

Item # 83

ADDITIONAL MATERIAL
Regular Meeting
June 1, 2021

SUBMITTED AT THE REQUEST OF

COMMISSIONER
DALE V.C. HOLNESS

PALM BEACH COUNTY

Disparity Study

Revised Draft Final Report

DECEMBER 2017



MASON TILLMAN
ASSOCIATES, LTD

III. Disparity Analysis Summary

A. Construction Prime Contracts

As indicated in Table 7.11 below, disparity was found for Hispanic American prime contractors on construction contracts valued under \$50,000. Disparity was also found for African American and Hispanic American prime contractors on construction contracts valued \$50,000 to \$1,296,000.

Table 7.11: Disparity Summary: Construction Prime Contract Dollars, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Construction	
	Contracts Valued Under \$50,000	Contracts Valued \$50,000 to \$1,296,000
African Americans	No Disparity	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>
Native Americans	Too Few Available Firms to Perform Statistical Analysis	Too Few Available Firms to Perform Statistical Analysis
Caucasian Females	No Disparity	No Disparity



B. Professional Services Prime Contracts

As indicated in Table 7.12 below, disparity was found for African American and Caucasian female prime contractors on professional services contracts valued under \$50,000. Disparity was also found for African American and Caucasian female prime contractors on professional services contracts valued \$50,000 to \$301,000, which included contracts awarded to CCNA certified professional service contractors. The disparity analysis calculated for CCNA certified prime contractors found disparity for African American CCNA certified prime contractors on contracts awarded to CCNA certified professional services contractors.

Table 7.12: Disparity Summary: Professional Services Prime Contract Dollars, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Professional Services		
	Contracts Valued Under \$50,000	Contracts Valued \$50,000 to \$301,000	All CCNA Contracts
African Americans	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity	No Disparity
Native Americans	Too Few Available Firms to Perform Statistical Analysis	Too Few Available Firms to Perform Statistical Analysis	Too Few Available Firms to Perform Statistical Analysis
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>	No Disparity



C. Goods and Services Prime Contracts

As indicated in Table 7.13 below, disparity was found for African American and Caucasian female prime contractors on goods and services contracts valued under \$50,000. Disparity was also found for African American, Asian American, Hispanic American, and Caucasian female prime contractors on goods and services contracts valued \$50,000 to \$321,000.

Table 7.13: Disparity Summary: Goods and Services Prime Contract Dollars, January 1, 2009, to December 31, 2013

Ethnicity/Gender	Goods and Services	
	Contracts Valued Under \$50,000	Contracts Valued \$50,000 to \$321,000
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	<i>Disparity</i>
Hispanic Americans	No Disparity	<i>Disparity</i>
Native Americans	Too Few Available Firms to Perform Statistical Analysis	Too Few Available Firms to Perform Statistical Analysis
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>



CHAPTER 8: Subcontract Disparity Analysis

I. Introduction

The objective of this analysis is to determine if available Minority and Woman-owned Business Enterprise (M/WBE) subcontractors were underutilized in the award of Palm Beach County's (County) subcontracts during the January 1, 2009, to December 31, 2013, study period. A detailed discussion of the statistical procedures for conducting a disparity analysis is set forth in *Chapter 7: Prime Contract Disparity Analysis*. The same statistical methodology is used to perform the subcontract disparity analysis.

Under a fair and equitable system of awarding subcontracts, the proportion of subcontract dollars awarded to M/WBE subcontractors should be relatively close to the proportion of available M/WBE subcontractors in the County's market area. Availability is defined as the number of willing and able market area businesses. The methodology for determining willing and able businesses is detailed in *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*.

If the ratio of utilized M/WBE subcontractors to available M/WBE subcontractors is less than one, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event which is less probable.⁴⁰⁰ The Court in *Croson* states that an inference of discrimination can be made *prima facie* if the observed disparity is statistically significant. Under the *Croson* standard, non-minority male-owned businesses (non-M/WBE) are not subjected to a statistical test of underutilization.⁴⁰¹

II. Disparity Analysis

As detailed in *Chapter 4: Subcontractor Utilization Analysis*, an extensive effort was undertaken to obtain subcontract records for the County's construction and professional services prime contracts. The disparity analysis was performed on the reconstructed subcontracts issued during the January 1, 2009, to December 31, 2013, study period.

The subcontract disparity findings in the two industries under consideration are detailed in *Section III, Disparity Analysis: All Subcontracts, by Industry*. The outcomes of the statistical analyses are presented in the "P-Value" column of the tables. A description of the statistical outcomes in the disparity tables are presented in Table 8.1.



⁴⁰⁰ 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 the statistical standard used in physical and social sciences, and is thus used in the present report to determine if an inference of discrimination can be made.

⁴⁰¹ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

Table 8.1: Statistical Outcome Descriptions

P-Value Outcome	Definition of P-Value Outcome
< .05 *	This underutilization is statistically significant.
not significant	<ul style="list-style-type: none"> • M/WBEs: This underutilization is not statistically significant. • Non-minority males: This overutilization is not statistically significant.
< .05 †	This overutilization is statistically significant.
----	While this group was underutilized, there were too few available firms to determine statistical significance.
**	This Study does not test statistically the overutilization of minority or gender groups or the underutilization of non-minority males.



III. Disparity Analysis: All Subcontracts by Industry

A. Construction Subcontracts

The disparity analysis of construction subcontracts is described below and shown in Table 8.2 and Chart 8.1.

African Americans represent 11.15% of the available construction businesses and received 5.38% of the construction subcontract dollars. This underutilization is statistically significant.

Asian Americans represent 1.55% of the available construction businesses and received 0.62% of the construction subcontract dollars. This underutilization is not statistically significant.

Hispanic Americans represent 11.61% of the available construction businesses and received 4.13% of the construction subcontract dollars. This underutilization is statistically significant.

Native Americans represent 0.31% of the available construction businesses and received 0.00% of the construction subcontract dollars. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 14.40% of the available construction businesses and received 9.38% of the construction subcontract dollars. This underutilization is not statistically significant.

Non-minority Males represent 60.99% of the available construction businesses and received 80.49% of the construction subcontract dollars. This overutilization is statistically significant.



**Table 8.2: Disparity Analysis: Construction Subcontracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$4,651,701	5.38%	11.15%	\$9,628,715	-\$4,977,014	0.48	< .05 *
Asian Americans	\$533,469	0.62%	1.55%	\$1,337,322	-\$803,853	0.40	not significant
Hispanic Americans	\$3,564,036	4.13%	11.61%	\$10,029,911	-\$6,465,876	0.36	< .05 *
Native Americans	\$0	0.00%	0.31%	\$267,464	-\$267,464	0.00	---
Caucasian Females	\$8,104,300	9.38%	14.40%	\$12,437,090	-\$4,332,790	0.65	not significant
Non-minority Males	\$69,537,465	80.49%	60.99%	\$52,690,468	\$16,846,996	1.32	< .05 †
TOTAL	\$86,390,971	100.00%	100.00%	\$86,390,971			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$271,719	0.31%	2.17%	\$1,872,250	-\$1,600,531	0.15	not significant
African American Males	\$4,379,982	5.07%	8.98%	\$7,756,465	-\$3,376,483	0.56	not significant
Asian American Females	\$287,281	0.33%	0.46%	\$401,196	-\$113,916	0.72	---
Asian American Males	\$246,188	0.28%	1.08%	\$936,125	-\$689,937	0.26	not significant
Hispanic American Females	\$563,636	0.65%	3.25%	\$2,808,375	-\$2,244,739	0.20	not significant
Hispanic American Males	\$3,000,400	3.47%	8.36%	\$7,221,536	-\$4,221,137	0.42	< .05 *
Native American Females	\$0	0.00%	0.15%	\$133,732	-\$133,732	0.00	---
Native American Males	\$0	0.00%	0.15%	\$133,732	-\$133,732	0.00	---
Caucasian Females	\$8,104,300	9.38%	14.40%	\$12,437,090	-\$4,332,790	0.65	not significant
Non-minority Males	\$69,537,465	80.49%	60.99%	\$52,690,468	\$16,846,996	1.32	< .05 †
TOTAL	\$86,390,971	100.00%	100.00%	\$86,390,971			

(*) denotes a statistically significant underutilization.

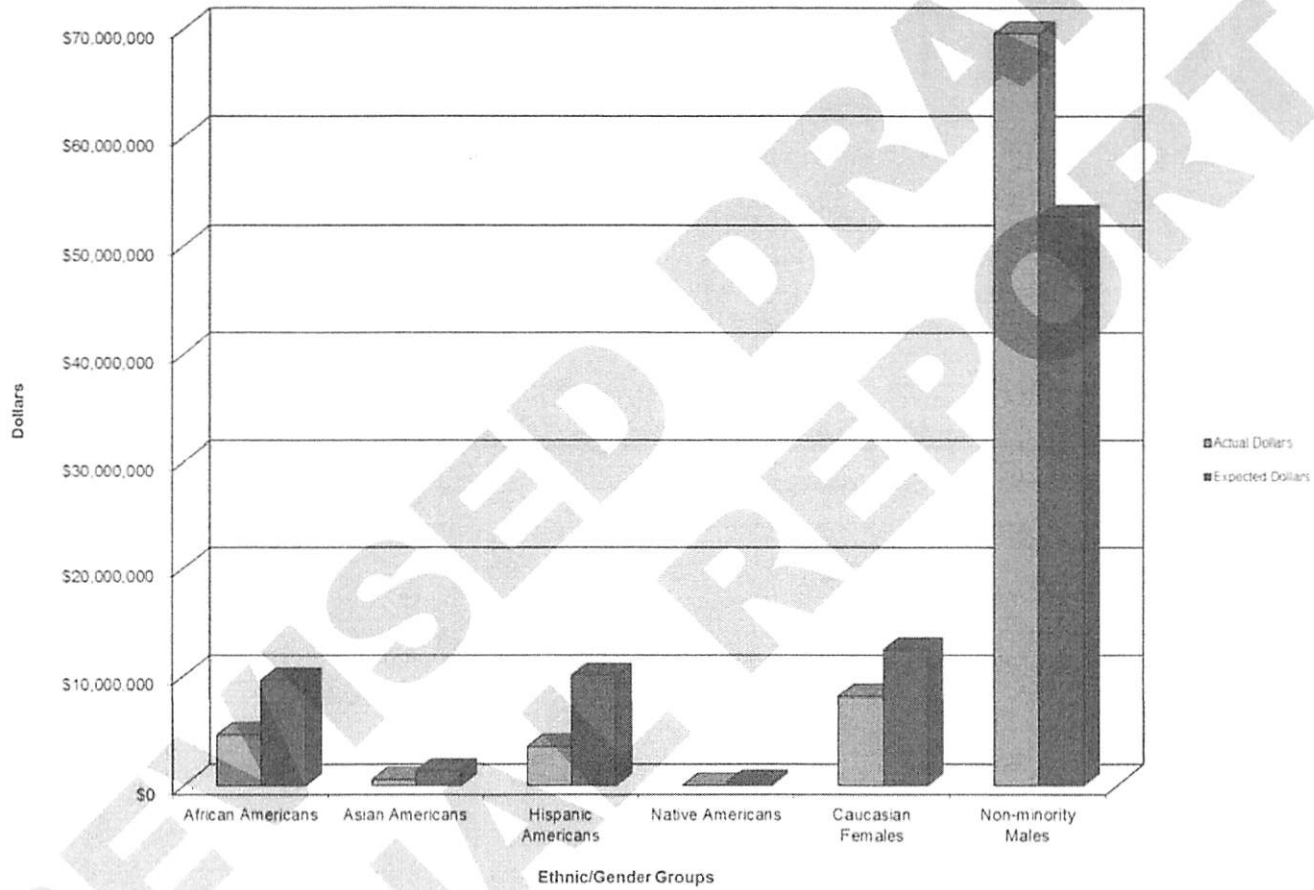
(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of minority or gender groups or the underutilization of non-minority males.

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



**Chart 8.1: Disparity Analysis: Construction Subcontracts,
January 1, 2009, to December 31, 2013**



B. Professional Services Subcontracts

The disparity analysis of professional services subcontracts is described below and shown in Table 8.3 and Chart 8.2.

African Americans represent 10.62% of the available professional services businesses and received 0.91% of the professional services subcontract dollars. This underutilization is statistically significant.

Asian Americans represent 4.31% of the available professional services businesses and received 0.44% of the professional services subcontract dollars. This underutilization is not statistically significant.

Hispanic Americans represent 10.00% of the available professional services businesses and received 6.23% of the professional services subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.15% of the available professional services businesses and received 0.00% of the professional services subcontract dollars. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 20.92% of the available professional services businesses and received 8.91% of the professional services subcontract dollars. This underutilization is not statistically significant.

Non-minority Males represent 54.00% of the available professional services businesses and received 83.51% of the professional services subcontract dollars. This overutilization is statistically significant.



**Table 8.3: Disparity Analysis: Professional Services Subcontracts,
January 1, 2009, to December 31, 2013**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$344,221	0.91%	10.62%	\$4,012,892	-\$3,668,670	0.09	< .05 *
Asian Americans	\$165,994	0.44%	4.31%	\$1,628,420	-\$1,462,426	0.10	not significant
Hispanic Americans	\$2,355,016	6.23%	10.00%	\$3,780,260	-\$1,425,244	0.62	not significant
Native Americans	\$0	0.00%	0.15%	\$58,158	-\$58,158	0.00	---
Caucasian Females	\$3,370,076	8.91%	20.92%	\$7,909,468	-\$4,539,392	0.43	not significant
Non-minority Males	\$31,567,297	83.51%	54.00%	\$20,413,407	\$11,153,891	1.55	< .05 †
TOTAL	\$37,802,605	100.00%	100.00%	\$37,802,605			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$31,753	0.08%	4.31%	\$1,628,420	-\$1,596,667	0.02	< .05 *
African American Males	\$312,468	0.83%	6.31%	\$2,384,472	-\$2,072,004	0.13	not significant
Asian American Females	\$0	0.00%	1.08%	\$407,105	-\$407,105	0.00	not significant
Asian American Males	\$165,994	0.44%	3.23%	\$1,221,315	-\$1,055,321	0.14	not significant
Hispanic American Females	\$495,176	1.31%	4.15%	\$1,570,262	-\$1,075,087	0.32	not significant
Hispanic American Males	\$1,859,841	4.92%	5.85%	\$2,209,998	-\$350,158	0.84	not significant
Native American Females	\$0	0.00%	0.00%	\$0	\$0	---	---
Native American Males	\$0	0.00%	0.15%	\$58,158	-\$58,158	0.00	---
Caucasian Females	\$3,370,076	8.91%	20.92%	\$7,909,468	-\$4,539,392	0.43	not significant
Non-minority Males	\$31,567,297	83.51%	54.00%	\$20,413,407	\$11,153,891	1.55	< .05 †
TOTAL	\$37,802,605	100.00%	100.00%	\$37,802,605			

(*) denotes a statistically significant underutilization.

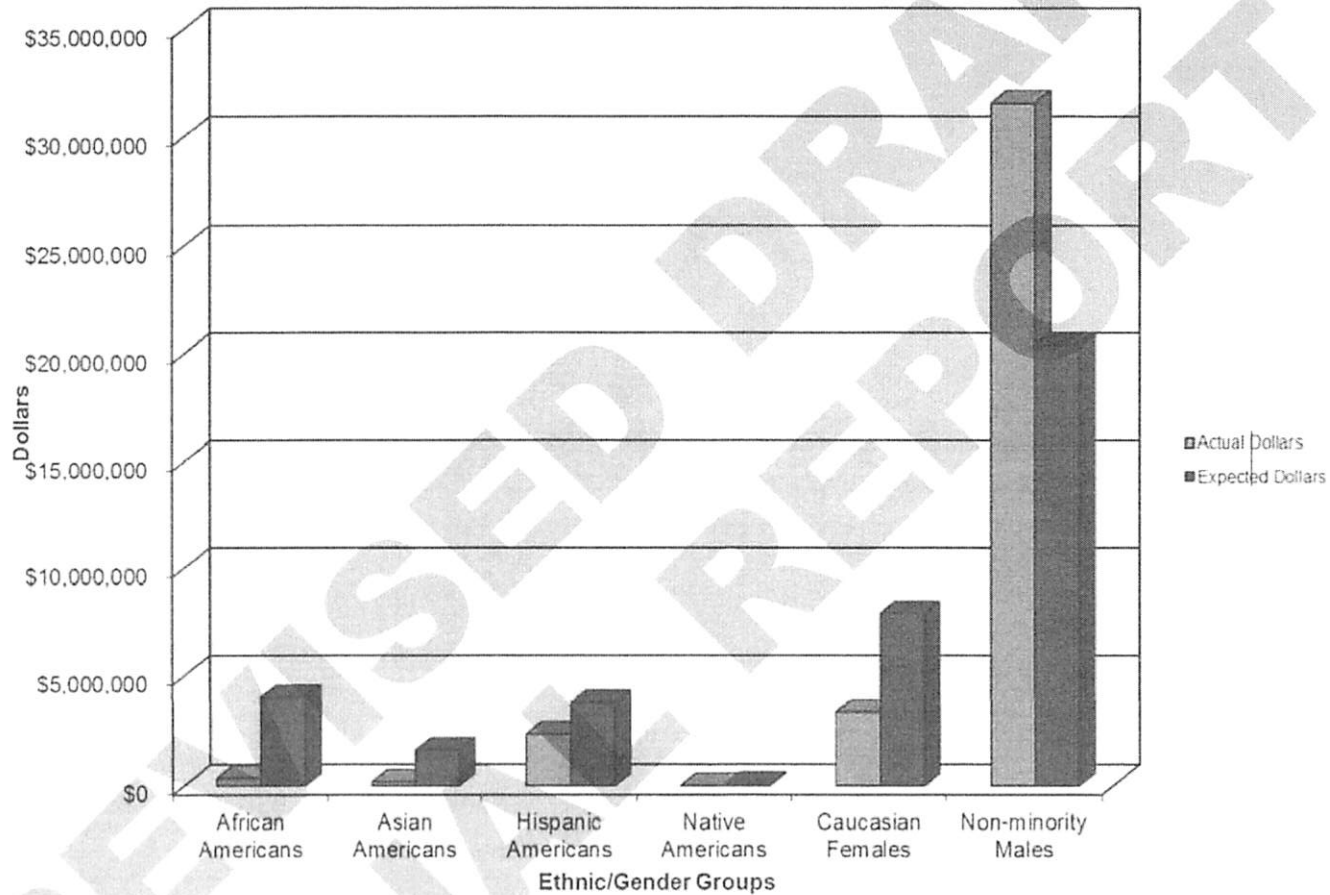
(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of minority or gender groups or the underutilization of non-minority males.

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



**Chart 8.2: Disparity Analysis: Professional Services Subcontracts,
January 1, 2009, to December 31, 2013**



IV. *Subcontract Disparity Summary*

As indicated in Table 8.4, disparity was found for African American and Hispanic American construction subcontractors and for African American professional services subcontractors.

**Table 8.4: Subcontract Disparity Summary,
January 1, 2009, to December 31, 2013**

Ethnicity / Gender	Construction	Professional Services
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Americans	No Disparity	No Disparity
Hispanic Americans	<i>Disparity</i>	No Disparity
Native Americans	Too Few Available Firms to Perform Statistical Analysis	Too Few Available Firms to Perform Statistical Analysis
Caucasian Females	No Disparity	No Disparity

