\$843.68	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	218561	EAST COAST CUSTOM CONSTRUCTION	\$3,125.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	288734	EC&C	\$86,220.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	312491	FAST SIGNS	\$424.46	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	357623	ACOUSICAL CELINGS INC	\$4,150.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	390789	HITT ELECTRIC CORP	\$95,613.37	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	390992	ROANOKE ENGINEERING SALES CO INC	\$17,362.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2865	1999	391120	VIRGINIA ELEVATOR ROAD	\$11,247.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
2865	1999	391144	WARWICK AIR CONDITIONING	\$417,019.00	15745	BARRETT HALL RENOVATION - HEATING SYSTEM REPLACEMENT/BATHROO
2866	1999	206955	ATLANTIC ROOFING SYSTEMS	\$16,892.57	15745	DORM ROOFS - LANDRUM, BROWN BRYAN AND JEFFERSON HALLS
2866	1999	650444	VIRTEXCO	\$18,424.75	15745	DORM ROOFS - LANDRUM, BROWN BRYAN AND JEFFERSON HALLS
2868	2000	133189	E C & C	\$46,137.00	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	151568	ADVANCED ENVIRONMENTAL	\$45,520.26	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	195166	BROCCUTO DRYWALL	\$90,327.00	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	200211	AQUAWORKS	\$61,985.00	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	209952	SIGN GRAPHICS	\$4,601.77	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	214997	R E BROWN CORP	\$37,098.35	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	216589	TILE & TERRAZZO INC	\$56,824.00	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	220555	CRAFTMASTERS OF VA	\$16,831.00	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2868	2000	373485	SHAW PAINT & WALLPAPER	\$4,780.89	15745	YATES HALL HVAC UPGRADES & INSULATION REPAIRS
2874	2000	16811	A A C CONTRACTING INC	\$56,060.59	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	117270	ROSENBAUM FENCE CO	\$7,267.23	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	184983	A A B CONTRACTING INC	\$3,016.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	192236	ACE SHEET METAL WORKS INC	\$2,819.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	193479	RETRO INSULATION	\$56,979.53	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	193837	WORSHAM SPRINKLER CO INC	\$84,633.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	214205	EASTERN FENCE & WINDOW CORP	\$38,174.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	225098	ADVANCED WATERPROOFING	\$10,195.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	260750	E CALIGARI & SON INC	\$42,811.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	361468	COGGIN ELECTRICAL SPECIALISTS	\$381,124.80	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	365159	GOODMAN HARDWARE CO	\$14,311.20	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	373969	SOUTHERN AIR INC	\$19,306.45	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	374440	STROMBERG SHEET METAL	\$109,927.35	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	381941	CONSCIENTIOUS CARPET CARE	\$11,671.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	387755	CARPET GALLERY & INTERIORS INC	\$2,597.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	390999	ROOF SERVICES CORP	\$75,000.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	404725	VISCOM	\$4,400.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	418523	F C VOGT CO INC	\$32,750.00	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	621754	MATURKO CO LTD	\$41,469.97	15921	IMP: RENOVATION OF WREN BUILDING
2874	2000	648254	SIEMENS BUILDING TECHNOLOGIES	\$154,262.00	15921	IMP: RENOVATION OF WREN BUILDING
2887	2001	113187	A A A	\$457,209.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	139017	CREATIVE DÉCOR PAINT CO	\$40,665.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	146938	INTERNATIONAL FLOORINGS	\$9,949.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	196291	SCOGGINS PAINTING	\$3,578.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	196602	HAMPTON REALS MECHANICAL	\$169,438.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	204843	OCEAN DRYWALL	\$615,200.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	229926	WYTHE CONTRACT SALES	\$6,194.54	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	365747	HART ARCHITECTURAL SIGNAGE	\$6,153.11	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	373924	SOUND STRUCTURES	\$5,102.48	16340	BARRETT HALL RENOVATIONS PHASE II

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
2887	2001	387533	WELD TECHNOLOGY	\$12,000.00	16340	BARRETT HALL RENOVATIONS PHASE II
2887	2001	390664	COSTEN FLOORS	\$16,000.00	16340	BARRETT HALL RENOVATIONS PHASE II
2888	2001	54845	TILE SHOP	\$89,417.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	114976	W T PATRICK & SONS	\$1,880.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	195166	BROCCUTO DRYWALL	\$9,542.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	196602	HAMPTON ROADS MECHANICAL	\$126,353.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	214997	R E BROWN CORP	\$43,040.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	361468	COGGIN ELECTRIC	\$84,926.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	375381	TRINDCO	\$10,900.00	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	387533	WELD TECHNOLOGY	\$25,173.12	16340	OLD DOMINION RENOVATIONS PHASE I
2888	2001	390529	ABATEMENT TECHNICAL SERVICES	\$18,829.00	16340	OLD DOMINION RENOVATIONS PHASE I
2889	2001	111200	SENECA BALANCE	\$1,000.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	133189	E C & C ABATEMENT	\$8,500.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	151548	MACSONS INC	\$5,200.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	193479	RETRO INSULATION	\$4,309.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	193766	SOUTHERN TILE & TUG	\$15,100.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	204843	OCEAN DRYWALL	\$17,605.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	205334	CREATIVE CABINETS	\$12,780.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	211070	A & A SHEETMETAL	\$23,486.38	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	319784	QUALITY BUILDING PRODUCTS	\$1,675.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	365747	HART ARCHITECTURAL SIGNAGE	\$1,555.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	390998	ROGERS ACOUSTICS	\$20,605.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2889	2001	391092	TILE CONCEPTS INC	\$37,800.00	16340	BRYAN COMPLEX RENONVATIONS - CAMM DORMITORY
2903	2001	119260	COMMERCIAL STEEL ERECTORS	\$200,000.00	15880	CLARK HALL - STRUCTURAL STEEL
2904	2001	159835	BLUE RIDGE CONCRETE	\$24,052.00	15880	CLARK HALL - CAST IN PLACE CONCRETE
2904	2001	358900	AUGUSTA ERECTORS	\$11,700.00	15880	CLARK HALL - CAST IN PLACE CONCRETE
2905	2001	227762	SHENANDOAH ENGINEERING SERVICES	\$20,912.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2905	2001	279661	CANADA CONTRACTING (PRO CUT)	\$5,726.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2906	2001	201939	UNITHERM INC	\$475,903.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2906	2001	247958	VIRGINIA WATER SYSTEMS	\$5,560.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2906	2001	390938	PARHAM CONSTRUCTION	\$50,014.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2906	2001	415220	MECHANICAL BALANCING	\$75,229.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2906	2001	672990	JOHNSON CONTROLS INC	\$931,601.00	15880	CHILLED WATER PLANT EXPANSION MECH.&PLUMB - CLARK
2914	2001	8712	WALL MASTERS	\$485,621.00	15880	DRYWALL PROJECT PACKAGE - CLARK HALL
2914	2001	357708	ADTEK ENGINEERS	\$4,100.00	15880	DRYWALL PROJECT PACKAGE - CLARK HALL
2914	2001	390968	R E LEE & SON INC	\$277,000.00	15880	DRYWALL PROJECT PACKAGE - CLARK HALL
2915	2001	205118	SOUTHEASTERN METAL PANEL SALES & ERECTION	\$43,850.00	15880	ARCHITECTRUAL METAL & GLASS PACKAGE - CLARK HALL
2962	2001	205366	COASTAL SERVICE	\$9,100.00	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERAL SCHOOL
2962	2001	391022	SHEN VALLEY DRYWALL	\$6,272.00	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERAL SCHOOL
2962	2001	415220	MECHANICAL BALANCING	\$12,048.00	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERAL SCHOOL
2962	2001	672990	JOHNSON CONTROLS	\$140,978.00	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERAL SCHOOL

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
2962	2001	682033	DESIGN ELECTRIC	\$31,935.00	16059	REPLACEMENT OF AHU-1 FANS @ JUDGE ADVOCATE GERAL SCHOOL
2978	2002	682033	DESIGN ELECTRIC	\$216,000.00	16382	CONSTRUCT EMMET STREET BRIDGE
2979	2002	682033	DESIGN ELECTRIC	\$216,000.00	16382	CONSTRUCT EMMET STREET BRIDGE
2998	2000	261192	JACK ST CLAIR INC	\$56,155.00	14815	CASELL COLISEUM PARKING LOT
2998	2000	299212	VALLEY LANDSCAPING	\$1,923.00	14815	CASELL COLISEUM PARKING LOT
2998	2000	698111	THOMAS BROS INC	\$31,900.00	14815	CASELL COLISEUM PARKING LOT
2999	2002	698111	THOMAS BROS INC	\$54,904.00	14815	ADD PARKING SPACES IN FOUR LOTS
3002	2001	107340	THYSSENKRUPP ELEVATOR	\$63,850.00	15232	NC: DRY RENDERING FACILITY
3002	2001	140864	SO LO CO INC	\$35,000.00	15232	NC: DRY RENDERING FACILITY
3002	2001	192695	PARSON & LUSK INC	\$121,686.63	15232	NC: DRY RENDERING FACILITY
3002	2001	207727	P A GRISSO PAINTING	\$81,283.46	15232	NC: DRY RENDERING FACILITY
3002	2001	209086	FRYE ROOFING INC	\$23,598.50	15232	NC: DRY RENDERING FACILITY
3002	2001	280873	CAPIOL BOILER INC	\$410,515.85	15232	NC: DRY RENDERING FACILITY
3002	2001	360203	BYRD & GOFF CONSTRUCTION	\$83,318.00	15232	NC: DRY RENDERING FACILITY
3002	2001	363594	ELCO CONCRETE	\$72,000.00	15232	NC: DRY RENDERING FACILITY
3002	2001	391162	WILLIAMSON & WILMER INC	\$59,665.00	15232	NC: DRY RENDERING FACILITY
3002	2001	699479	SERVICE CONTRACTING OF VA INC	\$46,191.00	15232	NC: DRY RENDERING FACILITY
3017	2002	636282	VISION GLASS	\$31,681.00	16287	WILLIAMS HALL WINDOW REPLACEMENT
3022	2001	107340	THYSSENKRUPP ELEVATOR CORP	\$199,498.85	16480	STADIUM EXPANSION - PHASE I
3022	2001	122400	MC NEIL ROOFING INC	\$159,778.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	141917	STAR CITY MASONRY	\$816,500.24	16480	STADIUM EXPANSION - PHASE I
3022	2001	195138	J W SQUIRE CO INC	\$25,785.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	195549	WARCO COSNTRUCTION INC	\$64,125.76	16480	STADIUM EXPANSION - PHASE I
3022	2001	198877	HARCON INC	\$1,699,750.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	201649	G J HOPKINS INC	\$1,223,565.31	16480	STADIUM EXPANSION - PHASE I
3022	2001	204154	AGRA FOUNDATIONS INC	\$828,750.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	204829	BANKER STEEL CO LLC	\$1,010,307.47	16480	STADIUM EXPANSION - PHASE I
3022	2001	209820	SURFACES INC	\$150,900.01	16480	STADIUM EXPANSION - PHASE I
3022	2001	212553	PROFESSIONAL DOOR INC	\$54,332.19	16480	STADIUM EXPANSION - PHASE I
3022	2001	214432	HAHN ENTERPRISES INC	\$317,132.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	215798	VOLUNTEER SPECIALTIES INC	\$484,139.87	16480	STADIUM EXPANSION - PHASE I
3022	2001	215888	HAILE LANDSCAPE DESIGN INC	\$65,590.73	16480	STADIUM EXPANSION - PHASE I
3022	2001	335031	GAY & KEESEE INC	\$51,976.94	16480	STADIUM EXPANSION - PHASE I
3022	2001	360761	CAVANAUGH CABINETS INC	\$405,174.88	16480	STADIUM EXPANSION - PHASE I
3022	2001	370131	NEW RIVER CONCRETE SUPPLY	\$954,152.40	16480	STADIUM EXPANSION - PHASE I
3022	2001	390919	NEWCOMB ELECTRIC CO INC	\$2,272,827.79	16480	STADIUM EXPANSION - PHASE I
3022	2001	390988	RIVERFRONT GLASS INC	\$278,258.01	16480	STADIUM EXPANSION - PHASE I
3022	2001	390992	ROANOKE ENGINEERING SALES CO	\$89,510.49	16480	STADIUM EXPANSION - PHASE I
3022	2001	414228	PLEASANTS HARDWARE	\$137,899.17	16480	STADIUM EXPANSION - PHASE I
3022	2001	415220	MECHANICAL BALANCING INC	\$12,825.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	415385	HOBBS & ASSOC INC	\$10,220.10	16480	STADIUM EXPANSION - PHASE I

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3022	2001	617040	IRWIN SEATING CO	\$162,172.63	16480	STADIUM EXPANSION - PHASE I
3022	2001	648254	SIEMENS BUILDING TECHNOLOGIES	\$162,816.79	16480	STADIUM EXPANSION - PHASE I
3022	2001	667188	SKANSKA USA BUILDING INC	\$1,498,244.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	679544	CUSTERS CUSTOM PAINTING INC	\$183,850.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	681675	RESUN LEASING INC	\$10,577.49	16480	STADIUM EXPANSION - PHASE I
3022	2001	685218	EAST COAST FIRE PROTECTION	\$164,495.00	16480	STADIUM EXPANSION - PHASE I
3022	2001	689846	ENGINEERING SALES CORP	\$8,960.88	16480	STADIUM EXPANSION - PHASE I
3022	2001	692189	ONE SOURCE BUILDING TECHNOLOGIES	\$85,709.50	16480	STADIUM EXPANSION - PHASE I
3022	2001	698111	THOMAS BROS LLC	\$127,735.31	16480	STADIUM EXPANSION - PHASE I
3024	2001	638194	BALLARD CONSTRUCTION INC	\$717,754.00	16484	FOOTBALL PRACTICE FIELDS
3029	2002	203246	ADAMS ELECTRIC CO	\$32,404.00	16534	NEW CONST: MICROELECTRONIC LABORATORY
3029	2002	648289	SIMPLEX GRINNEL	\$8,379.50	16534	NEW CONST: MICROELECTRONIC LABORATORY
3054	2001	135185	CAVALIER FLOORING SYSTEMS	\$6,325.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	135890	WALLACE DAY INC	\$46,230.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	151333	J E PURDUE LANDSCAPING	\$1,000.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	170917	RANDSTAD	\$1,457.55	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	191044	NATIONS ENVIRONMENTAL INC	\$121,998.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	196047	COLONIAL PLUMBING & HEATING INC	\$33,870.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	196478	AMERICAN DOORS & GLASS INC	\$5,720.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	197224	JOHN W BOYLES INC	\$6,820.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	205601	C & M CONSTRUCTION CO LLC	\$3,490.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	207939	DORTON BROTHERS INC	\$75,362.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	221668	COMMONWEALTH DRYWALL	\$18,422.50	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	283093	S A FOSTER ELECTRIC CO	\$124,508.26	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	364663	FREEBURGER CUSTOM CABINETRY	\$6,730.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	364789	GALE WELDING & MACHINE	\$1,953.13	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	367004	J S ARCHER CO INC	\$156.75	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	369903	NATIONS CONSTRUCTION INC	\$850.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	373612	SHOOSMITH BROTHERS INC	\$104.40	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	386899	PROFICIENT CONSTRUCTION CO	\$3,400.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	391006	S B COX INC	\$95.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	391120	VIRGINIA ELEVATOR CO INC	\$249.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	391628	R L CONTRACTORS INC	\$5,193.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	392121	BUILDING SPECIALTIES	\$1,070.08	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	626742	HODGMANS INC / DUPONT	\$302.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	653136	CARGO CLEANING SERVICES	\$3,899.50	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	659490	SEABOARD CONCRETE PRODUCTS CO	\$5,228.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3054	2001	685218	EAST COAST FIRE PROTECTION INC	\$93,954.00	16085	REPAIR LINDSAY-MONTAGUE HALL
3065	2002	146938	INTERNATIONAL FLOORING	\$8,114.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	195517	JULIAN SWAIN BUILDERS INC	\$22,500.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	200400	CUSTOM DRYWALL & ACOUSTICS INC	\$1,440.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3065	2002	205554	EXCEL PAVING CORP	\$1,413.43	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	206080	BURGESS SNYDER INDUSTRIES	\$90,603.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	215285	PROFESSIONAL SALES ESTABLISHMENT LTD	\$5,000.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	216014	EAST COAST ABATEMENT & DEMOLITION	\$48,500.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	216731	E S CHAPPELL & SON	\$8,425.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	222517	EAGLE ROOFING INC	\$7,700.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	325235	WILKINS & ASSOC INC	\$1,145.60	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	335246	VIRGINIA AIR BALANCE CONTROL	\$11,600.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	365747	HART ARCHITECTURAL SIGNAGE	\$5,903.41	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	380857	HUDSON BUILDING SUPPLY CO INC	\$6,820.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	382050	COATER CO	\$36,745.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	383177	CIRCLE M CONTRACTING INC	\$215,500.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	390680	DAVCON INC	\$718,000.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	390698	DOOR ENGINEERING CORP	\$10,718.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	390814	J C DRISKILL INC	\$407,000.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	390998	ROGERS ACOUSTICS INC	\$64,400.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	616719	HERCULES FENCE	\$1,650.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3065	2002	626742	HODGMANS INC	\$115,500.00	16086	IMP: RENOVATE COMMUNICATIONS BUILDING
3066	2002	111200	SENECA BALANCE OF VA	\$24,500.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	121343	THERMO TROL CORPORATION	\$161,129.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	126869	T & T ELECTRIC CO	\$79,246.99	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	140819	CHAMPION FENCE	\$1,000.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	184983	A A B CONTRACTING INC	\$32,800.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	200167	INTERNATIONAL CONSTRUCTION	\$10,000.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	202527	DAVIS MASONRY	\$6,250.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	369538	MINTON & ROBERSON INC	\$232,874.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	388422	INDUSTRIAL MARINE SERVICE INC	\$5,600.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	390929	OLD DOMINION INSULATION	\$32,592.35	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	390998	ROGERS ACOUSTICS	\$1,040.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3066	2002	620877	COX POWELL CORPORATION	\$28,510.00	16448	WOODS SCIENCE BLDG - HVAC IMPROVEMENTS
3067	2002	121343	THERMO TROL CORP	\$97,824.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	126869	T & T ELECTRIC CO	\$93,733.75	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	195250	SOUTHERN SHEET METAL INC	\$203,278.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	200167	INTERNATIONAL CONSTRUCTION	\$15,000.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	202527	DAVIS MASONRY	\$10,181.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	388422	INDUSTRIAL MARINE SERVICE INC	\$6,300.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	390929	OLD DOMINION INSULATION	\$68,000.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	390998	ROGERS ACOUSTICS	\$62,499.25	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3067	2002	621908	TESTING SPECIALTIES	\$21,100.00	16448	FINE ARTS BLDG - HVAC IMPROVEMENTS
3076	1999	149382	ENVIRONMENTAL OPTIONS	\$145.00	16231	HAZARDOUS WASTE STORAGE CLEANUP
3076	1999	248284	ENVIRO COMPLIANCE	\$8,625.10	16231	HAZARDOUS WASTE STORAGE CLEANUP

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3076	1999	279661	CANADA CONTRACTING	\$500.00	16231	HAZARDOUS WASTE STORAGE CLEANUP
3081	1999	260836	DUNN ELECTRIC	\$278,685.86	15754	IMP: RENOVATION OF HVAC SYSTEM, GOOLRICK HALL
3081	1999	373969	SOUTHERN AIR	\$1,656,143.69	15754	IMP: RENOVATION OF HVAC SYSTEM, GOOLRICK HALL
3084	1999	194805	BAIRD CONCRETE	\$71,047.00	16099	REPLACE TENNIS COURTS
3084	1999	197084	EARTH CRAFTERS	\$251,000.00	16099	REPLACE TENNIS COURTS
3084	1999	197287	TOMMY WALLACE	\$132,469.00	16099	REPLACE TENNIS COURTS
3087	2002	135890	WALLACE DAY	\$12,425.00	16348	REPLACEMENT OF CHILLER - WILLARD
3087	2002	139465	D & L CONTRACTORS	\$13,377.00	16348	REPLACEMENT OF CHILLER - WILLARD
3087	2002	374112	SPECIAL RENOVATIONS	\$14,500.00	16348	REPLACEMENT OF CHILLER - WILLARD
3090	2002	107340	THYSSENKRUPP ELEVATOR CORP	\$17,460.00	16626	NEW CONST: ALUMNI CENTER
3090	2002	196016	LOGAN ELECTRIC SERVICE	\$19,660.50	16626	NEW CONST: ALUMNI CENTER
3090	2002	210518	WELDON STEEL CORP	\$150,552.00	16626	NEW CONST: ALUMNI CENTER
3090	2002	220424	J & J CONTRACTING	\$197,896.36	16626	NEW CONST: ALUMNI CENTER
3090	2002	260992	LONG FENCE	\$3,504.28	16626	NEW CONST: ALUMNI CENTER
3090	2002	291287	BROWNING FERRIS	\$2,125.75	16626	NEW CONST: ALUMNI CENTER
3090	2002	293113	S W RODGERS CO INC	\$229,549.63	16626	NEW CONST: ALUMNI CENTER
3090	2002	334981	REAMES & MOYER INC	\$121,050.00	16626	NEW CONST: ALUMNI CENTER
3090	2002	374112	SPECIAL RENOVATIONS INC	\$36,848.79	16626	NEW CONST: ALUMNI CENTER
3109	2002	200710	CONTRACTING UNLIMITED INC	\$1,282.50	16492	BURRESS, CARRIER LIBRARY SANITARY SEWER REPLACE
3109	2002	315355	MID VALLEY ELECTRIC	\$4,544.00	16492	BURRESS, CARRIER LIBRARY SANITARY SEWER REPLACE
3111	1999	201636	THOMPSON MASONRY CONTR INC	\$85,381.00	15818	NEW CONST: CONSTRUCT TRACK & SOCCER FIELD, PHASE I
3111	1999	260889	GREGORY SEEDING	\$3,150.00	15818	NEW CONST: CONSTRUCT TRACK & SOCCER FIELD, PHASE I
3115	2001	107340	THYSSEN ELEVATOR	\$61,926.00	16068	CONST: TRACK & SOCCER FIELD, PHASE II
3115	2001	192695	PARSON & LUSK	\$361,563.00	16068	CONST: TRACK & SOCCER FIELD, PHASE II
3115	2001	201636	THOMPSON MASONRY	\$216,577.00	16068	CONST: TRACK & SOCCER FIELD, PHASE II
3115	2001	260732	H T BOWLING	\$171,986.00	16068	CONST: TRACK & SOCCER FIELD, PHASE II
3115	2001	657924	MELVIN T MORGAN ROOFING	\$52,428.00	16068	CONST: TRACK & SOCCER FIELD, PHASE II
3139	2001	165031	CAROLINA CAST STONE	\$886,909.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	211292	SAGE CONSTRUCTION LLC	\$2,161,672.90	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	215285	PROFESSIONAL FIRE PROTECTION INC	\$35,127.54	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	260914	HIGHWAY ELECTRIC INC	\$435,694.06	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	261273	E V WILLIAMS INC	\$248,990.44	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	282936	DOOR & GLASS SERVICES	\$241,917.43	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	290496	SCHINDLER ELEVATOR CORP	\$310,329.96	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	325231	CUSTOM ORNAMENTAL	\$498,312.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	390579	BAY PAINTING CO	\$20,911.81	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	390629	CHESAPEAKE BAY STEEL INC	\$101,176.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	390840	K PLUS SERVICES INC	\$228,000.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	390999	ROOF SERVICES CORP	\$61,180.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	391033	SNOW JR & KING INC	\$9,050.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3139	2001	391052	STUTZMAN CONSTRUCTION INC	\$503,692.97	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3139	2001	621665	GENTLE RAIN IRRIGATION CO	\$7,585.00	15869	NEW CONST: CONVOCATION CENTER PARKING STRUCTURES
3141	2002	150027	HITE CONCRETE	\$36,000.00	15869	ODU-CONVOCATION CENTER NORTH PARKING LOT
3141	2002	194151	BAY CONCRETE	\$34,867.50	15869	ODU-CONVOCATION CENTER NORTH PARKING LOT
3141	2002	221724	BAY AREA IRRIGATION	\$15,113.00	15869	ODU-CONVOCATION CENTER NORTH PARKING LOT
3141	2002	260810	DAGAN ELECTRIC	\$49,675.00	15869	ODU-CONVOCATION CENTER NORTH PARKING LOT
3142	2001	116458	WALKER & LABERGE CO INC	\$1,006,450.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	120185	MONTGOMERY DOORS INC	\$13,812.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	174149	CAPITAL DOORS SYSTEMS INC	\$5,458.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	184769	ROD BUSTERS INC	\$193,588.40	15870	NEW CONST: CONVOCATION CENTER
3142	2001	204224	KALWALL CORP	\$45,984.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	211533	COASTAL FIRE PROTECTION CO	\$294,013.71	15870	NEW CONST: CONVOCATION CENTER
3142	2001	212742	JOHN HENRY STEEL INC	\$948,885.56	15870	NEW CONST: CONVOCATION CENTER
3142	2001	213071	SOUTHSIDE UTILITIES	\$258,718.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	213519	PREMIER MILLWORK	\$212,076.49	15870	NEW CONST: CONVOCATION CENTER
3142	2001	261273	E V WILLIAMS INC	\$18,796.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	290496	SCHINDLER ELEVATOR CORP	\$198,565.40	15870	NEW CONST: CONVOCATION CENTER
3142	2001	335246	VIRGINIA AIR BALANCE	\$18,980.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	357623	ACOUSTIC CEILINGS INC	\$155,798.98	15870	NEW CONST: CONVOCATION CENTER
3142	2001	363325	DYNAMIC SYSTEMS INTEGRATION	\$384,117.36	15870	NEW CONST: CONVOCATION CENTER
3142	2001	373485	SHAW PAINT & WALLPAPER CO INC	\$303,234.86	15870	NEW CONST: CONVOCATION CENTER
3142	2001	374756	TALLEY SIGN CO	\$9,037.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	380857	HUDSON BUILDING SUPPLY CO	\$104,155.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390559	ASPHALT ROADS & MATERIALS CO	\$20,245.30	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390580	BAY SIDE CONTRACTING INC	\$3,835,358.88	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390629	CHESAPEAKE BAY STEEL INC	\$3,778,145.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390698	DOOR ENGINEERING CORP	\$73,549.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390840	K PLUS SERVICES INC	\$135,176.01	15870	NEW CONST: CONVOCATION CENTER
3142	2001	390957	PRESTIGE FLOORS INC	\$359,049.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	391033	SNOW JR & KING INC	\$3,944,899.40	15870	NEW CONST: CONVOCATION CENTER
3142	2001	391045	STEINER B MOORE CORP	\$25,999.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	391119	VIRGINIA DRYWALL INC	\$1,197,086.33	15870	NEW CONST: CONVOCATION CENTER
3142	2001	407106	AMERICAN COATINGS CORP	\$291,666.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	616719	HERCULES FENCE	\$30,811.00	15870	NEW CONST: CONVOCATION CENTER
3142	2001	617040	IRWIN SEATING CO	\$1,085,327.58	15870	NEW CONST: CONVOCATION CENTER
3142	2001	621665	GENTLE RAIN IRRIGATION CO	\$34,540.00	15870	NEW CONST: CONVOCATION CENTER
3149	2001	126869	T & T ELECTRIC	\$4,800.00	16194	IMP: DIEHN ARTS CENTER HUMIDIFICATION
3149	2001	188884	WADLEY & CO INC	\$1,644.00	16194	IMP: DIEHN ARTS CENTER HUMIDIFICATION
3149	2001	200905	ECS CONTROLS INC	\$5,150.00	16194	IMP: DIEHN ARTS CENTER HUMIDIFICATION
3151	2002	116458	WALKER & LABERGE CO INC	\$148,959.90	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	192609	ITS ELECTRIC INC	\$680,758.11	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	211558	COASTAL MASONRY INC	\$860,080.99	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3151	2002	212031	SOUTHERN STRUCTURAL STEEL INC	\$749,721.00	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	213071	SOUTHSIDE UTILITIES INC	\$57,527.69	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	390580	BAY SIDE CONTRACTING INC	\$1,051,971.06	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	390853	LAMB & ROBINSON INC	\$585,865.00	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	416307	VIRGINIA SPRINKLER CO INC	\$94,830.37	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	648254	SIEMENS BUILDING TECHNOLOGIES INC	\$26,291.25	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3151	2002	652094	ROOF SYSTEMS OF VIRGINIA INC	\$85,545.00	16293	ENGRG & COMPUTATIONAL SCIENCES BLDG-PH II
3152	2001	195250	SOUTHERN SHEETMETAL	\$580.00	16449	SPONG HALL WINDOW REPLACEMENT - REGULATORY COMPLIANCE
3152	2001	195402	HICO SPECIALTY	\$58,775.00	16449	SPONG HALL WINDOW REPLACEMENT - REGULATORY COMPLIANCE
3152	2001	214205	EASTERN FENCE & WINDOW CORP	\$620.00	16449	SPONG HALL WINDOW REPLACEMENT - REGULATORY COMPLIANCE
3152	2001	260750	E CALIGARI & SON INC	\$12,615.00	16449	SPONG HALL WINDOW REPLACEMENT - REGULATORY COMPLIANCE
3162	2002	211389	STRUCTURAL CONCRETE PRODUCTS	\$113,000.00	16536	NEW CONST: LIVESTOCK TEACHING ARENA
3162	2002	212541	GENERAL & MECHANICAL SERVICES	\$181,109.00	16536	NEW CONST: LIVESTOCK TEACHING ARENA
3162	2002	260732	H T BOWLING	\$230,228.00	16536	NEW CONST: LIVESTOCK TEACHING ARENA
3162	2002	390553	APPOMATTOX GLASS & STOREFRONT	\$87,591.00	16536	NEW CONST: LIVESTOCK TEACHING ARENA
3162	2002	698190	JAMISON ELECTRICAL	\$160,112.00	16536	NEW CONST: LIVESTOCK TEACHING ARENA
3165	2000	196047	COLONIAL PLUMBING	\$21,280.00	15810	STUDENT HOUSING PHASE II - SPRINKLER SYSTEM
3165	2000	214244	FIRE PROTECTION EQUIPMENT CO	\$47,909.00	15810	STUDENT HOUSING PHASE II - SPRINKLER SYSTEM
3172	2001	156241	CHAMBERLAIN MECHANICAL	\$84,389.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	192509	TATE & HILL	\$648,604.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	196478	AMERICAN DOOR & GLASS	\$6,643.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	211554	R W HARPER	\$53,859.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	369903	NATIONS CONSTRUCTION INC	\$443,764.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	388050	DELM INDUSTRIAL CORP	\$242,016.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	388803	ARCHITECTURAL PRODUCTS	\$87,223.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	390829	JAMES RIVER INTERIORS	\$285,187.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3172	2001	685218	EAST COAST FIRE PROTECTION	\$128,747.00	15933	WEST HOSPITAL LIFE & FIRE SAFETY
3180	2002	165031	CAROLINA CAST STONE INC	\$543,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	174149	CAPITOL DOOR SYSTEMS INC	\$3,600.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	192247	G L HOWARD INC	\$1,100,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	193986	SOUTHERN BRICK CONTRACTORS INC	\$840,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	195476	INTERNATIONAL ROOFING	\$2,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	195549	WARCO CONSTRUCTION	\$180,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	200816	SIMONS HAULING CO INC	\$291,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	213208	NYCOM INC	\$2,100,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	282767	HALL HODGES CO	\$135,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	325933	JAMES RIVER CONCRETE INC	\$2,000,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	361529	COLLINS BROTHERS CABINETS CORP	\$51,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	361564	COLONIAL MECHANICAL CORP	\$4,500,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	390691	DILLON STONE CORP	\$85,700.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	390714	EAST COAST GLASS SYSTEMS INC	\$485,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3180	2002	390812	J A WALDER INC	\$707,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	390829	JAMES RIVER INTERIORS	\$925,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	390925	NORTHSIDE ELECTRIC CO	\$1,300,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	390992	ROANOKE ENGINEERING SALES CO INC	\$3,200.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	391120	VIRGINIA ELEVATOR CO	\$249,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	413692	DRAPER ADEN ASSOC	\$5,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3180	2002	639793	CONSTRUCTION SPECIALTIES INC	\$64,000.00	16344	NEW CONST: MASSEY CANCER CENTER ADDITION
3200	2001	61033	W D HARLESS CO INC	\$217,760.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	192419	EAST TENNESSEE TILE & MARBLE INC	\$16,230.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	192590	DIXIE GLASS INC	\$160,553.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	193004	R S JONES & ASSOC INC	\$517,789.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	195730	UNITED ELEVATOR SERVICES	\$46,966.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	197880	DANIELS PLUMBING & HEATING INC	\$1,948,047.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	198372	WOODS PAINT CO INC	\$68,635.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	201649	G J HOPKINS INC	\$979,252.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	204498	LONG FOUNDATION DRILLING CO	\$175,835.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	209086	FRYE ROOFING INC	\$137,183.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	213945	DAVIS BROTHERS NURSERY INC	\$8,620.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	216132	LIVEWIRE COMMUNICATIONS CO	\$52,063.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	261254	W L PAVING & CONSTRUCTION CO	\$22,388.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	288381	FABRICRAFT INC	\$553,868.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	289633	HAYES CARPET SALES & SERVICE INC	\$58,719.00	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	362793	DEARY MASONRY CONST CO	\$103,517.02	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3200	2001	685218	EAST COAST FIRE PROTECTION INC	\$101,806.47	15850	IMP: RENOVATE AND CONSTRUCT ADDITION TO SCIENCE BUILDING
3201	1999	192307	INDUSTRIAL WELDING & MACHINE	\$91,822.00	15931	IMP: REPLACE WATER TANK
3201	1999	208030	BOGGS MUNICIPAL SERVICES INC	\$16,637.00	15931	IMP: REPLACE WATER TANK
3201	1999	390966	QUESENBERRYS INC	\$41,810.00	15931	IMP: REPLACE WATER TANK
3203	2002	207674	E & D SPECIALTY STANDS INC	\$112,339.00	15964	ATHLETIC & RECREATIONAL FIELDS - FOOTBALL STADIUM UPGRADE
3204	2002	417753	FRANKS CONSTRUCTION	\$64,406.00	15964	FOOTBALL STADIUM UPGRADE - PHASE 4: GRANDSTAND CONCRETE PAC
3206	2002	192590	DIXIE GLASS INC	\$14,850.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	195134	SMITH MECHANICAL CONTRACTORS INC	\$163,082.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	198372	WOODS PAINT CO INC	\$20,300.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	206779	ABINGDON ROOFING CO INC	\$144,994.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	209194	PARSONS CONSTRUCTION CO INC	\$169,953.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	218260	CHRIS MULLINS CO LLC	\$7,460.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	286464	LITTLE HENRYS EXCAVATING & PAVING	\$13,188.00	15964	UVA WISE FIELDHOUSE PHASE III
3206	2002	421523	KINGSPORT ARMATURE & ELECTRIC CO INC	\$102,166.00	15964	UVA WISE FIELDHOUSE PHASE III
3207	2000	144333	PEST CONTROL PLUS	\$2,750.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	153783	PARRISH & CARUSO PAINTING	\$30,165.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	194717	KELLER GLASS CO	\$107,912.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	195009	A B G CAULKING CONTRACTORS INC	\$15,000.00	16151	NEW CONST: RESIDENCE HALL

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3207	2000	197880	DANIELS PLUMBING & HEATING	\$592,013.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	205866	E S DOCKERY CO INC	\$18,460.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	206779	ABINGDON ROOFING CO INC	\$107,440.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	213536	EAST TENNESSEE SPRINKLER CO	\$65,300.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	286464	LITTLE HENRY EXCAVATING & PAVING	\$12,308.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	289633	HAYES CARPET SALES & SERVICE INC	\$39,089.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	311704	TAILORED FOAM INC	\$1,860.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	335997	POWELL CONSTRUCTION	\$14,500.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	418055	WILDER ENTERPRISES OF VA INC	\$22,175.00	16151	NEW CONST: RESIDENCE HALL
3207	2000	421523	KINGSPORT ARMATURE & ELECTRIC	\$582,803.00	16151	NEW CONST: RESIDENCE HALL
3209	2001	198372	WOODS PAINT CO	\$1,100.00	16286	IMP: CAMPUS INFRASTRUCTURE
3209	2001	376954	WILDER COAL CORPORATION	\$504,629.00	16286	IMP: CAMPUS INFRASTRUCTURE
3209	2001	421523	KINGSPORT ARMATURE & ELECTRIC	\$194,411.00	16286	IMP: CAMPUS INFRASTRUCTURE
3213	2000	110065	M & M INSULATION	\$117,500.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3213	2000	110296	JOHN E KELLY & SONS ELECTRICAL	\$297,000.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3213	2000	195402	HICO INC	\$17,858.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3213	2000	261250	JOHN VITALE & SONS INC	\$68,187.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3213	2000	365199	GRADE SOLUTIONS	\$31,500.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3213	2000	659622	SIEMENS BUILDING	\$318,798.00	14650	CHILLERS 6 & 7 - ACADEMIC IV
3219	2001	195402	H I C O INC	\$9,000.00	15532	STUDENT UNION 1 - PHASE IIA
3219	2001	207607	ASSOCIATED GLASS	\$9,000.00	15532	STUDENT UNION 1 - PHASE IIA
3219	2001	213273	VIRGINIA MILLWORK	\$13,600.00	15532	STUDENT UNION 1 - PHASE IIA
3220	2002	107692	ATLANTIC BUILDERS HARDWARE	\$51,356.53	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3220	2002	193100	POWER SERVICES INC	\$427,759.00	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3220	2002	210196	AIRON INC	\$179,590.00	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3220	2002	220791	CREATIVE SURFACE INTERIORS INC	\$43,750.00	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3220	2002	288468	SUN CONTROL SYSTEMS	\$32,000.00	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3220	2002	711267	GENERAL ELECTRIC CO	\$70,109.05	15533	EXTERIOR & INTERIOR REPAIRS - STUDENT APT. RENOVATIONS
3222	1999	215257	VIRGINIA PAVING	\$16,975.00	15938	IMP: ALTERNATIVE FUEL FACILITY
3222	1999	260921	WILLIAM B HOPKE	\$39,303.00	15938	IMP: ALTERNATIVE FUEL FACILITY
3222	1999	411373	HURLEY CO	\$199,202.08	15938	IMP: ALTERNATIVE FUEL FACILITY
3245	1999	107340	THYSSEN ELEVATORS	\$68,860.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	120185	MONTGOMERY DOORS	\$14,055.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	137709	POMPEI	\$141,578.39	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	148298	TIDEWATER COMMERCIAL CEILINGS	\$123,096.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	192757	T J DISTRIBUTORS	\$101,100.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	194388	C R BENFORD	\$9,820.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	194480	R L DRESSER	\$13,350.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	208165	WESTAR	\$487,298.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	212743	DOMINION SITE WORK	\$280,681.93	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	213333	FREDERICKSBURG GLASS	\$121,926.11	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3245	1999	215285	PROFESSIONAL FIRE PROTECTION	\$68,938.70	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	219334	ELLISON CONSTRUCTION	\$9,560.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	279122	FIRE SPRINKLER LTD	\$28,833.93	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	325231	CUSTOM ORNAMENTAL IRON	\$33,159.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	357713	ADVANCED DESIGN	\$7,278.28	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	368499	LUXTERRA ELECTRIC	\$510,840.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	390535	ACOUSTICAL SOLUTIONS	\$5,841.72	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	390581	BAYSIDE CONCRETE	\$296,535.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	390630	CHESAPEAKE MASONRY	\$1,062,837.28	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	411271	ROCKVILLE PARTITIONS	\$17,945.00	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3245	1999	419565	TESCO	\$13,132.25	15509	NEW CONST: INSTRUCTIONAL SUPPORT BLDG - TNCC
3249	2001	205906	UNITED MASONRY INC	\$30,000.00	15568	2 STORY ELEVATOR ADDITION - CF BLDG. NVCC - ANNANDALE
3249	2001	224203	NJS INC	\$13,253.00	15568	2 STORY ELEVATOR ADDITION - CF BLDG. NVCC - ANNANDALE
3249	2001	290496	SCHINDLER ELEVATOR CORPORATION	\$42,888.00	15568	2 STORY ELEVATOR ADDITION - CF BLDG. NVCC - ANNANDALE
3260	2000	206944	HIGH COUNTRY C INC	\$17,500.00	16169	CONST: NATURAL SCIENCE CENTER - VWCC
3260	2000	209820	SURFACES INC	\$4,515.00	16169	CONST: NATURAL SCIENCE CENTER - VWCC
3260	2000	229378	CREATIVE GLASS	\$38,050.00	16169	CONST: NATURAL SCIENCE CENTER - VWCC
3260	2000	703071	PROFESSIONAL PAINT & DESIGN	\$2,863.00	16169	CONST: NATURAL SCIENCE CENTER - VWCC
3263	2000	5228	JONES & CO	\$652,365.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	117214	WARNER MOORE & CO	\$14,390.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	117270	ROSENBAUM FENC CO	\$2,350.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	137709	POMPEI INC	\$25,240.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	146938	INTERNATIONAL FLOORING & PROTECTIVE COATING INC	\$28,145.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	149055	WHISPER WALLS OF VIRGINIA	\$34,000.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	160502	AMERICAST	\$13,938.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	169855	U S FILTER DISTRIBUTION	\$15,550.59	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	195117	DAVID ALLEN CO	\$71,120.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	196188	ASPHALT SEALCOAT CO	\$13,029.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	199336	SPRINKLE MASONRY INC	\$644,366.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	205519	G A GIACOMETTI	\$112,000.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	211533	COASTAL FIRE PROTECTION CO	\$34,203.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	212031	SOUTHERN STRUCTURAL STEEL INC	\$291,500.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	219334	ELLISON CONSTRUCTION INC	\$5,730.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	243876	E R BATTEN CO INC	\$30,000.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	260750	E CALIGARI & SONS INC	\$34,291.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	282936	DOOR & GLASS SERVICES INC	\$76,215.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	287983	PAYNES PARKING DESIGN INC	\$1,768.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	296870	HANSON CONCRETE PRODUCTS INC	\$15,176.97	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	319784	QUALITY BUILDING PRODUCTS	\$16,507.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	359605	BLAIR BROTHERS INC	\$102,492.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	365747	HART ARCHITECTURE SIGNAGE	\$9,635.66	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3263	2000	372487	RICHMAN STEEL	\$6,665.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390698	DOOR ENGINEERING CO INC	\$9,687.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390789	HITT ELECTRIC CORP	\$439,716.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390957	PRESTIGE FLOORS INC	\$7,917.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390992	ROANOKE ENGINEERING	\$48,000.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390992	ROANOKE ENGINEERING SALES CO INC	\$10,656.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	390999	ROOF SERVICES CORP	\$205,600.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	419565	TESCO INC	\$12,300.00	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3263	2000	698127	AQUATIC ECOSYSTEM	\$5,382.44	16181	CONST: WORKFORCE DEVELOPMENT CENTER. PDCC
3266	2002	119260	COMMERCIAL STEEL ERECTION	\$18,600.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	198416	MAYS ELECTRIC	\$202,985.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	199736	ENGINEERED ROOF SYSTEMS	\$94,824.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	200041	ROANOKE SPRINKLER	\$15,600.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	202418	KREIDER AYERS & ASSOCIATES	\$183,000.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	206944	HIGH COUNTRY CONTRACTORS	\$3,005.50	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	291509	HAWKS CONCRETE PUMPING	\$3,793.50	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	373031	S R DRAPER PAVING	\$79,378.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	678702	POWERS FENCE	\$5,000.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	698111	THOMAS BROTHERS EXCAVATING	\$200,600.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3266	2002	703071	PROFESSIONAL PAINT & DESIGN	\$11,070.00	16270	NEW CONST: COLLEGE SERVICES BUILDING - VWCC
3267	2002	107340	THYSSENKRUPP ELEVATOR	\$101,650.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	192509	TATE & HILL	\$289,000.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	193986	SOUTHERN BRICK CONTRACTORS	\$14,000.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	196478	AMERICAN DOOR & GLASS	\$33,000.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	197367	READ STEEL SERVICES INC	\$4,440.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	207987	ALEXANDER WATERPROOFING	\$1,200.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	214244	FIRE PROTECTION EQUIPMENT CO	\$10,800.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	215703	ATLANTIC WATERPROOFING	\$85,000.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	219717	PAINTING BY GUIRRERI	\$16,721.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	261251	VSTRUCTURAL LLC	\$17,400.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	293113	S W ROGERS	\$234,845.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	325933	JAMES RIVER CONCRETE	\$360,700.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	334981	REAMES & MOYER	\$56,203.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	368268	LIPHART STEEL	\$294,000.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	390786	HIGHTECH SIGNS	\$18,428.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	390812	J A WALDER INC	\$499,051.97	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	391101	TRIAD DEMOLITION	\$9,500.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3267	2002	652094	ROOF SYSTEMS	\$31,100.00	16345	NEW CONST: DOWNTOWN CAMPUS PARKING DECK - JSRCC
3268	2001	195299	A A A ELECTRIC	\$32,851.00	16413	TNCC - CAMPUS INFRASTRUCTURE - CENTRAL PLAZA
3268	2001	220910	REYNOLDS ENTERPRISES	\$18,314.00	16413	TNCC - CAMPUS INFRASTRUCTURE - CENTRAL PLAZA
3268	2001	359241	BASIC CONSTRUCTION CO	\$47,370.00	16413	TNCC - CAMPUS INFRASTRUCTURE - CENTRAL PLAZA

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3268	2001	616719	HERCULES FENCE	\$76,900.00	16413	TNCC - CAMPUS INFRASTRUCTURE - CENTRAL PLAZA
3288	2002	120185	MONTGOMERY DOORS	\$8,080.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	121410	DELMARVA DRYWALL	\$13,070.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	140208	WALLS INC	\$2,100.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	146938	INTERNATIONAL FLOORING	\$2,359.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	194015	WAYMAR INC	\$15,500.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	201847	FOUR C CONSTRUCTION	\$26,300.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	202177	GLANVILLE IRON WORKS	\$2,629.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	216286	VIRGINIA STORAGE SYS	\$1,112.50	16444	ESCC - MAINTENANCE BUILDING
3288	2002	357713	ADVANCE DESIGN FABRICATION	\$614.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	373814	SMITH & KEENE	\$32,000.00	16444	ESCC - MAINTENANCE BUILDING
3288	2002	415747	ALL VIRGINIA STATE PEST CONTROL	\$400.00	16444	ESCC - MAINTENANCE BUILDING
3289	2002	107340	THYSSENKRUPP ELEVATOR CO	\$38,614.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	109798	OVERHEAD DOOR CO OF ROANOKE	\$15,900.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	197532	JAKE A MOORE & SONS EXCAVATING	\$132,500.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	208711	RAGNAROK INC	\$71,874.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	212824	MARVIN V TEMPLETON & SONS	\$27,340.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	321565	CRIST ELECTRIC CONTRACTOR	\$801,686.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	369056	MCGANN MASONRY INC	\$569,380.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	373969	SOUTHERN AIR INC	\$1,232,880.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	391129	W A LYNCH ROOFING CO	\$90,776.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	413510	WHITT CARPET & TILE SERVICE	\$21,633.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	415099	PIEDMONT GLASS	\$61,785.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3289	2002	685218	EAST COAST FIRE PROTECTION	\$68,900.00	16502	NEW CONST: MANUFACTURING TECHNOLOGIES BUILDING
3302	2002	109798	OVERHEAD DOOR OF JOHNSON CITY	\$9,560.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	163611	MERCER GLASS & MIRROR	\$31,000.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	194269	S & R CONSTRUCTION	\$39,045.62	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	194269	S & R CONSTRUCTION	\$97,742.89	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	203880	L & A MECHANICAL	\$40,000.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	205866	E S DOCKERY	\$15,500.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	213273	VIRGINIA MILLWORK	\$35,260.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	213945	DAVIS BROTHERS ROOFING	\$32,087.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	215201	FRANK BLANKENSHIP ELECTRICAL CONTRACTOR INC	\$62,000.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	215201	FRANK BLANKENSHIP ELECTRICAL CONTRACTOR INC	\$85,994.75	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3302	2002	224065	TRI STATE SECURITY FENCE	\$5,300.00	16540	NEW CONST: MARION REGIONAL OFFICE COMPLEX
3306	2002	79934	JIM LAMBERT CONSTRUCTION	\$47,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	107340	THYSSENKRUPP ELEVATOR	\$177,800.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	114982	CAMPOSTELLA BUILDERS & SUPPLY CORP	\$449,240.27	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	116458	WALKER & LABERGE CO INC	\$9,975.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	117270	ROSENBAUM FENCE CO	\$1,375.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	185461	LONG ON SITE CONTRACTING	\$27,428.00	16026	THEATER & SPECIAL EXHIBIT GALLERY

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3306	2002	195070	BAKER ROOFING CO	\$177,800.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	201114	BYLER PLUMBING & HEATING CO INC	\$138,724.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	201648	SWING ELECTRICAL CO INC	\$513,500.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	207987	ALEXANDER WATERPROOFING CO INC	\$70,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	213071	SOUTHSIDE UTILITIES INC	\$39,191.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	214256	R T ATKISON BUILDING CORP	\$178,665.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	215285	PROFESSIONAL FIRE PROTECTION CO INC	\$59,300.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	216589	TILE & TERRAZZO INC	\$13,298.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	228665	T M S	\$45,091.75	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	286767	DISTINCTIVE INTERIORS INC	\$1,217.42	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	372770	ROCKINGHAM STEEL	\$13,997.92	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390536	ACOUSTICS & INTERIOR CONSTRUCITON INC	\$31,997.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390653	COMPASS CONTRACTING	\$12,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390664	COSTEN FLOORS INC	\$7,470.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390698	DOOR ENGINEERING CORP	\$12,017.50	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390698	DOOR ENGINEERING CORP	\$19,898.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390728	F & C FIREPROOFING	\$8,700.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390746	GLOBE IRON CONSTRUCTION CO INC	\$510,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390754	H & P HARDWARE & SPECIALTY INC	\$83,558.20	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390779	HEARD CONCRETE	\$220,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	390992	ROANOKE ENGINEERING SALES CO INC	\$11,013.84	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	391092	TILE CONCEPTS LLC	\$122,000.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	391165	WINDOW & MORE	\$86,802.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	406450	BEST ACCESS SYSTEMS	\$215,500.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3306	2002	628262	INVENSYS BUILDING SYSTEMS INC	\$87,978.00	16026	THEATER & SPECIAL EXHIBIT GALLERY
3308	1999	120185	MONTGOMERY DOORS INC	\$3,698.00	13855	Franklin Area Headquarters
3308	1999	148298	TIDEWATER COM CEIL & WALLS INC	\$5,360.00	13855	Franklin Area Headquarters
3308	1999	195250	SOUTHERN SHEET METAL	\$1,675.00	13855	Franklin Area Headquarters
3308	1999	200633	T W WHITE	\$10,075.00	13855	Franklin Area Headquarters
3308	1999	202527	DAVIS MASONRY	\$26,328.51	13855	Franklin Area Headquarters
3308	1999	204843	OCEAN DRYWALL	\$6,300.00	13855	Franklin Area Headquarters
3308	1999	207930	JONES ROOFING	\$8,915.00	13855	Franklin Area Headquarters
3308	1999	224007	METRO WOOD WORKS	\$5,400.00	13855	Franklin Area Headquarters
3308	1999	230240	CHARLES W GERLOFF CO INC	\$4,987.00	13855	Franklin Area Headquarters
3308	1999	311704	TAILORED FOAM	\$1,241.00	13855	Franklin Area Headquarters
3308	1999	413843	COMMERCIAL CAULKING	\$1,100.00	13855	Franklin Area Headquarters
3308	1999	415747	ALL VA STATE PEST CONTROL	\$200.00	13855	Franklin Area Headquarters
3311	1999	154943	ENVISION ENVIRONMENTAL	\$22,000.00	15029	CHANGE LOCATION FROM W. TAZEWELL TO BLUEFIELD
3311	1999	188215	FLOYD ASPHALT	\$4,986.00	15029	CHANGE LOCATION FROM W. TAZEWELL TO BLUEFIELD
3312	1998	195402	HICO	\$12,450.00	15034	HORSE PASTURE
3312	1998	201032	WHITLOCK PLUMBING & HEATING	\$8,990.00	15034	HORSE PASTURE

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3312	1998	201032	WHITLOCK PLUMBING & HEATING	\$27,000.00	15034	HORSE PASTURE
3312	1998	213380	EDEN GLASS & WINDSHIELD	\$9,414.65	15034	HORSE PASTURE
3312	1998	391103	TRIANGLE ELECTRIC	\$25,785.00	15034	HORSE PASTURE
3314	1999	201032	WHITLOCK PLUMBING & HEATING INC	\$23,750.00	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3314	1999	203910	NEIGHBORS ELECTRIC CO	\$12,665.43	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3314	1999	208939	LELANDS TILE CO INC	\$3,085.00	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3314	1999	357623	ACOUSTICAL CEILING & DRYWALL	\$4,250.00	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3314	1999	679544	CUSTERS COSTOM PAINTING	\$3,980.00	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3314	1999	684774	MIDWAY GLAZING	\$2,756.00	15034	CARLISLE AREA HEADQUARTERS - OFFICE BUILDING (SALEM)
3320	1999	248572	BLAUCH BROTHERS	\$226,025.00	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	298069	DEAN STEEL	\$8,600.00	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	315355	MID VALLEY ELECTRIC	\$178,321.25	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	315545	PAINT & WALLCOVERING	\$13,510.00	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	390936	P D INTERIOR	\$26,103.47	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	390988	RIVERFRONT GLASS	\$4,482.00	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3320	1999	631827	GENERAL ELEVATOR	\$35,400.00	15655	CONST: HARRISONBURG RESIDENCY - OFFICE/SHOP RENOVATION
3328	1998	215257	VIRGINIA PAVING CO	\$41,540.00	15664	MERRYFIELD SALT DOME - CHANGE LOCATION FROM COLUMBIA PIKE
3328	1998	283894	AMERICAN ELECTRIC SERVICE CO	\$5,500.00	15664	MERRYFIELD SALT DOME - CHANGE LOCATION FROM COLUMBIA PIKE
3331	1998	152688	E & L DIAMOND ELECTRIC INC	\$3,141.12	15838	NEW CONST: CHEMICAL STORAGE BUILDINGS (14 LOCATIONS)
3331	1998	214245	HILLTOP CONSTRUCTION CO INC	\$44,600.00	15838	NEW CONST: CHEMICAL STORAGE BUILDINGS (14 LOCATIONS)
3332	2000	199164	HAWKEYE CONSTRUCTION	\$8,655.00	15838	CHATHAM DOME
3332	2000	283894	AMERICAN ELECTRIC SERVICE CO	\$7,790.25	15838	CHATHAM DOME
3332	2000	292812	APAC VIRGINIA INC	\$215,565.00	15838	CHATHAM DOME
3333	1999	205554	EXCEL PAVING CORP	\$31,301.18	15838	WARDS CORNER SALT DOME
3333	1999	242976	G & S CONSTRUCTION	\$25,191.47	15838	WARDS CORNER SALT DOME
3333	1999	283894	AMERICAN ELECTRIC SERVICE CO	\$8,800.00	15838	WARDS CORNER SALT DOME
3335	2002	152539	PIONEER ELECTRIC	\$105,803.00	15838	NC: NOVA DISTRICT MAINTENANCE COMPLEX - CONSTRUCT CHEMICAL S
3335	2002	195977	RICE CONTRACTING	\$357,464.00	15838	NC: NOVA DISTRICT MAINTENANCE COMPLEX - CONSTRUCT CHEMICAL S
3335	2002	215257	VIRGINIA PAVING	\$263,000.00	15838	NC: NOVA DISTRICT MAINTENANCE COMPLEX - CONSTRUCT CHEMICAL S
3335	2002	314348	DOME TECHNOLOGY	\$574,049.00	15838	NC: NOVA DISTRICT MAINTENANCE COMPLEX - CONSTRUCT CHEMICAL S
3336	1999	206067	HAINES PAVING	\$59,449.00	15838	RESTON CHEM
3336	1999	283894	AMERICAN ELECTRIC	\$9,300.00	15838	RESTON CHEM
3343	1999	202527	DAVIS MASONRY	\$7,000.00	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.
3343	1999	223596	EIC KEL PAINTING	\$3,050.00	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.
3343	1999	280509	TESCO SITE DEVELOPMENT	\$8,850.00	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.
3343	1999	390520	A & D ELECTRICAL	\$14,989.00	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.
3343	1999	413843	COMMERCIAL CAULKING	\$300.00	15840	FARMERS AREA HQ. EQUIPMENT STORAGE BLDG.
3345	1999	30355	ESTES, W L	\$9,500.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.
3345	1999	65802	BLUE RIDGE GARAGE DOORS	\$5,600.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.
3345	1999	219465	LOUDOUN VALLEY ROOFING	\$1,230.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.
3345	1999	240411	COWLES & SON	\$12,352.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3345	1999	390683	DAVENPORT INSULATION	\$810.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.
3345	1999	416465	PAINT VARIATIONS LTD	\$2,754.00	15840	HILLSBORO AREA HEADQUARTERS - EQUIPMENT STORAGE BLDG.
3353	1998	48595	JONES PLUMBING	\$36,433.00	15842	ASHLAND RESIDENCY SHOP
3353	1998	216014	EAST COAST	\$22,000.00	15842	ASHLAND RESIDENCY SHOP
3359	2001	195428	COLONY CONSTRUCTION INC	\$110,900.00	16130	HAMPDEN SYDNEY AHQ CHEM BLDGS (2)
3359	2001	199164	HAWKEYE CONSTRUCTION	\$8,160.00	16130	HAMPDEN SYDNEY AHQ CHEM BLDGS (2)
3359	2001	283894	AMERICAN ELECTRIC SERVICE CO	\$7,150.00	16130	HAMPDEN SYDNEY AHQ CHEM BLDGS (2)
3360	2002	109798	OVERHEAD DOOR CO	\$12,688.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	117317	TIMBER TRUSS	\$4,570.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	118362	CLIMATE CONTROL INC	\$26,979.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	120113	BROOKFIELD MACHINE & WELDING	\$3,745.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	150581	TALBOTT INC	\$30,077.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	174149	CAPITAL DOOR SYSTEMS	\$12,296.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	185458	LINWARD BUILDING SPEC INC	\$955.13	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	199726	ARCHITECTURAL CONCRETE PRODUCTS INC	\$4,050.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	201880	CLYDE A SMITH PLUMBING	\$26,500.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	216879	M R DISHMAN & SONS INC	\$4,200.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	281666	CLEANING EQUIPMENT & SERVICES	\$23,895.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	287991	E F BROWN CONST CO	\$60,779.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	292000	WEBBER ELECTRIC CO INC	\$58,675.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	414228	PLEASANTS HARDWARE PRODUCTS	\$6,850.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	415099	PIEDMONT GLASS	\$4,225.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	415747	ALL VA STATE PEST CONTROL	\$300.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3360	2002	679428	CARPET HOUSE	\$5,690.00	16130	HAMPDEN SYDNEY AHQ COMBO BLDG
3364	2002	137709	POMPEI TILE	\$6,713.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	153772	CUSTOM CONTRACTING	\$2,900.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	174149	CAPITAL DOORS	\$8,118.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	195091	HYMAN MECHANICAL	\$116,017.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	196478	AMERICAN DOOR & GLASS	\$11,364.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	196756	COMMERCIAL SURFACES	\$2,835.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	211152	G T DUKE	\$1,800.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	213752	ESSEX CONCRETE	\$44,000.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	223596	EIC KEL PAINTING	\$6,225.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	233171	PAWS CONCRETE	\$1,700.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	319784	QUALITY BUILDING PRODUCTS	\$3,359.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	368499	LUXTERRA ELECTRICAL	\$28,400.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	413843	COMMERCIAL CAULKING	\$1,675.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3364	2002	415747	ALL VA STATE PEST CONTROL	\$300.00	16130	MIDDLESEX AHQ EQUIP STOR BLDG
3366	2000	30355	ESTES, W L	\$31,010.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	111396	ZEIGLER MECHANICAL	\$34,143.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	117187	MCPHERSON PLUMBING & HEATING	\$13,203.00	16130	MT JACKSON AHQ OFFICE BLDG

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3366	2000	130691	JOHN LAKE PAVING	\$12,500.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	210190	F & S MASONRY	\$32,784.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	232876	SENSENY CONSTRUCTION	\$4,830.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	260892	GULL CORPORATION	\$34,314.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	390683	DAVENPORT INSULATION	\$3,660.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	390837	JONES & FRANK	\$16,964.00	16130	MT JACKSON AHQ OFFICE BLDG
3366	2000	416465	PAINT VARIATIONS LTD	\$4,748.00	16130	MT JACKSON AHQ OFFICE BLDG
3370	2000	203484	COLUMBIA EXCAVATING INC	\$36,845.00	16130	BASIE AHQ CHEMICAL STORAGE BLDGS. (1)
3370	2000	316329	COLONIAL CONSTRUCTION INC	\$24,278.00	16130	BASIE AHQ CHEMICAL STORAGE BLDGS. (1)
3371	2002	109798	OVERHEAD DOOR OF ROANOKE	\$10,700.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	152688	E & L DIAMOND	\$35,895.10	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	161367	ALAN TYE & ASSOC	\$51,000.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	195009	A B G CAULKING CONTRACTORS INC	\$2,500.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	203319	DUNFORD ROOFING INC	\$22,200.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	203880	L & A MECHANICAL	\$67,425.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3371	2002	215980	L C M CORP	\$2,578.00	16130	INDEPENDENCE - EQUIPMENT STORAGE BUILDING
3372	2002	116498	BOOKMAN CONSTRUCTION CO INC	\$7,850.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	123413	LAUTERBACH ELECTRICAL CO INC	\$21,145.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	185278	FAST GLASS INC	\$312.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	195802	MOWLES MASONRY INC	\$62,800.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	196047	COLONIAL PLUMBING & HEATING CO INC	\$51,000.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	199202	HANOVER IRON & STEEL	\$3,270.85	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	202430	AMELIA OVERHEAD DOOR	\$4,800.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	211397	H & B MECHANICAL INC	\$39,000.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	219717	PAITING BY GURRIERI	\$2,900.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	288167	C G HARRIS CONSTRUCTION CO	\$45,150.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	359013	B & B TRUSS INC	\$5,000.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	367004	J S ARCHER CO INC	\$1,792.00	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3372	2002	391165	WINDOWS & MORE LLC	\$848.22	16130	BASIE RD AHQ-EQUIP STORAGE-VEHICLE MAINT BLDG
3373	2002	144466	MARTIN PLUMBING	\$14,990.00	16130	PEARISBURG SUPERINTENDENT-TIMEKEEPERS OFFICE
3373	2002	203319	DUNFORD ROOFING INC	\$5,500.00	16130	PEARISBURG SUPERINTENDENT-TIMEKEEPERS OFFICE
3373	2002	211065	NEW RIVER KITCHEN & BATH	\$6,250.00	16130	PEARISBURG SUPERINTENDENT-TIMEKEEPERS OFFICE
3373	2002	290400	BLUEFIELD GLASS & INTERIORS	\$16,800.00	16130	PEARISBURG SUPERINTENDENT-TIMEKEEPERS OFFICE
3373	2002	390605	C F W CONTRACTING INC	\$19,850.00	16130	PEARISBURG SUPERINTENDENT-TIMEKEEPERS OFFICE
3376	2002	150620	SOUTH ANNA STAIR & RAIL CO	\$23,590.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	154020	FORTRESS CORPORATION	\$2,226.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	196478	AMERICAN DOOR & GLASS INC	\$12,960.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	219717	PAINTING BY GURRIERI	\$5,478.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	279661	CANADA CONTRACTING	\$25,755.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	300740	HOUCHINS PEST CONTROL	\$350.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	362536	D M A & ASSOCIATES	\$795.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3376	2002	390925	NORTHSIDE ELECTRIC CO	\$96,161.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	390999	ROOF SERVICES CORPORATION	\$30,000.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	391039	SOUTHWORTH MECHANICAL CROP	\$18,650.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3376	2002	391120	VIRGINIA ELEVATOR CO INC	\$45,670.00	16140	RICHMOND DIST. TRAINING CENTER - ADDITIONS & RENOVATIONS
3378	2002	129449	QUY DUONG PLUMBING	\$17,221.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	210047	EPOXY SYSTEMS	\$21,465.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	212265	GIBSON INDUSTRIAL INC	\$142,945.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	213273	VIRGINIA MILLWORK	\$1,739.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	311704	TAILORED FOAM INC	\$950.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	390536	ACOUSTICS & INTERIOR CONSTRUCITON	\$2,373.00	16140	SALUDA SHOP ADDITIONS/RENOV
3378	2002	390536	ACOUSTICS & INTERIOR CONSTRUCTION	\$2,613.00	16140	SALUDA SHOP ADDITIONS/RENOV
3379	2001	107340	THYSSEN GENERAL ELEVATOR	\$32,497.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	129841	W F HOY JR PLASTER & DRYWALL	\$25,400.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	145874	A & A PLUMBING	\$15,200.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	192617	DON LARGENT ROOFING	\$7,287.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	192716	MARCH INC	\$6,600.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	195009	A B G CAULKING	\$2,000.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	201467	GREERS SUPPLY CO	\$37,756.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	291359	BLACKS PAINT & FLOOR COVERING	\$13,500.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	363084	DODSON BROTHERS EXTERMINATING	\$250.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	368930	MAST & BRUNK	\$167,097.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	390683	DAVENPORT INSULATION	\$3,146.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	390988	RIVERFRONT GLASS	\$4,387.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	391022	SHEN VALLEY DRYWALL	\$12,458.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3379	2001	678533	WACO INC	\$1,800.00	16140	STAUNTON DISTRICT SHOP RENOVATION
3383	2002	211797	HARRELL CONTRACTORS	\$67,821.00	16369	LAWRENCEVILLE AHQ-RICHMOND DIST-DOME CHEMICAL STORAGE BLDG
3384	2002	211797	HARRELL CONTRACTING INC	\$73,164.00	16369	JENNINGS ORDINARY AHQ-CONSTRUCT DOME TYPE CHEM STORAGE BLDG
3385	2002	192979	FITZGERALD EXCAVATING & CONSTRUCTION	\$53,240.00	16369	CHEMICAL STORAGE BLDG AT FISHERSVILLE AREA HDQRTS
3385	2002	283894	AMERICAN ELECTRIC SERVICE CO	\$9,590.00	16369	CHEMICAL STORAGE BLDG AT FISHERSVILLE AREA HDQRTS
3386	2002	192979	FITZGERALD EXCAVATING & CONST	\$74,695.00	16369	COVINGTON - DOME TYPE CHEMICAL STORAGE BLDG
3386	2002	205485	ALLEGHANY ASPHALT & CONST INC	\$1,000.00	16369	COVINGTON - DOME TYPE CHEMICAL STORAGE BLDG
3386	2002	283894	AMERICAN ELECTRIC SERVICE CO	\$6,590.00	16369	COVINGTON - DOME TYPE CHEMICAL STORAGE BLDG
3387	2002	205554	EXEL PAVING CORP	\$73,167.65	16369	CHEMICAL STORAGE BLDG-SUFFOLK AREA HEADQUARTERS
3387	2002	283894	AMERICAN ELECTRIC SERVICE CO	\$20,600.00	16369	CHEMICAL STORAGE BLDG-SUFFOLK AREA HEADQUARTERS
3388	2002	205554	EXEL PAVING CORP	\$27,066.70	16369	SEAFORD - CHEMICAL STORAGE BUILDING
3388	2002	283894	AMERICAN ELECTRIC SERVICE CO	\$7,580.00	16369	SEAFORD - CHEMICAL STORAGE BUILDING
3391	1999	195117	DAVID ALLEN CO	\$332,211.00	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18
3391	1999	213335	NOTTOWAY CONSTRUCTION	\$236,109.00	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18
3391	1999	361376	CLIMATE CONTROL	\$1,067,421.00	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18
3391	1999	416307	VIRGINIA SPRINKLER CO	\$185,706.00	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18
3391	1999	631827	GENERAL ELEVATOR	\$190,372.00	15184	LSC & ADA RENOVATIONS BLDG 31 & ELEVATORS BLDGS 15-18

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3400	1998	291623	ESCO	\$26,284.00	15649	REPLACE EXISTING CHILLER & COOLING TOWER - NVMHI
3400	1998	414011	ANNANDALE BALANCING	\$2,300.00	15649	REPLACE EXISTING CHILLER & COOLING TOWER - NVMHI
3401	1998	102682	MID ATLANTIC TEST & BALANCE	\$3,137.01	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.
3401	1998	192617	DON LARGENT ROOFING	\$2,200.00	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.
3401	1998	212515	AIR CONDITIONING EQUIPMENT SALES	\$80,333.40	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.
3401	1998	214758	DEAN BROTHERS	\$15,000.00	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.
3401	1998	678533	WACO INC	\$7,290.00	15649	REPAIR/REPLACE BOILERS, BLDGS 123& 124, WESTERN STATE HOSP.
3404	2000	153772	CUSTOM CONTRACTING	\$9,843.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3404	2000	154113	HICKEY ELECTRIC	\$54,250.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3404	2000	185358	HVAC BALANCING & COM	\$46,240.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3404	2000	197547	LYNCHBURG CRANE	\$7,500.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3404	2000	282750	DUKE FENCE CO	\$1,255.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3404	2000	323507	SWEET BRIAR SHEET METAL	\$5,794.00	15649	REPLACE CHILLERS IN BUILDINGS 57 AND 59 - CVTC
3407	2002	377144	WISE HUNDLEY ELECT	\$16,946.27	15826	REPLACE FIRE ALARM SYSTEM - BLDG NUMBER 739-001 SVMHI
3417	2000	131318	KENBRIDGE INDUSTRIAL ELECTRICAL SERVICES	\$58,600.00	15403	RN OF WATER RENO. SYSTEM
3417	2000	140577	WALLACE FENCE INC	\$4,100.00	15403	RN OF WATER RENO. SYSTEM
3417	2000	154229	CREWS & GREGROY FIRE SPRINKLER CO INC	\$60,800.00	15403	RN OF WATER RENO. SYSTEM
3417	2000	290210	JOHN BOYS LANDSCAPING	\$6,800.00	15403	RN OF WATER RENO. SYSTEM
3417	2000	359071	B P SHORT & SON PAVING CO	\$11,130.00	15403	RN OF WATER RENO. SYSTEM
3426	2002	109798	OVERHEAD DOOR CO OF CENTRAL VA	\$3,565.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	195746	JAILCRAFT INC	\$162,390.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	196478	AMERICAN DOOR & GLASS	\$997.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	203678	HURRICANE FENCE CO	\$82,080.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	203800	SWARTZ RESTAURANT SUPPLY INC	\$244,000.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	205341	PIEDMONT ELECTRICAL	\$325,000.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	208008	TIM EVANS INC	\$1,450.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	211226	MASONOMICS	\$238,136.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	219717	PAINTING BY GURRIERI	\$13,747.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	325933	JAMES RIVER CONCRETE	\$43,000.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	359127	BAKER & HAZELWOOD	\$330,700.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	363594	ELCO CONCRETE CO	\$29,900.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	370389	NORTHSTAR EXCAVATING INC	\$229,822.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	390730	F RICHARD WILTON JR INC	\$41,840.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	390784	HERMITAGE STEEL INC	\$115,000.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	390879	MANSON & UTLEY INC	\$19,946.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	391036	SOUTHERN ENVIRONMENTAL SERVICES INC	\$4,500.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	415747	ALL VA STATE PEST CONTROL	\$564.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3426	2002	678817	FIRE X	\$20,000.00	16417	NEW CONST: BEAUMONT J.C.C. KITCHEN & DINING HALL
3439	2001	413433	BEST ELECTRIC CO	\$3,000.00	15665	BLAND WASTEWATER SYSTEM - PHASE 4
3441	2002	198034	SHERWIN ELECTRIC	\$22,455.00	15666	WATER SYSTEM IMPROVEMENTS - JRCC
3442	2001	102682	MID ATLANTIC TANK	\$85,250.00	15666	POCAHONTAS CORRECTIONAL UNIT #13 - WATER SYSTEM UPGRADE

## BCOM CONSTRUCTION SUBCONTRACTS (Continued)

MGT#	FISCAL YEAR	MGT VENDOR #	SUB CONTRACTOR NAME	AWARD AMOUNT	PROJECT NUMBER	PROJECT DESCRIPTION
3442	2001	155932	GOLDON RULE CONSTRUCTION	\$2,975.00	15666	POCAHONTAS CORRECTIONAL UNIT #13 - WATER SYSTEM UPGRADE
3443	2002	102682	MID ATLANTIC SYSTEMS INC	\$122,547.04	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3443	2002	129975	CENTURY CONTROL SYSTEMS INC	\$21,461.32	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3443	2002	152688	E & L DIAMOND ELECTRICAL INC	\$54,427.62	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3443	2002	206779	ABINGDON ROOFING CO INC	\$18,192.60	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3443	2002	360203	BYRD & GOFF CONSTRUCTION INC	\$48,737.28	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3443	2002	650428	VIRGINIA TRANE INC	\$8,640.00	15666	UPGRADE BLAND WATER UPGRADE - 200,000 GALLONE WATER STORAGE
3444	2002	102682	MID ATLANTIC	\$123,400.00	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.
3444	2002	204799	ELM CONSTRUCTION	\$50,000.00	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.
3444	2002	217035	SYSTEMS EAST	\$62,340.00	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.
3444	2002	220424	J & J CONTRACTING	\$21,630.59	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.
3444	2002	369056	MCGANN MASONRY	\$11,179.00	15666	NEW WATER STORAGE TANKS @ APPALACHIAN & RUSTBURG C.U.
3446	2001	197112	ENCOMPASS CONSTRUCTORS	\$50,722.00	15675	VCCW ELECTRICAL
3446	2001	197766	GUARD CONSTRUCTION	\$6,320.00	15675	VCCW ELECTRICAL
3446	2001	203678	HURRICANE FENCE CO	\$9,000.00	15675	VCCW ELECTRICAL
3446	2001	281819	LASCO CONTRACTING	\$203,900.00	15675	VCCW ELECTRICAL
3447	2002	153772	CUSTOMER CONTRACTING	\$12,520.21	15713	REPLACE ROOFS - MECKLENBURG - ADMINISTRATION, SECURITY BLDG.
3447	2002	155486	FMS CONSTRUCTION INC	\$3,375.50	15713	REPLACE ROOFS - MECKLENBURG - ADMINISTRATION, SECURITY BLDG.
3447	2002	206681	RUSSELL FENCE CO	\$23,587.00	15713	REPLACE ROOFS - MECKLENBURG - ADMINISTRATION, SECURITY BLDG.
3453	2002	135890	WALLACE DAY INC	\$19,614.00	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV
3453	2002	205366	COASTAL SERVICE CO INC	\$21,780.00	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV
3453	2002	208165	WESTAR ROOFING CORP	\$5,549.00	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV
3453	2002	358980	AVIS ELECTRIC CO INC	\$35,877.00	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV
3453	2002	360245	C & W AIR BALANCING INC	\$6,000.00	15830	REPLACEMENT OF HVAC SYSTEM @ WOMEN'S DIVERSION CTR - PH IV
3456	2002	89415	UNITHERM	\$990.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	111200	SENECA BALANCE	\$900.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	195022	J D MILES & SONS	\$13,240.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	213273	VIRGINIA MILLWORK	\$22,430.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	214451	DUTCHLAND INC	\$173,000.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	218262	CAPITAL MASONRY	\$24,885.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	280647	JENNINGS EXCAVATING	\$65,500.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	363084	DODSON EXTERMINATING	\$610.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	391040	SPECIFIED TILE	\$5,039.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	639947	CREATIVE CONTRACTING	\$9,950.00	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3456	2002	645461	MORE THAN GLASS	\$2,118.02	16110	IMP: POCAHONTAS WASTEWATER TREATMENT PLANT
3460	2002	217035	SYSTEMS EAST INC	\$8,538.50	16433	EQUIPMENT: INSTALL AUGER/GRINDER COLLECTION SYSTEMS
3460	2002	261247	VIRGINIA INFRASTRUCTURE	\$55,450.00	16433	EQUIPMENT: INSTALL AUGER/GRINDER COLLECTION SYSTEMS

***APPENDIX F:***  
***ARCHITECTURE AND***  
***ENGINEERING PAYMENTS***

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***APPENDIX F***  
***ARCHITECTURE AND ENGINEERING PAYMENTS***

A list of architecture and engineering payments was provided electronically to the Commonwealth of Virginia due to the large number of payments.

***APPENDIX G:***  
***PROFESSIONAL SERVICES***  
***PAYMENTS***

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**APPENDIX G**  
**PROFESSIONAL SERVICES PAYMENTS**

A list of professional services payments was provided electronically to the Commonwealth of Virginia due to the large number of payments.

***APPENDIX H:***  
***OTHER SERVICES PAYMENTS***

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***APPENDIX H***  
***OTHER SERVICES PAYMENTS***

A list of other services payments was provided electronically to the Commonwealth of Virginia due to the large number of payments.

**APPENDIX I:**  
**GOODS AND SUPPLIES**  
**PAYMENTS**

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**APPENDIX I**  
**GOODS AND SUPPLIES PAYMENTS**

A list of goods and supplies payments was provided electronically to the Commonwealth of Virginia due to the large number of payments.

**APPENDIX J:**  
**PHONE SURVEY RESPONSE**  
**FREQUENCIES**

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**APPENDIX J**  
**THE COMMONWEALTH OF VIRGINIA**  
**PHONE SURVEY FREQUENCIES**

<b>QUESTION</b>	<b>African American</b>	<b>Asian American</b>	<b>Hispanic American</b>	<b>Native American</b>	<b>Nonminority Women</b>	<b>Total M/WBE</b>	<b>Nonminority Male</b>	<b>TOTAL</b>
<i>Length of establishment</i>								
1973 or earlier	2	0	1	3	15	21	20	41
1974 to 1983	10	4	2	0	22	38	18	56
1984 to 1993	46	19	13	2	45	125	19	144
1994 to 2003	113	53	31	11	71	279	18	297
	<b>171</b>	<b>76</b>	<b>47</b>	<b>16</b>	<b>153</b>	<b>463</b>	<b>75</b>	<b>538</b>
<i>Organizational structure of company</i>								
Sole Proprietorship	39	10	1	2	19	71	11	82
Partnership	2	0	0	0	2	4	1	5
Corporation	114	55	40	12	109	330	51	381
Limited Liability Partnership	1	0	0	0	0	1	1	2
Limited Liability Corporation	15	11	4	1	21	52	9	61
Other	2	0	2	0	1	5	2	7
	<b>173</b>	<b>76</b>	<b>47</b>	<b>15</b>	<b>152</b>	<b>463</b>	<b>75</b>	<b>538</b>
<i>Company's primary line of business</i>								
Building Construction	10	1	2	2	6	21	3	24
Special Trade	23	2	2	3	20	50	6	56
Professional Services	90	61	35	6	80	272	20	292
General/Personal Services	38	8	2	1	13	62	8	70
Supplies & Equipment	12	4	6	4	35	61	38	99
	<b>173</b>	<b>76</b>	<b>47</b>	<b>16</b>	<b>154</b>	<b>466</b>	<b>75</b>	<b>541</b>
<i>Number of full-time employees</i>								
1 - 3 employees	63	28	17	4	47	159	14	173
4 - 10 employees	49	19	13	6	44	131	26	157
11 - 30 employees	27	12	9	3	33	84	20	104
31 or more employees	29	14	8	3	26	80	17	97
	<b>168</b>	<b>73</b>	<b>47</b>	<b>16</b>	<b>150</b>	<b>454</b>	<b>77</b>	<b>531</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Gross Revenues</i>								
Up to \$50,000	28	10	3	1	9	51	3	54
\$50,001 to \$100,000	27	8	4	3	21	63	0	63
\$100,001 to \$300,000	24	10	14	3	26	77	12	89
\$300,001 to \$500,000	15	8	3	2	14	42	3	45
\$500,001 to \$1,000,000	17	14	10	2	19	62	15	77
\$1,000,001 to \$2,000,000	16	9	5	0	29	59	16	75
\$2,000,001 to \$5,000,000	27	12	4	2	27	72	19	91
\$5,000,001 to \$10,000,000	10	1	2	1	4	18	2	20
More than \$10,000,000	9	4	2	2	5	22	7	29
	<b>173</b>	<b>76</b>	<b>47</b>	<b>16</b>	<b>154</b>	<b>466</b>	<b>77</b>	<b>543</b>
<i>Mean percentage of gross revenues earned from private and public sector business in 2002</i> <span style="float: right;">n=509</span>								
Public Sector	45	54	44	56	56	50	63	52
Private Sector	55	46	56	44	44	50	37	48
<i>Company certified as MBE, WBE, or DBE?</i>								
Yes	134	55	39	8	106	342	23	365
No	26	17	6	6	37	92	45	137
	<b>160</b>	<b>72</b>	<b>45</b>	<b>14</b>	<b>143</b>	<b>434</b>	<b>68</b>	<b>502</b>
<i>Gender of Company owner</i>								
Female	43	27	8	7	154	239	0	239
Male	130	47	39	9	0	225	75	300
	<b>173</b>	<b>74</b>	<b>47</b>	<b>16</b>	<b>154</b>	<b>464</b>	<b>75</b>	<b>539</b>
<i>Owner's highest level of education</i>								
Some High School	1	0	0	0	0	1	3	4
High School Graduate	7	0	2	1	21	31	4	35
Trade or Technical Education	4	0	3	1	2	10	1	11
Some College	20	0	6	4	18	48	15	63
College Graduate	76	27	12	5	53	173	27	200
Postgraduate Degree	63	47	24	5	57	196	26	222
	<b>171</b>	<b>74</b>	<b>47</b>	<b>16</b>	<b>151</b>	<b>459</b>	<b>76</b>	<b>535</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Owner's years of experience</i>								
Less than 10 years	15	8	2	2	15	42	6	48
11 to 15 years	42	18	12	2	29	103	7	110
16 to 20 years	29	22	7	4	33	95	15	110
21 to 29 years	37	15	13	6	45	116	13	129
30 to 35 years	29	9	10	1	22	71	19	90
More than 35 years	17	3	3	1	9	33	17	50
	<b>169</b>	<b>75</b>	<b>47</b>	<b>16</b>	<b>153</b>	<b>460</b>	<b>77</b>	<b>537</b>
<i>Percentage Revenue from Commonwealth Business</i> <span style="float: right;">n=527</span>								
	22	27	28	50	43	31	65	36
<i>Business start-up loan</i>								
Applied	32	6	7	2	7	54	1	55
Approved	10	5	5	2	6	28	1	29
<i>Operating capital loan</i>								
Applied	43	8	18	3	30	102	9	111
Approved	15	6	15	2	26	64	9	73
<i>Performance bond</i>								
Applied	28	7	3	4	25	67	8	75
Approved	21	7	2	4	23	57	8	65
<i>Bid bond</i>								
Applied	32	5	4	2	25	68	14	82
Approved	21	5	4	2	21	53	14	67
<i>Equipment loan</i>								
Applied	30	4	8	6	33	81	16	97
Approved	18	4	7	6	31	66	15	81

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Commercial liability insurance</i>								
Applied	109	46	34	9	99	297	46	343
Approved	107	45	33	9	99	293	46	339
<i>Professional liability insurance</i>								
Applied	70	39	26	5	65	205	26	231
Approved	69	37	26	4	65	201	26	227
<i>Number of Times as Prime Contractor since 1998</i>								
Never	64	35	18	7	54	178	41	219
1 - 10 times	45	22	13	3	39	122	9	131
11 - 100 times	52	15	13	2	38	120	14	134
More than 100 times	3	1	2	2	11	19	4	23
	<b>164</b>	<b>73</b>	<b>46</b>	<b>14</b>	<b>142</b>	<b>439</b>	<b>68</b>	<b>507</b>
<i>Number of times bid as a subcontractor or subconsultant</i>								
Never	53	22	10	5	51	141	44	185
1 to 10 times	65	27	17	2	50	161	8	169
11 to 99 times	42	23	14	4	31	114	9	123
More than 100 times	6	2	5	3	11	27	3	30
	<b>166</b>	<b>74</b>	<b>46</b>	<b>14</b>	<b>143</b>	<b>443</b>	<b>64</b>	<b>507</b>
<i>Number of times asked to be a subcontractor or subconsultant</i>								
Never	57	25	13	5	60	160	43	203
1 to 10 times	74	29	14	5	41	163	10	173
11 to 99 times	30	18	16	1	32	97	7	104
More than 100 times	4	2	2	3	10	21	4	25
	<b>165</b>	<b>74</b>	<b>45</b>	<b>14</b>	<b>143</b>	<b>441</b>	<b>64</b>	<b>505</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Number of times hired as a subcontractor or subconsultant</i>								
Never	67	24	10	2	63	166	46	212
1 to 10 times	74	37	19	8	48	186	9	195
11 to 99 times	22	10	13	2	22	69	5	74
More than 100 times	3	3	3	2	11	22	3	25
	<b>166</b>	<b>74</b>	<b>45</b>	<b>14</b>	<b>144</b>	<b>443</b>	<b>63</b>	<b>506</b>
<i>Number of Times Used Subcontractors or Subconsultants since 1998</i>								
Yes	75	31	23	6	65	200	11	211
No	41	14	8	3	27	93	17	110
	<b>116</b>	<b>45</b>	<b>31</b>	<b>9</b>	<b>92</b>	<b>293</b>	<b>28</b>	<b>321</b>
<i>Used M/WBEs for Commonwealth Projects since 1998</i>								
Very Often	8	4	4	1	6	23	0	23
Sometimes	7	2	1	1	7	18	3	21
Seldom	2	1	0	2	5	10	4	14
Never	5	10	13	2	22	52	1	53
	<b>22</b>	<b>17</b>	<b>18</b>	<b>6</b>	<b>40</b>	<b>103</b>	<b>8</b>	<b>111</b>
<i>Used M/WBEs for Private Projects since 1998</i>								
Very Often	33	12	10	3	19	77	1	78
Sometimes	17	5	6	1	16	45	3	48
Seldom	6	3	0	2	8	19	4	23
Never	7	3	6	0	13	29	2	31
	<b>63</b>	<b>23</b>	<b>22</b>	<b>6</b>	<b>56</b>	<b>170</b>	<b>10</b>	<b>180</b>
<i>Rate Experience with Minority Men and Women Subs</i>								
Excellent/Good	61	24	17	6	43	151	8	159
Fair/Poor	9	2	1	0	5	17	1	18
	<b>70</b>	<b>26</b>	<b>18</b>	<b>6</b>	<b>48</b>	<b>168</b>	<b>9</b>	<b>177</b>
<i>Rate Experience with Nonminority Women Subs</i>								
Excellent/Good	42	17	15	6	41	121	8	129
Fair/Poor	9	1	1	0	4	15	0	15
	<b>51</b>	<b>18</b>	<b>16</b>	<b>6</b>	<b>45</b>	<b>136</b>	<b>8</b>	<b>144</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Rate Experience with Nonminority Male Subs</i>								
Excellent/Good	49	23	16	4	47	139	9	148
Fair/Poor	12	2	2	1	8	25	1	26
	<b>61</b>	<b>25</b>	<b>18</b>	<b>5</b>	<b>55</b>	<b>164</b>	<b>10</b>	<b>174</b>
<i>Rate Experience with Primes since 1998</i>								
Excellent/Good	76	41	29	9	70	225	15	240
Fair/Poor	24	8	6	3	12	53	3	56
	<b>100</b>	<b>49</b>	<b>35</b>	<b>12</b>	<b>82</b>	<b>278</b>	<b>18</b>	<b>296</b>
<i>Prime Never Responded to Sub Bid/Quote</i>	46	16	18	4	41	125	11	136
<i>Asked to be a 'front' for Non-minority Firm</i>	22	11	8	1	14	56	1	57
<i>Pressured to lower bid</i>	53	20	17	4	38	132	12	144
<i>Paid less than negotiated contract amount</i>	23	12	12	3	17	67	7	74
<i>Dropped after Prime received contract</i>	26	10	6	3	17	62	4	66
<i>Delayed payment after job completion</i>	54	17	19	7	44	141	8	149
<i>Completed job, never paid</i>	24	10	5	4	19	62	4	66
<i>Did other or less work than agreed</i>	34	13	9	4	24	84	5	89
<i>Held to hire standards than other subs</i>	31	7	4	3	14	59	3	62
<i>Other experiences</i>	0	0	0	0	0	0	0	0
<i>Submitted bids for Commonwealth construction work as prime since 1998?</i>								
Never	62	24	18	7	57	168	46	214
1 to 10 times	5	0	2	0	8	15	3	18
11 to 99 times	6	1	3	3	7	20	1	21
More than 100 times	1	0	0	0	0	1	0	1
	<b>74</b>	<b>25</b>	<b>23</b>	<b>10</b>	<b>72</b>	<b>204</b>	<b>50</b>	<b>254</b>
<i>Submitted bids for Commonwealth construction work as sub since 1998?</i>								
Never	65	24	17	8	58	172	48	220
1 to 10 times	7	1	3	1	6	18	1	19
11 to 99 times	3	0	3	1	3	10	0	10
More than 100 times	0	0	0	0	5	5	1	6
	<b>75</b>	<b>25</b>	<b>23</b>	<b>10</b>	<b>72</b>	<b>205</b>	<b>50</b>	<b>255</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>Awarded Commonwealth construction work as prime since 1998?</i>								
Never	71	24	21	8	62	186	47	233
1 to 10 times	2	1	1	1	7	12	1	13
11 to 99 times	1	0	1	0	2	4	0	4
More than 100 times	1	0	0	0	1	2	0	2
	<b>75</b>	<b>25</b>	<b>23</b>	<b>9</b>	<b>72</b>	<b>204</b>	<b>48</b>	<b>252</b>
<i>Awarded Commonwealth construction work as sub since 1998?</i>								
Never	66	25	19	8	64	182	46	228
1 to 10 times	4	0	2	0	1	7	1	8
11 to 99 times	4	0	2	1	5	12	1	13
More than 100 times	0	0	0	0	2	2	0	2
	<b>74</b>	<b>25</b>	<b>23</b>	<b>9</b>	<b>72</b>	<b>203</b>	<b>48</b>	<b>251</b>
<i>Barriers to obtaining work</i>								
Prequalification requirements	14	0	2	2	7	25	0	25
Performance bond requirements	14	0	1	4	7	26	1	27
Financing	12	0	0	2	6	20	1	21
Insurance requirements	6	0	0	0	5	11	3	14
Bid specifications too rigid	7	0	1	3	13	24	2	26
Limited time to prepare a bid package/quote	12	0	4	4	15	35	3	38
Limited info received on pending projects	12	0	3	2	13	30	3	33
Limited knowledge of contracting procedures	6	0	1	0	7	14	3	17
Lack of experience	4	0	1	0	9	14	0	14
Lack of personnel	5	0	1	0	8	14	1	15
Contract too large	13	0	2	1	10	26	1	27
Contract too expensive to bid?	12	0	3	3	12	30	1	31
Prequalifications limit the competition?	13	0	4	3	12	32	0	32
eVA system (Virginia Internet base purchasing system)?	5	0	0	2	10	17	5	22
<i>Informal network of prime and subcontractors in the Commonwealth of Virginia</i>								
Strongly agree/agree	130	35	23	13	71	272	16	288
Disagree/strongly disagree	11	6	2	0	9	28	4	32
Neutral/do not know	19	15	8	1	28	71	17	88
	<b>160</b>	<b>56</b>	<b>33</b>	<b>14</b>	<b>108</b>	<b>371</b>	<b>37</b>	<b>408</b>

**THE COMMONWEALTH OF VIRGINIA  
PHONE SURVEY FREQUENCIES (Continued)**

QUESTION	African American	Asian American	Hispanic American	Native American	Nonminority Women	Total M/WBE	Nonminority Male	TOTAL
<i>This network excluded company from bidding or winning a contract in public and sectors</i>								
Strongly agree/agree	94	24	18	7	36	179	7	186
Disagree/strongly disagree	31	19	9	5	55	119	23	142
Neutral/do not know	30	11	7	2	26	76	14	90
	<b>155</b>	<b>54</b>	<b>34</b>	<b>14</b>	<b>117</b>	<b>374</b>	<b>44</b>	<b>418</b>
<i>Informal network has greater adverse effect on M/WBE owned firms than on others.</i>								
Strongly agree/agree	135	34	21	10	55	255	12	267
Disagree/strongly disagree	10	9	3	1	26	49	13	62
Neutral/do not know	15	14	13	3	34	79	18	97
	<b>160</b>	<b>57</b>	<b>37</b>	<b>14</b>	<b>115</b>	<b>383</b>	<b>43</b>	<b>426</b>
<i>Double standards in qualifications/performance make it more difficult for MWBE businesses to win bids and contracts.</i>								
Strongly agree/agree	124	30	29	5	57	245	10	255
Disagree/strongly disagree	17	19	5	8	39	88	16	104
Neutral/do not know	20	10	7	2	23	62	18	80
	<b>161</b>	<b>59</b>	<b>41</b>	<b>15</b>	<b>119</b>	<b>395</b>	<b>44</b>	<b>439</b>
<i>Primes sometimes drop M/WBE subs after winning the contract</i>								
Strongly agree/agree	70	29	20	9	36	164	8	172
Disagree/strongly disagree	16	15	8	1	29	69	8	77
Neutral/do not know	51	8	7	5	36	107	19	126
	<b>137</b>	<b>52</b>	<b>35</b>	<b>15</b>	<b>101</b>	<b>340</b>	<b>35</b>	<b>375</b>
<i>M/WBE firms are viewed as less competent than non-minority firms</i>								
Strongly agree/agree	127	37	30	8	61	263	9	272
Disagree/strongly disagree	19	19	7	5	43	93	29	122
Neutral/do not know	15	9	4	2	20	50	16	66
	<b>161</b>	<b>65</b>	<b>41</b>	<b>15</b>	<b>124</b>	<b>406</b>	<b>54</b>	<b>460</b>
<i>Some non-minority firms change their bids when not required to hire MWBE's.</i>								
Strongly agree/agree	91	37	23	10	49	210	8	218
Disagree/strongly disagree	13	11	4	1	12	41	10	51
Neutral/do not know	40	9	9	2	37	97	17	114
	<b>144</b>	<b>57</b>	<b>36</b>	<b>13</b>	<b>98</b>	<b>348</b>	<b>35</b>	<b>383</b>

***APPENDIX K:***  
***VENDOR INTERVIEW GUIDE AND***  
***AFFIDAVIT***

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## **APPENDIX K**

### **COMMONWEALTH OF VIRGINIA DISPARITY STUDY**

#### **PERSONAL INTERVIEWS**

**INTERVIEWER:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **TIME:** \_\_\_\_\_

**PLACE:** \_\_\_\_\_

<b>CONTACT NAME:</b> _____
<b>CONTACT TITLE:</b> _____
<b>NAME OF COMPANY:</b> _____
<b>ADDRESS:</b> _____
<b>CITY:</b> _____ <b>STATE:</b> _____ <b>ZIP:</b> _____
<b>TELEPHONE:</b> _____ <b>FAX:</b> _____
<b>E-MAIL:</b> _____ <b>BUSINESS HOURS:</b> _____

#### **CONFIDENTIALITY STATEMENT**

Please read the following to interviewee.

This interview is on behalf of the Commonwealth of Virginia (Commonwealth). This interview is part of a comprehensive study of the Commonwealth's procurement of services and products. The Commonwealth is committed to improving business with all their vendors. The questions we ask and your responses on your firm and industry are designed to provide us with information that can be used to improve business relationships with all vendors including small, minority, women, and non-minority businesses.

Responses to this questionnaire will be held in strict confidence, and will not be distributed to any other firm or person with your firm's identity revealed. However, in the case of a court order, all documentation will be turned over to the court.

**COMMONWEALTH OF VIRGINIA  
DISPARITY STUDY  
INTERVIEW GUIDE**

**BUSINESS PROFILE**

1. What is your company's primary line of business? [Try to get a good feel for what this company does.]

- Construction Services (bridge, road, building, general contractor, etc.) (Specify)  
\_\_\_\_\_
- Professional Services (architecture, engineering, accountant, public relations, legal, etc.) (Specify)  
\_\_\_\_\_
- Operational Services (security, equipment repair, art work, janitorial, maintenance, etc.)  
\_\_\_\_\_
- Supplies and Equipment (Specify)  
\_\_\_\_\_
- Other (Specify) \_\_\_\_\_

1.a Are you in the same line of business as when you established your business? Yes \_\_\_\_\_ No \_\_\_\_\_  
(Explain)

2. What is the race or ethnic background of the owner/controlling party? [Get as much detail as possible.]

- White  Native American  
 African American (Black)  Asian American  
 Hispanic American  Other \_\_\_\_\_

3. What is the gender of the owner/controlling party?

Male \_\_\_\_\_ Female \_\_\_\_\_ Joint male and female (50/50) \_\_\_\_\_

4. In what year was your business established or purchased from the most recent owner?

\_\_\_\_\_

5. Is your company sole proprietor, partnership or corporation?

- Sole proprietor  Partnership  
 Corporation  Non-profit organization  
 Other (Specify) \_\_\_\_\_

5.a Does the company or owners maintain any special licensing? Yes \_\_\_\_\_ No \_\_\_\_\_ If so, specify.

6. Excluding owners, how many full-time and how many part-time employees does this firm have?

\_\_\_\_\_ Full-time \_\_\_\_\_ Part-time/cyclical

7. What was your company's approximate gross revenues for calendar year 2002? \$\_\_\_\_\_

If respondent does not provide an answer, then read following ranges for respondent to select one.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Less than \$25,000     | <input type="checkbox"/> \$300,001 to \$500,000     | <input type="checkbox"/> \$3,000,001 to \$5,000,000  |
| <input type="checkbox"/> \$25,001 to \$50,000   | <input type="checkbox"/> \$500,001 to \$1,000,000   | <input type="checkbox"/> \$5,000,001 to \$10,000,000 |
| <input type="checkbox"/> \$50,001 to \$100,000  | <input type="checkbox"/> \$1,000,001 to \$3,000,000 | <input type="checkbox"/> over \$10,000,000           |
| <input type="checkbox"/> \$100,001 to \$300,000 |   | <input type="checkbox"/> No Response                 |

8. What percentage of these gross revenues were earned from the private sector and the public (government) sector? (Must total 100%)

\_\_\_\_\_ % Private sector  
 \_\_\_\_\_ % Public (government) sector  
 \_\_\_\_\_ Don't Know

9. What is the highest level of education completed by the owner of your company?

- |   |   |
|---|---|
| <input type="checkbox"/> Some high school     | <input type="checkbox"/> College graduate             |
| <input type="checkbox"/> High school graduate | <input type="checkbox"/> Post graduate degree         |
| <input type="checkbox"/> Some college         | <input type="checkbox"/> Trade or technical education |
|   | <input type="checkbox"/> No Response                  |

10. How many years of direct experience does the primary owner of your firm have in the firm's line of business?

\_\_\_\_\_ Years  No Response

**READ: This study is to capture information over a five-year period from fiscal years 1998 through 2002. The next set of questions I will ask refer to those time frames and concern your company's attempts to do business with the Commonwealth of Virginia.**

<b>CONDUCTING BUSINESS WITH THE COMMONWEALTH OF VIRGINIA AS A PRIME CONTRACTOR OR VENDOR</b>
--

11. Have you ever bid on a Commonwealth project or provided a quote for goods, services, equipment?

Yes \_\_\_\_ No \_\_\_\_

11a. If prime has bid on a project: How often have you bid as a prime?

1-10 \_\_\_\_ 11-25 \_\_\_\_ 26-50 \_\_\_\_ 51-100 \_\_\_\_ Over 100 \_\_\_\_

11b. If prime has provided quotes: How often have you provided quotes?

1-10 \_\_\_\_ 11-25 \_\_\_\_ 26-50 \_\_\_\_ 51-100 \_\_\_\_ Over 100 \_\_\_\_

12. What percentage of the time that you have bid on projects or provided quotes have you been awarded a contract or a purchase order by the Commonwealth?

12a. \_\_\_\_\_% (Should be between 0 and 100%) - Bids

12b. \_\_\_\_\_% (Should be between 0 and 100%) - Quotes

13. Are there any factors (such as insurance bonding requirements, size of project) that have interfered with your ability to bid or provide a quote on Commonwealth procurement?

Yes \_\_\_ No \_\_\_

If yes, please provide as much detail as possible.

14. Does the Commonwealth have any practices or procedures that have prevented you from bidding or receiving any contracts or purchase orders? Yes \_\_\_ No \_\_\_

[Get details.]

15. Has the Commonwealth made any attempts to encourage you to bid on their procurement? Yes \_\_\_ No \_\_\_

If so, describe their outreach efforts. If not, please indicate any outreach efforts you would like to see implemented.

16. Has the Commonwealth been helpful when you have questions or need information about the procurement process? Yes \_\_\_\_\_ No \_\_\_\_\_ (Explain.)

16a. If yes, has the information provided by the Commonwealth been timely and accurate? Yes \_\_\_\_\_ No \_\_\_\_\_ [Get details.]

17. Generally, are Commonwealth personnel courteous and responsive when you interact with them? (Probe for examples depending upon response.)

18. Has your company ever been treated unfairly in the selection process? Yes \_\_\_ No \_\_\_

[If yes, get examples!]

18a. Do you think the Commonwealth favors some companies over others? Yes \_\_\_ No \_\_\_

[If yes, find out why!]

19. Generally, how fair do you think the Commonwealth selection process is?

20. To the best of your knowledge, have you ever been the low bidder on a Commonwealth project and not been awarded the contract or purchase order? Yes \_\_\_ No \_\_\_

[If yes, get details.]

21. What factors would you say most frequently prevent you from winning Commonwealth contracts or purchase orders?

[Get details.]

22. Have you ever appealed a contract or purchase order award? Yes \_\_\_\_ No \_\_\_\_

[If yes, get details.]

23. Do you think your company will be retaliated against if you lodge a complaint with the Commonwealth?

Yes \_\_\_\_ No \_\_\_\_

23a. If so, why?

24. What can the Commonwealth do to improve the procurement and selection process?

**READ:** The next set of questions are designed for firms that have served as a subcontractor to a prime contractor.

25. Have you ever served as a subcontractor on any Commonwealth projects? Yes \_\_\_\_ No \_\_\_\_

*(If respondent answers NO, ask Question 25a and then skip to Question #29.)*

*(If respondent answers YES, ask Question 26 and continue on.)*

25a Are there any factors (such as lack of information or financing) that prevent your firm from serving as a subcontractor on Commonwealth projects? Yes \_\_\_\_ No \_\_\_\_

[Get details.]

**CONDUCTING BUSINESS WITH THE COMMONWEALTH OF VIRGINIA AS A SUBCONTRACTOR**

26. How often have you served as a subcontractor on a Commonwealth project?

1-10 \_\_\_\_ 11-25 \_\_\_\_ 26-50 \_\_\_\_ 51-100 \_\_\_\_ Over 100 \_\_\_\_

27. Have you ever been informed that you were low bidder, awarded a contract, and then found out that another subcontractor or the prime was performing the work? Yes \_\_\_\_ No \_\_\_\_

27a. If yes, explain.

27.b What action did you take?

28. Do prime contractors show any favoritism toward particular subcontractors when it comes to procuring services and products for a Commonwealth project? Yes \_\_\_\_ No \_\_\_\_

28a. If yes, explain.

*The next set of questions are designed for firms that are minority or woman-owned. If the respondent is not an M/WBE, skip to Question 38.*

**MINORITY AND WOMAN-OWNED BUSINESSES**

29. Are you certified as a small, minority, or woman-owned business? Yes \_\_\_\_ No \_\_\_\_

If yes, with whom?

30. Do you think certification has an effect on the ability of your company to compete with other businesses? Why or why not?
31. Are you aware of any practices that prime contractors use to get around having to use small, minority, or woman businesses? Describe.
32. Do you notice any difference in the willingness of primes to use small, minority, or woman businesses? Describe.
33. Do you notice any differences in the willingness of primes to use small, minority, or woman businesses in the public (government) and private sector? If so, explain the differences.
34. Do you think primes will use small, minority, or woman businesses if there are no M/WBE goals?  
Why or why not?

35. What are the biggest obstacles faced by small, minority, or woman businesses? Elaborate.

36. Have you experienced discriminatory behavior from the Commonwealth? Elaborate.

37. Have you experienced discriminatory behavior from other public or private sector organizations? Elaborate.

*The next set of questions are designed for non-minority male-owned businesses. (If respondent is not a white male, skip to Question #44)*

<b>NON-MINORITY MALE-OWNED BUSINESSES</b>
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38. Do you think your company has ever suffered from reverse discrimination. If so, can you provide any details?



*The final two questions are designed for each business owner.*

**FINAL QUESTIONS – ALL FIRMS**

44. Do you feel there is an informal network that gives an advantage to select businesses?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, how does it operate in the Commonwealth?

45. Is there anything that we have not covered that you feel will be helpful to this study?

Yes  No

If yes, ask what?

**AFFIDAVIT**

\_\_\_\_\_ **HEREBY ACKNOWLEDGE**  
**THAT THE TESTIMONY I GAVE IS TRUE AND AN ACCURATE REFLECTION OF**  
**MY PAST EXPERIENCES IN PROCUREMENT AND BUSINESS OPPORTUNITIES**  
**WITH THE COMMONWEALTH OF VIRGINIA.**

**ADDITIONALLY, THIS TESTIMONY WAS GIVEN FREELY AND I HAVE NOT**  
**BEEN COERCED OR RECEIVED ANY REMUNERATION FOR MY COMMENTS.**

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**SIGNATURE OF INTERVIEWER AS WITNESS**

\_\_\_\_\_  
**DATE**

***APPENDIX L:***  
***PUMS REGRESSION ANALYSIS***

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**APPENDIX L**  
**PUMS REGRESSION ANALYSIS**

**RESULTS OF LOGISTIC REGRESSION**

**Construction**

<b>Commonwealth of Virginia</b>			
	<b>B</b>	<b>Sig.</b>	<b>Exp (B)</b>
African American	-.376*	.000	.687
Asian American	.431*	.009	1.539
Hispanic American	-.724*	.000	.485
Native American	.320	.147	1.378
Sex (1=Male)	.880*	.000	2.412
Marital Status (1=Married)	.214*	.000	1.239
Age	.039*	.000	1.040
Disability (1=Yes)	-.099	.150	.906
Tenure (1=Yes)	-.592*	.000	.553
Value	.082*	.000	1.085
Mortgage	.000*	.000	1.000
Unearn	.000*	.008	1.000
Resdinc	.000*	.001	1.000
P65	-.429*	.000	.651
P18	.088*	.000	1.091
Some College (1=Yes)	.191*	.001	1.210
College Graduate (1=Yes)	-.198	.044	.820
More than College (1=Yes)	-.181	.257	.835
Number of Observations	11033		
Chi-squared statistic (df=18)	997.041		
Log Likelihood	-10662.56		
<p>Note: * Statistically significant at p &lt; .05.            Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.            Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.</p>			

**RESULTS OF LOGISTIC REGRESSION (Continued)**

**Architecture and Engineering**

<b>Commonwealth of Virginia</b>			
	<b>B</b>	<b>Sig.</b>	<b>Exp (B)</b>
African American	-1.052	.085	.349
Asian American	-1.164	.057	.312
Hispanic American	-1.351	.192	.259
Native American	-18.585	.999	.000
Sex (1=Male)	1.286*	.000	.276
Marital Status (1=Married)	.023	.933	1.023
Age	.073*	.000	1.076
Disability (1=Yes)	.456	.132	1.577
Tenure (1=Yes)	-.556	.423	.573
Value	.091*	.027	1.095
Mortgage	.000*	.019	1.000
Unearn	.000*	.001	1.000
Resdinc	.000*	.017	1.000
P65	-.302	.290	.739
P18	.094	.315	1.099
Some College (1=Yes)	-.202	.590	.817
College Graduate (1=Yes)	.439	.213	1.551
More than College (1=Yes)	.001	.997	1.001
Number of Observations	1970		
Chi-squared statistic (df=18)	177.03		
Log Likelihood	-873.78		

Note: \* Statistically significant at p < .05.  
 Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LOGISTIC REGRESSION (Continued)**

**Professional Services**

<b>Commonwealth of Virginia</b>			
	<b>B</b>	<b>Sig.</b>	<b>Exp (B)</b>
African American	-.685*	.000	.507
Asian American	-.483*	.001	.617
Hispanic American	-.558*	.017	.572
Native American	-.427	.257	.653
Sex (1=Male)	1.177*	.000	3.245
Marital Status (1=Married)	.047	.537	1.048
Age	.043*	.000	1.044
Disability (1=Yes)	-.034	.739	.967
Tenure (1=Yes)	-.781*	.000	.458
Value	.089*	.000	1.093
Mortgage	.000*	.005	1.000
Unearn	.000*	.005	1.000
Resdinc	.000*	.000	1.000
P65	.215*	.004	1.240
P18	.068*	.019	1.071
Some College (1=Yes)	.283*	.028	1.326
College Graduate (1=Yes)	.639*	.000	1.894
More than College (1=Yes)	1.339*	.000	3.814
Number of Observations	18145		
Chi-squared statistic (df=18)	2752.884		
Log Likelihood	-8483.024		

Note: \* Statistically significant at p < .05.  
 Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LOGISTIC REGRESSION (Continued)**

**Other Services**

<b>Commonwealth of Virginia</b>			
	<b>B</b>	<b>Sig.</b>	<b>Exp (B)</b>
African American	-.158*	.021	.854
Asian American	.202*	.033	1.224
Hispanic American	-.438*	.000	.646
Native American	.176	.416	1.193
Sex (1=Male)	-.157*	.002	.854
Marital Status (1=Married)	.229*	.000	1.258
Age	.034*	.000	1.035
Disability (1=Yes)	.091	.122	1.095
Tenure (1=Yes)	-.052	.638	.949
Value	.041*	.000	1.042
Mortgage	.000*	.000	1.000
Unearn	.000	.707	1.000
Resdinc	.000	.092	1.000
P65	-.112*	.043	.894
P18	.038	.000	1.092
Some College (1=Yes)	.038	.464	1.038
College Graduate (1=Yes)	-.111	.078	.895
More than College (1=Yes)	-.270*	.002	.763
Number of Observations	19199		
Chi-squared statistic (df=18)	750.841		
Log Likelihood	-15008.58		

Note: \* Statistically significant at  $p < .05$ .  
 Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LOGISTIC REGRESSION (Continued)**

**Goods and Supplies**

<b>Commonwealth of Virginia</b>			
	<b>B</b>	<b>Sig.</b>	<b>Exp (B)</b>
African American	-1.285*	.000	.277
Asian American	.472*	.001	1.603
Hispanic American	-.734	.005	.480
Native American	-.637	.167	.529
Sex (1=Male)	.406*	.000	1.501
Marital Status (1=Married)	.257*	.002	1.292
Age	.048*	.000	1.049
Disability (1=Yes)	.016	.858	1.017
Tenure (1=Yes)	-.915*	.000	.401
Value	.093*	.000	1.097
Mortgage	.000	.265	1.000
Unearn	.000*	.004	1.000
Resdinc	.000	.074	1.000
P65	-.069	.387	.934
P18	.062	.070	1.064
Some College (1=Yes)	.163*	.034	1.177
College Graduate (1=Yes)	.192*	.044	1.212
More than College (1=Yes)	-.077	.607	.926
Number of Observations	20197		
Chi-squared statistic (df=18)	914.682		
Log Likelihood	-7586.776		

Note: \* Statistically significant at p < .05.  
 Estimation was conducted using the Binary Logistic command on SPSS. The Binary Logistic command performs binary logistic regressions and reports estimated coefficients and odds ratios that measure the effect on the probability of each one-unit increase in the included variables.  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LINEAR REGRESSION**

**Construction**

<b>Commonwealth of Virginia</b>					
	<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>B</b>		
African American	-.198*	.070	-.060	-2.835	.000
Asian American	-.101	.127	-.017	-.795	.427
Hispanic American	.129	.093	.030	1.388	.165
Native American	-.452*	.183	-.052	-2.465	.014
Nonminority Women (1=Female)	-.184*	.077	-.053	-2.393	.017
Marital Status (1=Married)	.231*	.039	.127	5.888	.000
Age	.006*	.006	.002	3.603	.000
Disability (1=Yes)	-.138*	-.138	.047	-2.961	.003
Speaks English Well (1=Yes)	.375*	.154	.196	2.436	.016
Some College (1=Yes)	.067	.039	.037	1.722	.085
College Graduate (1=Yes)	.451*	.063	.155	7.121	.000
More than College (1=Yes)	.416*	.103	.086	4.023	.000
Constant	9.800	.085		114.698	.000

Note: \* Statistically significant at p < .05.  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LINEAR REGRESSION (Continued)**

**Architecture and Engineering**

<b>Commonwealth of Virginia</b>					
	<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>B</b>		
African American	-.983*	.496	-.158	-1.984	.000
Asian American	-.123	.488	-.020	-.252	.377
Hispanic American	.744	.839	.069	.887	.049
Native American	.000	.000	.000	-.252	.801
Nonminority Women (1=Female)	-.655*	.303	-.178	-2.163	.032
Marital Status (1=Married)	.332	.192	.142	1.729	.086
Age	-.006	.007	-.072	-.872	.385
Disability (1=Yes)	.002	.223	.001	.008	.994
Speaks English Well (1=Yes)	-.579	.900	-.214	-.644	.548
Some College (1=Yes)	.602*	.303	.261	1.986	.049
College Graduate (1=Yes)	.786*	.273	.446	2.877	.005
More than College (1=Yes)	.967*	.289	.492	3.348	.001
Constant	10.225	.458		22.348	.000

Note: \* Statistically significant at  $p < .05$ .  
 Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.

**RESULTS OF LINEAR REGRESSION (Continued)**

**Professional Services**

<b>Commonwealth of Virginia</b>					
	<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>B</b>		
African American	-.620*	.096	-.144	-6.440	.000
Asian American	-.160	.110	-.031	-1.445	.149
Hispanic American	-.406	.347	-.025	-1.169	.242
Native American	-.537	.110	-.036	-1.656	.098
Nonminority Women (1=Female)	-.508*	.061	-.198	-8.355	.000
Marital Status (1=Married)	.268*	.057	.104	4.687	.000
Age	-.004	.002	-.042	-1.885	.060
Disability (1=Yes)	-.138	.081	-.038	-1.701	.089
Speaks English Well (1=Yes)	.164	.328	.038	.500	.618
Some College (1=Yes)	.256*	.113	.082	2.270	.023
College Graduate (1=Yes)	.467*	.108	.183	4.329	.000
More than College (1=Yes)	.972*	.102	.459	9.571	.000
Constant	10.287	.170		60.562	.000
Note: * Statistically significant at $p < .05$ . Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.					

**RESULTS OF LINEAR REGRESSION (Continued)**

**Other Services**

<b>Commonwealth of Virginia</b>					
	<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>B</b>		
African American	-.351*	.051	-.131	-6.881	.000
Asian American	-.351*	.070	-.091	-4.987	.000
Hispanic American	-.480*	.151	-.057	-3.176	.002
Native American	-.685*	.184	-.066	-3.719	.000
Nonminority Women (1=Female)	-.561*	.037	-.284	-14.961	.000
Marital Status (1=Married)	.118*	.037	.058	3.212	.001
Age	.005*	.001	.067	3.750	.000
Disability (1=Yes)	-.095*	.045	-.038	-2.120	.034
Speaks English Well (1=Yes)	.087	.116	.037	.750	.454
Some College (1=Yes)	.187*	.039	.094	4.836	.000
College Graduate (1=Yes)	.452*	.045	.195	9.953	.000
More than College (1=Yes)	.541*	.064	.159	8.515	.000
Constant	9.685	.082		117.736	.000
Note: * Statistically significant at $p < .05$ . Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.					

**RESULTS OF LINEAR REGRESSION (Continued)**

**Goods and Supplies**

<b>Commonwealth of Virginia</b>					
	<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>B</b>		
African American	-.399*	.120	-.099	-3.333	.001
Asian American	-.366*	.099	-.110	-3.696	.000
Hispanic American	-.599	.337	-.052	-1.776	.076
Native American	.130	.410	.009	.318	.751
Nonminority Women (1=Female)	-.457*	.060	-.228	-7.638	.000
Marital Status (1=Married)	.101	.060	.050	1.674	.094
Age	-.007*	.002	-.088	-3.001	.003
Disability (1=Yes)	-.073	.072	-.030	-1.021	.307
Speaks English Well (1=Yes)	.203	.172	.106	1.777	.242
Some College (1=Yes)	.115	.059	.062	1.945	.052
College Graduate (1=Yes)	.333*	.068	.155	4.863	.000
More than College (1=Yes)	.395*	.107	.112	3.704	.000
Constant	10.433	.158		66.115	.000
Note: * Statistically significant at $p < .05$ . Source: The Public Use Microdata Samples (PUMS) data from 2000 Census of Population and MGT of America, Inc. Calculations using SPSS.					