

# APPENDIX E.

## General Approach to Availability Analysis

The study team used a *custom census* approach to analyze the availability of minority- and woman-owned businesses for construction, professional services, and goods and other services prime contracts and subcontracts that the Los Angeles County Metropolitan Transportation Authority (Metro) awarded between January 1, 2011 and December 31, 2015. Appendix E expands on the information presented in Chapter 5 to describe the study team's:

- A. General approach to collecting availability information;
- B. Development of the business establishments list;
- C. Development of the survey instrument;
- D. Execution of surveys; and
- E. Additional considerations related to measuring availability.

### A. General Approach to Collecting Availability Information

BBC Research & Consulting (BBC) contracted with Customer Research International (CRI) to conduct telephone surveys with thousands of business establishments in Los Angeles County, which BBC identified as the *relevant geographic market area* for Metro contracting. Business establishments that CRI surveyed were businesses with locations in Los Angeles County that the study team identified as doing work in fields closely related to the types of contracts that Metro awarded during the study period. The study team began the survey process by determining the subindustries for each relevant Metro contract element and identifying 8-digit Dun & Bradstreet (D&B) work specialization codes that best corresponded to those subindustries.<sup>1</sup> The study team then collected information about local business establishments that D&B listed as having their primary lines of business within those work specializations. Rather than drawing a sample of business listings from D&B, the study team attempted to contact every business establishment listed under relevant work specialization codes.<sup>2</sup>

As part of the telephone survey effort, the study team attempted to contact 7,558 business establishments in the local marketplace that do work that is relevant to Metro contracting. That total included 3,649 construction establishments; 1,926 professional services establishments; and 1,983 goods and other services establishments. The study team was able to successfully contact 2,734 of those establishments—42 percent of the establishments with valid phone

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<sup>1</sup> D&B has developed 8-digit industry codes that provide more precise definitions of business specializations than the 4-digit Standard Industrial Classification (SIC) codes or the North American Industry Classification System (NAICS) codes that the federal government has prepared.

<sup>2</sup> Because D&B organizes its database by *business establishment* and not by “business” or “firm,” BBC purchased business listings in that fashion. Therefore, in many cases, the study team purchased information about multiple locations of a single business and called all of those locations. BBC’s method for consolidating information for different establishments that were associated with the same business is described later in Appendix C.

listings (1,063 business establishments did not have valid phone listings). Of business establishments that the study team contacted successfully, 959 establishments completed availability surveys.

## **B. Development of the Business Establishments List**

The study team did not expect every business establishment that it contacted to be potentially available for Metro work. The study team's goal was to develop—with a high degree of precision—unbiased estimates of the availability of minority- and woman-owned businesses for the types of contracts that Metro awarded during the study period. In fact, for some subindustries, BBC anticipated that relatively few businesses would be available to perform that type of work for Metro.

In addition, BBC did not design the research effort so that the study team would contact every local business possibly performing construction, professional services, or goods and other services work. To do so would have required the study team to include subindustries that are only marginally related or unrelated to the types of contracts that Metro awarded during the study period. Moreover, some business establishments working in relevant subindustries may have been missing from corresponding D&B or other listings.

BBC determined the types of work involved in Metro prime contracts by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period. Figure E-1 lists the 8-digit work specialization codes within construction, professional services, or goods and other services that the study team determined were most related to the contract dollars that Metro awarded during the study period and that BBC considered as part of the availability analysis. The study team grouped those specializations into distinct subindustries, which are presented as headings in Figure E-1.

## **C. Development of the Survey Instrument**

BBC drafted an availability survey instrument to collect business information from construction, professional services, or goods and other services business establishments in Los Angeles County. As an example, the survey instrument that the study team used with construction establishments is presented at the end of Appendix E. The study team modified the construction survey instrument slightly for use with establishments working in other industries in order to reflect terms more commonly used in those industries (e.g., the study team substituted the words “prime contractor” and “subcontractor” with “prime consultant” and “subconsultant” when surveying professional services establishments).<sup>3</sup>

**Survey structure.** The availability survey included 17 sections, and CRI attempted to cover all sections with each business establishment that they successfully contacted and that was willing to complete a survey. Surveyors did not know the race/ethnicity or gender of business owners when calling business establishments.

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<sup>3</sup> BBC also developed a fax and e-mail version of the survey instrument for business establishments that reported a preference to complete the survey in those formats.

**Figure E-1.**  
**Subindustries included in the availability analysis**

Industry Code	Industry Description	Industry Code	Industry Description
<b>Construction</b>			
<b>Asphalt and concrete supply</b>		<b>Landscape services</b>	
14420000	Construction sand and gravel	07829903	Landscape contractors
32720300	Precast terrazzo or concrete products		
<b>Building construction</b>		<b>Other construction</b>	
15420101	Commercial and office building, new construction	17110301	Fire sprinkler system installation
15429901	Custom builders, non-residential	17990702	Parking lot maintenance
<b>Electrical work</b>		<b>Painting and striping</b>	
17319903	General electrical contractor	17210200	Commercial painting
<b>Excavation and drilling</b>		<b>Plumbing, heating, and air</b>	
17949901	Excavation and grading, building construction	17110000	Plumbing, heating, air-conditioning
<b>Fencing, guardrails, and signs</b>		<b>Railroad construction</b>	
17999912	Fence construction	16290200	Railroad and subway construction
<b>Flagging services</b>		<b>Rebar and reinforcing steel</b>	
73599912	Work zone traffic equipment (flags, cones, barrels, etc.)	17910000	Structural steel erection
<b>Heavy construction</b>		<b>Roofing, siding, and sheetmetal work</b>	
16220000	Bridge, tunnel, and elevated highway construction	17610000	Roofing, siding, and sheetmetal work
16119901	General contractor, highway and street construction	<b>Trucking</b>	
16290000	Heavy construction, nec	42129905	Dump truck haulage
16110000	Highway and street construction	42120000	Local trucking, without storage
<b>Heavy construction equipment rental</b>		<b>Water, sewer, and utility lines</b>	
50820000	Construction and mining machinery	16230302	Sewer line construction
73530000	Heavy construction equipment rental	16230203	Telephone and communication line construction
35360000	Hoists, cranes, and monorails	16239906	Underground utilities contractor
<b>Land site prep</b>		16230300	Water and sewer line construction
17990900	Building site preparation	<b>Wrecking and demolition</b>	
16299902	Earthmoving contractor	17950000	Wrecking and demolition work

**Figure E-1.**  
**Subindustries included in the availability analysis (continued)**

Industry Code	Industry Description	Industry Code	Industry Description
<b>Professional Services</b>			
<b>Construction management</b>		<b>Public finance</b>	
87419902	Construction management	87420401	Banking and finance consultant
<b>Engineering</b>		<b>Surveying and mapping</b>	
87110402	Civil engineering	87130000	Surveying services
87110000	Engineering services	<b>Transportation consulting</b>	
<b>Environmental research and consulting</b>		87420410	Transportation consultant
87489905	Environmental consultant	87480200	Urban planning and consulting services
<b>Landscape architecture</b>			
07810201	Landscape architects		
<b>Goods and Other Services</b>			
<b>Cleaning and janitorial services</b>		<b>Industrial equipment and machinery</b>	
17990501	Cleaning building exteriors, nec	35890201	Car washing machinery
73490104	Janitorial service, contract basis	<b>Office goods</b>	
<b>Cleaning supplies</b>		50440000	Office equipment
50870304	Janitors' supplies	<b>Other goods and supplies</b>	
<b>Communications equipment</b>		50440200	Copying equipment
38610300	Cameras and related equipment	<b>Paints and allied products</b>	
<b>Electrical supplies</b>		28510000	Paints and allied products
36290000	Electrical industrial apparatus, nec	<b>Passenger Transport</b>	
36690206	Traffic signals, electric	41190000	Local passenger transportation, nec
36690200	Transportation signaling devices	<b>Pest control</b>	
<b>Elevator goods and services</b>		73420200	Pest control services
17969901	Elevator installation and conversion		
50840803	Elevators		
76992501	Elevators: inspection, service, and repair		

**Figure E-1.**  
**Subindustries included in the availability analysis (continued)**

Industry Code	Industry Description	Industry Code	Industry Description
<b>Goods and Other Services (continued)</b>			
<b>Petroleum products</b>		<b>Uniforms and vestments</b>	
51720203	Gasoline	56990102	Uniforms
49240000	Natural gas distribution		
51729905	Petroleum brokers	<b>Vehicle parts</b>	
51720000	Petroleum products, nec	55310100	Auto and truck equipment and parts
		35190000	Internal combustion engines, nec
<b>Security and safety supplies</b>		25310303	Seats, automobile
59990103	Safety supplies and equipment	37130000	Truck and bus bodies
<b>Security services</b>		37130102	Truck bodies (motor vehicles)
73810101	Armored car services	37130100	Truck bodies and parts
73829903	Protective devices, security	<b>Waste services</b>	
73810105	Security guard service	17990500	Exterior cleaning, including sandblasting
		49530100	Hazardous waste collection and disposal
<b>Towing</b>			
75490301	Towing service, automotive		
75490300	Towing services		

Source: BBC Research & Consulting.

**1. Identification of purpose.** The surveys began by identifying Metro as one of the survey sponsors and describing the purpose of the study (e.g., “developing a list of companies interested in providing construction-related services for state or local government agencies or for public colleges in Los Angeles County”).

**2. Verification of correct business name.** The surveyor verified that he or she had reached the correct business, and if not, inquired about the correct contact information for the correct business. When the business name was not correct, surveyors asked if the respondent knew how to contact the business. CRI followed up with the desired company based on the new contact information (see areas “X” and “Y” of the availability survey instrument at the end of Appendix E).

**3. Verification of work related to relevant projects.** The surveyor asked whether the organization does work or provides materials related to construction, maintenance, or design (Question A1). Surveyors continued the survey with businesses that responded “yes” to that question.<sup>4</sup>

**4. Verification of for-profit business status.** The surveyor asked whether the organization was a for-profit business as opposed to a government or nonprofit entity (Question A2). Surveyors continued the survey with businesses that responded “yes” to that question.

**5. Confirmation of main lines of business.** Businesses confirmed their main lines of business according to D&B (Question A4a). If D&B’s work specialization codes were incorrect, businesses then described their main lines of business (Question A4b). After the survey was complete, as necessary, BBC coded new information on main lines of business into appropriate 8-digit D&B work specialization codes.

**6. Sole location or multiple locations.** Because the study team surveyed business establishments and not businesses or firms, the surveyor asked business owners or managers if their businesses had other locations (Question A5) and whether their establishments were affiliates or subsidiaries of other businesses (Questions A6 and A7).

**7. Past bids or work with government agencies and private sector organizations.** The surveyor asked about bids and work on past government and private sector contracts. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B1 through B8).<sup>5</sup>

**8. Qualifications and interest in future work.** The surveyor asked about businesses’ qualifications and interest in future work with state or local government agencies or public colleges in Indiana. CRI asked those questions in connection with both prime contracts and subcontracts (Questions B9 through B12).<sup>6</sup>

**9. Geographic areas.** The surveyor asked questions about the geographic regions within Indiana in which businesses serve customers (Question C1).

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<sup>4</sup> Goods and other services businesses were not asked questions about whether they work or provides materials related to construction, maintenance, or design.

<sup>5</sup> Goods and other services businesses were not asked questions about subcontract work.

<sup>6</sup> Goods and other services businesses were not asked questions about subcontract work.

**10. Year established.** The surveyor asked businesses to identify the approximate year in which they were established (Question D1).

**11. Largest contracts.** The study team asked businesses to identify the value of the largest contract on which they had bid on or had been awarded during the past five years. CRI asked those questions for both prime contracts and subcontracts (Questions D2 through D4).<sup>7</sup>

**12. Ownership.** The surveyor asked whether businesses were at least 51 percent owned and controlled by women and/or minorities. If businesses indicated that they were minority-owned, they were also asked about the race/ethnicity of their business' ownership (Questions E1 through E3). The study team confirmed that information through several other data sources including:

- The California Department of Transportation directory of certified minority- and woman-owned business enterprises (MBE/WBEs);
- Metro and other participating entities' vendor data;
- Metro staff review; and
- Information from D&B and other sources.

When information about race/ethnicity or gender of ownership conflicted between sources, the study team reconciled that information through follow-up telephone calls with the businesses.

**13. Business revenue.** The surveyor asked several questions about the size of businesses in terms of their revenues. For businesses with multiple locations, the Business Revenue section also asked about their revenues and number of employees across all locations (Questions F1 through F3).

**14. Potential barriers in the marketplace.** The surveyor asked an open-ended question concerning general insights about conditions in the local marketplace (Question G1). In addition, the survey included a question asking whether respondents would be willing to participate in a follow-up interview about conditions in the local marketplace (Question G2).

**15. Contact information.** The survey concluded with questions about the participant's name and position with the organization (Questions H1 and H2).

## **D. Execution of Surveys**

BBC held planning sessions via telephone with CRI executives and surveyors prior to conducting the availability surveys. CRI conducted all surveys in 2017. CRI programmed the surveys, conducted them via telephone, and provided BBC with weekly data reports. To minimize non-response, CRI made up to five attempts during different times of the day and on different days of the week to successfully reach each business establishment. CRI attempted to survey an available company representative such as the owner, manager, chief financial officer, or other key official who could provide accurate and detailed responses to survey questions.

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<sup>7</sup> Goods and other services businesses were not asked questions about subcontract work.

**Establishments that the study team successfully contacted.** Figure E-2 presents the disposition of the 7,582 business establishments that the study team attempted to contact for availability surveys and how that number resulted in the 2,755 establishments that the study team was able to successfully contact.

**Figure E-2.**  
Disposition of attempts to survey business establishments

Note:

CRI made up to five attempts to complete a survey with each establishment.

Source:

BBC Research & Consulting availability analysis.

	Number of firms	Percent of business listings
Beginning list	7,582	
Less duplicate phone numbers	147	
Less non-working phone numbers	668	
Less wrong number/business	251	
Unique business listings with working phone numbers	6,516	100.0 %
Less no answer	3207	49.2
Less could not reach responsible staff member	457	7.0
Less language barrier	97	1.5
<b>Establishments successfully contacted</b>	<b>2,755</b>	<b>42.3 %</b>

**Non-working or wrong phone numbers.** Some of the business listings that the study team purchased from D&B and that CRI attempted to contact were:

- Duplicate phone numbers (147 listings);
- Non-working phone numbers (668 listings); or
- Wrong numbers for the desired businesses (251 listings).

Some non-working phone numbers and wrong numbers resulted from businesses going out of business or changing their names and phone numbers between the time that D&B listed them and the time that the study team attempted to contact them.

**Working phone numbers.** As shown in Figure E-2, there were 6,516 business establishments with working phone numbers that CRI attempted to contact. CRI was unsuccessful in contacting many of those businesses for various reasons:

- CRI could not reach anyone after five attempts at different times of the day and on different days of the week for 3,207 establishments.
- CRI could not reach a responsible staff member after five attempts at different times of the day on different days of the week for 457 establishments.
- CRI could not conduct the availability survey due to language barriers for 97 establishments.
- CRI sent hardcopy fax or e-mail availability surveys upon request but did not receive completed surveys from 236 establishments.

After taking those unsuccessful attempts into account, CRI was able to successfully contact 2,755 business establishments, or about 42 percent of establishments with valid phone listings.



**Establishments included in the availability database.** Figure E-3 presents the disposition of the 2,755 business establishments that CRI successfully contacted and how that number resulted in the 582 businesses that the study team included in the availability database and that the study team considered available for Metro and other entity work.

**Figure E-3.**  
**Disposition of successfully contacted business establishments**

	Number of Establishments
Establishments successfully contacted	2,755
Less establishments not interested in discussing availability for Metro work	1,415
Less unreturned fax/email surveys	236
Establishments that completed interviews about firm characteristics	1,104
Less no relevant work	241
Less not a for-profit business	13
Less line of work outside scope	9
Less no past bid/award	167
Less no interest in future work	76
Less established after study period	6
Less multiple establishments	10
<b>Establishments potentially available for entity work</b>	<b>582</b>

Source: BBC Research & Consulting availability analysis.

**Establishments not interested in discussing availability for Metro work.** Of the 2,555 business establishments that the study team successfully contacted, 1,415 establishments were not interested in discussing their availability for Metro work. In total, 1,104 (43%) successfully-contacted business establishments completed availability surveys.

**Establishments available for entity work.** The study team only deemed a portion of the business establishments that completed availability surveys as available for the prime contracts and subcontracts that Metro and other entities participating in the disparity study awarded during the study period. The study team excluded many of the business establishments that completed surveys from the availability database for various reasons:

- BBC excluded 241 establishments that indicated that their businesses were not involved in relevant contracting work.
- Of the establishments that completed availability surveys, 13 indicated that they were not a for-profit business. The survey ended when respondents reported that their establishments were not for-profit businesses.
- BBC excluded 9 establishments that indicated that their businesses were involved in construction, professional services, or goods and other services work but reported that their main lines of business were outside of the study scope.
- BBC excluded 167 establishments that reported not having bid on or been awarded contracts within the past five years.

- BBC excluded 76 establishments that reported not being qualified or interested in either prime contracting or subcontracting opportunities with state or local government agencies in Indiana.
- BBC excluded 6 business establishments that reported being established in 2016 or later. Those business establishments would not have been available for contract elements that Metro or other entities awarded during the study period.
- Ten establishments represented different locations of the same businesses. Prior to analyzing results, BBC combined responses from multiple locations of the same business into a single data record.

After those exclusions, BBC compiled a database of 582 businesses that were considered potentially available for Metro and other entity work.

**Coding responses from multi-location businesses.** Responses from different locations of the same business were combined into a single summary data record according to several rules:

- If any of the establishments reported bidding or working on a contract within a particular subindustry, the study team considered the business to have bid or worked on a contract in that subindustry.
- The study team combined the different roles of work that establishments of the same business reported (i.e., prime contractor or subcontractor) into a single response corresponding to the appropriate subindustry. For example, if one establishment reported that it works as a prime contractor and another establishment reported that it works as a subcontractor, then the study team considered the business as available for both prime contracts and subcontracts within the relevant subindustry.<sup>8</sup>
- Except when there were large discrepancies among individual responses regarding establishment dates, BBC used the earliest founding date that establishments of the same business provided. In cases of large discrepancies, BBC followed up with the business establishments to obtain accurate establishment date information.
- BBC considered the largest contract that any establishments of the same business reported having bid or worked on as the business' relative capacity (i.e., the largest contract for which the business could be considered available).
- BBC considered the largest revenue total that any establishments of the same business reported as the business' revenue cap (for purposes of determining status as a potential DBE).
- BBC determined the number of employees for businesses by calculating the mode or the mean of responses from its establishments.
- BBC coded businesses as minority- or woman-owned if the majority of its establishments reported such status.

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<sup>8</sup> Goods and other services businesses were not asked questions about subcontract work.

## E. Additional Considerations Related to Measuring Availability

The study team made several additional considerations related to its approach to measuring availability to ensure that the study team’s estimates of the availability of minority- and woman-owned businesses for Metro work were as accurate as possible.

**Not providing a count of all businesses available for Metro work.** The purpose of the availability analysis was to provide precise and representative estimates of the percentage of Metro contracting dollars for which minority- and woman-owned businesses are available. The availability analysis did not provide a comprehensive listing of every business that could be available for Metro work and should not be used in that way. Federal courts have approved BBC’s use of that approach to measuring availability. In addition, federal regulations, such as the United States Department of Transportation’s (USDOT’s) “Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program” recommend similar approaches to measuring availability for agencies implementing minority- and woman-owned owned business programs.<sup>9</sup>

**Not basing the availability analysis on MBE/WBE or DBE directories, prequalification lists, or bidders lists.** Federal guidance, such as USDOT guidance for determining the availability of minority- and woman-owned businesses, recommends dividing the number of businesses in an entity’s certification directory by the total number of businesses in the marketplace, as reported in U.S. Census data. As another option, USDOT suggests using a list of prequalified businesses or a bidders list to estimate the availability of minority- or woman-owned businesses for an entity’s prime contracts and subcontracts. The primary reason why the study team rejected such approaches when measuring the availability of minority- and woman-owned businesses for Metro work is that dividing a simple count of certified businesses by the total number of businesses does not provide the data on business characteristics that the study team desired for the disparity study. The methodology applied in this study takes a custom census approach to measuring availability and adds several layers of refinement to a simple head count approach. For example, the surveys provided data on qualifications, relative capacity, and interest in Metro work for each business, which allowed the study team to take a more refined approach to measuring availability. Court cases involving implementations of minority- and woman-owned business programs have approved the use of such approaches to measuring availability.<sup>10</sup>

**Using D&B lists as the sample frame.** BBC began its custom census approach of measuring availability with D&B business lists. D&B does not require businesses to pay a fee to be included in its listings—it is completely free to listed businesses. D&B provides the most comprehensive private database of business listings in the United States. Even so, the database does not include all establishments operating in Indiana:

- There can be a lag between formation of a new business and inclusion in D&B, meaning that the newest businesses may be underrepresented in the sample frame. Based on information

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<sup>9</sup> Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, <http://www.osdbu.dot.gov/dbeprogram/tips.cfm>.

<sup>10</sup> Note that BBC used MBE/WBE and DBE certification directories and other sources of information to confirm information about the race/ethnicity and gender of business ownership that it obtained from availability surveys.

from BBC's survey effort, newly formed businesses are more likely to be minority- or woman-owned, suggesting that minority- and woman-owned businesses might be underrepresented in the final availability database.

- Although D&B includes home-based businesses, those businesses are more difficult to identify and are thus somewhat less likely than other businesses to be included in D&B listings. Small, home-based businesses are more likely than large businesses to be minority- or woman-owned, which again suggests that minority- and woman-owned businesses might be underrepresented in the final availability database.

BBC is not able to quantify the degree to which minority- and woman-owned businesses were underrepresented in the final availability database, if at all. However, estimates presented in the disparity study should be considered conservative estimates of the availability of minority- and woman-owned businesses. Note that there are no alternative business listings that would better address such issues.

**Selection of specific subindustries.** Defining subindustries based on specific work specialization codes (e.g., NAICS or D&B industry codes) is a standard step in analyzing businesses in an economic sector. Government and private sector economic data are typically organized according to such codes. As with any such research, there are limitations when choosing specific D&B work specialization codes to define sets of establishments to be surveyed. For example, it was not possible for BBC to include all businesses possibly doing work in relevant industries without conducting surveys with nearly every business in the relevant geographic market area.

In addition, some industry codes are imprecise and overlap with other business specialties. Some businesses span several types of work, even at the 8-digit level of specificity. That overlap can make classifying businesses into single main lines of business difficult and imprecise. When the study team asked business owners and managers to identify main lines of business, they often gave broad answers. For those and other reasons, BBC collapsed many of the work specialization codes into broader subindustries to more accurately classify businesses in the availability database.

**Non-response bias.** An analysis of non-response bias considers whether businesses that were not successfully surveyed are systematically different from those that were successfully surveyed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

**Research sponsorship.** Surveyors introduced themselves by identifying Metro as one of the survey sponsors, because businesses may be less likely to answer somewhat sensitive business questions if the surveyor was unable to identify the sponsor. In past survey efforts—particularly those related to availability studies—BBC has found that identifying the sponsor substantially increases response rate.

**Work specializations.** Businesses in highly mobile fields, such as trucking, may be more difficult to reach for availability surveys than businesses more likely to work out of fixed offices (e.g., engineering businesses). That assertion suggests that response rates may differ by work specialization. Simply counting all surveyed businesses across work specializations to estimate the availability of minority- and woman-owned businesses would lead to estimates that were biased in favor of businesses that could be easily contacted by telephone. However, work specialization as a potential source of non-response bias in the BBC availability analysis is minimized, because the availability analysis examines businesses within particular work fields before calculating overall availability estimates. Thus, the potential for businesses in highly mobile fields to be less likely to complete a survey is less important, because the study team calculated availability estimates within those fields before combining them in a dollar-weighted fashion with availability estimates from other fields. Work specialization would be a greater source of non-response bias if particular subsets of businesses within a particular field were less likely than other subsets to be easily contacted by telephone.

**Language barriers.** Metro contracting documents are in English and are not in other languages. For that reason, the study team made the decision to only include businesses able to complete surveys in English in the availability analysis. Businesses unable to complete the survey due to language barriers represented less than one percent of contacted businesses.

**Response reliability.** Business owners and managers were asked questions that may be difficult to answer including questions about their revenues. For that reason, the study team collected corresponding D&B information for their establishments and asked respondents to confirm that information or provide more accurate estimates. Further, respondents were not typically asked to give absolute figures for difficult questions such as revenue and capacity. Rather, they were given ranges of dollar figures. BBC explored the reliability of survey responses in a number of ways. For example:

- BBC reviewed data from the availability surveys in light of information from other sources such as vendor information that the study team collected from Metro and other participating entities. For example, certification databases include data on the race/ethnicity and gender of the owners of MBE/WBE- and DBE-certified businesses. The study team compared survey responses concerning business ownership with that information.
- BBC examined Metro contract data to further explore the largest contracts and subcontracts awarded to businesses that participated in the availability surveys. BBC compared survey responses about the largest contracts that businesses won during the past five years with actual Metro contract data.
- Metro reviewed vendor data that the study team collected and compiled as part of the availability analysis and provided feedback regarding its accuracy.

# LA Metro Disparity Study — Availability Survey Instrument [Construction]

Hello. My name is *[interviewer name]* from Customer Research International. We are calling on behalf of the Los Angeles County Metropolitan Transportation Authority (Metro).

This is not a sales call. Metro is developing a list of companies involved in construction, maintenance, or design on a wide range of projects including transit facilities, rail lines, parking facilities, paving, concrete work, tunnels, and bridges. Who can I speak with to get the information we need from your firm?

*[AFTER REACHING AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY INCLUDING THIS STATEMENT AND BEGIN WITH QUESTIONS]*

*[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO METRO'S EXISTING DATA ON COMPANIES INTERESTED IN WORKING WITH THE DEPARTMENT]*

*[IF ASKED ABOUT CONFIDENTIALITY, PLEASE RESPOND WITH:*

**We will make every effort to maintain all the confidentiality of the information gathered in this survey.**

**X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is *[firm name]*?**

1=RIGHT COMPANY – **SKIP TO A1**

2=NOT RIGHT COMPANY

99=REFUSE TO GIVE INFORMATION – **TERMINATE**

**Y1. What is the name of this firm?**

1=VERBATIM

**Y2a. Is *[new firm name]* the same as *[firm name]* doing business under a new name?**

1=Yes, same firm doing business under a different name

2=No, different firm – **SKIP TO Y3**

98=No, does not have information – **TERMINATE**

99=Refused to give information – **TERMINATE**

**Y2b. Was [firm name] bought or sold, or did it change ownership?**

1=Yes, company bought/sold/changed ownership

2=No, same ownership

98=No, does not have information – **TERMINATE**

99=Refused to give information – **TERMINATE**

**Y3. Can you give me the complete address or city for [new firm name]?**

*(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT):*

. *STREET ADDRESS*

. *CITY*

. *STATE*

. *ZIP*

1=VERBATIM

**Y5. Can you give me the name of the owner or manager of [new firm name]?**

*(ENTER UPDATED NAME)*

1=VERBATIM

**Y6. Can I have a telephone number for him/her?**

*(ENTER UPDATED PHONE)*

1=VERBATIM

**Y8. Do you work for this new company?**

1=YES

2=NO – **TERMINATE**

**A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance, or design on transportation-related projects. Is this correct?**

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTENANCE OR DESIGN SUCH AS TRANSIT FACILITIES, RAIL LINES, PARKING FACILITIES, PAVING, CONCRETE WORK, TUNNELS, BRIDGES, AND OTHER TRANSPORTATION-RELATED PROJECTS. IT ALSO INCLUDES TRUCKING AND HAULING)

(NOTE TO INTERVIEWER – INCLUDES HAVING DONE WORK, TRYING TO SELL THIS WORK, OR PROVIDING MATERIALS)

1=Yes

2=No - **TERMINATE**

**A2. Let me confirm that [firm name / new firm name] is a business, as opposed to a non-profit organization, a foundation, or a government office. Is that correct?**

1=Yes, a business

2=No, other - **TERMINATE**

**A3. Let me also confirm what kind of business this is. The information we have from Dun & Bradstreet indicates that your main line of business is [SIC Code description]. Is this correct?**

(NOTE TO INTERVIEWER – IF ASKED, DUN & BRADSTREET OR D&B, IS A COMPANY THAT COMPILES BUSINESS INFORMATION THROUGHOUT THE COUNTRY)

1=Yes – **SKIP TO A5**

2=No

98=(DON'T KNOW)

99=(REFUSED)

**A4. What would you say is the main line of business at [firm name / new firm name]?**

(NOTE TO INTERVIEWER: IF RESPONDENT INDICATES THAT FIRM'S MAIN LINE OF BUSINESS IS "GENERAL CONSTRUCTION" OR "GENERAL CONTRACTOR," PROBE TO FIND OUT IF MAIN LINE OF BUSINESS IS CLOSER TO INDUSTRIAL BUILDING CONSTRUCTION OR HIGHWAY AND ROAD CONSTRUCTION)

(ENTER VERBATIM RESPONSE)

1=VERBATIM

**A5. Is this the sole location for your business, or do you have offices in other locations?**



1=Sole location

2=Have other locations

98=(DON'T KNOW)

99=(REFUSED)

**A6. Is your company a subsidiary or affiliate of another firm?**

1=Independent – **SKIP TO B1**

2=Subsidiary or affiliate of another firm

98=(DON'T KNOW) – **SKIP TO B1**

99=(REFUSED) – **SKIP TO B1**

**A7. What is the name of your parent company?**

1=ENTER NAME

98=(DON'T KNOW)

99=(REFUSED)

**A8. ENTER NAME OF PARENT COMPANY**

1=VERBATIM

**B1. Next, I have a few questions about your company's role in transportation-related construction, maintenance, or design. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a city, state, county, or local government agency in California?**

1=Yes

2=No – **SKIP TO B3**

98=(DON'T KNOW) – **SKIP TO B3**

99=(REFUSED) – **SKIP TO B3**

**B2. Were those bids or price quotes to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

*[MULTIPUNCH]*

1=Prime contractor/consultant

2=Subcontractor/consultant

3=Trucker/hauler

98=(DON'T KNOW)

4=Supplier (or manufacturer)

99=(REFUSED)

**B3. During the past five years, has your company received an award for work on any part of a contract for a city, state, county, or local government agency in California?**

1=Yes

2=No – **SKIP TO B5**

98=(DON'T KNOW) – **SKIP TO B5**

99=(REFUSED) – **SKIP TO B5**

**B4. Were those awards to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

*[MULTIPUNCH]*

1=Prime contractor/consultant

2=Subcontractor/consultant

3=Trucker/hauler

4=Supplier (or manufacturer)

98=(DON'T KNOW)

99=(REFUSED)

**B5. During the past five years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in California?**

1=Yes

2=No – **SKIP TO B7**

98=(DON'T KNOW) – **SKIP TO B7**

99=(REFUSED) – **SKIP TO B7**

**B6. Were those bids or price quotes to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

*[MULTIPUNCH]*

1=Prime contractor/consultant

2=Subcontractor/consultant

3=Trucker/hauler

98=(DON'T KNOW)

4=Supplier (or manufacturer)

99=(REFUSED)

**B7. During the past five years, has your company received an award for work on any part of a contract for a private sector organization in California?**

1=Yes

2=No – **SKIP TO B9**

98=(DON'T KNOW) – **SKIP TO B9**

99=(REFUSED) – **SKIP TO B9**

**B8. Were those awards to work as a prime contractor/consultant, a subcontractor/consultant, a trucker/hauler, or as a supplier?**

*[MULTIPUNCH]*

1=Prime contractor/consultant

4=Supplier (or manufacturer)

2=Subcontractor/consultant

98=(DON'T KNOW)

3=Trucker/hauler

99=(REFUSED)

**B9. Please think about future transportation-related work as you answer the following few questions. Is your company qualified and interested in working with Metro as a prime contractor/consultant?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**B10. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in California as a prime contractor?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**B11. Is your company qualified and interested in working with Metro as a subcontractor/consultant, trucker/hauler, or supplier?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**B12. Is your company qualified and interested in working with cities, counties, or other local transportation agencies in California as a subcontractor, trucker/hauler, or supplier?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**C1. Now I want to ask you about the geographic area your company serves within California. As you answer, think about whether your company could be involved in potential transportation-related projects in that area. Could your company do work in the Los Angeles County area?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**D1. About what year was your firm established?**

*(RECORD FOUR-DIGIT YEAR, e.g., '1977')*

9998=(DON'T KNOW)

9999=(REFUSED)

1=NUMERIC (1600-2015)

**D2. In rough dollar terms, what was the largest transportation-related contract or subcontract your company was awarded in California during the past five years?**

*(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)*

*(NOTE TO INTERVIEWER –INCLUDES CONTRACTS NOT YET COMPLETE)*

*(NOTE TO INTERVIEWER –READ CATEGORIES IF NECESSARY)*

- |  |  |
|--|--|
| 1=\$100,000 or less                      | 8=More than \$20 million to \$50 million     |
| 2=More than \$100,000 to \$500,000       | 9=More than \$50 million to \$100 million    |
| 3=More than \$500,000 to \$1 million     | 10= More than \$100 million to \$200 million |
| 4=More than \$1 million to \$2 million   | 11=\$200 million or greater                  |
| 5=More than \$2 million to \$5 million   | 97=(NONE)                                    |
| 6=More than \$5 million to \$10 million  | 98=(DON'T KNOW)                              |
| 7=More than \$10 million to \$20 million | 99=(REFUSED)                                 |

**D3. Was that the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in California during the past five years?**

- 1=Yes – **SKIP TO E1**
- 2=No
- 98=(DON'T KNOW) – **SKIP TO E1**
- 99=(REFUSED) – **SKIP TO E1**

**D4. What was the largest transportation-related contract or subcontract that your company bid on or submitted quotes for in California during the past five years?**

*(NOTE TO INTERVIEWER – IF ASKED, INCLUDES EITHER PRIVATE SECTOR OR PUBLIC SECTOR)*

*(NOTE TO INTERVIEWER – READ CATEGORIES IF NECESSARY)*

1=\$100,000 or less

8=More than \$20 million to \$50 million

2=More than \$100,000 to \$500,000

9=More than \$50 million to \$100 million

3=More than \$500,000 to \$1 million

10= More than \$100 million to \$200 million

4=More than \$1 million to \$2 million

11=\$200 million or greater

5=More than \$2 million to \$5 million

97=(NONE)

6=More than \$5 million to \$10 million

98=(DON'T KNOW)

7=More than \$10 million to \$20 million

99=(REFUSED)

**E1. My next questions are about the ownership of the business. A business is defined as woman-owned if more than half — that is, 51 percent or more — of the ownership and control is by women. By this definition, is [*firm name / new firm name*] a woman-owned business?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**E2. A business is defined as minority-owned if more than half — that is, 51 percent or more — of the ownership and control is Black American, Asian, Hispanic, Native American or another minority group. By this definition, is [*firm name || new firm name*] a minority-owned business?**

1=Yes

2=No – **SKIP TO F1**

3=(OTHER GROUP - SPECIFY)

98=(DON'T KNOW) – **SKIP TO F1**

99=(REFUSED) – **SKIP TO F1**

**E2. OTHER GROUP - SPECIFY**

1=VERBATIM

**E3. Would you say that the minority group ownership of your company is mostly Black American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?**

1=Black American

2=Asian Pacific American (persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong)

3=Hispanic American (persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race)

4=Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians)

5=Subcontinent Asian American (persons whose Origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka)

6=(OTHER - SPECIFY)

98=(DON'T KNOW)

99=(REFUSED)

**E3. OTHER - SPECIFY**

1=VERBATIM

**E4. A business is defined as veteran-owned if more than half—that is, 51 percent or more—of the ownership and control is by veterans. By this definition, is [*firm name* || *new firm name*] a veteran-owned business?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**F1. Dun & Bradstreet indicates that your company has about [*number*] employees working out of just your location. Is that an accurate estimate of your company's average employees over the last three years?**

(NOTE TO INTERVIEWER – INCLUDES EMPLOYEES WHO WORK AT THAT LOCATION AND THOSE WHO WORK FROM THAT LOCATION)

1=Yes – **SKIP TO F3**

2=No

98=(DON'T KNOW) – **SKIP TO F3**

99=(REFUSED) – **SKIP TO F3**

**F2. About how many employees did you have working out of just your location, on average, over the last three years?**

(RECORD NUMBER OF EMPLOYEES)

1=NUMERIC (1-999999999)

**F3. Dun & Bradstreet lists the average annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that an accurate estimate for your company's average annual gross revenue over the last three years?**

1=Yes – **SKIP TO F5**

2=No

98=(DON'T KNOW) – **SKIP TO F5**

99=(REFUSED) – **SKIP TO F5**

**F4. Roughly, what was the average annual gross revenue of your company, just considering your location, over the last three years? Would you say . . . (READ LIST)**

1=Less than \$1 Million

6=\$16.6 Million - \$18.5 Million

2=\$1 Million - \$4.5 Million

7=\$18.6 Million - \$24 Million

3=\$4.6 Million - \$7 Million

8=\$24.1 Million or more

4=\$7.1 Million - \$12 Million

98= (DON'T KNOW)

5=\$12.1 Million - \$16.5 Million

99= (REFUSED)

**F5. [ONLY IF A5 = 2] About how many employees did you have, on average, for all of your locations over the last three years?**



1=(ENTER RESPONSE)

98=(DON'T KNOW)

99=(REFUSED)

**F6. [ONLY IF A5 = 2] Roughly, what was the average annual gross revenue of your company, for all of your locations over the last three years? Would you say . . . (READ LIST)**

1=Less than \$1 Million

6=\$16.6 Million - \$18.5 Million

2=\$1 Million - \$4.5 Million

7=\$18.6 Million - \$24 Million

3=\$4.6 Million - \$7 Million

8=\$24.1 Million or more

4=\$7.1 Million - \$12 Million

98= (DON'T KNOW)

5=\$12.1 Million - \$16.5 Million

99= (REFUSED)

**G1. We're interested in whether your company has experienced barriers or difficulties in California associated with starting or expanding a business in your industry or with obtaining work. Do you have any thoughts to share on these topics?**

1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)

97=(NOTHING/NONE/NO COMMENTS)

98=(DON'T KNOW)

99=(REFUSED)

**G2. Finally, we're asking for general insights on starting and expanding a business in your industry or winning work in California. Do you have any thoughts to offer on these topics?**

1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)

97=(NOTHING/NONE/NO COMMENTS)

98=(DON'T KNOW)

99=(REFUSED)

**G3. Would you be willing to participate in a follow-up interview about any of these issues?**

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

**H1. Just a few last questions. What is your name?**

*(RECORD FULL NAME)*

1=VERBATIM

**H2. What is your position at [*firm name / new firm name*]?**

1=Receptionist

2=Owner

3=Manager

4=CFO

5=CEO

6=Assistant to Owner/CEO

7=Sales manager

8=Office manager

9=President

9=(OTHER - SPECIFY)

99=(REFUSED)

**H2. OTHER - SPECIFY**

1=VERBATIM

**H3. For purposes of receiving information from Metro, is your mailing address [*firm address*]:**

1=Yes – **SKIP TO H5**

2=No

98=(DON'T KNOW)

99=(REFUSED)

**H4. What mailing address should they use to get any materials to you?**

1=VERBATIM

**H5. What fax number could they use to fax any materials to you?**

1=NUMERIC (1000000000-9999999999)

**H6. What e-mail address could they use to get any materials to you?**

1=ENTER E-MAIL

97=(NO EMAIL ADDRESS)

98=(DON'T KNOW)

99=(REFUSED)

*(RECORD EMAIL ADDRESS) (VERIFY ADDRESS LETTER BY LETTER: EXAMPLE: 'John@CRI-RESEARCH.COM' SHOULD BE VERIFIED AS: J-O-H-N-at-C-R-I-hyphen-R-E-S-E-A-R-C-H-dot-com)*

1=VERBATIM

**Thank you very much for your participation. If you have any questions, please contact Tashai Smith at Metro. Ms. Smith's phone number is (213) 922-2128. Ms. Smith's email address is [SmithT@metro.net](mailto:SmithT@metro.net).**