

Metropolitan Transit Authority of Harris County, Texas DISPARITY STUDY EXECUTIVE SUMMARY SUBMITTED APRIL 2021



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Executive Summary

I. Disparity Study Overview

A. Study Team

Mason Tillman Associates, Ltd., a public policy consulting firm in Oakland, California, performed the 2021 Disparity Study for the Metropolitan Transit Authority of Harris County, Texas (METRO). Local subconsultants Boone DeLeon Communications and Goodwille Pierre, LLC assisted Mason Tillman in the performance of the Study. The subconsultants collected data, performed surveys, conducted interviews, and helped facilitate two virtual business community meetings.

METRO's Deputy Chief Procurement Officer, Karen Hudson, managed the Study. Ms. Hudson was instrumental in facilitating Mason Tillman's access to the procurement and contract data needed to perform the Study. Under her leadership, Mason Tillman was able to complete the Study in a timely manner.

B. Study Purpose

The purpose of the Study was to determine if minority and women-owned business enterprises (M/WBEs) were underutilized in the award of METRO's prime contracts and subcontracts during the October 1, 2013 to September 30, 2018 study period. Before addressing the Study, Mason Tillman has reviewed Small Business Programs across the country. The METRO Small Business Program is a model program, aggressive and innovative, which has made commendable progress in providing contracting opportunities to the small business community.

Under a fair and equitable system of awarding contracts, the proportion of contract dollars awarded to M/WBEs should be relatively close to the proportion of available M/WBEs in the relevant market area. If either the available M/WBE prime contractors or the available M/WBE subcontractors are underutilized, a statistical test is conducted to calculate the probability of observing the empirical disparity ratio or any event that is less probable. Thus, the test performed determines if a finding of underutilization is statistically significant.

C. Study Methodology

Mason Tillman's disparity study methodology is grounded in a thorough legal review. Its constitutionality has been upheld in two federal circuit courts without a legal challenge.¹



Kossman Contr. Co. v. City of Houston, 128 Fed. Appx. 376 (2005).

Midwest Fence Corp. v. United States Dep't of Transp., 84 F. Supp. 3d 705 (2015).

1. Legal Framework

The United States Supreme Court ruling in *City of Richmond v. J.A. Croson Co.² (Croson)* and related case law provide the legal framework for conducting the disparity study. Specifically, *Croson* set the standard by which federal courts review both local and state government minority business enterprise programs. The Court affirmed the longstanding legal precedent that programs employing racial classification would be subject to "strict scrutiny," which is the highest legal standard. Under *Croson*, government agencies such as METRO may adopt race-conscious programs only as a remedy for discrimination identified as statistically significant, and the remedy must impose a minimal burden on unprotected classes. The Court held that an inference of discrimination can be made *prima facie* if the disparity is statistically significant.³ For this Disparity Study, this analysis was applied to M/WBEs by ethnicity and gender within the three industries.

2. Critical Components

Eight critical components were performed for METRO's Disparity Study:

- Legal review to define the evidentiary standard.
- Review of procurement policies to determine the contracting processes employed during the study period.
- Collection of contract records to determine the extent to which METRO and its prime contractors procured construction, professional services, and goods and services from M/WBEs and non-M/WBEs.
- Identification of the market area in which METRO spent its dollars.
- Availability analysis to identify market area businesses willing and able to provide the construction, professional services, and goods and services procured by METRO and its prime contractors.
- Disparity analysis to determine if a statistically significant underutilization of M/WBEs existed within each of the industries.
- Anecdotal analysis to describe the contemporary experiences of business owners in the market area.
- Recommendations to enhance current business practices and strategies to remedy any identified disparity.



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

Id.

D. Industries Studied

The analyzed contracts were classified into three industries:

- Construction
- Professional Services
- Goods and Services

E. Ethnic and Gender Groups Studied

The data in the Study are disaggregated into seven ethnic and gender groups, which are listed in Table 1.

Ethnicity and Gender Category	Definition
African Americans	Businesses owned by male and female African Americans
Hispanic Americans	Businesses owned by male and female Hispanic 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
Native Americans	Businesses owned by male and female Native Americans
Caucasian Females	Businesses owned by Caucasian females
Non-minority Males	Businesses owned by non-minority males and businesses that could not be identified as minority or Caucasian female-owned

Table 1: Business Ethnic and Gender Groups

F. Prime Contract Data Sources

The prime contract data are purchase orders issued during the October 1, 2013 to September 30, 2018 study period. The contract data were extracted from the two financial systems, Oracle E-Business Suite (Oracle) and System Analysis Program (SAP). During the study period, METRO migrated from Oracle to SAP. Therefore, the prime contract data were extracted from the two systems by METRO. Mason Tillman normalized the data.



The closed contracts extracted from the Oracle system were combined with the SAP records, which included open contracts from Oracle and both open and closed contracts set-up originally in SAP. Prime contracts were analyzed by Oracle contract, Oracle purchase order, SAP contract, SAP purchase order, and Supplier Relationship Management number.

The combined dataset was scrubbed to remove duplicates, prime contracts awarded outside the study period, not-for-profit entities, state and other local government agencies, utility companies, and claims/reimbursements. After removing exclusions, the remaining prime contracts were classified into one of the three industries—construction, professional services, or goods and services. An industry was assigned to each contract based on prime vendor name and the description of the contract or purchase order. METRO approved the industry classifications.

Several additional steps were undertaken to determine the ethnicity and gender of each prime contractor. The initial step determined whether the contractor was certified by METRO or another certifying agency. When available, the ethnicity and gender of the prime contractor was derived from the certification record. Additional public sources used to determine the ethnicity and gender of the non-certified contractors included chamber of commerce directories, trade organization membership lists, and the internet. Internet research included a review of the company's website for ethnicity and gender. When necessary, social media platforms, digital media, and business listings were perused to determine the business owner's ethnicity and gender. Contractors that could not be located on the internet were surveyed and asked to identify their ethnicity and gender. Prime contractors whose ethnicity and gender could not be verified as minority or female using these methods were classified as non-minority male. The non-minority male category also included publicly traded corporations, employee-owned businesses, and 50/50 partnerships in which the partners were neither a minority nor a woman.

G. Subcontract Data Sources

METRO uses a comprehensive Small Business Enterprise Compliance system to track the participation of certified small businesses (SBE) on all prime contracts. SBE awards and payments tracked in the system are each linked to a unique contract number. Some non-SBEs are also tracked in the Small Business Enterprise system. However, additional research was undertaken in conjunction with METRO in an effort to reconstruct the non-SBE subcontracts on construction and professional services (including architecture and engineering) prime contracts during the study period.

Three methods were used to reconstruct the non-SBE subcontract data. Construction and professional services (including architecture and engineering) prime contractors were surveyed to collect their subcontractors. Subcontractors identified through the survey were also contacted to verify their utilization. METRO's managers reviewed some of the large prime contracts for their subcontract records.

H. Contract Thresholds



METRO's prime contracts awarded in three industries are analyzed at three size thresholds: (1) all prime contracts; (2) informal prime contracts, and (3) formal prime contracts. The informal and formal levels are both defined in the Metropolitan Transit Authority of Harris County, Texas Procurement Manual. However, for the disparity analysis, an upper limit was determined as a threshold for the formal contracts included in the disparity analysis. The threshold, calculated to exclude outliers or large contracts that were anomalies from the disparity analysis to ensure a

reliable statistical analysis, was set for each industry. Tables 2 and 3 present the formal and informal contract thresholds by industry, respectively.

Industry	Formal Contract Threshold
Construction	More than \$50,000 and less than \$3,530,000
Professional Services	More than \$50,000 and less than \$1,560,000
Goods and Services	More than \$50,000 and less than \$670,000

Table 2: Formal Contract Thresholds by Industry

Table 3: Informal Contract Thresholds by Industry

Industry	Informal Contract Threshold
Construction	\$10,000 and less \$10,001 to \$15,000 \$15,001 to \$50,000
Professional Services	\$10,000 and less \$10,001 to \$15,000 \$15,001 to \$50,000
Goods and Services	\$10,000 and less \$10,001 to \$15,000 \$15,001 to \$50,000

II. Notable Findings

A. Utilization Analysis

Mason Tillman documented METRO's utilization of Minority and Woman Business Enterprise (M/WBE) and non-minority male-owned business enterprises by ethnicity, gender, and industry during the October 1, 2013 to September 30, 2018 study period at both the prime contractor and subcontractor levels.

1. Prime Contractor Utilization Analysis



METRO issued 38,818 prime contracts during the October 1, 2013 to September 30, 2018 study period, which included 582 for construction, 852 for professional services, and 37,384 for goods and services. The payments made by METRO during the study period totaled \$598,483,022 for all 38,818 prime contracts. Payments included \$119,534,468 for construction, \$166,185,086 for professional services, and \$312,763,467 for goods and services.

The utilization analysis was performed for prime contracts in the three industries at three-dollar thresholds: (1) all prime contracts regardless of award amount; (2) all informal prime contracts valued \$10,000 and less, \$10,001 to \$15,000, and \$15,001 to \$50,000 for construction, professional services, and goods and services, as defined by the Procurement Manual; and (3) formal prime contracts with thresholds set for each industry to eliminate outliers. Given the application of the thresholds, the formal prime contracts analyzed were valued at more than \$50,000 and less than \$3,530,000 for construction, more than \$50,000 and less than \$1,560,000 for professional services, and more than \$50,000 and less than \$670,000 for goods and services. Table 4 presents a summary of prime contractor utilization by industry and percent of dollars awarded by ethnicity and gender.

Ethnicity	Construction	Professional Services	Goods and Services
African Americans	7.91%	0.47%	3.50%
Asian-Pacific Americans	0.00%	1.48%	4.18%
Asian Subcontinent Americans	2.04%	0.93%	0.07%
Hispanic Americans	6.95%	9.16%	5.08%
Native Americans	0.00%	0.00%	0.05%
Caucasian Females	1.77%	3.29%	2.76%
Non-minority Males	81.33%	84.66%	84.34%

Table 4: Prime Contractor Utilization Summary by Industry and Ethnicity

2. Subcontractor Utilization Analysis

A total of 384 subcontracts compiled from the Small Business Enterprise Compliance system and a business survey were analyzed. The subcontracts included 180 for construction and 204 for professional services.

These 384 subcontracts were awarded by METRO's prime contractors during the October 1, 2013 to September 30, 2018 study period and totaled \$26,396,523. The total amount expended included \$15,300,362 for construction and \$11,096,161 for professional services subcontracts. Table 5 presents a summary of subcontractor utilization by industry.



Ethnicity	Construction	Professional Services
African Americans	5.04%	4.64%
Asian-Pacific Americans	0.00%	2.01%
Asian Subcontinent Americans	0.24%	0.15%
Hispanic Americans	7.28%	4.55%
Native Americans	0.00%	0.23%
Caucasian Females	6.47%	7.87%
Non-minority Males	80.97%	80.54%

Table 5: Subcontractor Utilization Summary by Industry

B. Market Area Analysis

Although *Croson* and its progeny do not provide a bright-line rule for the delineation of the local market area, the case law, taken collectively, supports a definition of the market area as the geographical boundaries of the government entity. The market area analysis determined that METRO awarded 64.10% of its dollars to businesses domiciled in Harris County. Thus, the geographical boundaries of Harris County demarcate the Study's market area.

C. Prime and Subcontract Availability Analysis

The availability analysis presented the enumeration of willing and able market area businesses by ethnicity, gender, and industry. The capacity of the enumerated businesses was assessed using five methods: (1) a review of METRO's contract size distribution to identify the capacity needed to perform most METRO contracts; (2) a determination of the largest contracts METRO awarded to M/WBEs; (3) a frequency distribution that defined the median size of contracts awarded to both M/WBEs and non-minority males; (4) an analysis that defined the outliers, or contract anomalies, to be removed from the formal contracts in order to set a threshold for the analysis to produce reliable statistical findings; and (5) a business capacity analysis that assessed relevant socioeconomic factors in the private sector affecting business formation and revenue to determine the capacity of M/WBEs and similarly situated non-minority males.

The findings from these analyses illustrate that M/WBEs have a socioeconomic profile comparable to similarly situated non-minority males, as well as the capacity to perform large METRO contracts. Minority-owned businesses account for 31.43% of construction, professional services, and goods and services prime contractors; woman-owned businesses account for 22.78%; and non-minority male-owned business account for 56.68%. Minority-owned businesses account for 33.64% of both construction and professional services subcontractors; woman-owned businesses account for 22.73%; and non-minority male-owned businesses account for 54.89%.



Table 6 presents prime contractor availability according to ethnicity, gender, and industry. The prime contractor availability analysis is based on the 4,499 willing market area businesses enumerated from four availability sources: METRO contract records, government certification lists, business community meetings, and business association membership lists.

Ethnicity	Construction	Professional Services	Goods and Services
African Americans	12.21%	19.84%	17.05%
Asian-Pacific Americans	0.95%	2.55%	1.72%
Asian Subcontinent Americans	1.29%	4.46%	1.92%
Hispanic Americans	13.93%	9.73%	8.99%
Native Americans	0.95%	1.03%	0.93%
Caucasian Females	6.96%	14.13%	11.89%
Non-minority Males	63.71%	48.26%	57.49%

Table 6: Prime Contractor Availability Analysis

Table 7 presents subcontractor availability according to ethnicity, gender, and industry. Subcontractor availability was not calculated for goods and other services, as the subcontracting activity in that industry was limited.

Ethnicity	Construction	Professional Services
African Americans	17.39%	19.08%
Asian-Pacific Americans	1.92%	2.12%
Asian Subcontinent Americans	2.91%	3.25%
Hispanic Americans	11.43%	10.92%
Native Americans	1.16%	1.19%
Caucasian Females	10.98%	11.78%
Non-minority Males	54.22%	51.66%

Table 7: Subcontractor Availability Analysis

D. Disparity Analysis

A disparity analysis was performed on all prime contracts and construction and professional service subcontracts awarded during the study period. Disparity was found at both the prime contract and subcontract levels for several ethnic and gender groups.

1. Prime Contracts

a) Informal and Formal Construction Prime Contracts

As indicated in Table 8 below, disparity was found for African American, Subcontinent Asian American, Hispanic American, and woman-owned prime contractors on informal construction contracts valued at \$10,000 and less.

Disparity was found for African American prime contractors on informal construction contracts valued at \$15,001 to \$50,000.

Disparity was not found on construction contracts valued at \$10,001 to \$15,000 and between \$50,000 and \$3,530,000.

	Construction				
Ethnicity/ Gender	Contracts \$10,000 and less	Contracts \$10,001 to \$15,000	Contracts \$15,001 to \$50,000	Contracts between \$50,000 and \$3,530,000	
African Americans	Disparity	No Disparity	Disparity	No Disparity	
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity	
Subcontinent Asian Americans	Disparity	No Disparity	No Disparity	No Disparity	
Hispanic Americans	Disparity	No Disparity	No Disparity	No Disparity	
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity	
Caucasian Females	Underutilized	Underutilized	No Disparity	Underutilized	
Minority Business Enterprises	Disparity	No Disparity	No Disparity	No Disparity	
Woman Business Enterprises	Disparity	No Disparity	No Disparity	No Disparity	

Table 8: Disparity Summary: Construction Prime Contract DollarsOctober 1, 2013 to September 30, 2018

b) Professional Services Prime Contracts

As indicated in Table 9 below, disparity was found for African American, Subcontinent Asian American, Hispanic American, Caucasian female, minority-owned, and woman-owned prime contractors on informal professional services contracts valued at \$10,000 and less.

Disparity was found for African American, Subcontinent Asian American, Caucasian female, minority-owned, and woman-owned prime contractors on informal professional services contracts valued from \$10,001 to \$15,000.



Disparity was found for African American, Subcontinent Asian American, Hispanic American, Caucasian female, minority-owned, and woman owned prime contractors on informal professional services contracts valued from \$15,001 to \$50,000.

Disparity was also found for African American, Caucasian female, and woman-owned prime contractors on professional services contracts valued between \$50,000 and \$1,560,000.

	Professional Services			
Ethnicity/ Gender	Contracts \$10,000 and less	Contracts \$10,001 to \$15,000	Contracts \$15,001 to \$50,000	Contracts between \$50,000 and \$1,560,000
African Americans	Disparity	Disparity	Disparity	Disparity
Asian-Pacific Americans	No Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	Disparity	Disparity	Disparity	No Disparity
Hispanic Americans	Disparity	No Disparity	Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity
Caucasian Females	Disparity	Disparity	Disparity	Disparity
Minority Business Enterprises	Disparity	Disparity	Disparity	Disparity
Woman Business Enterprises	Disparity	Disparity	Disparity	Disparity

Table 9: Disparity Summary: Professional Services Prime Contract DollarsOctober 1, 2013 to September 30, 2018

c) Goods and Services Prime Contracts

As indicated in Table 10 below, disparity was found for African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, Caucasian female, and womanowned prime contractors on informal goods and services contracts valued at \$10,000 and less.

Disparity was found for African American, Subcontinent Asian American, Hispanic American, Caucasian female, and woman-owned prime contractors on informal goods and services contracts valued from \$10,001 to \$15,000.

Disparity was found for African American, Subcontinent Asian American, Hispanic American, Caucasian female, and woman-owned prime contractors on informal goods and services contracts valued from \$15,001 to \$50,000.



Disparity was also found for African American, Subcontinent Asian American, Caucasian female, and woman-owned prime contractors on goods and services contracts valued between \$50,000 and \$670,000.

Table 10: Disparity Summary: Goods and Services Prime Contract DollarsOctober 1, 2013 to September 30, 2018

	Goods and Services			
Ethnicity/ Gender	Contracts \$10,000 and under	Contracts \$10,001 to \$15,000	Contracts \$15,001 to \$50,000	Contracts between \$50,000 and \$670,000
African Americans	Disparity	Disparity	Disparity	Disparity
Asian-Pacific Americans	Disparity	No Disparity	No Disparity	No Disparity
Subcontinent Asian Americans	Disparity	Disparity	Disparity	Disparity
Hispanic Americans	Disparity	Disparity	Disparity	No Disparity
Native Americans	No Disparity	No Disparity	No Disparity	No Disparity
Caucasian Females	Disparity	Disparity	Disparity	Disparity
Minority Business Enterprises	Disparity	Disparity	Disparity	No Disparity
Woman Business Enterprises	Disparity	Disparity	Disparity	Disparity

2. Subcontracts

As indicated in Table 11, disparity was found for African American subcontractors on construction contracts. Disparity was also found for African American and woman-owned subcontractors on professional services subcontracts.



Table 11: Subcontract Disparity SummaryOctober 1, 2013 to September 30, 2018

Ethnicity/Gender	Construction	Professional Services
African Americans	Disparity	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	Underutilized	Underutilized
Minority Business Enterprises	No Disparity	No Disparity
Woman Business Enterprises	Underutilized	Disparity

E. Anecdotal Analysis

The importance of anecdotal evidence in assessing the presence of discrimination in a geographic market area was identified in the landmark *Croson* case.⁴ The Court held that a pattern of individual discriminatory acts can explain the statistical disparity findings.⁵ However, such acts cannot be used to determine the presence of discrimination in a government's contracting process. The anecdotal testimony collected from business owners describing their perceptions of barriers in the market area were used to define best management practices to improve M/WBEs' access to METRO's contracts.



⁴ City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989).

⁵ Id.

Phase one of the anecdotal process was the collection of public comments during the business community meetings held on April 4, 2020 via Zoom Webinar at 10:00 am and 3:00 pm, respectively. The meetings served as a platform to announce the study, inform the business community about the study's legal framework, methodology, and timeline. The business owners were provided an opportunity to speak with METRO representatives regarding contracting opportunities and were invited to sign-up for an anecdotal interview.

One-on-one interviews were used to collect anecdotal information. An extensive effort was undertaken to identify business owners willing to provide anecdotal accounts. Lists of the utilized businesses, certification directories and the attendee list from the business community meetings were used to identify interviewees.

Businesses that expressed interest in being interviewed were screened. The screener identified basic demographic data and specific information to determine the relevant experiences of the business owner. The screener also captured information regarding the interviewee's experience with public contracting and determined the person's willingness to recount their experiences to a trained interviewer. Structured anecdotal questions were used to solicit information in one-on-one interviews with the business owners that agreed to an interview.

F. Regression Analysis

Two regression analyses were conducted to determine whether there were factors in the private sector that might help explain the current levels of M/WBE availability and the statistical disparities between M/WBE availability and utilization identified in the Disparity Study. The regression analysis findings can be used to enhance the race-neutral recommendations to eliminate identified statistically significant disparities in the METRO's use of available M/WBEs. Regression analysis is not a proxy for the required statistical analysis of disparity in METRO's utilization of available M/WBEs.

The two analyses examined the following outcome variables: business ownership and business earnings. These analyses were performed for three industries—construction, professional services, and goods and services. The regression analyses examined the effect of race and gender on the two dependent variables. The Business Ownership Analysis and the Earnings Disparity Analysis used data from the 2013 through 2017 PUMS datasets for the METRO and compared business ownership rates and earnings for M/WBEs to those of similarly situated non-minority males.



The analysis of the two dependent variables document disparities that could adversely affect the formation and growth of M/WBEs within the construction, professional services, and goods and services industries. Based on the statistical analysis performed, lower business ownership and business earning are significantly correlated with race and gender for select groups. Racial and gender discrimination, as found in the analysis of business ownership and earning, is likely a manifestation of economic conditions in the private sector that impede 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 M/WBEs' experiences and likely contributed to lower levels of willing and able M/WBEs.

Other factors such as having a child under the age of six consistently have negative correlations with earnings. This is likely the result of older individuals seeking retirement and relying on fixed income or simply working less, rather than being actively engaged in generating higher income. Additionally, individuals with a child under six are likely younger and have a company in its infancy.

An interesting finding from the analysis shows that construction and goods and services company ownership is negatively correlated with earning a bachelor's degree. This likely stems from the fact that higher education is not a barrier to entry for owning a construction or goods and services company. In contrast, higher education is an asset for entering the professional services industry. Furthermore, earnings for business owners are positively correlated with having a bachelor's degree for each of the three industries analyzed. This finding suggests that business owners with a bachelor's or advanced degree are able to earn more in each industry.

G. Recommendations

METRO's aggressive and innovative Small Business Program, which is a model in both the region and the industry, has been the primary reason significant progress has been made in providing contracting opportunities to M/WBEs and other small businesses. Even though the small business program is both well established and robust, the Disparity Study documented a statistical disparity in both the prime contracts and subcontracts METRO awarded during the study period. Race and gender-specific and race and gender-neutral recommendations are offered to remedy the documented statistically significant disparity in the utilization of the available Minority and Women Business Enterprises (M/WBEs). Recommendations are also offered to maximize the participation of veteran and disabled person-owned business enterprises on METRO's construction, professional services, and goods and services contracts.

1. Race and Gender-Specific Recommendations

Race and gender-specific requirements should be considered to address the disparity in the award of prime contracts and subcontracts to the available minority and woman-owned businesses.

a) Prime Contract Remedies

The following remedies were offered to address the disparity in the award of prime contracts:

- Incentive credits for professional services contracts for African Americans and Caucasian females.
- Bid discounts applied to construction for African Americans and Caucasian females.
- Bid discounts on goods and services for African Americans, Subcontinent Asian Americans, and Caucasian females.



b) Subcontract Remedies

The following remedies were offered to address the disparity in the award of subcontracts:

- Set subcontract goals on construction and professional services solicitations for African Americans and Caucasian females.
- Implement quantified good faith effort criteria.

2. Procedures to Implement Remedies for M/WBEs

METRO has a robust SBE Program. However, an augmented SBE Program staff is needed to effectively implement the procedures recommended to remedy the prime contractor and subcontractor race and gender-conscious remedies. Recommendations in this area include:

- Require goal attainment at bid opening.
- Institute M/WBE certification requirements.
- Verify commercially useful function.
- Compile M/WBE quarterly participation report.
- Assess penalties for failing to achieve M/WBE subcontract goals.
- Develop M/WBE program training manual.
- Develop department-wide program training.
- Enhance SBE and M/WBE outreach and marketing strategies.
- Augment M/WBE Program staff.
- Establish M/WBE Advisory Committee.

3. Race and Gender-Neutral Recommendations

Race and gender-neutral recommendations are offered to strengthen the SBE Program, which is well honed and has effectively achieved parity in the award of both prime and subcontracts to most M/WBEs. Recommendations are offered to improve METRO's effectiveness in eliminating the statistically significant underutilization of all M/WBEs.

a) Administrative Strategies

- Revise bonding and insurance requirements.
- Provide adequate lead time when advertising solicitations.
- Expand solicitation notification media sources.
- Unbundle large procurements into smaller contracts.
- Use direct contracting to award small contracts.
- Pay mobilization to subcontractors.
- Give five-day notice of invoice disputes.



b) Supportive Services

- Enhance networking opportunities.
- Create a ListservTM to communicate with certified businesses.

c) Contract Monitoring and Reporting

• Track and monitor prime contracts and subcontracts.

4. Veteran-owned and Service-disabled owned Business Enterprises and Persons with Disability-owned Business Enterprises Availability and Utilization Analyses

METRO's desire to foster business development for veteran-owned and service-disabled-owned business enterprises (VOBEs) and persons with disability-owned business enterprises (PDOBEs) by maximizing their participation on its construction, professional services, and goods and services contracts satisfies the rational basis review.

a) Veteran-owned and Service-disabled-owned Business Enterprises Availability Analysis

The availability of VOBEs domiciled in Harris County were identified from sources published by five certifying agencies. The ethnicity and gender of the VOBEs domiciled in Harris County was determined by internet research. African American and Non-Minority Males represent the majority of VOBEs in Harris County in each industry. There were no available Asian Subcontinent American VOBEs in either construction or professional services.

b) Veteran-owned and Service-disabled-owned Business Enterprises Utilization Analysis

The utilization analysis revealed that Hispanic Americans and Non-Minority Males were the only certified VOBEs that received construction prime contracts. The utilization analysis revealed that African Americans and Non-Minority Males were the only certified VOBEs that received professional services (including architecture and engineering services) prime contracts. The utilization analysis revealed that Hispanic Americans and Non-Minority Males were the only certified VOBEs that received construction analysis revealed that Hispanic Americans and Non-Minority Males were the only certified VOBEs that received goods and services prime contracts.

c) Persons with Disability-owned Business Enterprises Availability Analysis

Only seven Persons with Disability-owned Business Enterprises (PDOBEs) domiciled in Harris County were identified in the City of Houston's PDOBE certification list. There were too few PDOBEs to perform a meaningful analysis of PDOBE utilization.



d) Strategies to Maximize the Participation on METRO Contracts

i. Implement Sheltered Market Program for Veteranowned Business Enterprises and Persons with Disabilityowned Business Enterprises

METRO should implement a Sheltered Market Program limited to VOBEs and PDOBEs on small purchases valued at \$50,000 and under. The type of work the certified VOBEs and PDOBEs perform should be identified and the contracts included in the sheltered market should reflect their offerings. The sheltered market opportunities should be reviewed annually to ensure they mirror the capabilities of the certified VOBEs.

ii. Outreach Strategies Targeting Persons with Disabilityowned Business Enterprises

- Develop tag line and message.
- Revamp procurement documents.
- Design promotional materials.
- Launch an outdoor advertising campaign.
- Enhance internet presence.
- Conduct a media campaign.
- Conduct METRO open house.
- Partner with local agencies.
- Conduct annual METRO evaluation.
- Develop outreach plan overview.

5. Website Enhancements to Improve Access to Disabled Persons-Owned Business Enterprises

METRO's website (https://www.ridemetro.org/Pages/index.aspx) was reviewed to offer userfriendly enhancements for disabled persons-owned business owners. The website review included webpages with information for users with disabilities who wish to access METRO services. The goal of the review was to assess the accessibility features of the website to offer suggestions to improve website accessibility for people with disabilities.



a) METRO Website Assessment: Americans with Disabilities Act and World Wide Web Consortium's Analysis

The first part of the website evaluation consisted of a review based on the guidelines set by the Americans with Disabilities Act (ADA) and the World Wide Web Consortium's (W3C) Web Access Initiative. The analysis included:

- Sampling video content for closed captions.
- Navigation testing without a mouse.
- Examining samples of HTML source code to determine ease of use for screen readers.

METRO's website was found to be accessible in most areas. METRO's website improves the experience of web users with disabilities by effective use of closed-captioning, and site-wide language translation powered by Google Translate. Many language options for Title VI complaint forms were easily navigable without the use of a mouse.

While the website provides many useful accessibility features, there are some modifications that would enhance its functionality for users with disabilities in the following areas:

- Skip Navigation
- Links
- Images
- Alternate document formats
- Web forms
- Check boxes
- Drop-down menus
- Tables
- Videos

b) Website Accessibility Policy and Procedure Enhancements Outreach Strategies Targeting Persons with Disability-owned Business Enterprises

To improve web accessibility, METRO should have the following practices, documents, and policies available on the METRO website:

- Written policy for web accessibility.
- More visible and detailed accessibility policies.



c) Website Monitoring and Quality Control Outreach Strategies Targeting Persons with Disability-owned Business Enterprises

METRO should enact and list procedures for website monitoring and quality control. The procedures should be reviewed annually and minimally include:

- Training on web accessibility.
- Written commitment to maintaining accessibility that lists steps METRO will take to achieve accessibility goals.
- Procedures to ensure that content is not added to the website until it has been made accessible.
- Standards for a routine check of the HTML on all new webpages to assess accessibility before the webpages are posted.
- Alternative formats to PDF documents, including HTML or RTF.
- Dissemination of the web accessibility policy and related procedures, and training on how to ensure web accessibility to METRO staff and contractors.



Appendix A: Structure of the Report

The Disparity Study findings are presented in 11 chapters as briefly described below.

- *Chapter 1: Legal Review* presents the case law applicable to business affirmative action programs and the required methodology based on the relevant law.
- Chapter 2: Procurement Review summarizes the METRO's procurement policies and practices.
- Chapter 3: Prime Contractor Utilization Analysis presents the distribution of prime contractor purchase orders 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 determining the geographic market area and defines METRO's market area.
- *Chapter 6: Prime Contractor and Subcontractor Availability Analysis* presents the distribution of available businesses in METRO's market area.
- *Chapter 7: 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 compared to subcontractor availability by industry, ethnicity, and gender, and evaluates the statistical significance of any underutilization.
- *Chapter 9: Regression Analysis* examined two outcome variables to determine whether METRO is passively participating in ethnic and gender discrimination.
- *Chapter 10: Anecdotal Analysis* presents the business community's perceptions of barriers and exemplary practices encountered in contracting or attempting to contract with METRO.
- *Chapter 11: Recommendations* presents race and gender-conscious and race and genderneutral remedies to enhance METRO's procurement policies and procedures as well as its contracting with M/WBEs and other small businesses. In addition, it offers analyses of VOBE and PDOBE availability and utilization and website enhancements.





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