

APPENDIX D.

Availability Survey

The study team analyzed MBE/WBE availability for City of Portland (“City”) and Portland Development Commission (PDC) construction and construction-related professional services contracts and subcontracts.^{1,2} Appendix D expands on the analysis presented in Chapter 5 by explaining:

- A. Overall approach;
- B. Development of list of business establishments;
- C. Development of questionnaire;
- D. Interview execution and performance;
- E. Additional considerations; and
- F. A summary of the above sections.

A. Overall Approach

BBC Research 7 Consulting (BBC) contracted with Customer Research International (CRI) to conduct telephone interviews with business establishments in the Portland Metropolitan Statistical Area (MSA). The business establishments interviewed were those identified in a Dun & Bradstreet (D&B) database as doing work in fields closely related to the types of construction and construction-related professional services work related to City and PDC contracts. D&B strives to list every company in business — its list of businesses and phone numbers represents the most comprehensive list of business establishments BBC could obtain.

The study team attempted to contact every listing in relevant industry codes rather than drawing a sample of listings from the D&B database.

- CRI attempted to reach 8,130 business listings via telephone. Repeated attempts were made to reach each business listing.
- The study team successfully contacted 3,726 business establishments, about 63 percent of the establishments with valid phone listings (about 2,200 listings were non-working, duplicate or wrong numbers).

¹ PDC professional services contracts are referred to as “personal services” contracts.

² The City’s construction-related professional services contracts are awarded through the Professional, Expert and Technical Services contracting process.

- About 1,700 establishments that were successfully contacted indicated they were not interested in participating in a discussion of availability for public sector work.
- Nearly 2,000 firms completed interviews about firm characteristics, their interest and qualifications for work in Portland, and other topics.
- After screening for qualifications, interest in future construction and construction-related professional services work, and other factors, BBC identified 1,536 firms as available for City construction and construction-related professional services work.

B. Development of List of Business Establishments

BBC developed a list of business establishments to contact for availability interviews based on a D&B database of establishments with locations in metropolitan Portland. The study team determined business specializations that accounted for most City construction and construction-related professional services work. BBC then identified the 8-digit D&B industry codes best corresponding to that work and collected information about Portland area firms that D&B listed as having their primary lines of business within those industries.

- The study team did not expect every firm in these lines of business to report that they were available for the City's construction or construction-related professional services work. In some subindustries, BBC anticipated that relatively few firms would perform that type of work.
- In the same vein, the study team did not design the research effort so that every firm possibly performing construction or construction-related professional services work would be called as part of the interviews. To do so would have required including subindustries that are only marginally related to City construction and construction-related professional services contracts.
- Some firms did not respond to the interview effort after multiple attempts to contact the firm. It is also possible that some firms were not included in the D&B database or were inaccurately coded within the database.
- Finally, only firms with Portland metropolitan area locations were included in the interviews.

For the above reasons, the interviews do not represent a complete census of all firms possibly available for City construction and construction-related professional services work. The study team's objective was to develop accurate, unbiased estimates of the relative availability of minority- and women-owned firms (MBE/WBEs) among firms doing business in the Portland area within the lines of work principally involved in the City's construction and construction-related professional services contracting. Although the interviews are not a complete census, the availability analysis might approach one when considering statistical reliability of results, as explained further in this appendix.

Identifying the relevant subindustries for Portland construction and construction-related professional services contracting. BBC determined the types of firms involved in City construction and construction-related professional services contracts by reviewing the dollars of City prime contracts and subcontracts going to different types of businesses. Appendix C describes the study team's collection and analysis of City contract and subcontract data.

D&B has developed 8-digit industry codes that provide more precise definitions of firm specializations than the 4-digit SIC codes or the NAICS codes that have been prepared by the federal government. Figure D-1 on the following page lists industry codes for construction and construction-related professional services firms that were contacted as part of the telephone interview process.

Figure D-1.
Construction and construction-related professional services work types included in the availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--|---|------------------------|---|
| Construction | | | |
| Highway and street construction | | Excavation | |
| 1611-0000 | Highway and street construction | 1611-0203 | Grading |
| 1611-0200 | Surfacing and paving | 1629-0400 | Land preparation construction |
| 1611-0204 | Highway and street paving contractor | 1794-0000 | Excavation work |
| 1611-0205 | Resurfacing contractor | 1794-9901 | Excavation and grading, building construction |
| 1611-9901 | General contractor, highway and street construction | 1799-0901 | Boring for building construction |
| 1611-9902 | Highway and street maintenance | | |
| 1622-9901 | Bridge construction | Concrete supply | |
| 1629-0202 | Railroad and railway roadbed construction | 3272-0000 | Concrete products, nec |
| 1771-0300 | Driveway, parking lot, and blacktop contractors | 3272-0303 | Concrete products, precast, nec |
| 1771-0301 | Blacktop (asphalt) work | 3272-0608 | Pipe, concrete or lined with concrete |
| 7389-9921 | Flagging service (traffic control) | 3272-9904 | Prestressed concrete products |
| | | 3273-0000 | Ready-mixed concrete |
| Bridge construction and repair | | Concrete work | |
| 1622-0000 | Bridge, tunnel, and elevated highway construction | 1611-0202 | Concrete construction: roads, highways, sidewalks, etc. |
| | | 1771-0000 | Concrete work |
| Building construction | | 1771-0100 | Stucco, gunite, and grouting contractors |
| 1522-0000 | Residential construction, nec | 1771-0103 | Guniting contractor |
| 1522-0101 | Apartment building construction | 1771-0200 | Curb and sidewalk contractors |
| 1541-0000 | Industrial buildings and warehouses | 1771-0201 | Curb construction |
| 1541-9902 | Factory construction | 1771-0202 | Sidewalk contractor |
| 1541-9905 | Industrial buildings, new construction, nec | 1771-0302 | Driveway contractor |
| 1541-9908 | Prefabricated building erection, industrial | 1771-9901 | Concrete pumping |
| 1541-9909 | Renovation, remodeling and repairs: industrial buildings | 1771-9902 | Concrete repair |
| 1541-9910 | Steel building construction | 1799-9911 | Erection and dismantling of forms for poured concrete |
| 1541-9912 | Warehouse construction | | |
| 1542-0000 | Nonresidential construction, nec | Electrical work | |
| 1542-0100 | Commercial and office building contractors | 1731-0000 | Electrical work |
| 1542-0101 | Commercial and office building, new construction | 1731-0300 | Communications specialization |
| 1542-0103 | Commercial and office buildings, renovation and repair | 1731-0302 | Fiber optic cable installation |
| 1542-0400 | Specialized public building contractors | 1731-0304 | Telephone and telephone equipment installation |
| 1542-9901 | Custom builders, non-residential | 1731-0305 | Voice, data, and video wiring contractor |
| 1542-9902 | Design and erection, combined: non-residential | 1731-0403 | Fire detection and burglar alarm systems specialization |
| 1791-0000 | Structural steel erection | 1731-9903 | General electrical contractor |
| 1791-9905 | Iron work, structural | 1731-9904 | Lighting contractor |
| Construction equipment rental | | Painting | |
| 7353-0000 | Heavy construction equipment rental | 1721-0200 | Commercial painting |
| 7353-9901 | Cranes and aerial lift equipment, rental or leasing | 1721-0201 | Exterior commercial painting contractor |
| 7359-9912 | Work zone traffic equipment (flags, cones, barrels, etc.) | 1721-0300 | Industrial painting |
| | | 1721-0303 | Pavement marking contractor |
| Landscaping | | Trucking | |
| 0782-9903 | Landscape contractors | 4212-0000 | Local trucking, without storage |
| | | 4212-9905 | Dump truck haulage |
| Roofing | | 4213-9905 | Heavy machinery transport |
| 1761-0000 | Roofing, siding, and sheetmetal work | 4214-0000 | Local trucking with storage |
| 1761-0100 | Roofing and gutter work | | |
| 1761-0103 | Roofing contractor | | |

Figure D-1 (continued).
Construction and construction-related professional services work types included in the availability interviews

| Industry code | Industry description | Industry code | Industry description |
|---|---|---------------------------------------|--|
| Construction | | | |
| Water, sewer and utility line construction | | Plumbing and HVAC | |
| 1622-9903 | Tunnel construction | 1711-0000 | Plumbing, heating, air-conditioning |
| 1623-0000 | Water, sewer, and utility lines | 1711-0200 | Plumbing contractors |
| 1623-0300 | Water and sewer line construction | 1711-0301 | Fire sprinkler system installation |
| 1623-0302 | Sewer line construction | 1711-0302 | Irrigation sprinkler system installation |
| 1623-0303 | Water main construction | 1711-0400 | Heating and air conditioning contractors |
| 1623-9903 | Pipe laying construction | 1711-0401 | Mechanical contractor |
| 1623-9904 | Pipeline construction, nsk | 1711-0404 | Ventilation and duct work contractor |
| 1623-9906 | Underground utilities contractor | 1711-0405 | Warm air heating and air conditioning contractor |
| 1799-0208 | Insulation of pipes and boilers | 1731-0203 | Environmental system control installation |
| Specialty trades and other construction | | Structural steel supply | |
| 1623-0204 | Transmitting tower (telecommunication) construction | 3441-9901 | Building components, structural steel |
| 1629-0000 | Heavy construction, nec | 5051-0216 | Steel |
| 1629-0100 | Dams, waterways, docks, and other marine construction | Wrecking and demolition | |
| 1629-0105 | Drainage system construction | 1795-0000 | Wrecking and demolition work |
| 1629-0106 | Dredging contractor | 1795-9901 | Concrete breaking for streets and highways |
| 1629-0108 | Irrigation system construction | 1795-9902 | Demolition, buildings and other structures |
| 1629-0110 | Marine construction | Water, sewer and utility lines | |
| 1629-0302 | Golf course construction | 3317-0000 | Steel pipe and tubes |
| 1629-0303 | Tennis court construction | 3317-0203 | Pipes, wrought: welded, lock joint, or heavy riveted |
| 1741-0000 | Masonry and other stonework | 3498-0000 | Fabricated pipe and fittings |
| 1742-0101 | Drywall | Other construction materials | |
| 1742-0104 | Plastering, plain or ornamental | 2434-0000 | Wood kitchen cabinets |
| 1742-0201 | Acoustical and ceiling work | 3312-9906 | Iron and steel products, hot-rolled |
| 1742-0203 | Insulation, buildings | 3441-0000 | Fabricated structural metal |
| 1751-0100 | Cabinet and finish carpentry | 3442-0100 | Window and door frames |
| 1752-0000 | Floor laying and floor work, nec | 3444-0000 | Sheet metalwork |
| 1752-9908 | Wood floor installation and refinishing | 3449-0101 | Bars, concrete reinforcing: fabricated steel |
| 1761-9901 | Architectural sheet metal work | 3496-9906 | Fencing, made from purchased wire |
| 1761-9903 | Sheet metal work, nec | 5031-0308 | Skylights, all materials |
| 1771-0102 | Grouting work | 5039-0101 | Metal buildings |
| 1771-9903 | Flooring contractor | 5063-0400 | Lighting fixtures |
| 1793-0000 | Glass and glazing work | 5072-9901 | Builders' hardware, nec |
| 1796-0000 | Installing building equipment | 5074-0000 | Plumbing and hydronic heating supplies |
| 1796-9901 | Elevator installation and conversion | 5075-0000 | Warm air heating and air conditioning |
| 1799-0100 | Athletic and recreation facilities construction | 5075-0200 | Warm air heating equipment and supplies |
| 1799-0102 | Court construction, indoor athletic | 5082-0000 | Construction and mining machinery |
| 1799-0200 | Coating, caulking, and weather, water, and fireproofing | 5084-0803 | Elevators |
| 1799-0201 | Caulking (construction) | 5211-0303 | Solar heating equipment |
| 1799-0210 | Weather stripping | 5211-9907 | Fencing |
| 1799-0400 | Rigging and scaffolding | 5999-9916 | Plumbing and heating supplies |
| 1799-0800 | Decontamination services | | |
| 1799-0801 | Asbestos removal and encapsulation | | |
| 1799-9902 | Artificial turf installation | | |
| 1799-9906 | Core drilling and cutting | | |
| 1799-9912 | Fence construction | | |
| 7699-2501 | Elevators: inspection, service, and repair | | |

Figure D-1 (continued).
Construction and construction-related professional services work types included in the availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--------------------------------|--------------------------------------|---|--|
| Professional services | | | |
| Engineering | | Architecture | |
| 8711-0000 | Engineering services | 7373-0401 | Computer-aided design (CAD) systems services |
| 8711-0202 | Mechanical engineering | 8712-0000 | Architectural services |
| 8711-0400 | Construction and civil engineering | 8712-0100 | Architectural engineering |
| 8711-0401 | Building construction consultant | 8712-0101 | Architectural engineering |
| 8711-0402 | Civil engineering | 8712-0102 | House designer |
| 8711-0404 | Structural engineering | Consulting services - environmental, transportation and planning | |
| 8711-9901 | Acoustical engineering | 0711-9906 | Soil testing services |
| 8711-9903 | Consulting engineer | 8733-0201 | Archeological expeditions |
| 8711-9905 | Electrical or electronic engineering | 8742-0410 | Transportation consultant |
| Construction management | | 8748-0200 | Urban planning and consulting services |
| 8741-9902 | Construction management | 8748-9905 | Environmental consultant |
| Landscape architects | | Surveying | |
| 0781-0201 | Landscape architects | 8713-0000 | Surveying services |

Note: 8-digit SIC codes were developed by Dun & Bradstreet.
Source: BBC Research & Consulting from Dun & Bradstreet Marketplace, 2009-2010.

Determining list of establishments to be contacted. Each Portland area business establishment within relevant subindustries for which D&B had a phone number was included in the list purchased from D&B. There was no “sampling” of business establishments from the D&B list. BBC purchased contact information for 8,130 business establishments for the availability interviews. This number included 6,480 construction-related establishments and 1,650 construction-related professional services work establishments.

Because D&B organizes its database by “business establishment,” not by “firm,” BBC purchased the business listings in that fashion. Therefore, multiple Portland locations for a single firm were obtained in the list of establishments to be called. The study team attempted to contact each establishment by telephone. (BBC’s methods for consolidating information for multiple establishments into a single record for a firm are described later in this appendix.)

C. Development of Questionnaire

The study team drafted a telephone interview guide to collect business information from construction and construction-related Construction and construction-related professional services firms. Before the interview guide was used in the field, City staff reviewed the questionnaire. BBC has successfully used similar questionnaires as part of other disparity studies. The basic interview document for construction firms is provided in Figure D-4 at the end of this appendix. The questionnaire was slightly modified for certain groups of firms based on line of work in order to use the terms commonly employed in those fields. For example, the words “prime consultant” and “subconsultant” were substituted for “prime contractor” and “subcontractor” when interviewing construction-related professional services firms.

A fax/email version of the questionnaire was developed for firms that, once contacted, preferred to complete the questionnaire in hard copy format. Those firms returned completed questionnaires to BBC via fax or e-mail.

Interview structure. Questions in each section of the survey were asked of all firms. Interviewers did not know race/ethnicity/gender ownership status when calling a firm. The questionnaires included the following sections.

Identification of purpose. The interviews began by identifying the City and PDC as the survey sponsors and by describing the purpose of the study.

Verification of correct firm name. The interviewer verified that he or she had reached the correct business, and if not, inquired about the correct contact information for that business. When the firm name was not correct, interviewers asked if the respondent knew how to contact the company. The BBC study team followed up with the desired company based on the new contact information (see areas “X” and “Y” of the Availability Questionnaire in Figure D-4).

Performance of construction or PTE work. Firms were asked, “First, I want to confirm that your firm does work or provides materials related to construction projects. Is this correct?” Interviewers continued with firms responding “yes” to this question (Question A1). BBC instructed interviewers that “doing work” included trying to sell that work.

Verification of for-profit business status. The interviewer also asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question A2). Interviewers continued with firms responding “yes” to this question.

Confirmation of main line of business. Construction firms were asked to identify types of work they perform from a list developed based on the City’s prequalification categories (Question A3). They also confirmed their primary line of business according to D&B records (Question A4). Firms seeking to change or clarify this description were then asked to identify their primary line of business (Question A4b). (After the interview was complete, BBC coded the new information on primary line of business into appropriate industry codes.) Construction-related professional services firms were also asked to confirm or update their main line of business, and BBC coded the new information appropriately.

Sole location, or multiple locations. Because the study team interviewed business establishments, business owners and managers were asked if they had other locations (Question A5). They were also asked if the establishment was an affiliate or subsidiary of another firm (Question A9). (A discussion of how BBC consolidated this information into a single response for a firm is presented later in this appendix.)

Past bids or work with governments and the private sector. The interviewer inquired about bids or work on past government and private sector projects. This area of questions also asked whether the firm had bid or worked as a prime contractor or as a subcontractor or supplier (Questions B1–B12).

Qualifications and interest in future construction work. Firm representatives were asked about their qualifications and interest in future work for the City and PDC. Separate questions asked about qualifications and interest in this work as a prime contractor and/or as a subcontractor (Questions B13–B14).

Year firm established. Interviewers asked firms to identify the approximate year that the firm was established (Question D1).

Largest contracts. Interviewers asked firms to identify the largest prime contract or subcontract they had been awarded in the Portland area in the past five years. They were also asked about the largest prime contract or subcontract that they had bid on in the Portland area in the past five years (Questions D2–D4).

Ownership. Firms were asked whether they were at least 51 percent owned and controlled by women and/or minorities (Questions E1–E3). If firms indicated that they were minority-owned, they were also asked about the race/ethnicity of ownership.

Business background. Several questions collected information on 2009 revenues and number of employees (Questions F1–F6). For firms with multiple establishments, the interview also asked about revenue and employee numbers for all locations.

Comments about the marketplace and doing business with the City and PDC. Near the end of the interview, CRI asked a series of questions concerning general insights on the marketplace and City and PDC contracting practices (Question G1a – G1m). This set of questions was introduced with the following statement: “Finally, we’re interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past five years as we ask you these questions.”

The interview also included an open-ended question about the Portland area marketplace (Question G2): “Finally, we’re asking for general insights on starting and expanding a business in your field or winning work as a prime or subcontractor. Do you have any thoughts to offer on these topics?”

Contact information. The interview concluded by collecting complete contact information for the establishment (Questions H1–H6).

D. Interview Execution and Performance

CRI has completed tens of thousands of similar telephone interviews for BBC as part of disparity studies and other BBC assignments throughout the country. BBC routinely holds planning sessions with CRI executives and training sessions with CRI interviewers as part of BBC’s ongoing relationship with the firm. CRI programmed and conducted the interviews and provided daily reports on results. BBC instructed CRI to make at least five attempts to reach a person at each phone number. This design is intentionally persistent to minimize non-response.

BBC instructed CRI staff to identify and interview an available company representative such as the owner, manager, chief financial officer or other key official who could answer questions about the company’s line of business, past contracts, financial and employment figures, interest in work with various clients, and ownership status. The interviews were conducted from December 2009 through October 2010.

Performance. The interview process began with a very large number of D&B business listings for organizations in the Portland area in certain lines of work related to construction and construction-related professional services. At the end of the availability analysis process, firms reporting that they

were available for and interested in City or construction-related professional services work, and had bid on or had performed construction or construction-related professional services work, were included in the database used for the availability analysis.

Valid business listings. Some of the business listings purchased from D&B were:

- Duplicate numbers (122 listings);
- Non-working phone numbers (1,705 listings); or
- Wrong numbers for the desired businesses (360 listings that could not be reached through follow-up calls).

Figure D-2 shows how the beginning set of 8,130 listings became a set of 5,943 establishments with working phone numbers by eliminating listings with duplicate, non-working or incorrect phone numbers. Some non-working phone numbers and some wrong numbers for the desired businesses reflect firms going out of business or changing their names and phone numbers between the time that D&B listed them in its database and the time that the study team attempted to contact them.

Figure D-2 also shows the final disposition of the 5,943 business establishments that CRI attempted to contact:

- Slightly less than 10 percent of business establishments could not be reached after a minimum of five phone calls (558 establishments). Call-backs to these business establishments were made at different times of day and different days of the week in order to maximize response.
- About 20 percent of business establishments could not provide a staff member to complete the interview after a minimum of five phone calls (1,185 establishments).
- Interviews were only conducted in English. Less than one-half of one percent of business establishments could not communicate with the interviewer due to language barriers (20 establishments).
- About 8 percent of business establishments asked the study team to send the questionnaire via fax or e-mail but did not successfully obtain the fax or e-mail (after multiple attempts) or received the questionnaire but did not return a completed interview to BBC (454 establishments).

In sum, BBC successfully contacted 3,726 business establishments, or about 63 percent of the business establishments with valid phone listings.

**Figure D-2.
Disposition of
attempts to interview
D&B business listings**

Note:

* After multiple attempts to complete interview.

Source:

BBC Research & Consulting from 2009–2010 Availability Interviews.

| | Number of firms | Percent of business listings |
|--|-----------------|------------------------------|
| Beginning list | 8,130 | |
| Less duplicate numbers | 122 | |
| Less non-working phone numbers | 1,705 | |
| Less wrong number/business | 360 | |
| Unique business listings with working phone numbers | 5,943 | 100.0 % |
| Less no answer* | 558 | 9.4 |
| Less could not reach responsible staff member | 1,185 | 19.9 |
| Less language barrier | 20 | 0.3 |
| Less unreturned fax/email | 454 | 7.6 |
| Establishments successfully contacted | 3,726 | 62.7 % |

Establishments not interested in discussing availability for City work. Figure D-3 shows that among the 3,726 business establishments successfully contacted, 1,754 establishments were not interested in discussing availability for City or PDC work. Many of these firms indicated that they did not perform construction or construction-related professional services work and were not interested in conducting the interview. More than 50 percent of the firms successfully contacted completed interviews about firm characteristics (1,972 establishments).

Firms that report being available for construction and construction-related professional services work. Among the business establishments that completed interviews, only a portion was deemed available for any type of City construction or construction-related professional services work, as explained below:

- Thirty-two individual establishments of multi-location firms completed the interview. Prior to analyzing results, BBC combined responses from these multiple establishments into a single response (described below). This removed 16 establishments from the availability analysis (about 1 percent of total completed interviews).
- About 8 percent of the firms that completed an interview indicated they did not perform work related to construction or construction-related professional services (148 establishments). The interview ended when a business owner or manager reported that the business did not do that type of work.
- Less than 1 percent of interviewed establishments indicated that they were involved in construction or construction-related professional services work but reported main lines of work that were well outside the scope of the availability analysis (5 establishments). For example, a firm identified by D&B as a consulting engineering firm reported in the interview that they did construction-related professional services work but that their primary line of business was personnel management consultation, which is outside the scope of the study. CRI completed the full interview with these firms. Prior to analyzing results, BBC removed them from the final data set.
- A few interviewed establishments were excluded because they were an organization other than a for-profit business (16 establishments). Non-profit and public sector agencies were not included in the availability analysis because the study focused on for-profit firms. The interview ended

when a respondent reported that the establishment was something other than a for-profit business.

- Two hundred and forty-four firms that were interested in future work with the City or PDC were not counted as firms available for City or PDC projects because they had not bid on or received awards for similar projects in the Portland area within the past five years.
- Seven additional firms were not counted as firms available for City projects because they said they were not interested in either prime contracting or subcontracting opportunities on such projects.

After these refinements, the interview effort produced a database of 1,536 firms for the availability analysis (see Figure D-3).

Figure D-3.
Screening of completed business telephone interviews for possible inclusion in the availability analysis

Note:

*One hundred and seventy-nine of these firms were not included in the availability marketplace analysis (Appendix H), because they did not respond to question D2 or D4 on the availability survey.

Source:

BBC Research & Consulting from 2009-2010 Availability Interviews.

| | Number of firms |
|--|-----------------|
| Establishments successfully contacted | 3,726 |
| Less establishments not interested in discussing availability for City or PDC work | 1,754 |
| Establishments that completed interviews about firm characteristics | 1,972 |
| Less multiple establishments | 16 |
| Less no City or PDC related work | 148 |
| Less line of work outside scope | 5 |
| Less not a business | 16 |
| Less no past bid/award | 244 |
| Less no interest in future work | 7 |
| Firms available for City of Portland work* | 1,536 |

Study team identification and coding of responses from multi-location firms. Multiple responses from different establishments operating under the same firm name were combined into a single, summary case according to the following rules:

- If any of the establishments reported bidding or working on a contract within a particular sector, the firm summary for that variable was coded to an affirmative response for the corresponding subindustry;
- The role of work (prime contractor, subcontractor, supplier or trucker) that establishments reported were summed to a single variable, again corresponding to the appropriate subindustry;
- Except when there was a large discrepancy among the individual responses in a set of establishments' self-reported founding dates, BBC used the median founding date provided by the multiple establishments;
- The values for the firm summary variables for contract sizes and firm revenue are the largest dollar amounts indicated by any of its establishments;
- The summary number of firm employees is equal to the most common or the mean response of the multiple establishments; and

- Firms with multiple locations were re-coded as women- or minority-owned, or certified emerging small businesses (ESBs) if duplicate establishments indicated such status.

E. Additional Considerations

The study team explored several possible limitations in its approach to estimating relative availability. They include:

- Assessing relative MBE/WBE availability and not providing a count of all firms available for City work;
- Use of D&B as the sample frame;
- Selection of specific industry;
- Non-response bias;
- Language; and
- Reliability of answers to interview questions.

Not providing a count of all firms available for City work. The purpose of the availability interviews was to estimate the *percentage* of firms available for City and PDC construction and construction-related professional services work that were minority- and women-owned and controlled (i.e., “relative” MBE/WBE availability). The interviews provided such information. The interviews do not provide a comprehensive listing of every firm available for City and PDC work and should not be used as such.

The interview approach of measuring relative availability has been approved by federal courts (see, for example, the Seventh Circuit decision on *Northern Contracting*) when considering state implementation of the Federal DBE Program.³ Use of a survey is recommended as an approach to measuring availability in the USDOT guidance on goal-setting.⁴

Use of D&B list. D&B provides the most comprehensive private database of business listings in the United States. Even so, this database does not include all establishments operating in the Portland area:

- **New firms.** There can be a lag between formation of a new business and inclusion in the database. This means that the newest firms are underrepresented in the sample frame. Based on the firms successfully interviewed, newly formed firms are more likely than older firms to be minority- or women-owned, which suggests that MBEs and WBEs might be slightly underrepresented in the final database of interviewed firms.
- **Home-based businesses.** The D&B database is more likely to miss a business working out of the home than a firm with a distinct business office. Small, home-based firms are more

³ *N. Contracting, Inc. v. Illinois DOT*, 473 F.3d 715 (7th Cir. 2007)

⁴ USDOT. *Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program* (<http://osdbu.dot.gov/?TabId=133>)

likely than large firms to be MBE/WBEs, which again suggests that MBEs and WBEs might be slightly underrepresented in the final availability data set.

Selection of specific industry. Defining an industry based on specific industry codes (e.g., SIC, NAICS or D&B industry codes) is a standard step when analyzing an economic sector. Government and private sector economic data are typically organized according to industry codes. As with any such research, there are limitations when choosing the specific industry codes to define sets of establishments to be interviewed. For example, it was not possible for BBC to include all industries possibly related to construction and construction-related professional services work without interviewing firms in nearly every industry in the Portland area.

A further limitation to the use of D&B codes to classify businesses, or any other work type classification method, is that some codes are imprecise and overlap with other business specialties. Even though BBC used D&B's own 8-digit industry codes, D&B does not maintain a detailed 8-digit code for each firm in its database. When firm owners and managers were asked to identify primary lines of business, they often gave broad answers. For these reasons, BBC collapsed many of the industry codes into broader work categories in the final database of firms available for construction and construction-related professional services work.

Non-response bias. Analysis of non-response bias considers whether firms not successfully interviewed are different from those successfully interviewed and included in the final data set. There are opportunities for non-response bias in any primary research effort. The study team considered the potential for non-response bias due to:

- Research sponsorship; and
- Work specializations.

Research sponsorship and introduction. Interviewers introduced themselves by identifying the City and PDC as interview sponsors in order to encourage firms that performed construction and construction-related professional services work to participate in the interview. Firms would be less likely to answer somewhat sensitive business questions asked by an interviewer who was unable to identify the sponsor of the interview. In fact, some firms asked to check with the City or PDC to verify sponsorship prior to participating in the interview.

Analysis of interview refusal rates suggests that sponsorship had a positive effect on response rates. Most of the businesses contacted conducted interviews.

Work specializations. Businesses in highly-mobile fields, such as trucking, may be more difficult to reach than firms more likely to work out of a fixed office (e.g., engineering firms). This suggests that response rates will differ by business specialization.

If all interviewed firms were simply counted to determine relative MBE/WBE availability, this would lead to estimates that relied too heavily on fields that could be easily contacted by telephone. This potential non-response bias is minimal in this study because the availability analysis compares firms within particular work fields before determining an MBE/WBE availability figure. In other words, the potential for trucking firms to be less likely to complete an interview is less important because the

number of MBE/WBE trucking firms completing interviews is compared with total number of trucking firms, not all firms across all fields.

Language. City of Portland and PDC contracting documents are in English and not other languages. The study team made the decision to only include businesses able to provide a representative who could complete the interview in English in the availability analysis to remove language barriers as a potential explanation for any differences in outcomes observed between MBE/WBEs and majority-owned firms.

Individuals who could not communicate in English well enough to complete the interview and could not locate another individual to answer interview questions in English were not captured in the availability analysis.

Response reliability. Firm owners and managers were asked questions that may be difficult to answer, including firm revenues and employment. For this reason, the study team prompted them with D&B information for their establishment and asked them to confirm that information or provide more accurate estimates. Further, respondents were typically not asked to give absolute figures for difficult questions such as firm revenues. Rather, they were given ranges of dollar figures or employment levels.

BBC explored reliability by analyzing consistency of interview responses for the firm revenues and firm employment questions. BBC found interview responses to these difficult questions to be internally consistent. For example, firms with smaller employee numbers reported revenues consistent with their employment levels.

F. Summary

“Custom census” approaches to availability that begin with D&B data have been reviewed positively by federal courts. The study team’s methodology for analyzing MBE/WBE availability took the previous custom census approach as a starting point and added several layers of additional screening when determining firms available for City and PDC construction and construction-related professional services work (or, in the case of PDC, personal services work).

The study team attempted to complete interviews with all Portland area firms that, according to D&B, have a primary line of business within construction and construction-related professional services codes. (There was no “sampling” from the sample frame in preparing the list of firms to be interviewed.) The study team attempted to contact 8,130 business listings, about 2,200 of which were found to be invalid listings. A relatively high proportion of the establishments with working phone numbers were successfully contacted, and 3,726 business establishments completed availability interviews.

BBC examined several potential sources of non-response bias. It is possible that MBEs and WBEs were slightly under-represented in the final database of available firms. However, BBC concludes that this potential under-representation of MBE/WBEs does not significantly affect the analyses.

Figure D-4. Interview Instrument [Construction]

Hello. My name is [*interviewer name*] from CRI. We are calling on behalf of the City of Portland and the Portland Development Commission.

We are developing a list of companies involved in construction work in the Portland area. With whom can I speak to get the information we need from your firm?

[AFTER REACHING THE OWNER OR AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY AND BEGIN WITH QUESTIONS]

[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO EXISTING DATA FOR THE CITY AND THE DEVELOPMENT COMMISSION ON COMPANIES INTERESTED IN WORKING WITH THE CITY AND PDC IN THE FUTURE]

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 – SKIP TO Y1
- 3=REFUSE TO GIVE INFORMATION – TERMINATE

Y1. Can you give me any information about [*firm name*]?

- 1=Yes, same owner doing business under a different name – SKIP TO Y4
- 2=Yes, can give information about named company – SKIP TO Y2
- 3=Company bought/sold/changed ownership – SKIP TO Y4
- 4=No, does not have information – TERMINATE
- 5=Refused to give information – TERMINATE

Y1. ENTER NEW NAME

- 1=VERBATIM

Y2. Can you give me the phone number of [*firm name*]?

(ENTER UPDATED PHONE OF NAMED COMPANY)

1=VERBATIM

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

(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT:

. STREET ADDRESS

. CITY

. STATE

. ZIP)

1=VERBATIM

Y4. And what is the new name of the business that used to be [*firm name*]?

(ENTER UPDATED NAME)

1=VERBATIM

Y5. Can you give me the name of the owner or manager of the new business?

(ENTER UPDATED NAME)

1=VERBATIM

Y6. Can I have a telephone number for them?

(ENTER UPDATED PHONE)

1=VERBATIM

Y7. Can you give me the complete address or city for [*new firm name*]?

1=VERBATIM

Y8. Do you work for this new company?

1=YES - CONTINUE

2=NO – TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction projects. Is this correct?

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTAINENCE OR DESIGN SUCH AS BUILDING AND PARKING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS.)

(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. What types of work does your company perform?

[CHECK ALL THAT APPLY, DO NOT PROMPT]

- a. Building construction
- b. Water and sewer facility construction
- c. Water, sewer and utility lines (underground utility lines)
- d. Highway and street construction
- e. Bridge construction and repair (include elevated highway)
- f. Concrete work
- g. Excavation
- h. Electrical work
- i. Wrecking and demolition
- j. Plumbing and HVAC
- k. Painting
- l. Roofing
- m. Landscaping
- n. Construction management
- o. Concrete supply
- p. Structural steel supply
- q. Other construction materials

- r. Trucking
- s. Other: _____ [VERBATIM]

A4a. Let me also confirm what your main line of business 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)

A4b. What would you say is the main line of business at [firm name / new firm name]?

(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 – SKIP TO A8

2=Have other locations

98= (DON'T KNOW)

99= (REFUSED)

A8. 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)

99= (REFUSED)

A9. What is the name of your parent company?

1=ENTER NAME

98= (DON'T KNOW)

99= (REFUSED)

A9. ENTER NAME OF PARENT COMPANY

1=VERBATIM

B1. Next, I have a few questions about your company's role in construction work. During the past five years, has your company submitted a bid or a price quote to any part of a government project in the Portland area?

1=Yes

2=No – SKIP TO B3

98= (DON'T KNOW) – SKIP TO B3

99= (REFUSED) – SKIP TO

B2. Were those bids or price quotes to work as a prime contractor, a subcontractor, or as a supplier?

1=Prime contractor

2=Subcontractor

3=Supplier (or manufacturer)

4=Prime and Sub

5=Sub and Supplier

6=Prime and Supplier

7=Prime, Sub, and Supplier

8=Trucker

10=(Supplier and Trucker)

11=(Prime and Trucker)

12=(Sub and Trucker)

13= (Prime, Supplier, and Trucker)

14= (Sub, Supplier, and Trucker)

15= (Prime, Sub, and Trucker)

16= (Prime, Sub, Supplier, Trucker)

98= (DON'T KNOW)

99= (REFUSED)

B3. During the past five years, has your company received an award for work as a prime contractor or as a subcontractor to any part of a government project in the Portland area?

1=Yes

2=No – SKIP TO B9

98= (DON'T KNOW) – SKIP TO B9

99= (REFUSED) – SKIP TO B9

B4. Were those awards to work as a prime contractor, a subcontractor, or as a supplier?

- | | |
|-------------------------------|-------------------------------------|
| 1=Prime contractor/consultant | 10= (Supplier and Trucker) |
| 2=Subcontractor/subconsultant | 11= (Prime and Trucker) |
| 3=Supplier (or manufacturer) | 12= (Sub and Trucker) |
| 4=Prime and Sub | 13= (Prime, Supplier, and Trucker) |
| 5=Sub and Supplier | 14= (Sub, Supplier, and Trucker) |
| 6=Prime and Supplier | 15= (Prime, Sub, and Trucker) |
| 7=Prime, Sub, and Supplier | 16= (Prime, Sub, Supplier, Trucker) |
| 8=Trucker | 98= (DON'T KNOW) |
| | 99= (REFUSED) |

B9. During the past five years, has your company submitted a bid or a price quote for any part of a private sector contract in the Portland area?

- 1=Yes
- 2=No – SKIP TO B11
- 98= (DON'T KNOW) – SKIP TO B11
- 99= (REFUSED) – SKIP TO B11

B10. Were those bids or price quotes to work as a prime contractor, a subcontractor, or as a supplier?

- | | |
|-------------------------------|-------------------------------------|
| 1=Prime contractor/consultant | 10= (Supplier and Trucker) |
| 2=Subcontractor/consultant | 11= (Prime and Trucker) |
| 3=Supplier (or manufacturer) | 12= (Sub and Trucker) |
| 4=Prime and Sub | 13= (Prime, Supplier, and Trucker) |
| 5=Sub and Supplier | 14= (Sub, Supplier, and Trucker) |
| 6=Prime and Supplier | 15= (Prime, Sub, and Trucker) |
| 7=Prime, Sub, and Supplier | 16= (Prime, Sub, Supplier, Trucker) |
| 8=Trucker | 98= (DON'T KNOW) |
| | 99= (REFUSED) |

B11. During the past five years, has your company received an award for work as a prime contractor or as a subcontractor for any part of a private sector contract in the Portland area?

1=Yes

2=No – SKIP TO B13

98= (DON'T KNOW) – SKIP TO B13

99= (REFUSED) – SKIP TO B13

B12 Were those awards to work as a prime contractor, a subcontractor, or as a supplier?

1=Prime contractor/consultant

2=Subcontractor/subconsultant

3=Supplier (or manufacturer)

4=Prime and Sub

5=Sub and Supplier

6=Prime and Supplier

7=Prime, Sub, and Supplier

8=Trucker

10= (Supplier and Trucker)

11= (Prime and Trucker)

12= (Sub and Trucker)

13= (Prime, Supplier, and Trucker)

14= (Sub, Supplier, and Trucker)

15= (Prime, Sub, and Trucker)

16= (Prime, Sub, Supplier, Trucker)

98= (DON'T KNOW)

99= (REFUSED)

B13. Is your company qualified and interested in working with the City of Portland or Portland Development Commission as a prime contractor?

1=Yes (BOTH)

2=Yes (JUST THE CITY OF PORTLAND)

3=Yes (JUST THE DEVELOPMENT COMMISSION)

4=No

98= (DON'T KNOW)

99= (REFUSED)

B14. Is your company qualified and interested in working with the City of Portland or Portland Development Commission (PDC) as a subcontractor or supplier?

1=Yes Yes (BOTH)

2=Yes (JUST THE CITY OF PORTLAND)

3=Yes (JUST THE DEVELOPMENT COMMISSION)

4=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 (1600-2009)

D2. In rough dollar terms, what was the largest contract or subcontract your company was awarded in the Portland area during the past five years?

(NOTE TO INTERVIEWER - INCLUDES CONTRACTS NOT YET COMPLETE)

(NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY)

1=\$100,000 or less

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

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

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

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

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

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

8=\$20 million to \$50 million

9=\$50 million to \$100 million

10=Greater than \$100 million

97= (NONE)

98= (DON'T KNOW)

99= (REFUSED)

D3. Was this the largest contract or subcontract that your company bid on or submitted quotes for in the Portland area 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 contract or subcontract that your company bid on or submitted quotes for in the Portland area during the past five years?

(READ CATEGORIES IF NECESSARY)

1=\$100,000 or less

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

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

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

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

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

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

8=\$20 million to \$50 million

9=\$50 million to \$100 million

10=Greater than \$100 million

97= (NONE)

98= (DON'T KNOW)

99= (REFUSE)

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 African 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)

99= (REFUSED)

E2. OTHER GROUP - SPECIFY

1=VERBATIM

E3. Would you say that the minority group ownership is mostly African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?

1=African-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, Juvalu, 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

F1. Dun & Bradstreet indicates that your company has about [number] employees working out of just your location. Is that a fairly accurate average thinking about the past 12 months?

(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)

99= (REFUSED) – SKIP TO F3

F2. About how many employees did you have working out of just your location, on average, over the course of last 12 months?

(RECORD NUMBER OF EMPLOYEES)

1=NUMERIC (1-999999999)

F3. Dun & Bradstreet lists the annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that accurate for 2009?

1=Yes – SKIP TO F5

2=No

98= (DON'T KNOW)

99= (REFUSED) – SKIP TO F5

F4. Roughly, what was the gross revenue of your company, just considering your location, in 2009? Would you say . . . (READ LIST)

1=Less than \$200,000

2=\$200,000 - \$499,999

3=\$500,000 - \$999,999

4=\$1 Million - \$2.49 Million

5=\$2.5 Million - \$4.9 Million

6=\$5 Million - \$9.9 Million

7=\$10 Million - \$24.9 Million

8=\$25 Million - \$49.9 Million

9=\$50 Million or more

98= (DON'T KNOW)

99= (REFUSED)

F5. For 2009, about how many employees did you have, on average, for all of your locations?

1= (ENTER RESPONSE)

98= (DON'T KNOW)

99= (REFUSED)

F5. RECORD NUMBER OF EMPLOYEES

1=VERBATIM

F6. Roughly, what was the gross revenue of your company, for all of your locations in 2009?

Would you say . . . (READ LIST)

1=Less than \$200,000

2=\$200,000 - \$499,999

3=\$500,000 - \$999,999

4=\$1 Million - \$2.49 Million

5=\$2.5 Million - \$4.9 Million

6=\$5 Million - \$9.9 Million

7=\$10 Million - \$24.9 Million

8=\$25 Million - \$49.9 Million

9=\$50 Million or more

98= (DON'T KNOW)

99= (REFUSED)

G1. Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past five years as we ask you these questions.

G1a. Has your company experienced any difficulties in obtaining lines of credit or loans?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1b. Has your company obtained or tried to obtain a bond for a project?

1=Yes

2=No [SKIP TO G1d]

98= (Don't know) [SKIP TO G1d]

99= (Does not apply) [SKIP TO G1d]

G1c. Has your company had any difficulties obtaining bonds needed for a project?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1d. Have any insurance requirements on projects presented a barrier to bidding?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1e. Has the size of projects presented a barrier to bidding?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1f. Has your company experienced any difficulties learning about bid opportunities with the City of Portland?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1g. Has your company experienced any difficulties learning about bid opportunities with the Portland Development Commission?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1h. Has your company experienced any difficulties learning about bid opportunities with the private sector in the Portland area?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1i. Has your company experienced any difficulties learning about subcontracting opportunities in the Portland area?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1i. Has your company experienced any difficulties receiving payment in a timely manner?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1j. Has your company looked into or applied for prequalification for City of Portland prime contracts?

1=Yes

2=No [SKIP TO G1m]

98= (Don't know) SKIP TO G2

99= (Does not apply) SKIP TO G2

G1k. Has your company experienced any difficulties with the City prequalification process?

1=Yes

2=No

98= (Don't know)

99= (Does not apply)

G1l. What were those difficulties?

_____ [OPEN-ENDED TO START, WILL CLOSE AFTER INITIAL SURVEYS]

98= (Don't know)

GO TO G2

G1m. Why not?

_____ [OPEN-ENDED TO START, WILL CLOSE AFTER INITIAL SURVEYS]

98= (Don't know)

G2. Finally, we're asking for general insights on starting and expanding a business in your field or winning work as a prime or subcontractor. 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 and position at [*firm name / new firm name*]?

(RECORD FULL NAME)

1=VERBATIM

H2. What is your position?

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 the City and Development Commission, 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)

H6. (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 Annette Palmer at the City of Portland or Linda Andrews at the Portland Development Commission. Ms. Palmer's phone number is 503-823-7194, her email address is apalmer@ci.portland.or.us. Ms. Andrews' phone number is 503-823-3261, her email address is andrewsll@pdc.us.