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CHAPTER 4: SUBCONTRACTOR UTILIZATION ANALYSIS

I. INTRODUCTION

As discussed in *Chapter 3: Prime Contractor Utilization Analysis*, a disparity study, as required under *Croscon*, documents Minority and Woman-owned Business Enterprise (M/WBE) contracting history in the market area. The objective of this chapter is to determine the level of DBE² subcontractor utilization by ethnicity and gender compared to Non-Minority Male subcontractor utilization. A finding of statistically significant disparity is required to implement race-based DBE subcontracting remedies.

Subcontracts issued by the Los Angeles County Metropolitan Transportation Authority's (Metro's) prime contractors during the January 1, 2008 to December 31, 2010 study period are analyzed. The analysis was undertaken in order to determine whether there is underutilization of available DBE subcontractors in the construction, architecture and engineering, and miscellaneous and other professional services industries.

II. SUBCONTRACTOR UTILIZATION DATA SOURCES

Extensive research was undertaken to reconstruct the construction, architecture and engineering, and miscellaneous and other professional services subcontracts issued by Metro's prime contractors. Subcontracts for goods and other services contracts were not included in the analysis, because prime contractors in this industry traditionally do not subcontract their work.

The effort to collect comprehensive subcontract data was conducted in four phases. First, Mason Tillman collected subcontract records from Metro's contract files. Each contract file, which included bid documents, invoices, and close-out reports to capture listed subcontractors, their award amounts, any payment information, and contact information, was reviewed. After the review the hard copy records were photocopied, scanned, and entered into Mason Tillman's relational database. In the second phase Metro's contract administrators contacted each prime contractor with whom they worked and requested



² The term DBE includes minority and women business enterprises (MWBES).

payment data on all subcontractors, subconsultants, suppliers, and truckers. This information was compiled and entered into Mason Tillman's relational database.

The third phase included two surveys to verify that the collected subcontractor data was correct. The identified prime contractors were contacted to verify that the subcontractors listed in their contracts or reported to Metro's contract administrators were utilized. Additionally, the prime contractors were contacted to confirm the subcontractors' award amounts and payment amounts. Next, all identified subcontractors were contacted to verify their participation on each prime contract and the amount of their payment. Up to three attempts were made to contact each prime contractor and subcontractor by telephone. Once contacted, the prime and subcontractors had the option of verifying data by telephone, email, fax, or U.S. mail. If the prime contractor or subcontractor could not be contacted, the original data collected from Metro's project files and contract administrators was used in the utilization analysis.

In the fourth phase Metro's executive management staff reached out to the non-responsive prime contractors, as well as to those prime contractors who only reported using M/WBE subcontractors. For the prime contractors that did not respond to Metro's contract administrators or Mason Tillman's survey, Metro's executive management staff asked them to provide payment data for all utilized subcontractors, subconsultants, suppliers, and truckers. This payment data was requested to verify the reporting from the prime contractors that only reported M/WBEs subcontractors, subconsultants, suppliers, and truckers. The data recovered by Metro's executive management staff was compiled and entered into Mason Tillman's relational database.

The extraordinary efforts by Mason Tillman and Metro's contract administrators and executive management staff allowed for a comprehensive reconstruction of the subcontract data in the construction, architecture and engineering, and miscellaneous and other professional services industries.



III. SUBCONTRACTOR UTILIZATION

A. All Subcontracts

As depicted in Table 4.01 below, 256 subcontracts were analyzed, which included 154 construction subcontracts, 59 architecture and engineering subcontracts, and 43 miscellaneous and other professional services subcontracts for the January 1, 2008 to December 31, 2010 study period.

There were \$63,709,179.83 total subcontract dollars expended during the January 1, 2008 to December 31, 2010 study period, which included \$28,524,453.67 for construction subcontracts, \$30,863,309.37 for architecture and engineering subcontracts, and \$4,321,416.79 for miscellaneous and other professional services subcontracts.

Table 4.01: Total Subcontracts Awarded and Dollars Expended, All Industries, January 1, 2008 to December 31, 2010

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	154	\$28,524,453.67
Architecture and Engineering	59	\$30,863,309.37
Miscellaneous and Other Professional Services	43	\$4,321,416.79
Total	256	\$63,709,179.83



B. All Subcontracts by Industry

1. Construction Subcontracts

depicts the construction subcontracts awarded by Metro's prime contractors. Minority Business Enterprises received 7.34 percent of the construction subcontract dollars; Caucasian Female Business Enterprises received 17.31 percent; and Non-Disadvantaged Business Enterprises received 75.35 percent of subcontract dollars. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

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

Asian-Pacific American Businesses received two, or 1.3 percent, of the construction subcontracts during the study period, representing \$59,461.37, or 0.21 percent of the subcontract dollars.

Subcontinent Asian American Businesses received three, or 1.95 percent, of the construction subcontracts during the study period, representing \$286,038.98, or 1 percent of the subcontract dollars.

Hispanic American Businesses received 14, or 9.09 percent, of the construction subcontracts during the study period, representing \$1,749,142.13, or 6.13 percent of the subcontract dollars.

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

Minority Business Enterprises received 19, or 12.34 percent, of the construction subcontracts during the study period, representing \$2,094,642.48, or 7.34 percent of the subcontract dollars.

Caucasian Female Business Enterprises received seven, or 4.55 percent, of the construction subcontracts during the study period, representing \$4,936,654.13, or 17.31 percent of the subcontract dollars.

Disadvantaged Business Enterprises received 26, or 16.88 percent, of the construction subcontracts during the study period, representing \$7,031,296.61, or 24.65 percent of the subcontract dollars.

Non-Disadvantaged Business Enterprises received 128, or 83.12 percent, of the construction subcontracts during the study period, representing \$21,493,157.06, or 75.35 percent of the subcontract dollars.



**Table 4.02: Construction Subcontractor Utilization,
January 1, 2008 to December 31, 2010**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$ -	0.00%
Asian-Pacific Americans	2	1.30%	\$ 59,461.37	0.21%
Subcontinent Asian Americans	3	1.95%	\$ 286,038.98	1.00%
Hispanic Americans	14	9.09%	\$ 1,749,142.13	6.13%
Native Americans	0	0.00%	\$ -	0.00%
Caucasian Females	7	4.55%	\$ 4,936,654.13	17.31%
Non-Minority Males	128	83.12%	\$ 21,493,157.06	75.35%
TOTAL	154	100.00%	\$ 28,524,453.67	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$ -	0.00%
African American Males	0	0.00%	\$ -	0.00%
Asian-Pacific American Females	2	1.30%	\$ 59,461.37	0.21%
Asian-Pacific American Males	0	0.00%	\$ -	0.00%
Subcontinent Asian American Females	0	0.00%	\$ -	0.00%
Subcontinent Asian American Males	3	1.95%	\$ 286,038.98	1.00%
Hispanic American Females	5	3.25%	\$ 1,332,310.89	4.67%
Hispanic American Males	9	5.84%	\$ 416,831.24	1.46%
Native American Females	0	0.00%	\$ -	0.00%
Native American Males	0	0.00%	\$ -	0.00%
Caucasian Females	7	4.55%	\$ 4,936,654.13	17.31%
Caucasian Males	128	83.12%	\$ 21,493,157.06	75.35%
TOTAL	154	100.00%	\$ 28,524,453.67	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	7	4.55%	\$ 1,391,772.26	4.88%
Minority Males	12	7.79%	\$ 702,870.22	2.46%
Caucasian Females	7	4.55%	\$ 4,936,654.13	17.31%
Non-Minority Males	128	83.12%	\$ 21,493,157.06	75.35%
TOTAL	154	100.00%	\$ 28,524,453.67	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	19	12.34%	\$ 2,094,642.48	7.34%
Caucasian Female Business Enterprises	7	4.55%	\$ 4,936,654.13	17.31%
Disadvantaged Business Enterprises	26	16.88%	\$ 7,031,296.61	24.65%
Non Disadvantaged Business Enterprises	128	83.12%	\$ 21,493,157.06	75.35%
TOTAL	154	100.00%	\$ 28,524,453.67	100.00%



2. Architecture and Engineering Subcontracts

depicts the architecture and engineering subcontracts issued by Metro's prime contractors. Minority Business Enterprises received 21.3 percent of the architecture and engineering subcontract dollars; Caucasian Female Business Enterprises received 13.35 percent; and Non-Disadvantaged Business Enterprises received 65.34 percent. These ethnic and gender groups are defined in Table 3.01 of *Chapter 3: Prime Contractor Utilization Analysis*.

African American Businesses received three, or 5.08 percent, of the architecture and engineering subcontracts during the study period, representing \$1,197,029.32, or 3.88 percent of the subcontract dollars.

Asian-Pacific American Businesses received three, or 5.08 percent, of the architecture and engineering subcontracts during the study period, representing \$1,065,220.64, or 3.45 percent of subcontract dollars.

Subcontinent Asian American Businesses received none of the architecture and engineering subcontracts during the study period.

Hispanic American Businesses received nine, or 15.25 percent, of the architecture and engineering subcontracts during the study period, representing \$4,312,864.41, or 13.97 percent of the subcontract dollars.

Native American Businesses received none of the architecture and engineering subcontracts during the study period.

Minority Business Enterprises received 15, or 25.42 percent, of the architecture and engineering subcontracts during the study period, representing \$6,575,114.37, or 21.3 percent of the subcontract dollars.

Caucasian Female Business Enterprises received nine, or 15.25 percent, of the architecture and engineering subcontracts during the study period, representing \$4,121,613.23, or 13.35 percent of the subcontract dollars.

Disadvantaged Business Enterprises received 24, or 40.68 percent, of the architecture and engineering subcontracts during the study period, representing \$10,696,727.60, or 34.66 percent of the subcontract dollars.

Non-Disadvantaged Business Enterprises received 35, or 59.32 percent, of the architecture and engineering subcontracts during the study period, representing \$20,166,581.77, or 65.34 percent of the subcontract dollars.



**Table 4.03: Architecture and Engineering Subcontractor Utilization,
January 1, 2008 to December 31, 2010**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	3	5.08%	\$ 1,197,029.32	3.88%
Asian-Pacific Americans	3	5.08%	\$ 1,065,220.64	3.45%
Subcontinent Asian Americans	0	0.00%	\$ -	0.00%
Hispanic Americans	9	15.25%	\$ 4,312,864.41	13.97%
Native Americans	0	0.00%	\$ -	0.00%
Caucasian Females	9	15.25%	\$ 4,121,613.23	13.35%
Non-Minority Males	35	59.32%	\$ 20,166,581.77	65.34%
TOTAL	59	100.00%	\$ 30,863,309.37	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	1	1.69%	\$ 544,842.00	1.77%
African American Males	2	3.39%	\$ 652,187.32	2.11%
Asian-Pacific American Females	0	0.00%	\$ -	0.00%
Asian-Pacific American Males	3	5.08%	\$ 1,065,220.64	3.45%
Subcontinent Asian American Females	0	0.00%	\$ -	0.00%
Subcontinent Asian American Males	0	0.00%	\$ -	0.00%
Hispanic American Females	0	0.00%	\$ -	0.00%
Hispanic American Males	9	15.25%	\$ 4,312,864.41	13.97%
Native American Females	0	0.00%	\$ -	0.00%
Native American Males	0	0.00%	\$ -	0.00%
Caucasian Females	9	15.25%	\$ 4,121,613.23	13.35%
Caucasian Males	35	59.32%	\$ 20,166,581.77	65.34%
TOTAL	59	100.00%	\$ 30,863,309.37	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	1	1.69%	\$ 544,842.00	1.77%
Minority Males	14	23.73%	\$ 6,030,272.37	19.54%
Caucasian Females	9	15.25%	\$ 4,121,613.23	13.35%
Non-Minority Males	35	59.32%	\$ 20,166,581.77	65.34%
TOTAL	59	100.00%	\$ 30,863,309.37	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	15	25.42%	\$ 6,575,114.37	21.30%
Caucasian Female Business Enterprises	9	15.25%	\$ 4,121,613.23	13.35%
Disadvantaged Business Enterprises	24	40.68%	\$ 10,696,727.60	34.66%
Non Disadvantaged Business Enterprises	35	59.32%	\$ 20,166,581.77	65.34%
TOTAL	59	100.00%	\$ 30,863,309.37	100.00%



3. Miscellaneous and Other Professional Services Subcontracts

depicts the miscellaneous and other professional services subcontracts issued by Metro's prime contractors. Minority Business Enterprises received 31.22 percent of the professional services subcontract dollars; Caucasian Female Business Enterprises received 5.71 percent; and Non-Disadvantaged Business Enterprises received 63.07 percent.

African American Businesses received two, or 4.65 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$22,965.01, or 0.53 percent of the subcontract dollars.

Asian-Pacific American Businesses received four, or 9.3 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$522,862.73, or 12.1 percent of the subcontract dollars.

Subcontinent Asian American Businesses received one, or 2.33 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$128,255, or 2.97 percent of subcontract dollars.

Hispanic American Businesses received six, or 13.95 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$674,957.07, or 15.62 percent of the subcontract dollars.

Native American Businesses received none of the miscellaneous and other professional services subcontracts during the study period.

Minority Business Enterprises received 13, or 30.23 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$1,349,039.81, or 31.22 percent of the subcontract dollars.

Caucasian Female Business Enterprises received two, or 4.65 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$246,840.62, or 5.71 percent of the subcontract dollars.

Disadvantaged Business Enterprises received 15, or 34.88 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$1,595,880.43, or 36.93 percent of the subcontract dollars.

Non-Disadvantaged Business Enterprises received 28, or 65.12 percent, of the miscellaneous and other professional services subcontracts during the study period, representing \$2,725,536.36, or 63.07 percent of the subcontract dollars.



Table 4.04: Miscellaneous and Other Professional Services Subcontractor Utilization, January 1, 2008 to December 31, 2010

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	2	4.65%	\$ 22,965.01	0.53%
Asian-Pacific Americans	4	9.30%	\$ 522,862.73	12.10%
Subcontinent Asian Americans	1	2.33%	\$ 128,255.00	2.97%
Hispanic Americans	6	13.95%	\$ 674,957.07	15.62%
Native Americans	0	0.00%	\$ -	0.00%
Caucasian Females	2	4.65%	\$ 246,840.62	5.71%
Non-Minority Males	28	65.12%	\$ 2,725,536.36	63.07%
TOTAL	43	100.00%	\$ 4,321,416.79	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	0	0.00%	\$ -	0.00%
African American Males	2	4.65%	\$ 22,965.01	0.53%
Asian-Pacific American Females	0	0.00%	\$ -	0.00%
Asian-Pacific American Males	4	9.30%	\$ 522,862.73	12.10%
Subcontinent Asian American Females	1	2.33%	\$ 128,255.00	2.97%
Subcontinent Asian American Males	0	0.00%	\$ -	0.00%
Hispanic American Females	3	6.98%	\$ 553,726.07	12.81%
Hispanic American Males	3	6.98%	\$ 121,231.00	2.81%
Native American Females	0	0.00%	\$ -	0.00%
Native American Males	0	0.00%	\$ -	0.00%
Caucasian Females	2	4.65%	\$ 246,840.62	5.71%
Caucasian Males	28	65.12%	\$ 2,725,536.36	63.07%
TOTAL	43	100.00%	\$ 4,321,416.79	100.00%
Minority and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Females	4	9.30%	\$ 681,981.07	15.78%
Minority Males	9	20.93%	\$ 667,058.74	15.44%
Caucasian Females	2	4.65%	\$ 246,840.62	5.71%
Non-Minority Males	28	65.12%	\$ 2,725,536.36	63.07%
TOTAL	43	100.00%	\$ 4,321,416.79	100.00%
Minority and Women	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
Minority Business Enterprises	13	30.23%	\$ 1,349,039.81	31.22%
Caucasian Female Business Enterprises	2	4.65%	\$ 246,840.62	5.71%
Disadvantaged Business Enterprises	15	34.88%	\$ 1,595,880.43	36.93%
Non Disadvantaged Business Enterprises	28	65.12%	\$ 2,725,536.36	63.07%
TOTAL	43	100.00%	\$ 4,321,416.79	100.00%



IV. SUMMARY

There were 256 subcontracts were analyzed including 154 construction subcontracts, 59 architecture and engineering subcontracts, and 43 miscellaneous and other professional services subcontracts for the January 1, 2008 to December 31, 2010 study period. The 256 subcontracts represented \$63,709,179.83 including \$28,524,453.67 for construction subcontracts, \$30,863,309.37 for architecture and engineering subcontracts, and \$4,321,416.79 for miscellaneous and other professional services subcontracts.

The subcontractor utilization analysis revealed a low pattern of usage among Minority Business Enterprises by Metro's prime contractor's on the construction subcontracts. Minority Business Enterprises received 7.34 percent of the construction subcontract dollars. The utilization of Caucasian Female Business Enterprises by Metro's prime contractors on miscellaneous and other professional services subcontracts was also small representing 5.71 percent of the subcontracts.

