CHAPTER 5. 
Availability Analysis

BBC Research & Consulting (BBC) analyzed the availability of minority- and woman-owned businesses that are ready, willing, and able to perform on Los Angeles County Metropolitan Transportation Authority (Metro) construction, professional services, and goods and other services prime contracts and subcontracts. Chapter 5 describes the availability analysis in seven parts:

A. Purpose of the availability analysis;
B. Potentially available businesses;
C. Businesses in the availability database;
D. Availability calculations;
E. Availability results;
F. Base figure for overall DBE goal; and
G. Implications for DBE contract goals.

Appendix E provides supporting information related to the availability analysis.

A. Purpose of the Availability Analysis

BBC examined the availability of minority- and woman-owned businesses for Metro prime contracts and subcontracts to provide information for the agency in implementing the Federal Disadvantaged Business Enterprise (DBE) Program. In addition, BBC used availability analysis results as inputs in the disparity analysis. In the disparity analysis, BBC compared the percentage of Metro contract dollars that went to minority- and woman-owned businesses during the study period (i.e., utilization) to the percentage of dollars that one might expect those businesses to receive based on their availability for specific types and sizes of Metro prime contracts and subcontracts (i.e., availability). Comparisons between utilization and availability allowed the study team to determine whether any minority- or woman-owned business groups were underutilized during the study period relative to their availability for Metro work (for details, see Chapter 8).

B. Potentially Available Businesses

BBC’s availability analysis focused on specific areas of work (i.e., subindustries) related to the types of transportation-related construction, professional services, goods and other services prime contracts and subcontracts that Metro awarded during the study period. BBC began the availability analysis by identifying the specific subindustries in which Metro spends the majority of its contracting dollars (for details, see Chapter 5) as well as the geographic areas in which the majority of the businesses with which Metro spends those contracting dollars are located (i.e., the relevant geographic market area, which BBC identified as Los Angeles County). The study team then developed a representative, unbiased, and statistically-valid database of potentially
available businesses through surveys with businesses located in the relevant geographic market area that perform work within relevant subindustries. That method of examining availability is referred to as a custom census and has been accepted in federal court as a valid methodology for conducting availability analyses.\textsuperscript{1,2,3} Figure 5-1 summarizes the strengths of BBC’s custom census approach.

**Overview of availability surveys.** The study team conducted telephone surveys with business owners and managers to identify Los Angeles County businesses that are potentially available for Metro construction, professional services, and goods and other services prime contracts and subcontracts.\textsuperscript{4} BBC began the survey process by compiling a comprehensive and unbiased telephone book of all types of Los Angeles County businesses—that is, not only those businesses that are minority- and woman-owned but all businesses—that perform work in relevant industries. BBC developed that phone book based on information from Dun & Bradstreet (D&B) Marketplace.\textsuperscript{5}

BBC collected information about all business establishments listed under 8-digit work specialization codes (as developed by D&B) that were most related to the contracts that Metro awarded during the study period. BBC obtained listings on 7,582 Los Angeles County businesses that do work related to those work specializations. However, BBC did not have working phone numbers for 1,066 of those businesses. BBC attempted availability surveys with the remaining 6,516 business establishments. BBC augmented data from D&B using information from Los Angeles County chambers of commerce and Metro vendor data.

---

\textsuperscript{1} Midwest Fence Corporation v. United States DOT and Federal Highway Administration, the Illinois DOT, the Illinois State Toll Highway Authority, et al., 84 F. Supp. 3d 705, 2015 WL 1396376 (N.D. Ill. 2015), affirmed, 840 F.3d 932 (7th Cir. 2016).


\textsuperscript{3} Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 (N.D. Ill., 2005), aff’d 473 F.3d 715 (7th Cir. 2007)

\textsuperscript{4} The study team offered business representatives the option of completing surveys via fax or e-mail if they preferred not to complete surveys via telephone.

\textsuperscript{5} D&B Marketplace is accepted as the most comprehensive and unbiased source of business listings in the nation.
**Availability survey information.** The BBC project team conducted telephone surveys with the owners or managers of the identified business establishments. Survey questions covered many topics about each business including:

- Status as a private business (as opposed to a public agency or nonprofit organization);
- Status as a subsidiary or branch of another company;
- Primary lines of work;
- Role as a contractor (i.e., prime contractor, subcontractor, or both);
- Qualifications in performing work for Metro;
- Interest in performing work for Metro;
- Largest prime contract or subcontract bid on or performed in the previous five years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

Appendix E provides details about specific survey questions and an example of the availability survey instrument.

**Potentially available businesses.** BBC considered businesses to be potentially available for Metro prime contracts or subcontracts if they reported having a location in Los Angeles County and reported possessing *all* of the following characteristics:

- Being a private business (as opposed to a nonprofit organization);
- Having performed work relevant to Metro construction, professional services, or goods and other services contracting;
- Having bid on or performed construction, professional services, or goods and other services prime contracts or subcontracts in either the public sector or private sector in Los Angeles County in the past five years;
- Being able to perform work or serve customers in the geographical area in which the work took place;
- Being qualified to perform Metro work; and
- Being interested in performing Metro work.⁶

BBC also considered key information about businesses to determine if they were potentially available for specific prime contracts and subcontracts that Metro awarded during the study period:

- The largest contract they bid on or performed in the past five years; and
- The year in which they were established.

---

⁶That information was gathered separately for prime contract and subcontract work.
C. Businesses in the Availability Database

After conducting availability surveys with thousands of local businesses, the study team developed a representative, unbiased, and statistically-valid database of information about businesses that are potentially available for Metro construction, professional services, and goods and other services contracts. Figure 5-2 presents the percentage of businesses in the study team's availability database that were minority- or woman-owned. The information in Figure 5-2 reflects a simple head count of businesses with no analysis of their availability for specific Metro prime contracts and subcontracts. Thus, it represents only a first step toward analyzing the availability of minority- and woman-owned businesses for Metro work. The database included 582 businesses that are potentially available for specific transportation-related construction, professional services, and goods and other services contracts that Metro awarded during the study period. As shown in Figure 5-2, of those businesses, 47 percent were minority- or woman-owned.

Figure 5-2. Percentage of businesses in the availability database that were minority- or woman-owned

Note: Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.

Source: BBC Research & Consulting availability analysis.

<table>
<thead>
<tr>
<th>Business group</th>
<th>Availability %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic white woman-owned</td>
<td>12.4 %</td>
</tr>
<tr>
<td>Black American-owned</td>
<td>7.7</td>
</tr>
<tr>
<td>Asian Pacific American-owned</td>
<td>6.4</td>
</tr>
<tr>
<td>Subcontinent Asian American-owned</td>
<td>1.4</td>
</tr>
<tr>
<td>Hispanic American-owned</td>
<td>18.6</td>
</tr>
<tr>
<td>Native American-owned</td>
<td>0.5</td>
</tr>
<tr>
<td>Total Minority- and Woman-owned</td>
<td>46.9 %</td>
</tr>
</tbody>
</table>

D. Availability Calculations

BBC analyzed information from the availability database to develop dollar-weighted estimates of the availability of minority- and woman-owned businesses for Metro contracting work. Those estimates represent the percentage of Metro construction, professional services, and goods and other services contracting dollars that minority- and woman-owned businesses would be expected to receive based on their availability for specific types and sizes of Metro prime contracts and subcontracts.

Steps to calculating availability. BBC used a bottom up, contract-by-contract matching approach to calculate availability. Only a portion of the businesses in the availability database was considered potentially available for any given Metro prime contract or subcontract. BBC first examined the characteristics of each specific prime contract or subcontract (referred to generally as a contract element) including type of work, location of work, contract size, and contract date. BBC then identified businesses in the availability database that perform work of that type, in that role (i.e., as a prime contractor or subcontractor), in that location, of that size, and that were in business in the year that Metro awarded the contract element.

BBC identified the specific characteristics of each prime contract and subcontract that the study team examined as part of the disparity study and then took the following steps to calculate availability for each contract element:
1. For each contract element, the study team identified businesses in the availability database that reported that they:
   - Are qualified and interested in performing construction, professional services, and goods and other services work in that particular role for that specific type of work for Metro;
   - Are able to serve customers in the geographical area in which the work took place;
   - Have bid on or performed work of that size in the past five years; and
   - Were in business in the year that Metro awarded the contract element.
2. The study team then counted the number of minority-owned businesses, non-Hispanic white woman-owned businesses, and businesses owned by non-Hispanic white men in the availability database that met the criteria specified in Step 1.
3. The study team translated the numeric availability of businesses for the contract element into percentage availability.

BBC repeated those steps for each contract element that the study team examined as part of the disparity study. BBC multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was dollar-weighted estimates of the availability of minority- and woman-owned businesses, both overall and separately for each racial/ethnic and gender group. Figure 5-3 provides an example of how BBC calculated availability for a specific subcontract associated with a construction prime contract that Metro awarded during the study period.

**Figure 5-3. Example of the availability calculation for a Metro subcontract**

On a contract that Metro awarded in 2013, the prime contractor awarded a subcontract worth $5,500 for electrical work. To determine the overall availability of minority- and woman-owned businesses for that subcontract, the study team identified businesses in the availability database that:

a. Were in business in 2013;

b. Indicated that they performed electrical work;

c. Reported bidding on work of similar or greater size in the past; and

d. Reported qualifications and interest in working as a subcontractor on Metro projects.

The study team found 20 businesses in the availability database that met those criteria. Of those businesses, 8 were minority- or woman-owned businesses. Thus, the availability of minority- and woman-owned businesses for the subcontract was 40 percent (i.e., 8/20 X 100 = 40).

**Improvements on a simple head count of businesses.** BBC used a custom census approach to calculating the availability of minority- and woman-owned businesses for Metro work rather than using a simple head count of minority- and woman-owned businesses (e.g., simply calculating the percentage of all local construction, professional services, and goods and other services businesses that are minority- or woman-owned). There are several important ways in which BBC’s custom census approach to measuring availability is more precise than completing a simple head count.

**BBC’s approach accounts for type of work.** Federal regulations suggest calculating availability based on businesses’ abilities to perform specific types of work. For example, the United States...
Department of Transportation (USDOT) gives the following example in “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program:

If 90 percent of an agency’s contracting dollars is spent on heavy construction and 10 percent on trucking, the agency would calculate the percentage of heavy construction businesses that are [minority- or woman-owned] and the percentage of trucking businesses that are [minority- or woman-owned], and weight the first figure by 90 percent and the second figure by 10 percent when calculating overall [minority- and woman-owned business] availability. 7

The BBC study team took type of work into account by examining 54 different subindustries related to construction, professional services, and goods and other services as part of estimating availability for Metro prime contracts and subcontracts.

**BBC's approach accounts for qualifications and interest in relevant prime contract and subcontract work.** The study team collected information on whether businesses are qualified and interested in working as prime contractors, subcontractors, or both on Metro construction, professional services, and goods and other services work (in addition to considering several other factors related to Metro prime contracts and subcontracts such as contract types, sizes, and locations):

- Businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts;
- Businesses that reported being qualified for and interested in working as subcontractors were counted as available for subcontracts; and
- Businesses that reported being qualified for and interested in working as both prime contractors and subcontractors were counted as available for both prime contracts and subcontracts.

**BBC's approach accounts for the relative capacity of businesses.** BBC considered the size—in terms of dollar value—of the prime contracts and subcontracts that a business bid on or received in the previous five years (i.e., relative capacity) when determining whether to count that business as available for a particular contract element. BBC considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value. BBC’s approach is consistent with many recent, key court decisions that have found relative capacity measures to be important to measuring availability (e.g., Associated General Contractors of America, San Diego Chapter vs. California Department of Transportation, et al,8 Western States Paving Company v. Washington State DOT,9 Rothe Development Corp. v. U.S. Department of Defense,10 and Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County11).
BBC’s approach generates dollar-weighted results. BBC examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Thus, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. BBC’s approach is consistent with relevant case law and federal regulations including USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,” which suggests a dollar-weighted approach to calculating availability.

E. Availability Results

BBC estimated the availability of minority- and woman-owned businesses for the 12,149 transportation-related construction, professional services, and goods and other services prime contracts and subcontracts that Metro awarded between January 1, 2011 and December 31, 2015. Figure 5-4 presents overall dollar-weighted availability estimates by racial/ethnic and gender group for those contracts.

Figure 5-4.
Overall dollar-weighted availability estimates by racial/ethnic and gender group

Note:
Numbers rounded to nearest tenth of 1 percent and thus may not sum exactly to totals.
For more detail and results by group, see Figure F-2 in Appendix F.

<table>
<thead>
<tr>
<th>Business group</th>
<th>Availability %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic white woman-owned</td>
<td>4.4 %</td>
</tr>
<tr>
<td>Black American-owned</td>
<td>6.8</td>
</tr>
<tr>
<td>Asian Pacific American-owned</td>
<td>2.5</td>
</tr>
<tr>
<td>Subcontinent Asian American-owned</td>
<td>0.6</td>
</tr>
<tr>
<td>Hispanic American-owned</td>
<td>16.3</td>
</tr>
<tr>
<td>Native American-owned</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Total Minority- and Woman-owned</strong></td>
<td><strong>31.3 %</strong></td>
</tr>
</tbody>
</table>

Overall, the availability of minority- and woman-owned businesses for Metro construction, professional services, and goods and other service contracts is 31.3 percent. Hispanic American-owned businesses (16.3%) and Black American-owned businesses (6.8%) exhibited the highest availability percentages among all groups. Note that availability estimates varied when the study team examined different subsets of those contracts (for availability results for specific contract sets, see Appendix F). Assuming that the mix of the types, sizes, and locations of the contracts that Metro awards in the future are similar to that of the contracts that the agency awarded during the study period, one might expect 31.3 percent of Metro’s contracting dollars to go to minority- and woman-owned businesses based on their availability for that work.

F. Base Figure for Overall DBE Goal

Establishing a base figure is the first step in calculating an overall goal for DBE participation in Metro’s Federal Transit Administration (FTA)-funded transportation contracts.\textsuperscript{12} BBC calculated the base figure using the same availability database and approach described above except that calculations only included potential DBEs—that is, minority- and woman-owned businesses that are DBE-certified or appear that they could be DBE-certified based on revenue requirements.


\textsuperscript{12} The study team considered a contract to be FHWA-funded if it included at least one dollar of FHWA funding.
described in 49 Code of Federal Regulations Part 26—and only included FTA-funded prime contracts and subcontracts. BBC’s approach to calculating Metro’s base figure is consistent with:

- Court-reviewed methodologies in several states including Washington, California, Illinois, and Minnesota;
- Instructions in The Final Rule effective February 20, 2011 that outline revisions to the Federal DBE Program; and
- USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program.”

BBC’s availability analysis indicates that the availability of potential DBEs for Metro’s USDOT-funded transportation contracts is 27.0 percent. Metro might consider 27.0 percent as the base figure for its overall goal for DBE participation, assuming that the types, sizes, and locations of USDOT-funded contracts that the agency awards in the time period that the goal will cover are similar to the types of USDOT-funded contracts that the agency awarded during the study period. For details about Metro’s base figure for its overall DBE goal, see Chapter 9.

**Differences from overall MBE/WBE availability.** The availability of potential DBEs for USDOT-funded contracts is slightly lower than the overall availability of minority- and woman-owned businesses that is presented in Figure 5-4. BBC’s calculation of the overall availability of minority- and woman-owned businesses includes three groups of minority- and woman-owned businesses that the study team did not count as potential DBEs when calculating the base figure:

- Minority- and woman-owned businesses that graduated from the DBE Program (that were not recertified);
- Minority- and woman-owned businesses that are not currently DBE-certified but that applied for DBE certification and have been denied; and
- Minority- and woman-owned businesses that are not currently DBE-certified that reported annual revenues over the most recent three years that were so high as to deem them ineligible for DBE certification.

In addition, the study team’s analyses for calculating the base figure for USDOT-funded contracts only included USDOT-funded prime contracts and subcontracts. The calculations for the overall availability of minority- and woman-owned businesses included both USDOT- and local-funded transportation prime contracts and subcontracts.

**Additional steps before Metro determines its overall DBE goal.** Metro must consider whether to make a step-2 adjustment to the base figure as part of determining its overall DBE goal. Step-2 adjustments can be upward or downward, but there is no requirement for Metro to make a step-2 adjustment as long as the agency can explain what factors it considered and why no adjustment was warranted. Chapter 9 discusses factors that Metro might consider in deciding whether to make a step-2 adjustment to the base figure.

**G. Implications for Any DBE Contract Goals**

If Metro determines that the use of DBE contract goals is appropriate in the future, it might use information from the availability analysis when setting any contract-specific DBE goals. It might
also use information from a current DBE directory, a current bidders list, or other sources that could provide information about the availability of minority- and woman-owned businesses to participate in particular contracts. The Federal DBE Program provides agencies that use DBE contract goals with some flexibility in how they set those goals. DBE goals on some contracts might be higher than the overall DBE goal. DBE goals on other contracts might be lower than the overall DBE goal. In addition, there may be some USDOT-funded contracts for which setting DBE contract goals would not be appropriate.