



2017 JOINT DISADVANTAGED BUSINESS ENTERPRISE CONTRACT AVAILABILITY AND UTILIZATION STUDY

FINAL REPORT

AUGUST 2017

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY



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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 2017 Joint Disadvantaged Business Enterprise (DBE) Contract Availability and Utilization Study (Study) for Santa Clara Valley Transportation Authority (VTA). Jungle Communications, Inc., Davis Associates Communication, Inc., and Minority Business Consortium assisted Mason Tillman in the performance of the Study. The consultants performed data entry, anecdotal interviews, and assisted in the planning and facilitation of the community meetings.

Liz Brazil, VTA's Business Diversity Programs Manager, managed the Study. Ms. Brazil facilitated Mason Tillman's access to the procurement and contract data needed to perform the Study.

B. Study Purpose

The purpose of the Study was to determine whether there was statistically significant underutilization in the award of VTA's federally funded prime contracts and subcontracts to DBEs¹ in the market area during the July 1, 2011, to June 30, 2015, study period. 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 DBEs² in the relevant market area. If the available DBE prime contractors or subcontractors are underutilized, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event which is less probable.



¹ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

² 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 analyzed contracts were classified into three industries:

- Construction includes all public works contracts, defined as an agreement for the erection, construction, alteration, repair, or improvement of any public structure, building, road, other public improvement of any kind.
- Professional services include architectural and landscape architectural services, engineering, environmental, and land surveying services, as well as incidental services that members of those professions and those in their employ may logically or justifiably perform.³ Construction management services are included in professional services. Construction management services are defined as services provided by a licensed architect, registered engineer, or licensed general contractor for managing and supervising work performed on construction projects, including construction project design review and evaluation, construction mobilization and supervision, bid evaluation, project scheduling, cost-benefit analysis, claims review and negotiation, and general management and administration of a construction project.⁴
- Goods/equipment/supplies includes goods, and tangible items such as movable or personal property, as opposed to services.⁵ Services not defined as construction or professional services were also included in this industry.



³ *California State Contracting Manual*. Department of General Services, 2012, p. 126.

⁴ *California State Contracting Manual*. Department of General Services, 2012, p. 127.

⁵ *California State Contracting Manual*. Department of General Services, 2012, Glossary 3.

D. Ethnic and Gender Groups Studied

The data in the Study is disaggregated into eight ethnic and gender groups. The eight groups are listed in Table 1.

Table 1: Business Ethnic and Gender Groups

Ethnicity and Gender Category	Definition
African Americans	Businesses owned by male and female African Americans
Asian Pacific Americans	Businesses owned by male and female Asian Pacific Americans
Subcontinent Asian Americans	Businesses owned by male and female Subcontinent Asian Americans
Hispanic Americans	Businesses owned by male and female Hispanic Americans
Native Americans	Businesses owned by male and female Native Americans
Minority-owned Businesses	Businesses owned by male and female African Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans
Caucasian Female-owned Businesses	Businesses owned by Caucasian females
Non-minority Male-owned Businesses (non-DBE)	Businesses owned by Caucasian males, and businesses that could not be identified as minority or female-owned ⁶

E. Prime Contract Data

The prime contract data consists of contract records extracted from VTA's financial systems, B2GNow and SAP. The awards and payments were issued during the July 1, 2011, to June 30, 2015, study period. Purchase orders were grouped by contract number. Each contract was classified into one of the three industries. The industry classifications were reviewed and approved by VTA.

VTA's contract and purchase order data was normalized and combined to create a single prime contract dataset. Both purchase orders and contracts for each unique procurement are referred to as contracts in this analysis. For each closed contract, the total payment amount including change orders were analyzed. For open contracts, the award amount was analyzed. The award amount was analyzed for contracts without payment information.



⁶ See Section I.E: Prime Contract Data for the methodology employed to identify the ethnicity and gender of the VTA's utilized prime contractors.

The normalized and combined dataset was scrubbed before analysis to remove duplicates and contracts awarded outside the study period. In addition, agreements with non-profits, government agencies, and utilities were excluded from the dataset. Purchases of proprietary commodities and software, and maintenance and service of these proprietary commodities were also excluded.

To determine the ethnicity and gender of each prime contractor, several steps were undertaken. The initial step determined whether the contractor was certified by the California Unified Certification Program or another government agency. The ethnicity and gender of the certified firms was derived from the certification record. Additional sources used to determine the ethnicity and gender of non-certified contractors included chambers of commerce directories, trade organization membership lists, internet research, and contractor surveys. Internet research examined the company's website, social media, digital media, and business listings. The contractor survey solicited ethnicity and gender information directly from the business. Prime contractors whose ethnicity and gender could not be verified as minority or female were classified as non-minority male-owned businesses. The non-minority male-owned business category also included publicly traded corporations, employee-owned businesses, and 50/50 partnerships where the partners were neither a minority nor woman. Once the ethnicity and gender research was completed and the contract records were cleaned, the utilization analysis was performed.

F. Subcontractor Data

Most VTA's subcontracting records were maintained in B2GNow. Construction and professional services subcontracts issued by VTA's prime contractors that were not tracked in B2GNow were reconstructed. The reconstructed subcontract data was compiled by VTA staff in conjunction with Mason Tillman. Project files were examined by VTA staff for awards, payments, and related documents that identified subcontractors, subconsultants, suppliers, and truckers. Prime contractors were also surveyed by Mason Tillman to secure their subcontractors, subconsultants, suppliers, and truckers' awards and payment data. All identified subcontractors, subconsultants, suppliers, and truckers were surveyed to verify their payments. Data verifying ethnicity and gender were compiled from certification lists, minority and woman business organization membership directories, Internet research, and contractor surveys. The organization sources used to verify contractor information are defined in Table 6.1 of *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*.

G. Contract Thresholds

The distribution of prime contracts and subcontracts by dollar amount within each industry was determined using a quartile analysis. To perform the quartile analysis, prime contract dollars retained after subtracting the subcontract awards and payments were calculated. Individual subcontracts were thereafter appended to the retained value of the prime contracts. All contracts were then ordered from largest to smallest to detail the spread of contracts awarded to both prime and subcontractors. Quartiles represent four equal parts within the full range of prime and subcontracts. The quartile analysis was used to set the threshold within which the utilization analysis was performed. Contract size is a depiction of the capacity that a willing business needs

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to successfully compete for VTA’s prime and subcontracts. Several of VTA’s prime contractors awarded large contracts to subcontractors and subconsultants. This illustrates that within the pool of available subcontractors, there is documented capacity to perform both considerably large prime contracts and large subcontracts.

In each of the three industries, the contracts analyzed were limited by value to those beneath the third quartile, which is also known as the upper quartile. The upper quartile represents the 75th percentile of the contracts VTA awarded, meaning that 75% of VTA’s contracts are beneath this value, and 25% of VTA’s contracts are above this value. Applying contract thresholds, as defined by the quartile analysis, is a method to ensure that contracts which are outliers in size and scope (by dollar value) do not skew the results of the disparity analysis. This threshold is also applied to ensure that the businesses enumerated in the availability analysis have the capacity to perform the contracts subject to analysis. To this end, contracts within each of the three industries were analyzed at three thresholds.

- One threshold includes all competitively bid contracts regardless of award amount. This analysis is illustrative only, and no analysis of disparity or program recommendations will be based on the analysis of all competitively bid contracts.
- The second threshold includes competitively bid contracts beneath the 75th percentile of awarded contracts. The 75th percentile threshold for each industry is listed in Table 2.

Table 2: Competitively Bid Contract Threshold for Analysis by Industry

Industry	Contract Threshold
Construction	\$1,000,000 and under
Professional Services	\$500,000 and under
Goods/Equipment/Supplies	\$500,000 and under

- The third threshold includes all informal contracts as defined by VTA’s procurement policies. The informal thresholds for each industry is listed in Table 3.



Table 3: Informal Contracts Threshold for Analysis by Industry

Industry	Contract Threshold
Construction	\$25,000 and under
Professional Services	\$50,000 and under
Goods/Equipment/Supplies	\$50,000 and under

II. Methodology

A. Legal Framework

The *City of Richmond v. J.A. Croson Co.*⁷ (*Croson*) and related case law provided the legal framework for conducting the Contract Availability and Utilization Study. Specifically, two United States decisions, *Croson* and *Adarand v. Peña*⁸ (*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, Virginia (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%. The goal required 30% participation of minority businesses. The factual predicate for the plan included a statistical study demonstrating that 50% of the City's population was African American and the utilization of African Americans on the City's prime construction contracts was 0.67%. 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. Government agencies such as VTA, 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 three 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.

⁷ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

⁸ *Adarand Constructors, Inc. v. Federico Pena*, 115 S.Ct. 2097 (1995).



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.⁹ Until the 2005 Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. State of Washington Dept. of Transportation*¹⁰ (*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. The following critical components were performed for VTA's Contract Availability and Utilization Study.

Contract Availability and Utilization Study Critical Components

1. Legal Framework
2. Contracting and Procurement Policies
3. Utilization Analysis
4. Geographic Market Area Identification
5. Availability Analysis
6. Disparity Analysis
7. Anecdotal Evidence
8. Race and Gender-Neutral Policies
9. Recommendations

A legal review was the **first component** in the contract availability and utilization study. VTA's contracting and procurement policies were reviewed in **component two** to determine the contracting processes employed. Utilization records were collected in **component three** to determine the extent to which VTA and its prime contractors procured construction, professional services, and goods/equipment/supplies from DBEs. Identification of VTA's market area was **component four**. Prime utilization records were used to determine the market area in which prime contractors were located. **Component five**, the availability analysis, identified businesses in the market area willing and able to provide construction, professional services, and goods/equipment/supplies procured by VTA and its prime contractors. **Component six** determined whether there is statistically significant underutilization of DBEs within each of the industries

examined. In **component seven**, the anecdotal analysis, the contemporary experiences of business owners in VTA's market area, was collected and reviewed. **Component eight** was a review of VTA's race- and gender-neutral efforts. Finally, in **component nine**, recommendations for best practices to enhance VTA's current business practices to remedy any identified disparity will be made.



⁹ *Sherbrooke Turf Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 969-73 (8th Cir 2003); *Gross Seed Co. v. Nebraska Department of Roads*, 345 F.3d 964 (8th Cir. 2003); *Western States Paving Co. v. State of Washington Dept. of Transportation*, 407 F. 3d 983 (9th Cir. 2005); *Northern Contracting Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (2007).

¹⁰ *Western States*, 407 F. 3d 983 (9th Cir. 2005)

B. Structure of the Report

The Contract Availability and Utilization Study findings are presented in 11 chapters. The contents of each chapter are briefly described below.

Overview of the Contract Availability and Utilization Study Report

- *Chapter 1: Legal Review* presents the case law applicable to business affirmative action programs and the methodology based on those cases required for the Study.
- *Chapter 2: Procurement Review* presents a matrix that summarizes VTA'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 geographic market area determination and defines VTA's market area.
- *Chapter 6: Prime Contractor and Subcontractor Availability Analysis* presents the distribution of available businesses in VTA's market area.
- *Chapter 7: Prime Contract Disparity Analysis* presents prime contractor utilization as compared to prime contractor availability by industry, ethnicity, and gender and evaluates the statistical significance of any underutilization.
- *Chapter 8: Subcontract Disparity Analysis* presents subcontractor utilization as compared to subcontractor availability by industry, ethnicity, and gender and evaluates the statistical significance of any underutilization.
- *Chapter 9: Regression Analysis* presents an examination of private sector economic indicators of discrimination in VTA's market area which could impact DBE formation and development.
- *Chapter 10: Anecdotal Analysis* presents the business community's perceptions of barriers and exemplary practices encountered in contracting or attempting to contract with VTA.
- *Chapter 11: Recommendations* presents race and gender-neutral remedies to enhance VTA's DBE Program and its contracting with DBEs and other small businesses



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 VTA’s utilization of DBE prime and subcontractors by ethnicity and gender for the study period July 1, 2011, to June 30, 2015.

1. Prime Contractor Utilization Analysis

VTA issued 126 contracts during the study period. The payments made by VTA during the study period totaled \$1,212,484,043 for all 126 prime contracts, which included 31 for construction, 54 for professional services, and 41 for goods/equipment/supplies. Payments included \$1,107,202,078 for construction, \$94,138,139 for professional services, and \$11,143,826 for goods/equipment/supplies. Table 4 summarizes the prime contractor utilization analysis by the percent of prime contract dollars awarded to each ethnic and gender group.

Table 4: Prime Contractor Utilization Summary

Ethnicity	Construction	Professional Services	Goods/Equipment/Supplies
All Prime Contracts			
African Americans	0.00%	1.29%	0.00%
Asian Pacific Americans	0.07%	49.16%	0.00%
Subcontinent Asian Americans	0.00%	0.15%	1.18%
Hispanic Americans	0.06%	0.01%	0.00%
Native Americans	0.00%	0.00%	0.00%
Caucasian Females	0.00%	9.34%	1.68%
Non-minority Males	99.87%	40.04%	97.13%
Formal Competitively Bid Contracts			
African Americans	0.00%	0.00%	0.00%
Asian Pacific Americans	11.40%	18.21%	0.00%
Subcontinent Asian Americans	0.00%	2.34%	2.64%
Hispanic Americans	10.49%	0.11%	0.00%
Native Americans	0.00%	0.00%	0.00%
Caucasian Females	0.00%	1.40%	3.77%
Non-minority Males	78.11%	77.94%	93.59%
Informal Contracts			
African Americans	0.00%	0.00%	0.00%
Asian Pacific Americans	0.00%	17.39%	0.00%



Ethnicity	Construction	Professional Services	Goods/Equipment/Supplies
All Prime Contracts			
Subcontinent Asian Americans	0.00%	8.90%	0.00%
Hispanic Americans	0.00%	2.46%	0.00%
Native Americans	0.00%	0.00%	0.00%
Caucasian Females	0.00%	0.00%	2.36%
Non-minority Males	100.00%	71.26%	97.64%

2. Subcontractor Utilization Analysis

A total of 477 subcontracts were analyzed, which included 430 construction and 47 professional services subcontracts. There were \$709,755,058 total subcontract dollars expended during the July 1, 2011, to June 30, 2015, study period. These dollars included \$700,054,923 for construction and \$9,700,136 for professional services subcontracts. Table 5 summarizes the subcontractor utilization by the percent of subcontracts received by each ethnic and gender group by industry.

Table 5: Subcontract Utilization Summary

Ethnicity	Construction	Professional Services
African Americans	1.19%	0.65%
Asian Pacific Americans	4.59%	9.58%
Subcontinent Asian Americans	1.21%	11.28%
Hispanic Americans	11.20%	0.85%
Native Americans	0.36%	0.00%
Caucasian Females	13.18%	9.17%
Non-minority Males	68.28%	68.47%

B. Market Area Analysis

As established in *Croson*, VTA 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.¹¹ In *Croson*, the Court found the City of Richmond, Virginia'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.¹² The identification of the local market area is particularly important because it is the



¹¹ *Croson*, 488 U.S. at 497 (1989).

¹² *Croson*, 488 U.S. at 497 (1989).

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, within its service area, the case law supports a definition of the market area as the geographical boundaries of the government entity.

During the study period, VTA awarded 126 prime contracts valued at \$1,212,484,043. VTA awarded 59.52% of these contracts and 95.49% of dollars to businesses located in Alameda, Santa Clara, and San Francisco counties. Given the distribution of the awarded contracts and the applicable case law, Alameda, Santa Clara, and San Francisco counties was defined as the market area. The analysis of contracts has been limited to an examination of contracts awarded to available market area businesses. Table 6 summarizes the market area analysis.

Table 6: Market Area Analysis

Market Area	Number of Contracts	Total Dollars	Percent of Contracts	Percent of Dollars
All Industries				
Market Area	75	\$1,157,746,758	59.52%	95.49%
Outside Market Area	51	\$54,737,285	40.48%	4.51%
Total	126	\$1,212,484,043	100.00%	100.00%

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 contracting 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 that provide construction, professional services and goods/equipment/supplies was compiled.

Mason Tillman used four types of sources to identify businesses in the market area that provide the goods and services that VTA procures. One source was VTA’s records, including a vendors list. The second source was government certification directories. The third source was business association membership lists. The fourth source was attendees of the business community meeting. Only businesses determined to be willing were added to the availability list. Any business identified as “willing” from more than one source was counted only once in an industry. A business that was willing to provide goods or services in more than one industry was listed uniquely in each relevant industry’s availability list.

The four sources were ranked, with the highest rank assigned to the utilized businesses and vendors. Government certification lists ranked second, business association membership lists third, and the business community meeting attendees fourth. Therefore, the first document used to build the availability list was VTA’s utilized businesses. Vendor lists were then appended. Businesses identified from federal and local government certification agencies were thereafter



appended. Businesses identified from association membership lists and community meeting attendance that affirmed their willingness through a survey of business association members were also appended. The business associations included trade organizations, professional organizations, and chambers of commerce. Tables 7 and 8 summarize the prime and subcontractor availability analyses.

Table 7: Prime Contractor Availability Analysis

Ethnicity	Construction	Professional Services	Goods/Equipment/Supplies
African Americans	14.45%	11.08%	9.87%
Asian Pacific Americans	17.17%	17.32%	17.20%
Subcontinent Asian Americans	4.17%	6.75%	6.05%
Hispanic Americans	17.17%	8.28%	15.29%
Native Americans	0.80%	0.76%	0.32%
Caucasian Females	15.89%	21.91%	12.42%
Non-minority Males	30.34%	33.89%	38.85%

Table 8: Subcontractor Availability Analysis

Ethnicity	Construction	Professional Services
African Americans	12.26%	10.89%
Asian Pacific Americans	15.53%	17.02%
Subcontinent Asian Americans	3.68%	6.63%
Hispanic Americans	15.12%	8.26%
Native Americans	0.68%	0.75%
Caucasian Females	14.85%	21.65%
Non-minority Males	37.87%	34.79%

D. Contract Size Analysis

In each of the industries, the contracts analyzed were limited to those beneath the third quartile (Q3), which is also known as the upper quartile. The upper quartile represents the 75th percentile of the contracts VTA awarded, meaning that 75% of VTA’s contracts are beneath this value, and 25% of VTA’s contracts are above this value. Applying contract thresholds as defined by the quartile analysis, is a method to ensure that the contracts subject to analysis can be performed by the businesses enumerated in the availability analysis. As detailed in Table 9, 25% of VTA’s prime and subcontracts were less than \$98,696, 50% were under \$300,000, and 75% were under \$895,950. This finding illustrates the fact that most VTA’s prime and subcontracts were small, requiring limited capacity to perform the solicited scopes of work.



Table 9: Quartile Analysis by Size and Industry

Quartile	All Industries Combined	Construction	Professional Services	Goods/Equipment/Supplies
Minimum	\$26,467	\$26,467	\$53,025	\$50,976
Q1 (25 th Percentile)	\$98,696	\$100,000	\$91,789	\$93,095
Q2 (Median)	\$300,000	\$338,405	\$188,852	\$271,611
Q3 (75 th Percentile)	\$895,950	\$992,215	\$493,450	\$504,329
Maximum	\$305,552,728	\$305,552,728	\$35,606,668	\$1,534,701

IV. Analysis of Statistically Significant Underutilization

The objective of the disparity analysis is to determine the levels at which DBEs¹³ are utilized on VTA prime and subcontracts. Under a fair and equitable system of awarding prime contracts, the proportion of prime contract dollars awarded to DBEs should be relatively close to the corresponding proportion of available DBEs¹⁴ 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. This analysis assumes a fair and equitable system.¹⁵ *Croson* states that an inference of discrimination can be made *prima facie* if the disparity is statistically significant. Under the *Croson* model, non-DBEs are not subjected to a statistical test of underutilization.

A disparity analysis was performed on prime contracts beneath the 75th percentile and all subcontracts awarded from July 1, 2011, to June 30, 2015. Disparity was found at both the prime contract and subcontract levels for several ethnic and gender groups.

¹³ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

¹⁴ Availability is defined as the number of ready, willing, and able firms. The methodology for determining willing and able firms is detailed in *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*.

¹⁵ 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 statistical standard to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analysis here was done within the 95-percent confidence level.



A. *Disparity Findings*

1. Prime Contracts

As indicated in Table 10, disparity was not found for DBE prime contractors on construction contracts valued \$1,00,000 and under, or construction contracts valued \$25,000 and under. Disparity was found for African American, Hispanic American, and Caucasian female prime contractors on professional services contracts valued \$500,000 and under, and professional services contracts valued \$50,000 and under. Disparity was found for African American, Asian Pacific American, and Hispanic American prime contractors on goods/equipment/supplies contracts valued \$500,000 and under, and goods/equipment/supplies contracts valued \$50,000 and under.



**Table 10: Prime Contract Disparity Summary
July 1, 2011 to June 30, 2015**

Ethnicity/Gender	Construction		Professional Services		Goods/Equipment/Supplies	
	Contracts Valued \$1,000,000 and Under	Contracts Valued \$25,000 and Under	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under
African Americans	No Disparity	No Disparity	Disparity	Disparity	Disparity	Disparity
Asian Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	Disparity	Disparity
Subcontinent Asian Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity	Disparity	Disparity	Disparity	Disparity
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity	No Disparity
Caucasian Females	No Disparity	No Disparity	Disparity	Disparity	No Disparity	No Disparity



2. Subcontracts

As indicated in Table 11 below, disparity was found for African American, Asian Pacific American, and Subcontinent Asian American construction subcontractors. Disparity was also found for African American professional service subcontractors.

**Table 11: Subcontract Disparity Summary
July 1, 2011, to June 30, 2015**

Ethnicity / Gender	Construction	Professional Services
African Americans	Disparity	Disparity
Asian Pacific Americans	Disparity	No Disparity
Subcontinent Asian Americans	Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity
Caucasian Females	No Disparity	No Disparity

V. Anecdotal Findings

The importance of anecdotal evidence in assessing the presence of discrimination in a geographic market was identified in the landmark *Croson* case.¹⁶ The United States Supreme Court in its 1989 *Croson* decision specified the use of anecdotal testimony to determine whether remedial, race-conscious relief may be justified in a local government’s market area. The court stated that a pattern of individual discriminatory acts can explain the statistical disparity findings.¹⁷ However, such discriminatory acts cannot be used to determine the presence of discrimination in a government’s contracting process.

The Court did find that anecdotal testimony of individual discriminatory acts can document the routine practices affecting minority and women-owned businesses’ access to a government’s contracts. While the statistical data must be used to measure the existence of discrimination, anecdotal testimony provides the human context through which the numbers can be understood. The anecdotal testimony collected from business owners describes their perceptions of barriers in the market area. This type of information will be used to define best management practices that could improve DBE access to each government’s contracts.



¹⁶ City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989)

¹⁷ *Id.*

A. Summary of In-Depth Interviews

Anecdotal testimony allowed interviewees to describe the barriers they experienced in conducting business and inform an understanding of how barriers occur, who creates them, and their effect on business development. Thus, the information obtained offers VTA vital insights on an array of policy changes to its DBE Program.

Business community meetings were held in May, June, and August 2016. The purpose of the meetings was to announce the Study, inform the business community about the Study's legal framework, methodology, and timeline, and give business owners the opportunity to speak with VTA representatives, prime contractors, and other Bay Area transportation agencies that are members of the Metropolitan Transportation Commission, regarding contracting opportunities. The meetings also sought to solicit the business community's support for the Study and to identify business owners willing to participate in the anecdotal interviews.

Extensive efforts were undertaken to conduct 50 one-on-one interviews. Potential interviewees were identified from contract and certification records, business community meetings, and outreach. Potential interviewees were pre-screened to determine if they operated a business within the market area during the study period and were willing to commit to the interview process. A total of 82 business owners agreed to be interviewed, but only 32 business owners completed an interview. The 50 business owners who declined to be interviewed would not provide a reason for their decision. All the interviewees were business owners whose businesses were headquartered within VTA's market area and provided construction, professional, or goods/equipment/supplies.

The patterns and practices evident in the interviewee accounts have been grouped into six categories. The categories are as follows:

- Comments about the Disadvantaged Business Enterprise Program
- Financing and bonding
- Certification requirements
- Exemplary practices of the Agencies
- Informal business connections
- Recommendations to enhance the DBE program

VI. Recommendations

The disparity findings provide evidence of the utilization of DBEs compared to their rate of availability in VTA's geographic market area. The race- and gender-conscious recommendations are based on the documented findings of statistically significant disparity for the July 1, 2011, to June 30, 2015, study period. The recommendations are offered to maximize the use of DBEs on VTA's contracts.

Race- and gender-neutral recommendations are offered to increase DBE and other small business access to VTA's prime and subcontracts, enhancing capacity-building efforts, and revise reporting

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of DBE prime contractor and subcontractor utilization. The recommended strategies address all industries and apply to all ethnic and gender groups. The recommendations are derived from an analysis of VTA's DBE Program, anecdotal interviews, and government and corporate best management practices.

A. Remedial Program Recommendations

1. Race- and Gender-Conscious Remedies

- a. Amend the Triennial 2017 – 2019 Goal Setting Methodology Report

2. Design-Build Recommendations

- a. Mandate DBE and SBE Goal Compliance on Design-Build Projects

B. Race- and Gender-Neutral Recommendations

1. Capacity Building Recommendations

- a. Enhance VTA's Mentor-Protégé Program
- b. Form Non-Project Specific Partnerships with Private Firms to Provide Technical and Supportive Services

2. Pre-Award Recommendations

- a. Assess Allocation of Risk at Prime and Subcontract Level
- b. Review Selection Panel Process
- c. Review Unbundling Policy
- d. Use Direct Contracting to Award Small Contracts

3. Post-Award Recommendations

- a. Publish Semi-Annual DBE Utilization Reports

VII. Conclusion

Based on the utilization and availability analysis, it was determined that there was statistically significant underutilization in the award of VTA's federally funded prime contracts and subcontracts to businesses owned by DBEs in the market area during the July 1, 2011, to June 30, 2015, study period. The industries analyzed for this study were construction, professional services, and goods/equipment/supplies. Disparity was found for African American, Hispanic American, and Caucasian female prime contractors on professional services contracts valued \$500,000 and



under, and professional services contracts valued \$50,000 and under. Disparity was found for African American, Asian Pacific American, and Hispanic American prime contractors on goods/equipment/supplies contracts valued \$500,000 and under, and goods/equipment/supplies contracts valued \$50,000 and under. Disparity was found for African American, Asian Pacific American, and Subcontinent Asian American construction subcontractors. Disparity was also found for African American professional service subcontractors.

The disparity findings provide evidence of the underutilization of DBEs compared to their rate of availability in VTA's geographic market area. The race- and gender- conscious recommendations are based on the documented findings of statistically significant disparity, and are offered to maximize the use of DBEs on VTA's contracts. Race- and gender-neutral recommendations are offered to increase DBE and other small business access to VTA's prime and subcontracts, enhancing capacity-building efforts, and revise reporting of DBE prime contractor and subcontractor utilization. The recommended strategies address all industries and apply to all ethnic and gender groups.



CHAPTER 1: Legal Review

I. Introduction

Two United States Supreme Court decisions, *City of Richmond v. J.A. Croson Co. (Croson)*¹⁸ and *Adarand v. Peña (Adarand)*¹⁹, raised the standard by which federal courts shall review both local and federal government minority business enterprise and disadvantaged business enterprise contracting programs. This chapter discusses the federal law applicable to public contracting affirmative action programs. It also includes a discussion of the United States Department of Transportation (USDOT) Disadvantaged Business Enterprise (DBE) regulations and relevant case law.

The 2017 Joint DBE Contract Availability and Utilization Study was commissioned to conduct statistical analyses of data measuring the availability and utilization of DBEs in contracts awarded by the Santa Clara Valley Transportation Authority, San Mateo County Transit District, and the Peninsula Corridor Joint Powers Board (collectively referred to as the Agencies). Since the analysis is limited to the Agencies' United States Department of Transportation (USDOT) funded contracts, this Study will ensure that the Agencies' DBE Programs are narrowly tailored and are in compliance with 49 Code of Federal Regulations, Subtitle A, Part 26, *Western States Paving v. Washington Department of Transportation*,²⁰ and the other federal law applicable to USDOT-funded public contracting programs, and the California Constitution.

The United States Supreme Court decision in *Croson* sets forth the strict scrutiny constitutional analysis applicable to race based remedies for public contracting programs. Since the Agencies are located within California, the California Constitution and Ninth Circuit decisions including *Western States* constitute legal precedent and are discussed herein. Case law pertaining to M/WBE programs and the DBE regulations adjudicated outside of the Ninth Circuit are discussed because they are instructive, albeit not binding authority, when implementing race-based public contracting programs.

II. Standard of Review

The standard of review represents the measure by which a court evaluates whether a legal claim meets a certain statute, rule, or precedent. The standard of review that the Supreme Court set in *Croson* for race-specific programs is applicable to meet constitutional muster. *Croson*, decided in 1989, dealt with non-federally funded programs and established an evidentiary standard of review for race-based programs. The Court announced that programs employing racial classification

¹⁸ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

¹⁹ *Adarand Constructors, Inc. v. Federico Peña*, 115 S.Ct. 2097 (1995).

²⁰ *Western States Paving Co. v. State of Washington Dept. of Transportation*, 407 F.3d 983 (9th Cir. 2005).



would be subject to “strict scrutiny,” the highest legal standard. Broad notions of equity or general allegations of historical and societal discrimination against minorities fail to meet the requirements of strict scrutiny. Local governments, 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.

A. Race-Conscious Programs

In *Croson* the United States Supreme Court affirmed that pursuant to the 14th Amendment, the proper standard of review for state and local MBE programs, which are necessarily race-based, is strict scrutiny.²¹ Specifically, the government must show that the classification is narrowly tailored to achieve a compelling state interest.²² The Court recognized that a state or local entity may take action, in the form of an MBE program, to rectify the effects of *identified, systemic racial discrimination* within its jurisdiction.²³ Justice O’Connor, speaking for the majority, articulated various methods of demonstrating discrimination and set forth guidelines for crafting MBE programs so that they are “narrowly tailored” to address systemic racial discrimination.²⁴

III. Burden of Proof

The procedural protocol established by *Croson* imposes an initial burden of proof upon the government to demonstrate that the challenged MBE program is supported by a strong factual predicate, i.e., documented evidence of past discrimination. Notwithstanding this requirement, the plaintiff bears the ultimate burden of proof to persuade the court that the MBE program is unconstitutional. The plaintiff may challenge a government’s factual predicate on any of the following grounds:²⁵

- Disparity exists due to race-neutral reasons
- Methodology is flawed
- Data is statistically insignificant
- Conflicting data exists

²¹ *Croson*, 488 U.S. at 493-95.

²² *Id.* at 493.

²³ *Croson*, 488 U.S. at 509.

²⁴ *Croson*, 488 U.S. at 501-02. Cases involving education and employment frequently refer to the principal concepts applicable to the use of race in government contracting: compelling interest and narrowly tailored remedies. The Supreme Court in *Croson* and subsequent cases provide fairly detailed guidance on how those concepts are to be treated in contracting. In education and employment, the concepts are not explicated to nearly the same extent. Therefore, references in those cases to “compelling governmental interest” and “narrow tailoring” for purposes of contracting are essentially generic and of little value in determining the appropriate methodology for disparity studies.

²⁵ These were the issues on which the district court in Philadelphia reviewed the disparity study before it.



Thus, a disparity study must be analytically rigorous, at least to the extent that the data permits, if it is to withstand legal challenge.²⁶

A. Strong Basis in Evidence

Croson requires defendant jurisdictions to produce a “strong basis in evidence” that the objective of the challenged MBE program is to rectify the effects of discrimination.²⁷ The issue of whether or not the government has produced a strong basis in evidence is a question of law.²⁸ Because the sufficiency of the factual predicate supporting the MBE program is at issue, factual determinations relating to the accuracy and validity of the proffered evidence underlie the initial legal conclusion to be drawn.²⁹

The adequacy of the government’s evidence is “evaluated in the context of the breadth of the remedial program advanced by the [jurisdiction].”³⁰ The onus is upon the jurisdiction to provide a factual predicate that is sufficient in scope and precision to demonstrate that current disparity in utilization necessitated the adoption of the MBE program.

B. Ultimate Burden of Proof

The party challenging an MBE program will bear the ultimate burden of proof throughout the course of the litigation—despite the government’s obligation to produce a strong factual predicate to support its program.³¹ The plaintiff must persuade the court that the program is constitutionally flawed by challenging the government’s factual predicate for the program or by demonstrating that the program is overly broad.

Justice O’Connor explained the nature of the plaintiff’s burden of proof in her concurring opinion in *Wygant v. Jackson Board of Education (Wygant)*.³² She stated that following the production of the factual predicate supporting the program:

[I]t is incumbent upon the non-minority [plaintiffs] to prove their case; they continue to bear the ultimate burden of persuading the court that the [government’s] evidence did not support an inference of prior discrimination and thus a remedial

²⁶ *Croson*, 488 U.S. 469.

²⁷ *Concrete Works of Colorado v. City and County of Denver*, 36 F.3d 1513 at 1522 (10th Cir. 1994), (citing *Wygant v. Jackson Board of Education*, 476 U.S. 267, 292 (1986); see *Croson* 488 U.S. at 509 (1989)).

²⁸ *Id.* (citing *Associated General Contractors v. New Haven*, 791 F.Supp. 941, 944 (D.Conn 1992)).

²⁹ *Concrete Works I*, 36 F.3d at 1522.

³⁰ *Concrete Works I*, 36 F.3d at 1522. (citing *Croson* 488 U.S. at 498).

³¹ *Id.* (citing *Wygant*, 476 U.S. at 277-278).

³² *Wygant v. Jackson Board of Education*, 476 U.S. 267, 293 (1986).



purpose, or that the plan instituted based on this evidence was not sufficiently “narrowly tailored.”³³

In *Philadelphia*, the Third Circuit Court of Appeals clarified this allocation of the burden of proof and the constitutional issue of whether facts constitute a “strong basis” in evidence.³⁴ That court wrote that the allocation of the burden of persuasion depends on the theory of constitutional invalidity that is being considered.³⁵ If the plaintiff’s theory is that an agency has adopted race-based preferences with a purpose other than remedying past discrimination, the plaintiff has the burden of convincing the court that the identified remedial motivation is a pretext and that the real motivation was something else.³⁶

The situation differs if the plaintiff’s theory is that an agency’s conclusions as to the existence of discrimination and the necessity of the remedy chosen have no strong basis in evidence. In such a situation once the agency comes forward with evidence of facts alleged to justify its conclusions, the plaintiff has the burden of persuading the court that those facts are not accurate. However, the ultimate issue of whether a strong basis in evidence exists is an issue of law, and the burden of persuasion in the traditional sense plays no role in the court’s resolution of that ultimate issue.³⁷

In *Concrete Works II*, the Tenth Circuit clearly stated that as the plaintiff’s burden is an evidentiary one, it cannot be discharged simply by argument. The court cited its opinion in *Adarand Constructors Inc. v. Slater*, 228 F.3d 1147 (2000): “[g]eneral criticism of disparity studies, as opposed to particular evidence undermining the reliability of the particular disparity study, is of little persuasive value.”³⁸

The Supreme Court’s disposition of the plaintiff’s petition for *certiorari* strongly supports the conclusion that plaintiff has the burden of proof. Supreme Court review of appellate decisions is discretionary in that four justices must agree, so normally little can be inferred from its denial. However, *Concrete Works* is not the typical instance. Justice Scalia concurred in *Croson* that strict scrutiny was required of race-conscious contracting programs. However, his antagonism there and over the years to the use of race is clear. Justice Scalia’s view is that governmental remedies should be limited to provable individual victims. That view is at the base of his written dissent, on which

³³ *Wygant*, 476 U.S. at 293

³⁴ *Contractors Association of Eastern Pennsylvania v. City of Philadelphia*, 6 F.3d 990 (3rd Cir. 1993), on remand, 893 F.Supp. 419 (E.D. Penn. 1995), aff’d, 91 F.3d 586 (3rd Cir. 1996).

³⁵ *Id.* at 597

³⁶ *Id.* at 597

³⁷ At first glance, the position of the Third Circuit does not square with what the Eleventh Circuit announced as its standard in reviewing whether a jurisdiction has established the “compelling interest” required by strict scrutiny. The Eleventh Circuit said the inquiry was factual and would be reversed only if it was “clearly erroneous.” However, the difference in formulation may have had to do with the angle from which the question was approached: If one starts with the disparity study—whether a compelling interest has been shown—factual issues are critical. If the focus is the remedy, because the constitutional issue of equal protection in the context of race comes into play, the review is necessarily a legal one.

³⁸ *Concrete Works II*, 321 F.3d at 979 (quoting *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (2000)).



only Chief Justice Rehnquist joined, to the Court's November 17, 2003 decision not to grant *certiorari* in *Concrete Works*.³⁹

Justice Scalia would place the burden of proof squarely on the defendant jurisdiction when a plaintiff pleads unequal treatment. Pursuant to Justice Scalia's argument, the Tenth Circuit was simply wrong, because the defendant should have to *prove* that there was discrimination. He takes this position despite the case law in equal employment cases, from which *Croson* was derived, that the defendant has the burden of *production*. Once the defendant satisfies that, the burden of *proof* shifts to the plaintiff.

Contrary to Justice Scalia's dissenting opinion, the Tenth Circuit in *Concrete Works II* held that the defendant must show "a strong basis" for concluding that MBEs are being discriminated against. Additionally, the plaintiff has to put in evidence that negates its validity.

IV. *Croson* Evidentiary Framework

Government entities must construct a strong evidentiary framework to stave off legal challenges and to ensure that the adopted MBE program complies with the requirements of the Equal Protection clause of the U.S. Constitution. The framework must comply with the stringent requirements of the strict scrutiny standard. Accordingly, there must be a strong basis in evidence, and the race-conscious remedy must be "narrowly tailored," as set forth in *Croson*. A summary of the appropriate types of evidence to satisfy the first element of the *Croson* standard follows.

A. *Active or Passive Participation*

Croson requires that the local entity seeking to adopt an MBE program must have perpetuated the discrimination to be remedied by the program. However, the local entity need not be an active perpetrator of such discrimination. Passive participation will satisfy this part of the Court's strict scrutiny review.⁴⁰

An entity will be considered an "active" participant if the evidence shows that it has created barriers that actively exclude MBEs from its contracting opportunities. In addition to examining the government's contracting record and process, MBEs who have contracted or attempted to contract with that entity can be interviewed to relay their experiences in pursuing that entity's contracting opportunities.⁴¹



³⁹ *Concrete Works of Colorado, Inc. v. City and County of Denver, Colorado*, 321 F.3d 950 (10th Cir. 2003), *petition for cert. denied*, (U.S. Nov. 17, 2003) (No. 02-1673) ("*Concrete Works II*").

⁴⁰ *Croson*, 488 U.S. at 509.

⁴¹ *Wygant v. Jackson Board of Education*, 476 U.S. 267 at 275 (1985).

An entity will be considered to be a “passive” participant in private sector discriminatory practices if it has infused tax dollars into that discriminatory industry.⁴² The *Croson* Court emphasized a government’s ability to passively participate in private sector discrimination with monetary involvement, stating:

[I]t is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from tax contributions of all citizens, do not serve to finance the evil of private prejudice.⁴³

Until *Concrete Works I*, the inquiry regarding passive discrimination was limited to the subcontracting practices of government prime contractors. In *Concrete Works I*, the Tenth Circuit considered a purely private sector definition of passive discrimination. Since no government funds were involved in the contracts analyzed in the case, the court questioned whether purely private sector discrimination was likely to be a fruitful line of inquiry.⁴⁴ On remand the district court rejected the three disparity studies offered to support the continuation of Denver's M/WBE program, because each focused on purely private sector discrimination. Indeed, Denver’s focus on purely private sector discrimination may account for what seemed to be a shift by the court away from the standard *Croson* queries of: (1) whether there was a firm basis in the entity’s contracting process to conclude that discrimination existed; (2) whether race-neutral remedies would resolve what was found; and (3) whether any race-conscious remedies had to be narrowly tailored. The court noted that in the City of Denver’s disparity studies, the chosen methodologies failed to address the following six questions:

- Was there pervasive discrimination throughout the Denver Metropolitan Statistical Area (MSA)?
- Were all designated groups equally affected?
- Was discrimination intentional?
- Would Denver’s use of such firms constitute “passive participation”?
- Would the proposed remedy change industry practices?
- Was the burden of compliance—which was on white male prime contractors in an intensely competitive, low profit margin business—a fair one?

⁴² *Croson*, 488 U.S. at 492; *Coral Construction*, 941 F.2d at 916.

⁴³ *Croson*, 488 U.S. at 492.

⁴⁴ *Concrete Works I*, 36 F.3d at 1529. “What the Denver MSA data does not indicate, however, is whether there is any linkage between Denver’s award of public contracts and the Denver MSA evidence of industry-wide discrimination. That is, we cannot tell whether Denver indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against MBE and/or WBE subcontractors in other private portions of their business or whether the private discrimination was practiced by firms who did not receive any public contracts. Neither *Croson* nor its progeny clearly state whether private discrimination that is in no way funded with public tax dollars can, by itself, provide the requisite strong basis in evidence necessary to justify a municipality’s affirmative action program. A plurality in *Croson* simply suggested that remedial measures could be justified upon a municipality’s showing that ‘it had essentially become “a passive participant” in a system of racial exclusion practiced by elements of the local construction industry’ [citing *Croson*]. Although we do not read *Croson* as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination, such evidence would at least enhance the municipality’s factual predicate for a race- and gender-conscious program. The record before us does not explain the Denver government’s role in contributing to the underutilization of MBEs and WBEs in the private construction market in the Denver MSA, and this may well be a fruitful issue to explore at trial.”



The court concluded that the City of Denver had not documented a firm basis of identified discrimination derived from the statistics submitted.⁴⁵

However, the Tenth Circuit on appeal of that decision completely rejected the district court's analysis. The district court's queries required Denver to prove the existence of discrimination. Moreover, the Tenth Circuit explicitly held that "passive" participation included private sector discrimination in the marketplace. The court, relying on *Shaw v. Hunt*,⁴⁶ a post-*Croson* Supreme Court decision, wrote as follows:

The *Shaw* Court did not adopt any requirement that only discrimination by the governmental entity, either directly or by utilizing firms engaged in discrimination on projects funded by the entity, was remediable. The Court, however, did set out two conditions which must be met for the governmental entity to show a compelling interest. "First, the discrimination must be identified discrimination." *Id.* at 910. The City can satisfy this condition by identifying the discrimination "public or private, with some specificity." *Id.* (quoting *Croson*, 488 U.S. at 504 (emphasis added)). The governmental entity must also have a "strong basis in evidence to conclude that remedial action was necessary." *Id.*⁴⁷

The Tenth Circuit therefore held that the City was correct in its attempt to show that it "indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against M/WBE subcontractors in other private portions of their business."⁴⁸ The court emphasized that its reading of *Croson*⁴⁹ and its own precedents supported that conclusion. Also, the court pointed out that the plaintiff, which had the burden of proof, failed to introduce conflicting evidence and merely *argued* that the private sector was out of bounds and that Denver's data was flawed.⁵⁰

The courts found that the disparities in MBE private sector participation, demonstrated with the rate of business formation and lack of access to credit which affected MBEs' ability to expand in order to perform larger contracts, gave Denver a firm basis to conclude that there was actionable private sector discrimination. For technical legal reasons,⁵¹ however, the court did not examine whether the consequent public-sector remedy—i.e., one involving a goal requirement on the City

⁴⁵ *Concrete Works I*, 36 F.3d at 61.

⁴⁶ *Shaw v. Hunt*, 517 U.S. at 519.

⁴⁷ *Concrete Works II*, 321 F.3d at 975-76.

⁴⁸ Slip opinion, pg. 20.

⁴⁹ See also *Shaw v. Hunt*, 517 U.S. 899 (1996), which it cited.

⁵⁰ Whether Denver had the requisite strong basis to conclude that there was discrimination was a question of law; it was for the Tenth Circuit to decide. The standard by which the factual record before it was reviewed was "clearly erroneous."

⁵¹ Plaintiff had not preserved the issue on appeal; therefore, it was no longer part of the case.



of Denver’s contracts—was “narrowly tailored.” The court took this position despite the plaintiff’s contention that the remedy was inseparable from the findings and that the court should have addressed the issue of whether the program was narrowly tailored.

Ten months later, in *Builders Association of Greater Chicago v. City of Chicago*,⁵² the question of whether a public-sector remedy is “narrowly tailored” when it is based on purely private sector discrimination was at issue. The district court reviewed the remedies derived from private sector practices with a more stringent scrutiny. It found that there was discrimination against minorities in the Chicago construction industry. However, it did not find the City of Chicago’s MBE subcontracting goal an appropriate remedy because it was not “narrowly tailored” to address the lack of access to credit for MBEs which was the documented private discrimination. The court also criticized the remedy because it was a “rigid numerical quota,” and there was no individualized review of MBE beneficiaries, citing Justice O’Connor’s opinion in *Gratz v. Bollinger*.⁵³

The question of whether evidence of private sector practices met the Court standard also arose in *Builders Ass’n of Greater Chicago v. County of Cook*.⁵⁴ In this case the Seventh Circuit cited *Associated General Contractors of Ohio v. Drabik*⁵⁵ in throwing out a 1988 County ordinance under which at least 30 percent of the value of prime contracts was to go to minority subcontractors and at least ten percent to woman-owned businesses. Appellants argued that evidence of purely private sector discrimination justified a public-sector program. The Court found that the County, in order to justify the public-sector remedy, had to demonstrate that it had been at least a passive participant in the private discrimination by showing that it had infused tax dollars into the discriminatory private industry.

B. Systemic Discriminatory Exclusion

Croson clearly established that an entity enacting a business affirmative action program must demonstrate identified, systemic discriminatory exclusion on the basis of race or any other illegitimate criteria (arguably gender).⁵⁶ Thus, it is essential to demonstrate a pattern and practice

⁵² 298 F.Supp2d 725 (N.D.Ill. 2003).

⁵³ 123 S.Ct. 2411, 2431 (2003). *Croson* requires a showing that there was a strong basis for concluding that there was *discrimination* before a race-conscious remedy can be used in government contracting. In the University of Michigan cases that considered race-conscious admissions programs, a key element in the decisions is the Court acceptance of *diversity* as a constitutionally sufficient ground; it did not require a showing of past *discrimination* against minority applicants. If it had, the basis for a program would have disappeared. Discrimination is the historic concern of the 14th Amendment, while promoting diversity is of recent origin. The Court may have been disposed therefore to apply a more rigorous review of legislation based on diversity. The 14th Amendment’s prohibitions are directed against “state action.” The private sector behavior of businesses that contract with state and local governments is a conceptual step away from what it does in its public-sector transactions. That distinction may lead courts to apply the *Gratz* approach of more searching scrutiny to remedial plans based on private sector contracting.

⁵⁴ 256 F.3d 642 (7th Cir. 2001).

⁵⁵ 214 F.3d 730 (6th Cir. 2000).

⁵⁶ *Croson*, 488 U.S. at 469. See also *Monterey Mechanical v. Pete Wilson*, 125 F.3d 702 (9th Cir. 1997). The Fifth Circuit Court in *W.H. Scott Construction Co. v. City of Jackson, Mississippi*, 199 F.3d 206 (1999) found that the City’s MBE program was unconstitutional for construction contracts because minority participation goals were arbitrarily set and not based on any objective data. Moreover, the Court noted that had the



of such discriminatory exclusion in the relevant market area.⁵⁷ Using appropriate evidence of the entity's active or passive participation in the discrimination, as discussed above, the showing of discriminatory exclusion must cover each racial group to whom a remedy would apply.⁵⁸ Mere statistics and broad assertions of purely societal discrimination will not suffice to support a race or gender-conscious program.

Croson enumerates several ways an entity may establish the requisite factual predicate. First, a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by an entity or by the entity's prime contractors may support an inference of discriminatory exclusion.⁵⁹ In other words when the relevant statistical pool is used, a showing of gross statistical disparity alone "may constitute *prima facie* proof of a pattern or practice of discrimination."⁶⁰

The *Croson* Court made clear that both prime contract and subcontracting data was relevant. The Court observed that "[w]ithout any information on minority participation in subcontracting, it is quite simply impossible to evaluate overall minority representation in the city's construction expenditures."⁶¹ Subcontracting data is also an important means by which to assess suggested future remedial actions. Since the decision makers are different for the awarding of prime contracts and subcontracts, the remedies for discrimination identified at a prime contractor versus subcontractor level might also be different.

Second, "evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified."⁶² Thus, if an entity has statistical evidence that non-minority contractors are

City implemented the recommendations from the disparity study it commissioned, the MBE program may have withstood judicial scrutiny (the City was not satisfied with the study and chose not to adopt its conclusions). "Had the City adopted particularized findings of discrimination within its various agencies and set participation goals for each accordingly, our outcome today might be different. Absent such evidence in the City's construction industry, however, the City lacks the factual predicates required under the Equal Protection Clause to support the Department's 15% DBE-participation goal."

In 1996, Houston Metro had adopted a study done for the City of Houston whose statistics were limited to aggregate figures that showed *income* disparity between groups, without making any connection between those statistics and the City's contracting policies. The disadvantages cited that M/WBEs faced in contracting with the City also applied to small businesses. Under *Croson*, that would have pointed to race-neutral remedies. The additional data on which Houston Metro relied was even less availing. Its own expert contended that the ratio of lawsuits involving private discrimination to total lawsuits and ratio of unskilled black wages to unskilled white wages established that the correlation between low rates of black self-employment was due to discrimination. Even assuming that nexus, there is nothing in *Croson* that accepts a low number of MBE business *formation* as a basis for a race-conscious remedy.

⁵⁷ *Croson*, 488 U.S. at 509.

⁵⁸ *Croson*, 488 U.S. at 506. As the Court said in *Croson*, "[t]he random inclusion of racial groups that, as a practical matter, may never have suffered from discrimination in the construction industry in Richmond suggests that perhaps the city's purpose was not in fact to remedy past discrimination." See *North Shore Concrete and Assoc. v. City of New York*, 1998 U.S. Dist. LEXIS 6785 (EDNY 1998), which rejected the inclusion of Native Americans and Alaskan Natives in the City's program, citing *Croson*.

⁵⁹ *Id.* at 509.

⁶⁰ *Id.* at 501 (citing *Hazelwood School District v. United States*, 433 U.S. 299, 307-08 (1977)).

⁶¹ *Croson*, 488 U.S. at 502-03.

⁶² *Id.* at 509.



systematically excluding minority businesses from subcontracting opportunities, it may act to end the discriminatory exclusion.⁶³ Once an inference of discriminatory exclusion arises, the entity may act to dismantle the closed business system.

In *Coral Construction*, the Ninth Circuit Court of Appeals further elaborated upon the type of evidence needed to establish the factual predicate that justifies a race-conscious remedy. The court held that both statistical and anecdotal evidence should be relied upon in establishing systemic discriminatory exclusion in the relevant marketplace as the factual predicate for an MBE program.⁶⁴ The court explained that statistical evidence, standing alone, often does not account for the complex factors and motivations guiding contracting decisions, many of which may be entirely race-neutral.⁶⁵

Likewise, anecdotal evidence, standing alone, is unlikely to establish a systemic pattern of discrimination.⁶⁶ Nonetheless, anecdotal evidence is important because the individuals who testify about their personal experiences bring “the cold numbers convincingly to life.”⁶⁷

1. Geographic Market

Croson did not speak directly to how the geographic market is to be determined. In *Coral Construction*, the Court of Appeals held that “an MBE program must limit its geographical scope to the boundaries of the enacting jurisdiction.”⁶⁸ Conversely, in *Concrete Works I* the Tenth Circuit Court of Appeals specifically approved the Denver MSA as the appropriate market area since 80 percent of the construction contracts were let there.⁶⁹

Read together, these cases support a definition of market area that is reasonable rather than dictated by a specific formula. *Croson* and its progeny did not provide a bright line rule for local market area, which determination should be fact-based. An entity may limit consideration of evidence of discrimination within its own jurisdiction.⁷⁰ Extra-jurisdictional evidence may be permitted when it is reasonably related to where the jurisdiction contracts.⁷¹

⁶³ *Croson*, 488 U.S. at 509.

⁶⁴ *Coral Construction*, 941 F.2d at 919.

⁶⁵ *Id.*

⁶⁶ *Coral Construction*, 941 F.2d at 919.

⁶⁷ *Id.* (quoting *International Brotherhood of Teamsters v. United States (Teamsters)*, 431 U.S. 324, 339 (1977)).

⁶⁸ *Coral Construction*, 941 F.2d at 925.

⁶⁹ *Concrete Works of Colorado v. City and County of Denver*, 823 F.Supp. 821, 835-836 (D.Colo. 1993); rev'd on other grounds, 36 F.3d 1513 (10th Cir. 1994); 86 F. Supp. 2d 1042 (D. Colo. 2000).

⁷⁰ *Cone Corporation V. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990); *Associated General Contractors v. Coalition for Economic Equity*, 950 F.2d 1401 (9th Cir. 1991).

⁷¹ There is a related question of which firms can participate in a remedial program. In *Coral Construction*, the Court held that the definition of “minority business” used in King County’s MBE program was over-inclusive. The Court reasoned that the definition was overbroad because it included businesses other than those who were discriminated against in the King County business community. The program would have



2. Current Versus Historical Evidence

In assessing the existence of identified discrimination through demonstration of a disparity between MBE utilization and availability it may be important to examine disparity data both prior to and after the entity's current MBE program was enacted. This will be referred to as "pre-program" versus "post-program" data.

On the one hand *Croson* requires that an MBE program be "narrowly tailored" to remedy current evidence of discrimination.⁷² Thus, goals must be set according to the evidence of disparity found. For example, if there is a current disparity between the percentage of an entity's utilization of Hispanic construction contractors and the availability of Hispanic construction contractors in that entity's marketplace, then that entity can set a goal to bridge that disparity.

It is not mandatory to examine a long history of an entity's utilization to assess current evidence of discrimination. In fact, *Croson* indicates that it may be legally fatal to justify an MBE program based upon outdated evidence.⁷³ Therefore, the most recent two or three years of an entity's utilization data would suffice to determine whether a statistical disparity exists between current M/WBE utilization and availability.⁷⁴

Pre-program data regarding an entity's utilization of MBEs prior to enacting the MBE program may be relevant to assess the need for the agency to keep such a program intact. A 1992 unpublished opinion by Judge Henderson of the U.S. District Court for the Northern District of California, *RGW Construction v. San Francisco Bay Area Rapid Transit District (BART)*,⁷⁵ set forth the possible significance of statistical data during an entity's "pre-program" years. Judge Henderson opined that statistics that provides data for a period when no M/WBE goals were operative is often the most relevant data in evaluating the need for remedial action by an entity. Indeed, "to the extent that the most recent data reflect the impact of operative DBE goals, then such data are not necessarily a reliable basis for concluding that remedial action is no longer warranted."⁷⁶ Judge Henderson noted that this is particularly so given the fact that M/WBEs report that they are seldom or never used by a majority prime contractor without M/WBE goals. That this situation may be the case suggests a possibly fruitful line of inquiry: an examination of whether different programmatic approaches in the same market area led to different outcomes in M/WBE

allowed, for instance, participation by MBEs who had no prior contact with the County. Hence, location within the geographic area is not enough. An MBE had to have shown that it previously sought business, or is currently doing business, in the market area.

⁷² See *Croson*, 488 U.S. at 509-10.

⁷³ See *Croson*, 488 U.S. at 499 (stating that "[i]t is sheer speculation how many minority firms there would be in Richmond absent past societal discrimination").

⁷⁴ See *Associated General Contractors of California v. Coalition for Economic Equity and City and County of San Francisco*, 950 F.2d 1401 (9th Cir. 1991). (Consultant study looked at City's MBE utilization over a one-year period).

⁷⁵ See November 25, 1992, Order by Judge Thelton Henderson (on file with Mason Tillman Associates).

⁷⁶ *Id.*



participation. The Tenth Circuit came to the same conclusion in *Concrete Works II*. It is permissible for a study to examine programs where there were no goals.

Similarly, the Eleventh Circuit in *Dade County* cautions that using post-enactment evidence (post-program data) may mask discrimination that might otherwise be occurring in the relevant market. Still, the court agreed with the district court that it was not enough to speculate on what MBE utilization would have been in the absence of the program.⁷⁷

Thus, an entity should look both at pre-program and post-program data in assessing whether discrimination exists currently and analyze whether it would exist in the absence of an M/WBE program.

3. Statistical Evidence

To determine whether statistical evidence is adequate to give rise to an inference of discrimination, courts have looked to the “disparity index,” which consists of the percentage of minority or women contractor participation in local contracts divided by the percentage of minority or women contractor availability or composition in the population of available firms in the local market area.⁷⁸ Disparity indexes have been found highly probative evidence of discrimination where they ensure that the “relevant statistical pool” of minority or women contractors is being considered. The Third Circuit Court of Appeals, in *Philadelphia*, ruled that the “relevant statistical pool” includes those businesses that not only exist in the marketplace but that is qualified and interested in performing the public agency’s work. In that case, the Third Circuit rejected a statistical disparity finding where the pool of minority businesses used in comparing utilization to availability were those that were merely licensed to operate in the City of Philadelphia. Merely being licensed to do business with the City does not indicate either a willingness or capability to do work for the City. As such, the Court concluded this particular statistical disparity did not satisfy *Croson*.⁷⁹

Statistical evidence demonstrating a disparity between the utilization and availability of M/WBEs can be shown in more than one way. First, the number of M/WBEs utilized by an entity can be compared to the number of available M/WBEs. This is a strict *Croson* “disparity” formula. A

⁷⁷ *Eng’g Contractors Ass’n v. Metro. Dade County*, 122 F.3d 895, 912 (11th Cir. 1997).

⁷⁸ Although the disparity index is a common category of statistical evidence considered, other types of statistical evidence have been considered. In addition to looking at Dade County’s contracting and subcontracting statistics, the district court also considered marketplace data statistics (which looked at the relationship between the race, ethnicity, and gender of surveyed firm owners and the reported sales and receipts of those firms), the County’s Wainwright study (which compared construction business ownership rates of M/WBEs to those of non-M/WBEs and analyzed disparities in personal income between M/WBE and non-M/WBE business owners), and the County’s Brimmer Study (which focused only on Black-owned construction firms and looked at whether disparities existed when the sales and receipts of Black-owned construction firms in Dade County were compared with the sales and receipts of all Dade County construction firms).

The court affirmed the judgment that declared appellant’s affirmative action plan for awarding county construction contracts unconstitutional and enjoined the plan’s operation because there was no statistical evidence of past discrimination and appellant failed to consider race and ethnic-neutral alternatives to the plan.

⁷⁹ *Philadelphia*, 91 F.3d at 586. The courts have not spoken to the non-M/WBE component of the disparity index. However, if only as a matter of logic, the “availability” of non-M/WBEs requires that their willingness to be government contractors be established. The same measures used to establish the interest of M/WBEs should be applied to non-M/WBEs.



significant statistical disparity between the number of MBEs that an entity utilizes in a given product/service category and the number of available MBEs in the relevant market area specializing in the specified product/service category would give rise to an inference of discriminatory exclusion.

Second, M/WBE dollar participation can be compared to M/WBE availability. This comparison could show a disparity between the award of contracts by an entity in the relevant locality/market area to available majority contractors and the award of contracts to M/WBEs. Thus, in *AGCC II* an independent consultant’s study compared the number of available MBE prime contractors in the construction industry in San Francisco with the amount of contract dollars awarded to San Francisco-based MBEs over a one-year period. The study found that available MBEs received far fewer construction contract dollars in proportion to their numbers than their available non-minority counterparts.⁸⁰

Whether a disparity index supports an inference that there is discrimination in the market turns not only on what is being compared, but also on whether any disparity is statistically significant. In *Croson* Justice O’Connor opined, “[w]here the gross statistical disparities can be shown, they alone, in a proper case, may constitute a *prima facie* proof of a pattern or practice of discrimination.”⁸¹

However, the Court has not assessed nor attempted to cast bright lines for determining if a disparity index is sufficient to support an inference of discrimination. Rather, the analysis of the disparity index and the finding of its significance are judged on a case-by-case basis.⁸²

Following the dictates of *Croson*, courts may carefully examine whether there is data that shows that MBEs are ready, willing, and able to perform.⁸³ *Concrete Works I* made the same point: capacity—i.e., whether the firm is “able to perform”—is a ripe issue when a disparity study is examined on the merits:

[Plaintiff] has identified a legitimate factual dispute about the accuracy of Denver’s data and questioned whether Denver’s reliance on the percentage of MBEs and WBEs available in the marketplace overstates “the ability of MBEs or WBEs to conduct business relative to the industry as a whole because M/WBEs tend to be smaller and less experienced than non-minority owned firms.” In other words, a disparity index calculated on the basis of the absolute number of MBEs in the local

⁸⁰ *AGCC II*, 950 F.2d 1401 at 1414. Specifically, the study found that MBE availability was 49.5 percent for prime construction, but MBE dollar participation was only 11.1 percent; that MBE availability was 36 percent prime equipment and supplies, but MBE dollar participation was 17 percent; and that MBE availability for prime general services was 49 percent, but dollar participation was 6.2 percent.

⁸¹ *Croson*, 488 U.S. at 501 (quoting *Hazelwood School District v. United States*, 433 U.S. 299, 307-308 (1977)).

⁸² *Concrete Works*, 36 F.3d at 1522.

⁸³ The *Philadelphia* study was vulnerable on this issue.



market may show greater underutilization than does data that takes into consideration the size of MBEs and WBEs.⁸⁴

Notwithstanding that appellate concern, the disparity studies before the district court on remand did not examine the issue of M/WBE capacity to perform Denver's public-sector contracts. As mentioned above, they were focused on the private sector, using census-based data and Dun & Bradstreet statistical extrapolations.

The Sixth Circuit Court of Appeals in *Drabik* concluded that for statistical evidence to meet the legal standard of *Croson*, it must consider the issue of capacity.⁸⁵ The State's factual predicate study based its statistical evidence on the percentage of M/WBE businesses in the population.

The statistical evidence did not consider the number of minority businesses that were construction firms, let alone how many were qualified, willing, and able to perform state contracts.⁸⁶ The court reasoned as follows:

Even statistical comparisons that might be apparently more pertinent, such as with the percentage of all firms qualified in some minimal sense, to perform the work in question, would also fail to satisfy the Court's criteria. If MBEs comprise 10% of the total number of contracting firms in the State, but only get 3% of the dollar value of certain contracts that does not alone show discrimination, or even disparity. It does not account for the relative size of the firms, either in terms of their ability to do particular work or in terms of the number of tasks they have resources to complete.⁸⁷

Further, *Drabik* also pointed out that the State not only relied upon the wrong type of statistical data but that the data was more than twenty years old.

The appellate opinions in *Philadelphia*⁸⁸ and *Dade County*⁸⁹ regarding disparity studies involving public-sector contracting are particularly instructive in defining availability. First, in *Philadelphia*, the earlier of the two decisions, contractors' associations challenged a city ordinance that created set-asides for minority subcontractors on city public works contracts. Summary judgment was granted for the contractors.⁹⁰ The Third Circuit upheld the third appeal, affirming that there was

⁸⁴ *Concrete Works*, 36 F.3d at 1528.

⁸⁵ See *Contractors of Ohio v. Drabik*, 214 F.3d 730 (6th Cir. 2000). The Court reviewed Ohio's 1980, pre-*Croson*, program, which the Sixth Circuit found constitutional in *Ohio Contractors Ass'n v. Keip*, 1983 U.S. App. LEXIS 24185 (6th Cir. 1983), finding the program unconstitutional under *Croson*.

⁸⁶ *Drabik*, 214 F.3d at 730.

⁸⁷ *Drabik*, 214 F.3d at 736.

⁸⁸ *Philadelphia*, 6 F.3d 990 (3rd Cir. 1993), on remand, 893 F.Supp. 419 (E.D. Penn. 1995), aff'd, 91 F.3d 586 (3rd Cir. 1996).

⁸⁹ *Dade County*, 943 F.Supp. 1546 (11th Circuit, 1997).

⁹⁰ *Philadelphia*, 91 F.3d at 586.



no firm basis in evidence for finding that race-based discrimination existed to justify a race-based program and that the program was not narrowly tailored to address past discrimination by the City.⁹¹

The Third Circuit reviewed the evidence of discrimination in prime contracting and stated that whether it is strong enough to infer discrimination is a “close call” which the court “chose not to make.”⁹² It was unnecessary to make this determination because the court found that even if there was a strong basis in evidence for the program, a subcontracting program was not narrowly tailored to remedy prime contracting discrimination.

When the court looked at subcontracting, it found that a firm basis in evidence did not exist. The only subcontracting evidence presented was a review of a random 25 to 30 percent of project engineer logs on projects more than \$30,000. The consultant determined that no MBEs were used during the study period based upon recollections regarding whether the owners of the utilized firms were MBEs. The court found this evidence insufficient as a basis for finding that prime contractors in the market were discriminating against subcontractors.⁹³

The Third Circuit has recognized that consideration of qualifications can be approached at different levels of specificity, and the practicality of the approach also should be weighed. The Court of Appeals found that “[i]t would be highly impractical to review the hundreds of contracts awarded each year and compare them to each and every MBE” and that it was a “reasonable choice” under the circumstances to use a list of certified contractors as a source for available firms.⁹⁴ Although theoretically it may have been possible to adopt a more refined approach, the court found that using the list of certified contractors was a rational approach to identifying qualified firms.

Furthermore, the court discussed whether bidding was required in prime construction contracts as the measure of “willingness” and stated, “[p]ast discrimination in a marketplace may provide reason to believe the minorities who would otherwise be willing are discouraged from trying to secure work.”⁹⁵

In addition, the court found that a program certifying MBEs for federal construction projects was a satisfactory measure of capability of MBE firms.⁹⁶ In order to qualify for certification the federal certification program required firms to detail their bonding capacity, size of prior contracts,

⁹¹ *Philadelphia*, 91 F.3d at 586.

⁹² *Philadelphia*, 91 F.3d at 605.

⁹³ Another problem with the program was that the 15 percent goal was not based on data indicating that minority businesses in the market area were available to perform 15 percent of the City’s contracts. The court noted, however, that “we do not suggest that the percentage of the preferred group in the universe of qualified contractors is necessarily the ceiling for all set-asides.” The court also found the program flawed because it did not provide sufficient waivers and exemptions, as well as consideration of race-neutral alternatives.

⁹⁴ *Philadelphia*, 91 F.3d at 603.

⁹⁵ *Id.* at 603.

⁹⁶ *Id.* at 603.



number of employees, financial integrity, and equipment owned. According to the court, “the process by which the firms were certified [suggests that] those firms were both qualified and willing to participate in public work projects.”⁹⁷ The court found certification to be an adequate process of identifying capable firms, recognizing that the process may even understate the availability of MBE firms.⁹⁸ Therefore, the court was somewhat flexible in evaluating the appropriate method of determining the availability of MBE firms in the statistical analysis of a disparity.

In *Dade County*, the district court held that the County had not shown the compelling interest required to institute a race-conscious program, because the statistically significant disparities upon which the County relied disappeared when the size of the M/WBEs was taken into account.⁹⁹ The *Dade County* district court accepted the disparity study’s limiting of “available” prime construction contractors to those that had bid at least once in the study period. However, it must be noted that relying solely on bidders to identify available firms may have limitations. If the solicitation of bidders is biased, then the results of the bidding process will be biased.¹⁰⁰ In addition a comprehensive count of bidders is dependent on the adequacy of the agency’s record keeping.¹⁰¹

The appellate court in *Dade County* did not determine whether the County presented sufficient evidence to justify the M/WBE program. It merely ascertained that the lower court was not clearly erroneous in concluding that the County lacked a strong basis in evidence to justify race-conscious affirmative action. The appellate court did not prescribe the district court’s analysis or any other specific analysis for future cases.

C. Anecdotal Evidence

In *Croson* Justice O’Connor opined that “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”¹⁰² Anecdotal evidence should be gathered to determine if minority contractors are systematically being excluded from contracting opportunities in the relevant market area. Remedial measures fall along a sliding scale determined by their intrusiveness on non-targeted groups. At one end of the spectrum are race-neutral measures and policies, such as outreach to the M/WBE community, which are accessible to all segments of the business community regardless of race. They are not intrusive and in fact require

⁹⁷ *Id.* at 603.

⁹⁸ *Philadelphia*, 91 F.3d at 603.

⁹⁹ *Engineering Contractors Association of South Florida, Inc. et al. v. Metropolitan Dade County*, 943 F. Supp. 1546 (S.D. Florida 1996).

¹⁰⁰ Cf. *League of United Latin American Citizens v. Santa Ana*, 410 F.Supp. 873, 897 (C.D. Cal. 1976); *Reynolds v. Sheet Metal Workers, Local 102*, 498 F.Supp 952, 964 n. 12 (D. D.C. 1980), *aff’d*, 702 F.2d 221 (D.C. Cir. 1981). (Involving the analysis of available applicants in the employment context).

¹⁰¹ Cf. *EEOC v. American Nat’l Bank*, 652 F.2d 1176, 1196-1197 (4th Cir.), *cert. denied*, 459 U.S. 923 (1981). (In the employment context, actual applicant flow data may be rejected where race coding is speculative or nonexistent).

¹⁰² *Croson*, 488 U.S. at 509. The Court specifically cited to *Teamsters*, 431 U.S. at 338.



no evidence of discrimination before implementation. Conversely, race-conscious measures, such as set-asides, fall at the other end of the spectrum and require a larger amount of evidence.¹⁰³

As will be discussed below, anecdotal evidence will not suffice standing alone to establish the requisite predicate for a race-conscious program. Its great value lies in pointing to remedies that are “narrowly tailored,” the second prong of a *Croson* study.

The following types of anecdotal evidence have been presented and relied upon by the Ninth Circuit, in both *Coral Construction* and *AGCC II*, to justify the existence of an M/WBE program:

- M/WBEs denied contracts despite being the low bidders—*Philadelphia*¹⁰⁴
- Prime contractors showing MBE bids to non-minority subcontractors to find a non-minority firm to underbid the MBEs—*Cone Corporation v. Hillsborough County*¹⁰⁵
- M/WBEs’ inability to obtain contracts for private sector work—*Coral Construction*¹⁰⁶
- M/WBEs told that they were not qualified, although they were later found to be qualified when evaluated by outside parties—*AGCC*¹⁰⁷
- Attempts to circumvent M/WBE project goals—*Concrete Works I*¹⁰⁸
- Harassment of M/WBEs by an entity's personnel to discourage them from bidding on an entity's contracts—*AGCC*¹⁰⁹

Courts must assess the extent to which relief measures disrupt settled “rights and expectations” when determining the appropriate corrective measures.¹¹⁰ Presumably, courts would look more favorably upon anecdotal evidence, which supports a less intrusive program than a more intrusive one. For example, if anecdotal accounts related experiences of discrimination in obtaining bonds, they may be sufficient evidence to support a bonding program that assists M/WBEs. However, these accounts would not be evidence of a statistical availability that would justify a racially limited program such as a set-aside.

¹⁰³ Cf. *AGCC II*, 950 F.2d at 1417-18 (in finding that an ordinance providing for bid preferences was narrowly tailored, the Ninth Circuit stated that the program encompassed the required flexibility and stated that “the burdens of the bid preferences on those not entitled to them appear relatively light and well distributed. In addition, in contrast to remedial measures struck down in other cases, those bidding have no settled expectation of receiving a contract. [Citations omitted.]”).

¹⁰⁴ *Philadelphia*, 6 F.3d at 1002.

¹⁰⁵ *Cone Corporation v. Hillsborough County*, 908 F.2d at 916 (11th Cir.1990).

¹⁰⁶ For instance, where a small percentage of an MBE or WBE’s business comes from private contracts and most of its business comes from race or gender-based set-asides, this would demonstrate exclusion in the private industry. *Coral Construction*, 941 F.2d 910 at 933 (WBE’s affidavit indicated that less than seven percent of the firm’s business came from private contracts and that most of its business resulted from gender-based set-asides).

¹⁰⁷ *AGCC II*, 950 F.2d at 1415.

¹⁰⁸ *Concrete Works*, 36 F.3d at 1530.

¹⁰⁹ *AGCC II*, 950 F.2d at 1415.

¹¹⁰ *Wygant*, 476 U.S. at 283.



As noted above, in *Croson*, the Supreme Court found that the City of Richmond’s MBE program was unconstitutional because the City lacked proof that race-conscious remedies were justified. However, the Court opined that “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government’s determination that broader remedial relief is justified.”¹¹¹

In part, it was the absence of such evidence that proved lethal to the program. The Supreme Court stated that “[t]here was no direct evidence of race discrimination on the part of the city in letting contracts or any evidence that the city’s prime contractors had discriminated against minority-owned subcontractors.”¹¹²

This was not the situation confronting the Ninth Circuit in *Coral Construction*. There, the 700-plus page appellate records contained the affidavits of “at least 57 minorities or women contractors, each of whom complain in varying degrees of specificity about discrimination within the local construction industry. These affidavits certainly suggest that ongoing discrimination may be occurring in much of the King County business community.”¹¹³

Nonetheless, this anecdotal evidence standing alone was insufficient to justify King County’s MBE program since “[n]otably absent from the record, however, is *any* statistical data in support of the County’s MBE program.”¹¹⁴ After noting the Supreme Court’s reliance on statistical data in Title VII employment discrimination cases and cautioning that statistical data must be carefully used, the Court elaborated on its mistrust of pure anecdotal evidence:

Unlike the cases resting exclusively upon statistical deviations to prove an equal protection violation, the record here contains a plethora of anecdotal evidence. However, anecdotal evidence, standing alone, suffers the same flaws as statistical evidence. Indeed, anecdotal evidence may even be less probative than statistical evidence in the context of proving discriminatory patterns or practices.¹¹⁵

The Court concluded its discourse on the potency of anecdotal evidence in the absence of a statistical showing of disparity by observing that “rarely, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan.”¹¹⁶

¹¹¹ *Croson*, 488 U.S. at 509, citing *Teamsters*, 431 U.S. at 338.

¹¹² *Croson*, 488 U.S. at 480.

¹¹³ *Coral Construction*, 941 F.2d at 917-18.

¹¹⁴ *Coral Construction*, 941 F.2d at 918 (emphasis added) (additional statistical evidence gathered after the program had been implemented was also considered by the court and the case was remanded to the lower court for an examination of the factual predicate).

¹¹⁵ *Coral Construction*, 941 F.2d at 919.

¹¹⁶ *Id.*



Two other circuit courts also suggested that anecdotal evidence might be dispositive, while rejecting it in the specific case before them. For example, in *Contractors Ass’n* the Third Circuit Court of Appeals noted that the Philadelphia City Council had “received testimony from at least fourteen minority contractors who recounted personal experiences with racial discrimination,” which the district court had “discounted” because it deemed this evidence to be “impermissible” for consideration under *Croson*.¹¹⁷ The circuit court disapproved of the district court’s actions

because in its view the court’s rejection of this evidence betrayed the court’s role in disposing of a motion for summary judgment.¹¹⁸ “Yet,” the circuit court stated:

[g]iven *Croson*’s emphasis on statistical evidence, even had the district court credited the City’s anecdotal evidence, we do not believe this amount of anecdotal evidence is sufficient to satisfy strict scrutiny [quoting *Coral, supra*]. Although anecdotal evidence alone may, in an exceptional case, be so dominant or pervasive that it passes muster under *Croson*, it is insufficient here.¹¹⁹

The District of Columbia Circuit Court echoed the Ninth Circuit’s acknowledgment of the rare case in which anecdotal evidence is singularly potent in *O’Donnell Construction v. District of Columbia*.¹²⁰ The court found that in the face of conflicting statistical evidence, the anecdotal evidence there was not sufficient:

It is true that in addition to statistical information, the Committee received testimony from several witnesses attesting to problems they faced as minority contractors. Much of the testimony related to bonding requirements and other structural impediments any firm would have to overcome, no matter what the race of its owners. The more specific testimony about discrimination by white firms could not in itself support an industry-wide remedy [quoting *Coral*]. Anecdotal evidence is most useful as a supplement to strong statistical evidence—which the Council did not produce in this case.¹²¹

The Eleventh Circuit is also in accord. In applying the “clearly erroneous” standard to its review of the district court’s decision in *Dade County*, it commented that “[t]he picture painted by the

¹¹⁷ *Philadelphia*, 6 F.3d at 1002.

¹¹⁸ *Philadelphia*, 6 F.3d at 1003.

¹¹⁹ *Id.*

¹²⁰ 963 F.2d at 427 (D.C. Cir.1992).

¹²¹ *Id.*



anecdotal evidence is not a good one.”¹²² However, it held that this was not the “exceptional case” where, unreinforced by statistics, the anecdotal evidence was enough.¹²³

In *Concrete Works I*, the Tenth Circuit Court of Appeals described the type of anecdotal evidence that is most compelling: evidence within a statistical context. In approving of the anecdotal evidence marshaled by the City of Denver in the proceedings below, the court recognized that

[w]hile a fact finder should accord less weight to personal accounts of discrimination that reflect isolated incidents, anecdotal evidence of a municipality’s institutional practices carries more weight due to the systemic impact that such institutional practices have on market conditions.¹²⁴

The court noted that the City had provided such systemic evidence.

The Ninth Circuit Court of Appeals has articulated what it deems to be permissible anecdotal evidence in *AGCC II*.¹²⁵ There, the court approved a “vast number of individual accounts of discrimination” which included numerous reports of MBEs denied contracts despite being the low bidder; MBEs told they were not qualified although they were later found qualified when evaluated by outside parties; MBEs refused work even after they were awarded the contracts as low bidder; and MBEs being harassed by city personnel to discourage them from bidding on city contracts. On appeal, the City points to numerous individual accounts of discrimination to substantiate its findings that discrimination exists in the City’s procurement processes; an “old boy’s network” still exists; and racial discrimination is still prevalent within the San Francisco construction industry.¹²⁶ Based on *AGCC II*, it would appear that the Ninth Circuit’s standard for acceptable anecdotal evidence is more lenient than other Circuits that have considered the issue.

Taken together, these statements constitute a taxonomy of appropriate anecdotal evidence. The cases suggest that to be optimally persuasive, anecdotal evidence must satisfy six particular requirements.¹²⁷ These requirements are that the accounts:

¹²² *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).

¹²³ *Engineering Contractors Ass’n of South Florida v. Metropolitan Dade County*, 943 F.Supp. at 926.

¹²⁴ *Concrete Works I*, 36 F.3d at 1530.

¹²⁵ *AGCC II*, 950 F.2d at 1401.

¹²⁶ *AGCC II*, 950 F.2d at 1415.

¹²⁷ *Philadelphia*, 6 F.3d at 1003. The anecdotal evidence must be “dominant or pervasive.”



- Are gathered from minority contractors, preferably those that are “qualified.”¹²⁸
- Concern specific, verifiable instances of discrimination.¹²⁹
- Involve the actions of governmental officials.¹³⁰
- Involve events within the relevant jurisdiction’s market area.¹³¹
- Discuss the harm that the improper conduct has inflicted on the businesses in question.¹³²
- Collectively reveal that discriminatory exclusion and impaired contracting opportunities are systemic rather than isolated or sporadic.¹³³

Given that neither *Croson* nor its progeny identifies the circumstances under which anecdotal evidence alone will carry the day, it is not surprising that none of these cases explicate bright line rules specifying the quantity of anecdotal evidence needed to support a race-conscious remedy. However, the foregoing cases and others provide some guidance by implication.

Philadelphia makes clear that 14 anecdotal accounts will not suffice.¹³⁴ While the matter is not free of countervailing considerations, 57 accounts, many of which appeared to be of the type referenced above, were insufficient to justify the program in *Coral Construction*. The number of anecdotal accounts relied upon by the district court in approving Denver’s M/WBE program in *Concrete Works I* is unclear, but by one count the number might have exceeded 139.¹³⁵ It is, of course, a matter of speculation as to how many of these accounts were indispensable to the court’s approval of the Denver M/WBE program.

In addition, as noted above, the quantum of anecdotal evidence that a court would likely find acceptable may depend on the remedy in question. The remedies that are least burdensome to non-targeted groups would likely require a lesser degree of evidence. Those remedies that are more burdensome on the non-targeted groups would require a stronger factual basis likely extending to verification.

¹²⁸ *Philadelphia*, 91 F.3d at 603.

¹²⁹ *Coral Construction*, 941 F.2d at 917-18. But see *Concrete Works II*, 321 F.3d at 989. “There is no merit to [plaintiff’s] argument that the witnesses’ accounts must be verified to provide support for Denver’s burden.”

¹³⁰ *Croson*, 488 U.S. at 509.

¹³¹ *Coral Construction*, 941 F.2d at 925.

¹³² *O’Donnell*, 963 F.2d at 427.

¹³³ *Coral Construction*, 941 F.2d at 919.

¹³⁴ *Philadelphia*, 6 F.3d. at 1002-03.

¹³⁵ The Denver City Council enacted its M/WBE ordinance in 1990. The program was based on the results of public hearings held in 1983 and 1988 at which numerous people testified (approximately 21 people and at least 49 people, respectively), and on a disparity study performed in 1990. See *Concrete Works of Colorado v. Denver*, 823 F.Supp. 821, 833-34. The disparity study consultant examined all of this preexisting data, presumably including the anecdotal accounts from the 1983 and 1988 public hearings, as well as the results of its own 69 interviews, in preparing its recommendations. *Id.* at 833-34. Thus, short of analyzing the record in the case, it is not possible to determine a minimum number of accounts because it is not possible to ascertain the number of consultant interviews and anecdotal accounts that are recycled statements or statements from the same people. Assuming no overlap in accounts, however, and also assuming that the disparity study relied on prior interviews in addition to its own, the number of M/WBEs interviewed in this case could be as high as 139, and, depending on the number of new people heard by the Denver Department of Public Works in March 1988 (*see id.* at 833), the number might have been even greater.



D. Remedial Statutory Scheme

In 2010 *H.B. Rowe Company (Rowe) v. Tippett* challenged the constitutionality of the North Carolina General Assembly's Statute 136-28.4 (Statute), promulgated in 1983.¹³⁶ The Statute set forth a general policy to promote the use of small, minority, physically handicapped, and women contractors in non-federally funded State construction projects. The 1983 Statute directed North Carolina Department of Transportation (NCDOT) to encourage and promote the policy. Seven years later in 1990, the Statute was amended to include specific participation goals on state-funded transportation construction contracts for minority and women-owned businesses.

As a result of the amendment, NCDOT created a Minority Business Enterprise and Women Business Enterprise Program for non-federally funded highway and bridge construction contracts. The program, for all intents and purposes, mirrored the federal DBE Program pursuant to 49 CFR Part 26. In 1991, the Statute was challenged in District court regarding its constitutionality. The District court ruled in favor of the plaintiff, stating that in order to implement race-conscious measures to remedy discrimination, the governmental entity must identify with "some specificity" the racial discrimination it seeks to remedy. As a result of the District court decision, NCDOT suspended its M/WBE Program in 1991.

In 1993 NCDOT commissioned a disparity study on state-funded transportation construction contracts. The study determined that minority and women subcontractors were underutilized at a statistically significant level, and the M/WBE Program was re-implemented. In 1998, the North Carolina General Assembly commissioned an update to the 1993 study. The 1998 update study concluded that minority and women-owned businesses continued to be underutilized in State-funded road construction contracts.

In 2002 H.B. Rowe Company was denied a NCDOT contract because the company's bid included 6.6 percent women subcontractor participation and no minority subcontractor participation. NCDOT claimed that Rowe failed to meet the good faith effort requirements. A third study was commissioned in 2004 to again study minority and women contractor participation on the State's highway construction industry. In 2006, relying on the 2004 study, the North Carolina General Assembly amended Statute 136-28.4. The principle modifications were:

- Remedial action should only be taken when there is a strong basis in evidence of ongoing effects of past or present discrimination that prevents or limits disadvantaged minority and women-owned businesses from participating as subcontractors in State-funded projects.
- The minority/women classification was limited to those groups that suffered discrimination.
- A disparity study should be performed every five years to respond to changing conditions.
- A sunset provision should be included.



¹³⁶ *H.B. Rowe Company v. Tippett*, 615 F.3d 233, (4th Cir. 2010).

First, the court considered whether the statutory scheme as it relates to minorities survives the “strict scrutiny” standard. The circuit court reviewed the statistical evidence detailed in the 2004 disparity study to determine if the statutory scheme was based on strong statistical evidence to implement race-conscious subcontractor goals. The statistical evidence was also examined to determine if the statute’s definition of minorities was over-inclusive by including minority groups that did not suffer discrimination pursuant to the statistical standards set forth in the 2004 disparity study.

The court did not consider whether the statistical methodology employed in the 2004 disparity study was sufficient to support a compelling state interest. The court noted and accepted that the statistical measure to determine whether the underutilization of minorities on the State’s subcontracts was statistically significant was the disparity index. The 2004 disparity study calculated a disparity at .05 confidence level. A statistical calculation is significant at the .05 confidence level because the probability of that result occurring by chance is five percent or less.¹³⁷ The .05 confidence level is used in social sciences as a marker of when a result is a product of some external influence, rather than ordinary variation or sampling error.¹³⁸

The circuit court admonished that “the study itself sets out the standard by which one could confidently conclude that discrimination was at work,” but the standard was not followed in the State’s statutory scheme. The statistical evidence in the 2004 disparity study demonstrated that African American and Native American subcontractors were underutilized at a disparity index of .05. Hispanic American and Asian American subcontractors were also underutilized but not at a .05 confidence level. The 2004 Study determined that underutilization was not statistically significant.

Therefore, the statutory scheme was ruled “narrowly tailored” to achieve the State’s compelling interest as it relates to African American and Native American subcontractors but not Hispanic American and Asian American subcontractors. Thus, the State provided a strong basis in evidence for minority subcontractor participation goals pertaining to African American and Native American subcontractors.

Second, the court considered whether the statutory scheme as it relates to women survives the intermediate scrutiny standard. The evidence demonstrated that the State’s prime contractors “substantially over-utilized” women-owned businesses on public road construction projects. The 2004 disparity study calculated the overutilization of women subcontractors as statistically significant at a 96 percent confidence level. The circuit court further noted that the private sector evidence was insufficient to overcome the strong evidence of overutilization. Consequently, the circuit court determined that the evidence in the 2004 disparity study did not provide “exceedingly persuasive justification” to include women-owned businesses in gender-based remedies.

In light of the *Rowe* decision, caution should be exercised when determining which minority or gender group is appropriate for race-conscious or gender-conscious remedies. For an M/WBE

¹³⁷ Fourth Circuit Court citing, *Research Methods and Statistics: A Critical Thinking Approach*, Sherri L. Jackson, (3ed. 2009).

¹³⁸ Fourth Circuit Court citing, *The Practice of Social Research*, Earl Babbie, (12th ed. 2010).



program to be narrowly tailored, there must be a statistical finding of underutilization of minority subcontractors. Where the underutilization of a minority group is not found to be statistically significant, the minority group should not be included in race-conscious remedies.

The intermediate scrutiny standard for gender classifications can be met with statistical evidence of underutilization that is not statistically significant. However, this does not apply when there is demonstrated overutilization. Women-owned businesses should be considered for gender-based remedies when the statistical evidence demonstrates that the overutilization is not statistically significant.

V. Consideration of Race-Neutral Options

A remedial program must address the source of the disadvantage faced by minority businesses. If it is found that race discrimination places MBEs at a competitive disadvantage, an MBE program may seek to counteract the situation by providing MBEs with a counterbalancing advantage.¹³⁹ On the other hand an MBE program cannot stand if the sole barrier to minority or woman-owned business participation is a barrier that is faced by all new businesses, regardless of ownership.¹⁴⁰ If the evidence demonstrates that the sole barrier to M/WBE participation is that M/WBEs disproportionately lack capital or cannot meet bonding requirements, then only a race-neutral program of financing for all small firms would be justified.¹⁴¹ In other words if the barriers to minority participation are race-neutral, then the program must be race-neutral or contain race-neutral aspects.

The requirement that race-neutral measures be considered does not mean that they must be exhausted before race-conscious remedies can be employed. The district court recently wrote in *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County*:

The Supreme Court has recently explained that although “narrow tailoring does not require exhaustion of every conceivable race-neutral alternative” it “does require serious, good faith consideration of workable race-neutral alternatives that will achieve... diversity[.]” *Gratz*, 123 S.Ct, at 2344, 2345. The County has failed to show the necessity for the relief it has chosen, and the efficacy of alternative remedies has not been sufficiently explored.¹⁴²

If the barriers appear race-related but are not systemic, then the remedy should be aimed at the specific arena in which exclusion or disparate impact has been found. If the evidence shows that

¹³⁹ *AGCC II*, 950 F.2d at 1404.

¹⁴⁰ *Croson*, 488 U.S. at 508.

¹⁴¹ *Croson*, 488 U.S. at 507.

¹⁴² *Hershell Gill*, 333 F.Supp. 2d 1305, 1330 (S.D.Fla. 2004) (quoting *Gratz v. Bollinger*, 123 S. Ct 2411 (2003)); *Grutter v. Bollinger*, 539 U.S. 306 (2003).



in addition to capital and bonding requirements, which are race-neutral, MBEs also face race discrimination in the awarding of contracts, then a race-conscious program will stand, so long as it also includes race-neutral measures to address the capital and bonding barriers.¹⁴³

The Ninth Circuit Court of Appeals in *Coral Construction* ruled that there is no requirement that an entity exhaust every possible race-neutral alternative.¹⁴⁴ Instead, an entity must make a serious, good faith consideration of race-neutral measures in enacting an MBE program. Thus, in assessing MBE utilization it is imperative to examine barriers to MBE participation that go beyond “small business problems.” The impact on the distribution of contracts programs that have been implemented to improve MBE utilization should also be measured.¹⁴⁵

VI. United States Department of Transportation Disadvantaged Business Enterprise Program

In *Adarand*, which the United States Supreme Court decided in 1995, the plaintiff directly challenged the USDOT’s Disadvantaged Business Enterprise Program as set forth in statute and regulations.¹⁴⁶ The Court found a compelling interest for the DBE Program but ruled, after applying the *Croson* required “strict scrutiny” standard to this federal program, 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.

In response to the United States Supreme Court’s decision in *Adarand*, which applied the strict scrutiny standard to federal programs, the USDOT revised provisions of the DBE rules. Effective March 1999, the USDOT revised 49 CFR Part 26 of its DBE program rules. The goal of promulgating the rule was to modify the DBE program consistent with the “narrow tailoring” requirement of *Adarand*. The revised provisions applied only to USDOT airport, transit, and highway financial assistance programs. Effective February 28, 2011, the USDOT amended the DBE regulations set forth in 49 CFR Part 26 as described in the Federal Register, Volume 76, No. 19. According to the 2011 amendment, recipients must incorporate a Small Business Enterprise component in their DBE Program by February 28, 2012. Two years later the DBE regulations were again amended in October 2014 and published in the Federal Register Volume 79, Number 191.¹⁴⁷

¹⁴³ *Hershell Gill*, 333 F.Supp. 2d at 1330 (upholding MBE program where it operated in conjunction with race-neutral measures aimed at assisting all small businesses).

¹⁴⁴ *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir. 1991).

¹⁴⁵ *Dade County*, 122 F.3d at 927. At the same time, the Eleventh Circuit’s caveat in *Dade County* should be kept in mind: “Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications that a government may use to treat race-based problems. Instead, it is the strongest of medicines, with many potentially harmful side-effects, and must be reserved to those severe cases that are highly resistant to conventional treatment.” For additional guidance, see *supra* the discussion of narrow tailoring in *Concrete Works*, *Adarand*, *County of Cook*, and *City of Chicago*.

¹⁴⁶ See generally *Adarand Constructors, Inc. v. Federico Pena*, 115 S.Ct. 2097 (1995).

¹⁴⁷ U.S. DEPARTMENT OF TRANSPORTATION, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs, 49 CFR Part 26 (Oct. 2, 2014).



There were three major categorical amendments to the DBE regulations including: (1) revisions to the uniform certification application and reporting forms and the implementation of a uniform personal net worth form; (2) a certification provision authorizing summary suspensions; and (3) modifications to the overall goal setting, good faith efforts, and reporting for truckers.¹⁴⁸

The overall Disadvantaged Business Enterprise (DBE) goal setting methodology is a requirement set forth in the United States Department of Transportation (USDOT) DBE regulations, 49 CFR Part 26.45. The DBE regulations require USDOT recipients to set an overall triennial goal for DBE participation in their federally assisted projects.¹⁴⁹

The regulations require that the overall goal be prepared using a two-step process. According to the *USDOT Tips for Goal Setting*¹⁵⁰ (*USDOT Tips*), approved by the General Counsel of the USDOT. The recipient must first determine a base figure for the relative availability of certified DBEs and potentially certified Minority and Woman-owned Business Enterprises, hereafter collectively referred to as Disadvantaged Business Enterprises (DBEs), in the relevant market area. Next, the recipient must examine all relevant evidence to determine what adjustment, if any, is needed to the base figure in order to arrive at an overall goal. The final adjusted figure is the recipient's overall goal, and represents the proportion of federal transportation funding that the recipient is expected to allocate to DBEs during the subsequent three federal fiscal years (FFY). Once the adjusted overall goal is determined, the process requires considering what portion of the goal will be met by race- and gender-neutral measures.

If a recipient purports that it can meet its overall goal with race- and gender-neutral measures, those measures must be utilized. In contrast, if the recipient determines it cannot achieve the entire overall goal using only race- and gender-neutral measures, it must establish a race- and gender-conscious portion of the overall goal.¹⁵¹

There have been several challenges to the DBE regulations. A major decision was adjudicated in

¹⁴⁸ Effective October 2, 2014, the USDOT amended the DBE regulations set forth in 49 CFR Part 26 in three major categories: First, the rule revised the uniform certification application and reporting forms, created a uniform personal net worth form, and implemented data collection procedures required by the Moving Ahead for Progress in the 21st Century Act (MAP-21) to provide for data on the percentage of DBEs in each State. Second, the rule strengthened the certification-related program provisions, including the addition of a new provision authorizing summary suspensions under specified circumstances. Third, the rule modified several program provisions, including overall goal setting guidelines and good faith efforts requirements.

¹⁴⁹ Effective February 28, 2011, the USDOT amended the DBE regulations set forth in 49 CFR Part 26 as described in the Federal Register, Volume 76, Number 19. Pursuant to the 2011 Amendment, USDOT recipients must also incorporate a race- and gender-neutral Small Business Enterprise component in the DBE Program. Effective October 2, 2014, the USDOT amended the DBE regulations set forth in 49 CFR Part 26 in three major categories: First, the rule revised the uniform certification application and reporting forms, created a uniform personal net worth form, and implemented data collection procedures required by the Moving Ahead for Progress in the 21st Century Act (MAP-21) to provide for data on the percentage of DBEs in each State. Second, the rule strengthened the certification-related program provisions, including the addition of a new provision authorizing summary suspensions under specified circumstances. Third, the rule modified several program provisions, including overall goal setting guidelines and good faith efforts requirements.

¹⁵⁰ United States Department of Transportation, *Tips for Goal Setting in the Disadvantaged Business Enterprise (DBE) Program*, U.S. DEPARTMENT OF TRANSPORTATION, May 15, 2015, <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>.

¹⁵¹ Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs, 49 CFR Part 26, §26.51(f)(1), §26.51(d).



the Ninth Circuit, and the decision acts as binding precedent for the Agencies. Other circuit court cases are discussed to inform the Agencies' on federal rulings analyzing local and state agencies' implementation of the DBE regulations. The Seventh and Eighth Circuits were the first two circuits to apply *Croson* to the DBE regulations and constitute persuasive, but not binding, legal authority. The Seventh and Eighth Circuit Courts approved the DBE program, while the Ninth Circuit did not. The initial challenge was in the Eighth Circuit. The relevant decisions are discussed in chronological order.

A. Analysis of the Eighth Circuit Challenges

Sherbrooke Turf Inc. v. Minnesota Department of Transportation and *Gross Seed Co. v. Nebraska Dep't of Roads*¹⁵² is a 2003 joint decision. In both cases, the district courts found that the revised DBE Program, as amended in 1999, met the strict scrutiny standard prescribed in *Adarand*.

On appeal, the Circuit Court held that Congress had a "compelling interest" to enact the legislation because it "had a sufficient evidentiary basis on which to conclude that the persistent racism and discrimination in highway subcontracting warranted a race-conscious procurement program."

For the court's "narrow tailoring" examination it looked at the DBE regulations. The court held that four factors demonstrated that the program was narrowly tailored on its face. Those factors were: (1) the emphasis on the use of race-neutral measures to meet goals; (2) the substantial flexibility allowed; (3) goals were tied to the local market; and (4) participation was open to all small businesses who could show that they were socially and economically disadvantaged, and presumption that minority businesses qualified was limited to those with \$750,000 or less in net worth.

The Circuit Court then examined whether the program was narrowly tailored *as applied* by Minnesota and Nebraska in its local labor markets. Each state retained a consultant to examine local conditions. In Minnesota, the consultant followed the regulations' two-step goal setting process, reducing the availability it found by the precipitous drop in DBE participation when the program was suspended. In Nebraska, the consultant determined the DBE availability in the four years before the program was amended in 1999 to make clear that the ten percent goal was not mandatory. After determining what decisions had been reached on a race-neutral basis the consultant predicted the amount of the availability that would require race and gender-conscious subcontracting. The Eighth Circuit rejected the plaintiffs' appeal based on the evidence presented by the consultant.¹⁵³

¹⁵² 345 F.3d 964 (8th Cir. 2003).

¹⁵³ The Seventh Circuit is in accord. *Northern Contracting Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (2007). Consultant's methodology were consistent with the flexible nature of the DBE regulations: (1) use of its 'custom census' was acceptable method to determine Step 1 availability; (2) was not required to separate prime and subcontracting availability; and (3) reasonably determined amount of goal that would use race neutral means.



B. Analysis of the Ninth Circuit Challenges

The Ninth Circuit case challenging the constitutionality of the DBE program, *Western States Paving Co. v. Washington State Department of Transportation*,¹⁵⁴ was decided in the Ninth Circuit Court of Appeals in 2005 and is discussed below.

1. Western States

Western States, decided in 2005, subjected the State of Washington's Department of Transportation DBE Program to a two-pronged analysis. One aspect of the analysis determined whether the USDOT DBE legislation was facially constitutional, and the other assessed whether the State of Washington's application of the DBE regulations was valid.

b. Facial Constitutional Challenge

In *Western States*, the plaintiff sought a declaratory judgment arguing that the 1998 Transportation Equity Act for the 21st Century's (TEA-21) preference program was in violation of the equal protection provision under the Fifth and Fourteenth Amendments of the U.S. Constitution. The TEA-21 DBE Program on its face and as applied by the State of Washington was claimed to be unconstitutional. In addressing *Western States*' facial challenge, the Court interpreted the issue as to whether the United States met its burden of demonstrating that the federal statute and regulations satisfied the strict scrutiny's exacting requirements.

The federal government, according to *Croson*, has a compelling interest in ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry.¹⁵⁵ Thus, the Court evaluated the evidence that Congress considered in enacting the DBE statute to ensure it had a "strong basis in evidence for its conclusion that remedial action was necessary."¹⁵⁶ The Court concluded that a substantial body of statistical and anecdotal evidence was considered by Congress at the time the law was enacted. Therefore, the Court found that Congress had a strong basis in evidence for concluding that at least in some parts of the country there was discrimination within the transportation contracting industry which hindered minorities' ability to compete for federally funded contracts.¹⁵⁷

Next, the Court considered whether the DBE regulation's racial classification was narrowly tailored as represented in the State of Washington's DBE goals. Citing *Croson*, *Western States* decided that a minority preference program must establish utilization goals that bear a close relationship to minority firms' availability in a particular market in order to be narrowly tailored.¹⁵⁸

¹⁵⁴ *Western States Paving Co., v. Washington State Department of Transportation*, 407 F.3d 983 (9th Cir. 2005)

¹⁵⁵ *Croson*, 488 U.S. 469, 492 (1982).

¹⁵⁶ *Id.* at 493.

¹⁵⁷ *Western States Paving Co., v. Washington State Department of Transportation*, 407 F.3d at 983 (9th Cir. 2005).

¹⁵⁸ *Western States*, 407 F.3d at 983.



The Court referenced *Sherbrooke*, noting that the Eighth Circuit in holding that the DBE programs of the Minnesota and Nebraska Departments of Transportation independently satisfied the strict scrutiny’s narrow tailoring requirement by relying upon two disparity studies.

The Minnesota Department of Transportation (MnDOT) offered statistical evidence of the highway contracting market in Minnesota. Following the goal setting methodology set forth in 49 CFR Section 26.45(c), MnDOT formulated a factual predicate which illustrated the DBE availability in MnDOT’s relevant market area. Findings from the statistical analysis of business formation statistics were used to adjust the base figure upward based on the rationale that the number of participating minority-owned businesses would be higher in a race-neutral market.

MnDOT implemented good faith efforts to encourage prime contractors to meet the DBE goal. The availability of DBEs and the extent of subcontracting opportunities for each project were considered when setting the race-conscious portion of the overall DBE goal. The Eighth Circuit court agreed with the district court that MnDOT’s revised DBE Program served a compelling government interest and was narrowly tailored on its face and as applied in Minnesota. Similarly, the Nebraska Department of Transportation (NDOT) also set an overall DBE goal pursuant to the DBE regulations for the Nebraska highway construction market. Like Minnesota, the Eighth Circuit found that NDOT’s DBE Program was narrowly tailored. The Court notes that the DBE regulations did not establish a mandatory nationwide minority utilization goal in transportation contracting. The Court found that the ten percent DBE utilization goal in the regulation was only “aspirational” and that the regulation provides that each state must establish a DBE utilization goal based upon the proportion of ready, willing, and able DBEs in its transportation contracting industry.¹⁵⁹ Because the regulations require each state to set minority utilization goals that reflect the contractor availability in its own labor market, the Court found the DBE regulations to be narrowly tailored to remedy the effects of race and sex-based discrimination within the transportation contracting industry. The Court ultimately held that it was satisfied that TEA-21’s DBE program was narrowly tailored to remedy the effects of race and sex-based discrimination within the transportation contracting industry, and thus *Western States*’ facial challenge failed.

c. Application of the Narrowly Tailored Standard in Overall Goal Setting

The second prong of the Court’s analysis considered whether the utilization goals established by the State of Washington “as applied” were unconstitutional because there is no evidence of discrimination within the State’s transportation industry. The State contended that its implementation of the DBE Program was constitutional because it comported with the federal statute and regulations. The State also proffered that since the proportion of DBEs in the state was 11.17 percent and the percentage of contracting funds awarded to them on race-neutral contracts was only nine percent, discrimination was demonstrated.¹⁶⁰ The Court disagreed with the rationale. It found that this oversimplified statistical evidence is entitled to little weight because it does not



¹⁵⁹ *Western States*, 407 F.3d at 983.

¹⁶⁰ *Western States Paving Co., v. Washington State Department of Transportation*, 407 F.3d at 983 (9th Cir. 2005).

account for factors that may affect the relative capacity of DBEs to undertake contracting work.

The Ninth Circuit opined that the only other circuit to consider an applied challenge to the federal DBE program was the Eighth Circuit in *Sherbrook*. In discussing the Eighth Circuit's opinion in *Sherbrook* the Ninth Circuit reasoned that both Minnesota and Nebraska had hired outside consulting firms to conduct statistical analysis of the availability and capacity of DBEs in their local market. Accordingly, *Western States* concluded that the Eighth Circuit had relied upon the statistical evidence in the studies to hold that the State's DBE program was narrowly tailored and satisfied strict scrutiny.

Citing *Croson*, the Court opined that recipients of federal funds could not use race-conscious methods to meet their DBE goals without a finding of discrimination. The Ninth Circuit also concluded that in order to satisfy the narrowly tailored requirement even when discrimination is present, the State may only implement a remedial race-conscious program including those minority groups that have actually suffered discrimination. The Ninth Circuit found insufficient evidence suggesting that minorities currently or previously suffered discrimination in the Washington transportation contracting industry. Further, the Court found that the State of Washington failed to provide evidence of discrimination within its own contracting market and thus failed to meet its burden of demonstrating that its DBE program was narrowly tailored to further Congress's compelling remedial interest.¹⁶¹

The Court concluded that the District Court erred when it upheld the State's DBE program simply because the State complied with the federal program's requirement. Washington's DBE program was categorized as an "unconstitutional windfall to minority contractors solely on the basis of their race or sex."

In sum, *Western States* found that Washington's DBE program met the first prong of the test and was held facially constitutional, but it did not pass the second prong because the State's application of the DBE regulations was not narrowly tailored to a finding of statistically significant underutilization of the respective minority groups. Therefore, the State's application of the DBE regulations was deemed unconstitutional.

d. Evidentiary Requirements for Overall Goal Setting

In response to *Western States* the USDOT issued a Memorandum in 2005 recommending a disparity study, which adheres to the evidentiary standards set forth in *Croson*, as the appropriate method for USDOT recipients in the Ninth Circuit to formulate narrowly tailored DBE goals.¹⁶²



¹⁶¹ *Western States*, 407 F.3d at 983.

¹⁶² We note that the USDOT regulations, as demanded in 1992 recommends the use of a disparity study among other availability sources for setting the DBE goals.

2. Associated General Contractors

Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation (AGC), filed in 2011 in the District Court, cited civil rights violations in the application of California Department of Transportation's (Caltrans) 2009 DBE Program.¹⁶³ *AGC* charged that the Equal Protection Clause, federal DBE program regulations, and the U.S. Constitution generally require that Caltrans' DBE Program be predicated on evidence showing intentional discrimination. The remedial scheme regarding various groups based on Caltrans' statistical evidence, *AGC* argued, violates the nondiscrimination mandate of Title VI of the 1964 Civil Rights Act. Additionally, *AGC* argued that Caltrans, as a federal grantee, did not demonstrate that it would lose its federal funds if it did not implement the 2009 DBE program.

Specifically, *AGC* challenged the 2005 congressionally enacted "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users" as applied by Caltrans. The Act requires that a minimum of ten percent of federal dollars be expended with disadvantaged business enterprises (DBEs).

AGC sought an injunction against Caltrans' DBE program, declaring the program unconstitutional. *AGC* asserted that Caltrans must identify intentional acts of discrimination and that failing to identify specific acts of intentional discrimination renders its program unconstitutional. The program was also attacked on the ground that some of the categories included in the DBE goal did not include sufficient specific statistical evidence pertaining to minority women. The statistical evidence in the disparity study found disparities for minorities, but the findings were not broken down by gender.

To rebut *AGC's* claim, Caltrans argued that its program met the requirements set forth in *Western States's* two-prong test for narrow tailoring. The presence or absence of discrimination in the State's transportation contracting industry and the narrowly tailored remedy limited to minority groups that actually had suffered discrimination were the two prongs.

The court compared the probative evidence presented in *Western States* and *AGC*. It was determined that in *Western States* there was insufficient evidence of discrimination within the department's own contracting market. Thus, Washington failed to meet its burden of demonstrating that its DBE program was narrowly tailored to further Congress's compelling remedial interest. To calculate a disparity in *Western States*, the proportion of DBE firms in the state was compared with the percentage of contracts awarded to DBEs on race-neutral contracts. This methodology was found to be oversimplified by the Appellate Court. In contrast, the evidence Caltrans proffered was characterized by the District Court as extensive statistical and anecdotal evidence of discrimination in the California contracting industry.



¹⁶³ California Department of Transportation (Caltrans) in the matter, *Associated General Contractors of California, San Diego Chapter v. Caltrans* (2:09-CV-01622-JAM-GGH) March 23, 2011.

On March 23, 2011 in the *AGC* case, the District Court granted summary judgment in favor of Caltrans. The Court found that Caltrans met the standard set forth in *Croson* by identifying discrimination with “specificity,” and showing a pattern of “deliberate exclusion.”¹⁶⁴

AGC appealed the District Court’s decision to the Ninth Circuit Court of Appeal where it is currently under review. On April 16, 2013 Judge Jerome Harris delivered the opinion for the Ninth Circuit, dismissed AGC’s appeal, and upheld Caltrans’ DBE Program ruling that it survived the strict scrutiny standard.¹⁶⁵ Judge Harris opined that Caltrans presented sufficient evidence of discrimination in the California transportation contracting industry, and that the DBE Program was narrowly tailored to remedy the identified discrimination.¹⁶⁶ The Ninth Circuit dismissed the appeal for lack of standing, and held that AGC did not establish that any of its members had suffered or will suffer harm as a result of Caltrans’ program.¹⁶⁷

C. Analysis of the Seventh Circuit Challenges

Northern Contracting, Inc. v. Illinois Department of Transportation (NCI), decided in 2007, challenged Illinois Department of Transportation’s (IDOT) application of its DBE program. The District Court concluded that Northern Contracting, a company specializing in the highway construction of guardrails and fences, failed to prove a constitutional violation against IDOT. The Seventh Circuit Court of Appeals considered that IDOT had not violated the Supremacy Clause and the Fourteenth Amendment of the United States Constitution in administering its DBE program, because the program was designed to increase the participation of DBEs in Illinois highway construction subcontracts.¹⁶⁸

NCI initially alleged that: (1) TEA-21 and USDOT’s regulations were outside the scope of Congressional power; (2) federal provisions violated the Fifth Amendment’s guarantee of equal protection; and (3) the Illinois statute implementing the federal DBE requirement violated 42 U.S.C. §§ 1981, 1983, 2000(d) and the Fourteenth Amendment’s Equal Protection Clause. The district court summarily sided with IDOT, concluding that the federal government had demonstrated a compelling interest. At trial, the district court ruled that IDOT’s Fiscal Year 2005 DBE Program was narrowly tailored to the compelling interest identified by the federal government to remedy the effects of racial and gender discrimination in the Illinois highway construction market.

The appellate court agreed with the district court’s ruling that IDOT’s DBE program was narrowly tailored. Additionally, *NCI*’s contention that IDOT must adjust its goal based on local market conditions was characterized as unfounded by the court. IDOT correctly argued that Section

¹⁶⁴ *Croson*, 488 U.S. at 509.

¹⁶⁵ *ACG II*, 713 F.3d at 1200.

¹⁶⁶ *Id.*

¹⁶⁷ *Associated General Contractors of California, San Diego Chapter v. Caltrans*, Case No. 11-16228 (9th Cir. April 16, 2013).

¹⁶⁸ *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715 (7th Cir. 2007).



26.45(d) did not require the agency to make any adjustments to the base figure after the initial calculation but simply provides recipients with authority to make such adjustments, if necessary. The court also dismissed *NCI's* argument that IDOT violated 49 CFR Section 26.51 by failing to meet the maximum feasible portion of its overall goal through race-neutral means. IDOT demonstrated that all of the methods described in Section 26.51(b) to maximize the portion of the goal that could be achieved through race-neutral means were utilized by the department.

VII. Section 31 of the California Constitution

California Constitution, Section 31 is a constitutional amendment that precludes the use of preferences based on race, sex, color, ethnicity, or national origin in the award of public contracts. Although the amendment allows for the affirmative action requirements of a federal grant, the question of the appropriate application of a DBE program by a USDOT grantee in California has not been reviewed by the Ninth Circuit. The question of the appropriate application of the DBE program by a USDOT grantee in California was reviewed by the Ninth Circuit in *AGC*, and the court determined that Caltrans was required to comply with the DBE regulations.¹⁶⁹ The federal court, however, has yet to rule on whether Section 31 of the California Constitution conflicts with the Equal Protection Clause of the Fourteenth Amendment.¹⁷⁰

However, the U.S. Constitution requires governmental agencies to treat all individuals and groups equally in the operation of public employment, public education, and public contracting. Section 31 does state that “if any parts are found to conflict with federal law or the U.S. Constitution, the section shall be implemented to the maximum extent that federal law and the U.S. Constitution permit.”

The leading California cases concerning Section 31 are *Hi-Voltage v. City of San Jose*¹⁷¹ and *Ward Connerly v. State Personnel Board*.¹⁷² In *Hi-Voltage* the California Supreme Court held that Section 31 prohibited the City of San Jose from requiring construction contractors to document their efforts to solicit M/WBEs as subcontractors. The court noted two fatal flaws: (1) Contractors were required to request bids from at least four M/WBEs, which the court considered a preference in favor of M/WBEs; and (2) the program also failed because the extent to which M/WBEs were chosen would be measured against the City’s statistical expectation.

Ward Connerly, a subsequent appellate court opinion, determined that Section 31 applied to the five California statutory programs before that court.¹⁷³ However, neither *Hi-Voltage* nor *Ward Connerly*

¹⁶⁹ *ACG II*, 713 F.3d at 1200.

¹⁷⁰ *Id.* at 1193.

¹⁷¹ 24 Cal. 4th 537 (Cal. 2000).

¹⁷² 92 Cal. App. 4th 16 (Cal. 2001).

¹⁷³ State Lottery, Professional Bond Services, State Civil Service, Community Colleges, State Contracting (reporting requirements).



speaking directly to what would happen should the findings of the local government's disparity study point to a race-conscious remedy.

Hi-Voltage refers to the impact of a remedy based on a disparity study. The California Supreme Court wrote:

...if it were determined the City had violated federal constitutional or statutory law, the supremacy clause as well as the express terms of Proposition 209 would dictate federal law prevails...¹⁷⁴

Crucially, it went on:

The disparity study is not part of the record in this case. Without it, the court has no basis for measuring the fit between the Program and the goal of eliminating a disparity in the amount of contract dollars awarded MBEs in comparison to non-MBEs.¹⁷⁵

Therefore, it is unclear whether the inclusion of a disparity study in this case may have permitted a race-conscious remedy despite Proposition 209.

Moreover, federal courts still have to decide whether Proposition 209 conflicts with the Equal Protection Clause of the Fourteenth Amendment.¹⁷⁶ *Croson* stated that such race-conscious contracting remedies are appropriate. In accordance with the Supreme Court's 1803 decision, *Marbury v. Madison*,¹⁷⁷ the Supreme Court of the United States retains the constitutional authority to review legislative acts. The federal courts are granted the power to determine whether a remedy growing out of a disparity study process sanctioned by the Court in *Croson* is narrowly tailored.

Title VI of the Civil Rights Act of 1964 established nondiscrimination requirements on recipients of federal funds in their non-federally funded programs.¹⁷⁸ In *Coral Construction v. San Francisco*¹⁷⁹ the California Superior Court determined that Proposition 209 barred San Francisco's race-conscious program.¹⁸⁰ On April 18, 2007 the First District Court of Appeals affirmed that

¹⁷⁴ *Hi-Voltage*, 24 Cal. 4th 537 at 569.

¹⁷⁵ *Id.*

¹⁷⁶ *Cantrell v. Granholm* is a constitutional challenge, framed in the context of higher education, to the Michigan Civil Rights Initiative (a *Ward Connerly*-backed measure similar to Proposition which became law in 2006). Plaintiffs argue that MCRI (1) discriminated against them on account of race; (2) use of the initiative process to amend of Michigan Constitution placed a unique and too heavy a burden on racial minorities in that they in that they would have obtain a constitutional amendment to reverse that policy; and (3) the federal government preempted the field of race and gender discrimination from the states by Title VI of the 1964 Civil Rights Act and Title IX of the Education Amendments of 1972. On March 18, 2008, the District Court granted summary judgment for the Attorney General, rejected each of plaintiffs' challenges, holding that race conscious state or locally funded programs were a prohibited "preference" within the meaning of MCRI.

¹⁷⁷ 5 U.S. 137 (1803).

¹⁷⁸ The 1987 Civil Rights Restoration Act reversed court decisions that restricted its reach.

¹⁷⁹ *Coral Construction, Inc. v. City & County of San Francisco*, See 116 Cal. App. 4th 6 (2004).

¹⁸⁰ It is also challenging the procedural propriety of the court granting plaintiff summary judgment because the factual record did not support one.



judgment but remanded the case for a determination of whether the defendant’s evidence met the majority opinion’s test that the discrimination was intentional.¹⁸¹

The application of Title VI to the Sacramento Municipal Utility District was also raised in *C&C Construction v. Sacramento Municipal Utility District (SMUD)*.¹⁸² The majority Court of Appeals opinion began with the point that race-neutral programs are the only ones Proposition 209 permits in California but also acknowledged that its provisions were subject to federal law. It viewed the regulations of the U.S. Departments of Energy, Defense, and Transportation as not *requiring* recipients of federal funds to use race-conscious remedial programs for identified discrimination. Moreover, its reading of the regulations themselves was that SMUD’s actions had to be consistent with Proposition 209.¹⁸³ Also, both SMUD’s 1993 disparity study and its 1998 update found *Croson*-level discrimination against MBEs, but they did not look at whether race-neutral remedies would suffice to meet its federal nondiscrimination obligations.¹⁸⁴ Indeed, the majority observed that the disparity study update was specifically instructed not to consider this factor. Finally, the Court found that SMUD, under its reading of the federal regulations, had a burden to show that it would *lose* funds if it did not put in place the race-conscious program.

Citing *S.J. Groves & Sons v. Fulton County*,¹⁸⁵ the dissent’s view of the regulations was that, properly read, a race-conscious program is not an *option* where a race-neutral one will suffice. The required “affirmative action” did not refer only to race-neutral programs; it also included race-conscious programs.¹⁸⁶ The Department Secretary determined whether SMUD was in compliance. What the majority did in affirming the trial court decision to enjoin the use of race interfered with that authority and SMUD’s obligation to comply with the regulations. As such, SMUD violated the Supremacy Clause. However, the majority held that what could be seen as a cogent argument was raised too late to be considered during the appeal.

The dissent summarized its position as follows:

Since the requirement of “affirmative action” includes both race-neutral and race-conscious action and the undisputed evidence establishes that SMUD has attempted to use race-neutral outreach and other methods and concluded in good faith that

¹⁸¹ 149 Cal.App.4th 1218 (2007). The City’s appeal is pending in the California Supreme Court.

¹⁸² 122 Cal. App. 4th 284 (Cal. App. 2004).

¹⁸³ SMUD offers no argument or authority that the Department of Energy requires race-based discrimination [a violation of Proposition 209], either in general or specifically, in SMUD’s case, as an “appropriate remedial step.” It would appear that the Department of Energy, by using the general term “‘appropriate,’ meant for the funding recipient to consider the state laws and regulations relevant to that recipient when determining what action to take. In SMUD’s case, such consideration includes the limitations of [Proposition 209].” The opinion interpreted the Department of Transportation’s regulations as also not *requiring* race conscious responses.

¹⁸⁴ By implication, we note, if SMUD had, it could have move to a race-conscious program.

¹⁸⁵ 920 F.2d 752 (11th Cir. 1991).

¹⁸⁶ The applicable regulation “condone[s], and in some cases, *require[s]*, race-conscious regulations and/or action”. (*italics added*), *S.J. Groves*, 920 F.2d at 764-765.



they were not sufficient to remedy the statistical underutilization reflected in the disparity studies, SMUD was left with no other alternative but to adopt a race-conscious remedial plan to eliminate the effects of its own discriminatory practices.¹⁸⁷

The decision of the U.S. Supreme Court in the *Croson* and *Adarand* cases changed the legal landscape for business affirmative action programs. The U.S. Supreme Court altered the authority of local government to use local and federal funds to institute remedial race-conscious public contracting programs. This chapter has examined what *Croson*, *Adarand*, and their progeny require for VTA to institute a constitutional race-conscious public contracting program. The case law interpretation has also considered the significance of Section 31 of the California constitution.

Because California is in the Ninth Circuit, a disparity study should provide the factual predicate for any legal race-conscious affirmative action contracting program.

VIII. Conclusion

The decision of the United States Supreme Court in the *Croson* case changed the legal landscape for business affirmative action programs. The United States Supreme Court altered the authority of a local government to use federal funds to institute remedial race-conscious public contracting programs.

This chapter has examined what *Croson* and its progeny, including *Western States*, require for a local or state government agency to institute a constitutional race- or gender-conscious public contracting program. Given the case law discussed in this Chapter, any race- or gender-conscious affirmative action contracting program recommended must be based on a constitutionally sound factual predicate. The statistical findings of the DBE Availability and Disparity Study support the need for race- and gender-conscious remedies for Santa Clara Valley Transportation Authority.



¹⁸⁷ 122 Cal. App. 4th 284 at 324.

IX. List of Authorities

A. Cases

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<i>Associated Gen. Contractors v. Coal. for Econ. Equity (“AGCC IP”)</i> , 950 F.2d 1401 (9th Cir. 1991)	<i>passim</i>
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<i>City of Richmond v. J.A. Croson Co.</i> , 488 U.S. 469 (1989)	<i>passim</i>
<i>Concrete Works of Colo., Inc. v. City & Cnty. of Denver (“Concrete Works I”)</i> , 823 F. Supp. 821 (D. Colo. 1993)	<i>passim</i>



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<i>Coral Constr. Co. v. King County,</i> 941 F.2d 910 (9th Cir. 1991)	<i>passim</i>
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B. Statutes

42 U.S.C. Section 14000e et seq.

49 CFR Part 26.

Cal. Const., Article I, Section 31.

Cal. Public Contracting Code, Section 2002.



CHAPTER 2: Procurement Review

I. Introduction

This chapter is an overview of the purchasing requirements which governed the Santa Clara Valley Transportation Authority's (VTA) procurement and contracting during the July 1, 2011, to June 30, 2015 study period. The overview is limited to the requirements governing procurement and contracting in the three industries analyzed in the 2017 Joint Disadvantaged Business Enterprise (DBE) Contract Availability and Utilization Study (Study). The industries under review are construction, professional services, and goods/equipment/supplies. The VTA requirements relevant to construction, professional services, and goods/equipment/supplies contracts are addressed herein.

II. Procurement Process Overview

The procurement methods available to the VTA are set forth in Table 2.1. The procurement method is based upon the dollar value and type of the purchase.



Table 2.12: Santa Clara Valley Transportation Authority Procurement Matrix

Procurement Category	Purchase Threshold	Advertising Requirements	Solicitation Type	Procurement ¹⁸⁸	Authorization
Informal Procurements (Small Purchases)					
Construction	Under \$25,000	Publicly Advertised	Request for Quotes	Purchase Order or Agreement	Contract Administrator/ Construction Contracts Manager/Manager of Project and Construction Management Services
Professional Services	\$2,501 to \$100,000	Publicly Advertised	Informal or Letter Request for Proposals	Purchase Order or Agreement	Contracts Administrator/ Contracts Manager/ Manager of Project and Construction Management Services
Professional Services (Architecture and Engineering)	\$2,501 to \$100,000	Publicly Advertised	Informal or Letter Request for Proposals	Purchase Order or Agreement	Contracts Administrator/Contracts Manager/ Manager of Project and Construction Management Services
Goods/Equipment/Supplies	\$2,501 to \$100,000	Purchase Requisition	Request for Quotes	Purchase Order	Buyer/Manager of Project and Construction Management Services/Purchasing Manager/ Procurement and Materials Manager



¹⁸⁸ *Contracts and Materials Management Manual*. Santa Clara Valley Transportation Authority, 2014



Procurement Category	Purchase Threshold	Advertising Requirements	Solicitation Type	Procurement ¹⁸⁸	Authorization
Formal Procurements					
Construction	\$25,000 to \$100,000	Publicly Advertised	Invitation for Bids	Purchase Order	Contract Manager/Manager of Project and Construction Management Services
Construction	\$100,001 to \$500,000	Publicly Advertised	Invitation for Bids	Purchase Order	General Manager/Manager of Project and Construction Management Services
Construction	Over \$500,000	Publicly Advertised	Invitation for Bids	Purchase Order	Board of Director/General Manager/ Manager of Project and Construction Management Services
Professional Services	\$100,001 to \$500,000	Publicly Advertised	Formal Request for Proposal	Purchase Order	Contract Administrator/ Contract Manager/General Manager/ Manager of Project and Construction Management Services
Professional Services (Architecture and Engineering)	\$100,001 to \$500,000	Publicly Advertised	Formal Request for Proposal	Purchase Order	Contract Administrator/Contract Manager/General Manager/Manager of Project and Construction Management Services
Professional Services	Over \$500,000	Publicly Advertised	Formal Request for Proposal	Purchase Order	Board of Directors/Contract Administrator/Contract

Procurement Category	Purchase Threshold	Advertising Requirements	Solicitation Type	Procurement ¹⁸⁸	Authorization
					Manager/General Manager/Manager of Project and Construction Management Services
Formal Procurements					
Goods/Equipment/Supplies	\$100,001 to \$500,000	Publicly Advertised	Formal Invitation for Bids/ Request for Proposal	Purchase Order or Agreement	General Manager/Manager of Project and Construction Management Services
Goods/Equipment/Supplies	Over \$500,000	Publicly Advertised	Formal Invitation for Bids/ Request for Proposal	Purchase Order or Agreement	Board of Director/General Manager/ Manager of Project and Construction Management Services
Other Procurements					
Direct Pay Purchases (Goods/Equipment/Supplies)	\$1,000 and under	N/A	N/A	Direct Pay Purchases	Department Managers
Micro Purchases (Goods/Equipment/Supplies)	\$2,500 and under	N/A	Competitive Quotes or Noncompetitive Quotes	Micro Purchases	Department Managers/Staff/State of California Procurement Card
Sole Source/Preferred Vendor	\$2,500 to \$100,000	N/A	Noncompetitive Justification Request Form, In Case of Emergency	Purchase Order or Agreement	Manager of Project and Construction Management Services
Sole Source/Preferred Vendor	Over \$100,000	N/A	Noncompetitive Justification Request Form, In Case of Emergency	Purchase Order or Agreement	General Manager/Manager of Project and Construction Management Services



Procurement Category	Purchase Threshold	Advertising Requirements	Solicitation Type	Procurement¹⁸⁸	Authorization
Other Procurements					
Emergency Purchase	Under \$1,000,000	N/A	N/A	Purchase Order or Agreement	General Manager
Emergency Purchase	\$1,000,000 and over	N/A	N/A	Purchase Order or Agreement	Board of Directors/General Manager
Procurement Modifications					
Modification Category	Modification Threshold	Requirements	Solicitation Type	Procurement Manual	Authorization
Cardinal Change ¹⁸⁹	\$0	Not Allowed	N/A	N/A	Not Allowed
Change Order – Goods and Services (Construction)	No greater than 15% of board approved value	Refer to CMM Chapter 22 and 23	N/A	Purchase Order or Agreement	General Manager/Manager of Project and Construction Management Services/ Purchasing Manager
Change Order – Goods and Services (Construction)	Greater than 15% of the original contract amount	Refer to CMM Chapter 22 and 23	N/A	Purchase Order or Agreement	Board of Directors
Amendments –Services Contracts	No greater than 15% of board approved value	Within scope of original contract; Independent Cost Estimate; Negotiations Summary;	N/A	Purchase Order or Agreement	Contracts Manager/General Manager/Manager of Project and Construction Management Services
Amendments –Services Contracts	Greater than 15% of the original contract amount	Within scope of original contract; Independent Cost Estimate; Negotiations Summary;	N/A	Purchase Order or Agreement	Board of Directors



¹⁸⁹ Not within the general scope of the original or large dollar value that a new procurement would be justified.

CHAPTER 3: Prime Contractor Utilization Analysis

I. Introduction

This chapter documents Santa Clara Valley Transportation Authority's (VTA) utilization of Disadvantaged Business Enterprise (DBE) and non-minority male prime contractors by ethnicity and gender during the July 1, 2011, to June 30, 2015, study period.¹⁹⁰ The analysis of VTA's awards and payments during the study period focuses on three industries—construction, professional services, and goods/equipment/supplies.

- Construction includes all public works contracts, defined as an agreement for the erection, construction, alteration, repair, or improvement of any public structure, building, road, other public improvement of any kind.
- Professional services include architectural and landscape architectural services, engineering, environmental, and land surveying services, as well as incidental services that members of those professions and those in their employ may logically or justifiably perform.¹⁹¹ Construction management services are included in professional services. Construction management services are defined as services provided by a licensed architect, registered engineer, or licensed general contractor for managing and supervising work performed on construction projects, including construction project design review and evaluation, construction mobilization and supervision, bid evaluation, project scheduling, cost-benefit analysis, claims review and negotiation, and general management and administration of a construction project.¹⁹²
- Goods/equipment/supplies includes goods, and tangible items such as movable or personal property, as opposed to services.¹⁹³ Services not defined as construction or professional services were also included in the industry.

The data in the Contract Availability and Utilization Study (Study) is disaggregated into eight ethnic and gender groups. The eight groups are listed in Table 3.1.

¹⁹⁰ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

¹⁹¹ *California State Contracting Manual*. Department of General Services, 2012, p. 126.

¹⁹² *California State Contracting Manual*. Department of General Services, 2012, p. 127.

¹⁹³ *California State Contracting Manual*. Department of General Services, 2012, Glossary 3.



Table 3.1: Business Ethnic and Gender Groups

Ethnicity and Gender Category	Definition
African Americans	Businesses owned by male and female African Americans
Asian Pacific Americans	Businesses owned by male and female Asian Pacific Americans
Subcontinent Asian Americans	Businesses owned by male and female Subcontinent Asian Americans
Hispanic Americans	Businesses owned by male and female Hispanic Americans
Native Americans	Businesses owned by male and female Native Americans
Minority-owned Businesses	Businesses owned by male and female African Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans
Caucasian Female-owned Businesses	Businesses owned by Caucasian females
Non-minority Male-owned Businesses (non-DBE)	Businesses owned by Caucasian males, and businesses that could not be identified as minority or female-owned ¹⁹⁴

II. Prime Contract Data Sources

The prime contract data consists of contract records extracted from VTA’s financial systems, B2GNow and SAP. The awards and payments were issued during the July 1, 2011, to June 30, 2015, study period. Purchase orders were grouped by contract number. Each contract was classified into one of the three industries; the industry classifications were reviewed and approved by VTA.

VTA’s contract and purchase order data was normalized and combined to create a single prime contract dataset. Both purchase orders and contracts for each unique procurement are referred to as contracts in this analysis. For each closed contract, the total payment amount including change orders were analyzed. For open contracts, the award amount was analyzed. The award amount was analyzed for contracts without payment information.

The normalized and combined dataset was scrubbed before analysis to remove duplicates and contracts awarded outside the study period. In addition, contracts that were not fully federally funded and agreements with non-profits, government agencies, and utilities were excluded from the dataset. Purchases of proprietary commodities and software, and maintenance and service of these proprietary commodities were also excluded.

¹⁹⁴ See Section II: Prime Contract Data Sources for the methodology employed to identify the ethnicity and gender of the VTA’s utilized prime contractors.



To determine the ethnicity and gender of each prime contractor, several steps were undertaken. The initial step determined whether the contractor was certified by the California Department of Transportation Office of Business and Economic Opportunity or another certifying agency. The ethnicity and gender of the certified firms was derived from the certification record. Additional sources used to determine the ethnicity and gender of non-certified contractors included chambers of commerce directories, trade organization membership lists, internet research, and contractor surveys. Internet research examined the company's website, social media, digital media, and business listings. The contractor survey solicited ethnicity and gender information directly from the business. Prime contractors whose ethnicity and gender could not be verified as minority or female were classified as non-minority male-owned businesses. The non-minority male-owned businesses category also included publicly traded corporations, employee-owned businesses, and 50/50 partnerships where the partners were neither a minority nor woman. Once the ethnicity and gender research was completed and the contract records were cleaned, the utilization analysis was performed.

III. Prime Contract Utilization Thresholds

The distribution of prime contracts and subcontracts by dollar amount within each industry was determined using a quartile analysis. To perform the quartile analysis, prime contract dollars retained after subtracting the subcontract awards and payments were calculated. Individual subcontracts were thereafter appended to the retained value of the prime contracts. All contracts were then ordered from largest to smallest to detail the spread of contracts awarded to both prime and subcontractors. Quartiles represent four equal parts within the full range of prime and subcontracts. The quartile analysis was used to set the threshold within which the utilization analysis was performed. Contract size is a depiction of the capacity that a willing business needs to successfully compete for VTA's prime and subcontracts. Several of VTA's prime contractors awarded large contracts to subcontractors and subconsultants. This illustrates that within the pool of available subcontractors, there is documented capacity to perform both considerably large prime contracts and large subcontracts.

In each of the three industries the contracts analyzed were limited by value to those beneath the third quartile, which is also known as the upper quartile. The upper quartile represents the 75th percentile of the contracts VTA awarded, meaning that 75% of VTA's contracts are beneath this value, and 25% of VTA's contracts are above this value. Applying contract thresholds, as defined by the quartile analysis, is a method to ensure that contracts which are outliers in size and scope (by dollar value) do not skew the results of the disparity analysis. This threshold is also applied to ensure that the businesses enumerated in the availability analysis have the capacity to perform the contracts subject to analysis. To this end, contracts within each of the three industries were analyzed at three thresholds.

- One threshold includes all competitively bid contracts regardless of award amount. This analysis is illustrative only, and no analysis of disparity or program recommendations will be based on the analysis of all competitively bid contracts.



- The second threshold includes competitively bid contracts beneath the 75th percentile of awarded contracts. The 75th percentile threshold for each industry is listed in Table 3.2.

Table 3.2: Competitively Bid Thresholds for Analysis by Industry

Industry	Competitively Bid Contract Threshold
Construction	\$1,000,000 and under
Professional Services	\$500,000 and under
Goods/Equipment/Supplies	\$500,000 and under

- The third threshold includes all informal contracts as defined by VTA’s procurement policies. The informal thresholds for each industry is listed in Table 3.3.

Table 3.3: Informal Contracts Thresholds for Analysis by Industry

Industry	Informal Contract Threshold
Construction	\$25,000 and under
Professional Services	\$50,000 and under
Goods/Equipment/Supplies	\$50,000 and under

IV. Prime Contractor Utilization

A. All Prime Contractors

As depicted in Table 3.4, VTA issued 126 prime contracts during the July 1, 2011, to June 30, 2015, study period. The 126 total prime contracts included 31 for construction, 54 for professional services, and 41 for goods/equipment/supplies.

The payments made by VTA during the study period totaled \$1,212,484,043 for all 126 prime contracts. Payments included \$1,107,202,078 for construction, \$94,138,139 for professional services, and \$11,143,826 for goods/equipment/supplies.



**Table 3.4: Total Prime Contracts and Dollars Expended:
All Industries, July 1, 2011, to June 30, 2015**

Industry	Total Number of Contracts	Total Dollars Expended
Construction	31	\$1,107,202,078
Professional Services	54	\$94,138,139
Goods/Equipment/Supplies	41	\$11,143,826
Total Expenditures	126	\$1,212,484,043

B. Highly Used Construction Prime Contractors

VTA awarded a total of 31 construction contracts during the study period. As depicted in Table 3.5, VTA’s 31 construction prime contracts were received by 22 unique vendors.

Table 3.5: Construction Prime Contracts

Total Prime Contracts	31
Total Utilized Vendors	22
Total Expenditures	\$1,107,202,078

Table 3.6 presents the distribution of the VTA construction prime contracts by the number of vendors. Four of the 22 vendors received \$1,002,228,230 or 91% of the total construction prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of construction prime contract dollars spent by VTA.

Table 3.6: Construction Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars ¹⁹⁵	Number of Contracts	Percent of Contracts ¹⁹⁶
4 Highly Used Vendors	\$1,002,228,230	91%	6	19%
18 Vendors	\$104,973,848	9%	25	81%
22 Total Vendors	\$1,107,202,078	100%	31	100%

Table 3.7 presents the ethnicity and gender of the most highly used construction prime contractors who received approximately 91% of the construction prime contract dollars. The four most highly



¹⁹⁵ Percentages are rounded to the nearest whole number.

¹⁹⁶ Percentages are rounded to the nearest whole number.

used prime contractors were non-minority male-owned businesses. The contracts received by these four businesses ranged from \$2,188,181 to \$815,072,872.

Table 3.7: Top 4 Highly Used Construction Prime Contractors

Ethnicity/ Gender¹⁹⁷	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Non-minority Males	\$1,002,228,230	90.52%	6	19%

C. Highly Used Professional Services Prime Contractors

VTA awarded a total of 54 professional services contracts during the study period. As depicted in Table 3.8, VTA’s 54 professional services prime contracts were received by 45 unique vendors.

Table 3.8: Professional Services Prime Contracts

Total Prime Contracts	54
Total Utilized Vendors	45
Total Expenditures	\$94,138,139

Table 3.9 presents the distribution of the VTA professional services prime contracts by the number of vendors. Two of the 45 vendors received \$65,276,984 or 69% of the total professional services prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of professional services prime contract dollars spent by VTA.

Table 3.9: Professional Services Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars¹⁹⁸	Number of Contracts	Percent of Contracts¹⁹⁹
2 Highly Used Vendors	\$65,276,984	69%	3	6%
43 Vendors	\$28,861,155	31%	51	94%
45 Total Vendors	\$94,138,139	100%	54	100%

Table 3.10 presents the ethnicity and gender of the most highly used professional services prime contractors, who received approximately 69% of the professional services prime contract dollars. The two most highly used prime contractors were Asian Pacific American and Non-minority male-



¹⁹⁷ African Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and Caucasian females were omitted from the table because they were not highly used.

¹⁹⁸ Percentages are rounded to the nearest whole number.

¹⁹⁹ Percentages are rounded to the nearest whole number.

owned businesses. The contracts received by these two businesses ranged from \$10,209,214 to \$44,500,000.

Table 3.10: Top 2 Highly Used Professional Services Prime Contractors

Ethnicity/ Gender²⁰⁰	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Asian Pacific Americans	\$44,500,000	47.27%	1	1.85%
Non-minority Males	\$20,776,984	22.07%	2	3.70%

D. Highly Used Goods/Equipment/Supplies Prime Contractors

VTA awarded a total of 41 goods/equipment/supplies contracts during the study period. As depicted in Table 3.11, VTA’s 41 goods/equipment/supplies prime contracts were received by 23 unique vendors.

Table 3.11: Goods/Equipment/Supplies Prime Contracts

Total Prime Contracts	41
Total Utilized Vendors	23
Total Expenditures	\$11,143,826

Table 3.12 presents the distribution of the VTA goods/equipment/supplies prime contracts by the number of vendors. Five of the 23 vendors received \$7,736,937 or 69% of the total goods/equipment/supplies prime contract dollars. The findings illustrate that a small group of prime contractors received the majority of goods and other services prime contract dollars spent by VTA.

Table 3.12: Goods/Equipment/Supplies Prime Contracts Distributed by Number of Vendors

Vendors	Total Dollars	Percent of Dollars²⁰¹	Number of Contracts	Percent of Contracts²⁰²
5 Highly Used Vendors	\$7,736,937	69%	19	46%
18 Vendors	\$3,406,890	31%	22	54%
23 Total Vendors	\$11,143,826	100%	41	100%



²⁰⁰ African Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and Caucasian females were omitted from the table because they were not highly used.

²⁰¹ Percentages are rounded to the nearest whole number.

²⁰² Percentages are rounded to the nearest whole number.

Table 3.13 presents the ethnicity and gender of the most highly used goods/equipment/supplies prime contractors, who received approximately 50% of the goods/equipment/supplies prime contract dollars. The two most highly used prime contractors were non-minority male-owned businesses. The contracts received by these two businesses ranged from \$10,559 to \$1,534,701.

Table 3.13: Top 2 Highly Used Goods/Equipment/Supplies Prime Contractors

Ethnicity/ Gender²⁰³	Total Dollars	Percent of Dollars	Number of Contracts	Percent of Contracts
Non-minority Males	\$5,434,642	49%	13	32%

E. All Prime Contracts by Industry

1. Construction Prime Contract Utilization: All Contracts

Table 3.14 summarizes all prime contract dollars expended by VTA on construction prime contracts. Minority businesses received 0.13% the construction prime contract dollars; Caucasian female-owned businesses received 0.00%; and non-minority male-owned businesses received 99.87%.

African Americans received 0 or 0.00% of all construction prime contracts awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Asian Pacific Americans received 1 or 3.23% of all construction prime contracts awarded during the study period, representing \$758,098 or 0.07% of the construction prime contract dollars.

Subcontinent Asian Americans received 0 or 0.00% of all construction prime contracts awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Hispanic Americans received 3 or 9.68% of all construction prime contracts awarded during the study period, representing \$697,889 or 0.06% of the construction prime contract dollars.

Native Americans received 0 or 0.00% of all construction prime contracts awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Caucasian Females received 0 or 0.00% of all construction prime contracts awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Non-minority Males received 27 or 87.10% of all construction prime contracts awarded during the study period, representing \$1,105,746,092 or 99.87% of the construction prime contract dollars.



²⁰³ African Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, Native Americans, and Caucasian females were omitted from the table because they were not highly used.

**Table 3.14: Construction Prime Contract Utilization:
All Contracts, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	1	3.23%	\$758,098	0.07%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	3	9.68%	\$697,889	0.06%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	27	87.10%	\$1,105,746,092	99.87%
TOTAL	31	100.00%	\$1,107,202,078	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	1	3.23%	\$758,098	0.07%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	3	9.68%	\$697,889	0.06%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	27	87.10%	\$1,105,746,092	99.87%
TOTAL	31	100.00%	\$1,107,202,078	100.00%



2. Professional Services Prime Contract Utilization: All Contracts

Table 3.15 summarizes all contract dollars expended by VTA on professional services prime contracts. Minority-owned businesses received 50.62% of the professional services prime contract dollars; Caucasian female-owned businesses received 9.34%; and non-minority male-owned businesses received 40.04%.

African Americans received 1 or 1.85% of all professional services prime contracts awarded during the study period, representing \$1,214,281 or 1.29% of the professional services prime contract dollars.

Asian Pacific Americans received 7 or 12.96% of all professional services prime contracts awarded during the study period, representing \$46,282,592 or 49.16% of the professional services prime contract dollars.

Subcontinent Asian Americans received 2 or 3.70% of all professional services prime contracts awarded during the study period, representing \$144,412 or 0.15% of the professional services prime contract dollars.

Hispanic Americans received 1 or 1.85% of all professional services prime contracts awarded during the study period, representing \$6,900 or 0.01% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of all professional services prime contracts awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Caucasian Females received 2 or 3.70% of all professional services prime contracts awarded during the study period, representing \$8,795,323 or 9.34% of the professional services prime contract dollars.

Non-minority Males received 41 or 75.93% of all professional services prime contracts awarded during the study period, representing \$37,694,631 or 40.04% of the professional services prime contract dollars.



**Table 3.15: Professional Services Prime Contract Utilization:
All Contracts, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	1	1.85%	\$1,214,281	1.29%
Asian Pacific Americans	7	12.96%	\$46,282,592	49.16%
Subcontinent Asian Americans	2	3.70%	\$144,412	0.15%
Hispanic Americans	1	1.85%	\$6,900	0.01%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	2	3.70%	\$8,795,323	9.34%
Non-minority Males	41	75.93%	\$37,694,631	40.04%
TOTAL	54	100.00%	\$94,138,139	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	1	1.85%	\$1,214,281	1.29%
Asian Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	7	12.96%	\$46,282,592	49.16%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	2	3.70%	\$144,412	0.15%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	1	1.85%	\$6,900	0.01%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	2	3.70%	\$8,795,323	9.34%
Non-minority Males	41	75.93%	\$37,694,631	40.04%
TOTAL	54	100.00%	\$94,138,139	100.00%



3. Goods/Equipment/Supplies Prime Contract Utilization: All Contracts

Table 3.16 summarizes all contract dollars expended by VTA on goods/equipment/supplies prime contracts. Minority-owned businesses received 1.18% of the goods/equipment/supplies prime contract dollars; Caucasian female-owned businesses received 1.68%; and non-minority male-owned businesses received 97.13%.

African Americans received 0 or 0.00% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Asian Pacific Americans received 0 or 0.00% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Subcontinent Asian Americans received 1 or 2.44% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$131,604 or 1.18% of the goods/equipment/supplies prime contract dollars.

Hispanic Americans received 0 or 0.00% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Native Americans received 0 or 0.00% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Caucasian Females received 2 or 4.88% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$187,672 or 1.68% of the goods/equipment/supplies prime contract dollars.

Non-minority Males received 38 or 92.68% of all goods/equipment/supplies prime contracts awarded during the study period, representing \$10,824,551 or 97.13% of the goods/equipment/supplies prime contract dollars.



**Table 3.16: Goods/Equipment/Supplies Prime Contract Utilization:
All Contracts, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	1	2.44%	\$131,604	1.18%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	2	4.88%	\$187,672	1.68%
Non-minority Males	38	92.68%	\$10,824,551	97.13%
TOTAL	41	100.00%	\$11,143,826	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	1	2.44%	\$131,604	1.18%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	0	0.00%	\$0	0.00%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	2	4.88%	\$187,672	1.68%
Non-minority Males	38	92.68%	\$10,824,551	97.13%
TOTAL	41	100.00%	\$11,143,826	100.00%



F. Formal Contracts by Industry

1. Construction Prime Contract Utilization: Contracts Valued \$1,000,000 and Under

Table 3.17 summarizes all contract dollars expended by VTA on construction prime contracts valued \$1,000,000 and under. Minority-owned businesses received 21.89% of the construction prime contract dollars; Caucasian female-owned businesses received 0.00%; and non-minority male-owned businesses received 78.11%.

African Americans received 0 or 0.00% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Asian Pacific Americans received 1 or 7.14% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$758,098 or 11.40% of the construction prime contract dollars.

Subcontinent Asian Americans received 0 or 0.00% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Hispanic Americans received 3 or 21.43% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$697,889 or 10.49% of the construction prime contract dollars.

Native Americans received 0 or 0.00% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Caucasian Females received 0 or 0.00% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Non-minority Males received 10 or 71.43% of the construction prime contracts valued \$1,000,000 and under awarded during the study period, representing \$5,195,023 or 78.11% of the construction prime contract dollars.



**Table 3.17: Construction Prime Contract Utilization:
Contracts Valued \$1,000,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	1	7.14%	\$758,098	11.40%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	3	21.43%	\$697,889	10.49%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	10	71.43%	\$5,195,023	78.11%
TOTAL	14	100.00%	\$6,651,009	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	1	7.14%	\$758,098	11.40%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	3	21.43%	\$697,889	10.49%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	10	71.43%	\$5,195,023	78.11%
TOTAL	14	100.00%	\$6,651,009	100.00%



2. Professional Services Prime Contract Utilization: Contracts Valued \$500,000 and Under

Table 3.18 summarizes all contract dollars expended by VTA on professional services prime contracts valued \$500,000 and under. Minority-owned businesses received 20.66% of the professional services prime contract dollars; Caucasian female-owned businesses received 1.40%; and non-minority male-owned businesses received 77.94%.

African Americans received 0 or 0.00% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Asian Pacific Americans received 5 or 11.90% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$1,126,227 or 18.21% of the professional services prime contract dollars.

Subcontinent Asian Americans received 2 or 4.76% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$144,412 or 2.34% of the professional services prime contract dollars.

Hispanic Americans received 1 or 2.38% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$6,900 or 0.11% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Caucasian Females received 1 or 2.38% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$86,323 or 1.40% of the professional services prime contract dollars.

Non-minority Males received 33 or 78.57% of the professional services prime contracts valued \$500,000 and under awarded during the study period, representing \$4,819,447 or 77.94% of the professional services prime contract dollars.



**Table 3.18: Professional Services Prime Contract Utilization:
Contracts Valued \$500,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	5	11.90%	\$1,126,227	18.21%
Subcontinent Asian Americans	2	4.76%	\$144,412	2.34%
Hispanic Americans	1	2.38%	\$6,900	0.11%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	1	2.38%	\$86,323	1.40%
Non-minority Males	33	78.57%	\$4,819,447	77.94%
TOTAL	42	100.00%	\$6,183,309	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	5	11.90%	\$1,126,227	18.21%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	2	4.76%	\$144,412	2.34%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	1	2.38%	\$6,900	0.11%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	1	2.38%	\$86,323	1.40%
Non-minority Males	33	78.57%	\$4,819,447	77.94%
TOTAL	42	100.00%	\$6,183,309	100.00%



3. Goods/Equipment/Supplies Prime Contract Utilization: Contracts Valued \$500,000 and Under

Table 3.19 summarizes all contract dollars expended by VTA on goods/equipment/supplies prime contracts valued \$500,000 and under. Minority-owned businesses received 2.64% of the goods/equipment/supplies prime contract dollars; Caucasian female-owned businesses received 3.77%; and non-minority male-owned businesses received 93.59%.

African Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Asian Pacific Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Subcontinent Asian Americans received 1 or 2.94% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$131,604 or 2.64% of the goods/equipment/supplies prime contract dollars.

Hispanic Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Native Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Caucasian Females received 2 or 5.88% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$187,672 or 3.77% of the goods/equipment/supplies prime contract dollars.

Non-minority Males received 31 or 91.18% of the goods/equipment/supplies prime contracts valued \$500,000 and under awarded during the study period, representing \$4,659,218 or 93.59% of the goods/equipment/supplies prime contract dollars.



**Table 3.19: Goods/Equipment/Supplies Prime Contract Utilization:
Contracts Valued \$500,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	1	2.94%	\$131,604	2.64%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	2	5.88%	\$187,672	3.77%
Non-minority Males	31	91.18%	\$4,659,218	93.59%
TOTAL	34	100.00%	\$4,978,493	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	1	2.94%	\$131,604	2.64%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	0	0.00%	\$0	0.00%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	2	5.88%	\$187,672	3.77%
Non-minority Males	31	91.18%	\$4,659,218	93.59%
TOTAL	34	100.00%	\$4,978,493	100.00%



G. Informal Contracts by Industry

1. Construction Prime Contract Utilization: Contracts Valued \$25,000 and Under

Table 3.20 summarizes all contract dollars expended by VTA on construction prime contracts valued \$25,000 and under. Minority-owned businesses received 0.00% of the construction prime contract dollars; Caucasian female-owned businesses received 0.00%; and non-minority male-owned businesses received 100.00%.

African Americans received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Asian Pacific Americans received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Subcontinent Asian Americans received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Hispanic Americans received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Native Americans received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Caucasian Females received 0 or 0.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$0 or 0.00% of the construction prime contract dollars.

Non-minority Males received 1 or 100.00% of the construction prime contracts valued \$25,000 and under awarded during the study period, representing \$20,882 or 100.00% of the construction prime contract dollars.



**Table 3.20: Construction Prime Contract Utilization:
Contracts Valued \$25,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	1	100.00%	\$20,882	100.00%
TOTAL	1	100.00%	\$20,882	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	0	0.00%	\$0	0.00%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	1	100.00%	\$20,882	100.00%
TOTAL	1	100.00%	\$20,882	100.00%



2. Professional Services Prime Contract Utilization: Contracts Valued \$50,000 and Under

Table 3.21 summarizes all contract dollars expended by VTA on professional services prime contracts valued \$50,000 and under. Minority-owned businesses received 28.74% of the professional services prime contract dollars; Caucasian female-owned businesses received 0.00%; and non-minority male-owned businesses received 71.26%.

African Americans received 0 or 0.00% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Asian Pacific Americans received 1 or 8.33% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$48,811 or 17.39% of the professional services prime contract dollars.

Subcontinent Asian Americans received 1 or 8.33% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$24,981 or 8.90% of the professional services prime contract dollars.

Hispanic Americans received 1 or 8.33% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$6,900 or 2.46% of the professional services prime contract dollars.

Native Americans received 0 or 0.00% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Caucasian Females received 0 or 0.00% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the professional services prime contract dollars.

Non-minority Males received 9 or 75.00% of the professional services prime contracts valued \$50,000 and under awarded during the study period, representing \$200,058 or 71.26% of the professional services prime contract dollars.



**Table 3.21: Professional Services Prime Contract Utilization:
Contracts Valued \$50,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	1	8.33%	\$48,811	17.39%
Subcontinent Asian Americans	1	8.33%	\$24,981	8.90%
Hispanic Americans	1	8.33%	\$6,900	2.46%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	9	75.00%	\$200,058	71.26%
TOTAL	12	100.00%	\$280,750	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	1	8.33%	\$48,811	17.39%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	1	8.33%	\$24,981	8.90%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	1	8.33%	\$6,900	2.46%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	0	0.00%	\$0	0.00%
Non-minority Males	9	75.00%	\$200,058	71.26%
TOTAL	12	100.00%	\$280,750	100.00%



3. Goods/Equipment/Supplies Prime Contract Utilization: Contracts Valued \$50,000 and Under

Table 3.22 summarizes all contract dollars expended by VTA on goods/equipment/supplies prime contracts valued \$50,000 and under. Minority-owned businesses received 0.00% of the goods/equipment/supplies prime contract dollars; Caucasian female-owned businesses received 2.36%; and non-minority male-owned businesses received 97.64%.

African Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Asian Pacific Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Subcontinent Asian Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Hispanic Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Native Americans received 0 or 0.00% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$0 or 0.00% of the goods/equipment/supplies prime contract dollars.

Caucasian Females received 1 or 8.33% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$7,672 or 2.36% of the goods/equipment/supplies prime contract dollars.

Non-minority Males received 11 or 91.67% of the goods/equipment/supplies prime contracts valued \$50,000 and under awarded during the study period, representing \$317,706 or 97.64% of the goods/equipment/supplies prime contract dollars.



**Table 3.22: Goods/Equipment/Supplies Prime Contract Utilization:
Contracts Valued \$50,000 and Under, July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African Americans	0	0.00%	\$0	0.00%
Asian Pacific Americans	0	0.00%	\$0	0.00%
Subcontinent Asian Americans	0	0.00%	\$0	0.00%
Hispanic Americans	0	0.00%	\$0	0.00%
Native Americans	0	0.00%	\$0	0.00%
Caucasian Females	1	8.33%	\$7,672	2.36%
Non-minority Males	11	91.67%	\$317,706	97.64%
TOTAL	12	100.00%	\$325,378	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 Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	0	0.00%	\$0	0.00%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	0	0.00%	\$0	0.00%
Hispanic American Females	0	0.00%	\$0	0.00%
Hispanic American Males	0	0.00%	\$0	0.00%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	1	8.33%	\$7,672	2.36%
Non-minority Males	11	91.67%	\$317,706	97.64%
TOTAL	12	100.00%	\$325,378	100.00%



V. Summary

The prime contract utilization analysis examined \$1,212,484,043 of VTA's expenditures on prime contracts awarded during the July 1, 2011, to June 30, 2015, study period. The \$1,212,484,043 expended included \$1,107,202,078 for construction, \$94,138,139 for professional services, and \$11,143,826 for goods/equipment/supplies. A total of 126 prime contracts were analyzed, which included 31 for construction, 54 for professional services, and 41 for goods/equipment/supplies.

The utilization analysis was performed separately for formal competitively bid and informal prime contracts. The analysis of formal competitively bid contracts was performed at two dollar thresholds for each industry: all contracts, contracts valued \$1,000,000 and under for construction, \$500,000 and under for professional services, and \$500,000 and under for goods/equipment/supplies. The informal thresholds included contracts valued \$25,000 and under for construction, \$50,000 and under for professional services, and \$50,000 and under for goods/equipment/supplies. *Chapter 7: Prime Contract Disparity Analysis* presents the statistical analysis of disparity in each of the three industries.



CHAPTER 4: Subcontractor Utilization Analysis

I. Introduction

As discussed in *Chapter 3: Prime Contractor Utilization Analysis*, a disparity study as required under *Croscon*, documents Disadvantaged Business Enterprise' (DBE)²⁰⁴ contracting history. The objective of this chapter is to determine the level of DBE and non-DBE subcontractor utilization by ethnicity and gender. In this Contract Availability and Utilization Study (Study), the construction and professional services subcontracts issued by Santa Clara Valley Transportation Authority's (VTA) prime contractors during the July 1, 2011, to June 30, 2015 study period were analyzed.

II. Data Sources

The majority of VTA's subcontracting records were maintained in B2Gnow. Construction and professional services subcontracts issued by VTA's prime contractors that were not tracked in B2Gnow were reconstructed. The reconstructed subcontract data were compiled by VTA staff in conjunction with Mason Tillman Associates, Ltd. (Mason Tillman). Project files were examined by VTA staff for awards, payments, and related documents that identified subcontractors, subconsultants, suppliers, and truckers. Prime contractors were also surveyed by Mason Tillman to secure their subcontractors, subconsultants, suppliers, and truckers' awards and payment data. All identified subcontractors, subconsultants, suppliers, and truckers were surveyed to verify their participation and payments. Data verifying ethnicity and gender were compiled from certification lists, minority and woman business organization membership directories, Internet research, and contractor surveys. The organization sources used to verify contractor information are defined in Table 3.1 of *Chapter 3: Prime Contractor Utilization Analysis*.

III. Subcontractor Utilization

A. All Subcontracts

As depicted in Table 4.1, 477 subcontracts were analyzed, which included 430 construction and 47 professional services subcontracts.



²⁰⁴ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

There were \$709,755,058 total subcontract dollars expended during the July 1, 2011, to June 30, 2015 study period. These dollars included \$700,054,923 for construction and \$9,700,136 for professional services subcontracts.

Table 4.1: Total Subcontracts Awarded and Dollars Expended by Industry, July 1, 2011, to June 30, 2015

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	430	\$700,054,923
Professional Services	47	\$9,700,136
Total	477	\$709,755,058

B. All Subcontracts by Industry

1. Construction Subcontracts

Table 4.2 depicts the identified construction subcontracts awarded by VTA’s prime contractors. Minority-owned businesses received 18.54%; Caucasian female-owned businesses received 13.18%; and non-minority male-owned businesses received 68.28% of the construction subcontract dollars.

African Americans received 22 or 5.12% of VTA’s construction subcontracts during the study period, representing \$8,329,277 or 1.19% of the construction subcontract dollars.

Asian Pacific Americans received 24 or 5.58% of VTA’s construction subcontracts during the study period, representing \$32,110,519 or 4.59% of the construction subcontract dollars.

Subcontinent Asian Americans received 4 or 0.93% of VTA’s construction subcontracts during the study period, representing \$8,478,906 or 1.21% of the construction subcontract dollars.

Hispanic Americans received 54 or 12.56% of VTA’s construction subcontracts during the study period, representing \$78,371,570 or 11.20% of the construction subcontract dollars.

Native Americans received 5 or 1.16% of VTA’s construction subcontracts during the study period, representing \$2,511,043 or 0.36% of the construction subcontract dollars.

Caucasian Females received 75 or 17.44% of VTA’s construction subcontracts during the study period, representing \$92,274,090 or 13.18% of the construction subcontract dollars.

Non-minority Males received 246 or 57.21% of VTA’s construction subcontracts during the study period, representing \$477,979,517 or 68.28% of the construction subcontract dollars.



**Table 4.2: Construction Subcontractor Utilization,
July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American	22	5.12%	\$8,329,277	1.19%
Asian Pacific American	24	5.58%	\$32,110,519	4.59%
Subcontinent Asian American	4	0.93%	\$8,478,906	1.21%
Hispanic American	54	12.56%	\$78,371,570	11.20%
Native American	5	1.16%	\$2,511,043	0.36%
Caucasian Females	75	17.44%	\$92,274,090	13.18%
Non-minority Males	246	57.21%	\$477,979,517	68.28%
TOTAL	430	100.00%	\$700,054,923	100.00%
Ethnicity and Gender	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American Females	6	1.40%	\$1,528,203	0.22%
African American Males	16	3.72%	\$6,801,074	0.97%
Asian Pacific American Females	7	1.63%	\$2,809,729	0.40%
Asian Pacific American Males	17	3.95%	\$29,300,790	4.19%
Subcontinent Asian American Females	1	0.23%	\$17,442	0.00%
Subcontinent Asian American Males	3	0.70%	\$8,461,464	1.21%
Hispanic American Females	8	1.86%	\$3,794,209	0.54%
Hispanic American Males	46	10.70%	\$74,577,361	10.65%
Native American Females	1	0.23%	\$36,959	0.01%
Native American Males	4	0.93%	\$2,474,084	0.35%
Caucasian Females	75	17.44%	\$92,274,090	13.18%
Non-minority Males	246	57.21%	\$477,979,517	68.28%
TOTAL	430	100.00%	\$700,054,923	100.00%



2. Professional Services Subcontracts

Table 4.3 depicts the professional services subcontracts issued by VTA's prime contractors. Minority-owned businesses received 22.36%; Caucasian female-owned businesses received 9.17%; and non-minority male-owned businesses received 68.47% of the professional services subcontract dollars.

African Americans received 2 or 4.26% of VTA's professional services subcontracts during the study period, representing \$63,180 or 0.65% of the professional services subcontract dollars.

Asian Pacific Americans received 8 or 17.02% of VTA's professional services subcontracts during the study period, representing \$928,951 or 9.58% of the professional services subcontract dollars.

Subcontinent Asian Americans received 1 or 2.13% of VTA's professional services subcontracts during the study period, representing \$1,094,087 or 11.28% of the professional services subcontract dollars.

Hispanic Americans received 2 or 4.26% of VTA's professional services subcontracts during the study period, representing \$82,416 or 0.85% of the professional services subcontract dollars.

Native Americans received 0 or 0.00% of VTA's professional services subcontracts during the study period, representing \$0 or 0.00% of the professional services subcontract dollars.

Caucasian Females received 10 or 21.28% of VTA's professional services subcontracts during the study period, representing \$889,892 or 9.17% of the professional services subcontract dollars.

Non-minority Males received 24 or 51.06% of VTA's professional services subcontracts during the study period, representing \$6,641,610 or 68.47% of the professional services subcontract dollars.



**Table 4.3: Professional Services Subcontractor Utilization,
July 1, 2011, to June 30, 2015**

Ethnicity	Number of Contracts	Percent of Contracts	Amount of Dollars	Percent of Dollars
African American	2	4.26%	\$63,180	0.65%
Asian Pacific American	8	17.02%	\$928,951	9.58%
Subcontinent Asian American	1	2.13%	\$1,094,087	11.28%
Hispanic American	2	4.26%	\$82,416	0.85%
Native American	0	0.00%	\$0	0.00%
Caucasian Females	10	21.28%	\$889,892	9.17%
Non-minority Males	24	51.06%	\$6,641,610	68.47%
TOTAL	47	100.00%	\$9,700,136	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	2	4.26%	\$63,180	0.65%
Asian Pacific American Females	0	0.00%	\$0	0.00%
Asian Pacific American Males	8	17.02%	\$928,951	9.58%
Subcontinent Asian American Females	0	0.00%	\$0	0.00%
Subcontinent Asian American Males	1	2.13%	\$1,094,087	11.28%
Hispanic American Females	1	2.13%	\$38,416	0.40%
Hispanic American Males	1	2.13%	\$44,000	0.45%
Native American Females	0	0.00%	\$0	0.00%
Native American Males	0	0.00%	\$0	0.00%
Caucasian Females	10	21.28%	\$889,892	9.17%
Non-minority Males	24	51.06%	\$6,641,610	68.47%
TOTAL	47	100.00%	\$9,700,136	100.00%



IV. Summary

VTA's subcontractor utilization analysis examined \$709,755,058 expended on subcontracts awarded by VTA's prime contractors from July 1, 2011, to June 30, 2015. The \$709,755,058 expended included \$700,054,923 for construction and \$9,700,136 for professional services. A total of 477 subcontracts were analyzed, which included 430 for construction and 47 for professional services.



CHAPTER 5: Market Area Analysis

I. Market Area Definition

A. Legal Criteria for Geographic Market Area

The Supreme Court’s decision in *City of Richmond v. J.A. Croson Co.*²⁰⁵ (*Croson*) held that programs established by local governments to set goals for the participation of minority and woman-owned firms must be supported by evidence of past discrimination in the award of their contracts. Prior to the *Croson* decision, local agencies could implement race-conscious programs without developing a detailed public record to document the underutilization of minority and woman-owned firms in their award of contracts. Instead, they relied on widely recognized societal patterns of discrimination.²⁰⁶

Croson established that a local government could not rely on society-wide discrimination as the basis for a race-based program. Instead, a local government was required to identify discrimination within its own contracting jurisdiction.²⁰⁷ In *Croson*, the United States Supreme Court found the City of Richmond, Virginia’s Minority Business Enterprise (MBE) construction program 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 to business utilization. Therefore, the identification of the local market area is particularly important because it establishes the parameters within which to conduct a disparity study.

B. Application of the Croson Standard

While *Croson* emphasized the importance of the local market area, it provided little assistance in defining its parameters. However, it is informative to review the Court’s definition of the City of Richmond, Virginia’s market area. In discussing the geographic parameters of the constitutional violation that must be investigated, the Court interchangeably used the terms “relevant market,” “Richmond construction industry,”²⁰⁸ and “city’s construction industry.”²⁰⁹ These terms were used to define the proper scope for examining the existence of discrimination within the City. This

²⁰⁵ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

²⁰⁶ *United Steelworkers v. Weber*, 433 U.S. 193, 198, n. 1 (1979).

²⁰⁷ *Croson*, 488 U.S. at 497.

²⁰⁸ *Croson*, 488 U.S. at 500.

²⁰⁹ *Id.* at 470.



interchangeable use of terms lends support to a definition of market area that coincides with the boundaries of a contracting jurisdiction.

An analysis of the cases following *Croson* reveals a pattern that provides additional guidance for defining the market area. The body of cases examining the *reasonable* market area definition is *fact-based*—rather than dictated by a specific formula.²¹⁰ In *Cone Corporation v. Hillsborough County*,²¹¹ the United States Eleventh Circuit Court of Appeals considered a study in support of Hillsborough County, Florida’s MBE Program, which used minority contractors located in Hillsborough County as the measure of available firms. The program was found to be constitutional under the compelling governmental interest element of the strict scrutiny standard.

Hillsborough County’s program was based on statistics indicating that specific discrimination existed in the construction contracts awarded by Hillsborough County, not in the construction industry in general. Hillsborough County extracted data from within its own jurisdictional boundaries and assessed the percentage of minority businesses available in Hillsborough County. The Court stated that the disparity study was properly conducted within the “local construction industry.”²¹²

Similarly, in *Associated General Contractors v. Coalition for Economic Equity (AGCCII)*,²¹³ the United States Ninth Circuit Court of Appeals found the City and County of San Francisco, California’s MBE Program to have the factual predicate necessary to survive strict scrutiny. The San Francisco MBE Program was supported by a study that assessed the number of available MBE contractors within the City and County of San Francisco, California. The Court found it appropriate to use the City and County as the relevant market area within which to conduct a disparity study.²¹⁴

In *Coral Construction v. King County*, the United States 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.”²¹⁵ In support of its MBE program, King County, Washington offered studies compiled by other jurisdictions, including entities completely within the County, others coterminous with the boundaries of the County, as well as a jurisdiction completely outside of King County. The plaintiffs contended that *Croson* required King County, Washington, to compile its own data and cited *Croson* as prohibiting 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

²¹⁰ See e.g., *Concrete Works of Colorado v. City of Denver, Colorado*, 36 F.3d 1513, 1528 (10th Cir. 1994) (“*Concrete Works*”).

²¹¹ *Cone Corporation v. Hillsborough County*, 908 F.2d 908 (11th Cir. 1990).

²¹² *Id.* at 915.

²¹³ *Associated General Contractors of California v. Coalition for Economic Equity and City and County of San Francisco*, 950 F.2d 1401 (9th Cir. 1991).

²¹⁴ *AGCCII*, 950 F.2d at 1415.

²¹⁵ *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir. 1991).



could be unnecessarily burdened if an MBE program were based on outside data. However, the Court also found that the data from entities within King County and from coterminous jurisdictions were relevant to discrimination in the County. They also found that the data posed no risk of unfairly burdening innocent third parties.

The Court concluded that data gathered by a neighboring county 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 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.”²¹⁶ However, the Court did note that the “world of contracting does not conform itself neatly to jurisdictional boundaries.”²¹⁷

There are other situations where courts have approved a market area definition that extended beyond a jurisdiction’s geographic boundaries. In *Concrete Works v. City and County of Denver (Concrete Works)*,²¹⁸ the United States Tenth Circuit Court of Appeals directly addressed the issue of whether extra-jurisdictional evidence of discrimination can be used to determine the “local market area” for a disparity study. In *Concrete Works*, the defendant relied on evidence of discrimination in the six-county Denver, Colorado Metropolitan Statistical Area (Denver MSA) to support its MBE program. Plaintiffs argued that the federal constitution prohibited consideration of evidence beyond jurisdictional boundaries. The Court of Appeals disagreed.

Critical to the Court’s acceptance of the Denver MSA as the relevant local market was the finding that more than 80% of construction and design contracts awarded by the City and County of Denver were awarded to contractors within the Denver MSA. Another consideration was that the City and County of Denver’s analysis was based on United States Census data, which was available for the Denver MSA but not for the City of Denver itself. There was no undue burden placed on nonculpable parties, as the City and County of Denver had expended a majority of its construction contract dollars within the area defined as the local market. Citing *AGCC II*,²¹⁹ 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.”²²⁰

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

²¹⁶ *Coral Construction*, 941 F.2d at 917.

²¹⁷ *Id.*

²¹⁸ *Concrete Works*, 36 F.3d at 1528.

²¹⁹ *AGCC II*, 950 F.2d at 1401.

²²⁰ *Concrete Works*, 36 F.3d at 1528.



as the area encompassing the location of businesses that received more than 90% of the dollar value of all contracts awarded by the agency.²²¹

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 business owners in the government’s marketplace.²²² 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.

II. Market Area Analysis

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 a definition of the market area as the geographical boundaries of the government entity. Given Santa Clara Valley Transportation Authority’s (VTA) jurisdiction, and the geographic area in which the majority of contract dollars were awarded, the Study’s market area is determined to be the geographical boundaries of Alameda, Santa Clara, and San Francisco counties.

A. Summary of the Distribution of All Prime Contracts Awarded

VTA awarded 126 prime contracts valued at \$1,212,484,043 from July 1, 2011, to June 30, 2015, study period. The distribution of all prime contracts awarded and dollars received by all firms domiciled inside and outside of the market area is depicted in Table 5.1.

Table 5.1: Distribution of All Contracts Awarded

Geographic Area	Number of Contracts	Percent of Contracts	Total Dollars	Percent of Dollars
SANTA CLARA	29	23.02%	\$907,239,394	74.82%
SAN FRANCISCO	30	23.81%	\$204,122,744	16.84%
ALAMEDA	24	19.05%	\$61,023,342	5.03%
CONTRA COSTA	5	3.97%	\$24,968,957	2.06%
SONOMA	1	0.79%	\$6,124,973	0.51%
SAN MATEO	3	2.38%	\$1,218,438	0.10%
FRESNO	3	2.38%	\$753,867	0.06%
LOS ANGELES	4	3.17%	\$742,061	0.06%
YOLO	2	1.59%	\$342,020	0.03%
ORANGE	1	0.79%	\$320,227	0.03%
SAN JOAQUIN	2	1.59%	\$141,049	0.01%
OUT-OF-STATE	22	17.46%	\$5,486,971	0.45%
TOTAL	126	100.00%	\$1,212,484,043	100.00%



²²¹ *Opportunity Denied! New York State’s Study*, 26 Urban Lawyer No. 3, Summer 1994.

²²² *Croson*, 488 U.S. at 501.

B. Distribution of Construction Prime Contracts

VTA awarded 31 construction prime contracts valued at \$1,107,202,078 during the study period. Businesses located in the market area received 70.97% of the construction prime contracts and 96.86% of the dollars. The distribution of the construction prime contracts awarded and dollars received by all firms domiciled inside and outside of the market area is depicted in Table 5.2.

Table 5.2: Distribution of Construction Prime Contracts

Geographic Area	Number of Contracts	Percent of Contracts	Total Dollars	Percent of Dollars
SANTA CLARA	7	22.58%	\$879,413,316	79.43%
SAN FRANCISCO	10	32.26%	\$146,491,065	13.23%
ALAMEDA	5	16.13%	\$46,562,741	4.21%
CONTRA COSTA	2	6.45%	\$24,762,134	2.24%
SONOMA	1	3.23%	\$6,124,973	0.55%
SAN MATEO	3	9.68%	\$1,218,438	0.11%
OUT-OF-STATE	3	9.68%	\$2,629,410	0.24%
TOTAL	31	100.00%	\$1,107,202,078	100.00%

C. Distribution of Professional Services Prime Contracts

VTA awarded 54 professional services prime contracts valued at \$94,138,139 during the study period. Businesses located in the market area received 81.48% of the professional services prime contracts and 99.02% of the dollars. The distribution of the professional services prime contracts awarded and dollars received by all firms domiciled inside and outside of the market area is depicted below in Table 5.3.

Table 5.3: Distribution of Professional Services Prime Contracts

Geographic Area	Number of Contracts	Percent of Contracts	Total Dollars	Percent of Dollars
SAN FRANCISCO	12	22.22%	\$53,248,000	56.56%
SANTA CLARA	16	29.63%	\$27,097,971	28.79%
ALAMEDA	16	29.63%	\$12,865,763	13.67%
YOLO	2	3.70%	\$342,020	0.36%
ORANGE	1	1.85%	\$320,227	0.34%
SAN JOAQUIN	1	1.85%	\$93,449	0.10%
CONTRA COSTA	1	1.85%	\$24,243	0.03%
LOS ANGELES	2	3.70%	\$14,290	0.02%
OUT-OF-STATE	3	5.56%	\$132,175	0.14%
TOTAL	54	100.00%	\$94,138,139	100.00%



D. Distribution of Goods/Equipment/Supplies Prime Contracts

VTA awarded 41 goods/equipment/supplies prime contracts valued at \$11,143,826 during the study period. Businesses located in the market area received 41.46% of the goods/equipment/supplies prime contracts and 60.18% of the dollars. The distribution of the goods/equipment/supplies prime contracts awarded and dollars received by all firms domiciled inside and outside of the market area is depicted below in Table 5.4.

Table 5.4: Distribution of Goods/Equipment/Supplies Prime Contracts

Geographic Area	Number of Contracts	Percent of Contracts	Total Dollars	Percent of Dollars
SAN FRANCISCO	8	19.51%	\$4,383,679	39.34%
ALAMEDA	3	7.32%	\$1,594,838	14.31%
FRESNO	3	7.32%	\$753,867	6.76%
SANTA CLARA	6	14.63%	\$728,107	6.53%
LOS ANGELES	2	4.88%	\$727,771	6.53%
CONTRA COSTA	2	4.88%	\$182,579	1.64%
SAN JOAQUIN	1	2.44%	\$47,600	0.43%
OUT-OF-STATE	16	39.02%	\$2,725,386	24.46%
TOTAL	41	100.00%	\$11,143,826	100.00%



III. Summary

During the study period, VTA awarded 126 construction, professional services, and goods/equipment/supplies prime contracts valued at \$1,212,484,043. VTA awarded 65.87% of prime contracts and 96.69% of dollars to businesses domiciled within the market area.

Table 5.5 below presents an overview of the number of construction, professional services, and goods/equipment/supplies prime contracts VTA awarded and the dollars spent in the market area.

Construction Prime Contracts: 22 or 70.97% of construction prime contracts were awarded to market area businesses. Construction prime contracts in the market area accounted for \$1,072,467,123 or 96.86% of the total construction prime contract dollars.

Professional Services Prime Contracts: 44 or 81.48% of professional services prime contracts were awarded to market area businesses. Professional services prime contracts in the market area accounted for \$93,211,734 or 99.02% of the total professional services prime contract dollars.

Goods/Equipment/Supplies Prime Contracts: 17 or 41.46% of goods/equipment/supplies prime contracts were awarded to market area businesses. Goods/equipment/supplies prime contracts in the market area accounted for \$6,706,624 or 60.18% of the total goods/equipment/supplies prime contract dollars.

Table 5.5: VTA Contract Distribution

Geographic Area	Number of Contracts	Percent of Contracts	Total Dollars	Percent of Dollars
Combined Industries				
Market Area	83	65.87%	\$ 1,172,385,481	96.69%
Outside Market Area	43	34.13%	\$ 40,098,562	3.31%
TOTAL	126	100.00%	\$ 1,212,484,043	100.00%
Construction				
Market Area	22	70.97%	\$ 1,072,467,123	96.86%
Outside Market Area	9	29.03%	\$ 34,734,955	3.14%
TOTAL	31	100.00%	\$ 1,107,202,078	100.00%
Professional Services				
Market Area	44	81.48%	\$ 93,211,734	99.02%
Outside Market Area	10	18.52%	\$ 926,405	0.98%
TOTAL	54	100.00%	\$ 94,138,139	100.00%
Goods/Equipment/Supplies				
Market Area	17	41.46%	\$ 6,706,624	60.18%
Outside Market Area	24	58.54%	\$ 4,437,202	39.82%
TOTAL	41	100.00%	\$ 11,143,826	100.00%



CHAPTER 6: Prime Contractor and Subcontractor Availability Analysis

I. Introduction

Availability is defined, according to *Croson*, as the number of qualified businesses in the jurisdiction’s market area that are willing and able to provide the goods or services procured in the jurisdiction.²²³ To determine availability, Disadvantaged Business Enterprises (DBE)²²⁴ and non-minority male-owned Businesses (non-DBE) within the jurisdiction’s market area that are ready, willing, and able to provide the goods and services need to be enumerated. The market area for the three industries – construction, professional services, and goods/equipment/supplies as defined in *Chapter 5: Market Area Analysis* – is the geographical boundaries of Alameda, San Francisco, and Santa Clara counties.

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 contracting with the jurisdiction, as implied by the term “willing.” The other is the business’ ability or capacity to provide a service or good, as implied by the term “able.”

II. Prime Contractor Availability Data Sources

A. Identification of Willing Businesses Within the Market Area

Mason Tillman used three types of sources to identify businesses in the market area that provide the goods and services that Santa Clara Valley Transportation Authority (VTA) procures. One source was VTA’s records, including a vendors list. The second source was government certification directories. The third source was business association membership lists. Only businesses determined to be willing were added to the availability list. Any business identified as “willing” from more than one source was counted only once in an industry. A business that was willing to provide goods or services in more than one industry was listed uniquely in each relevant industry’s availability list.



²²³ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

²²⁴ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

The three sources were ranked, with the highest rank assigned to the utilized businesses and vendors. Government certification lists ranked second, and business association membership lists third. Therefore, the first document used to build the availability list was VTA’s utilized businesses. Vendor lists were then appended. Businesses identified from federal and local government certification agencies were thereafter appended. Businesses identified from association membership lists that affirmed their willingness through a survey of business association members were also appended. The business associations included trade organizations, professional organizations, and chambers of commerce.

Extensive targeted outreach to business associations in the market area was performed to identify and secure business membership directories. From the three sources, 1,566 unique market area businesses that provided goods or services in one or more of the three industries were identified. An accounting of the willing businesses derived by source is listed below:

1. VTA Records

One hundred seventy-one (171) unique market area businesses were added to the availability database from VTA records.

2. Government Certification Lists

Nine hundred fifteen (915) unique market area businesses were added to the availability database from government certification lists.

3. Business Association Membership Lists

Four hundred and eighty (480) unique market area businesses were surveyed from business association membership lists.

These businesses were surveyed to determine their willingness to contract with JPB. Of the 480 surveyed businesses, 2 refused to participate, 356 did not respond despite multiple attempts to reach them by email and telephone, 36 telephone numbers were disconnected, and 86 businesses completed the survey. Of the 86 businesses that completed the survey, 15 were deemed willing and added to the availability database.

B. Prime Contractor Sources

Table 6.1 lists the sources from which the list of willing businesses was compiled.

Table 6.1: Prime Contractor Availability Data Sources

Source	Type of Information
VTA Records	
VTA B2Gnow Contract Sublist	Non-DBE and DBE
VTA Federal Goods Contracts Unique Vendors	Non-DBE and DBE



Source	Type of Information
VTA SAP Purchase Orders for Spending Analysis	Non-DBE and DBE
Government Certification Directories	
California Unified Certification Disadvantaged Business Enterprise Database	DBE
City and County of San Francisco, Directory of LBE, LBE-PUC	DBE
City of Oakland SLBE Certification List	DBE
Supplier Clearinghouse - California Public Utilities Commission	DBE
United States Small Business Administration Santa Clara County	Non-DBE and DBE
United States Small Business Administration Alameda County	DBE
United States Small Business Administration Contra Costa County	DBE
United States Small Business Administration San Francisco County	DBE
United States Small Business Administration San Mateo County	DBE
United States Small Business Administration Santa Clara County	DBE
United States Small Business Administration Service Disabled Veteran	DBE
Business Association Membership Lists	
Alameda Chamber of Commerce	Non-DBE and DBE
Albany Chamber of Commerce	Non-DBE and DBE
Allegiant Battle for Veterans	Non-DBE and DBE
American Institute of Architects, San Francisco Chapter	Non-DBE and DBE
Association of Environmental Contractors	Non-DBE and DBE
Bay Area Business Women	DBE
Bay Point Chamber of Commerce	Non-DBE and DBE
Berkeley Chamber of Commerce	Non-DBE and DBE
Black Chamber of Commerce Silicon Valley	DBE
Brentwood Chamber of Commerce	Non-DBE and DBE
Brisbane Chamber of Commerce	Non-DBE and DBE
Builders Exchange of Alameda County	Non-DBE and DBE
Builders Exchange of Santa Clara County	Non-DBE and DBE
Burlingame Chamber of Commerce	Non-DBE and DBE
California Association of General Contractors	Non-DBE and DBE
California Landscape Contractors Association, East Bay	Non-DBE and DBE
California Landscape Contractors Association, San Francisco	Non-DBE and DBE
California Landscape Contractors Association, Central Coast	Non-DBE and DBE
California Landscape Contractors Association, North Valley	Non-DBE and DBE
California Precast Concrete Association	Non-DBE and DBE
Campbell Chamber of Commerce	Non-DBE and DBE
Castro Valley Chamber of Commerce	Non-DBE and DBE
Cleaning and Restoration Association	Non-DBE and DBE
Concrete Masonry Association of California and Nevada	Non-DBE and DBE
Contra Costa Black Chamber of Commerce	DBE



Source	Type of Information
Contractors State License Board San Francisco	Non-DBE and DBE
Cooling Technology Institute	Non-DBE and DBE
Daly City-Colma Chamber of Commerce	Non-DBE and DBE
Danville Area Chamber of Commerce	Non-DBE and DBE
Engineering Contractors Association, Northern California Chapter	Non-DBE and DBE
Finishing Contractors Association	Non-DBE and DBE
Floor Covering Institute	Non-DBE and DBE
Foster City Chamber of Commerce	Non-DBE and DBE
Gilroy Chamber of Commerce	Non-DBE and DBE
Greater Concord Chamber of Commerce	Non-DBE and DBE
Half Moon Bay Coastsides Chamber of Commerce	Non-DBE and DBE
Livermore Chamber of Commerce	Non-DBE and DBE
Los Gatos Chamber of Commerce	Non-DBE and DBE
Martinez Chamber of Commerce	Non-DBE and DBE
Masonry Contractors Association of California	Non-DBE and DBE
Masonry Institute of America	Non-DBE and DBE
Menlo Park Chamber of Commerce	Non-DBE and DBE
Millbrae Chamber of Commerce	Non-DBE and DBE
Milpitas Chamber of Commerce	Non-DBE and DBE
Moraga Chamber of Commerce	Non-DBE and DBE
Mountain View Chamber of Commerce	Non-DBE and DBE
National Association of the Remodeling Industry Silicon Valley Chapter	Non-DBE and DBE
National Association of Women Business Owners	DBE
National Electrical Contractors Association, Santa Clara	Non-DBE and DBE
National Institute of Steel Detailing California Chapter	Non-DBE and DBE
Northern California Mechanical Contractor Association	Non-DBE and DBE
Oakland Chinatown Chamber of Commerce	DBE
Oakley Chamber of Commerce	Non-DBE and DBE
Orinda Chamber of Commerce	Non-DBE and DBE
Pacifica Chamber of Commerce	Non-DBE and DBE
Palo Alto Chamber of Commerce	Non-DBE and DBE
Pleasant Hill Chamber of Commerce	Non-DBE and DBE
Pleasanton Chamber of Commerce	Non-DBE and DBE
Plumbing-Heating-Cooling Contractors Association	Non-DBE and DBE
Redwood City San Mateo Chamber of Commerce	Non-DBE and DBE
San Bruno Chamber of Commerce	Non-DBE and DBE
San Carlos Chamber of Commerce	Non-DBE and DBE
San Francisco Chamber of Commerce	Non-DBE and DBE
San Jose Silicon Valley Chamber of Commerce	Non-DBE and DBE
San Leandro Chamber of Commerce	Non-DBE and DBE



Source	Type of Information
San Mateo Chamber of Commerce	Non-DBE and DBE
San Ramon Chamber of Commerce	Non-DBE and DBE
Santa Clara Silicon Valley Central Chamber of Commerce	Non-DBE and DBE
Saratoga Chamber of Commerce	Non-DBE and DBE
Semiconductor Equipment and Materials International	Non-DBE and DBE
Silicon Valley Black Chamber of Commerce	DBE
South Bay Piping Industry	Non-DBE and DBE
Sunnyvale Silicon Valley Chamber of Commerce	Non-DBE and DBE

C. Determination of Willingness

All businesses included in the availability analysis were determined to be willing to contract with VTA. “Willingness” is defined in *Croson* and its progeny as a business’ interest in contracting with the government. To be classified as willing, each business either bid on a government contract, secured government certification, or was listed on a business association’s membership list and affirmed an interest in contracting with VTA through the willingness survey. Businesses identified from the 87 sources listed in Table 6.1 demonstrated their willingness to perform on public contracts.

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

Table 6.2 through Table 6.5 present the distribution of willing prime contractors by source. The highest ranked source was the prime contractors utilized by VTA. Each ranked business is counted only once. For example, a utilized prime contractor counted in the prime contractor utilization source was not counted a second time as a bidder, certified business, or company identified from a business association list.

A distribution of available businesses by source also was calculated for each industry. As noted in Table 6.2, 98.23% of the construction businesses identified were derived from VTA’s records, other government agencies’ records, and government certification lists. Companies identified through the business association membership lists and the community meeting attendee lists represent 1.77% of the willing businesses.



Table 6.2: Distribution of Prime Contractor Availability Data Sources, Construction

Sources	DBEs Percentage	Non-DBEs Percentage	Source Percentage
Federally Funded Utilized Prime Contractors	2.76%	10.05%	4.98%
Non-Federally Funded Utilized Prime Contractors	4.84%	16.93%	8.51%
Certification Lists	91.24%	69.84%	84.75%
Subtotal	98.85%	96.83%	98.23%
Community Meeting Attendees	1.15%	2.65%	1.61%
Willingness Survey	0.00%	0.53%	0.16%
Subtotal	1.15%	3.17%	1.77%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100% due to rounding.

Table 6.3 depicts the data sources for the available professional services prime contractors. As noted, 96.31% of the professional services businesses identified were derived from VTA’s records, other government agencies’ records, and government certification lists. Companies identified through the business association membership lists and the community meeting attendee lists represent 3.69% of the willing businesses.

Table 6.3: Distribution of Prime Contractor Availability Data Sources, Professional Services

Sources	DBEs Percentage	Non-DBEs Percentage	Source Percentage
Federally Funded Utilized Prime Contractors	2.89%	11.28%	5.73%
Non-Federally Funded Utilized Prime Contractors	3.28%	12.41%	6.37%
Certification Lists	92.87%	67.29%	84.20%
Subtotal	99.04%	90.98%	96.31%
Community Meeting Attendees	0.96%	3.38%	1.78%
Willingness Survey	0.00%	5.64%	1.91%
Subtotal	0.96%	9.02%	3.69%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100% due to rounding.

Table 6.4 depicts the data sources for the available goods/equipment/supplies prime contractors. As noted, 99.36% of the goods/equipment/supplies businesses identified were derived from VTA’s records, other government agencies’ records, and government certification lists. Companies identified through the business association membership lists and the community meeting attendee lists represent 0.64% of the willing businesses.



**Table 6.4: Distribution of Prime Contractor Availability Data Sources,
Goods/Equipment/Supplies**

Sources	DBEs Percentage	Non-DBEs Percentage	Source Percentage
Federally Funded Utilized Prime Contractors	3.65%	9.84%	6.05%
Non-Federally Funded Utilized Prime Contractors	7.29%	29.51%	15.92%
Certification Lists	88.54%	59.84%	77.39%
Subtotal	99.48%	99.18%	99.36%
Community Meeting Attendees	0.52%	0.82%	0.64%
Subtotal	0.52%	0.82%	0.64%
Grand Total*	100.00%	100.00%	100.00%

*The percentages may not total 100% due to rounding.

III. Capacity

The second component of the availability requirement set forth in *Croson* is the capacity or ability of a business to perform the contracts that a jurisdiction awards.²²⁵ However, capacity requirements are not delineated in *Croson*. In those cases where capacity has been considered, the matter has involved large, competitively bid construction prime contracts. Nevertheless, the capacity of willing market area businesses to perform VTA contracts was assessed using several measures. The analysis included an analysis of contract size and vendor capacity.

- **Largest Awards:** The analysis classified the largest contracts that VTA awarded by ethnicity and gender within industry to determine DBEs' capacity to perform large formal contracts.
- **Size Analysis:** Contract size is a determinant of the capacity that a willing business needs to be competitive. The distribution of contracts by size within industry was calculated using a quartile analysis to determine the range of VTA's contracts by award amount. The quartile analysis was used to set the threshold in which the analysis was performed. The contracts analyzed were limited by dollar value, representing the 75th percentile of VTA's contracts awarded in each of the three industries.
- **Capacity Assessment:** The capacity assessment questionnaire was designed to elicit information on economic indicators of a business's ability to perform VTA's contracts. The questionnaire was administered to assess the relative capacity of DBEs and similarly situated non-DBEs. The findings from this analysis are described in *Section C* below.



²²⁵ *Croson*, 488 U.S. 469.

A. ***Largest DBE Contract Awarded by Industry***

DBEs were awarded large contracts in each industry. The distribution of the largest contracts VTA awarded to DBEs is depicted in Table 6.5. The utilization analysis shows that DBEs demonstrated the capacity to successfully compete for contracts as large as \$758,098 in construction, \$44,500,000 in professional services, and \$180,000 in goods/equipment/services.

Table 6.5: Largest DBE Contracts Awarded by VTA

Ethnic/Gender Group	Construction	Professional Services	Goods/Equipment/Supplies
African American Female	----	----	----
African American Male	----	\$1,214,281	----
Asian Pacific American Female	----	----	----
Asian Pacific American Male	\$758,098	\$44,500,000	----
Subcontinent Asian American Female	----	----	----
Subcontinent Asian American Male	----	\$119,432	\$131,604
Hispanic American Female	----	----	----
Hispanic American Male	\$257,082	\$6,900	----
Native American Female	----	----	----
Native American Male	----	----	----
Caucasian Female	----	\$8,709,000	\$180,000
Largest Dollar Amounts MBEs	\$758,098	\$44,500,000	\$131,604
Largest Dollar Amounts Caucasian Females	----	\$8,709,000	\$180,000

(----) Denotes a group that was not awarded any contracts within the respective industry.

B. ***Size Analysis***

The quartile analysis was used to set the threshold within which the utilization analysis was performed. Contract size is a depiction of the capacity that a willing business needs to successfully compete for VTA's prime and subcontracts. In each of the three industries the contracts analyzed were limited by value to those beneath the third quartile, which is also known as the upper quartile. The upper quartile represents the 75th percentile of the contracts VTA awarded, meaning that 75% of VTA's contracts are beneath this value, and 25% of VTA's contracts are above this value. Applying contract thresholds, as defined by the quartile analysis, is a method to ensure that contracts which are outliers in size and scope (by dollar value) do not skew the results of the disparity analysis. This threshold is also applied to ensure that the businesses enumerated in the availability analysis have the capacity to perform the contracts subject to analysis. To this end, contracts within each of the three industries were analyzed at three thresholds.

In each of the industries the contracts analyzed were limited to those beneath the third quartile (Q3), which is also known as the upper quartile. The upper quartile represents the 75th percentile of the contracts VTA awarded, meaning that 75% of VTA's contracts are beneath this value, and 25% of VTA's contracts are above this value. Applying contract thresholds as defined by the quartile analysis, is a method to ensure that the contracts subject to analysis can be performed by the businesses enumerated in the availability analysis. As detailed in Table 6.6, 25% of VTA's

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competitively bid contracts were less than \$98,696, 50% were under \$300,000, and 75% were under \$895,950. This finding illustrates the fact that most VTA’s competitively bid contracts were small, requiring limited capacity to perform the solicited scopes of work.

Table 6.6: Quartile Analysis by Size and Industry

Quartile	All industries Combined	Construction	Professional Services	Goods/Equipment/Supplies
Minimum	\$26,467	\$26,467	\$53,025	\$50,976
Q1 (25 th Percentile)	\$98,696	\$100,000	\$91,789	\$93,095
Q2 (Median)	\$300,000	\$338,405	\$188,852	\$271,611
Q3 (75 th Percentile)	\$895,950	\$992,215	\$493,450	\$504,329
Maximum	\$305,552,728	\$305,552,728	\$35,606,668	\$1,534,701

C. Business Capacity Assessment

Neither *Croscon* nor its progeny have given guidance on how to determine if a business is qualified or able to perform public contracting. Consequently, there are no clear methods to define measures of business capacity. A firm’s revenue, business size, number of employees, bonding levels, and bidding history are factors that can be used as indicators of capacity. Although these indicators are subject to the effects of marketplace discrimination, the presence of discrimination in the Agencies’ marketplace is documented in *Chapter 7: Prime Contract Disparity Analysis*, *Chapter 8: Subcontract Disparity Analysis*, and *Chapter 10: Anecdotal Analysis*.

To determine the relative capacity of minority-owned businesses, Caucasian female-owned businesses, and non-minority male-owned businesses enumerated in the availability analysis, an eSurvey was administered. The analysis of business capacity considered annual gross revenue as a proxy for business capacity. Revenue was selected because it reflects a business’s contracting activity. This analysis found that minority male and minority female business revenue and contracting opportunities were limited even when minority males, minority females, Caucasian females, and similarly situated non-minority males bid on contracts at the same frequency. None of the economic indicators that were assessed accounted for the disproportionate award of contracts to non-minority males as documented in *Chapter 7: Prime Contract Disparity Analysis*, and *Chapter 8: Subcontract Disparity Analysis*. The findings discussed below illustrate the impact of independent business characteristics on business capacity.

1. Methodology

e. Data Sample

Inferences about the capacity of businesses identified in the Study were made from a stratified sample of businesses. The stratified sample of minority-owned businesses, Caucasian female-owned businesses, and non-minority male-owned businesses willing to contract with the Agencies



was drawn from the businesses in the availability and utilization databases. The sample was stratified by ethnicity, gender, and industry.

f. Data Analysis

An ordered logistic regression analysis and an analysis of cumulative frequencies were used to analyze the survey data. A statistically significant finding indicates that there is a non-random relationship between the dependent variable and the independent variable. The cumulative frequencies illustrate the distribution of responses by ethnicity, gender, and, in some cases, industry. A Chi-square test of independence was conducted to determine if there was a statistically significant difference in the frequency of responses by ethnicity and gender.

- ***In the regression coefficient tables***, a finding of statistical significance is denoted by an asterisk (*) when the independent variable is significant at or above the 95% confidence level. Tables of regression results indicate the sign of each variable's coefficient from the regression output. If the coefficient sign is positive, it indicates that there is a positive relationship between the dependent variable and that independent variable. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent variable and that independent variable. When the correlation coefficient is close to zero, it indicates that no linear relationship exists.
- ***In the cumulative frequency summary tables***, a finding of statistical significance is denoted by the *p-value*. If the *p-value* is equal to or less than 0.05, the difference is statistically significant at the 95% confidence level.

2. Profile of Respondents

The business capacity survey was completed by 121 unique businesses – 17.36% were African American-owned, 18.18% were Asian Pacific American-owned, 5.79% were Subcontinent Asian American-owned, 17.36% were Hispanic American-owned, 1.65% were Native American-owned, 3.31% were owned by other races, and 36.36% were Caucasian American-owned. 39.67% were completed by females of all ethnicities, and 60.33% were completed by males of all ethnicities.

Ethnic groups were combined and were analyzed aggregately as “minority males” and “minority females” in the cumulative frequency tables. Regression coefficient tables are presented by industry, minority-owned businesses, Caucasian female-owned businesses, and non-minority male-owned businesses.



Table 6.7: Ethnicity and Gender of Business Owners

Response	African Americans	Asian Pacific Americans	Subcontinent Asian Americans	Hispanic Americans	Native Americans	Caucasian Americans	Other Races	Total
Female	3.31%	4.96%	3.31%	8.26%	1.65%	17.36%	0.83%	39.67%
Male	14.05%	13.22%	2.48%	9.09%	0.00%	19.01%	2.48%	60.33%
Total	17.36%	18.18%	5.79%	17.36%	1.65%	36.36%	3.31%	100.00%

As shown in Table 6.8, 26.45% of businesses provided construction services; 60.33% of businesses provided professional services; and 13.22% of businesses provided goods/equipment/supplies.

Table 6.8: Primary Industry

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
Construction	4.96%	11.57%	4.96%	4.96%	26.45%
Professional Services	12.40%	23.97%	12.40%	11.57%	60.33%
Goods/Equipment/Supplies	4.96%	5.79%	0.00%	2.48%	13.22%
Total Percent	22.31%	41.32%	17.36%	19.01%	100.00%
Total Number	27	50	21	23	121

3. Capacity Analysis

a. Introduction

Several independent economic indicators were examined to determine the effect of minority-owned businesses, Caucasian female-owned businesses, and non-minority male-owned businesses' characteristics on their reported annual gross revenue. Discrimination can depress a minority-owned business' and Caucasian female-owned business' revenue, contracting activity, and number of employees. This analysis will show that contracting opportunities and revenue for minority-owned businesses and Caucasian female-owned businesses are limited even when they are similarly situated and bid on VTA's contracts at the same frequency as non-minority males. Of the metrics considered in this analysis, non-minority male-owned businesses are not awarded contracts more frequently because of any single measure of capacity or a combination of the capacity measures.

4. Business Annual Gross Revenue by Industry

Business annual gross revenue regression coefficient tables were prepared by industry for construction, professional services, and goods/equipment/supplies.

As shown in Table 6.9, 10.43% of businesses earned up to \$50,000; 3.48% of businesses earned \$50,001 to \$100,000; 20.87% of businesses earned \$100,001 to \$300,000; 7.83% of businesses



earned \$300,001 to \$500,000; 11.30% of businesses earned \$500,001 to \$1,000,000; 17.39% of businesses earned \$1,000,001 to \$3,000,000; 10.43% of businesses earned \$3,000,001 to \$5,000,000; 13.91% of businesses earned \$5,000,001 to \$10,000,000; and 4.35% of businesses earned over \$10 million. Also, 9.09% of Caucasian males and 10.53% of Caucasian females earned over \$10 million dollars, whereas 0.00% of minority females and only 2.13% of minority males earned over \$10 million.

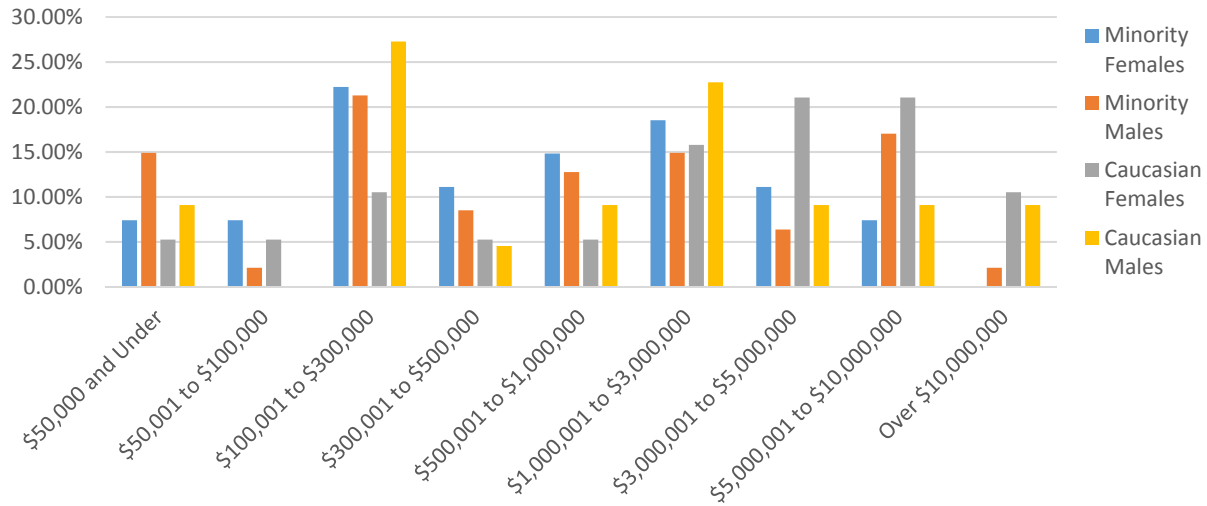
Table 6.9: Annual Gross Revenue

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
\$50,000 and Under	7.41%	14.89%	5.26%	9.09%	10.43%
\$50,001 to \$100,000	7.41%	2.13%	5.26%	0.00%	3.48%
\$100,001 to \$300,000	22.22%	21.28%	10.53%	27.27%	20.87%
\$300,001 to \$500,000	11.11%	8.51%	5.26%	4.55%	7.83%
\$500,001 to \$1,000,000	14.81%	12.77%	5.26%	9.09%	11.30%
\$1,000,001 to \$3,000,000	18.52%	14.89%	15.79%	22.73%	17.39%
\$3,000,001 to \$5,000,000	11.11%	6.38%	21.05%	9.09%	10.43%
\$5,000,001 to \$10,000,000	7.41%	17.02%	21.05%	9.09%	13.91%
Over \$10,000,000	0.00%	2.13%	10.53%	9.09%	4.35%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	27	47	19	22	115

Chart 6.1 further illustrates that minority males and minority females earn less annually than Caucasian males and Caucasian females.



Chart 6.1: Annual Gross Revenue



a. Business Annual Gross Revenue: Construction

Table 6.10 presents the results of the ordered logistic regression conducted to determine how annual gross revenue of a business in the construction industry is impacted by independent business characteristics.

Table 6.10: Annual Gross Revenue Ordered Logistic Regression: Construction

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	0.322741		0.223781	1.44	0.149
Years of Operation	0.385255		0.316963	1.22	0.224
Number of Employees	1.430267	*	0.526195	2.72	0.007
Bonding Amount	-0.020663		0.191783	-0.11	0.914
Associate's Degree (a)	-0.920132		1.757267	-0.52	0.601
Bachelor's Degree	0.119694		0.877206	0.14	0.891
Advanced Degree	0.247454		1.219889	0.20	0.839
Caucasian Female (b)	1.983369		1.645136	1.21	0.228
Minority	-1.336493		0.982617	-1.36	0.174

(a) For the degree variables, the baseline variable is no degree.
 (b) For the ethnicity variables, the baseline variable is Caucasian male.
 (P>|z|) of 0.05 and less denotes findings of statistical significance.
 (*) denotes a statistically significant variable with 95% confidence.



- Businesses in the construction industry that have more current employees have statistically significant higher annual gross revenue

- Businesses in the construction industry that are owned by bachelor’s degree holders or advanced degree holders are more likely to have higher annual gross revenue, but not at a statistically significant level
- Businesses in the construction industry that are owned by minorities are more likely to have lower annual gross revenue, but not at a statistically significant level

b. Business Annual Gross Revenue: Professional Services

Table 6.11 presents the results of the ordered logistic regression conducted to determine how annual gross revenue of a business in the professional services industry is impacted by independent business characteristics.

Table 6.11: Annual Gross Revenue Ordered Logistic Regression: Professional Services

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	0.691435	*	0.181779	3.80	0.000
Years of Operation	0.383041	*	0.189027	2.03	0.043
Number of Employees	1.279046	*	0.225248	5.68	0.000
Bonding Amount	0.235247	*	0.106797	2.20	0.028
Associate's Degree (a)	-		-	-	-
Bachelor's Degree	2.460797		1.349881	1.82	0.068
Advanced Degree	2.270820		1.305756	1.74	0.082
Caucasian Female (b)	0.667187		0.727698	0.92	0.359
Minority	-0.485644		0.607280	-0.80	0.424

(a) For the degree variables, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian male.

(P>|z|) of 0.05 and less denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.

- Businesses in the professional services industry that have more contracts have statistically significant higher annual gross revenue
- Businesses in the professional services industry that have been in operation longer have statistically significant higher annual gross revenue
- Businesses in the professional services industry that have more current employees have statistically significant higher annual gross revenue
- Businesses in the professional services industry that are owned by bachelor’s degree holders and advanced degree holders are more likely to have higher annual gross revenue, but not at a statistically significant level
- Businesses in the professional services industry that are owned by minorities are more likely to have lower annual gross revenue, but not at a statistically significant level



c. Business Annual Gross Revenue: Goods/Equipment/Supplies

Table 6.12 presents the results of the ordered logistic regression conducted to determine how annual gross revenue of a business in the goods/equipment/supplies industry is impacted by independent business characteristics.

Table 6.12: Annual Gross Revenue Ordered Logistic Regression: Goods/Equipment/Supplies

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	-2.415220		1.576656	-1.53	0.126
Years of Operation	5.576557	*	2.817273	1.98	0.048
Number of Employees	13.674880		7.635756	1.79	0.073
Bonding Amount	-0.526480		0.521117	-1.01	0.312
Associate's Degree (a)	-2.448827		3.091885	-0.79	0.428
Bachelor's Degree	16.193480		8.458908	1.91	0.056
Advanced Degree	7.370952		5.052653	1.46	0.145
Caucasian Female (b)	-		-	-	-
Minority	-10.021460		5.310473	-1.89	0.059

(a) For the degree variables, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian male.

(P>|z|) of 0.05 and less denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.

- Businesses in the goods/equipment/supplies industry that have been in operation longer have statistically significant higher annual gross revenue
- Businesses in the goods/equipment/supplies industry that are owned by bachelor's degree holders and advanced degree holders are more likely to have higher annual gross revenue, but not at a statistically significant level
- Businesses in the goods/equipment/supplies industry that are owned by minorities are more likely to have lower annual gross revenue, but not at a statistically significant level

5. Business Annual Gross Revenue by Ethnicity

The business annual gross revenue was analyzed by ethnicity for minority-owned businesses, Caucasian female-owned businesses, and non-minority male-owned businesses.

a. Business Annual Gross Revenue: Non-minority Male-owned Businesses, All Industries



Table 6.13 illustrates how the annual gross revenue of non-minority male-owned businesses is impacted by independent business characteristics.

Table 6.13: Annual Gross Revenue Ordered Logistic Regression: Non-minority Male-owned Businesses

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	-0.401238		0.446969	-0.90	0.369
Years of Operation	-0.494776		0.473659	-1.04	0.296
Number of Employees	2.958079	*	0.891994	3.32	0.001
Bonding Amount	0.460908	*	0.225397	2.04	0.041
Associate's Degree (a)	3.316156		2.842043	1.17	0.243
Bachelor's Degree	-0.128917		1.523080	-0.08	0.933
Advanced Degree	0.692271		1.523960	0.45	0.650

(a) For the degree variables, the baseline variable is no degree.
(P>|z|) of 0.05 and less denotes findings of statistical significance.
(*) denotes a statistically significant variable with 95% confidence.

- Non-minority male-owned businesses that have more current employees have statistically significant higher annual gross revenue
- Non-minority male-owned businesses that have higher bonding amount have statistically significant higher annual gross revenue
- Non-minority male-owned businesses that are owned by associate's degree holders or advanced degree holders are more likely to have higher annual gross revenue, but not at a statistically significant level

b. Business Annual Gross Revenue: Caucasian Female-owned Businesses, All Industries

Table 6.14 illustrates how the annual gross revenue of Caucasian female-owned businesses is impacted by independent business characteristics.

Table 6.14: Annual Gross Revenue Ordered Logistic Regression: Caucasian Female-owned Businesses

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	0.722719	*	0.353232	2.05	0.041
Years of Operation	-0.036203		0.372129	-0.10	0.922
Number of Employees	1.654804	*	0.553548	2.99	0.003
Bonding Amount	0.234937		0.238817	0.98	0.325
Associate's Degree (a)	-		-	-	-
Bachelor's Degree	-		-	-	-
Advanced Degree	-0.405055		1.087996	-0.37	0.710



Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
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- (a) For the degree variables, the baseline variable is no degree.
- (b) For the ethnicity variables, the baseline variable is Caucasian Male.
- (P>|z|) of 0.05 and less denotes findings of statistical significance.
- (*) denotes a statistically significant variable with 95% confidence.
- (-) denotes a variable with too few available data to determine statistical significance.

- Caucasian female-owned businesses that have more contracts have statistically significant higher annual gross revenue
- Caucasian female-owned businesses that have more current employees have statistically significant higher annual gross revenue

c. Business Annual Gross Revenue: Minority-owned Businesses, All Industries

Table 6.15 illustrates how the annual gross revenue of minority-owned businesses is impacted by independent business characteristics.²²⁶

Table 6.15: Annual Gross Revenue Ordered Logistic Regression: Minority-owned Businesses

Annual Gross Revenue	Coefficient	Significance	Standard Error	Z-score	P> z
Number of Contracts	0.411956	*	0.137661	2.99	0.003
Years of Operation	0.727073	*	0.184978	3.93	0.000
Number of Employees	1.303211	*	0.232881	5.60	0.000
Bonding Amount	0.217646	*	0.098034	2.22	0.026
Associate's Degree (a)	-3.340662	*	1.064239	-3.14	0.002
Bachelor's Degree	-0.019703		0.675213	-0.03	0.977
Advanced Degree	-0.121891		0.698849	-0.17	0.862

- (a) For the degree variables, the baseline variable is no degree.
- (b) For the ethnicity variables, the baseline variable is Caucasian Male.
- (P>|z|) of 0.05 and less denotes findings of statistical significance.
- (*) denotes a statistically significant variable with 95% confidence.

- Minority-owned businesses that have more contracts have statistically significant higher annual gross revenue
- Minority-owned businesses that have been in operation longer have statistically significant higher annual gross revenue
- Minority-owned businesses that have more current employees have statistically significant higher annual gross revenue



²²⁶ Minority denotes African Americans, Asian Pacific Americans, Subcontinent Asian Americans, Hispanic Americans, and Native Americans.

- Minority-owned businesses that have higher bonding amount have statistically significant higher annual gross revenue
- Minority-owned businesses that are owned by associate's degree holders have statistically significant lower annual gross revenue

6. Current Employees by Ethnicity, All Industries

Because the number of employees had a positive correlation with annual gross revenue for all business classifications by ethnicity and gender, the following tables are presented.

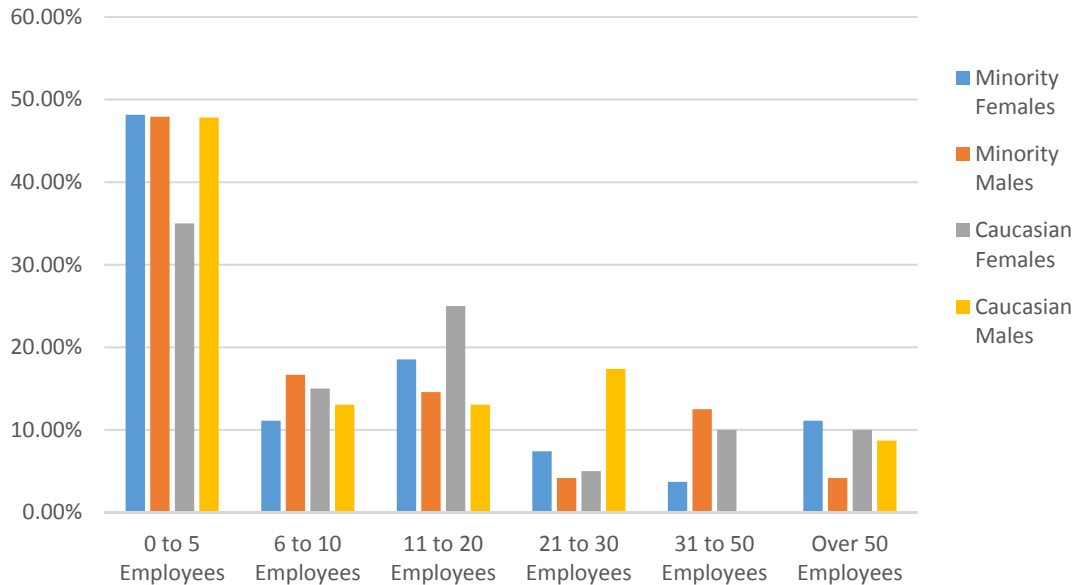
As shown in Table 6.16, 45.76% of business had less than 5 employees; 14.41% had 6 to 10 employees; 16.95% had 11 to 20 employees; 7.63% had 21 to 30 employees; 7.63% had 31 to 50 employees; and 7.63% had more than 50 employees.

Table 6.16: Current Number of Employees

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
0 to 5 Employees	48.15%	47.92%	35.00%	47.83%	45.76%
6 to 10 Employees	11.11%	16.67%	15.00%	13.04%	14.41%
11 to 20 Employees	18.52%	14.58%	25.00%	13.04%	16.95%
21 to 30 Employees	7.41%	4.17%	5.00%	17.39%	7.63%
31 to 50 Employees	3.70%	12.50%	10.00%	0.00%	7.63%
Over 50 Employees	11.11%	4.17%	10.00%	8.70%	7.63%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	27	48	20	23	118



Chart 6.2: Current Number of Employees



7. Number of Contracts, All Industries

Table 6.17 illustrates that 38.46% of minority females were awarded over 20 contracts; 21.74% of minority males were awarded over 20 contracts; 42.11% of Caucasian females were awarded over 20 contracts, and 28.57% of Caucasian males were awarded over 20 contracts.

Table 6.17: Number of Annual Contracts

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
Not Applicable	11.54%	23.91%	10.53%	14.29%	16.96%
1 Contract	7.69%	6.52%	0.00%	0.00%	4.46%
2 to 5 Contracts	23.08%	17.39%	15.79%	23.81%	19.64%
6 to 10 Contracts	11.54%	21.74%	10.53%	19.05%	16.96%
11 to 20 Contracts	7.69%	8.70%	21.05%	14.29%	11.61%
Over 20 Contracts	38.46%	21.74%	42.11%	28.57%	30.36%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	26	46	19	21	112



8. Frequency of Bidding, All Industries

As shown in Table 6.18, 30.43% of minority females submitted bids to Agencies from July 1, 2011, to June 30, 2015; while 44.44% of minority males, 40.00% of Caucasian females, and 37.50% of Caucasian males submitted bids to Agencies from July 1, 2011, to June 30, 2015.

Table 6.18: Submitted a Bid to Agencies

Response	Minority Females	Minority Males	Caucasian Females	Caucasian Males	Total
Yes	30.43%	44.44%	40.00%	37.50%	39.42%
No	69.57%	55.56%	60.00%	62.50%	60.58%
Total Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Total Number	23	45	20	16	104

9. Conclusion

The analysis shows that the number of employees have statistically significant relationships with the business's annual gross revenue in construction, professional services, and goods/equipment/supplies for all ethnic and gender groups. This finding supports an inference that all businesses, regardless of ethnicity or gender, witness an increase in revenue when they have more employees. However, in *North Shore Concrete & Association v. City of New York*, the court stated in reference to construction contractors that the "firm size is not a reliable indicator of the kind of work a firm can perform."²²⁷ The court further stated that "it is relatively easy to obtain 'qualifications' by hiring additional employees." Although this court's opinion specifically references the construction industry, the same elasticity characterizes non-construction related services. In the presence of contracting opportunities, non-construction related firms have the elasticity to expand their capacity to perform more and larger contracts through subcontracting, joint ventures, and staff augmentation. Therefore, the number of employees is not a reliable indicator of business capacity for either industry.

Considering the metrics reviewed in this analysis, Caucasian males are not awarded contracts more frequently because of any single business economic indicators or combination of measures. The fact that Caucasian males are awarded more contracts, as detailed in *Chapter 3: Prime Contractor Utilization Analysis*, is likely a function of public and private sector business practices.



²²⁷ *N. Shore Concrete & Assoc. v. City of New York*, No. 94-cv-4017, 1998 U.S. Dist. LEXIS 6785 * 25 (E.D.N.Y. Apr. 12, 1998).

IV. Prime Contractor Availability Analysis

The size of VTA's contracts demonstrates that the majority of the contracts are small, requiring limited capacity to perform. Furthermore, the awards VTA has made to DBEs demonstrate that the capacity of the available businesses is considerably greater than needed to bid on the majority of the contracts awarded in the three industries studied. Nevertheless, as noted in *Chapter 3: Prime Contractor Utilization Analysis*, the decision was made to limit the prime contracts subject to the disparity analysis to those valued \$1,000,000 and under for construction, and \$500,000 and under for professional services and goods/equipment/supplies.

The prime contractor availability findings for VTA's market areas are as follows:

A. Construction Prime Contractor Availability

The distribution of available construction prime contractors is summarized in Table 6.19.

African Americans account for 14.45% of the construction prime contractors in VTA's market area.

Asian Pacific Americans account for 17.17% of the construction prime contractors in VTA's market area.

Subcontinent Asian Americans account for 4.17% of the construction prime contractors in VTA's market area.

Hispanic Americans account for 17.17% of the construction prime contractors in VTA's market area.

Native Americans account for 0.80% of the construction prime contractors in VTA's market area.

Caucasian Females account for 15.89% of the construction prime contractors in VTA's market area.

Non-minority Males account for 30.34% of the construction prime contractors in VTA's market area.



**Table 6.19: Available Construction Prime Contractors,
July 1, 2011, to June 30, 2015**

Ethnicity	Percent of Businesses
African Americans	13.35%
Asian Pacific Americans	15.58%
Subcontinent Asian Americans	3.86%
Hispanic Americans	16.17%
Native Americans	0.89%
Caucasian Females	14.99%
Non-minority Males	35.16%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.45%
African American Males	8.90%
Asian Pacific American Females	5.04%
Asian Pacific American Males	10.53%
Subcontinent Asian American Females	1.34%
Subcontinent Asian American Males	2.52%
Hispanic American Females	3.26%
Hispanic American Males	12.91%
Native American Females	0.15%
Native American Males	0.74%
Caucasian Females	14.99%
Non-minority Males	35.16%
TOTAL	100.00%



B. Professional Services Prime Contractor Availability

The distribution of available professional services prime contractors is summarized in Table 6.20.

African Americans account for 11.08% of the professional services prime contractors in VTA's market area.

Asian Pacific Americans account for 17.32% of the professional services prime contractors in VTA's market area.

Subcontinent Asian Americans account for 6.75% of the professional services prime contractors in VTA's market area.

Hispanic Americans account for 8.28% of the professional services prime contractors in VTA's market area.

Native Americans account for 0.76% of the professional services prime contractors in VTA's market area.

Caucasian Females account for 21.91% of the professional services prime contractors in VTA's market area.

Non-minority Males account for 33.89% of the professional services prime contractors in VTA's market area.



**Table 6.20: Available Professional Services Prime Contractors,
July 1, 2011, to June 30, 2015**

Ethnicity	Percent of Businesses
African Americans	11.08%
Asian Pacific Americans	17.32%
Subcontinent Asian Americans	6.75%
Hispanic Americans	8.28%
Native Americans	0.76%
Caucasian Females	21.91%
Non-minority Males	33.89%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.71%
African American Males	6.37%
Asian Pacific American Females	6.11%
Asian Pacific American Males	11.21%
Subcontinent Asian American Females	2.80%
Subcontinent Asian American Males	3.95%
Hispanic American Females	2.42%
Hispanic American Males	5.86%
Native American Females	0.25%
Native American Males	0.51%
Caucasian Females	21.91%
Non-minority Males	33.89%
TOTAL	100.00%



C. Goods/Equipment/Supplies Prime Contractor Availability

The distribution of available goods/equipment/supplies prime contractors is summarized in Table 6.21.

African Americans account for 9.87% of the goods/equipment/supplies prime contractors in VTA's market area.

Asian Pacific Americans account for 17.20% of the goods/equipment/supplies prime contractors in VTA's market area.

Subcontinent Asian Americans account for 6.05% of the goods/equipment/supplies prime contractors in VTA's market area.

Hispanic Americans account for 15.29% of the goods/equipment/supplies prime contractors in VTA's market area.

Native Americans account for 0.32% of the goods/equipment/supplies prime contractors in VTA's market area.

Caucasian Females account for 12.42% of the goods/equipment/supplies prime contractors in VTA's market area.

Non-minority Males account for 38.85% of the goods/equipment/supplies prime contractors in VTA's market area.



**Table 6.21: Available Goods/Equipment/Supplies Prime Contractors,
July 1, 2011, to June 30, 2015**

Ethnicity	Percent of Businesses
African Americans	9.87%
Asian Pacific Americans	17.20%
Subcontinent Asian Americans	6.05%
Hispanic Americans	15.29%
Native Americans	0.32%
Caucasian Females	12.42%
Non-minority Males	38.85%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	3.50%
African American Males	6.37%
Asian Pacific American Females	6.37%
Asian Pacific American Males	10.83%
Subcontinent Asian American Females	2.87%
Subcontinent Asian American Males	3.18%
Hispanic American Females	4.14%
Hispanic American Males	11.15%
Native American Females	0.32%
Native American Males	0.00%
Caucasian Females	12.42%
Non-minority Males	38.85%
TOTAL	100.00%



V. Subcontractor Availability Analysis

A. Source of Willing and Able Subcontractors

All available prime contractors were included in the calculation of subcontractor availability. Additional subcontractors in VTA's market area were identified using the source listed in Table 6.22. Subcontractor availability was not calculated for the goods/equipment/supplies industry, as the subcontracting activity in that industry was limited.

Table 6.22: Unique Subcontractor Availability Data Source

Source	Type of Information
Subcontract Awards Provided by VTA	DBEs and Non-DBEs
Subcontractors Identified by Prime Contractors	DBEs and Non-DBEs

B. Determination of Willingness and Capacity

Subcontractor availability was limited to utilized prime contractors and the unique businesses utilized as subcontractors. Therefore, the determination of willingness and capacity was achieved. Furthermore, *Crososn* does not require a separate measure of subcontractor capacity in the analysis of subcontractor availability.



C. Construction Subcontractor Availability

The distribution of available construction subcontractors is summarized in Table 6.23.

African Americans account for 12.26% of the construction subcontractors in VTA's market area.

Asian Pacific Americans account for 15.53% of the construction subcontractors in VTA's market area.

Subcontinent Asian Americans account for 3.68% of the construction subcontractors in VTA's market area.

Hispanic Americans account for 15.12% of the construction subcontractors in VTA's market area.

Native Americans account for 0.68% of the construction subcontractors in VTA's market area.

Caucasian Females account for 14.85% of the construction subcontractors in VTA's market area.

Non-minority Males account for 37.87% of the construction subcontractors in VTA's market area.



**Table 6.23: Available Construction Subcontractors,
July 1, 2011, to June 30, 2015**

Ethnicity	Percent of Businesses
African American	12.26%
Asian Pacific American	15.53%
Subcontinent Asian American	3.68%
Hispanic American	15.12%
Native American	0.68%
Caucasian Females	14.85%
Non-minority Males	37.87%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.09%
African American Males	8.17%
Asian Pacific American Females	4.90%
Asian Pacific American Males	10.63%
Subcontinent Asian American Females	1.36%
Subcontinent Asian American Males	2.32%
Hispanic American Females	3.27%
Hispanic American Males	11.85%
Native American Females	0.14%
Native American Males	0.54%
Caucasian Females	14.85%
Non-minority Males	37.87%
TOTAL	100.00%



D. Professional Services Subcontractor Availability

The distribution of available professional services subcontractors is summarized in Table 6.24.

African Americans account for 10.89% of the professional services subcontractors in VTA's market area.

Asian Pacific Americans account for 17.02% of the professional services subcontractors in VTA's market area.

Subcontinent Asian Americans account for 6.63% of the professional services subcontractors in VTA's market area.

Hispanic Americans account for 8.26% of the professional services subcontractors in VTA's market area.

Native Americans account for 0.75% of the professional services subcontractors in VTA's market area.

Caucasian Females account for 21.65% of the professional services subcontractors in VTA's market area.

Non-minority Males account for 34.79% of the professional services subcontractors in VTA's market area.



**Table 6.24: Available Professional Services Subcontractors,
July 1, 2011, to June 30, 2015**

Ethnicity	Percent of Businesses
African American	10.89%
Asian Pacific American	17.02%
Subcontinent Asian American	6.63%
Hispanic American	8.26%
Native American	0.75%
Caucasian Females	21.65%
Non-minority Males	34.79%
TOTAL	100.00%
Ethnicity and Gender	Percent of Businesses
African American Females	4.63%
African American Males	6.26%
Asian Pacific American Females	6.01%
Asian Pacific American Males	11.01%
Subcontinent Asian American Females	2.75%
Subcontinent Asian American Males	3.88%
Hispanic American Females	2.38%
Hispanic American Males	5.88%
Native American Females	0.25%
Native American Males	0.50%
Caucasian Females	21.65%
Non-minority Males	34.79%
TOTAL	100.00%



VI. Summary

This chapter provided the availability analysis for the VTA's market area. A total of 1,120 unique businesses that can provide goods and services during the study period in one or more of the three industries were identified.

Prime contractor and subcontractor availability were analyzed by ethnicity and gender. Minority-owned businesses account for 45.54% of prime contractors within the three industries analyzed, Caucasian female-owned businesses account for 19.02% of prime contractors, and non-minority Male-owned businesses account for 35.45% of prime contractors.

Minority-owned businesses account for 41.61% of subcontractors within the two industries analyzed, Caucasian female-owned businesses account for 19.10% of subcontractors, and non-minority male-owned businesses account for 39.30% of subcontractors.



CHAPTER 7: Prime Contract Disparity Analysis

I. Introduction

The objective of the disparity analysis is to determine the levels at which Disadvantaged Business Enterprises (DBE) are utilized on Santa Clara Valley Transportation Authority (VTA) prime contracts.²²⁸ Under a fair and equitable system of awarding prime contracts, the proportion of prime contract dollars awarded to DBEs should be relatively close to the corresponding proportion of available DBEs in the relevant market area.²²⁹ 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. This analysis assumes a fair and equitable system.²³⁰ *Croson* states that an inference of discrimination can be made *prima facie* if the disparity is statistically significant. Under the *Croson* model, non-minority male-owned businesses (non-DBE) are not subjected to a statistical test of underutilization.

The first step in conducting the statistical test is to calculate the contract value that each ethnic and gender group is expected to receive. This value is based on each group's availability in the market area and shall be referred to as the **expected contract amount**. The next step computes the difference between each ethnic and gender group's expected contract amount and the **actual contract amount** received by each group. The **disparity ratio** is then computed by dividing the actual contract amount by the expected contract amount.

For parametric and non-parametric analyses, 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 equal to or less than 0.05, the difference is statistically significant.²³¹

In the simulation analysis, the p-value takes into account a combination of the distribution formulated from the empirical data and the contract dollar amounts or contract rank. If the actual

²²⁸ Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

²²⁹ Availability is defined as the number of ready, willing, and able firms. The methodology for determining willing and able firms is detailed in *Chapter 6: Prime Contractor and Subcontractor Availability Analysis*.

²³⁰ 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 statistical standard to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analysis here was done within the 95-percent confidence level.

²³¹ A statistical test is not performed for underutilization of non-minority males or when the ratio of utilized to available DBEs is greater than one.



contract dollar amount, or actual contract rank, falls below the fifth percentile of the distribution, it denotes a p-value less than 0.05, which is statistically significant.

Mason Tillman’s statistical model employs all three methods simultaneously to each industry. Findings from one of the three methods are reported. If the p-value from any one of the three methods is less than 0.05, the finding is reported in the disparity tables as statistically significant. If the p-value is greater than 0.05, the finding is reported as not statistically significant.

II. Disparity Analysis

A prime contract disparity analysis was performed on the contracts awarded in the construction, professional services, and goods/equipment/supplies industries during the July 1, 2011, to June 30, 2015, study period.

The threshold levels for the size of contracts examined in each industry were set to ensure that there was capacity within the pool of willing businesses to perform the prime contracts analyzed herein. The quartile analysis, as discussed in the *Chapter 3: Prime Contractor Utilization Analysis*, was used to set the threshold within which the statistical disparity analysis was performed.

The competitive contracts analyzed were limited by dollar value to contracts beneath the upper limit of contracts, representing the 75th percentile of VTA’s contracts awarded in each of the three industries. Applying this threshold mirrors the capacity of businesses enumerated in the availability analysis and ensures that contracts that are outliers in size and scope do not skew the results of this analysis. The competitive contract thresholds for analysis by industry are listed in Table 7.1.

Table 7.1: Competitive Contract Thresholds for Analysis by Industry

Industry	Contract Threshold
Construction	\$1,000,000 and Under
Professional Services	\$500,000 and Under
Goods/Equipment/Supplies	\$500,000 and Under

The disparity analysis was also conducted for informal thresholds. The informal thresholds were defined by VTA’s procurement policies. The informal thresholds for each industry are listed in Table 7.2.



Table 7.2: Informal Thresholds for Analysis by Industry

Industry	Contract Threshold
Construction	\$25,000 and Under
Professional Services	\$50,000 and Under
Goods/Equipment/Supplies	\$50,000 and Under

The findings from the three methods employed to calculate statistical significance, as discussed on page 7-1, are presented in the subsequent sections. The outcomes of the statistical analyses are presented in the “P-Value” column of the tables. A description of these statistical outcomes, as depicted in the disparity tables, is presented below in Table 7.3.

Table 7.3: 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"> • DBEs: 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 DBEs



A. Disparity Analysis: Competitive Prime Contracts, by Industry

1. Construction Prime Contracts Valued \$1,000,000 and Under

The disparity analysis of construction prime contracts valued \$1,000,000 and under is described below and depicted in Table 7.4 and Chart 7.1.

African Americans represent 14.45% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$1,000,000 and under. This underutilization is not statistically significant.

Asian Pacific Americans represent 17.17% of the available construction businesses and received 11.40% of the dollars on construction contracts valued \$1,000,000 and under. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 4.17% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$1,000,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 17.17% of the available construction businesses and received 10.49% of the dollars on construction contracts valued \$1,000,000 and under. This underutilization is not statistically significant.

Native Americans represent 0.80% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$1,000,000 and under. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 15.89% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$1,000,000 and under. This underutilization is not statistically significant.

Non-minority Males represent 30.34% of the available construction businesses and received 78.11% of the dollars on construction contracts valued \$1,000,000 and under. This overutilization is statistically significant.



**Table 7.4: Disparity Analysis: Construction Prime Contracts Valued \$1,000,000 and Under,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	14.45%	\$960,820	-\$960,820	0.00	not significant
Asian Pacific Americans	\$758,098	11.40%	17.17%	\$1,142,308	-\$384,211	0.66	not significant
Subcontinent Asian Americans	\$0	0.00%	4.17%	\$277,570	-\$277,570	0.00	not significant
Hispanic Americans	\$697,889	10.49%	17.17%	\$1,142,308	-\$444,420	0.61	not significant
Native Americans	\$0	0.00%	0.80%	\$53,379	-\$53,379	0.00	----
Caucasian Females	\$0	0.00%	15.89%	\$1,056,902	-\$1,056,902	0.00	not significant
Non-minority Males	\$5,195,023	78.11%	30.34%	\$2,017,722	\$3,177,301	2.57	< .05 †
TOTAL	\$6,651,009	100.00%	100.00%	\$6,651,009			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	4.82%	\$320,273	-\$320,273	0.00	not significant
African American Males	\$0	0.00%	9.63%	\$640,547	-\$640,547	0.00	not significant
Asian Pacific American Females	\$0	0.00%	5.62%	\$373,652	-\$373,652	0.00	not significant
Asian Pacific American Males	\$758,098	11.40%	11.56%	\$768,656	-\$10,558	0.99	not significant
Subcontinent Asian American Females	\$0	0.00%	1.44%	\$96,082	-\$96,082	0.00	not significant
Subcontinent Asian American Males	\$0	0.00%	2.73%	\$181,488	-\$181,488	0.00	not significant
Hispanic American Females	\$0	0.00%	3.53%	\$234,867	-\$234,867	0.00	not significant
Hispanic American Males	\$697,889	10.49%	13.64%	\$907,441	-\$209,552	0.77	not significant
Native American Females	\$0	0.00%	0.16%	\$10,676	-\$10,676	0.00	----
Native American Males	\$0	0.00%	0.64%	\$42,703	-\$42,703	0.00	----
Caucasian Females	\$0	0.00%	15.89%	\$1,056,902	-\$1,056,902	0.00	not significant
Non-minority Males	\$5,195,023	78.11%	30.34%	\$2,017,722	\$3,177,301	2.57	< .05 †
TOTAL	\$6,651,009	100.00%	100.00%	\$6,651,009			

(*) denotes a statistically significant underutilization.

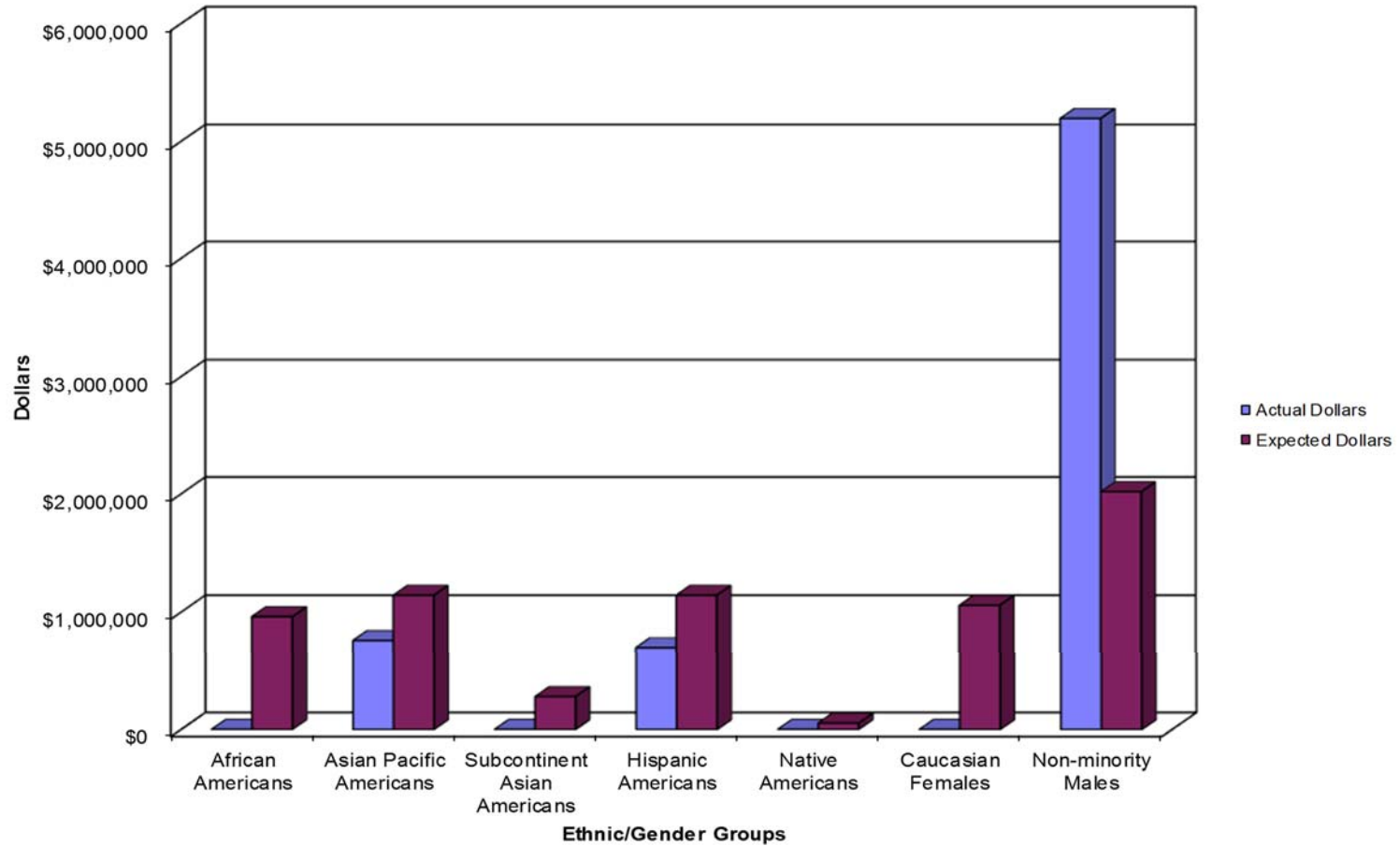
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.1: Disparity Analysis: Construction Prime Contracts Valued \$1,000,000 and Under, July 1, 2011, to June 30, 2015



2. Professional Services Prime Contracts Valued \$500,000 and Under

The disparity analysis of professional services prime contracts valued \$500,000 and under is described below and depicted in Table 7.5 and Chart 7.2.

African Americans represent 11.08% of the available professional services businesses and received 0.00% of the dollars on professional services contracts valued \$500,000 and under. This underutilization is statistically significant.

Asian Pacific Americans represent 17.32% of the available professional services businesses and received 18.21% of the dollars on professional services contracts valued \$500,000 and under. This study does not test statistically the overutilization of DBEs.

Subcontinent Asian Americans represent 6.75% of the available professional services businesses and received 2.34% of the dollars on professional services contracts valued \$500,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 8.28% of the available professional services businesses and received 0.11% of the dollars on professional services contracts valued \$500,000 and under. This underutilization is statistically significant.

Native Americans represent 0.76% of the available professional services businesses and received 0.00% of the dollars on professional services contracts valued \$500,000 and under. While this group was underutilized, there were too few available firms to determine the statistical significance.

Caucasian Females represent 21.91% of the available professional services businesses and received 1.40% of the dollars on professional services contracts valued \$500,000 and under. This underutilization is statistically significant.

Non-minority Males represent 33.89% of the available professional services businesses and received 77.94% of the dollars on professional services contracts valued \$500,000 and under. This overutilization is statistically significant.



**Table 7.5: Disparity Analysis: Professional Services Prime Contracts Valued \$500,000 and Under,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	11.08%	\$685,284	-\$685,284	0.00	< .05 *
Asian Pacific Americans	\$1,126,227	18.21%	17.32%	\$1,071,248	\$54,979	1.05	**
Subcontinent Asian Americans	\$144,412	2.34%	6.75%	\$417,472	-\$273,059	0.35	not significant
Hispanic Americans	\$6,900	0.11%	8.28%	\$511,994	-\$505,094	0.01	< .05 *
Native Americans	\$0	0.00%	0.76%	\$47,261	-\$47,261	0.00	----
Caucasian Females	\$86,323	1.40%	21.91%	\$1,354,814	-\$1,268,492	0.06	< .05 *
Non-minority Males	\$4,819,447	77.94%	33.89%	\$2,095,236	\$2,724,211	2.30	< .05 †
TOTAL	\$6,183,309	100.00%	100.00%	\$6,183,309			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	
African American Females	\$0	0.00%	4.71%	\$291,443	-\$291,443	0.00	not significant
African American Males	\$0	0.00%	6.37%	\$393,841	-\$393,841	0.00	not significant
Asian Pacific American Females	\$0	0.00%	6.11%	\$378,088	-\$378,088	0.00	not significant
Asian Pacific American Males	\$1,126,227	18.21%	11.21%	\$693,161	\$433,066	1.62	**
Subcontinent Asian American Females	\$0	0.00%	2.80%	\$173,290	-\$173,290	0.00	not significant
Subcontinent Asian American Males	\$144,412	2.34%	3.95%	\$244,182	-\$99,769	0.59	not significant
Hispanic American Females	\$0	0.00%	2.42%	\$149,660	-\$149,660	0.00	not significant
Hispanic American Males	\$6,900	0.11%	5.86%	\$362,334	-\$355,434	0.02	not significant
Native American Females	\$0	0.00%	0.25%	\$15,754	-\$15,754	0.00	----
Native American Males	\$0	0.00%	0.51%	\$31,507	-\$31,507	0.00	----
Caucasian Females	\$86,323	1.40%	21.91%	\$1,354,814	-\$1,268,492	0.06	< .05 *
Non-minority Males	\$4,819,447	77.94%	33.89%	\$2,095,236	\$2,724,211	2.30	< .05 †
TOTAL	\$6,183,309	100.00%	100.00%	\$6,183,309			

(*) denotes a statistically significant underutilization.

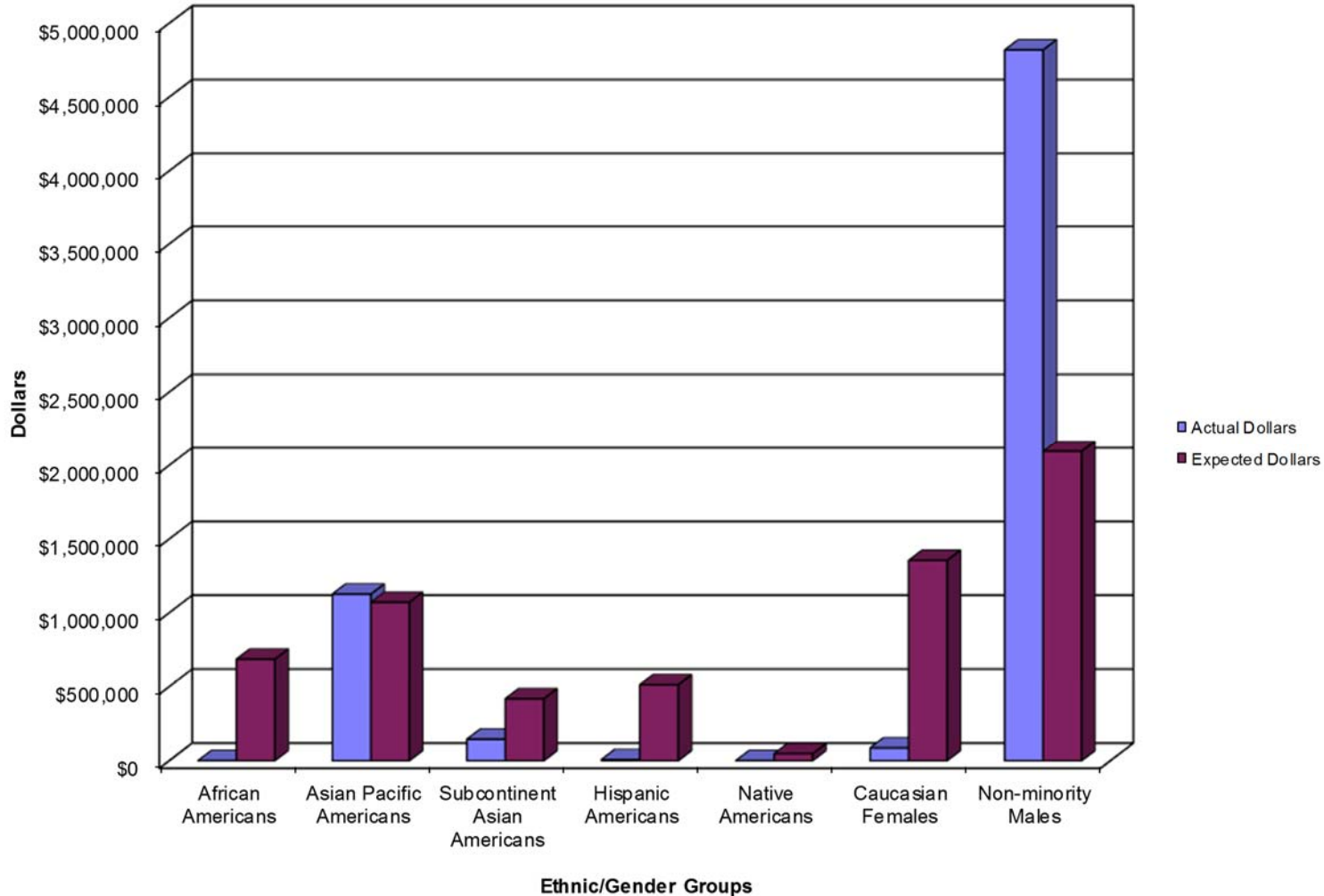
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.2: Disparity Analysis: Professional Services Prime Contracts Valued \$500,000 and Under, July 1, 2011, to June 30, 2015



3. Goods/Equipment/Supplies Prime Contracts Valued \$500,000 and Under

The disparity analysis of goods/equipment/supplies prime contracts valued \$500,000 and under is described below and depicted in Table 7.6 and Chart 7.3.

African Americans represent 9.87% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This underutilization is statistically significant.

Asian Pacific Americans represent 17.20% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This underutilization is statistically significant.

Subcontinent Asian Americans represent 6.05% of the available goods/equipment/supplies businesses and received 2.64% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 15.29% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This underutilization is statistically significant.

Native Americans represent 0.32% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 12.42% of the available goods/equipment/supplies businesses and received 3.77% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This underutilization is not statistically significant.

Non-minority Males represent 38.85% of the available goods/equipment/supplies businesses and received 93.59% of the dollars on goods/equipment/supplies contracts valued \$500,000 and under. This overutilization is statistically significant.



**Table 7.6: Disparity Analysis: Goods/Equipment/Supplies Prime Contracts Valued \$500,000 and Under,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	9.87%	\$491,507	-\$491,507	0.00	< .05 *
Asian Pacific Americans	\$0	0.00%	17.20%	\$856,174	-\$856,174	0.00	< .05 *
Subcontinent Asian Americans	\$131,604	2.64%	6.05%	\$301,246	-\$169,643	0.44	not significant
Hispanic Americans	\$0	0.00%	15.29%	\$761,044	-\$761,044	0.00	< .05 *
Native Americans	\$0	0.00%	0.32%	\$15,855	-\$15,855	0.00	----
Caucasian Females	\$187,672	3.77%	12.42%	\$618,348	-\$430,676	0.30	not significant
Non-minority Males	\$4,659,218	93.59%	38.85%	\$1,934,319	\$2,724,899	2.41	< .05 †
TOTAL	\$4,978,493	100.00%	100.00%	\$4,978,493			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	3.50%	\$174,406	-\$174,406	0.00	not significant
African American Males	\$0	0.00%	6.37%	\$317,101	-\$317,101	0.00	not significant
Asian Pacific American Females	\$0	0.00%	6.37%	\$317,101	-\$317,101	0.00	not significant
Asian Pacific American Males	\$0	0.00%	10.83%	\$539,073	-\$539,073	0.00	< .05 *
Subcontinent Asian American Females	\$0	0.00%	2.87%	\$142,696	-\$142,696	0.00	not significant
Subcontinent Asian American Males	\$131,604	2.64%	3.18%	\$158,551	-\$26,947	0.83	not significant
Hispanic American Females	\$0	0.00%	4.14%	\$206,116	-\$206,116	0.00	not significant
Hispanic American Males	\$0	0.00%	11.15%	\$554,928	-\$554,928	0.00	< .05 *
Native American Females	\$0	0.00%	0.32%	\$15,855	-\$15,855	0.00	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$187,672	3.77%	12.42%	\$618,348	-\$430,676	0.30	not significant
Non-minority Males	\$4,659,218	93.59%	38.85%	\$1,934,319	\$2,724,899	2.41	< .05 †
TOTAL	\$4,978,493	100.00%	100.00%	\$4,978,493			

(*) denotes a statistically significant underutilization.

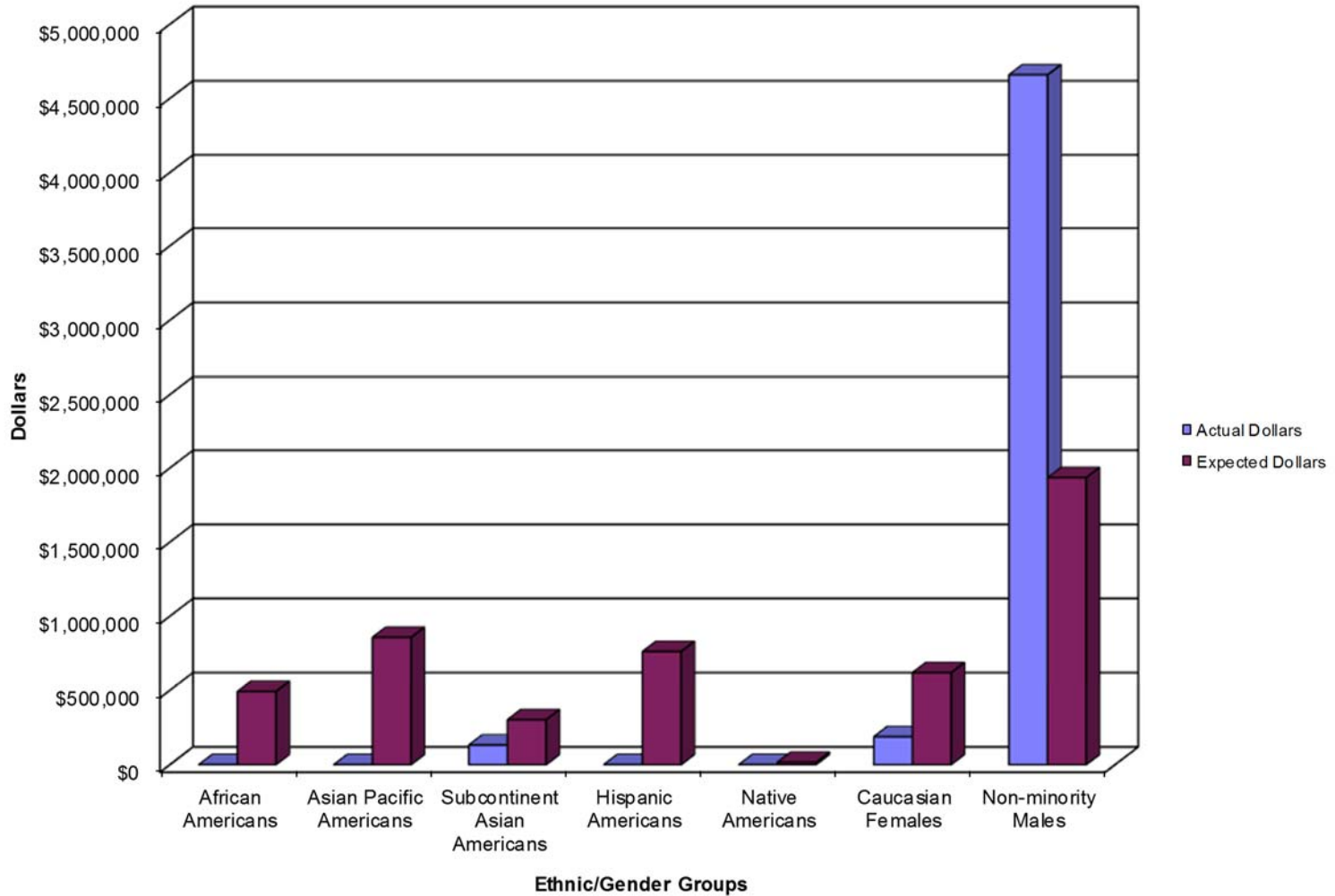
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.3: Disparity Analysis: Goods/Equipment/Supplies Prime Contracts Valued \$500,000 and Under, July 1, 2011, to June 30, 2015



B. Disparity Analysis: Informal Prime Contracts, by Industry

1. Construction Prime Contracts Valued \$25,000 and Under

The disparity analysis of construction prime contracts valued \$25,000 and under is described below and depicted in Table 7.7 and Chart 7.4.

African Americans represent 14.45% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. This underutilization is not statistically significant.

Asian Pacific Americans represent 17.17% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 4.17% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 17.17% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. This underutilization is not statistically significant.

Native Americans represent 0.80% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 15.89% of the available construction businesses and received 0.00% of the dollars on construction contracts valued \$25,000 and under. This underutilization is not statistically significant.

Non-minority Males represent 30.34% of the available construction businesses and received 100.00% of the dollars on construction contracts valued \$25,000 and under. This overutilization is statistically significant.



**Table 7.7: Disparity Analysis: Construction Prime Contracts Valued \$25,000 and Under,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	14.45%	\$3,017	-\$3,017	0.00	not significant
Asian Pacific Americans	\$0	0.00%	17.17%	\$3,587	-\$3,587	0.00	not significant
Subcontinent Asian Americans	\$0	0.00%	4.17%	\$871	-\$871	0.00	not significant
Hispanic Americans	\$0	0.00%	17.17%	\$3,587	-\$3,587	0.00	not significant
Native Americans	\$0	0.00%	0.80%	\$168	-\$168	0.00	----
Caucasian Females	\$0	0.00%	15.89%	\$3,318	-\$3,318	0.00	not significant
Non-minority Males	\$20,882	100.00%	30.34%	\$6,335	\$14,547	3.30	< .05 †
TOTAL	\$20,882	100.00%	100.00%	\$20,882			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	
African American Females	\$0	0.00%	4.82%	\$1,006	-\$1,006	0.00	not significant
African American Males	\$0	0.00%	9.63%	\$2,011	-\$2,011	0.00	not significant
Asian Pacific American Females	\$0	0.00%	5.62%	\$1,173	-\$1,173	0.00	not significant
Asian Pacific American Males	\$0	0.00%	11.56%	\$2,413	-\$2,413	0.00	not significant
Subcontinent Asian American Females	\$0	0.00%	1.44%	\$302	-\$302	0.00	not significant
Subcontinent Asian American Males	\$0	0.00%	2.73%	\$570	-\$570	0.00	not significant
Hispanic American Females	\$0	0.00%	3.53%	\$737	-\$737	0.00	not significant
Hispanic American Males	\$0	0.00%	13.64%	\$2,849	-\$2,849	0.00	not significant
Native American Females	\$0	0.00%	0.16%	\$34	-\$34	0.00	----
Native American Males	\$0	0.00%	0.64%	\$134	-\$134	0.00	----
Caucasian Females	\$0	0.00%	15.89%	\$3,318	-\$3,318	0.00	not significant
Non-minority Males	\$20,882	100.00%	30.34%	\$6,335	\$14,547	3.30	< .05 †
TOTAL	\$20,882	100.00%	100.00%	\$20,882			

(*) denotes a statistically significant underutilization.

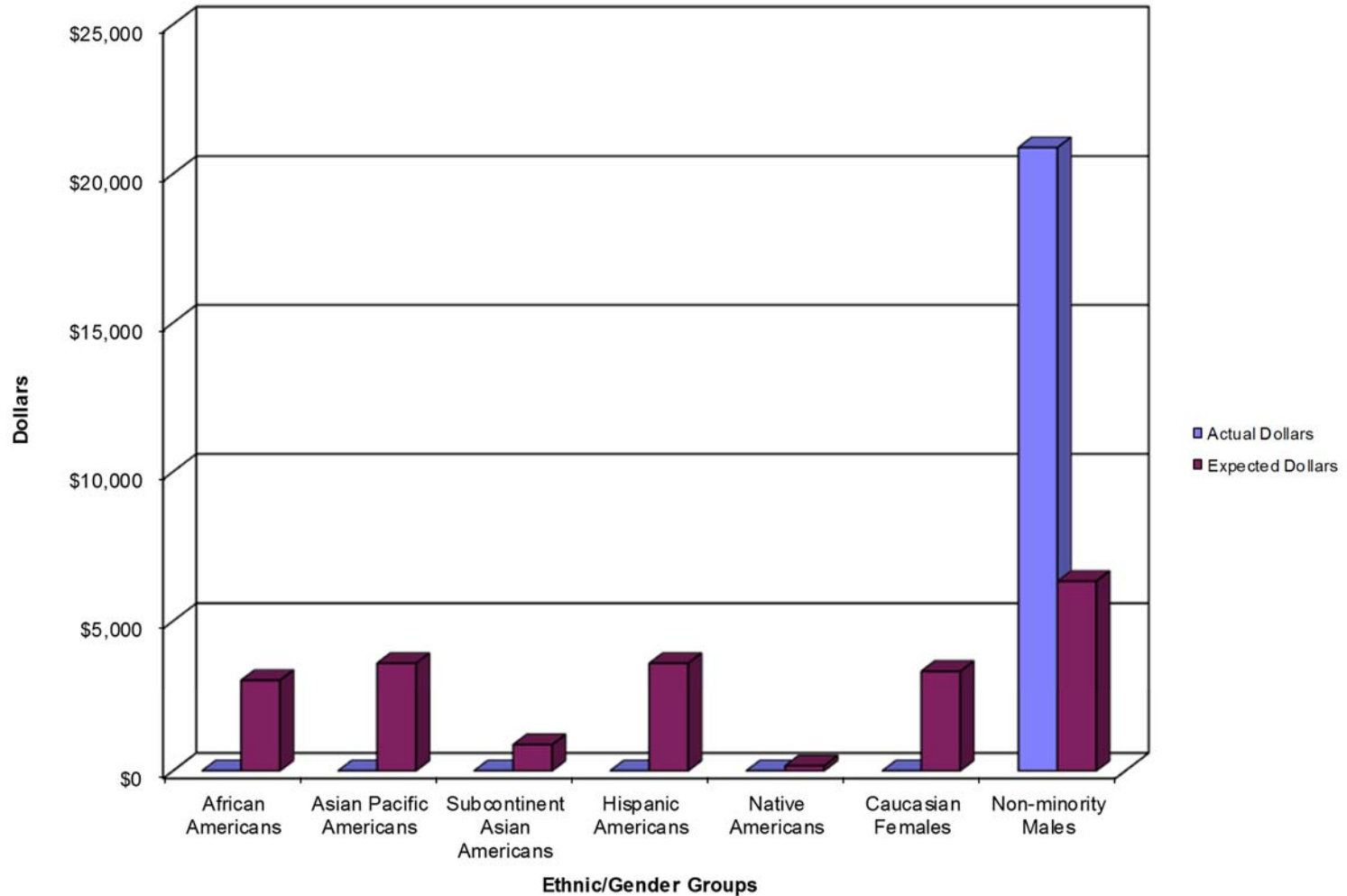
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.4: Disparity Analysis: Construction Prime Contracts Valued \$25,000 and Under, July 1, 2011, to June 30, 2015



2. Professional Services Prime Contracts Valued \$50,000 and Under

The disparity analysis of professional services prime contracts valued \$50,000 and under is described below and depicted in Table 7.8 and Chart 7.5.

African Americans represent 11.08% of the available professional services businesses and received 0.00% of the dollars on professional services contracts valued \$50,000 and under. This underutilization is statistically significant.

Asian Pacific Americans represent 17.32% of the available professional services businesses and received 17.39% of the dollars on professional services contracts valued \$50,000 and under. This study does not test the overutilization of DBEs.

Subcontinent Asian Americans represent 6.75% of the available professional services businesses and received 8.90% of the dollars on professional services contracts valued \$50,000 and under. This study does not test the overutilization of DBEs.

Hispanic Americans represent 8.28% of the available professional services businesses and received 2.46% of the dollars on professional services contracts valued \$50,000 and under. This underutilization is statistically significant.

Native Americans represent 0.76% of the available professional services businesses and received 0.00% of the dollars on professional services contracts valued \$50,000 and under. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 21.91% of the available professional services businesses and received 0.00% of the dollars on professional services contracts valued \$50,000 and under. This underutilization is statistically significant.

Non-minority Males represent 33.89% of the available professional services businesses and received 71.26% of the dollars on professional services contracts valued \$50,000 and under. This overutilization is statistically significant.



**Table 7.8: Disparity Analysis: Professional Services Prime Contracts Valued \$50,000 and Under,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	11.08%	\$31,115	-\$31,115	0.00	< .05 *
Asian Pacific Americans	\$48,811	17.39%	17.32%	\$48,639	\$172	1.00	**
Subcontinent Asian Americans	\$24,981	8.90%	6.75%	\$18,955	\$6,026	1.32	**
Hispanic Americans	\$6,900	2.46%	8.28%	\$23,247	-\$16,347	0.30	< .05 *
Native Americans	\$0	0.00%	0.76%	\$2,146	-\$2,146	0.00	----
Caucasian Females	\$0	0.00%	21.91%	\$61,515	-\$61,515	0.00	< .05 *
Non-minority Males	\$200,058	71.26%	33.89%	\$95,133	\$104,925	2.10	< .05 †
TOTAL	\$280,750	100.00%	100.00%	\$280,750			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	
African American Females	\$0	0.00%	4.71%	\$13,233	-\$13,233	0.00	not significant
African American Males	\$0	0.00%	6.37%	\$17,882	-\$17,882	0.00	< .05 *
Asian Pacific American Females	\$0	0.00%	6.11%	\$17,167	-\$17,167	0.00	< .05 *
Asian Pacific American Males	\$48,811	17.39%	11.21%	\$31,473	\$17,338	1.55	**
Subcontinent Asian American Females	\$0	0.00%	2.80%	\$7,868	-\$7,868	0.00	not significant
Subcontinent Asian American Males	\$24,981	8.90%	3.95%	\$11,087	\$13,894	2.25	**
Hispanic American Females	\$0	0.00%	2.42%	\$6,795	-\$6,795	0.00	not significant
Hispanic American Males	\$6,900	2.46%	5.86%	\$16,452	-\$9,552	0.42	not significant
Native American Females	\$0	0.00%	0.25%	\$715	-\$715	0.00	----
Native American Males	\$0	0.00%	0.51%	\$1,431	-\$1,431	0.00	----
Caucasian Females	\$0	0.00%	21.91%	\$61,515	-\$61,515	0.00	< .05 *
Non-minority Males	\$200,058	71.26%	33.89%	\$95,133	\$104,925	2.10	< .05 †
TOTAL	\$280,750	100.00%	100.00%	\$280,750			

(*) denotes a statistically significant underutilization.

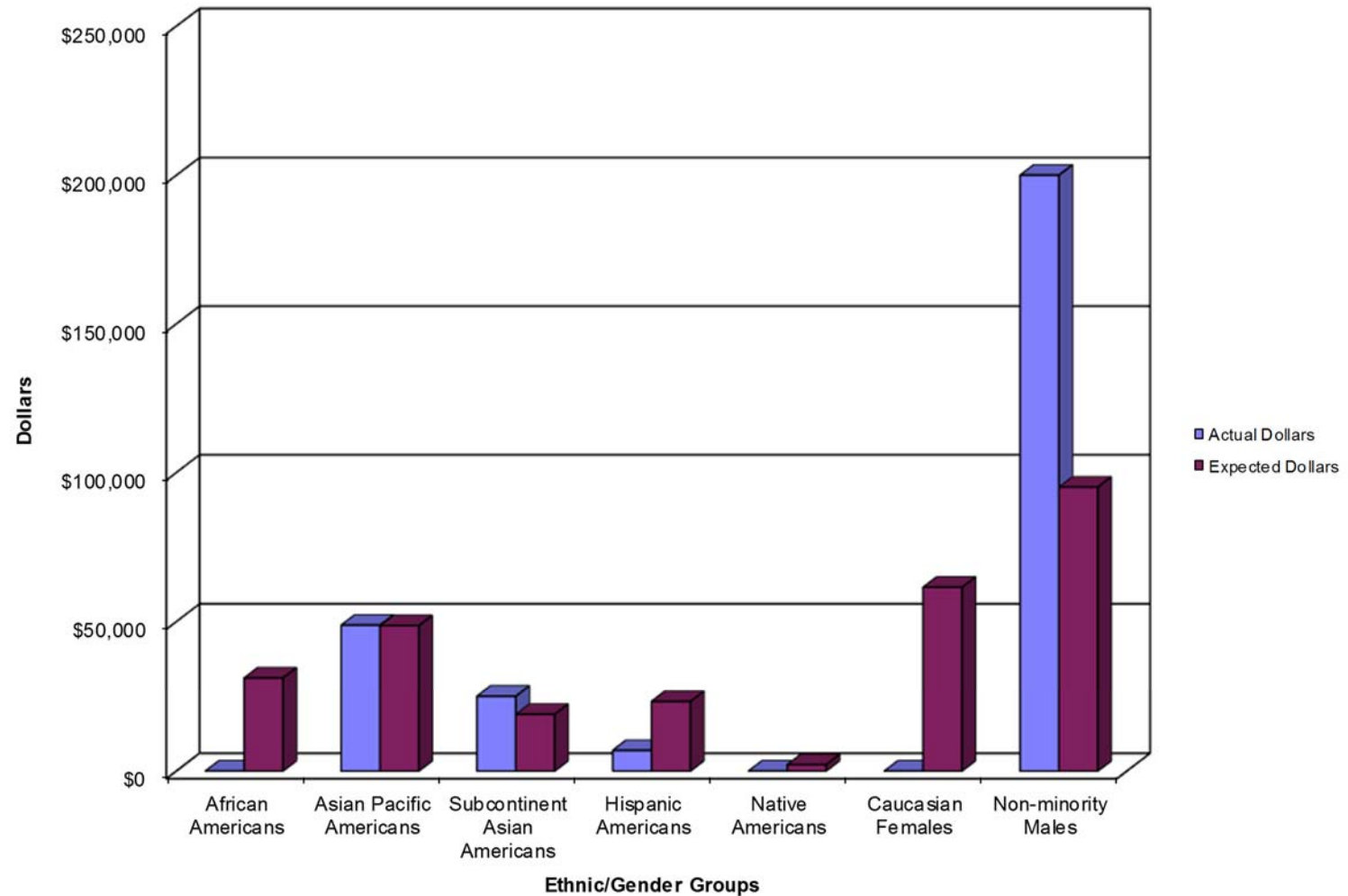
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.5: Disparity Analysis: Professional Services Prime Contracts Valued \$50,000 and Under, July 1, 2011, to June 30, 2015



3. Goods/Equipment/Supplies Prime Contracts Valued \$50,000 and Under

The disparity analysis of goods/equipment/supplies prime contracts valued \$50,000 and under is described below and depicted in Table 7.9 and Chart 7.6.

African Americans represent 9.87% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This underutilization is statistically significant.

Asian Pacific Americans represent 17.20% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This underutilization is statistically significant.

Subcontinent Asian Americans represent 6.05% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This underutilization is not statistically significant.

Hispanic Americans represent 15.29% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This underutilization is statistically significant.

Native Americans represent 0.32% of the available goods/equipment/supplies businesses and received 0.00% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 12.42% of the available goods/equipment/supplies businesses and received 2.36% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This underutilization is not statistically significant.

Non-minority Males represent 38.85% of the available goods/equipment/supplies businesses and received 97.64% of the dollars on goods/equipment/supplies contracts valued \$50,000 and under. This overutilization is statistically significant.



Table 7.9: Disparity Analysis: Goods/Equipment/Supplies Prime Contracts Valued \$50,000 and Under, July 1, 2011, to June 30, 2015

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African Americans	\$0	0.00%	9.87%	\$32,123	-\$32,123	0.00	< .05 *
Asian Pacific Americans	\$0	0.00%	17.20%	\$55,957	-\$55,957	0.00	< .05 *
Subcontinent Asian Americans	\$0	0.00%	6.05%	\$19,689	-\$19,689	0.00	not significant
Hispanic Americans	\$0	0.00%	15.29%	\$49,739	-\$49,739	0.00	< .05 *
Native Americans	\$0	0.00%	0.32%	\$1,036	-\$1,036	0.00	----
Caucasian Females	\$7,672	2.36%	12.42%	\$40,413	-\$32,741	0.19	not significant
Non-minority Males	\$317,706	97.64%	38.85%	\$126,421	\$191,286	2.51	< .05 †
TOTAL	\$325,378	100.00%	100.00%	\$325,378			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	
African American Females	\$0	0.00%	3.50%	\$11,399	-\$11,399	0.00	not significant
African American Males	\$0	0.00%	6.37%	\$20,725	-\$20,725	0.00	< .05 *
Asian Pacific American Females	\$0	0.00%	6.37%	\$20,725	-\$20,725	0.00	< .05 *
Asian Pacific American Males	\$0	0.00%	10.83%	\$35,232	-\$35,232	0.00	< .05 *
Subcontinent Asian American Females	\$0	0.00%	2.87%	\$9,326	-\$9,326	0.00	not significant
Subcontinent Asian American Males	\$0	0.00%	3.18%	\$10,362	-\$10,362	0.00	not significant
Hispanic American Females	\$0	0.00%	4.14%	\$13,471	-\$13,471	0.00	not significant
Hispanic American Males	\$0	0.00%	11.15%	\$36,268	-\$36,268	0.00	< .05 *
Native American Females	\$0	0.00%	0.32%	\$1,036	-\$1,036	0.00	----
Native American Males	\$0	0.00%	0.00%	\$0	\$0	----	----
Caucasian Females	\$7,672	2.36%	12.42%	\$40,413	-\$32,741	0.19	not significant
Non-minority Males	\$317,706	97.64%	38.85%	\$126,421	\$191,286	2.51	< .05 †
TOTAL	\$325,378	100.00%	100.00%	\$325,378			

(*) denotes a statistically significant underutilization.

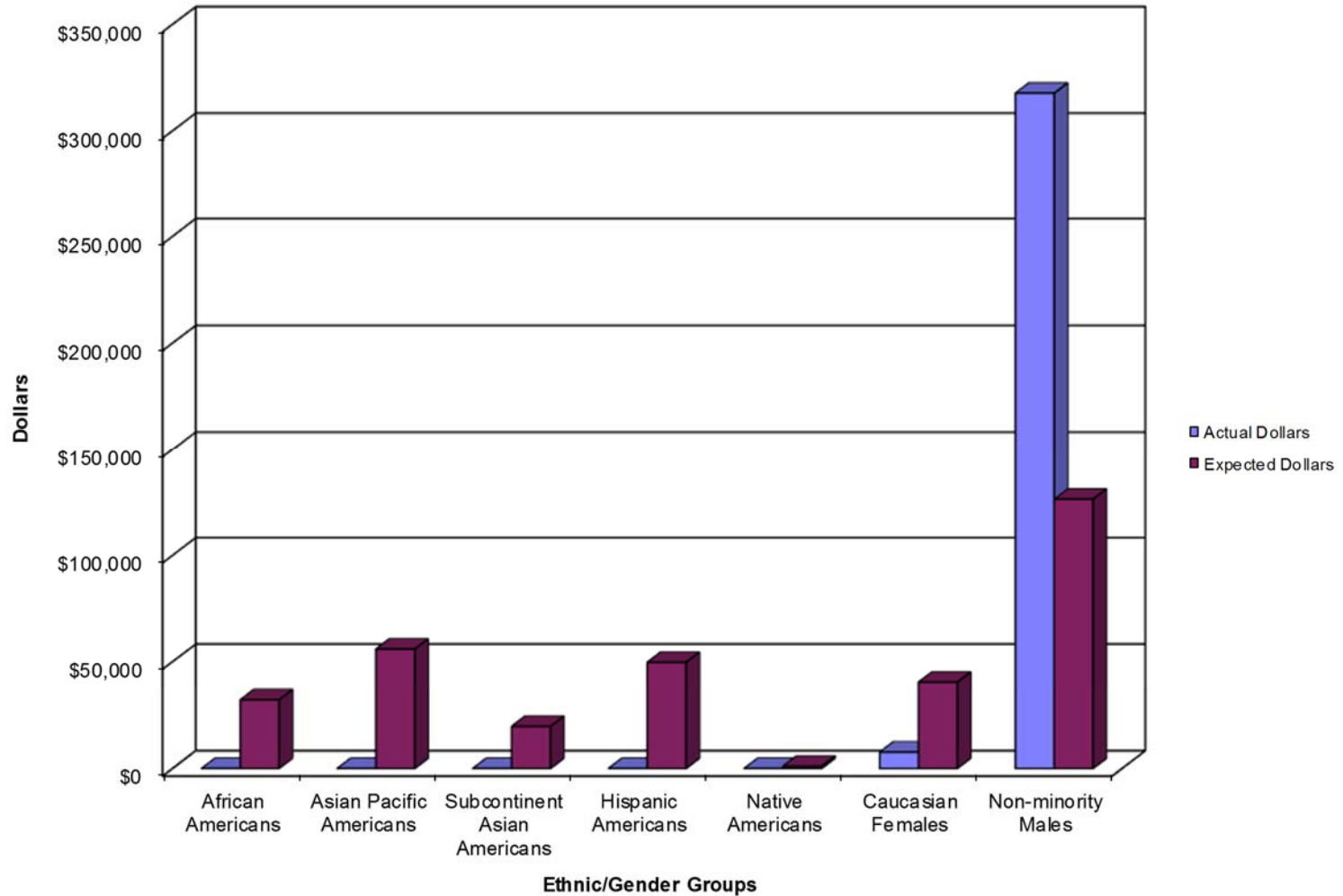
(†) denotes a statistically significant overutilization.

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.

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



Chart 7.6: Disparity Analysis: Goods/Equipment/Supplies Prime Contracts Valued \$50,000 and Under, July 1, 2011, to June 30, 2015



III. Disparity Analysis Summary

A. Construction Prime Contracts

As indicated in Table 7.10 below, no disparity was found for prime contractors on construction contracts valued at \$1,000,000 and under or contracts valued \$25,000 and under.

**Table 7.10: Disparity Summary: Construction Prime Contract Dollars,
July 1, 2011, to June 30, 2015**

Ethnicity/Gender	Construction	
	Contracts Valued \$1,000,000 and Under	Contracts Valued \$25,000 and Under
African Americans	No Disparity	No Disparity
Asian Pacific Americans	No Disparity	No Disparity
Subcontinent Asian Americans	No Disparity	No Disparity
Hispanic Americans	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity
Caucasian Females	No Disparity	No Disparity



B. Professional Services Prime Contracts

As indicated in Table 7.11 below, disparity was found for African American, Hispanic American, and Caucasian female prime contractors on professional services contracts valued \$500,000 and under. Disparity was found for African American, Hispanic American, and Caucasian female prime contractors on professional services contracts valued \$50,000 and under.

Table 7.11: Disparity Summary: Professional Services Prime Contract Dollars, July 1, 2011, to June 30, 2015

Ethnicity/Gender	Professional Services	
	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Pacific Americans	No Disparity	No Disparity
Subcontinent Asian Americans	No Disparity	No Disparity
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>
Native Americans	No Disparity	No Disparity
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>



C. Goods/Equipment/Supplies Prime Contracts

As indicated in Table 7.12 below, disparity was found for African American, Asian Pacific American, and Hispanic American prime contractors on goods/equipment/supplies contracts valued \$500,000. Disparity was found for African American, Asian Pacific American, and Hispanic American prime contractors on goods/equipment/supplies contracts valued \$50,000 and under.

**Table 7.12: Disparity Summary: Goods/Equipment/Supplies Prime Contract Dollars
July 1, 2011, to June 30, 2015**

Ethnicity/Gender	Goods/Equipment/Supplies	
	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under
African Americans	Disparity	Disparity
Asian Pacific Americans	Disparity	Disparity
Subcontinent Asian Americans	No Disparity	No Disparity
Hispanic Americans	Disparity	Disparity
Native Americans	No Disparity	No Disparity
Caucasian Female	No Disparity	No Disparity



CHAPTER 8: Subcontract Disparity Analysis

I. Introduction

The objective of this chapter is to determine if there was any underutilization of Disadvantaged (DBE)²³² subcontractors on Santa Clara Valley Transportation Authority's (VTA) contracts during the July 1, 2011, to June 30, 2015 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 procedures are used to perform the subcontract disparity analysis.

Under a fair and equitable system of awarding subcontracts, the proportion of subcontracts and subcontract dollars awarded to DBE subcontractors should be relatively close to the proportion of available DBE subcontractors in VTA's market area. Availability is defined as the number of willing and able 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 DBE subcontractors to available DBE 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.²³³ *Croson* states that an inference of discrimination can be made *prima facie* if the observed disparity is statistically significant. Under the *Croson* model, Non-minority Male-owned Business Enterprises (non-DBE) are not subjected to a statistical test.

II. Disparity Analysis

As detailed in *Chapter 4: Subcontractor Utilization Analysis*, extensive efforts were undertaken to obtain subcontractor records for VTA's construction and professional services contracts. The disparity analysis was performed on subcontracts issued July 1, 2011, to June 30, 2015.

The subcontract disparity findings in the two industries under consideration are summarized below. 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 below in Table 8.1.

²³² Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

²³³ 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 statistical standards to be an acceptable level in determining whether an inference of discrimination can be made. Thus, the data analysis here was done within the 95-percent confidence level.



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"> • DBEs: This underutilization is not statistically significant • Non-minority Males: This overutilization is not 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 DBEs.
< .05 †	This overutilization is statistically significant.

III. Disparity Analysis: All Subcontracts, By Industry

A. All Subcontracts

The disparity analysis of all subcontracts is described below and depicted in Table 8.2 and Chart 8.1.

African Americans represent 10.24% of the available businesses and received 1.18% of the all subcontract dollars. This underutilization is statistically significant.

Asian Pacific Americans represent 14.48% of the available businesses and received 4.66% of the all subcontract dollars. This underutilization is statistically significant.

Subcontinent Asian Americans represent 4.43% of the available businesses and received 1.35% of the all subcontract dollars. This underutilization is statistically significant.

Hispanic Americans represent 11.62% of the available businesses and received 11.05% of the all subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.83% of the available businesses and received 0.35% of the all subcontract dollars. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 19.10% of the available businesses and received 13.13% of the all subcontract dollars. This underutilization is not statistically significant.

Non-minority Males represent 39.30% of the available businesses and received 68.28% of the all subcontract dollars. This overutilization is statistically significant.



**Table 8.2: Disparity Analysis: All Subcontracts,
July 1, 2011, to June 30, 2015**

Ethnicity	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	
African American	\$8,392,456	1.18%	10.24%	\$72,677,870	-\$64,285,414	0.12	< .05 *
Asian Pacific American	\$33,039,470	4.66%	14.48%	\$102,796,627	-\$69,757,157	0.32	< .05 *
Subcontinent Asian American	\$9,572,993	1.35%	4.43%	\$31,428,268	-\$21,855,275	0.30	< .05 *
Hispanic American	\$78,453,986	11.05%	11.62%	\$82,499,204	-\$4,045,218	0.95	not significant
Native American	\$2,511,043	0.35%	0.83%	\$5,892,800	-\$3,381,757	0.43	----
Caucasian Females	\$93,163,982	13.13%	19.10%	\$135,534,407	-\$42,370,425	0.69	not significant
Non-minority Males	\$484,621,127	68.28%	39.30%	\$278,925,881	\$205,695,246	1.74	< .05 †
TOTAL	\$709,755,058	100.00%	100.00%	\$709,755,058			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,528,203	0.22%	3.78%	\$26,844,979	-\$25,316,776	0.06	< .05 *
African American Males	\$6,864,254	0.97%	6.46%	\$45,832,891	-\$38,968,637	0.15	< .05 *
Asian Pacific American Females	\$2,809,729	0.40%	4.70%	\$33,392,535	-\$30,582,806	0.08	< .05 *
Asian Pacific American Males	\$30,229,741	4.26%	9.78%	\$69,404,092	-\$39,174,351	0.44	< .05 *
Subcontinent Asian American Females	\$17,442	0.00%	1.75%	\$12,440,356	-\$12,422,914	0.00	< .05 *
Subcontinent Asian American Males	\$9,555,551	1.35%	2.68%	\$18,987,912	-\$9,432,361	0.50	< .05 *
Hispanic American Females	\$3,832,625	0.54%	2.68%	\$18,987,912	-\$15,155,287	0.20	not significant
Hispanic American Males	\$74,621,361	10.51%	8.95%	\$63,511,292	\$11,110,069	1.17	**
Native American Females	\$36,959	0.01%	0.28%	\$1,964,267	-\$1,927,308	0.02	----
Native American Males	\$2,474,084	0.35%	0.55%	\$3,928,534	-\$1,454,449	0.63	----
Caucasian Females	\$93,163,982	13.13%	19.10%	\$135,534,407	-\$42,370,425	0.69	not significant
Non-minority Males	\$484,621,127	68.28%	39.30%	\$278,925,881	\$205,695,246	1.74	< .05 †
TOTAL	\$709,755,058	100.00%	100.00%	\$709,755,058			

(*) denotes a statistically significant underutilization.

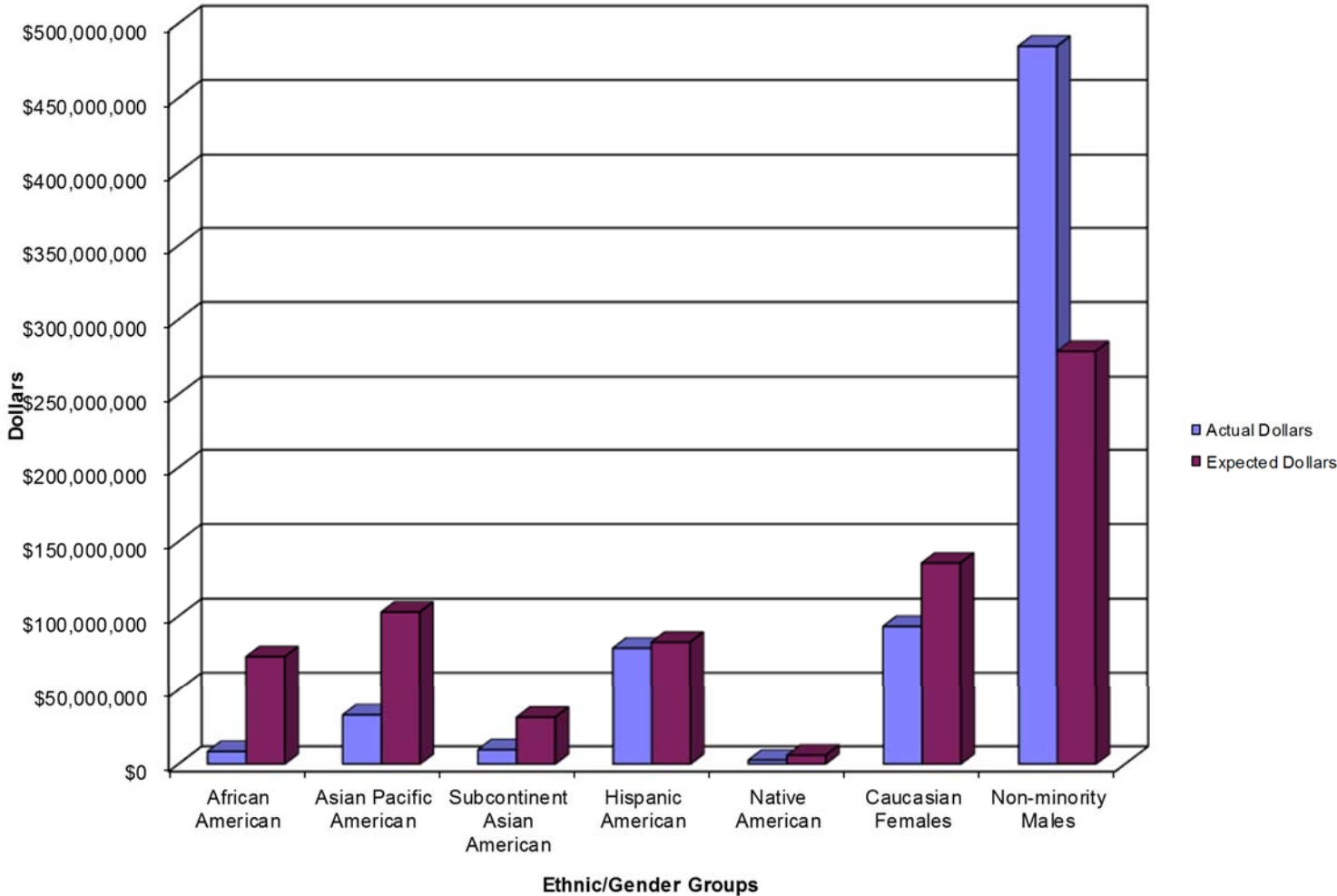
(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of DBEs 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: All Subcontracts,
July 1, 2011, to June 30, 2015**



B. Construction Subcontracts

The disparity analysis of construction subcontracts is described below and depicted in Table 8.3 and Chart 8.2.

African Americans represent 12.26% of the available construction businesses and received 1.19% of the construction subcontract dollars. This underutilization is statistically significant.

Asian Pacific Americans represent 15.53% of the available construction businesses and received 4.59% of the construction subcontract dollars. This underutilization is statistically significant.

Subcontinent Asian Americans represent 3.68% of the available construction businesses and received 1.21% of the construction subcontract dollars. This underutilization is statistically significant.

Hispanic Americans represent 15.12% of the available construction businesses and received 11.20% of the construction subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.68% of the available construction businesses and received 0.36% of the construction subcontract dollars. While this group was underutilized, there were too few available firms to determine statistical significance.

Caucasian Females represent 14.85% of the available construction businesses and received 13.18% of the construction subcontract dollars. This underutilization is not statistically significant.

Non-minority Males represent 37.87% of the available construction businesses and received 68.28% of the construction subcontract dollars. This overutilization is statistically significant.



**Table 8.3: Disparity Analysis: Construction Subcontracts,
July 1, 2011, to June 30, 2015**

Group	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American	\$8,329,277	1.19%	12.26%	\$85,837,797	-\$77,508,520	0.10	< .05 *
Asian Pacific American	\$32,110,519	4.59%	15.53%	\$108,727,876	-\$76,617,357	0.30	< .05 *
Subcontinent Asian American	\$8,478,906	1.21%	3.68%	\$25,751,339	-\$17,272,433	0.33	< .05 *
Hispanic American	\$78,371,570	11.20%	15.12%	\$105,866,616	-\$27,495,046	0.74	not significant
Native American	\$2,511,043	0.36%	0.68%	\$4,768,767	-\$2,257,723	0.53	----
Caucasian Females	\$92,274,090	13.18%	14.85%	\$103,959,110	-\$11,685,020	0.89	not significant
Non-minority Males	\$477,979,517	68.28%	37.87%	\$265,143,418	\$212,836,099	1.80	< .05 †
TOTAL	\$700,054,923	100.00%	100.00%	\$700,054,923			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$1,528,203	0.22%	4.09%	\$28,612,599	-\$27,084,396	0.05	< .05 *
African American Males	\$6,801,074	0.97%	8.17%	\$57,225,198	-\$50,424,124	0.12	< .05 *
Asian Pacific American Females	\$2,809,729	0.40%	4.90%	\$34,335,119	-\$31,525,390	0.08	< .05 *
Asian Pacific American Males	\$29,300,790	4.19%	10.63%	\$74,392,757	-\$45,091,967	0.39	< .05 *
Subcontinent Asian American Females	\$17,442	0.00%	1.36%	\$9,537,533	-\$9,520,091	0.00	< .05 *
Subcontinent Asian American Males	\$8,461,464	1.21%	2.32%	\$16,213,806	-\$7,752,342	0.52	< .05 *
Hispanic American Females	\$3,794,209	0.54%	3.27%	\$22,890,079	-\$19,095,870	0.17	not significant
Hispanic American Males	\$74,577,361	10.65%	11.85%	\$82,976,537	-\$8,399,176	0.90	not significant
Native American Females	\$36,959	0.01%	0.14%	\$953,753	-\$916,794	0.04	----
Native American Males	\$2,474,084	0.35%	0.54%	\$3,815,013	-\$1,340,929	0.65	----
Caucasian Females	\$92,274,090	13.18%	14.85%	\$103,959,110	-\$11,685,020	0.89	not significant
Non-minority Males	\$477,979,517	68.28%	37.87%	\$265,143,418	\$212,836,099	1.80	< .05 †
TOTAL	\$700,054,923	100.00%	100.00%	\$700,054,923			

(*) denotes a statistically significant underutilization.

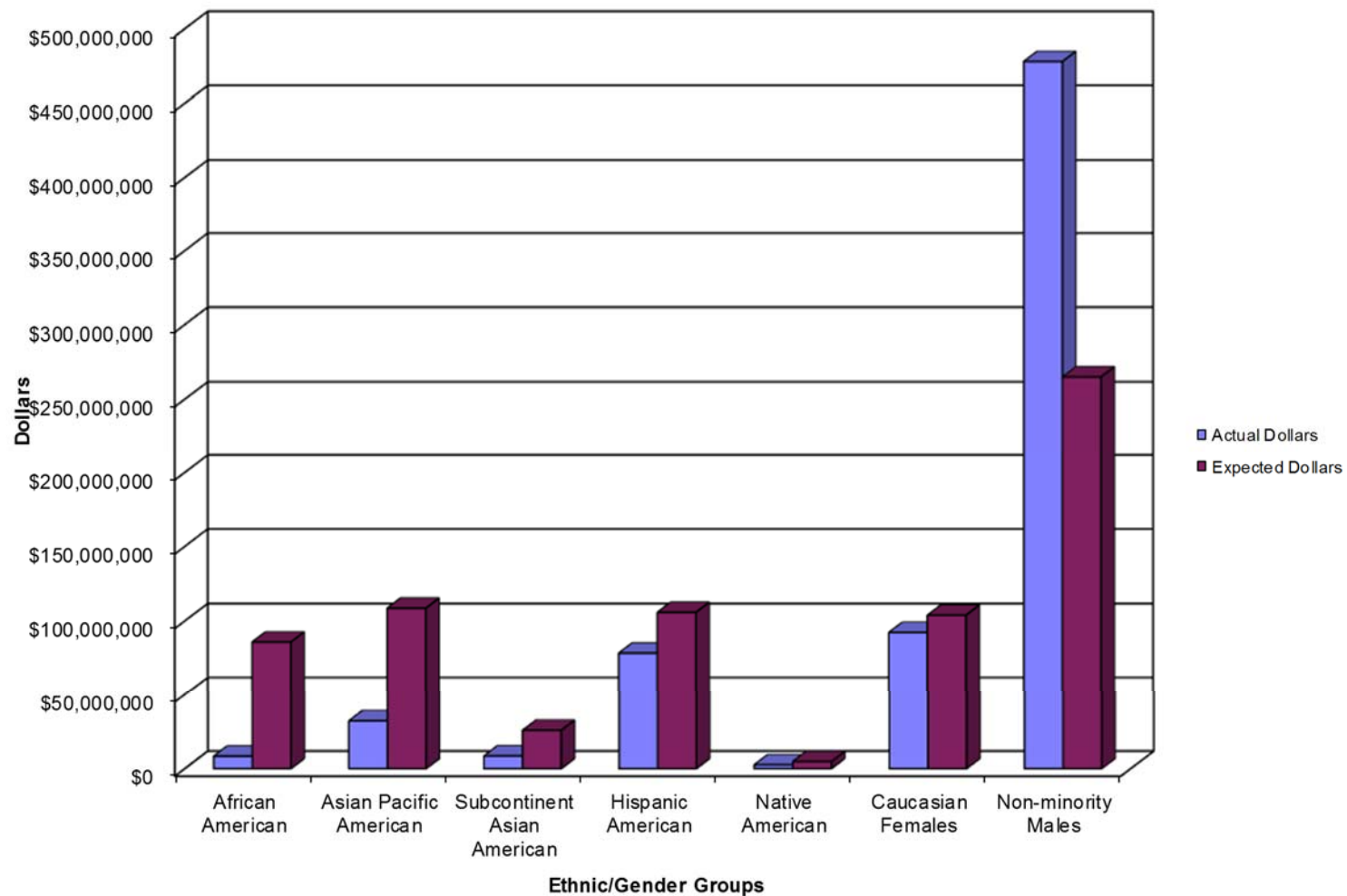
(†) denotes a statistically significant overutilization.

(**) denotes that this study does not test statistically the overutilization of DBEs 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: Construction Subcontracts,
July 1, 2011, to June 30, 2015**



C. Professional Services Subcontracts

The disparity analysis of professional services subcontracts is described below and depicted in Table 8.4 and Chart 8.3.

African Americans represent 10.89% of the available professional services businesses and received 0.65% of the professional services subcontract dollars. This underutilization is statistically significant.

Asian Pacific Americans represent 17.02% of the available professional services businesses and received 9.58% of the professional services subcontract dollars. This underutilization is not statistically significant.

Subcontinent Asian Americans represent 6.63% of the available professional services businesses and received 11.28% of the professional services subcontract dollars. This study does not test statistically the overutilization of DBEs.

Hispanic Americans represent 8.26% of the available professional services businesses and received 0.85% of the professional services subcontract dollars. This underutilization is not statistically significant.

Native Americans represent 0.75% 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 firms to determine statistical significance.

Caucasian Females represent 21.65% of the available professional services businesses and received 9.17% of the professional services subcontract dollars. This underutilization is not statistically significant.

Non-minority Males represent 34.79% of the available professional services businesses and received 68.47% of the professional services subcontract dollars. This overutilization is statistically significant.



**Table 8.4: Disparity Analysis: Professional Services Subcontracts,
July 1, 2011, to June 30, 2015**

Group	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American	\$63,180	0.65%	10.89%	\$1,056,210	-\$993,030	0.06	< .05 *
Asian Pacific American	\$928,951	9.58%	17.02%	\$1,651,087	-\$722,136	0.56	not significant
Subcontinent Asian American	\$1,094,087	11.28%	6.63%	\$643,438	\$450,649	1.70	**
Hispanic American	\$82,416	0.85%	8.26%	\$801,263	-\$718,847	0.10	not significant
Native American	\$0	0.00%	0.75%	\$72,842	-\$72,842	0.00	----
Caucasian Females	\$889,892	9.17%	21.65%	\$2,100,280	-\$1,210,388	0.42	not significant
Non-minority Males	\$6,641,610	68.47%	34.79%	\$3,375,016	\$3,266,594	1.97	< .05 †
TOTAL	\$9,700,136	100.00%	100.00%	\$9,700,136			
Ethnicity and Gender	Actual Dollars	Utilization	Availability	Expected Dollars	Dollars Lost	Disp. Ratio	P-Value
African American Females	\$0	0.00%	4.63%	\$449,193	-\$449,193	0.00	not significant
African American Males	\$63,180	0.65%	6.26%	\$607,017	-\$543,838	0.10	not significant
Asian Pacific American Females	\$0	0.00%	6.01%	\$582,737	-\$582,737	0.00	not significant
Asian Pacific American Males	\$928,951	9.58%	11.01%	\$1,068,350	-\$139,399	0.87	not significant
Subcontinent Asian American Females	\$0	0.00%	2.75%	\$267,088	-\$267,088	0.00	not significant
Subcontinent Asian American Males	\$1,094,087	11.28%	3.88%	\$376,351	\$717,736	2.91	**
Hispanic American Females	\$38,416	0.40%	2.38%	\$230,667	-\$192,251	0.17	not significant
Hispanic American Males	\$44,000	0.45%	5.88%	\$570,596	-\$526,596	0.08	not significant
Native American Females	\$0	0.00%	0.25%	\$24,281	-\$24,281	0.00	----
Native American Males	\$0	0.00%	0.50%	\$48,561	-\$48,561	0.00	----
Caucasian Females	\$889,892	9.17%	21.65%	\$2,100,280	-\$1,210,388	0.42	not significant
Non-minority Males	\$6,641,610	68.47%	34.79%	\$3,375,016	\$3,266,594	1.97	< .05 †
TOTAL	\$9,700,136	100.00%	100.00%	\$9,700,136			

(*) denotes a statistically significant underutilization.

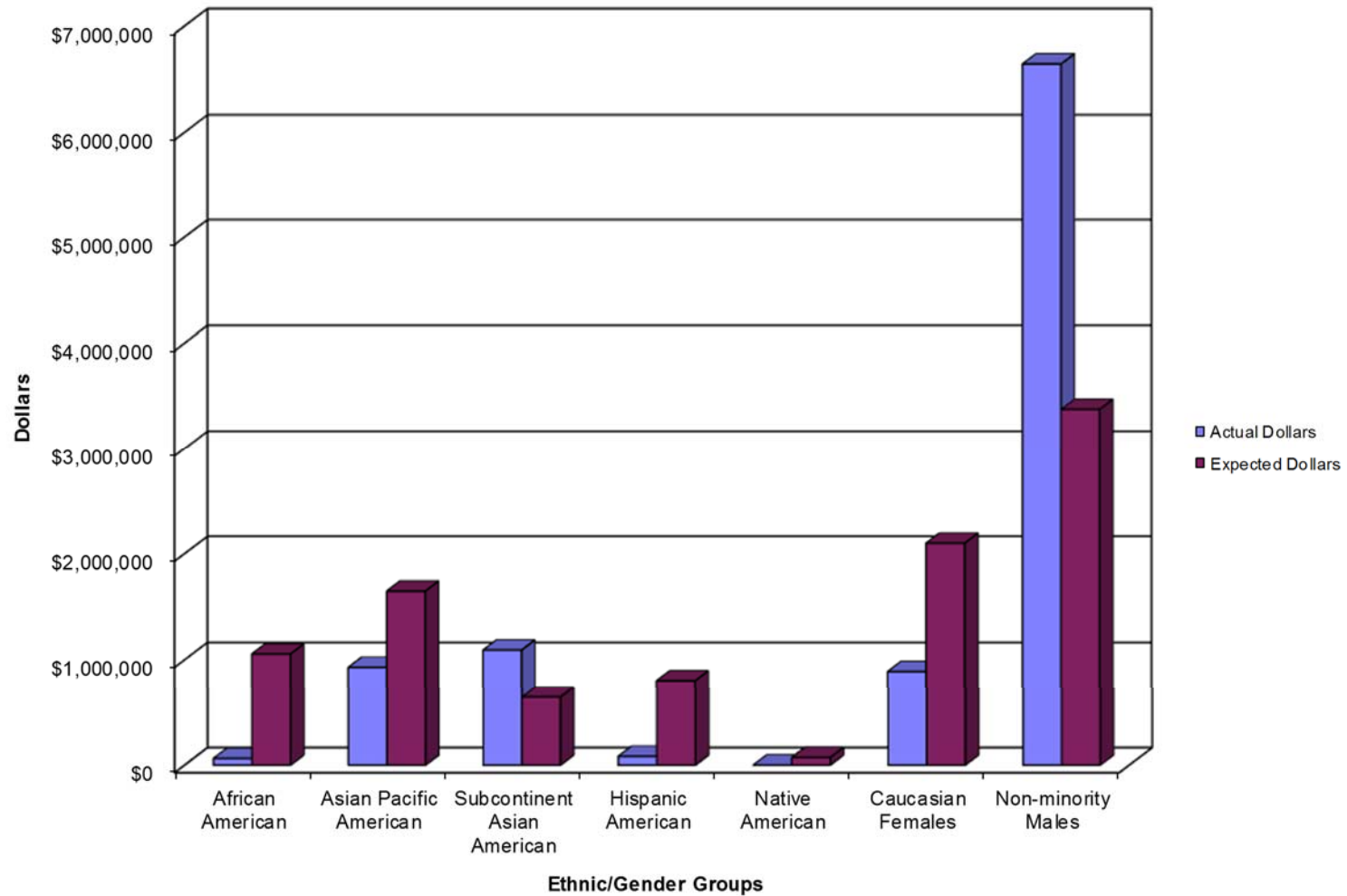
(†) denotes a statistically significant overutilization.

(**) 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.



**Chart 8.3: Disparity Analysis: Professional Services Subcontracts,
July 1, 2011, to June 30, 2015**



IV. Subcontract Disparity Summary

As indicated in Table 8.5, disparity was found for African American, Asian Pacific American, and Subcontinent Asian American subcontractors on construction subcontracts. Disparity was found for African American subcontractors on professional services subcontracts.

**Table 8.5: Subcontract Disparity Summary,
July 1, 2011, to June 30, 2015**

Ethnicity / Gender	Construction	Professional Services
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Pacific Americans	<i>Disparity</i>	No Disparity
Subcontinent Asian Americans	<i>Disparity</i>	No Disparity
Hispanic Americans	No Disparity	No Disparity
Native Americans	No Disparity	No Disparity
Caucasian Females	No Disparity	No Disparity



CHAPTER 9: Regression Analysis

I. Introduction

Private sector business practices are not subject to the same legal standards as a local agency's Disadvantaged Business Enterprise (DBE) Program. However private sector business practices are indicators of marketplace conditions that could adversely affect the formation and growth of DBEs, which are businesses owned by minority males and females and Caucasian females. Adverse private sector marketplace conditions could depress the current availability of DBEs. *Concrete Works of Colorado v. City and County of Denver (Concrete Works III)*²³⁴ sets forth the regression analysis as an analytical framework for assessing discrimination in private sector business practices.

In accordance with *Concrete Works III* and *Kossmann*, the regression analyses examined three outcome variables—business ownership, business earnings, and business loan approval—to determine if private sector ethnic and gender discrimination exists in Santa Clara Valley Transportation Authority, San Mateo County Transit District, and the Peninsula Corridor Joint Powers Board's (Agencies) market area. The three regression analyses examined possible impediments to minority and woman business ownership, business earnings, and business loan approval. The third regression analysis examined DBE business loan approval rates.

Each regression analysis compared minority group members²³⁵ and Caucasian females to Caucasian males by controlling for race- and gender-neutral explanatory variables, such as age, education, marital status, and access to capital. The findings present the impact of the explanatory variables on the outcome variables. These findings also elucidate the socioeconomic conditions in the Agencies' market area that could adversely affect the relative availability of DBEs and Non-minority male-owned businesses (non-DBE).

The United States Census Public Use Microdata Sample (PUMS) data were used to compare the probability of minority males, minority females, and Caucasian females owning a business to the probability of Caucasian males owning a business. Logistic regression was used to determine if race and gender have had a statistically significant effect on the probability of business ownership. The PUMS data were also used to compare the business earnings of DBEs to Caucasian males. Ordinary Least Squares (OLS) regression was utilized to analyze the PUMS data for disparities in owner-reported incomes when controlling for race- and gender-neutral factors.

The Kauffman Firm Survey (KFS) data were used to compare the probability of minority males, minority females, and Caucasian females being approved for loans to the probability of Caucasian



²³⁴ *Concrete Works of Colo., Inc. v. Denver*, 86 F. Supp. 2d 1042, 1057-61 (D. Colo. 2000); *rev'd on other grounds*, 321 F.3d 950 (10th Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003) ("*Concrete Works III*").

²³⁵ Minority group members include both males and females.

males being approved a loan. Ordered logistic regression was utilized to analyze the KFS data for disparities in business loan approval when controlling for race- and gender-neutral factors.

The applicable limits of the private sector discrimination findings, are set forth in *Builders Association of Greater Chicago v. City of Chicago (City of Chicago)*.²³⁶ The court established that even when there is evidence of private sector discrimination, the findings cannot be used as the factual predicate for a government-sponsored, race-conscious DBE program unless there is a nexus between the private sector data and the public agency actions. The private sector findings, however, can be used to develop race-neutral programs to address barriers to the formation and development of DBEs. Given the case law, caution must be exercised in the interpretation and application of these regression findings. Case law regarding the application of private sector discrimination is discussed below.

II. Legal Analysis

A. Passive Discrimination

The controlling legal precedent is set forth in the 1989 *City of Richmond v. J.A. Croson Co. (Croson)*²³⁷ decision, where the Court upheld state and local governments' programs to remedy discrimination in the award of subcontracts by its prime contractors on the grounds that the government is a "passive participant" in such discrimination. In January 2003, *Concrete Works IV*²³⁸ and *City of Chicago*²³⁹ extended the scope private sector analysis to include the investigation of discriminatory barriers that minority males, minority females, and Caucasian females encountered in the formation and development of businesses, and the consequences of state and local remedial programs. *Concrete Works IV* set forth a framework for considering such private sector discrimination as a passive participant model for analysis. However, the obligation of presenting an appropriate nexus between the government remedy and the private sector discrimination was first addressed in *City of Chicago*.

The Tenth Circuit Court decided in *Concrete Works IV* that business activities conducted in the private sector, if within the government's market area, are also appropriate areas to explore the issue of passive participation.²⁴⁰ Given the finding of private sector discrimination, however, the appropriateness of the City's remedy was not at issue before the court. The question before the court was whether sufficient facts existed to determine if the private sector business practices under consideration constituted discrimination. For technical legal reasons,²⁴¹ the court did not examine whether a consequent public-sector remedy that involved a goal requirement on the City of

²³⁶ *Builders Ass'n of Greater Chicago v. Chicago*, 298 F. Supp. 2d 725 (N.D. Ill. 2003).

²³⁷ 488 U.S. 469 (1989).

²³⁸ *Concrete Works of Colo., Inc. v. Denver*, 321 F.3d 950, 965-69 (10th Cir. 2003) ("*Concrete Works IV*").

²³⁹ *City of Chicago*, 298 F. Supp. 2d at 738-39.

²⁴⁰ *Concrete Works IV*, 321 F.3d at 966-67.

²⁴¹ Plaintiff had not preserved the issue on appeal. Therefore, it was no longer part of the case.



Denver’s contracts was “narrowly tailored” or otherwise supported by the City’s private sector findings of discrimination.

B. Narrow Tailoring

The question of whether a public-sector remedy is narrowly tailored when it is based solely on business practices within the private sector was at issue in *City of Chicago*. Decided ten months after *Concrete Works IV*, *City of Chicago* found that certain private sector business practices constituted discrimination against minorities in the Chicago, Illinois market area. However, the district court did not find the City of Chicago’s M/WBE subcontracting goal to be a “narrowly tailored” remedy to address the documented private sector discriminatory business practices that had been discovered within the City’s market area.²⁴² The court explicitly stated that certain discriminatory business practices documented by regression analyses constituted private sector discrimination.²⁴³ It is also notable that the documented discriminatory business practices reviewed by the court in *City of Chicago* were similar to those reviewed in *Concrete Works IV*. Notwithstanding the fact that discrimination in the City’s market area was documented, the *City of Chicago* determined that the evidence was insufficient to support the City’s race-based subcontracting goals.²⁴⁴ The court ordered an injunction to invalidate the City’s race-based program.²⁴⁵

The following statements from that opinion are noteworthy:

Racial preferences are, by their nature, highly suspect, and they cannot be used to benefit one group that, by definition, is not either individually or collectively the present victim of discrimination . . . There may well also be (and the evidence suggests that there are) minorities and women who do not enter the industry because they perceive barriers to entry. If there [are] none, and their perception is in error, that false perception cannot be used to provide additional opportunities to M/WBEs already in the market to the detriment of other firms who, again by definition, neither individually nor collectively, are engaged in discriminatory practices.²⁴⁶

Given these distortions of the market and these barriers, is the City’s program narrowly tailored as a remedy? It is here that I believe the program fails. There is no “meaningful individualized review” of M/WBEs. *Gratz v. Bollinger*, 539 U.S. 244, 156 L. Ed. 2d 257, 123 S.Ct. 2411, 2431 (2003) (Justice O’Connor concurring). Chicago’s program is more expansive and more rigid than plans that have been sustained in the courts. It has no termination date, nor has it any means

²⁴² *City of Chicago*, 298 F. Supp. 2d at 739.

²⁴³ *Id.* at 731-32.

²⁴⁴ *Id.* at 742.

²⁴⁵ *Id.*

²⁴⁶ *City of Chicago*, 298 F. Supp. 2d at 734-35.



for determining a termination date. The “graduation” revenue amount is very high, \$27,500,000, and very few have graduated. There is no net worth threshold. A third-generation Japanese-American from a wealthy family, with a graduate degree from MIT, qualifies (and an Iraqi immigrant does not). Waivers are rarely or never granted on construction contracts, but “regarding flexibility, ‘the availability of waivers’ is of particular importance . . . a ‘rigid numerical quota’ particularly disserves the cause of narrow tailoring.” *Adarand Constructors v. Slater, supra*, at 1177. The City’s program is a “rigid numerical quota,” a quota not related to the number of available, willing, and able firms but to concepts of how many of those firms there should be. Formalistic points did not survive strict scrutiny in *Gratz v. Bollinger, supra*, and formalistic percentages cannot survive scrutiny.²⁴⁷

As established in *City of Chicago*, private sector discrimination cannot be used as the factual basis for a government-sponsored, race-based program without a sufficient nexus to the government’s actions. Therefore, the discrimination that might be revealed in this regression analysis will not be sufficient factual predicate for the Agencies to establish a race-based DBE program since a nexus cannot be established between the Agencies and this private sector data. The economic indicators revealed in this regression analysis, albeit not a measure of passive discrimination, are illustrative of private sector discrimination and can support the Agencies sponsored, race-neutral programs.

III. Regression Analysis Methodology

The three regression analyses focus on the construction, professional services, including architecture and engineering (hereinafter referred to as professional services), and goods/equipment/supplies industries. The datasets used for the regression analyses did not allow for an exact match of the industries used in the 2017 Joint DBE Contract Availability and Utilization Study (Study). Therefore, the industries were selected to most closely mirror the three industries used in the Study.

As noted, three separate regression analyses were conducted.²⁴⁸ They are the Business Ownership Analysis, the Business Earnings Analysis, and the Business Loan Approval Analysis. These analyses take into consideration race- and gender-neutral factors, such as age, education, and creditworthiness, in assessing whether the explanatory factors examined are disproportionately affecting minorities and Caucasian females when compared to similarly situated Caucasian males.

IV. Datasets Analyzed

The 2010 to 2014 PUMS dataset produced by the United States Census Bureau was used to analyze business ownership and business earnings within Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties. The 2010 to 2014 PUMS dataset represents the most recent data matching the July 1, 2011, to June 30, 2015 study period. The data for Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties were identified using Public Use Microdata



²⁴⁷ *City of Chicago*, 298 F.Supp.2d at 739-40.

²⁴⁸ Detailed description of the steps taken to clean and merge data are listed in *Regression Analysis Technical Appendix*.

Areas (PUMA) variables within the PUMS dataset; this dataset reports data for segmented areas within counties and states. The dataset includes information on personal profile, industry, work characteristics, and family structure. The PUMS data allowed for an analysis by an individual's race and gender.

The 2009 to 2011 KFS dataset was considered to examine business loan approval rates. These data represent the most recent information available on access to credit and contain observations for business and business owner characteristics, including the business owner's credit and resources and the business's credit and financial health. While the KFS data are available by Census Division, data for the West Region, which consists of the Mountain Division and the Pacific Division, were utilized. It should be noted that the ethnicity and gender of the responding businesses were categorized based upon the ownership percentages of the majority owners. There were many businesses who did not respond with if they were approved for a loan. In this case, it is assumed that the business was sometimes approved and sometimes denied a loan. Table 9.1 depicts the percentage of Caucasian males and DBEs by industry and their response to whether they were always, sometimes, or never approved for a business loan.

Table 9.1: Caucasian Males and DBE Business Loan Approval

Loan Variable	Caucasian Male	Caucasian Female	Minority Male and Female
West Region, Construction			
Always Approved	16.67%	10.23%	9.38%
Sometimes Approved/Sometimes Denied	70.00%	84.09%	78.13%
Always Denied	13.33%	5.68%	12.50%
West Region, Professional Services			
Always Approved	6.85%	4.52%	4.88%
Sometimes Approved/Sometimes Denied	91.78%	94.84%	90.24%
Always Denied	1.37%	0.65%	4.88%
West Region, Goods/Equipment/Supplies			
Always Approved	5.05%	3.27%	4.00%
Sometimes Approved/Sometimes Denied	88.89%	95.42%	94.00%
Always Denied	6.06%	1.31%	2.00%

In the construction industry, 10.23% of Caucasian females and 9.38% of minority males and females were always approved for a loan, and 5.68% of Caucasian females and 12.50% of minority males and females were always denied a loan. In contrast, 16.67% of Caucasian males were always approved for a loan and 13.33% of Caucasian males were always denied a loan.

Likewise, in the professional services industry, 4.52% of Caucasian females and 4.88% of minority males and females were always approved for a loan, and 0.65% of Caucasian females and 4.88% of minority males and females were always denied a loan. In contrast, 6.85% of Caucasian males were always approved for a loan and 1.37% of Caucasian males were always denied a loan.



In the goods/equipment/supplies industry, 3.27% of Caucasian females and 4.00% of minority males and females were always approved for a loan, and 1.31% of Caucasian females and 2.00% of minority males and females were always denied a loan. In contrast, 5.05% of Caucasian males were always approved for a loan and 6.06% of Caucasian males were always denied a loan.

V. Regression Models Defined

A. Business Ownership Analysis

The Business Ownership Analysis examines the relationship between the likelihood of being a business owner and independent socioeconomic variables. Business ownership, the dependent variable, includes business owners of incorporated and unincorporated firms. The business ownership variable utilizes two values. A value of “1” indicates that a person is a business owner, whereas a value of “0” indicates that a person is not a business owner. When the dependent variable is defined this way, it is called a binary variable. In this case, a logistic regression model is utilized to predict the likelihood of business ownership using independent socioeconomic variables. Three logistic models were run to predict the probability of business ownership in each of the three industries examined in the Study. Categories of the independent variables analyzed include educational level, citizenship status, personal characteristics, and race/gender.

In Tables 9.05 to 9.07, a finding of disparity is denoted by an asterisk (*) when the independent variable is significant at or above the 95-percent confidence level. A finding of disparity indicates that there is a non-random relationship between the probability of owning a business and the independent variable. The tables of regression results indicate the sign of each variable’s coefficient from the regression output. If the coefficient sign is positive, it indicates that there is a positive relationship between the dependent and independent variables. For example, having an advanced degree is positively related to the likelihood of being a business owner, holding all other variables constant. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent and independent variables. For instance, an individual with children under the age of six has a lower likelihood of owning a business, holding all other variables constant.

For each of the three industries, the logistic regression is used to identify the likelihood that an individual owns a business given his or her background, including race, gender, and race- and gender-neutral factors. The dependent variables in all regressions are binary variables coded as “1” for individuals who are self-employed and “0” for individuals who are not self-employed.²⁴⁹ Table 9.2 presents the independent variables used for the Business Ownership Analysis.



²⁴⁹ Note: The terms “business owner” and “self-employed” are used interchangeably throughout this chapter.

Table 9.2: Independent Variables Used for the Business Ownership Analysis

Personal Characteristics	Educational Attainment	Ethnicity	Gender
Age	Bachelor's Degree	Caucasian American	Female
Age-squared	Advanced Degree	African American	
Home Ownership		Asian American	
Home Value		Hispanic American	
Monthly Mortgage Payment		Native American	
Interest and Dividends		Other Minority*	
Language Spoken at Home			
A Child Under the Age of Six in the Household			
Marital Status			

(*) Other Minority includes individuals who belong to two or more racial groups.

B. Business Earnings Analysis

The Business Earnings Analysis examines the relationship between the annual self-employment income and independent socioeconomic variables. “Wages” are defined as the individual’s total dollar income earned in the previous 12 months. Categories of independent socioeconomic variables analyzed include educational level, citizenship status, personal characteristics, business characteristics, and race/gender.

All of the independent variables are regressed against wages in an OLS regression model. The OLS model estimates a linear relationship between the independent variables and the dependent variable. This multivariate regression model estimates a line similar to the standard $y=mx+b$ format, but with additional independent variables. The mathematical purpose of a regression analysis is to estimate a best-fit line for the model and assess which findings are statistically significant.

In Tables 9.09 to 9.11, a finding of disparity is denoted by an asterisk (*) when an independent variable is significant at or above the 95-percent confidence level. A finding of disparity indicates that there is a non-random relationship between wages and the independent variable. Tables of regression results indicate the sign of each variable’s coefficient from the regression output. If the coefficient sign is positive, it means there is a positive relationship between the dependent and independent variables. For example, if age is positively related to wages, this implies that older business owners tend to have higher business earnings, holding all other variables constant. If the coefficient sign for the independent variable is negative, this implies an inverse relationship between the dependent and independent variables. For example, if the coefficient for having a child under the age of six is negative, this implies that business owners with children under the age of six tend to have lower business earnings.



An OLS regression analysis is used to assess the presence of business earning disparities. OLS regressions have been conducted separately for each industry. Table 9.3 presents the independent variables used for the Business Earnings Analysis.²⁵⁰

Table 9.3: Independent Variables Used for the Business Earnings Analysis

Personal Characteristics	Educational Attainment	Ethnicity	Gender
Age	Bachelor's Degree	Caucasian American	Female
Age-squared	Advanced Degree	African American	
Incorporated Business		Asian American	
Home Ownership		Hispanic American	
Home Value		Native American	
Monthly Mortgage Payment		Other Minority*	
Interest and Dividends			
Language Spoken at Home			
A Child Under the Age of Six in the Household			
Marital Status			

(*) Other Minority includes individuals who belong to two or more racial groups.

C. Business Loan Approval Analysis

The Business Loan Approval Analysis examines the relationship between the probability of obtaining a business loan and variables related to socioeconomic factors and business characteristics. The model is an Ordered Logistic model where the dependent variable is the reported probability of obtaining a business loan.

The KFS data was commissioned by the Ewing Marion Kauffman Foundation and was conducted every year by Mathematica Policy Research, Inc. (MPR). The KFS data provides detailed longitudinal information on businesses and multiple owners' characteristics on 4,928 businesses started in 2004 in the United States. The most recent year the KFS data contains is 2011.

In Tables 9.13 to 9.15, a finding of disparity is denoted by an asterisk (*) when the independent variable is significant at or above the 95-percent confidence level. A finding of disparity indicates that there is a non-random relationship between obtaining a business loan and each independent variable. The tables containing the regression results also indicate the sign of each variable's coefficient from the regression output. If the coefficient sign is positive, it means there is a positive relationship between the dependent and independent variables. For example, if having a bachelor's degree has a positive coefficient, the business owners with a bachelor's degree are more probable to obtain a business loan, holding all other variables constant. If the coefficient for the independent



²⁵⁰ If an independent variable is a binary variable, it will be coded as "1" or "0" if the individual has that variable present (i.e. for the Hispanic American variable, it is coded as "1" if the individual is Hispanic American and "0" if not). If an independent variable is a continuous variable, that variable will be used (i.e. one's age can be labeled as 35).

variable is negative, this implies an inverse relationship between the dependent and independent variables. For instance, if having larger liabilities has a negative coefficient, this implies an indirect relationship between having larger liabilities and obtaining a business loan. Therefore, a firm that has larger liabilities has a decreased probability of obtaining a business loan (or a higher probability of being denied a business loan).

An Ordered Logistic regression is used to examine the factors that might explain loan approvals for the business owners. The dependent variable is a categorical variable where “2” denotes always being approved a business loan, “1” denotes sometimes being denied a business loan, and “0” signifies always being denied a business loan.²⁵¹ The independent variables describe the sets of factors below:

- Business’s credit and financial health
- Business owner’s credit and resources
- Business owner’s ethnicity and gender group classification

Table 9.4 presents the independent variables used for the Business Loan Approval Analysis.²⁵²

Table 9.4: Independent Variables Used for the Business Loan Approval Analysis

Firm's Credit and Financial Health	Owner's Credit and Resources	Ethnicity	Gender
Organization Type	Work Experience	Caucasian American	Female
Credit Risk	Use of Owner's Personal	African American	
Total Liabilities	Credit Card for Business	Asian American	
Annual Revenue	Expenses	Hispanic American	
Comparative Advantage	Bachelor's Degree	Native American	
	Advanced Degree	Other Minority*	

(*) Other Minority includes individuals who belong to two or more racial groups and multiracial businesses



²⁵¹ An Ordered Logistic model could be used differently for this model by assessing the numbers: 1= always denied a loan, 2= sometimes denied a loan, and 3= never denied a loan.

²⁵² If an independent variable is a binary variable, it will be coded as “1” if the individual has that variable present and “0” if otherwise (i.e. for the Hispanic American variable, it is coded as “1” if the individual is Hispanic American and “0” if otherwise). If an independent variable is a continuous variable, a value will be used (i.e. one’s age can be labeled as 35).

VI. Findings

A. Business Ownership Analysis

The business ownership variable is defined by the number of self-employed individuals in each of the three industries: construction, professional services, and goods/equipment/supplies. The analysis considered incorporated and unincorporated businesses. The data in this section come from Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties, California, which were specified using PUMAs.²⁵³ As noted in *Section IV* because each PUMA is determined by the United States Census, the region analyzed in the regression analyses could be limited to Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties, California.

Previous studies have shown that many non-discriminatory factors, such as education, age, and marital status, are associated with self-employment. In this analysis, race- and gender-neutral factors are combined with race- and gender-specific factors in a logistic regression model to determine whether observed race or gender disparities are independent of the race- and gender-neutral factors known to be associated with self-employment. It must be noted that many of these variables, such as having an advanced degree, while seeming to be race- and gender-neutral, may in fact be correlated with race and gender. For example, if Caucasian females are less likely to have advanced degrees and the regression results show that individuals with advanced degrees are significantly more likely to own a business, Caucasian females may be disadvantaged in multiple ways. First, Caucasian females may have statistically significant lower business ownership rates, so they face a direct disadvantage as a group. Second, they are indirectly disadvantaged as fewer of them tend to have advanced degrees, which significantly increase one's chances of owning a business.



²⁵³ Public Use Microdata Areas (PUMAs) are statistical geographic areas defined for the dissemination of Public Use Microdata Sample (PUMS) data. The PUMS data were collected by the United States Census Bureau from a five-percent sample of United States households. The observations were weighted to preserve the representative nature of the sample in relation to the population as a whole.

1. Logistic Model Results for Construction Business Ownership

Table 9.5 presents the logistic regression results for the likelihood of owning a business in the construction industry based on the 21 variables analyzed in this model.

Table 9.5: Construction Industry Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Age	0.061353	*	0.024594	2.49	0.013
Age-squared	-0.000255		0.000258	-0.99	0.323
Bachelor's Degree (a)	-0.053476		0.129711	-0.41	0.680
Advanced Degree	-0.341327		0.189965	-1.80	0.072
Home Owner	-0.065875		0.144697	-0.46	0.649
Home Value	0.000000		0.000000	1.11	0.269
Monthly Mortgage Payment	0.000007		0.000053	0.14	0.888
Interest and Dividends	0.000000		0.000000	-0.11	0.910
Speaks English at Home	-0.563335	*	0.167338	-3.37	0.001
Has a Child under the Age of Six	-0.221151		0.543910	-0.41	0.684
Married	0.048841		0.122627	0.40	0.690
Caucasian Female (b)	-0.765508	*	0.262005	-2.92	0.003
African American	-0.294301		0.289063	-1.02	0.309
Asian American	-0.116172		0.205728	-0.56	0.572
Hispanic American	-0.978315	*	0.186641	-5.24	0.000
Native American	0.002567		0.727125	0.00	0.997
Other Minority	-0.687256		0.415749	-1.65	0.098
Year 2011 (c)	0.120943		0.465804	0.26	0.795
Year 2012	-0.466944		0.328790	-1.42	0.156
Year 2013	-0.579873		0.329716	-1.76	0.079
Year 2014	-0.689536	*	0.327552	-2.11	0.035
Constant	-2.058653	*	0.663519	-3.10	0.002

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is Year 2010.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The construction industry logistic regression results indicate the following:²⁵⁴

- The likelihood of construction business ownership is positively associated with increased age. Older individuals are significantly more likely to be business owners in the construction industry. However, as individuals age the likelihood of being a business owner decreases in the construction industry, but not at a significant level.



²⁵⁴ For the Business Ownership Analysis, the results are presented for the age, education, race, and gender variables only.

- Individuals speaking English at home are significantly less likely to be business owners in the construction industry.
- Caucasian females and Hispanic Americans are significantly less likely to be business owners in the construction industry than Caucasian males.
- African Americans, Asian Americans, and other minorities²⁵⁵ are less likely to be business owners than Caucasian males in the construction industry, but not at a significant level.
- Native Americans are more likely to be business owners than Caucasian males in the construction industry, but not at a significant level.
- Individuals are significantly more likely to be business owners in the year 2014 than the year 2010 in the construction industry.

2. Logistic Model Results for Professional Services Business Ownership

Table 9.6 presents the logistic regression results for the likelihood of owning a business in the professional services industry based on the 21 variables analyzed in this model.



²⁵⁵ Other minorities include individuals who belong to two or more racial groups.

Table 9.6: Professional Services Industry Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Age	0.101731	*	0.017430	5.84	0.000
Age-squared	-0.000485	*	0.000168	-2.88	0.004
Bachelor's Degree (a)	0.454032	*	0.102598	4.43	0.000
Advanced Degree	0.539254	*	0.104936	5.14	0.000
Home Owner	-0.082202		0.085096	-0.97	0.334
Home Value	0.000000	*	0.000000	3.30	0.001
Monthly Mortgage Payment	-0.000019		0.000026	-0.71	0.478
Interest and Dividends	0.000000		0.000000	0.17	0.863
Speaks English at Home	0.296099	*	0.092806	3.19	0.001
Has a Child under the Age of Six	0.245848		0.147085	1.67	0.095
Married	-0.021981		0.076528	-0.29	0.774
Caucasian Female (b)	0.053985		0.084188	0.64	0.521
African American	-0.359265		0.213130	-1.69	0.092
Asian American	-0.649418	*	0.114443	-5.67	0.000
Hispanic American	0.155466		0.134787	1.15	0.249
Native American	0.848719		0.651667	1.30	0.193
Other Minority	0.186816		0.173023	1.08	0.280
Year 2011 (c)	-0.203984		0.261712	-0.78	0.436
Year 2012	-0.382580	*	0.190868	-2.00	0.045
Year 2013	-0.319733		0.191133	-1.67	0.094
Year 2014	-0.354865		0.190230	-1.87	0.062
Constant	-5.135153	*	0.490829	-10.46	0.000

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is Year 2010.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The professional services industry logistic regression results indicate the following:²⁵⁶

- The likelihood of professional services business ownership is positively associated with increased age. Older individuals are significantly more likely to be business owners in the professional services industry. However, as individuals age the likelihood of being a business owner significantly decreases in the professional services industry.
- Individuals with a bachelor's degree or an advanced degree are significantly more likely to be business owners in the professional services industry.
- Individuals who have higher-valued home are significantly more likely to be business owners in the professional services industry.



²⁵⁶ For the Business Ownership Analysis, the results are presented for the age, education, race, and gender variables only.

- Individuals speaking English at home are significantly more likely to be business owners in the professional services industry.
- Asian Americans are significantly less likely to be business owners in the professional services industry than Caucasian males.
- African Americans are less likely to be business owners in the professional services industry than Caucasian males, but not at a significant level.
- Caucasian females, Hispanic Americans, Native Americans and other minorities²⁵⁷ are more likely to be business owners in the professional services industry than Caucasian males, but not at a significant level.
- Individuals are significantly less likely to be business owners in the year 2012 than the year 2010 in the professional services industry.

3. Logistic Model Results for Goods/Equipment/Supplies Business Ownership

Table 9.7 presents the logistic regression results for the likelihood of owning a business in the goods/equipment/supplies industry based on the 21 variables analyzed in this model.

Table 9.7: Goods/Equipment/Supplies Industry Logistic Model

Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Age	0.125327	*	0.029013	4.32	0.000
Age-squared	-0.000810	*	0.000293	-2.76	0.006
Bachelor's Degree (a)	-0.349395	*	0.163454	-2.14	0.033
Advanced Degree	-0.377022		0.198626	-1.90	0.058
Home Owner	-0.356009	*	0.156891	-2.27	0.023
Home Value	0.000000		0.000000	1.48	0.140
Monthly Mortgage Payment	-0.000081		0.000062	-1.31	0.189
Interest and Dividends	0.000000		0.000000	0.41	0.684
Speaks English at Home	-0.558180	*	0.172360	-3.24	0.001
Has a Child under the Age of Six	-0.733396		0.446024	-1.64	0.100
Married	-0.120187		0.144435	-0.83	0.405
Caucasian Female (b)	-0.567276	*	0.225496	-2.52	0.012
African American	-0.715808	*	0.344750	-2.08	0.038
Asian American	-0.679537	*	0.211066	-3.22	0.001
Hispanic American	-0.104580		0.209763	-0.50	0.618
Native American	-		-	-	-
Other Minority	-1.518732	*	0.410515	-3.70	0.000

²⁵⁷ Other minorities include individuals who belong to two or more racial groups.



Business Ownership Model	Coefficient	Significance	Standard Error	Z-score	P> z
Year 2011 (c)	0.494798		0.698597	0.71	0.479
Year 2012	0.122979		0.456634	0.27	0.788
Year 2013	0.048790		0.458604	0.11	0.915
Year 2014	-0.233571		0.457031	-0.51	0.609
Constant	-4.535981	*	0.846740	-5.36	0.000

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is Year 2010.

(P>|z|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available data to determine statistical significance.

The goods/equipment/supplies industry logistic regression results indicate the following:²⁵⁸

- The likelihood of goods/equipment/supplies business ownership is positively associated with increased age. Older individuals are significantly more likely to be business owners in the goods/equipment/supplies industry. However, as individuals age the likelihood of being a business owner significantly decreases in the goods/equipment/supplies industry.
- Individuals with a bachelor's degree are significantly less likely to be business owners in the goods/equipment/supplies industry.
- Home owners are significantly less likely to be business owners in the goods/equipment/supplies services industry.
- Individuals speaking English at home are significantly less likely to be business owners in the goods/equipment/supplies industry.
- Caucasian females, African Americans, Asian Americans, and other minorities²⁵⁹ are significantly less likely to be business owners in the goods/equipment/supplies industry than Caucasian males.
- Hispanic Americans less likely to be business owners in the goods/equipment/supplies industry than Caucasian males, but not at a significant level.



²⁵⁸ For the Business Ownership Analysis, the results are presented for the age, education, race, and gender variables only.

²⁵⁹ Other minorities include individuals who belong to two or more racial groups.

B. Business Ownership Analysis Summary

The Business Ownership Analysis examined the different explanatory variables' impact on an individual's likelihood of owning a business in the construction, professional services, and goods/equipment/supplies industries. Controlling for race- and gender-neutral factors, the Business Ownership Analysis results show that statistically significant disparities in the likelihood of owning a business exist for minorities and Caucasian females when compared to similarly situated Caucasian males.

Caucasian females are significantly less likely to own a business in the construction and goods/equipment/supplies industries than similarly situated Caucasian males. African Americans are significantly less likely to own a business in the goods/equipment/supplies industries. Asian Americans are significantly less likely to own a business in the professional services and goods/equipment/supplies industries. Hispanic Americans are significantly less likely to own a business in the construction industry. Other minorities are significantly less likely to own a business in the goods/equipment/supplies industry. Table 9.8 depicts the business ownership regression analysis results by ethnicity, gender, and industry.

Table 9.8: Statistically Significant Business Ownership Disparities

Ethnicity/Gender	Construction	Professional Services	Goods/Equipment/Supplies
Caucasian Female	<i>Disparity</i>	No Disparity	<i>Disparity</i>
African American	No Disparity	No Disparity	<i>Disparity</i>
Asian American	No Disparity	<i>Disparity</i>	<i>Disparity</i>
Hispanic American	<i>Disparity</i>	No Disparity	No Disparity
Native American	No Disparity	No Disparity	No Disparity
Other Minority ²⁶⁰	No Disparity	No Disparity	<i>Disparity</i>

C. Business Earnings Analysis

The business earnings variable is identified by self-employment income²⁶¹ from 2010 to 2014 for the three industries: construction, professional services, and goods/equipment/supplies. The analysis considered incorporated businesses.

Previous studies have shown that many non-discriminatory factors, such as education, age, and marital status, are associated with self-employment income. In this analysis, race- and gender-neutral factors are combined with race and gender groups in an OLS regression model to determine whether observed race or gender disparities were independent of the race- and gender-neutral factors known to be associated with self-employment income.



²⁶⁰ Other minority includes individuals who belong to two or more racial groups.

²⁶¹ The terms "business earnings" and "self-employment income" are used interchangeably.

1. OLS Regression Results in the Construction Industry

Table 9.9 depicts the results of the OLS regression for business earnings in the construction industry based on the 22 variables analyzed in this model.

Table 9.9: Construction Industry OLS Regression

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	3386.647	*	486.797	6.96	0.000
Age-squared	-33.260	*	5.959	-5.58	0.000
Incorporated Business	7180.460		6746.917	1.06	0.287
Bachelor's Degree (a)	21696.650	*	3383.091	6.41	0.000
Advanced Degree	5770.484		3273.577	1.76	0.078
Home Owner	498.274		2720.015	0.18	0.855
Home Value	0.012	*	0.004	2.88	0.004
Monthly Mortgage Payment	7.537	*	1.484	5.08	0.000
Interest and Dividends	0.001		0.007	0.19	0.846
Speaks English at Home	10103.110	*	2604.669	3.88	0.000
Has a Child under the Age of Six	-10623.760	*	5293.111	-2.01	0.045
Married	11460.830	*	2236.178	5.13	0.000
Caucasian Female (b)	-23740.370	*	6017.980	-3.94	0.000
African American	-23206.870	*	6432.259	-3.61	0.000
Asian American	-21152.860	*	4317.050	-4.90	0.000
Hispanic American	-17397.210	*	3342.997	-5.20	0.000
Native American	-32961.870	*	7288.663	-4.52	0.000
Other Minority	-12698.360	*	6408.031	-1.98	0.048
Year 2011 (c)	-1335.196		13919.740	-0.10	0.924
Year 2012	8106.807		6085.137	1.33	0.183
Year 2013	8800.602		6171.783	1.43	0.154
Year 2014	9517.099		6102.317	1.56	0.119
Constant	-53724.920	*	11999.690	-4.48	0.000

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2010.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The OLS regression results for business earnings in the construction industry indicate the following:²⁶²

- Older business owners have significantly higher business earnings in the construction industry. However, as business owners age, they have significantly lower business earnings in the construction industry.



²⁶² For the Business Earnings Model, the results are presented for the age, education, race, and gender variables only.

- Business owners with a bachelor’s degree have significantly higher business earnings in the construction industry. Business owners with an advanced degree have higher business earnings in the construction industry, but not at a significant level.
- Business owners who have higher-valued home have significantly higher business earnings in the construction industry.
- Business owners paying higher monthly mortgages have significantly higher business earnings in the construction industry.
- Business owners speaking English at home have significantly higher business earnings in the construction industry.
- Business owners who have a child under the age of six have significantly lower business earnings in the construction industry.
- Married Business owners have significantly higher business earnings in the construction industry.
- Caucasian female, African American, Asian American, Hispanic American, Native American, and other minority²⁶³ business owners have significantly lower business earnings than Caucasian males in the construction industry.

2. OLS Regression Results in the Professional Services Industry

Table 9.10 depicts the results of the OLS regression for business earnings in the professional services industry based on the 22 variables analyzed in this model.

Table 9.10: Professional Services Industry OLS Regression

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	9008.841	*	528.294	17.05	0.000
Age-squared	-93.502	*	6.012	-15.55	0.000
Incorporated Business	-385.238		7034.308	-0.05	0.956
Bachelor's Degree (a)	28663.360	*	2466.207	11.62	0.000
Advanced Degree	56273.020	*	3140.449	17.92	0.000
Home Owner	-2409.541		3189.398	-0.76	0.450
Home Value	0.020	*	0.003	6.58	0.000
Monthly Mortgage Payment	10.262	*	1.195	8.59	0.000
Interest and Dividends	0.032	*	0.010	3.06	0.002
Speaks English at Home	9336.313	*	2538.390	3.68	0.000
Has a Child under the Age of Six	-9455.288	*	4242.813	-2.23	0.026

²⁶³ Other minority includes individuals who belong to two or more racial groups.



Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Married	13130.130	*	2584.528	5.08	0.000
Caucasian Female (b)	-34566.150	*	3396.332	-10.18	0.000
African American	-43079.310	*	4354.204	-9.89	0.000
Asian American	-32966.710	*	3382.399	-9.75	0.000
Hispanic American	-46852.990	*	3876.127	-12.09	0.000
Native American	-37421.860	*	9762.214	-3.83	0.000
Other Minority	-34460.710	*	5937.164	-5.80	0.000
Year 2011 (c)	9091.883		8871.895	1.02	0.305
Year 2012	26103.280	*	6792.531	3.84	0.000
Year 2013	29266.540	*	6870.915	4.26	0.000
Year 2014	27170.480	*	6871.496	3.95	0.000
Constant	-173887.800	*	13020.430	-13.35	0.000

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2010.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The OLS regression results for business earnings in the professional services industry indicate the following.²⁶⁴

- Older business owners have significantly higher business earnings in the professional services industry. However, as business owners age, they have significantly lower business earnings in the professional services industry.
- Business owners with a bachelor's degree or an advanced degree have significantly higher business earnings in the professional services industry.
- Business owners who have higher-valued home have significantly higher business earnings in the professional services industry.
- Business owners paying higher monthly mortgages have significantly higher business earnings in the professional services industry.
- Business owners who have higher interest and dividends income have significantly higher business earnings in the professional services industry.
- Business owners speaking English at home have significantly higher business earnings in the professional services industry.
- Business owners who have a child under the age of six have significantly lower business earnings in the professional services industry.



²⁶⁴ For the Business Earnings Model, the results are presented for the age, education, race, and gender variables only.

- Married business owners have significantly higher business earnings in the professional services industry.
- Caucasian female, African American, Asian American, Hispanic American, Native American, and other minority²⁶⁵ business owners have significantly lower business earnings than Caucasian males in the professional services industry.
- Business owners have significantly higher adjusted business earnings in the years 2012, 2013, and 2014 than the year 2010 in the professional services industry.

3. OLS Regression Results in the Goods/Equipment/Supplies Industry

Table 9.11 depicts the results of the OLS regression for business earnings in the goods/equipment/supplies industry based on the 22 variables analyzed in this model.



²⁶⁵ Other minority includes individuals who belong to two or more racial groups.

Table 9.11: Goods/Equipment/Supplies Industry OLS Regression

Business Earnings Model	Coefficient	Significance	Standard Error	t-value	P> t
Age	6564.509	*	581.123	11.30	0.000
Age-squared	-73.736	*	6.786	-10.87	0.000
Incorporated Business	1771.013		14013.770	0.13	0.899
Bachelor's Degree (a)	30465.510	*	3375.784	9.02	0.000
Advanced Degree	54843.320	*	4866.741	11.27	0.000
Home Owner	-7214.688		4331.911	-1.67	0.096
Home Value	0.032	*	0.006	5.44	0.000
Monthly Mortgage Payment	10.282	*	1.742	5.90	0.000
Interest and Dividends	0.043	*	0.014	3.03	0.002
Speaks English at Home	2537.936		4198.531	0.60	0.546
Has a Child under the Age of Six	-8671.874		7979.640	-1.09	0.277
Married	13473.610	*	3268.081	4.12	0.000
Caucasian Female (b)	-17674.490	*	5685.808	-3.11	0.002
African American	-45886.240	*	7456.399	-6.15	0.000
Asian American	-27097.790	*	5922.581	-4.58	0.000
Hispanic American	-43336.340	*	5013.611	-8.64	0.000
Native American	-36950.280	*	12712.420	-2.91	0.004
Other Minority	-20678.060	*	8667.016	-2.39	0.017
Year 2011 (c)	6381.980		21683.060	0.29	0.769
Year 2012	26662.560	*	11305.760	2.36	0.018
Year 2013	34562.240	*	11334.360	3.05	0.002
Year 2014	33611.030	*	11227.070	2.99	0.003
Constant	-123673.300	*	16877.380	-7.33	0.000

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2010.

(P>|t|) of less than 0.05 denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The OLS regression results for business earnings in the goods/equipment/supplies industry indicate the following:²⁶⁶

- Older business owners have significantly higher business earnings in the goods/equipment/supplies industry. However, as business owners age, they have significantly lower business earnings in the goods/equipment/supplies industry.
- Business owners with a bachelor's degree or an advanced degree have significantly higher business earnings in the goods/equipment/supplies industry.



²⁶⁶ For the Business Earnings Model, the results are presented for the age, education, race, and gender variables only.

- Business owners who have higher-valued home have significantly higher business earnings in the goods/equipment/supplies industry.
- Business owners paying higher monthly mortgages have significantly higher business earnings in the goods/equipment/supplies industry.
- Business owners who have higher interest and dividends income have significantly higher business earnings in the goods/equipment/supplies industry.
- Married business owners have significantly higher business earnings in the goods/equipment/supplies industry.
- Caucasian female, African American, Asian American, Hispanic American, Native American, and other minority²⁶⁷ business owners have significantly lower business earnings than Caucasian males in the goods/equipment/supplies industry.
- Business owners have significantly higher adjusted business earnings in the years 2012, 2013, and 2014 than the year 2010 in the goods/equipment/supplies industry.

D. Business Earnings Analysis Summary

Controlling for race- and gender-neutral factors, the Business Earnings Analysis documented statistically significant disparities in business earnings for minorities and Caucasian females when compared to similarly situated Caucasian males. Caucasian females have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies industries. African Americans have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies industries. Asian Americans have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies industries. Hispanic Americans have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies industries. Native Americans have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies industries. Other minorities have significantly lower business earnings in the construction, professional services, and goods/equipment/supplies services industries. Table 9.12 depicts the business earnings regression results by ethnicity, gender, and industry.



²⁶⁷ Other minority includes individuals who belong to two or more racial groups.

Table 9.12: Statistically Significant Business Earnings Disparities

Ethnicity/Gender	Construction	Professional Services	Goods/Equipment/Supplies
Caucasian Female	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
African American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Asian American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Hispanic American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Native American	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>
Other Minority ²⁶⁸	<i>Disparity</i>	<i>Disparity</i>	<i>Disparity</i>

E. Business Loan Approval Analysis

Access to business capital in the form of loans is measured by the Business Loan Approval Analysis. The probability of business loan approval variable is a score that reflects the reported probability of experiencing business loan approval. The data in this section comes from the KFS dataset. Previous studies have shown that many non-discriminatory factors, such as education, experience of the business owner, and firm characteristics, could lead to differences in a business owner’s loan approval rate. In this analysis race- and gender-neutral factors are combined with race and gender groups in an ordered logistic regression model to determine whether observed race or gender disparities were independent of the race- and gender-neutral factors known to be associated with business loan approval.

Access to business capital in the form of loans is measured by the probability of obtaining a business loan in three industries: construction, professional services, and goods/equipment/supplies. The KFS records the geographic location of the firm by the Census Division. Due to this, the sampling region was expanded to the West Region as defined by the Census. This region includes: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

1. Ordered Logistic Regression Results in the Construction Industry

Table 9.13 depicts the results of the ordered logistic regression for business loan approval in the construction industry based on the 17 variables analyzed in this model.



²⁶⁸ Other minority includes individuals who belong to two or more racial groups.

Table 9.13: Construction Ordered Logistic Regression

Business Loan Approval Model	Coefficient	Significance	Standard Error	Z-score	P> z
Work Experience	-0.008077		0.02904	-0.28	0.781
Corporation	-1.253285		0.71912	-1.74	0.081
Credit Risk	-0.598757	*	0.24439	-2.45	0.014
Total Liabilities	-0.043403		0.12257	-0.35	0.723
Annual Revenue	0.000001		0.00000	1.37	0.171
Use of Owner's Personal Credit Card for Business	0.270068		0.58085	0.46	0.642
Competitiveness	0.676398		0.49088	1.38	0.168
Bachelor's Degree (a)	-1.327811		0.80177	-1.66	0.098
Advanced Degree	0.372411		0.94362	0.39	0.693
Caucasian Female (b)	-0.122270		1.09558	-0.11	0.911
African American	-1.925250		1.45869	-1.32	0.187
Asian American	-2.205973		1.14906	-1.92	0.055
Hispanic American	-1.705412		1.41162	-1.21	0.227
Native American	-		-	-	-
Other Minority	19.730390	*	1.86497	10.58	0.000
Year 2010 (c)	0.682430		0.77428	0.88	0.378
Year 2011	1.581488	*	0.79566	1.99	0.047

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|z|) of 0.05 and less denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available firms to determine statistical significance.

The ordered logistic regression results for business loan approval in the construction industry indicate the following:²⁶⁹

- Businesses with higher credit risk have a significantly lower probability of obtaining a business loan in the construction industry.
- Caucasian females, African Americans, Asian Americans, and Hispanics Americans have a lower probability of obtaining a business loan than Caucasian males in the construction industry, but not at a significant level.
- Other minorities have a significantly higher probability of obtaining a business loan than Caucasian males in the construction industry.
- Business Owners have a significantly higher probability of obtaining a business loan in the year 2011 then the year 2009.



²⁶⁹ For the Earnings Disparity Model, the results are presented for the age, education, race, and gender variables only.

2. Ordered Logistic Regression Results in the Professional Services Industry

Table 9.14 depicts the results of the ordered logistic regression for business loan approval in the professional services industry based on the 17 variables analyzed in this model.

Table 9.14: Professional Services Ordered Logistic Regression

Business Loan Approval Model	Coefficient	Significance	Standard Error	Z-score	P> z
Work Experience	0.052565	*	0.02535	2.07	0.038
Corporation	0.865177		0.62681	1.38	0.167
Credit Risk	-0.409741		0.23554	-1.74	0.082
Total Liabilities	0.092883		0.08734	1.06	0.288
Annual Revenue	0.000001		0.00000	1.50	0.134
Use of Owner's Personal Credit Card for Business	-0.517988		0.61188	-0.85	0.397
Competitiveness	-0.793944		0.42718	-1.86	0.063
Bachelor's Degree (a)	-0.176720		0.45849	-0.39	0.700
Advanced Degree	-1.123204	*	0.54668	-2.05	0.040
Caucasian Female (b)	-0.335592		0.61587	-0.54	0.586
African American	-0.078711		1.83634	-0.04	0.966
Asian American	-1.281255		0.82674	-1.55	0.121
Hispanic American	0.586703		1.21262	0.48	0.629
Native American	-0.901352		0.57622	-1.56	0.118
Other Minority	-2.484005	*	0.70808	-3.51	0.000
Year 2010 (c)	0.462331		0.58259	0.79	0.427
Year 2011	0.061345		0.49660	0.12	0.902

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|z|) of 0.05 and less denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

The ordered logistic regression results for business loan approval in the professional services industry indicate the following:²⁷⁰

- Business owners with longer work experience have a significantly higher probability of obtaining a business loan in the professional services industry.
- Business owners with an advanced degree have a significantly lower probability of obtaining a business loan in the professional services industry.



²⁷⁰ For the Earnings Disparity Model, the results are presented for the age, education, race, and gender variables only.

- Caucasian females, African Americans, Asian Americans, and Native Americans have a lower probability of obtaining a business loan than Caucasian males in the professional services industry, but not at a significant level.
- Hispanic Americans have a higher probability of obtaining a business loan than Caucasian males in the professional services industry, but not at a significant level.
- Other minorities have a significantly lower probability of obtaining a business loan than Caucasian males in the professional services industry.

3. Ordered Logistic Regression Results in the Goods/Equipment/Supplies Industry

Table 9.15 depicts the results of the ordered logistic regression for business loan approval in the goods/equipment/supplies industry based on the 17 variables analyzed in this model.

Table 9.15: Goods/Equipment/Supplies Ordered Logistic Regression

Business Loan Approval Model	Coefficient	Significance	Standard Error	Z-score	P> z
Work Experience	0.072416	*	0.02945	2.46	0.014
Corporation	-0.614012		1.13463	-0.54	0.588
Credit Risk	0.661940		0.36111	1.83	0.067
Total Liabilities	0.402766	*	0.20299	1.98	0.047
Annual Revenue	0.000000		0.00000	-0.08	0.933
Use of Owner's Personal Credit Card for Business	-1.425827		0.82577	-1.73	0.084
Competitiveness	1.248508		0.78147	1.60	0.110
Bachelor's Degree (a)	-1.106964		0.87136	-1.27	0.204
Advanced Degree	-0.204394		0.97378	-0.21	0.834
Caucasian Female (b)	0.488569		0.87341	0.56	0.576
African American	1.944139		1.43325	1.36	0.175
Asian American	0.005668		1.37789	0.00	0.997
Hispanic American	-3.456120	*	1.47805	-2.34	0.019
Native American	-		-	-	-
Other Minority	3.615046	*	1.52384	2.37	0.018
Year 2010 (c)	0.747846		0.63648	1.17	0.240
Year 2011	-0.307243		1.13371	-0.27	0.786

(a) For the variables bachelor's degree and advanced degree, the baseline variable is no degree.

(b) For the ethnicity variables, the baseline variable is Caucasian Male.

(c) For the year variables, the baseline variable is year 2009.

(P>|z|) of 0.05 and less denotes findings of statistical significance.

(*) denotes a statistically significant variable with 95% confidence.

(-) denotes a variable with too few available firms to determine statistical significance.



The ordered logistic regression results for business loan approval in the goods/equipment/supplies industry indicate the following:²⁷¹

- Business owners with longer work experience have a significantly higher probability of obtaining a business loan in the professional services industry.
- Businesses with higher total liabilities have a significantly higher probability of obtaining a business loan in the professional services industry.
- Caucasian females, African Americans, and Asian Americans have a higher probability of obtaining a business loan than Caucasian males in the goods/equipment/supplies industry, but not at a significant level.
- Hispanic Americans have a significantly lower probability of obtaining a business loan than Caucasian males in the goods/equipment/supplies industry, but not at a significant level.
- Other minorities have a significantly higher probability of obtaining a business loan than Caucasian males in the goods/equipment/supplies industry.

F. Business Loan Approval Analysis Summary

Controlling for race- and gender-neutral factors, the Business Loan Approval Analysis documented statistically significant disparities in business loan approval rates for Hispanic Americans and other minorities when compared to similarly situated Caucasian males. Hispanic Americans have a significantly lower probability of obtaining a business loan in the goods/equipment/supplies industry. Other minorities have a significantly lower probability of obtaining a business loan in the professional services industry. Table 9.16 depicts the business loan approval disparity regression results by ethnicity, gender, and industry.



²⁷¹ For the Earnings Disparity Model, the results are presented for the age, education, race, and gender variables only.

Table 9.16: Statistically Significant Business Loan Approval Disparities

Ethnicity/Gender	Construction	Professional Services	Goods/Equipment/Supplies
Caucasian Female	No Disparity	No Disparity	No Disparity
African American	No Disparity	No Disparity	No Disparity
Asian American	No Disparity	No Disparity	No Disparity
Hispanic American	No Disparity	No Disparity	<i>Disparity</i>
Native American	No Disparity	No Disparity	No Disparity
Other Minority	No Disparity	<i>Disparity</i>	No Disparity

VII. Conclusion

Three regression analyses were conducted to determine whether there were factors in the private sector that might help explain the current levels of DBE availability and any statistical disparities between DBE availability and utilization identified in the Study. The analyses examined the following outcome variables: business ownership, business earnings, and business loan approval rates.

These analyses were performed for the three industries—construction, professional services, and goods/equipment/supplies—included in the Study. The regression analyses examined the effect of race and gender on the three outcome variables. The Business Ownership Analysis and the Business Earnings Analysis used data from the 2010 to 2014 PUMS datasets for Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties, California, and compared business ownership rates and earnings for DBEs to those of similarly situated Caucasian males. The Business Loan Approval Analysis used the 2009 to 2011 KFS dataset for the South Region and compared business loan approval rates for DBEs to those of similarly situated Caucasian males.

The analyses of the three outcome variables document disparities that could adversely affect the formation and growth of DBEs within the construction, professional services, and goods/equipment/supplies industries. In the absence of a race- and gender-neutral explanation for the disparities, the regression findings point to racial and gender discrimination that depressed business ownership, business earnings, and business loan approval. Such discrimination is a manifestation of economic conditions in the private sector that impedes minorities’ and Caucasian females’ efforts to own, expand, and sustain businesses. It can reasonably be inferred that these private sector conditions are manifested in the current DBEs’ experiences and likely contributed to lower levels of willing and able DBEs.

It is important to note that there are limitations to using the regression findings to access disparity between the utilization and availability of businesses. No matter how discriminatory the private sector is, the findings cannot be used as the factual basis for a local government-sponsored, race-conscious DBE program. Therefore, caution must be exercised in the interpretation and application of the regression findings in a legally sound disparity study. The findings’ greatest utility is in the formulation of race-neutral recommendations for the Study.



CHAPTER 10: Anecdotal Analysis

I. Introduction

This chapter presents anecdotal evidence that was gathered and analyzed to supplement the statistical findings and disclose any barriers that might affect Disadvantaged Business Enterprise (DBE)²⁷² access to the Santa Clara Valley Transportation Authority, San Mateo County Transit District, and the Peninsula Corridor Joint Powers Board (Agencies) contracts. The anecdotal evidence was gathered in a fair and equitable manner. In-depth, one-on-one interviews were conducted, and testimony was gathered from business community meetings.

II. Legal Standard

The importance of anecdotal evidence in assessing the presence of discrimination in a geographic market was identified in the landmark case of *City of Richmond V. J.A. Croson Co (Croson)*.²⁷³ The United States Supreme Court in its 1989 *Croson* decision specified the use of anecdotal testimony to determine whether remedial, race-conscious relief may be justified in a local government's market area. The court stated that a pattern of individual discriminatory acts can explain the statistical disparity findings.²⁷⁴ However, such discriminatory acts cannot be used to determine the presence of discrimination in a government's contracting process.

The court did find that anecdotal testimony of individual discriminatory acts can document the routine practices affecting minority and women-owned businesses' access to a government's contracts. While the statistical data must be used to measure the existence of discrimination, anecdotal testimony provides the human context through which the numbers can be understood. The anecdotal testimony collected from business owners describes their perceptions of barriers in the market area.

A. Evidence of Active and Passive Participation

Croson authorizes anecdotal inquiries along two lines. The first approach investigates active government discrimination defined as acts of exclusion committed by the government. The purpose of examining passive participation is to determine whether the government engaged in acts that prevented DBEs from obtaining contracts.

²⁷² Disadvantaged Business Enterprises are defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

²⁷³ *City of Richmond V. J.A. Croson Co.*, 488 U.S. 469 (1989)

²⁷⁴ *Id.*



The second approach examines the government’s passive support of discriminatory practices in the market area where its funds are infused. Passive exclusion occurs when government contracts are awarded to companies that discriminate against DBEs, and when the government fails to prevent discrimination by its prime contractors.²⁷⁵

Although anecdotal evidence of discrimination is entitled to less evidentiary weight than statistical evidence, when paired with appropriate statistical data, anecdotal evidence of either active or passive discrimination can support the imposition of a race or gender-conscious remedial program.²⁷⁶ Therefore, anecdotal testimony used in combination with statistical data that supports a race or gender-conscious program has value in the *Croson* framework. In addition, anecdotal testimony, according to *Croson*, can identify practices that should be enhanced or eliminated to increase contracting opportunities for DBEs.

B. Anecdotal Interview Process

The two methods used to gather anecdotal testimony allowed interviewees to describe the barriers they experienced in conducting business and inform an understanding of how barriers occur, who creates them, and their effect on business development. Thus, the information obtained offers the Agencies vital insights on an array of policy changes to its Disadvantaged Business Enterprise (DBE) Program.

1. In-depth Interviews

Extensive efforts were undertaken to conduct 50 one-on-one interviews. Potential interviewees were identified from contract and certification records, business community meetings, and outreach. Potential interviewees were pre-screened to determine if they operated a business within the market area during the study period and were willing to commit to the interview process. A total of 82 business owners agreed to be interviewed, but only 32 business owners completed an interview. The 50 business owners who declined to be interviewed would not provide a reason for their decision.

The businesses owned by the 32 business owners that were interviewed were located in Alameda, San Francisco, San Mateo, and Santa Clara counties. The structured interview questionnaire queried the business owner for information about the barriers business owners encountered working with or seeking work from the Agencies. A description of positive experiences working with the Agencies and their prime contractors, knowledge of the Agencies’ DBE programs, and recommendations to enhance each program were also elicited through the questionnaire.

2. Business Community Meeting Testimony

Business community meetings were held in May, June, and August 2016. The purpose of the meetings was to announce the Study; inform the business community about the Study’s legal

²⁷⁵ *Croson*, 488 U.S. at 491-93, 509.

²⁷⁶ *Croson*, 488 U.S. at 509.



framework, methodology, and timeline; and give business owners the opportunity to speak with the Agency representatives regarding contracting opportunities. The meetings also sought to solicit the business community's support for the Study and to identify business owners willing to participate in the anecdotal interviews.

The meetings were held at the following locations:

- Santa Clara Valley Transportation Authority Auditorium, San Jose, May 3, 2016, at 8:30 A.M.
- Southeast Community Facility, San Francisco, June 23, 2016, at 1:00 P.M.
- SamTrans Auditorium, San Carlos, August 2, 2016, at 9:00 A.M.

The outreach efforts to promote the business community meetings targeted firms from the construction, professional services, and goods/equipment/supplies industries. A total of 114 people attended the San Jose meeting, 16 people attended the San Francisco meeting, and 39 people attended the San Carlos meeting. The meetings were also attended by Agency representatives. The meetings were recorded and transcribed. Testimony from these meetings has been incorporated in this chapter in combination with the accounts from the 32 one-on-one interviews.

C. Summary of the Anecdotal Interview Findings

Excerpts from the interviewee accounts illustrate a pattern of practices that have affected DBE participation in the Agencies' contracting process. The practices identified by the interviewees are grouped into six categories:

1. Informal Business Connections
2. Financing and Bonding
3. Comments about Certification Requirements
4. Comments about the Disadvantaged Business Enterprise Program
5. Exemplary Practices of the Agencies
6. Recommendations to Enhance the DBE Program

III. Anecdotal Findings

A. Informal Business Connections

. Interviewees complained that they were unable to establish relationships with non-minority-owned businesses despite their attempts to break into the contracting community.

A Caucasian female owner of a construction company believes that exclusionary networks still exist in her industry:



I think that the good old boys' network is part of the construction management firms. They tend to try and take advantage of start-ups. It's a network that is hard to break into if you're not connected.

A minority male owner of a construction company explained how he believes the good old boys' network operates:

I believe the good old boys' network is still present. It happens behind-the-scenes on change orders, informal contracts, and emergency contracts. That is where they have a lot of discretion.

A minority male owner of a professional services company believes that the good old boys' network is prevalent in his industry because of negative stereotypes about minority business owners:

The good old boys' network is very present, especially in my field. It's very difficult for minority companies, especially African American and Hispanic American-owned businesses, to get information technology work. There are ingrained beliefs that minorities are not good in technology. We are not looked at as competent and able to do the work and do it well.

A minority female owner of a professional services company believes that the good old boys' network exists in the local transportation industry:

The good old boys' network is present in the transit agencies. My industry is male-dominated, and the good old boys' network is in place and have been in place for so many years. They have key relationships especially in the Bay Area. Large firms promote their businesses with their own lobbyists that help them gain knowledge and get projects. I think that is a part of the good old boys' network.



A Caucasian female owner of a professional services company described the transportation industry as controlled by the good old boys' network:

The transportation industry is a very male-dominated field. I've been in this profession for decades, but the good old boys' network dominates this industry. Business is conducted in a good old boys' fashion quite often. I would say it's alive and well.

A Caucasian female owner of a professional services company also believes that the transportation industry is dominated by the good old boys' network:

The transit industry evolved from a good old boys' network. There is an old boys' network both spoken and unspoken. I don't know if the network impacted our firm, but to ignore the fact that there is an old boys' network is a fool's errand.

A minority male owner of a professional services company reported that the architecture and design industry is controlled by the good old boys' network:

The good old boys' network is definitely present in the architecture and design field. They meet at the athletic club or over drinks at the cigar bar, it's mutually exclusive.

A minority male owner of a professional services company believes that the good old boys' network dominates the engineering industry:

The good old boys' network controls the engineering design field. If it wasn't for the DBE Program, we would not get any work. The good old boys' network is very significant in my industry,

A Caucasian female owner of a professional services company also believes that the good old boys' network is prevalent in the engineering field:

The good old boys' network is alive and well. I work in construction oversight and engineering which is very male-dominated and stereotypical. So, yes, the good old boys' network is absolutely alive and well. I see and experience it daily.



A minority male owner of a professional services company explained why he believes his industry is dominated by the good old boys' network:

The good old boys' network absolutely exists in my industry. Most contractors already have a contractor in mind that they want to roll with.

A minority male owner of a construction company reported why he believes the good old boys' network still exists in the construction industry:

The good old boys exist. The same firms have gotten the majority of the work over the last 20 years. So yeah, it exists.

B. Difficulty Obtaining Financing and Bonding

Business owners expressed difficulties securing bonding and financing for business operations, equipment, and expansion.

A Caucasian female owner of a construction company reported that she has not been able to obtain bonding since 2009:

We couldn't get bonding. We couldn't meet the financial ratio due to under-capitalization. We haven't had any bonding since 2009.

A minority male owner of a construction company described the difficulties small business owners face while trying to meet the bonding requirements and obtain financing:

Unless you're loaded, you can't get bonding. The SBA [Small Business Administration] claims they have bonding programs, but they require that you have been in business for three years. If you survive for three years, then we can talk about whether we can give you a line of credit or bonding. I was working on a design-build job and they had a prequalification requirement regarding the amount of insurance we had to carry. In order for a small company to do the work, we had to fork out \$20,000 or \$30,000 a year just to bid the job. So, things like that are a hindrance to DBEs and small businesses. The inability to get bonding keeps us from being competitive. So, contractors use this as a reason not to work with us. They warn us in their advertisements soliciting DBE subcontractors. They require that a bond be provided in order



to be used as their subcontractor. This is used to dispose of DBE contractors. For those of us that can't get bonding, we are relegated to bidding jobs only as a subcontractor. When you bid as a prime contractor, the field narrows and you can be as aggressive and creative as you want because you don't have to go through anyone else. If I have to bid to a prime contractor, he holds my fate in his hand.

A minority male owner of a professional services company believes the inability to obtain bonding is a major obstacle for DBEs:

The number one issue is always bonding. Bonding is a big problem. Bonding is just a way to suppress small businesses because of their inability to get bonding. It serves as a cap for the growth of our company.

A minority male owner of a professional services company explained that he is unable to bid on certain contracts because of the performance bond requirements:

There were contracts that we wanted to bid on, but they required an absurd amount of money for the bonding. We decided not to pursue projects where we would otherwise be qualified for.

A minority male owner of a construction company also reported that the bonding requirements exclude him from bidding on construction projects:

I'm not able to bid on certain jobs because of the bonding requirements. It's an exclusionary tactic. It's not inclusionary.

A minority male owner of a professional services company explained that performance bonds are a hindrance for his small business:

The challenges we face is getting the bonds in order to bid the job. Performance bonds make it hard to bid jobs. We also have to limit the number of companies we apply for bonding because that can go against your credit.



A minority female owner of a construction company reported that she was unable to get bonding because she could not meet the collateral requirements:

I don't have enough collateral to get the bonding I need. I don't do a lot of public agency projects because of the bonding requirements. Most private projects don't require bonding. It's kind of a Catch-22. You need to have the experience, but we can't get the experience because we can't get the bond. So, we are between a rock and a hard place.

A minority male owner of a professional services company explained why he believes that some insurance requirements are difficult for small businesses to meet:

Nowadays it's ruthless in the professional services field because of insurance requirements. I believe the Peninsula Corridor Joint Powers Board requires \$10 million in insurance. No DBE firms that I know can meet that requirement. How do they expect a DBE firm to participate on projects where there is a \$10 million errors and omissions insurance? We can't even afford \$2 million, which is common. That is one of the biggest stumbling blocks for DBE firms. This actually makes it hard for small businesses to survive. No prime contractor can cover a subcontractor for that amount. So, that requirement basically pushes us aside. What happens is the good old boys' network gets all the work.

A minority male owner of a professional services company explained that he refused to respond to a proposal because of the excessive insurance requirements even though his firm was qualified to perform the services:

With SamTrans we were required to have \$2,000,000 to \$4,000,000 errors and omissions insurance coverage. I don't know anyone who writes those. To get it we had to get a special policy that costs \$5,000 to \$6,000. There was no way I was going to pay that kind of money just to satisfy the insurance requirement, even though I might have been the successful bidder. I know of about three other examples that show they were really want to work with the big players that do this type of work. I was told that Joint Powers Board wanted these requirements. So, we just walked away and said to heck with it. We have better things to do with our time than play these games.



A Caucasian female owner of a professional services company also reported that the insurance requirements are beyond the reach of small businesses:

I know that the Peninsula Joint Powers Board has some very onerous insurance requirements. They require insurance that was totally irrelevant to my area of work. It is a huge headache. The general liability requirement is fairly affordable. But, professional liability can be thousands of dollars a year. So, a firm would have to pay \$5,000 a year for insurance premiums.

A Caucasian female owner of a goods/equipment/supplies company reported that her small business is unable to meet the insurance requirements:

We can't meet these high liability insurance requirements. As a small business, we don't even qualify.

C. Certification Requirement

The California Unified Certification Program (CUCP) was implemented on January 1, 2002, pursuant to the uniform certification program requirements set forth in 49 CFR Section 26.81. All California USDOT-assisted agencies participate in the CUCP which maintains the directory of DBEs certified by any agency authorized to certify. The certification standards the Agencies use are consistent with the uniform certification program requirements set forth in 49 CFR Section 26.81. Many interviewees reported that the time required to obtain a DBE certification is too lengthy. Certification requirements can be a major obstacle for minority and woman-owned business enterprises.

A Caucasian female owner of a construction company explained why she stopped trying to get a DBE certification:

The paperwork is pretty onerous. I gave up trying to get certified nine years ago. I think being a minority might be easier. But it was hard as a woman-owned business because of community property and all of that.



A minority male owner of a construction company explained that the DBE certification process can be difficult to navigate for new businesses:

The certification process, in general, can be burdensome and overwhelming to people that aren't used to it. Especially new businesses or startups. It seems like the requirements for a DBE certification is way beyond the boundaries of what's necessary to unearh scams. The emphasis is placed on the applicant to prove that they're innocent. Also, if the applicant can't figure out the right commodity codes, they will be disqualified.

A minority female owner of a professional services company questioned the utility of DBE certification compared to the effort needed to obtain it:

It would be great if there was some way to streamline that process. That would be extremely helpful. Right now, it's almost counterintuitive. The effort required to be certified or recertified is not worth the benefit. Most small businesses don't have the staff or administrative support to pull together the required documentation. The process is too cumbersome, and small businesses don't have the luxury of having staff dedicated to take care of it.

A minority male owner of a goods/equipment/supplies company reported that he did not recertify his DBE certification because he did not believe it was beneficial to his business:

We quit certifying with the agencies a couple of years ago because we didn't receive any opportunities. We were certified for 26 years.

A Caucasian female owner of a professional services company reported that the time required to complete the DBE certification application is excessive for small businesses, and the possibility of securing a contract is low:

The certification and recertification process is exceedingly onerous for a small business. From my experience of 15 years, doing DBE certification and recertification, it takes a minimum of eight hours. The paperwork submitted can be anywhere from half an inch to three-quarters of an inch of papers.



A minority male owner of a professional services company also described the DBE certification process as laborious for small business owners without the benefit of reciprocal certification with local agencies:

There is a tremendous amount of information needed for certification, and it gets to be tedious. The biggest problem is they don't accept some of the existing certifications that I have. It seems like every agency wants you to certify with them specifically, and that's too cumbersome for a small business. So, we let our certifications lapse with some of the agencies.

A minority male owner of a professional services company reported that the DBE recertification process is just as cumbersome as the certification process:

In terms of the recertification process with VTA, it has essentially been a nightmare because they want to look at every piece of property you own. They assign values that are basically pulled from the blue-sky using internet tools that are not intended for that purpose. And there are lengthy delays trying to get timely feedback. It's been almost eight months of going through hoops, and we still have no idea how close we are to a resolution. It has made it difficult for us because we cannot provide the DBE certification that the prime contractors require when bidding. General contractors that have contacted us about bidding on transit projects assuming that we're still DBE-certified. We've had to tell them that we are not at this point. So, now we are less competitive.

A minority male owner of a professional services company recommends raising the personal net worth eligibility requirement for the DBE Program:

We need to see an overhaul of the DBE requirements as they relate to California businesses. The personal net worth element, which is about \$1.32 million, is not realistic based on California or Bay Area economies.

D. Disadvantaged Business Enterprise Program

The interviewees reported on their observations regarding the Agencies' DBE Program and recommendations that they believe will enhance the program.

A Caucasian female owner of a construction company explained why she believes the DBE Program is valuable for small businesses:

I believe the DBE Program is valuable. I believe in the intent to help women-owned businesses. The program has value in terms of outreaching to



disadvantaged businesses and giving them an opportunity to learn what contracts are out there for bid and who they could might subcontract with.

A minority male owner of a construction company explained that the DBE Program would be more valuable for small businesses if the good faith requirement were more rigorously applied by the Agencies:

I believe the program is valuable, and it provides advantages for minority businesses if done correctly. I think every agency should require that prime contractors name their subcontractors. There is too much latitude that is given to contractors by allowing them to meet a good faith effort in lieu of meeting the goal. There are a lot of gimmicks used to avoid the goal. Most of these prime contractors have boiler plate good faith effort packages. So, they have the resources allocated to make sure they can demonstrate a good faith effort.

A minority male owner of a professional services company explained the integrity of the DBE Program would be enhanced if prime contractors were required to list their subcontractors in their bid:

If properly implemented, I think the DBE Program could be very valuable. Sometimes we contact some of these companies to see if we can help them meet their DBE requirements. I think the prime contractors should definitely meet the DBE goals at the time of bid opening. I think more effort needs to be done by the agencies to enforce the DBE goals. Some prime contractors put forth charades to appear like they met the good faith efforts. They should also be mandated to keep the DBE subcontractor throughout the project because sometimes they play games.

A minority female owner of a professional services company reported that the DBE Program has had a positive impact on his firm:

As a minority business owner, we have we have the DBE Program to be useful in helping us continue to grow our business since our focus is largely in the area of transportation and transit agencies. We find that when agencies actually have formal programs that encourage DBE participation, it's helpful for us to be able to participate and expand our book of business. It shows commitment to small businesses on the part of the agencies by requiring DBE participation on their contracts.



A Caucasian female owner of a goods/equipment/supplies company believes the DBE Program creates fair competition for established and small firms:

I think the DBE Program levels the playing field and lets everybody compete as subcontractors.

A minority male owner of a goods/equipment/supplies company explained why the DBE Program has not been beneficial for his business:

I'm not sure if the DBE Program has value. It depends on how it's applied. If the requirements are enforced, it could be effective. If it's not enforced, then what good is it? We get hundreds of requests by prime contractors trying to meet their good faith effort. But in 26 years we have never won a project. But we get wallpapered with requests. Their solicitations mean absolutely nothing. We have a corporate policy of immediately following up on the requests, but we have received nothing.

A minority male owner of a professional services company explained that the DBE Program has benefited his small business because is a marketing tool:

The DBE Program is very valuable. The program allows our professional firm that does good quality work, stays within budget, and does everything that our clients request gain exposure that we might not otherwise receive. We do not have enough money to do major marketing, so the DBE Program helps us open doors. After that it's up to us to prove ourselves. I think that the best part about the program is that it provides opportunities for firms who generally would not have exposure to the kind of work the Agencies need.

A Caucasian female owner of a professional services company reported that the DBE Program is valuable for small businesses:

I absolutely believe the DBE Program is valuable, just because a firm is larger does not mean it is better. Small doesn't mean unsophisticated. Smaller disadvantaged businesses make up most of the businesses, but the lion's share of the work gets done by large firms.



A Caucasian male owner of a construction company explained what he believes is needed to improve the DBE Program:

I think the eligibility for the DBE Program should be based on the size of the business and economic factors, rather than gender and ethnicity. I think the program would be much better served. You wouldn't have artists becoming certified based on gender and ethnicity and starting an engineering business, and having an advantage over people who have spent a lifetime in the industry.

A Caucasian female owner of professional services company believes that small businesses benefit from the DBE Program:

I believe the DBE Program is valuable. It helps small businesses be a little bit more robust.

A Caucasian female owner of a goods/equipment/supplies company credits the DBE Program for opening doors for small businesses:

The DBE Program at least shines an eye on businesses who might not otherwise get a look. So, I think it's worthwhile. It gives small businesses an opportunity to compete against the big guys.

A Caucasian female owner of a professional services company also believes small firms are afforded an opportunity to provide their services because of the DBE Program:

I think the program gives qualified DBE firms a chance to get more attention to showcase their expertise. Otherwise, smaller firms get lost in the shuffle.

A minority male owner of a professional services company supports the DBE Program even though he has not received any benefits as a result of the program:

I believe the DBE Program is valuable, even though we haven't benefitted from it directly. I'm sure there are other contractors that have benefitted from the program. Prime contractors should essentially have an obligation to include DBE subcontractors at the time of their bid. They should be required to make



that commitment on the front end when they're submitting their proposals and bids. Rather than trying to scramble after the fact trying to fill a void.

A Caucasian female owner of a goods/equipment/supplies company believes that the good faith effort provision should be scrutinized more carefully before the DBE Program can be valuable to small businesses:

There are too many DBEs that are not getting any work. These prime contractors should not receive waivers because in my opinion, not enough of DBEs are getting work. Prime contractors should make more of an effort to find those DBEs. I would like to know why as a certified DBE, we don't get any preference when it comes to getting work with SamTrans.

A Caucasian female owner of a professional services company explained what she believes is needed to improve the DBE Program:

I believe that there are disadvantaged businesses which could use help in the bidding process, and this program certainly helps them in that endeavor. Sometimes there are no qualified DBEs for what is being requested in the proposal. So, it can be very frustrating for prime contractors dealing with unqualified proposers who may end up being placed on proposals just to meet the requirements. However, I do think that it's a very valuable program. When there are qualified DBEs available, then yes, I believe that they should be required to include them.

A minority male owner of a professional services company believes that prime contractors should be required to meet the DBE goal at the time of bid opening:

If prime contractors are required to meet the DBE subcontract goal at the time of the bid opening, that would be advantageous for DBE firms.

A minority male owner of a professional services company believes that the DBE Program levels the playing fields for small businesses:



I think the program is very valuable in terms of giving us some leverage with general contractors to work on large public bid projects. Also, smaller firms can bid as a prime contractor.

A minority male owner of a construction company believes the DBE Program serves as an advocate for small business owners:

The program ensures that the Agencies know that there is someone watching over them to make sure that they do the right things. As a result of the program, larger firms know who is certified, and they can get to know those smaller firms. So, to me it's a good thing for the Agencies to help the larger firms, and the smaller firms get to know each other. So, it's very positive.

A minority male owner of a construction company does not believe the DBE Program is beneficial for joint ventures that are comprised of DBE firms:

The Disadvantaged Business Enterprise Program is probably very helpful for the companies that meet the criteria, but I think it often puts them in a position of having to joint venture or team with stronger firms to actually perform the services. So, the value of it is questionable. They are usually too small to provide the services that are required in the contract. Prime contractors should be required to list their subcontractors at the time of the bid opening to be fair and transparent.

A minority male owner of a professional services company explained why he is not certain that the DBE Program is valuable:

I am not sure if the DBE Program is valuable. Prime contractors should be required to state what percentage their subcontractors will receive at the time of bid opening. Sometimes during the bid process, the prime contractor receives several estimates from subcontractors, but they won't commit to anyone. By the time the contract is awarded, the subcontractors are substituted.



A minority male owner of a professional services company explained why he does not believe the DBE Program is beneficial:

For some reason, it's very difficult to get anything with VTA. VTA is an agency that has been extremely difficult. They turn out all these studies, and I think part of the problem is that the people they put in charge of all these DBE programs are not the right people for those jobs. A lot of them don't have the passion and the commitment to really help the DBE companies. Most of them are more sympathetic toward the big companies. They listen to the complaints of the big companies, and they don't even give the small business an audience. If I try to set up a meeting with VTA today, it would take forever. But, a big company will get audience much quicker. In all probability, most of them are currently working with the agency. We attended a meeting with the people that manage the Small Business Program to talk about a project. The reception that I received was different from the receptions other businesses received. It just seems in terms of attitude and follow-up. I did not receive anything that encouraged me to continue so I just dropped off. These are some of the big challenges that we face. Also, when the prime contractors know that you don't have the support of the agency they tend to mistreat you.

E. Agencies' Exemplary Practices

The interviewees express positive sentiments regarding the Agencies' procurement practices.

A Caucasian male owner of a construction company spoke highly of her experience with the Joint Power Board:

I mainly interfaced with the inspectors at the Joint Power Board. The one job we did with them was great.

A minority male owner of a professional services company reported that he has received helpful assistance from each of the Agencies:

Generally speaking, most managers are pretty helpful. When we have questions and they're fairly responsive. This is consistent across all Agencies.

A minority male owner of a professional services company reported that more outreach should be conducted to increase the participation of DBEs that provide eminent domain appraisal services:

There are a lot of people that are qualified in small firms to do eminent domain appraisal work. It's just a matter of the Agencies going out and using



them. We're appraisal certified for eminent domain work. We're certified for commercial real estate appraisal. There's no secret there. But what happens is most of the times they work with large firms. To ask them to bring in small appraisers is like expecting a lion to act like a sheep, and it just won't work.

A minority male owner of a professional services company reported that several VTA staff members assisted her while working on a project and helped her navigate the procurement process:

There are three individuals at VTA that have been extremely helpful in executing our contract and getting the work done. [Name withheld] in purchasing was very good in helping me understand the way that VTA purchasing, bid, and contracting process works. [Name withheld] that handles the design phase was extremely helpful in helping us get some issues that we had resolved. And [name withheld] in operations has been an excellent guy to work with.

A minority male owner of a professional services company spoke highly of VTA's DBE Program staff:

The VTA has quite a few people who are very good overall because they know us and respect our work. Their DBE coordinator is very helpful. The DBE Program as a group at VTA are good people. They work with DBE firms and they respect us. VTA is probably one of the much better agencies that I have come across as far as the DBE Program.

A Caucasian female owner of a professional services company was also complimentary of the VTA staff:

Most of my experience has been with the VTA. Within VTA, they have a very active women's transportation group. Their environmental planning manager is great. The environmental planning manager consistently reinforces to others that I'm doing an excellent job. And she encourages people to work with me.



A minority male owner of a professional services company described his experience with VTA as extremely helpful to his business:

Staff at VTA have been extremely helpful after we got the contract. They were responsive to all our questions. They were amazing. I know other contractors that work with them in the past, and I've only heard really good things from them because they respond really fast.

A Caucasian male owner of a professional services company reported having had positive experiences with all three Agencies:

I have not had a bad experience with any of the project managers that I've dealt with at VTA, SamTrans, and PCJ/PBE. They all have been helpful. I've never had a really bad experience with any of the project managers.

A Caucasian female owner of a goods/equipment/supplies company believes that the Agencies' procurement practices are fair to all businesses:

The Santa Clara Valley Transportation Authority, San Mateo County Transit District, and the Peninsula Corridors Joint Powers Board are a pretty well-run group. If I don't get the work, it's due to price, but they are pretty fair. The specifications are fair. So, I don't have any complaints with how they award work. I know that they'd love to deal with me, but if my price isn't the lowest, they just can't. It is what it is.

F. Recommendations to Enhance the Agencies' DBE Program

The interviewees reported recommendations that they believe would enhance the administration of the DBE Program.

A minority male owner of a professional services company recommends an expedited payment standard:

There are many challenges for small contractors. After we sign a contract it takes a long time before the work starts. And even after we engage in the work, it takes a long time for the Agencies to pay us. Particularly JPB because they always fall behind in paperwork. We start the work and then don't get paid until six or eight months later. My invoice says I should be paid within 30 days. They need to pay, do something to turnaround the invoices quicker.



A Caucasian female owner of a goods/equipment/supplies company also recommends an expedited payment process:

They should offer expedited payments for small businesses. Cash-flow is probably the greatest problem that many of us face. Especially because we are lean and oftentimes are taking a lower profit margin. So, having a quicker pay for a small company might be helpful.

A Caucasian female owner of a professional services company recommends a prompt payment clause:

I think they need a prompt payment clause. This would be helpful because the Agencies pay late.

A Caucasian male owner of a construction company believes the Agencies should verify that the subcontractors listed to meet the goal have the requisite capability:

I think it would be less challenging if VTA and other agencies take on the Caltrans model, where the owners of the small business are required to have the experience, education, and license in the field to get work. But those are the primary reasons why it is challenging.

A Caucasian female owner of a professional services company recommends that subcontractors not be required to meet the insurance requirements obligating the prime contractor:

My recommendation is that the Agencies allow prime contractors to negotiate different indemnification language with their subcontractors so that there is a more equitable cost sharing between the prime contractor and the subcontractor. Otherwise, I can be on the hook for everything, and that's not fair.



A Caucasian female owner of a construction company recommend bonding and financial assistance for DBEs:

I think the biggest barrier is bonding and getting a credit line for small business. I recommend assistance for bonding and financial assistance. I recommend financial assistance programs for DBEs. Any State-sponsored financial assistance programs to help small businesses would be helpful.

A minority male owner of a professional services company suggests the Agencies include more technical staff at outreach events and consider changing bonding requirements:

I would like to suggest that more technical people attend the outreach events to discuss information technology projects that are coming up for the next 12 months. I also think the Agencies should look into self-bonding or remove the bonding requirements on some small projects. There are small businesses qualified to do the work, but they can't get bonding.

A minority male owner of a professional services company suggests reviewing the Request for Proposal for procedures that may be barriers to DBE participation:

I think some of the requirements in the Request for Proposals can be a barrier for small businesses. For instance, they require that you have completed three transit projects in the last five years. If you do not have three transit projects in your portfolio, then you are not qualified. The Agencies need to support innovation, and they could get a better product.

A minority male owner of a professional services company recommends forecasts for upcoming subcontracting opportunities:

I think that there needs to be more information distributed about what kind of subcontracting work is available. When there are big projects being awarded, there should be an easier way to learn about subcontracting opportunities than having to deal with the prime contractors. Another thing is VTA has a marketplace where every couple of years vendors are approved, and the VTA will make small purchases from those vendors without going to bid. I think that process should be practiced minimally annually.



A minority male owner of a goods/equipment/supplies company suggest stricter monitoring of the DBE Program requirements:

I think they should do better monitoring of the number of DBEs that are listed on jobs and the number DBEs that actually finished the job. And look at how many DBE firms went bankrupt while working on the project.

A minority male owner of a professional services company recommends an automated system that publishes payments made to prime contractors. He also suggests that the payments made to subcontractors should be monitored by the Agencies:

They should send notifications when the prime contractors are paid. I think there should be an automated system regarding prime contract payments. It should be very easy to monitor their payments. They should also confirm that the subcontractors were paid. So, if there was a discrepancy between what the prime reported and what the subcontractor reported it could be addressed. Timely payment is very critical to DBE firms. Also, they could help us mitigate some of these insurance requirements by reducing the costs for liability insurance.

A Caucasian male owner of a construction company recommends a debriefing session for all contracts:

The only time you really get a debriefing is when you were shortlisted and interviewed. They should offer debriefing sessions to all bidders.

A minority male owner of a professional services company recommends unbundling large projects:

They could break up some of the projects and put them in separate categories, that would help level the playing field when bidding against a bigger prime contractor.

A minority male owner of a professional services company recommends unbundling large contracts to create more opportunities to meet the DBE goals:

I think more needs to be done to meet the goals than the good faith effort. There must be an effort between the prime consultant and the Agencies to



create scopes of work that are suitable for smaller companies. Smaller DBE companies specialize in certain areas, and those items of work tend to be bundled into larger projects.

A Caucasian female owner of a goods/equipment/supplies company recommends a mentor/protégé program for DBEs:

DBEs are pretty much left on their own with no guidance for small businesses. It would be fantastic if DBEs had a mentor to help us navigate the process. Also, SamTrans should have an industry day and invite local small businesses. We could meet with the end users, IT managers, and the procurement officers.

A Caucasian female owner of a construction company recommends a mentor/protégé program for DBE construction contractors:

I would suggest a mentorship program for construction contractors. So, a drywall contractor would be mentored by a large drywall contractor to help guide us you through the project. The big contractor that is getting all the work should participate in the mentorship program.

A minority male owner of a construction company suggests lowering the insurance requirements for DBEs:

The insurance requirements for errors and omissions professional liability insurance coverage is too high. They should consider lowering the coverage requirements for small businesses.

A Caucasian male owner of a professional services company believes that DBE goals should be mandatory:

Yes, I believe that small business and disadvantaged business set asides are very important for public contracting. And I think five percent should be an absolute minimum goal.



A minority male owner of a construction company suggests that the Agencies engage in additional efforts to unbundle large projects into smaller opportunities for DBEs:

I think they should break up these huge construction jobs. The lion's share of the work goes to the big companies. But breaking up the jobs would help build capacity for small contractors.

IV. Summary

The anecdotal analysis presents the perceptions of business owners domiciled in the Agencies' market area. The anecdotes were solicited through in-depth, one-on-one interviews and the public comment received during the business community meetings. Interviewees for the one-on-one interviews were identified from business community meetings, certification directories, and outreach efforts.

The anecdotes reported by the interviewees referenced exclusionary tactics of the good old boys' network, difficulty obtaining bonding, and meeting the Agencies' insurance requirements. The interviewees also identified problems with the DBE certification process, size of the projects, and adherence to the contract goals that limit the effectiveness of the DBE Program. The interviewees also recommended the inclusion of a small business element in the DBE Program to increase the competitiveness of small businesses on the Agencies' contracts. Recommendations to enhance the VTA's contracting practices could be derived from the anecdotal evidence presented in this Chapter, and presented in *Chapter 11: Recommendations*.



CHAPTER 11: Recommendations

I. Introduction

This Chapter presents recommendations for the Santa Clara Valley Transportation Authority (VTA) to address the disparity documented in the 2017 Joint Disadvantaged Business Enterprise (DBE)²⁷⁷ Contract Availability and Utilization Study (Study). The Study included a review of contracts awarded in the construction, professional services, and goods/equipment/supplies industries. The statistical findings provide evidence of the utilization of DBEs compared to their rate of availability in VTA's geographic market area. The recommendations are based on the documented findings of statistically significant disparity for the July 1, 2011, to June 30, 2015, study period. This Chapter also presents race- and gender-neutral recommendations which can be implemented without a finding of disparity. The recommendations are offered to maximize the use of DBEs and other small businesses on VTA's contracts.

This chapter is organized into five sections. The first section is this *Introduction*. Section two, *Disparity Analysis Findings*, presents the statistically significant findings of disparity. *DBE Program Review Findings* provides the review of notable remedial program and race and gender-neutral policies instituted to ensure business diversity. *Remedial Program Recommendations*, predicated on the statistically significant findings, are presented in the fourth section, which provides policies designed to remedy the documented disparity. *Race- and Gender-Neutral Recommendations* are presented in the fifth section.

II. Disparity Analysis Findings

The statistically significant findings of disparity in the award of both prime and subcontracts were calculated in compliance with the constitutional parameters set forth in *City of Richmond v. J.A. Croson (Croson)*,²⁷⁸ and its progeny. The statistical findings of disparity summarized in this Chapter are detailed in *Chapter 7: Prime Contract Disparity Analysis* and *Chapter 8: Subcontract Disparity Analysis*.

A. Number of Prime Contracts

As depicted in Table 11.1, VTA issued 126 prime contracts during the July 1, 2011, to June 30, 2015, study period. The 126 prime contracts included 31 construction contracts, 54 professional services contracts, and 41 goods/equipment/supplies contracts.



²⁷⁷ A Disadvantaged Business Enterprises is defined as for-profit small business where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations. African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.

²⁷⁸ *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).

The payments made by VTA during the study period totaled \$1,212,484,043 for the 126 prime contracts. Prime contract payments included \$1,107,202,078 for construction, \$94,138,139 for professional services, and \$11,143,826 for goods/equipment/supplies contracts.

Table 11.1: Total Prime Contracts and Dollars Expended: All Industries, July 1, 2011, to June 30, 2015

Industry	Total Number of Contracts	Total Dollars Expended
Construction	31	\$1,107,202,078
Professional Services	54	\$94,138,139
Goods/Equipment/Supplies	41	\$11,143,826
Total Expenditures	126	\$1,212,484,043

B. Number of Subcontracts

As depicted in Table 11.2, 477 subcontracts were analyzed. The goods/equipment/supplies industry was not included in the subcontract analysis, as the subcontracting activity in that industry was limited. The analysis included 430 construction and 47 professional services subcontracts. The subcontract dollars expended during the study period totaled \$709,755,058, including \$700,054,923 for construction subcontracts and \$9,700,136 for professional services subcontracts.

Table 11.2: Total Subcontracts and Dollars Expended: All Industries, July 1, 2011, to June 30, 2015

Industry	Total Number of Subcontracts	Total Amount Expended
Construction	430	\$700,054,923
Professional Services	47	\$9,700,136
Total	477	\$709,755,058



C. Prime Contract Disparity Findings

1. Construction Prime Contract Disparity Findings

Table 11.3 depicts the construction prime contract disparity findings at two contract thresholds: competitive formal contracts valued \$1,000,000 and under, and informal contracts valued \$25,000 and under. No statistically significant disparity was found for competitive formal prime contracts valued \$1,000,000 and under. On informal contracts valued \$25,000 and under, which did not require advertisement, no statistically significant disparity was found.

**Table 11.3: Prime Contract Disparity Summary: Construction,
July 1, 2011, to June 30, 2015**

Ethnicity/Gender	Construction	
	Contracts Valued \$1,000,000 and Under	Contracts Valued \$25,000 and Under
African Americans	<i>No Disparity</i>	<i>No Disparity</i>
Asian Pacific Americans	<i>No Disparity</i>	<i>No Disparity</i>
Subcontinent Asian Americans	<i>No Disparity</i>	<i>No Disparity</i>
Hispanic Americans	<i>No Disparity</i>	<i>No Disparity</i>
Native Americans	----	----
Caucasian Females	<i>No Disparity</i>	<i>No Disparity</i>

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

2. Professional Services Prime Contract Disparity Findings

Table 11.4 depicts the professional services prime contract disparity findings at two contract thresholds. The two levels were competitive formal contracts valued \$500,000 and under, and informal contracts valued \$50,000 and under. Disparity was found for African American, Hispanic American, and Caucasian female-owned businesses on competitive formal prime contracts valued \$500,000 and under. On informal contracts valued \$50,000 and under, which did not require advertisement, disparity was found for African American, Hispanic American, and Caucasian female-owned businesses.



Table 11.4: Prime Contract Disparity Summary: Professional Services, July 1, 2011, to June 30, 2015

Ethnicity/Gender	Professional Services	
	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Pacific Americans	**	**
Subcontinent Asian Americans	<i>No Disparity</i>	**
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>
Native Americans	----	----
Caucasian Females	<i>Disparity</i>	<i>Disparity</i>

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.
 (----) denotes an underutilized group with too few available firms to test statistical significance.

3. Goods/Equipment/Supplies Prime Contract Disparity Findings

Table 11.5 depicts the goods/equipment/supplies prime contract disparity findings at two contract thresholds. The levels were competitive formal contracts valued \$500,000 and under, and informal contracts valued \$50,000 and under. Disparity was found for African American, Asian Pacific American, and Hispanic American-owned businesses on competitive formal prime contracts valued \$500,000 and under. On informal contracts valued \$50,000 and under, which did not require advertisement, disparity was found for African American, Asian Pacific American, and Hispanic American-owned businesses.

Table 11.5: Prime Contract Disparity Summary: Goods/Equipment/Supplies, July 1, 2011, to June 30, 2015

Ethnicity/Gender	Goods/Equipment/Supplies	
	Contracts Valued \$500,000 and Under	Contracts Valued \$50,000 and Under
African Americans	<i>Disparity</i>	<i>Disparity</i>
Asian Pacific Americans	<i>Disparity</i>	<i>Disparity</i>
Subcontinent Asian Americans	<i>No Disparity</i>	<i>No Disparity</i>
Hispanic Americans	<i>Disparity</i>	<i>Disparity</i>
Native Americans	----	----
Caucasian Females	<i>No Disparity</i>	<i>No Disparity</i>

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

D. Subcontract Disparity Findings



The disparity analysis was limited to construction and professional services subcontracts issued during the July 1, 2011, to June 30, 2015, study period. As detailed in *Chapter 4: Subcontractor Utilization Analysis*, the subcontract data were compiled by VTA in conjunction with Mason Tillman Associates, Ltd. (Mason Tillman). The data collection efforts included compiling data

from VTA records, conducting expenditure surveys, and verifying subcontractor ethnicity and gender.

Project files were examined by VTA staff for awards, payments, and related documents that identified subcontractors, subconsultants, suppliers, and truckers. Prime contractors were also surveyed by Mason Tillman to secure their subcontractors, subconsultants, suppliers, and truckers' awards and payment data. All identified subcontractors, subconsultants, suppliers, and truckers were surveyed to verify their payments. Data verifying ethnicity and gender were compiled from certification lists, minority and woman business organization membership directories, Internet research, and telephone surveys. The organization sources used to verify contractor information are defined in Table 3.1 of *Chapter 3: Prime Contractor Utilization Analysis*.

1. Construction Contract Subcontract Disparity Findings

As indicated in Table 11.6, disparity was found in the award of construction subcontracts to African American, Asian Pacific American, and Subcontinent Asian American-owned businesses.

Table 11.6: Subcontract Disparity Summary: Construction, July 1, 2011, to June 30, 2015

Ethnicity/Gender	Construction
African Americans	<i>Disparity</i>
Asian Pacific Americans	<i>Disparity</i>
Subcontinent Asian Americans	<i>Disparity</i>
Hispanic Americans	<i>No Disparity</i>
Native Americans	----
Caucasian Females	<i>No Disparity</i>

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

2. Professional Services Subcontract Disparity Findings

As indicated in Table 11.7, disparity was found in the award of professional services subcontracts to African American-owned businesses.



**Table 11.7: Subcontract Disparity Summary: Professional Services,
July 1, 2011, to June 30, 2015**

Ethnicity/Gender	Professional Services
African Americans	<i>Disparity</i>
Asian Pacific Americans	<i>No Disparity</i>
Subcontinent Asian Americans	**
Hispanic Americans	<i>No Disparity</i>
Native Americans	----
Caucasian Females	<i>No Disparity</i>

(**) this study does not test statistically the overutilization of DBEs or the underutilization of non-minority males.
 (----) denotes an underutilized group with too few available firms to test statistical significance.

III. DBE Program Review Findings

During the study period, VTA utilized various procedures and policies that have increased the range of contracting opportunities available to DBEs. The processes that VTA has incorporated into the DBE Program constitute best practices utilized by government agencies of similar size and contract spending, and are listed as follows:

- Centralize data management
- Contractor workshops
- Business diversity initiatives
- Networking programs
- Mentor-Protégé program

A. Centralize Data Management

VTA utilizes B2GNow to centralize its data management. The contract dashboard contains complete contract data for each project, and minimally includes the unique contract number, the contract name, award amount and date, payment amounts and dates, and vendor name. VTA tracks comprehensive contracting activity from contract award through contract completion, including the ethnicity and gender of the prime contractors and all first through fourth tier subcontractors including non-DBEs, DBE and SBE certification status, contract award and payment amounts throughout the life of the project, including all change orders and amendments.

VTA requires that prime contractors submit monthly DBE Utilization Reports electronically to the Office of Business Diversity Programs (OBDP) as a standard contract provision. These reports document when payments to subcontractors were made, the dollar value of the payments made to



DBE and non-DBE firms, and the percentage of the contract completed. The monthly tracking of DBEs allows VTA more oversight of the goal attainment on projects, including large design-build contracts, thus ensuring accountability in the expenditure of publicly funded public works projects.

B. DBE Monitoring of Large Design-Build Projects

VTA requires design-build firms to submit a DBE Work Plan at time of bid opening.²⁷⁹ VTA has incorporated a DBE Work Plan to ensure that DBEs are utilized for all multi-year design-build projects.²⁸⁰ The DBE Work Plan requires the prime contractor to delineate the projected DBE contract opportunities including the project scope and expected value, any obstacles to DBE utilization, outreach and education efforts, and internal training or review. The prime contractor must also provide a list of all current DBE and non-DBE subcontractors, up to the 10th tier subcontractor, including the scope of work, industry, NAICS code, contract value, and percentage completed. VTA reviews each design-build project quarterly.

C. Contractor Workshops

One component of the DBE Work Plan is to provide technical assistance to DBEs. VTA works with the prime contractor to develop a technical assistance structure and syllabus ensuring that certain business practices like insurance and bonding, estimating, accounting, scheduling, bidding, contracts, and project closeout are covered for each design-build contract. Requiring prime contractors to provide detailed plans for promoting and administering contractor workshops ensures that local businesses benefit from targeted education and training, provides an arena to address small business concerns, and provides opportunities for business growth and networking opportunities.

D. Business Diversity Initiatives

To ensure non-discrimination in the award and administration of contracts and to create a level of playing field, VTA manages a Regional Business Diversity Program (Program). The Program includes the DBE Program for federally funded projects, Small Business Enterprise (SBE) Program for state funded projects, Disabled Veteran Business Enterprise (DVBE), Lesbian, Gay, Bisexual and Transgender Business Enterprise (LGBTBE), and Minority and Women Owned Business Enterprise (MWBE) Program for locally funded projects.²⁸¹ The Program's initiatives include:

- Increasing participation of DBEs, SBEs, DVBEs, LGBTBEs, and MWBEs
- Providing a one stop certification system



²⁷⁹ Id.

²⁸⁰ Santa Clara Valley Transportation Authority, *Disadvantaged Business Enterprise (DBE) Policy and Requirements (49 CFR Part 26)*, Appendix 8, section 8.2.

²⁸¹ Santa Clara Valley Transportation Authority, Regional Business Diversity Programs website (<http://www.vta.org/rbdp>). Accessed April 2017.

- Instituting a centralized resource for small businesses with website information and newsletter
- Ensuring networking opportunities and training/workshop for businesses in VTA’s market area

E. Networking Programs

VTA hosts and sponsors numerous networking opportunities for interested contractors. In 2016, VTA hosted 12 networking and training events.²⁸² The scope of the events includes meeting the primes, procurement fairs, contracting opportunities, mentorship opportunities, and workshops covering topics such as submitting a successful bid and how to become certified. Interested contractors can receive notifications for upcoming events through email, website posts, and the Business Outreach Committee quarterly newsletter.

F. Mentor-Protégé Program

VTA is one of the public agency participants of the California Department of Transportation (Caltrans) mentor-protégé program, Calmentor. VTA is part of the District 4 division, which serves Alameda, San Francisco, Santa Clara, Sonoma, Napa, Solano, Marin, Contra Costa, and San Mateo.²⁸³ Calmentor is designed to encourage and support small businesses through voluntary partnerships with established firms. The mission of the program is to provide business development opportunities, mentoring and partnership development, and opportunities to network with other consultants.²⁸⁴ In 2015, VTA received the Outstanding Public Agency Partner Award in recognition of exceptional support of the Caltrans Mentor-Protégé Program from Caltrans.

G. DBE Program Recommendations

Despite VTA’s exemplary DBE Program benefits, local businesses report difficulty in obtaining assistance to secure VTA contracts.

1. Conduct an Outreach Campaign

VTA should conduct a comprehensive outreach campaign to inform the local business population of the resources that are available through VTA’s DBE Program. Efforts to meet VTA’s policy objectives could be enhanced with a comprehensive outreach campaign to communicate contracting opportunities, contracting procedures, and the goals and objectives of the programs. The comprehensive outreach campaign and marketing campaign should be launched based on a communication and marketing plan. The outreach campaign should communicate the goals and



²⁸² Santa Clara Valley Transportation Authority, Outreach Events website (<http://www.vta.org/About-Us/Inside-VTA/Outreach-Events>). Accessed April 2017.

²⁸³ California Department of Transportation District 4. Calmentor Public Agency Participant website (http://www.dot.ca.gov/dist4/calmentor/public_agency_participant.html). Accessed April 2017.

²⁸⁴ California Department of Transportation District 4. Calmentor website (<http://www.dot.ca.gov/dist4/calmentor>). Accessed April 2017.

objectives of the DBE Program to local SBEs, including MWBEs, and other market area businesses. Additionally, the outreach campaign should include information about some of VTA's more innovative programs, like the B2GNow self-reporting system, and the networking opportunities that VTA provides.

A well-planned and executed outreach campaign is essential to increasing the participation of small, minority and woman-owned businesses. Therefore, a comprehensive outreach campaign should be initiated to promote the DBE Program. VTA should partner with local agencies, including the Peninsula Corridor Joint Powers Board and the San Mateo County Transit District to disseminate press releases and public service announcements informing the local business community about the certification process, VTA's procurement process, and the benefits and resources of the DBE Program.

H. Conclusion

VTA has endeavored to ensure that DBEs and non-DBEs have equal opportunities to contract with VTA. Caltrans acknowledged several measures that VTA has implemented in its DBE Compliance Review.²⁸⁵ Among the acknowledgements were the following:

- VTA holds a large number of workshops and outreach events throughout each fiscal year.
- As VTA is a DBE Certifying Agency, the staff seems to be very knowledgeable in the significance of the DBE program and how to recruit new potential DBE firms.
- VTA has begun the use of a data collection and payment monitoring system, supported by B2GNow. This tracking and reporting mechanism is crucial to the establishment of the VTA's DBE Program Policy and Procedures, DBE goal setting, and federal government and Caltrans reporting. This report tracking is also beneficial to VTA staff so they may identify areas that need improvement. This is a proactive measure that the DBE constituents in their area can highly benefit from.
- VTA is also an active participant in the Caltrans District 4 Calmentor program.²⁸⁶

The procedures and policies that VTA has implemented into the DBE have increased the range of contracting opportunities available to DBEs. Despite their best efforts, disparity still exists in the award of VTA's contracts. Recommendations are offered to address the statistically significant disparity documented in this Study.

IV. Race- and Gender-Conscious Remedies

Several race and gender-conscious remedies are recommended to address the statistically significant findings of disparity for DBEs at the prime contract and the subcontract levels. The



²⁸⁵ California Department of Transportation (Caltrans), Disadvantaged Business Enterprise (DBE) Compliance Review - Santa Clara Valley Transportation Authority Preliminary Report, p. 6-7

²⁸⁶ California Department of Transportation (Caltrans), Disadvantaged Business Enterprise (DBE) Compliance Review - Santa Clara Valley Transportation Authority Preliminary Report, p. 6-7

formal competitive level of \$1,000,000 for the construction prime contract analysis, \$500,000 for the professional services prime contract analysis, and \$500,000 for the goods/equipment/supplies prime contract analysis were determined to ensure that within the pool of available businesses there was capacity to perform the prime contracts analyzed.

The findings of statistically significant underutilization of African Americans, Asian Pacific Americans, Hispanic Americans and Caucasian females on VTA's prime contracts and African Americans, Asian Pacific Americans and Subcontinent Asian Americans, on VTA's subcontracts constitute a legally sound predicate for the implementation of narrowly tailored DBE goals. The statistical findings of disparity are detailed in *Chapter 7: Prime Contract Disparity Analysis* and *Chapter 8: Subcontract Disparity Analysis*. The following narrowly tailored race- and gender-conscious remedies are offered to remedy the statistically significant disparity documented in the utilization of the available market area DBEs.

A. Amend the Triennial 2017 – 2019 Goal Setting Methodology Report

VTA submitted a *Three-Year Overall Goal and Methodology Report for Federal Fiscal Years 2017 – 2019* (Report), which was approved by the Federal Transportation Authority (FTA). The Report determined a 13% overall DBE goal; 10.78% of the goal is race-conscious, and 2.22% is race-neutral. The Report was based on the findings of the *DBE Availability and Utilization Study* which was published on December 14, 2007.

It is recommended that VTA submit an amended Report reflective of the current availability and utilization of market area DBEs. The amended report should be prepared pursuant to the requirements set forth in 49 Code of Federal Regulation Section 26.45 and based on overall contract dollars awarded to both prime contractors and subcontractors.

Additionally, to implement the race-conscious portion of an amended overall DBE goal, VTA will be required to submit a DBE program waiver to FTA. The waiver will exclude application of the DBE contract goal to groups without a statistically significant disparity documented in the Study. The race-conscious overall DBE program goal would only be applied to African Americans, Asian Pacific Americans, and Subcontinent Asian Americans on construction subcontracts and African Americans on professional services subcontracts.

B. Design-Build Recommendations

Design-build is a delivery method that bundles a significant number of construction items of work and professional services tasks in one contract. VTA utilizes the design-build contracting method to construct several large public works projects. Given the scale and scope of VTA's design-build contracts, any remedial program intended to benefit DBEs must be carefully crafted to ensure the design-build contractor's full compliance with the Program.

It is recommended that additional program provisions be instituted to ensure that DBE goals are met on VTA's design-build contracts. VTA established a 13% overall DBE goal for FTA-funded

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contracts during the fiscal year 2017 through 2019 triennial period. For design-build contracts, VTA establishes overall goals for a project that are applied post-contract award. In the design-build contracting method, VTA awards a master contract to a prime contractor, and the prime contractor subsequently awards contracts, or purchase orders, to subcontractors. A design-build contract is a purchase order driven contract. Consequently, the scopes of work assigned to each purchase order that will be utilized to meet overall DBE goals are not identified at the time of award. Though VTA sets the overall project DBE goal, the prime contractor is responsible for establishing and monitoring contract goals for each scope of work subsequently awarded to a subcontractor, consistent with federal requirements for transportation projects.²⁸⁷ VTA provides oversight of the prime contractor, including monitoring attainment of the contract DBE goals, compliance, commercially useful function, and prompt payment adherence.

Since the DBE goals are applied to the design-build contracts after contract award, VTA should assess the current oversight policies to identify whether the procedures should be enhanced to include targeted provisions that will provide greater assurance that the DBE goals are achieved. Subcontracting arrangements are under the control of the contractor. As such, specific race- and gender-conscious recommendations are provided to maximize the participation of DBEs on contracts awarded using the design-build delivery method. The following recommendations will address issues specific to design-build contracting.

V. Race- and Gender-Neutral Recommendations

The race- and gender-neutral recommendations presented in this section apply to the three industries examined in the Contract Availability and Utilization Study: construction, professional services, and goods/equipment/supplies. Race- and gender-neutral recommendations can be implemented without a finding of disparity. The recommendations are offered to maximize the use of DBEs, SBEs, and other small diverse businesses on VTA's contracts.

A. Capacity Building Recommendations

VTA has implemented supportive services and training measures to increase DBE and SBE participation in the award of construction, professional services, and goods/equipment/supplies contracts. VTA's SBE program provides support services to assist firms with certification, educates SBEs on how to do business with VTA, and provides workshops on labor compliance, insurance and bonding, and accessing capital. As a component of the DBE program, VTA operates a mentor-protégé program and offers networking opportunities to market area DBEs.



²⁸⁷ Santa Clara Valley Transportation Authority, Disadvantaged Business Enterprise Program, Revision 2.0 – June 11, 2014 § Administrative reconsideration (*applying* 49 CFR Part 26.53(e): “In a “design-build” contracting situation, in which the recipient lets a master contract to a contractor, who in turn lets subsequent subcontracts for the work of the project, a recipient may establish a goal for the project. The master contractor then establishes contract goals, as appropriate, for the subcontracts it lets. Recipients must maintain oversight of the master contractor’s activities to ensure that they are conducted consistent with the requirements of this part”).

Despite these existing programs, contractors reported issues building sufficient capacity to bid on VTA's larger projects as an emerging SBE or DBE business. VTA should build upon the current successful supportive services and training measures to implement programs and enhance existing programs to address the capacity issues experienced by contractors in the market area. Two methods that VTA could utilize to provide capacity building opportunities for market area businesses are enhancing VTA's Mentor-Protégé Program and forming project-specific partnerships with private firms and non-profit agencies for contracts valued \$50,000,000 and over.

1. Enhance VTA's Mentor-Protégé Program

VTA is a Calmentor Local Agency Partner, and operates two programs that pair protégé firms with mentor firms that have successfully contracted with public agencies. VTA participates in Caltrans' Mentor-Protégé Program to enhance the capabilities of DBEs and SBEs to perform prime contracts and subcontracts.²⁸⁸ As a Calmentor Local Agency Partner, VTA participates in the Calmentor for Architecture & Engineering program and the Mentor-Protégé Construction program for District 4, which spans the Bay Area.²⁸⁹ A program evaluation should be conducted to verify that these programs are meeting the programmatic objectives, and whether there are any opportunities to expand VTA's involvement in the Calmentor Mentor-Protégé Program.

2. Form Project Specific Partnerships to Provide Technical and Supportive Services

VTA should continue partnering with large private construction and professional services firms in the market area to provide training and supportive services, and identify additional opportunities for capacity building partnerships for contracts valued \$50,000,000 and over. VTA should expand upon the existing project-specific partnerships with private firms to increase opportunities for market area businesses. VTA has partnered with large private contractors on design-build contracts to provide networking and training opportunities to DBEs selected to subcontract on projects. For example, VTA has partnered with general contractors previously to provide capacity building programs such as the Building with an Objective to provide Opportunity through Sustainable Training (BOOST) program. This program offered a series of classes to small business professionals that were expected to work on future purchase orders. The classes provided tips on successful bidding, construction accounting, and project execution. The outcome of the BOOST program on the level of DBE utilization was reported as a component of the semi-annual compliance report.

VTA should identify additional opportunities to partner with large firms and non-profits that provide technical assistance services in the Bay Area to provide additional classes, technical training, and supportive services to market area SBEs and DBEs regularly. Technical assistance services should minimally include drafting partnership and joint venture agreements, software



²⁸⁸ DBE Overall Goal FFY 2014-2016 – August 1, 2013.

²⁸⁹ Calmentor and Mentor Protégé, (last accessed April 2017, at <http://www.dot.ca.gov/hq/bep/calmentorprm.html>).

programs, and utilizing Building Information Modeling to construct 3D blueprints and maintain building portfolios.

There are non-profit agencies that can provide these business development services locally, such as SCORE Business Mentor, the Renaissance Entrepreneurship Center, Minority Business Development Agency Resource Centers with U.S. Department of Commerce, and the United States Small Business Administration.

B. Pre-Award Recommendations

1. Assess Allocation of Risk at Prime and Subcontract Level

VTA should closely monitor indemnity clauses that prime design-build contractors include in each subcontract for the purchase orders issued against the master contract. Indemnity clauses, which are referred to as “risk shifting” clauses, were identified as a significant barrier for SBEs and DBEs seeking to subcontract with VTA prime contractors. These clauses are a contractual device used by prime contractors to shift the common law and statutory risk associated with the project to subcontractors.

VTA should control the use of flow-down provisions through the terms and conditions in their prime contracts. The controls on flow-down provisions should preclude indemnity clauses on small contracts valued less than \$100,000.

VTA should institute an Owner Controlled Insurance Program (OCIP), otherwise known as a wrap-up insurance policy, for contracts valued \$10,000,000 and over. An OCIP is a centrally procured and managed insurance and risk control program that can be used for a single construction or professional services project or a series of projects. Newer and smaller construction contractors often experience difficulties getting insurance, especially small businesses and DBEs. The Federal Transportation Administration identifies wrap-up or owner-controlled insurance programs as a best management practice that will enable more contractors to compete for public projects, thereby enhancing an agency’s DBE participation and overall competitive environment. VTA is permitted, pursuant to the FTA’s Best Practices Procurement Manual, to implement owner-controlled or wrap-up insurance for a construction program valued over \$10,000,000, with some restrictions.²⁹⁰ The OCIP would insure VTA, all prime contractors, and all subcontractors for work performed for the relevant project. By implementing flow-down provisions for small contracts, and OCIPs for contracts valued \$10,000,000 and over, VTA will provide more advantageous contracting opportunities for small businesses, retain higher liability limits, and experience greater claims management control.

2. Review Selection Panel Process



²⁹⁰ FEDERAL TRANSPORTATION ADMINISTRATION REGS., Best Practices Procurement Manual § 6-6 Insurance (2010).

The proposers should have access to the evaluation forms promptly, so that they may assess their performance. The evaluation score of the panel members should be de-identified and released when the Intent to Award is issued.

The winning proposal should be released, upon request, at the time the notice of Intent to Award is published. The release of proposal information should follow State of California legal requirements for limits to disclosures such as financial statements and proprietary information. Providing such information upon demand creates greater transparency and allows unsuccessful proposers to improve their bids on future VTA opportunities.

3. Expand Unbundling Policy

Large projects should be routinely evaluated for unbundling into smaller contracts to increase the number of businesses participating at both the prime contracting and subcontracting levels. The substantial size of VTA's procurements is an impediment to disadvantaged, minority, woman-owned, and small business participation in the contracting opportunities. Moreover, when the terms for contracts are multi-year, a single vendor controls a substantial amount of subcontract opportunities.

4. Use Direct Contracting to Award Small Contracts

VTA should assess the use of direct contracting to award small contracts valued \$150,000 and under. Direct contracting would increase the opportunities for, and build the capacity of small firms by allowing them to work as prime contractors on a greater variety of contracts. Direct contracting occurs when separate contracts are awarded for specialty or non-license services which might otherwise be included as an item of work within the scope of an architecture and engineering contract. The smaller contracts, that could be direct contracting opportunities are often bundled as purchase orders on larger multi-year contracts.

Design services, which are not required to be performed by a licensed engineer, architect, or registered surveyor, could be awarded as direct contracts. These services include planning, environmental assessments, ecological services, cultural resource services, surveying, and testing services. VTA should require the design-build contractor to solicit and receive at least two price quotes from certified SBEs. Purchase orders should not be approved where this requirement has not been enforced.

C. Post-Award Recommendations

1. Publish Semi-Annual DBE Utilization Reports

As a recipient of federal funds, VTA is required to submit a semi-annual report of DBE Awards or Commitments and Payments. The report presents contract awards and payments that VTA made



during the reporting period, and reports this information by certification status. Furthermore, VTA reports the total dollar amounts awarded to DBEs through the use of race-conscious and race-neutral methods. VTA should publish each semi-annual DBE Utilization Report on its website and distributed electronically to certified businesses, after it is submitted and approved by the USDOT.

VTA should also assess whether supplemental information should be published with the semi-annual DBE Utilization Report. Supplemental information may include an assessment of program activities, VTA's exemplary practices, and achievements.

2. Enforce Prompt Payment Provisions

VTA should uniformly enforce the prompt payment provisions. Payments that prime contractors make to subcontractors should be verified by the utilized subcontractors to enhance the current prompt payment policy.²⁹¹ PANYNJ requires prime contractors to pay subcontractors and suppliers within 30 days of receipt of payment from VTA. Despite these provisions, businesses reported that they often received delayed payments, particularly for lower tiered subcontractors.

VTA may utilize its own electronic tracking system, B2GNow, to monitor compliance with the prompt payment policy, and implement a payment verification program. These procedures would allow subcontractors to notify VTA of late payments or non-payments in real time. In addition, each subcontractor listed as paid for the previous billing cycle should be contacted electronically to verify that payment was received. This verification procedure would eliminate reliance on self-reporting by the prime contractors.

3. Provide Debriefing Sessions for Unsuccessful Bidders

Debriefing sessions should be made available to any unsuccessful bidders. This option should be published on VTA's website and included in the Notice of Intent to Award sent to unsuccessful bidders. VTA should consider including relevant information for the unsuccessful bidder in its debriefing sessions, such as evaluators' scores, the firms' strengths and weaknesses in its proposal or bid in accordance with the evaluation criteria, and a summary of the rationale for the selection decision.

The debriefing session should be transcribed, and the minutes should be provided to the unsuccessful bidder in writing. If the reasons for rejection are highly technical, VTA should consider including a subject matter expert to participate in the session.



²⁹¹ VTA requires prime contractors to pay subcontractors and suppliers within 30 days of receipt of payment by VTA. Public Contract Code § 20104.50.



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