

APPENDIX H.

Success of Businesses in Construction; Architecture and Engineering; and Information Technology Industries in the Atlanta Public Schools Market Area

The study team examined the success of minority- and women-owned business enterprises (MBE/WBEs) in the Atlanta Metropolitan Area construction; architecture and engineering; and information technology industries. The study team assessed whether business outcomes for MBE/WBEs differ from those of non-Hispanic white male-owned businesses (i.e., majority-owned businesses).¹

The study team examined outcomes for MBE/WBEs and majority-owned businesses in terms of:

- Business closures, expansions and contractions;
- Business receipts and earnings; and
- Potential barriers to starting or expanding businesses.

Business Closures, Expansions and Contractions

The study team used Small Business Administration (SBA) data to examine business outcomes — including closures, expansions, and contractions — for minority-owned businesses in Georgia and in the nation as a whole. The SBA analyses compare business outcomes for minority-owned businesses (by demographic group) to business outcomes for all businesses.

Business closures. High rates of business closures may reflect adverse business conditions for minority business owners.

Overall rates of business closures in Georgia. A 2010 SBA report investigated business dynamics and whether minority-owned businesses were more likely to close than other businesses. By matching data from business owners who responded to the 2002 U.S. Census Bureau Survey of Business Owners (SBO) to data from the Census Bureau's 1989-2006 Business Information Tracking Series, the SBA reported on business closure rates between 2002 and 2006 across different sectors of the economy.^{2, 3} The SBA report examined patterns in each state but not in individual metropolitan areas. Figure H-1 presents those data for African American-, Asian American- and Hispanic American-owned businesses as well as for white-owned businesses.

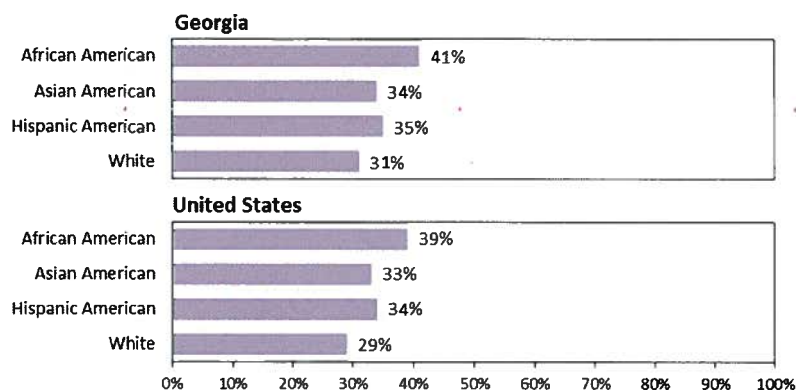
¹ The study team uses the terms “MBEs” and “WBEs” to refer to businesses that are owned and controlled by minorities or women, regardless of whether they are certified or meet the revenue and net worth requirements for DBE certification and regardless of whether they are certified as MBEs or WBEs.

² Lowrey, Ying. 2010. “Race/Ethnicity and Establishment Dynamics, 2002-2006.” U.S. Small Business Administration Office of Advocacy. Washington D.C.

³ Businesses classifiable by race/ethnicity exclude publicly traded companies. The study team did not categorize racial groups by ethnicity. As a result, some Hispanic Americans may also be included in statistics for African Americans, Asian Americans and whites.

As shown in Figure H-1, 41 percent of African American-owned businesses operating in Georgia in 2002 had closed by the end of 2006, a higher rate than that of all other groups. Hispanic American- and Asian American-owned firms also had closure rates higher than for non-minority-owned businesses during this time period. Disparities in closure rates for minority-owned firms, compared to white-owned firms, appear to have been similar in Georgia and in the United States during the same time period.

Figure H-1.
Rates of business closure, 2002 through 2006, Georgia and the U.S.



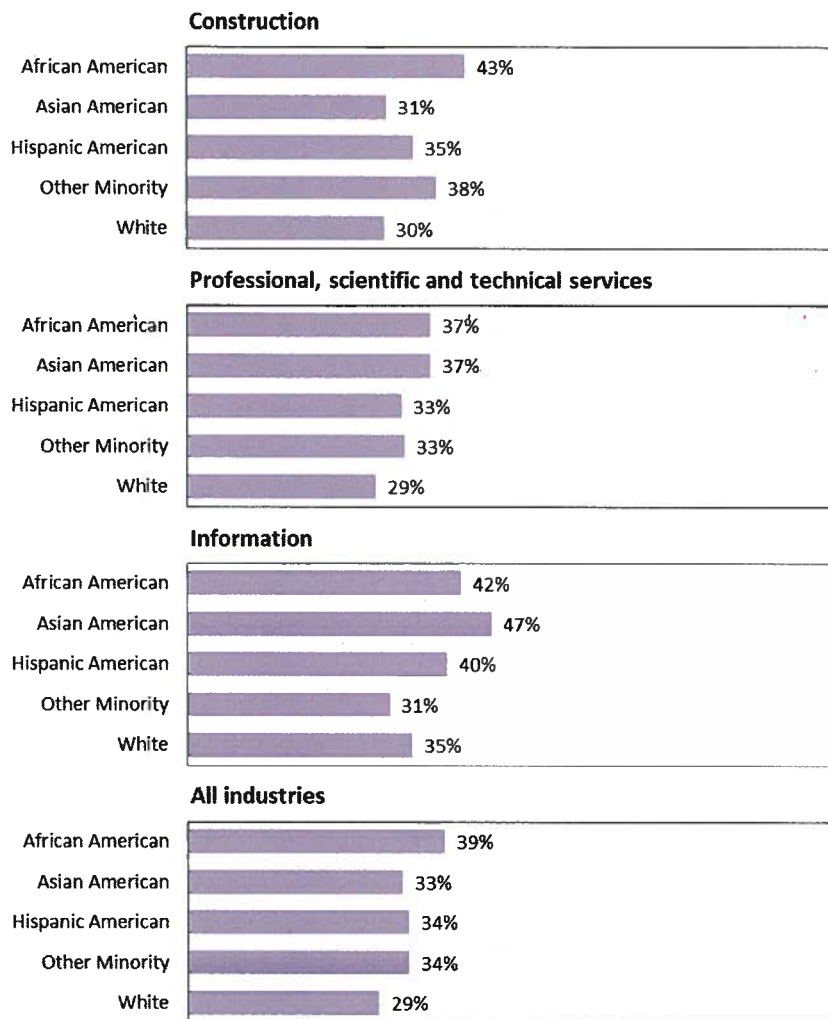
Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Rates of business closures by industry. The SBA report also examined business closure rates by race/ethnicity for 21 different industry classifications. Figure H-2 compares national rates of firm closure for construction; professional, scientific, and technical services; and information services. Figure H-2 also presents closure rates for all industries by race/ethnicity.

African American-owned businesses that were operating in the United States in 2002 had the highest rate of closure by 2006 among all racial/ethnic groups — including white-owned businesses — in construction (43%) and all industries (39%). Asian American-owned information businesses that were operating in 2002 had the highest rate of closure in 2006 (47%). Hispanic American-owned businesses and Asian American-owned businesses that were operating in 2002 were also more likely to have closed by 2006 than white-owned businesses in all of the study industries, and all industries. The study team could not examine whether those differences also existed in the Atlanta Metropolitan Area or in Georgia as a whole, because the SBA analysis by industry was not available for individual states or metropolitan areas.

Figure H-2.
Rates of business closure, 2002 through 2006, relevant study industries and all industries in the U.S.



Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Unsuccessful closures. Not all business closures can be interpreted as “unsuccessful closures.” Businesses may close when an owner retires or a more profitable business opportunity emerges, both of which represent “successful closures.” The 1992 Characteristics of Business Owners (CBO) Survey is one of the few Census Bureau sources to classify business closures into successful and unsuccessful subsets.⁴ The 1992 CBO combines data from the 1992 Economic Census and a survey of business owners conducted in 1996. The survey portion of the 1992 CBO asked owners of businesses that had closed between 1992 and 1995, “Which item below describes the status of this business at the time the decision was made to cease operations?” Only the responses “successful” and “unsuccessful” were permitted. A firm that reported being unsuccessful at the time of closure was understood to have failed.

Figure H-3 presents CBO data on the proportion of businesses that closed due to failure between 1992 and 1995 in construction, services and all industries.^{5, 6, 7}

According to CBO data, African American-owned businesses were the most likely to report being “unsuccessful” at the time at which their businesses closed. About 77 percent of African American-owned businesses in all industries reported an unsuccessful business closure between 1992 and 1995, compared with only 61 percent of non-Hispanic white male-owned businesses. Unsuccessful closure rates were also relatively high for Hispanic American-owned businesses (71%) and for businesses owned by “Other Minority” groups (73%). The rate of unsuccessful closures for women-owned businesses (61%) was similar to that of non-Hispanic white male-owned businesses.

In the construction industry, minority- and women-owned businesses were more likely to report unsuccessful business closures than non-Hispanic white male-owned businesses (58%). Those trends were similar in the services industry with one exception — women-owned businesses in the services industry (52%) were less likely to report unsuccessful closures than non-Hispanic white male-owned businesses (59%).

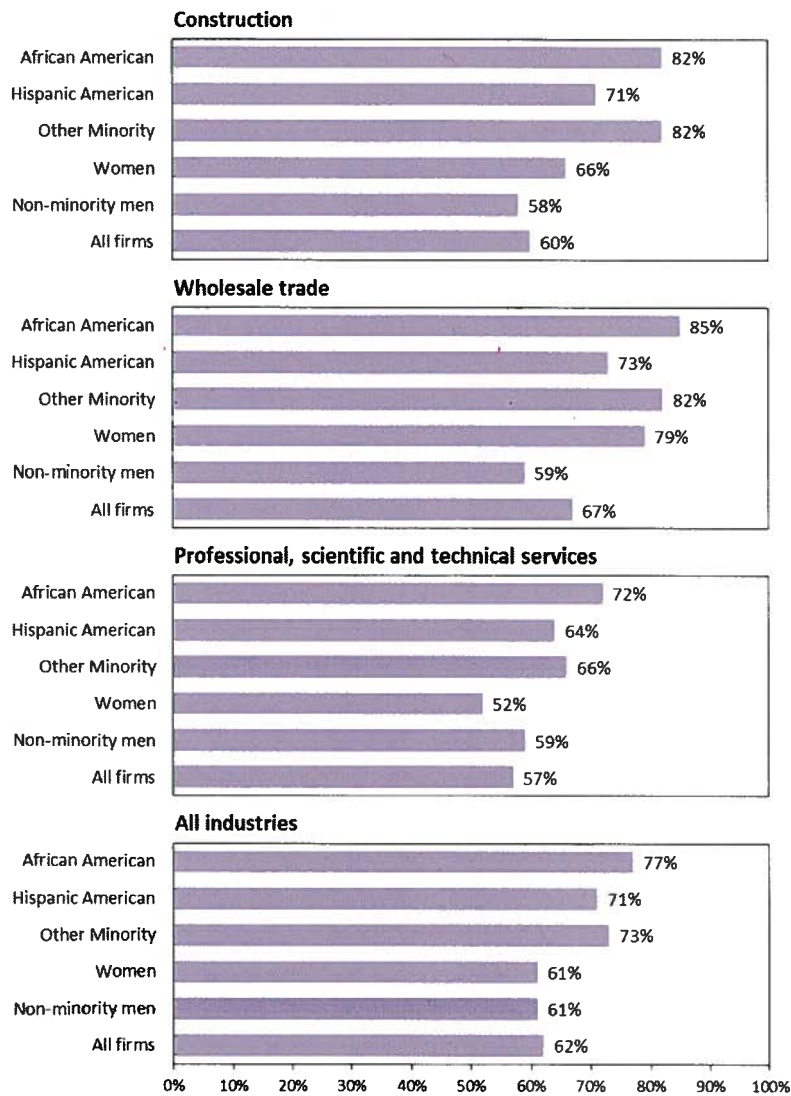
⁴ CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful business closures. To date, the 1992 CBO is the only U.S. Census dataset that includes such statistics.

⁵ All CBO data should be interpreted with caution as businesses that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. Holmes, Thomas J. and James Schmitz. 1996. “Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey.” *Journal of Business & Economic Statistics*. 14(2): 231-241. This report does not include CBO data on overall business closure rates, because businesses not responding to the survey were found to be much more likely to have closed than ones that did.

⁶ This study includes CBO data on firm success because there is no compelling reason to believe that closed businesses responding to the survey would have reported different rates of success/failure than those closed businesses that did not respond to the survey. Headd, Brian. U.S. Small Business Administration, Office of Advocacy. 2000. *Business Success: Factors leading to surviving and closing successfully*. Washington D.C.: 12.

⁷ Data for firms operating in the management of companies and enterprises and administrative, support, waste management, and remediation industries were not available in the CBO survey.

Figure H-3.
Proportions of closures reported as unsuccessful between 1992 and 1995 in the U.S.



Source: U.S. Census Bureau, 1996 Characteristics of Business Owners Survey (CBO).

Reasons for differences in unsuccessful closure rates. Several researchers have offered explanations for higher rates of unsuccessful closures among minority- and women-owned businesses compared with non-Hispanic white-owned businesses:

- Unsuccessful business failures of minority-owned businesses are largely due to barriers in access to capital. Regression analyses have identified initial capitalization as a significant factor in determining firm viability. Because minority-owned businesses secure smaller amounts of debt equity in the form of loans, they may be more liable to

fail. Difficulty in accessing capital is found to be particularly acute for minority-owned businesses in the construction industry.⁸

- Prior work experience in a family member's business or similar experiences are found to be strong determinants of business viability. Because minority business owners are much less likely to have such experience, their businesses are less likely to survive.⁹ Similar research has been conducted for women-owned businesses and found similar gender-based gaps in the likelihood of business survival.¹⁰
- Level of education is found to be a strong determinant of business survival. Educational attainment explains a substantial portion of the gap in business closure rates between African American-owned and non-minority-owned businesses.¹¹
- Non-minority business owners have broader business opportunities, increasing their likelihood of closing successful businesses to pursue more profitable business alternatives. Minority business owners, especially those who do not speak English, have limited employment options and are less likely to close a successful business.¹²
- The possession of greater initial capital and generally higher levels of education among Asian Americans are related to the relatively high rate of survival of Asian American-owned businesses compared to other minority-owned businesses.¹³

Expansions and contractions. Comparing rates of expansion and contraction between minority-owned and white-owned businesses is also useful in assessing the success of minority-owned businesses. As with closure data, only some of the data on expansions and contractions that were available for the nation were also available at the state level, and none is available for the Atlanta Metropolitan Area.

Expansions. The 2010 SBA study of minority business dynamics from 2002 through 2006 examined the number of non-publicly-held Georgia businesses that expanded and contracted between 2002 and 2006. Figure H-4 presents the percentage of all businesses, by race/ethnicity of ownership, that increased their total employment between 2002 and 2006. Those data are presented for Georgia and for the nation as a whole.

⁸ Bates, Timothy and Caren Grown. 1991. "Commercial Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Census Bureau.

⁹ Robb, A. and R. Fairlie. 2005. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital." University of California, Santa Cruz.

¹⁰ Fairlie, R. and A. Robb. 2009. "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey." University of California, Santa Cruz.

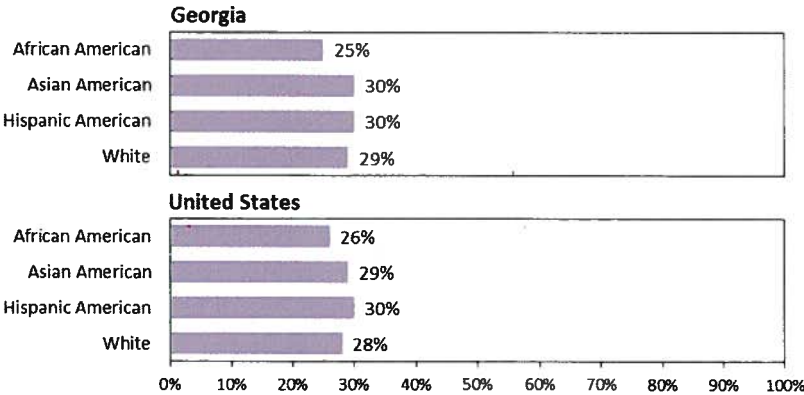
¹¹ *Ibid.* 24.

¹² Bates, Timothy. 2002. "Analysis of Young Small Businesses That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

¹³ Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

Approximately 29 percent of white-owned Georgia businesses expanded between 2002 and 2006, compared to 25 percent of African American-owned businesses, 30 percent of Asian American-owned businesses and 30 percent of Hispanic American-owned businesses. Expansion results were similar for the nation as a whole.

Figure H-4.
Percentage of businesses that expanded, 2002 through 2006, Georgia and the U.S.

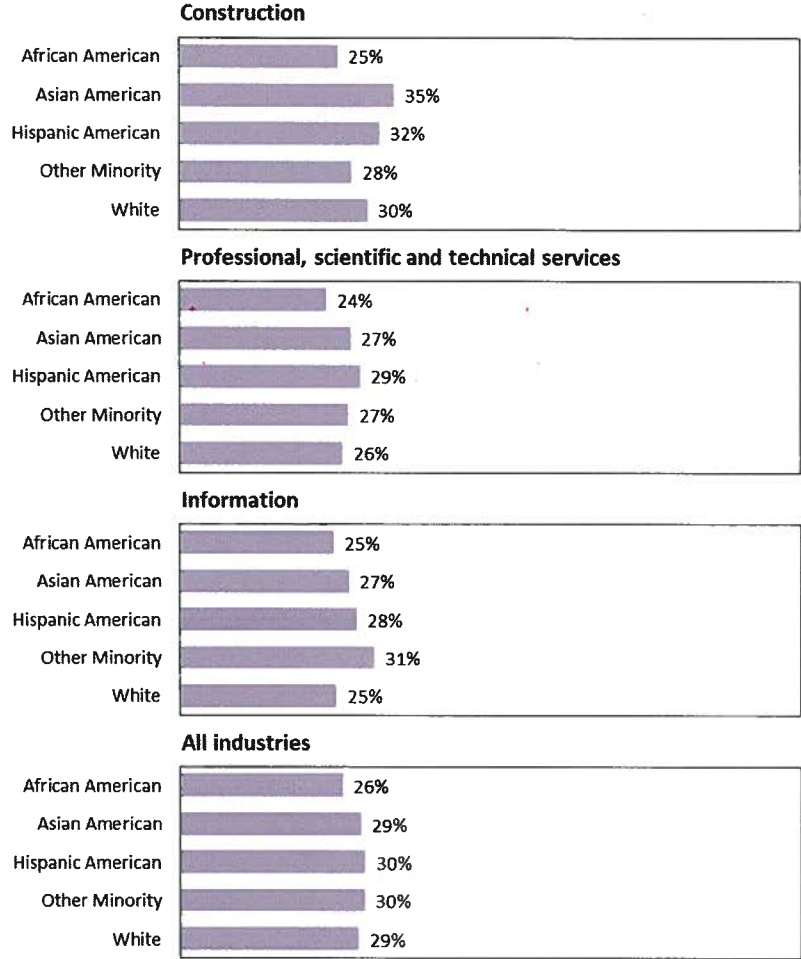


Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Figure H-5 presents the percentage of businesses that expanded in construction; professional, scientific, and technical services; information; and in all industries in the United States. The 2010 SBA study did not report results for businesses in individual industries at the state level.

Figure H-5.
 Percentage of businesses that expanded, 2002 through 2006, relevant study industries and all industries in the U.S.



Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

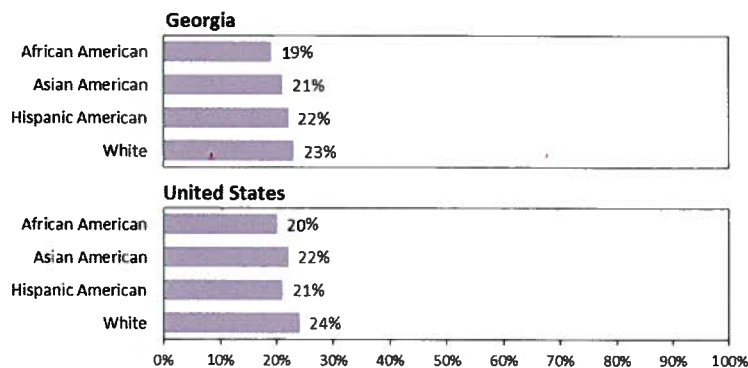
Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

At the national level, the patterns evident for study industries were similar to those observed for all industries:

- African American-owned businesses in the construction and professional, scientific, and technical services industries were less likely than white-owned businesses to have expanded between 2002 and 2006.
- Hispanic American- and Asian American-owned companies in the relevant study industries were more likely than white-owned businesses to have expanded between 2002 and 2006.

Contraction. Figure H-6 shows the percentage of non-publicly held businesses operating in 2002 that reduced their employment (i.e., contracted) between 2002 and 2006 in Georgia and in the nation as a whole. In both Georgia and the United States as a whole, African American-, Asian American- and Hispanic American-owned businesses were less likely to have contracted during 2002 through 2006 than white-owned businesses.

Figure H-6.
Percentage of businesses that contracted, 2002 through 2006, Georgia and the U.S.



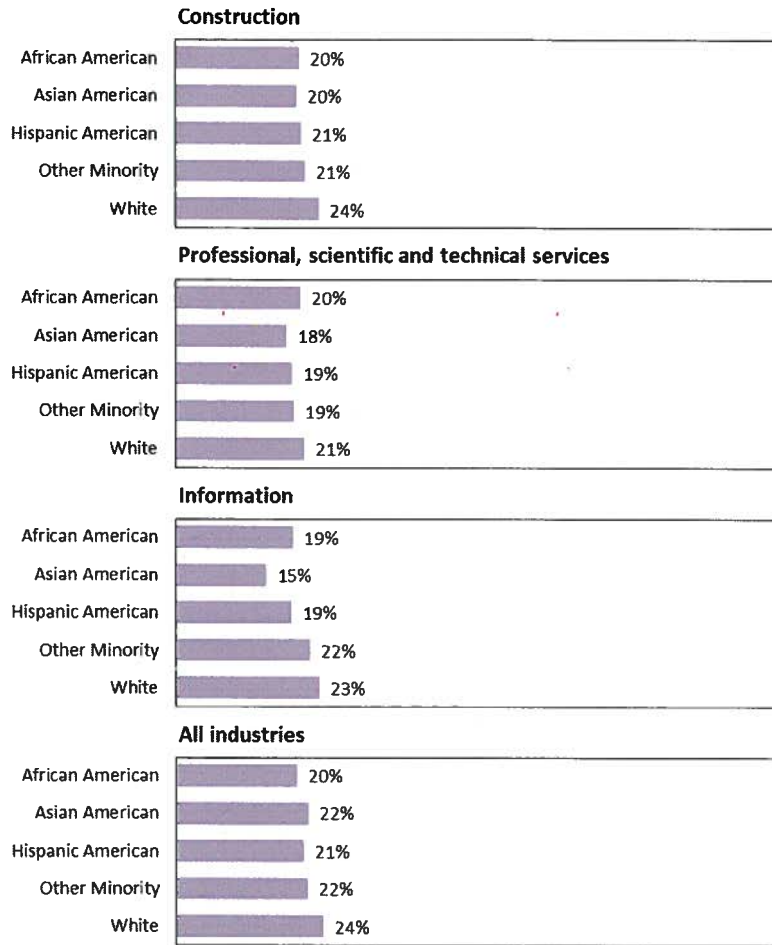
Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

The SBA study did not report state-specific results relating to contractions in individual industries. Figure H-7 shows the percentage of businesses that contracted in the relevant study industries and in all industries at the national level. Compared to white-owned businesses in the United States, in general, a smaller percentage of minority-owned businesses in the relevant study industries and in all industries contracted between 2002 and 2006.

Figure H-7.

Percentage of businesses that contracted, 2002 through 2006, relevant study industries and all industries in the U.S.



Note: Data refer only to non-publicly held businesses only. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

Business Receipts and Earnings

Annual business receipts and earnings for business owners are also indicators of the success of businesses. The study team examined:

- Business receipts data from the U.S. Census Bureau 2012 Survey of Business Owners;
- Business earnings data for business owners from the 2010-2014 American Community Survey (ACS); and
- Annual revenue data for firms in the study industries located in the Atlanta area that the study team collected as part of availability interviews.

Business receipts. The study team examined receipts for businesses in the Atlanta Metropolitan Statistical Area (MSA) and the United States using data from the 2012 SBO, conducted by the U.S. Census Bureau.¹⁴ The study team also analyzed receipts for businesses in individual industries. The SBO reports business receipts separately for employer businesses (i.e., those with paid employees other than the business owner and family members) and for all businesses.¹⁵

Receipts for all businesses. Figure H-8 presents 2012 mean annual receipts for employer and non-employer businesses by race, ethnicity and gender. Racial categories in the Atlanta MSA are not available by both race and ethnicity. As such, the racial categories shown may include Hispanic Americans. The SBO data for businesses across all industries in the Atlanta MSA indicate that average receipts for minority- and women-owned businesses were much lower than that for non-Hispanic-owned, white-owned or male-owned businesses, with some groups faring worse than others.

- Average receipts of African American-owned businesses (\$40,000) were only 7 percent that of white-owned businesses (\$558,000).
- Average receipts of Asian American-owned businesses (\$343,000) were approximately two-thirds that of white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses (\$87,000) were about 16 percent that of white-owned businesses.
- Hispanic-owned businesses (\$125,000) exhibited revenues that were less than one-third of the average of non-Hispanic-owned businesses (\$394,000).
- Average receipts for women-owned businesses (\$130,000) were less than a quarter of the average for male-owned businesses (\$569,000).

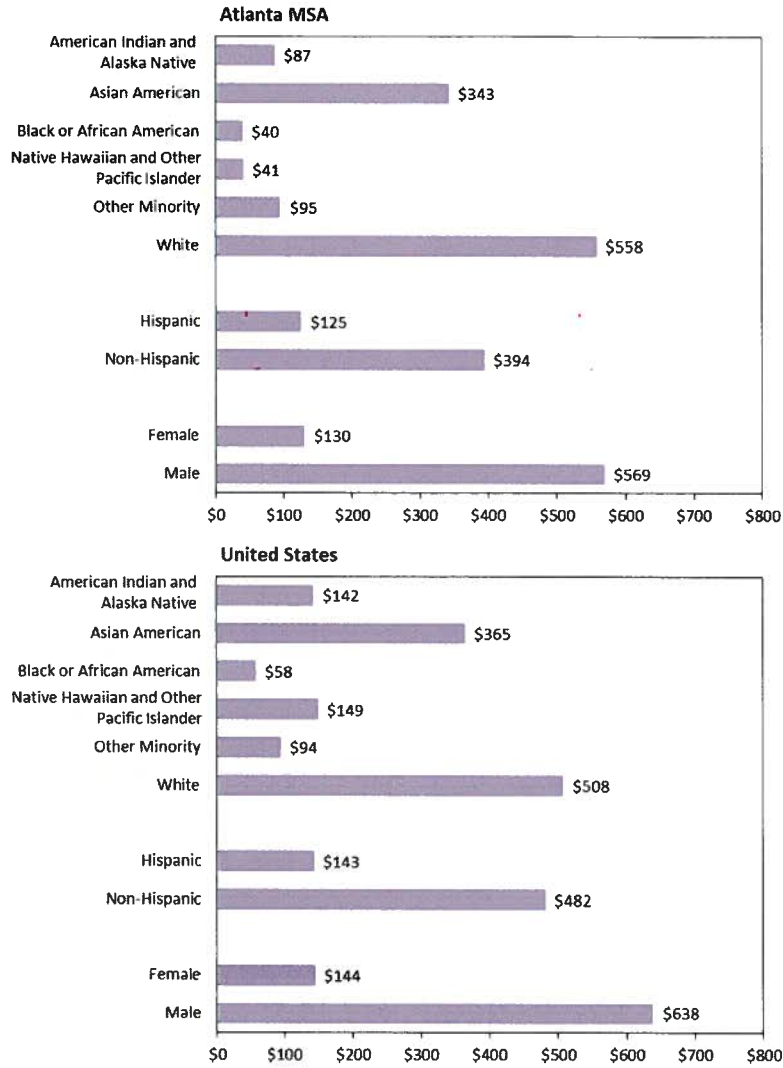
Disparities in business receipts for minority- and women-owned businesses compared to non-Hispanic white- and male-owned businesses in the Atlanta MSA are consistent with those seen in the United States as a whole. A 2007 SBA study identified differences similar to those presented in Figure H-8 when examining businesses in all industries across the U.S.¹⁶

¹⁴ The 2012 SBO data are not available at the same geographic level as Census and ACS data. For most marketplace analyses using Census and ACS data, results are presented for the 20-county “APS market area” but analyses using the SBO data are conducted for the Atlanta MSA, which includes the APS market area counties along with eight additional counties. The Atlanta MSA includes the following Georgia counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding and Walton.

¹⁵ We use “all businesses” to denote SBO data used in this analysis. The data include incorporated and unincorporated businesses, but not publicly-traded companies or other businesses not classifiable by race/ethnicity and gender.

¹⁶ Lowrey, Ying. 2007. *Minorities in Business: A Demographic Review of Minority Business Ownership*. Office of Economic Research, Office of Advocacy, U.S. Small Business Administration.

Figure H-8.
Mean annual receipts (thousands) for all businesses, by race/ethnicity and gender of owners, 2012



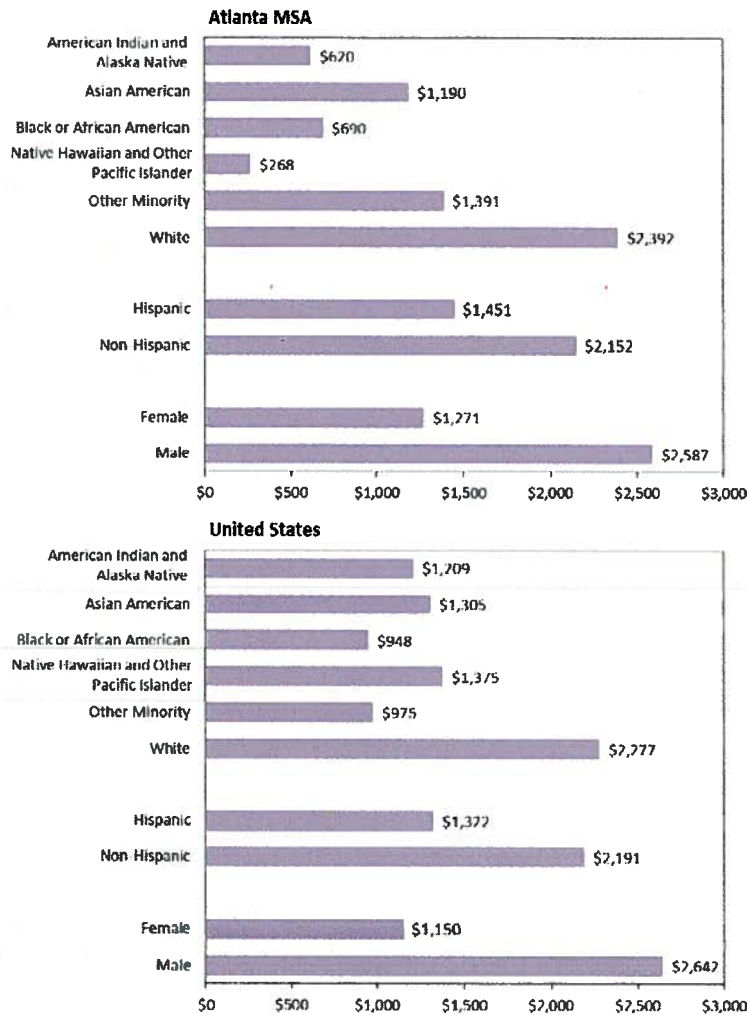
Note: Includes employer and non-employer businesses. Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined.

Source: 2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census.

Figure H-9 presents average annual receipts in 2012 for only employer businesses in the Atlanta MSA and in the United States. (Employer businesses are those with paid employees.) Minority- and women-owned businesses had substantially lower average business receipts than non-Hispanic-, white- and male-owned employer businesses in the Atlanta MSA:

- Average receipts of Native Hawaiian-owned businesses (\$268,000) were 11 percent of the average of white-owned businesses (\$2.4 million).
- Average receipts of American Indian and Alaska Native-owned businesses (\$620,000) were about one quarter that of the average of white-owned businesses.
- Average receipts of African American-owned businesses (\$690,000) were less than 30 percent of the average for white-owned businesses.
- Asian American-owned businesses had average receipts (\$1.2 million) that were half of the average of white-owned businesses.
- Hispanic American-owned businesses had average receipts (\$1.5 million) that were about two-thirds that of non-Hispanic-owned businesses (\$2.2 million).
- Average receipts for women-owned businesses (\$1.3 million) were half the average of male-owned businesses (\$2.6 million).

Figure H-9.
 Mean annual receipts (thousands) for employer businesses, by race/ethnicity and gender of owners, 2012



Note: Includes only employer businesses. Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined.

Source: 2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census.

Receipts by industry. The study team also analyzed SBO receipts data separately for businesses in the relevant study industries. Figure H-10 and H-11 present mean annual receipts in 2012 for all (i.e., employer and non-employer businesses combined) businesses in the relevant study industries and for just employer businesses by racial, ethnic and gender group. Results are presented for the Atlanta MSA and for the nation as a whole.

Figure H-10.
Mean annual receipts (thousands) for all firms in the relevant study industries, by race/ethnicity and gender of owners, 2012

	All firms			
	All industries together	Construction	Professional, scientific & technical services	Information
Atlanta MSA				
Race				
American Indian and Alaska Native	\$87	N/A	\$81	N/A
Asian	\$343	\$205	\$298	\$270
Black or African American	\$40	\$36	\$44	\$44
Native Hawaiian and Other Pacific Islander	\$41	\$38	\$35	N/A
Other Minority	\$95	\$51	\$66	\$107
White	\$558	\$462	\$261	\$1,153
Ethnicity				
Hispanic	\$125	\$73	\$103	\$87
Non-Hispanic	\$394	\$427	\$226	\$811
Gender				
Female	\$130	\$222	\$96	N/A
Male	\$569	\$368	\$301	\$513
United States				
Race				
American Indian and Alaska Native	\$142	\$206	\$102	\$129
Asian	\$365	\$200	\$245	\$445
Black or African American	\$58	\$81	\$76	\$88
Native Hawaiian and Other Pacific Islander	\$149	\$272	\$148	\$170
Other Minority	\$94	\$86	\$105	\$116
White	\$508	\$455	\$235	\$628
Ethnicity				
Hispanic	\$143	\$117	\$121	\$135
Non-Hispanic	\$482	\$467	\$235	\$609
Gender				
Female	\$144	\$350	\$104	\$252
Male	\$638	\$415	\$301	\$736

Note: Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined. "N/A" indicates that estimates were suppressed by the SBO because publication standards were not met.

Source: 2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census.

In the Atlanta MSA, when considering all industries together, average 2012 receipts for most minority and female-owned businesses were lower than the average for non-Hispanic, white- and male-owned businesses. Results for all businesses (i.e., employer and non-employer businesses combined) indicate that:

- Average receipts of African American-owned businesses (\$40,000) were only 7 percent that of white-owned businesses (\$558,000).
- Average receipts of Asian American-owned businesses (\$343,000) were approximately two-thirds that of white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses (\$87,000) were about 16 percent that of white-owned businesses.
- Hispanic-owned businesses (\$125,000) exhibited revenues that were less than one-third of the average of non-Hispanic-owned businesses (\$394,000).
- Average receipts for women-owned businesses (\$130,000) were less than a quarter of the average for male-owned businesses (\$569,000).

In general, these trends persisted when analyzing industry-specific data in the Atlanta MSA. Within the study industries, where data was available for specific minority groups and females, those groups generally earned less than non-Hispanic, white- and male-owned businesses. Results across all study industries indicate that:

- Average receipts of African American-owned businesses were between 4 and 17 percent that of white-owned businesses.
- Average receipts of Asian American-owned businesses were between 23 and 114 percent that of white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses were between 16 and 31 percent that of white-owned businesses.
- Hispanic-owned businesses exhibited revenues that varied between 11 and 46 percent that of the average of non-Hispanic-owned businesses.
- Average receipts for women-owned businesses varied between 32 and 60 percent that of the average for male-owned businesses.

Figure H-11. Mean annual receipts (thousands) for employer firms in the relevant study industries, by race/ethnicity and gender of owners, 2012

	All firms			
	All industries together	Construction	Professional, scientific & technical services	Information
Atlanta MSA				
Race				
American Indian and Alaska Native	\$620	N/A	\$241	N/A
Asian	\$1,190	\$1,224	\$1,000	\$1,467
Black or African American	\$690	\$817	\$425	\$1,148
Native Hawaiian and Other Pacific Islander	\$268	N/A	N/A	N/A
Other Minority	\$1,391	\$1,060	\$745	\$1,949
White	\$2,392	\$2,171	\$902	\$5,389
Ethnicity				
Hispanic	\$1,451	\$750	\$710	\$622
Non-Hispanic	\$2,152	\$2,214	\$887	\$5,155
Gender				
Female	\$1,271	\$1,319	\$521	N/A
Male	\$2,587	\$2,292	\$1,061	\$2,556
United States				
Race				
American Indian and Alaska Native	\$1,209	\$1,266	\$605	\$1,330
Asian	\$1,305	\$1,223	\$1,154	\$2,959
Black or African American	\$948	\$1,096	\$816	\$2,073
Native Hawaiian and Other Pacific Islander	\$1,375	\$1,732	\$1,274	\$1,682
Other Minority	\$975	\$839	\$1,139	\$1,419
White	\$2,277	\$1,730	\$983	\$3,366
Ethnicity				
Hispanic	\$1,322	\$1,005	\$865	\$1,453
Non-Hispanic	\$2,191	\$1,749	\$999	\$3,388
Gender				
Female	\$1,150	\$1,561	\$620	\$2,659
Male	\$2,642	\$1,842	\$1,167	\$3,800

Note: Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined. "N/A" indicates that estimates were suppressed by the SBO because publication standards were not met.

Source: 2012 Survey of Business Owners, part of the U.S. Census Bureau's 2012 Economic Census

SBO data indicated that average receipts were higher for employer businesses than for all businesses (i.e., employer and non-employer businesses combined). In the Atlanta MSA, when considering only employer firms, average 2012 receipts for most minority and female-owned businesses were lower than the average for non-Hispanic, white- and male-owned businesses. Results for all employer firms indicate that:

- Average receipts of African American-owned businesses (\$690,000) were only 29 percent that of white-owned businesses (\$2,392,000).
- Average receipts of Asian American-owned businesses (\$1,190,000) were half that of white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses (\$620,000) were slightly more than one quarter that of white-owned businesses.
- Hispanic-owned businesses (\$1,451,000) exhibited revenues that were approximately two-thirds that of the average of non-Hispanic-owned businesses (\$2,152,000).
- Average receipts for women-owned businesses (\$1,271,000) were slightly less than half that of the average for male-owned businesses (\$2,587,000).

In general, these trends persisted when analyzing industry-specific data in the Atlanta MSA. Within the study industries, where data was available for specific minority groups and females, those groups generally earned less than non-Hispanic, white- and male-owned businesses. Results across all study industries for employer firms indicate that:

- Average receipts of African American-owned businesses were between 21 and 47 percent that of white-owned businesses.
- Average receipts of Asian American-owned businesses were between 27 and 111 percent that of white-owned businesses.
- Average receipts of American Indian and Alaska Native-owned businesses were around one-fourth that of white-owned businesses.¹⁷
- Hispanic-owned businesses exhibited revenues between 34 and 80 percent that of the average of non-Hispanic-owned businesses.
- Average receipts for women-owned businesses varied between 49 and 58 percent that of the average for male-owned businesses.

Business earnings. In order to assess the success of self-employed minorities and women in the relevant study industries, the study team examined earnings of business owners using Public Use Microdata Series (PUMS) data from the 2010-2014 ACS. The study team analyzed earnings of incorporated and unincorporated business owners age 16 and older who reported positive business earnings.

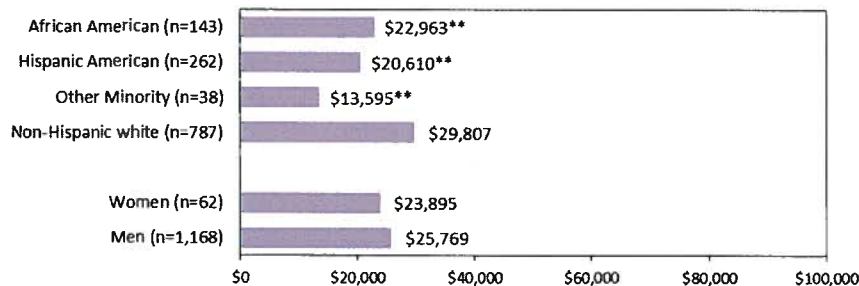
¹⁷ This variation may be due to small sample sizes.

Construction business owner earnings, 2010-2014. The 2011-2015 ACS also reports business owner earnings. Because of the way that the U.S. Census Bureau conducts each year's ACS, earnings for business owners reported in the 2011 through 2014 sample were for the previous 12 months between 2010 and 2014.¹⁸ However, all dollar amounts are presented in 2014 dollars.

Figure H-12 shows earnings in 2010 through 2014 for business owners in the construction industry in the Atlanta Metropolitan Area and the nation as a whole. Again, due to sample sizes for individual minority groups, Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans and "other race minorities" were combined.

- On average, African American construction business owners in the Atlanta Metropolitan Area (\$22,963) earned less in 2010-2014 than non-Hispanic white construction business owners (\$29,807), a statistically significant difference.
- Hispanic American business owners (\$20,610) also earned substantially less than non-Hispanic white business owners in 2010-2014, a statistically significant difference.
- Other Minority business owners (\$13,595) also earned substantially less than non-Hispanic white business owners in 2010-2014.
- Average earnings for female construction business owners (\$23,895) were similar to those of male construction business owners (\$25,769) in the Atlanta Metropolitan Area from 2010-2014.

Figure H-12.
Mean annual business owner earnings in the construction industry, 2010 through 2014, Atlanta Metropolitan Area



Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars. *, ** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

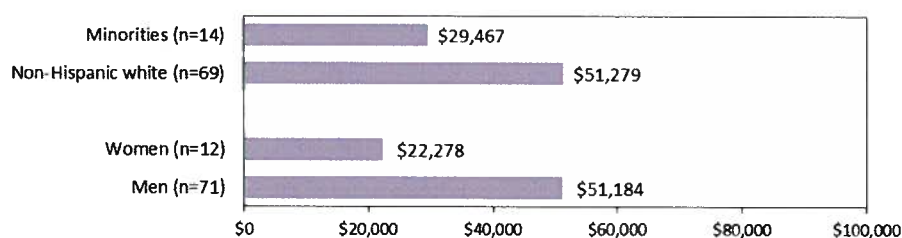
Source: BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

¹⁸ For example, if a business owner completed the survey on January 1, 2011, the figures for the previous 12 months would reference January 1, 2010 to December 31, 2010. Similarly, a business owner completing the survey December 31, 2014 would reference amounts since January 1, 2014.

Architecture and engineering business owner earnings, 2010-2014. As with earnings data for the construction industry, earnings for architecture and engineering (A&E) business owners that were reported in the 2011-2015 ACS data were for the time period between 2010 and 2014. All dollar amounts are presented in 2014 dollars. Due to small sample sizes, all minority business owners were combined into a single category. Those results are displayed in Figure H-13.

- On average, minority business owners in the A&E industry earned approximately three-fifths of the earnings of non-Hispanic white business owners in the Atlanta Metropolitan Area in 2010 through 2014 (\$29,467 and \$51,279, respectively).
- Average earnings for female architecture and engineering business owners (\$22,278) were less than half the earnings for male business owners (\$51,184) in the Atlanta Metropolitan Area in 2010 through 2014¹⁹. (Note that sample sizes for minority- and women-owned A&E business owners were small.)

Figure H-13.
Mean annual business owner earnings in the architecture and engineering industry, 2010 through 2014, Atlanta Metropolitan Area



Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.
** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

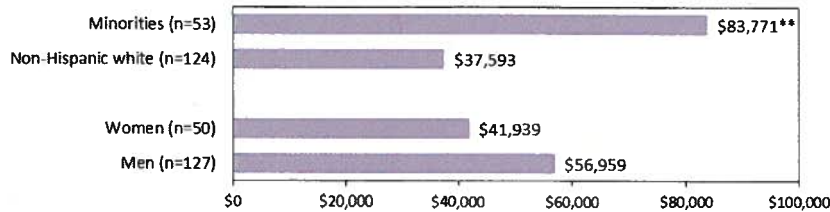
Source: BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Information technology business owner earnings, 2010-2014. As with earnings data for the previously reported industries, earnings for information technology (IT) business owners that were reported in the 2011-2015 ACS data were for the time period between 2010 and 2014. All dollar amounts are presented in 2014 dollars. Again, due to small sample sizes, all minority business owners were combined into a single category. Results are displayed in Figure H-14.

- Average earnings for minority business owners in the Atlanta Metropolitan Area IT industry (\$83,771) were significantly greater than non-Hispanic white business owners (\$37,593).
- There was not a statistically significant difference between average earnings for female business owners in the IT industry (\$41,939) and earnings of male business owners (\$56,959).

¹⁹ The sample sizes did not reach the minimum required (25 per group) to qualify for significance testing. Therefore, significance tests were not conducted for business earnings in the architecture and engineering industry.

Figure H-14.
 Mean annual business owner earnings in the information technology industry,
 2010 through 2014, the Atlanta Metropolitan Area



Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2014 dollars.
 ** Denotes statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Regression analyses of business earnings. Differences in business earnings among different racial/ethnic and gender groups may be at least partially attributable to race- and gender-neutral factors such as age, marital status and educational attainment. The study team performed regression analyses using 2010-2014 ACS data to examine whether there were differences in business earnings between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and gender-neutral factors.

The study team applied an ordinary least squares regression model to the data that was very similar to models reviewed by courts after other disparity studies.²⁰ The dependent variable in the model was the natural logarithm of business earnings. Business owners that reported zero or negative business earnings were excluded, as were observations for which the U.S. Census Bureau had imputed values of business earnings. Along with variables for the race/ethnicity and gender of business owners, the model also included available measures from the data considered likely to affect earnings potential, including age, age-squared, marital status, ability to speak English well, disability condition and educational attainment.

The study team developed models for business owner earnings in 2010 through 2014 for the Atlanta Metropolitan Area in the following industries:

- A model for business owner earnings in the construction industry that included 1,230 observations;
- A model for business owner earnings in the A&E industry that included 614 observations; and
- A model for business owner earnings in the IT industry that included 158 observations.

²⁰ For example, National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation; and National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Construction industry regression results, 2010 through 2014. Figure H-15 illustrates the results of the regression model for 2010 through 2014 earnings in the construction industry in the Atlanta Metropolitan Area. The model indicated that several race- and gender-neutral factors significantly predicted earnings of business owners in the construction industry in the Atlanta Metropolitan Area:

- Older business owners tended to have greater business earnings than younger business owners; however, the oldest individuals had lower earnings;
- Married business owners tended to have greater business earnings than unmarried business owners;
- Business owners with a disability tend to have lower business earnings than those without a disability; and
- Having a four-year college degree was associated with greater business earnings.

After statistically controlling for race- and gender-neutral factors, the model indicated a statistically significant disparity in earnings for Other Minorities and female business owners. Being Hispanic American was associated with higher business earnings.

Figure H-15.
Atlanta Metropolitan Area construction business owner earnings model, 2010-2014

Note:

*, ** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	7.334 **
Age	0.088 **
Age-squared	-0.001 **
Married	0.313 **
Speaks English well	0.293
Disabled	-0.659 *
Less than high school	-0.257 **
Some college	-0.025
Four-year degree	0.445 **
Advanced degree	0.106
African American	-0.108
Asian Pacific American	0.012
Subcontinent Asian American	-0.629
Hispanic American	0.310 **
Native American	-1.004
Other Minority	-1.971 **
Female	-0.504 **

Architecture and engineering industry regression results, 2010 through 2014. Figure H-16 presents the results of the regression model of business owner earnings specific to the Atlanta Metropolitan Area A&E industry for 2010 through 2014. The model indicated that several race- and gender-neutral factors significantly predicted earnings of business owners in this industry:

- Speaking English well was associated with greater business earnings;
- Business owners with a disability tended to have lower earnings than business owners without a disability; and

- Educational attainment impacted business earnings; having less than a high school education was associated with greater business earnings; however, having some college, a four-year degree, or an advanced degree was also associated with greater business earnings.

After accounting for neutral factors, the model indicated a statistically significant disparity in earnings for Native American and female business owners in the Atlanta Metropolitan A&E industry.

Figure H-16.
Atlanta Metropolitan Area architecture and engineering industry business owner earnings model, 2010-2014

Note:

*, ** Denotes statistical significance at the 90% and 95% confidence level, respectively.

“Other Minority” was omitted from the analysis due to small sample size.

Source:

BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	3.774
Age	0.138
Age-squared	-0.001
Married	0.114
Speaks English well	1.717 **
Disabled	-1.767 **
Less than high school	2.841 **
Some college	1.365 *
Four-year degree	1.710 **
Advanced degree	1.901 **
African American	0.229
Asian Pacific American	-1.731
Subcontinent Asian American	0.086
Hispanic American	-0.054
Native American	-2.144 **
Female	-1.516 *

Information technology industry regression results, 2010 through 2014. Figure H-17 presents the results of the regression model of business owner earnings specific to the Atlanta Metropolitan Area IT industry for 2010 through 2014. The model identified certain race- and gender-neutral factors that significantly predicted earnings of business owners in the IT industry:

- Married business owners tended to have greater business earnings than unmarried business owners; and
- Speaking English well was associated with lower business earnings.

After accounting for neutral factors, the model indicated a statistically significant disparity in earnings for other minority business owners, whereas being Subcontinent Asian American was associated with higher business earnings.

Figure H-17.
Atlanta Metropolitan Area information
technology industry business owner
earnings model, 2010-2014

Note:

*, ** Denotes statistical significance at the 90% and 95% confidence level, respectively.

Source:

BBC Research & Consulting from 2010-2014 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	9.062 **
Age	0.051
Age-squared	-0.001
Married	1.128 **
Speaks English well	-2.091 *
Disabled	-0.906
Less than high school	0.935
Some college	0.582
Four-year degree	1.222
Advanced degree	0.901
African American	0.679
Asian Pacific American	1.401
Subcontinent Asian American	0.671 *
Hispanic American	0.697
Native American	-0.356
Other Minority	-2.069 **
Female	-0.366

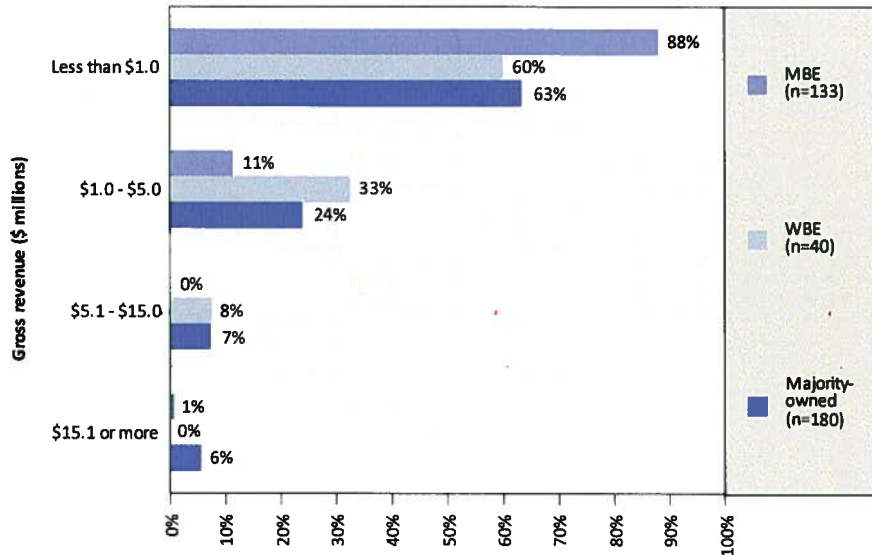
Gross revenue of firms from availability interviews. As discussed previously, total revenue is a key measure of the economic success of businesses. In the availability telephone interviews that Keen Independent conducted (discussed in Appendix C), firm owners and managers were asked to identify the size range of their average annual gross revenue in the previous three years: from 2014 through 2016. Only firms with locations in the Atlanta Metropolitan Area were included in the availability interviews.

Construction. Figure H-18 presents the reported annual revenue for MBE, WBE and majority-owned construction businesses in the Atlanta availability interviews. Majority-owned construction firms were more likely to report higher average annual revenues relative to minority- and women-owned construction firms in the Atlanta Metropolitan Area.

- About 88 percent of MBEs reported average revenue of less than \$1 million per year compared to 60 percent of WBEs and 63 percent of majority-owned firms.
- After combining the highest revenue categories, relatively few MBEs (1%) reported average revenue of more than \$15 million per year compared with 6 percent of majority-owned businesses. No WBE construction firms reported average annual revenue more than \$15 million.

Figure H-18.

Average annual gross revenue of company over previous three years, construction industry in the Atlanta Metropolitan Area



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

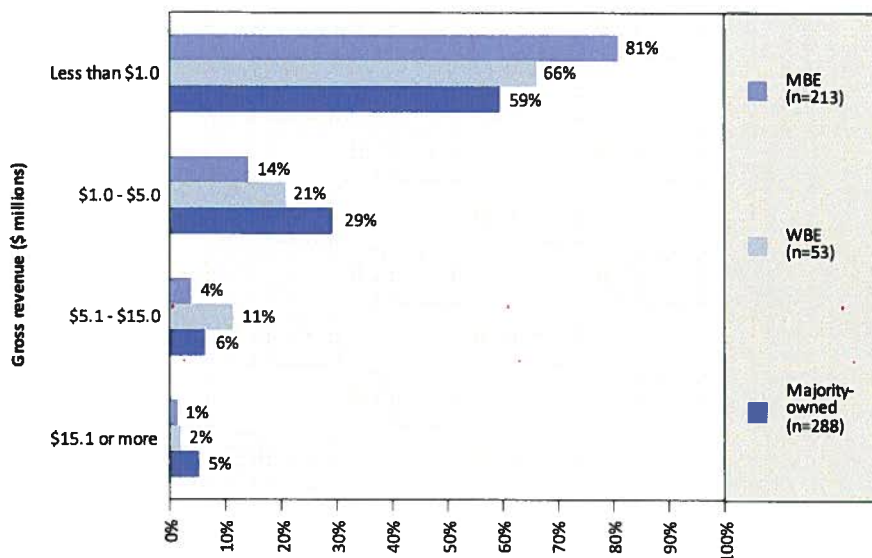
Source: Keen Independent Research from 2017 availability interviews.

A&E and IT industries. Figure H-19 presents the reported annual revenue for MBEs, WBEs and majority-owned A&E and IT businesses in the Atlanta Metropolitan Area (data were combined to increase sample sizes). MBEs and WBEs were more likely to report lower annual revenues compared to majority-owned businesses.

- A higher percentage of MBEs (81%) and WBEs (66%) than majority-owned businesses (59%) reported average revenue of less than \$1 million per year.
- Relatively few MBE firms (1%) and WBE firms (2%) reported average revenue of more than \$15 million per year compared with majority-owned businesses (5%).

Figure H-19.

Average annual gross revenue of company over previous three years, professional services industry in the Atlanta Metropolitan Area



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Relative Bid Capacity

Some legal cases regarding race- and gender-conscious contracting programs have considered the importance of the "relative capacity" of businesses included in an availability analysis.²¹

Keen Independent directly measured bid capacity in its availability analysis.²²

Through this analysis, Keen Independent was able to distinguish firms based on the largest contracts or subcontracts they had performed or bid on (i.e., "bid capacity" as used in this study). Although additional measures of capacity might be theoretically possible, the bid capacity concept can be articulated and quantified for individual firms for specific time periods.

Data. The availability analysis produced a database of construction, A&E, IT and other businesses for which bid capacity could be examined. (Keen Independent combined A&E and IT into "professional services" to increase the sample size for this analysis.)

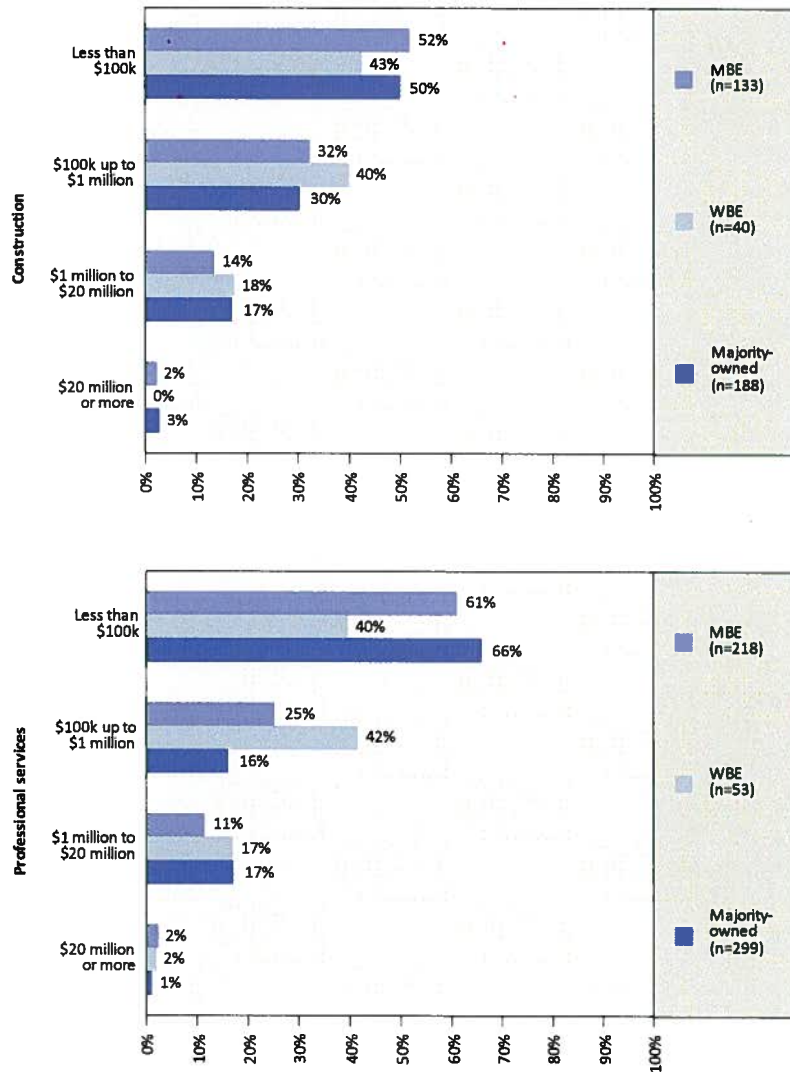
"Relative bid capacity" for a business is measured as the largest contract or subcontract that the business performed or reported that they had bid on within the five years preceding when Keen Independent interviewed it.

²¹ For example, see the decision of the United States Court of appeals for the Federal Circuit in *Rotbe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

²² See Appendix C for details about the availability interview process.

Results. As shown in Figure H-20, there is little indication that MBEs in the construction and other services have lower bid capacity than majority-owned firms. In construction, for example, one-half of MBEs had bid capacity less than \$100,000, about the same as majority-owned firms. At the other end of the spectrum, 2 percent of MBEs had bid capacity of more than \$20 million, about the same as majority-owned firms. There was also little difference in bid capacity between minority- and majority-owned professional services firms. Across industries, WBEs were more likely than majority-owned firms to have bid capacity of more than \$100,000.

Figure H-20.
Largest contract bid on or awarded (bid capacity) by industry for construction and professional services firms in the Atlanta Metropolitan Area



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Above median bid capacity. Keen Independent further explored bid capacity on a subindustry level. Subindustries such construction management and development tend to involve relatively large projects. Other subindustries, such as landscape contracting and maintenance, typically involve smaller contracts. Figure H-21 reports the median relative bid capacity among Atlanta Metropolitan Area businesses in 18 subindustries. Results categorized companies according to their primary line of business (which is why building construction appears as these firms may also perform other work).

Figure H-21.

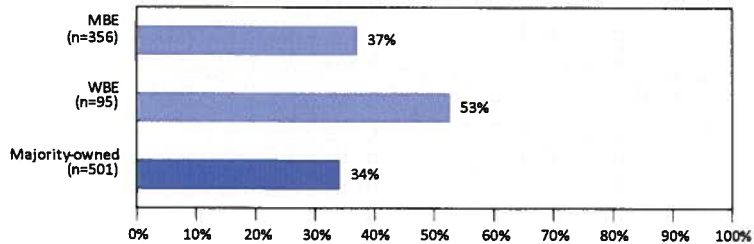
Median relative capacity of Atlanta Metropolitan Area businesses by subindustry

Subindustry	Median bid capacity
Construction	
Site preparation	\$2 million to \$5 million
Construction management for multifamily properties	\$1 million to \$2 million
Developer of multifamily properties	\$1 million
Building construction or other general contractor for multifamily properties	\$500,000 to \$1 million
Building construction or other general contractor for school properties	\$500,000 to \$1 million
Electrical work	\$100,000 to \$500,000
Plaster and drywall work	\$100,000 to \$500,000
Water and sewerlines	\$100,000 to \$500,000
Concrete work	\$100,000 or less
Plumbing, heating or air conditioning	\$100,000 or less
Other - construction	\$100,000 or less
Professional services	
Construction management	\$100,000
Digital learning and business software	\$100,000 or less
Engineering, architecture and design services	\$100,000 or less
Environmental consulting	\$100,000 or less
IT Infrastructure, installation, staffing and support	\$100,000 or less
Other services	
Guard and security services	\$1 million to \$2 million
Other - services	\$100,000 or less

Source: Keen Independent Research from 2017 availability interviews.

Comparison of above median bid capacity for MBEs, WBEs and majority-owned firms. Based on the median bid capacity figures identified in Figure H-22, Keen Independent classified firms into “above median bid capacity,” “at median bid capacity,” and “below median bid capacity” for their subindustry. About the same percentage of MBEs (37%) as majority-owned firms (34%) had above median bid capacity for their subindustry. The percentage was higher for WBEs: 53 percent.

Figure H-22.
Percent of firms above
median bid capacity for
their subindustry, Atlanta
Metropolitan Area, 2017



Source:
Keen Independent Research from 2017
availability interviews.

Regression analysis. The study team developed a logistic regression model to determine whether the likelihood that a firm at above median bid capacity for its subindustry varied for MBEs and WBEs compared with majority-owned firms after accounting for age of businesses. After controlling for length of time in business, there was no evidence that minority- and women-owned firms had lower bid capacity than majority-owned firms.

Availability Interview Results Concerning Potential Barriers

As part of the availability interviews conducted with Atlanta Metropolitan Area businesses, Keen Independent asked firm owners and managers if they had experienced barriers or difficulties associated with starting or expanding a business or with obtaining work. Appendix C explains the survey process and provides the survey questions.

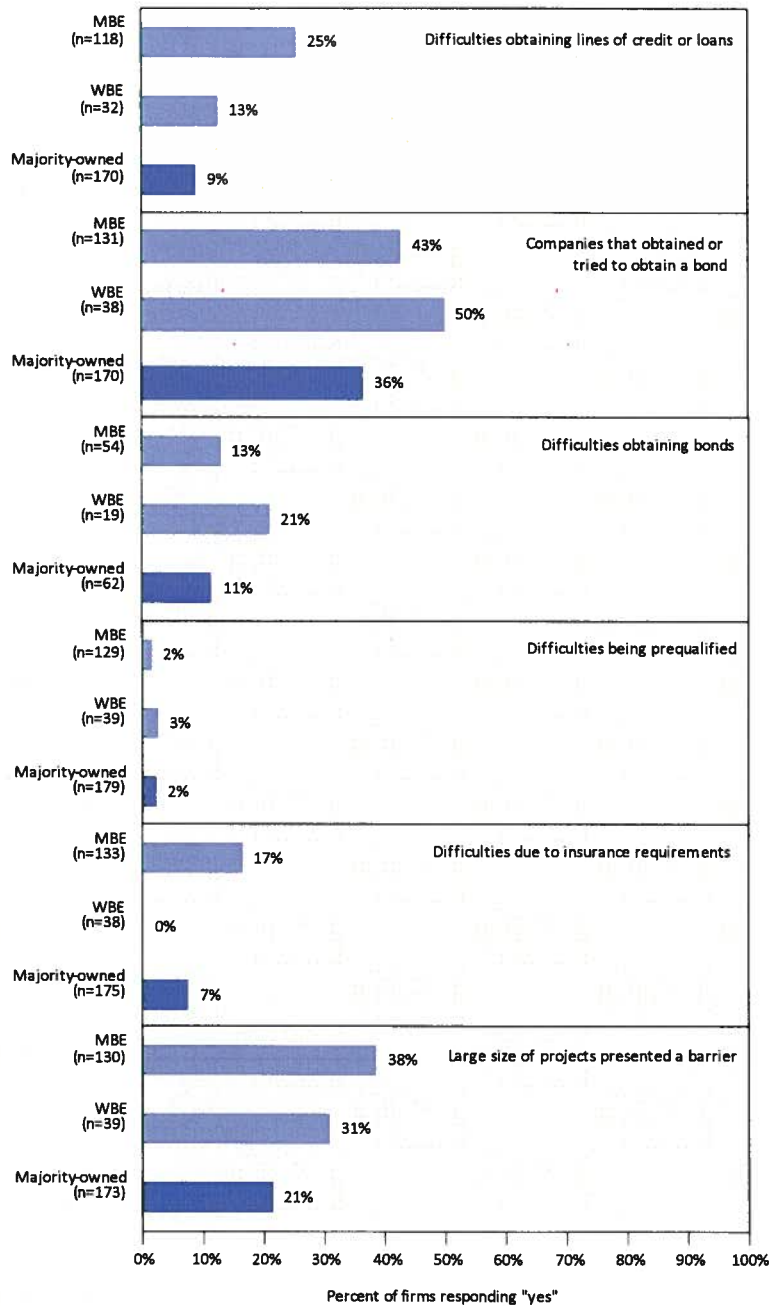
Results for interview questions are discussed within the context of the relevant study industry; some questions were industry-specific and not asked of all available businesses. The analysis is grouped into three groups for each study industry: barriers to learning about bid opportunities, barriers related to project requirements and barriers related to access to capital.

Construction. In the availability survey, construction firms were asked about obtaining financing and bonding, being prequalified for work, insurance requirements and whether project size was a barrier to bidding. Figure H-23 shows results.

- About 25 percent of MBE construction firms surveyed reported difficulties associated with obtaining lines of credit or loans compared with only 13 percent of majority-owned firms and 9 percent of WBEs.
- About one-half of MBE/WBE and majority-owned survey respondents had obtained or tried to obtain bonds. WBEs were more likely than majority-owned firms to indicate difficulties obtaining bonds, however, there were a small number of responses for WBEs (only firms that had sought bonds were asked the barrier question).
- Very few firms reported difficulties being prequalified for work.
- A larger percentage of MBEs (17%) than majority-owned firms (7%) reported that insurance requirements on contracts were a barrier to bidding.
- MBEs (38%) and WBEs (31%) were more likely than majority-owned construction firms (21%) to indicate that large contract size presented a barrier to bidding.

Figure H-23.

Responses to availability interview questions concerning loans, bonding and insurance, prequalification and size of projects Atlanta Metropolitan Area MBE, WBE and majority-owned construction firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

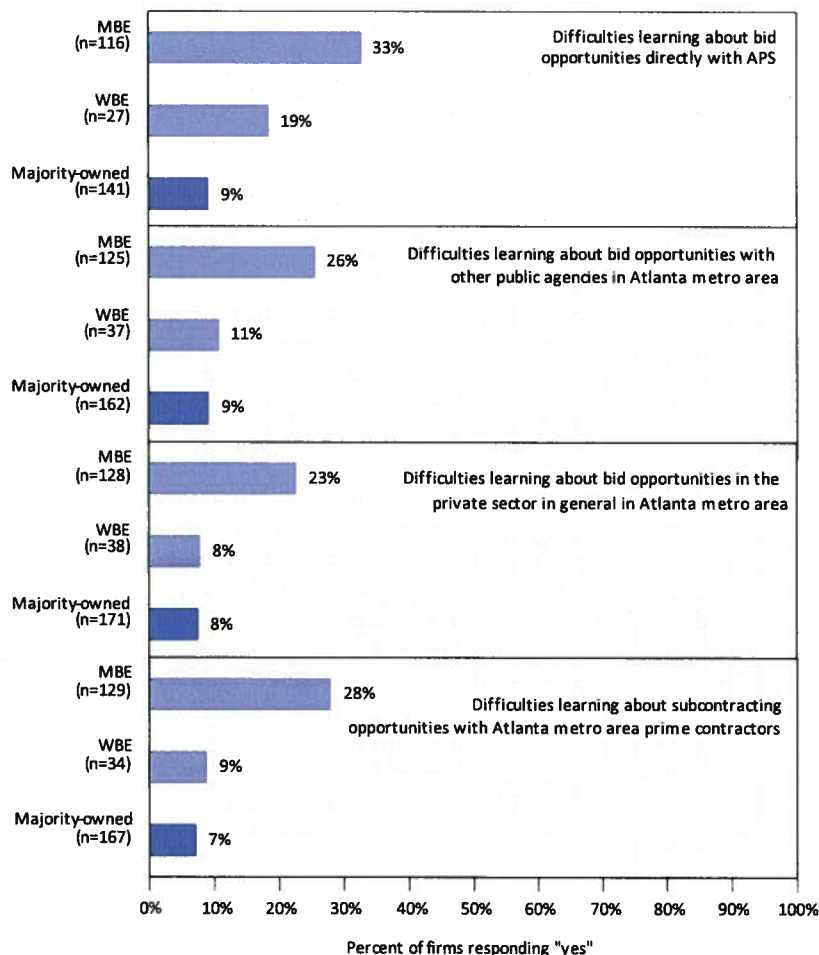
Source: Keen Independent Research from 2017 availability interviews.

The survey also asked construction firms about any difficulties learning about bid opportunities.

- In general, relatively more MBEs than majority-owned firms indicated difficulties learning about bid opportunities directly with APS, other public agencies in the Atlanta area, in the private sector and with prime contractors, as shown in Figure H-24. Note that results for MBEs and majority-owned firms for the question about learning about bid opportunities with APS (top of Figure H-24) were similar to results for MBEs and majority-owned firms related to bid opportunities with other organizations.
- WBEs were more likely than majority-owned firms to indicated difficulties learning about bid opportunities with APS.

Figure H-24.

Responses to availability interview questions concerning learning about work, Atlanta Metropolitan Area MBE, WBE and majority-owned construction firms



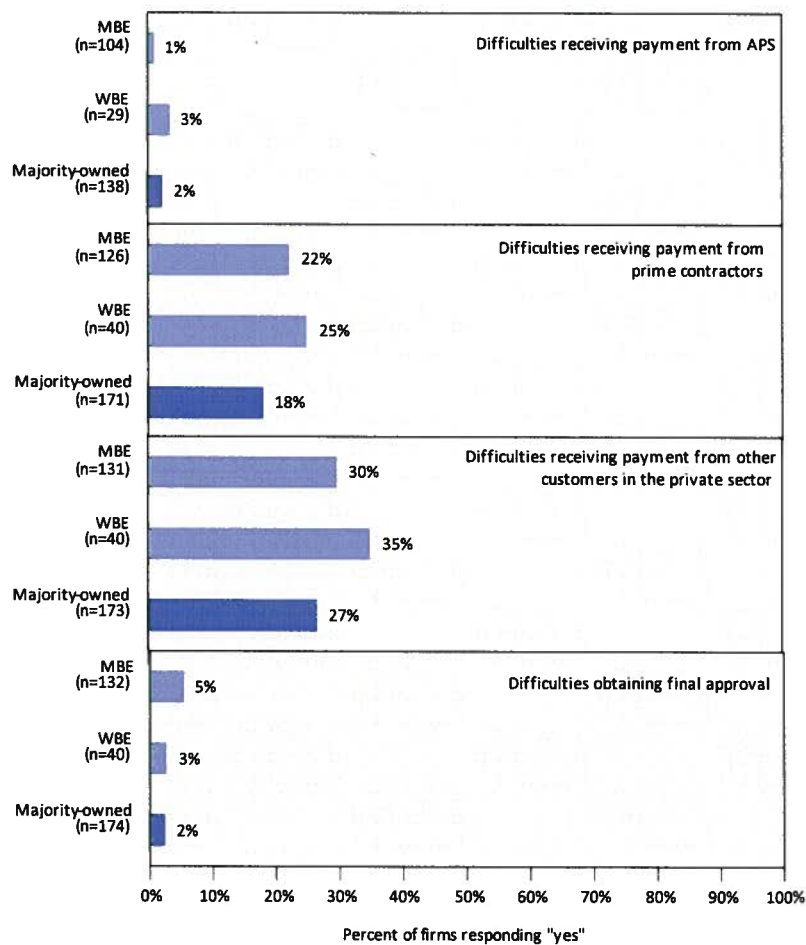
Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Keen Independent also examined the proportion of firms reporting difficulty receiving payments.

- Very few firms said that they experienced difficulties receiving payment from APS. (After further analysis, this might be because many had not obtained APS work.)
- About one quarter of construction firms said that they had experienced difficulties receiving payment from prime contractors. About one-third of respondents reported difficulties receiving payment from other customers in the private sector. Somewhat more MBE/WBEs indicating difficulties receiving payment than majority-owned firms.

Figure H-25.
Responses to availability interview questions concerning receipt of payments and approval of work, Atlanta Metropolitan Area MBE, WBE and majority-owned construction firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

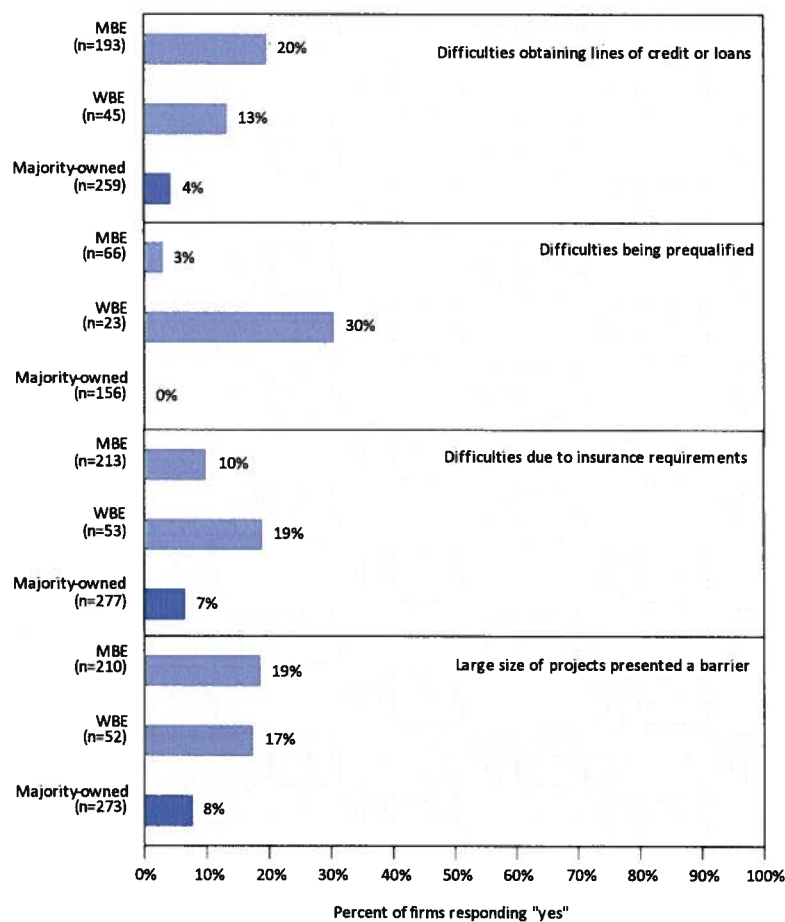
Source: Keen Independent Research from 2017 availability interviews.

Professional services. The study team asked similar questions about marketplace barriers in the availability interviews with professional services firms (combining A&E- and IT-related firms).

- Relatively more MBEs (20%) and WBEs (13%) reported difficulties obtaining lines of credit or loans than majority-owned firms (4%), and a greater share of WBEs reported difficulties being prequalified and difficulties due to insurance requirements.
- MBEs (19%) and WBEs (17%) were more likely to report large project size as a barrier compared with majority-owned firms (8%).

Figure H-26.

Responses to availability interview questions concerning loans, prequalification, insurance and size of projects Atlanta Metropolitan Area MBE, WBE and majority-owned professional services firms

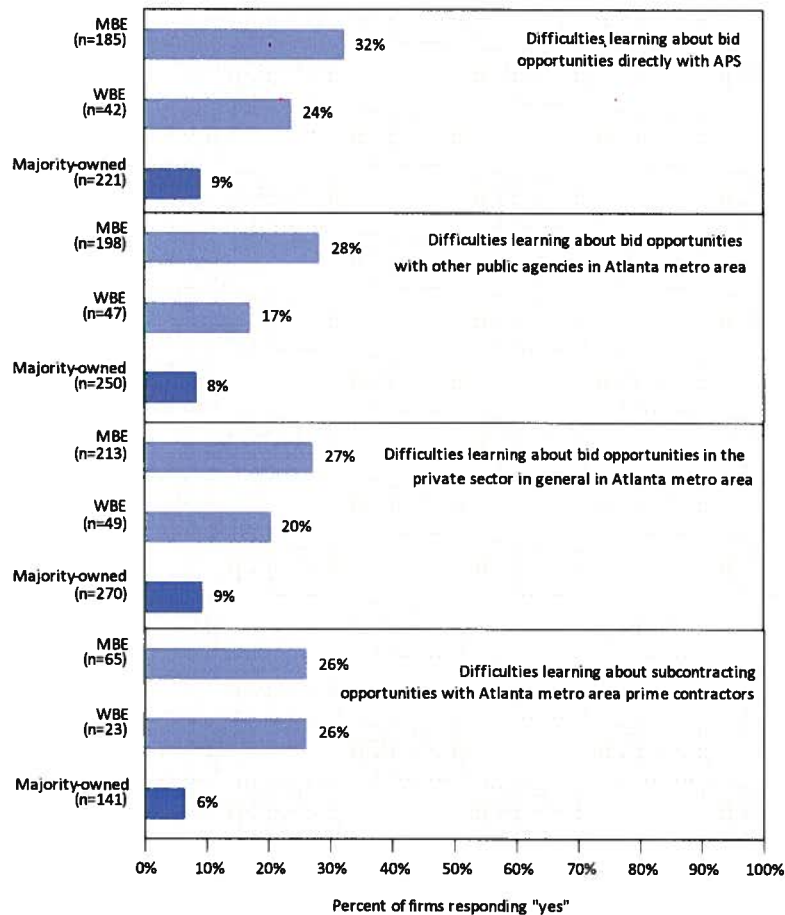


Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Compared with majority-owned firms, a larger proportion of MBE and WBE professional services firms reported difficulties learning about bid opportunities with APS, other public agencies, prime contractors and with private sector customers. For example, 32 percent of MBEs and 24 percent of WBEs indicated difficulties learning about bid opportunities directly with APS compared with only 9 percent of majority-owned firms. As shown in Figure H-27, results for the question about difficulties learning about APS opportunities were similar to responses when firms were asked about learning about opportunities with other organizations.

Figure H-27.
Responses to availability interview questions concerning learning about work, Atlanta Metropolitan Area MBE, WBE and majority-owned professional services firms



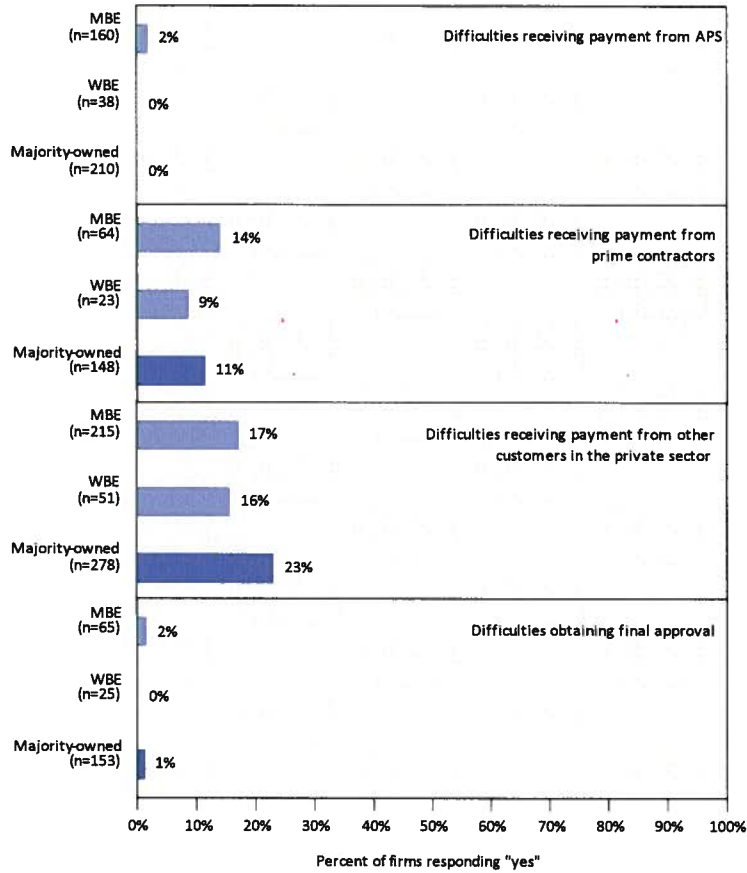
Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Very few professional firms reported difficulties receiving payment from APS (which might mean that they had not worked with APS). Although more firms indicated difficulties receiving payment from prime contractors or customers in the private sector, MBE/WBEs were no more likely to report these difficulties than majority-owned firms. Only a few firms said that they had difficulty obtaining final approvals on work.

Figure H-28.

Responses to availability interview questions concerning receipt of payments and approval of work, Atlanta Metropolitan Area MBE, WBE and majority-owned professional services firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2017 availability interviews.

Summary

The study team used the 2010 SBA study of minority business dynamics to examine business closures, expansions and contractions. That study found that, between 2002 and 2006, 29 percent of non-publicly held U.S. businesses had expanded their employment, 24 percent had contracted their employment and 30 percent had closed.

The following results focus on businesses in Georgia:

- Among the racial/ethnic groups examined, African American-owned firms in all industries were the most likely to close and the least likely to expand. However, they were less likely to contract than white-owned businesses.
- Hispanic American-owned businesses were more likely to close than white-owned businesses. However, Hispanic American-owned businesses were slightly more likely to expand and slightly less likely to contract than white-owned businesses.
- Asian American-owned businesses were more likely to close than non-Hispanic white firms. However, similar to Hispanic American-owned businesses, they were slightly more likely to expand and slightly less likely to contract than white-owned businesses.

The study team examined several different datasets to analyze business receipts and earnings for minority- and female-owned businesses. Analysis of 2012 Survey of Business Owners data indicated that, in the Atlanta MSA, average receipts for African American-, Hispanic American-, Native American and women-owned businesses were lower compared to those of white-, non-Hispanic and male-owned businesses across study industries, and that Asian American-owned construction and IT firms had lower revenue than majority-owned firms.

Data from 2010-2014 ACS indicated that, in the Atlanta Metropolitan Area, minority-owned businesses earned less than majority-owned businesses in the construction industry. Regression analyses using U.S. Census Bureau data for 2010-2014 business owner earnings indicated that there were statistically significant effects of race and gender on business earnings for certain types of Atlanta Metropolitan Area businesses, after statistically controlling for specific gender-neutral factors:

- Being female was associated with lower business earnings in the construction and architecture and engineering industries;
- Being Native American was associated with lower business earnings in the architecture and engineering industry.

Analysis of 2017 telephone survey data for Atlanta Metropolitan Area construction and professional services firms (which combined A&E and IT businesses) showed disparities in average annual revenue for minority- and women-owned firms compared with majority-owned firms in those industries. However, there was little difference in bid capacity among MBEs, WBEs and majority-owned firms.

Keen Independent asked respondents in the 2017 availability interviews whether they had experienced certain types of barriers to doing business.

- Minority-owned firms were much more likely than majority-owned firms to report difficulties obtaining lines of credit or loans and learning about bid opportunities. Relative to majority-owned firms, more MBEs indicated difficulties with insurance requirements and that the large size of projects presented a barrier to bidding. These patterns persisted across industries.

- A similar pattern was evident for WBEs. In addition, WBEs that had attempted to obtain bonds were more likely than majority-owned firms to report difficulties obtaining bonds. Relatively more women-owned A&E and IT firms indicated difficulties being prequalified than majority-owned firms.
- There was little indication that MBEs and WBEs had more difficulty receiving payment for their work than majority-owned firms.

APPENDIX I.

Description of Data Sources for Marketplace Analyses

To perform the marketplace analyses presented in Appendices E through H, the study team used data from a range of sources, including:

- The 2010-2014 five-year American Community Survey (ACS), conducted by the U.S. Census Bureau;
- The 2012 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau; and
- Home Mortgage Disclosure Act (HMDA) data provided by the Federal Financial Institutions Examination Council (FFIEC).

The following sections provide further detail on each data source, including how the study team used it in its quantitative marketplace analyses.

U.S. Census Bureau PUMS Data

Focusing on the construction; architecture and engineering; and information technology industries, the study team used PUMS data to analyze:

- Demographic characteristics;
- Measures of financial resources; and
- Self-employment (business ownership).

PUMS data offer several features ideal for the analyses reported in this study, including historical cross-sectional data, stratified national and local samples, and large sample sizes that enable many estimates to be made with a high level of statistical confidence, even for subsets of the population (e.g., racial/ethnic and occupational groups).

The study team obtained selected Census and ACS data from the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS). The IPUMS program provides online access to customized, accurate datasets.¹ For the analyses contained in this report, the study team used the 2010-2014 five-year ACS sample.

¹ Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 6.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2015.

2010-2014 ACS. The study team examined 2010-2014 ACS data obtained through IPUMS. The U.S. Census Bureau conducts the ACS, which uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form.² Since 2005, the Census has conducted monthly surveys based on a random sample of housing units in every county in the U.S. (along with the District of Columbia and Puerto Rico). Currently, these surveys cover roughly 1 percent of the population per year. The 2010-2014 ACS five-year estimates represent average characteristics over the five-year period of time, and correspond to roughly 5 percent of the population. For the Atlanta Metropolitan Area, the 2010-2014 ACS dataset includes 230,263 observations which — according to person-level weights — represent 5,374,137 individuals.

Categorizing individual race/ethnicity. To define race/ethnicity, the study team used the IPUMS race/ethnicity variables — RACED and HISPAN — to categorize individuals into one of seven groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Native American; and
- Other minority (unspecified).

An individual was considered “non-Hispanic white” if they did not report Hispanic ethnicity and indicated being white only — not in combination with any other race group. All self-identified Hispanics (based on the HISPAN variable) were considered Hispanic American, regardless of any other race or ethnicity identification. For the five other racial groups, an individual’s race/ethnicity was categorized by the first (or only) race group identified in each possible race-type combination. The study team used a rank ordering methodology similar to that used in the 2000 Census data dictionary. An individual who identified multiple races was placed in the reported race category with the highest ranking in the study team’s ordering. African American is first, followed by Native American, Asian-Pacific American, and then Subcontinent Asian American. For example, if an individual identified himself or herself as “Korean,” that person was placed in the Asian-Pacific American category. If the individual identified himself or herself as “Korean” in combination with “Black,” the individual was considered African American.

- The Asian-Pacific American category included the following race/ethnicity groups: Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Native Hawaiian, Samoan, Taiwanese, Thai, Tongan and Vietnamese. This category also included other Polynesian, Melanesian and Micronesian races, as well as individuals identified as Pacific Islanders.

² U.S. Census Bureau. *Design and Methodology: American Community Survey*. Washington D.C.: U.S. Government Printing 2009. Available at http://www.census.gov/acs/www/SBasics/desgn_meth.htm.

- The Subcontinent Asian American category included these race groups: Asian Indian (Hindu), Bangladeshi, Pakistani and Sri Lankan. Individuals who identified themselves as “Asian,” but were not clearly categorized as Subcontinent Asian were placed in the Asian-Pacific American group.
- American Indian, Alaska Native and Latin American Indian groups were considered Native American.
- If an individual was identified with any of the above groups and an “other race” group, the individual was categorized into the known category. Individuals identified as “other race” or “white and other race” were categorized as “Other Minority.”

Education variables. The study team used the variable indicating respondents’ highest level of educational attainment (EDUCD) to classify individuals into four categories: less than high school, high school diploma (or equivalent), some college or associate’s degree, and bachelor’s degree or higher.³

Home ownership and home value. Rates of home ownership were analyzed using the RELATED variable to identify heads of household and the OWNERSHPD variable to define tenure. Heads of household living in dwellings owned free and clear and dwellings owned with a mortgage or loan (OWNERSHPD codes 12 or 13) were considered homeowners. Median home values are estimated using the VALUEH variable, which reports the value of housing units in contemporary dollars. In the 2010-2014 ACS, home value is a continuous variable (rounded to the nearest \$1,000) and median estimation is straightforward.

Definition of workers. Analyses involving worker class, industry, and occupation include workers 16 years of age or older who are employed within the industry or occupation in question. Analyses involving all workers regardless of industry, occupation, or class include both employed persons and those who are unemployed but seeking work.

Business ownership. The study team used the Census detailed “class of worker” variable (CLASSWKD) to determine self-employment. The variable classifies individuals into one of eight categories, shown in Figure I-1. The study team counted individuals who reported being self-employed — either for an incorporated or a non-incorporated business — as business owners.

³ In the 1940-1980 samples, respondents were classified according to the highest year of school completed (HIGRADE). In the years after 1980, that method was used only for individuals who did not complete high school, and all high school graduates were categorized based on the highest degree earned (EDUC99). The EDUCD variable merges two different schemes for measuring educational attainment by assigning to each degree the typical number of years it takes to earn it.

Figure I-1.
Class of worker variable
code in the 2010-2014 ACS

Source:
BBC study team from the IPUMS
program: <http://usa.ipums.org/usa/>

Description	2010-2014 ACS CLASSWKRD codes
N/A	0
Self-employed, not incorporated	13
Self-employed, incorporated	14
Wage/salary, private	22
Wage/salary at non-profit	23
Federal government employee	25
State government employee	27
Local government employee	28
Unpaid family worker	29

Business earnings. The study team used the Census “business earnings” variable (INCBUS00) to analyze business income by race/ethnicity and gender. The study team included business owners aged 16 and over with positive earnings in the analyses.

Study industries. The marketplace analyses focus on three industries: construction; architecture and engineering; and information technology. The study team used the IND variable to identify individuals as working in one of these industries. That variable includes several hundred industry and sub-industry categories. Figure I-2 identifies the IND codes used to define each study area.

Figure I-2.
2010-2014 Census industry codes used for construction, architecture and engineering, and
information technology

Study industry	2010-2014 ACS IND codes	Description
Construction	0770	Construction industry
Architecture & Engineering	7290	Architectural, engineering and related services
Information Technology	6490; 7380	Software publishing; computer systems design and related services

Source: BBC study team from the IPUMS program: <http://usa.ipums.org/usa/>.

Industry occupations. The study team also examined workers by occupation within the construction industry using the PUMS variable OCC. Figure I-3 summarizes the 2010-2014 ACS OCC codes used in the study team’s analyses.

Figure I-3.
2010-2014 ACS occupation codes used to examine workers in construction

2010-2014 ACS occupational title and code	Job description
Construction managers 2010-14 Code: 220	Plan, direct, coordinate or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling and implementation. Include specialized construction fields, such as carpentry or plumbing. Include general superintendents, project managers and constructors who manage, coordinate, and supervise the construction process.
First-line supervisors of construction trades and extraction workers 2010-14 Code: 6200	Directly supervise and coordinate the activities of construction or extraction workers.
Brickmasons, blockmasons and stonemasons 2010-14 Code: 6220	Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block and terra-cotta block. Construct or repair walls, partitions, arches, sewers and other structures. Build stone structures, such as piers, walls, and abutments and lay walks, curbstones or special types of masonry for vats, tanks and floors.
Carpenters 2010-14 Code: 6230	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms, building frameworks, including partitions, joists, studding, rafters, wood stairways, window and door frames, and hardwood floors.
Carpet, floor, and tile installers and finishers 2010-14 Code: 6240	Apply shock-absorbing, sound-deadening, or decorative coverings to floors. Lay carpet on floors and install padding and trim flooring materials. Scrape and sand wooden floors to smooth surfaces, apply coats of finish. Apply hard tile, marble, wood tile, walls, floors, ceilings and roof decks.

Source: ACS occupational titles and codes at https://usa.ipums.org/usa/volii/occ_acs.shtml.

Figure I-3 (continued).
 2010-2014 ACS occupation codes used to examine workers in construction

2010-2014 ACS occupational title and code	Job description
Cement masons, concrete finishers and terrazzo workers 2010-14 Code: 6250	Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs or gutters; patch voids; use saws to cut expansion joints. Terrazzo workers apply a mixture of cement, sand, pigment or marble chips to floors, stairways and cabinet fixtures.
Construction laborers 2010-14 Code: 6260	Perform tasks involving physical labor at building, highway and heavy construction projects, tunnel and shaft excavations and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers. Exclude construction laborers who primarily assist a particular craft worker, and classify them under "Helpers, Construction Trades."
Paving, surfacing and tamping equipment operators 2010-14 Code: 6300	Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators and stone spreader operators.
Miscellaneous construction equipment operators, including pile-driver operators 2010-14 Code: 6320	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors or front-end loaders to excavate, move and grade earth, erect structures, or pour concrete or other hard surface pavement. Operate pile drivers mounted on skids, barges, crawler treads or locomotive cranes to drive pilings for retaining walls, bulkheads and foundations of structures, such as buildings, bridges and piers.
Drywall installers, ceiling tile installers and tapers 2010-14 Code: 6330	Apply plasterboard or other wallboard to ceilings or interior walls of buildings, mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound.

Source: ACS occupational titles and codes at https://usa.ipums.org/usa/volii/occ_acs.shtml.

Figure I-3 (continued).

2010-2014 ACS occupation codes used to examine workers in construction

2010-2014 ACS occupational title and code	Job description
Electricians 2010-14 Code: 6355	Install, maintain, and repair electrical wiring, equipment and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems or electrical control systems. Exclude "Security and Fire Alarm Systems Installers."
Glaziers 2010-14 Code: 6360	Install glass in windows, skylights, store fronts, display cases, building fronts, interior walls, ceilings and tabletops.
Painters, construction and maintenance 2010-14 Code: 6420	Paint walls, equipment, buildings, bridges and other structural surfaces, using brushes, rollers and spray guns. Remove old paint to prepare surfaces prior to painting and mix colors or oils to obtain desired color or consistency.
Pipelayers, plumbers, pipefitters and steamfitters 2010-14 Code: 6440	Lay pipe for storm or sanitation sewers, drains and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe or seal joints. Excludes "Welders, Cutters, Solderers and Brazers." Assemble, install, alter and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinkler fitters.
Plasterers and stucco masons 2010-14 Code: 6460	Apply interior or exterior plaster, cement, stucco or similar materials and set ornamental plaster.
Roofers 2010-14 Code: 6515	Cover roofs of structures with shingles, slate, asphalt, aluminum and wood. Spray roofs, sidings and walls with material to bind, seal, insulate, or soundproof sections of structures
Iron and steel workers, including reinforcing iron and rebar workers 2010-14 Code: 6530	<i>Iron and steel workers</i> raise, place, and unite iron or steel girders, columns and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. <i>Reinforcing iron and rebar workers</i> position and secure steel bars or mesh in concrete forms in order to reinforce concrete. Use a variety of fasteners, rod-bending machines, blowtorches and hand tools. Include rod busters.
Helpers, construction trades 2010-14 Code: 6600	All construction trades helpers not listed separately.

Source: ACS occupational titles and codes at https://usa.ipums.org/usa/voliii/occ_acs.shtml.

Figure I-3 (continued).

2010-2014 ACS occupation codes used to examine workers in construction

2010-2014 ACS occupational title and code	Job description
<p>Driver/sales workers and truck drivers 2010-14 Code: 9130</p>	<p><i>Driver/sales workers</i> drive trucks or other vehicles over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers. <i>Truck drivers (heavy)</i> drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW to transport and deliver goods, livestock or materials in liquid, loose or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license. <i>Truck drivers (light)</i> drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck. Exclude "Couriers and Messengers."</p>
<p>Crane and tower operators 2010-14 Code: 9510</p>	<p>Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines or products in many directions. Exclude "Excavating and Loading Machine and Dragline Operators."</p>
<p>Dredge, excavating and loading machine operators 2010-14 Code: 9520</p>	<p><i>Dredge operators</i> operate dredge to remove sand, gravel or other materials from lakes, rivers or streams; and to excavate and maintain navigable channels in waterways. <i>Excavating and loading machine and dragline operators</i> operate or tend machinery equipped with scoops, shovels or buckets to excavate and load loose materials. <i>Loading machine operators, underground mining</i> operate underground loading machine to load coal, ore or rock into shuttle or mine car or onto conveyors. Loading equipment may include power shovels, hoisting engines equipped with cable-drawn scraper or scoop, or machines equipped with gathering arms and conveyor.</p>

Source: ACS occupational titles and codes at https://usa.ipums.org/usa/volii/occ_acs.shtml.

Note: Codes 6300, 6320, 9510 and 9520 were combined to form the "Miscellaneous construction equipment operators" category.

Survey of Business Owners (SBO)

The study team used data from the 2012 SBO to analyze mean annual firm receipts. The SBO is conducted every five years by the U.S. Census Bureau. Data for the most recent publication of the SBO was collected in 2012. Response to the survey is mandatory, which ensures comprehensive economic and demographic information for business and business owners in the U.S. All tax-filing businesses and nonprofits were eligible to be surveyed, including firms with and without paid employees. In 2012, approximately 1.75 million firms were surveyed. The study team examined SBO data relating to the number of firms, number of firms with paid employees, and total receipts. That information is available by geographic location, industry, gender, race and ethnicity.

The SBO uses the 2002 North American Industry Classification System (NAICS) to classify industries. The study team analyzed data for firms in all industries and for firms in selected industries that corresponded closely to construction; architecture and engineering; and information technology.

To categorize the business ownership of firms reported in the SBO, the Census Bureau uses standard definitions for women-owned and minority-owned businesses. A business is defined as female-owned if more than half of the ownership and control is by women. Firms with joint male-/female-ownership were tabulated as an independent gender category. A business is defined as minority-owned if more than half of the ownership and control is by African Americans, Asian Americans, Hispanic Americans, Native Americans or by another minority group. Respondents had the option of selecting one or more racial groups when reporting business ownership. Racial categories in the Atlanta Metropolitan Area are not available by both race and ethnicity, so race and ethnicity were analyzed independently. The study team reported business receipts for the following racial, ethnic and gender groups:

- Racial groups — African Americans, Asian Americans, Native Americans and whites;
- Ethnic groups — Hispanic Americans and non-Hispanics; and
- Gender groups — men and women.

Home Mortgage Disclosure Act (HMDA) Data

The study team analyzed mortgage lending in the Atlanta Metropolitan Area using HMDA data that the Federal Financial Institutions Examination Council (FFIEC) provides. HMDA data provide information on mortgage loan applications that financial institutions, savings banks, credit unions and some mortgage companies receive. Those data include information about the location, dollar amount and types of loans made, as well as race/ethnicity, income and credit characteristics of loan applicants. Data are available for home purchase, home improvement and refinance loans.

Depository institutions were required to report 2014 HMDA data if they had assets of more than \$43 million on the preceding December 31 (\$36 million for 2007 and \$40 million for 2011), had a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Non-depository mortgage companies were required to report HMDA if they were for-profit institutions, had home purchase loan originations either (a) exceeding 10 percent of all loan obligations in the past year or (b) exceeding \$25 million, were located in an MSA (or originated five or more home purchase loans in an MSA), and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the preceding calendar year.

The study team used those data to examine loan denial rates and subprime lending rates for different racial and ethnic groups in 2007, 2011 and 2014. Note that the HMDA data represent the entirety of home mortgage loan applications reported by participating financial institutions in each year examined. Those data are not a sample. Appendix G provides a detailed explanation of the methodology that the study team used for measuring loan denial and subprime lending rates.

APPENDIX J.

Qualitative Information from In-depth Personal Interviews and Availability Survey

Appendix J presents qualitative information that Keen Independent collected as part of this disparity study. The study team conducted in-depth interviews with 27 businesses and trade associations. Keen Independent also collected and analyzed open-ended comments from business representatives participating in the availability survey. Appendix J includes eight parts:

- A. Introduction describes the process for gathering and analyzing the information summarized in Appendix J.
- B. Background on the Businesses in the Atlanta Area summarizes information about how businesses become established and how companies change over time.
- C. Current Marketplace Conditions summarizes information about how the economic environment and current marketplace conditions have affected local companies.
- D. The section Keys to Business Success and Any Barriers in the Way discusses certain barriers to doing business, including access to financing, bonding and insurance.
- E. Knowledge and Experience Concerning Business Assistance Programs provides comments on business assistance programs and insights on certification.
- F. Allegations of Unfair Treatment presents information about any experiences with unfair treatment such as bid shopping, treatment during performance of work, stereotypical attitudes about minorities and women and allegations of a “good ol’ boy” network that adversely affects opportunities for MBE/WBEs in Atlanta.
- G. Experience Doing Business with Atlanta Public Schools (APS) discusses issues such as limited knowledge of APS bidding opportunities and protocols.
- H. Insights Regarding How to Improve Working with APS summarizes input on how APS could improve its business practices to open more opportunities for minority- and women-owned businesses.

A. Introduction

Keen Independent conducted and analyzed the results of 27 in-depth interviews. Business owners and managers had the opportunity to discuss their experiences working in the local marketplace as well as with APS and other public agencies. They could also discuss local business assistance programs, certification and other topics important to them.

Keen Independent also collected and analyzed 324 comments from Atlanta area construction and professional services business representatives collected as part of the 2017 availability survey.

In-depth personal interviews. The study team conducted in-depth personal interviews with 27 Atlanta businesses and trade associations. The interviews included discussions about interviewees' perceptions and anecdotes regarding opportunities related to construction and design, and IT-related services that an agency such as APS would purchase.

Interviewees included individuals representing construction and professional services (including architecture- and engineering-related design services and IT-related services) view participants from a cross-section of firms. The study team conducted most of the interviews with the owner, president, CEO or other officer of the business or association. Of the businesses that the study team interviewed, some work exclusively or primarily as prime contractors or subcontractors, and many work as both. All of the businesses are located in the Atlanta area.

Keen Independent's analysis in Appendix J identifies interviewees by interviewee numbers (i.e., #I-1, #I-2, #I-3, etc.). Interviews with trade associations and trade organizations are identified by "#TO."

Interviewees were often quite specific in their comments. When necessary, the study team reported comments in more general form to minimize the chance that readers could readily identify interviewees or other individuals or businesses that were mentioned in the interviews.

Keen Independent reports whether each interviewee represents an MBE-, WBE-, or DBE-certified business or other certified status and also reports the race, ethnicity and gender of the business owner, when available.¹

Availability interviews. In the 2017 availability survey, the study team asked firm owners and managers to provide comments at the end of the telephone interview. Businesses were asked, "Do any other barriers come to mind about winning work as a prime or subcontractor in the Atlanta metro area? Also, do you have any general thoughts or insights on starting and expanding a business in your field?"

A total of 324 individuals interested in work with APS provided responses. The study team analyzed responses to these questions and provided examples of different types of comments in Appendix J. Some responses indicated no barriers or insights to report. Availability survey comments are referenced as "#AI."

¹ Note that "male" or "white" are sometimes not included as identifiers to simplify the written descriptions of business owners.

B. Background on the Businesses in Atlanta Area

Interviewees and respondents of the in-depth interviews reported on their business histories or the histories of the businesses they represent. Part B summarizes information related to:

- Business start-up history;
- Industry entry and advancement for minorities and women in Atlanta;
- Work types;
- Changes in types of work performed;
- Business expansion or contraction;
- Types and sizes of contracts;
- Work performed in the private or public sector;
- Differences between working in the private and public sectors, if any;
- Work as a prime or subcontractor/subconsultant, or both;
- Efforts to engage MBE- and WBE-owned businesses as subcontractors/subconsultants; and
- Challenges to starting, sustaining or growing a business.

Business start-up history. Interviewees representing businesses in the Atlanta area reported when and how they started or purchased their companies. Many interviewees reported that their companies were started (or purchased) by individuals with prior experience in their respective industries. This pattern demonstrates that any race or gender barriers to entering and advancing within the Atlanta construction, architectural and engineering, information technology and related fields would affect the relative number of firms started by minorities and women in Atlanta.

Many interviewees reported that they had worked in or had some other connection to the industry prior to launching their own firms. [e.g., #I-4, #I-10A, #I-12, #I-16, #AI-27] Additional examples from the in-depth interviews include:

- An African American owner of a DBE-certified engineering firm reported a life-long interest in engineering that led to an engineering degree. He said that as a senior in college, along with engineering classes, he took a class in entrepreneurship. It was then that he realized that he could own his own engineering design firm. [#I-7]

This same engineer reported working at a small engineering firm moving on to a larger business where he “learned the ropes.” To sit for his engineering licensing exam, this business owner worked for four years under a licensed engineer. He added that while still an employee, he started his own engineering firm by “moonlighting.” [#I-7]

- The African American owner of a technology-related firm reported that upon leaving the military, he started working in the industry as an employee and independent contractor. He started his own firm in the field after gaining experience working for others. [#I-15]

Some business owners specifically reported having applied what they learned from their experiences in the industry to gain the confidence and knowledge to run a business or take advantage of new or unexpected business opportunities. Comments included:

- A Middle Eastern owner of a specialty contracting firm reported launching his business after working for 13 years in the industry. He added that he started in the industry at a young age, worked hard, moved up making “supervisor” in 2012. At that point, he realized that he had learned enough to run a business himself and felt confident that he could achieve success on his own. [#I-20]
- The Native American male owner of an MBE-/DBE-certified specialty contracting firm reported that, at first, he was not planning to start a business. Instead he took advantage of a new opportunity that presented itself after having “five years under his belt ... working as a helper, learning the trade ...” He explained that while serving as the “right-hand man” to a specialty contracting firm owner, his boss “handed [him the business] ... in a diplomatic manner.” [#I-5]
- Based on the owners’ experiences, a white male representative of a white woman- and veteran-owned consulting engineering firm reported launching the firm because “a lot of large projects [were] handed to me” [#I-11]

A number of business owners had left positions with other firms in the field because they had little opportunity to advance or were laid off. For those business owners, starting a new firm was considered a favorable alternative. For example:

- One white female owner of a telecommunications firm reported that she moved from employee to business owner several years after deregulation in the industry. She observed that those making the money in the industry served as “agents,” not employees. This observation motivated her to launch her own business and take advantage of expanded, more lucrative opportunities in the field. [#I-9]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported that the Asian-Pacific American partner had 30 years of experience in the field. She reported that this minority business owner was motivated to start the firm because, when serving as an employee, he observed that a “minority” would never “be in a better position in the workplace.” In response, he began his own firm. [#I-21]
- A white female owner of a WBE-certified engineering firm reported that she started her own firm after being laid-off at another company. She reported starting her firm as a subconsultant to a larger firm. “At least it was something ... I had some revenue coming in the door” [to help her start her firm]. [#I-2]

Industry entry and advancement for minorities and women in Atlanta. Some business owners and representatives reported barriers for minorities and women seeking industry entry or advancement. Examples included:

- The African American owner of a DBE-certified engineering firm commented that economic gaps and educational gaps are what prevent minorities from entering the industry. [#I-7]
- A white male owner of a specialty contracting firm reported that there are not many minorities or women in the construction field in the Atlanta area and even fewer are business owners. He added that most business owners are “white guys” that came up through the trade. [#I-17]
- When asked about any entry and advancement barriers for minorities and women, the white female owner of a telecommunications firm responded that although they have education, it does not meet business-climate standards. She remarked, “They [minorities and women attempting to enter the industry] are not getting the basic skills ... that they need ... both speaking and the written word” [#I-9]
- A female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE- certified IT consulting firm reported on barriers to entry and advancement in the industry. She commented that in her industry “every single worker in IT departments [is a] foreigner, but the managers are ‘white.’ It’s how it is.” She added that, in the industry, men also get higher pay than women. [#I-21]
- The African American male co-owner of an African American-owned specialty contracting firm indicated that he has never witnessed a solely woman-owned or minority woman-owned firm on a project in his 20 years in business. He stated that although women or minority women may get into a larger firm as an employee, “ownership is different.” He stated, “I’ve never seen a minority woman or woman as a sole owner [on a job site].” [#I-23]

Work types. Interviewees reported on the types of work that their firms perform. Business owners and representatives interviewed reported several work types such as construction, architecture and engineering, IT and other related work types. Some of the trade organization representatives reported having a number of MWBE- and DBE-certified member firms, and members that worked for school districts and other government agencies in Atlanta. [e.g., #I-7, #I-8, #I-11, #I-12, #I-21, #TO-1, #TO-2, #TO-3]

Changes in types of work performed. Business owners and representatives reported on whether or not their firms had changes in services performed over time.

Several interviewees reported no change in the type of work or services the firm performs. [e.g., #I-10A, #I-16] For example, the white female representative of a women’s business trade organization reported that as many member businesses are in start-up stages, few had made any changes in services over time. [#TO-2]

Many other business owners and representatives indicated that they have made changes in the types of work their firms perform or have expanded their services. [e.g., #I-14, #I-23] Other examples follow:

- A white male vice president of a Hispanic American female-owned engineering firm reported adopting the policy of the founding owner: “Provide services other firms won’t do.” Therefore, the firm conducts a variety of work tasks and sizes growing from “strictly planning in its early stages” to now including a range of engineering services. [#I-1]
- An owner of a majority-owned IT firm reported that, years ago, he used to exclusively conduct programming and design work; however, now the business is more involved in product development. [#I-12]
- The white female owner of a communications firm reported a number of changes in types of work performed. For example, the firm has merged phone services with “cloud services” over time, knowing both are critical. This interviewee added that the industry had also changed significantly from analog to digital in the 1990s. [#I-9]
- An African American owner of a DBE-certified engineering firm reported that his background was initially in one specialized area of engineering, but as he gained more experience, the firm expanded to include a full range of engineering offerings. [#I-7]
- A Middle Eastern owner of a specialty contracting firm reported that he started with a sole focus on residential specialty contracting work, based on his experience in the field. He has since expanded his capabilities, assembling the appropriate subconsultants, to take on larger projects. [#I-20]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm indicated that the firm started by placing IT contractors in firms needing them. This led to expanded markets including working on projects that married data from mergers and acquisitions. [#I-21]

Business expansion or contraction. Business owners were asked to comment on any changes in the size of their companies over time. Some reported reasons for expansion or contraction such as changes in market conditions over time.

For varied reasons, several business owners and representatives reported a relatively consistent business size or no change in business size over time. Some interviewees explained their reasons for sustaining a steady business size:

- The white female representative of a women’s trade organization reported that many of the organization’s members are women business owners struggling to manage work/life balance (including commitments to family) and cannot manage expansion or “large-scale” contracts. [#TO-2]

- An African American half owner of an African American-owned specialty contracting firm reported a consistently two-person staff (he and his wife). He described his firm as a “mom and pop” small business. [#I-23]

Many business owners expressed a desire to expand their companies. Some of these businesses faced barriers to expansion that included limited resources and access to financing.

[e.g., #AI-1, #AI-2, #AI-99, #AI-104, #AI-134, #AI-170, #AI-192, #AI-251, #AI-269, #AI-292, #AI-310, #AI-319, #AI-320, #AI-321, #AI-324]

Some business representatives and owners reported periods of expansion or growth in the size of their company over time. For one of these businesses interviewed, growth was substantial.

Examples included:

- A white female representative of a majority-owned small telecommunications firm commented that the owners “slowly” added employees over time. [#I-14]
- The African American owner of a DBE-certified engineering firm reported that for a long time he was the sole worker performing all functions of the firm. He indicated that he started hiring staff about three years ago and, when needed, engages four subconsultants. [#I-7]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported that the firm grew over time to 20 people; however, there were staffing “ups and downs” throughout the five years. [#I-21]
- A white female owner of a telecommunications firm reported that her firm has grown “to more than a one-man shop” including over 100 agents with an administrative staff of 4.5, including herself. [#I-9]
- The African American owner of a technology-related firm reported that for three years he worked alone, relying on independent contractors as needed. A partner joined the firm in 2013. Although he did not need a partner to sustain the business, he said that the two knew each other for a long time in the industry and he was happy with the new addition to the firm. [#I-15]

Some interviewees reported on variability in size of contracts or changes in market conditions that resulted in expansion or contraction of their companies, or any challenges that limited expansion. Several of these firms also relied on a pool of subs to accommodate the demands of larger projects. Examples of interviewee comments included:

- For an African American representative of a minority trade organization, business expansion was challenging. He said, “Regarding [hiring] employees, it would depend on available capital and [available] jobs.” [#TO-4]
- The white male vice president of a Hispanic American female-owned engineering firm stated that, at purchase, the co-owners downsized from a six-person firm to a three-person firm, and now, within the last year, to a two-person firm. [#I-1]

- A white male representative of a white women- and veteran-owned engineering firm reported that, on two occasions, the firm ramped up with new employees for contracts abroad. [#I-11]
- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm reported that, in 2005 to 2007, the firm had only four or five employees and has since grown. She explained her growth by saying, “The ‘demand’ has gotten bigger ... there is more work coming in” [#I-16]
- A Middle Eastern owner of a specialty contracting firm reported that he did not change the company’s size for a while due to cash flow concerns. He remarked that he started on his own, however his staff increased over time to four full-timers plus subconsultants to manage demand. [#I-20]

This interviewee further commented that for larger commercial contracts, his subconsultants might have up to eight or nine of their own team members on a single project, so the size of the project team varies significantly from contract-to-contract. [#I-20]

The Hispanic American representative of a minority trade organization reported on how some of the trade organization members he represented cope with the demands of growth. For example, he expressed that as firms change size, combined space is the new “market condition” where firms share space. He added that more business owners also work from their homes as long as they do not need storefronts or office space. [#TO-1]

Types and sizes of contracts. The study team also asked about the sizes of contracts and subcontracts companies typically perform. Some business owners and representatives also described what determines the type and size of contract or subcontract they pursue.

For many business owners or business representatives, size of contracts varied. Comments included:

- The white female owner of a WBE-certified engineering firm reported that her contracts are typically in the “\$25,000 range.” She remarked that at that size, the job does not have to be bid out. However, the same business owner added that her largest contract was \$210,000 and secured through an RFP process. She remarked that she beat out large engineering firms for this work. [#I-2]
- The majority owner of an architecture firm said, “The price of construction has really gone up.” He expressed that his price depends on the total cost of the project and his fee varies between 8 percent and 30 percent, the smaller amount for very large projects over \$3 million. He concluded that large firms work on large projects “because that’s where the money is” [#I-13]

- The African American owner of a DBE-certified engineering firm reported that his firm works on large contracts like schools, libraries, airport terminals, stadiums and other facilities like the police precinct in Atlanta. He added that his contracts range from \$1,000 to \$100,000. [#I-7]

Although size of contracts varied among businesses, for some, the size of the business factored into the size of the work they bid. For example, the Hispanic American representative of a minority trade organization reported that members' size determined the size of contracts they secure. He explained that there is "an overabundance" of firms working on contracts up to and around \$500,000 to \$1 million, but over \$1 million, the amount of businesses interested starts "dwindling." [#TO-1]

The same representative commented about his members, for example, "We should be all over the airport, we should be all over the new stadium and we're not ... we're not as a 'chamber' knocking down doors as we should" [#TO-1]

When asked about size of contracts performed, one business owner said that he does not "oversell" the business. Regarding size of contracts, the Native American owner of an MBE-/DBE-certified specialty contracting firm reported, "I don't oversell myself ... you have to work with what you have" He added, "I'd rather be busy than big I don't want to be big ... I'm focused on my niche [market]" [#I-5]

Work performed in the private or public sector. Business owners and representatives reported on whether their firms worked in the public sector, private sector or both.

Many business owners and representatives interviewed reported working in both the public and private sectors or making efforts to expand from primarily private sector to government-based work. [e.g., #I-4, #I-10, #I-18, #I-16] Examples included:

- The Asian American male representative of an MBE-/WBE-certified technology and engineering firm reported that his firm works in both sectors, including military, hospitality, senior living facilities, mixed-use properties, overseas, etc. [#I-8]
- The representative of a white woman- and veteran-owned engineering firm reported that the firm performs both public and private sector work, including for public schools. [#I-11]
- The African American owner of a DBE-certified engineering firm, in addition to working regularly in the public sector, reported that he works in the private sector as both a prime and subcontractor on projects such as apartment developments and factories. [#I-7]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT firm indicated having worked mostly in the private sector, but now is taking the steps to move into government work, including work with Atlanta Public Schools. [#I-21]

A number of business owners reported working primarily or exclusively in the public sector.

Examples included:

- The white male vice president of a Hispanic American female-owned engineering firm reported mostly public-sector assignments with government entities. He added that although no work was performed by the firm specifically for Atlanta Public Schools, the firm had done work with a number of colleges and universities since the firm's founding. [#I-1]
- The white female owner of a WBE-certified engineering firm reported that her work is "exclusively public sector ... state ... local government ... quasi ... cities, counties" By choice, she reported not doing federal work. [#I-2]

Some business owners reported working primarily in the private sector. [e.g., #I-20, #I-23, #AI-78, #AI-169] For instance, when asked what sectors the firm works in, some interviewees responded:

- The white female representative of a women's trade organization reported that few member businesses worked in the public sector, as their newness meant they did not have the knowledge or experience to bid on public sector jobs, but had interest in learning how to seek this kind of work. For example, she expressed, "We're not given the tools to negotiate." [#TO-2]
- A white female representative of a majority-owned small telecommunications firm reported that the firm works mostly in the private sector with just one job in "city government" and in a charter school in Atlanta. [#I-14]

A number of business owners and representatives expressed interest in learning more about public sector work opportunities. [e.g., #AI-16, #AI-26, #AI-74, #AI-265]

Differences between working in the private and public sectors, if any. Many business owners and representatives elaborated on what they perceived as the fundamental differences between working in private sector and public sector in Atlanta.

Several business owners and representatives commented that securing work in the public sector was more difficult than getting work in the private sector. Despite trying, some of those businesses had never successfully secured public sector work or said they were "shut out." Examples follow:

- An owner of an architecture firm reported that he used to work in both sectors, but not much now in the public sector because public sector agencies use larger firms for work. He added that in the public sector, smaller firms sometimes collaborate with larger firms; however, that causes issues that he is not interested in taking on such as management of documents. [#I-13]

The same business owner conveyed that public sector agencies do not understand that, regardless of size, a job requiring three people will be done by a large or small firm utilizing three people, not more than that. [#I-13]

- The Native American owner of an MBE-/DBE-certified specialty contracting firm said that he had bid public sector jobs, but did not secure any work. [#I-5]
- For an African American co-owner of a specialty contracting firm, working in the public sector was impossible. This business owner reported having been “shut out” from public sector work explaining, more specifically, that public sector is “shutting black businesses out.” He added, “[Blacks] can’t just get in there [public sector]. [I] have to work in private sector.” [#I-23]

One business owner indicated that public sector work is more politically driven than work is in the private sector. For example, the Hispanic American male co-owner of a woman-owned and minority-owned specialty contracting firm said that the differences that he experienced with public sector work in Atlanta were “more politically generated as far as trying to get your work ... and as far as putting in a bid” [#I-4]

Other business representatives and owners commented on the regulations and higher levels of paperwork in public sector. For instance:

- The white female representative of a majority-owned small telecommunications firm reported that working in public-sector (for example, public sector schools) is difficult due to “government funding ... all the regulations ... the paperwork.” She added, “It makes us think twice [to do more government work].” [#I-14]
- When asked what barriers he faces in securing government work, the Asian American co-owner of a specialty contracting firm replied, “the paperwork ... getting on their schedule” He added that most information on government websites is “so scattered ... there is not a single check list” [#I-6]
- When asked if any other barriers come to mind about winning work as a prime or subcontractor in the Atlanta area, a representative of an African American-owned construction firm reported that barriers included “pre-qualifications [that] keep growing and too much paperwork.” [#AI-3]

Work as a prime or subcontractor/subconsultant, or both. Business representatives reported that they worked primarily as a prime contractor/prime consultant, as a subcontractor/subconsultant or as both a prime and a sub.

Most business owners and representatives reported working as both primes and subs. For some of these businesses, the size of the contract drove whether or not they could act as a prime. [e.g., #I-2, #I-11, #I-21] For instance:

- A representative of a majority-owned engineering firm reported that the firm has worked as both a prime and a sub. He added that the firm mostly subs unless there is a special need and then they prime jobs. [#I-3]

- A Middle Eastern owner of a specialty contracting firm reported that he has worked both as a prime and subcontractor, but nowadays mostly as a prime and he prefers it that way. [#I-20]
- The African American owner of a technology related firm reported that he has a good relationship with larger firms that bid large jobs “like APS.” He indicated that primes call him for his quote after the large firm has already won the bid. He added, “when they call ... we already know [that they have the job].” [#I-15]

The same business owner indicated that they work as primes on small jobs as well as large jobs. He said, however, that they are so busy that they do not often pursue large prime jobs. He further remarked that he would like to bid large jobs and “take out the middle man” if he could. [#I-15]

A few interviewees reported primarily working independently or as a prime contractor or prime consultant. Some explained how they had gained some experience working as a prime. For example:

- An Asian American male owner of a specialty contracting firm reported that he currently works under his own contracts, not as a sub. [#I-6]
- The owner of a construction firm reported primarily working directly with his own clients. [#I-18]
- The African American owner of a DBE-certified engineering firm reported that he was awarded a prime contract with the City of Atlanta as part of a joint-venture partnership with a large prime. He reported that the larger majority-owned firm was required to joint venture with a minority-owned firm. [#I-7]

A few business leaders reported working primarily as subcontractors or subconsultants. Some of those firms, on occasion, also worked as primes. These included:

- The white female representative of a women’s trade organization reported that, as many member businesses are in start-up or mid-size stages of development, few had had opportunities to expand business relationships to include priming or subbing on larger jobs. [#TO-2]
- The African American co-owner of a specialty contracting firm said that working as primarily a subconsultant to a general contractor was “... the only way to go.” [#I-23]
- The white male vice president of a Hispanic American female-owned engineering firm reported working primarily as a subconsultant, but also as a prime at times. [#I-1]

Efforts to engage MBE- and WBE-owned businesses as subcontractors/subconsultants.

Business representatives reported whether they made efforts to engage minority- and women-owned firms on their contracts.

A number of business owners and representatives conveyed that they had made efforts to include minority- and women-owned businesses on their teams. Comments from the in-depth interviews included:

- The white male vice president of a Hispanic American female-owned engineering firm indicated that the firm has engaged other DBEs as subconsultants on a number of its projects. [#I-1]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm indicated that engaging minority-owned firms is a natural fit for her company, based on its own minority ownership. [#I-21]
- The owner of an architecture firm reported that he hires subcontractors by reputation and having had worked with them on other projects. He said that fair price is a factor as well. He said that he “has no problem” working with minority- or women-owned firms “as long as they are professional.” [#I-13]
- The Hispanic American representative of a minority membership organization reported that the organization encourages its members to do business with other members, when possible. This membership organization representative reported that the organization hires from within; it “leads by example.” [#TO-1]
- The white male representative and the owner of an African American woman-owned technology firm reported that the business hires MBE-/WBE-certified firms as a “great way to network” They reported relying on selection of subs based on “experience.” [#I-10, #I-10A]

The white female representative of a Hispanic-owned MBE-/DBE-certified specialty contracting firm indicated that the firm’s owner uses subs with whom he has a long-standing relationship and occasionally posts opportunities. She further reported that many of their subs are minority- or woman-owned firms. For example, she stated that the sub that the owner uses most often is MBE-certified. [#I-16]

One white female representative of a majority-owned small telecommunications firm reported on her failed attempts to engage with minority-owned firms. This business representative indicated that her firm made attempts to join with minority-owned firms when bidding on work. However, when asked how those attempts worked out, she said, “It didn’t happen.” She further commented that one attempt to establish a relationship with a minority-owned firm did not materialize because the minority-owned firm had too much work already. [#I-14]

In the absence of goal setting for APS, the white male representative of a large majority-owned general contracting firm reported not using minority- and women-owned firms as subcontractors on APS projects. This firm regularly uses one minority-owned subcontracting business on projects for public agencies other than APS, as those agencies have set goals on their contracts or specifically encourage “healthy” outreach efforts. On the other hand, he said that the firm does not use minority- and women-owned subcontractors on its APS contracts as there is no incentive to do so.

When asked if the firm seeks out MBE/SBE participation, this representative explained, “APS does not require a ‘minimum’ or a certain percentage. Now, we do a good bit of work for the City of Atlanta. City of Atlanta proper does require a large portion of work to go to the DBEs.

He went on to report, “We don’t use our minority partner on Atlanta Public Schools work because ‘they don’t require it.’ For other work in Fulton County, City of Atlanta, Fulton County Public Libraries and other things ‘we do.’ We have one minority firm that we work with because it’s our relationship we have together ... they’re small. [#I-22]

Challenges to starting, sustaining or growing a business in Atlanta. Business owners discussed any challenges they faced when starting or expanding their businesses, including barriers that were race- or gender-based.

Some business owners and representatives reported “hard work,” “growing pains,” or a “learning curve” at business start-up and beyond. For these business, many of barriers continued after start-up. Examples included:

- An African American female owner of a technology-related firm reported that the firm is new and they are still “working through the ‘kinks’ ... seeing what the job market wants” [#I-10A]
- The African American owner of a DBE-certified engineering firm reported that his first challenge “was to gain the knowledge to actually perform the work.” He also said that it has been challenging to learn business skills over time. [#I-7]

A number of business owners and representatives indicated that networking and finding opportunities for work were challenges they faced at start-up and beyond. For some businesses, marketing became a challenge when coupled with performing work and other operating tasks.

- A Middle Eastern owner of a specialty contracting firm reported that the hardest element for a new small business owner is to secure new clients. He said that this was true when he started in several years ago and still holds true today. [#I-20]
- The African American representative of a minority trade organization reported that it is difficult for start-ups and other small companies to learn about new opportunities when busy performing work and running businesses. [#TO-4]
- An African American owner of a DBE-certified engineering firm said that learning how to develop relationships with clients was challenging. [#I-7]

Some business owners reported on their initial and on-going marketing strategies. In some cases, marketing was about who they knew or didn't know. Comments included:

- The white female representative of a Hispanic male MBE-/DBE-certified firm said that she actively “seeks out” customers by contacting general contractors when she knows of an upcoming project. [#I-16]
- A Middle Eastern owner of a specialty contracting firm reported that, at launch, he initially worked for homeowners, using “Angie’s List” as a resource for finding clients. However, it did not give him the boost he thought it would so he unsubscribed after approximately a year. [#I-20]
- An African American co-owner of a specialty contracting firm reported building the firm “through marketing.” However, he said that “[getting] into minority business programs” was “too political” for his firm to use as a marketing tool. [#I-23]
- When asked how she marketed her firm, the white female owner of a WBE-certified engineering firm replied that she did a combination of knocking on doors and responding to RFQs and RFPs. [#I-2]

She commented that working for local government for several years has given her “very strong local government contacts.” She reported, “Very rarely do I find that I get a project without ‘knowing somebody’” [#I-2]

For some minority-owned businesses, industry associations served as a source for learning about potential work. For instance, the African American male representative of a minority trade organization reported that the organization helps connect its members with opportunities that they would not normally find on their own. [#TO-4]

For several businesses, getting a foot in the door was particularly challenging as a minority business owner. These examples included:

- For an African American-owned IT-related business, getting in the door was a challenge. The owner said that “marketing is so hard unless you ‘know someone’ to get in.” [#AI-215]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported that the Asian-Pacific American business owner recognized that to compete in his industry, he needed a non-minority partner.

This representative explained, “The reason to pick a [white male] partner was to navigate [the industry] ... [make it] easy to fit into some situations where [the minority owner] would not be completely accepted.” [#I-21]

- An Asian American male representative of a MWBE-certified technology and engineering firm expressed difficulties in finding opportunities in the Atlanta marketplace. He indicated that trying to speak with project representatives “was a freaking nightmare.” He explained, “There’s a lot of challenges in the Atlanta marketplace ... getting contracts with the City of Atlanta and DeKalb County from a minority standpoint,” for example. [#I-8]

This representative added that bidding on projects was very challenging; he often saw projects awarded to other firms before his firm could even ask questions about the project. He said, “The lack of communication was dumbfounding” [#I-8]

A trade organization representative reported that, in some industries, non-native-English speaking business owners faced added barriers at start-up and beyond. For example, the Asian American male representative of a minority trade organization stated that Asian Pacific-American businesses, other than those in “hi-tech and hi-research,” are disadvantaged because white- and African American-owned businesses, on a whole, have more “political control.” [#TO-3]

He explained that in Atlanta white and African American firms are sometimes given preference over businesses owned by persons experiencing language barriers or those speaking English with “accents.” [#TO-3]

A number of businesses reported access to capital, finances and securing loans and credit as both start-up and on-going challenges. Comments included:

- The Hispanic American representative of a minority trade organization said, “... all small businesses suffer from lack of resources ... capital ... for the most part.” [#TO-1]

The same representative of a minority trade organization stated, “There’s not a lot of capital out there for somebody who’s starting a business.” [#TO-1]

- At the start of the business, the white female representative of a majority-owned small telecommunications firm reported that the business owners had difficulty securing the “starting capital” they needed. [#I-14]
- An African American representative of a minority trade organization reported that financing projects is one of the “major challenges” that the members face. [#TO-4]
- A representative of a majority-owned IT-related business reported difficulty finding venture capital. [#AI-259]

Some minority and women business owners and representative reported on tapping personal funds or remortgaging a home to finance a business. For instance:

- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm said, “The founders of the business ... didn’t apply for loans, [instead] they used personal funds that they had set aside for starting the business.” [#I-21]

- The white female representative of a women’s trade organization reported “funding” as a key obstacle to business start-up and growth, particularly for women- and minority-owned firms. She indicated that many women and minority business owners (including members) resort to remortgaging their homes to support their business goals. [#TO-2]

An owner of a one-woman business recounted difficulty with cash flow at start-up and beyond. She reported late payments from public sector entities or others as a contributing factor. This female owner of a WBE-certified engineering firm experienced continued difficulties securing on-time payments. She reported payments from one to nine months from date of invoice, as typical, with public sector entities, such as the City of Atlanta, taking the longest to pay. This business owner coped by relying on her husband’s income from a nine-to-five job and avoiding work with the City of Atlanta, for instance. [#I-2]

Another business owner reported putting plans for growth on hold until he could better manage cash flow. This Middle Eastern owner of a specialty contracting firm reported that he had to keep his company’s size small for a while to overcome initial cash flow issues. [#I-20]

Several business owners and representatives reported bonding as a challenge for minority- and women-owned firms and other small businesses. Comments reported included:

- The African American representative of a minority trade organization reported bonding as a “major challenge” to conducting business. [#TO-4]
- An Asian American male representative of a minority trade organization indicated that obtaining bonding (and insurance) can be more of a challenge for minority business owners. [#TO-3]
- A representative of a white woman-owned specialty contracting firm reported, “The biggest hurdle is ... bonding and contract size.” [#AI-96]

C. Current Marketplace Conditions

The study team asked businesses to comment on the current market conditions in their fields. Part C includes:

- Reports on positive marketplace conditions;
- Perceived challenges and other factors affecting certain industries in Atlanta; and
- Marketplace conditions specifically impacting minority- and women-owned firms.

Reports on positive marketplace conditions. Many business owners and representatives reported good, improving or stable marketplace conditions. [e.g., #I-6, #I-15, #I-16, #I-18, #I-23, #TO-2, #AI-14, #AI-24]

Some business owners and representatives commented on how the current marketplace positively impacted their businesses. For example:

- The white female owner of a WBE-certified engineering firm reported that a good economy meant that “full employment is returning” She added that, in her industry, projects have started to move ahead that had been on hold for a few years. [#I-2]
- The white male representative of an African American woman-owned technology firm reported that the information technology industry has improved since the downturn of 2008 through 2009. He reported a positive economy for medical tech and tech work related to computer hacking. He further commented that currently “everyone wants their [own] private ‘Cloud.’” [#I-10]
- An African American owner of a DBE-certified engineering firm indicated that the current economy is good. He reported having more opportunities than he can bid. He added that there is also significant airport spending predicted over the next twenty years that will likely provide opportunities. [#I-7]
- A Middle Eastern owner of a specialty contracting firm reported that he is very optimistic about current economic conditions because everyone is getting work. He indicated that there is plenty of work in the pipeline. [#I-20]
- The Hispanic American male co-owner of a woman-owned and minority-owned specialty contracting firm commented that the economy in the industry is good. He stated that the firm “is turning work away ... just can’t handle it all.” [#I-4]
- A Native American owner of an MBE-/DBE-certified specialty contracting firm remarked, “I feel optimistic right now I noticed a change since the first of the year.” He added that he relies on certain key indicators that suggest growth in the economy and predicted that work would be coming his way. [#I-5]

Others reported on a stable or improving economy. Examples of comments included:

- The white male vice president of a Hispanic American female-owned engineering firm indicated that economic conditions are stable, but certain federally-driven enhancements were eliminated three years ago, which impacted overall workload. [#I-1]
- A white female representative of a majority-owned small telecommunications firm said, “It’s pretty good, it’s definitely picking up.” [#I-14]

Perceived challenges and other factors influencing certain industries in Atlanta. Some reported on-going challenges in their industries that made getting work difficult. For example:

- A male representative of a white woman- and veteran-owned engineering firm reported on engineering: “It’s not a ‘hot-volume’ business ... it’s a ‘onesie-twosie.’” [#I-11]

- As reported by a representative of a majority-owned IT-related small business, “It’s been extremely difficult for small businesses to generate new revenue. It’s been rough years in the IT industry. A lot of companies have gone out of business.” [#AI-32]
- The white female owner of a telecommunications firm stated that with the introduction of copper-cable limitations “the industry ... is in a huge state of flux” [#I-9]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm commented that in her industry “price” always drives opportunities. “You can have all the qualifications, but it always comes down to price ... other things don’t matter as much.” [#I-21]
- A Native American owner of an MBE-/DBE-certified specialty contracting firm reported on how cyclical economic conditions impacted contracting opportunities in Atlanta. He remarked that during economic downturns, “repairs” go up; when the economy improves, “new build” projects are available. [#I-5]

Marketplace conditions specifically impacting minority- and women-owned firms. Several business owners reported on specific factors that impact minority- and women-owned firms in the current Atlanta marketplace. Examples included:

- The African American representative of a minority trade organization reported that although opportunities are available in the current marketplace, securing that work is problematic for minority business owners. He expressed, “Opportunities are available in the Atlanta area, but getting them is the problem.” [#TO-4]
- The Hispanic American representative of a minority trade organization reported that the state of the economy “depends on the industry and sector” He indicated that he held a meeting with three large Hispanic-owned construction firm owners that reported a strong construction industry. However, he indicated that Hispanic-owned firms conducting business in other industries have taken a hit with the “Trump administration.” [#TO-1]
- The white female owner of a telecommunications firm reported that female business owners seeking work in Atlanta have greater difficulty finding work than men. [#I-9]

D. Keys to Business Success and Any Barriers in the Way

The study team asked firm owners and managers about the keys to their business success, and any barriers they faced to doing business. Discussions focused on:

- Relationship building;
- Employees;
- Equipment and technology;
- Access to materials including good pricing and credit;

- Bidding process;
- Permitting and licensing;
- Financing and bonding;
- Insurance;
- Timely payment; and
- One firm’s advantage over another.

Interviewees described many keys to their success, including a strong work ethic among leadership and staff, good customer service, innovation and other factors. Other business owners reported on the barriers that get in the way of their and others business success.

Relationship building. Many business owners or representatives identified relationship building as key components to the success of their businesses. [e.g., #I-5, #I-9, #I-15, #AI-116, #AI-125, #AI-154]

Several business owners or representatives reported that “glad-handing” or building and sustaining relationships that encourage referrals were important to business success. Examples of these businesses included:

- The white male representative of an African American woman-owned technology firm commented that it is the “intangibles” that add to their success like “glad-handing, talking to people, building the relationship, that’s key to getting contracts” [#I-10]
- The female Hispanic American business manager of an Asian-Pacific American-owned minority IT consulting firm reported designing the firm around building relationships. She stated that, from the start, the firm has had a [white male] partner “from here” who can work with “[white] people from here,” and an Asian-Pacific American partner who can work, more comfortably, with minority communities. [#I-21]
- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm reported that “word of mouth” by former customers is a key to the firm’s success. [#I-16]

Many business owners reported that quality work, customer service and honesty were important factors in relationship-building and to overall business success. [e.g., #I-5, #I-23] For instance, business responses included:

- The Hispanic American male co-owner of a woman-owned and minority-owned specialty contracting firm reported that success is dependent on the “quality” of work. [#I-4]

- The white male vice president of a Hispanic American female-owned engineering firm reported from its founding in the 1960s, a “client-first” policy that the co-owners continue to this day. He indicated that this drives the firm’s success. [#I-1]
- The African American owner of a DBE-certified engineering firm reported that the firm has built a reputation for honesty, integrity and doing quality work. [#I-7]
- The white male representative of a white woman- and veteran-owned firm consulting engineering firm stated that “being open and honest . . .” drove their success. [#I-11]
- The white female owner of a telecommunications firm reported that her firm is “unscrupulously honest.” [#I-9]

Employees. A number of business owners and managers discussed the importance of highly-motivated and experienced employees.

Some business owners and representatives reported employees as their most important business asset. Comments from the in-depth interviews reported included:

- A white female representative of a majority-owned small telecommunications firm said, “Having a good team of people.” [#I-14]
- The African American owner of a DBE-certified engineering firm reported that his staff is the key factor to his success since they enjoy and appreciate engineering. [#I-7]
- The majority-owner of an architecture firm commented that good, qualified employees are necessary. [#I-13]
- The Native American owner of an MBE-/DBE-certified specialty contracting firm commented that he considered working to improve the workplace for employees as an important measure of business success. He stated that he encouraged anyone who wants to work regardless of his or her ethnicity. For example, he added that women should be paid equally to men. [#I-5]

Some business owners and representatives reported difficulty finding and retaining good employees. For example:

- For the majority-owner of an architecture firm, “competing for talent” is a challenge as a small business. He explained that small firms train architects and then those employees move to large firms. This business owner also indicated that junior architects expect pay that is higher than he can pay. He stated that as a small firm, he “pays for experience . . .” [#I-13]
- The Asian American male part owner of a specialty contracting firm reported that he started his firm “on a shoe string” and faced challenges finding work and recruiting and keeping the best talent. He remarked that some of his best hires have moved on to larger firms. [#I-6]

- The white male representative of a white- women and veteran-owned consulting engineering firm commented that unqualified personnel are the main problems for businesses, which is why they implement personnel qualification interviews and offer training at their firm. [#I-11]
- The Hispanic American representative of a minority trade organization reported several members of large construction firms reported that they could not find skilled labor or engineers. He said that these business owners have to bring in engineers from Columbia and Mexico. [#TO-1]

Equipment and technology. Business owners and managers discussed the importance of having the right equipment and/or technology for operating their businesses, and the added importance of fair pricing. For instance:

- One Asian American male representative of a minority trade organization reported that having the latest technology was critical to a firm’s success. He stated that a “technology edge” is important to business success. [#TO-3]
- The African American owner of a technology-related firm reported, positively, that he orders for “many thousands of dollars of equipment” from suppliers without any financing fees being imposed. [#I-15]
- Some business owners and representatives reported the importance of access to fair pricing and credit for materials. For instance, the white female representative of a women’s trade organization indicated that the women business owners she represented reported difficulty securing volume pricing and credit for materials. She added that their limited access to fair pricing and credit disadvantaged their firms when competing with larger, more established businesses. She stated, “Large firms always get price breaks because of volume.” [#TO-2]

Bidding process. Some business owners and representatives reported on the pros and cons of the bidding process. Example included:

- The white male owner of an architecture firm reported that most public projects have architects and engineers who assist the agency in creating the documents needed for the request for proposal. He declared, “That person has an inside track.” He added, “I don’t think governments are as ethical as they say they are.” He commented that the same design-build teams repeatedly get the jobs in the public sector. [#I-3]

The same business owner also commented that projects are not often awarded to the “low bid ... they are given to best bid,” which, he said, is a “nebulous statement.” [#I-13]

- On the other hand, the white male owner of a specialty contracting firm indicated that workmanship in higher bids far exceeds what can be obtained through awarding based on the low bidder. He added that “low bid” is a bad model for awarding contracts. [#I-17]

Permitting and licensing. Some business representatives reported challenges with permitting and licensing or difficulty with related restrictive contract requirements. For example:

- The representative of a white woman-owned IT-related firm conveyed, “Getting a City of Atlanta business license, it’s very difficult, the paperwork was never handled correctly.” [#AI-60]
- A representative of a majority-owned environmental consulting firm reported that the “GC license can be very prohibitive to a new company.” [#AI-179]
- For a representative of a majority-owned engineering and architecture firm “the permitting process” was a primary barrier to conducting work in Atlanta. [#AI-158]
- The white male owner of a specialty contracting firm reported that it was not easy to do work with Atlanta Public Schools as it has very restrictive contract requirements including for licensing and insurance. He stated, “Contracts are one-sided ... everything is stacked to their advantage.” [#I-17]

Financing and bonding. Many business owners reported that obtaining financing and bonding were important in establishing and growing their businesses, particularly when seeking certain types of work.

Many businesses owners and representatives reported access to capital, good “cash flow” and financing as keys to business success. Some interviewees described financial barriers. Examples included:

- The white male representative of an African American woman-owned technology firm commented that easy access to capital is a factor in business success. [#I-10]
- A Middle Eastern owner of a specialty contracting firm reported that keeping positive “cash flow” is important to his firm’s success. [#I-20]
- Reporting financing as a key to business success, an owner of a majority-owned IT firm indicated that he financed his business through the “luck” of a three-year contract with a large IT firm that kept his “business alive.” He reported that he reinvested the funds he received from this contract back into his business. [#I-12]
- A Hispanic American representative of a minority trade organization said, “Everybody is looking for external sources [of financing] ... very few people aren’t.” [#TO-1]
- The African American representative of a minority trade organization reported financing as a key to business success. This trade organization representative indicated that, when possible, the trade organization provided lending location assistance to its members. [#TO-4]

- When asked about any barriers to doing business, a representative of an African American minority-owned IT-related firm conveyed, “It’s mostly financial; and, because of that it ‘kinda’ has a negative effect on everything, resources and everything ... getting the loans are hard ... it’s a lot to get [loans] paid back. The financial part is the problem.” [#AI-35]

Several interviewees reported tapping personal funds to finance their businesses. For example, the Asian American co-owner of a specialty contracting firm reported that he personally extends credit to the firm when necessary to meet payroll. [#I-6]

Several firms commented on their experiences concerning bonding. For one, contract bonding requirements were not a challenge; for another, bonding was problematic. One small business owner reported on how he relied on primes to cover bonding. Examples follow:

- The white male representative of an African American woman-owned technology firm reported that he needs bonding if he physically is inside of a firm and working on their computers. He expressed that bonding has not been a challenge. [#I-10]
- The African American owner of a DBE-certified engineering firm commented that he has “heard stories” about minority-owned construction firms having negative issues during the bonding process. He indicated that he is attempting to develop “strategies to overcome that issue.” [#I-7]
- An owner of a majority-owned IT business reported that his firm has relied on the large primes he works with to cover bonding for his business. [#I-12]

Insurance. Business owners and representatives reported on their experiences meeting insurance requirements or obtaining insurance.

Meeting insurance requirements created a challenge for some business owners. For these businesses, cost was prohibitive or disproportionately high for the size of contracts they bid. Examples included:

- The owner of a majority-owned IT firm reported that it was very difficult for him to get insurance due to the high cost. [#I-12]
- A white female owner of a WBE-certified engineering firm reported insurance as a barrier to doing work with public agencies and others. She stated, for instance, that Cobb County required high levels of insurance for “any size” project. She said that a policy costing \$1,500 for a \$7,500 project was unreasonable, for example. [#I-2]

An African American owner of a technology-related firm reported having a long-standing relationship with one insurance company. For this business owner, meeting contract insurance requirements was easy. This business owner indicated that he has been with the same insurance company for a long time and has no problems. He said that if a job requires additional coverage, the insurance company is responsive. [#I-15]

Timely payment. Business owners reported on the importance of prompt payment; however, most payments reported ranged from 30 to 120 days from date of invoice. For some, late payments resulted in financial burden. For example:

- An Asian American male representative of an MBE-/WBE-certified technology and engineering firm reported that payments on APS projects are slow, 60 to 70 days. [#I-8]
- The African American owner of a DBE-certified engineering firm reported that he would prefer prompt payments from public agencies such as the City of Atlanta, the Board of Regents, counties and others. He added that if a public agency wants its projects completed by experienced and qualified firms, it should “speed up” its payment process. [#I-7]
- The white male owner of an architecture firm commented that being a small firm, he cannot afford to “float out 120 days” for payments. [#I-13]
- The African American owner of a technology-related firm reported that most of his work is “net 30,” so he has to wait for payments from primes. He indicated that with “net 30” payments the norm, he must keep substantial money in the bank to make payroll. [#I-15]

This business owner added that he faced issues with primes not paying twice a year, on average. To secure payment for work performed, he reported having “to go after them [primes] a couple of times ... bug the sh*t out of them.” [#I-15]

One firm’s advantage over another. Business owners described advantages that one business may have over another. Factors mentioned included business size, longevity, knowledge and experience, as well as competitive pricing.

Many business owners reported on the existence of closed networks that advantaged some businesses over others. These included:

- The white male vice president of a Hispanic American female-owned engineering firm stated, “Word of mouth, exclusive deals with particular groups.” He went on to say that larger “heavy hitters” blanket projects with a full range of services, making it difficult for smaller firms to compete. [#I-1]
- An Asian American male representative of a minority trade organization repeated that white- and African American-owned businesses tend to get preference over those that are Asian-Pacific American-owned. [#TO-3]
- The African American co-owner of an African American-owned specialty contracting firm explained, “If I try to get into the bidding of the bigger contracts [as a prime] ... that’s when the ‘white boys’ come in ... they get all the big contracts.” He observed that being a white-owned firm getting larger jobs further advantages that firm over minority-owned firms in his industry, because “larger jobs are where the money really is.” [#I-23]

- A representative of a majority-owned environmental consulting firm indicated, “It’s sometimes the doors are open, but it’s full of people already there. There seems to be a lot of ‘back-scratching’ going on and I don’t even bother because I don’t think I’ll get the jobs.” [#AI-176]
- The representative of an African American minority-owned specialty contracting firm conveyed, “Work is ‘closed’ to new startups unless you ‘know’ someone. General contractors say that they stick with preferred vendors.” [#AI-101]
- A white representative of a white woman- and veteran-owned consulting engineering firm said, “... from conversations with others ... it’s a ‘pay to play.’” [#I-11]
- The representative of an African American minority-owned business reported, “Of course those who are on in the ‘inside’ do not like letting new people [in], because they do not want to share the work and money [in the] marketplace ... that is the nature of the beast.” [#AI-243]

Some business owners and representatives reported that larger business size advantaged some businesses over other smaller firms. These included:

- A white female owner of a WBE-certified engineering firm indicated that “scale, size, capacity” advantaged her firm. [#I-2]
- The white female representative of a women’s trade organization reported on challenges for start-ups or new business stages that continue beyond the launch of a business. For example, she indicated that larger, more established businesses have a competitive advantage making it difficult for smaller, newer firms to get contracts. [#TO-2]
- The white male vice president of a Hispanic American female-owned engineering firm commented that larger “heavy hitters” blanket projects with a full range of services, making it difficult for smaller firms to compete. [#I-1]
- An Asian American part owner of a specialty contracting firm reported that size of a firm often is reflected in the work a firm can secure because clients suspect that hiring a small business is “too risky.” [#I-6]

Several mentioned staff experience, good communications and access to the latest technology as contributing factors to a competitive advantage. For instance:

- The white male vice president of a Hispanic American female-owned engineering firm reported that some RFQs require engineering degrees for all assigned staff, indicating that firms where all employees hold college-level degrees in engineering are advantaged over others. [#I-1]
- An Asian American male representative of an MBE-/WBE-certified technology and engineering firm reported, “... communications is a big part ...” He added that his firm has an advantage when communicating: “Ours [drawings] are a lot cleaner” [#I-8]

- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm stated, “[Having] awareness of the latest technology or you will be behind, having a professional who knows the latest technology.” [#I-21]

Some business owners and representatives reported on the advantages of strong business operations such as proficient business and employee management, access to capital and competitive pricing. Comments included:

- An African American owner of a DBE-certified engineering firm reported that it is the management and structure of a firm that provides advantages to one firm over another. He added that policies and processes for efficiency are advantages, as well as supporting his engineering staff. [#I-7]
- The Asian American co-owner of a specialty contracting firm reported that capital is a factor in one firm having an advantage over another. He added that having marketing and sales personnel is an advantage. [#I-6]
- A white female representative of a majority-owned small telecommunications firm said, “Price is always a factor” [#I-14]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported, “Price is always going to be key.” [#I-21]

A number of business owners reported that good customer service and superior workmanship advantages some firms over others. These comments included:

- A Middle Eastern owner of a specialty contracting firm reported that he knew how to make customers “happy.” He reported that he started working at a young age and knew how to deal with clients. He remarked that customer service and workmanship set him apart from others. [#I-20]
- The Hispanic American male co-owner of a woman-owned and minority-owned specialty contracting firm reported that “quality usually wins over price.” He added that firms that “are ‘low-balling’ ... their quality [is not good] and they are hungry ... they just need work” [#I-4]

E. Knowledge and Experience Concerning Business Assistance Programs

Business owners and representatives reported on their experiences with and use of business assistance programs in Atlanta. These discussions included:

- Perceptions of business assistance programs; and
- Insights on certification (MWBE, SBE, other).

Perceptions of business assistance programs. Many firms reported on their perceptions of business assistance programs in Atlanta.

Many reported awareness of or having taken advantage of programs available in Atlanta designed to assist businesses. For example:

- An Asian American representative of a minority trade organization mentioned he was aware of business assistance programs, but the programs offered need to be better marketed. [#TO-3]
- The white male vice president of a Hispanic American female-owned engineering firm indicated knowledge of the Georgia Department of Transportation DBE assistance program, which he described as “meetings and such.” [#I-1]
- A white female representative of a majority-owned small telecommunications firm reported that the firm utilized the “Georgia” Small Business Program where they learned about business operations. [#14]
- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm indicated that the firm got help from a Georgia Department of Transportation representative regarding DBE certification. [#I-16]
- The white male representative of a white woman- and veteran-owned consulting engineering firm reported that his wife attended a program and a pre-bid meeting that made her think that only black women, not white women, could gain advantages in the Fulton County arena. He added that he had attended veteran-owned workshops given by General Services Administration (GSA) in the Atlanta area and thought they were informative. [#I-11]
- When asked about any experience with business assistance programs, the female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm indicated having taken classes and scheduled an orientation related to working with Atlanta Public Schools. [#I-21]

She also reported knowledge of a business assistance-matching program through Georgia Tech that puts small businesses in touch with procurement officers. She indicated being cautious about seeking this kind of assistance because the matching program required that businesses commit to being “active and responsive.” She concluded, “... if you burn yourself with them, there’s no turning back.” [#I-21]

A few business owners and representatives had no awareness of business assistance programs, or made unsatisfactory attempts to receive business assistance: For instance:

- The Asian American part owner of a specialty contracting firm reported that he tried to reach out to the Bureau of Internal Revenue (related to small businesses) via email, and the response was “lukewarm.” In general, he said that he had not received any help from business assistance programs. [#I-6]

- A Middle Eastern owner of a specialty contracting firm commented that he did not realize public agencies provide classes or workshops and other assistance for small businesses. [#I-20]
- The white female owner of a telecommunications firm reported difficulties in locating business assistance programs when hiring staff. She added that she contacted Chattahoochee Tech to post her job announcements, for instance, and it was a challenging experience to do so. [#I-9]

Some other business owners and representatives reported on negative experiences regarding bidding-related business assistance. Comments included:

- The African American co-owner of an African American-owned specialty contracting firm, when asked about any experience with business assistance programs, indicated having received many calls from business assistance providers offering to help him fill out forms for work in the public sector, including specifically for securing minority contracts. He commented that there was always a fee, “\$500 to \$1,000 off the bat, upfront.” He explained that these providers “claim they have access to government contracts and will assist you in bidding of contracts ... or offer minority loans.” He added that if he were to pay upfront, “It’s taking a chance, [it’s] an investment in their integrity.” [#I-23]
- An African American owner of a technology related firm reported that when he started his firm he worked with “Biz Opps” (i.e., FedBizOpps.gov) to get RFPs. He stated that many times the information was not in his industry. [#I-15]

Insights on certification (MWBE, SBE, other). Interviewees reported on their knowledge of certification programs, ease/difficulty with the certification process and usefulness of certification.

Some business owners and representatives reported that their firms had certifications (e.g., MBE, WBE, SBE, other), but had not seen any work as an outcome. For example:

- The white male vice president of a Hispanic American female-owned engineering firm said that although certified as a DBE, the interviewee’s firm has never been awarded a contract based on its DBE status. [#I-1]
- A white female owner of a WBE-certified engineering firm indicated that her certification has not resulted in any work opportunities. [#I-2]
- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm stated that the firm first learned of certification from a subcontractor. She commented that the firm she represents has not “gotten any more or any less work because of it [certification].” [#I-16]

She further remarked that the certification applications are time consuming, but not difficult. [#I-16]

Some reported certification to be a benefit for minority- and women-owned businesses. For example:

- A representative of an African American minority-owned firm reported the need for APS and other public agencies to consider certification as a benefit when seeking primes and subcontractors. He indicated that, as proof of experience and capabilities, “certification makes a difference ... to prove we are viable long enough” [#AI-253]
- An African American female owner of a technology firm described the benefit of her firm being certified. She remarked that certification “will open doors ... like a major ticket to enter ... puts you in the running” She added, “You are put into a smaller box” when certified. [#10A]

However, the Asian American representative of a minority trade association reported on somewhat limited awareness of certifications among his members. He stated that many business owners do not know about certification. [#TO-3]

One business representative interviewed questioned if certification was cost effective; another interviewee expressed that certification was used by firms that cannot get work. For instance:

- The white representative of a white woman- and veteran-owned consulting engineering firm reported that the firm has not gone through the certification administrative process because “sometimes it is cost effective, sometimes it’s not” [#I-11]
- A Middle Eastern owner of a specialty contracting firm commented that he does very well without certification and has not sought it. He expressed that those who seek certification do so because they “cannot find work the traditional way.” [#I-20]

Some reported difficulty with the certification process, chose not to seek any certifications or could not qualify. For example:

- An African American owner of a technology related firm, who had not sought certification, reported that he did not know how to apply. [#I-15]
- The Native American owner of an M/DBE-certified specialty contracting firm commented that each state’s certification process has its own “idiosyncrasies ... some are lengthy ... [However] GA, SC and Mississippi were pretty easy.” [#I-5]
- The representative of a white woman-owned architecture and engineering firm reported, “We sought certification in the City of Atlanta for woman-owned business and they made it very, very difficult. [The City was] very hard to work with; it discouraged us very much” [#AI-168]
- The white female representative of a women’s trade organization stated that one certifying agency denied a member certification, despite that member having a minority business partner. The firm’s application was declined because the application reviewer perceived the business to be a “front.” [#TO-2]

Many reported that the certification process was challenging and required heavy paperwork and tax information or that information on the process was lacking. Comments included:

- The African American co-owner of an African American-owned specialty contracting firm reported having filled out forms for certification in the past, but “the forms don’t make sense, they have a way of discouraging [minorities].” For example, he tried to certify with the City of Atlanta in 2004 indicating that he never heard back. He explained, “They ask for information that is not even relevant.” [#I-23]
- The African American owner of a DBE-certified engineering firm reported that certification “can be a challenge” [#I-7]
- The Asian American part owner of a specialty contracting firm reported that the paperwork involved with MBE certification would take him months to complete. The same business owner suggested that “simple guidelines” that are uniform across certifications are needed to improve the process. [#I-6]
- A white female owner of a telecommunications firm reported that the certification process seemed too complicated and time-consuming for her to apply for any certifications. She commented that the process is too “paper intense.” [#I-9]
- An African American female owner of a technology firm reported remarked on applying for Economically Disadvantaged Woman-owned small business certification: “It’s tedious ... a lot of paperwork ... a lot of back and forth” [#10A]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm indicated that the firm had certified as an MBE and SBE and now is attempting to certify as a DBE. Although she is prepared to supply the necessary documents, she reported that the paperwork is cumbersome. [#I-21]

F. Allegations of Unfair Treatment

Business owners and representatives reported on any allegations of unfair treatment, challenges to bidding, stereotyping, closed networks and other evidence of unfair treatment. Interview topics covered included:

- Whether there is a level playing field for minority- and women-owned firms;
- Denial of opportunity to bid;
- Bid shopping and bid manipulation;
- Double standards and any unfair treatment for women- or minority-owned firms when performing work; and
- Experience with “good ol’ boy” networks or other closed networks.

Whether there is a level playing field for minority- and woman-owned firms. Many business owners and representatives interviewed reported that the field is not level.

Many interviewees who reported an unlevel playing field commented on barriers specific to minority- and women-owned firms. For instance:

- When asked about whether the playing field is level, the white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm said, “I know it’s [an unlevel playing field] out there!” [#I-16]
- An Asian American male representative of an MBE-/WBE-certified technology and engineering firm remarked that the playing field is not level. He stated that “favoritism” exists and “wheeling and dealing” gets the contract. [#I-8]
- The Asian American representative of a minority trade organization indicated that Asian-Pacific Americans faced barriers related to their “accents” and “language,” along with other cultural insensitivities. He added that the playing field is not level, due to “moving goal posts ... based on who you know.” Additionally, he explained that for Asian-Pacific Americans, it will take “time to overcome these challenges,” as they are recent entrants. He reported that white- and African American-owned firms have preference over Asian-owned firms. [#TO-3]
- One white female representative of a women’s trade organization reported that experience with “cronyism,” unfair pricing and “unequal pay” made the playing field imbalanced for women- and minority-owned businesses. [#TO-2]
- For the female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm, when asked if there is a level playing field for minority- and women-owned firms in the Atlanta marketplace, she stated, “I do not think there is a level playing field. It’s an ‘issue that’s there,’ like that a man will make more money than a woman ... it’s the way it is.” She went on to explain that in her industry “every single worker in IT departments are foreigners, but the managers are ‘white,’ it’s how it is.” [#I-21]

This business manager of an Asian-Pacific American-owned MBE-SBE- certified enterprise conducting IT consulting indicated that as a “positive” person, she doesn’t look for evidence of unfair treatment; however, she explained that “the bar, it is [set] too high for minorities.” She added, “Minorities ... you go kill a lion every day; it’s not a walk in the park!” [#I-21]

She went on to give the example that when applying for consideration for contracts with large corporations, she has submitted 150 applications using specified online portals encouraging minority participation — providing “all the qualifications and a little extra,” a 30-second commercial, business and staff profiles, and “all the marketing materials” and has never once received a response. [#I-21]

- A Middle Eastern owner of a specialty contracting firm reported that as a Middle Eastern and Muslim, he “works in a field where there are a lot of ‘bros.’” He reported being treated differently than others. [#I-20]
- The white female owner of a telecommunications firm, when asked if there are advantages for men over women in her industry, reported, “It’s huge because the industry is male.” She added that she is excluded, for example, when “the men go out drinking.” [#I-9]

The same business owner commented that when winning an industry award; she was the only woman in attendance at the ceremony. She said, “The atmosphere, the presentation, the speakers, the everything, is geared to an ‘all-male audience’... not even being cognizant [that] there’s women in the room.” [#I-9]

- The Hispanic American representative of a minority trade organization commented that the playing field is not level, particularly for Hispanic American-owned businesses. [#TO-1]
- For the representative of an African American minority-owned IT-related company, “One of the main barriers is ... ‘discrimination’” [#AI-49]

Several business owners and representatives reported other factors that contributed to an unlevel playing field, including “fronts.” For instance:

- The African American co-owner of a specialty contracting firm reported knowing of “fronts” where white male-owned firms gave their wives 51 percent ownership to bid on projects where there are goals. He indicated, for example, that when taking qualifying exams in his industry, he observes many women taking the exams, but never sees them operating any businesses in his industry. [#I-23]
- The African American owner of a DBE-certified engineering firm commented that challenges exist when unqualified firms are “pop-ups ... or ‘fronts’ ... to get work because you are a minority or female” [#I-7]
- A white male owner of a specialty contracting firm reported that more advantages are available to minority- and woman-owned companies than to majority-owned firms. He stated that he has seen “wives” set up as business owners to take advantage of opportunities for minority- or women-owned firms. In reality, he expressed, the businesses he referenced are majority-owned firms operated by white males. [#I-17]

Only a few business owners and representatives indicated that there is a level playing field. These business owners and representatives included:

- The Asian American co-owner of a specialty contracting firm reported that that he has not experienced any challenges as a minority-owned business. [#I-6]

- The white female owner of a WBE-certified firm reported that there are incentives for minority- and women-owned firms in the Atlanta Metro Area. She expressed that she has not experienced any issues as Atlanta is progressive. She added that “social engineering” provided advantages for minority-owned businesses taking advantage of goals in Atlanta and created an affluent minority population. [#I-2]
- The representative of a majority-owned engineering firm commented, “I don’t think the private sector cares” regarding whether a firm is minority- or women- owned or majority-owned. [#I-3]

Although one white male business owner “thought” the playing field was level, he indicated that only “white guys” get work. This white male owner of a majority construction firm commented that he thought there was a level playing field for minority- and women-owned firms, but went on to report that “most of the construction industry” is conducted by “white guys ... like me.” [#I-18]

Some other business owners and representatives reported that minority- and/or women-owned firms have the advantage when bidding work; or that, in Atlanta, there was no unfair treatment specific to minority-owned firms. For instance:

- A white female representative of a majority-owned small telecommunications firm said regarding government opportunities, women- and minority-owned firms “actually have an advantage ... so I guess we are at a disadvantage in that regard.” [#I-14]
- The white representative of a white woman- and veteran-owned consulting engineering firm remarked, “If you are a minority in the Atlanta area, you are part of the culture ... you do not get discriminated against ... you’re discriminated against if you are not part of the culture ... it’s a ‘backlash’ type thing” [#I-11]
- A white male representative of a white woman- and veteran-owned engineering consulting firm commented, “If you are minority-owned, especially if you are black, then you get first priority ... whether you are the best qualified or not” [#I-11]
- The Native American owner of an MBE-/DBE-certified specialty contracting firm reported that unfair treatment does not exist in the Atlanta marketplace for minorities. He stated that the reverse is true, “minorities want to stay minorities.” [#I-5]
- The majority owner of an architecture firm expressed his belief that “there are advantages ... in the Atlanta area ... being a minority.” He added that when recruiters came to his college years ago, “If I had been a ‘black Jewish woman,’ I could have named my ticket.” [#I-13]

Denial of the opportunity to bid. The study team asked business owners and managers if they were ever denied the opportunity to bid.

Some interviewees could not recall any direct experience where they were denied an opportunity to bid. [e.g., #I-1, #I-2, #I-4, #I-5, #I-6, #I-13, #I-15] For instance, the Asian American representative of a minority trade organization reported that he has no knowledge “directly,” but denial of opportunity to bid “has possibly happened to organization members.” [#TO-3]

However, several other interviewees recounted experiences where they were denied opportunity to bid. Comments expressed included:

- The Asian American male representative of an MBE-/WBE-certified technology and engineering firm indicated that often projects were awarded to other firms before his firm could even “ask questions” about the project. He expressed, “The lack of communication was dumbfounding” [#I-8]
- A Middle Eastern owner of a specialty contracting firm reported that he had experienced denial of opportunity to bid on a project. [#I-20]
- The white female owner of a telecommunications firm commented that she was denied the opportunity to propose on a project; she indicated that the project had set-asides for minority-owned firms. [#I-9]

Bid shopping and bid manipulation. Many business owners and representatives reported being concerned about bid shopping and bid manipulation or having related experiences. Only a few businesses reported no experiences with bid shopping and bid manipulation.

Bid shopping and bid manipulation experiences were a common part of business for many interviewed. [e.g. #I-4, #I-6, #I-7, #I-8, #I-9, #I-10, #I-13, #I-15] For example:

- A Middle Eastern owner of a specialty contracting firm reported that he has seen it all, including, at times, having his bid used just for the client to negotiate with others. [#I-20]
- The white representative of a woman- and veteran-owned consulting engineering firm reported that an Atlanta Public Schools bid he submitted had been “shopped.” He said, “[Bid shopping] is a common practice in Fulton County ... it’s the culture ... if you’re part of the team ... you’re in [Atlanta Public Schools] ... they’re part of it.” [#I-11]
- Regarding bid shopping, an African American owner of a technology related firm reported that he has had bids accepted and then “they went somewhere else” He said that he found out that this happened “through the grapevine.” [#I-15]

- In reference to bid manipulation, the Asian American part owner of a specialty contracting firm said, “That happens all the time . . . all the time!” He commented that being a small business, it is assumed that his firm will cut its price in order to get the work. [#I-6]
- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm commented that bid manipulation had likely happened once or twice to her firm. She explained that the firm’s owner, for instance, submitted a low bid and did not get the work. She indicated that a higher-bidding firm got the contract. [#I-16]

One representative of a majority-owned engineering firm expressed that he had experienced bid shopping and bid manipulation; however, he reported that when bid shopping and bid manipulation occur, word spreads quickly. This representative stated, “If you shop somebody’s bid, it’s going to spread like wildfire.” [#I-3]

Only a few interviewees indicated that they were not concerned about bid shopping or bid manipulation. [e.g., #I-1, #I-2, #I-5]

Double standards and any unfair treatment for minority- and women-owned firms when performing work. The study team asked firms about any double standards for minority- and women-owned firms when performing work in Atlanta.

Double standards and other unfair treatment reported by some business owners and representatives ranged from disparate expectations to “cronyism.” Comments included:

- A white male vice president of a Hispanic American female-owned engineering firm observed that his female partner, when in meetings where he is also present, is treated as “the secretary.” He added, “I’m thirty years older, a male Caucasian. She’s a diminutive, dark-skinned woman. I can’t believe this [double standard] still exists after 40 years. She’s the licensed engineer!” He emphasized, “Yes! There’s a double standard.” [#I-1]
- The Asian American male representative of an MBE-/WBE-certified technology and engineering firm indicated that a female architect colleague has to work “twice as hard” as men do. [#I-8]
- The Hispanic American male co-owner of a woman- and minority-owned specialty contracting firm said, “They [minority and women business owners] must be spot on.” He added, if there is a mistake, it better not be made by the minority- or woman-owned firm. He added that minority- or women-owned firms “cover” themselves so other firms cannot blame them for mistakes because of “where you stand or who you are.” [#I-4]

He further added that to avoid problems, minority- or women-owned firms must document their work. He stated that everything must be “recorded . . . in writing . . . or pictured . . . especially in my industry . . .” [#I-4]

- The white female representative of a women’s trade organization reported that “40 percent of businesses are women-owned, but they have only 4.7 percent of the business revenue in Georgia.” She stated that some “speculate” that women of childbearing age have difficulty balancing a large-scale business with childcare. “Life/work balance, [limited] access to funds and ‘cronyism’” perpetuate double standards for women business owners, she concluded. [#TO-2]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm stated, “You hear that they [public sector agencies] encourage start-ups, small companies, you can learn all the portals, all the tools ... it does not mean I can ‘move forward’ even though I know all the guidelines.” [#I-21]

She also reported that doors do not open as readily for the Asian-Pacific American owner of the business, as they do for others. She reported a noticeable difference stating that doors open more easily for her (a Hispanic American female) than for the Asian-Pacific American business owner. [#I-21]

A number of business owners and representatives reported unfavorable work environments specific to women business owners and minority women business owners. Comments included:

- The white female owner of a telecommunications firm commented that at her industry award presentation, “The atmosphere, the presentation, the speakers, the everything, is geared to an ‘all-male audience’ ... not even being cognizant [that] there [is a] woman in the room.” [#I-9]
- A white male representative of an African American woman-owned technology business commented that at some trade shows, his wife was told “... you are so beautiful ... women may face that all of the time ...” He added that he knew of a client representative who told him that he was giving a contract to an attractive woman “because she is going to give me ‘something’ for the contract.” [#I-10]

Some business owners and representatives, challenged by double standards or other unfair treatment, reported how they or their colleagues responded. Examples from the in-depth interviews included:

- The Asian American male representative of an MBE-/WBE-certified technology and engineering firm stated that the firm needed to be more visible and more “in front of everybody ... like the big boys” [#I-8]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported, “It’s not easy, it’s not what we want to see. I’m very positive ... I try not to see [the double standards] ... if I look I will not play.” [#I-21]

- The white male vice president of a Hispanic American female-owned engineering firm reported that when his female business partner is treated as a secretary, “She stands her ground, takes control. When they hear her talk, they know she knows her stuff.” [#I-1]
- An African American female co-owner of a technology firm reported that there are double standards for women. She recounted experiences where male colleagues should have been attending to business, but they only wanted to talk to her because of her physical appearance. She remarked that she responded in these situations by keeping the conversation “professional” and directed at “business needs.” [#I-10A]

Experience with “Good ol’ boy” networks or other closed networks. Many interviewees had experience with closed networks and reported that they existed in Atlanta. [e.g., #I-15, #I-10A, #I-16, #I-18, #TO-3] A few others reported long-term relationships that they considered to be part of business.

Many business owners had experiences with closed networks in Atlanta. For instance, closed networks made finding opportunities for work more difficult for many:

- An African American male co-owner of an African American-owned specialty contracting firm, when asked about what gives one firm advantages over others in the industry, stated, “Again its Georgia! It’s a ‘red’ state ... if you’re white you can penetrate ‘ol’ boy’ networks.” [#I-23]
- The white male representative of an African American woman-owned technology firm reported that to break through closed networks, a firm must go “through a hazing process” by attending all of their events. [#I-10]
- A white male owner of a specialty contracting firm indicated that there was definitely a “good ol’ boy” network that existed in the Atlanta area and mentioned that it was influenced by area politics. [#I-17]
- The Native American owner of an MBE-/DBE-certified specialty contracting firm reported that some family-owned businesses do not permit others to work with them. He added that there are many family-owned firms in the area that exclude others. [#I-5]
- The white female owner of a telecommunications firm commented, “They’re [good ‘ol boy networks] not blatant, but ‘yes,’ they’re there.” She added, “What we [women] don’t have in ‘gender,’ we make up for in ethics.” [#I-9]
- An owner of a majority-owned IT firm commented that he had difficulties “as a Yankee” working in the south. He said he had difficulty integrating into the community. [#I-12]

The same business owner reported that years ago he was looking to work for the City of Atlanta and could not get meetings with the right person and was told, “It’s all ‘money under the table’” [#I-12]

- A Middle Eastern owner of a specialty contracting firm reported that there is a “good ol’ boy” network of “bros.” He said that that is the nature of the industry; construction is all about networking and word-of-mouth. [#I-20]
- The representative of a majority-owned engineering firm reported that he has noticed closed networks in “the private side” and specifically cited a phrase in sales, “If everything else ‘is’ the same, people would rather do business with people they like. And if everything ‘is not’ the same, they would still rather do business with people they like.” [#I-3]
- A representative of an African American minority-owned IT-related business reported, “A lot of association in clicks hard to penetrate.” [#AI-183]

Some business owners and representatives specifically indicated that “good ‘ol boy” networks and other closed networks in Atlanta put businesses outside those networks or newer businesses at a disadvantage when seeking work. [e.g., #AI-191, #AI-193, #AI-196, #AI-204] For example, comments included:

- The African American owner of a DBE-certified engineering firm indicated that in public school systems, with unadvertised projects under \$10,000, the “good ol’ boys” can have an advantage when securing that work. [#I-7]
- An African American male co-owner of an African American-owned specialty contracting firm, when asked about any existence of closed networks, stated, “Yes! Even if you [a business outside the network] give the lowest bid, with the best credentials, they’ll take your bid but you’ll never hear back.” He added, “You put in a good bid, one you know is good, you don’t get it . . . that’s when you know you in your gut you’re in the good ol’ boy system.” [#I-23]
- A white male representative and the African American female owner of a minority-owned technology firm commented on their experiences with closed networks. They indicated that in the case of the Airport expansion project, for example, larger companies that were “friends” with airport representatives secured the prime contracting work. This business representative and owner reported that women- and minority-owned businesses were not “in the loop.” [#I-10, #I-10A]
- A white male vice president of a Hispanic American female-owned engineering firm reported the existence of “exclusive deals with particular groups” as advantaging some firms over others when seeking work. [#I-1]
- A female Hispanic American business manager of an Asian-Pacific American-owned minority business enterprise conducting IT consulting stated, “You apply [for contracts] a lot, try to establish relationships, but if you don’t ‘know people’ you don’t hear back.” [#I-21]

- An Asian American representative of a minority trade organization reported on closed networks stating that entry is “based on who you know.” He indicated that “who-you-know” networks created and continues to create barriers for Asian-Pacific Americans trying to do business in Atlanta particularly because they are newer to the marketplace. [#TO-3]
- The Hispanic American male co-owner of a woman- and minority-owned specialty contracting firm commented on how work is secured in the City of Atlanta. He stated that “the ‘good ol’ boy’ network ... if they had been in the game a ‘long time’ ... most of the contracts went their way.” He added, “... it’s hard for anyone ‘new’ to come in and grab any of the contracts.” He further continued that, as a specialty contractor, he has difficulty finding out if his firm was “low-bidder ... or got the job or not.” [#I-4]
- A Hispanic American representative of a minority trade organization commented that working on the large projects, for example at the airport; it is a network where the general contractors use the same subs repeatedly because they know that those subs “can get the job done.” He explained, “... part of it is ‘generational’ ... the Hispanic community has not been here that long.” [#TO-1]

One Hispanic American representative of a minority trade organization commented on specific factors that fostered the development of closed networks in the Atlanta area. He reported, “Rarely you will see big construction firms doing a serious outreach.” He said, regarding construction, “It’s very competitive ... a tight and closed circle” He commented that many of the large construction firms that have work on large projects are African American-owned. He expressed, “We [Hispanic American business owners in Atlanta] don’t have to be mad ... we have to emulate what they [African American business owners] have done” [#TO-1]

One interviewee reported having no experience with closed networks. Two others differentiated the benefits of long-term business relationships from deliberately closed networks. For example:

- The majority-owner of an architecture firm reported that he has no proof of closed networks, because “the guys cross their t’s and dot their i’s” [#I-13]
- A white owner of a WBE-certified firm said that the “good ol’ boy” network makes it sound like its deliberate ... intentional” She added, “Everybody has people that they know and they trust” She commented that she “certainly benefitted from people knowing and trusting me.” [#2]
- The Asian American part owner of a specialty contracting firm reported that if a firm is used to working with another firm for many years, then that firm has an advantage. He added, “word of mouth and who you know” is an advantage. [#I-6]

G. Experience Doing Business with Atlanta Public Schools

The study team asked business owners and representatives about their experience working with school districts in Atlanta, including APS. Topics discussed included:

- Challenges learning about opportunities to work with Atlanta Public Schools or seeking contracts with APS;
- Difficulties when working with APS; and
- Barriers specific to minority- and women-owned firms.

Challenges learning about opportunities to work with Atlanta Public Schools or seeking contracts with APS. A number of business owners and representatives reported on barriers they faced when seeking work with APS.

Many business owners expressed difficulty finding bidding opportunities with Atlanta Public Schools. [e.g., #AI-21, #AI-22, #AI-28, #AI-32, #AI-124, #AI-209, #AI-212, #AI-213, #AI-214] Few interviewees reported a high level of confidence when seeking opportunities with APS. Several regarded APS website communications as a primary obstacle. Comments included:

- The white female representative of a Hispanic male MBE-/DBE-certified specialty contracting firm reported that the firm has tried to “branch out” to working with schools. She commented that the APS website does not make procurement information easily accessible. [#I-16]
- An African American owner of a technology-related firm reported that, to learn about APS opportunities, a firm must go through a “big network.” The same business owner said that he was “intimidated” when he went to a pre-bid meeting because he came from a small firm. [#I-15]
- A white male representative of an African American woman-owned technology firm commented on APS procurement practices stating that when he looks online for RFPs at APS, they are “already awarded.” [#I-10]
- The white female representative of a women’s trade organization reported observing that when a solicitation is released, it is earmarked for larger firms or the winner is pre-selected. She also reported that her organization has never heard from APS about any procurement opportunities or invitations to bid. [#TO-2]
- A representative of an African American minority-owned IT-related business reported, “There’s difficulties knowing about where to bid, I would like to learn more about that.” [#AI-256]
- A representative of an African American minority-owned IT-related firm indicated when asked about any barriers to seeking work with APS or other public agencies, “Just the knowledge of [contract] availability, I had no idea that those contracts were available ... [with] the ‘school system.’” [#AI-210]

- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm reported that the firm is taking the steps to seek opportunities with Atlanta Public Schools. She stated that she is attending all the classes, has scheduled to attend the orientation, will participate in webinars and is trying to “learn the process.” [#I-21]

However, she reported knowing of a colleague who had a contract with Atlanta Public Schools. She indicated that that person has “something special, he’s a one-of-a-kind who can ‘get in the door’ ...” She added, “I’ll never be that person.” [#I-21]

- A representative of an African American minority-owned firm indicated that when bidding, in general, “... you don’t know bids are out there, there might be an RFP, by the time you get them it’s already bid on” [#AI-248]

One business representative reported no knowledge of any barriers to identifying and securing opportunities with APS. The white male vice president of a Hispanic American female-owned engineering firm reported, “If a firm does its due diligence and does it early, finding out about [APS] opportunities should not be difficult.” [#I-1]

Difficulties when working with APS. Some business owners and representatives reported their experiences working with Atlanta Public Schools and other schools.

A number of businesses reported issues with Atlanta Public School’s project funding, procurement protocols and restrictive contract requirements. For example:

- The Asian American male representative of an MBE-/WBE-certified technology and engineering firm reported that the way Atlanta Public Schools projects are funded made working and securing work with APS more difficult than finding and securing work with other public agencies. He added that funding protocols resulted in projects that are not “publicly-addressed” by RFP and, therefore, more difficult to get. [#I-8]
- The white male owner of a majority specialty contracting firm reported that it is not easy to do work with APS as they have very restrictive contract requirements for insurance and licensing. “Contracts are one-sided ... everything is stacked to their [APS’s] advantage.” He also reported on their unwillingness to pay competitive market rates. [#I-17]
- The white female representative of a Hispanic male-owned MBE-/DBE-certified firm expressed that she did not know how to contact APS for work. [#I-16]
- A representative of a majority-owned architecture and engineering firm reported, “[It is] very difficult to work with APS, they’re very closed as to how they want you to do their work.” [#AI-163]

- The white female representative of a women’s trade organization had no experience with APS. However, she indicated a high level of interest in learning more about APS opportunities for her members. For example, she stated that she would welcome the opportunity to “engage with APS” through “webinars” instructing on “how to bid on work” and other related “workshop topics.” She conveyed frustration that APS had never reached out to her trade organization directly. [#TO-2]

Some business owners and representatives reported, for various reasons, that their businesses did not do work with Atlanta Public Schools. Some specifically identified the challenges that influenced their decisions to not seek work with APS. Comments included:

- The majority-owner of a specialty-contracting firm reported that his firm does work on other schools; however, it does not actively pursue work with APS. [#I-17]
- A majority-owner of a construction firm reported that 80 percent of his work is in school districts in Buford County. He added that unless he needs future work, he would not actively pursue work with APS. [#I-18]
- The majority-owner of an architecture firm reported that he worked for Cobb County Schools many years ago doing small additions and renovations. He reported no experience working with APS. [#I-13]
- The white male representative of a white woman- and veteran-owned consulting engineering firm reported that he learned about opportunities from a colleague at Atlanta Public Schools. He added that his colleague at APS knew the quality of the firm’s work so he received contracts with APS. However, after his colleague left APS, this business owner indicated that the firm was the most qualified and lowest bidder on a few projects and was not awarded those contracts. He concluded, “It became a wasted effort to even submit bids ...” to APS and county schools. [#I-11]
- The white representative of a white woman- and veteran-owned consulting engineering firm reported that many years ago he was asked to make financial contributions to personnel at APS and after that, he did not work with APS any longer. [#I-11]

The same business representative reported that, now, other business colleagues he knows, who have worked for APS in the past, have stopped because high APS employee turnover has made working on contracts with APS difficult. [#I-11]

Barriers specific to minority- and women-owned firms and small businesses seeking work with APS or other public agencies. Business owners and representatives reported any barriers specific to working with APS or other public agencies.

Difficulties for minority- and women- owned businesses and other small firms reported included challenges identifying and negotiating opportunities and getting work. These included:

- The representative of a majority-owned engineering firm remarked that, like with all public agency work, a small business or minority- or women-owned firm seeking work with APS faced challenges based on whether the business is “new” or has the “financial record” and “insurance capacity” to conduct work. [#I-3]
- An African American male co-owner of a specialty contracting firm reported that getting work with Atlanta Public Schools would be a “battle” for an African American-owned business. This specialty contractor stated, “It’s very difficult, very difficult to investigate or secure opportunities with the public schools. Even in communities that are primarily African American, [there are] all white contractors.” He added, “It’s not worth my time [to try] to get in, that would be a ‘battle’ I wouldn’t get into.” [#I-23]
- The white female owner of a telecommunications firm reported on a failed attempt to respond to an Atlanta Public Schools RFP. She expressed that “there were two strikes against us because we weren’t a male [owned] firm.” [#I-9]
- The white female representative of a women’s trade organization stated that there is a gender gap when it comes to business ownership in Atlanta, and a wage gap for women overall. She indicated that in her experience, when it comes to pay and pricing, women are judged on what “we’ve done” and men are judged on “how they negotiate.” These disparities, she indicated were part of doing work with public agencies such as APS and other schools. [#TO-2]
- A representative of an African American minority-owned IT-related business reported, “We are a small minority-owned firm, and we are fully capable of providing the same level of service as the larger firms, but are overlooked because we are small firm as opposed to the larger firms.” [#AI-260]

The white male representative of a large majority-owned general contracting firm reported on APS pre-qualification and future projects-posting protocols. This representative reported between “150 to 200” hours, when preparing pre-qualification documents for submittal. Although this firm had repeat experience with APS pre-qualification and RFQ processes, he indicated that success is based on an “ability to articulate how [a firm is] going to take [its] experience and [its] team and turn it into a good project for Atlanta Public Schools.” He explained that APS pre-qualification is up for renewal every five years. He reported, “[APS has] opened its pool to more firms ... it increases the level of effort [to secure work with APS] ... it’s not necessarily a bad thing ... it’s a pain, it’s aggravating, but I have to do a good job [to be pre-qualified].” [#I-22]

Additionally, this representative stated that it would take “considerable” time for a less experienced proposer to submit its qualifications for an APS RFQ, particularly if that proposer did not track its projects efficiently. [#I-22]

He also reported on how APS posts future projects by stating, “For all the Public Schools stuff, [it] is ... on [the] website for ‘all to see.’” However, he added, “There is still some ‘onus’ on ... the interested party to look.” He explained that “APS procurement future projects ... legally have to publish a list of projects including in that tax referendum I can go to APS website and show you a list of all the future projects ... based on this Special Purpose Local Option Sales Tax ... going into effect ... July 1 or August 1.” [#I-22]

H. Insights on How to Improve Working with APS

The study team asked if businesses had any experiences when working with APS that differed from their experiences when working with other firms or public agencies. Topics included:

- Insights from businesses on how APS can improve overall; and
- Strategies reported for specifically improving APS’s minority- and women-owned business and small business practices.

Insights from businesses on how APS can improve overall. Interviewees made recommendations for a broad range of improvements.

Many business owners and representatives made recommendations specifically related to APS’s minority- and woman-owned business practices. These included discussions focused on the need for improved APS outreach to women- and minority-owned firms and public education regarding contracting protocols:

- The white female representative of a Hispanic male-owned MBE-/DBE-certified firm expressed that she did not know how to contact APS for work, and would benefit from more information from APS. [#I-16]
- An African American owner of a technology-related firm suggested “a once-a-year seminar of some kind ... a public broadcast ...” explaining APS procurement. [#I-15]
- An Asian American co-owner of a specialty contracting firm commented that there are many companies that “can do wonderful things for APS; they just do not know how.” He added that firms do not know when RFP’s are published and APS must implement a simple way of publishing them and notifying firms of available RFPs. [#I-6]
- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm recommended fewer barriers for minority- and women-owned firms to gain APS experience. She stated that even projects with public agencies that offer set-asides require extreme levels of expertise and experience, which are not easily met. [#I-21]

Several reported a need for greater transparency in procurement procedures and improved communications over all. For instance:

- The African American co-owner of an African American-owned specialty contracting firm stated, “All they would have to do is ... look up state [business] licenses, if they really wanted [to identify minority-owned firms as potential contractors]. I could do it ‘blindfolded.’ They have 1,000 ways to check minority [status] ... very easily.” [#I-23]

He went on to add, “It’s a ‘systematic’ fix. I go to seminars; we all think it is a ‘systematic’ fix. I go looking around APS construction projects, they may have minority labor ... but I’ve yet to see a black [specialty] contractor doing the work.” [#I-23]

- The female Hispanic American business manager of an Asian-Pacific American-owned MBE-/SBE-certified IT consulting firm stated that, in general, RFP requirements are very difficult for small businesses. She reported that “you need a ‘department’ to do it [fulfill the requirements of RFPs], only in extreme cases can one person ... get through the system ... I don’t feel I can do it.” [#I-21]
- A Middle Eastern owner of a specialty contracting firm commented that he used to work with the City of Atlanta, “It’s all about who you know ... and as long as public agencies work like this, it will always be really hard for small businesses to enter new markets or grow ... they should stop favoritism.” [#I-20]

Many reported room for improvements in business assistance and other areas, that could enhance APS operations. Examples included:

- The white owner of a WBE-certified engineering firm commented that programs should exist for high school students to learn trades-to-entrepreneurship. [#I-2]
- An African American owner of a DBE-certified engineering firm suggested that APS and other schools utilize their STEM curriculum to develop and encourage young engineers. [#I-7]
- A Native American owner of an MBE-/DBE-certified specialty contracting firm reported that short training workshops are more effective for businesses than long six-week programs. He added that workshops also provide opportunities for networking. [#I-5]
- The Hispanic American male co-owner of a woman- and minority-owned specialty contracting firm suggested that APS send bid information directly to firms to improve the contracting process. [#I-4]
- The Hispanic American representative of a minority trade organization said, “There must be an intentional and deliberate effort” to assist small firms with their business needs. He added, “What doesn’t get measured doesn’t get done.” He commented that the initiative must come from the top, superintendents, boards, etc. [#TO-1]

- The white male representative of an African American woman-owned technology firm suggested that the APS website should be “more organized” like FedBids.com. [#I-10]

He commented that the APS bid process to award is lengthy. He recommended that APS be more accessible and hold “easy going” “non-threatening” and “friendly ... less terse” events for firms to learn about upcoming projects. [#I-10]

- The white male owner of a specialty contracting firm suggested that APS open up purchasing guidelines and broaden their award of projects. He said, “Project awards should not be driven by being the lowest bidder but should be based on the overall quality of the work the firm provides.” [#I-17]
- A Middle Eastern owner of a specialty contracting firm commented that public agencies need to realize that hiring smaller companies is cheaper and gives them access to better customer service. [#I-20]
- A majority-owner of an architectural firm suggested that APS utilize design-build teams to “have a good handle on the budget” [#I-13]
- One business representative of a majority-owned firm reported that he knew of a business-skills program offered by his church. He expressed that there is “no catch” to church- and community-based business assistance programs. He indicated that public agencies can benefit from looking at programs, such as these, that he labeled as being “more genuine.” [#I-3]

Strategies reported for specifically improving APS’s minority- and women-owned business and small business practices. A number of business owners and representatives identified the need for improved cultural sensitivity and outreach to minority- and women-owned businesses in Atlanta. For example:

- An Asian American representative of a minority trade organization reported a need for APS to “learn to be sensitive to other subcultures” and to embrace multiculturalism in its operations. [#TO-3]
- A Hispanic American representative of a minority trade organization suggested that APS implement diversity and inclusion programming, especially supplier diversity. He commented that APS should look to large companies that are “proud” to spend with diverse suppliers. [#TO-1]

He added that APS should develop relationships with chambers, support the local chambers and include them on advisory boards to foster diversity and inclusion. [#TO-1]

- The representative of a majority-owned engineering firm suggested that APS should provide workshops to meet the needs of small businesses who must learn how to perform “due diligence.” [#I-3]

- A white female representative of a women’s trade organization said that although her organization had never heard from APS, she welcomed APS outreach to her organization. She identified the need for increased education concerning APS bidding and bidding opportunities, particularly for those female members just now starting businesses in Atlanta. [#TO-2]

Additionally, the same women’s trade organization representative indicated that her organization would welcome invitations to APS training webinars and other learning opportunities, and that she would disseminate any APS materials to encourage member participation. [#TO-2]

- The white female owner of a telecommunications firm suggested that APS request for proposals be written so women- and minority-owned firms are encouraged to apply. She added that APS might consider following the lead of the federal government inclusion of “set-asides” in its procurement process. [#I-9]
- The Hispanic American male co-owner of a woman- and minority-owned specialty contracting firm suggested that “unbundling” would be helpful. [#I-4]
- The white male vice president of a Hispanic American female-owned engineering firm indicated that “unbundling” of contract opportunities would be advantageous for small businesses, as larger contracts typically go to larger firms. [#I-1]

Additionally, he recommended “goal setting” on APS contracts, including a goal for professional services, as a way to increase utilization of minority- and women-owned businesses on APS contracts. [#I-1]