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# ***EXECUTIVE SUMMARY***

## ***I. STUDY OVERVIEW***

### ***A. Study Team***

Mason Tillman Associates, Ltd., (Mason Tillman) a public policy consulting firm based in Oakland, California, performed the 2012 Disadvantaged Business Enterprise Program Disparity Study Update. Debra Varnado Analytics, Golden State Management Services, Katherine Padilla & Associates, Inc., Roy Willis & Associates Inc., and Sullivan International, Inc. assisted Mason Tillman in the performance of the Study. The consultants performed data collection, anecdotal interviews, and outreach.

Tashai Smith, Director of Small Business Programs, Diversity and Economic Opportunity Department (DEOD) managed the Study. Linda Wright, Executive Officer led the management team. Ms. Smith and Ms. Wright facilitated Mason Tillman's access to the Los Angeles County Metropolitan Transportation Authority (Metro) data which were needed in order to complete the Study. The extraordinary cooperation of Metro's Transportation Business Advisory Council, Contract Administrators, and executive staff should also be acknowledged.

### ***B. Study Purpose***

The purpose of the Disparity Study was to determine whether or not a statistically significant disparity existed in the relevant market area regarding Metro's award of contracts to available disadvantaged business enterprises (DBEs), which includes certified DBEs and other M/WBEs. Under a fair and equitable system of awarding contracts, the proportion of contract dollars awarded to DBEs should be relatively close to the corresponding proportion of available DBEs<sup>1</sup> in the relevant market area. If the available DBE prime contractors are underutilized, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event which is less probable.



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<sup>1</sup> Availability is defined as the number of ready, willing and able firms. The methodology for determining willing and able firms is detailed in Chapter 4.

### **C. Study Period and Industries**

The study period was January 1, 2008 to December 31, 2010. The analyzed contracts were classified into the following four industries:

- **Construction:** the construction, reconstruction, or improvement of any facility
- **Architecture and Engineering:** professional services that are required by law to be performed by a California registered or licensed architect or engineer
- **Goods and Other Services:** petroleum products, industrial equipment and machinery, hydraulic equipment, and non-professional services
- **Miscellaneous and Other Professional Services:** services not defined as architecture and engineering-related services.

### **D. Ethnic and Gender Groups Studied**

Consistent with 49 CFR Section 26.5, the analysis of disparity was disaggregated into nine ethnic and gender groups. The nine groups are listed in Table 1.

**Table 1: Business Ethnic and Gender Groups**

<b>Ethnicity and Gender Category</b>	<b>Definition</b>
African American Businesses	Businesses owned by male and female African Americans
Asian-Pacific American Businesses	Businesses owned by male and female Asian-Pacific Americans
Subcontinent Asian American Businesses	Businesses owned by male and female Subcontinent Asian Americans
Hispanic American Businesses	Businesses owned by male and female Hispanic Americans
Native American Businesses	Businesses owned by male and female Native Americans
Caucasian Female Business Enterprises	Businesses owned by Caucasian females
Minority Business Enterprises	Businesses owned by African American, Asian American, Hispanic American, and Native American males and females
Women Business Enterprises	Businesses owned by Caucasian females



Ethnicity and Gender Category	Definition
Disadvantaged Business Enterprises	Businesses owned by Minority males, Minority females, and Caucasian females
Non Disadvantaged Business Enterprises	Businesses owned by Caucasian males, businesses that did not declare their ethnicity, or businesses that could not be identified as minority- or female-owned <sup>2</sup>

**E. Prime Contract Data**

The dataset for the prime contractor utilization analysis was the payment data extracted from Metro’s contract and financial management system. Data was limited to payments that were issued during the January 1, 2008 to December 31, 2010 study period. Payments were grouped by “Transaction ID” to create unique transactions. All unique transactions are referred to as contracts.

Each Metro contract was classified into one of the four industries. Mason Tillman worked closely with Metro to classify the contracts into the appropriate industry by using both object and organization codes. Cooperative agreements and contracts with non-profits, government agencies, utilities, and contracts designated as non-competitive purchases were excluded from the Study. After the industry classifications were approved by Metro, the ethnicity and gender of each prime contractor was verified. Mason Tillman had to conduct research to reconstruct the ethnicity and gender for many prime contractors.

The prime contractor names were cross-referenced with certification lists, chambers of commerce lists, and trade organization membership directories. Websites were also reviewed for ethnicity and gender of the business owner. Prime contractors whose ethnicity and gender could not be verified through published sources were surveyed. Mason Tillman also submitted the utilized vendor list to Metro to review for ethnicity and gender classifications known to the Authority. Once the contract records were cleaned and the ethnicity and gender verified, the utilization analysis was performed.

**F. Subcontractor Data**

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.



<sup>2</sup> See Section II: Prime Contract Data Sources for the methodology employed to identify the ethnicity and gender of Metro’s utilized prime contractors.

The subcontract data collection was conducted in four phases. First, Mason Tillman collected subcontract records from Metro's contract files. Each contract file was reviewed including bid documents, invoices, and close-out reports to capture listed subcontractors, their award amounts, payment and contact information. 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 comprehensive payment data for 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. Prime contractors were contacted to verify that the subcontractors either listed on their contract or reported to Metro's contract administrators were utilized. Additionally, the prime contractors were asked to confirm each subcontractor's award and payment amount. Next, all identified subcontractors were contacted to verify their participation on the prime contract and their payment amount. Up to three attempts were made to contact each prime and subcontractor by telephone. Once contacted, the prime and subcontractors had the option of verifying the data by telephone, email, facsimile, or U.S. mail.

In the fourth phase, Metro's executive management staff contacted the non-responsive prime contractors, as well as the prime contractors who only reported using DBE subcontractors. Metro's executive management staff requested payment data for all utilized subcontractors, subconsultants, suppliers, and truckers.

The data recovered by Metro's executive management staff was compiled and entered into Mason Tillman's relational database. As a result of the collaborative effort by Mason Tillman and Metro's staff a relatively comprehensive reconstruction of the subcontract data in construction, architecture and engineering, and miscellaneous and other professional services was completed.

## ***G. Contract Thresholds***

Contracts within each of the four industries were analyzed at three dollar levels. One category included all contracts regardless of size. The second category included all contracts under \$500,000. The third category included informal contracts that did not require advertising.

The \$500,000 threshold was designated because there was a demonstrated capacity within the pool of DBEs willing to perform Metro's contracts at this level. The informal contract threshold is set forth in Metro's procurement manual. The informal contract threshold for construction, architecture and engineering, other miscellaneous and professional services, and goods and other services is less than \$100,000.



## **II. METHODOLOGY**

### **A. Legal Framework**

The *City of Richmond v. J.A. Croson Co.*<sup>3</sup> (*Croson*) and related case law provided the legal framework for conducting the Disparity Study. Specifically, two United States decisions, *Croson* and *Adarand v. Peña*<sup>4</sup> (*Adarand*), raised the standard by which federal courts review both local and federal government minority business enterprise and disadvantaged business enterprise contracting programs.

The City of Richmond (City) adopted a Minority Business Utilization Plan (Plan) which required prime contractors awarded a City construction contract to meet a subcontract goal of at least 30 percent of the dollar amount of each contract to one or more minority business enterprise. The factual predicate for the plan included a statistical study demonstrating that 50 percent of the City's population was African American and the utilization of African Americans on the City's prime construction contracts was 0.67 percent. The plaintiff, J.A. Croson, Inc., was denied a waiver of the goal and challenged the City's Plan under 42 U.S.C. 1983, and argued that it was unconstitutional under the Fourteenth Amendment's Equal Protection Clause. The court announced the longstanding legal precedent that programs employing racial classification would be subject to "strict scrutiny," the highest legal standard. Local governments such as Metro, as set forth in *Croson*, may adopt race-conscious programs only as a remedy for identified statistical findings of discrimination and the remedy must impose a minimal burden upon unprotected classes. *Croson* ruled that an inference of discrimination can be made prima facie if the disparity is statistically significant. For this study, this analysis was applied to DBEs by ethnicity and gender within the four industries.

*Adarand*, which the United States Supreme Court decided in 1995, directly challenged the USDOT's Disadvantaged Business Enterprise (DBE) Program as set forth in statute and regulations. The Court found a compelling interest for the USDOT DBE Program but ruled, after applying the *Croson* "strict scrutiny" standard, that the DBE Program was not narrowly tailored. In response, the USDOT amended its regulations in 1999 to include goals which can be met by race-neutral and race-specific means.

Following *Adarand*, there were several circuit court cases which challenged the constitutionality of the USDOT DBE regulations.<sup>5</sup> Until the 2005 Ninth Circuit Court of

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<sup>3</sup> *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

<sup>4</sup> *Adarand Constructors, Inc. v. Federico Pena*, 115 S.Ct. 2097 (1995).

<sup>5</sup> *Sherbrooke Turf Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 969-73 (8<sup>th</sup> Cir 2003); *Gross Seed Co. v. Nebraska Department of Roads*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003); *Western States Paving Co. v. State of Washington Dept. of*





Appeals decision in *Western States Paving Co. v. State of Washington Dept. of Transportation*<sup>6</sup> (*Western States*), the challenges had been unsuccessful. However, *Western States* found that the State of Washington's DBE Program was facially constitutional, but determined the State's application of the regulations was invalid because it was not narrowly tailored to a finding of statistically significant underutilization of the respective minority groups.

### Disparity Study: Critical Components

1. Legal Framework
2. Utilization Analysis
3. Market Area Analysis
4. Availability Analysis
5. Disparity Analysis
6. Anecdotal Analysis
7. Recommendations
8. Regression Analysis

The USDOT Memorandum recommends that its recipients conduct a disparity study to establish the factual predicate when setting the DBE overall goal. A legal review was the **first step** in the disparity study. Case law sets the standard for the methodology employed in a disparity study. Metro followed each of the eight steps. **Step two** was to collect utilization records and determine the extent to which Metro had used disadvantaged business enterprises to secure its needed construction, architecture and engineering, miscellaneous and other professional services, and goods and other services. Utilization records were also used to determine the geographical area in which companies that had received Metro contracts were located. In **step three**, Metro's market area was identified.

Once the market area was defined, the **fourth step**, the availability analysis, identified businesses willing and able to provide construction, architecture and engineering, miscellaneous and other professional services, and goods and other services needed by Metro. In the **fifth step**, a disparity analysis was performed to determine whether there was a statistically significant underutilization within the four industries. In **step six**, the anecdotal analysis, the contemporary experiences of business owners in Metro's market area were collected. The anecdotal analysis also included testimony from trade and business representatives that provided information on their members' experiences seeking or working with Metro. In **step seven**, the statistical and anecdotal analyses were reviewed and recommendations were written to enhance Metro's efforts in contracting with DBEs in its market area. Additionally, a regression analysis was conducted to determine if factors other than discrimination could account for any statistically significant disparity.



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*Transportation*, 407 F. 3d 983 (9th Cir. 2005); *Northern Contracting Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (2007).

<sup>6</sup> *Western States*, 407 F. 3d 983 (9th Cir. 2005)

## **B. Structure of the Report**

The Disparity Study findings are presented in ten chapters. The contents of each chapter are briefly described below:

### **Overview of the Disparity Study Report**

- *Chapter 1: Legal Analysis* presents the case law applicable to business affirmative action programs and the methodology based on those cases required for the Study
- *Chapter 2: Contracting and Procurement Policies Analysis* presents Metro's contracting and procurement practices
- *Chapter 3: Prime Contractor Utilization Analysis* presents the distribution of prime contracts by industry, ethnicity, and gender
- *Chapter 4: Subcontractor Utilization Analysis* presents the distribution of subcontracts by industry, ethnicity, and gender
- *Chapter 5: Market Area Analysis* presents the legal basis for geographical market area determination and defines Metro's market area
- *Chapter 6: Prime Contractor and Subcontractor Availability Analysis* presents the distribution of available businesses in Metro's market area
- *Chapter 7: Regression and Private Sector Analysis* presents an examination of private sector economic indicators of discrimination in Metro's market area which could impact DBEs formation and development
- *Chapter 8: Anecdotal Analysis* presents the business community's perceptions of barriers and exemplary practices encountered in contracting or attempting to contract with Metro
- *Chapter 9: Disparity Analysis* presents contractor utilization as compared to contractor availability by industry and DBE status and evaluates the statistical significance of any underutilization
- *Chapter 10: Recommendations* presents race and gender neutral remedies to enhance Metro's DBE Program and its contracting with DBEs and other small businesses

*Appendix A: Overall DBE Goal Setting Report*

*Appendix B: Supporting Statistical Tables*



### **III. NOTABLE FINDINGS**

#### **A. Utilization Analysis**

The objective of the utilization analyses is to determine the level of DBE utilization as prime and subcontractors. This study documents Metro’s utilization of DBE prime and subcontractors by ethnicity and gender for the study period January 1, 2008 through December 31, 2010 (study period). The analysis of Metro’s expenditures was limited to contracts that were funded by federal dollars and classified into four industries—construction, architecture and engineering, goods and other services, and miscellaneous and other professional services.

##### **1. Prime Contractor Utilization Analysis**

Metro issued 182 contracts during the study period. The 182 contracts included 31 for construction, 17 for architecture and engineering, 63 for miscellaneous and other professional services, and 71 for goods and other services.

The payments made by Metro during the study period totaled \$318,869,443 for all 182 contracts. Payments included \$146,949,873 for construction, \$114,676,893 for architecture and engineering, \$17,218,959 for miscellaneous and other professional services, and \$40,023,718 for goods and other services. Table 2 below summarizes the prime contractor utilization analysis by the percent of prime contract dollars awarded to each ethnic and gender group.

**Table 2: Prime Contractor Utilization Summary**

<b>Ethnicity</b>	<b>Construction</b>	<b>Architecture and Engineering</b>	<b>Miscellaneous and Other Professional Services</b>	<b>Goods and Other Services</b>
<b>All Prime Contracts</b>				
African American	0.00 %	0.00 %	1.59 %	0.00 %
Asian-Pacific Americans	3.23 %	5.88 %	0.00 %	1.41 %
Subcontinent Asian Americans	3.23 %	5.88 %	0.00 %	0.00 %
Hispanic Americans	6.45 %	11.76 %	20.63 %	12.68 %
Native Americans	0.00 %	0.00 %	0.00 %	0.00 %
Caucasian Females	3.23 %	5.88 %	14.29 %	4.23 %
Non-Minority Males	83.87 %	70.59 %	63.49 %	81.69 %
<b>Prime Contracts Under \$500,000</b>				
African American	0.00 %	0.00 %	1.69 %	0.00 %
Asian-Pacific Americans	5.56 %	11.11 %	0.00 %	1.54 %
Subcontinent Asian Americans	5.56 %	11.11 %	0.00 %	0.00 %
Hispanic Americans	11.11 %	22.22 %	20.34 %	10.77 %
Native Americans	0.00 %	0.00 %	0.00 %	0.00 %
Caucasian Females	5.56 %	11.11 %	15.25 %	4.62 %



Ethnicity	Construction	Architecture and Engineering	Miscellaneous and Other Professional Services	Goods and Other Services
Non-Minority Males	72.22 %	44.44 %	62.71 %	83.08 %

## 2. Subcontractor Utilization Analysis

A total of 344 subcontracts were analyzed, which included 176 construction subcontracts, 120 architecture and engineering subcontracts, and 48 miscellaneous and other professional services subcontracts.

There were \$109,838,922.16 total subcontract dollars expended during the study period, which included \$40,468,696.90 for construction subcontracts, \$59,095,000.99 for architecture and engineering subcontracts, and \$10,275,224.27 for miscellaneous and other professional services subcontracts. Table 3 below summarizes the subcontractor utilization by the percent of subcontract dollars awarded to each ethnic and gender group.

**Table 3: Sub Contract Utilization Summary**

Ethnicity	Construction	Architecture and Engineering	Miscellaneous and Other Professional Services
African American	0.00 %	5.08 %	4.65 %
Asian-Pacific Americans	1.3 %	5.08 %	9.3 %
Subcontinent Asian Americans	1.95 %	0.00 %	2.33 %
Hispanic Americans	9.09 %	15.25 %	13.95 %
Native Americans	0.00 %	0.00 %	0.00 %
Caucasian Females	4.55 %	15.25 %	4.65 %
Non-Minority Males	83.12 %	59.32 %	65.12 %

## **B. Market Area Analysis**

As established in *Croson*, Metro cannot rely on society-wide discrimination as the basis for a race-based program but, is required to identify any discrimination within its own contracting jurisdiction.<sup>7</sup> In *Croson*, the Court found the City of Richmond, VA's MBE Plan to be unconstitutional because there was 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 statistical comparisons of business availability and business utilization. The identification of the local market area is particularly important because it is the geographic area within which the available businesses are enumerated. Although *Croson* and its progeny do not provide a bright line rule for the delineation of the local market area, taken collectively, the case law supports

<sup>7</sup> *Croson*, 488 U.S. at 497 (1989).



a definition of market area as within the geographic area where the jurisdiction spends a majority of its dollars.

During the study period Metro awarded 182 construction, architecture and engineering, miscellaneous and other professional services, and goods and other services contracts valued at \$318,869,443. Metro awarded 58.79 percent of these contracts and 71.86 percent of dollars to businesses located in Los Angeles County. Given the distribution of the awarded contracts and the applicable case law, Los Angeles County was defined as the market area. The analysis of discrimination has been limited to an examination of contracts awarded to available market area businesses in Los Angeles County. Table 4 below summarizes the market area analysis.

**Table 4: Market Area Analysis**

Market Area	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
<b>Combined Industries</b>				
Market Area	107	58.79 %	\$229,154,451	71.86 %
Outside Market Area	75	41.21 %	\$89,714,992	28.14 %
Total	182	100 %	\$318,869,443	100 %

**C. Availability Analysis**

When considering sources for determining the number of willing and able DBEs and non-DBEs in the market area, the selection must be based on whether two aspects about the population in question can be gauged from the sources. One consideration is a business’ interest in doing business with the jurisdiction, as implied by the term “willing,” and the other is its ability or capacity to provide a service or good, as implied by the term “able.” A list of available DBEs and non-DBEs in the construction, architecture and engineering, other miscellaneous and professional services, and goods and other services areas was compiled. The availability list was separated by industry for prime contractors and subcontractors. A distribution of the available businesses is presented in the Availability Chapter by ethnicity, gender, and industry.

The availability of willing market area businesses was weighted according to NAICS code.

- **Calculation of Weighted Availability**

All federally funded contracts awarded during the study period were assigned an NAICS code based on the description of the contract. A total of 52 NAICS codes were assigned to the awarded contracts. Weights were assigned based on the percentage of the total award amount in each NAICS code. As a result, the NAICS code with the highest associated dollars was assigned the highest weight. The weights were reflected according to the percentage of the total dollars awarded.



The businesses in the availability database were also classified according to NAICS code. The utilized firms in the availability lists were assigned the NAICS code as discussed above. The balance of the coding was derived from certification lists and Internet research. The weights for each NAICS code were used as multipliers. The number of available businesses in each NAICS code was multiplied by the assigned weight. The total represented the number of available firms in each NAICS code. The total for each NAICS code was added together to calculate the overall weighted availability. The ethnicity and gender distribution percentages were then calculated based on the overall weighted availability. Tables 5 and 6 summarize the prime and subcontractor availability analyses.

**Table 5: Prime Contractor Availability Analysis**

<b>Ethnicity</b>	<b>All Industries</b>	<b>Construction</b>	<b>Architecture and Engineering</b>	<b>Miscellaneous and Other Professional Services</b>	<b>Goods and Other Services</b>
African American	9.38 %	8.97 %	9.51 %	13.36 %	9.92 %
Asian-Pacific Americans	9.32 %	8.55 %	10.15 %	10.53 %	7.88 %
Subcontinent Asian Americans	1.7 %	1.25 %	2.11 %	2.1 %	1.82 %
Hispanic Americans	12.48 %	13.08 %	11.87 %	13.22 %	12.36 %
Native Americans	0.82 %	1.01 %	0.71 %	0.49 %	0.27 %
Caucasian Females	8.08 %	6.6 %	9.29 %	13.04 %	7.73 %
Non-Minority Males	58.22 %	60.53 %	56.35 %	47.25 %	60.01 %

**Table 6: Subcontractor Availability Analysis**

<b>Ethnicity</b>	<b>Construction</b>	<b>Architecture and Engineering</b>	<b>Miscellaneous and Other Professional Services</b>
African American	10.12 %	9.5 %	10.6 %
Asian-Pacific Americans	7.75 %	10.7 %	10.28 %
Subcontinent Asian Americans	1.22 %	2.85 %	2.91 %
Hispanic Americans	17.59 %	12.43 %	12.65 %
Native Americans	0.85 %	0.77 %	0.68 %
Caucasian Females	6.51 %	10.1 %	12.18 %
Non-Minority Males	55.96 %	53.66 %	50.7 %

#### **D. Contract Size Analysis**

For the size analysis, Metro's contracts were grouped into nine dollar ranges.<sup>8</sup> Each industry was analyzed to determine the number and percentage of contracts within each of the nine size categories. The size distribution of contracts awarded to Non-DBEs was then compared to the size distribution of contracts awarded to Caucasian Females, Minority Females, and Minority Males.

<sup>8</sup> The nine dollar ranges are \$1 to \$25,000; \$25,001 to \$50,000; \$50,001 to \$100,000; \$100,001 to \$250,000; \$250,001 to \$500,000; \$500,001 to \$750,000; \$750,001 to \$1,000,000; \$1,000,001 to \$3,000,000; and \$3,000,001 and greater.



The size distribution for prime contracts awarded within the nine dollar ranges in all industries combined, demonstrated that 43.96 percent of Metro’s contracts were less than \$25,000; 54.4 percent were less than \$50,000; 67.58 percent were less than \$100,000; and 82.97 percent were less than \$500,000. Only 17.03 percent of Metro’s contracts were \$500,000 or more. Table 7 below depicts the prime contracts by size.

**Table 7: Prime Contracts Size Analysis**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$25,000	7	50.00%	62	45.59%	6	40.00%	5	29.41%	80	43.96%
\$25,001 - \$50,000	1	7.14%	11	8.09%	3	20.00%	4	23.53%	19	10.44%
\$50,001 - \$100,000	4	28.57%	14	10.29%	4	26.67%	2	11.76%	24	13.19%
\$100,001 - \$249,999	2	14.29%	15	11.03%	1	6.67%	3	17.65%	21	11.54%
\$250,000 - \$499,999	0	0.00%	6	4.41%	0	0.00%	1	5.88%	7	3.85%
\$500,000 - \$999,999	0	0.00%	5	3.68%	0	0.00%	1	5.88%	6	3.30%
\$1,000,000 - \$2,999,999	0	0.00%	8	5.88%	1	6.67%	0	0.00%	9	4.95%
\$3,000,000 and greater	0	0.00%	15	11.03%	0	0.00%	1	5.88%	16	8.79%
Total	14	100.00%	136	100.00%	15	100.00%	17	100.00%	182	100.00%

The size distribution for subcontracts awarded within the nine dollar ranges in all industries combined, demonstrated that 44.53 percent of Metro’s subcontracts were less than \$25,000; 67.97 percent were less than \$100,000; and 88.67 percent were less than \$500,000. Only 11.33 percent of Metro’s subcontracts were \$500,000 or more. Table 8 below depicts the subcontracts by size.



**Table 8: Subcontracts Size Analysis**

Size	Non-Minority				Minority				Total	
	Females		Males		Females		Males			
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
\$1 - \$25,000	2	11.11%	96	50.26%	5	41.67%	11	31.43%	114	44.53%
\$25,001 - \$50,000	2	11.11%	24	12.57%	2	16.67%	3	8.57%	31	12.11%
\$50,001 - \$100,000	2	11.11%	22	11.52%	1	8.33%	4	11.43%	29	11.33%
\$100,001 - \$249,999	3	16.67%	19	9.95%	1	8.33%	7	20.00%	30	11.72%
\$250,000 - \$499,999	2	11.11%	15	7.85%	1	8.33%	5	14.29%	23	8.98%
\$500,000 - \$999,999	5	27.78%	6	3.14%	1	8.33%	4	11.43%	16	6.25%
\$1,000,000 - \$2,999,999	2	11.11%	5	2.62%	1	8.33%	1	2.86%	9	3.52%
\$3,000,000 and greater	0	0.00%	4	2.09%	0	0.00%	0	0.00%	4	1.56%
Total	18	100.00%	191	100.00%	12	100.00%	35	100.00%	256	100.00%

## **IV. DISPARITY FINDINGS OF STATISTICAL UNDERUTILIZATION**

The objective of the disparity analysis is to determine the levels at which DBEs and non-DBEs are utilized on Metro’s contracts. Under a fair and equitable system of awarding contracts, the proportion of contract dollars awarded to DBEs should be relatively close to the corresponding proportion of available DBEs<sup>9</sup> in the relevant market area. If the ratio of utilized DBE prime contractors to available DBE prime contractors 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. *Croscon* states that an inference of discrimination can be made *prima facie* if the disparity is statistically significant. Under the *Croscon* model, Non-DBEs are not subjected to a statistical test.

A prime and subcontract disparity analysis was performed on all contracts awarded from January 1, 2008 to December 31, 2010. All ethnic groups were found to be underutilized on all contracts. At the subcontract level, all ethnic groups’ underutilization was statistically significant.

### **A. Disparity Findings**

#### **1. All Contracts**

As indicated in Table 9, underutilization was found for all ethnic and gender business enterprise contractors for all contracts. Underutilization is defined as a disparity ratio of less than one.



<sup>9</sup> Availability is defined as the number of ready, willing, and able firms. The methodology for determining willing and able firms is detailed in Chapter 5.



**Table 9: All Contracts  
January 1, 2008 through December 31, 2010**

<b>Ethnicity</b>	<b>Utilization</b>	<b>Availability</b>	<b>Disparity Ratio</b>
African American	0.37 %	9.44 %	0.04
Asian-Pacific Americans	0.45 %	9.54 %	0.05
Subcontinent Asian Americans	0.12 %	1.98 %	0.06
Hispanic Americans	8.13 %	12.79 %	0.64
Native Americans	0.00 %	0.78 %	0.00
Caucasian Females	2.69 %	8.49 %	0.32
Non-Minority Males	88.24 %	56.98 %	1.55
Minority Business Enterprises	9.07 %	34.53 %	0.26
Caucasian Female Business Enterprises	2.69 %	8.49 %	0.32
Disadvantaged Business Enterprises	11.76 %	43.02 %	0.27
Non Disadvantaged Business Enterprises	88.24 %	56.98 %	1.55

**2. All Prime Contracts**

As indicated in Table 10, underutilization was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans, minority business enterprise, Caucasian female business enterprise, and disadvantaged business enterprise contractors for all prime contracts less than \$500,000. Underutilization is defined as a disparity ratio of less than one.

**Table 10: All Prime Contract Dollars Less than \$500,000,  
January 1, 2008 through December 31, 2010**

<b>Ethnicity</b>	<b>Utilization</b>	<b>Availability</b>	<b>Disparity Ratio</b>
African American	1.58 %	9.38 %	0.17
Asian-Pacific Americans	0.53 %	9.32 %	0.06
Subcontinent Asian Americans	0.53 %	1.7 %	0.31
Hispanic Americans	16.6 %	12.48 %	1.33
Native Americans	0.00 %	0.82 %	0.00
Caucasian Females	8.04 %	8.08 %	0.99
Non-Minority Males	72.73 %	58.22 %	1.25
Minority Business Enterprises	19.24 %	33.7 %	0.57
Caucasian Female Business Enterprises	8.04 %	8.08 %	0.99
Disadvantaged Business Enterprises	27.27 %	41.78 %	0.65
Non Disadvantaged Business Enterprises	72.73 %	58.22 %	1.25



### 3. All Subcontracts

As indicated in Table 11 below, statistically significant disparity was found for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, minority business enterprise, and disadvantaged business enterprise subcontractors. Statistically significant disparity is defined as having a p-value of less than 0.5. Native Americans were underutilized, but there were too few available firms to test statistical significance.

**Table 11: All Subcontract Dollars,  
January 1, 2008 through December 31, 2010**

Ethnicity	Utilization	Availability	Disparity Ratio	P-Value
African American	1.91%	9.41%	0.20	< .05 *
Asian-Pacific Americans	2.59%	9.17%	0.28	< .05 *
Subcontinent Asian Americans	0.65%	2.14%	0.30	< .05 *
Hispanic Americans	10.57%	17.75%	0.60	< .05 *
Native Americans	0.00%	0.77%	0.00	----
Caucasian Females	14.61%	8.5%	1.72	**
Non-Minority Males	69.67%	52.26%	1.33	< .05 †
Minority Business Enterprises	15.73%	39.25%	0.40	< .05 *
Caucasian Female Business Enterprises	14.61%	8.5%	1.72	**
Disadvantaged Business Enterprises	30.33%	47.74%	0.64	< .05 *
Non Disadvantaged Business Enterprises	69.67%	52.26%	1.33	< .05 †

( \* ) denotes a statistically significant underutilization.

( † ) denotes a statistically significant overutilization.

( \*\* ) denotes that this study does not test statistically the overutilization of M/WBEs or the underutilization of non-minority males.

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



## **V. ANECDOTAL FINDINGS**

In addition to requiring a statistical analysis, the United States Supreme Court in *Croson* stated that anecdotal findings, “if supported by appropriate statistical proofs, lend support to a [local entity’s] determination that broader remedial relief [is] justified.” *Croson* authorizes anecdotal inquiries along two lines. The first approach examines barriers attributed to the local entity. Such action is defined as the active participation of the government entity. The second approach examines whether the local entity had essentially become a passive participant in a system of racial exclusion practiced by its contractors.

### **A. Summary of In-Depth Interviews**

The anecdotal analysis describes general market conditions, prime contractor barriers, and the range of experiences encountered by interviewees attempting to do business with Metro. A selection of barriers the interviewees identified includes:

- Racial and Gender Barriers
- Difficulty with the Contracting Community
- Difficulty with the Good-Old-Boys Network
- Difficulty in the Contracting Process
- Bid Shopping
- Inadequate Time to Respond to Solicitations
- Prime Contractors Avoiding DBE Program Requirements
- Agency Managers Creating Barriers
- Late Payments from Prime Contractors
- Certification Process Challenges
- Difficulty Meeting Pre-qualifications Requirements
- Knowledge of Companies Acting as Fronts

The interviewees also provided comments about the DBE Program, exemplary Metro business practices, and recommendations to increase DBEs participation on Metro contracts.



## **VI. REGRESSION ANALYSIS**

Three regression models were used to determine whether there were factors in the private sector which might further explain any statistical disparities between DBE availability and utilization identified in the Disparity Study. The three models examined business ownership, business earnings, and business loan approval.

### **A. Business Ownership Analysis**

The presence of barriers in Metro's market area and its contracting practices are additional factors which could depress the availability of DBEs. Controlling for the existence of race and gender-neutral factors, the Business Ownership Analysis documented statistically significant disparities in the probability of owning a business for minorities and females when compared to similarly situated Caucasian males. Caucasian females and African Americans experience the greatest disparity as they are significantly less probable to own a business in the construction, professional services, goods and services, and architecture and engineering industries as similarly situated Caucasian males. Asian-Pacific Americans are also significantly less probable to own a business in the goods and services and professional services industries. In addition, they are less probable to own a business in the construction and architecture and engineering industries, however, not at a statistically significant level.

Subcontinent Asian Americans, Hispanic Americans, and Native Americans are all significantly less probable to own a business in the construction, goods and services, and professional services industries compared to similarly situated Caucasian Males. In the architecture and engineering industry, Subcontinent Asian Americans and Hispanic Americans are less probable to own a business, but not at a statistically significant level. Other Minority groups have a statistically significant business ownership disparity in the goods and services and professional services industries. They also have lower business ownership probabilities in the construction and architecture and engineering industries, but this relationship is not statistically significant.

### **B. Business Earnings Analysis**

Controlling for race and gender-neutral factors, the Business Earnings Analysis documented statistically significant disparities in business earnings for minorities and females when compared to similarly situated Caucasian males. Caucasian females, African Americans, and Asian Pacific Americans have lower business earnings at a statistically significant level in the construction, goods and services, and professional services industries. These ethnic groups also have lower business earnings in the architecture and engineering industry, but not at a statistically significant level. While Subcontinent Asian Americans have lower business earnings in the construction, goods and services, professional services, and architecture and engineering industries, these disparities are not statistically significant.



Hispanic Americans have statistically significant lower business earnings in two of the four industries—goods and services and professional services—when compared to similarly situated Caucasian males. They also are more probable to have lower business earnings in the construction industry, but not at a statistically significant level. Native Americans face statistically significant business earnings disparities in the professional services and architecture and engineering industries. However, Native Americans’ lower earnings in construction and goods and services industries are not statistically significant. Lastly, other minority groups have significantly lower earnings in the goods and services, professional services, and architecture and engineering industries. Other minority groups do not have statistically significant lower business earnings in the construction industry.

### **C. Business Loan Approval Analysis**

Controlling for race and gender-neutral factors, the Business Loan Approval Analysis reveals statistically significant disparities for DBEs when compared to similarly situated Caucasian males. Caucasian females have a statistically significant disparity in obtaining a business loan in the construction industry. Minority groups have a disparity in obtaining a business loan in the construction and goods and services industries, but not at a statistically significant level. The data also shows overutilization of Caucasian females in the professional services industry.

The statistically significant disparity documented for DBEs when compared to similarly situated Caucasian males points to the presence of race and gender disparity as a factor in access to business capital. Access to business capital in the private sector constitutes a major factor in business development, continuity, and growth. The documented disparity in DBE’s access to business capital may adversely impact the number of these businesses in the construction, professional services, and goods and services industries available to perform on Metro contracts during the study period.

## **VII. RACE AND GENDER-NEUTRAL REMEDIES**

These recommendations are offered to increase DBE and small business enterprises’ (SBEs’) access to Metro’s prime and subcontracts. The race and gender-neutral recommendations apply to all ethnic and gender groups. The recommendations are derived from an analysis of *Metro’s Compliance Manual*, a review of Metro’s web page, anecdotal testimonials, regression analyses, and government and corporate best management practices.



## **A. Pre-Award Recommendations**

- Publish Micro-Purchases
- Encourage Prime Contractors to Outreach to DBEs
- Establish a Direct Purchase Program for Construction Contracts
- Promote Diversity in Distributorships
- Pay Mobilization to Subcontractors
- Maintain Virtual Plan Room
- Revise Insurance Requirements
- Form Partnerships with Financial Institutions
- Review Selection Panel Process
- Publish Bid Protest Procedures
- Aggressively target small, minority, and women-owned businesses identified in the 2012 DBE Program Study Update to apply for DBE certification in order to increase the number of certified DBEs in Los Angeles County

## **B. Post-Award Recommendations**

- Enhance DBE Subcontractor Substitution Standards
- Develop an Expedited Subcontractor Payment Program
- Publish Prime Contractor Payments
- Conduct Routine Post-Award Contract Compliance Monitoring
- Publish DBE and SBE Utilization Reports
- Provide Debriefing Sessions for Unsuccessful Bidders

## **C. Procurement Process and DBE Program Enhancements**

- Standardize and Publish Metro's Procurement Procedures
- Establish a DBE Ombudsperson Position

## **D. Data Management Enhancements**

- Add Source of Certification in the Prime Contractor Profile
- Track Subcontract Data

