Volume 3

State of New Jersey

Construction Services Disparity Study

STATE COLLEGES AND UNIVERSITIES

October 2005

Submitted to:
The Disparity Study Commission

Submitted by:
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ACKNOWLEDGMENT

In 2003, the State of New Jersey commissioned a Discrimination in State Employment and Contracting Disparity Study to update the State's original disparity study and findings, which are set forth in the Study on Discrimination in Public Works, Procurement and Construction Contracts, dated February 22, 1993. Mason Tillman Associates, Ltd., of Oakland, California was selected by the Disparity Study Commission to perform the construction services portion of the Study.

The purpose of the Disparity Study is to determine whether there is a disparity between the number of qualified minority and women-owned businesses ready, willing and able to perform construction and construction-related services and the number of contractors/vendors actually engaged to perform such services. The study period covered July 1, 2000 to June 30, 2002.

Management Interventions, Inc, a Trenton-based female-minority-owned firm, assisted Mason Tillman in the performance of the Study. Management Interventions, Inc performed data collection activities and outreach to the business community.

The Study could not have been conducted without the cooperation of the local chambers of commerce and business organizations, and the many State of New Jersey business owners who demonstrated their commitment to the Study by participating in interviews and public hearings. In addition, the State Agencies, Authorities, and Commissions, and Colleges, and Universities' staff played a critical role in assisting with the data collection by making available State personnel, contract records, and documents needed to perform the Study. This Study could not have been completed without their extraordinary effort.

Regena L. Thomas, Secretary of State along with Assistant Secretary of State, Kathleen Kisko, the Chairman of the Disparity Study Commission, Peter M. Suzuki, Esq. and the Disparity Study Commissioners provided overall guidance and direction for the Study.

Jeanne M. Victor and Sharon B. Hartley, Directors of the Disparity Study Commission managed the completion of the Study. Their leadership and guidance helped keep the Study process focused and on target.

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STATE COLLEGES AND UNIVERSITIES PRIME CONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

As set forth in *Croson* and its progeny, a disparity study must document minority contracting in the jurisdiction under review. The first step in a disparity analysis is the statistical review of prime contracts. The objective of this statistical analysis is to determine the level of minority and woman-owned business enterprise (M/WBE) prime contractor utilization compared to non-M/WBE prime contractor utilization on contracts awarded between July 1, 2000 and June 30, 2002. The definition of prime contractors for the Study is all firms to which the State Colleges and Universities awarded contracts during the study period.

The prime utilization analysis included construction and construction-related contracts awarded by the State Colleges and Universities. Only those colleges and universities that awarded construction and construction-related contracts to for-profit businesses were included in the Study. State Agencies, Authorities, and Commissions contracts are analyzed separately from the State Colleges and Universities. Findings from the analysis of State Agencies, Authorities, and Commissions are presented in Volume 2, Chapter 1: Prime Contractor Utilization Analysis.

Construction contracts included new construction and renovations, except routine building maintenance. All residential and non-residential building construction; heavy construction such as streets, roads, and bridges; and special trade construction such as fencing, HVAC, paving, and electrical were included.

Construction-related contracts included design services, such as architectural, engineering, and construction management services, performed as part of a construction project.

This chapter will discuss the State Colleges and Universities' utilization of prime contractors in the two industries.

II. STATE COLLEGES AND UNIVERSITIES PRIME CONTRACT DATA SOURCES

The State Colleges and Universities prime contract data were collected from each State College and University, with two exceptions. Firstly, Richard Stockton College managed their own small construction and construction-related contracts. Their data for large contracts were provided by the State Treasury Department's Division of Property Management and Construction (DPMC). Secondly, Rowan College provided their contracts in a hard copy report. Additional contracts for Rowan College were identified by the Treasury's Division of Contract Compliance data and collected by Mason Tillman.

The State Colleges and Universities which provided all prime contract data from their own sources are listed below:

Colleges and Universities

- The College of New Jersey
- Kean University
- Montclair State University
- New Jersey City University
- New Jersey Institute of Technology
- Ramapo College
- Rutgers University
- University Medicine & Dentistry of New Jersey
- William Paterson College

The following data were used as additional sources of information to assess the comprehensiveness of the provided prime data:

- Treasury's Division of Contract Compliance

Treasury's Division of Contract Compliance provided a list of construction contracts awarded by State Colleges and Universities, for which the prime contractor had filed Equal Employment Opportunity forms. This information was cross-referenced with the data provided by the State Colleges and Universities and DPMC to insure accuracy and completeness of the prime contract records included in the study. All discrepancies found between the sources of data were resolved with State College or University staff.

- Department of Labor (DOL) business registration database

DOL provided a database listing all contractors that have been registered since the beginning of the study period. This database was used as a source of addresses and contact information for prime and subcontractors.

III. STATE COLLEGES AND UNIVERSITIES PRIME CONTRACTOR UTILIZATION THRESHOLDS

Prime contracts within each industry classification were grouped into three size categories. One category included all the contract records without regard to size of the award. The other two categories were defined by the industry's informal and formal procurement standards. Informal contracts were the small purchases that had a maximum size threshold of $19,500 and did not require advertising. Although some State Colleges and Universities had different formal and informal levels, the size categories chosen for the analysis reflect the procurement policies governing most of the State Colleges and Universities. Table 1.01 details the informal thresholds used in the analysis.

Formal contracts were the advertised solicitations above the informal threshold. Formal contracts have no maximum size threshold. However, the analysis of formal contracts was capped at $500,000 for both industries because there was demonstrated capacity within the pool of willing M/WBEs to perform contracts at this level.

Table 1.01 Prime Contract Procurement Thresholds

State Colleges and Universities	Informal
Construction	$19,500 and under
Construction-Related	$19,500 and under

Prime contract awards have been grouped, by amount, into these three categories and are presented in the tables and charts that follow. The three categories of contracts are all contracts, contracts under $500,000, and contracts under $19,500. The number of contracts and dollar amounts are presented within each of the three categories.

IV. STATE COLLEGES AND UNIVERSITIES PRIME CONTRACTOR UTILIZATION

As depicted in Table 1.02 below, the State Colleges and Universities issued 1,594 construction and construction-related prime contracts during the July 1, 2000 to June 30, 2002 study period. The 1,594 contracts included 1,331 for construction contracts and 266 for construction-related contracts.

Also, State Colleges and Universities expended $502,995,582 for construction and construction-related contracts during the study period, with $357,178,758 for construction services and $145,816,824 for construction-related services.

Table 1.02 Total Construction and Construction-Related Prime Contracts and Dollars Expended between July 1, 2000 and June 30, 2002

State Colleges and Universities	Total Number of Contracts	Total Dollars Expended
Construction	1,331	$357,178,758
Construction-Related	266	$145,816,824
Total	1,597	$502,995,582

A. All State Colleges and Universities Prime Contracts by Industry

1. Construction Prime Contractor Utilization: All Contracts

Table 1.03 summarizes all contract dollars expended by State Colleges and Universities on construction prime contracts. Minority Business Enterprises received 3.06 percent of the construction prime contract dollars; Women Business Enterprises received 4.47 percent; and Caucasian Male Business Enterprises received 92.47 percent.

African American Businesses received 11 or 0.83 percent of the construction contracts during the study period, representing $88,865 or 0.02 percent of the contract dollars.

Asian American Businesses received 19 or 1.43 percent of the construction contracts during the study period, representing $5,906,569 or 1.65 percent of the contract dollars.

Hispanic American Businesses received 29 or 2.18 percent of the construction contracts during the study period, representing $4,940,392 or 1.38 percent of the contract dollars.

Native American Businesses received none of the construction contracts during the study period.

Minority Business Enterprises received 59 or 4.43 percent of the construction contracts during the study period, representing $10,935,826 or 3.06 percent of the contract dollars.

Women Business Enterprises received 149 or 11.19 percent of the construction contracts during the study period, representing $15,957,167 or 4.47 percent of the contract dollars.

Minority and Women Business Enterprises received 208 or 15.63 percent of the construction contracts during the study period, representing $26,892,993 or 7.53 percent of the contract dollars.

Caucasian Male Business Enterprises received 1,123 or 84.37 percent of the construction contracts during the study period, representing $330,285,765 or 92.47 percent of the contract dollars.

Table 1.03 Construction Prime Contractor Utilization: All Contracts, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	11	0.83%	$88,865	0.02%
Asian Americans	19	1.43%	$5,906,569	1.65%
Hispanic Americans	29	2.18%	$4,940,392	1.38%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	149	11.19%	$15,957,167	4.47%
Caucasian Males	1,123	84.37%	$330,285,765	92.47%
TOTAL	1,331	100.00%	$357,178,758	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	11	0.83%	$88,865	0.02%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	19	1.43%	$5,906,569	1.65%
Hispanic American Females	1	0.08%	$312,849	0.09%
Hispanic American Males	28	2.10%	$4,627,543	1.30%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	149	11.19%	$15,957,167	4.47%
Caucasian Males	1,123	84.37%	$330,285,765	92.47%
TOTAL	1,331	100.00%	$357,178,758	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	1	0.08%	$312,849	0.09%
Minority Males	58	4.36%	$10,622,977	2.97%
Caucasian Females	149	11.19%	$15,957,167	4.47%
Caucasian Males	1,123	84.37%	$330,285,765	92.47%
TOTAL	1,331	100.00%	$357,178,758	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	59	4.43%	$10,935,826	3.06%
Women Business Enterprises	149	11.19%	$15,957,167	4.47%
Minority and Women Business Enterprises	**208**	**15.63%**	**$26,892,993**	**7.53%**
Caucasian Male Business Enterprises	1,123	84.37%	$330,285,765	92.47%
TOTAL	1,331	100.00%	$357,178,758	100.00%

2. Construction-Related Prime Contractor Utilization: All Contracts

Table 1.04 summarizes all contract dollars expended by State Colleges and Universities on construction-related prime contracts. Minority Business Enterprises received 0.09 percent of the construction-related prime contract dollars; Women Business Enterprises received 1.53 percent; and Caucasian Male Business Enterprises received 98.38 percent.

African American Businesses received none of the construction-related contracts during the study period.

Asian American Businesses received none of the construction-related contracts during the study period.

Hispanic American Businesses received 10 or 3.76 percent of the construction-related contracts during the study period, representing $129,006 or 0.09 percent of the contract dollars.

Native American Businesses received none of the construction-related contracts during the study period.

Minority Business Enterprises received 10 or 3.76 percent of the construction-related contracts during the study period, representing $129,006 or 0.09 percent of the contract dollars.

Women Business Enterprises received 34 or 12.78 percent of the construction-related contracts during the study period, representing $2,237,821 or 1.53 percent of the contract dollars.

Minority and Women Business Enterprises received 44 or 16.54 percent of the construction-related contracts during the study period, representing $2,366,827 or 1.62 percent of the contract dollars.

Caucasian Males Business Enterprises received 222 or 83.46 percent of the construction-related contracts during the study period, representing $143,297,997 or 98.38 percent of the contract dollars.

Table 1.04 Construction-Related Prime Contractor Utilization: All Contracts, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	$0	0.00%
Asian Americans	0	0.00%	$0	0.00%
Hispanic Americans	10	3.76%	$129,006	0.09%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	34	12.78%	$2,237,821	1.53%
Caucasian Males	222	83.46%	$143,449,997	98.38%
TOTAL	266	100.00%	$145,816,824	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	0	0.00%	$0	0.00%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	0	0.00%	$0	0.00%
Hispanic American Females	0	0.00%	$0	0.00%
Hispanic American Males	10	3.76%	$129,006	0.09%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	34	12.78%	$2,237,821	1.53%
Caucasian Males	222	83.46%	$143,449,997	98.38%
TOTAL	266	100.00%	$145,816,824	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	0	0.00%	$0	0.00%
Minority Males	10	3.76%	$129,006	0.09%
Caucasian Females	34	12.78%	$2,237,821	1.53%
Caucasian Males	222	83.46%	$143,449,997	98.38%
TOTAL	266	100.00%	$145,816,824	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	10	3.76%	$129,006	0.09%
Women Business Enterprises	34	12.78%	$2,237,821	1.53%
Minority and Women Business Enterprises	**44**	**16.54%**	**$2,366,827**	**1.62%**
Caucasian Male Business Enterprises	222	83.46%	$143,449,997	98.38%
TOTAL	266	100.00%	$145,816,824	100.00%

B. All State Colleges and Universities Prime Contracts under $500,000, by Industry

1. Construction Prime Contractor Utilization: Contracts under $500,000

Table 1.05 summarizes all contract dollars expended by State Colleges and Universities on construction prime contracts under $500,000. Minority Business Enterprises received 5.2 percent of the prime contract dollars; Women Business Enterprises received 12.15 percent; and Caucasian Male Business Enterprises received 82.65 percent.

African American Businesses received 11 or 0.88 percent of the construction contracts under $500,000 during the study period, representing $88,865 or 0.16 percent of the contract dollars.

Asian American Businesses received 14 or 1.12 percent of the construction contracts under $500,000 during the study period, representing $711,551 or 1.29 percent of the contract dollars.

Hispanic American Businesses received 25 or 2 percent of the construction contracts under $500,000 during the study period, representing 2,076,869 or 3.75 percent of the contract dollars.

Native American Businesses received none of the construction contracts under $500,000 during the study period.

Minority Business Enterprises received 50 or 4 percent of the construction contracts under $500,000 during the study period, representing $2,877,285 or 5.2 percent of the contract dollars.

Women Business Enterprises received 142 or 11.37 percent of the construction contracts under $500,000 during the study period, representing $6,726,884 or 12.15 percent of the contract dollars.

Minority and Women Business Enterprises received 192 or 15.37 percent of the construction contracts under $500,000 during the study period, representing $9,604,169 or 17.35 percent of the contract dollars.

Caucasian Male Business Enterprises received 1,057 or 84.63 percent of the construction contracts under $500,000 during the study period, representing $45,757,892 or 82.65 percent of the contract dollars.

Table 1.05 Construction Prime Contractor Utilization: Contracts under $500,000, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	11	0.88%	$88,865	0.16%
Asian Americans	14	1.12%	$711,551	1.29%
Hispanic Americans	25	2.00%	$2,076,869	3.75%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	142	11.37%	$6,726,884	12.15%
Caucasian Males	1,057	84.63%	$45,757,892	82.65%
TOTAL	1,249	100.00%	$55,362,061	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	11	0.88%	$88,865	0.16%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	14	1.12%	$711,551	1.29%
Hispanic American Females	1	0.08%	$312,849	0.57%
Hispanic American Males	24	1.92%	$1,764,020	3.19%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	142	11.37%	$6,726,884	12.15%
Caucasian Males	1,057	84.63%	$45,757,892	82.65%
TOTAL	1,249	100.00%	$55,362,061	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	1	0.08%	$312,849	0.57%
Minority Males	49	3.92%	$2,564,436	4.63%
Caucasian Females	142	11.37%	$6,726,884	12.15%
Caucasian Males	1,057	84.63%	$45,757,892	82.65%
TOTAL	1,249	100.00%	$55,362,061	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	50	4.00%	$2,877,285	5.20%
Women Business Enterprises	142	11.37%	$6,726,884	12.15%
Minority and Women Business Enterprises	**192**	**15.37%**	**$9,604,169**	**17.35%**
Caucasian Male Business Enterprises	1,057	84.63%	$45,757,892	82.65%
TOTAL	1,249	100.00%	$55,362,061	100.00%

2. Construction-Related Prime Contractor Utilization: Contracts under $500,000

Table1.06 summarizes all contract dollars expended by State Colleges and Universities on construction-related prime contracts under $500,000. Minority Business Enterprises received 0.89 percent of the prime contract dollars; Women Business Enterprises received 11.76 percent; and Caucasian Male Business Enterprises received 87.36 percent.

African American Businesses received none of the construction-related contracts under $500,000 during the study period.

Asian American Businesses received none of the construction-related contracts under $500,000 during the study period.

Hispanic American Businesses received 10 or 4.46 percent of the construction-related contracts under $500,000 during the study period, representing $129,006 or 0.89 percent of the contract dollars.

Native American Businesses received none of the construction-related contracts under $500,000 during the study period.

Minority Business Enterprises received 10 or 4.46 percent of the construction-related contracts under $500,000 during the study period, representing $129,006 or 0.89 percent of the contract dollars.

Women Business Enterprises received 33 or 14.73 percent of the construction-related contracts under $500,000 during the study period, representing $1,712,821 or 11.76 percent of the contract dollars.

Minority and Women Business Enterprises received 43 or 19.2 percent of the construction-related contracts under $500,000 during the study period, representing $1,841,827 or 12.64 percent of the contract dollars.

Caucasian Male Business Enterprises received 181 or 80.8 percent of the construction-related contracts under $500,000 during the study period, representing $12,727,542 or 87.36 percent of the contract dollars.

Table 1.06 Construction-Related Prime Contractor Utilization: Contracts under $500,000, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	$0	0.00%
Asian Americans	0	0.00%	$0	0.00%
Hispanic Americans	10	4.46%	$129,006	0.89%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	33	14.73%	$1,712,821	11.76%
Caucasian Males	181	80.80%	$12,727,542	87.36%
TOTAL	224	100.00%	$14,569,369	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	0	0.00%	$0	0.00%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	0	0.00%	$0	0.00%
Hispanic American Females	0	0.00%	$0	0.00%
Hispanic American Males	10	4.46%	$129,006	0.89%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	33	14.73%	$1,712,821	11.76%
Caucasian Males	181	80.80%	$12,727,542	87.36%
TOTAL	224	100.00%	$14,569,369	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	0	0.00%	$0	0.00%
Minority Males	10	4.46%	$129,006	0.89%
Caucasian Females	33	14.73%	$1,712,821	11.76%
Caucasian Males	181	80.80%	$12,727,542	87.36%
TOTAL	224	100.00%	$14,569,369	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	10	4.46%	$129,006	0.89%
Women Business Enterprises	33	14.73%	$1,712,821	11.76%
Minority and Women Business Enterprises	**43**	**19.20%**	**$1,841,827**	**12.64%**
Caucasian Male Business Enterprises	181	80.80%	$12,727,542	87.36%
TOTAL	224	100.00%	$14,569,369	100.00%

C. All State Colleges and Universities Prime Contracts under $19,500, by Industry

1. Construction Prime Contractor Utilization: Contracts under $19,500

Table 1.07 summarizes all contract dollars expended by State Colleges and Universities on construction prime contracts under $19,500. Minority Business Enterprises received 4.73 percent of the prime contract dollars; Women Business Enterprises received 10.36 percent; and Caucasian Male Business Enterprises received 84.91 percent.

African American Businesses received 11 or 1.41 percent of the construction contracts under $19,500 during the study period, representing $88,865 or 1.83 percent of the contract dollars.

Asian American Businesses received 10 or 1.29 percent of the construction contracts under $19,500 during the study period, representing $72,381 or 1.49 percent of the contract dollars.

Hispanic American Businesses received 11 or 1.41 percent of the construction contracts under $19,500 during the study period, representing $68,057 or 1.4 percent of the contract dollars.

Native American Businesses received none of the construction contracts under $19,500 during the study period.

Minority Business Enterprises received 32 or 4.11 percent of the construction contracts under $19,500 during the study period, representing $229,303 or 4.73 percent of the contract dollars.

Women Business Enterprises received 78 or 10.03 percent of the construction contracts under $19,500 during the study period, representing $502,530 or 10.36 percent of the contract dollars.

Minority and Women Business Enterprises received 110 or 14.14 percent of the construction contracts under $19,500 during the study period, representing $731,833 or 15.09 percent of the contract dollars.

Caucasian Male Business Enterprises received 668 or 85.86 percent of the construction contracts under $19,500 during the study period, representing $4,119,120 or 84.91 percent of the contract dollars.

Table 1.07 Construction Prime Contractor Utilization: Contracts under $19,500, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	11	1.41%	$88,865	1.83%
Asian Americans	10	1.29%	$72,381	1.49%
Hispanic Americans	11	1.41%	$68,057	1.40%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	78	10.03%	$502,530	10.36%
Caucasian Males	668	85.86%	$4,119,120	84.91%
TOTAL	778	100.00%	$4,850,953	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	11	1.41%	$88,865	1.83%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	10	1.29%	$72,381	1.49%
Hispanic American Females	0	0.00%	$0	0.00%
Hispanic American Males	11	1.41%	$68,057	1.40%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	78	10.03%	$502,530	10.36%
Caucasian Males	668	85.86%	$4,119,120	84.91%
TOTAL	778	100.00%	$4,850,953	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	0	0.00%	$0	0.00%
Minority Males	32	4.11%	$229,303	4.73%
Caucasian Females	78	10.03%	$502,530	10.36%
Caucasian Males	668	85.86%	$4,119,120	84.91%
TOTAL	778	100.00%	$4,850,953	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	32	4.11%	$229,303	4.73%
Women Business Enterprises	78	10.03%	$502,530	10.36%
Minority and Women Business Enterprises	**110**	**14.14%**	**$731,833**	**15.09%**
Caucasian Male Business Enterprises	668	85.86%	$4,119,120	84.91%
TOTAL	778	100.00%	$4,850,953	100.00%

2. Construction-Related Prime Contractor Utilization: Contracts under $19,500

Table 1.08 summarizes all contract dollars expended by State Colleges and Universities on construction-related prime contracts under $19,500. Minority Business Enterprises received 4.14 percent of the prime contract dollars; Women Business Enterprises received 13.23 percent; and Caucasian Male Business Enterprises received 82.63 percent.

African American Businesses received none of the construction-related contracts under $19,500 during the study period.

Asian American Businesses received none of the construction-related contracts under $19,500 during the study period.

Hispanic American Businesses received 8 or 5.88 percent of the construction-related contracts under $19,500 during the study period, representing $34,156 or 4.14 percent of the contract dollars.

Native American Businesses received none of the construction-related contracts under $19,500 during the study period.

Minority Business Enterprises received 8 or 5.88 percent of the construction-related contracts under $19,500 during the study period, representing $34,156 or 4.14 percent of the contract dollars.

Women Business Enterprises received 22 or 16.18 percent of the construction-related contracts under $19,500 during the study period, representing $109,045 or 13.23 percent of the contract dollars.

Minority and Women Business Enterprises received 30 or 22.06 percent of the construction-related contracts under $19,500 during the study period, representing $143,201 or 17.37 percent of the contract dollars.

Caucasian Male Business Enterprises received 106 or 77.94 percent of the construction-related contracts under $19,500 during the study period, representing $681,265 or 82.63 percent of the contract dollars.

Table 1.08 Construction-Related Prime Contractor Utilization: Contracts under $19,500, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	$0	0.00%
Asian Americans	0	0.00%	$0	0.00%
Hispanic Americans	8	5.88%	$34,156	4.14%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	22	16.18%	$109,045	13.23%
Caucasian Males	106	77.94%	$681,265	82.63%
TOTAL	136	100.00%	$824,467	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	0	0.00%	$0	0.00%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	0	0.00%	$0	0.00%
Hispanic American Females	0	0.00%	$0	0.00%
Hispanic American Males	8	5.88%	$34,156	4.14%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	22	16.18%	$109,045	13.23%
Caucasian Males	106	77.94%	$681,265	82.63%
TOTAL	136	100.00%	$824,467	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	0	0.00%	$0	0.00%
Minority Males	8	5.88%	$34,156	4.14%
Caucasian Females	22	16.18%	$109,045	13.23%
Caucasian Males	106	77.94%	$681,265	82.63%
TOTAL	136	100.00%	$824,467	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	8	5.88%	$34,156	4.14%
Women Business Enterprises	22	16.18%	$109,045	13.23%
Minority and Women Business Enterprises	**30**	**22.06%**	**$143,201**	**17.37%**
Caucasian Male Business Enterprises	106	77.94%	$681,265	82.63%
TOTAL	136	100.00%	$824,467	100.00%

2

SUBCONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

The objective of the subcontractor utilization analysis of construction and construction-related services contracts is to determine the level of minority and woman-owned business enterprise (M/WBE) subcontractor utilization compared to non-M/WBE subcontractor utilization. The subcontractor utilization analysis presents the choices made by prime contractors in their selection of M/WBE and non-M/WBE subcontractors on State Colleges and Universities prime contracts.

The subcontractor utilization analysis includes construction and construction-related contracts awarded by State Colleges and Universities between July 1, 2000 and June 30, 2002. State Colleges and Universities contracts were analyzed separately from the State Agencies, Authorities, and Commissions.

II. SUBCONTRACTOR UTILIZATION DATA SOURCES

The first step in compiling subcontractor data was the determination of the size of the prime contracts to be researched. The research in identifying subcontractor utilization was limited to prime contracts $50,000 and greater. Once the threshold was defined, the State Colleges and Universities were surveyed to determine if there were subcontractor records on file for prime contracts $50,000 and greater.

It was determined that there was no centralized source for the State Colleges and Universities' construction and construction-related subcontracts, and few State Colleges and Universities had complete subcontractor records for their prime contracts. While none of the State Colleges and Universities maintained comprehensive subcontractor records,

several could provide subcontractor award records for some of their prime contracts. In collecting the payment and award data needed for all subcontractors, a number of strategies were employed.

Six State Colleges and Universities have compiled subcontracting data that could be provided in an electronic format. The six State Colleges and Universities which provided such records are listed below:

- The College of New Jersey
- New Jersey City University
- Ramapo College
- Rowan University
- Rutgers University
- University Medicine & Dentistry of New Jersey

After reviewing the electronic files provided, it was determined that additional research should be performed to review project files at three of the six State Colleges and Universities. Hard copy records were copied on site at seven State Colleges and Universities and the relevant information was entered into an electronic file. State Colleges and Universities where hard copy subcontractor records were reviewed are listed below:

- The College of New Jersey
- Kean University
- Montclair State University
- New Jersey Institute of Technology
- Rowan University
- Rutgers University
- William Paterson University

The Office of Contract Compliance maintained records of subcontractors, which had been submitted by prime contractors in response to the requirement to file Equal Employment Opportunity forms. There were only a limited number of these records which included the project award date, contract, title, and subcontractors.

Once the electronic and hard copy subcontractor records were compiled, the prime contractors were surveyed to collect payment data for the identified subcontracts and secure information on any utilized subcontractors which had not been identified through documentary research.

Identified subcontractors were contacted to verify their subcontract dollars. As a result of this intensive effort to collect subcontracting subcontracts, a total of 715 subcontracts were identified in the two industries.

III. STATE COLLEGES AND UNIVERSITIES SUBCONTRACTOR UTILIZATION ANALYSIS: ALL SUBCONTRACTS

As depicted in Table 2.01 below, the State Colleges and Universities prime contractors issued 715 construction and construction-related subcontracts during the July 1, 2000 to June 30, 2002 study period. These included 319 for construction contracts and 396 for construction-related contracts.

Also, the State Colleges and Universities prime contractors expended $167,997,451 construction and construction-related subcontract dollars during the study period, with $93,541,355 for construction contracts and $74,456,096 for construction-related contracts.

Table 2.01 Total Construction and Construction-Related Subcontracts and Dollars Expended between July 1, 2000 and June 30, 2002

State Colleges and Universities	Total Number of Subcontracts	Total Dollars Expended
Construction	319	$93,541,355
Construction-Related	396	$74,456,096
Total	715	$167,997,451

State Colleges and Universities Subcontractor Utilization

1. State Colleges and Universities Construction Subcontract Utilization: All Subcontracts

Table 2.02 depicts construction subcontracts awarded by prime contractors. Minority Business Enterprises received 3.81 percent of the construction subcontract dollars; Women Business Enterprises received 7.25 percent; and Caucasian Male Business Enterprises received 88.94 percent.

African American Businesses received 4 or 1.25 percent of the construction subcontracts during the study period, representing $426,480 or 0.46 percent of the subcontract dollars.

Asian American Businesses received 4 or 1.25 percent of the construction subcontracts during the study period, representing $381,825 or 0.41 percent of the subcontract dollars.

Hispanic American Businesses received 12 or 3.76 percent of the construction subcontracts during the study period, representing $2,753,351 or 2.94 percent of the subcontract dollars.

Native American Businesses received none of the construction subcontracts during the study period.

Minority Business Enterprises received 20 or 6.27 percent of the construction subcontracts during the study period, representing $3,561,656 or 3.81 percent of the subcontract dollars.

Women Business Enterprises received 18 or 5.64 percent of the construction subcontracts during the study period, representing $6,781,374 or 7.25 percent of the subcontract dollars.

Minority and Women Business Enterprises received 38 or 11.91 percent of the construction subcontracts during the study period, representing $10,343,030 or 11.06 percent of the subcontract dollars.

Caucasian Male Business Enterprises received 281 or 88.09 percent of the construction subcontracts during the study period, representing $83,198,324 or 88.94 percent of the subcontract dollars.

Table 2.02 Construction Utilization: All Subcontracts, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	4	1.25%	$426,480	0.46%
Asian Americans	4	1.25%	$381,825	0.41%
Hispanic Americans	12	3.76%	$2,753,351	2.94%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	18	5.64%	$6,781,374	7.25%
Caucasian Males	281	88.09%	$83,198,324	88.94%
TOTAL	319	100.00%	$93,541,355	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	4	1.25%	$426,480	0.46%
Asian American Females	1	0.31%	$57,469	0.06%
Asian American Males	3	0.94%	$324,356	0.35%
Hispanic American Females	4	1.25%	$205,054	0.22%
Hispanic American Males	8	2.51%	$2,548,297	2.72%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	18	5.64%	$6,781,374	7.25%
Caucasian Males	281	88.09%	$83,198,324	88.94%
TOTAL	319	100.00%	93,541,355	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	5	1.57%	$262,523	0.28%
Minority Males	15	4.70%	$3,299,133	3.53%
Caucasian Females	18	5.64%	$6,781,374	7.25%
Caucasian Males	281	88.09%	$83,198,324	88.94%
TOTAL	319	100.00%	$93,541,355	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	20	6.27%	$3,561,656	3.81%
Women Business Enterprises	18	5.64%	$6,781,374	7.25%
Minority and Women Business Enterprises	**38**	**11.91%**	**$10,343,030**	**11.06%**
Caucasian Male Business Enterprises	281	88.09%	$83,198,324	88.94%
TOTAL	319	100.00%	$93,541,355	100.00%

2. State Colleges and Universities Construction-Related Subcontracts July 1, 2000 to June 30, 2002

Table 2.03 depicts construction-related subcontracts awarded by prime contractors. Minority Business Enterprises received 4 percent of the construction-related subcontract dollars; Women Business Enterprises received 20.53 percent; and Caucasian Male Business Enterprises received 75.46 percent.

African American Businesses received 3 or 0.76 percent of the construction-related subcontracts during the study period, representing $350,008 or 0.47 percent of the subcontract dollars.

Asian American Businesses received 15 or 3.79 percent of the construction-related subcontracts during the study period, representing $2,165,481 or 2.91 percent of the subcontract dollars.

Hispanic American Businesses received 6 or 1.52 percent of the construction-related subcontracts during the study period, representing $466,222 or 0.63 percent of the subcontract dollars.

Native American Businesses received none of the construction-related subcontracts during the study period.

Minority Business Enterprises received 24 or 6.06 percent of the construction-related subcontracts during the study period, representing $2,981,711 or 4 percent of the subcontract dollars.

Women Business Enterprises received 54 or 13.64 percent of the construction-related subcontracts during the study period, representing $15,289,014 or 20.53 percent of the subcontract dollars.

Minority and Women Business Enterprises received 78 or 19.7 percent of the construction-related subcontracts during the study period, representing $18,270,725 or 24.54 percent of the subcontract dollars.

Caucasian Male Business Enterprises received 318 or 80.3 percent of construction-related subcontract dollars during the study period, representing $56,185,372 or 75.46 percent of the subcontract dollars.

Table 2.03 Construction-Related Utilization: All Subcontracts, July 1, 2000 to June 30, 2002

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	3	0.76%	$350,008	0.47%
Asian Americans	15	3.79%	$2,165,481	2.91%
Hispanic Americans	6	1.52%	$466,222	0.63%
Native Americans	0	0.00%	$0	0.00%
Caucasian Females	54	13.64%	$15,289,014	20.53%
Caucasian Males	318	80.30%	$56,185,372	75.46%
TOTAL	396	100.00%	$74,456,096	100.00%
Ethnicity and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
African American Females	0	0.00%	$0	0.00%
African American Males	3	0.76%	$350,008	0.47%
Asian American Females	0	0.00%	$0	0.00%
Asian American Males	15	3.79%	$2,165,481	2.91%
Hispanic American Females	1	0.25%	$2,300	0.00%
Hispanic American Males	5	1.26%	$463,922	0.62%
Native American Females	0	0.00%	$0	0.00%
Native American Males	0	0.00%	$0	0.00%
Caucasian Females	54	13.64%	$15,289,014	20.53%
Caucasian Males	318	80.30%	$56,185,372	75.46%
TOTAL	396	100.00%	74,456,096	100.00%
Minority and Gender	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Females	1	0.25%	$2,300	0.00%
Minority Males	23	5.81%	$2,979,411	4.00%
Caucasian Females	54	13.64%	$15,289,014	20.53%
Caucasian Males	318	80.30%	$56,185,372	75.46%
TOTAL	396	100.00%	$74,456,096	100.00%
Minority and Women	**Number of Contracts**	**Percent of Contracts**	**Amount of Dollars**	**Percent of Dollars**
Minority Business Enterprises	24	6.06%	$2,981,711	4.00%
Women Business Enterprises	54	13.64%	$15,289,014	20.53%
Minority and Women Business Enterprises	**78**	**19.70%**	**$18,270,725**	**24.54%**
Caucasian Male Business Enterprises	318	80.30%	$56,185,372	75.46%
TOTAL	396	100.00%	$74,456,096	100.00%

3

MARKET AREA ANALYSIS

I. MARKET AREA DEFINITION

A. Legal Criteria for Geographic Market Area

The Supreme Court's decision in *Richmond v. Croson*[1] firmly established that programs which set aside a certain percentage of state and local contracts for minority and woman-owned firms must be supported by *evidence of past discrimination in the award of their contracts.*

Prior to the *Croson* decision, many agencies and jurisdictions implementing race-conscious programs had done so without developing a detailed public record to document discrimination in their award of contracts. Instead, they relied upon common knowledge and widely-recognized patterns of discrimination, both local and national.[2]

Croson established that a local government should not rely on society-wide discrimination as the basis for a race-based program, but should instead identify discrimination within its own jurisdiction.[3] In *Croson*, the Court found the City of Richmond's Minority Business Enterprise (MBE) construction program to be unconstitutional due to insufficient evidence of discrimination in the *local construction market.*

Croson was explicit in saying that the *local construction market* was the appropriate geographical framework within which to perform the statistical comparison of business availability and business utilization. Therefore, the identification of the local market area

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1 *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989).

2 *United Steelworkers v. Weber*, 433 U.S. 193, 198, n. 1 (1979).

3 *Croson*, 488 U.S. at 497.

is particularly important as it establishes the parameters within which to conduct a disparity study.

B. Application of the Croson Standard

While *Croson* did much to emphasize the importance of local market area, it provided little assistance in defining its parameters. However, it is informative to review the Court's definition of market area in the City of Richmond context. In discussing the scope of the constitutional violation that must be investigated, the Court interchangeably used the terms "relevant market,"[4] "Richmond construction industry,"[5] and "city's construction industry"[6] to define the proper scope of the examination of the existence of discrimination. This substitution of terms lends support to a definition of market area that coincides with the boundaries of a jurisdiction.

In analyzing the cases following *Croson,* a pattern emerges which provides us with additional guidance. The body of cases examining market area support a definition of market area that is reasonable.[7] In *Cone Corporation v. Hillsborough County*,[8] the Eleventh Circuit Court of Appeals considered a study in support of Florida's Hillsborough County MBE program, which used minority contractors located in the County as the measure of available firms. The program was found to be constitutional under the compelling governmental interest prong of strict scrutiny.

Hillsborough County's program was based on statistics indicating that specific discrimination existed in the construction contracts awarded by the County, not in the construction industry in general. Hillsborough County had extracted data from within its own jurisdictional boundaries and assessed the percentage of minority businesses available in Hillsborough County. The court stated that the study was properly conducted within the "local construction industry."[9]

Similarly, in *Associated General Contractors v. Coalition for Economic Equity (AGCCII)*,[10] the Ninth Circuit Court of Appeals found the City and County of San Francisco's MBE

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4 *Croson*, 488 U.S. at 471.

5 *Id.* at 500.

6 *Id.* at 470.

7 See, e.g., *Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513, 1528 (10th Cir. 1994).

8 *Cone Corp. v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990).

9 *Id.* at 915.

10 *Associated General Contractors v. Coalition for Economic Equity*, 950 F.2d 1401 (9th Cir. 1991).

program to have the factual predicate necessary to survive strict scrutiny. The MBE program was supported by a study that assessed the number of available MBE contractors within the City and County of San Francisco. The court found it appropriate to use the City and County as the relevant market area within which to conduct a disparity study.[11]

In *Coral Construction v. King County*, the Ninth Circuit Court of Appeals held that, "a set-aside program is valid only if actual, identifiable discrimination has occurred within the local industry affected by the program."[12] In support of its MBE program, Washington's King County offered studies compiled by other jurisdictions, including entities completely within the County or coterminous with the boundaries of the County, as well as a separate jurisdiction completely outside of the County. The plaintiffs contended that *Croson* required King County to compile its own data and cited *Croson* to prohibit data sharing.

The court found that data sharing could potentially lead to the improper use of societal discrimination data as the factual basis for a local MBE program and that innocent third parties could be unnecessarily burdened if an MBE program were based on outside data.

However, the court also found that the data from entities within the County and from coterminous jurisdictions to be relevant to discrimination in the County and posed no risk of unfairly burdening innocent third parties. As for data gathered by a neighboring county, the court concluded that this data could not be used to support King County's MBE program. The court noted, "It is vital that a race-conscious program align itself as closely to the scope of the problem legitimately sought to be rectified by the governmental entity. To prevent overbreadth, the enacting jurisdiction should limit its factual inquiry to the presence of discrimination within its own boundaries."[13] However, the court did acknowledge that the "world of contracting does not conform itself neatly to jurisdictional boundaries."[14]

In other situations courts have approved a definition of market area that extends beyond a jurisdiction's boundaries. In *Concrete Works v. City and County of Denver*,[15] the court directly addressed the issue of whether extra-jurisdictional evidence of discrimination can be used to determine "local market area" for a disparity study. In *Concrete Works*, the defendant relied on evidence of discrimination in the six-county Denver Metropolitan Statistical Area (MSA) to support its MBE program. Relying on *Croson*, plaintiffs argued that the extra jurisdictional evidence should not be considered. The court disagreed, finding

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11 *Id.* at 1415.

12 *Coral Construction v. King County*, 941 F.2d 910, 916 (9th Cir. 1991).

13 *Id.* at 917.

14 *Ibid.*

15 *Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513 , 1528 (10th Cir. 1994).

that *Croson*'s concern was that cities not use vaguely defined societal discrimination as the factual predicate for a disparity study. The court explained that evidence of discrimination should be specific so that race-conscious programs are designed to minimize burdens upon nonculpable third parties.

Critical to the court's acceptance of the Denver MSA as the relevant local market was the finding that more than 80 percent of construction and design contracts awarded by Denver were awarded to contractors within the MSA. Another consideration was that Denver's analysis was based on U.S. Census data, which was available for the Denver MSA, but not for the city itself. There was no undue burden placed on nonculpable parties, as Denver had conducted a majority of its construction contracts within the area defined as the local market. Citing *AGCCII,*[16] the court noted, "that any plan that extends race-conscious remedies beyond territorial boundaries must be based on very specific findings that actions that the city has taken in the past have visited racial discrimination on such individuals."[17]

Similarly, New York State conducted a disparity study in which the geographic market consisted of New York State and eight counties in northern New Jersey. The geographic market was defined as the area encompassing the location of businesses which received more than 90 percent of the dollar value of all contracts awarded by the agency.[18]

State and local governments must pay special attention to the geographical scope of their disparity studies. *Croson* determined that the statistical analysis should focus on the number of qualified minority individuals or qualified minority business owners in the government's marketplace.[19] The text of *Croson* itself suggests that the geographical boundaries of the government entity comprise an appropriate market area, and other courts have agreed with this finding. In addition, other cases have approved the use of a percentage of the dollars spent by an agency on contracting.

It follows then that an entity may limit consideration of evidence of discrimination within its own jurisdiction. Under certain circumstances, extra-jurisdictional evidence can be used if the percentage of governmental dollars supports such boundaries. Taken collectively, the cases support a definition of market area that is reasonable rather than dictating a specific formula. In other words, since *Croson* and its progeny did not provide a bright line rule for local market area, that determination should be fact-based and case-specific.

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16 *AGCCII*, 950 F.2d at 1401.

17 *Concrete Works*, 36 F.3d at 1528.

18 *Opportunity Denied! New York State's Study*, 26 Urban Lawyer No. 3, Summer 1994.

19 *Croson*, 488 U.S. at 501.

II. STUDY'S MARKET AREA

The clear implication of the market area cases is that in applying the test of reasonableness, one can limit the area to that of the jurisdiction if the facts support it. The following table depicts the overall number of construction and construction-related contracts and the dollar value of contracts awarded by the State Colleges and Universities between July 1, 2000 and June 30, 2002. As depicted in the table, the State Colleges and Universities awarded 1,597 prime contracts valued at $502,995,582. Of these contracts, 1,451 or 90.86 percent were awarded to New Jersey-based companies. The dollar value of those contracts was $471,359,360 or 93.71 percent of all dollars. For construction prime contracts, 1,232 or 92.56 percent were awarded to New Jersey-based companies. The dollar value of those contracts was $330,019,713 or 92.4 percent of the total construction dollars. Of the construction-related services prime contracts, 219 or 82.33 percent of the contracts were awarded to New Jersey-based companies. The dollar value of those contracts was $141,339,647 or 96.93 percent of the total construction-related dollars. Given that geographical distribution, the State of New Jersey is determined to be this study's geographical market area.

Table 3.01 State Colleges and Universities Market Area: July 1, 2000 to June 30, 2002

Market Area	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Combined Types of Work				
Market Area: State of New Jersey	1,451	90.86%	$471,359,360	93.71%
Outside Market Area	146	9.14%	$31,636,222	6.29%
Total	1,597	100.00%	$502,995,582	100.00%
Construction				
Market Area: State of New Jersey	1,232	92.56%	$330,019,713	92.40%
Outside Market Area	99	7.44%	$27,159,045	7.60%
Total	1,331	100.00%	$357,178,758	100.00%
Construction-Related Services				
Market Area: State of New Jersey	219	82.33%	$141,339,647	96.93%
Outside Market Area	47	17.67%	$4,477,178	3.07%
Total	266	100.00%	$145,816,824	100.00%

4

AVAILABILITY ANALYSIS

I. INTRODUCTION

According to *Croson*, availability is defined as businesses in the jurisdiction's market area that are willing and able to provide goods or services the jurisdiction procures.[1] To determine availability, minority and woman-owned business enterprises (M/WBEs) and non-M/WBEs within the jurisdiction's market area that are willing and able to perform its contracts need to be enumerated. When considering sources for determining the number of willing and able M/WBEs and non-M/WBEs, the selection must be based on whether two significant aspects about the population in question can be gauged from the various sources. The source must indicate first the firm's interest in doing business with the local government, as implied by the term "willing," and second, the willing business' capacity to provide goods or services, as implied by the term "able."

The determination of availability must follow from the definition of an entity's market area. The market area analysis presented in Chapter 3 defined the State of New Jersey (State) as the market area for State Colleges and Universities because the majority of businesses utilized are domiciled within the State's jurisdiction.

The compiled list of available businesses includes minority, women, and Caucasian male-owned businesses in the areas of construction and construction-related services. Separate availability lists were compiled for prime contractors and subcontractors in those industries.

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[1] *Croson*, 488 U.S. at 509.

II. SOURCES OF POTENTIALLY WILLING AND ABLE PRIME CONTRACTORS

A. Prime Contractor Sources

M/WBEs and non-M/WBEs willing and able to do business with the State were identified from various sources. Businesses that demonstrated willingness to contract with the State were identified from State and other agency sources. The willingness of businesses identified from non-governmental sources had to be determined. Table 4.01 lists the sources used. These sources include government and private listings of M/WBEs and non-M/WBEs in the market area.

Table 4.01 Summary of Prime Contractor Availability Data Sources

Source of Record	Type of Information
State of New Jersey and Other Government Records	
State of New Jersey: State Agency, Authority, Commission, College, and University Vendors	M/WBEs and Non-M/WBEs
State of New Jersey: State Agency, Authority, Commission, College, and University Utilized Businesses	M/WBEs and Non-M/WBEs
State of New Jersey: State Agency, Authority, Commission, College, and University Unsuccessful Bidders	M/WBEs and Non-M/WBEs
State of New Jersey: State Agency, Authority, Commission, College, and University Pre-qualification Lists	M/WBEs and Non-M/WBEs
Government Agency Certification Lists	
Department of Commerce Certification List	M/WBEs and Non-M/WBEs
New Jersey Department of Transportation Certification List	M/WBEs and Non-M/WBEs
The Port Authority of New York and New Jersey Certification Database	M/WBEs
United States Small Business Administration PRO-Net Database	M/WBEs and Non-M/WBEs
Business Outreach Events	
State of New Jersey Public Hearings' Attendee Lists	M/WBEs and Non-M/WBEs
State of New Jersey Business Surveys	M/WBEs and Non-M/WBEs
Trade Association Membership Lists	
Associated General Contractors	M/WBEs and Non-M/WBEs

Table 4.01 Summary of Prime Contractor Availability Data Sources

Source of Record	Type of Information
Atlantic Plumbing & Heating	M/WBEs and Non-M/WBEs
Better Business Bureau	M/WBEs and Non-M/WBEs
Builders League of South Jersey	M/WBEs and Non-M/WBEs
Building Construction Association of NJ	M/WBEs and Non-M/WBEs
Maple Shade Progress Business Association	M/WBEs and Non-M/WBEs
New Jersey Association of Women Business Owners	M/WBEs
South Jersey Mechanic Contractors Association	M/WBEs and Non-M/WBEs
Chamber of Commerce Membership and Business Directory Lists	
Asian Indian Chamber of Commerce	M/WBEs
Atlantic County Chamber of Commerce	M/WBEs and Non-M/WBEs
Avalon Chamber of Commerce	M/WBEs and Non-M/WBEs
Bayshore New Jersey	M/WBEs and Non-M/WBEs
Bloomfield Chamber of Commerce	M/WBEs and Non-M/WBEs
Bridgeton Chamber of Commerce	M/WBEs and Non-M/WBEs
Brigantine Chamber of Commerce	M/WBEs and Non-M/WBEs
Cherry Hill Chamber of Commerce	M/WBEs and Non-M/WBEs
Chinese American Chamber of Commerce	M/WBEs
Cranford Chamber of Commerce	M/WBEs and Non-M/WBEs
Dennis Township Chamber of Commerce	M/WBEs and Non-M/WBEs
Denville Chamber of Commerce	M/WBEs and Non-M/WBEs
East Brunswick Regional Chamber of Commerce	M/WBEs and Non-M/WBEs
Eastern Monmouth Chamber of Commerce	M/WBEs and Non-M/WBEs
Elmwood Park Chamber of Commerce	M/WBEs and Non-M/WBEs
Franklin Township Chamber of Commerce	M/WBEs and Non-M/WBEs
Garfield Chamber of Commerce	M/WBEs and Non-M/WBEs
Glassboro Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Elizabeth Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Fort Lee Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Hammonton Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Mercer County Chamber of Commerce	M/WBEs and Non-M/WBEs
Greater Vineland Chamber of Commerce	M/WBEs and Non-M/WBEs
Highland Park Chamber of Commerce	M/WBEs and Non-M/WBEs
Hope Chamber of Commerce	M/WBEs and Non-M/WBEs
Howell Chamber of Commerce	M/WBEs and Non-M/WBEs

Table 4.01 Summary of Prime Contractor Availability Data Sources

Source of Record	Type of Information
Hudson Chamber of Commerce	M/WBEs and Non-M/WBEs
Irvington Chamber of Commerce	M/WBEs and Non-M/WBEs
Jackson Chamber Member Directory	M/WBEs and Non-M/WBEs
Jefferson Township Chamber of Commerce	M/WBEs and Non-M/WBEs
Lower Township Chamber of Commerce	M/WBEs and Non-M/WBEs
Main Street Hammonton Businesses	M/WBEs and Non-M/WBEs
Matawan Aberdeen Chamber of Commerce	M/WBEs and Non-M/WBEs
Metropolitan Trenton African American Chamber of Commerce	M/WBEs
Metuchen Chamber of Commerce	M/WBEs and Non-M/WBEs
Middlesex County Regional Chamber of Commerce	M/WBEs and Non-M/WBEs
Millburn Chamber of Commerce	M/WBEs and Non-M/WBEs
Montville Chamber of Commerce	M/WBEs and Non-M/WBEs
North Jersey Chamber of Commerce	M/WBEs and Non-M/WBEs
North Essex Chamber of Commerce	M/WBEs and Non-M/WBEs
Ocean Township Chamber of Commerce	M/WBEs and Non-M/WBEs
Paramus Chamber of Commerce	M/WBEs and Non-M/WBEs
Paulsboro Chamber of Commerce	M/WBEs and Non-M/WBEs
Perth Amboy Chamber of Commerce	M/WBEs and Non-M/WBEs
Phillipsburg Chamber of Commerce	M/WBEs and Non-M/WBEs
Piscataway-Middlesex-South Plainfield Chamber of Commerce	M/WBEs and Non-M/WBEs
Point Pleasant Chamber of Commerce	M/WBEs and Non-M/WBEs
Pompton Lakes Chamber of Commerce	M/WBEs and Non-M/WBEs
Regional Business Partnership Directory	M/WBEs and Non-M/WBEs
Ridgewood Chamber of Commerce	M/WBEs and Non-M/WBEs
Ringwood Chamber of Commerce	M/WBEs and Non-M/WBEs
Salem County Chamber of Commerce	M/WBEs and Non-M/WBEs
Sea Isle City Chamber of Commerce	M/WBEs and Non-M/WBEs
Somerset County Business Partnership	M/WBEs and Non-M/WBEs
Southern New Jersey Chamber of Commerce	M/WBEs and Non-M/WBEs
Tom's River Ocean County Chamber of Commerce	M/WBEs and Non-M/WBEs
Westfield Area Chamber of Commerce	M/WBEs and Non-M/WBEs
Westfield Business Directory	M/WBEs and Non-M/WBEs

B. Determination of Willingness

The term "willingness" refers to a firm's indicated interest in doing government contracting. This term, as it has been used in *Croson* and its progeny, is addressed in detail in the Legal Analysis chapter in Volume 1. Companies secured through the State of New Jersey and other governmental agencies, listed in Table 4.01, have demonstrated their willingness to perform on public contracts. These businesses had either bid on State projects, sought government contracts, secured government certification, or responded to the outreach campaign conducted in conjunction with this Disparity Study and other State outreach programs. It is therefore presumed that companies that sought government contracts are willing to provide the goods and services needed by the State.

Companies from the non-governmental agency membership lists in Table 4.01 were not presumed to be willing, based on the *Croson* criteria. These companies were surveyed to determine their willingness to bid on State contracts. The businesses that indicated a willingness when surveyed, were added to the database used to create a unique list of willing businesses in the State's market area. The surveyed businesses that indicated an interest in contracting with the State were combined with the businesses from the State and other government lists, certification lists, and outreach lists to compile this unique list of willing businesses.

C. Distribution of Available Prime Contractors by Source, Ethnicity, and Gender

Tables 4.02 through 4.04 represent the distribution of available prime contractors. The sources are ranked, with the highest ranking assigned to the contractors utilized by the State. Each company is *counted only once in the distribution*. For example, a utilized prime contractor is counted once in the prime contractor utilization source and is not counted a second time, even though the company may have been certified or identified as a bidder.

As noted in Table 4.02, 98.24 percent of the prime contractors available in the two industries combined were obtained from public agencies, certification lists, and business outreach events. Companies identified through the willingness survey represented 1.76 percent of the willing firms.

Table 4.02 Distribution of Prime Contractor Availability Data Sources: All Construction and Construction-Related

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor and Subcontractor Utilization	8.92%	19.25%	16.43%
Pre-Qualified Contractors	32.39%	66.86%	57.47%
Bidders Lists	0.31%	1.82%	1.41%
Certification Lists	54.36%	9.07%	21.41%
US SBA Pro-net	2.09%	0.64%	1.04%
Public Hearing Attendees	0.26%	0.57%	0.48%
Subtotal	**98.33%**	**98.20%**	**98.24%**
Willingness Survey	1.67%	1.80%	1.76%
Grand Total*	**100.00%**	**100.00%**	**100.00%**

*The percentages may not total 100 percent due to rounding

The distribution of available businesses by source was performed for each industry. As noted in Table 4.03, 98.18 percent of the construction prime contractors identified were derived from public agencies, certification lists, and business outreach sources. Companies identified through the willingness survey represented 1.82 percent of the willing firms.

Table 4.03 Distribution of Prime Contractor Availability Sources: Construction

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor and Subcontractor Utilization	9.93%	21.06%	18.06%
Pre-Qualified Contractor	32.50%	65.00%	56.27%
Bidders Lists	0.43%	2.39%	1.86%
Certification Lists	52.86%	8.74%	20.60%
US SBA Pro-net	2.14%	0.47%	0.92%
Public Hearing Attendees	0.21%	0.55%	0.46%
Subtotal	**98.07%**	**98.21%**	**98.18%**
Willingness Survey	1.93%	1.79%	1.82%
Grand Total*	**100.00%**	**100.00%**	**100.00%**

*The percentages may not total 100 percent due to rounding

Table 4.04 depicts the data sources for construction-related prime contractors. As noted, 98.54 percent of the prime contractors were obtained from public agencies, certification lists, and business outreach sources. Companies identified through the willingness survey represented 1.46 percent of the willing firms.

Table 4.04 Distribution of Prime Contractor Availability Sources: Construction-Related

Sources	M/WBEs Percentage	Non M/WBEs Percentage	Source Percentage
Prime Contractor and Subcontractor Utilization	8.07%	15.68%	13.40%
Pre-Qualified Contractor	35.46%	71.29%	60.55%
Bidders Lists	0%	0.14%	0.10%
Certification Lists	53.61%	9.50%	22.72%
US SBA Pro-net	1.68%	1.08%	1.26%
Public Hearing Attendees	0.34%	0.58%	0.50%
Subtotal	**99.16%**	**98.27%**	**98.54%**
Willingness Survey	0.84%	1.73%	1.46%
Grand Total*	**100.00%**	**100.00%**	**100.00%**

*The percentages may not total 100 percent due to rounding

III. CAPACITY

The second component of the availability requirement set forth in *Croson* is a firm's capacity or ability to perform the contracts awarded by an agency.[2] However, capacity requirements are not delineated in *Croson*. In fact, a standard for capacity has only been addressed in a few subsequent cases. Each case where capacity has been considered has involved large, competitively bid, construction prime contracts. Therefore, in order to assess the capacity of willing market area firms to do business with the State, four approaches have been employed:

- the size of the State's awarded prime contracts is analyzed to determine the capacity needed to perform the average awarded contract
- The largest contracts awarded to M/WBEs were identified to determine demonstrated ability to win large, competitively bid contracts
- the M/WBE certification process was assessed to determine if it meets the standard set in *Contractors Ass'n of Eastern Pennsylvania v. City of Philadelphia (Philadelphia),*[3] which found certification to be a measure of capacity
- The disparity analysis has been restricted to an examination of prime contract awards $500,000 and under to limit the capacity required to perform contracts subjected to the statistical analysis

This methodology was sufficient to assess the capacity of willing market area firms to do business with the State.

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2 *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989).

3 *Contractors Ass'n of Eastern Pennsylvania v. City of Philadelphia*, 6 F.3d 990 (3d Cir. 1993), on remand, 893 F. Supp. 419 (E.D. Penn. 1995), affd, 91 F.3d 586 (3d Cir. 1996).

A. Size of Prime Contracts Analyzed

In *Associated General Contractors of California v. City of Columbus* and *Engineering Contractors Ass'n of South Florida v. Metropolitan Dade County*, the courts were primarily concerned with the capacity analysis of available bidders for large, competitively bid contracts. It should also be noted that the focus in both cases was on the bidding company's size and ability to perform on large, competitively bid construction contracts.[4]

The State's construction and construction-related services contracts were analyzed to determine the capacity required to perform the contracts and the capacity demonstrated by prime contractors regarding ethnic and gender groups. The size distribution illustrates the fact that limited capacity is needed to perform the overwhelming majority of the State Colleges and Universities' contracts.

1. Construction Prime Contracts, by Size

Table 4.05 depicts the State Colleges and Universities' construction contracts awarded within dollar ranges. The percentage of contracts valued under $25,000 was 63.19 percent, the percentage of those under $100,000 was 82.05 percent, and the percentage of those under $500,000 was 93.85 percent. A P-value calculation was conducted to determine the probability that the findings comprise a pattern or a chance occurrence.

The P-value of <0.05 denotes a significant difference in the size of construction contract dollars across ethnic/gender groups.

2. Construction-Related Services Prime Contracts, by Size

Table 4.06 depicts the State Colleges and Universities' construction-related contracts awarded within dollar ranges. The percentage of contracts valued under $25,000 was 55.26 percent; the percentage of those under $100,000 was 65.79 percent; and the percentage of those under $500,000 was 84.21 percent.

The P-value of >0.05 denotes an insignificant difference in the size of construction-related contract dollars across ethnic/gender groups.

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[4] *Associated General Contractors of California v. City of Columbus*, 936 F. Supp. 1363 (S.D. Ohio 1996) and *Engineering Contractors Ass'n of South Florida v. Metropolitan Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996), aff'd 122 F.3d 895 (11th Cir. 1997).

Table 4.05 Construction Prime Contracts by Size: July 1, 2000 to June 30, 2002

Size	Caucasian				Minority					
	Females		Males		Females		Males		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
$1 - $24,999	82	55.03%	726	64.65%	0	0.00%	33	56.90%	841	63.19%
$25,000 - $49,999	24	16.11%	107	9.53%	0	0.00%	3	5.17%	134	10.07%
$50,000 - $99,999	16	10.74%	97	8.64%	0	0.00%	4	6.90%	117	8.79%
$100,000 - $249,999	14	9.40%	77	6.86%	0	0.00%	6	10.34%	97	7.29%
$250,000 - $499,999	6	4.03%	50	4.45%	1	100.00%	3	5.17%	60	4.51%
$500,000 - $999,999	4	2.68%	27	2.40%	0	0.00%	6	10.34%	37	2.78%
$1,000,000 - $2,999,999	3	2.01%	23	2.05%	0	0.00%	3	5.17%	29	2.18%
$3,000,000 and greater	0	0.00%	16	1.42%	0	0.00%	0	0.00%	16	1.20%
Total	149	100.00%	1123	100.00%	1	100.00%	58	100.00%	1331	100.00%

P-Value < 0.05

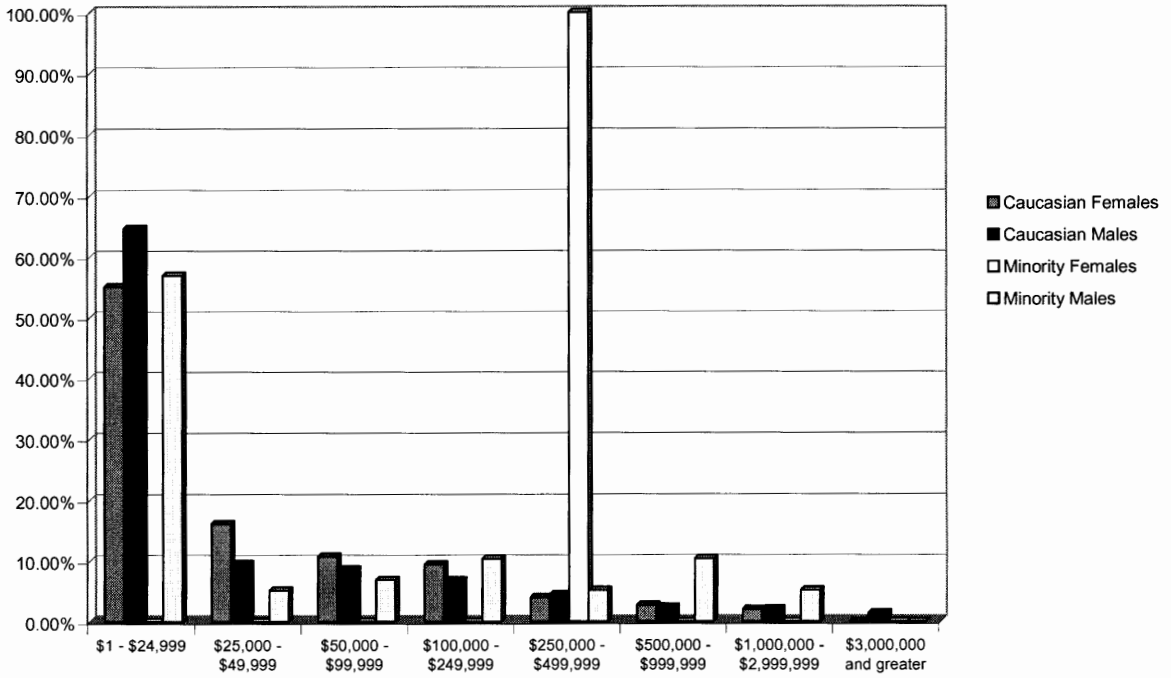
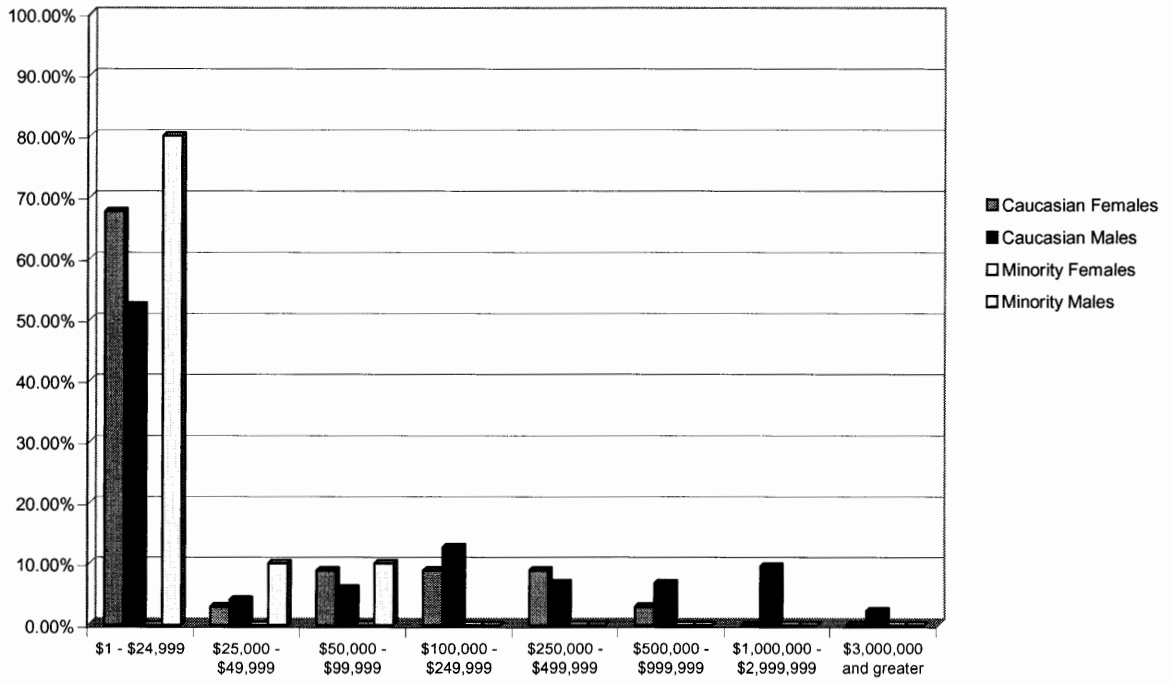


Table 4.06 Construction-Related Prime Contracts by Size: July 1, 2000 to June 30, 2002

Size	Caucasian				Minority					
	Females		Males		Females		Males		Total	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
$1 - $24,999	23	67.65%	116	52.25%	0	0.00%	8	80.00%	147	55.26%
$25,000 - $49,999	1	2.94%	9	4.05%	0	0.00%	1	10.00%	11	4.14%
$50,000 - $99,999	3	8.82%	13	5.86%	0	0.00%	1	10.00%	17	6.39%
$100,000 - $249,999	3	8.82%	28	12.61%	0	0.00%	0	0.00%	31	11.65%
$250,000 - $499,999	3	8.82%	15	6.76%	0	0.00%	0	0.00%	18	6.77%
$500,000 - $999,999	1	2.94%	15	6.76%	0	0.00%	0	0.00%	16	6.02%
$1,000,000 - $2,999,999	0	0.00%	21	9.46%	0	0.00%	0	0.00%	21	7.89%
$3,000,000 and greater	0	0.00%	5	2.25%	0	0.00%	0	0.00%	5	1.88%
Total	34	100.00%	222	100.00%	0	0.00%	10	100.00%	266	100.00%

P-Value > 0.05



B. Largest M/WBE Prime Contract Awards, by Industry

Large prime contracts were awarded to M/WBEs in construction and construction-related industries by State Agencies, Authorities, Commissions, and State Colleges and Universities. The distribution of the largest M/WBE prime contracts awarded is depicted in Table 4.07 below. In each industry, M/WBEs were awarded very large, competitively bid contracts. The utilization analysis shows that M/WBEs demonstrated the capacity to successfully compete for contracts as large as $34.4 million in construction and $3.1 million in construction-related services. WBEs were awarded contracts over $15 million in construction and over $760,000 in construction-related services.

Table 4.07 The Largest M/WBE Prime Contract Awards, by Industry: State Agencies, Authorities, Commissions, and State Colleges and Universities

Ethnicity	Construction	Construction-Related
African Americans	$799,900	$2,827,742
Asian Americans	$10,634,531	$3,160,061
Hispanic Americans	$34,438,866	$2,346,208
Native Americans	$851,908	$365,503
Caucasian Females	$15,004,003	$761,313

IV. PRIME CONTRACTOR AVAILABILITY ANALYSIS

The availability analysis above demonstrates that the capacity needed to perform on most of the State's Agency, Authority, Commission, and State College and University contracts is limited. Furthermore, M/WBE firms in the State's market area do in fact have the capacity to bid on large contracts in each of the industries studied.

The prime contractor availability findings are summarized below.

A. Construction Prime Contractor Availability

The distribution of available construction prime contractors is summarized in Table 4.08.

African American Businesses account for 6.42 percent of the construction firms in the State's market area.

Asian American Businesses account for 3.05 percent of the construction firms in the State's market area.

Hispanic American Businesses account for 5.71 percent of the construction firms in the State's market area.

Native American Businesses account for 0.08 percent of the construction firms in the State's market area.

Minority Business Enterprises account for 15.26 percent of the construction firms in the State's market area.

Women Business Enterprises account for 11.6 percent of the construction firms in the State's market area.

Minority and Women Business Enterprises account for 26.86 percent of the construction firms in the State's market area.

Caucasian Male Business Enterprises account for 73.14 percent of the construction firms in the State's market area.

Table 4.08 Available Construction Prime Contractors

Ethnicity	Percent of Businesses
African Americans	6.42%
Asian Americans	3.05%
Hispanic Americans	5.71%
Native Americans	0.08%
Caucasian Females	11.60%
Caucasian Males	73.14%
TOTAL	100.00%
Ethnicity and Gender	**Percent of Businesses**
African American Females	0.90%
African American Males	5.52%
Asian American Females	0.57%
Asian American Males	2.48%
Hispanic American Females	1.35%
Hispanic American Males	4.36%
Native American Females	0.00%
Native American Males	0.08%
Caucasian Females	11.60%
Caucasian Males	73.14%
TOTAL	100.00%
Minority and Gender	**Percent of Businesses**
Minority Females	2.82%
Minority Males	12.44%
Caucasian Females	11.60%
Caucasian Males	73.14%
TOTAL	100.00%
Minority and Females	**Percent of Businesses**
Minority Business Enterprises	15.26%
Women Business Enterprises	11.60%
Minority and Women Business Enterprises	**26.86%**
Caucasian Male Business Enterprises	73.14%
TOTAL	100.00%

B. Construction-Related Prime Contractor Availability

The distribution of available construction-related prime contractors is summarized in Table 4.09.

African American Businesses account for 4.94 percent of the construction-related firms in the State's market area.

Asian American Businesses account for 7.93 percent of the construction-related firms in the State's market area.

Hispanic American Businesses account for 4.39 percent of the construction-related firms in the State's market area.

Native American Businesses account for 0.1 percent of the construction-related firms in the State's market area.

Minority Business Enterprises account for 17.36 percent of the construction-related firms in the State's market area.

Women Business Enterprises account for 12.42 percent of the construction-related firms in the State's market area.

Minority and Women Business Enterprises account for 29.78 percent of the construction-related firms in the State's market area.

Caucasian Male Business Enterprises account for 70.22 percent of the construction-related firms in State's market area.

Table 4.09 Available Construction-Related Prime Contractors

Ethnicity	Percent of Businesses
African Americans	4.94%
Asian Americans	7.93%
Hispanic Americans	4.39%
Native Americans	0.10%
Caucasian Females	12.42%
Caucasian Males	70.22%
TOTAL	100.00%
Ethnicity and Gender	**Percent of Businesses**
African American Females	1.15%
African American Males	3.79%
Asian American Females	1.35%
Asian American Males	6.58%
Hispanic American Females	1.15%
Hispanic American Males	3.24%
Native American Females	0.05%
Native American Males	0.05%
Caucasian Females	12.42%
Caucasian Males	70.22%
TOTAL	100.00%
Minority and Gender	**Percent of Businesses**
Minority Females	3.69%
Minority Males	13.67%
Caucasian Females	12.42%
Caucasian Males	70.22%
TOTAL	100.00%
Minority and Females	**Percent of Businesses**
Minority Business Enterprises	17.36%
Women Business Enterprises	12.42%
Minority and Women Business Enterprises	**29.78%**
Caucasian Male Business Enterpris	70.22%
TOTAL	100.00%

V. SOURCES OF POTENTIALLY WILLING AND ABLE SUBCONTRACTORS AND AVAILABILITY

A. Subcontractor Sources

All available State Colleges and Universities prime contractors were included in the subcontractor availability. Additional subcontractors were identified using sources in Table 4.10.

Table 4.10 Unique Subcontractor Availability Data Sources

Type of Record	Type of Information
• Subcontracting records provided by the State	• M/WBEs and non-M/WBEs
• Subcontractors identified by utilized prime contractors through the prime contractor survey	• M/WBEs and non-M/WBEs

B. Determination of Willingness and Capacity

Subcontractor availability was limited to businesses determined to be willing and able to perform as prime contractors and businesses utilized as subcontractors; therefore, the determination of willingness was achieved. *Croson* does not require a measure of subcontractor capacity; therefore, it is not necessary to address capacity issues in the context of subcontractors.

The subcontractor availability findings are summarized below.

C. Construction Subcontractor Availability

The distribution of available construction subcontractors is summarized in Table 4.11.

African American Businesses account for 6.3 percent of the construction firms in the State's market area.

Asian American Businesses account for 4.34 percent of the construction firms in the State's market area.

Hispanic American Businesses account for 5.52 percent of the construction firms in the State's market area.

Native American Businesses account for 0.12 percent of the construction firms in the State's market area.

Minority Business Enterprises account for 16.28 percent of the construction firms in the State's market area.

Women Business Enterprises account for 12.67 percent of the construction firms in the State's market area.

Minority and Women Business Enterprises account for 28.94 percent of the construction firms in the State's market area.

Caucasian Male Business Enterprises account for 71.06 percent of the construction firms in the State's market area.

Table 4.11 Available Construction Subcontractors

Ethnicity	Percent of Businesses
African Americans	6.30%
Asian Americans	4.34%
Hispanic Americans	5.52%
Native Americans	0.12%
Caucasian Females	12.67%
Caucasian Males	71.06%
TOTAL	100.00%
Ethnicity and Gender	**Percent of Businesses**
African American Females	0.98%
African American Males	5.32%
Asian American Females	0.85%
Asian American Males	3.49%
Hispanic American Females	1.40%
Hispanic American Males	4.13%
Native American Females	0.00%
Native American Males	0.12%
Caucasian Females	12.67%
Caucasian Males	71.06%
TOTAL	100.00%
Minority and Gender	**Percent of Businesses**
Minority Females	3.22%
Minority Males	13.05%
Caucasian Females	12.67%
Caucasian Males	71.06%
TOTAL	100.00%
Minority and Females	**Percent of Businesses**
Minority Business Enterprises	16.28%
Women Business Enterprises	12.67%
Minority and Women Business Enterprises	**28.94%**
Caucasian Male Business Enterprises	71.06%
TOTAL	100.00%

D. Construction-Related Subcontractor Availability

The distribution of available construction-related prime contractors is summarized in Table 4.12.

African American Businesses account for 4.51 percent of the construction-related firms in the State's market area.

Asian American Businesses account for 7.11 percent of the construction-related firms in the State's market area.

Hispanic American Businesses account for 4.09 percent of the construction-related firms in the State's market area.

Native American Businesses account for 0.13 percent of the construction-related firms in the State's market area.

Minority Business Enterprises account for 15.84 percent of the construction-related firms in the State's market area.

Women Business Enterprises account for 12.27 percent of the construction-related firms in the State's market area.

Minority and Women Business Enterprises account for 28.11 percent of the construction-related firms in the State's market area.

Caucasian Male Business Enterprises account for 71.89 percent of the construction-related firms in State's market area.

Table 4.12 Available Construction-Related Subcontractors

Ethnicity	Percent of Businesses
African Americans	4.51%
Asian Americans	7.11%
Hispanic Americans	4.09%
Native Americans	0.13%
Caucasian Females	12.27%
Caucasian Males	71.89%
TOTAL	100.00%
Ethnicity and Gender	**Percent of Businesses**
African American Females	0.98%
African American Males	3.53%
Asian American Females	1.19%
Asian American Males	5.92%
Hispanic American Females	1.06%
Hispanic American Males	3.02%
Native American Females	0.09%
Native American Males	0.04%
Caucasian Females	12.27%
Caucasian Males	71.89%
TOTAL	100.00%
Minority and Gender	**Percent of Businesses**
Minority Females	3.32%
Minority Males	12.52%
Caucasian Females	12.27%
Caucasian Males	71.89%
TOTAL	100.00%
Minority and Females	**Percent of Businesses**
Minority Business Enterprises	15.84%
Women Business Enterprises	12.27%
Minority and Women Business Enterprises	**28.11%**
Caucasian Male Business Enterprises	71.89%
TOTAL	100.00%

5

PRIME CONTRACTOR DISPARITY ANALYSES

I. INTRODUCTION

The objective of the disparity analysis is to determine the level minority and woman-owned business enterprises (M/WBEs) were utilized on State Colleges and Universities contracts. Under a fair and equitable system of awarding contracts, the proportion of contract dollars awarded to Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs) would be approximate to the proportion of available MBEs[1] and WBEs in the relevant market area. If the available M/WBE businesses are underutilized, a statistical test could determine the probability that the disparity is due to chance. If there is a low probability that the disparity is due to chance,[2] *Croson* states that an inference of discrimination can be made. This type of analysis is applied to M/WBEs by both ethnicity and gender.

The first step in conducting a statistical test of disparity is to calculate the contract value that each ethnic/gender group is expected to receive, based on each group's respective availability in the market area. This value shall be referred to as the **expected contract amount**. The next step is to compute the difference between the expected contract amount of a given ethnic/gender group and the **actual contract amount** received by that group.

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1 Availability is defined as willing and able firms. The methodology for determining willing and able firms is detailed in Chapter 4.

2 When conducting statistical tests, a confidence level must be established as a gauge for the level of certainty that an observed occurrence is not due to chance. It is important to note that a 100 percent confidence level or a level of absolute certainty can never be obtained in statistics. A 95 percent confidence level is considered by the courts to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analyzed here was done within the 95 percent confidence level.

A disparity ratio less than 0.80 indicates a relevant degree of disparity. This disparity may be detected using a parametric analysis,[3] where the number of contracts is sufficiently large and the variation of the contract amount is not too large. When the variation in contract dollar amounts is high, a disparity may not be detectable. Under the condition when the variation in contract dollar amounts is high, a non-parametric analysis[4] would be employed to analyze the contracts ranked by dollar amount.

In order to assess whether the difference in contract values is attributable to chance, a P-value[5] is calculated. The P-value takes into account the number of contracts, amount of contract dollars, and variation in contract dollars. If the difference between the actual and expected number of contracts and total contract dollars has a P-value of less than 0.05, the difference is statistically significant.[6]

There are two critical constraints in performing statistical tests of significance. First, the size of the population affects the reliability of the results. In other words, a relatively small population size, whether in terms of the total number of contracts or the total number of available businesses, decreases the reliability of the statistical results. Second, although an inference of discrimination cannot be made if statistical significance is not obtained from the test, one cannot infer from the results that there was no discrimination. Thus, the results of the statistical disparity analysis are necessarily influenced by the size of the population in each industry and ethnic/gender category. Where the results are not statistically significant, the existence of discrimination ***cannot*** be ruled out. Given these limitations, the anecdotal data has an especially important role in explaining the conditions of discrimination that might exist in the market area.

The analysis of the value of prime contract dollars for each ethnic and gender group incorporates the number of prime contracts awarded. Hence, the disparity analysis for the value of prime contract dollars awarded reflects an analysis of both the number of prime contracts awarded and the value of the prime contract dollars received by each ethnic/gender group.

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3 Parametric analysis is a statistical examination based on the actual values of the variable. In this case, the parametric analysis consists of the actual dollar values of the contracts.

4 Non-parametric analysis is a method to make data more suitable for statistical testing by allowing one variable to be replaced with a new variable that maintains the essential characteristics of the original one. In this case, the contracts are ranked from the smallest to the largest. The dollar value of each contract is replaced with its rank order number.

5 P-value is a measure of statistical significance.

6 The study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian males.

II. DISPARITY ANALYSES

Prime contractor disparity analysis was performed on construction and construction-related services contracts awarded by the State Colleges and Universities between July 1, 2000 and June 30, 2002.

As demonstrated in Chapter 4: Availability Analysis, the majority of the State Colleges and Universities contracts are small with 92.24 percent under $500,000 and 61.87 percent $25,000 and under. The fact that the majority of the State Colleges and Universities contracts are small demonstrates that the capacity needed to perform most of the contracts awarded during the study period was minimal. Furthermore, there is evidence that the willing firms had the capacity to perform contracts in excess of $500,000. A threshold of $500,000 was set for the prime contract disparity analysis to ensure that willing firms had the capacity to perform contracts included in the analysis. The prime contract disparity findings in the industries under consideration are summarized in the sections below.

A. State Colleges and Universities Disparity Analysis: Construction Prime Contracts, under $500,000

The disparity analysis of all construction prime contract dollars under $500,000 is depicted in Table 5.01 and Chart 5.01.

African American Businesses represent 6.42 percent of the available construction firms and received 0.16 percent of the construction prime contract dollars under $500,000. This underutilization is statistically significant.

Asian American Businesses represent 3.05 percent of the available construction firms and received 1.29 percent of the construction prime contract dollars under $500,000. This underutilization is statistically significant.

Hispanic American Businesses represent 5.71 percent of the available construction firms and received 3.75 percent of the construction prime contract dollars under $500,000. This underutilization is statistically significant.

Native American Businesses represent 0.08 percent of the available construction firms and received none of the construction prime contract dollars under $500,000. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 15.26 percent of the available construction firms and received 5.2 percent of the construction prime contract dollars under $500,000. This underutilization is statistically significant.

Women Business Enterprises represent 11.6 percent of the available construction firms and received 12.15 percent of the construction prime contract dollars under $500,000. This overutilization is not statistically significant.

Minority and Women Business Enterprises represent 26.86 percent of the available construction firms and received 17.35 percent of the construction prime contract dollars under $500,000. This underutilization is statistically significant.

Caucasian Male Business Enterprises represent 73.14 percent of the available construction firms and received 82.65 percent of the construction prime contract dollars under $500,000. This overutilization is statistically significant.

Table 5.01 State Colleges and Universities Disparity Analysis: Construction Prime Contracts under $500,000, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$88,865	0.16%	6.42%	$3,553,717	-$3,464,852	0.03	< .05 *
Asian Americans	$711,551	1.29%	3.05%	$1,687,225	-$975,674	0.42	< .05 *
Hispanic Americans	$2,076,869	3.75%	5.71%	$3,163,546	-$1,086,678	0.66	< .05 *
Native Americans	$0	0.00%	0.08%	$42,181	-$42,181	0.00	----
Caucasian Females	$6,726,884	12.15%	11.60%	$6,421,999	$304,885	1.05	**
Caucasian Males	$45,757,892	82.65%	73.14%	$40,493,393	$5,264,499	1.13	< .05 †
TOTAL	$55,362,061	100.00%	100.00%	$55,362,061			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	0.90%	$495,622	-$495,622	0.00	----
African American Males	$88,865	0.16%	5.52%	$3,058,095	-$2,969,230	0.03	< .05 *
Asian American Females	$0	0.00%	0.57%	$316,355	-$316,355	0.00	----
Asian American Males	$711,551	1.29%	2.48%	$1,370,870	-$659,319	0.52	< .05 *
Hispanic American Females	$312,849	0.57%	1.35%	$748,706	-$435,857	0.42	< .05 *
Hispanic American Males	$1,764,020	3.19%	4.36%	$2,414,840	-$650,821	0.73	< .05 *
Native American Females	$0	0.00%	0.00%	$0	$0	----	----
Native American Males	$0	0.00%	0.08%	$42,181	-$42,181	0.00	----
Caucasian Females	$6,726,884	12.15%	11.60%	$6,421,999	$304,885	1.05	**
Caucasian Males	$45,757,892	82.65%	73.14%	$40,493,393	$5,264,499	1.13	< .05 †
TOTAL	$55,362,061	100.00%	100.00%	$55,362,061			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$312,849	0.57%	2.82%	$1,560,683	-$1,247,834	0.20	< .05 *
Minority Males	$2,564,436	4.63%	12.44%	$6,885,986	-$4,321,550	0.37	< .05 *
Caucasian Females	$6,726,884	12.15%	11.60%	$6,421,999	$304,885	1.05	**
Caucasian Males	$45,757,892	82.65%	73.14%	$40,493,393	$5,264,499	1.13	< .05 †
TOTAL	$55,362,061	100.00%	100.00%	$55,362,061			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$2,877,285	5.20%	15.26%	$8,446,669	-$5,569,384	0.34	< .05 *
Women Business Enterprises	$6,726,884	12.15%	11.60%	$6,421,999	$304,885	1.05	**
Minority and Women Business Enterprises	**$9,604,169**	**17.35%**	**26.86%**	**$14,868,668**	**-$5,264,499**	**0.65**	**< .05 ***
Caucasian Male Business Enterprises	$45,757,892	82.65%	73.14%	$40,493,393	$5,264,499	1.13	< .05 †

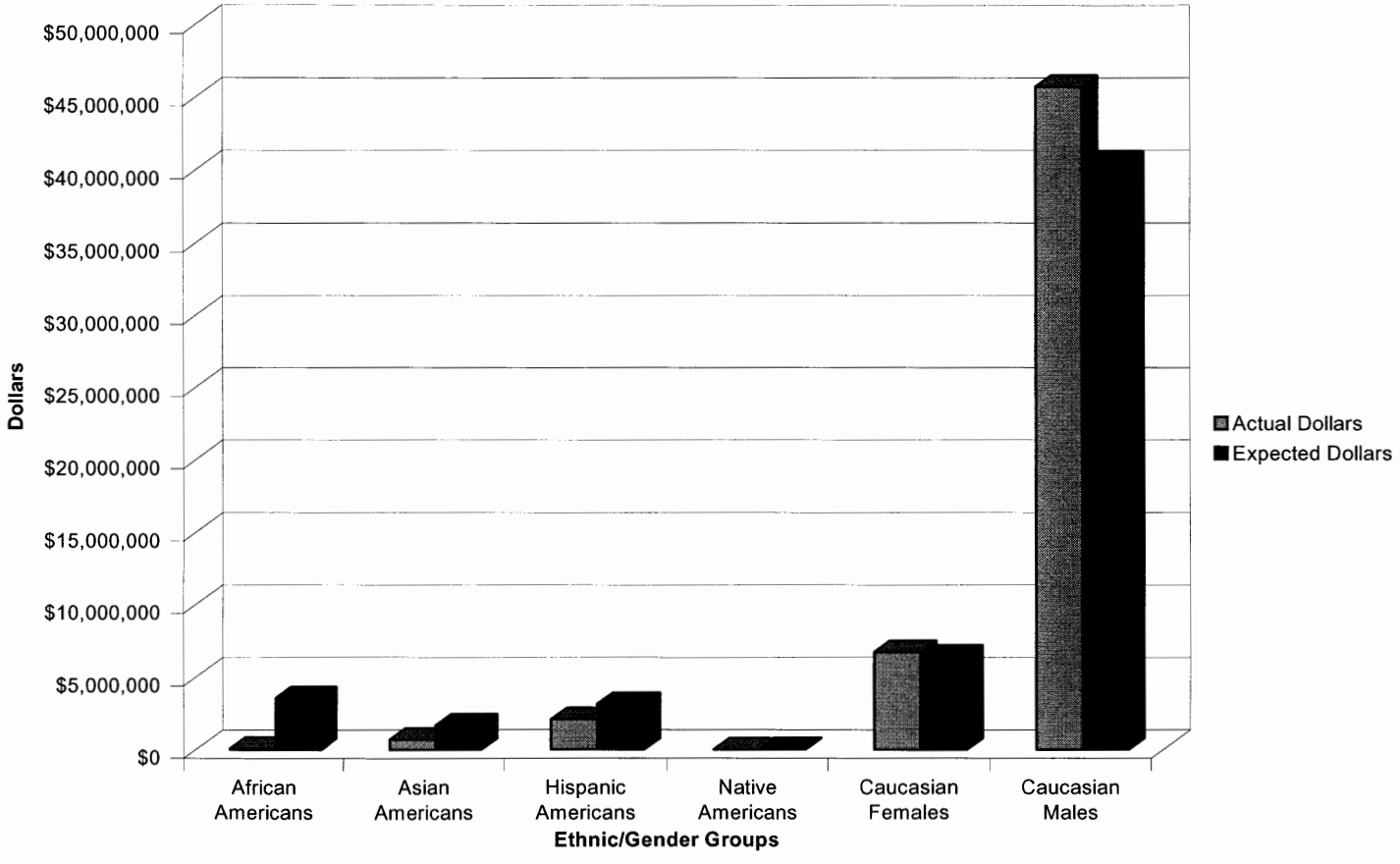
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 5.01 State Colleges and Universities Disparity Analysis: Construction Prime Contracts under $500,000, July 1, 2000 to June 30, 2002



B. State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts, under $500,000

The disparity analysis of all construction-related prime contract dollars under $500,000 is depicted in Table 5.02 and Chart 5.02.

African American Businesses represent 4.94 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $500,000. This underutilization is statistically significant.

Asian American Businesses represent 7.93 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $500,000. This underutilization is statistically significant.

Hispanic American Businesses represent 4.39 percent of the available construction-related firms and received 0.89 percent of the construction-related prime contract dollars under $500,000. This underutilization is not statistically significant.

Native American Businesses represent 0.1 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $500,000. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 17.36 percent of the available construction-related firms and received 0.89 percent of the construction-related prime contract dollars under $500,000. This underutilization is statistically significant.

Women Business Enterprises represent 12.42 percent of the available construction-related firms and received 11.76 percent of the construction-related prime contract dollars under $500,000. This underutilization is not statistically significant.

Minority and Women Business Enterprises represent 29.78 percent of the available construction-related firms and received 12.64 percent of the construction-related prime contract dollars under $500,000. This underutilization is statistically significant.

Caucasian Male Business Enterprises represent 70.22 percent of the available construction-related firms and received 87.36 percent of the construction-related prime contract dollars under $500,000. This overutilization is statistically significant.

Table 5.02 State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts under $500,000, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$0	0.00%	4.94%	$719,385	-$719,385	0.00	< .05 *
Asian Americans	$0	0.00%	7.93%	$1,155,376	-$1,155,376	0.00	< .05 *
Hispanic Americans	$129,006	0.89%	4.39%	$639,454	-$510,448	0.20	not significant
Native Americans	$0	0.00%	0.10%	$14,533	-$14,533	0.00	----
Caucasian Females	$1,712,821	11.76%	12.42%	$1,809,363	-$96,542	0.95	not significant
Caucasian Males	$12,727,542	87.36%	70.22%	$10,231,257	$2,496,284	1.24	< .05 †
TOTAL	$14,569,369	100.00%	100.00%	$14,569,369			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	1.15%	$167,130	-$167,130	0.00	not significant
African American Males	$0	0.00%	3.79%	$552,255	-$552,255	0.00	< .05 *
Asian American Females	$0	0.00%	1.35%	$196,196	-$196,196	0.00	not significant
Asian American Males	$0	0.00%	6.58%	$959,180	-$959,180	0.00	< .05 *
Hispanic American Females	$0	0.00%	1.15%	$167,130	-$167,130	0.00	not significant
Hispanic American Males	$129,006	0.89%	3.24%	$472,324	-$343,318	0.27	not significant
Native American Females	$0	0.00%	0.05%	$7,267	-$7,267	0.00	----
Native American Males	$0	0.00%	0.05%	$7,267	-$7,267	0.00	----
Caucasian Females	$1,712,821	11.76%	12.42%	$1,809,363	-$96,542	0.95	not significant
Caucasian Males	$12,727,542	87.36%	70.22%	$10,231,257	$2,496,284	1.24	< .05 †
TOTAL	$14,569,369	100.00%	100.00%	$14,569,369			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$0	0.00%	3.69%	$537,722	-$537,722	0.00	< .05 *
Minority Males	$129,006	0.89%	13.67%	$1,991,026	-$1,862,020	0.06	< .05 *
Caucasian Females	$1,712,821	11.76%	12.42%	$1,809,363	-$96,542	0.95	not significant
Caucasian Males	$12,727,542	87.36%	70.22%	$10,231,257	$2,496,284	1.24	< .05 †
TOTAL	$14,569,369	100.00%	100.00%	$14,569,369			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$129,006	0.89%	17.36%	$2,528,748	-$2,399,743	0.05	< .05 *
Women Business Enterprises	$1,712,821	11.76%	12.42%	$1,809,363	-$96,542	0.95	not significant
Minority and Women Business Enterprises	**$1,841,827**	**12.64%**	**29.78%**	**$4,338,111**	**-$2,496,284**	**0.42**	**< .05 ***
Caucasian Male Business Enterprises	$12,727,542	87.36%	70.22%	$10,231,257	$2,496,284	1.24	< .05 †

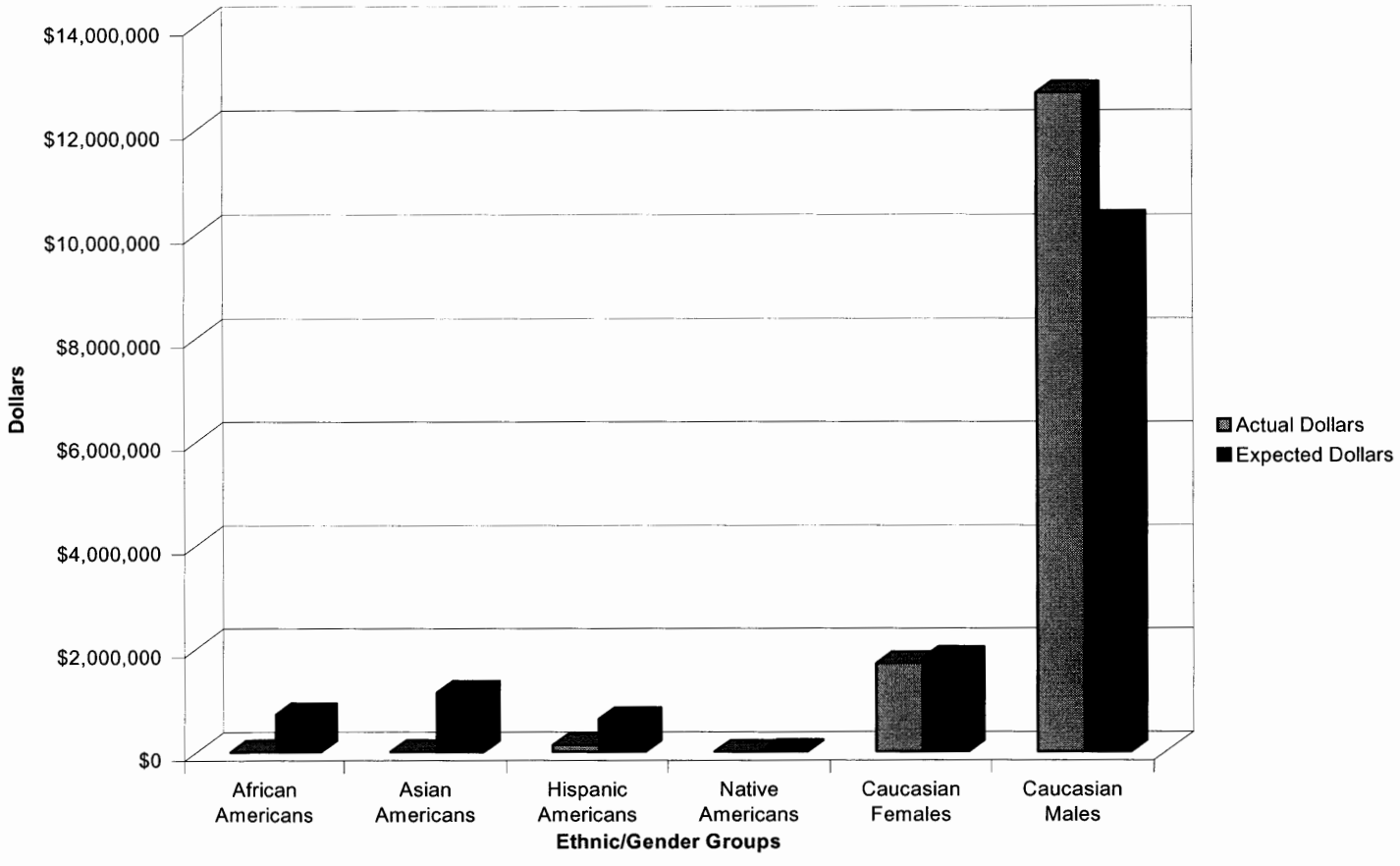
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 5.02 State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts under $500,000, July 1, 2000 to June 30, 2002



C. State Colleges and Universities Disparity Analysis: Construction Prime Contracts, under $19,500

The disparity analysis of construction prime contract dollars under $19,500 is depicted in Table 5.03 and Chart 5.03.

African American Businesses represent 6.42 percent of the available construction firms and received 1.83 percent of the construction prime contract dollars under $19,500. This underutilization is statistically significant.

Asian American Businesses represent 3.05 percent of the available construction firms and received 1.49 percent of the construction prime contract dollars under $19,500. This underutilization is statistically significant.

Hispanic American Businesses represent 5.71 percent of the available construction firms and received 1.4 percent of the construction prime contract dollars under $19,500. This underutilization is statistically significant.

Native American Businesses represent 0.08 percent of the available construction firms and received none of the construction prime contract dollars under $19,500. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 15.26 percent of the available construction firms and received 4.73 percent of the construction prime contract dollars under $19,500. This underutilization is statistically significant.

Women Business Enterprises represent 11.6 percent of the available construction firms and received 10.36 percent of the construction prime contract dollars under $19,500. This underutilization is not statistically significant.

Minority and Women Business Enterprises represent 26.86 percent of the available construction firms and received 15.09 percent of the construction prime contract dollars under $19,500. This underutilization is statistically significant.

Caucasian Male Business Enterprises represent 73.14 percent of the available construction firms and received 84.91 percent of the construction prime contract dollars under $$19,500. This overutilization is statistically significant.

Table 5.03 State Colleges and Universities Disparity Analysis: Construction Prime Contracts under $19,500, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$88,865	1.83%	6.42%	$311,385	-$222,520	0.29	< .05 *
Asian Americans	$72,381	1.49%	3.05%	$147,839	-$75,458	0.49	< .05 *
Hispanic Americans	$68,057	1.40%	5.71%	$277,197	-$209,140	0.25	< .05 *
Native Americans	$0	0.00%	0.08%	$3,696	-$3,696	0.00	----
Caucasian Females	$502,530	10.36%	11.60%	$562,711	-$60,181	0.89	not significant
Caucasian Males	$4,119,120	84.91%	73.14%	$3,548,126	$570,995	1.16	< .05 †
TOTAL	$4,850,953	100.00%	100.00%	$4,850,953			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	0.90%	$43,428	-$43,428	0.00	----
African American Males	$88,865	1.83%	5.52%	$267,957	-$179,092	0.33	< .05 *
Asian American Females	$0	0.00%	0.57%	$27,720	-$27,720	0.00	----
Asian American Males	$72,381	1.49%	2.48%	$120,119	-$47,738	0.60	not significant
Hispanic American Females	$0	0.00%	1.35%	$65,603	-$65,603	0.00	< .05 *
Hispanic American Males	$68,057	1.40%	4.36%	$211,594	-$143,537	0.32	< .05 *
Native American Females	$0	0.00%	0.00%	$0	$0	----	----
Native American Males	$0	0.00%	0.08%	$3,696	-$3,696	0.00	----
Caucasian Females	$502,530	10.36%	11.60%	$562,711	-$60,181	0.89	not significant
Caucasian Males	$4,119,120	84.91%	73.14%	$3,548,126	$570,995	1.16	< .05 †
TOTAL	$4,850,953	100.00%	100.00%	$4,850,953			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$0	0.00%	2.82%	$136,751	-$136,751	0.00	< .05 *
Minority Males	$229,303	4.73%	12.44%	$603,366	-$374,063	0.38	< .05 *
Caucasian Females	$502,530	10.36%	11.60%	$562,711	-$60,181	0.89	not significant
Caucasian Males	$4,119,120	84.91%	73.14%	$3,548,126	$570,995	1.16	< .05 †
TOTAL	$4,850,953	100.00%	100.00%	$4,850,953			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$229,303	4.73%	15.26%	$740,117	-$510,814	0.31	< .05 *
Women Business Enterprises	$502,530	10.36%	11.60%	$562,711	-$60,181	0.89	not significant
Minority and Women Business Enterprises	**$731,833**	**15.09%**	**26.86%**	**$1,302,827**	**-$570,995**	**0.56**	**< .05 ***
Caucasian Male Business Enterprises	$4,119,120	84.91%	73.14%	$3,548,126	$570,995	1.16	< .05 †

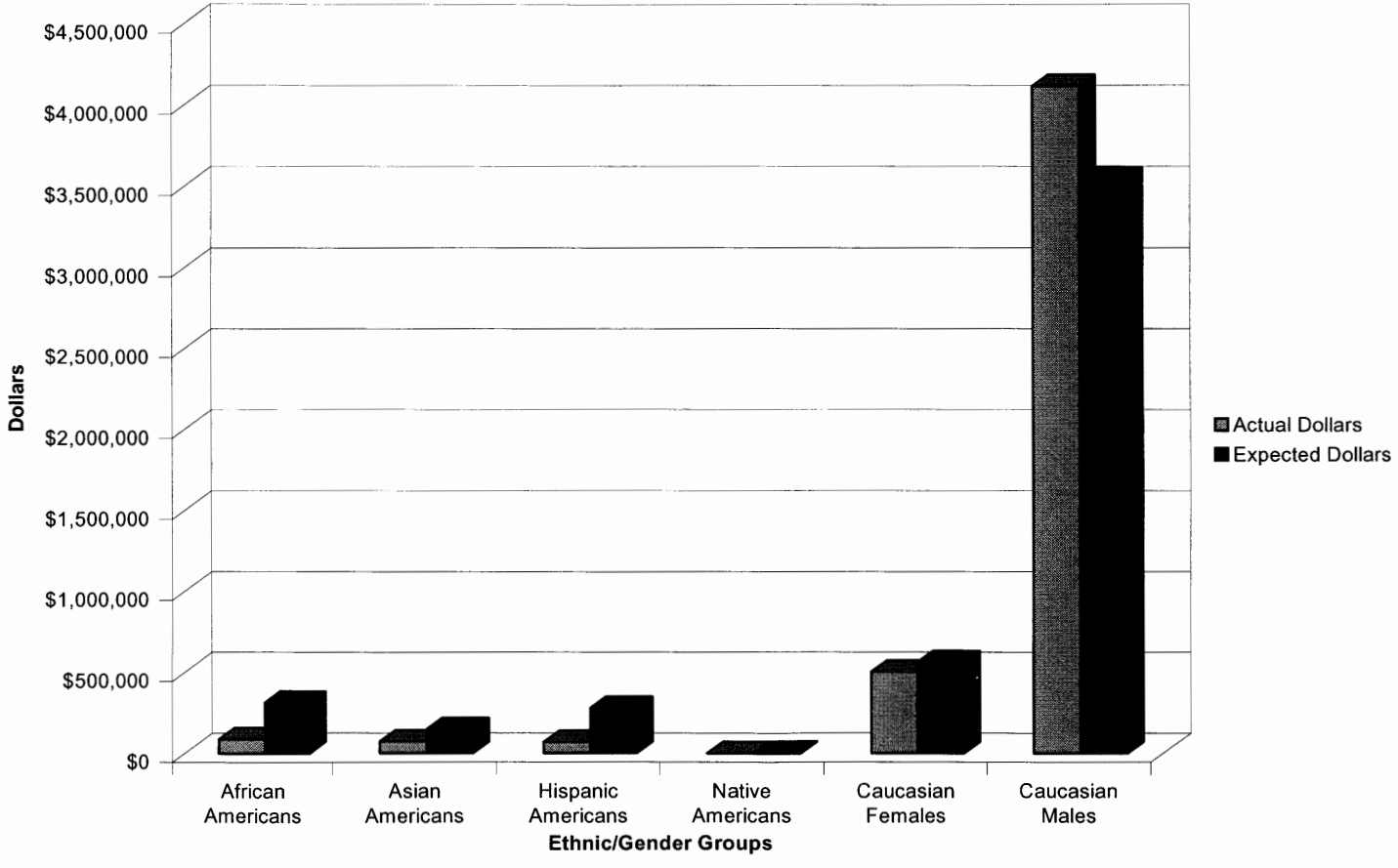
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 5.03 State Colleges and Universities Disparity Analysis: Construction Prime Contracts under $19,500, July 1, 2000 to June 30, 2002



D. State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts, under $19,500

The disparity analysis of construction-related prime contract dollars under $19,500 is depicted in Table 5.04 and Chart 5.04.

African American Businesses represent 4.94 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $19,500. This underutilization is statistically significant.

Asian American Businesses represent 7.93 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $19,500. This underutilization is statistically significant.

Hispanic American Businesses represent 4.39 percent of the available construction-related firms and received 4.14 percent of the construction-related prime contract dollars under $19,500. This underutilization is not statistically significant.

Native American Businesses represent 0.1 percent of the available construction-related firms and received none of the construction-related prime contract dollars under $19,500. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 17.36 percent of the available construction-related firms and received 4.14 percent of the construction-related prime contract dollars under $19,500. This underutilization is statistically significant.

Women Business Enterprises represent 12.42 percent of the available construction-related firms and received 13.23 percent of the construction-related prime contract dollars under $19,500. This overutilization is not statistically significant.

Minority and Women Business Enterprises represent 29.78 percent of the available construction-related firms and received 17.37 percent of the construction-related prime contract dollars under $19,500. This underutilization is statistically significant.

Caucasian Male Business Enterprises represent 70.22 percent of the available construction-related firms and received 82.63 percent of the construction-related prime contract dollars under $19,500. This overutilization is statistically significant.

Table 5.04 State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts under $19,500, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$0	0.00%	4.94%	$40,709	-$40,709	0.00	< .05 *
Asian Americans	$0	0.00%	7.93%	$65,382	-$65,382	0.00	< .05 *
Hispanic Americans	$34,156	4.14%	4.39%	$36,186	-$2,030	0.94	not significant
Native Americans	$0	0.00%	0.10%	$822	-$822	0.00	----
Caucasian Females	$109,045	13.23%	12.42%	$102,390	$6,655	1.06	**
Caucasian Males	$681,265	82.63%	70.22%	$578,977	$102,288	1.18	< .05 †
TOTAL	$824,467	100.00%	100.00%	$824,467			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	1.15%	$9,458	-$9,458	0.00	not significant
African American Males	$0	0.00%	3.79%	$31,252	-$31,252	0.00	< .05 *
Asian American Females	$0	0.00%	1.35%	$11,103	-$11,103	0.00	not significant
Asian American Males	$0	0.00%	6.58%	$54,279	-$54,279	0.00	< .05 *
Hispanic American Females	$0	0.00%	1.15%	$9,458	-$9,458	0.00	not significant
Hispanic American Males	$34,156	4.14%	3.24%	$26,728	$7,427	1.28	**
Native American Females	$0	0.00%	0.05%	$411	-$411	0.00	----
Native American Males	$0	0.00%	0.05%	$411	-$411	0.00	----
Caucasian Females	$109,045	13.23%	12.42%	$102,390	$6,655	1.06	**
Caucasian Males	$681,265	82.63%	70.22%	$578,977	$102,288	1.18	< .05 †
TOTAL	$824,467	100.00%	100.00%	$824,467			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$0	0.00%	3.69%	$30,429	-$30,429	0.00	< .05 *
Minority Males	$34,156	4.14%	13.67%	$112,670	-$78,515	0.30	< .05 *
Caucasian Females	$109,045	13.23%	12.42%	$102,390	$6,655	1.06	**
Caucasian Males	$681,265	82.63%	70.22%	$578,977	$102,288	1.18	< .05 †
TOTAL	$824,467	100.00%	100.00%	$824,467			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$34,156	4.14%	17.36%	$143,099	-$108,944	0.24	< .05 *
Women Business Enterprises	$109,045	13.23%	12.42%	$102,390	$6,655	1.06	**
Minority and Women Business Enterprises	**$143,201**	**17.37%**	**29.78%**	**$245,490**	**-$102,288**	**0.58**	**< .05 ***
Caucasian Male Business Enterprises	$681,265	82.63%	70.22%	$578,977	$102,288	1.18	< .05 †

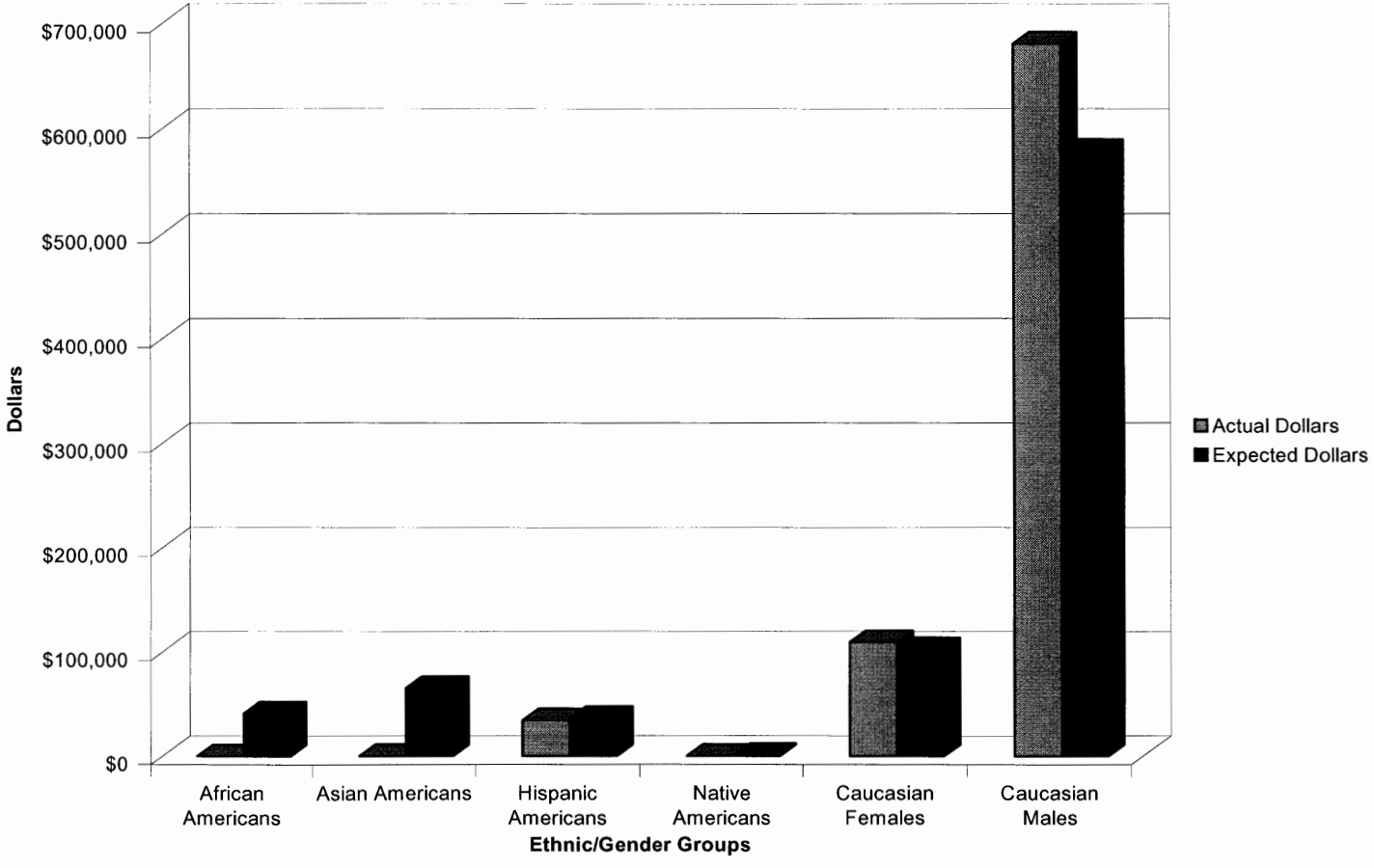
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 5.04 State Colleges and Universities Disparity Analysis: Construction-Related Prime Contracts under $19,500, July 1, 2000 to June 30, 2002



The disparity findings for State Colleges and Universities are summarized in the tables below.

1. Construction Prime Contracts

As indicated in Table 5.05, all minority construction prime contractors were determined to be underutilized at both contract levels. Women Business Enterprises were not underutilized at either contract level.

Table 5.05 Disparity Summary: Construction Prime Contract Dollars, July 1, 2000 to June 30, 2002

Ethnicity/Gender	Contracts Under $500,000	Contracts $19,500 and Under
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	Yes	Yes
Native Americans	---	---
Minority Business Enterprises	Yes	Yes
Women Business Enterprises	**	No
Minority and Woman Business Enterprises	Yes	Yes

Yes = Statistically significant disparity was found
No = Statistically significant disparity was not found
--- = There were insufficient records to determine statistical disparity
** = The study did not test statistically the overutilization of M/WBEs

2. Construction-Related Prime Contracts

As indicated in Table 5.06, with the exception of Hispanic Americans, minority construction-related prime contractors were determined to be underutilized at both contract levels. Women Business Enterprises were not underutilized at either contract level.

Table 5.06 Disparity Summary: Construction-Related Prime Contract Dollars, July 1, 2000 to June 30, 2002

Ethnicity/Gender	Contracts Under $500,000	Contracts $19,500 and Under
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	No	No
Native Americans	---	---
Minority Business Enterprises	Yes	Yes
Women Business Enterprises	No	**
Minority and Woman Business Enterprises	Yes	Yes

Yes = Statistically significant disparity was found
No = Statistically significant disparity was not found
--- = There were insufficient records to determine statistical disparity
** = The study did not test statistically the overutilization of M/WBEs

In conclusion, there is documented disparity in each of the industries studied. Remedies to address the observed prime contractor disparities are presented in Chapter 7: Recommendations.

6

SUBCONTRACTOR DISPARITY ANALYSIS

I. INTRODUCTION

The objective of this analysis is to determine if minority and woman-owned business enterprise (M/WBE) subcontractors were underutilized at a statistically significant level. A detailed discussion of the statistical procedure for conducting a disparity analysis is set forth in Chapter 5: Prime Contractor Disparity Analysis. The same statistical procedure was used in performing the State Colleges and Universities subcontractor disparity analysis. In sum, under a fair and equitable system of awarding subcontracts, the proportion of subcontracts and subcontract dollars awarded to M/WBEs should be approximate to the proportion of M/WBEs in the relevant market area. If the proportions are not approximate, and a disparity exists between these proportions, the probability that the disparity is due to chance can be determined using a statistical test. If there is a low probability that the disparity is due to chance, *Croson* states that an inference of discrimination can be made.[1]

II. STATE COLLEGES AND UNIVERSITIES DISPARITY ANALYSES

As detailed in Chapter 2: Subcontractor Utilization Analysis, extensive efforts were undertaken to obtain subcontract records for the State Colleges and Universities construction and construction-related contracts. Subcontractor records were compiled for both industries within the July 1, 2000 to June 30, 2002 study period.

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1 When conducting statistical tests, a level of confidence must be established as a gauge for the level of certainty that an observed occurrence is not due to chance. It is important to note that a 100 percent confidence level or a level of absolute certainty can never be obtained in statistics. A 95 percent confidence level is considered by the Courts as an acceptable level in determining whether an inference of discrimination can be made. Thus the data analyzed here was done within the 95 percent confidence level.

A. State Colleges and Universities Disparity Analysis: All Formal Construction Subcontracts, July 1, 2000 to June 30, 2002

The disparity analysis of all construction subcontract dollars is depicted in Table 6.01 and Chart 6.01.

African American Businesses represent 6.3 percent of the available construction firms and received 0.46 percent of the construction subcontract dollars. This underutilization is statistically significant.

Asian American Businesses represent 4.34 percent of the available construction firms and received 0.41 percent of the construction subcontract dollars. This underutilization is statistically significant.

Hispanic American Businesses represent 5.52 percent of the available construction firms and received 2.94 percent of the construction subcontract dollars. This underutilization is not statistically significant.

Native American Businesses represent 0.12 percent of the available construction firms and received none of the construction subcontract dollars. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 16.28 percent of the available construction firms and received 3.81 percent of the construction subcontract dollars. This underutilization is statistically significant.

Women Business Enterprises represent 12.67 percent of the available construction firms and received 7.25 percent of the construction subcontract dollars. This underutilization is statistically significant.

Minority and Women Business Enterprises represent 28.94 percent of the available construction firms and received 11.06 percent of the construction subcontract dollars. This underutilization is statistically significant.

Caucasian Male Business Enterprises represent 71.06 percent of the available construction firms and received 88.94 percent of the construction subcontract dollars. This overutilization is statistically significant.

Table 6.01 State Colleges and Universities Disparity Analysis: All Formal Construction Subcontracts, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$426,480	0.46%	6.30%	$5,889,744	-$5,463,264	0.07	< .05 *
Asian Americans	$381,825	0.41%	4.34%	$4,056,144	-$3,674,319	0.09	< .05 *
Hispanic Americans	$2,753,351	2.94%	5.52%	$5,167,417	-$2,414,066	0.53	not significant
Native Americans	$0	0.00%	0.12%	$111,127	-$111,127	0.00	----
Caucasian Females	$6,781,374	7.25%	12.67%	$11,848,942	-$5,067,568	0.57	< .05 *
Caucasian Males	$83,198,324	88.94%	71.06%	$66,467,981	$16,730,343	1.25	< .05 †
TOTAL	$93,541,355	100.00%	100.00%	$93,541,355			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	0.98%	$916,800	-$916,800	0.00	----
African American Males	$426,480	0.46%	5.32%	$4,972,944	-$4,546,464	0.09	< .05 *
Asian American Females	$57,469	0.06%	0.85%	$791,782	-$734,313	0.07	----
Asian American Males	$324,356	0.35%	3.49%	$3,264,363	-$2,940,007	0.10	< .05 *
Hispanic American Females	$205,054	0.22%	1.40%	$1,305,745	-$1,100,691	0.16	not significant
Hispanic American Males	$2,548,297	2.72%	4.13%	$3,861,672	-$1,313,375	0.66	not significant
Native American Females	$0	0.00%	0.00%	$0	$0	----	----
Native American Males	$0	0.00%	0.12%	$111,127	-$111,127	0.00	----
Caucasian Females	$6,781,374	7.25%	12.67%	$11,848,942	-$5,067,568	0.57	< .05 *
Caucasian Males	$83,198,324	88.94%	71.06%	$66,467,981	$16,730,343	1.25	< .05 †
TOTAL	$93,541,355	100.00%	100.00%	$93,541,355			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$262,523	0.28%	3.22%	$3,014,326	-$2,751,803	0.09	not significant
Minority Males	$3,299,133	3.53%	13.05%	$12,210,106	-$8,910,973	0.27	< .05 *
Caucasian Females	$6,781,374	7.25%	12.67%	$11,848,942	-$5,067,568	0.57	< .05 *
Caucasian Males	$83,198,324	88.94%	71.06%	$66,467,981	$16,730,343	1.25	< .05 †
TOTAL	$93,541,355	100.00%	100.00%	$93,541,355			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$3,561,656	3.81%	16.28%	$15,224,432	-$11,662,776	0.23	< .05 *
Women Business Enterprises	$6,781,374	7.25%	12.67%	$11,848,942	-$5,067,568	0.57	< .05 *
Minority and Women Business Enterprises	**$10,343,030**	**11.06%**	**28.94%**	**$27,073,374**	**-$16,730,343**	**0.38**	**< .05 ***
Caucasian Male Business Enterprises	$83,198,324	88.94%	71.06%	$66,467,981	$16,730,343	1.25	< .05 †

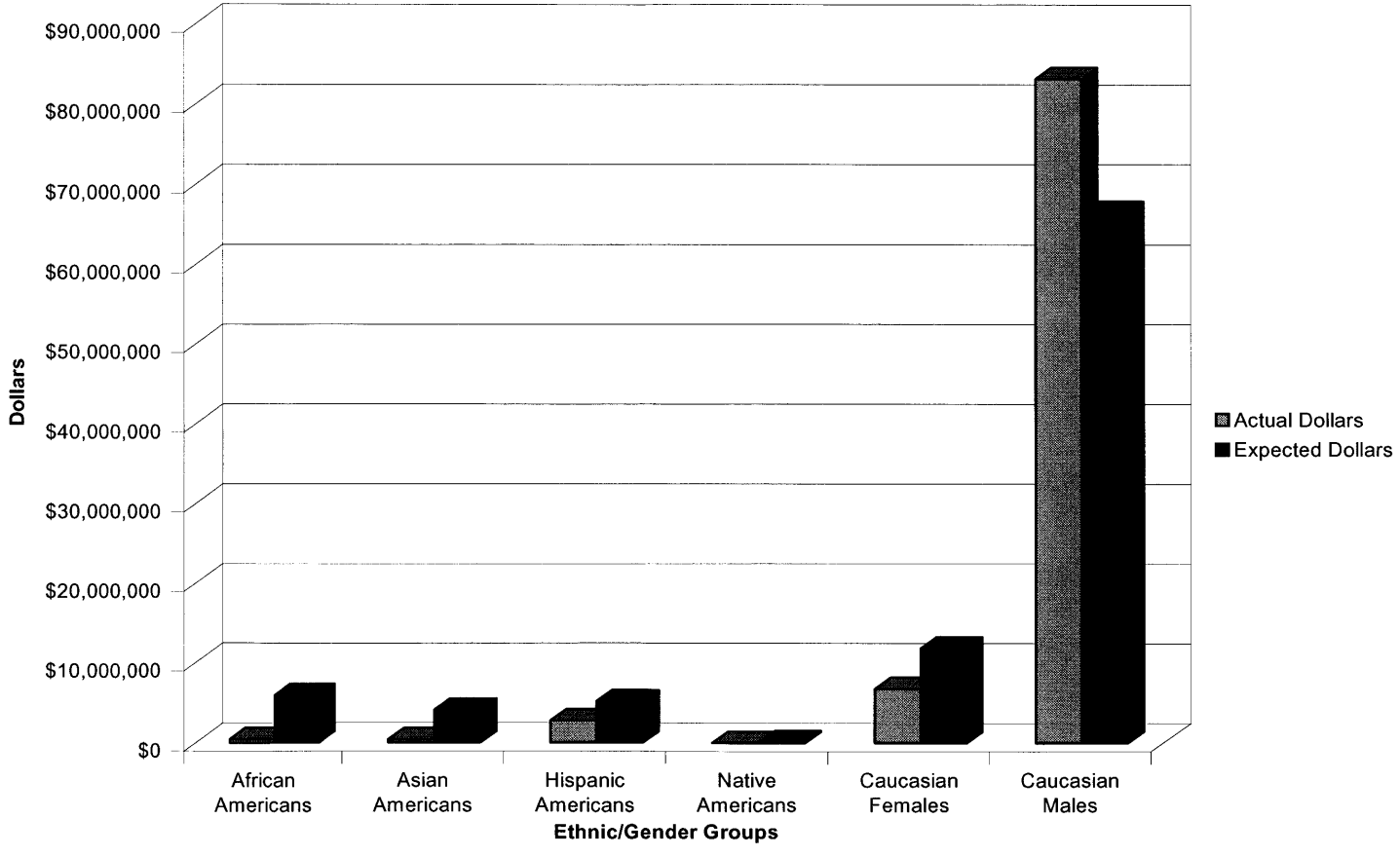
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 6.01 State Colleges and Universities Disparity Analysis: All FormalConstruction Subcontracts, July 1, 2000 to June 30, 2002



B. State Colleges and Universities Disparity Analysis: All Formal Construction-Related Subcontracts, July 1, 2000 to June 30, 2002

The disparity analysis of all construction-related prime contract dollars is depicted in Table 6.02 and Chart 6.02.

African American Businesses represent 4.51 percent of the available construction-related firms and received 0.47 percent of the construction-related subcontract dollars. This underutilization is statistically significant.

Asian American Businesses represent 7.11 percent of the available construction-related firms and received 2.91 percent of the construction-related subcontract dollars. This underutilization is statistically significant.

Hispanic American Businesses represent 4.09 percent of the available construction-related firms and received 0.63 percent of the construction-related subcontract dollars. This underutilization is statistically significant.

Native American Businesses represent 0.13 percent of the available construction-related firms and received none of the construction-related subcontract dollars. The records were not sufficient to determine statistical significance.

Minority Business Enterprises represent 15.84 percent of the available construction-related firms and received 4 percent of the construction-related subcontract dollars. This underutilization is statistically significant.

Women Business Enterprises represent 12.27 percent of the available construction-related firms and received 20.53 percent of the construction-related subcontract dollars. This study does not test statistically the overutilization of Women Business Enterprises.

Minority and Women Business Enterprises represent 28.11 percent of the available construction-related firms and received 24.54 percent of the construction-related subcontract dollars. This underutilization is not statistically significant.

Caucasian Male Business Enterprises represent 71.89 percent of the available construction-related firms and received 75.46 percent of the construction-related subcontract dollars. This overutilization is not statistically significant.

Table 6.02 State Colleges and Universities Disparity Analysis: All Formal Construction-Related Subcontracts, July 1, 2000 to June 30, 2002

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Ethnicity	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African Americans	$350,008	0.47%	4.51%	$3,361,306	-$3,011,298	0.10	< .05 *
Asian Americans	$2,165,481	2.91%	7.11%	$5,295,642	-$3,130,162	0.41	< .05 *
Hispanic Americans	$466,222	0.63%	4.09%	$3,044,202	-$2,577,980	0.15	< .05 *
Native Americans	$0	0.00%	0.13%	$95,131	-$95,131	0.00	----
Caucasian Females	$15,289,014	20.53%	12.27%	$9,132,605	$6,156,409	1.67	**
Caucasian Males	$56,185,372	75.46%	71.89%	$53,527,211	$2,658,161	1.05	not significant
TOTAL	$74,456,096	100.00%	100.00%	$74,456,096			
Ethnicity and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
African American Females	$0	0.00%	0.98%	$729,340	-$729,340	0.00	----
African American Males	$350,008	0.47%	3.53%	$2,631,966	-$2,281,958	0.13	< .05 *
Asian American Females	$0	0.00%	1.19%	$887,892	-$887,892	0.00	< .05 *
Asian American Males	$2,165,481	2.91%	5.92%	$4,407,750	-$2,242,270	0.49	< .05 *
Hispanic American Females	$2,300	0.00%	1.06%	$792,761	-$790,461	0.00	< .05 *
Hispanic American Males	$463,922	0.62%	3.02%	$2,251,441	-$1,787,519	0.21	< .05 *
Native American Females	$0	0.00%	0.09%	$63,421	-$63,421	0.00	----
Native American Males	$0	0.00%	0.04%	$31,710	-$31,710	0.00	----
Caucasian Females	$15,289,014	20.53%	12.27%	$9,132,605	$6,156,409	1.67	**
Caucasian Males	$56,185,372	75.46%	71.89%	$53,527,211	$2,658,161	1.05	not significant
TOTAL	$74,456,096	100.00%	100.00%	$74,456,096			
Minority and Gender	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Females	$2,300	0.00%	3.32%	$2,473,414	-$2,471,114	0.00	< .05 *
Minority Males	$2,979,411	4.00%	12.52%	$9,322,867	-$6,343,457	0.32	< .05 *
Caucasian Females	$15,289,014	20.53%	12.27%	$9,132,605	$6,156,409	1.67	**
Caucasian Males	$56,185,372	75.46%	71.89%	$53,527,211	$2,658,161	1.05	not significant
TOTAL	$74,456,096	100.00%	100.00%	$74,456,096			
Minority and Females	**Actual Dollars**	**Utilization**	**Availability**	**Expected Dollars**	**Dollars Lost**	**Disp. Ratio**	**P-Value**
Minority Business Enterprises	$2,981,711	4.00%	15.84%	$11,796,281	-$8,814,570	0.25	< .05 *
Women Business Enterprises	$15,289,014	20.53%	12.27%	$9,132,605	$6,156,409	1.67	**
Minority and Women Business Enterprises	**$18,270,725**	**24.54%**	**28.11%**	**$20,928,886**	**-$2,658,161**	**0.87**	**not significant**
Caucasian Male Business Enterprises	$56,185,372	75.46%	71.89%	$53,527,211	$2,658,161	1.05	not significant

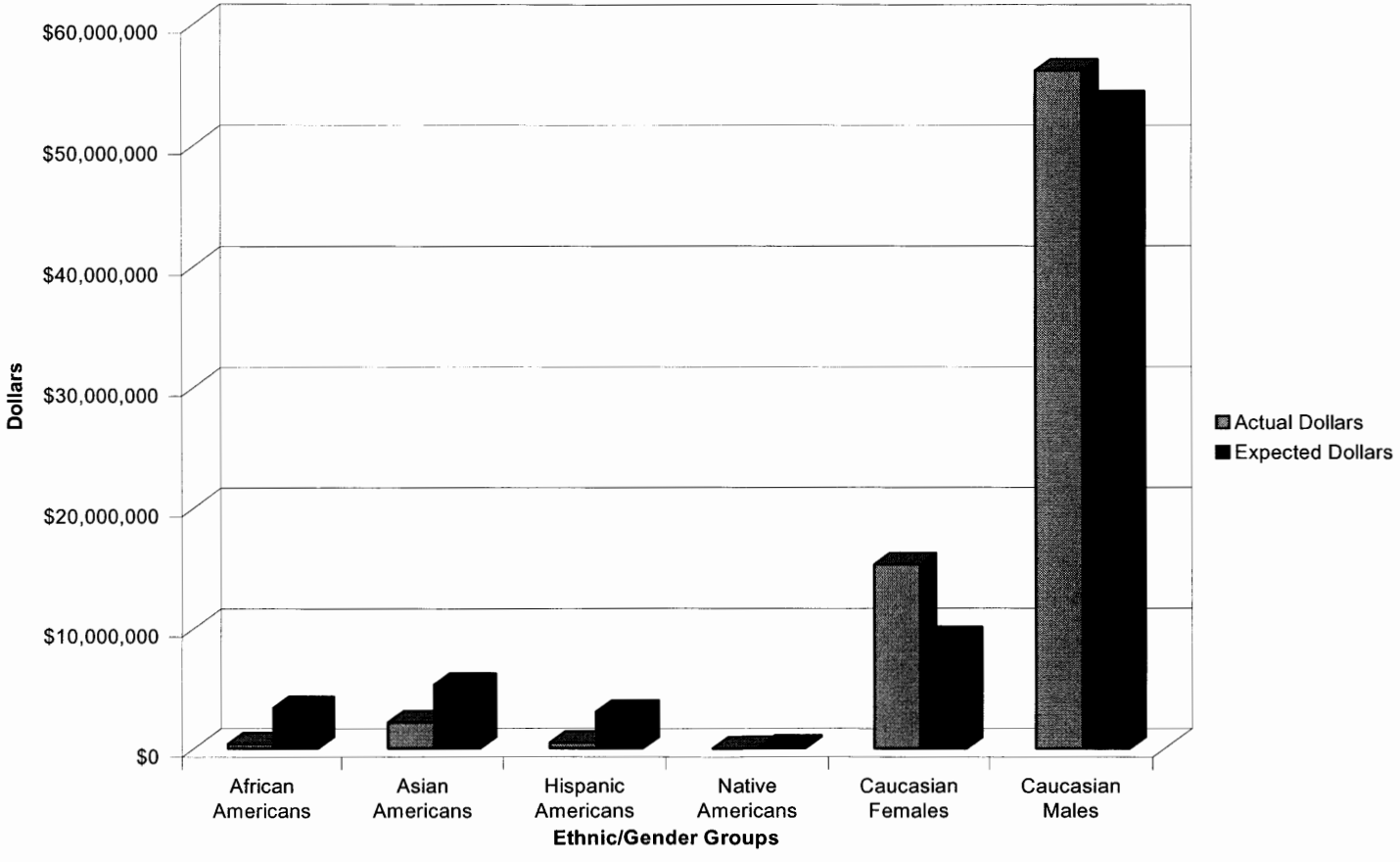
(*) denotes a statistically significant underutilization.

(†) denotes a statistically significant overutilzation.

(**) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of Caucasian Males.

(----) denotes an underutilized group with too few contracts to test statistical significance.

Chart 6.02 State Colleges and Universities Disparity Analysis: All Formal Construction-Related Subcontracts, July 1, 2000 to June 30, 2002



The State Colleges and Universities subcontractor disparity findings are summarized in Table 6.03 below. All minorities, with the exception of Hispanic Americans, were underutilized at a statistically significant level in construction. All minorities were underutilized at a statistically significant level in construction-related services. Women Business Enterprises were underutilized at a statistically significant level in construction, but not in construction-related services.

Table 6.03 State Colleges and Universities Subcontractor Disparity Summary, July 1, 2000 to June 30, 2002

Ethnicity/Gender	Construction	Construction-Related
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	No	Yes
Native Americans	--	--
Minority Business Enterprises	Yes	Yes
Women Business Enterprises	Yes	**
Minority and Women Business Enterprises	Yes	No

Yes = Statistically significant disparity was found
No = Statistically significant disparity was not found
--- = There were insufficient records to determine statistical disparity
** = The study did not test statistically the overutilization of M/WBEs

7

DISPARITY STUDY RECOMMENDATIONS

I. INTRODUCTION

Race and gender-conscious and race and gender-neutral recommendations are offered to remedy the statistically significant underutilization of minorities identified in the two industries studied - construction and construction-related. The race and gender-conscious measures include prime contracting and subcontracting remedies for the ethnic and gender groups where disparities were found. The race and gender-neutral recommendations are offered as a strategy to increase equity in contracting without regard to race or gender. They are presented as best practices applicable to all units of State government contracting. These same race and gender-conscious and race and gender-neutral recommendations are also found in the State Agencies, Authorities, and Commissions Volume 3, Chapter 7.

II. SUMMARY OF STATISTICAL FINDINGS

The statistical analysis is a key research component of the Study. The purpose of the statistical analysis is to identify disparity between the use of M/WBEs and their availability in the marketplace. Disparity is defined as statistically significant underutilization. Statistical significance means that disparity results did not occur by chance.

Tables 7.01 and 7.02 depict the disparity findings. In summary, in the award of prime contracts for construction and construction-related services there was disparity at both the formal and informal contracting levels for State Colleges and Universities. At the subcontractor level, there was also disparity in both construction and construction-related services.

III. RACE AND GENDER-CONSCIOUS RECOMMENDATIONS

Several remedies are proposed to address the statistically significant prime contractor and subcontractor underutilization of minority groups. It is critical that race and gender-conscious remedies are narrowly tailored to correct documented statistically significant underutilization. Therefore, the remedies recommended address the underutilization of those racial groups with a disparity. Since the statistical analysis does not examine the overutilization of M/WBEs, remedies are not applicable. Table 7.01 depicts the ethnic and gender groups which had documented disparity.

Table 7.01 Prime Contract Disparity Findings: State Colleges and Universities

Ethnicity and Gender	Construction Services	Construction-Related Services
Informal Contracts	Contracts less than $19,500	Contracts less than $19,500
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	Yes	No
Native Americans	---	---
Caucasian Females	No	**
Formal Contracts	Contracts less than $500,000	Contracts less than $500,000
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	Yes	No
Native Americans	---	---
Caucasian Females	**	No

Yes = Statistically significant disparity was found
No = Statistically significant disparity was not found
--- = There were insufficient records to determine statistical disparity
** = The study did not test statistically the overutilization of M/WBEs

A. Prime Contractor Remedies

The prime contractor remedies apply to both formal and informal contracts. However, remedies for formal contracts are limited to contracts under $500,000. Remedies for informal contracts apply to both industries and to groups with a disparity finding since

awards need not be determined by price. The recommendations below apply only to those groups with identified disparity.

1. Formal Prime Contract Remedies:

a. Incentive Credits

Incentive credits should be given to statistically significant underutilized groups on construction-related contracts since these contracts can be awarded based on qualifications. The incentive credits can counterbalance the competitive disadvantage experienced by these groups. Offsetting the comparative disadvantage could mitigate the disparity in this industry. The credits would be applied to the rating for formally awarded contracts under $500,000.

b. Evaluation Criteria

Utilization of the groups with a disparity could be a weighted criterion in the evaluation of statements of qualifications and proposals for construction-related contracts.

c. Bid Discounts

Bid discounts could be applied to the construction bids submitted by the groups with identified disparity. The price cost considered in the evaluation of the bid would be the actual less the discount.

d. Joint Venture Incentive Credits

Incentive credits should be given for joint ventures where the statistically significant underutilized groups own at least 51%. The joint venture incentive credits can increase depending on the level of the underutilized groups' participation.

2. Informal Prime Contract Remedies

a. Sheltered Market

A Sheltered Market program should be established for informal contracts. The Sheltered Market would limit competition to firms from the statistically significant underutilized groups and other firms of comparable capacity. A Sheltered Market program would ensure that quotations for informal contracts are solicited from a diverse pool of certified small businesses. Because the Sheltered Market program awards prime contracts, it is a means for building the capacity of small businesses.

Firms would be required to qualify for the program. In addition, the statistically significant underutilized groups would be presumptive members of the program. The eligibility of any

other groups would be determined through a certification process. The existence of the small contracts rotation process should be widely advertised to the target ethnic and gender groups in each industry.

An approved list of Sheltered Market participants should be developed for each industry, and as needed, specialized lists would be compiled within industries. The businesses would be randomly ranked on each list, and twice a year there would be an open enrollment period. When the open enrollment period closed, the random list of new businesses would be appended to the existing list. The lists of Sheltered Market firms would be posted for public review. Sheltered Market contract awards, like other current State College and University contract awards, should also be posted for public review.

Informally bid contracts, where the State Colleges and Universities can identify a fixed unit price for the services, should be rotated among all firms that can provide the services. This list should include M/WBE and non-M/WBE firms interested in participating in the rotation. Where M/WBE firms were found to be underutilized at a statistically significant level, every fifth contract should be limited to competition between the underutilized groups. Contracts for which the State Colleges and Universities cannot identify a fixed unit price should be competitively bid.

Departments should be deterred from issuing change orders on contracts under the informal threshold and instead select a contractor from the Sheltered Market list. Maximum use of Sheltered Market firms should be encouraged.

Financial and technical assistance should also be made available to firms that participate in the Sheltered Market program. Finally, the Sheltered Market program should require that firms graduate after they reach a certain size threshold or participate in the program over a specified time period.

b. Staff Good Faith Efforts

Staff with informal contract purchasing authority should consistently document a Good Faith Effort to solicit quotes from the statistically significant underutilized groups. Informal contracts do not require public bidding; and therefore, the solicitation and selection are under the discretion of staff. Informal solicitations and awards should be published on each State College and University website. Access to this page should be limited to certified SBEs using a unique password. Monthly reports should be published by each State College and University detailing awards made in order to document compliance. Good Faith Efforts would standardize the solicitation of statistically significant underutilized groups for informal contracts.

One example of Good Faith Effort documentation is a checklist that would require buyers to demonstrate their efforts to solicit quotes from the statistically significant underutilized groups. The checklist would outline Good Faith Effort criteria, detail the level of effort

required, and list the documentation required to demonstrate that effort. Whenever there is an intent to award an informal contract to a business other than one from a statistically significant underutilized group, supervisory review and approval of the Good Faith Effort would be required to award the contract.

B. Subcontractor Remedies

M/WBE remedies are proposed for construction and construction-related contracts for groups with identified statistically significant underutilization. Since the statistical analysis does not examine the overutilization of M/WBEs, remedies are not applicable. Table 7.02 depicts the groups which had a documented disparity.

Table 7.02 Subcontract Disparity Findings: State Colleges and Universities

Ethnicity and Gender	Construction Services	Construction-Related Services
Subcontracts	All Formal Contracts	All Formal Contracts
African Americans	Yes	Yes
Asian Americans	Yes	Yes
Hispanic Americans	No	Yes
Native Americans	---	---
Caucasian Females	Yes	**

Yes = Statistically significant disparity was found
No = Statistically significant disparity was not found
--- = There were insufficient records to determine statistical disparity
** = The study did not test statistically the overutilization of M/WBEs

1. Overall M/WBE Subcontracting Goals

An overall goal should be established as a target for the participation of the underutilized groups in the State Colleges and Universities' subcontracts. The goal should reflect the availability of the statistically significant underutilized groups as calculated in the Study. The overall goal should be reviewed periodically. Tables 7.03 and 7.04 depict the construction and construction-related subcontractor availability of the statistically underutilized groups. Based on the group's availability, the overall construction subcontract goals for State Colleges and Universities would be 6.30 percent for African Americans and 4.34 percent for Asian Americans, and 12.67 percent for Caucasian Females.

Table 7.03 Construction Subcontractor Availability - State Colleges and Universities

Underutilized Group	Percent Availability
African Americans	6.30%
Asian Americans	4.34%
Caucasian Females	12.67%

The overall goal for the construction-related industry based on the underutilized groups availability would be 4.51 percent for African Americans, 7.11 percent for Asian Americans, and 4.09 percent for Hispanic Americans.

Table 7.04 Construction-Related Services Subcontractor Availability-State Colleges and Universities

Underutilized Group	Percent Availability
African Americans	4.51%
Asian Americans	7.11%
Hispanic Americans	4.09%

2. Contract-Specific M/WBE Subcontracting Goals

Contract-specific subcontracting goals should be set on all construction contracts for groups with an identified disparity. Goals should reflect the availability at the time each contract is advertised. Setting contract specific goals narrowly tailored to the current availability of the businesses to perform the identified subcontracting opportunities is the most prudent method to remedy the disparity. This contract specific goal setting method also ensures that the goals are reasonably attainable.

Both the items of work in the contract and the availability of M/WBEs to perform the work items must be determined beforehand in order to set a contract-specific goal. To set contract- specific goals, the State Colleges and Universities will need to maintain a current database with M/WBE and non-M/WBE available firms to perform contracts.

3. Weighted Good Faith Efforts

Good faith effort criteria that define and quantify the minimum behavior required to demonstrate an affirmative effort to meet the subcontracting goal should be developed. A waiver provision is also necessary in order to address the circumstances in which the goals cannot be met. Good Faith Efforts will measure a prime contractor's endeavor to meet the M/WBE subcontracting goals.

There would be a minimum score for the prime contractor to demonstrate a Good Faith Effort. Prime contractors failing to meet the M/WBE subcontractor goal or make a Good Faith Effort to do so would be deemed non-responsive.

C. Disadvantaged Business Enterprise Programs

Federal Disadvantaged Business Enterprise (DBE) subcontracting goals should be utilized whenever the contract is funded by federal dollars. The U.S. Department of Transportation's Disadvantaged Business Enterprise Program and the U.S. Environmental Protection Agency's (EPA) Fair Share Program, require subcontracting goals to achieve disadvantaged businesses' participation (which includes M/WBEs). These federal programs, used in combination with State-funded programs, will help to alleviate the identified disparity. These federal programs do not require a factual finding of disparity however, they do require funding recipients to implement measures to ensure equitable contracting. For the DOT, these measures are outlined in 49 CFR Part 26. The EPA is currently developing its draft rules.

Both the DOT and EPA require goal setting based on the relative availability of ready, willing and able DBEs in the relevant market area. Additionally, the DOT rules require a recipient agency to determine each year the apportionment between race-conscious method and race-neutral method to achieve the annual DBE goal. The recipient agency must meet at least some of the DBE goal through race-neutral means. The race-neutral recommendations offered are designed to promote use of M/WBEs in State-funded contracts, but they could also be used to enhance the race-neutral components of the State's DBE programs.

IV. RACE AND GENDER-NEUTRAL RECOMMENDATIONS

Croson case law requires that the State consider (but not exhaust) race and gender-neutral initiatives before resorting to race conscious remedies. The State operated a race-neutral Small Business program from October 1984 to July 10, 2003 in conjunction with a race-conscious M/WBE program. This Disparity Study found disparities, as noted above, during the July 1, 2000 to June 30, 2002 study period. Since July 10, 2003, the race-conscious M/WBE Program was eliminated with only the race-neutral Small Business Program continuing. In meeting this *Croson* requirement, the State should evaluate whether documented M/WBE participation in this Small Business Program, since the elimination of the M/WBE Set-Aside Program, was a sufficient response to the findings of disparity discussed earlier in this document.

Mason Tillman makes specific race and gender-neutral program recommendations for future contracting programs. They incorporate an examination of a number of best management practices of similarly situated jurisdictions. As such, they can serve as a guide for State contracting efforts

1. Unbundle Large Procurement Into Smaller Contracts Where Feasible

Bundling occurs when a procurement consolidates small purchases into one contract, or when goods and services previously purchased individually are grouped together in a single solicitation.

Large contracts should be unbundled to maximize small business participation. During the data collection process for this study, it was found that there were a number of large contracts awarded by the State College and Universities. Unbundling large procurement will increase the opportunity for small businesses to compete for State contracts.

In determining whether projects should be divided, the following criteria should be reviewed:

- Whether or not the project takes place in more than one location
- Size and complexity of the procurement
- Similarity of the goods and services procured
- Sequencing and delivery of the work
- Public safety issues and convenience
- Procurement segmentation options

The federal government has made contract unbundling a key element of its small business agenda.[1]

2. Raise Pre-Qualification Contract Levels

The use of pre-qualification standards should only be considered on large and complex projects above $10 million. Only contracts above $10 million that require specialized technical expertise beyond licensing requirements and a demonstration of financial capacity beyond what is needed to acquire bonding should be considered for pre-qualification.

Pre-qualification standards may inhibit the development of small firms by denying capable and experienced entrepreneurs opportunities on public-funded projects. Eliminating pre-qualification standards, except for large and complex projects above $10 million, will provide otherwise capable firms the opportunity to compete for State Colleges and Universities' contracts.

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[1] United States. The Office of Federal Procurement Policy (OFPP) *Contract Bundling: A Strategy for Increasing Federal Contracting Opportunities for Small Business.* Washington D.C. Executive Office of the President, October 2002.

State licensing, bond and insurance requirements, and bid and proposal specifications already serve as mechanisms to ensure the capability and capacity of contractors and consultants, rendering many pre-qualification standards redundant. Projects that do not require capability or capacity beyond that demonstrated through licensing, bonding, and bid or proposal specifications, should not be subjected to pre-qualification standards.

3. Use Direct Contracting As a Means to Award Small Contracts

Direct contracting occurs when a public agency directly awards construction support services contracts that normally are included within the general contract. These contracts include construction support services such as trucking, landscaping, demolition, site clearing, surveying, and site security.

Construction support services should be awarded as direct contracts. Many construction support services are distinct tasks often performed by small firms. Direct contracting will increase the opportunities for, and build the capacity of, small firms by allowing them to work as prime contractors.

4. Evaluate Bonding and Insurance Requirements

Bonding and insurance requirements should be evaluated to ensure that smaller contracts do not carry a disproportionately high level of coverage. Prohibitive bonding and insurance requirements can be a disincentive to bidders, constitute a barrier to small business, and increase the costs of goods and services. Revised bonding and insurance requirements will attract more small firms as bidders, thus increasing competition and reducing costs.

The revised bonding and insurance requirements should address bid, performance, and payment bonds; general and professional liability; and errors and omissions insurance. Risk management standards could be developed that are applicable to the industry and associated liability. For example, a $100,000 air conditioning installation contract would have one set of bonding and insurance requirements, while a $1,000,000 building renovation contract would have another. Both would be based on the project's size, scope, scale, and risk to the State Colleges and Universities.

5. Phase Bonding and Retainage Requirements

a. Bonding

Prime contractors' bonds should be proportionally released as goods and services, accepted and rolled over into the next portion of the contract. Subcontractors' bonds should be released upon completion and acceptance of their portion of work. Phasing bonding requirements will increase a small firm's access to credit, promoting business growth.

b. Retainage

Retainage is the percent of the contract value withheld until the successful completion of a contract.

The subcontractors' portion of the retainage should be released once work has been completed and accepted. Retainage should be eliminated for small subcontracts and reduced for all certified M/WBE contractors. This will reduce the cash flow burden experienced by small construction subcontractors. Increased cash flow will allow these small firms to build capacity.

6. Post Project Forecast on the Internet

A quarterly forecast should be posted on the Internet to provide firms with adequate notice and lead time. There were several anecdotes of firms that could not secure timely information about upcoming contract opportunities. Project forecasting will provide prime contractors and subcontractors more lead time for networking and outreach.

The State Colleges and Universities should also consider "listing" contract opportunities prior to the issue of contract solicitation. Upcoming contract opportunities could be listed 15 to 30 days prior to the actual release date. The "listing" would consist of the draft project specifications, anticipated release date, and subcontracting goals for the project. The "listings" should be posted the same day each week.

7. Consider Reducing SBE Size Standards

The State should consider reducing SBE size standards to enable M/WBEs to compete with similarly situated businesses. The current SBE size standard is based on firms with no more than 100 full time employees. The number of small businesses in the State and the small size of State construction and construction-related contracts, provide compelling reasons for creating a small business definition individualized to the profile of State businesses and expanding the existing preferences for small business.

According to the 1997 U.S. Census, 93.37 percent of the construction businesses and 88.3 percent of the construction-related businesses with paid employees in the State had fewer than 20 employees, creating a large pool of potentially available firms. For the construction industry, 63.19 percent of the State Colleges and Universities' contracts were under $25,000, 73.26 percent were under $50,000, and more than 82 percent were under $100,000. For the construction-related industry, 55.26 percent of the State Colleges and Universities' contracts were under $25,000, 59.4 percent were under $50,000, and more than 65 percent were under $100,000. Therefore, small businesses would have the capacity to provide services on the average State Colleges and Universities' contract. However, analysis of awarded contracts shows that small businesses are not being utilized on small contracts.

8. Allow Certified M/WBEs to Register Their Interest as Subcontractors for State Colleges and Universities Projects Via the Internet

For each contract solicitation with subcontracting opportunities, the State Colleges and Universities could set up a link on each of their web sites that would allow M/WBEs to express interest in subcontracting on a particular project. Many M/WBE companies that are too small to be a prime contractor on a large project are available to perform as subcontractors. Prime contractors could use this on-line source list to solicit M/WBEs for subcontracting opportunities.

9. Require Prime Contractors to List All Subcontractors with Their Bids and Proposals

The State Colleges and Universities should require prime contractors submitting bids and proposals to include a list of their subcontractors' contract amounts and certification standards. The State Colleges and Universities could then verify the amounts with the subcontractors prior to awarding the contract. The State Colleges and Universities would be able to reject non-responsive bids and proposals during the submission review process, avoiding the administrative issues of handling non-compliance after the awarding of the contract.

The State Colleges and Universities could consider requiring prime contractors to secure a "letter of intent" from each subcontractor to be submitted prior to awarding the contract as well. The letter of intent is a statement from the subcontractor stating its agreement to provide the services listed in the bid or proposal for the amount listed. Prime contractors should be penalized for the unauthorized listing of subcontractors. This additional level of scrutiny can prevent prime contractors from listing subcontractors without their consent.

10. Debrief Unsuccessful Bidders and Proposers

The State Colleges and Universities should develop an official policy to encourage firms to review unsuccessful bids and proposals. Debriefing helps businesses learn about their areas of strength and weakness and how to create a more successful bid or proposal. Debriefing is a means to increase the quality of bids and proposals received by the State Colleges and Universities from M/WBEs.

As part of the debriefing process, a firm could schedule an appointment to review the successful submission and also receive specific critiques on its unsuccessful submission. M/WBE bidders who have three successive failed bids or proposals should be strongly encouraged to schedule a debriefing appointment.

11. Establish Uniform Bid and Proposal Protest Procedures

The State Colleges and Universities should establish uniform bid and proposal protest procedures. Specific bid and proposal protest procedures afford vendors with a due process to challenge what may be a questionable contract award. Uniform bid and proposal protest procedures would minimize the time and resources needed by all parties to respond to a protest.

The State should establish uniform regulations applicable to all State Colleges and Universities similar to those used by the Department of the Treasury's Division of Property Management and Construction (DPMC), with some modifications. DPMC, under Title 17, Chapter 19, Subchapter 4 of New Jersey's Administrative Code, requires firms wishing to protest a bid decision to submit a written request specifying the grounds on which the award of a contract or the rejection of a bid is challenged. The protest must be received within five calendar days after the opening of bids. An informal hearing is held within fifteen calendar days of the receipt of the request and is overseen by an impartial hearing officer. The hearing officer then prepares a report within ten calendar days of the hearing's conclusion, unless greater time is required. This report is merely advisory and is not binding. All parties to the hearing also receive copies of the hearing officer's report and then have ten calendar days to provide written comments on exceptions. After this ten-day period, the final decision on the matter is issued.

DPMC's bid protest procedures should be revised by shortening the bid protest period, including a bid appeals process by an independent appeals panel, and making the rule applicable to both bid and proposal protests. An informal hearing should be overseen by a hearing officer, but it should be held within five calendar days of the receipt of the request. The hearing officer should make a final decision on the protest within five days of the hearing.

The State should create a bid and proposal protest appeals process by which the business can appeal. The appeals process should be overseen by an independent three person hearing panel. One of the individuals in the appeals panel should be a vendor who would represent the bidders on State contracts. Members of the three member appeals panel should be subject to term limits.

The appeals panel should hold a hearing within ten days of receipt of a written appeal of the hearing officer's determination and it should issue a final decision within five days of the appeals hearing. The decision of the three person panel should be appealable in a court of law.

12. Develop an Expedited Payment Program

An expedited payment program should be developed for M/WBEs. Expedited payments will remove a major barrier to small business participation in public contracting. They will

also provide additional incentives for businesses to compete for State Colleges and Universities' contracts by establishing the State Colleges and Universities as preferred public sector clients.

In an expedited payment program, M/WBEs would be paid on an accelerated schedule. Non-certified prime contractors who meet M/WBE participation goals would also be eligible for the expedited payment program. When a participating firm submits an invoice, it would include an identification number that marks it for a 15-day expedited payment. State Colleges and Universities' staff would date stamp invoices immediately upon receipt. If an invoice is not date stamped, the 15-day cycle would begin on the date specified in the invoice.

As an alternative to the 15-day expedited payment, firms participating in the expedited payment program could be permitted to submit invoices for progress payment at two-week intervals. Firms would be paid according to the normal State Colleges and Universities' schedule, but because they would be allowed to invoice more frequently, they would be paid more frequently.

The State Colleges and Universities should assess an interest penalty for late payments to certified firms. Penalties would be assessed the day after the contractual payment due date. If there is no payment due date stipulated in the contract, penalties would be assessed on the 31st day after receipt of the invoice. The penalty would be a nominal percentage of the invoice amount assessed daily until a check is issued.

13. Provide for Partial Payment of Invoices

The State Colleges and Universities should be required to notify a firm within five days of receiving an invoice if there are any items in dispute. Project managers should be granted line item approval authority. This would allow undisputed invoice amounts to be paid promptly and disputed items to be resolved in a timely manner. As a result, small businesses that contract with the State Colleges and Universities would be able to maintain a positive cash flow while providing goods or services to the State Colleges and Universities.

14. Assess the Contract Dispute Resolution Process

The State Colleges and Universities should assess its dispute resolution process to ensure that it does not unduly disadvantage or burden M/WBEs. Small businesses may be deterred from seeking legitimate redress if the process is costly and time consuming. Streamlined dispute resolution procedures can also establish a greater degree of fairness.

15. Avoid Overly Complex or Restrictive Specifications

To encourage M/WBE contractor participation, requiring a base bid with multiple alternatives should be avoided. This type of specification requires a considerable degree of expertise and resources to prepare what ultimately is several bids at once. Simplified specifications can promote accurate bids, minimizing the needs for Requests for Information and change orders.

In addition, unnecessary work hour restrictions can also limit a small contractor's flexibility in meeting demanding construction schedules. Proprietary specifications can be costly as well. When a supplier is granted an artificial monopoly on materials by a public agency owner, the supplier can and often will demand an excessive price. If brand-name material is required in the bid specifications, it should be purchased by the State Colleges and Universities and not the contractor.

16. Develop Subcontractor Substitution Standards

Formal subcontractor substitution standards should be developed so that subcontractors are not removed from a project without due process. Eliminating a subcontractor from a project or reducing its scope of work can pose a significant hardship on small contractors. Formalizing subcontractor substitution standards ensures that prime contractors are accountable to commitments made to M/WBEs at the time of bid or proposal submission.

A subcontractor should be notified in writing of an intended substitution and afforded the opportunity to respond. Substitutions should only be allowed after the subcontractor has had a chance to respond and only with the approval of the State Colleges and Universities. In addition, any reduction in the scope of work or contract value for a subcontractor should be considered as a substitution. Failure to adhere to the substitution standard should be a breach of contract and the appropriate sanctions applied.

17. Post Prime Contractor Payments to the Internet

Prime contractor payments should be published on the internet. This will allow subcontractors and subconsultants to monitor the progress of their project and to track when the prime contractor receives payment.

18. Conduct Routine Post-Award Contract Compliance

Routine contract compliance monitoring should be conducted to ensure that M/WBE goals are met throughout the duration of a contract. This type of monitoring will verify the prime contractor's commitments both prior to and after the contract award. Consistent contract compliance should minimize the hardships experienced by small firms with limited resources.

The following contract compliance methods are recommended:

- Periodically collect copies of canceled checks to subcontractors to verify payment information
- Penalize prime contractors and subcontractors for non-compliance with program requirements
- Fine prime contractors for unapproved substitutions
- Include a provision for liquidated damages if a contract is breached due to non-compliance with M/WBE requirements

19. Publish M/WBE Utilization Reports

Prime contractor and subcontractor utilization should be reported on a regular basis. Reporting will measure the success of the M/WBE programs' efforts and determine if they require modification. Periodic reporting can also serve as a public relations tool, informing the community of the State Colleges and Universities' efforts to ensure diversity.

These reports should include verified payment in addition to award data. The verification process should be standardized. The reports should also include change orders and substitutions. Reports should also be posted to each State College and University web site and circulated to local chambers of commerce and trade organizations. The utilization reports should include an assessment of M/WBE program activities and recommendations for improvement on an annual basis.

V. ADMINISTRATIVE RECOMMENDATIONS

A. Organizational Recommendations

1. Establish a Centralized M/WBE Office with Adequate Staff

A centralized M/WBE contract compliance office should assume responsibility for the design, implementation, and operation of the business equity programs. Currently contract compliance is decentralized. Consolidating all of these units into one office will ensure that all business equity programs are uniformly implemented and monitored.

The M/WBE contract compliance office should be under the jurisdiction of the Office of the President for each State College and University and separate from any college or university office with purchasing authority. This will relieve the natural tension between the deliberation required to ensure contract compliance and the need to expediently procure products and services. The contract compliance office will need the authority to approve solicitations, reject bids or proposals, and enforce penalties to contractors and staff for non-compliance with the business equity program requirements. The Office of the President

would be the final arbitrator of the competing interest between contract compliance and procurement.

The centralized contract compliance office should be adequately staffed with experienced professionals capable of fulfilling the new responsibilities. Adequate staffing is necessary to promote the smooth implementation of the State Colleges and Universities' new business equity programs. Personnel staffing the contract compliance office should have knowledge about procurement procedures, public contracting law, affirmative action programs, and the business community. The personnel should have education or professional experience in public administration and be knowledgeable about current business trends and the operation of a small business.

2. Recognize Buyers that Utilize M/WBEs

Staff who comply with Program requirements to utilize M/WBEs on informal contract solicitations should be recognized. Such acknowledgment could be in the form of a letter from supervisory staff. Formal recognition will provide State Colleges and Universities' staff an additional incentive to meet M/WBE program requirements and reward those that consistently demonstrate a commitment to diversity.

3. Develop a Systemwide M/WBE Program Manual

A systemwide M/WBE Program Manual should be developed for all State Colleges and Universities. Creating a uniform manual would streamline the contract compliance process and provide one source that is applicable to all State Colleges and Universities' contracting. A uniform M/WBE Program Manual will also provide staff with clear guidance on their responsibilities and requirements.

The recommendations in this report should be included in drafting the M/WBE Program Manual. Training should be provided when the manual is approved. Staff compliance should be evaluated through both department-level reports of M/WBE utilization and staff performance reviews.

4. Conduct Outreach and Implement Marketing Strategies

The proposed M/WBE program should have an outreach component. The outreach component should include the following three elements:

- Promote new programs
- Solicit firms to pursue certification
- Advertise contract opportunities in order to increase the number of businesses responding to informal and formal solicitations

Effective outreach will also attract more bidders and proposers and inform them of new requirements.

The table below lists the strategies and tactics that can be used to market the programs, inform the business community of new requirements, and attract M/WBE firms to certify with the State, and to bid on State Colleges and Universities' contracts.

Table 7.05 Outreach and Marketing Strategies

Strategy	Tactics
Design tagline and display banner	• Develop tagline • Design banner with placement of existing logo and new tagline
Define design standards, layout, and appearance of procurement documents for the organization	• Revise all procurement materials to include the program logo and tagline in order to have a uniform appearance
Develop collateral print material for outreach campaign	• Revise brochure to reflect program changes • Develop articles and media packets
Launch outreach campaign	• Distribute media packets and press releases • Place public service announcements • Pitch campaign to broadcast media
Host semi-annual contractors' open house and other networking events	• Plan and coordinate open house events • Send out invitations via mail, fax, and e-mail • Include buyers in outreach events • Make informal contract opportunities available • Distribute contract forecasts and certification forms
Distribute forecasts of contracting opportunities via facsimile and e-mail	• Distribute contract forecast • Post to web site • Distribute through fax and e-mail
Partner with agencies and organizations to disseminate program information	• Continue current agency partnerships • Develop local business and trade group partners
Conduct an annual program evaluation	• Establish measurable outcomes • Conduct surveys • Examine bidding history

B. Data Management Recommendations

1. Track All Subcontract Bidders

All subcontract bidders should be tracked electronically, on a systemwide basis. Setting M/WBE contract goals will require a list of available firms. Electronically recording bidders is a comprehensive means of tracking ready, willing, and able firms.

In order to maintain a list of available subcontractors, the following information should be collected from prime contractors at the time of bid opening:

- Subcontractors' names
- Subcontractors' certification status
- Service to be provided by each subcontractors
- Subcontractors' bid amount

2. Consistently Track All Subcontractor Payments

There should be uniform tracking of all subcontractor payments. Tracking subcontractor payments is a critical element of contract compliance. Tracking subcontractor payments will also identify problematic areas in contract compliance and project management.

Data should be stored electronically in a relational database. Each college or university that manages contracts should maintain its own relational database. The databases should be based on the same platform, in order that the data can be easily integrated when needed. In addition, the contract numbering system should be the same across all the State Colleges and Universities, and it should match the one used in the NJCFS.

3. Code Contracts by Industry Classification in the New Jersey Comprehensive Financial System (NJCFS)

State Colleges and Universities contracts should be coded by industry and entered into the NJCFS at the time of the contract award. Coding each record by industry would facilitate compliance reporting and aid in producing utilization reports.

The numeric code for the type of industry should be based on the federal North American Industrial Classification Standard (NAICS). Then, the existing contract description field in the NJCFS would be used to verify the classification.

4. Consolidate All Payment Tracking into the New Jersey Comprehensive Financial System (NJCFS)

The NJCFS should be used by State Colleges and Universities to track and monitor payments. Currently, only State agencies consistently use the NJCFS. A centralized system will streamline payment monitoring and financial reporting for all State Colleges and Universities.