CITY OF PHILADELPHIA
FISCAL YEAR 2006
ANNUAL DISPARITY STUDY

Final Report Submitted To:
City of Philadelphia Department of Finance
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EXECUTIVE SUMMARY

The Econsult team is pleased to submit the Annual Disparity Study for Fiscal Year 2006 to the City of Philadelphia. Pursuant to Title 17 of the Philadelphia Code, as amended by Ordinance 060855-A, this study is designed to analyze the City of Philadelphia's utilization of Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), and Disabled Business Enterprises (DSBEs), collectively known as Disadvantaged Business Enterprises (DBEs), relative to the availability of such firms to compete for City business.

By doing so, it will determine the extent to which disparity exists, as well as provide critical data in the development and formulation of the Finance Director's Annual Participation Goals. This is an important component of what should be an overall strategy to safeguard the public interest in identifying and rectifying instances of discrimination, and proactively seeking ways to promote the inclusive participation of DBEs in economic opportunities.

Disparity reflects the ratio of DBE utilization to DBE availability. For the purposes of this study, "utilization" for each category and industry sector is defined as the total dollar value of contracts awarded to for-profit DBE prime contractors and sub-contractors certified by the City of Philadelphia's Minority Business Enterprise Council (MBEC), divided by the dollar value of all City contracts awarded to for-profit prime contractors and sub-contractors, as recorded in MBEC's Participation Report. "Availability" for each category and industry is defined as the proportion of "ready, willing and able" (RWA) DBEs in the Philadelphia Metropolitan Statistical Area (MSA), relative to the region's total number of RWA enterprises. A disparity ratio greater than 1.0 represents over-utilization, whereas a disparity ratio less than 1.0 represents under-utilization (see Figure ES.1).

Figure ES.1 – Disparity Ratio

Utilization		*Availability*
$ value of City contracts awarded to DBE prime contractors and sub-contractors	divided by	DBE for-profit firms that are "ready, willing, and able"
Total $ value of City contracts awarded to all for-profit prime contractors and sub-contractors		All for-profit firms that are "ready, willing, and able"

Source: Econsult Corporation

Producers of disparity studies encounter little if any difficulty about either the approach to determining the utilization rate or the availability of relevant data with which to calculate the utilization rate. In contrast, the

availability rate is subject to interpretation and to data limitations. Legal precedent defines the universe of relevant firms as those that are "ready, willing, and able" (RWA). One can define this universe of RWA firms to varying degrees of strictness.

In the narrowest sense, that universe can be considered to comprise only those firms that have demonstrated RWA by actually registering or certifying to do business with the City. However, there are certainly firms that are ready, willing, and able to do business with the City, both DBE and non-DBE, who for a variety of reasons have not or have not yet registered with the City. Considering only registered firms, then, would under-count both the DBE amount and the non-DBE amount, with a possible skewing on the availability rate depending on whether DBEs were more or less likely than non-DBEs to choose not to register.

Using a broader definition of RWA, we could utilize the 2002 Census Survey of Business Owners, which gives us a sense of the number of all firms in a geographic location and under a particular industry. However, we now have the opposite problem as with the narrower definition of RWA; instead of potentially under-counting our universe, we are now susceptible of over-counting it, since there are certainly firms that, while in existence and generating positive revenues, for whatever reason are not in fact ready, willing, or able to do business with the City. They should therefore not be counted in the availability rate.

We have pursued both a "broad" and "narrow" approach, and calculated availability rates for both approaches. In this way, we can determine the differences in disparity ratios using the different approaches, and comment based on the actual results as to which approach is preferable. We can also offer ranges in our recommended participation goals for MBEs, WBEs, and DSBEs (See Table ES.1).

Table ES.1 - Recommended 2007 Participation Goals
"U" = 2006 Utilization Rate > 2006 Availability Rate (i.e. disparity ratio > 1.0)
"A" = 2006 Availability Rate > 2006 Utilization Rate (i.e. disparity ratio < 1.0)

PW = Public Works Contracts
PPS = Personal and Professional Services Contracts
SSE = Services, Supplies, and Equipment Contracts
All = All Contract Types

Category	PW	PPS	SSE	All
MBE	U: 5-7%	U: 16-21%	A: 8-11%	U: 9-12%
WBE	U: 8-11%	A: 14-18%	A: 11-15%	A: 12-16%
DSBE	x	x	x	x
All DBE *	U: 10-13%	A: 19-25%	A: 19-25%	A: 19-25%

Source: Econsult Corporation
"x" denotes data unavailable or insufficient
** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

In cases where actual utilization is less than actual availability (i.e. the disparity ratio is less than 1.0), we recommend that future utilization rates increase to 80 percent to 100 percent of current availability rates as measured in this analysis. In cases where actual utilization is greater than actual availability (i.e. the disparity ratio is greater than 1.0), we recommend that future utilization rates hold at 80 percent to 100 percent of current utilization rates.

Thus, the ranges above can be offered as benchmark utilization rates that should be reached in FY07, with a prefix of "U" signifying cases in which DBE utilization is currently greater than DBE availability, and a prefix of "A" signifying cases in which DBE utilization is currently lower than DBE availability. These ranges acknowledge the imprecise nature of the data availability and overall approach inherent in disparity studies, and provide a citywide framework for the Finance Director's development of department-by-department participation goals.

It is important to note that a disparity ratio is merely one tool for identifying any differences between utilization rates and availability rates. It is certainly a useful measure in cases in which current utilization rates trail current availability rates, and pushing for higher future utilization rates is equivalent to promoting greater DBE participation in the economic opportunities represented by City contracts.

For example, in cases in which availability rates are unusually low, a disparity ratio will not adequately pick up on the problem at hand. In fact, because of the way a disparity ratio is defined, an unusually low

availability rate will usually lead to a disparity ratio of over 1.0. This otherwise positive score masks the fact that what needs to happen to promote greater DBE participation in economic success is not simply inadequate utilization of DBEs in City contracts, but also an inadequate quality and quantity (i.e. availability) of DBE firms.

Again, this qualification applies only to situations in which availability rates are unusually low; of course, where availability rates are relatively reasonable, a disparity ratio of over 1.0 is a very positive outcome, for it means that DBE utilization rates exceed DBE availability rates. Furthermore, even in cases in which availability rates are unusually low, leading to somewhat misleading high disparity ratios, this is still a very positive outcome, for it means that despite the relative lack of ready, willing, and able DBEs, City agencies were able to enable DBE participation at a significant rate. Nevertheless, in seeking to advocate for utilization rates to be as high as or higher than availability rates, it is equally important to advocate for availability rates to be higher as well.

Thus, in addition to these participation goal recommendations, we offer the following two sets of recommendations: 1) disparity study data and methodology recommendations, and 2) related public policy recommendations (see Table ES.2):

Table ES.2 – Additional Recommendations

Data And Methodology Recommendations	Related Public Policy Recommendations
• Expand disparity discussion to include non-mayoral departments.	• Streamline MBEC certification process to minimize the universe of "certifiable" DBEs that have not or have not yet certified with MBEC.
• Collect follow-up information on actual disbursements to sub contractors.	• Continue to target strategic outreach and assistance efforts to increase the number of certified DBE firms in commodity types and industry areas that are currently underrepresented in City contracts (or are in fields where city procurement demand may be expected to increase), and to increase the bidding activity of such DBE firms.
• Expand disparity analysis to look at percentages of ownership and employment make-up.	• Work in concert with public and private sector technical assistance providers to increase the quality and quantity of DBE firms, so as to a) increase the availability rate of DBE firms, b) increase the utilization rate of DBE firms, and c) increase the participation of DBE firms in other public and private sector contract opportunities outside of City procurement.
• Expand disparity discussion to include sub-contractors under non-profit prime contractors.	
• Collect "best practices" from public entities	

Data And Methodology Recommendations

around the country that have successfully worked with DBEs to increase bidding and awarding of government contracts and to strengthen overall organizational capacity and technical skill.

- Enhance raw data collection phase with interviews with DBEs concerning their experiences with the City contract notification, bidding, and selection process.

- Provide more time for the compilation of disparity study analysis and recommendations.

Related Public Policy Recommendations

- Disparity studies should not only look inward, at the City's participation data, but outward, at "best practices" in increasing DBE participation in City contracts. Special attention should be given, then, to MBEC's current efforts to collect innovative and effective techniques being used by other municipal governments to increase the quality and quantity of ready, willing, and able DBE firms, to increase the amount of bidding on City contracts that they engage in, and to increase the amount of City contract participation they enjoy.
- Empower MBEC to take a more pro-active role in a) following through on potential instances of discrimination, and b) championing increased DBE participation in City contract opportunities, to augment their current, more passive certification and monitoring role.

1.0 INTRODUCTION

The Econsult team is pleased to submit the Annual Disparity Study for Fiscal Year 2006 to the City of Philadelphia. Set forth in this section is a brief discussion of the purpose and legal basis of this study, a broad overview of the legal context in which the establishment of Disadvantaged Business Enterprises (DBEs) programs arose, a contextual summary of the procurement process, the expenditure context, and a brief summary of the previous disparity study conducted by DJ Miller & Associates (DJMA).

1.1. Study Purpose

Pursuant to Title 17 of the Philadelphia Code, as amended by Ordinance 060855-A, this study is designed to analyze the City of Philadelphia's utilization of Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), and Disabled Business Enterprises (DSBEs), collectively known as Disadvantaged Business Enterprises (DBEs), relative to the availability of firms to compete for City business.

By doing so, it will determine the extent to which disparity exists, as well as provide critical data in the development and formulation of the Finance Director's Annual Participation Goals. This is an important component of what should be an overall strategy to safeguard the public interest in identifying and rectifying instances of discrimination, and proactively seeking ways to promote the inclusive participation of DBEs in economic opportunities.[1]

1.2 Study Requirements

Under Ordinance 060855-A, in conducting the Annual Disparity Study and developing the Annual Participation Goals, pursuant to Section 6-109 of the Philadelphia Home Rule Charter, this study is required to analyze Disadvantaged Business Enterprises (DBEs) owned by persons within the following categories:

- African-Americans
- Asian-Americans
- Women
- Hispanic-Americans
- Native-Americans
- Disabled

[1] It is important to distinguish between disparity and discrimination. Disparity is the difference between two groups on an outcome of interest and is a necessary, but insufficient condition for finding discrimination. In other words, disparity does not necessarily equal discrimination; discrimination requires additional analysis and proof. Dr. Bernard Anderson, Whitney M. Young Jr. Professor of Management at the Wharton School of Business at the University of Pennsylvania.

In addition, the Ordinance further requires that the Study distinguish between Personal and Professional Services contracts, Public Works contracts, and Services, Supplies and Equipment contracts.

Disparity reflects the ratio of DBE utilization to DBE availability. For the purposes of this Study, "utilization" for each category and industry sector is defined as the total dollar value of contracts awarded to for-profit DBE prime contractors and sub-contractors certified by the City of Philadelphia's Minority Business Enterprise Council (MBEC), divided by the dollar value of all City contracts awarded to for-profit entities, as recorded in MBEC's Participation report. Or, more simply, the utilization rate for a given DBE category can be viewed as the percentage of dollars from all City contracts that went to businesses in that category who are registered with MBEC.

Conversely, "availability" for each category and industry is defined as the proportion of "ready, willing and able" (RWA) DBE's in the Philadelphia Metropolitan Statistical Area (MSA),[2] relative to the region's total number of RWA enterprises. A disparity ratio greater than 1.0, represents over-utilization, whereas a disparity ratio less than 1.0 represents under-utilization. Please see Section 2 for a detailed analysis of the methodology developed to meet the Ordinance's requirements.

1.3 Legal Context

In presenting the Study's findings as well as recommendations, it is important to understand the legal context of DBE disparity, and the extent to which legal doctrine has shaped the development of M/W/DSBE programs. The "Croson" case is universally recognized as the catalyst for the subsequent emergence of standards with respect to race-based municipal programs.

In *Richmond v. J.A. Croson Company, 488 U.S. 469 (1989)*, the Appellant, the City of Richmond, had issued an invitation to bid on a project for the provision and installation of plumbing fixtures at the City's jail. The bid, consistent with the guidelines adopted by the City's Minority Business Utilization Plan, required prime contractors to subcontract 30 percent of the dollar value to minority business enterprises. In large part, the Plan was established as a response to the fact that, though 50 percent of the City's population was African-American, less than one percent of construction contracts were awarded to minority business enterprises.

The Supreme Court found the City's reliance on the disparity between the number of prime contracts awarded to Minority Business Enterprises and the City's minority population "misplaced," specifically noting that the City did not ascertain the number of MBEs available in the local construction market, and as a result failed to identify the need for remedial action. In establishing discriminatory exclusion, the Court set the test as follows:

[2] The Philadelphia MSA is an 11-county region is the modern equivalent of the now-defunct 9-county Primary Metropolitan Statistical Area (PMSA) used in the DJMA& Associates report.

> *Where there is a statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise.*[3]

With this case, the Supreme Court clearly defined the parameters under which race-based programs will stand: namely that they meet a compelling government interest, are narrowly tailored to remedy the effects of prior discrimination,[4] and define an availability rate that utilizes the notion of "ready, willing and able" firms.

1.4 Procurement Context

In furtherance of the City's policy to foster an environment of inclusion, the Minority Business Enterprise Council (MBEC) was established in 1982 to ensure that minority, women and disabled enterprises are afforded equal access and opportunity to not only compete for, but more importantly, secure contracts within the City of Philadelphia. As an agency, it creates a framework under which greater parity is injected in the marketplace.

Within the City of Philadelphia, the Procurement Department is the central purchasing agency. Its stated objective is to acquire services, equipment and construction at the lowest possible price within an equitable competitive bidding framework.

Public Works (PW) bids and all competitive bids for Services, Supplies and Equipment (SSE) in excess of $25,000 are advertised locally for a specified date. Conversely, for Small Order Purchases, the process is decentralized and driven by local individual operating departments. Specifically, for purchases greater than $500 but less than $25,000, departments are urged to solicit from MBEC and SBA- certified firms.

Within the Public Works (PW) sector, critical components of responsiveness include:

- For all bids exceeding $25,000, a bid surety that guarantees a vendor's commitment to hold the price, terms and conditions firm or incur liability for losses suffered by the City
- For all Public Works (PW) contracts in excess of $5,000, contractors are required to furnish a performance as well as payment bond equivalent to 100 percent of the contract amount

The City of Philadelphia attempts to process payments within a timely fashion, generally within 45 to 60 days following the acceptance of goods and services. Under the MBEC anti-discrimination policy, DBEs must be paid within a timely fashion, with "timely" being defined as no later than five (5) days after the contractor receives payment.

[3] *Richmond v. J.A. Croson Company (1989).*

[4] "Narrowly tailored" was explicitly defined in the *Croson* case to mean that the program should: 1) be instituted either after or in conjunction with race-neutral means of increasing minority business participation, 2) the program should not make use of strict numerical quotas, and 3) the program should be limited to the boundaries of the governmental entity that instituted it.

Within the Personal and Professional Services (PPS) realm, in February 2006 the City implemented an automated Request for Proposal (RFP) process. "eContractPhilly" (www.phila.gov/contracts) is an online interface that manages the non-competitively bid contracting process electronically. Under the program, vendors register to create a Vendor Record and submit applications online for non-competitively bid opportunities, which are posted for a period of 15 days. The system's features are comprehensive and allow vendors to:

- Search new non-competitively bid contract opportunities
- View the names of all applicants for each advertised opportunity
- Research awarded contracts
- View renewal certifications for contracts
- Access reports that summarize non-bid contract activity

Though MBEC is the central gateway for certified firms, it nevertheless maintains a highly collaborative relationship with the Managing Director's Office, as well as the Procurement office in order to implement its mandate.

1.5 Expenditure Context

It is important to define the universe of expenditures that is being studied, in terms of distribution of economic opportunity to various DBE categories. The FY 2006 budget for the City of Philadelphia, which includes both capital and operating expenditures, totals $5.9 billion. However, only $539 million, or nine percent, are directly analyzed in this report. That $539 million represents bidded and non-competitively bid contracts/ and requests for proposals.

Thus, one significant shortcoming in regard to the focus of our study and of the previous studies is that it only analyzes a subset of all City expenditures. DBE firms and their advocates understandably consider all public sector expenditures equally when it comes to business opportunities, not making the narrow, legal distinctions among government departments and quasi-government agencies which are under various degrees of authority by the Mayor and City Council, and which keep differing levels of contract-by-contract data on DBE participation.

When considering the analysis contained within this report and others like it, it is important to be aware of these limitations, and to appreciate the larger scope of government expenditures that is not included in this analysis, to say nothing of the much larger universe of private sector contract opportunities in the local economy. These limitations also make disparity comparisons across cities difficult, since mayoral control over various local government functions is not uniform across cities.

To provide a sense of scale, the following agencies, which report their MBE and WBE utilization to MBEC and are therefore listed in MBEC's annual Participation Report, represent an additional combined $365 million in annual contracts, or more than two thirds the size of the $539 million in City Contracts that are analyzed in this study (see Table 1.1). Although this Study is necessarily focused on mayoral departments, it is worth noting that there are other dollars being spent that should also be scrutinized from the standpoint of DBE participation.

Table 1.1 – FY 2006 MBE/WBE Utilization for Selected Quasi-Governmental Agencies

Agency	Time Period	MBE $M	WBE $M	Total $M	MBE%	WBE%
PHA	10/1/05-9/30/06	$ 28.3	$ 11.3	$ 82.5	34.3%	13.7%
PIDC	7/1/05-6/30/06	$ 9.1	$ 1.6	$ 21.7	41.9%	7.5%
PWDC	7/1/05-6/30/06	$ 6.8	$ 1.1	$ 116.5	5.8%	0.9%
RDA	7/1/05-6/30/06	$ 28.0	$ 9.4	$ 143.4	19.5%	6.6%
Total		$ 72.2	$ 23.4	$ 364.1	19.8%	6.4%

Source: MBEC FY 2006 Participation Report

1.6 Summary of Previous Study

DJ Miller & Associates (DJMA) conducted a disparity study for the City of Philadelphia in which it analyzed data from 1998 to 2003. That study serves as a starting point for our report, although it is important to note two important differences, one related to data and one related to scope. In terms of data, in calculating availability using US Census datasets, DJMA used 1997 data while we had access to 2002 data. In terms of scope, the DJMA study was used to satisfy the standards established in the *Croson* case, whereas our report was more designed to address issues of performance.

In general, our availability estimates are of the same order of magnitude as the earlier DJMA estimates, with several notable exceptions that are described in Section 3. Among the major findings, covering FY 1998-2003, were the following (see Table 1.2):

Table 1.2 – DBE Utilization, FY 1998-2003

Category	PW		PPS		SSE		All Contract Types	
	$M	%	$M	%	$M	%	$M	%
MBE	5.7	1.0%	0.4	1.0%	40.7	4.1%	46.8	2.3%

WBE	22.4	2.4%	13.4	11.5%	9.0	0.9%	44.8	2.2%
Other	891.9	96.6%	102.2	87.5%	950.3	95.0%	1944.4	95.5%
Total	920.0	100.0%	116.0	100.0%	1000.0	100.0%	2036.0	100.0%

Source: DJ Miller & Associates 2004

Here, we note the following figures concerning the City's performance in DBE utilization during FY 1998-2003:

- The City of Philadelphia awarded $2.04 billion in for-profit contracts, across all procurement types, with MBEs and WBEs accounting for 2.3 and 22.2 percent respectively.
- Within the Public Works (PW) sector, $920 million was awarded to firms located with the Philadelphia Primary Metropolitan Statistical Area (PMSA), of which less than 1 percent was captured by MBEs and 2.4 percent by WBEs.
- Within the sector of Services, Supplies and Equipment (SSE), $1 billion was awarded, with MBEs and WBEs garnering 4.1 percent and 0.9 percent respectively.
- Awards of Personal and Professional Services (PPS) contracts totaled $116 million with MBEs receiving less than 1 percent and WBEs receiving 11.5 percent.

This Study, like the one completed by DJMA, analyzes availability within the Philadelphia Metropolitan Statistical Area (MSA)[5] and utilization among Public Works (PW), Services, Supplies and Equipment (SSE), and Personal and Professional Services (PPS). However, it differs in the following ways:

- It segments and cross-tabulates the analysis by ethnicity and gender, where possible.
- It expands the analysis to include Disabled Business Enterprises (DSBEs), where possible.
- It considers the geographic distribution of DBE utilization.

1.7 Report Overview

In Section 2, we describe the approach used to measure the levels of utilization and availability of the various DBE categories under consideration. We will also briefly discuss how our methodology both builds on and differs from that used by DJMA in the FY 1998-2003 study.

[5] The Philadelphia MSA is an 11-county region is the modern equivalent of the now-defunct 9-county Primary Metropolitan Statistical Area (PMSA) used in the DJMA report.

In Section 3, we provide a detailed analysis of the utilization and availability rates we calculated, as well as the disparity ratios for the DBE categories under consideration. Our analysis is broken down by DBE category, as well as geographic location, in order to give a full picture of DBE participation in Philadelphia and the Philadelphia MSA.

Section 4 provides participation goals for FY 2007 based on the disparity ratios calculated from the FY 2006 data. These goals are created in reference to the three major DBE categories, namely Minority Business Enterprises (MBE), Women Business Enterprises (WBE) and total Disadvantaged Business Enterprises (DBE).[6]

In Section 5, we offer the following two sets of recommendations: 1) disparity study data and methodology recommendations, and 2) related public policy recommendations

[6] Insufficient data prevents us from setting goals within DBE subcategories.

2.0 METHODOLOGY

In determining our methodology for this study, we first examined the methodology utilized by DJ Miller & Associates (DJMA) in their initial 1998-2003 Disparity Study and 2004 Disparity Study Update. We also examined methodologies developed by other consulting firms for other disparity studies. Because DJMA discussed various interpretations of the requirements of the US Supreme Court's *Croson* decision (as well as subsequent court rulings) with respect to defining what a disparity study should actually measure and examine, we will not go into further legal context description beyond what is discussed in Section 1.3.

This section describes the method we use to determine and compare the level of actual and expected utilization of the required Disadvantaged Business Enterprises (DBE) categories in the stated industry classes. Specifically, we are interested in calculating the "disparity ratio" for the following DBE categories and City contract types, per the City ordinance, the Mayor's Executive Order, and the Participation Report of the City of Philadelphia's Minority Business Enterprise Council (MBEC) (see Figure 2.1):

Figure 2.1 – DBE Categories and City Contract Types of Interest

DBE Categories

- Native American males
- Asian males
- African American males
- Hispanic males
- Disabled
- Native American females
- Asian females
- African American females
- Hispanic females
- Caucasian females

City Contract Types

- Public Works (PW)
- Personal and Professional Services >$25K (PPS)
- Services, Supplies, and Equipment >$25K (SSE)

Source: City of Philadelphia

Please see Appendix A for more information on our specific methodology in obtaining, filtering, and organizing data from these sources, and Appendix B for the FY 2006 Disparity Study dataset and related files.

2.1 Disparity

We define our "disparity ratio" in the following way: utilization rate divided by availability rate. The utilization rate is defined as the total dollar value of contracts awarded to MBEC-certified for-profit DBEs divided by the dollar value of all City contracts awarded to for-profit entities. And, in a similar fashion, the availability rate is defined as the proportion of "ready, willing and able" (RWA) DBEs in the Philadelphia Metropolitan Statistical Area (MSA)[7] relative to the region's total number of RWA enterprises.

In other words, we compare actual utilization, in the form of contract awards, with an expected utilization level, based on the availability of "ready, willing, and able" firms. Thus, a disparity ratio of less than 1.0 would be considered under-utilization, and a ratio of greater than 1.0 over-utilization. These utilization rates, availability rates, and disparity ratios can be further sub-divided by DBE category and contract type.

Additionally, one key approach to augment previous analysis is to determine the geographic market area under consideration for the analysis. Part of this is conceptual: in other words, we must determine what is the appropriate economic market from which the City should draw contractors and vendors. DJMA correctly identified this as the Philadelphia MSA, as opposed to just the City of Philadelphia. Another factor for choosing the metropolitan area as the geographic market area is data availability, which is, for the most part, available at the metropolitan level, rather than city level.

Both the numerator and denominator in the disparity ratio are themselves fractions, as will be described below. "Utilization" is defined as the dollar amount of contracts awarded in a given contract type and DBE category, divided by the total dollar amount of contracts awarded in that given contract type. "Availability" is defined as the number of "ready, willing, and able" firms in a given contract type and DBE category, divided by the total number of "ready, willing, and able" firms in that given contract type (see Figure 2.2):

Figure 2.2 – Disparity Ratio

Utilization		*Availability*
$ value of City contracts awarded to DBE prime contractors and sub-contractors	divided by	DBE for-profit firms that are "ready, willing, and able"
Total $ value of City contracts awarded to all for-profit prime contractors and sub-contractors		All for-profit firms that are "ready, willing, and able"

Source: Econsult Corporation

[7] The Philadelphia MSA is an 11-county region is the modern equivalent of the now-defunct 9-county Primary Metropolitan Statistical Area (PMSA) used in the DJMA report. The counties included in the Philadelphia MSA are Burlington (NJ), Gloucester (NJ), Chester (PA), Montgomery (PA), New Castle (DE), Salem (NJ), Camden (NJ), Bucks (PA), Delaware (PA), Philadelphia (PA), and Cecil (MD).

For the purposes of this report, we are interested exclusively in FY 2006 data. Also, unless otherwise noted, we are concentrating on firms located within the Philadelphia (MSA). The tables and analysis in Section 3 are based on this methodology.

Where data constraints result in missing, insufficient or ambiguous figures we do not include these figures, but instead show an "X". Therefore, all figures shown are statistically significant.[8]

2.2 Utilization

In determining utilization rates, we used raw data from MBEC's FY 2006 Participation Report. This data, in addition to summarizing participation by various DBE categories and in various City contract types, also lists all contracts awarded in which the prime contractor and/or one or more sub-contractors was a MBEC-certified DBE.

Given this data set, we were able to verify and reproduce the summary tables in MBEC's Participation Report.[9] Also, given access to MBEC's Vendor List, we were further able to identify the proportion of City contracts awarded to DBEs that are headquartered within the City of Philadelphia, as well as those that are headquartered within the Philadelphia (MSA).

In approaching the utilization rate in this manner, we acknowledge the following challenges in understanding the true utilization of DBE firms in the awarding of City contracts:

- There are an unknown amount of City contracts that are awarded to firms that would qualify under one or more DBE classifications, but who have not or not yet been certified by MBEC. We cannot estimate what that amount is, precisely, because the reason for MBEC certification is to verify the authenticity of a firm's qualification as a DBE. A "certifiable" firm, in other words, might prove to not actually qualify as a DBE. Nevertheless, we recognize that there may be some amount of City contracts that are awarded to firms that should be considered DBEs, but for whatever reason have not or not yet certified with MBEC. Not including the participation of these certifiable firms would mean that our calculated utilization rates are artificially low.

- The universe of contracts we have studied only includes departments that fall within MBEC's Participation Report. Therefore, there are a large amount of contracts that represent local public sector procurement opportunities but that are not included in this analysis. This necessarily circumscribes the scope of our study.

[8] See Appendix E for detailed charts displaying FY 2006 disparity data.

[9] Please see Appendix A for more information on our specific methodology in obtaining, filtering, and organizing data from these sources, and Appendix B for the FY 2006 Disparity Study dataset and related files.

- We are exclusively interested in the dollar amount of contracts awarded by category and contract type. We are therefore not commenting on the actual amounts earned and received, which in the case of sub-contractors, could deviate substantially from the initial award amounts. On one level, this is acceptable, as it is the initial award that represents a decision within the City's ability to influence. On another level, however, it may not tell the whole story of DBE participation in the economic opportunities generated by City procurement activity.

- Utilization is typically measured in a very similar manner across various disparity studies. In the DJMA report utilization was measured in three ways with data from the following sources: contracts awarded, purchase orders made, and actual payments received. All of these measures are limited in one form or another. Thus, DJMA concluded that it was necessary to include them all in order to provide an overall picture of the true utilization rates. This is similar to our method of measuring utilization, with a few exceptions. Our analysis focused primarily on contracts awarded. Additionally, we made a special effort to include the geographic location of the various firms in our analysis and, where possible, provided separate utilization rates for firms headquartered directly in the City of Philadelphia as opposed to those located in the Philadelphia MSA.

There is no one standardized way to conduct a disparity study. Nevertheless, based on the scope of services, data limitations, and a thorough review of other methodologies we have come to the conclusion that our approach is an appropriate one. However, we will revisit these limitations in Section 5, as they relate to possible adjustments for future study and policy-making.[10]

2.3 Availability

To match the "numerator" of utilization rate, we must consider the equivalent "denominator," i.e. the available universe of firms that can secure City contracts. To begin with, availability cannot simply be measured as "percent of total population." Although a certain demographic may compose a certain percentage of the total population, this gives no accurate indication of the number of firms available to do business with the City that are owned by individuals who fall into that demographic category.

Therefore, we will use the legal foundation of "ready, willing, and able" (RWA) for availability, as discussed previously. We affirm the previous reports' analysis of this legal basis, as well as their use of the Philadelphia MSA as the geographic boundaries of their availability analysis.

In keeping with the legal precedent for defining availability as set forth by *Croson,* DJMA used a definition for availability that examined a firm's readiness, willingness, and ability to do business with the City.

1. Specifically, a firm was considered *ready* simply by virtue of its existence. Thus, Census data on the number of minority firms existing in the MSA was taken as the number of *ready* firms.

[10] See Appendix C for detailed charts displaying FY 2006 utilization data.

2. Similarly, willingness was determined by one of two sources: a firm was considered to be *willing* if it was either registered with the City of Philadelphia's Procurement Office or with the federal government.

3. Ability to do business with the City is an important part of determining overall DBE availability rates.

Thus, DJMA was careful to define a benchmark for availability based upon the notion of *capacity* as was determined legally in *Concrete Works of Colorado, Inc. v. the City and County of Denver*.

Nonetheless, a fair amount of ambiguity remains as to how exactly capacity should be measured and in what way these three characteristics could be viewed together to determine a useful method of distinguishing an RWA firm from a non-RWA firm. After all, readiness, willingness, and ability are all relatively subjective terms, which do not easily lend themselves to being determined by objective data sources.

Other similar disparity studies, such as MGT of America in Phoenix[11] and Mason Tillman in New York City[12] have used *Croson* as a guideline for defining availability. Our methodology in determining availability rates takes this existing body of knowledge into account, and evaluates it from the perspective of determining an approach that is sensitive to the constraints involved in considering either broader or narrow definitions of "ready, willing, and able" firms.

One can define this universe of RWA firms to varying degrees of strictness. In the narrowest sense, that universe can be considered as only those firms that have demonstrated RWA by actually registering or certifying to do business with the City. The availability rate for each category and industry of interest, then, would be the number of DBE firms certified with MBEC, divided by the number of all firms registered with the City's Procurement Office.

Using a broader definition of RWA, we could utilize the 2002 US Census Survey of Business Owners, which gives us a sense of the number of all firms, and the annual revenues of such firms, in a geographic location and under a particular industry. Using NAICS codes, we can reasonably know the total number of firms by category and industry, as well as the number with one or more paid employees and the annual revenues in aggregate.[13]

However, we now have the opposite problem as the narrower definition of RWA, since there are certainly firms out there that, while are in full operation and are generating positive revenues, for whatever reason are not in fact ready, willing, or able to do business with the City. This leads to a situation in which the number of firms used to calculate the availability rate is greater that the number of firms which are actually ready willing and able to do business with the City.

[11] Second Generation Disparity Study, MGT of America, Inc (1999).

[12] City of New York Disparity Study, Mason Tillman and Associates, Ltd. (2005).

[13] The majority of the availability data used in our study comes from the Economic Census conducted every five years by the US Census Bureau. In particular, we used the Survey of Business Owners (SBO), which, since 2002, is a consolidation of two former studies, the Survey of Minority- and Women-Owned Business Enterprises (SMOBE/SWOBE). The latest year for which SBO data are available is 2002, which is the dataset we used for this report.

Either way, we have to contend with the fact that there are certainly firms that are ready, willing, and able to do business with the City, both DBE and non-DBE, who for a variety of reasons have not or not yet registered with the City. Considering only registered firms, then, would under-count both the DBE amount and the non-DBE amount, with a possible skewing on the availability rate, depending on whether DBEs were more or less likely than non-DBEs to choose not to register.

In fact, we have pursued both a "broad" and "narrow" approach, and calculated availability rates for both approaches. In this way, we can determine the differences in disparity ratios using the different approaches, and comment based on the actual results as to which approach is preferable.

Specifically, our "broad" approach utilizes the US Census data from 2002, whereas our "narrow" approach utilizes MBEC and Procurement Office data. We have ruled out the use of the Central Contractor Registration (formerly known as PRONet) as a proxy for RWA because this federal level of certification is vastly more cumbersome than its local equivalent, causing far too much attrition to be considered a fair measure of availability.

Similarly, we could use another, government certification process as the screen for identifying RWA firms: the Central Contractor Registration (formerly known as PRO-Net), the US Small Business Administration's database of firms registered to do business with the federal government. We ruled out this approach because the data bore out that such an approach would leave a large universe of "certifiable" firms that could qualify to be a DBE but chose not to undergo the relatively cumbersome process of registering into the federal database. In other words, we found such a methodology to be too narrow to yield a reasonably accurate availability rate.

Whichever the data source, we must further decide if we are interested in the raw number of firms, or only those with one or more paid employees. Alternatively, we might consider capacity commensurate to firm size, and so rather than adding up the raw number of firms, we would add up the annual revenues of such businesses. This is because it may not be accurate to say, hypothetically, that Asian-owned public works businesses have an availability rate of 20 percent if they represent 20 percent of all public works firms but only 2 percent of the revenues of all public works firms.

As stated above, because of the difficulty in determining the actual availability rate of "ready, willing, and available" DBE firms, we consider two sets of proxies: 1) the number of DBE firms in the metropolitan area divided by the number of all firms in the metropolitan area, as reported in the 2002 US Census Survey of Business Owners, and 2) the number of DBE firms that have certified with MBEC divided by the number of all firms that have registered with the City's Procurement Office.[14]

These proxies can only approximate the actual availability rate of RWA DBE firms as a proportion of all RWA firms because of the difficulty in determining readiness, willingness, and ability. In fact, the first proxy will be different to the extent that the proportion of DBE firms that are not in fact RWA is different than the proportion of all firms that are RWA. The second proxy will be different to the extent that the proportion of DBE firms that are in fact RWA but have not or have not yet certified with MBEC is different than the

[14] See Appendix D for detailed charts displaying FY 2006 availability data.

proportion of all firms that are RWA but have not or have not yet registered with the City's Procurement Office.

Disparity studies necessarily have to utilize existing data and cannot perfectly know the actual availability rate because of the challenge in quantifying the appropriate universes of RWA firms. This hinders the preciseness of stated availability rates (see Figure 2.3).

Figure 2.3 - Different Approaches to Determining DBE Availability Rate

# DBE Firms / # All Firms	*may or may not be equal to*	Actual # DBE RWA Firms / Actual # All RWA Firms	*may or may not be equal to*	# DBE Certified Firms / # All Registered Firms
(based on SBA/ Census data)		*(i.e. the actual availability rate)*		*(based on MBEC / Procurement Office)*

Source: Econsult Corporation

In contrast to the thorough datasets provided by MBEC for the calculation of utilization rates, the datasets used in calculating availability rates contain considerable gaps. For example, US Census data does not always break out data down to our desired level of ethnic, geographic, or industry detail. Also, there are some instances in which the US Census datasets choose not to display certain figures, because their small counts are either statistically insufficient or would reveal too much detail about one or two large firms within an ethnic, geographic, or industry category.

3.0 ANALYSIS

In this section, we provide a series of charts and accompanying narratives that depict the disparity ratio for all relevant Disadvantaged Business Enterprises (DBE) categories and contract types. We will arrive at these disparity ratios by looking first at utilization rate and then at availability rate. In each set of charts, we will examine the City's performance in one or more of four ways:

- FY 2006 results relative to published results from DJ Miller & Associates' (DJMA) analysis of 1998-2003 data;
- FY 2006 results across all for-profit contract types;
- FY 2006 results across geographic boundaries; and
- FY 2006 results across DBE categories: Minority Business Enterprises (MBEs) (and, where data availability allows it, distinct ethnic groupings within), Women Business Enterprises (WBEs), and Disabled Business Enterprises (DSBEs).[15]

Where data constraints result in missing, insufficient or ambiguous figures we do not include these figures, but instead show an "X". Therefore, all figures shown are statistically significant.

3.1 Utilization

As described in Section 2, DBE utilization is defined as the dollar value of contracts awarded to for-profit DBEs divided by the total dollar value of contracts awarded to for-profit entities, as reported in the 2006 Participation Report of the City of Philadelphia's Minority Business Enterprise Council (MBEC), which lists contracts awarded and DBE participation in those contracts. We are further interested in the geographic distribution of contracts awarded to DBEs, to the extent that we know, per MBEC's Vendor List, whether they are located in the City of Philadelphia, in the Philadelphia MSA, or outside the region. Because, unlike our treatment of the availability rate, we calculate the utilization rate in only one way, we refer to this approach as "U1."

Table 3.1 provides an overview of the City's utilization of DBE firms in its awarding of contracts. The percentages represent the dollar amount of contracts within each contract type, and then for all contract types in aggregate, that were awarded to DBE firms that are located in the Philadelphia MSA. [16]

[15] It is important to note that while many government agencies allow a firm to certify as one and only one DBE type (example: MBE or WBE, but not both), and/or will designate contracts that have been awarded to DBE firms as having gone to only one DBE type, we depict and analyze figures that allow for DBE firms to be classified as more than one DBE type. Where data is available to make such distinctions, this allows for a finer level of detail and therefore a finer level of analysis. When totaling up figures for all DBE categories, we are careful to ensure that there is no double-counting.

These contract types are:

1. Public Works (PW).
2. Personal and Professional Services (PPS).
3. Services, Supplies and Equipment (SSE).

Where available, we also show results from 1998 to 2003, per the DJMA report.

Finally, we show percentages for the following DBE categories:

1. White females.
2. Native American males and females.
3. Asian males and females.
4. African American males and females.
5. Hispanic males and females.
6. All Minority Business Enterprises (MBEs) (i.e. the sum of categories 2, 3, 4, and 5).
7. All Women Business Enterprises (WBEs) (i.e. the sum of category 1 and the female portion of categories 2, 3, 4, and 5).
8. All Disabled Business Enterprises (DSBEs).
9. All DBEs (i.e. the sum of categories 1, 2, 3, 4, and 5; or alternatively, the sum of categories 6, 7, and 8, minus any double-counting of DBE firms that belong to more than one of those categories.[17]

[16] Utilization rates for DBE firms located in the City of Philadelphia and for all DBE firms, and accompanying analysis, can be found in Appendix C

[17] A more detailed version of this table can be found in Appendix C.

Table 3.1 - FY 2006 Utilization (U1) - Utilization of For-Profit DBE Prime Contractors and Sub-Contractors, Divided by Utilization of All For-Profit Prime Contractors and Sub-Contractors (by $ Contracts Awarded)

Category		PW	PPS	SSE	All Contract Types	DJ Miller 1998-2003 (Metro)			
Ethnic/Disabled	Gender	Metro	Metro	Metro	Metro	PW	PPS	SSE	All
White	Female	5.8%	0.9%	4.2%	3.0%	x	x	x	x
							x	x	x
Native American	All	0.0%	0.1%	0.0%	0.0%	x	x	x	x
Asian	All	1.3%	1.2%	0.5%	1.4%	x	x	x	x
African American	All	3.6%	16.4%	8.3%	9.0%	x	x	x	x
Hispanic	All	1.9%	2.6%	1.3%	1.5%	x	x	x	x
All MBE	All	6.8%	20.6%	10.1%	11.9%	10.5%	2.1%	10.8%	5.8%
All	Female	10.6%	5.7%	5.9%	6.2%	4.4%	0.7%	4.9%	2.0%
Disabled	All	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
All DBE *	All	12.9%	21.5%	14.3%	16.3%	14.9%	2.8%	15.7%	7.8%

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Source: 2006 MBEC Participation Report
"x" denotes data unavailable or insufficient

In terms of Philadelphia's utilization results between 1998 and 2003 and FY 2006, we note the following points:

- DBE utilization was up considerably, from 7.8 percent across all contract categories for Philadelphia MSA DBE firms in 1998-2003 to 16.3 percent in 2006.
  - DBE utilization went from 14.9 percent in 1998-2003 to 12.9 percent in 2006 for Public Works (PW).
  - DBE utilization went from 2.8 percent in 1998-2003 to 21.5 percent in 2006 for Personal and Professional Services (PPS).
  - DBE utilization went from 15.7 percent in 1998-2003 to 14.3 percent in 2006 for Services, Supplies, and Equipment (SSE).
- MBE utilization was up considerably, from 5.8 percent across all contract categories for Philadelphia MSA MBE firms in 1998-2003 to 11.9 percent in 2006.
  - MBE utilization went from 10.5 percent in 1998-2003 to 6.8 percent in 2006 for Public Works (PW).

  - MBE utilization went from 2.1 percent in 1998-2003 to 20.6 percent in 2006 for Personal and Professional Services (PPS).

  - MBE utilization went from 10.8 in 1998-2003 to 10.1 percent in 2006 for Services, Supplies, and Equipment (SSE).

- WBE utilization was up considerably, from 2.0 percent across all contract categories for Philadelphia MSA WBE firms in 1998-2003 to 9.2 percent in 2006.

  - WBE utilization went from 4.4 percent in 1998-2003 to 10.6 percent in 2006 for Public Works (PW).

  - WBE utilization went from 0.7 percent in 1998-2003 to 5.7 percent in 2006 for Personal and Professional Services (PPS).

  - WBE utilization went from 4.9 percent in 1998-2003 to 5.9 percent in 2006 for Services, Supplies, and Equipment (SSE).

In terms of Philadelphia's utilization results in FY 2006 as it relates to various contract types, we note the following points:

- DBE utilization was highest for PPS contracts in 2006 (21.5 percent of the dollar value of all PPS contracts went to DBEs located in the Philadelphia MSA, vs. 12.9 percent of PW contracts and 14.3 percent of SSE contracts).

- This represents a marked change from 1998-2003, when it was lowest (2.8 percent, vs. 14.9 percent for PW and 15.7 percent for SSE).

- This high utilization for PPS contracts, relative to other types, is most pronounced among African-American firms, which garnered 16.4 percent of the dollar value of all PPS contracts, vs. 3.6 percent of PW contracts and 8.3 percent of SSE contracts.

In terms of Philadelphia's utilization results in FY 2006 as it relates to different DBE categories, we note the following points:

- African-Americans enjoyed vastly higher utilization rates than other ethnic categories in terms of the dollar value share of PPS contracts: 16.4 percent of the dollar value of PPS contracts went to African-American firms in the Philadelphia MSA, versus 3.9 percent to all other MBE firms. They enjoyed higher utilization rates in PW and SSE contracts, but not to this degree of difference.

- White females enjoyed the largest utilization rates among all DBE categories in PW contracts (5.8 percent of the dollar value of PW contracts went to white females in the Philadelphia MSA), and also did well in SSE contracts (4.2 percent), but lagged in PPS contracts (0.9 percent).

- Disabled owners enjoyed relatively small utilization rates across the board, and were awarded 0.1 percent of the dollar value of all contracts across types.

The distribution of contracts in which DBE firms participated as prime contractors or sub-contractors was relatively, as demonstrated in Table 3.2. Across all DBE categories and contract types, the vast majority of contract recipients participated in five or less City contracts. For example, within the 202 Public Works contracts in which DBE firms participated as either prime contractors or sub-contractors, 51 different DBE firms participated. Forty-one of them participated in five or fewer of those contracts (24 participated in one contract, and another 17 participated in two to five contracts), while only two participated in 11 or more contracts (one participated in 11-20 contracts, and one participated in more than 21 contracts).

Table 3.2 - FY 2006 Distribution of DBE Contracts - # Firms Participating in Contracts

	PUBLIC WORKS			SERVICES, SUPPLIES, AND EQUIPMENT		PROFESSIONAL SERVICES		
# contracts awarded	MBE	WBE	DSBE	MBE	WBE	MBE	WBE	DSBE
1	24	14	0	18	15	61	40	1
2-5	17	22	1	11	7	30	24	0
6-10	8	2	0	2	0	2	2	0
11-20	1	1	0	0	0	2	1	0
21+	1	1	0	0	0	0	0	0
total # of DBE firms awarded contracts	51	40	1	31	22	95	67	1
total # of contracts awarded	202	124	5	58	32	185	124	1
highest # of contracts awarded to 1 DBE	44	23	5	6	3	14	12	1

Source: MBEC 2006 Participation Report

3.2 Availability

As described in Section 2, there is a "broad" and a "narrow" approach to defining DBE availability, and we have decided to pursue both approaches in our analysis. In using the broad approach, we determined, in any given contract category, the number of DBE firms in the Philadelphia MSA and divided that number by the number of all firms in the Philadelphia MSA. For such an approach, we utilized the 2002 US Census Survey of Business Owners.

In contrast, with the narrow approach, we recognized that not all firms are in fact part of the universe of "ready, willing, and able" (RWA) firms, and that a stricter interpretation of the legal requirements of RWA necessitates including only those businesses that are in fact ready to do business with the City, as evidenced by registering with the City to bid for contracts.

Based on the broad approach and using 2002 US Census survey data, we can further delineate between the number of firms, the number of firms with paid employees, the aggregate annual revenues of firms, and the aggregate annual revenues of firms with paid employees. These represent four approaches to determining the appropriate availability of DBE firms, and together help better clarify that availability rate.

For example, using the number of firms might disproportionately weight firms that have no employees and are really not of a scale to be "ready, willing, and able." Using the number of firms with paid employees is probably a more accurate number, but it would still tend to disproportionately weight smaller firms over larger firms; using the aggregate annual revenues of firms speaks to this notion of capacity, but might have the opposite problem of disproportionately weighting larger firms over smaller firms. Data availability also becomes an issue, as not all DBE categories are delineated in this data source.

Because we have considered multiple approaches to determining availability rate, we consider these four approaches A1-A4:

- A1 - # DBE Firms Divided By # All Firms in Philadelphia MSA, Based on SBA/Census Survey of Business Owners
- A2 - # DBE Firms > 1 Employee Divided by # All Firms > 1 Employee in Philadelphia MSA, Based on SBA/Census Survey of Business Owners
- A3 - $ Revenue of DBE Firms Divided by $ Revenue of All Firms in Philadelphia MSA, Based on SBA/Census Survey of Business Owners
- A4 - $ Revenue of DBE Firms > 1 Employee Divided by $ Revenue of All Firms > 1 Employee in Philadelphia MSA, Based on SBA/Census Survey of Business Owners

As DJMA's approach in analyzing 1998-2003 data is most similar to A2, we provide a summary of that data below in Table 3.3 and focus our analysis on those figures. A more detailed version of this table, and tables that show the results of the other approaches, can be found in Appendix D.

Table 3.3 - FY 2006 Availability (A2) - # DBE Firms > 1 Employee in Philadelphia MSA, Divided by # All Firms > 1 Employee in Philadelphia MSA

Category		DBE				DBE %				DJ Miller 1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
White	Female	x	x	x	x	x	x	x	x	8.3%	7.7%	13.7%	12.6%
Native American	All	35	43	x	253	0.3%	0.2%	x	0.2%	0.4%	0.0%	0.1%	0.1%
Asian	All	x	623	2,061	6,310	x	3.6%	8.4%	5.5%	0.5%	0.9%	5.9%	4.8%
African American	All	174	320	231	2,442	1.3%	1.9%	0.9%	2.1%	2.1%	2.4%	2.7%	2.6%
Hispanic	All	151	176	245	1,368	1.1%	1.0%	1.0%	1.2%	1.1%	0.2%	0.9%	0.9%
All MBE	All	368	1,162	2,537	10,373	2.8%	6.7%	10.3%	9.0%	4.1%	3.6%	9.5%	8.4%
All	Female	1,073	3,090	3,501	17,854	8.1%	17.9%	14.3%	15.5%	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	1,433	4,252	6,038	28,227	10.8%	24.6%	24.6%	24.6%	12.4%	11.3%	23.2%	21.0%

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	13,242	17,275	24,526	114,869

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

In terms of the characteristics of the Philadelphia MSA as they pertain to DBE availability between 1998 and 2003 and FY 2006, we note the following points:

- DBE availability held relatively steady, rising slightly from 8.4 percent in 1998-2003 to 9.0 percent in 2006.
  - DBE availability went down in terms of Public Works (PW), from 4.1 percent in 1998-2003 to 2.8 percent in 2006.
  - DBE availability went up in terms of Personal and Professional Services (PPS), from 3.6 percent in 1998-2003 to 6.7 percent in 2006.
  - DBE availability went up in terms of Services, Supplies, and Equipment (SSE), from 9.5 percent in 1998-2003 to 10.3 percent in 2006.
- Asian Americans enjoyed large gains in availability:
  - In PPS from 0.9 percent in 1998-2003 to 3.6 percent in 2006.
  - In SSE from 5.9 percent in 1998-2003 to 8.4 percent in 2006.
- African Americans experienced losses in availability across the board:
  - In PW from 2.1 percent in 1998-2003 to 1.3 percent in 2006.
  - In PPS from 2.4 percent in 1998-2003 to 1.9 percent in 2006.
  - In SSE from 2.7 percent in 1998-2003 to 0.9 percent in 2006.

In terms of the characteristics of the Philadelphia MSA in FY 2006 as they relate to various contract types, we note the following points:

- MBEs were much more available in SSE, representing 10.3 percent of all firms with paid employees, versus 2.8 percent of PW firms and 6.7 percent of PPS firms.
- WBEs were much more available in PPS, representing 17.9 percent of all firms with paid employees, versus 8.1 percent of PW firms and 14.3 percent of all SSE firms.

In terms of the characteristics of the Philadelphia MSA in FY 2006 as they relate to different DBE categories, we note the following points:

- Asian Americans had the highest availability rates in PPS (3.6 percent of all firms) and SSE (8.4 percent of all firms), dwarfing all other MBE categories.
- Information on the availability of WBEs and DSBEs could not be obtained due to data limitations.

In contrast, a narrow approach would recognize that not all firms are in fact part of the universe of "ready, willing, and able" (RWA) firms, and that a stricter interpretation of the legal requirements of RWA would necessitate including only those businesses that are in fact ready to do business with the City, as evidenced by registering with the City to bid for contracts.

Accordingly, we consider two additional approaches to determining availability rates:

- A.5 - MBEC Vendor List Divided By Procurement Office Vendor List
- A.6 - Procurement Office Self-Identified MBE/WBE Divided By Procurement Office Vendor List

Although we will not incorporate our results from these approaches into our annual participation goals, we include these tables and resulting analysis in Appendix D.

3.3 Disparity

As described in Section 2, DBE disparity is defined as the utilization rate, as calculated in Section 3.1, divided by the availability rate, as calculated in Section 3.2. A disparity ratio of more than 1.0 means a utilization rate greater than the availability rate, and a disparity ratio of less than 1.0 means a utilization rate lower than the availability rate. It is important to note that an under-representation of DBEs in the economic opportunities represented by the universe of City contracts can manifest itself in at least two ways:

1. Under-utilization of DBEs in particular contract category, commensurate to DBE availability (unusually low utilization rate divided by normal availability rate = disparity ratio of less than 1.0).
2. Relatively low availability of DBEs in a particular contract category (normal utilization rate divided by unusually low availability rate = disparity ratio of greater than 1.0).

Again, this qualification applies only to situations in which availability rates are unusually low; of course, where availability rates are relatively reasonable, a disparity ratio of over 1.0 is a very positive outcome, for it means that DBE utilization rates exceed DBE availability rates. Furthermore, even in cases in which availability rates are unusually low, leading to somewhat misleading high disparity ratios, this is still a very positive outcome, for it means that despite the relative lack of ready, willing, and able DBEs, City agencies were able to enable DBE participation at a significant rate.

In the previous section, we considered a number of approaches for determining availability rates, which therefore leads to a number of ways in which to display disparity ratios. Since DJMA's approach in calculating availability rates is most similar to our approach ("A2"), we have calculated disparity ratios using availability rates from that approach (see Table 3.4). A more detailed version of this table, and tables that show the results of the other approaches, can be found in Appendix D, as well as resulting analysis.

Table 3.4 - FY 2006 Disparity Ratio (D2)
Utilization (U1) - Utilization of For-Profit DBE Prime Contractors and Sub-Contractors, Divided by Utilization of All For-Profit Prime Contractors and Sub-Contractors (by $ Contracts Awarded)
Availability (A2) - # DBE Firms > 1 Employee in Philadelphia MSA, Divided by # All Firms > 1 Employee in Philadelphia PMSA

Category		PW	PPS	SSE	All City Contracts	DJ Miller 1998-2003			
Ethnic/Disabled	Gender	Metro	Metro	Metro	Metro	PW	PPS	SSE	All
White	Female	x	x	x	x	x	x	x	x
Native American	All	0.0	0.3	x	0.0	x	x	x	x
Asian	All	x	0.3	0.1	0.3	x	x	x	x
African American	All	2.7	8.8	8.8	4.2	x	x	x	x
Hispanic	All	1.7	2.6	1.3	1.2	x	x	x	x
All MBE	All	2.5	3.1	1.0	1.3	2.5	0.6	1.1	0.7
All	Female	1.3	0.3	0.4	0.4	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x
All DBE *	All	1.2	0.9	0.6	0.7	1.2	0.2	0.7	0.4

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Utilization =2006 MBEC Participation Report, Availability = 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

In terms of Philadelphia's disparity ratio results, we note the following points:

- The disparity ratio for all DBE categories in aggregate was up considerably, from 0.7 across all contract categories for Philadelphia MSA DBE firms in 1998-2003 to 1.3 in 2006.
  - This is due almost exclusively to a substantial jump in the disparity ratio for Personal and Professional Services (PPS) contracts, from 0.6 in 1998-2003 to 3.1 in 2006.
  - In contrast, the disparity ratios for Public Works (PW) (2.5 for 1998-2003 and for 2006) and SSE (from 1.1 in 1998-2003 to 1.0 in 2006) held relatively steady.
- The disparity ratio for all MBE categories in aggregate was significantly above 1.0 for PW contracts and PPS contracts, and was exactly 1.0 for Services, Supplies, and Equipment (SSE) contracts.
  - African Americans enjoyed disparity ratios over 1.0 in all contract categories, including disparity ratios of 8.8 for PPS and SSE contracts.
  - Hispanics also enjoyed disparity ratios over 1.0 in all contract categories, including disparity ratios of 1.7 for PW contracts and 2.6 for PPS contracts.
  - Asian Americans experienced disparity ratios under 1.0 for PPS contracts (0.3) and SSE contracts (0.1).
- Women-owned businesses enjoyed a disparity ratio over 1.0 in PW contracts (1.3) but experienced a disparity ratio under 1.0 in PPS (0.3) and SSE (0.4) contracts.
- The disparity ratio for African-American SSE firms in the Philadelphia MSA is 8.8, but for African-American SSE firms in the City of Philadelphia, it is 3.2, suggesting either a higher African-American SSE utilization in the Philadelphia suburbs relative to the City, and/or a lower African-American SSE availability in the Philadelphia suburbs relative to the City.
- The disparity ratio for women-owned PW firms in the Philadelphia MSA is 1.3, but for women-owned PW firms in the City of Philadelphia, it is 0.4, suggesting either a higher women-owned PW utilization in the Philadelphia suburbs relative to the City, and/or a lower women-owned PW availability in the Philadelphia suburbs relative to the City.

Looking across tables, we can make the following points about the constitution of firms in various DBE categories and contract types:

- The relatively high disparity ratios for African Americans across contract types (2.7 for PW contracts and 8.8 for PPS and SSE contracts) change into much lower disparity ratios if the availability rate that is used utilizes the number of firms rather than the number of firms with paid employees (1.2 for PW contracts, 3.7 for PPS contracts, and 2.3 for SSE contracts).

  - This suggests that, particularly in the PPS and SSE categories, a much smaller proportion of African American firms have no employees, in relation to firms owned by non-African Americans.

- Conversely, the relatively high disparity ratios for African Americans across contract types change into even higher disparity ratios if the availability rate that is used utilizes the aggregate annual revenue of firms (91.8 for SSE contracts and 27.2 for all contracts).

  - This suggests that African American firms are typically smaller in annual revenues than firms owned by non-African Americans.

- Related to the point above, women-owned firms experience a similar rise in their disparity ratios if the availability rate that is used utilizes the aggregate annual revenue of firms (from 0.4 to 6.4 in SSE contracts, and from 0.4 to 2.1 for all contracts).

  - This would similarly suggest that women-owned firms are typically smaller in annual revenues than firms owned by men.

4.0 PARTICIPATION GOALS

In this section, we offer our recommended participation goals for future Disadvantaged Business Enterprises (DBE) utilization, based on FY06 DBE utilization and availability. This is an important component of what should be an overall strategy to safeguard the public interest in identifying and rectifying instances of discrimination, and proactively seeking ways to promote the inclusive participation of DBEs in economic opportunities.

In making these recommendations we are mindful that by calculating availability rates via 2002 US Census data (our approach "A2"), we are likely to be overstating availability rates for the different categories of businesses. We have defined the availability of each category as the number of DBE firms in that category in the Philadelphia Metropolitan Statistical Area (MSA), divided by the total number all firms in that category in the Philadelphia MSA.

We are using these calculations as proxies for the actual availability rates, which would be adjusted so that that only "ready, willing, and able" (RWA) firms are considered, so we must consider whether the reduction in both the numerator (i.e. the number of DBE firms that are not in fact RWA) and the denominator (i.e. the number of all firms that are not in fact RWA) are in fact proportionate. It is our best judgment that those reductions are not proportionate and that the "true" availability rate is actually lower than our calculated availability rate, because we expect that the proportion of DBE firms that are RWA is lower than that of all firms. Given that the actual availability rate is likely lower than an availability rate calculated using US Census data, what remains uncertain is how much lower that rate is.

There simply does not exist a perfectly accurate proxy for availability, so we cannot say how much lower the actual availability rates are likely to be. Certainly, the commissioning of future disparity studies should take into account the need for additional time to further explore a variety of methods for estimating these reduction proportions and therefore more precisely arriving at the "true" availability rates. Without reliable availability estimates, it is extremely difficult to set utilization goals that are high enough to inspire best efforts, but low enough to be attainable if best efforts are made.

With an unfortunate but unavoidable degree of subjectivity, we have set the lower ends of the utilization goal ranges equal to the higher of 80 percent of what would be needed to reach a disparity ratios of 1.0 and the utilization rate of the previous year. Thus, in cases where actual utilization is less than 80 percent of actual availability, we recommend that the future goal be a utilization rate between 80 percent and 100 percent of current availability rates. In other words, we recommend that in situations in which the disparity ratio is less than 1.0, the City should seek for future utilization to "catch up" to current availability, such that the future disparity ratio is 1.0, and at the very least it should be 0.8. In cases where actual utilization is greater than 80 percent of actual availability, we recommend that the future goal be a utilization rate between the previous year's percentage and 100 percent of current availability rates.

The rationale for this approach is that we should usually be able to accept historical utilization rates evidence of minimum availability even if utilization exceeds 80 percent of measured availability. Using this approach in subsequent years will have the effect of ratcheting up the goals based on past performance.[18]

Of course, setting recommended future utilization rates to meet or exceed current availability rates assumes relatively constant availability rates over time. In fact, availability rates change all the time: if the number of DBE RWA firms grows faster than the number of all RWA firms, the availability rate will increase, and previously set targets for utilization rates will result in disparity ratios lower than expected, and if the number of DBE RWA firms grows slower than the number of all RWA firms, the availability rate will decrease, and previously set targets for utilization rates will result in disparity ratios higher than expected.

This is a significant overarching fact that must be taken into consideration when policymakers scrutinize these and other disparity ratios. To the extent that the problem of unusually low DBE participation in regional economic opportunities manifests itself in low availability rates, not only will this not be picked up in low disparity ratios, but disparity ratios will in fact be above 1.0. This otherwise desirable ratio masks the real problem, not just of low DBE utilization that needs to be increased but of low DBE availability that needs to be increased.

Participation goals can be generally classified as pointing to DBE categories and contract types in which the disparity ratio is less than 1.0. Stating that the desire is for the City to increase utilization such that the disparity ratio is 1.0 or more is the equivalent of stating that the future utilization rate should be increased such that it equals the availability rate.

Accordingly, it makes sense to depict participation goals in the context of juxtaposing existing (current) utilization rates and recommended (future) utilization rates, which again are equal to existing availability rates. This juxtaposition is shown here in the tables below, which also together serve as a nice summary of the utilization and availability rates calculated for this study. Table 4.1 presents a summary of current utilization rates for Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), and Disabled Business Enterprises (DSBEs) based on FY 2006 data (U1):

[18] In its disparity studies, for example, Mason Tillman defines a disparity ratio of less than 0.8 as "statistically significant."

Table 4.1 – FY 2006 Utilization (U1) – Utilization of For-Profit DBE Prime Contractors and Sub-Contractors, Divided by Utilization of All For-Profit Prime Contractors and Sub-Contractors (by $ Contracts Awarded)

PW = Public Works Contracts
PPS = Personal and Professional Services Contracts
SSE = Services, Supplies, and Equipment Contracts

Category	PW	PPS	SSE	All
MBE	6.8%	20.6%	10.1%	11.9%
WBE	10.6%	5.7%	5.9%	6.2%
DSBE	0.2%	0.0%	0.0%	0.0%
All DBE *	12.9%	21.5%	14.3%	16.3%

Source: 2006 MBEC Participation Report
"x" denotes data unavailable or insufficient
** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Table 4.2 presents a summary of availability rates based on FY 2006 data, using 2002 US Census data (A2):

Table 4.2 – FY 2006 Availability (A2) - # DBE Firms > 1 Employee in Philadelphia MSA, Divided by # All Firms > 1 Employee in Philadelphia PMSA

Category	PW	PPS	SSE	All
MBE	2.8%	6.7%	10.3%	9.0%
WBE	8.1%	17.9%	14.3%	15.5%
DSBE	x	x	x	x
All DBE *	10.8%	24.6%	24.6%	24.6%

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient
** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Finally, Table 4.3 presents a summary of disparity ratios based on FY 2006 data (D2), using the utilization rates and availability rates summarized above:

Table 4.3 - FY 2006 Disparity Ratio (D2)
Utilization (U1) - Utilization of For-Profit DBE Prime Contractors and Sub-Contractors, Divided by Utilization of All For-Profit Prime Contractors and Sub-Contractors (by $ Contracts Awarded)
Availability (A2) - # DBE Firms > 1 Employee in Philadelphia MSA Divided by # All Firms > 1 Employee in Philadelphia PMSA

Category	PW	PPS	SSE	All
MBE	2.5	3.1	1.1	1.3
WBE	1.3	0.5	0.4	0.6
DSBE	x	x	x	x
All DBE *	1.2	1.0	0.7	0.9

Sources: Utilization =2006 MBEC Participation Report, Availability = 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

We can now base our recommended participation goals on a comparison of current utilization rates and availability rates. As stated above, where current utilization rates are greater than current availability rates (i.e. the disparity ratio is greater than 1.0), we seek for future utilization to maintain such levels; and where current utilization rates are less than current availability rates (i.e. the disparity ratio is less than 1.0), we seek for future utilization to "catch up" to current availability (see Table 4.4 and Table 4.5).[19]

[19] Insufficient data prevents us from setting goals within DBE subcategories.

Table 4.4 – Recommended 2007 Participation Goals
"U" = 2006 Utilization Rate > 2006 Availability Rate (i.e. disparity ratio > 1.0)
"A" = 2006 Availability Rate > 2006 Utilization Rate (i.e. disparity ratio < 1.0)

Category	PW	PPS	SSE	All
MBE	U: 5-7%	U: 16-21%	A: 8-11%	U: 9-12%
WBE	U: 8-11%	A: 14-18%	A: 11-15%	A: 12-16%
DSBE	X	x	x	x
All DBE *	U: 10-13%	A: 19-25%	A: 19-25%	A: 19-25%

Sources: Utilization =2006 MBEC Participation Report, Availability = 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient
** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Table 4.5 - 2007 Disparity Ratios if Recommended 2007 Participation Goals are Met

Category	PW	PPS	SSE	All
MBE	2.0-2.5	2.5-3.1	0.8-1.0	1.0-1.3
WBE	1.0-1.3	0.8-1.0	0.8-1.0	0.8-1.0
DSBE	x	x	x	x
All DBE *	1.0-1.2	0.8-1.0	0.8-1.0	0.8-1.0

Sources: Utilization =2006 MBEC Participation Report, Availability = 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Thus, the ranges below can be offered as benchmark utilization rates that should be reached in FY07, with a prefix of "U" signifying cases in which DBE utilization is already greater than DBE availability, and a prefix of "A" signifying cases in which DBE utilization is currently lower than DBE availability. These ranges acknowledge the imprecise nature of the data availability and overall approach inherent in disparity studies, and provide a citywide framework for the Finance Director's development of department-by-department participation goals.

As a point of comparison, we provide below in Table 4.6 the recommended participation goals offered by DJMA after their review of FY 1998-2003 data:

Table 4.6 – DJMA's Recommended FY 2004 DBE Participation Goals

	PW	PPS	SSE	All
Using Bidders Data	5.12%	x	x	x
Using Vendors Data	14.94%	19.98%	8.49%	x
Using Census Data	12.38%	11.25%	23.23%	x
Range	16%	16%-21%	9%-14%	x

Source: DJMA& Associates (2004)
"x" denotes data unavailable or insufficient

We also note that the Finance Director's participation goals for FY 2006, which were set on a departmental basis, varied from one percent to 35 percent, with a large majority of these goals being in the ten percent range. We believe that the recommended participation goals we offer above provide a useful framework for the development of aggressive yet achievable department-by-department benchmarks.

From these tables above, we can make the following points:

- Utilization rates exceed availability rates (i.e. disparity ratio is greater than 1.0) for Public Works contracts for MBEs and WBEs.
- Availability rates exceed utilization rates (i.e. disparity ratio is less than 1.0) for Services, Supplies, and Equipment contracts for MBEs and WBEs.
- DBE utilization has the longest to go to catch up to availability rates in the category of Services, Supplies, and Equipment contracts (utilization rate of 14.3%, availability rate of 24.6%).
- Largely because availability rates have increased since the DJMA study, which is in and of itself a positive trends, our participation goal ranges are higher than those offered by DJMA.

These participation goals only isolate DBE categories and contract types in which the disparity ratio is less than 1.0. While outside the scope of this report, it is important to reiterate that the topic of fair distribution of the economic opportunities contained in City contracts ought also to include DBE categories and contract types with unusually low availability rates, which would not only show up in low disparity ratios but would in fact lead to high disparity ratios. This masks a potential problem, not in the utilization of existing DBE firms but in the unusually low availability of DBE firms to begin with. Therefore, the pursuit of the aforementioned participation goals should not be considered the only set of tasks relevant to ensuring fair participation in the economic opportunity that is available via City contracts.

5.0 OTHER RECOMMENDATIONS

In addition to these participation goal recommendations, we offer the following two sets of recommendations: 1) disparity study data and methodology recommendations, and 2) related public policy recommendations (summarized below in Table 5.1). These recommendations have emerged from our analysis of the data utilized for this Disparity Study as well as from our interviews with the City of Philadelphia's Minority Business Enterprise Council (MBEC) and other, relevant City agencies.

It is anticipated that additional work will be undertaken by the Econsult team subsequent to the completion and delivery of this Study. This additional work will further elaborate on these data, scope, and policy recommendations related to the participation of Disadvantaged Business Enterprises (DBEs) as prime contractors and sub-contractors in City contracts.

Table 5.1 – Additional Recommendations

Data And Methodology Recommendations	Related Public Policy Recommendations
• Expand disparity discussion to include non-mayoral departments.	• Streamline MBEC certification process to minimize the universe of "certifiable" DBEs that have not or have not yet certified with MBEC.
• Collect follow-up information on actual disbursements to sub contractors.	• Continue to target strategic outreach and assistance efforts to increase the number of certified DBE firms in commodity types and industry areas that are currently underrepresented in City contracts (or are in fields where city procurement demand may be expected to increase), and to increase the bidding activity of such DBE firms.
• Expand disparity analysis to look at percentages of ownership and employment make-up.	• Work in concert with public and private sector technical assistance providers to increase the quality and quantity of DBE firms, so as to a) increase the availability rate of DBE firms, b) increase the utilization rate of DBE firms, and c) increase the participation of DBE firms in other public and private sector contract opportunities outside of City procurement
• Expand disparity discussion to include sub-contractors under non-profit prime contractors.	• Disparity studies should not only look inward, at the City's participation data, but outward, at "best practices" in increasing DBE participation
• Collect "best practices" from public entities around the country that have successfully worked with DBEs to increase bidding and awarding of government contracts and to strengthen overall organizational capacity and	

Data And Methodology Recommendations

technical skill.

- Enhance raw data collection phase with interviews with DBEs concerning their experiences with the City contract notification, bidding, and selection process.

- Provide more time for the compilation of disparity study analysis and recommendations.

Related Public Policy Recommendations

in City contracts. Special attention should be given, then, to MBEC's current efforts to collect innovative and effective techniques being used by other municipal governments to increase the quality and quantity of ready, willing, and able DBE firms, to increase the amount of bidding on City contracts that they engage in, and to increase the amount of City contract participation they enjoy.

- Empower MBEC to take a more pro-active role in a) following through on potential instances of discrimination, and b) championing increased DBE participation in City contract opportunities, to augment their current, more passive certification and monitoring role.

5.1 Study Methodology / Data Availability Recommendations

We first offer the following recommendations related to issues around the methodology and data availability of disparity studies:

- There are an unknown amount of City contracts that are awarded to firms that would qualify under one or more DBE classifications, but who have not or have not yet been certified by MBEC. We cannot estimate what that amount is, precisely because the reason for MBEC certification is to verify the authenticity of a firm's qualification as a DBE. A "certifiable" firm, in other words, might prove to not actually qualify as a DBE. Nevertheless, we recognize that there may be some amount of City contracts that are awarded to firms that should be considered DBEs, but for whatever reason have not or have not yet certified with MBEC. Not including the participation of these certifiable firms would mean that our calculated utilization rates are artificially low.

  - The universe of contracts we have studied only includes mayoral departments, and it only includes contracts that require a bidding process. Therefore, there are a large amount of contracts that represent City procurement opportunities but that are not included in this analysis. Mayoral Departments together represent not only a small subset of all local government expenditures, but also do not include all categories of local government expenditures over which the Mayor (and, at times, City Council) may have some influence. Disadvantaged firms look to all public sector entities for business opportunities - most companies and people do not make the narrow, legal distinctions among the various government departments and agencies.

  - It is important to be aware of this limitation and to have an appreciation for the larger scope that is not being analyzed when trying to understand disparity. It is also important when making inter-city disparity comparisons, because Mayoral control over local government functions is not uniform across cities. As a result, such comparisons are not "apple-to-apple".

  - To provide a sense of scale, in the case of the City of Philadelphia, MBEC's FY 2006 Participation Report lists four agencies which represent a combined $365 million in annual contracts, or more than two thirds of the $539 million in City contracts that are analyzed in this Study. This does not include SEPTA or the School District, and the hundreds of millions of dollars in awarded contracts under their jurisdiction. This necessarily circumscribes the scope of our study.

- In this Study, we are exclusively interested in the dollar amount of contracts awarded by category and contract type. We are therefore not commenting on the actual amounts earned and received, which in the case of sub-contractors could deviate substantially from the initial award amounts. On one level, this is acceptable, as it is the initial award that represents a decision within the City's ability to influence. On another level, however, it may not tell the whole story of DBE participation in the economic opportunities generated by City procurement activity.

  - On a related note, it must be understood that the dollar value of contracts is not necessarily an accurate proxy of the actual economic gain enjoyed by various DBE categories, but is rather quite largely dependent on the scale of margins enjoyed by particular types of work. For example, for product-oriented opportunities like office supplies, a DBE firm might receive a contract from the City but end up passing down a large proportion of the size of the contract to a supplier, and thus the DBE only enjoys a relatively small percentage of the contract size in terms of economic impact. In contrast, professional services sorts of opportunities are usually more high-margin in nature, and thus a DBE that earns those sorts of contracts will directly enjoy a large proportion of the actual dollar amount.

    - Similarly, perhaps the dollar value of contracts awarded is less important to the distribution of economic impact as the dollar value of disbursements actually made to DBE firms. This is a particularly important distinction given the fact that most DBE participation is at the sub-contractor level. Thus, there may very well be a substantial difference between the dollar value of contracts awarded to DBE firms and the dollar value of disbursements actually received by DBE firms.

- DBE status is defined as 51 percent ownership. It therefore does not distinguish between a 51 percent DBE owner and a 100 percent DBE owner, nor between a DBE owner that employs no DBE employees and one that employs all DBE employees. This level of detail would further shed light on the participation rate of DBE categories in economic opportunity.

- This is not technically of concern for the Disparity Study, per the ordinance, or for the City of Philadelphia, which cannot possibly be expected to monitor the relationships between prime contractors and sub-contractors. However, some relatively non-invasive monitoring might result in a relatively detailed look at these figures, thus allowing the City to evaluate the true benefits being

accrued to DBE firms. For example, MBEC could distribute as part of the closing of a contract a follow-up survey to prime contractors and sub-contractors that asks for, among other items, dollars actually received.

- A larger follow-up study should be conducted to further develop the picture of Philadelphia's disparity issue. A larger study would build off of this one, with an interview component and more comparison analysis of other programs around the country. In *Croson*, Justice O'Connor noted that anecdotal evidence, when presented along with "appropriate statistical proof", can help demonstrate that minority- and women-owned businesses are being excluded from contract opportunities in a "pattern of individual discriminatory acts".[20]

  - Other, larger scale studies rely on this recommendation and have included personal interviews with "ready, willing, and able" minority- and women-owned businesses to provide a more comprehensive illustration of perceived and/or real barriers to government contracts. Both Mason Tillman's study for New York City and MGT of America's study for Phoenix include personal interviews with minority/women-owned businesses to gain their perspectives on the system in place to encourage equity in contract awards. MGT of America also included interviews with City officials in pertinent departments and non-minority/women-owned businesses (in addition to minority- and women-owned business owners).

  - This input from both sides of the equity program allows for a more thorough interpretation of the program's goals, strengths, and weaknesses. Feedback from personal interviews allows for a better understanding of obstacles faced by minority- and women-owned businesses and also provided supportive evidence for statistically significant disparity, in keeping with Justice O'Connor's recommendation.

- We have been solely concerned with the awarding of contracts to DBE firms who are serving as prime contractors or as sub-contractors to for-profit prime contractors. However, there is a significant amount of contract activity that is being enjoyed by DBE firms who are serving as sub-contractors to non-profit, social services prime contractors. For example, Philadelphia's Department of Human Services works with a large number of private, non-profit providers of social services. This information is not currently included in either the Disparity Study or the Participation Report, but it too represents a universe of economic opportunity for DBE firms.

In summary, there are many inherent constraints and challenges in calculating disparity ratios. More broadly speaking, there do not exist completely accurate and established performance metrics for evaluating a local government's utilization of DBE firms, disparity ratios being but one, imperfect type.

Disparity ratios do measure an important element of DBE participation in the economic opportunities represented by contracts awarded by a local government, and should not be dismissed but rather carefully scrutinized. We also recommend careful consideration as to the development and tracking of other

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

performance measures that, together with disparity ratios, can help policymakers understand the nature of the distribution of economic opportunity to various DBE categories.

Specifically, such performance metrics should be designed and discussed such that goals are aligned with the overall goal of enhancing the quality and quantity of DBE firms in the City. Each particular metric might, on its own, only shed light on a portion of the overall picture, but together they would offer a fuller depiction of how DBE firms are doing, and how the City is doing in promoting their success.

5.2 Public Policy Recommendations

Similarly, we offer the following recommendations concerning future public policy actions related to the monitoring and promoting of DBE participation in the region's economic opportunities:

- To the extent that true DBE firms are not obtaining their DBE certification from MBEC because of the difficulty of the certification process, this is an area in which the City can take action. In fact, the City in general and MBEC in particular have made commendable efforts to streamline the certification process. Hundreds of vendors have been trained on the City's new eContractPhilly online bidding website. There is a tutorial and instructions online to walk first-time users through the process. MBEC has publicized the availability of computers at various locations across the City for potential bidders for whom computer access is an issue.

  - Nevertheless, there are certainly ways that outreach can be ramped up so that the proportion of "certifiable" DBEs that are not or not yet certified is reduced. By way of example, New York City's Minority- and Women-owned Business Enterprise (M/WBE) Program, which plays an equivalent role as MBEC, has set as a goal that certification applications are processed within 20 days of the date when the application is determined complete, over two months faster than MBEC's stated turn-around goal of 90 days, which is a particularly commendable goal given the higher proportion of non-native English speakers in New York City as compared to Philadelphia. This sort of streamlining can lower the barriers for qualified DBEs, thus increasing not only the number of firms on MBECs Vendor List but also improving the depth and quality of the pool of DBEs bidding for City contracts.

- Similarly, MBEC currently plays an important communicative role in making DBE firms aware of contract opportunities. Certainly, however, these efforts can be enhanced to put DBE firms in the best position possible to bid on and win City contracts. This sort of early and specialized access can become an attractive incentive for firms to pursue DBE certification with MBEC.

  - In this regard, MBEC's inward outreach, to other City agencies, is just as important as its outward outreach, to DBE firms. This sort of information also further provides an incentive for qualified DBEs to go through the MBEC certification process.

- To be sure, quality, in this case, is more important than quantity; that is, there is nothing gained by increasing the number of certified DBE firms on the MBEC Vendor List if those firms infrequently or

never bid for City contracts, or if they are insufficiently ready, willing, and able to win and fulfill them. However, streamlining the certification process, making arrangements for businesses for whom language is a potential barrier, and making special efforts to publicize contract opportunities are three ways that MBEC can ensure a higher certification rate for high-quality DBEs.

- MBEC could also be further authorized to investigate discrimination claims and in general play a more proactive role in monitoring the bidding and post-bidding process. MBEC should strengthen its processes to evaluate and remedy valid claims of discrimination. The organization should also a) improve communication and outreach about contracting opportunities, b) provide technical assistance for recipients to eliminate processes that might unintentionally produce competitive disadvantages in bidding, and c) develop race and gender-neutral approaches to overcome problems that hinder minority and women-owned businesses in bidding for contracts.

- It is important to note that an equally if not more important aspect of diversifying the economic benefit of City contracts is the quantity and quality of DBE firms in the City. In other words, if a DBE category represents 2 percent of the universe of ready, willing, and able firms in a contract type but has only received 1 percent of the awarded City contracts in that contract type, part of the solution would be to set as a participation goal that that DBE category receive 2 percent of City contracts, but an equally if not more important part of the solution would be to provide technical assistance and business formation resources such that there are more firms in that DBE category, and that those firms have the training and skills to succeed. Thus, we recommend that any discussion of ensuring fair participation in City contracts take these important factors into account.

  - Similarly, City contracts represent a very small portion of the region's overall economy. The scope for this study was on the order of $539 million per year of for-profit City contracts that were awarded in FY 06, while most estimates of the Gross Metro Product put the figure at around $250 billion. Thus, our discussion on fair participation in City contracts represents less than a quarter of one percent of the region's economic opportunity. It is therefore important to extend the discussion about fair participation to other procurement opportunities, such as with major university and hospital institutions, large corporations, and other big purchasers.

- Enhanced technical assistance offerings to DBE firms should be pursued, both by the City and by private for-profit and non-profit service providers. Other legislative mechanisms for increasing DBE participation, such as reduced lending, should be explored, but it must be noted that many of these regulatory challenges are difficult to adjust, as they involve the cumbersome process of amending state and local law.

The monitoring and promoting of fair distribution of economic opportunities to DBE firms is a legitimate, important, and challenging public policy concern. MBEC currently plays a vital yet somewhat reactive and circumscribed role in this effort. It is reactive in that it focuses less on actively pursuing potential instances of discrimination or on promoting enhanced DBE participation in economic opportunities, and more on administering the DBE certification process and verifying the legitimacy of DBE eligibility. It is circumscribed in that it focuses almost exclusively on mayoral departments, and offers little accountability and evaluation concerning other, major public and private sector opportunities that together far exceed the annual dollar value of encumbered City contracts

MBEC should instead be empowered to take a more pro-active role in championing DBE participation in local economic opportunities. It should be authorized to follow through on potential instances of discrimination, and directed to more aggressively liaise between City procurement officials and DBE firms, in terms of publicizing bidding opportunities and streamlining the certification process.

Importantly, it should play an active role in working with other technical assistance providers, both those within the City administration as well as other public and private service providers, to increase the quality and quantity of DBE firms in the City, such that DBEs are appropriately equipped and positioned to garner a suitable share of public and private economic opportunities. This is an important component of what should be an overall strategy to safeguard the public interest in identifying and rectifying instances of discrimination, and proactively seeking ways to promote the inclusive participation of DBEs in economic opportunities.

APPENDIX A: ADDITIONAL DOCUMENTATION OF AVAILABILITY DATA APPROACH

A.1 Utilization - MBEC Participation Report (U1)

In order to obtain all the Utilization figures used in this Study, we used both the "Supplemental Participation Report for FY 2006" and "Listing of MBEC-certified DBEs" reports provided by the city of Philadelphia's Minority Business Enterprise Council (MBEC). The former document contains all the contracts that have been awarded to Disadvantaged Business Enterprises (DBEs) throughout the year and provides the company name, the race and gender of the minority business owners, as well as the contract amount. The Participation Report is further subdivided by contract type and provides the above-mentioned detail for the Public Works; Supply, Services and Equipment; and Professional and Public Services categories.

1. In order to classify each contract on the Participation Report as belonging to one of the three geographical categories identified by MBEC, namely "City", "Metro", and "All", we first identified the component parts of the Philadelphia Metropolitan Statistical Area (MSA)[21] as defined by the Office of Management and Budget and listed on the US Census Bureau site at http://www.census.gov/population/estimates/metro-city/0312msa.txt. The counties included in the MSA are:

    - Burlington County, NJ
    - Camden County, NJ
    - Gloucester County, NJ
    - Bucks County, PA
    - Chester County, PA
    - Delaware County, PA
    - Montgomery County, PA
    - Philadelphia County, PA
    - New Castle County, DE
    - Cecil County, MD
    - Salem County, NJ

2. In order to identify the vendors falling under each location category, we obtained a zip code database list through www.zip-codes.com. This database provides all the towns and zip codes of every county in the MSA territory.

3. By using an Excel "lookup" function, we were able to link the two documents listed above and to automatically assign a category, such as "City" or "Metro", to each vendor by comparing the

[21] The Philadelphia MSA is an 11-county region is the modern equivalent of the 9-county Primary Metropolitan Statistical Area (PMSA) used in the DJ Miller and Associates report. The counties included in the Philadelphia MSA are Burlington (NJ), Gloucester (NJ), Chester (PA), Montgomery (PA), New Castle (DE), Salem (NJ), Camden (NJ), Bucks (PA), Delaware (PA), Philadelphia (PA), and Cecil (MD).

vendor's actual zip code as provided in the "Listing of MBEC-certified DBEs" spreadsheet to the database we had compiled.

4. The vendors registered outside of either the "City" or "Metro" categories were counted under the third category, "All".

5. Although we were unable to locate some of the vendors that are listed on the Participation Report as having received contracts on the list of MBEC-certified DBEs, we performed additional research via the Internet, as well as through MBEC's website in order to establish their location and thus classify them correctly.

6. After flagging each vendor as either "City" or "Metro" we separated all contract awards by the gender or ethnicity of the firm's owner in order to obtain the total contract amounts applicable to each category in the Utilization table.

7. We performed the same steps in order to assign a vendor location to each vendor and to sum up the total contract amounts for each ethnic or gender category for each of the contract types listed in this report.

8. In order to present the data in the format required by MBEC, and in order to ease comparison with previously conducted disparity studies, we consolidated the data from the Participation Report into the following three categories according to the contract type:

    a. Public Works (PW)

    b. Personal and Professional Services (PPS)

    c. Supplies, Services, and Equipment (SSE)

A.2 Availability

A.2.1 US Census (A1-A4)

The majority of the availability data used in our study comes from the Economic Census conducted every five years by the US Census Bureau. In particular, we used the Survey of Business Owners (SBO), which, since 2002, is a consolidation of two former studies, the Survey of Minority- and Women-Owned Business Enterprises (SMOBE/SWOBE). The latest year for which SBO data are available is 2002, which is the dataset we used for this report.

SBO data reports provide information on US businesses by geographic location, by the gender and ethnic origin or race of business owners, by the 2-digit industry classification code according to the North American Industry Classification System (NAICS), and by size of the firms in terms of total employment and revenues.

SBO data are available through the Company Statistics Division of the US Census Bureau at http://www.census.gov/csd/sbo/index.html and through the American FactFinder website of the U.S. Census Bureau, available at:

http://factfinder.census.gov/servlet/EconSectorServlet?caller=dataset&sv_name=2002+Survey+of+Business+Owners&_SectorId=*&ds_name=EC0200A1

We used the following process to calculate availability rate using census data:

1. Start by going to the American FactFinder website listed above, which can be reached by going first to the American FactFinder homepage.

   http://factfinder.censu.gov/home/saff/main.html?_lang=en&_ts=, and clicking on the "Get Data" link under "Economic Census."

2. Once opened, the link automatically connects to the 2002 Economic Census dataset. Click on the "2002 Survey of Business Owners" link under "Detailed Statistics."

3. The page that opens up has three tabs that allow for data to be searched by sector, keyword, or geography. Click on the third tab, "filter by geography/industry/data item".

4. Click on the box that says "Geographic Area" and select "Metropolitan Statistical Area/Micropolitan Statistical Area" from the dropdown menu under "geographic type". Once the list of options appears, scroll down and select "Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area" and click OK on the right. The datasets available for the Philadelphia Metropolitan Statistical Area (MSA) will appear in the window below.

5. The first dataset from the list of eleven ones that are applicable for the MSA is called "SBO: Geographic Area Series: Economy-Wide Estimates of Business Ownership: 2002" and is a summary view of the rest of the reports listed. It provides the following data:

   - Total number of employer and non-employer firms in the MSA and their total receipts for all industry sectors and for all gender and ethnic categories, including majority-owned firms;

   - Total number of employer and non-employer firms and their total receipts in the MSA by ethnic category (Hispanic or Latino; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian or Other Pacific Islander) *in all industry sectors*;

   - Total number of employer and non-employer firms and their total receipts in the MSA by the above-listed ethnic categories *in each industry sector*.

   - The rest of the reports are from the Company Statistics Series and provide similar data but each only covers individual ethnic categories. For example, one of the reports in called "SBO: Asian: MSA by KOB: 2002", or "SBO: Company Statistics Series: Statistics by Kind of

Business for Selected Metropolitan Statistical Areas with 100 or More Asian-Owned Firms: 2002". Each report from this series provides the same data as the first report mentioned above but *only* for the identified ethnic category.

- Data pertaining to women-owned businesses is included in a separate report called "SBO: Women: MSA by KOB: 2002."

- The SBO does not collect data on disabled-owned business enterprises (DSBE).

6. In order to collect Availability data that adequately corresponds to the three contract types identified in the Utilization calculations, namely Public Works; Personal and Professional Services and; Services, Supplies, and Equipment, we associated each contract type with one or more industry sectors as classified by the North American Industry Classification System (NAICS) (see Table A.1).

Table A.1 – Contract Type by NAICS Code

Contract Type	NAICS Industry Sector Code and Description
Public Works (PW)	23, Construction
Personal and Professional Services (PPS)	54, Professional, Scientific, and Technical Services
Supplies, Services, and Equipment (SSE)	44 – 45, Retail Trade
	42, Wholesale Trade
	51, Information

Source: Econsult Corporation

7. As an example, to obtain data on the total number of African American-owned firms in the MSA and their total revenues for each contract type, the following steps could be taken:

   - Open the dataset called "SBO: Black: MSA by KOB: 2002".

   - The topmost line of the report provides the data for African American-owned firms in all sectors of the economy: there are a total of 24,486 firms with receipts amounting to $2,022,906,000. Of

them 2,442 were employer firms, i.e. establishments with more than one employee, and they had receipts of $1,567,034,000. Further, the report provides data on the number of employees and the firms' annual payroll, which have not been used for the purpose of this Disparity Study.

- The next lines break down the numbers by NAICS industry codes. For example, if we want to find data for the availability of firms in the Public Works sector, we can go to the second page and see that there were 1,313 firms in the Construction sector (NAICS code 23), of which 174 were employer firms with revenues of $140,066,000.

- For various reasons, the Census reports do not provide data for all the categories and subcategories. There are two major data error classifications:

  - "D - Withheld to avoid disclosing data for individual companies; data are included in higher level totals"

  - "S - Withheld because estimate did not meet publication standards"

- The SBO datasets also do not provide sufficient cross-reference detail in the sense that one could not find data on the number of business owners who are both women *and* belong to an ethnic minority.

A.2.2 Procurement Office Vendor List (A5-A6)

Another way that we chose to study the availability of firms in the Philadelphia MSA was to look at all the firms that have registered with the City's Procurement Office and whose physical address was within the Metropolitan area.

1. The list of companies registered to do business with the City of Philadelphia, provided by the Procurement Office, included 54,288 firms.

2. Since we only needed the total number of firms in the Philadelphia MSA and not those whose physical location was outside of it, we used a zip code database, obtained from www.zip-codes.com, in order to flag in an Excel spreadsheet all vendors as either belonging to the "Metro" category or not. By compiling a database of all zip codes of the counties included in MSA and by comparing each vendor zip code against that database, we were able to determine the count and breakdown all vendors on the Procurement Office list by the minority- or women-owned business category. We found out that there were no disabled-owned businesses in the Philadelphia MSA in the Public Works or Services, Supplies, and Equipment categories.

3. From those identified as falling under the "Metro" location category, 31,223 in total, we further pulled out only those vendors whose contracts awarded pertained either to the Public Works or to the Services, Supplies and Equipment categories. We were informed by MBEC, as well as by the Procurement Office, that Personal and Professional Services contracts are performed through the e-contracts system of the City of Philadelphia and therefore are not included in the Procurement

Office's Vendor List. Further, such Vendor List could not be obtained because the e-contracts department does not maintain such a list.

4. By using a pivot table to analyze these records, we were able to calculate the total number of firms under the minority- or women-owned businesses classification categories.

5. By using these data, there were two different ways of approaching the disparity ratio: either by comparing the total number of DBE firms registered with MBEC (from MBEC's Race Detail Report) to the total number of firms registered with the Procurement Department, or by comparing the total number of DBE firms to the total number of firms registered with the Procurement Department, i.e. comparing a subset to the total within the same data pool. We have provided both variations.

A.2.3 Central Contractor Registration (Formerly SBA PRO-Net)

Another way to identify the total availability of firms located within the Metro Area was to query the Central Contractor Registration database (formerly known as SBA Pro-Net). In an effort to simplify the federal contracting process, the US Small Business Administration, Department of Defense, Office of Management and Budget and General Services Administration have integrated the Pro-Net system into the Department of Defense's Central Contractor Registration site. In this way, the federal government is eliminating its former practice of asking vendors to register with all the different agencies they work with by creating a single portal for vendor registration that extends to the entire government. The vendor database can be accessed at www.ccr.gov, or directly by visiting the following link:

1. Go to http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm.

2. The page that opens is the database search engine. It allows data to be filtered by various filters, such as by location, by small disadvantaged business status, by minimum bonding level, by size of firm, etc.

3. In the Metropolitan Statistical Area box (underneath the state list on top of the page) enter the 4-digit code corresponding to the Philadelphia (MSA), 6160, in order to query only those records pertaining to it.

4. Scroll down to the "Other Ownership Data" section and check the "Minority" box in order to obtain all the minority-owned firms registered with CCR, totaling 1,158. Running the query again with the "Woman/Women" box checked and the "Minority" box unchecked will bring up all the businesses in the MSA area that are owned by women, totaling 1,482. Checking both boxes will produce the firms owned by women who are also members of ethnic minorities, or 389 firms.

5. Scroll down to the "Size" section and select the "At least" option and type in the number 1 in the box that corresponds to the number of employees. In this way, the resulting Vendor List will only show employer firms, i.e. firms with more than 1 employee.

6. This search engine allows for the manipulation of the columns of the dataset. Click on "Edit the columns to be displayed" box toward the bottom of the page. In the upper right corner the box that says "Fields to be Displayed" lists the default information that will appear as the outcome of the search. Click on each individual one and hit "Remove". Then, on the left, click on the following fields in order to add them to the "Field to be Displayed" list: "Name of Firm", "City", "State", "Zip", "Minority?", "Women-Owned Business?", and "NAICS, All (for which firm is small)". By eliminating the default field "Address and City, State, Zip" and replacing it with individual fields for each component of the address, the analysis of the data in an Excel spreadsheet is simplified.

7. When the search settings are all entered, from the dropdown menu next to "Maximum number of firms to be returned at a time" change the number to 1,500 and then click on "Search using these criteria" box at the bottom of the page. The Vendor List that is returned can be copied and pasted onto an Excel spreadsheet for further manipulation.

8. After we performed the steps described above, we used the NAICS scheme outlined under the US Census methodology section in order to count the number of firms that do business in the Construction, Professional, Scientific, and Technical Services, Retail and Wholesale Trade, and Information sectors and that we had established as analogous to the three contract types analyzed in this study. NAICS codes produced by the CCR vendor report are 5-digit numbers, corresponding to a more detailed level of industry descriptions, so in order to count the number of firms operating under the general headings of Construction, Retail Trade, etc. we counted the number of codes whose first two digits only are a match to the codes we were looking for.

9. Next, we flagged each vendor identified as falling under the industry categories mentioned below by further assigning an ethnic or gender flag to it. In this way we were able to obtain the total number of Minority Business Enterprises (MBEs) or Women Business Enterprises (WBEs) operating in each industry sector of interest.

APPENDIX B: DISPARITY STUDY DATASET AND RELATED FILES

File Name	Type of file	Description
"List of MBEC-certified DBE's (as of 4.17.07)"	MS Excel (.xls)	The original file provided to Econsult by MBEC listing all current certified vendors. We have added columns with calculations allowing us to flag each vendor location in terms of "City" or "Metro" and to sum up the total count. We have also copied this list as a separate tab at the end of the "Supplemental Participation Report Fiscal Year 2006 4-18-07" file (please see below).
"Supplemental Participation Report Fiscal Year 2006 4-18-07"	MS Excel (.xls)	The original file provided to Econsult by MBEC listing all prime and subcontract vendors along with contract amounts. In addition, we have added columns to flag each vendor under each applicable category (MBE/WBE/DSBE) as belonging to either the "City" or "Metro" classification, as well as to calculate the total contract amount by location ("City" or "Metro") and by ethnicity and/or gender. We have added two tabs: one is an exact copy of the "List of MBEC-certified DBE's (as of 4.17.07)", linked to several of the tabs in order to flag each contract by location, and the other is a list of the zip codes comprising the "Metro" area, used for the same purpose.
"Procurement's Vendor File"	MS Excel (.xls)	A list of vendors registered with the City's Procurement Office, provided by same. We have added columns with calculations in order to count the number of vendors by contract type in the Metro area. Also, we have added the list of Metro zip codes on a separate tab to use as a source of location identification, as well as several pivot tables in order to obtain several different breakdowns by category.

File Name	Type of file	Description
"Race Detail Report"	MS Excel (.xls)	The original file provided to Econsult by MBEC. We shrunk the spreadsheet to only show the subtotals for each ethnic/gender category.
"PMSA Zip Codes"	MS Excel (.xls)	A compilation of all the zip codes in the City and Metro areas.
"Summary of Availability Data – SBA Census"	MS Excel (.xls)	A spreadsheet with four tabs, each summarizing the data available from the 2002 Economic (SBO) Census by category: total MBEs, total WBEs, employer MBEs, employer WBEs. The cells that are blank represent categories for which the Census provides no data.
"GAS: Economy-Wide Estimates"	Adobe Acrobat (.pdf)	A scanned report from the U.S. Census website providing the numbers that were used to present the Census Availability data in the above-mentioned file.
"Pro-Net Vendors"	MS Excel (.xls)	A list of all vendors registered with the Central Contractor Registration website (formerly SBA Pro-Net). Each tab lists only the vendors registered under total MBE, MBE/males, WBE, and Veterans. Each tab also displays the calculations we used to identify each vendor by ethnicity and/or gender.
"Consolidated Disparity Ratio Spreadsheets"	MS Excel (.xls)	A document containing all the disparity, utilization, and availability tables on separate tabs.

APPENDIX C: UTILIZATION CHARTS

Table C.1 provides an overview of the City's utilization of Disadvantages Business Enterprise (DBE) firms in its awarding of contracts:

- The first two columns delineate which DBE category is being considered.
- The next three columns show the utilization of various DBE categories in Public Works (PW) contracts.
- The following three columns show the utilization of various DBE categories in Personal and Professional Services (PPS) contracts.
- The next three columns show the utilization of various DBE categories in Services, Supplies, and Equipment (SSE) contracts.
- The next three columns show the utilization of various DBE categories across all contract types.
- The following four columns show any equivalent figures available from the DJ Miller & Associates (DJMA) analysis of 1998-2003 data.
- The final four columns show the ranges of our Participation Goals, which we will revisit in Section 4.

Within each set of columns, we further broke out contracts awarded to DBE firms based on whether they are listed in the MBEC Vendor List as having a Philadelphia zip code ("City") or a zip code of one of the eleven counties in the Philadelphia Metropolitan Statistical Area (MSA) ("Metro"), or regardless of where they are located ("All"). In this way, we can further determine the utilization of local DBE firms, not just all DBE firms.

Table C.1 - FY 2006 Utilization (U1) – Utilization of DBEs, by $ Contracts Awarded, Based on 2006 MBEC Participation Report

Category		PW			PPS			SSE			All Contract Types			DJ Miller 1998-2003 (Metro)			
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All	PW	PPS	SSE	All
Native American	Male	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	x	x	x	x
Asian	Male	0.1%	0.1%	2.1%	0.1%	1.1%	1.2%	0.0%	0.4%	1.4%	0.1%	0.7%	1.5%	x	x	x	x
African American	Male	0.3%	0.3%	3.4%	10.9%	11.8%	12.5%	2.5%	6.7%	7.3%	6.2%	7.5%	8.9%	x	x	x	x
Hispanic	Male	1.9%	1.9%	1.9%	2.4%	2.6%	2.9%	1.3%	1.3%	1.4%	2.0%	2.2%	2.3%	x	x	x	x
															x	x	x
Native American	Female	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	x	x	x	x
Asian	Female	0.0%	1.2%	1.2%	0.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%	x	x	x	x
African American	Female	2.1%	3.3%	3.3%	3.6%	4.6%	4.6%	0.5%	1.7%	1.7%	2.6%	3.6%	3.6%	x	x	x	x
Hispanic	Female	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	x	x	x	x
White	Female	1.0%	5.8%	7.3%	0.4%	0.9%	3.7%	3.0%	4.2%	4.4%	0.0%	3.0%	4.8%	x	x	x	x
															x	x	x
Native American	All	0.0%	0.0%	2.8%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	x	x	x	x
Asian	All	0.1%	1.3%	3.3%	0.2%	1.2%	1.6%	0.0%	0.5%	1.4%	0.1%	1.4%	2.0%	x	x	x	x
African American	All	2.4%	3.6%	6.7%	14.5%	16.4%	17.1%	3.0%	8.3%	9.0%	8.8%	9.0%	12.5%	x	x	x	x
Hispanic	All	1.9%	1.9%	1.9%	2.4%	2.6%	3.0%	1.3%	1.3%	1.5%	2.0%	1.5%	2.4%	x	x	x	x
All MBE	All	4.5%	6.8%	12.1%	17.3%	20.6%	22.1%	4.3%	10.1%	11.9%	11.0%	11.9%	17.9%	10.5%	2.1%	10.8%	5.8%
All	Female	3.1%	10.6%	12.2%	4.1%	5.7%	8.8%	3.5%	5.9%	6.2%	3.7%	6.2%	9.9%	4.4%	0.7%	4.9%	2.0%
Disabled	All	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
All DBE *	All	5.4%	12.9%	19.6%	17.7%	21.5%	25.8%	7.2%	14.3%	16.3%	12.1%	16.3%	22.8%	14.9%	2.8%	15.7%	7.8%

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Source: 2006 MBEC Participation Report
"x" denotes data unavailable or insufficient

In terms of Philadelphia's utilization results in FY 2006 as it relates to various geographic boundaries, we note the following points:

- While the City awarded 19.6 percent of the dollar value of all Public Works (PW) contracts to Disadvantaged Business Enterprises (DBE) firms, that proportion drops by a third to 12.9 percent if only Philadelphia Metropolitan Statistical Area (MSA) DBE firms are considered, and it drops by three quarters to 5.4 percent if only Philadelphia firms are considered.

- While the City awarded 25.8 percent of the dollar value of all Personal and Professional Services (PPS) contracts to DBE firms, that proportion drops by a fifth to 21.5 percent if only Philadelphia MSA DBE firms are considered, and it drops by a third to 17.7 percent if only Philadelphia firms are considered.

- While the City awarded 16.3 percent of the dollar value of all Services, Supplies and Equipment (SSE) contracts to DBE firms, that proportion drops by a tenth to 14.3 percent if only Philadelphia MSA DBE firms are considered, and it drops by half to 7.2 percent if only Philadelphia firms are considered.

Also on the subject of geography, we also note that there is a significant proportion of DBE firms certified by the City of Philadelphia's Minority Business Council (MBEC) that are non-local. We note the following geographic distribution of MBEC-certified DBE firms, as reported on the most recent version of MBEC's Vendor List (see Table C.2 and Table C.3).

Table C.2 – Number of MBEC-Certified DBE's by Location

Area	Number
City (Philadelphia)	481
Metro (Philadelphia MSA)	899
Total	1,215

Source: MBEC Vendor List (2007)

Table C.3 – Geographic Distribution of MBEC-Certified DBEs (Selected States)

State	# MBEC-Certified DBEs
PA	825
NJ	173
MD	39
DE	23
NY	23
MA	14
IL	13
TX	13
VA	13
DC	12
FL	12
GA	8
OH	8

Source: MBEC Vendor List (2007)

APPENDIX D: AVAILABILITY CHARTS

Table D.1, Table D.2, Table D.3, and Table D.4 provide an overview of the City's availability of Disadvantaged Business Enterprise (DBE) firms, based on these four broad approaches and using 2002 Census data:

- The first two columns delineate which DBE category is being considered.
- The following four columns show the number of firms in various DBE categories, by contract type.
- The next four columns show the availability rate of firms in various DBE categories, by contract type.
- The final four columns show any equivalent figures available from the DJ Miller & Associates (DJMA) analysis of 1998-2003 data.
- The four cells underneath the main table provide the total number of firms by contract type; these numbers serve as the denominator of this method of the availability rate

Table D.1 – FY2006 Availability (A1) – # DBE Firms Divided By # All Firms in Philadelphia MSA, Based on 2002 US Census Survey of Business Owners

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	100	246	174	1,164	0.2%	0.3%	0.3%	0.3%	x	x	x	x
Asian	All	x	2,712	4,258	19,759	x	3.7%	6.5%	4.7%	x	x	x	x
African American	All	1,313	3,284	2,413	24,486	2.9%	4.4%	3.7%	5.9%	x	x	x	x
Hispanic	All	1,277	1,034	1,451	8,963	2.8%	1.4%	2.2%	2.2%	x	x	x	x
All MBE	All	2,699	7,276	8,296	54,639	6.0%	9.8%	12.6%	13.1%	x	x	x	x
All	Female	3,470	20,535	17,987	108,834	7.7%	27.8%	27.3%	26.1%	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	6,160	27,811	26,283	163,206	13.7%	37.6%	39.9%	39.2%	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	44,885	73,999	65,954	416,358

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table D.2 – FY2006 Availability (A2) – # DBE Firms > 1 Employee Divided by # All Firms > 1 Employee in Philadelphia MSA, Based on 2002 US Census Survey of Business Owners

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	8.3%	7.7%	13.7%	12.6%
Native American	All	35	43	x	253	0.3%	0.2%	x	0.2%	0.4%	0.0%	0.1%	0.1%
Asian	All	x	623	2,061	6,310	x	3.6%	8.4%	5.5%	0.5%	0.9%	5.9%	4.8%
African American	All	174	320	231	2,442	1.3%	1.9%	0.9%	2.1%	2.1%	2.4%	2.7%	2.6%
Hispanic	All	151	176	245	1,368	1.1%	1.0%	1.0%	1.2%	1.1%	0.2%	0.9%	0.9%
All MBE	All	368	1,162	2,537	10,373	2.8%	6.7%	10.3%	9.0%	4.1%	3.6%	9.5%	8.4%
All	Female	1,073	3,090	3,501	17,854	8.1%	17.9%	14.3%	15.5%	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	1,433	4,252	6,038	28,227	10.8%	24.6%	24.6%	24.6%	12.4%	11.3%	23.2%	21.0%

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	13,242	17,275	24,526	114,869

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table D.3 – FY2006 Availability (A3) – $ Revenue of DBE Firms Divided by $ Revenue of All Firms in Philadelphia MSA, Based on 2002 US Census Survey of Business Owners

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	$ 7,835,000	x	x	x	0.0%	x	x	x	x	x
Asian	All	x	x	$ 2,577,331,000	$ 5,054,156,000	x	x	1.1%	0.8%	x	x	x	x
African American	All	x	x	$ 207,350,000	$ 2,022,906,000	x	x	0.1%	0.3%	x	x	x	x
Hispanic	All	x	x	$ 262,565,000	$ 1,247,392,000	x	x	0.1%	0.2%	x	x	x	x
All MBE	All	x	x	$ 3,055,081,000	$ 8,363,921,000	x	x	1.3%	1.4%	x	x	x	x
All	Female	x	x	$ 2,116,342,000	$18,346,100,000	x	x	0.9%	3.0%	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	x	x	5,171,423,000	26,670,554,000	x	x	2.3%	4.4%	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	$27,815,880,000	$29,354,712,000	$228,442,546,000	$611,846,768,000

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table D.4 – FY2006 Availability (A4) –$ Revenue of DBE Firms > 1 Employee Divided by $ Revenue of All Firms > 1 Employee in Philadelphia MSA, Based on 2002 US Census Survey of Business Owners

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	x	x	x	x	x	x	x	x	x	x
Asian	All	x	x	$ 1,116,351,000	$ 1,116,351,000	x	x	0.5%	0.2%	x	x	x	x
African American	All	$ 140,966,000	x	x	$ 1,567,034,000	0.5%	x	x	0.3%	x	x	x	x
Hispanic	All	x	x	x	x	x	x	x	x	x	x	x	x
All MBE	All	$ 140,966,000	x	$ 1,116,351,000	$ 1,567,034,000	0.5%	x	0.5%	0.3%	x	x	x	x
All	Female	x	x	$ 1,861,849,000	$ 16,048,759,000	x	x	0.8%	2.7%	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	x	x	$ 2,978,200,000	$ 18,732,144,000	x	x	1.3%	3.1%	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	$ 25,832,877,000	$ 27,008,653,000	$ 226,221,855,000	$ 597,073,635,000

Source: 2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Looking across tables, we can make the following points about the constitution of firms in various DBE categories and contract types:

- Availability rates based on the number of firms with paid employees are consistently lower than those based on just the number of firms, which demonstrates that DBE firms are generally smaller in terms of staffing than majority firms.

- Availability rates based on aggregate annual revenues are consistently lower than those based on numbers of firms, which demonstrates that DBE firms are generally smaller in terms of revenues than majority firms.

In contrast, a narrow approach would recognize that not all firms are in fact part of the universe of "ready, willing, and able" (RWA) firms, and that a stricter interpretation of the legal requirements of RWA would necessitate including only those businesses that are in fact ready to do business with the City, as evidenced by registering with the City to bid for contracts.

Based on the narrow approach and using the City of Philadelphia's Minority Business Enterprise Council (MBEC) and Procurement Office data to determine the appropriate availability of DBE firms, we will consider only the number of firms in these universes. Table D.5 provides an overview of the City's availability rate of DBE firms, using the MBEC Vendor List as the numerator and Procurement Office data as the denominator (we consider this approach "Availability (A5)"). Table D.6 provides an overview of the City's availability rate of DBE firms, using Procurement Office data as both the numerator and the denominator (we consider this approach "Availability (A6)").

Table D.5 – FY 2006 Availability (A5) – # DBE Firms Divided By # All Firms in Philadelphia MSA, Based on MBEC Vendor List and Procurement Office Vendor List

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	6	0.0%	x	0.0%	0.0%	x	x	x	x
Asian	Male	x	x	x	91	0.0%	x	0.0%	0.3%	x	x	x	x
African American	Male	x	x	x	418	0.0%	x	0.0%	1.3%	x	x	x	x
Hispanic	Male	x	x	x	69	0.0%	x	0.0%	0.2%	x	x	x	x
Native American	Female	x	x	x	2	0.0%	x	0.0%	0.0%	x	x	x	x
Asian	Female	x	x	x	26	0.0%	x	0.0%	0.1%	x	x	x	x
African American	Female	x	x	x	164	0.0%	x	0.0%	0.5%	x	x	x	x
Hispanic	Female	x	x	x	22	0.0%	x	0.0%	0.1%	x	x	x	x
White	Female	x	x	x	389	0.0%	x	0.0%	1.2%	x	x	x	x
Native American	All	x	x	x	8	0.0%	x	0.0%	0.0%	x	x	x	x
Asian	All	x	x	x	117	0.0%	x	0.0%	0.4%	x	x	x	x
African American	All	x	x	x	582	0.0%	x	0.0%	1.9%	x	x	x	x
Hispanic	All	x	x	x	91	0.0%	x	0.0%	0.3%	x	x	x	x
All MBE	All	x	x	x	798	0.0%	x	0.0%	2.6%	x	x	x	x
All	Female	x	x	x	603	0.0%	x	0.0%	1.9%	x	x	x	x
Disabled	All	x	x	x	5	0.0%	x	0.0%	0.0%	x	x	x	x
All DBE *	All	x	x	x	1,192	0.0%	x	0.0%	3.8%	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	61	x	2,020	31,223

Source: 2006 MBEC Vendor List / 2007 Procurement Office
"x" denotes data unavailable or insufficient

Table D.6 – FY2006 Availability (A6) – # DBE Firms Divided By # All Firms in Philadelphia MSA, Based on Procurement Office Vendor List

Category		DBE				DBE %				DJMA1998-2003			
Ethnic/Disabled	Gender	PW	PPS	SSE	All	PW	PPS	SSE	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	x	x	x	x	x	x	x	x	x	x
Asian	All	x	x	x	x	x	x	x	x	x	x	x	x
African American	All	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	All	x	x	x	x	x	x	x	x	x	x	x	x
All MBE	All	5	x	125	3,094	8.2%	x	6.2%	9.9%	x	x	x	x
All	Female	4	x	24	1,446	6.6%	x	1.2%	4.6%	x	x	x	x
Disabled	All	x	x	x	x	0.0%	x	0.0%	0.0%	x	x	x	x
All DBE *	All	5	x	125	3,094	8.2%	x	6.2%	9.9%	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

All	All	61	x	2,020	31,223

Source: 2007 Procurement Office
"x" denotes data unavailable or insufficient

From these two tables, we can observe the following points:

- As can be expected, availability rates are lower if the MBEC Vendor List is used as the numerator than if Procurement Office data is used:
  - Minority Business Enterprise (MBE) availability of 2.6 percent across all contract categories if the MBEC Vendor List is used versus 9.9 percent if Procurement Office data is used.
  - Women Business Enterprise (WBE) availability of 1.9 percent across all contract categories if the MBEC Vendor List is used versus 4.6 percent if Procurement Office data is used.
- In other words, there are more self-identified minority-owned firms and women-owned firms registered with the Procurement Office than there are MBEs and WBEs certified with MBEC. The difference in scale represents a number of groupings of firms:
  - Legitimate self-identified minority-owned and women-owned firms that have registered with the Procurement Office but that have not or have not yet certified with MBEC.
  - Legitimate self-identified minority-owned and women-owned firms that have become certified MBEs or WBEs through some other, federal certification process, but that have not or have not yet certified with MBEC.
  - Formerly MBEC-certified firms whose MBEC certification has expired but who still appear on the Procurement Office Vendor List as "MBE" and/or "WBE."
  - Formerly MBEC-certified firms who have experienced a change of ownership such that they are no longer minority-owned or women-owned, but who still appear on the Procurement Office Vendor List as "MBE" and/or "WBE."
- As can also be expected, availability rates are lower using this “narrow” approach, which defines “ready, willing, and able” as having registered to do business with the City, than the previously described “broad” approach, which defines RWA simply as being a firm in existence.
  - Considering all firms per the SBA/Census survey, MBE availability is 13.1 percent and WBE availability is 26.1 percent.
  - Considering all firms with paid employees per the SBA/Census survey, MBE availability is 9.0 percent and WBE availability is 15.5 percent.
  - This means that there is larger drop in DBE categories than with the majority population from the number of firms to the number of firms that have registered to do business with the City. Shoring up this discrepancy is a significant component to ensuring fair participation in the economic opportunities represented by City contracts.

- In general, DBE categories represent a very small percentage of the pool of 31,223 firms that have registered to do business with the City, per the Procurement Office list. Only 3.8 percent of those firms are certified as DBE firms by MBEC: 2.6 percent as MBEs and 1.9 percent as WBEs.

APPENDIX E: DISPARITY CHARTS

As described in Section 2 and in Section 3.2, there is a broad and a narrow approach to defining Disadvantaged Business Enterprise (DBE) availability. Based on the broad approach and using 2002 US Census data, we can further delineate between the number of firms, the number of firms with paid employees, the aggregate annual revenues of firms, and the aggregate annual revenues of firms with paid employees.

These represent four approaches to determining the appropriate availability of DBE firms, and therefore four sets of results in determining the disparity ratio, which we call D1, D2, D3 and D4. Table E.1, Table E.2, Table E.3, and Table E.4 provide an overview of the City's utilization of DBE firms in its awarding of contracts:

- The first two columns delineate which DBE category is being considered.
- The following three columns show the utilization of various DBE categories in Public Works contracts.
- The next three columns show the utilization of various DBE categories in Personal and Professional Services contracts.
- The next three columns show the utilization of various DBE categories in Services, Supplies, and Equipment contracts.
- The following three columns show the utilization of various DBE categories across all contract types.
- The final four columns show any equivalent figures available from the DJMA analysis of 1998-2003 data.

Within each set of columns, we further broke out contracts awarded to DBE firms based on whether they are listed in the City of Philadelphia's Minority Business Enterprise Council (MBEC) Vendor List as having a Philadelphia zip code ("City") or a zip code of one of the nine counties in the Philadelphia Metropolitan Statitical Area (MSA) ("Metro"), or regardless of where they are located ("All"). In this way, we can further determine the utilization of local DBE firms, not just all DBE firms.

Table E.1 – FY 2006 Disparity (D1) – Availability Rate Based on # Firms in Philadelphia MSA

Category		PW			PPS			SSE			All City Contracts			DJMA1998-2003			
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	0.0	0.0	12.5	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	2.9	x	x	x	x
Asian	All	x	x	x	0.1	0.3	0.4	0.0	0.1	0.2	0.0	0.3	0.4	x	x	x	x
African American	All	0.8	1.2	2.3	3.3	3.7	3.8	0.8	2.3	2.5	1.5	1.5	2.1	x	x	x	x
Hispanic	All	0.7	0.7	0.7	1.7	1.9	2.1	0.6	0.6	0.7	0.9	0.7	1.1	x	x	x	x
All MBE	All	0.7	1.1	2.0	1.8	2.1	2.3	0.3	0.8	0.9	0.8	0.9	1.4	x	x	x	x
All	Female	0.4	1.4	1.6	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.2	0.4	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	0.4	0.9	1.4	0.5	0.6	0.7	0.2	0.4	0.4	0.3	0.4	0.6	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator=2006 MBEC Participation Report, Denominator=2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table E.2 – FY 2006 Disparity Ratio (D2) - Availability Rate Based on # Firms >1 Employee in Philadelphia MSA

Category		PW			PPS			SSE			All City Contracts			DJMA1998-2003			
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	0.0	0.0	10.6	0.0	0.3	0.3	x	x	x	0.0	0.0	3.7	x	x	x	x
Asian	All	x	x	x	0.1	0.3	0.4	0.0	0.1	0.2	0.0	0.3	0.4	x	x	x	x
African American	All	1.8	2.7	5.1	7.8	8.8	9.2	3.2	8.8	9.5	4.1	4.2	5.9	x	x	x	x
Hispanic	All	1.7	1.7	1.7	2.3	2.6	2.9	1.3	1.3	1.5	1.7	1.2	2.0	x	x	x	x
All MBE	All	1.6	2.5	4.3	2.6	3.1	3.3	0.4	1.0	1.1	1.2	1.3	2.0	2.5	0.6	1.1	0.7
All	Female	0.4	1.3	1.5	0.2	0.3	0.5	0.2	0.4	0.4	0.2	0.4	0.6	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	0.5	1.2	1.8	0.7	0.9	1.0	0.3	0.6	0.7	0.5	0.7	0.9	1.2	0.2	0.7	0.4

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator=2006 MBEC Participation Report, Denominator=2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table E.3 – FY 2006 Disparity Ratio (D3) - Availability Rate Based on $ Revenue of Firms

Category		PW			PPS			SSE			All City Contracts			DJMA1998-2003			
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	x	x	x	x	0.0	0.0	0.0	x	x	x	x	x	x	x
Asian	All	x	x	x	x	x	x	0.0	0.4	1.2	0.2	1.7	2.5	x	x	x	x
African American	All	x	x	x	x	x	x	33.0	91.8	99.1	26.5	27.2	37.8	x	x	x	x
Hispanic	All	x	x	x	x	x	x	11.1	11.3	12.7	10.0	7.1	11.6	x	x	x	x
All MBE	All	x	x	x	x	x	x	3.2	7.5	8.9	8.1	8.7	13.1	x	x	x	x
All	Female	x	x	x	x	x	x	3.8	6.4	6.7	1.2	2.1	3.3	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	x	x	x	x	x	x	3.2	6.3	7.2	2.8	3.7	5.2	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator=2006 MBEC Participation Report, Denominator=2002 SBA/Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table E.4 – Disparity Ratio (D4) - Availability Rate Based on $ Revenue of Firms >1 Employee

Category		PW			PPS			SSE			All City Contracts			DJMA1998-2003			
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All	PW	PPS	SSE	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Asian	All	x	x	x	x	x	x	x	x	x	0.8	7.5	10.9	x	x	x	x
African American	All	4.4	6.6	7.4	x	x	x	x	x	x	33.4	34.3	47.6	x	x	x	x
Hispanic	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
All MBE	All	8.2	12.6	22.1	x	x	x	x	x	x	42.0	45.2	68.3	x	x	x	x
All	Female	x	x	x	x	x	x	x	x	x	1.4	2.3	3.7	x	x	x	x
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	x	x	x	x	x	x	x	x	x	3.9	5.2	7.3	x	x	x	x

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator 2006 MBEC Participation Report, Denominator=2002 US Census Survey of Business Owners
"x" denotes data unavailable or insufficient

Table E.5 provides an overview of the City's disparity ratios, using the MBEC Vendor List as the numerator and Procurement Office data as the denominator (D5). Table E.6 provides an overview of the City's disparity ratios, using Procurement Office data as both the numerator and the denominator (D6).

Table E.5 – FY 2006 Disparity (D5) – Availability Rate Based on # DBE Firms divided by # All Firms in Philadelphia MSA, Based on MBEC Vendor List and Procurement Office Vendor List

Category		PW			PPS			SSE			All City Contracts		
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All
Native American	Male	x	x	x	x	x	x	x	x	x	0.0	1.9	2.0
Asian	Male	x	x	x	x	x	x	x	x	x	0.3	2.3	5.1
African American	Male	x	x	x	x	x	x	x	x	x	4.6	5.6	6.6
Hispanic	Male	x	x	x	x	x	x	x	x	x	9.2	9.7	10.5
Native American	Female	x	x	x	x	x	x	x	x	x	0.0	0.0	121.3
Asian	Female	x	x	x	x	x	x	x	x	x	0.5	4.8	6.6
African American	Female	x	x	x	x	x	x	x	x	x	4.9	6.9	5.5
Hispanic	Female	x	x	x	x	x	x	x	x	x	0.1	0.3	0.6
White	Female	x	x	x	x	x	x	x	x	x	0.0	2.4	3.9
Native American	All	x	x	x	x	x	x	x	x	x	0.0	0.0	31.8
Asian	All	x	x	x	x	x	x	x	x	x	0.4	3.8	5.4
African American	All	x	x	x	x	x	x	x	x	x	4.7	4.8	6.7
Hispanic	All	x	x	x	x	x	x	x	x	x	7.0	5.0	8.1
All MBE	All	x	x	x	x	x	x	x	x	x	4.3	4.6	7.0
All	Female	x	x	x	x	x	x	x	x	x	1.9	3.2	5.1
Disabled	All	x	x	x	x	x	x	x	x	x	0.0	0.0	4.1
All DBE *	All	x	x	x	x	x	x	x	x	x	3.2	4.3	6.0

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator 2006 MBEC Participation Report, Denominator=2002 MBEC Vendor List /2007 Procurement Office- #Firms
"x" denotes data unavailable or insufficient

Table E.6 – FY 2006 Disparity – Availability Based on # DBE Firms divided by # All Firms in Philadelphia MSA, Based on Procurement Office Vendor List

Category		PW			PPS			SSE			All City Contracts		
Ethnic/Disabled	Gender	City	Metro	All	City	Metro	All	City	Metro	All	City	Metro	All
Native American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Male	x	x	x	x	x	x	x	x	x	x	x	x
African American	Male	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Male	x	x	x	x	x	x	x	x	x	x	x	x
Native American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Asian	Female	x	x	x	x	x	x	x	x	x	x	x	x
African American	Female	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	Female	x	x	x	x	x	x	x	x	x	x	x	x
White	Female	x	x	x	x	x	x	x	x	x	x	x	x
Native American	All	x	x	x	x	x	x	x	x	x	x	x	x
Asian	All	x	x	x	x	x	x	x	x	x	x	x	x
African American	All	x	x	x	x	x	x	x	x	x	x	x	x
Hispanic	All	x	x	x	x	x	x	x	x	x	x	x	x
All MBE	All	0.5	0.8	1.5	x	x	x	0.7	1.6	1.9	1.1	1.2	1.8
All	Female	0.5	1.6	1.9	x	x	x	3.0	5.0	5.2	0.8	1.3	2.1
Disabled	All	x	x	x	x	x	x	x	x	x	x	x	x
All DBE *	All	0.7	1.6	2.4	x	x	x	1.2	2.3	2.6	1.2	1.6	2.3

** Note: Figures in this row are not necessarily the sum of the above three rows because of businesses who belong to more than one category.*

Sources: Numerator 2006 MBEC Participation Report, Denominator=2007 Procurement Office - #Firms
"x" denotes data unavailable or insufficient

From these two tables, we can observe the following points:

- As can be expected, disparity ratios are higher if the MBEC Vendor List is used as the numerator of the availability rate than if Procurement Office data is used as the numerator of the availability rate. This is because availability rates are lower using the MBEC Vendor List as the numerator, as described previously.

- The disparity ratio for MBEs and WBEs in the Philadelphia MSA is above 1.0:

  - 4.6 for MBEs and 3.2 for WBEs, if the MBEC Vendor List is used as the numerator of the availability rate.

  - 1.2 for MBEs and 1.3 for WBEs, if Procurement Office data is used as the numerator of the availability rate.

- MBE and WBE disparity ratios are higher if, instead of considering just firms in the Philadelphia MSA, all MBEC-certified vendors are considered, regardless of their geographic location.

  - The MBE disparity ratio is 7.0 for all firms, versus 4.6 for Philadelphia MSA firms and 4.3 for Philadelphia firms (a 39 percent drop-off from "All" to "City").

  - The WBE disparity ratio is 5.1 for all firms, versus 3.2 for Philadelphia MSA firms and 1.9 for Philadelphia firms (a 54 percent drop-off from "All" to "City").

  - This suggests that a higher proportion of City contracts go to MBEC-certified vendors outside the Philadelphia MSA (utilization), relative to the proportion of the MBEC Vendor List that is represented by firms outside the Philadelphia MSA (availability).

- The numbers, while smaller, are almost identical in terms of drop-off, if, instead of using the MBEC Vendor List as the numerator of the availability rate, Procurement Office data is used.

  - The MBE disparity ratio, in this case, is 1.8 for all firms, versus 1.2 for Philadelphia MSA firms and 1.1 for Philadelphia firms (a 39 percent drop-off from "All" to "City").

  - The WBE disparity ratio is 2.1 for all firms, versus 1.3 for Philadelphia MSA firms and 0.8 for Philadelphia firms (a 62 percent drop-off from "All" to "City").

  - Again, this suggests that a higher proportion of City contracts go to vendors outside the Philadelphia MSA that have registered with the Procurement Office (utilization), relative to the proportion of the Procurement Office Vendor List that is represented by firms outside the Philadelphia MSA (availability).