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# APPENDIX A. DETAILED MARKET AREA ANALYSES <br> 2019 Disparity Study 

City of Winston-Salem, North Carolina

TABLE A-1. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY BUSINESS CATEGORY AND YEAR

| BUSINESS CATEGORIES | YEAR | DOLLARS |  | PERCENT OF DOLLARS |
| :---: | :---: | :---: | :---: | :---: |
| CONSTRUCTION | 2013 | \$ | 22,741,287.70 | 6.52\% |
|  | 2014 | \$ | 35,275,952.39 | 10.12\% |
|  | 2015 | \$ | 56,644,804.26 | 16.25\% |
|  | 2016 | \$ | 124,136,831.41 | 35.61\% |
|  | 2017 | \$ | 83,303,603.18 | 23.89\% |
|  | 2018 | \$ | 26,531,930.66 | 7.61\% |
| CONSTRUCTION, TOTAL |  | \$ | 348,634,409.60 | 100.00\% |
|  |  |  |  |  |
| PROFESSIONAL SERVICES | 2013 | \$ | 5,901,049.64 | 7.41\% |
|  | 2014 | \$ | 13,497,016.74 | 16.95\% |
|  | 2015 | \$ | 13,359,407.54 | 16.78\% |
|  | 2016 | \$ | 14,345,016.47 | 18.01\% |
|  | 2017 | \$ | 21,436,852.08 | 26.92\% |
|  | 2018 | \$ | 11,093,761.40 | 13.93\% |
| PROFESSIONAL SERVICES, TOTAL |  | \$ | 79,633,103.87 | 100.00\% |
|  |  |  |  |  |
| OTHER SERVICES | 2013 | \$ | 8,729,567.42 | 8.67\% |
|  | 2014 | \$ | 16,372,258.91 | 16.26\% |
|  | 2015 | \$ | 19,211,384.44 | 19.08\% |
|  | 2016 | \$ | 22,271,107.28 | 22.12\% |
|  | 2017 | \$ | 22,533,642.59 | 22.38\% |
|  | 2018 | \$ | 11,560,184.91 | 11.48\% |
| OTHER SERVICES, TOTAL |  | \$ | 100,678,145.55 | 100.00\% |
|  |  |  |  |  |
| GOODS \& SUPPLIES | 2013 | \$ | 13,779,971.51 | 10.01\% |
|  | 2014 | \$ | 21,502,996.83 | 15.62\% |
|  | 2015 | \$ | 24,608,911.66 | 17.88\% |
|  | 2016 | \$ | 33,838,720.07 | 24.58\% |
|  | 2017 | \$ | 29,165,039.98 | 21.19\% |
|  | 2018 | \$ | 14,763,311.29 | 10.72\% |
| GOODS \& SUPPLIES, TOTAL |  | \$ | 137,658,951.34 | 100.00\% |
|  |  |  |  |  |
| ALL BUSINESS CATEGORIES | 2013 | \$ | 51,151,876.27 | 7.67\% |
|  | 2014 | \$ | 86,648,224.87 | 13.00\% |
|  | 2015 | \$ | 113,824,507.90 | 17.08\% |
|  | 2016 | \$ | 194,591,675.23 | 29.19\% |
|  | 2017 | \$ | 156,439,137.83 | 23.47\% |
|  | 2018 | \$ | 63,949,188.26 | 9.59\% |
| ALL BUSINESS CATEGORIES, TOTAL |  | \$ | 666,604,610.36 | 100.00\% |

TABLE A-2. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY LOCATION OF FIRM (COUNTY, STATE), ALL BUSINESS CATEGORIES

| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| ALL CATEGORIES |  |  |  |  |
| FORSYTH COUNTY, NC | \$ | 287,864,535.52 | 43.18\% | 43.18\% |
| GUILFORD COUNTY, NC | \$ | 86,177,901.50 | 12.93\% | 56.11\% |
| SURRY COUNTY, NC | \$ | 23,314,190.71 | 3.50\% | 59.61\% |
| DAVIDSON COUNTY, NC | \$ | 17,076,381.99 | 2.56\% | 62.17\% |
| DAVIE COUNTY, NC | \$ | 4,913,721.40 | 0.74\% | 62.91\% |
| STOKES COUNTY, NC | \$ | 1,251,419.01 | 0.19\% | 63.10\% |
| RANDOLPH COUNTY, NC | \$ | 973,181.09 | 0.15\% | 63.24\% |
| YADKIN COUNTY, NC | \$ | 959,120.02 | 0.14\% | 63.39\% |
| ALAMANCE COUNTY, NC | \$ | 697,564.23 | 0.10\% | 63.49\% |
| ROCKINGHAM COUNTY, NC | \$ | 244,026.83 | 0.04\% | 63.53\% |
| TOTAL, INSIDE CSA | \$ | 423,472,042.30 | 63.53\% |  |
|  |  |  |  |  |
| WAKE COUNTY, NC | \$ | 25,304,083.41 | 3.80\% | 67.32\% |
| MECKLENBURG COUNTY, NC | \$ | 23,564,208.95 | 3.53\% | 70.86\% |
| COOK COUNTY, IL | \$ | 23,060,511.05 | 3.46\% | 74.32\% |
| FULTON COUNTY, GA | \$ | 17,785,210.52 | 2.67\% | 76.99\% |
| ORANGE COUNTY, NC | \$ | 17,446,687.63 | 2.62\% | 79.60\% |
| UNION COUNTY, NC | \$ | 11,695,557.71 | 1.75\% | 81.36\% |
| STANLY COUNTY, NC | \$ | 11,001,314.37 | 1.65\% | 83.01\% |
| LOS ANGELES COUNTY, CA | \$ | 10,648,175.18 | 1.60\% | 84.60\% |
| LYNCHBURG CITY COUNTY, VA | \$ | 7,276,466.53 | 1.09\% | 85.70\% |
| DALLAS COUNTY, TX | \$ | 5,757,640.62 | 0.86\% | 86.56\% |
| CHATHAM COUNTY, NC | \$ | 4,811,563.53 | 0.72\% | 87.28\% |
| ALLEGHENY COUNTY, PA | \$ | 4,587,357.37 | 0.69\% | 87.97\% |
| SAN FRANCISCO COUNTY, CA | \$ | 4,086,180.38 | 0.61\% | 88.58\% |
| PHILADELPHIA COUNTY, PA | \$ | 3,455,169.48 | 0.52\% | 89.10\% |
| GREENVILLE COUNTY, SC | \$ | 3,403,985.87 | 0.51\% | 89.61\% |
| MARICOPA COUNTY, AZ | \$ | 3,300,563.77 | 0.50\% | 90.11\% |
| SAINT LOUIS COUNTY, MO | \$ | 2,955,161.97 | 0.44\% | 90.55\% |
| CABARRUS COUNTY, NC | \$ | 2,923,432.78 | 0.44\% | 90.99\% |
| CALDWELL COUNTY, NC | \$ | 2,886,264.69 | 0.43\% | 91.42\% |
| ROANOKE COUNTY, VA | \$ | 2,884,481.01 | 0.43\% | 91.85\% |
| IREDELL COUNTY, NC | \$ | 2,522,533.14 | 0.38\% | 92.23\% |
| LINCOLN COUNTY, NC | \$ | 2,479,365.89 | 0.37\% | 92.60\% |
| FAIRFAX COUNTY, VA | \$ | 2,439,324.98 | 0.37\% | 92.97\% |
| HAMILTON COUNTY, OH | \$ | 2,368,044.26 | 0.36\% | 93.33\% |
| WAYNE COUNTY, MI | \$ | 2,341,848.60 | 0.35\% | 93.68\% |
| KNOX COUNTY, TN | \$ | 2,317,442.71 | 0.35\% | 94.02\% |
| DEKALB COUNTY, GA | \$ | 1,954,002.75 | 0.29\% | 94.32\% |
| SAN DIEGO COUNTY, CA | \$ | 1,818,690.98 | 0.27\% | 94.59\% |
| WASHINGTON COUNTY, PA | \$ | 1,658,896.19 | 0.25\% | 94.84\% |
| SAN BERNARDINO COUNTY, CA | \$ | 1,505,654.68 | 0.23\% | 95.07\% |
| GASTON COUNTY, NC | \$ | 1,386,152.25 | 0.21\% | 95.27\% |


| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| COBB COUNTY, GA | \$ | 1,305,548.81 | 0.20\% | 95.47\% |
| DURHAM COUNTY, NC | \$ | 1,207,779.80 | 0.18\% | 95.65\% |
| ORANGE COUNTY, IN | \$ | 1,148,186.97 | 0.17\% | 95.82\% |
| LEE COUNTY, NC | \$ | 1,003,763.70 | 0.15\% | 95.97\% |
| KALAMAZOO COUNTY, MI | \$ | 956,749.89 | 0.14\% | 96.12\% |
| BALTIMORE COUNTY, MD | \$ | 915,641.84 | 0.14\% | 96.25\% |
| JEFFERSON COUNTY, AL | \$ | 895,608.32 | 0.13\% | 96.39\% |
| ONONDAGA COUNTY, NY | \$ | 878,277.96 | 0.13\% | 96.52\% |
| RICHMOND CITY COUNTY, VA | \$ | 809,955.48 | 0.12\% | 96.64\% |
| HENRICO COUNTY, VA | \$ | 801,592.04 | 0.12\% | 96.76\% |
| HALIFAX COUNTY, NC | \$ | 722,989.18 | 0.11\% | 96.87\% |
| LEXINGTON COUNTY, SC | \$ | 680,844.93 | 0.10\% | 96.97\% |
| EAST BATON ROUGE COUNTY, LA | \$ | 607,459.60 | 0.09\% | 97.06\% |
| HENNEPIN COUNTY, MN | \$ | 576,159.91 | 0.09\% | 97.15\% |
| SUMTER COUNTY, SC | \$ | 526,665.68 | 0.08\% | 97.23\% |
| SALT LAKE COUNTY, UT | \$ | 510,393.58 | 0.08\% | 97.31\% |
| WAUKESHA COUNTY, WI | \$ | 463,634.71 | 0.07\% | 97.38\% |
| CHESTERFIELD COUNTY, VA | \$ | 450,833.91 | 0.07\% | 97.44\% |
| DUPAGE COUNTY, IL | \$ | 431,201.27 | 0.06\% | 97.51\% |
| FRANKLIN COUNTY, VA | \$ | 430,365.00 | 0.06\% | 97.57\% |
| MONTGOMERY COUNTY, MD | \$ | 367,888.20 | 0.06\% | 97.63\% |
| MILWAUKEE COUNTY, WI | \$ | 358,868.77 | 0.05\% | 97.68\% |
| VIRGINIA BEACH CITY COUNTY, VA | \$ | 344,556.96 | 0.05\% | 97.73\% |
| BOTETOURT COUNTY, VA | \$ | 343,019.16 | 0.05\% | 97.78\% |
| FAIRFIELD COUNTY, OH | \$ | 336,818.94 | 0.05\% | 97.84\% |
| PITT COUNTY, NC | \$ | 324,285.40 | 0.05\% | 97.88\% |
| CATAWBA COUNTY, NC | \$ | 307,704.16 | 0.05\% | 97.93\% |
| CAMBRIA COUNTY, PA | \$ | 299,987.00 | 0.05\% | 97.97\% |
| HARRIS COUNTY, TX | \$ | 295,971.95 | 0.04\% | 98.02\% |
| BALDWIN COUNTY, AL | \$ | 295,790.65 | 0.04\% | 98.06\% |
| ALAMEDA COUNTY, CA | \$ | 293,723.74 | 0.04\% | 98.11\% |
| WARREN COUNTY, NY | \$ | 290,051.60 | 0.04\% | 98.15\% |
| HANOVER COUNTY, VA | \$ | 275,596.74 | 0.04\% | 98.19\% |
| NEW HANOVER COUNTY, NC | \$ | 268,101.42 | 0.04\% | 98.23\% |
| PIMA COUNTY, AZ | \$ | 267,638.36 | 0.04\% | 98.27\% |
| FRANKLIN COUNTY, NC | \$ | 262,606.71 | 0.04\% | 98.31\% |
| WATAUGA COUNTY, NC | \$ | 255,356.81 | 0.04\% | 98.35\% |
| WINONA COUNTY, MN | \$ | 240,404.11 | 0.04\% | 98.39\% |
| ORANGEBURG COUNTY, SC | \$ | 237,500.00 | 0.04\% | 98.42\% |
| PERSON COUNTY, NC | \$ | 234,749.06 | 0.04\% | 98.46\% |
| HILLSBOROUGH COUNTY, FL | \$ | 226,520.69 | 0.03\% | 98.49\% |
| KING COUNTY, WA | \$ | 217,077.13 | 0.03\% | 98.52\% |
| JASPER COUNTY, MO | \$ | 216,266.43 | 0.03\% | 98.56\% |
| ALACHUA COUNTY, FL | \$ | 215,542.73 | 0.03\% | 98.59\% |
| SACRAMENTO COUNTY, CA | \$ | 215,123.62 | 0.03\% | 98.62\% |
| OAKLAND COUNTY, MI | \$ | 208,986.80 | 0.03\% | 98.65\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| SUFFOLK COUNTY, MA | \$ | 207,797.65 | 0.03\% | 98.68\% |
| RUSSELL COUNTY, VA | \$ | 187,864.25 | 0.03\% | 98.71\% |
| MARIPOSA COUNTY, CA | \$ | 176,263.70 | 0.03\% | 98.74\% |
| VANDERBURGH COUNTY, IN | \$ | 169,055.30 | 0.03\% | 98.76\% |
| BERKS COUNTY, PA | \$ | 166,424.85 | 0.02\% | 98.79\% |
| CHESAPEAKE CITY COUNTY, VA | \$ | 165,926.70 | 0.02\% | 98.81\% |
| FLORENCE COUNTY, SC | \$ | 165,336.23 | 0.02\% | 98.84\% |
| CANADA | \$ | 164,300.91 | 0.02\% | 98.86\% |
| YORK COUNTY, SC | \$ | 161,923.66 | 0.02\% | 98.89\% |
| BURKE COUNTY, NC | \$ | 160,991.36 | 0.02\% | 98.91\% |
| HARTFORD COUNTY, CT | \$ | 160,986.12 | 0.02\% | 98.94\% |
| JOHNSON COUNTY, KS | \$ | 159,657.86 | 0.02\% | 98.96\% |
| WASHINGTON COUNTY, MN | \$ | 153,218.28 | 0.02\% | 98.98\% |
| CUYAHOGA COUNTY, OH | \$ | 148,010.93 | 0.02\% | 99.00\% |
| ROWAN COUNTY, NC | \$ | 147,557.98 | 0.02\% | 99.03\% |
| LEON COUNTY, FL | \$ | 147,414.89 | 0.02\% | 99.05\% |
| CLEVELAND COUNTY, NC | \$ | 145,052.27 | 0.02\% | 99.07\% |
| DENVER COUNTY, CO | \$ | 144,388.73 | 0.02\% | 99.09\% |
| NEW YORK COUNTY, NY | \$ | 138,942.19 | 0.02\% | 99.11\% |
| COLLIN COUNTY, TX | \$ | 136,899.82 | 0.02\% | 99.13\% |
| BROWARD COUNTY, FL | \$ | 128,017.19 | 0.02\% | 99.15\% |
| CHARLESTON COUNTY, SC | \$ | 127,484.11 | 0.02\% | 99.17\% |
| FOND DU LAC COUNTY, WI | \$ | 123,797.04 | 0.02\% | 99.19\% |
| BALTIMORE CITY COUNTY, MD | \$ | 121,659.07 | 0.02\% | 99.21\% |
| DAVIDSON COUNTY, TN | \$ | 121,051.37 | 0.02\% | 99.23\% |
| GWINNETT COUNTY, GA | \$ | 116,128.42 | 0.02\% | 99.24\% |
| DELAWARE COUNTY, OH | \$ | 112,634.40 | 0.02\% | 99.26\% |
| ORANGE COUNTY, FL | \$ | 111,658.49 | 0.02\% | 99.28\% |
| PINELLAS COUNTY, FL | \$ | 111,104.72 | 0.02\% | 99.29\% |
| CHEROKEE COUNTY, GA | \$ | 110,152.00 | 0.02\% | 99.31\% |
| RIVERSIDE COUNTY, CA | \$ | 109,039.86 | 0.02\% | 99.33\% |
| MARION COUNTY, IN | \$ | 106,260.56 | 0.02\% | 99.34\% |
| SARASOTA COUNTY, FL | \$ | 96,883.94 | 0.01\% | 99.36\% |
| PATRICK COUNTY, VA | \$ | 95,878.50 | 0.01\% | 99.37\% |
| NORFOLK CITY COUNTY, VA | \$ | 94,253.09 | 0.01\% | 99.39\% |
| ALLEN COUNTY, IN | \$ | 92,524.11 | 0.01\% | 99.40\% |
| DELAWARE COUNTY, NY | \$ | 88,114.61 | 0.01\% | 99.41\% |
| POWHATAN COUNTY, VA | \$ | 83,070.72 | 0.01\% | 99.43\% |
| BUNCOMBE COUNTY, NC | \$ | 81,108.58 | 0.01\% | 99.44\% |
| WILLIAMSON COUNTY, TN | \$ | 80,399.28 | 0.01\% | 99.45\% |
| ARAPAHOE COUNTY, CO | \$ | 79,529.31 | 0.01\% | 99.46\% |
| GREGG COUNTY, TX | \$ | 76,757.50 | 0.01\% | 99.47\% |
| MORRIS COUNTY, NJ | \$ | 76,442.64 | 0.01\% | 99.49\% |
| PRINCE WILLIAM COUNTY, VA | \$ | 74,370.25 | 0.01\% | 99.50\% |
| UTAH COUNTY, UT | \$ | 73,206.80 | 0.01\% | 99.51\% |
| PICKENS COUNTY, SC | \$ | 70,725.50 | 0.01\% | 99.52\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| NEW HAVEN COUNTY, CT | \$ | 70,444.00 | 0.01\% | 99.53\% |
| MIDDLESEX COUNTY, MA | \$ | 67,945.20 | 0.01\% | 99.54\% |
| HAYWOOD COUNTY, NC | \$ | 65,501.88 | 0.01\% | 99.55\% |
| ORANGE COUNTY, CA | \$ | 64,914.01 | 0.01\% | 99.56\% |
| MULTNOMAH COUNTY, OR | \$ | 58,125.00 | 0.01\% | 99.57\% |
| KANE COUNTY, IL | \$ | 57,632.94 | 0.01\% | 99.58\% |
| WILSON COUNTY, NC | \$ | 54,979.55 | 0.01\% | 99.58\% |
| POLK COUNTY, FL | \$ | 53,175.60 | 0.01\% | 99.59\% |
| ESSEX COUNTY, NJ | \$ | 52,594.88 | 0.01\% | 99.60\% |
| HARNETT COUNTY, NC | \$ | 52,264.36 | 0.01\% | 99.61\% |
| BRUNSWICK COUNTY, NC | \$ | 49,860.09 | 0.01\% | 99.62\% |
| CUMBERLAND COUNTY, NC | \$ | 49,634.50 | 0.01\% | 99.62\% |
| NASSAU COUNTY, NY | \$ | 49,277.63 | 0.01\% | 99.63\% |
| LANCASTER COUNTY, SC | \$ | 49,258.44 | 0.01\% | 99.64\% |
| CLARK COUNTY, NV | \$ | 48,935.30 | 0.01\% | 99.64\% |
| BREMER COUNTY, IA | \$ | 48,908.00 | 0.01\% | 99.65\% |
| HARRISON COUNTY, IA | \$ | 47,582.75 | 0.01\% | 99.66\% |
| LUCAS COUNTY, OH | \$ | 46,730.00 | 0.01\% | 99.67\% |
| TOLLAND COUNTY, CT | \$ | 45,789.93 | 0.01\% | 99.67\% |
| YAVAPAI COUNTY, AZ | \$ | 45,196.00 | 0.01\% | 99.68\% |
| PORTSMOUTH CITY COUNTY, VA | \$ | 44,918.87 | 0.01\% | 99.69\% |
| BENTON COUNTY, AR | \$ | 44,290.40 | 0.01\% | 99.69\% |
| HOWARD COUNTY, MD | \$ | 43,995.86 | 0.01\% | 99.70\% |
| ANDERSON COUNTY, TN | \$ | 43,495.00 | 0.01\% | 99.71\% |
| DUPLIN COUNTY, NC | \$ | 41,860.00 | 0.01\% | 99.71\% |
| DUVAL COUNTY, FL | \$ | 41,538.04 | 0.01\% | 99.72\% |
| OTTAWA COUNTY, MI | \$ | 41,324.20 | 0.01\% | 99.73\% |
| CUMBERLAND COUNTY, PA | \$ | 40,588.43 | 0.01\% | 99.73\% |
| JEFFERSON COUNTY, KY | \$ | 40,105.34 | 0.01\% | 99.74\% |
| JACKSON COUNTY, MO | \$ | 39,957.95 | 0.01\% | 99.74\% |
| KENT COUNTY, MI | \$ | 38,753.70 | 0.01\% | 99.75\% |
| RICHLAND COUNTY, SC | \$ | 38,643.12 | 0.01\% | 99.75\% |
| FREDERICK COUNTY, MD | \$ | 35,900.00 | 0.01\% | 99.76\% |
| ROCK COUNTY, WI | \$ | 34,897.79 | 0.01\% | 99.77\% |
| CLINTON COUNTY, NY | \$ | 33,836.90 | 0.01\% | 99.77\% |
| WARREN COUNTY, NJ | \$ | 33,339.29 | 0.01\% | 99.78\% |
| INDIAN RIVER COUNTY, FL | \$ | 33,157.00 | 0.00\% | 99.78\% |
| SAMPSON COUNTY, NC | \$ | 32,780.08 | 0.00\% | 99.79\% |
| TARRANT COUNTY, TX | \$ | 31,915.64 | 0.00\% | 99.79\% |
| WASHINGTON COUNTY, OH | \$ | 31,505.00 | 0.00\% | 99.79\% |
| MONTGOMERY COUNTY, NC | \$ | 31,226.20 | 0.00\% | 99.80\% |
| AVERY COUNTY, NC | \$ | 30,000.00 | 0.00\% | 99.80\% |
| CAYUGA COUNTY, NY | \$ | 28,421.71 | 0.00\% | 99.81\% |
| GRANVILLE COUNTY, NC | \$ | 27,946.20 | 0.00\% | 99.81\% |
| TRAVIS COUNTY, TX | \$ | 27,813.78 | 0.00\% | 99.82\% |
| LOUDOUN COUNTY, VA | \$ | 27,454.50 | 0.00\% | 99.82\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| MONMOUTH COUNTY, NJ | \$ | 27,187.50 | 0.00\% | 99.82\% |
| MORGAN COUNTY, AL | \$ | 27,131.66 | 0.00\% | 99.83\% |
| UNITED KINGDOM | \$ | 26,701.00 | 0.00\% | 99.83\% |
| MAHASKA COUNTY, IA | \$ | 26,431.30 | 0.00\% | 99.84\% |
| JAMES CITY COUNTY, VA | \$ | 26,283.39 | 0.00\% | 99.84\% |
| FRANKLIN COUNTY, OH | \$ | 26,211.98 | 0.00\% | 99.84\% |
| ERIE COUNTY, NY | \$ | 25,600.00 | 0.00\% | 99.85\% |
| DISTRICT OF COLUMBIA COUNTY, DC | \$ | 25,240.71 | 0.00\% | 99.85\% |
| MARION COUNTY, OH | \$ | 25,091.88 | 0.00\% | 99.86\% |
| JEFFERSON COUNTY, CO | \$ | 22,840.00 | 0.00\% | 99.86\% |
| SUMMIT COUNTY, OH | \$ | 21,789.25 | 0.00\% | 99.86\% |
| BUCKS COUNTY, PA | \$ | 21,061.91 | 0.00\% | 99.87\% |
| LAKE COUNTY, IL | \$ | 20,765.47 | 0.00\% | 99.87\% |
| JEFFERSON COUNTY, PA | \$ | 20,058.90 | 0.00\% | 99.87\% |
| MONTGOMERY COUNTY, OH | \$ | 19,961.78 | 0.00\% | 99.88\% |
| DUBOIS COUNTY, IN | \$ | 19,895.00 | 0.00\% | 99.88\% |
| BUTLER COUNTY, PA | \$ | 19,486.00 | 0.00\% | 99.88\% |
| VENTURA COUNTY, CA | \$ | 18,800.00 | 0.00\% | 99.88\% |
| LUZERNE COUNTY, PA | \$ | 17,296.90 | 0.00\% | 99.89\% |
| COLUMBIA COUNTY, AR | \$ | 16,485.00 | 0.00\% | 99.89\% |
| NEW LONDON COUNTY, CT | \$ | 16,149.61 | 0.00\% | 99.89\% |
| QUEENS COUNTY, NY | \$ | 15,273.85 | 0.00\% | 99.89\% |
| WILSON COUNTY, TN | \$ | 14,708.80 | 0.00\% | 99.90\% |
| SCOTT COUNTY, IA | \$ | 14,531.36 | 0.00\% | 99.90\% |
| CADDO COUNTY, LA | \$ | 13,994.50 | 0.00\% | 99.90\% |
| POPE COUNTY, AR | \$ | 13,923.06 | 0.00\% | 99.90\% |
| CALVERT COUNTY, MD | \$ | 13,114.24 | 0.00\% | 99.90\% |
| HENDERSON COUNTY, NC | \$ | 12,928.71 | 0.00\% | 99.91\% |
| JEFFERSON COUNTY, NY | \$ | 12,426.40 | 0.00\% | 99.91\% |
| ROANOKE CITY COUNTY, VA | \$ | 12,213.76 | 0.00\% | 99.91\% |
| NASH COUNTY, NC | \$ | 12,015.80 | 0.00\% | 99.91\% |
| RENSSELAER COUNTY, NY | \$ | 11,610.54 | 0.00\% | 99.91\% |
| ONSLOW COUNTY, NC | \$ | 11,344.02 | 0.00\% | 99.92\% |
| HINDS COUNTY, MS | \$ | 10,555.96 | 0.00\% | 99.92\% |
| BOULDER COUNTY, CO | \$ | 10,318.25 | 0.00\% | 99.92\% |
| OCEAN COUNTY, NJ | \$ | 10,300.00 | 0.00\% | 99.92\% |
| IOSCO COUNTY, MI | \$ | 9,813.00 | 0.00\% | 99.92\% |
| SAINT LOUIS CITY COUNTY, MO | \$ | 9,622.70 | 0.00\% | 99.92\% |
| VAN ZANDT COUNTY, TX | \$ | 9,600.00 | 0.00\% | 99.92\% |
| STRAFFORD COUNTY, NH | \$ | 9,598.83 | 0.00\% | 99.93\% |
| BROWN COUNTY, WI | \$ | 9,595.24 | 0.00\% | 99.93\% |
| BROOME COUNTY, NY | \$ | 9,530.13 | 0.00\% | 99.93\% |
| SARPY COUNTY, NE | \$ | 9,222.10 | 0.00\% | 99.93\% |
| DAKOTA COUNTY, MN | \$ | 9,089.69 | 0.00\% | 99.93\% |
| MARATHON COUNTY, WI | \$ | 8,745.08 | 0.00\% | 99.93\% |
| MONTGOMERY COUNTY, PA | \$ | 8,527.00 | 0.00\% | 99.93\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| POLK COUNTY, IA | \$ | 8,500.00 | 0.00\% | 99.94\% |
| MIDLAND COUNTY, MI | \$ | 8,404.00 | 0.00\% | 99.94\% |
| CHESTER COUNTY, PA | \$ | 8,262.91 | 0.00\% | 99.94\% |
| LEE COUNTY, FL | \$ | 7,997.00 | 0.00\% | 99.94\% |
| FORT BEND COUNTY, TX | \$ | 7,871.85 | 0.00\% | 99.94\% |
| PASSAIC COUNTY, NJ | \$ | 7,830.00 | 0.00\% | 99.94\% |
| LEHIGH COUNTY, PA | \$ | 7,727.67 | 0.00\% | 99.94\% |
| ASHLAND COUNTY, OH | \$ | 7,645.00 | 0.00\% | 99.94\% |
| JOHNSTON COUNTY, NC | \$ | 7,633.00 | 0.00\% | 99.94\% |
| NORTHUMBERLAND COUNTY, PA | \$ | 7,108.45 | 0.00\% | 99.95\% |
| MONTEREY COUNTY, CA | \$ | 7,022.89 | 0.00\% | 99.95\% |
| BURLINGTON COUNTY, NJ | \$ | 7,019.03 | 0.00\% | 99.95\% |
| WILKES COUNTY, NC | \$ | 6,796.96 | 0.00\% | 99.95\% |
| MAURY COUNTY, TN | \$ | 6,786.40 | 0.00\% | 99.95\% |
| MANATEE COUNTY, FL | \$ | 6,760.00 | 0.00\% | 99.95\% |
| LANCASTER COUNTY, PA | \$ | 6,735.00 | 0.00\% | 99.95\% |
| JOHNSON COUNTY, TX | \$ | 6,659.29 | 0.00\% | 99.95\% |
| CRAVEN COUNTY, NC | \$ | 6,631.15 | 0.00\% | 99.95\% |
| UNION COUNTY, PA | \$ | 6,604.37 | 0.00\% | 99.95\% |
| TAYLOR COUNTY, TX | \$ | 6,599.00 | 0.00\% | 99.96\% |
| DENTON COUNTY, TX | \$ | 6,457.49 | 0.00\% | 99.96\% |
| SHELBY COUNTY, TN | \$ | 6,410.00 | 0.00\% | 99.96\% |
| FRESNO COUNTY, CA | \$ | 6,089.17 | 0.00\% | 99.96\% |
| CHESTERFIELD COUNTY, SC | \$ | 6,007.30 | 0.00\% | 99.96\% |
| MADISON COUNTY, OH | \$ | 5,944.05 | 0.00\% | 99.96\% |
| SEBASTIAN COUNTY, AR | \$ | 5,870.82 | 0.00\% | 99.96\% |
| BERKELEY COUNTY, SC | \$ | 5,839.02 | 0.00\% | 99.96\% |
| JEFFERSON COUNTY, TX | \$ | 5,802.60 | 0.00\% | 99.96\% |
| NORFOLK COUNTY, MA | \$ | 5,749.69 | 0.00\% | 99.96\% |
| DELAWARE COUNTY, PA | \$ | 5,645.81 | 0.00\% | 99.96\% |
| SALEM COUNTY, VA | \$ | 5,590.77 | 0.00\% | 99.97\% |
| PUTNAM COUNTY, FL | \$ | 5,557.20 | 0.00\% | 99.97\% |
| FAIRFAX CITY COUNTY, VA | \$ | 5,470.00 | 0.00\% | 99.97\% |
| PLYMOUTH COUNTY, MA | \$ | 5,331.93 | 0.00\% | 99.97\% |
| WILLIAMSON COUNTY, TX | \$ | 5,276.90 | 0.00\% | 99.97\% |
| TRANSYLVANIA COUNTY, NC | \$ | 5,264.92 | 0.00\% | 99.97\% |
| SANTA CLARA COUNTY, CA | \$ | 5,236.84 | 0.00\% | 99.97\% |
| COLLIER COUNTY, FL | \$ | 5,124.36 | 0.00\% | 99.97\% |
| WASHINGTON COUNTY, RI | \$ | 5,010.00 | 0.00\% | 99.97\% |
| SALINE COUNTY, KS | \$ | 4,979.35 | 0.00\% | 99.97\% |
| DANE COUNTY, WI | \$ | 4,949.88 | 0.00\% | 99.97\% |
| BRADFORD COUNTY, PA | \$ | 4,611.00 | 0.00\% | 99.97\% |
| ONEIDA COUNTY, WI | \$ | 4,595.00 | 0.00\% | 99.97\% |
| CALUMET COUNTY, WI | \$ | 4,498.43 | 0.00\% | 99.98\% |
| PALM BEACH COUNTY, FL | \$ | 4,437.50 | 0.00\% | 99.98\% |
| HAMILTON COUNTY, TN | \$ | 4,434.15 | 0.00\% | 99.98\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| CANYON COUNTY, ID | \$ | 4,318.99 | 0.00\% | 99.98\% |
| DOUGLAS COUNTY, NE | \$ | 4,248.00 | 0.00\% | 99.98\% |
| RANDOLPH COUNTY, IL | \$ | 4,224.00 | 0.00\% | 99.98\% |
| PRATT COUNTY, KS | \$ | 4,030.00 | 0.00\% | 99.98\% |
| BUCHANAN COUNTY, MO | \$ | 3,992.00 | 0.00\% | 99.98\% |
| ALBANY COUNTY, WY | \$ | 3,860.00 | 0.00\% | 99.98\% |
| DOUGLAS COUNTY, GA | \$ | 3,795.34 | 0.00\% | 99.98\% |
| NATRONA COUNTY, WY | \$ | 3,658.34 | 0.00\% | 99.98\% |
| LARIMER COUNTY, CO | \$ | 3,593.84 | 0.00\% | 99.98\% |
| SKAGIT COUNTY, WA | \$ | 3,537.88 | 0.00\% | 99.98\% |
| MISSOULA COUNTY, MT | \$ | 3,500.86 | 0.00\% | 99.98\% |
| LUMPKIN COUNTY, GA | \$ | 3,500.00 | 0.00\% | 99.98\% |
| SEMINOLE COUNTY, FL | \$ | 3,500.00 | 0.00\% | 99.98\% |
| EL PASO COUNTY, CO | \$ | 3,500.00 | 0.00\% | 99.98\% |
| LACKAWANNA COUNTY, PA | \$ | 3,400.00 | 0.00\% | 99.99\% |
| MERCER COUNTY, PA | \$ | 3,332.45 | 0.00\% | 99.99\% |
| KENT COUNTY, DE | \$ | 3,330.00 | 0.00\% | 99.99\% |
| PRINCE GEORGES COUNTY, MD | \$ | 3,285.00 | 0.00\% | 99.99\% |
| ONEIDA COUNTY, NY | \$ | 3,284.24 | 0.00\% | 99.99\% |
| BIBB COUNTY, GA | \$ | 3,263.52 | 0.00\% | 99.99\% |
| SHAWNEE COUNTY, KS | \$ | 3,252.00 | 0.00\% | 99.99\% |
| LORAIN COUNTY, OH | \$ | 3,090.00 | 0.00\% | 99.99\% |
| SPOKANE COUNTY, WA | \$ | 2,995.00 | 0.00\% | 99.99\% |
| WASHTENAW COUNTY, MI | \$ | 2,953.50 | 0.00\% | 99.99\% |
| SNOHOMISH COUNTY, WA | \$ | 2,920.00 | 0.00\% | 99.99\% |
| GALAX CITY COUNTY, VA | \$ | 2,710.01 | 0.00\% | 99.99\% |
| PIERCE COUNTY, WA | \$ | 2,673.75 | 0.00\% | 99.99\% |
| WESTMORELAND COUNTY, PA | \$ | 2,546.61 | 0.00\% | 99.99\% |
| MINNEHAHA COUNTY, SD | \$ | 2,520.34 | 0.00\% | 99.99\% |
| WASHINGTON COUNTY, OR | \$ | 2,474.85 | 0.00\% | 99.99\% |
| LA PORTE COUNTY, IN | \$ | 2,473.14 | 0.00\% | 99.99\% |
| SHELBY COUNTY, OH | \$ | 2,430.24 | 0.00\% | 99.99\% |
| ELKHART COUNTY, IN | \$ | 2,400.59 | 0.00\% | 99.99\% |
| DELAWARE COUNTY, IN | \$ | 2,320.38 | 0.00\% | 99.99\% |
| SAINT LUCIE COUNTY, FL | \$ | 2,300.00 | 0.00\% | 99.99\% |
| CHEROKEE COUNTY, IA | \$ | 2,266.00 | 0.00\% | 99.99\% |
| SALINE COUNTY, AR | \$ | 2,229.87 | 0.00\% | 99.99\% |
| BLAIR COUNTY, PA | \$ | 2,227.37 | 0.00\% | 99.99\% |
| BREVARD COUNTY, FL | \$ | 2,195.25 | 0.00\% | 100.00\% |
| OZAUKEE COUNTY, WI | \$ | 2,023.47 | 0.00\% | 100.00\% |
| ADA COUNTY, ID | \$ | 2,008.04 | 0.00\% | 100.00\% |
| ORLEANS COUNTY, LA | \$ | 2,000.00 | 0.00\% | 100.00\% |
| LITCHFIELD COUNTY, CT | \$ | 1,920.00 | 0.00\% | 100.00\% |
| YORK COUNTY, PA | \$ | 1,897.25 | 0.00\% | 100.00\% |
| WASHINGTON COUNTY, TN | \$ | 1,850.00 | 0.00\% | 100.00\% |
| SPARTANBURG COUNTY, SC | \$ | 1,578.92 | 0.00\% | 100.00\% |


| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| MCHENRY COUNTY, IL | \$ | 1,561.75 | 0.00\% | 100.00\% |
| SAN JOAQUIN COUNTY, CA | \$ | 1,545.76 | 0.00\% | 100.00\% |
| ANDERSON COUNTY, KY | \$ | 1,528.75 | 0.00\% | 100.00\% |
| KINGS COUNTY, NY | \$ | 1,500.00 | 0.00\% | 100.00\% |
| MARSHALL COUNTY, AL | \$ | 1,500.00 | 0.00\% | 100.00\% |
| MUSKINGUM COUNTY, OH | \$ | 1,250.00 | 0.00\% | 100.00\% |
| GALVESTON COUNTY, TX | \$ | 1,164.64 | 0.00\% | 100.00\% |
| FORSYTH COUNTY, GA | \$ | 1,123.88 | 0.00\% | 100.00\% |
| MITCHELL COUNTY, IA | \$ | 1,039.00 | 0.00\% | 100.00\% |
| PULASKI COUNTY, AR | \$ | 1,023.36 | 0.00\% | 100.00\% |
| STEVENS COUNTY, WA | \$ | 1,000.00 | 0.00\% | 100.00\% |
| ERIE COUNTY, OH | \$ | 924.00 | 0.00\% | 100.00\% |
| HAMILTON COUNTY, IN | \$ | 550.00 | 0.00\% | 100.00\% |
| VOLUSIA COUNTY, FL | \$ | 521.00 | 0.00\% | 100.00\% |
| ASHE COUNTY, NC | \$ | 458.00 | 0.00\% | 100.00\% |
| KAUAI COUNTY, HI | \$ | 400.00 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, TX | \$ | 400.00 | 0.00\% | 100.00\% |
| SARATOGA COUNTY, NY | \$ | 340.00 | 0.00\% | 100.00\% |
| CLINTON COUNTY, OH | \$ | 234.55 | 0.00\% | 100.00\% |
| MECKLENBURG COUNTY, VA | \$ | 222.26 | 0.00\% | 100.00\% |
| MCCRACKEN COUNTY, KY | \$ | 216.30 | 0.00\% | 100.00\% |
| HAMPDEN COUNTY, MA | \$ | 180.45 | 0.00\% | 100.00\% |
| BRISTOL CITY COUNTY, VA | \$ | 156.25 | 0.00\% | 100.00\% |
| SUFFOLK COUNTY, NY | \$ | 22.89 | 0.00\% | 100.00\% |
|  | \$ | 666,604,610.36 | 100.00\% |  |

TABLE A-3. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY LOCATION OF FIRM (COUNTY, STATE), CONSTRUCTION

| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF |
| :--- | ---: | ---: | ---: | ---: |
| DOLLARS |  |  |  | CUMULATIVE | PERCENT |
| :--- |
| CONSTRUCTION |
| FORSYTH COUNTY, NC |
| GUILFORD COUNTY, NC |
| SURRY COUNTY, NC |
| DAVIE COUNTY, NC |
| RANDOLPH COUNTY, NC |
| YADKIN COUNTY, NC |
| STOKES COUNTY, NC |
| DAVIDSON COUNTY, NC |
| ALAMANCE COUNTY, NC |
| ROCKINGHAM COUNTY, NC |
| TOTAL, INSIDE CSA |


| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| RICHMOND CITY COUNTY, VA | \$ | 23,367.31 | 0.01\% | 99.98\% |
| JEFFERSON COUNTY, AL | \$ | 12,343.45 | 0.00\% | 99.98\% |
| BUNCOMBE COUNTY, NC | \$ | 11,900.00 | 0.00\% | 99.98\% |
| YORK COUNTY, SC | \$ | 9,927.74 | 0.00\% | 99.99\% |
| COBB COUNTY, GA | \$ | 7,500.00 | 0.00\% | 99.99\% |
| CHESTERFIELD COUNTY, SC | \$ | 6,007.30 | 0.00\% | 99.99\% |
| MADISON COUNTY, OH | \$ | 5,944.05 | 0.00\% | 99.99\% |
| PALM BEACH COUNTY, FL | \$ | 4,437.50 | 0.00\% | 99.99\% |
| COOK COUNTY, IL | \$ | 4,284.71 | 0.00\% | 100.00\% |
| PORTSMOUTH CITY COUNTY, VA | \$ | 3,850.00 | 0.00\% | 100.00\% |
| LORAIN COUNTY, OH | \$ | 3,090.00 | 0.00\% | 100.00\% |
| DUVAL COUNTY, FL | \$ | 2,624.75 | 0.00\% | 100.00\% |
| WESTMORELAND COUNTY, PA | \$ | 2,546.61 | 0.00\% | 100.00\% |
| SEMINOLE COUNTY, FL | \$ | 2,055.00 | 0.00\% | 100.00\% |
| WILKES COUNTY, NC | \$ | 1,995.16 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, TX | \$ | 400.00 | 0.00\% | 100.00\% |
| CONSTRUCTION, TOTAL | \$ | 348,634,409.60 | 100.00\% |  |

TABLE A-4. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY LOCATION OF FIRM (COUNTY, STATE), PROFESSIONAL SERVICES

| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF |
| :--- | :--- | ---: | ---: | ---: |
| DOLLARS |  |  |  | CUMULATIVE | PERCENT |
| :--- |
| PROFESSIONAL SERVICES |
| FORSYTH COUNTY, NC |
| GUILFORD COUNTY, NC |
| YADKIN COUNTY, NC |
| ROCKINGHAM COUNTY, NC |
| STOKES COUNTY, NC |
| ALAMANCE COUNTY, NC |
| SURRY COUNTY, NC |
| DAVIE COUNTY, NC |


| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| MARATHON COUNTY, WI | \$ | 8,745.08 | 0.01\% | 99.97\% |
| POLK COUNTY, IA | \$ | 8,500.00 | 0.01\% | 99.98\% |
| DURHAM COUNTY, NC | \$ | 7,389.94 | 0.01\% | 99.99\% |
| JEFFERSON COUNTY, CO | \$ | 6,065.00 | 0.01\% | 99.99\% |
| WATAUGA COUNTY, NC | \$ | 2,875.00 | 0.00\% | 100.00\% |
| SEMINOLE COUNTY, FL | \$ | 1,445.00 | 0.00\% | 100.00\% |
| GASTON COUNTY, NC | \$ | 770.00 | 0.00\% | 100.00\% |
| VOLUSIA COUNTY, FL | \$ | 521.00 | 0.00\% | 100.00\% |
| PROFESSIONAL SERVICES, TOTAL | \$ | 79,633,103.87 | 100.00\% |  |

TABLE A-5. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY LOCATION OF FIRM (COUNTY, STATE), OTHER SERVICES

| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| OTHER SERVICES |  |  |  |  |
| FORSYTH COUNTY, NC | \$ | 41,990,076.56 | 41.71\% | 41.71\% |
| GUILFORD COUNTY, NC | \$ | 14,098,232.88 | 14.00\% | 55.71\% |
| DAVIE COUNTY, NC | \$ | 2,616,304.80 | 2.60\% | 58.31\% |
| STOKES COUNTY, NC | \$ | 756,631.13 | 0.75\% | 59.06\% |
| DAVIDSON COUNTY, NC | \$ | 274,359.98 | 0.27\% | 59.33\% |
| ALAMANCE COUNTY, NC | \$ | 248,790.33 | 0.25\% | 59.58\% |
| SURRY COUNTY, NC | \$ | 158,717.96 | 0.16\% | 59.74\% |
| RANDOLPH COUNTY, NC | \$ | 94,010.21 | 0.09\% | 59.83\% |
| YADKIN COUNTY, NC | \$ | 51,385.00 | 0.05\% | 59.88\% |
| ROCKINGHAM COUNTY, NC | \$ | 8,600.00 | 0.01\% | 59.89\% |
| TOTAL, INSIDE CSA | \$ | 60,297,108.85 | 59.89\% |  |
|  |  |  |  |  |
| MECKLENBURG COUNTY, NC | \$ | 6,074,772.51 | 6.03\% | 65.92\% |
| FULTON COUNTY, GA | \$ | 5,025,869.96 | 4.99\% | 70.92\% |
| COOK COUNTY, IL | \$ | 4,766,751.09 | 4.73\% | 75.65\% |
| ALLEGHENY COUNTY, PA | \$ | 2,935,222.14 | 2.92\% | 78.57\% |
| SAINT LOUIS COUNTY, MO | \$ | 2,606,238.07 | 2.59\% | 81.16\% |
| DALLAS COUNTY, TX | \$ | 2,100,241.82 | 2.09\% | 83.24\% |
| WAKE COUNTY, NC | \$ | 1,767,003.25 | 1.76\% | 85.00\% |
| PHILADELPHIA COUNTY, PA | \$ | 1,569,901.37 | 1.56\% | 86.56\% |
| WAYNE COUNTY, MI | \$ | 1,563,325.39 | 1.55\% | 88.11\% |
| KALAMAZOO COUNTY, MI | \$ | 956,749.89 | 0.95\% | 89.06\% |
| SAN FRANCISCO COUNTY, CA | \$ | 799,537.35 | 0.79\% | 89.85\% |
| LOS ANGELES COUNTY, CA | \$ | 596,064.99 | 0.59\% | 90.45\% |
| SUMTER COUNTY, SC | \$ | 515,999.83 | 0.51\% | 90.96\% |
| SALT LAKE COUNTY, UT | \$ | 510,393.58 | 0.51\% | 91.46\% |
| RICHMOND CITY COUNTY, VA | \$ | 499,493.09 | 0.50\% | 91.96\% |
| DURHAM COUNTY, NC | \$ | 474,350.26 | 0.47\% | 92.43\% |
| HENNEPIN COUNTY, MN | \$ | 441,957.52 | 0.44\% | 92.87\% |
| IREDELL COUNTY, NC | \$ | 423,141.70 | 0.42\% | 93.29\% |
| CHESTERFIELD COUNTY, VA | \$ | 402,096.05 | 0.40\% | 93.69\% |
| DUPAGE COUNTY, IL | \$ | 358,175.68 | 0.36\% | 94.05\% |
| MILWAUKEE COUNTY, WI | \$ | 344,268.77 | 0.34\% | 94.39\% |
| HAMILTON COUNTY, OH | \$ | 312,589.20 | 0.31\% | 94.70\% |
| PIMA COUNTY, AZ | \$ | 251,150.00 | 0.25\% | 94.95\% |
| ORANGEBURG COUNTY, SC | \$ | 237,500.00 | 0.24\% | 95.18\% |
| SACRAMENTO COUNTY, CA | \$ | 215,123.62 | 0.21\% | 95.40\% |
| HILLSBOROUGH COUNTY, FL | \$ | 177,075.00 | 0.18\% | 95.57\% |
| VANDERBURGH COUNTY, IN | \$ | 169,055.30 | 0.17\% | 95.74\% |
| SUFFOLK COUNTY, MA | \$ | 154,204.53 | 0.15\% | 95.90\% |
| PITT COUNTY, NC | \$ | 153,163.70 | 0.15\% | 96.05\% |
| HARTFORD COUNTY, CT | \$ | 148,246.12 | 0.15\% | 96.19\% |
| COLLIN COUNTY, TX | \$ | 133,390.00 | 0.13\% | 96.33\% |

$\left.\begin{array}{|l|l|l|l|l|}\hline & & & \text { PERCENT OF } & \text { CUMULATIVE } \\ \hline \text { LOCATION OF FIRMS } & & & \text { DOLLARS } & \text { POLLARS }\end{array}\right]$

| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| ERIE COUNTY, NY | \$ | 25,600.00 | 0.03\% | 99.50\% |
| DISTRICT OF COLUMBIA COUNTY, DC | \$ | 25,240.71 | 0.03\% | 99.53\% |
| MIDDLESEX COUNTY, MA | \$ | 23,622.94 | 0.02\% | 99.55\% |
| STANLY COUNTY, NC | \$ | 19,935.17 | 0.02\% | 99.57\% |
| BUCKS COUNTY, PA | \$ | 19,489.91 | 0.02\% | 99.59\% |
| BUTLER COUNTY, PA | \$ | 19,486.00 | 0.02\% | 99.61\% |
| CUMBERLAND COUNTY, PA | \$ | 17,000.00 | 0.02\% | 99.63\% |
| YORK COUNTY, SC | \$ | 16,944.55 | 0.02\% | 99.64\% |
| JEFFERSON COUNTY, CO | \$ | 16,775.00 | 0.02\% | 99.66\% |
| MONTGOMERY COUNTY, NC | \$ | 16,351.20 | 0.02\% | 99.68\% |
| GWINNETT COUNTY, GA | \$ | 15,545.00 | 0.02\% | 99.69\% |
| LINCOLN COUNTY, NC | \$ | 15,169.18 | 0.02\% | 99.71\% |
| UNION COUNTY, NC | \$ | 14,796.43 | 0.01\% | 99.72\% |
| CADDO COUNTY, LA | \$ | 13,994.50 | 0.01\% | 99.74\% |
| BERKS COUNTY, PA | \$ | 13,800.00 | 0.01\% | 99.75\% |
| HALIFAX COUNTY, NC | \$ | 12,500.00 | 0.01\% | 99.76\% |
| JEFFERSON COUNTY, NY | \$ | 12,426.40 | 0.01\% | 99.77\% |
| BURKE COUNTY, NC | \$ | 12,201.00 | 0.01\% | 99.79\% |
| VAN ZANDT COUNTY, TX | \$ | 9,600.00 | 0.01\% | 99.80\% |
| BROOME COUNTY, NY | \$ | 9,530.13 | 0.01\% | 99.81\% |
| BROWN COUNTY, WI | \$ | 9,500.00 | 0.01\% | 99.81\% |
| SARPY COUNTY, NE | \$ | 9,222.10 | 0.01\% | 99.82\% |
| SAINT LOUIS CITY COUNTY, MO | \$ | 9,122.25 | 0.01\% | 99.83\% |
| ORANGE COUNTY, NC | \$ | 9,037.50 | 0.01\% | 99.84\% |
| MIDLAND COUNTY, MI | \$ | 8,404.00 | 0.01\% | 99.85\% |
| FORT BEND COUNTY, TX | \$ | 7,871.85 | 0.01\% | 99.86\% |
| QUEENS COUNTY, NY | \$ | 7,180.00 | 0.01\% | 99.86\% |
| JOHNSON COUNTY, TX | \$ | 6,659.29 | 0.01\% | 99.87\% |
| DENTON COUNTY, TX | \$ | 6,457.49 | 0.01\% | 99.88\% |
| TRAVIS COUNTY, TX | \$ | 6,286.87 | 0.01\% | 99.88\% |
| HENRICO COUNTY, VA | \$ | 5,723.92 | 0.01\% | 99.89\% |
| BOULDER COUNTY, CO | \$ | 5,319.25 | 0.01\% | 99.90\% |
| TRANSYLVANIA COUNTY, NC | \$ | 5,264.92 | 0.01\% | 99.90\% |
| CRAVEN COUNTY, NC | \$ | 5,159.82 | 0.01\% | 99.91\% |
| WILKES COUNTY, NC | \$ | 4,801.80 | 0.00\% | 99.91\% |
| COBB COUNTY, GA | \$ | 4,550.00 | 0.00\% | 99.91\% |
| CALUMET COUNTY, WI | \$ | 4,498.43 | 0.00\% | 99.92\% |
| HAMILTON COUNTY, TN | \$ | 4,434.15 | 0.00\% | 99.92\% |
| RICHLAND COUNTY, SC | \$ | 4,059.43 | 0.00\% | 99.93\% |
| ALBANY COUNTY, WY | \$ | 3,860.00 | 0.00\% | 99.93\% |
| DANE COUNTY, WI | \$ | 3,840.00 | 0.00\% | 99.94\% |
| FRANKLIN COUNTY, NC | \$ | 3,669.09 | 0.00\% | 99.94\% |
| EL PASO COUNTY, CO | \$ | 3,500.00 | 0.00\% | 99.94\% |
| LACKAWANNA COUNTY, PA | \$ | 3,400.00 | 0.00\% | 99.95\% |
| MERCER COUNTY, PA | \$ | 3,332.45 | 0.00\% | 99.95\% |
| KENT COUNTY, DE | \$ | 3,330.00 | 0.00\% | 99.95\% |


| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| COLLIER COUNTY, FL | \$ | 3,328.04 | 0.00\% | 99.96\% |
| PRINCE GEORGES COUNTY, MD | \$ | 3,285.00 | 0.00\% | 99.96\% |
| NORFOLK COUNTY, MA | \$ | 3,250.07 | 0.00\% | 99.96\% |
| HENDERSON COUNTY, NC | \$ | 3,089.00 | 0.00\% | 99.97\% |
| SPOKANE COUNTY, WA | \$ | 2,995.00 | 0.00\% | 99.97\% |
| GALAX CITY COUNTY, VA | \$ | 2,710.01 | 0.00\% | 99.97\% |
| MONTGOMERY COUNTY, PA | \$ | 2,495.00 | 0.00\% | 99.97\% |
| WATAUGA COUNTY, NC | \$ | 2,481.81 | 0.00\% | 99.98\% |
| NASSAU COUNTY, NY | \$ | 2,214.51 | 0.00\% | 99.98\% |
| ORLEANS COUNTY, LA | \$ | 2,000.00 | 0.00\% | 99.98\% |
| WASHINGTON COUNTY, TN | \$ | 1,850.00 | 0.00\% | 99.98\% |
| SAN BERNARDINO COUNTY, CA | \$ | 1,789.97 | 0.00\% | 99.98\% |
| ANDERSON COUNTY, KY | \$ | 1,528.75 | 0.00\% | 99.99\% |
| KINGS COUNTY, NY | \$ | 1,500.00 | 0.00\% | 99.99\% |
| EAST BATON ROUGE COUNTY, LA | \$ | 1,400.00 | 0.00\% | 99.99\% |
| MUSKINGUM COUNTY, OH | \$ | 1,250.00 | 0.00\% | 99.99\% |
| GALVESTON COUNTY, TX | \$ | 1,164.64 | 0.00\% | 99.99\% |
| FORSYTH COUNTY, GA | \$ | 1,123.88 | 0.00\% | 99.99\% |
| CHESTER COUNTY, PA | \$ | 1,050.00 | 0.00\% | 99.99\% |
| MONTGOMERY COUNTY, OH | \$ | 1,014.30 | 0.00\% | 99.99\% |
| STEVENS COUNTY, WA | \$ | 1,000.00 | 0.00\% | 99.99\% |
| ERIE COUNTY, OH | \$ | 924.00 | 0.00\% | 100.00\% |
| ALAMEDA COUNTY, CA | \$ | 772.35 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, MD | \$ | 624.00 | 0.00\% | 100.00\% |
| HAMILTON COUNTY, IN | \$ | 550.00 | 0.00\% | 100.00\% |
| DUVAL COUNTY, FL | \$ | 513.29 | 0.00\% | 100.00\% |
| ROWAN COUNTY, NC | \$ | 462.75 | 0.00\% | 100.00\% |
| KAUAI COUNTY, HI | \$ | 400.00 | 0.00\% | 100.00\% |
| SARATOGA COUNTY, NY | \$ | 340.00 | 0.00\% | 100.00\% |
| CLINTON COUNTY, OH | \$ | 234.55 | 0.00\% | 100.00\% |
| MCCRACKEN COUNTY, KY | \$ | 216.30 | 0.00\% | 100.00\% |
| HAMPDEN COUNTY, MA | \$ | 180.45 | 0.00\% | 100.00\% |
| SANTA CLARA COUNTY, CA | \$ | 40.00 | 0.00\% | 100.00\% |
| SUFFOLK COUNTY, NY | \$ | 22.89 | 0.00\% | 100.00\% |
| OTHER SERVICES, TOTAL | \$ | 100,678,145.55 | 100.00\% |  |

TABLE A-6. PRIME LEVEL
DISTRIBUTION OF DOLLARS BY LOCATION OF FIRM (COUNTY, STATE), GOODS \& SUPPLIES

| LOCATION OF FIRMS |  | DOLLARS | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| GOODS \& SUPPLIES |  |  |  |  |
| FORSYTH COUNTY, NC | \$ | 23,870,937.84 | 17.34\% | 17.34\% |
| DAVIDSON COUNTY, NC | \$ | 16,557,581.45 | 12.03\% | 29.37\% |
| GUILFORD COUNTY, NC | \$ | 12,928,574.82 | 9.39\% | 38.76\% |
| SURRY COUNTY, NC | \$ | 1,806,935.65 | 1.31\% | 40.07\% |
| ALAMANCE COUNTY, NC | \$ | 280,674.59 | 0.20\% | 40.28\% |
| DAVIE COUNTY, NC | \$ | 144,372.24 | 0.10\% | 40.38\% |
| STOKES COUNTY, NC | \$ | 114,117.71 | 0.08\% | 40.46\% |
| ROCKINGHAM COUNTY, NC | \$ | 89,169.92 | 0.06\% | 40.53\% |
| YADKIN COUNTY, NC | \$ | 65,393.30 | 0.05\% | 40.58\% |
| RANDOLPH COUNTY, NC | \$ | 46,842.81 | 0.03\% | 40.61\% |
| TOTAL, INSIDE CSA | \$ | 55,904,600.33 | 40.61\% |  |
|  |  |  |  |  |
| COOK COUNTY, IL | \$ | 18,131,454.56 | 13.17\% | 53.78\% |
| FULTON COUNTY, GA | \$ | 12,438,749.25 | 9.04\% | 62.82\% |
| MECKLENBURG COUNTY, NC | \$ | 11,947,118.88 | 8.68\% | 71.50\% |
| SAN FRANCISCO COUNTY, CA | \$ | 3,271,643.03 | 2.38\% | 73.87\% |
| ROANOKE COUNTY, VA | \$ | 2,884,481.01 | 2.10\% | 75.97\% |
| DALLAS COUNTY, TX | \$ | 2,880,527.63 | 2.09\% | 78.06\% |
| MARICOPA COUNTY, AZ | \$ | 2,767,661.21 | 2.01\% | 80.07\% |
| WAKE COUNTY, NC | \$ | 2,314,910.07 | 1.68\% | 81.75\% |
| DEKALB COUNTY, GA | \$ | 1,954,002.75 | 1.42\% | 83.17\% |
| SAN DIEGO COUNTY, CA | \$ | 1,711,252.98 | 1.24\% | 84.42\% |
| PHILADELPHIA COUNTY, PA | \$ | 1,654,080.37 | 1.20\% | 85.62\% |
| LOS ANGELES COUNTY, CA | \$ | 1,633,529.81 | 1.19\% | 86.80\% |
| ALLEGHENY COUNTY, PA | \$ | 1,512,432.90 | 1.10\% | 87.90\% |
| SAN BERNARDINO COUNTY, CA | \$ | 1,503,864.71 | 1.09\% | 89.00\% |
| COBB COUNTY, GA | \$ | 1,235,372.45 | 0.90\% | 89.89\% |
| LEE COUNTY, NC | \$ | 1,003,763.70 | 0.73\% | 90.62\% |
| JEFFERSON COUNTY, AL | \$ | 883,264.87 | 0.64\% | 91.26\% |
| ONONDAGA COUNTY, NY | \$ | 807,633.72 | 0.59\% | 91.85\% |
| HENRICO COUNTY, VA | \$ | 795,868.12 | 0.58\% | 92.43\% |
| LEXINGTON COUNTY, SC | \$ | 680,844.93 | 0.49\% | 92.92\% |
| WAUKESHA COUNTY, WI | \$ | 463,634.71 | 0.34\% | 93.26\% |
| GREENVILLE COUNTY, SC | \$ | 444,916.47 | 0.32\% | 93.58\% |
| FAIRFIELD COUNTY, OH | \$ | 336,818.94 | 0.24\% | 93.83\% |
| CAMBRIA COUNTY, PA | \$ | 299,987.00 | 0.22\% | 94.05\% |
| BALDWIN COUNTY, AL | \$ | 295,790.65 | 0.21\% | 94.26\% |
| ALAMEDA COUNTY, CA | \$ | 292,951.39 | 0.21\% | 94.47\% |
| IREDELL COUNTY, NC | \$ | 288,234.21 | 0.21\% | 94.68\% |
| VIRGINIA BEACH CITY COUNTY, VA | \$ | 250,802.61 | 0.18\% | 94.87\% |
| WATAUGA COUNTY, NC | \$ | 250,000.00 | 0.18\% | 95.05\% |
| WINONA COUNTY, MN | \$ | 240,404.11 | 0.17\% | 95.22\% |
| JASPER COUNTY, MO | \$ | 216,266.43 | 0.16\% | 95.38\% |


| LOCATION OF FIRMS |  |  | PERCENT OF |
| :--- | :--- | :--- | :--- | :--- |
| DOLLARS |  |  |  | CUMULATIVE | PERCENT |
| :--- |
| ALACHUA COUNTY, FL |
| OAKLAND COUNTY, MI |
| CHESAPEAKE CITY COUNTY, VA |
| FLORENCE COUNTY, SC |
| WASHINGTON COUNTY, MN |
| BURKE COUNTY, NC |
| YORK COUNTY, SC |
| HENNEPIN COUNTY, MN |
| KING COUNTY, WA |
| GASTON COUNTY, NC |
| DURHAM COUNTY, NC |
| FOND DU LAC COUNTY, WI |
| CUYAHOGA COUNTY, OH |
| KNOX COUNTY, TN |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| FAIRFAX COUNTY, VA | \$ | 44,477.52 | 0.03\% | 98.52\% |
| MIDDLESEX COUNTY, MA | \$ | 44,322.26 | 0.03\% | 98.55\% |
| BENTON COUNTY, AR | \$ | 44,290.40 | 0.03\% | 98.59\% |
| ANDERSON COUNTY, TN | \$ | 43,495.00 | 0.03\% | 98.62\% |
| SUFFOLK COUNTY, MA | \$ | 41,645.78 | 0.03\% | 98.65\% |
| OTTAWA COUNTY, MI | \$ | 41,324.20 | 0.03\% | 98.68\% |
| PORTSMOUTH CITY COUNTY, VA | \$ | 41,068.87 | 0.03\% | 98.71\% |
| JEFFERSON COUNTY, KY | \$ | 40,105.34 | 0.03\% | 98.74\% |
| JACKSON COUNTY, MO | \$ | 39,957.95 | 0.03\% | 98.77\% |
| DUVAL COUNTY, FL | \$ | 38,400.00 | 0.03\% | 98.79\% |
| PICKENS COUNTY, SC | \$ | 37,368.26 | 0.03\% | 98.82\% |
| FREDERICK COUNTY, MD | \$ | 35,900.00 | 0.03\% | 98.85\% |
| CHESTERFIELD COUNTY, VA | \$ | 34,925.86 | 0.03\% | 98.87\% |
| ROCK COUNTY, WI | \$ | 34,897.79 | 0.03\% | 98.90\% |
| RICHLAND COUNTY, SC | \$ | 34,583.69 | 0.03\% | 98.92\% |
| CLINTON COUNTY, NY | \$ | 33,836.90 | 0.02\% | 98.95\% |
| CANADA | \$ | 33,426.91 | 0.02\% | 98.97\% |
| WARREN COUNTY, NJ | \$ | 33,339.29 | 0.02\% | 99.00\% |
| INDIAN RIVER COUNTY, FL | \$ | 33,157.00 | 0.02\% | 99.02\% |
| SAMPSON COUNTY, NC | \$ | 32,780.08 | 0.02\% | 99.04\% |
| TARRANT COUNTY, TX | \$ | 31,915.64 | 0.02\% | 99.07\% |
| HANOVER COUNTY, VA | \$ | 31,696.94 | 0.02\% | 99.09\% |
| WASHINGTON COUNTY, OH | \$ | 31,505.00 | 0.02\% | 99.11\% |
| AVERY COUNTY, NC | \$ | 30,000.00 | 0.02\% | 99.14\% |
| CATAWBA COUNTY, NC | \$ | 29,714.80 | 0.02\% | 99.16\% |
| FRANKLIN COUNTY, NC | \$ | 29,165.10 | 0.02\% | 99.18\% |
| LEON COUNTY, FL | \$ | 28,672.92 | 0.02\% | 99.20\% |
| CAYUGA COUNTY, NY | \$ | 28,421.71 | 0.02\% | 99.22\% |
| GRANVILLE COUNTY, NC | \$ | 27,946.20 | 0.02\% | 99.24\% |
| MORGAN COUNTY, AL | \$ | 27,131.66 | 0.02\% | 99.26\% |
| JOHNSON COUNTY, KS | \$ | 26,930.40 | 0.02\% | 99.28\% |
| MAHASKA COUNTY, IA | \$ | 26,431.30 | 0.02\% | 99.30\% |
| FRANKLIN COUNTY, OH | \$ | 26,211.98 | 0.02\% | 99.32\% |
| MARION COUNTY, OH | \$ | 25,091.88 | 0.02\% | 99.34\% |
| CHATHAM COUNTY, NC | \$ | 25,019.90 | 0.02\% | 99.35\% |
| CUMBERLAND COUNTY, PA | \$ | 23,588.43 | 0.02\% | 99.37\% |
| TRAVIS COUNTY, TX | \$ | 21,526.91 | 0.02\% | 99.39\% |
| LAKE COUNTY, IL | \$ | 20,765.47 | 0.02\% | 99.40\% |
| BROWARD COUNTY, FL | \$ | 20,679.62 | 0.02\% | 99.42\% |
| JEFFERSON COUNTY, PA | \$ | 20,058.90 | 0.01\% | 99.43\% |
| DUBOIS COUNTY, IN | \$ | 19,895.00 | 0.01\% | 99.45\% |
| UTAH COUNTY, UT | \$ | 19,088.80 | 0.01\% | 99.46\% |
| VENTURA COUNTY, CA | \$ | 18,800.00 | 0.01\% | 99.47\% |
| PINELLAS COUNTY, FL | \$ | 17,610.72 | 0.01\% | 99.49\% |
| LUZERNE COUNTY, PA | \$ | 17,296.90 | 0.01\% | 99.50\% |
| PIMA COUNTY, AZ | \$ | 16,488.36 | 0.01\% | 99.51\% |

City of Winston-Salem, North Carolina * December 2019

| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| COLUMBIA COUNTY, AR | \$ | 16,485.00 | 0.01\% | 99.52\% |
| NEW LONDON COUNTY, CT | \$ | 16,149.61 | 0.01\% | 99.53\% |
| MARIPOSA COUNTY, CA | \$ | 16,116.00 | 0.01\% | 99.55\% |
| MONTGOMERY COUNTY, NC | \$ | 14,875.00 | 0.01\% | 99.56\% |
| WILSON COUNTY, TN | \$ | 14,708.80 | 0.01\% | 99.57\% |
| MILWAUKEE COUNTY, WI | \$ | 14,600.00 | 0.01\% | 99.58\% |
| SCOTT COUNTY, IA | \$ | 14,531.36 | 0.01\% | 99.59\% |
| POPE COUNTY, AR | \$ | 13,923.06 | 0.01\% | 99.60\% |
| CALVERT COUNTY, MD | \$ | 13,114.24 | 0.01\% | 99.61\% |
| HARTFORD COUNTY, CT | \$ | 12,740.00 | 0.01\% | 99.62\% |
| HOWARD COUNTY, MD | \$ | 12,530.86 | 0.01\% | 99.63\% |
| ROANOKE CITY COUNTY, VA | \$ | 12,213.76 | 0.01\% | 99.64\% |
| NASH COUNTY, NC | \$ | 12,015.80 | 0.01\% | 99.64\% |
| ONSLOW COUNTY, NC | \$ | 11,344.02 | 0.01\% | 99.65\% |
| HILLSBOROUGH COUNTY, FL | \$ | 10,990.05 | 0.01\% | 99.66\% |
| SUMTER COUNTY, SC | \$ | 10,665.85 | 0.01\% | 99.67\% |
| EAST BATON ROUGE COUNTY, LA | \$ | 10,561.03 | 0.01\% | 99.68\% |
| HINDS COUNTY, MS | \$ | 10,555.96 | 0.01\% | 99.68\% |
| CABARRUS COUNTY, NC | \$ | 10,438.32 | 0.01\% | 99.69\% |
| OCEAN COUNTY, NJ | \$ | 10,300.00 | 0.01\% | 99.70\% |
| HENDERSON COUNTY, NC | \$ | 9,839.71 | 0.01\% | 99.71\% |
| IOSCO COUNTY, MI | \$ | 9,813.00 | 0.01\% | 99.71\% |
| STRAFFORD COUNTY, NH | \$ | 9,598.83 | 0.01\% | 99.72\% |
| DAKOTA COUNTY, MN | \$ | 9,089.69 | 0.01\% | 99.73\% |
| ROWAN COUNTY, NC | \$ | 8,204.62 | 0.01\% | 99.73\% |
| QUEENS COUNTY, NY | \$ | 8,093.85 | 0.01\% | 99.74\% |
| LEE COUNTY, FL | \$ | 7,997.00 | 0.01\% | 99.74\% |
| LYNCHBURG CITY COUNTY, VA | \$ | 7,850.00 | 0.01\% | 99.75\% |
| PASSAIC COUNTY, NJ | \$ | 7,830.00 | 0.01\% | 99.76\% |
| LEHIGH COUNTY, PA | \$ | 7,727.67 | 0.01\% | 99.76\% |
| ASHLAND COUNTY, OH | \$ | 7,645.00 | 0.01\% | 99.77\% |
| JOHNSTON COUNTY, NC | \$ | 7,633.00 | 0.01\% | 99.77\% |
| SARASOTA COUNTY, FL | \$ | 7,516.44 | 0.01\% | 99.78\% |
| CHESTER COUNTY, PA | \$ | 7,212.91 | 0.01\% | 99.78\% |
| NORTHUMBERLAND COUNTY, PA | \$ | 7,108.45 | 0.01\% | 99.79\% |
| MONTEREY COUNTY, CA | \$ | 7,022.89 | 0.01\% | 99.79\% |
| BURLINGTON COUNTY, NJ | \$ | 7,019.03 | 0.01\% | 99.80\% |
| MAURY COUNTY, TN | \$ | 6,786.40 | 0.00\% | 99.80\% |
| MANATEE COUNTY, FL | \$ | 6,760.00 | 0.00\% | 99.81\% |
| LANCASTER COUNTY, PA | \$ | 6,735.00 | 0.00\% | 99.81\% |
| UNION COUNTY, PA | \$ | 6,604.37 | 0.00\% | 99.82\% |
| TAYLOR COUNTY, TX | \$ | 6,599.00 | 0.00\% | 99.82\% |
| SHELBY COUNTY, TN | \$ | 6,410.00 | 0.00\% | 99.83\% |
| FRESNO COUNTY, CA | \$ | 6,089.17 | 0.00\% | 99.83\% |
| MONTGOMERY COUNTY, PA | \$ | 6,032.00 | 0.00\% | 99.84\% |
| HARRIS COUNTY, TX | \$ | 5,934.85 | 0.00\% | 99.84\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| SEBASTIAN COUNTY, AR | \$ | 5,870.82 | 0.00\% | 99.85\% |
| BERKELEY COUNTY, SC | \$ | 5,839.02 | 0.00\% | 99.85\% |
| JEFFERSON COUNTY, TX | \$ | 5,802.60 | 0.00\% | 99.85\% |
| DELAWARE COUNTY, PA | \$ | 5,645.81 | 0.00\% | 99.86\% |
| SALEM COUNTY, VA | \$ | 5,590.77 | 0.00\% | 99.86\% |
| PUTNAM COUNTY, FL | \$ | 5,557.20 | 0.00\% | 99.87\% |
| FAIRFAX CITY COUNTY, VA | \$ | 5,470.00 | 0.00\% | 99.87\% |
| PLYMOUTH COUNTY, MA | \$ | 5,331.93 | 0.00\% | 99.87\% |
| WILLIAMSON COUNTY, TX | \$ | 5,276.90 | 0.00\% | 99.88\% |
| SANTA CLARA COUNTY, CA | \$ | 5,196.84 | 0.00\% | 99.88\% |
| WASHINGTON COUNTY, RI | \$ | 5,010.00 | 0.00\% | 99.88\% |
| BOULDER COUNTY, CO | \$ | 4,999.00 | 0.00\% | 99.89\% |
| SALINE COUNTY, KS | \$ | 4,979.35 | 0.00\% | 99.89\% |
| BRADFORD COUNTY, PA | \$ | 4,611.00 | 0.00\% | 99.90\% |
| ONEIDA COUNTY, WI | \$ | 4,595.00 | 0.00\% | 99.90\% |
| CANYON COUNTY, ID | \$ | 4,318.99 | 0.00\% | 99.90\% |
| BERKS COUNTY, PA | \$ | 4,298.97 | 0.00\% | 99.91\% |
| DOUGLAS COUNTY, NE | \$ | 4,248.00 | 0.00\% | 99.91\% |
| RANDOLPH COUNTY, IL | \$ | 4,224.00 | 0.00\% | 99.91\% |
| PRATT COUNTY, KS | \$ | 4,030.00 | 0.00\% | 99.91\% |
| BUCHANAN COUNTY, MO | \$ | 3,992.00 | 0.00\% | 99.92\% |
| DOUGLAS COUNTY, GA | \$ | 3,795.34 | 0.00\% | 99.92\% |
| NATRONA COUNTY, WY | \$ | 3,658.34 | 0.00\% | 99.92\% |
| LARIMER COUNTY, CO | \$ | 3,593.84 | 0.00\% | 99.93\% |
| SKAGIT COUNTY, WA | \$ | 3,537.88 | 0.00\% | 99.93\% |
| COLLIN COUNTY, TX | \$ | 3,509.82 | 0.00\% | 99.93\% |
| MISSOULA COUNTY, MT | \$ | 3,500.86 | 0.00\% | 99.93\% |
| LUMPKIN COUNTY, GA | \$ | 3,500.00 | 0.00\% | 99.94\% |
| ONEIDA COUNTY, NY | \$ | 3,284.24 | 0.00\% | 99.94\% |
| BIBB COUNTY, GA | \$ | 3,263.52 | 0.00\% | 99.94\% |
| SHAWNEE COUNTY, KS | \$ | 3,252.00 | 0.00\% | 99.94\% |
| BUNCOMBE COUNTY, NC | \$ | 3,244.11 | 0.00\% | 99.94\% |
| WASHTENAW COUNTY, MI | \$ | 2,953.50 | 0.00\% | 99.95\% |
| SNOHOMISH COUNTY, WA | \$ | 2,920.00 | 0.00\% | 99.95\% |
| PIERCE COUNTY, WA | \$ | 2,673.75 | 0.00\% | 99.95\% |
| MINNEHAHA COUNTY, SD | \$ | 2,520.34 | 0.00\% | 99.95\% |
| NORFOLK COUNTY, MA | \$ | 2,499.62 | 0.00\% | 99.95\% |
| WASHINGTON COUNTY, OR | \$ | 2,474.85 | 0.00\% | 99.96\% |
| LA PORTE COUNTY, IN | \$ | 2,473.14 | 0.00\% | 99.96\% |
| SHELBY COUNTY, OH | \$ | 2,430.24 | 0.00\% | 99.96\% |
| LINCOLN COUNTY, NC | \$ | 2,410.99 | 0.00\% | 99.96\% |
| ELKHART COUNTY, IN | \$ | 2,400.59 | 0.00\% | 99.96\% |
| DELAWARE COUNTY, IN | \$ | 2,320.38 | 0.00\% | 99.97\% |
| SAINT LUCIE COUNTY, FL | \$ | 2,300.00 | 0.00\% | 99.97\% |
| CHEROKEE COUNTY, IA | \$ | 2,266.00 | 0.00\% | 99.97\% |
| SALINE COUNTY, AR | \$ | 2,229.87 | 0.00\% | 99.97\% |


| LOCATION OF FIRMS | DOLLARS |  | PERCENT OF DOLLARS | CUMULATIVE PERCENT |
| :---: | :---: | :---: | :---: | :---: |
| BLAIR COUNTY, PA | \$ | 2,227.37 | 0.00\% | 99.97\% |
| BREVARD COUNTY, FL | \$ | 2,195.25 | 0.00\% | 99.97\% |
| CUMBERLAND COUNTY, NC | \$ | 2,168.43 | 0.00\% | 99.97\% |
| BALTIMORE COUNTY, MD | \$ | 2,095.88 | 0.00\% | 99.98\% |
| OZAUKEE COUNTY, WI | \$ | 2,023.47 | 0.00\% | 99.98\% |
| ADA COUNTY, ID | \$ | 2,008.04 | 0.00\% | 99.98\% |
| MONTGOMERY COUNTY, MD | \$ | 1,935.15 | 0.00\% | 99.98\% |
| LITCHFIELD COUNTY, CT | \$ | 1,920.00 | 0.00\% | 99.98\% |
| YORK COUNTY, PA | \$ | 1,897.25 | 0.00\% | 99.98\% |
| COLLIER COUNTY, FL | \$ | 1,796.32 | 0.00\% | 99.98\% |
| ESSEX COUNTY, NJ | \$ | 1,673.84 | 0.00\% | 99.99\% |
| SPARTANBURG COUNTY, SC | \$ | 1,578.92 | 0.00\% | 99.99\% |
| BUCKS COUNTY, PA | \$ | 1,572.00 | 0.00\% | 99.99\% |
| MCHENRY COUNTY, IL | \$ | 1,561.75 | 0.00\% | 99.99\% |
| SAN JOAQUIN COUNTY, CA | \$ | 1,545.76 | 0.00\% | 99.99\% |
| MARSHALL COUNTY, AL | \$ | 1,500.00 | 0.00\% | 99.99\% |
| CRAVEN COUNTY, NC | \$ | 1,471.33 | 0.00\% | 99.99\% |
| NEW HAVEN COUNTY, CT | \$ | 1,412.50 | 0.00\% | 99.99\% |
| WILLIAMSON COUNTY, TN | \$ | 1,146.48 | 0.00\% | 99.99\% |
| DANE COUNTY, WI | \$ | 1,109.88 | 0.00\% | 100.00\% |
| BOTETOURT COUNTY, VA | \$ | 1,041.92 | 0.00\% | 100.00\% |
| MITCHELL COUNTY, IA | \$ | 1,039.00 | 0.00\% | 100.00\% |
| PULASKI COUNTY, AR | \$ | 1,023.36 | 0.00\% | 100.00\% |
| PITT COUNTY, NC | \$ | 975.00 | 0.00\% | 100.00\% |
| ORANGE COUNTY, FL | \$ | 621.35 | 0.00\% | 100.00\% |
| SAINT LOUIS CITY COUNTY, MO | \$ | 500.45 | 0.00\% | 100.00\% |
| ASHE COUNTY, NC | \$ | 458.00 | 0.00\% | 100.00\% |
| MECKLENBURG COUNTY, VA | \$ | 222.26 | 0.00\% | 100.00\% |
| MONTGOMERY COUNTY, OH | \$ | 157.48 | 0.00\% | 100.00\% |
| BRISTOL CITY COUNTY, VA | \$ | 156.25 | 0.00\% | 100.00\% |
| BROWN COUNTY, WI | \$ | 95.24 | 0.00\% | 100.00\% |
| GOODS \& SUPPLIES, TOTAL | \$ | 137,658,951.34 | 100.00\% |  |

# APPENDIX B. DETAILED UTILIZATION ANALYSES <br> 2019 Disparity Study 

City of Winston-Salem, North Carolina

Summaries of the following tables are provided in Chapter 4, Market Area and Utilization Analysis of the report.

Tables C-1 through C-4 illustrate total expenditure utilization by each year of the study period, procurement category, and business ownership classification not considering the relevant geographic market area established for the study.

Tables C-5 through C-8 illustrate total expenditure utilization within the Winston-Salem Combined Statistical Area by each year of the study period, procurement category, and business ownership classification.

Tables C-9 through C-11 is restricted to FY14-FY18 HUBSCO data collected for prime utilization in the Winston-Salem Combined Statistical Area. There was no prime contractor utilization in the Winston-Salem CSA in the Professional Services sector in the HUBSCO data.

Tables C-12 through C-15 is restricted to FY14-FY18 HUBSCO data collected for subcontractor utilization in the Winston-Salem Combined Statistical Area.

TABLE B-1. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION TOTAL EXPENDITURES FOR STUDY PERIOD

CONSTRUCTION

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$1,202,263.29 | \$444,423.58 | \$802,160.52 | \$3,281,863.18 | \$939,159.37 | \$6,669,869.94 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$10,357.00 | \$0.00 | \$0.00 | \$77,055.00 | \$44,050.00 | \$131,462.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$1,212,620.29 | \$444,423.58 | \$802,160.52 | \$3,358,918.18 | \$983,209.37 | \$6,801,331.94 |
| Nonminority Women | \$5,098,562.77 | \$1,871,261.78 | \$2,169,105.78 | \$2,673,806.42 | \$3,842,160.28 | \$15,654,897.03 |
| TOTAL M/WBE FIRMS | \$6,311,183.06 | \$2,315,685.36 | \$2,971,266.30 | \$6,032,724.60 | \$4,825,369.65 | \$22,456,228.97 |
| TOTAL NON-M/WBE FIRMS | \$35,486,639.54 | \$30,453,154.31 | \$95,057,867.11 | \$108,945,442.29 | \$56,235,077.38 | \$326,178,180.63 |
| TOTAL FIRMS | \$41,797,822.60 | \$32,768,839.67 | \$98,029,133.41 | \$114,978,166.89 | \$61,060,447.03 | \$348,634,409.60 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 2.88\% | 1.36\% | 0.82\% | 2.85\% | 1.54\% | 1.91\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.02\% | 0.00\% | 0.00\% | 0.07\% | 0.07\% | 0.04\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 2.90\% | 1.36\% | 0.82\% | 2.92\% | 1.61\% | 1.95\% |
| Nonminority Women | 12.20\% | 5.71\% | 2.21\% | 2.33\% | 6.29\% | 4.49\% |
| TOTAL M/WBE FIRMS | 15.10\% | 7.07\% | 3.03\% | 5.25\% | 7.90\% | 6.44\% |
| TOTAL NON-M/WBE FIRMS | 84.90\% | 92.93\% | 96.97\% | 94.75\% | 92.10\% | 93.56\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-2 shows the utilization of M/WBE firms was 1.83 percent in the Professional Services sector.

TABLE B-2. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION TOTAL EXPENDITURES FOR STUDY PERIOD PROFESSIONAL SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$2,872.00 | \$19,436.00 | \$252,000.00 | \$263,166.36 | \$163,174.08 | \$700,648.44 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$43,134.01 | \$59,085.51 | \$131,068.22 | \$233,287.74 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$2,872.00 | \$19,436.00 | \$295,134.01 | \$322,251.87 | \$294,242.30 | \$933,936.18 |
| Nonminority Women | \$89,465.40 | \$59,380.32 | \$165,083.42 | \$123,656.68 | \$84,729.80 | \$522,315.62 |
| TOTAL M/WBE FIRMS | \$92,337.40 | \$78,816.32 | \$460,217.43 | \$445,908.55 | \$378,972.10 | \$1,456,251.80 |
| TOTAL NON-M/WBE FIRMS | \$13,105,829.24 | \$12,606,139.44 | \$13,245,711.63 | \$18,162,531.78 | \$21,056,639.98 | \$78,176,852.07 |
| TOTAL FIRMS | \$13,198,166.64 | \$12,684,955.76 | \$13,705,929.06 | \$18,608,440.33 | \$21,435,612.08 | \$79,633,103.87 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.02\% | 0.15\% | 1.84\% | 1.41\% | 0.76\% | 0.88\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.31\% | 0.32\% | 0.61\% | 0.29\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.02\% | 0.15\% | 2.15\% | 1.73\% | 1.37\% | 1.17\% |
| Nonminority Women | 0.68\% | 0.47\% | 1.20\% | 0.66\% | 0.40\% | 0.66\% |
| TOTAL M/WBE FIRMS | 0.70\% | 0.62\% | 3.36\% | 2.40\% | 1.77\% | 1.83\% |
| TOTAL NON-M/WBE FIRMS | 99.30\% | 99.38\% | 96.64\% | 97.60\% | 98.23\% | 98.17\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-3 shows the utilization of M/WBE firms was 24.83 percent in the Other Services sector.
TABLE B-3. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION TOTAL EXPENDITURES FOR STUDY PERIOD

OTHER SERVICES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$206,733.74 | \$523,122.03 | \$653,687.22 | \$439,694.95 | \$382,232.96 | \$2,205,470.90 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$8,440.00 | \$0.00 | \$8,440.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$206,733.74 | \$523,122.03 | \$653,687.22 | \$448,134.95 | \$382,232.96 | \$2,213,910.90 |
| Nonminority Women | \$2,670,507.07 | \$3,654,334.85 | \$5,845,281.35 | \$5,195,067.52 | \$5,422,777.73 | \$22,787,968.52 |
| TOTAL M/WBE FIRMS | \$2,877,240.81 | \$4,177,456.88 | \$6,498,968.57 | \$5,643,202.47 | \$5,805,010.69 | \$25,001,879.42 |
| TOTAL NON-M/WBE FIRMS | \$13,145,175.49 | \$13,022,268.74 | \$13,906,969.39 | \$19,051,814.73 | \$16,550,037.78 | \$75,676,266.13 |
| TOTAL FIRMS | \$16,022,416.30 | \$17,199,725.62 | \$20,405,937.96 | \$24,695,017.20 | \$22,355,048.47 | \$100,678,145.55 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 1.29\% | 3.04\% | 3.20\% | 1.78\% | 1.71\% | 2.19\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.03\% | 0.00\% | 0.01\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 1.29\% | 3.04\% | 3.20\% | 1.81\% | 1.71\% | 2.20\% |
| Nonminority Women | 16.67\% | 21.25\% | 28.65\% | 21.04\% | 24.26\% | 22.63\% |
| TOTAL M/WBE FIRMS | 17.96\% | 24.29\% | 31.85\% | 22.85\% | 25.97\% | 24.83\% |
| TOTAL NON-M/WBE FIRMS | 82.04\% | 75.71\% | 68.15\% | 77.15\% | 74.03\% | 75.17\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-4 shows the utilization of M/WBE firms was 4.75 percent in the Goods \& Supplies sector.
TABLE B-4. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION TOTAL EXPENDITURES FOR STUDY PERIOD

GOODS \& SUPPLIES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$41,079.17 | \$35,274.13 | \$76,972.42 | \$140,749.79 | \$19,646.41 | \$313,721.92 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$149,373.26 | \$216,171.72 | \$222,087.83 | \$220,246.25 | \$329,999.79 | \$1,137,878.85 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$190,452.43 | \$251,445.85 | \$299,060.25 | \$360,996.04 | \$349,646.20 | \$1,451,600.77 |
| Nonminority Women | \$327,649.42 | \$576,466.97 | \$940,562.45 | \$1,771,112.61 | \$1,467,023.61 | \$5,082,815.06 |
| TOTAL M/WBE FIRMS | \$518,101.85 | \$827,912.82 | \$1,239,622.70 | \$2,132,108.65 | \$1,816,669.81 | \$6,534,415.83 |
| TOTAL NON-M/WBE FIRMS | \$24,084,954.27 | \$22,862,506.87 | \$24,576,236.80 | \$34,562,237.72 | \$25,038,599.85 | \$131,124,535.51 |
| TOTAL FIRMS | \$24,603,056.12 | \$23,690,419.69 | \$25,815,859.50 | \$36,694,346.37 | \$26,855,269.66 | \$137,658,951.34 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.17\% | 0.15\% | 0.30\% | 0.38\% | 0.07\% | 0.23\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.61\% | 0.91\% | 0.86\% | 0.60\% | 1.23\% | 0.83\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.77\% | 1.06\% | 1.16\% | 0.98\% | 1.30\% | 1.05\% |
| Nonminority Women | 1.33\% | 2.43\% | 3.64\% | 4.83\% | 5.46\% | 3.69\% |
| TOTAL M/WBE FIRMS | 2.11\% | 3.49\% | 4.80\% | 5.81\% | 6.76\% | 4.75\% |
| TOTAL NON-M/WBE FIRMS | 97.89\% | 96.51\% | 95.20\% | 94.19\% | 93.24\% | 95.25\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-5 shows the utilization of M/WBE firms was 8.47 percent in the Construction sector.
TABLE B-5. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION INSIDE GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA)

CONSTRUCTION

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$1,202,263.29 | \$444,423.58 | \$755,175.52 | \$3,281,863.18 | \$939,159.37 | \$6,622,884.94 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$300.00 | \$300.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$1,202,263.29 | \$444,423.58 | \$755,175.52 | \$3,281,863.18 | \$939,459.37 | \$6,623,184.94 |
| Nonminority Women | \$5,079,876.07 | \$1,743,195.62 | \$2,089,285.74 | \$2,590,430.70 | \$3,093,610.70 | \$14,596,398.83 |
| TOTAL M/WBE FIRMS | \$6,282,139.36 | \$2,187,619.20 | \$2,844,461.26 | \$5,872,293.88 | \$4,033,070.07 | \$21,219,583.77 |
| TOTAL NON-M/WBE FIRMS | \$20,547,458.71 | \$19,330,424.00 | \$74,695,865.58 | \$77,145,382.25 | \$37,655,704.04 | \$229,374,834.58 |
| TOTAL FIRMS | \$26,829,598.07 | \$21,518,043.20 | \$77,540,326.84 | \$83,017,676.13 | \$41,688,774.11 | \$250,594,418.35 |
| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
|  | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 4.48\% | 2.07\% | 0.97\% | 3.95\% | 2.25\% | 2.64\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 4.48\% | 2.07\% | 0.97\% | 3.95\% | 2.25\% | 2.64\% |
| Nonminority Women | 18.93\% | 8.10\% | 2.69\% | 3.12\% | 7.42\% | 5.82\% |
| TOTAL M/WBE FIRMS | 23.41\% | 10.17\% | 3.67\% | 7.07\% | 9.67\% | 8.47\% |
| TOTAL NON-M/WBE FIRMS | 76.59\% | 89.83\% | 96.33\% | 92.93\% | 90.33\% | 91.53\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-6 shows the utilization of M/WBE firms was 1.90 percent in the Professional Services sector.

TABLE B-6. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION INSIDE GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) PROFESSIONAL SERVICES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$2,872.00 | \$19,436.00 | \$252,000.00 | \$263,166.36 | \$163,174.08 | \$700,648.44 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$2,100.00 | \$0.00 | \$0.00 | \$2,100.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$2,872.00 | \$19,436.00 | \$254,100.00 | \$263,166.36 | \$163,174.08 | \$702,748.44 |
| Nonminority Women | \$89,465.40 | \$37,204.32 | \$65,399.42 | \$105,312.68 | \$78,365.80 | \$375,747.62 |
| TOTAL M/WBE FIRMS | \$92,337.40 | \$56,640.32 | \$319,499.42 | \$368,479.04 | \$241,539.88 | \$1,078,496.06 |
| TOTAL NON-M/WBE FIRMS | \$8,714,110.69 | \$8,684,676.89 | \$9,406,705.04 | \$13,089,567.77 | \$15,702,358.32 | \$55,597,418.71 |
| TOTAL FIRMS | \$8,806,448.09 | \$8,741,317.21 | \$9,726,204.46 | \$13,458,046.81 | \$15,943,898.20 | \$56,675,914.77 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.03\% | 0.22\% | 2.59\% | 1.96\% | 1.02\% | 1.24\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.02\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.03\% | 0.22\% | 2.61\% | 1.96\% | 1.02\% | 1.24\% |
| Nonminority Women | 1.02\% | 0.43\% | 0.67\% | 0.78\% | 0.49\% | 0.66\% |
| TOTAL M/WBE FIRMS | 1.05\% | 0.65\% | 3.28\% | 2.74\% | 1.51\% | 1.90\% |
| TOTAL NON-M/WBE FIRMS | 98.95\% | 99.35\% | 96.72\% | 97.26\% | 98.49\% | 98.10\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-7 shows the utilization of M/WBE firms was 36.02 percent in the Other Services sector.

TABLE B-7. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION INSIDE GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA)

OTHER SERVICES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$206,733.74 | \$523,122.03 | \$653,687.22 | \$439,694.95 | \$365,713.79 | \$2,188,951.73 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$206,733.74 | \$523,122.03 | \$653,687.22 | \$439,694.95 | \$365,713.79 | \$2,188,951.73 |
| Nonminority Women | \$2,142,726.79 | \$3,174,713.98 | \$5,197,457.27 | \$4,391,729.78 | \$4,626,290.47 | \$19,532,918.29 |
| TOTAL M/WBE FIRMS | \$2,349,460.53 | \$3,697,836.01 | \$5,851,144.49 | \$4,831,424.73 | \$4,992,004.26 | \$21,721,870.02 |
| TOTAL NON-M/WBE FIRMS | \$5,851,757.02 | \$6,137,004.50 | \$6,746,846.15 | \$11,651,969.43 | \$8,187,661.73 | \$38,575,238.83 |
| TOTAL FIRMS | \$8,201,217.55 | \$9,834,840.51 | \$12,597,990.64 | \$16,483,394.16 | \$13,179,665.99 | \$60,297,108.85 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 2.52\% | 5.32\% | 5.19\% | 2.67\% | 2.77\% | 3.63\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 2.52\% | 5.32\% | 5.19\% | 2.67\% | 2.77\% | 3.63\% |
| Nonminority Women | 26.13\% | 32.28\% | 41.26\% | 26.64\% | 35.10\% | 32.39\% |
| TOTAL M/WBE FIRMS | 28.65\% | 37.60\% | 46.45\% | 29.31\% | 37.88\% | 36.02\% |
| TOTAL NON-M/WBE FIRMS | 71.35\% | 62.40\% | 53.55\% | 70.69\% | 62.12\% | 63.98\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-8 shows the utilization of M/WBE firms was 7.65 percent in the Goods \& Supplies sector.
TABLE B-8. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION INSIDE GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) GOODS \& SUPPLIES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$3,321.51 | \$2,726.40 | \$80,592.36 | \$19,646.41 | \$106,286.68 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$3,321.51 | \$2,726.40 | \$80,592.36 | \$19,646.41 | \$106,286.68 |
| Nonminority Women | \$249,898.49 | \$481,445.85 | \$694,837.79 | \$1,478,625.37 | \$1,265,518.64 | \$4,170,326.14 |
| TOTAL M/WBE FIRMS | \$249,898.49 | \$484,767.36 | \$697,564.19 | \$1,559,217.73 | \$1,285,165.05 | \$4,276,612.82 |
| TOTAL NON-M/WBE FIRMS | \$10,234,589.76 | \$9,579,337.34 | \$9,581,339.25 | \$11,166,858.16 | \$11,065,863.00 | \$51,627,987.51 |
| TOTAL FIRMS | \$10,484,488.25 | \$10,064,104.70 | \$10,278,903.44 | \$12,726,075.89 | \$12,351,028.05 | \$55,904,600.33 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 0.03\% | 0.03\% | 0.63\% | 0.16\% | 0.19\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 0.03\% | 0.03\% | 0.63\% | 0.16\% | 0.19\% |
| Nonminority Women | 2.38\% | 4.78\% | 6.76\% | 11.62\% | 10.25\% | 7.46\% |
| TOTAL M/WBE FIRMS | 2.38\% | 4.82\% | 6.79\% | 12.25\% | 10.41\% | 7.65\% |
| TOTAL NON-M/WBE FIRMS | 97.62\% | 95.18\% | 93.21\% | 87.75\% | 89.59\% | 92.35\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-9 illustrates that the utilization of M/WBE prime firms was 5.46 percent in the Construction sector.

TABLE B-9. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) CONSTRUCTION

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$0.00 | \$2,397,643.00 | \$0.00 | \$0.00 | \$2,397,643.00 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$0.00 | \$2,397,643.00 | \$0.00 | \$0.00 | \$2,397,643.00 |
| Nonminority Women | \$2,300,886.61 | \$0.00 | \$1,749,190.41 | \$321,611.00 | \$0.00 | \$4,371,688.02 |
| TOTAL M/WBE FIRMS | \$2,300,886.61 | \$0.00 | \$4,146,833.41 | \$321,611.00 | \$0.00 | \$6,769,331.02 |
| TOTAL NON-M/WBE FIRMS | \$6,431,655.15 | \$39,551,048.55 | \$50,819,685.24 | \$18,199,904.13 | \$2,205,838.32 | \$117,208,131.39 |
| TOTAL FIRMS | \$8,732,541.76 | \$39,551,048.55 | \$54,966,518.65 | \$18,521,515.13 | \$2,205,838.32 | \$123,977,462.41 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 0.00\% | 4.36\% | 0.00\% | 0.00\% | 1.93\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 0.00\% | 4.36\% | 0.00\% | 0.00\% | 1.93\% |
| Nonminority Women | 26.35\% | 0.00\% | 3.18\% | 1.74\% | 0.00\% | 3.53\% |
| TOTAL M/WBE FIRMS | 26.35\% | 0.00\% | 7.54\% | 1.74\% | 0.00\% | 5.46\% |
| TOTAL NON-M/WBE FIRMS | 73.65\% | 100.00\% | 92.46\% | 98.26\% | 100.00\% | 94.54\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-10 shows the utilization of prime M/WBE firms was 6.55 percent in the Other Services sector.
TABLE B-10. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) OTHER SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Nonminority Women | \$0.00 | \$0.00 | \$301,358.00 | \$0.00 | \$0.00 | \$301,358.00 |
| TOTAL M/WBE FIRMS | \$0.00 | \$0.00 | \$301,358.00 | \$0.00 | \$0.00 | \$301,358.00 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$4,301,886.40 | \$0.00 | \$0.00 | \$4,301,886.40 |
| TOTAL FIRMS | \$0.00 | \$0.00 | \$4,603,244.40 | \$0.00 | \$0.00 | \$4,603,244.40 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Nonminority Women | 0.00\% | 0.00\% | 6.55\% | 0.00\% | 0.00\% | 6.55\% |
| TOTAL M/WBE FIRMS | 0.00\% | 0.00\% | 6.55\% | 0.00\% | 0.00\% | 6.55\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 93.45\% | 0.00\% | 0.00\% | 93.45\% |
| TOTAL FIRMS | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 100.00\% |

Table C-11 shows the utilization of prime M/WBE firms was 100 percent in the Goods \& Supplies sector.
TABLE B-11. PRIME UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) GOODS \& SUPPLIES

| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CLASSIFICATION | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Nonminority Women | \$0.00 | \$0.00 | \$768,571.00 | \$433,353.00 | \$0.00 | \$1,201,924.00 |
| TOTAL M/WBE FIRMS | \$0.00 | \$0.00 | \$768,571.00 | \$433,353.00 | \$0.00 | \$1,201,924.00 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL FIRMS | \$0.00 | \$0.00 | \$768,571.00 | \$433,353.00 | \$0.00 | \$1,201,924.00 |
| BUSINESS OWNERSHIP | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| CLASSIFICATION | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Nonminority Women | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
| TOTAL M/WBE FIRMS | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL FIRMS | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

Table C-12 shows the utilization of subcontractor M/WBE firms was 100 percent in the Construction sector.

TABLE B-12. SUBCONTRACTOR UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA)
CONSTRUCTION

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$240,538.10 | \$392,318.73 | \$3,184,723.24 | \$123,445.59 | \$222,355.58 | \$4,163,381.24 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$203,958.36 | \$0.00 | \$203,958.36 |
| Hispanic Americans | \$0.00 | \$1,121,641.00 | \$1,613,850.71 | \$1,162,760.98 | \$102,321.20 | \$4,000,573.89 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$240,538.10 | \$1,513,959.73 | \$4,798,573.95 | \$1,490,164.93 | \$324,676.78 | \$8,367,913.49 |
| Nonminority Women | \$1,329,927.80 | \$1,192,977.27 | \$8,023,433.86 | \$1,461,695.70 | \$619,445.72 | \$12,627,480.35 |
| TOTAL M/WBE FIRMS | \$1,570,465.90 | \$2,706,937.00 | \$12,822,007.81 | \$2,951,860.63 | \$944,122.50 | \$20,995,393.84 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL FIRMS | \$1,570,465.90 | \$2,706,937.00 | \$12,822,007.81 | \$2,951,860.63 | \$944,122.50 | \$20,995,393.84 |
| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
|  | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 15.32\% | 14.49\% | 24.84\% | 4.18\% | 23.55\% | 19.83\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 6.91\% | 0.00\% | 0.97\% |
| Hispanic Americans | 0.00\% | 41.44\% | 12.59\% | 39.39\% | 10.84\% | 19.05\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 15.32\% | 55.93\% | 37.42\% | 50.48\% | 34.39\% | 39.86\% |
| Nonminority Women | 84.68\% | 44.07\% | 62.58\% | 49.52\% | 65.61\% | 60.14\% |
| TOTAL M/WBE FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-13 shows the utilization of subcontractor M/WBE firms was 100 percent in the Professional Services sector.

TABLE B-13. SUBCONTRACTOR UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA) PROFESSIONAL SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$0.00 | \$0.00 | \$10,385.05 | \$11,200.00 | \$21,585.05 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$0.00 | \$0.00 | \$10,385.05 | \$11,200.00 | \$21,585.05 |
| Nonminority Women | \$0.00 | \$0.00 | \$62,836.00 | \$21,770.00 | \$14,940.00 | \$99,546.00 |
| TOTAL M/WBE FIRMS | \$0.00 | \$0.00 | \$62,836.00 | \$32,155.05 | \$26,140.00 | \$121,131.05 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL FIRMS | \$0.00 | \$0.00 | \$62,836.00 | \$32,155.05 | \$26,140.00 | \$121,131.05 |
| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
|  | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 0.00\% | 0.00\% | 32.30\% | 42.85\% | 17.82\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 0.00\% | 0.00\% | 32.30\% | 42.85\% | 17.82\% |
| Nonminority Women | 0.00\% | 0.00\% | 100.00\% | 67.70\% | 57.15\% | 82.18\% |
| TOTAL M/WBE FIRMS | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL FIRMS | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-14 shows the utilization of subcontractor M/WBE firms was 100 percent in the Other Services sector.

TABLE B-14. SUBCONTRACTOR UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA)
OTHER SERVICES

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$113,676.75 | \$232,799.00 | \$1,161,145.67 | \$404,580.14 | \$128,338.12 | \$2,040,539.68 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$137,930.00 | \$256,882.00 | \$37,933.60 | \$0.00 | \$432,745.60 |
| Native Americans | \$0.00 | \$237,352.00 | \$399,984.00 | \$0.00 | \$0.00 | \$637,336.00 |
| TOTAL MINORITY FIRMS | \$113,676.75 | \$608,081.00 | \$1,818,011.67 | \$442,513.74 | \$128,338.12 | \$3,110,621.28 |
| Nonminority Women | \$183,401.39 | \$557,631.00 | \$727,128.01 | \$813,188.98 | \$39,650.52 | \$2,320,999.90 |
| TOTAL M/WBE FIRMS | \$297,078.14 | \$1,165,712.00 | \$2,545,139.68 | \$1,255,702.72 | \$167,988.64 | \$5,431,621.18 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL FIRMS | \$297,078.14 | \$1,165,712.00 | \$2,545,139.68 | \$1,255,702.72 | \$167,988.64 | \$5,431,621.18 |
| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
|  | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 38.26\% | 19.97\% | 45.62\% | 32.22\% | 76.40\% | 37.57\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 11.83\% | 10.09\% | 3.02\% | 0.00\% | 7.97\% |
| Native Americans | 0.00\% | 20.36\% | 15.72\% | 0.00\% | 0.00\% | 11.73\% |
| TOTAL MINORITY FIRMS | 38.26\% | 52.16\% | 71.43\% | 35.24\% | 76.40\% | 57.27\% |
| Nonminority Women | 61.74\% | 47.84\% | 28.57\% | 64.76\% | 23.60\% | 42.73\% |
| TOTAL M/WBE FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Table C-15 shows the utilization of subcontractor M/WBE firms was 100 percent in the Goods \& Supplies sector.

TABLE B-15. SUBCONTRACTOR UTILIZATION ANALYSIS BY BUSINESS OWNERSHIP CLASSIFICATION BASED ON HUBSCO DATA
GREENSBORO-WINSTON-SALEM-HIGH POINT, NC COMBINED STATISTICAL AREA (CSA)
GOODS \& SUPPLIES

| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$) | (\$) | (\$) | (\$) | (\$) | (\$) |
| African Americans | \$0.00 | \$264,254.00 | \$299,203.00 | \$15,279.00 | \$0.00 | \$578,736.00 |
| Asian Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Hispanic Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Native Americans | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL MINORITY FIRMS | \$0.00 | \$264,254.00 | \$299,203.00 | \$15,279.00 | \$0.00 | \$578,736.00 |
| Nonminority Women | \$32,155.41 | \$1,447,615.02 | \$1,993,904.65 | \$259,745.71 | \$0.00 | \$3,733,420.79 |
| TOTAL M/WBE FIRMS | \$32,155.41 | \$1,711,869.02 | \$2,293,107.65 | \$275,024.71 | \$0.00 | \$4,312,156.79 |
| TOTAL NON-M/WBE FIRMS | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| TOTAL FIRMS | \$32,155.41 | \$1,711,869.02 | \$2,293,107.65 | \$275,024.71 | \$0.00 | \$4,312,156.79 |
| BUSINESS OWNERSHIP CLASSIFICATION | FY14 | FY15 | FY16 | FY17 | FY18 | TOTAL |
|  | (\%) | (\%) | (\%) | (\%) | (\%) | (\%) |
| African Americans | 0.00\% | 15.44\% | 13.05\% | 5.56\% | 0.00\% | 13.42\% |
| Asian Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Hispanic Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Native Americans | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL MINORITY FIRMS | 0.00\% | 15.44\% | 13.05\% | 5.56\% | 0.00\% | 13.42\% |
| Nonminority Women | 100.00\% | 84.56\% | 86.95\% | 94.44\% | 0.00\% | 86.58\% |
| TOTAL M/WBE FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |
| TOTAL NON-M/WBE FIRMS | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| TOTAL FIRMS | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% |

# APPENDIX C. PRIVATE SECTOR ANALYSIS <br> 2019 Disparity Study 

City of Winston-Salem, North Carolina

## C.I INTRODUCTION

The Legal Framework presented in Chapter 2 of this report documented how a government entity must have a record of active or passive discrimination to justify remedies promoted through the institution of a minority- and women-owned business enterprise (M/WBE) program. Courts further require a compelling-interest analysis showing a connection between the government or agency and the public or private discrimination that may exist within their jurisdiction. Following documentation of disparities that exist in the public sector in Chapter 5, this chapter focuses on an over-arching question:


- Do private sector disparities exist in the private sector which compel the City to continue its M/WBE programs to avoid becoming a passive participant in discrimination?
Passive discrimination describes a circumstance where a public entity resides in a market with measurably disparate circumstances in the private sector but is failing to take proactive actions to implement remedies within the domain of its control. Substantiating the relevance of an analysis of the private sector:
- Defining passive participation, the Supreme Court in Croson stated, "if the city could show that it had essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system. ${ }^{11}$ This does not mean that the public entity is continuously turning a blind eye to discrimination but rather that the public entity has a compelling interest to mitigate private sector discrimination or risk becoming a passive participant to discrimination.
- Also stated in Croson is that "it is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice." ${ }^{2}$
- Croson further provided that the government "can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment." ${ }^{3}$
- In Concrete Works IV, the courts expressly cited as evidence of discrimination that M/WBE contractors used for business with the city of Denver were not used by the same prime contractors for private sector contracts. ${ }^{4}$
- In Adarand v. Slater, the Tenth Circuit favorably cited evidence of capital market discrimination as relevant in establishing the factual predicate for the federal DBE program. ${ }^{5}$ The same court, in Concrete Works IV, found that barriers to business formation were relevant insofar as this

[^0]evidence demonstrated that M/WBEs were "precluded from the outset from competing for public construction contracts." ${ }^{6}$

- Also in Adarand, the courts concluded there was a compelling interest for a government Disadvantaged Business Enterprise (DBE) program based primarily on evidence of private sector discrimination. ${ }^{7}$
- Along related lines, the court also found a regression analysis of census data to be relevant evidence showing barriers to M/WBE formation. ${ }^{8}$
- A district court upheld the state of North Carolina M/WBE program in road construction based largely on similar private sector evidence supplement by evidence from databases covering private sector commercial construction. ${ }^{9}$

Thus, discriminatory practices in the marketplace may in many circumstances show or serve to support the compelling interest required by courts to support an agency's program to intervene in order to prevent the agency from becoming a passive participant to discrimination.

With these decisions supporting investigation into this domain, as part of the development of a comprehensive framework and set of perspectives that have traditionally been used to justify M/WBE programs, this chapter provides an accumulation of evidence for the overarching question of whether or not the City of Winston-Salem, NC (City) has continued compelling interest to maintain its M/WBE programs based on circumstances observed in the private sector. This is investigated using two specific sources of data leveraged to address three specific questions substantiating the over-arching research question regarding disparities in the private sector:
> City construction permits data, which are used determine:

1. Do disparities exist in utilization of $M / W B E$ firms for commercial private sector construction projects relative to their availability?
> 2012 Census Survey of Business Owners (SBO) data, which are used to determine:
2. Do marketplace disparities exist in the private sector within the five procurement categories?

## 2013-2017 Census American Community Survey (ACS) Public Used Microdata Sample (PUMS)

 data, which are used to determine:1. Are racial, ethnic, and gender minority groups less likely than nonminority males (nonM/WBEs) to be self-employed?
2. Does racial, ethnic, and gender status have an impact on self-employed individuals' earnings?
[^1]In answering these questions, the private sector analysis also supports anecdotal comments offered in Chapter 7, Anecdotal Analysis, regarding difficulties M/WBE firms have in securing work on private sector projects.

## C. 2 PRIVATE SECTOR UTILIZATION ANALYSIS BASED ON CONSTRUCTION PERMITS

To help answer the over-arching research question regarding the existence of disparities in the private sector, as well as the specific question:

1. Do disparities exist in utilization of $M / W B E$ firms for commercial private sector construction projects relative to their availability?
Construction permits issued by the City were analyzed. The value in examining permits is that they offer up-to-date records of actual construction activity undertaken in the area. In order to isolate only commercial construction projects as the focus of analysis, public sector and residential permit records, where identified, were excluded. Additionally, to distinguish between primes and subs, MGT assigned general contractors as primes and all others as subs. Since the private sector permits data did not contain the contractor's race, ethnic, or gender information, MGT assigned business ownership classification using various vendor lists obtained from all registration and certification agencies in order to conduct a vendor match procedure. This vendor match procedure allowed MGT to assign business ownership classification to firms presented in the permit data. In order to achieve the greatest number of potential match combinations, in addition to electronically linking the various lists to the permits data, a manual match was also conducted. Firms identified as nonminority male, and firms for which there was no business ownership classification, were considered to be non-M/WBE firms and counted as non-M/WBE firms in the analysis conducted for this Study.

For the procurement category analysis, findings reported in this chapter deal only with private sector construction for two reasons: (1) permit data, by its nature, pertains only to construction activities, which is also the category for which data tends to be most extensive and reliable, and (2) courts have historically scrutinized construction activity in a given jurisdiction more than any other procurement category because, in both public and private sector business activity, it tends to be the most financially lucrative in terms of its impact on a local economy.

A total of $\$ 416.404$ million in prime and $\$ 197.779$ million subcontractor construction permits issued by the City during the study period (July 1, 2013 through June 31, 2018.) were analyzed as part of this investigation. Table D-1 shows that 0.07 percent of the prime permits were let to M/WBEs, with highest M/WBE utilization observed for Nonminority Female firms (0.07\%). Table D-1 also shows that 0.39 percent of the subcontractor permits were let to M/WBEs, with highest M/WBE utilization observed for African American firms (0.15\%) followed by Nonminority Female firms (0.24\%).

TABLE C-1.
UTILIZATION ANALYSIS OF FIRMS
COMMERCIAL CONSTRUCTION

| BUSINESS OWNERSHIP <br> CLASSIFICATION | PRIME PERMITS | PERCENT OF PRIME PERMITS | SUBCONTRACTOR PERMITS | PERCENT OF SUBCONTRACTOR PERMITS |
| :---: | :---: | :---: | :---: | :---: |
| AFRICAN AMERICAN FIRMS | \$0.00 | 0.00\% | \$304,750.00 | 0.15\% |
| ASIAN AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| HISPANIC AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| NATIVE AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| TOTAL MINORITY FIRMS | \$0.00 | 0.03\% | \$304,750.00 | 0.15\% |
| NONMINORITY FEMALE FIRMS | \$282,000.00 | 0.07\% | \$477,319.00 | 0.24\% |
| TOTAL M/WBE FIRMS | \$282,000.00 | 0.07\% | \$782,069.00 | 0.39\% |
| TOTAL NON-M/WBE | \$416,122,949.13 | 99.90\% | \$196,997,193.29 | 99.66\% |
| TOTAL FIRMS | \$416,404,949.13 | 100.00\% | \$197,779,262.29 | 100.00\% |

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data between July 1, 2013 through June 31, 2018.

With this point of reference established, MGT utilized two data sets to compare relative utilization of firms and gauge the scale of any differences. The first of these comparison data sets contained a listing of permits issued to contractors which appeared in both the permits and City public sector construction data, while the second data set contained firms utilized on City public sector construction projects during the study period.

TABLE C-2.
UTILIZATION ANALYSIS OF FIRMS
COMMERCIAL CONSTRUCTION - PRIME ONLY

| BUSINESS OWNERSHIP CLASSIFICATION | PERMITS ISSUED TO CONTRACTORS | PERCENT OF PERMITS | PUBLIC SECTOR UTILIZATION | PERCENT OF CONTRACTS |
| :---: | :---: | :---: | :---: | :---: |
| AFRICAN AMERICAN FIRMS | \$0.00 | 0.00\% | \$6,622,884.94 | 2.64\% |
| ASIAN AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| HISPANIC AMERICAN FIRMS | \$0.00 | 0.00\% | \$300.00 | 0.00\% |
| NATIVE AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| TOTAL MINORITY FIRMS | \$0.00 | 0.00\% | \$6,623,184.94 | 2.64\% |
| NONMINORITY FEMALE FIRMS | \$282,000.00 | 1.64\% | \$14,596,398.83 | 5.82\% |
| TOTAL M/WBE FIRMS | \$282,000.00 | 1.64\% | \$21,219,583.77 | 8.47\% |
| TOTAL NON-M/WBE FIRMS | \$16,888,320.13 | 98.36\% | \$229,374,834.58 | 91.53\% |
| TOTAL FIRMS | \$17,170,320.13 | 100.00\% | \$250,594,418.35 | 100.00\% |

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data between July 1, 2013 through June 31, 2018.

TABLE C-3.
UTILIZATION ANALYSIS OF FIRMS
COMMERCIAL CONSTRUCTION - SUBCONTRACTOR ONLY

| BUSINESS OWNERSHIP CLASSIFICATION | PERMITS ISSUED TO SUBCONTRACTORS | PERCENT OF PERMITS | PUBLIC SECTOR UTILIZATION | PERCENT OF CONTRACTS |
| :---: | :---: | :---: | :---: | :---: |
| AFRICAN AMERICAN FIRMS | \$162,000.00 | 1.31\% | \$4,163,381.24 | 4.75\% |
| ASIAN AMERICAN FIRMS | \$44,974.35 | 0.05\% | \$203,958.36 | 0.23\% |
| HISPANIC AMERICAN FIRMS | \$0.00 | 0.00\% | \$4,000,573.89 | 4.56\% |
| NATIVE AMERICAN FIRMS | \$0.00 | 0.00\% | \$0.00 | 0.00\% |
| TOTAL MINORITY FIRMS | \$162,000.00 | 1.31\% | \$8,367,913.49 | 9.54\% |
| NONMINORITY FEMALE FIRMS | \$453,320.00 | 3.67\% | \$12,627,480.35 | 14.40\% |
| TOTAL M/WBE FIRMS | \$615,320.00 | 4.98\% | \$20,995,393.84 | 23.94\% |
| TOTAL NON-M/WBE FIRMS | \$11,745,347.00 | 95.02\% | \$66,712,652.58 | 76.06\% |
| TOTAL FIRMS | \$12,360,667.00 | 100.00\% | \$87,708,046.42 | 100.00\% |

Source: MGT developed a Master Commercial Private Sector Database based on commercial construction permitting data between July 1, 2013 through June 31, 2018. Note: Subcontractor utilization is based on the HRC Award data provided by the city of Winston-Salem, and not payments.

The goal of this analysis was to examine public sector and private sector contracting patterns for construction. MGT compared the public sector utilization of firms in City-issued data with private sector utilization of such firms, as reflected in the private commercial permit data, to analyze to what extent utilized contractors which appear in the City data also appear in the permitting data for commercial construction projects.

When the permit results are compared to the City prime utilization results, the city utilizes M/WBEs at lower rates than the commercial sector for both prime contractor and subcontractors. From Table D-2, the City M/WBEs accounted for 8.47 percent of the number of prime construction contracts, while M/WBEs accounted for 1.64 percent of the number of prime construction permits. Specifically, MBEs accounted for only 2.64 percent of the number of prime construction contracts, while MBEs accounted for 0.00 percent of the number of construction permits; and WBEs accounted for 5.82 percent of the number of construction contracts, while WBEs accounted for 1.64 percent of the number of construction permits.

When the permit results are compared to the City subcontractor utilization results, the city utilizes M/WBEs at lower rates than the commercial sector for both prime contractor and subcontractors. From Table D-3, the City M/WBEs accounted for 23.94 percent of the number of subcontractor construction contracts, while M/WBEs accounted for 4.98 percent of the number of subcontractor construction permits. Specifically, MBEs accounted for only 9.54 percent of the number of subcontractor construction contracts, while MBEs accounted for 1.31 percent of the number of construction permits; and WBEs accounted for 14.40 percent of the number of construction contracts, while WBEs accounted for 3.67 percent of the number of construction permits.

While not definitive in isolation, the data does clearly show a pronounced difference in utilization of M/WBE firms within the private sector versus what we observed for the public sector, where program goals do not facilitate more equitable participation. Combining this perspective with others (such as the public sector disparity ratios presented in Chapter 5 and vendor survey results and anecdotal evidence to
be presented in Chapter 7), we see a prevailing theme in a pattern of cumulatively overwhelming evidence that disparities in contracting are fairly pervasive in this market.

## C. 3 PRIVATE SECTOR DISPARITIES IN SBO CENSUS DATA

To answer the over-arching research question regarding the existence of disparities in the private sector, as well as the specific question (1) of whether these disparities exist in procurement categories relevant to the City's contracting domain, MGT obtained and analyzed U.S. Census Bureau's 2012 Survey of Business Owners (SBO) data to measure private sector disparities. ${ }^{10}$ SBO provides data on economic and demographic characteristics for businesses and business owners by geography (such as states and metropolitan areas), categorized by industries defined by North American Industry Classification System (NAICS) codes, and supporting information including firm receipts (sales), ${ }^{11}$ firm employment size, and business ownership classification. The survey has been administered every five years since 1972 as part of the economic census.

The SBO gathers and reports data on (1) firms with paid employees, including workers on the payroll (employer firms), and (2) firms without paid employees, including sole proprietors and partners of unincorporated businesses that do not have any other employees on the payroll (non-employer firms), as well as (3) in aggregate across all firms. MGT calculated private sector disparity indices to examine whether M/WBE firms in any of these categories received a proportionate share of firm sales based on the availability of M/WBE firms, measured consistently with public sector availability presented in Chapter 5, as the number of classified firms divided by the total universe. Disparity indices were examined for all firms and employer firms.

The following NAICS codes ${ }^{12}$ were analyzed because they align with the categories of utilization analyzed for the City:

NAICS Code 23, Construction<br>NAICS Code 42, Wholesale Trade<br>NAICS Code 54, Professional, Scientific, and Technical Services<br>NAICS Code 56, Administrative and Support and Waste Management and Remediation Services<br>NAICS Code 81, Other Services (Except Public Administration)

## RESULTS OF ANALYSIS

This private sector analysis presents disparity results based on the following geographic market areas: (1) the state of North Carolina and (2) the Winston-Salem, NC Market Area, which contains the following counties in North Carolina: Alamance, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin. These marketplaces were chosen because they are the area's most readily available in the SBO data that allow for similar comparison to the public-sector utilization. The results based on the state of North Carolina are presented first, followed by the Winston-Salem, NC Market Area.

[^2]
## STATE OF NORTH CAROLINA MARKETPLACE

Tables D-4 through D-8 show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the state of North Carolina by race, ethnicity, and gender for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2012 SBO data, overall there remains a significant gap between the market share of M/WBE firms and their share of the state of North Carolina business population, where data were available.

## NAICS CODE 23: CONSTRUCTION, STATE MARKETPLACE

Table D-4 shows the availability, sales, and disparity results for construction. The results were derived from those firms which provide construction or construction-related services based on the NAICS Code 23.

There was a total of 100,710 construction firms (all firms ${ }^{13}$ ) in the State of North Carolina in 2012, of which 18.56 percent were owned by minorities and 14.55 percent by nonminority women.

- African American firms (disparity index of 21.96) were substantially underutilized, accounting for 6.24 percent of all firms and 1.37 percent of sales.
- Native American firms (disparity index of 20.76) were substantially underutilized, accounting for 2.79 percent of all firms and 0.58 percent of sales.
- Asian American firms (disparity index of 43.63) were substantially underutilized, accounting for 0.74 percent of all firms and 0.32 percent of sales.
- Hispanic American firms (disparity index of 29.77) were substantially underutilized, accounting for 8.78 percent of all firms and 2.61 percent of sales.
- Nonminority women firms (disparity index of 86.35) were underutilized, accounting for 14.55 percent of all firms and 12.56 percent of sales.

There was a total of 21,077 construction employer firms ${ }^{14}$ in the State of North Carolina in 2012, of which 6.73 percent were owned by minorities and 23.93 percent by nonminority women firms.

- African American firms (disparity index of 54.21) were substantially underutilized, accounting for 2.30 percent of employer firms and 1.25 percent of sales.
- Native American firms (disparity index of 44.95) were substantially underutilized, accounting for 0.74 percent of employer firms and 0.33 percent of sales.
- Data for Asian American firms were withheld; therefore, private sector disparities were not conducted.
- Hispanic American firms (disparity index of 50.01 ) were substantially underutilized, accounting for 3.43 percent of employer firms and 1.72 percent of sales.

[^3]- Nonminority women firms (disparity index of 52.26) were substantially underutilized, accounting for 23.93 percent of employer firms and 12.51 percent of sales.

TABLE C-4.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 23, CONSTRUCTION

## U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, STATE OF NORTH CAROLINA MARKETPLACE

| BUSINESS OWNERSHIP <br> CLASSIFICATION | ALLL FIRMS <br> (\#) | ALL FIRMS, SALES <br> (\$1,000) | EMPLOYER <br> FIRMS (\#) | EMPLOYER FIRMS <br> SALES (\$1,000) |
| :--- | :---: | :---: | :---: | :---: |
| All Firms | 100,710 | $\$ 41,487,760$ | 21,077 | $\$ 37,293,789$ |
| African American Firms | 6,286 | $\$ 568,572$ | 485 | $\$ 465,195$ |
| Native American Firms $^{1}$ | 2,814 | $\$ 240,657$ | 157 | $\$ 124,862$ |
| Asian American Firms $^{2}$ | 744 | $\$ 133,725$ | 53 | S |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
${ }^{4}$ S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS CODE 42: WHOLESALE TRADE, STATE MARKETPLACE

Table D-5 shows the availability, sales, and disparity results for wholesale trade firms. The results were derived from those firms which sell capital or durable goods to other businesses based on NAICS Code 42.

There was a total of 20,408 wholesale trade firms (all firms) in the State of North Carolina in 2012, of which 11.04 percent were owned by minorities and 27.63 percent by nonminority women.

- African American firms (disparity index of 2.27) were substantially underutilized, accounting for 5.45 percent of all firms and 0.12 percent of sales.
- Asian American firms (disparity index of 44.05) were substantially underutilized, accounting for 2.31 percent of all firms and 1.02 percent of sales.
- Hispanic American firms (disparity index of 13.49) were substantially underutilized, accounting for 2.65 percent of all firms and 0.36 percent of sales.
- Nonminority women firms (disparity index of 20.18) were substantially underutilized, accounting for 27.63 percent of all firms and 5.58 percent of sales.
- Native American firms (disparity index of 3.78 ) were substantially underutilized, accounting for 0.63 percent of all firms and 0.02 percent of sales.

There was a total of 9,296 wholesale trade employer firms in the State of North Carolina in 2012, of which 4.50 percent were owned by minorities and close to 22.49 percent by nonminority women.

- African American firms (disparity index of 21.46) were substantially underutilized, accounting for 0.54 percent of employer firms and 0.12 percent of sales.
- Asian American firms (disparity index of 39.30) were substantially underutilized, accounting for 2.56 percent of employer firms and 1.01 percent of sales.
- Hispanic American firms (disparity index 25.88) were substantially underutilized, accounting for 1.28 percent of employer firms and 0.33 percent of sales.
- Nonminority women firms (disparity index of 24.49) were substantially underutilized, accounting for 22.49 percent of employer firms and 5.51 percent of sales.
- Native American firms (disparity index of 18.38) were substantially underutilized, accounting for 0.12 percent of employer firms and 0.02 percent of sales.

TABLE C-5.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 42, WHOLESALE TRADE

## U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

 STATE OF NORTH CAROLINA MARKETPLACE| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES $(\$ 1,000)$ | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS <br> SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 20,408 | \$174,236,446 | 9,296 | \$173,472,709 |
| African American Firms | 1,113 | \$215,730 | 50 | \$200,198 |
| Native American Firms ${ }^{1}$ | 129 | \$41,636 | 11 | \$37,723 |
| Asian American Firms ${ }^{2}$ | 471 | \$1,771,431 | 238 | \$1,745,255 |
| Hispanic American Firms | 541 | \$623,091 | 119 | \$574,668 |
| Nonminority Women Firms ${ }^{3}$ | 5,638 | 9,715,102 | 2,091 | 9,554,344 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 5.45\% | 0.12\% | 0.54\% | 0.12\% |
| Native American Firms ${ }^{1}$ | 0.63\% | 0.02\% | 0.12\% | 0.02\% |
| Asian American Firms ${ }^{2}$ | 2.31\% | 1.02\% | 2.56\% | 1.01\% |
| Hispanic American Firms | 2.65\% | 0.36\% | 1.28\% | 0.33\% |
| Nonminority Women Firms ${ }^{3}$ | 27.63\% | 5.58\% | 22.49\% | 5.51\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 2.27 |  | 21.46 |
| Native American Firms ${ }^{1}$ |  | 3.78 |  | 18.38 |
| Asian American Firms ${ }^{2}$ |  | 44.05 |  | 39.30 |
| Hispanic American Firms |  | 13.49 |  | 25.88 |
| Nonminority Women Firms ${ }^{3}$ |  | 20.18 |  | 24.49 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS CODE 54: PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES, STATE MARKETPLACE

Table D-6 shows the availability, sales, and disparity results for professional, scientific, and technical services. Professional, scientific, and technical services, which require a high degree of expertise and training, were derived from those firms specializing in performing professional, scientific, and technical activities (such as legal advice, accounting, architecture, engineering, computer services, consulting services, advertising services) for others in NAICS Code 54.

There were a total of 101,233 professional, scientific, and technical services firms (all firms) in the State of North Carolina in 2012, of which 15.24 percent were owned by minorities and 35.18 percent by nonminority women.

- African American firms (disparity index of 14.16) were substantially underutilized, accounting for 8.38 percent of all firms and 1.19 percent of sales.
- Asian American firms (disparity index of 57.55) were substantially underutilized, accounting for 3.04 percent of all firms and 1.75 percent of sales.
- Hispanic American firms (disparity index of 32.78) were substantially underutilized, accounting for 2.99 percent of all firms and 0.98 percent of sales.
- Native American firms (disparity index of 19.19) were substantially underutilized, accounting for 0.84 percent of all firms and 0.16 percent of sales.
- Nonminority women firms (disparity index of 25.71 ) were substantially underutilized, accounting for 35.18 percent of all firms and 9.04 percent of sales.

There were a total of 20,852 professional, scientific, and technical services employer firms in the State of North Carolina in 2012, of which 8.84 percent were owned by minorities and 29.26 percent by nonminority women.

- African American firms (disparity index of 22.19) were substantially underutilized, accounting for 3.96 percent of employer firms and 0.88 percent of sales.
- Asian American firms (disparity index of 60.63) were substantially underutilized, accounting for 2.70 percent of employer firms and 1.63 percent of sales,
- Hispanic American firms (disparity index 55.38) were substantially underutilized, accounting for 1.59 percent of employer firms and 0.88 percent of sales.
- Native American firms (disparity index of 20.15) were substantially underutilized, accounting for 0.60 percent of all firms and 0.12 percent of sales.
- Nonminority women firms (disparity index of 25.10) were substantially underutilized, accounting for 29.26 percent of employer firms and 7.35 percent of sales.


## TABLE C-6.

PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 54, PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, STATE OF NORTH CAROLINA MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES (\$1,000) | EMPLOYER <br> FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 101,233 | \$38,389,831 | 20,852 | \$35,620,845 |
| African American Firms | 8,480 | \$455,425 | 825 | \$312,722 |
| Native American Firms ${ }^{1}$ | 846 | \$61,575 | 126 | \$43,366 |
| Asian American Firms ${ }^{2}$ | 3,080 | \$672,203 | 562 | \$582,035 |
| Hispanic American Firms | 3,025 | \$376,014 | 331 | \$313,149 |
| Nonminority Women Firms ${ }^{3}$ | 35,610 | 3,471,478 | 6,102 | 2,616,367 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 8.38\% | 1.19\% | 3.96\% | 0.88\% |
| Native American Firms ${ }^{1}$ | 0.84\% | 0.16\% | 0.60\% | 0.12\% |
| Asian American Firms ${ }^{2}$ | 3.04\% | 1.75\% | 2.70\% | 1.63\% |
| Hispanic American Firms | 2.99\% | 0.98\% | 1.59\% | 0.88\% |
| Nonminority Women Firms ${ }^{3}$ | 35.18\% | 9.04\% | 29.26\% | 7.35\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 14.16 |  | 22.19 |
| Native American Firms ${ }^{1}$ |  | 19.19 |  | 20.15 |
| Asian American Firms ${ }^{2}$ |  | 57.55 |  | 60.63 |
| Hispanic American Firms |  | 32.78 |  | 55.38 |
| Nonminority Women Firms ${ }^{3}$ |  | 25.71 |  | 25.10 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
${ }^{4}$ S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS CODE 56: ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES, STATE MARKETPLACE

Table D-7 shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (such as office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services) in NAICS Code 56.

There were a total of 79,818 administrative and support and waste management and remediation services firms (all firms) in the State of North Carolina in 2012 , of which 31.60 percent were owned by minorities and 34.37 percent by nonminority women.

- African American firms (disparity index of 14.68) were substantially underutilized, accounting for 20.87 percent of all firms and 3.06 percent of sales.
- Asian American firms (disparity index of 57.42) were substantially underutilized, accounting for 1.68 percent of all firms and 0.97 percent of sales.
- Hispanic American firms (disparity index of 21.00 ) were substantially underutilized, accounting for 7.27 percent of all firms and close to 1.53 percent of sales.
- Native American firms (disparity index of 64.77) were substantially underutilized, accounting for 1.78 percent of all firms and close to 1.15 percent of sales.
- Nonminority women firms (disparity index of 45.13) were substantially underutilized, accounting for 34.37 percent of all firms and 15.51 percent of sales.

There were a total of 10,090 administrative and support and waste management and remediation services employer firms in the State of North Carolina in 2012 , of which 11.41 percent were owned by minorities and 26.67 percent by nonminority women.

- African American firms (disparity index 34.44) were substantially underutilized, accounting for 6.28 percent of employer firms and 2.16 percent of sales.
- Asian American firms (disparity index of 46.36) were substantially underutilized, accounting for 1.88 percent of employer firms and 0.87 percent of sales.
- Hispanic American firms (disparity index of 42.86) were substantially underutilized, accounting for 2.56 percent of employer firms and 1.10 percent of sales.
- Native American firms (disparity index of 162.92 ) were overutilized, accounting for 0.68 percent of employer firms and close to 1.11 percent of sales.
- Nonminority women firms (disparity index of 53.59) were substantially underutilized, accounting for 26.67 percent of employer firms and 14.29 percent of sales.

TABLE C-7.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 56
ADMINISTRATIVE AND SUPPORT/WASTE MANAGEMENT AND REMEDIATION SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, STATE OF NORTH CAROLINA MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES $(\$ 1,000)$ | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 79,818 | \$17,622,318 | 10,090 | \$16,378,135 |
| African American Firms | 16,660 | \$539,798 | 634 | \$354,471 |
| Native American Firms ${ }^{1}$ | 1,418 | \$202,773 | 69 | \$182,470 |
| Asian American Firms ${ }^{2}$ | 1,342 | \$170,139 | 190 | \$142,984 |
| Hispanic American Firms | 5,800 | \$268,961 | 258 | \$179,478 |
| Nonminority Women Firms ${ }^{3}$ | 27,436 | 2,733,535 | 2,691 | 2,340,647 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 20.87\% | 3.06\% | 6.28\% | 2.16\% |
| Native American Firms ${ }^{1}$ | 1.78\% | 1.15\% | 0.68\% | 1.11\% |
| Asian American Firms ${ }^{2}$ | 1.68\% | 0.97\% | 1.88\% | 0.87\% |
| Hispanic American Firms | 7.27\% | 1.53\% | 2.56\% | 1.10\% |
| Nonminority Women Firms ${ }^{3}$ | 34.37\% | 15.51\% | 26.67\% | 14.29\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 14.68 |  | 34.44 |
| Native American Firms ${ }^{1}$ |  | 64.77 |  | 162.92 |
| Asian American Firms ${ }^{2}$ |  | 57.42 |  | 46.36 |
| Hispanic American Firms |  | 21.00 |  | 42.86 |
| Nonminority Women Firms ${ }^{3}$ |  | 45.13 |  | 53.59 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
${ }^{4} \mathrm{~S}$ denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS CODE 81: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION), STATE

 MARKETPLACETable D-8 shows the availability, sales, and disparity results for other services (except Public Administration) firms in NAICS Code 81. Firms in this sector primarily engage in equipment and machinery repairing, automotive repair services, electronic and precision equipment repair and maintenance services, providing laundry services, personal care services, and photofinishing services.

There were a total of 114,104 other services (except Public Administration) firms (all firms) in the State of North Carolina in 2012, of which 37.18 percent were owned by minorities and 34.13 percent by nonminority women.

- African American firms (disparity index of 27.08) were substantially underutilized, accounting for 24.16 percent of all firms and 6.54 percent of sales.
- Asian American (disparity index of 70.78) firms were substantially underutilized, accounting for 7.40 percent of all firms and close to 5.24 percent of sales.
- Hispanic American firms (disparity index of 48.75 ) were substantially underutilized, accounting for 3.85 percent of all firms and 1.88 percent of sales.
- Native American firms (disparity index of 47.41) were substantially underutilized, accounting for 1.77 percent of all firms and close to 0.84 percent of sales.
- Nonminority women firms (disparity index of 68.32) were substantially underutilized, accounting for 34.13 percent of all firms and 23.32 percent of sales

There were a total of 9,860 administrative and support and waste management and remediation services employer firms in the State of North Carolina in 2012, of which 12.76 percent were owned by minorities and 32.01 percent by nonminority women.

- African American firms (disparity index 54.66) were substantially underutilized, accounting for 4.08 percent of employer firms and 2.23 percent of sales.
- Asian American firms (disparity index of 46.06) were substantially underutilized, accounting for 6.30 percent of employer firms and 2.90 percent of sales.
- Hispanic American firms (disparity index of 47.23) were substantially underutilized, accounting for 1.84 percent of employer firms and 0.87 percent of sales.
- Native American firms (disparity index of 71.30) were substantially underutilized, accounting for 0.55 percent of employer firms and close to 0.39 percent of sales.
- Nonminority women firms (disparity index of 63.01) were substantially underutilized, accounting for 32.01 percent of employer firms and 20.17 percent of sales.


## TABLE C-8.

PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, STATE OF NORTH CAROLINA MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES <br> (\$1,000) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES (\$1,000) |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 114,104 | \$7,920,846 | 9,860 | \$5,494,290 |
| African American Firms | 27,565 | \$518,266 | 402 | \$122,450 |
| Native American Firms ${ }^{1}$ | 2,018 | \$66,414 | 54 | \$21,455 |
| Asian American Firms ${ }^{2}$ | 8,444 | \$414,908 | 621 | \$159,390 |
| Hispanic American Firms | 4,397 | \$148,786 | 181 | \$47,639 |
| Nonminority Women Firms ${ }^{3}$ | 38,948 | 1,847,169 | 3,156 | 1,108,027 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 24.16\% | 6.54\% | 4.08\% | 2.23\% |
| Native American Firms ${ }^{1}$ | 1.77\% | 0.84\% | 0.55\% | 0.39\% |
| Asian American Firms ${ }^{2}$ | 7.40\% | 5.24\% | 6.30\% | 2.90\% |
| Hispanic American Firms | 3.85\% | 1.88\% | 1.84\% | 0.87\% |
| Nonminority Women Firms ${ }^{3}$ | 34.13\% | 23.32\% | 32.01\% | 20.17\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 27.08 |  | 54.66 |
| Native American Firms ${ }^{1}$ |  | 47.41 |  | 71.30 |
| Asian American Firms ${ }^{2}$ |  | 70.78 |  | 46.06 |
| Hispanic American Firms |  | 48.75 |  | 47.23 |
| Nonminority Women Firms ${ }^{3}$ |  | 68.32 |  | 63.01 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## WINSTON-SALEM, NC MARKET AREA MARKETPLACE ${ }^{15}$

Tables D-9 through D-10 show the measures of private sector disparities based on U.S. Census, 2012 SBO data for the population of available firms in the Winston-Salem, NC Market Area marketplace by race, ethnicity, and gender for construction; wholesale trade; professional, scientific, and technical services; administrative and support and waste management and remediation services; and other services (except public administration).

Based on the analysis of the U.S. Census, 2012 SBO data, overall there remains a significant gap between the market share of M/WBE firms and their share of the Winston-Salem, NC Market Area marketplace business population, where data was available.

## NAICS CODE 23: CONSTRUCTION, WINSTON-SALEM, NC MARKET AREA

Table D-9 shows the availability, sales, and disparity results for construction (NAICS Code 23). There were a total of 13,885 construction firms (all firms ${ }^{16}$ ) in the Winston-Salem, NC area marketplace in 2012, of which 16.28 percent were owned by minorities and 17.82 percent by nonminority women.

- African American firms (disparity index 2.95) were substantially underutilized, accounting for 4.91 percent of all firms and 0.14 percent of sales.
- Hispanic American firms (disparity index of 0.75 ) were substantially underutilized, accounting for 10.02 percent of all firms and 0.08 percent of sales.
- Native American firms (disparity index of 8.53 ) were substantially underutilized, accounting for 0.96 percent of all firms and 0.08 percent of sales.
- Nonminority Women firms (disparity index of 32.11) were substantially underutilized, accounting for 17.82 percent of all firms and 5.72 percent of sales.
- Data for Asian American firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 3,423 construction employer firms ${ }^{17}$ in the Winston-Salem, NC area marketplace in 2012, of which 8.59 percent were owned by minorities and 26.67 percent by nonminority women.

- Nonminority Women firms (disparity index 8.41) were substantially underutilized, accounting for 26.67 percent of all firms and 2.25 percent of sales.
- Data for African American, Asian American, Hispanic American, and Native American, firms were withheld; therefore, private sector disparities were not conducted.

[^4]
## TABLE C-9.

PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 23, CONSTRUCTION

## U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, WINSTON-SALEM, NC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES (\$1,000) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 13,885 | \$5,704,595 | 3,423 | \$5,230,906 |
| African American Firms | 682 | \$8,271 | 90 | S |
| Native American Firms ${ }^{1}$ | 133 | \$4,660 | 1 | S |
| Asian American Firms ${ }^{2}$ | 54 | S | 2 | S |
| Hispanic American Firms | 1,391 | \$4,296 | 201 | S |
| Nonminority Women Firms ${ }^{3}$ | 2,475 | 326,489 | 916 | 117,710 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 4.91\% | 0.14\% | 2.63\% | S |
| Native American Firms ${ }^{1}$ | 0.96\% | 0.08\% | 0.03\% | S |
| Asian American Firms ${ }^{2}$ | 0.39\% | S | 0.06\% | S |
| Hispanic American Firms | 10.02\% | 0.08\% | 5.87\% | S |
| Nonminority Women Firms ${ }^{3}$ | 17.82\% | 5.72\% | 26.76\% | 2.25\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 2.95 |  | S |
| Native American Firms ${ }^{1}$ |  | 8.53 |  | S |
| Asian American Firms ${ }^{2}$ |  | S |  | S |
| Hispanic American Firms |  | 0.75 |  | S |
| Nonminority Women Firms ${ }^{3}$ |  | 32.11 |  | 8.41 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

NAICS CODE 42: WHOLESALE TRADE, WINSTON-SALEM, NC MARKET AREA
Table D-10 shows the availability, sales, and disparity results for wholesale trade (NAICS Code 42). There were a total of 4,578 wholesale trade firms (all firms) in the Winston-Salem, NC marketplace in 2012, of which 6.42 percent were owned by minorities and 29.18 percent by nonminority women.

- African American firms (disparity index 3.89) were substantially underutilized, accounting for 4.00 percent of all firms and 0.16 percent of sales.
- Hispanic American firms (disparity index of 42.94) were substantially underutilized, accounting for 0.57 percent of all firms and 0.24 percent of sales.
- Asian American firms (disparity index of 68.01) were substantially underutilized, accounting for 1.86 percent of all firms and 1.26 percent of sales.
- Nonminority Women firms (disparity index of 5.28) were substantially underutilized, accounting for 29.18 percent of all firms and 1.54 percent of sales.
- Data for Native American firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 2,415 wholesale trade employer firms in the Winston-Salem, NC marketplace in 2012, of which 4.02 percent were owned by minorities and 18.30 percent by nonminority women.

- African American firms (disparity index 14.74) were substantially underutilized, accounting for 0.99 percent of all firms and 0.15 percent of sales.
- Hispanic American firms (disparity index of 35.05 ) were substantially underutilized, accounting for 0.70 percent of all firms and 0.25 percent of sales.
- Asian American firms (disparity index of 54.56) were substantially underutilized, accounting for 2.32 percent of all firms and 1.27 percent of sales.
- Nonminority Women firms (disparity index of 7.23) were substantially underutilized, accounting for 18.30 percent of all firms and 1.32 percent of sales.
- Data for Native American firms were withheld; therefore, private sector disparities were not conducted.

TABLE C-10.
PRIVATE SECTOR CENSUS DISPARITIES NAICS CODE 42, WHOLESALE TRADE
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, WINSTON-SALEM, NC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES $(\$ 1,000)$ | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS <br> SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 4,578 | \$32,730,336 | 2,415 | \$32,243,238 |
| African American Firms | 183 | \$50,926 | 24 | \$47,229 |
| Native American Firms ${ }^{1}$ | S | S | S | S |
| Asian American Firms ${ }^{2}$ | 85 | \$413,316 | 56 | \$407,937 |
| Hispanic American Firms | 26 | \$79,813 | 17 | \$79,559 |
| Nonminority Women Firms ${ }^{3}$ | 1,336 | 504,741 | 442 | 426,508 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 4.00\% | 0.16\% | 0.99\% | 0.15\% |
| Native American Firms ${ }^{1}$ | S | S | S | S |
| Asian American Firms ${ }^{2}$ | 1.86\% | 1.26\% | 2.32\% | 1.27\% |
| Hispanic American Firms | 0.57\% | 0.24\% | 0.70\% | 0.25\% |
| Nonminority Women Firms ${ }^{3}$ | 29.18\% | 1.54\% | 18.30\% | 1.32\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 3.89 |  | 14.74 |
| Native American Firms ${ }^{1}$ |  | S |  | S |
| Asian American Firms ${ }^{2}$ |  | 68.01 |  | 54.56 |
| Hispanic American Firms |  | 42.94 |  | 35.05 |
| Nonminority Women Firms ${ }^{3}$ |  | 5.28 |  | 7.23 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

NAICS CODE 54: PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES, WINSTONSALEM, NC MARKET AREA
Table D-11 shows the availability, sales, and disparity results for professional, scientific, and technical services (NAICS Code 54). There were a total of 14,812 professional, scientific and technical services firms (all firms) in the Winston-Salem, NC marketplace in 2012, of which 13.80 percent were owned by minorities and 42.94 percent by nonminority women.

- African American firms (disparity index 17.53) were substantially underutilized, accounting for 8.63 percent of all firms and 1.51 percent of sales.
- Hispanic American firms (disparity index of 44.30) were substantially underutilized, accounting for 3.42 percent of all firms and 1.51 percent of sales.
- Asian American firms (disparity index of 48.50) were substantially underutilized, accounting for 1.76 percent of all firms and 0.85 percent of sales.
- Nonminority Women firms (disparity index of 31.74 ) were substantially underutilized, accounting for 42.94 percent of all firms and 13.63 percent of sales.
- Data for Native American firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 2,958 professional, scientific and technical services employer firms in the WinstonSalem, NC marketplace in 2012, of which 6.02 percent were owned by minorities and 32.86 percent by nonminority women.

- African American firms (disparity index 16.98) were substantially underutilized, accounting for 2.81 percent of all firms and 0.48 percent of sales.
- Hispanic American firms (disparity index of 77.59) were substantially underutilized, accounting for 1.59 percent of all firms and 1.23 percent of sales.
- Asian American firms (disparity index of 47.95) were substantially underutilized, accounting for 1.62 percent of all firms and 0.78 percent of sales.
- Nonminority Women firms (disparity index of 29.13) were substantially underutilized, accounting for 32.86 percent of all firms and 9.57 percent of sales.
- Data for Native American firms were withheld; therefore, private sector disparities were not conducted.

TABLE C-11.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 54, PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, WINSTON-SALEM, NC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES (\$1,000) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 14,812 | \$3,464,258 | 2,958 | \$2,996,460 |
| African American Firms | 1,278 | \$52,410 | 83 | \$14,279 |
| Native American Firms ${ }^{1}$ | S | S | S | S |
| Asian American Firms ${ }^{2}$ | 260 | \$29,491 | 48 | \$23,314 |
| Hispanic American Firms | 506 | \$52,430 | 47 | \$36,940 |
| Nonminority Women Firms ${ }^{3}$ | 6,361 | 472,274 | 972 | 286,874 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 8.63\% | 1.51\% | 2.81\% | 0.48\% |
| Native American Firms ${ }^{1}$ | S | S | S | S |
| Asian American Firms ${ }^{2}$ | 1.76\% | 0.85\% | 1.62\% | 0.78\% |
| Hispanic American Firms | 3.42\% | 1.51\% | 1.59\% | 1.23\% |
| Nonminority Women Firms ${ }^{3}$ | 42.94\% | 13.63\% | 32.86\% | 9.57\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 17.53 |  | 16.98 |
| Native American Firms ${ }^{1}$ |  | S |  | S |
| Asian American Firms ${ }^{2}$ |  | 48.50 |  | 47.95 |
| Hispanic American Firms |  | 44.30 |  | 77.59 |
| Nonminority Women Firms ${ }^{3}$ |  | 31.74 |  | 29.13 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms. S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## NAICS CODE 56: ADMINISTRATIVE AND SUPPORT, WASTE MANAGEMENT AND REMEDIATION SERVICES, WINSTON-SALEM, NC MARKET AREA

Table D-12 shows the availability, sales, and disparity results for administrative and support and waste management and remediation services (NAICS Code 56). There were a total 12,496 administrative and support and waste management and remediation services firms (all firms) in the Winston-Salem, NC marketplace in 2012 , of which 26.92 percent were owned by minorities and 48.20 percent by nonminority women.

- African American firms (disparity index 21.07) were substantially underutilized, accounting for 20.01 percent of all firms and 4.22 percent of sales.
- Hispanic American firms (disparity index of 4.37) were substantially underutilized, accounting for 5.77 percent of all firms and 0.25 percent of sales.
- Asian American firms (disparity index of 2.73 ) were substantially underutilized, accounting for 0.92 percent of all firms and 0.03 percent of sales.
- Nonminority Women firms (disparity index of 33.60) were substantially underutilized, accounting for 48.20 percent of all firms and 16.20 percent of sales.
- Data for Native American firms were withheld; therefore, private sector disparities were not conducted.

There were a total of 1,438 administrative and support and waste management and remediation services employer firms in the Winston-Salem, NC marketplace in 2012, of which 12.93 percent were owned by minorities and 24.20 percent by nonminority women.

- African American firms (disparity index 43.27) were substantially underutilized, accounting for 8.76 percent of all firms and 3.79 percent of sales.
- Nonminority Women firms (disparity index of 56.45) were substantially underutilized, accounting for 24.20 percent of all firms and 13.66 percent of sales.
- Data for Native American, Asian American, and Hispanic American firms were withheld; therefore, private sector disparities were not conducted.

TABLE C-12.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 56
ADMINISTRATIVE AND SUPPORT / WASTE MANAGEMENT AND REMEDIATION SERVICES U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS, WINSTON-SALEM, NC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES (\$1,000) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS <br> SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 12,496 | \$2,506,584 | 1,438 | \$2,261,868 |
| African American Firms | 2,500 | \$105,662 | 126 | \$85,747 |
| Native American Firms ${ }^{1}$ | 28 | S | 10 | S |
| Asian American Firms ${ }^{2}$ | 115 | \$630 | 12 | S |
| Hispanic American Firms | 721 | \$6,316 | 38 | S |
| Nonminority Women Firms ${ }^{3}$ | 6,023 | 405,951 | 348 | 308,995 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 20.01\% | 4.22\% | 8.76\% | 3.79\% |
| Native American Firms ${ }^{1}$ | 0.22\% | S | 0.70\% | S |
| Asian American Firms ${ }^{2}$ | 0.92\% | 0.03\% | 0.83\% | S |
| Hispanic American Firms | 5.77\% | 0.25\% | 2.64\% | S |
| Nonminority Women Firms ${ }^{3}$ | 48.20\% | 16.20\% | 24.20\% | 13.66\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 21.07 |  | 43.27 |
| Native American Firms ${ }^{1}$ |  | S |  | S |
| Asian American Firms ${ }^{2}$ |  | 2.73 |  | S |
| Hispanic American Firms |  | 4.37 |  | S |
| Nonminority Women Firms ${ }^{3}$ |  | 33.60 |  | 56.45 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00 . A disparity index below 80.00 indicates a substantial level of disparity.

NAICS CODE 81: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION), WINSTONSALEM, NC MARKET AREA
Table D-13 shows the availability, sales, and disparity results for NAICS Code, other services (except public administration). There were a total 19,791 other services (except public administration) firms (all firms) in the Winston-Salem, NC marketplace in 2012, of which 36.03 percent were owned by minorities and 57.69 percent by nonminority women.

- African American firms (disparity index 31.02) were substantially underutilized, accounting for 23.65 percent of all firms and 7.34 percent of sales.
- Hispanic American firms (disparity index of 16.59) were substantially underutilized, accounting for 3.70 percent of all firms and 0.61 percent of sales.
- Asian American firms (disparity index of 38.73) were substantially underutilized, accounting for 7.98 percent of all firms and 3.09 percent of sales.
- Nonminority Women firms (disparity index of 40.81) were substantially underutilized, accounting for 57.69 percent of all firms and 23.54 percent of sales.
- Native American firms (disparity index of 20.21) were substantially underutilized, accounting for 0.70 percent of all firms and 0.14 percent of sales.

There were a total of 1,676 other services (except public administration) employer firms in the WinstonSalem, NC marketplace in 2012, of which 9.43 percent were owned by minorities and 32.22 percent by nonminority women.

- Asian American firms (disparity index of 25.10) were substantially underutilized, accounting for 3.64 percent of all firms and 0.91 percent of sales.
- Nonminority Women firms (disparity index of 45.56) were substantially underutilized, accounting for 32.22 percent of all firms and 14.68 percent of sales.
- Data for African American, Hispanic American, and Native American firms were withheld; therefore, private sector disparities were not conducted.

TABLE C-13.
PRIVATE SECTOR CENSUS DISPARITIES
NAICS CODE 81, OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)
U.S. CENSUS 2012 SURVEY OF BUSINESS OWNERS,

WINSTON-SALEM, NC MARKETPLACE

| BUSINESS OWNERSHIP CLASSIFICATION | ALL FIRMS <br> (\#) | ALL FIRMS, SALES <br> (\$1,000) | EMPLOYER FIRMS (\#) | EMPLOYER FIRMS SALES $(\$ 1,000)$ |
| :---: | :---: | :---: | :---: | :---: |
| All Firms | 19,791 | \$1,247,044 | 1,676 | \$710,133 |
| African American Firms | 4,680 | \$91,477 | 70 | \$0 |
| Native American Firms ${ }^{1}$ | 138 | \$1,757 | 0 | \$0 |
| Asian American Firms ${ }^{2}$ | 1,580 | \$38,558 | 61 | \$6,488 |
| Hispanic American Firms | 732 | \$7,652 | 27 | \$0 |
| Nonminority Women Firms ${ }^{3}$ | 11,417 | 293,554 | 540 | 104,248 |
| PERCENTAGE OF MARKETPLACE |  |  |  |  |
| All Firms | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| African American Firms | 23.65\% | 7.34\% | 4.18\% | 0.00\% |
| Native American Firms ${ }^{1}$ | 0.70\% | 0.14\% | 0.00\% | 0.00\% |
| Asian American Firms ${ }^{2}$ | 7.98\% | 3.09\% | 3.64\% | 0.91\% |
| Hispanic American Firms | 3.70\% | 0.61\% | 1.61\% | 0.00\% |
| Nonminority Women Firms ${ }^{3}$ | 57.69\% | 23.54\% | 32.22\% | 14.68\% |
| DISPARITY INDEX |  |  |  |  |
|  |  | ALL FIRMS |  | EMPLOYER FIRMS |
| All Firms |  | 100.00 |  | 100.00 |
| African American Firms |  | 31.02 |  | 0.00 |
| Native American Firms ${ }^{1}$ |  | 20.21 |  | - |
| Asian American Firms ${ }^{2}$ |  | 38.73 |  | 25.10 |
| Hispanic American Firms |  | 16.59 |  | 0.00 |
| Nonminority Women Firms ${ }^{3}$ |  | 40.81 |  | 45.56 |

Source: MGT of America, Inc. conducted private sector disparities marketplace analyses based on U.S. Census Bureau, 2012 Survey of Business Owners (SBO) data.
${ }^{1}$ Native American consists of American Indian- and Alaska Native-owned firms.
${ }^{2}$ Asian American consists of Asian-owned and Native Hawaiian- and Other Pacific Islander-owned firms.
${ }^{3}$ Nonminority Women consists of White Women-owned and White Equally Women-/Male-owned firms.
S denotes findings were withheld as the estimates did not meet U.S. Census publication standards.
Sales includes total shipments, receipts, revenue, or business done by the firm.
Disparity index is the ratio of the percentage of sales to percentage of available firms multiplied by 100.00. A disparity index below 80.00 indicates a substantial level of disparity.

## SBO CONCLUSION

The SBO analysis shows consistent underutilization of M/WBE firms relative to their availability in the market area, validating the overarching research question of whether these disparities exist for the broader private sector, and is compelling for the City to maintain associated remedies to avoid passive participation in discrimination, irrespective of circumstances in the public sector.

Further, each of the five procurement categories analyzed showed substantial disparity among defined M/WBE classes where sufficient data were available.

## C. 4 ANALYSIS OF RACE, ETHNICITY, AND GENDER EFFECTS ON SELF-EMPLOYMENT AND EARNINGS

This section examines further evidence regarding the over-arching research question of whether disparities exist in the private sector and addresses the two more specific questions:
2. Are racial, ethnic, and gender minority groups less likely than nonminority males (nonM/WBEs) to be self-employed?
3. Do racial, ethnic, and gender status have an impact on individuals' earnings?

This is achieved through an examination of the effects of race, ethnicity, and gender, alongside controls for individual economic and demographic characteristics, on individuals' participation in the private sector as self-employed business operators, as well as the effects of these variables on their earnings. The analysis is targeted to four categories of private sector business activity (Construction, Professional Services, Other Services, and Goods \& Supplies) that generally align with the City procurement categories defined for the study, noting that Professional Services also encompasses Architecture and Engineering, due to observations in this category being too limited in this subset to support separate analysis.

Adopting the methodology and variables employed by a City of Denver disparity study (see Concrete Works v. City and County of Denver ${ }^{18}$ ), we use Public Use Microdata Samples (PUMS) data derived from the 2013-2017 American Community Survey (ACS), to which we apply appropriate regression statistics to draw conclusions.

## LINKS TO BUSINESS FORMATION AND MAINTENANCE

Research in economics consistently finds group differences by race, ethnicity, and gender in rates of business formation. ${ }^{19}$ We know, for instance, that in general most minorities and women ${ }^{20}$ have a lower median age than do nonminority males (ACS PUMS, 2013-2017) and that, in general, the likelihood of being self-employed increases with age (ACS PUMS, 2013-2017). An examination of these variables within the context of a disparity study, therefore, seeks to control for these other important demographic and economic variables in conjunction with race, ethnicity, and gender - since they also influence group rates of business formation - to determine if we can assert that inequities specific to minorities and women are demonstrably present to warrant consideration of public sector remedies. Questions about marketplace dynamics affecting self-employment-or, more specifically, the odds of being able to form one's own business and then to excel (i.e., generate earnings growth) - are at the heart of disparity analysis research.

## STATISTICAL MODELS AND METHODS

To answer the research questions identified for this section, we employed two multivariate regression techniques, respectively: (1) logistic regression, and (2) linear regression. Logistic regression is an econometric method that allows for analyzing dichotomous dependent variables. The results can then be translated into log likelihoods that allows for an examination of how likely one variable is to be true when

[^5]compared to another variable. Linear regression is an econometric method that helps explain the linear relationship between the dependent variable and the independent variables - how substantially and in what direction each of the independent variables influence the dependent variable. This will help analyze the direct impact that being part of a specific minority or gender group has on earnings.

To understand the appropriate application of these regression techniques, it is helpful to explore in greater detail the variables inherent in these questions. There are two general categories of variables employed in the regression techniques: (1) dependent variables and (2) independent variables.

- Dependent variables are the phenomena to be explained by influences such as age, race, gender, and disability status (i.e., the independent or "explanatory" variables).
- The first dependent variable is the probability of self-employment status, which is a binary, categorical variable based on two possible values: 0 (not self-employed) versus 1 (self-employed).
- Logistic regression is appropriately used to perform an analysis in which the dependent variable is binary and categorical, and therefore was employed for the analysis of selfemployment. ${ }^{21}$
- The second dependent variable is earnings from self-employment, which is a continuous variable with many possible values.
- Continuous variables are best explained using simple linear regression.


## THE INFLUENCES OF RACE, ETHNICITY, AND GENDER ON SELF EMPLOYMENT

To derive a set of variables known to predict employment status (self-employed/not self-employed), we used the 2013-2017 U.S. Census ACS five-percent PUMS data. Logistic regression was used to calculate the probability of being self-employed, the dependent variable, with respect to socioeconomic and demographic characteristics selected for their potential to influence the likelihood of self-employment. The sample for the analysis was limited to labor force participants who met the following criteria:

- Resident of Winston-Salem, NC Market Area22.
- Self-employed in construction, professional services, other services, architecture and engineering,23 or goods and supplies.
- Employed full-time (more than 35 hours a week).
- 18 years of age or older.

[^6]- Employed in the private sector.

Next, we derived the following variables ${ }^{24}$ hypothesized as predictors of employment status:

- Race and Gender: African American, Asian American, Hispanic American, Native American, nonminority woman, nonminority male.
- Availability of Capital: Homeownership, home value, mortgage rate, unearned income, residual income.
- Marital Status.
- Ability to Speak English Well.
- Disability Status: From individuals' reports of health-related disabilities.
- Age and Age Squared: Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and earnings.
- Owner's Level of Education.
- Number of Individuals Over the Age of 65 Living in Household.
- Number of Children Under the Age of 18 Living in Household.

This analysis examined the statistical effects of these variables on the likelihood of being self-employed in the Winston-Salem, Market Area. From the inverse of this value, we can interpret a likelihood value of its effect on self-employment. The results are interpretable based on the inverse of the "odds ratios". For example, the "odds ratio" for an African American is 0.399 as seen in the top portion of Table D-14, while the inverse of this is 2.51 , as seen in the lower portion of this table. This inverse value means that a nonminority male is 2.51 times more likely to be self-employed than an African American. Comparisons are made to nonminority males as a control group, where the influence of any of the race, ethnicity, or gender variables is considered absent. In this sense, the circumstance of the nonminority male is considered to be a baseline for what might be expected for self-employment rates for this market - with race, ethnicity, or gender variables being tested for their positive or negative influence.

[^7]TABLE C-14.
SELF-EMPLOYMENT ODDS RATIOS AND THEIR INVERSES FOR MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

| BUSINESS OWNERSHIP CLASSIFICATION | ALL INDUSTRIES | CONSTRUCTION | PROFESSIONAL SERVICES | OTHER <br> SERVICES | GOODS \& SUPPLIES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ODDS-RATIOS |  |  |  |  |  |
| African American Firms | 0.399 | 0.401 | 0.197 | 0.566 | 0.463 |
| Hispanic American Firms | 0.486 | 0.481 | 0.393 | 0.665 | 0.230 |
| Asian American Firms | 0.816 | 0.876 | 0.316 | 0.987 | 0.465 |
| Native American Firms | 0.677 | 0.876 | 0.315 | 0.735 | . 987 |
| Nonminority Women Firms | 0.456 | 0.424 | 0.234 | 0.543 | 0.654 |
| INVERSE OF ODDS-RATIOS |  |  |  |  |  |
| African American Firms | 2.506 | 2.494 | 5.076 | 1.767 | 2.160 |
| Hispanic American Firms | 2.058 | 2.079 | 2.545 | 1.504 | 4.348 |
| Asian American Firms | 1.225 | 1.142 | 3.165 | 1.013 | 2.151 |
| Native American Firms | 1.477 | 1.142 | 3.175 | 1.361 | 1.013 |
| Nonminority Women Firms | 2.193 | 2.358 | 4.274 | 1.842 | 1.529 |

Source: PUMS data from 2013-2017 American Community Survey (Winston-Salem, NC Market Area) and MGT, calculations using SPSS Statistics software. Note: Shading and bold indicates the estimated "odds ratio" for the group was statistically significant at $95 \%$ confidence interval ${ }^{25}$. The architecture and engineering business industry was excluded from this analysis because of the insufficient data.

Are racial, ethnic, and gender minority groups less likely than nonminority males (non-M/WBEs) to be selfemployed? The findings show that racial, ethnic, and gender minority groups are nearly universally less likely than nonminority males to be self-employed. For example, nonminority males were 5.08 times more likely than African Americans to be self-employed in the Professional Services; and nonminority males were 2.49 times more likely than African Americans to be self-employed in the Construction industry.

With respect to the over-arching research question, these findings again communicate that disparities do exist in the market. Within this circumstance and in response to the specific research question, it is also evident that racial, ethnic, and gender variables have a statistically significant negative impact on rates of self-employment after other factors are controlled for.

## THE INFLUENCES OF RACE, ETHNICITY, AND GENDER ON INDIVIDUAL EARNINGS

To explore whether there are any measurable impacts on earnings, we compared self-employed, minority, and women entrepreneurs' earnings to those of nonminority males in the Winston-Salem, NC Market Area, when the effect of other demographic and economic characteristics were controlled or neutralized. That is, we were able to examine the earnings of self-employed individuals of similar education levels, ages, etc., to permit earnings comparisons more purely by race, ethnicity, and gender.

[^8]First, we derived a set of independent variables known to predict earnings, including:

- Race and Gender: African American, Asian American, Hispanic American, Native American, nonminority woman, nonminority males.
- Availability of Capital: Homeownership, home value, mortgage rate, unearned income, residual income.
- Marital Status.
- Ability to Speak English Well.
- Disability Status: From individuals' reports of health-related disabilities.
- Age and Age Squared: Squaring the age variable acknowledges the positive, curvilinear relationship between each year of age and earnings.
- Owner's Level of Education.

For the dependent variable, we used 2013-2017 wages from employment for self-employed individuals, as reported in the 5 percent PUMS data.

This analysis examined the statistical effects of these variables on income from self-employment for business owners in Winston-Salem, NC Market Area. As yielded by the linear regression analysis, each number in Table D-15 represents a percent change in earnings associated with the introduction of the variable (business ownership classification) in the left-hand column. For example, across all industries, the adjustment factor for an African American is -0.319 , meaning that an African American would be predicted to earn 31.90 percent less than a nonminority male, all other variables considered or controlled for.

TABLE C-15.
EARNINGS ELASTICITIES OF MINORITY GROUPS RELATIVE TO NONMINORITY MALES AFTER CONTROLLING FOR DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

| BUSINESS OWNERSHIP <br> CLASSIFICATION | ALL <br> INDUSTRIES | CONSTRUCTION | PROFESSIONAL <br> SERVICES | OTHER <br> SERVICES | GOODS \& SUPPLIES |
| :--- | :---: | :---: | :---: | :---: | :---: |
| African American Firms | $\mathbf{- 0 . 3 1 9}$ | $\mathbf{0 . 3 4 2}$ | $\mathbf{- 0 . 4 7 9}$ | $\mathbf{- 0 . 2 2 1}$ | $\mathbf{- 0 . 9 2 1}$ |
| Hispanic American Firms | $\mathbf{- 0 . 2 9 5}$ | $\mathbf{- 0 . 4 2 1}$ | 0.124 | $\mathbf{- 0 . 2 1 4}$ | $\mathbf{- 0 . 5 2 7}$ |
| Asian American Firms | -0.103 | $\mathbf{- 0 . 1 2 4}$ | 1.021 | $\mathbf{- 0 . 4 3 1}$ | $\mathbf{- 0 . 8 7 2}$ |
| Native American Firms | -0.312 | -0.232 | 0.123 | -0.202 | $\mathbf{- 0 . 3 5 1}$ |
| Nonminority Women Firms | $\mathbf{- 0 . 3 2 3}$ | $\mathbf{- 0 . 2 6 1}$ | $\mathbf{- 0 . 2 2 1}$ | $\mathbf{- 0 . 4 1}$ | $\mathbf{- 0 . 3 3 2}$ |

Source: PUMS data from 2013-2017 American Community Survey (Winston-Salem, NC Market Area) and MGT, calculations using SPSS Statistics software. Note: Shading and bold indicates the estimated "elasticities" for the group were statistically significant at $95 \%$ confidence interval. The architecture and engineering business industry was excluded from this analysis because of insufficient data. In terms of the regression "elasticity" means the percent change resulting by being a member of one of the M/WBE groups.

The findings provide further positive evidence that disparities exist in the private sector of the City's market area, compelling the continuation of remedies in the domain of the government's influence.

The findings also provide affirmative evidence to the more specific questions regarding impacts on earning, demonstrating that self-employed racial, ethnic, and gender minority groups earn less than their nonminority male counterparts, all variables considered.

## C. 5 CONCLUSIONS

Analysis of the U.S. Census 2012 SBO data and the PUMS 2013-2017 data demonstrate, in response to the over-arching research question driving this analysis, that disparities do exist for M/WBE firms operating in the private sector within the City's market area. Thus, based on guidance offered by the courts into this domain, the City may have a compelling interest to continue its current M/WBE program to avoid becoming a passive participant to discrimination.

To the more specific research questions:

- The permits analysis presented a summary of firm utilization by racial, ethnic and gender classification comparing M/WBE utilization for the City private sector construction projects with commercial construction projects from July 1, 2013 through June 31, 2018. According to the findings from commercial construction projects, substantial M/WBE underutilization was evident in the private sector. When compared to findings from the commercial construction projects, M/WBE firms fared better on City projects.
- Findings from the U.S Census 2012 SBO data indicate that there are substantial disparities for most M/WBE firms across industry sectors resembling the procurement categories identified for this study.
- Findings from the 2013-2017 PUMS data indicate that:
- M/WBE firms were significantly less likely than nonminority males to be self-employed.
- If they were self-employed, M/WBE firms earned significantly less in 2013-2017 than did selfemployed nonminority males.

In light of these findings, credence may be given to the proposition established in Croson, which suggested a government could be a passive participant in private sector discrimination if it did not act to counter these dynamics at least within the domain of its influence. This evidence stands alongside the disparities observed in public sector contracting to illustrate the substantial inequities that continue to exist in the City's marketplace, underscoring its compelling interest in continuing to pursue remedies to address these extant gaps.

# APPENDIX D. CUSTOM CENSUS BUSINESS SURVEY INSTRUMENT 2019 Disparity Study 

City of Winston-Salem, North Carolina

## CUSTOM CENSUS BUSINESS SURVEY INSTRUMENT WINSTON-SALEM 2019 DISPARITY STUDY

Q. 1 Code Minority Status [ANSWER TO Q. 54]
(5)

- 1 Minority
- 2 Non_Minority
Q. 2 Code NAICS Code [ANSWER TO Q. 47]

DO NOT CHANGE RESPONSE: Code by using first 2 digits WHAT THE SYSTEM SAYS.
[REQUIRE ANSWER]
(6-7)
ㅁ 01541310
ㅁ 02541320

- 03541330

ㅁ 04541370
ㅁ 05541380
Q. 3 What is your title?
[REQUIRE ANSWER]
(8)

- 1 Owner/CEO/President

ㅁ 2 Manager/Financial Officer
ㅁ 3 Other
[S - IF THE ANSWER IS 1-2, THEN SKIP TO QUESTION 5]
Q. 4 Specify "OTHER"
[REQUIRE ANSWER]
$\qquad$ (9-58)
Q. 5 May I have your name just in case we have any further questions?
[REQUIRE ANSWER]
$\qquad$ (59-108)
Q. 6 Let me confirm that, based on information we have from Dun \& Bradstreet, this is a for-profit company, as opposed to a nonprofit, foundation or government office?

VERIFY RESPONSE IF THEY ANSWER "YES"NON-PROFIT, FOUNDATION OR GOVERNMENT OFFICE!
[REQUIRE ANSWER]
(109)
$\square \quad 1$ Yes
$\square 2 \mathrm{No}$
$\square 3$ Don't Know
[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 40]
Q. 7 Is your company interested in working as a Prime Contractor or Consultant, Supplier, or Subcontractor on a City (City of Winston-Salem) contract in the near future?
[REQUIRE ANSWER]
(110)
$\square \quad 1 \mathrm{Yes}$
$\square 2$ No
$\square 3$ Don't Know
[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 9]
Q. 8 You indicated that your company is not interested in doing business with the City of WinstonSalem. Is that because:
[REQUIRE ANSWER]
(111)
$\square \quad 1$ Your company does not work in the public sector
$\square 2$ Your company's past experience with the City
$\square 3$ Too many unsuccessful attempts to work with the City
$\square 4$ None of the above
[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 40]
Q. 9 Let me confirm that, based on the information we have from Dun \& Bradstreet, the company's primary line of business is [ANSWER TO Q. 46]?
[ANSWER TO Q. 46]
(READ NAICS WITH CORRESPONDINGDESCRIPTIVE TEXT)
[REQUIRE ANSWER]
(112)
$\square 1$ Yes
$\square 2 \mathrm{No}$
$\square 3$ Don't Know
[A - IF THE ANSWER TO QUESTION 9 IS 1, THEN SKIP TO QUESTION 11]
Q. 10 Please SPECIFY your company's Primary Type of work.
[REQUIRE ANSWER]
$\qquad$ (113-212)
Q. 11 Thinking about your company's operations, does your company bid, quote or propose primarily as a Prime Contractor or Consultant? Sub-contractor or Sub-consultant? or Both?
[REQUIRE ANSWER]
(213)
$\square 1$ Prime Contractor/ Consultant or Vendor
$\square 2$ Sub-contractor/Sub-consultant or Supplier
$\square 3$ Both (Prime \& Sub)
$\square 4$ Don't Know
Q. 12 Is your company at least 51 percent owned, managed, and controlled by a woman or women?
[REQUIRE ANSWER]
(214)
$\square \quad 1$ Yes
$\square 2$ No
$\square 3$ Don't Know
Q. 13 Is your company at least 51 percent owned, managed, and controlled by one of the following racial or ethnic groups?
[REQUIRE ANSWER]
(215)
$\square 1$ White/Caucasian
$\square 2$ Black/African American
$\square 3$ Hispanic American or Latino
$\square 4$ Asian or Pacific Islander
$\square 5$ Native American/American Indian
$\square 6$ Don't Know
$\square 7$ Other
[A - IF THE ANSWER TO QUESTION 13 IS 1-5, THEN SKIP TO QUESTION 15]
Q. 14 Please specify the race or ethnicity of the owner(s) / manager(s).
[REQUIRE ANSWER]
$\qquad$
Q. 15 Has your company ever had a contract/purchase order, subcontract on a City of Winston-Salem project, or attempted to do business with the City, or their prime contractors?

PROBE: Have you ever attempted?
[REQUIRE ANSWER]
(241)
$\square \quad 1$ Yes
$\square 2$ No
$\square 3$ Don't Know

## [S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 39]

Q. 16 What is the highest level of education completed by the primary owner of your company?
[REQUIRE ANSWER]
(242)
$\square \quad 1$ Some high school
$\square 2$ High school graduate
$\square 3$ Trade or technical education
$\square 4$ Some college
$\square 5$ College degree
$\square 6$ Post graduate degree
$\square 7$ Don't Know
Q. 17 How many combined years of experience do you or the primary owner(s) of your firm have in the company's primary line of business?
[REQUIRE ANSWER]
(243)
$\square$ 1 0-5 years
$\square$ 2 6-10 years
$\square$ 3 11-15 years
$\square$ 4 16-20 years
$\square \quad 5$ 20+ years
$\square 6$ Don't know
Q. 18 What percentage of the company's 2018 gross revenues was earned from the: City? The Private Sector? and/or Other Public Government Sector Projects (Non-College Public Government Sector)?
(Must Total 100\%)
[REQUIRE ANSWER: 3]
City of Winston-Salem $\qquad$ (244-246)

Private Sector
_ (247-249)
Non City Public Government Sector $\qquad$
Q. 19 In general, which of the following ranges best approximates your company's largest contract or subcontract awarded between July 1, 2013 and June 30,2018?

## (BEST GUESS)

## [REQUIRE ANSWER]

(253-254)

- 01 None
- 02 Up to $\$ 50,000$ ?

ㅁ 03 \$50,001 to \$100,000?
ㅁ $04 \$ 100,001$ to $\$ 200,000$ ?
ㅁ $05 \$ 200,001$ to $\$ 300,000$ ?
ㅁ $06 \$ 300,001$ to $\$ 400,000$ ?
ㅁ $07 \$ 400,001$ to $\$ 500,000$ ?

- 08 \$500,001 to \$1 million?

ㅁ 09 Over \$1 million?
ㅁ 10 Don't Know
Q. 20 Does your company have bonding?
[REQUIRE ANSWER]
(255)

ㅁ 1 Yes
口 2 No
ㅁ 3 Don't Know
[A - IF THE ANSWER TO QUESTION 20 IS 2-3, THEN SKIP TO QUESTION 22]
Q. 21 What is your current aggregate (the maximum) bonding capacity?
[PROMPT FOR ANSWER]
(256)

ㅁ 1 Below $\$ 100,000$ ?
ㅁ 2 \$100,001 to \$250,000?
ㅁ 3 \$250,001 to \$500,000?

- 4 \$500,001 to \$1 million?

ㅁ 5 million to $\$ 1.5$ million?

- $6 \$ 1.5$ million to $\$ 3$ million?
- 7 \$3 million to $\$ 5$ million?
- 8 Over \$5 million?

■ 9 Don't Know
Q. 22 Has your company applied to a commercial (business) bank loan or line of credit between 2013 and 2018?
[PROMPT FOR ANSWER]
(257)
$\square \quad 1 \mathrm{Yes}$
$\square 2$ No
$\square 3$ Don't Know

## [S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 27]

Q. 23 Were you or your company approved or denied for a commercial (business) bank loan or line of credit?
[PROMPT FOR ANSWER]
(258)
$\square \quad 1$ Approved
$\square 2$ Denied
$\square 3$ Don't Know
[S - IF THE ANSWER IS 2-3, THEN SKIP TO QUESTION 25]
Q. 24 What was the highest amount of a commercial bank loan your company received?
[PROMPT FOR ANSWER]
(259-260)
$\square 01$ Up to \$50,000
$\square 02$ \$50,001 to \$100,000
$\square 03$ \$100,001 to \$300,000
$\square 04$ \$300,001 to \$500,000
$\square 05$ \$500,001 to $\$ 1$ million
$\square 06$ \$1,000,001 to $\$ 3$ million
$\square 07$ \$3,000,001 to $\$ 5$ million
$\square 08$ \$5,000,001 to \$10, million
$\square 09$ Over \$10 million
$\square 10$ Don't Know
[A - IF THE ANSWER TO QUESTION 23 IS 1, THEN SKIP TO QUESTION 27]
Q. 25 Which of the following do you believe was the primary reason for you being denied a loan or line of credit?
[PROMPT FOR ANSWER]
(261)

ㅁ 1 Insufficient Documentation

- 2 Insufficient Business History
- 3 Confusion about the Process
- 4 Race or Ethnicity of Owner
- 5 Gender of Owner

ㅁ 6 Don't Know
ㅁ 7 Other
[A - IF THE ANSWER TO QUESTION 25 IS 1-6, THEN SKIP TO QUESTION 27]
Q. 26 Other reason for denial?
$\qquad$ (262-361)
[A - IF THE ANSWER TO QUESTION 11 IS 2-3, THEN SKIP TO QUESTION 30]
Q. 27 PRIMES: Did you experience discriminatory behavior by the City of Winston-Salem when attempting to work or while working on a project between 2013 and 2018?
[REQUIRE ANSWER]
(362)

ㅁ 1 Yes
口 2 No

- 3 Don't Know
- 4 Not Applicable
[A - IF THE ANSWER TO QUESTION 27 IS 2-4, THEN SKIP TO QUESTION 30]
Q. 28 IF YES: Please specify the reason you believe your company was discriminated against by the City?
[REQUIRE ANSWER]
$\qquad$
Q. 29 Are you willing to speak directly to MGT to provide more detail of the alleged discrimination your company has experienced by the City?

IF YES: Please contact Vernetta Mitchell at MGT, vmitchell@mgtconsulting.com, (850) 3863191ext. 2101 to provide this detail information.
[REQUIRE ANSWER]
(863)

- 1 Yes (Contact Vernetta Mitchell at MGT, vmitchell@mgtconsulting.com,(850) 386-3191, ext. 2101)

ㅁ 2 No
[A - IF THE ANSWER TO QUESTION 11 IS 1, THEN SKIP TO QUESTION 33]
Q. 30 Subs and Both, Subs and Primes, on Q11 Did you experience discriminatory behavior as a subcontractor or supplier when attempting to work or while working on a City project between 2013 and 2018?
[REQUIRE ANSWER]
(864)

ㅁ 1 Yes
ㅁ 2 No
ㅁ 3 Don't Know

- 4 Not Applicable
[A - IF THE ANSWER TO QUESTION 30 IS 2-4, THEN SKIP TO QUESTION 33]
Q. 31 IF YES: Please specify the reason you believe your company was discriminated against by the Primes contracted by the City:
[REQUIRE ANSWER]
$\qquad$ (865-1364)
Q. 32 Are you willing to speak directly to MGT Consulting Group to provide more detail of the alleged discrimination your company has experienced by the Prime contractor/vendor on City projects?
[REQUIRE ANSWER]
(1365)
- 1 Yes (Contact Vernetta Mitchell at MGT, vmitchell@mgtconsulting.com,(850) 386-3191, ext. 2101)

口 2 No
[A - IF THE ANSWER TO QUESTION 11 IS 1, THEN SKIP TO QUESTION 35]
Q. 33 Still talking about City prime contractors or vendors, while doing business or attempting to do business as a Subcontractor, have you experienced any of the following as a form of discrimination?
[REQUIRE ANSWER: 8]

|  | Yes | No | DK |
| :--- | :---: | :---: | :---: |
| Harassment | $a_{1}$ | $a_{2}$ | $a_{3(1366)}$ |
| Unequal or unfair treatment | $a_{1}$ | $a_{2}$ | $a_{3(1367)}$ |
| Bid shopping or bid manipulation | $a_{1}$ | $a_{2}$ | $a_{3(1368)}$ |
| Double standards in performance | $a_{1}$ | $a_{2}$ | $a_{3(1369)}$ |
| Denial of opportunity to bid | $a_{1}$ | $a_{2}$ | $a_{3(1370)}$ |
| Unfair denial of contract award | $a_{1}$ | $a_{2}$ | $a_{3(1371)}$ |
| Unfair termination | $a_{1}$ | $a_{2}$ | $a_{3(1372)}$ |
| Unequal price quotes from suppliers | $a_{1}$ | $a_{2}$ | $a_{3(1373)}$ |

[A - IF THE ANSWER TO QUESTION 11 IS 1, THEN SKIP TO QUESTION 35]
Q. 34 How often do prime contractors/vendors who use your company as a subcontractor on public sector projects with M/WBE goals, solicit your company on projects (private or public) without M/WBE goals? (M/WBE: Minority \& Women Business Certification)

Would you say:
[REQUIRE ANSWER]
(1374)

- 1 Very Often
- 2 Sometimes

ㅁ 3 Seldom

- 4 Never
- 5 Don't Know
- 6 Not Applicable
Q. 35 In your experience, have any of the following been a barrier when attempting to do work or while working on projects for the City or the City's Primes?
[REQUIRE ANSWER: 14]

|  | Yes | No | DK |
| :---: | :---: | :---: | :---: |
| Pre-qualification requirements | $\square 1$ | $\square 2$ | -3 (1375) |
| Performance/payment bond requirements | $\square 1$ | $\square 2$ | -3(1376) |
| Cost of bidding/proposing | $\square 1$ | $\square 2$ | - 3 (1377) |
| Financing | $\square 1$ | $\square 2$ | -3 (1378) |
| Insurance (general liability, professional liability, etc.) | $\square 1$ | $\square 2$ | -3 (1379) |
| Price of supplies/materials | $\square 1$ | $\square 2$ | -3 (1380) |
| Short or limited time given to prepare bid package or quote | $\square 1$ | $\square 2$ | - 3 (1381) |
| Contract too large | $\square 1$ | $\square 2$ | -3(1382) |
| Selection process/evaluation criteria | $\square 1$ | $\square 2$ | -3 (1383) |
| Slow payment or non-payment | $\square 1$ | $\square 2$ | -3 (1384) |
| Competing with large companies | $\square 1$ | $\square 2$ | -3 (1385) |
| Solicitation of subcontractor bids after contract award (I.e. bid shopping) | $\square 1$ | $\square 2$ | - 3 (1386) |
| Awarded scope of work reduced or eliminated | $\square 1$ | $\square 2$ | -3 (1387) |
| Operating at or near capacity | $\square 1$ | $\square 2$ | -3(1388) |

Q. 36 ALL The following questions are related to work you have done or attempted to do in the Private sector marketplace. Private Sector is defined as non-government businesses or companies. In the private sector marketplace, have you experienced any of the following as a form of discrimination:
[REQUIRE ANSWER]

|  | Yes | No | DK |
| :---: | :---: | :---: | :---: |
| Harassment | $\square 1$ | $\square 2$ | - 3 (4197) |
| Unequal or unfair treatment | $\square 1$ | $\square 2$ | -3 (4198) |
| Bid shopping or bid manipulation | $\square 1$ | $\square 2$ | -3 (4199) |
| Double standards in performance | $\square 1$ | $\square 2$ | -3 (4200) |
| Denial of opportunity to bid | $\square 1$ | $\square 2$ | -3 (4201) |
| Unfair denial of contract award | $\square 1$ | $\square 2$ | -3 (4202) |
| Unfair termination | $\square 1$ | $\square 2$ | -3 (4203) |
| Unequal price quotes from suppliers | $\square 1$ | $\square 2$ | -3 (4204) |

Q. 37 Please indicate whether you agree, neither agree nor disagree, disagree with the following statement:

There is an informal network of prime contractors/vendors and subcontractors that has excluded my company from doing business in the private sector.
[REQUIRE ANSWER]
(1389)

ㅁ 1 Agree
ㅁ 2 Neither agree nor disagree
ㅁ 3 Disagree
ㅁ 4 Don't Know
Q. 38 Have you experienced or observed a situation in which a prime contractor/vendor includes minority or woman subcontractors on a bid or proposal to satisfy the "good faith effort" requirements, and then drops the company as a subcontractor after winning the award for no legitimate reason?
[REQUIRE ANSWER]
(1390)

ㅁ 1 Yes
■ 2 No
ㅁ 3 Don't Know
Q. 39 That completes the survey! Again, thank you for your input and your participation in this important research for the City of Winston-Salem. Have a Great Day!

## PROVIDE ONLY IF ASKED FOR:

If you have any questions or would like more information on the disparity study, please contact Vernetta Mitchell, at (850) 386-3191 ext. 2101.
[A - IF THE ANSWER TO QUESTION 11 IS 1, THEN SKIP TO QUESTION 41]

## Q. 40 READ: Disqualification Statement Below!

## NON-PROFIT STATEMENT:

Thank you for your input; however, based on your answers, it appears that you do not qualify for this survey because we are only seeking input from FOR-PROFIT companies.

## NOT INTERESTED IN WORKING WITH THE CITY OF WINSTON-SALEM:

Thank you for your input: however, based on your answers, it appears that your company does not qualify for this survey because we are seeking input from companies that are interested in working with, have contracting experiences, or attempted to contract with the CITY OR CITY PROJECTS.

If you get this message:
PLEASE CODE THIS STUDY AS INELIGIBLE!
Q. 41 Interviewer's Comments $\qquad$ (1391-1890)
Q. 42 Telephone \# (2000-2015)
Q. 43 Ref Name (2016-2025)
Q. 44 Ref\# $\qquad$ (2026-2030)
Q. 45 Business Name $\qquad$ (2031-2130)
Q. 46 NAICS Description $\qquad$ (2131-2230)
Q. 47 NAICS Code (2231-2240)
Q. 48 Contact Name $\qquad$ (2241-2290)
Q. 49 Contact Title $\qquad$ (2291-2340)
Q. 50 Street Address (2341-2370)
Q. 51 City $\qquad$ (2371-2420)
Q. 52 County $\qquad$ (2421-2440)
Q. 53 DUNS \#
(2441-2450)
Q. 54 Minority Status $\qquad$ (2451-2475)
Q. 55 Interviewer (2476-2479)
Q. 56 Date (2480-2488)
Q. 57 Time (2489-2494)
Q. 58 Duration
$\qquad$
Q. 59 Call Result (2495-2500) (2501-2502)

# APPENDIX E. VENDOR SURVEY 

 RESULTS2019 Disparity Study

City of Winston-Salem, North Carolina

Q7- Is your company interested in working as a Prime Contractor or Consultant, Supplier, or Subcontractor on a City (City of Winston-Salem) contract in the near future? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Yes | Count | 18 | 121 | 62 | 8 | 248 | 755 | 7 | 1,219 |
|  | \% within Q7 | 1.48\% | 9.93\% | 5.09\% | 0.66\% | 20.34\% | 61.94\% | 0.57\% | 100.00\% |
|  | \% within Business Ownership | 81.82\% | 85.21\% | 79.49\% | 72.73\% | 74.25\% | 71.56\% | 87.50\% | 73.88\% |
| No | Count | 4 | 18 | 15 | 3 | 74 | 285 | 1 | 400 |
|  | \% within Q7 | 1.00\% | 4.50\% | 3.75\% | 0.75\% | 18.50\% | 71.25\% | 0.25\% | 100.00\% |
|  | \% within Business Ownership | 18.18\% | 12.68\% | 19.23\% | 27.27\% | 22.16\% | 27.01\% | 12.50\% | 24.24\% |
| Don't Know | Count | - | 3 | 1 | - | 12 | 15 | - | 31 |
|  | \% within Q7 | 0.00\% | 9.68\% | 3.23\% | 0.00\% | 38.71\% | 48.39\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 2.11\% | 1.28\% | 0.00\% | 3.59\% | 1.42\% | 0.00\% | 1.88\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q7 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q8- You indicated that your company is not interested in doing business with the City of Winston-Salem. Is that because * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Your company does not work in the public sector | Count | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
|  | \% within Q8 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.15\% | 0.00\% | 0.00\% | 0.23\% |
| Your company's past experiences with the City | Count | 0 | 2 | 0 | 0 | 1 | 4 | 0 | 7 |
|  | \% within Q8 | 0.00\% | 28.57\% | 0.00\% | 0.00\% | 14.29\% | 57.14\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 0.00\% | 0.00\% | 1.15\% | 1.32\% | 0.00\% | 1.61\% |
| Too many unsuccessful attempts to work with the City | Count | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
|  | \% within Q8 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.66\% | 0.00\% | 0.46\% |
| None of the above | Count | 4 | 20 | 16 | 3 | 85 | 297 | 1 | 426 |
|  | \% within Q8 | 0.94\% | 4.69\% | 3.76\% | 0.70\% | 19.95\% | 69.72\% | 0.23\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 90.91\% | 100.00\% | 100.00\% | 97.70\% | 98.02\% | 100.00\% | 97.71\% |
| Total | Count | 4 | 22 | 16 | 3 | 87 | 303 | 1 | 436 |
|  | \% within Q8 | 0.92\% | 5.05\% | 3.67\% | 0.69\% | 19.95\% | 69.50\% | 0.23\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q9- Let me confirm that, based on the information we have from Dun \& Bradstreet, the company's primary line of business is* Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Yes | Count | 18 | 137 | 73 | 10 | 312 | 1,018 | 8 | 1,576 |
|  | \% within Q9 | 1.14\% | 8.69\% | 4.63\% | 0.63\% | 19.80\% | 64.59\% | 0.51\% | 100.00\% |
|  | \% within Business Ownership | 81.82\% | 96.48\% | 93.59\% | 90.91\% | 93.41\% | 96.49\% | 100.00\% | 95.52\% |
| No | Count | 4 | 5 | 5 | 1 | 22 | 36 | 0 | 73 |
|  | \% within Q9 | 5.48\% | 6.85\% | 6.85\% | 1.37\% | 30.14\% | 49.32\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 18.18\% | 3.52\% | 6.41\% | 9.09\% | 6.59\% | 3.41\% | 0.00\% | 4.42\% |
| Don't Know | Count | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | \% within Q9 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.09\% | 0.00\% | 0.06\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q9 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q11- Thinking about your company's operations, does your company bid, quote or propose primarily as a Prime Contractor or Consultant? Sub-contractor or Sub-consultant? or Both? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Prime Contractor or Consultant | Count | 11 | 51 | 31 | 6 | 172 | 536 | 4 | 811 |
|  | \% within Q11 | 1.36\% | 6.29\% | 3.82\% | 0.74\% | 21.21\% | 66.09\% | 0.49\% | 100.00\% |
|  | \% within Business Ownership | 50.00\% | 35.92\% | 39.74\% | 54.55\% | 51.50\% | 50.81\% | 50.00\% | 49.15\% |
| Subcontractor or subconsultant | Count | 4 | 23 | 12 | 1 | 45 | 130 | 3 | 218 |
|  | \% within Q11 | 1.83\% | 10.55\% | 5.50\% | 0.46\% | 20.64\% | 59.63\% | 1.38\% | 100.00\% |
|  | \% within Business Ownership | 18.18\% | 16.20\% | 15.38\% | 9.09\% | 13.47\% | 12.32\% | 37.50\% | 13.21\% |
| Both | Count | 6 | 62 | 34 | 3 | 104 | 346 | 1 | 556 |
|  | \% within Q11 | 1.08\% | 11.15\% | 6.12\% | 0.54\% | 18.71\% | 62.23\% | 0.18\% | 100.00\% |
|  | \% within Business Ownership | 27.27\% | 43.66\% | 43.59\% | 27.27\% | 31.14\% | 32.80\% | 12.50\% | 33.70\% |
| Don't Know | Count | 1 | 6 | 1 | 1 | 13 | 43 | 0 | 65 |
|  | \% within Q11 | 1.54\% | 9.23\% | 1.54\% | 1.54\% | 20.00\% | 66.15\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 4.55\% | 4.23\% | 1.28\% | 9.09\% | 3.89\% | 4.08\% | 0.00\% | 3.94\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q11 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q12- Is your company at least 51 percent owned, managed, and controlled by a woman or women? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Yes | Count | 8 | 53 | 23 | 2 | 334 | 0 | 3 | 423 |
|  | \% within Q12 | 1.89\% | 12.53\% | 5.44\% | 0.47\% | 78.96\% | 0.00\% | 0.71\% | 100.00\% |
|  | \% within Business Ownership | 36.36\% | 37.32\% | 29.49\% | 18.18\% | 100.00\% | 0.00\% | 37.50\% | 25.64\% |
| No | Count | 14 | 88 | 54 | 9 | 0 | 1,006 | 5 | 1,176 |
|  | \% within Q12 | 1.19\% | 7.48\% | 4.59\% | 0.77\% | 0.00\% | 85.54\% | 0.43\% | 100.00\% |
|  | \% within Business Ownership | 63.64\% | 61.97\% | 69.23\% | 81.82\% | 0.00\% | 95.36\% | 62.50\% | 71.27\% |
| Don't Know | Count | 0 | 1 | 1 | 0 | 0 | 49 | 0 | 51 |
|  | \% within Q12 | 0.00\% | 1.96\% | 1.96\% | 0.00\% | 0.00\% | 96.08\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.70\% | 1.28\% | 0.00\% | 0.00\% | 4.64\% | 0.00\% | 3.09\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q12 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q13- Is your company at least 51 percent owned, managed, and controlled by one of the following racial or ethnic groups? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| Caucasian | Count | 0 | 0 | 0 | 0 | 334 | 1,055 | 0 | 1,389 |
|  | \% within Q13 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 24.05\% | 75.95\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% | 0.00\% | 84.18\% |
| African American | Count | 0 | 142 | 0 | 0 | 0 | 0 | 0 | 142 |
|  | \% within Q13 | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 8.61\% |
| Asian <br> American | Count | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
|  | \% within Q13 | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Q13 | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.33\% |
| Hispanic American | Count | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 78 |
|  | \% within Q12 | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 4.73\% |
| Native American | Count | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 11 |
|  | \% within Q13 | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.67\% |
| Don't Know | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \% within Q13 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Other (Specify) | Count | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
|  | \% within Q13 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.48\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q13 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q14- Has your company ever had a contract/purchase order, subcontract on a City of Winston-Salem project, or attempted to do business with the City, or their prime contractors? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonMWBE | Other |  |
| Yes | Count | 1 | 11 | 3 | 0 | 30 | 99 | 2 | 146 |
|  | \% within Q14 | 0.68\% | 7.53\% | 2.05\% | 0.00\% | 20.55\% | 67.81\% | 1.37\% | 100.00\% |
|  | \% within Business Ownership | 4.55\% | 7.75\% | 3.85\% | 0.00\% | 8.98\% | 9.38\% | 25.00\% | 8.85\% |
| No | Count | 21 | 130 | 75 | 10 | 283 | 908 | 6 | 1,433 |
|  | \% within Q14 | 1.47\% | 9.07\% | 5.23\% | 0.70\% | 19.75\% | 63.36\% | 0.42\% | 100.00\% |
|  | \% within Business Ownership | 95.45\% | 91.55\% | 96.15\% | 90.91\% | 84.73\% | 86.07\% | 75.00\% | 86.85\% |
| Don't Know | Count | 0 | 1 | 0 | 1 | 21 | 48 | 0 | 71 |
|  | \% within Q14 | 0.00\% | 1.41\% | 0.00\% | 1.41\% | 29.58\% | 67.61\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.70\% | 0.00\% | 9.09\% | 6.29\% | 4.55\% | 0.00\% | 4.30\% |
| Total | Count | 22 | 142 | 78 | 11 | 334 | 1,055 | 8 | 1,650 |
|  | \% within Q14 | 1.33\% | 8.61\% | 4.73\% | 0.67\% | 20.24\% | 63.94\% | 0.48\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q17- How many combined years of experience do you or the primary owner(s) of your firm have in the company's primary line of business? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonMWBE | Other |  |
| $\begin{aligned} & \hline 0-5 \\ & \text { years } \end{aligned}$ | Count | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
|  | \% within Q17 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.33\% | 1.01\% | 0.00\% | 1.37\% |
| $\begin{aligned} & 6-10 \\ & \text { years } \end{aligned}$ | Count | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
|  | \% within Q17 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.01\% | 50.00\% | 1.37\% |
| $\begin{aligned} & 11-15 \\ & \text { years } \end{aligned}$ | Count | 0 | 1 | 2 | 0 | 3 | 5 | 0 | 11 |
|  | \% within Q17 | 0.00\% | 9.09\% | 18.18\% | 0.00\% | 27.27\% | 45.45\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 66.67\% | 0.00\% | 10.00\% | 5.05\% | 0.00\% | 7.53\% |
| $\begin{aligned} & 16-20 \\ & \text { years } \end{aligned}$ | Count | 0 | 4 | 0 | 0 | 3 | 6 | 0 | 13 |
|  | \% within Q17 | 0.00\% | 30.77\% | 0.00\% | 0.00\% | 23.08\% | 46.15\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 36.36\% | 0.00\% | 0.00\% | 10.00\% | 6.06\% | 0.00\% | 8.90\% |
| 20+ years | Count | 1 | 6 | 1 | 0 | 23 | 83 | 1 | 115 |
|  | \% within Q17 | 0.87\% | 5.22\% | 0.87\% | 0.00\% | 20.00\% | 72.17\% | 0.87\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 54.55\% | 33.33\% | 0.00\% | 76.67\% | 83.84\% | 50.00\% | 78.77\% |
| Don't Know | Count | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
|  | \% within Q17 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.03\% | 0.00\% | 2.05\% |
| Total | Count | 1 | 11 | 3 | 0 | 30 | 99 | 2 | 146 |
|  | \% within Q17 | 0.68\% | 7.53\% | 2.05\% | 0.00\% | 20.55\% | 67.81\% | 1.37\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q18- What percentage of the company's 2018 gross revenues was earned from the: City? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonM/WBE | Other |  |
| 0 to 10\% | Count | 0 | 9 | 3 | 0 | 25 | 87 | 2 | 126 |
|  | \% within Q18 | 0.00\% | 7.14\% | 2.38\% | 0.00\% | 19.84\% | 69.05\% | 1.59\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 81.82\% | 100.00\% | 0.00\% | 83.33\% | 87.88\% | 100.00\% | 86.30\% |
| 11 to 20\% | Count | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 8 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 25.00\% | 75.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.67\% | 6.06\% | 0.00\% | 5.48\% |
| 21 to 30\% | Count | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.33\% | 1.01\% | 0.00\% | 1.37\% |
| 31 to 40\% | Count | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
|  | \% within Q18 | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.01\% | 0.00\% | 1.37\% |
| 41 to 50\% | Count | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
|  | \% within Q18 | 0.00\% | 66.67\% | 0.00\% | 0.00\% | 0.00\% | 33.33\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.01\% | 0.00\% | 2.05\% |
| 51 to 60\% | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| 61 to 70\% | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| 71 to 80\% | Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| 81 to 90\% | Count | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 1.01\% | 0.00\% | 0.68\% |
| 91 to 100\% | Count | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.67\% | 2.02\% | 0.00\% | 2.74\% |
| Total | Count | 1 | 11 | 3 | 0 | 30 | 99 | 2 | 146 |
|  | \% within Q18 | 0.68\% | 7.53\% | 2.05\% | 0.00\% | 20.55\% | 67.81\% | 1.37\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q18- What percentage of the company's 2018 gross revenues was earned from the: Private Sector? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonMWBE | Other |  |
| 0 to 10\% | Count | 0 | 3 | 0 | 0 | 4 | 12 | 0 | 19 |
|  | \% within Q18 | 0.00\% | 15.79\% | 0.00\% | 0.00\% | 21.05\% | 63.16\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 27.27\% | 0.00\% | 0.00\% | 13.33\% | 12.12\% | 0.00\% | 13.01\% |
| 11 to 20\% | Count | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 5 |
|  | \% within Q18 | 0.00\% | 20.00\% | 0.00\% | 0.00\% | 40.00\% | 40.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 0.00\% | 0.00\% | 6.67\% | 2.02\% | 0.00\% | 3.42\% |
| 21 to 30\% | Count | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 4 |
|  | \% within Q18 | 0.00\% | 25.00\% | 0.00\% | 0.00\% | 25.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 0.00\% | 0.00\% | 3.33\% | 2.02\% | 0.00\% | 2.74\% |
| 31 to 40\% | Count | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 4 |
|  | \% within Q18 | 25.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 75.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.03\% | 0.00\% | 2.74\% |
| 41 to 50\% | Count | 0 | 2 | 0 | 0 | 2 | 8 | 0 | 12 |
|  | \% within Q18 | 0.00\% | 16.67\% | 0.00\% | 0.00\% | 16.67\% | 66.67\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 18.18\% | 0.00\% | 0.00\% | 6.67\% | 8.08\% | 0.00\% | 8.22\% |
| 51 to 60\% | Count | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 3.03\% | 0.00\% | 2.05\% |
| 61 to 70\% | Count | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.02\% | 0.00\% | 1.37\% |
| 71 to 80\% | Count | 0 | 0 | 0 | 0 | 3 | 16 | 1 | 20 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 15.00\% | 80.00\% | 5.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 10.00\% | 16.16\% | 50.00\% | 13.70\% |
| 81 to 90\% | Count | 0 | 0 | 0 | 0 | 2 | 7 | 1 | 10 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 20.00\% | 70.00\% | 10.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.67\% | 7.07\% | 50.00\% | 6.85\% |
| 91 to 100\% | Count | 0 | 4 | 3 | 0 | 16 | 44 | 0 | 67 |
|  | \% within Q18 | 0.00\% | 5.97\% | 4.48\% | 0.00\% | 23.88\% | 65.67\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 36.36\% | 100.00\% | 0.00\% | 53.33\% | 44.44\% | 0.00\% | 45.89\% |
| Total | Count | 1 | 11 | 3 | 0 | 30 | 99 | 2 | 146 |
|  | \% within Q18 | 0.68\% | 7.53\% | 2.05\% | 0.00\% | 20.55\% | 67.81\% | 1.37\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

Q18- What percentage of the company's 2018 gross revenues was earned from the: Other Public Government Sector Projects? * Business Ownership Crosstabulation

|  |  | Business Ownership |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Asian Americans | African Americans | Hispanic Americans | Native Americans | Nonminority Women | NonMWBE | Other |  |
| 0 to 10\% | Count | 0 | 6 | 3 | 0 | 21 | 57 | 0 | 87 |
|  | \% within Q18 | 0.00\% | 6.90\% | 3.45\% | 0.00\% | 24.14\% | 65.52\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 54.55\% | 100.00\% | 0.00\% | 70.00\% | 57.58\% | 0.00\% | 59.59\% |
| 11 to 20\% | Count | 0 | 0 | 0 | 0 | 2 | 13 | 2 | 17 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 11.76\% | 76.47\% | 11.76\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.67\% | 13.13\% | 100.00\% | 11.64\% |
| 21 to 30\% | Count | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.06\% | 0.00\% | 4.11\% |
| 31 to 40\% | Count | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
|  | \% within Q18 | 50.00\% | 0.00\% | 0.00\% | 0.00\% | 50.00\% | 0.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 0.00\% | 0.00\% | 0.00\% | 3.33\% | 0.00\% | 0.00\% | 1.37\% |
| 41 to 50\% | Count | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 11 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 18.18\% | 81.82\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.67\% | 9.09\% | 0.00\% | 7.53\% |
| 51 to 60\% | Count | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 2.02\% | 0.00\% | 1.37\% |
| 61 to 70\% | Count | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 |
|  | \% within Q18 | 0.00\% | 33.33\% | 0.00\% | 0.00\% | 33.33\% | 33.33\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 0.00\% | 0.00\% | 3.33\% | 1.01\% | 0.00\% | 2.05\% |
| 71 to 80\% | Count | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 4 |
|  | \% within Q18 | 0.00\% | 25.00\% | 0.00\% | 0.00\% | 25.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 9.09\% | 0.00\% | 0.00\% | 3.33\% | 2.02\% | 0.00\% | 2.74\% |
| 81 to 90\% | Count |  |  |  |  |  | 4 |  | 4 |
|  | \% within Q18 | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 100.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 4.04\% | 0.00\% | 2.74\% |
| 91 to 100\% | Count | 0 | 3 | 0 | 0 | 2 | 5 | 0 | 10 |
|  | \% within Q18 | 0.00\% | 30.00\% | 0.00\% | 0.00\% | 20.00\% | 50.00\% | 0.00\% | 100.00\% |
|  | \% within Business Ownership | 0.00\% | 27.27\% | 0.00\% | 0.00\% | 6.67\% | 5.05\% | 0.00\% | 6.85\% |
| Total | Count | 1 | 11 | 3 | 0 | 30 | 99 | 2 | 146 |
|  | \% within Q18 | 0.68\% | 7.53\% | 2.05\% | 0.00\% | 20.55\% | 67.81\% | 1.37\% | 100.00\% |
|  | \% within Business Ownership | 100.00\% | 100.00\% | 100.00\% | 0.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

# APPENDIX F. SURVEY REGRESSION 

 ANALYSIS2019 Disparity Study

City of Winston-Salem, North Carolina

## F.I INTRODUCTION

This section reports findings from a survey of a sample of $121^{26}$ firms representative of the City vendors examined in the study to assess race, ethnicity, and gender effects on vendor revenue during the 2018 tax year. To determine these effects, MGT Consulting Group, LLC. (MGT) applied a multivariate regression model to survey findings.

There are two key questions for consideration in this analysis:

1. Do minority- and woman-owned firms tend to earn significantly less revenue than firms owned by nonminority males?

## APPENDIX SECTIONS

G. 1 Introduction
G. 2 Overview of Multivariate

Regression and Description of
Analytical Model
G. 3 Regression Model Variables
G. 4 Assessing Variables in the Model
G. 5 Multivariate Regression Model Results
G. 6 Summary of Survey Findings
2. If "yes," are their lower revenues due to race or gender classification or to other factors?

Case law and social science research provide some guidance for addressing these questions. From research literature, we know that in addition to race and gender, factors such as firm capacity, and education bear a relation to a firm's gross revenues. When multiple factors come into play, sometimes a multivariate statistical analysis can improve our understanding of more complex relationships among factors affecting company earnings. In this study, we employ linear regression to analyze variables, including race and gender that can affect a firm's success.

## F. 2 OVERVIEW OF MULTIVARIATE REGRESSION AND DESCRIPTION OF ANALYTICAL MODEL

Multivariate regression was employed to examine the influence of selected company and business characteristics, especially owner race and gender, on 2018 gross revenues reported by 121 firms participating in a telephone survey administered during June and July 2019. For this analysis, gross revenue was the dependent variable, or the variable to be explained by the presence, absence, or strength of "selected characteristics" variables, known as "independent" or "explanatory" variables.

Since disparity analysis is an established domain of research, the selection of the independent company characteristics variables for this study was based on an extensive review of disparity study research literature. Most economic studies of discrimination are based on the seminal work of Nobel Prize recipient Gary Becker, "The Economics of Discrimination." ${ }^{27}$ Becker was the first to define discrimination in financial and economic terms. Since Becker, labor economists and statistical researchers including Blinder and

[^9]Oaxaca, Corcoran and Duncan, Gwaltney and Long, Reimers, Saunders, Darity and Myers, Hanuschek, Hirsch, Topel and Blau, and others have adopted a standard in disparity study research of using company earnings, or revenue, as the dependent variable in race and gender discrimination analysis. ${ }^{28}$ Comparable worth studies have also proposed regression models using gross revenue as the dependent variable for policy analysis, ${ }^{29}$ and the U.S. Department of Commerce employs regression analysis (included in 48 CFR 19) to establish price evaluation adjustments for small disadvantaged businesses in federal procurement programs. ${ }^{30}$

## F. 3 REGRESSION MODEL VARIABLES

Timothy Bates ${ }^{31}$ used at least five general determinants, including firm capacity, managerial ability, and demographic characteristics such as race and gender, to explain statistical variations in firm gross revenues. These are elaborated below in terms of the dependent/independent variable relationship regression seeks to resolve.

## DEPENDENT VARIABLE

For this analysis, the dependent variable (the variable to be explained by the independent variables in the model) was defined operationally as "firm 2018 gross revenues." This variable is measured as the exact dollar figure for gross revenues.

## INDEPENDENT VARIABLES

The independent (i.e., explanatory) variables were those characteristics hypothesized as contributing to the variation in the dependent variable (2018 gross revenues). For this study, independent variables included:

- Number of full-time employees - The more employees a company has, the greater product volume it is likely to have to generate higher revenues.
- Owner's level of education - The research literature consistently reports a positive relationship between education and level of income. In this analysis, the category "College degree" served as a reference group against which all other race and gender groups were compared.
- Age of company - It is argued that a company's longevity is an indicator of both success and the owner's managerial ability.

[^10]- Race/ethnic group/gender of firm owners - The proposition to be tested was whether there was a statistically significant relationship between race, ethnicity, and gender classification of minority firm owners and firm revenue. In the analysis, the category "Non-M/WBE" served as a reference group against which all other race and gender groups were compared.
- Business Category-Since companies tend to be organized around a business concentration (e.g., Construction), business category was introduced as a predictor of gross revenue. In this analysis, the category "Construction" served as a reference group against which all other business category groups were compared.

Participants' responses to the survey provided the data to examine the relative importance of these factors. The operational relationship between these constructs (i.e., firm capacity, capability, race, and gender) and measures derived from survey items is presented in Table G-1.

TABLE F-1.
MODEL CONSTRUCTIONS, VARIABLES, AND MEASURES

| MODEL CONSTRUCTS | VARIABLES | MEASURES |
| :--- | :--- | :--- |
| CAPACITY | Number of Employees | Number of Employees Reported |
| O of company's 2018 gross revenue from private sector <br> projects |  |  |
| ABILITY |  |  |

Source: Winston-Salem's survey of vendors results.

## EXPLORING VARIABLE RELATIONSHIPS: HOW REGRESSION ANALYSIS WORKS

Multiple regression analysis permits simultaneous examination not only of the effects on the dependent variable of all independent variables in the multivariate model, but also the effect of each unique variable (i.e., controlling for the effects of the other independent variables in the equation). The effect of each predictor (independent) variable on the dependent variable is expressed as the magnitude of the change in the dependent variable $(\mathrm{Y}$ ) for each unit change in the independent variable $(\mathrm{X}$ ) plus an "error term." Since the independent variable is never a perfect predictor of the dependent variable-that is, X is expressed as an imperfect predictor of $Y$ such that one unit change in $X$ never leads to one unit change in $Y$-the "error term," $\varepsilon$, is postulated to acknowledge the residual change in the value of $Y$ that $X$ cannot explain.

The goal in sound regression modeling, therefore, is to minimize residual values associated with the independent variables and to maximize their explanatory power. In other words, a good model that seeks to explain what causes revenue earnings, in this case, will hypothesize a combination of independent variables based on solid research findings having sufficient explanatory power to account for case-by-case differences in company revenue, while minimizing that portion of variation in revenue values that the
independent variable cannot explain (i.e., minimizing the difference between $Y$ values predicted by the $X$ 's in the model and actual $Y$ values).

## F. 4 ASSESSING VARIABLES IN THE MODEL

As suggested earlier, in a model with multiple independent, or predictor, variables, the effect of each individual independent variable is expressed as the expected change in the dependent variable (y) for each unit change in the independent variable ( x ), holding constant (or controlling for) the values of all the other independent variables (i.e., the effect on $Y$ of the other $X$ 's in the equation). When $X$ and $Y$ values are plotted on a graph, linear regression attempts to find a straight line of best fit (also known as the leastsquares line) that minimizes the differences between actual $Y$ and predicted $Y$ values as a function of $X$. The slope of this line represents the statistical relationship between the predicted values of $Y$ based on $X$. The point at which this regression line crosses the Y axis (otherwise known as the constant) represents the predicted value of $Y$ when $X=0$. If the effect of $X$ on $Y$ is determined to be statistically significant (e.g., a significance level of $p<0.05$ asserts that the calculated relationship between $X$ and $Y$ could occur due to chance only 5 times in 100), it can be asserted that $X$ may indeed play a role in determining the value of $Y$ (in the case of this study, company revenues). For example, if the slope coefficient of the variable representing one of the specific racial groups is determined to be statistically significant, then, all other things being equal, the hypothesis that race of the owner of a firm affects the annual revenue of the firm has only a 5 percent chance of being false. In disparity research, theory asserts that the negative effect of race on revenue earnings associated with being a minority-owned business is likely a product of discrimination.

## MULTIVARIATE REGRESSION MODEL

Mathematically, the multivariate linear regression model is expressed as:
$Y=\beta_{0}+\beta_{1} X_{1}+\beta_{2} X_{2}+\beta_{3} X_{3+} \beta_{4} X_{4+} \beta_{5} X_{5}+\ldots+\varepsilon$
Where: $\quad Y=$ annual firm gross revenues
$\beta_{0}=$ the constant, representing the value of $Y$ when $X_{1}=0$
$\beta_{1}=$ coefficient representing the magnitude of $X_{1}$ 's effect on $Y$
$X_{1}=$ the independent variables, such as company age, race, and number of employees
$\varepsilon=$ the error term, representing the variance in Y unexplained by $\mathrm{X}_{\mathrm{l}}$
This equation describes the hypothesized relationship between the dependent variable and the independent variables and was used to test the hypothesis that there is no difference in 2018 revenue earnings for M/WBE firms when compared with non-M/WBE firms. Traditionally, the hypothesis of no difference (known as the null hypothesis) is represented as: $\quad \mathrm{H}_{0}: \mathrm{Y}_{1}=\mathrm{Y}_{2}$.

We can reject the null hypothesis if the analysis indicates that race and gender have been found to affect firm revenue (i.e., $H_{1}: Y_{1} \neq Y_{2}$, the alternate hypothesis). Results are statistically significant if it is
determined that the probability of achieving this difference due to chance was less than 5 in 100 (i.e., p < $0.05)$.

## LOGARITHMIC TRANSFORMATION OF VARIABLES

Some variables in the model have been transformed to logarithms. In this case, the dependent variable and selected independent variables were log transformed. Mathematically, a multivariate linear regression model with a logarithmic dependent variable and specified logarithmic independent variables is expressed as:

```
\(\log (Y)=\beta_{0}+\log \left(\beta_{1} X_{1}\right)+\log \left(\beta_{2} X_{2}\right)+\beta_{3} X_{3}+\beta_{4} X_{4}+\beta_{5} X_{5}+\ldots+\varepsilon\)
```

The specific model used for this analysis is outlined below. Note the logarithmic transformations on revenue, company age, and number of employees. Note that education and percent private were not transformed as the configuration of these variables did not warrant transformation.
$\operatorname{Ln}($ Revenue $)=\beta_{0}+\operatorname{Ln}\left(\beta_{1} X_{\text {Employes }}\right)+\operatorname{Ln}\left(\beta_{2} X_{\text {Age }}\right)+\beta_{3} X_{\text {Ethnicity }}+\beta_{4} X_{\text {Education }+} \beta_{5} X_{\text {Percent Private }}+\varepsilon$
Where: $\quad$ Revenue $=$ annual firm gross revenues
$\beta_{0}=$ the constant
$\beta_{1}=$ coefficient representing the magnitude of $X_{i}$ 's effect on $Y$
$X_{1}=$ the independent variables, such as company age, race, and number of employees
$\mathcal{E}=$ the error term, representing the variance in Y unexplained by $\mathrm{X}_{\mathrm{I}}$
For the independent variables that were not log transformed, the interpretation of the estimated coefficient $\beta$, is that a one-unit increase in $X$ will result in an increase in $\operatorname{Ln}($ Revenue $)$ of ( $\beta_{1}{ }^{*} 100$ ) percent. For instance, the coefficient on Percent Private is 0.002 . To interpret this, the coefficient is multiplied by 100 (.2) and then transformed into a percentage ( $0.2 \%$ ). The resulting interpretation indicates that for every 1-unit change in Percent Private (a percentage point), revenue increases by . $2 \%$.

For the independent variables that are log transformed variables, $\beta_{1}$ represent the elasticity of revenue with respect to all $X_{1}$. In other words, a change in $1 \%$ change in $X_{1}$ will result in a change of $\beta_{1}$ percent in Revenue. For example, the coefficient on the $\log ($ Age ) is .368 . This is interpreted by transforming the coefficient on $\log ($ Age ), .368 , into a percentage ( $0.368 \%$ ). This means that a $1 \%$ increase in a company's age results in a $0.368 \%$ increase in the company's revenue.

This equation describes the hypothesized relationship between the dependent variable and the independent variables and was used to test the hypothesis that there is no difference in 2018 revenue earnings for M/WBE firms when compared with non-M/WBE firms. Traditionally, the hypothesis of no difference (known as the null hypothesis) is represented as: $\quad \mathrm{H}_{0}: \mathrm{Y}_{1}=\mathrm{Y}_{2}$.

We can reject the null hypothesis if the analysis indicates that race and gender have been found to affect firm revenue (i.e., $H_{1}: Y_{1} \neq Y_{2}$, the alternate hypothesis). Results are statistically significant if it is determined that the probability of achieving this difference due to chance was less than 5 in 100 (i.e., $\mathrm{p}<$ $0.05)$.

## F. 5 MULTIVARIATE REGRESSION MODEL RESULTS

The regression model tested the effects of selected demographic and business characteristic variables on revenue earnings elicited from firms participating in the study. The tests for multicollinearity among independent variables and variance inflation due to outlier observations revealed no substantive problems with the data. ${ }^{32}$

TABLE F-2.
SURVEY OF VENDORS DATA RESULTS OF REGRESSION ANALYSIS

|  | CAPACITY |  |
| :--- | ---: | ---: |
|  | Standardized Coefficients |  |
|  | Beta | Std. Error |
| (Constant) | $\mathbf{1 0 . 5 1 5}$ | $\mathbf{0 . 2 3 2}$ |
| Log(Number of Employees) | $\mathbf{0 . 9 3 8}$ | $\mathbf{0 . 0 5 9}$ |
| Log(Company Age) | $\mathbf{0 . 3 6 8}$ | $\mathbf{0 . 0 7 4}$ |
| Business Category: A\&E | $\mathbf{- 0 . 3 9 6}$ | $\mathbf{0 . 1 4 7}$ |
| Business Category: Goods | -0.262 | 0.205 |
| Business Category: Other Services | $\mathbf{- 0 . 3 5 1}$ | $\mathbf{0 . 5 8 4}$ |
| Business Category: Professional Services | -0.523 | $\mathbf{0 . 1 9}$ |
| Ethnicity: Asian or Pacific Islander | -0.062 | 0.611 |
| Ethnicity: Black/African American | 0.079 | 0.195 |
| Ethnicity: Non-minority Female | -0.303 | 0.14 |
| Ethnicity: Hispanic American or Latino | 0.045 | 0.357 |
| Ethnicity: Other | -0.376 | 0.459 |
| Education: Some High School | 0.031 | 0.43 |
| Education: High School Graduate | 0.547 | 0.177 |
| Education: Trade or Technical Education | -0.018 | 0.332 |
| Education: Some College | 0.182 |  |
| Education: Post-Graduate | 0.316 | 0.168 |
| Percent Private | 0.002 | 0.264 |

Source: Winston Salem survey of vendors results.
Bold type indicates statistically significant results ( $p \leq 0.05$ ).

## RESULTS

- The model testing the effects of the variables listed in Table G-2 on revenue reported by companies participating in the survey explained 87.41 percent of the variance of the revenue variable ( R -

[^11]squared $=0.8741$, Adjusted R -squared $=.8519$, F -statistic $=39.35$ on 18 and $102 \mathrm{DF}, \mathrm{p} \leq 2.2 \mathrm{e}-16$, Residual standard error: .5766 on 102 degrees of freedom).

- When controlling for the effects of variables related to company demographics, capacity, and owner's managerial ability (i.e. company age, number of employees, percent private, and business category and ownership level of education), management ethnicity status had a non-significant impact on 2018 company earnings.
- Revenue for all groups increased as a function of number of employees and company age


## DERIVING PREDICTED REVENUE FOR RACE/GENDER/ETHNICITY CATEGORIES

Values from Table G-2 were inserted into the regression model in order to derive predicted revenue categories for each race, ethnicity, and gender classification. The following equation illustrates how predicted revenue would be calculated for a Hispanic in the Professional Services business category with a post-graduate degree.
$\operatorname{Ln}($ Revenues $)=10.515002+0.938 * \operatorname{Ln}($ Employees $)+0.367 * \operatorname{Ln}($ Age $)-0.303 *$ Hispanic $-.584 *$ Professional Services $+0.316^{*}$ Post Graduate $+0.002^{*}$ Percent Private .

For instance, using the equation above to interpret the effect or race, ethnicity, and gender classification on predicted gross revenue for an Hispanic with a 10 year old professional services company with 12 employees, holding all other variables constant, we would add the coefficients and also multiply the natural log of the appropriate coefficients (Employees) and (Age) and add those coefficients as well. Upon transformation, we find that the firm's revenue is predicted at $\$ 346,935$. Similarly, to derive the effect or race, ethnicity, and gender classification on predicted gross revenue, we will simply omit the coefficient from the Hispanic variable. Upon calculation, predicted revenue increases to $\$ 469,720$. The Hispanic designation translates into a revenue reduction of $\$ 122,785$ for the firm in the example.

## F. 6 SUMMARY OF SURVEY FINDINGS

Regarding the significant effects of company age and number of employees-it would be expected that a firm's revenue might be positively related to its size and age, supporting the logical conclusion that larger, more established firms tend to do more business. Regarding the insignificant effects of ethnicity and gender, it is possible that there is not enough variation in the ethnicity category to capture any relationship. The dataset was reduced to 121 observations per each variable used in the regression analysis.

# APPENDIX G. IN-DEPTH INTERVIEW GUIDE <br> 2019 Disparity Study 

City of Winston-Salem, North Carolina

READ: Hello. My name is $\qquad$ , we are working with the City of Winston-Salem to gather anecdotal comments from companies interested and willing to do business with the City, or prime vendors contracted by the City for its disparity study. Your company was randomly selected to participate in an in-depth interview.

Is this $\qquad$ \&\& $\qquad$ (Company's name)? IF COMPANY NAME VERIFIED, CONTINUE.

Are you the owner or an authorized decision maker in your company? [IF NO] May I speak with that person? [IF NO, SCHEDULE CALL-BACK]?

IF TRANSFERRED TO ANOTHER PARTY (CFO, MANAGER, ETC): READ INTRO AGAIN then ask Are you able to answer questions concerning business practices of this company? IF YES, CONTINUE.

Thank you for agreeing to participate. Your input is very important to outcome of the disparity study. Your responses to this survey will be aggregated for the overall analysis and used only for this research study. Individual information or identifying characteristics about your company will not be published. Your responses and comments should focus on the period between July 1, 2013 and June 30, 2018.

If you have any questions regarding the survey, I will be happy to provide you contact information at the end of the survey.

## By participating in this interview, you acknowledge that:

1. The qualitative input you will provide is given freely and represents an accurate reflection of your experiences doing business or attempting to do business with the City or its primes.
2. You have not been coerced or received any remuneration for your comments.
3. You understand that your name nor firm's name will be published in the report.
4. That your participation in this interview has no direct benefits to your firm or MGT.

The reference to "primes" in this interview refers to firms that have received contracts, bid on, or submitted proposals directly to the City.

Q1. Please specify your company's primary line of business? (Try to get a good feel for what they do.)

1. Construction Services (general contracting, carpentry, site work, electrical, concrete etc.) Specify $\qquad$
2. Professional Services (civil engineering, environmental engineering, mechanical engineering, construction management at risk, etc. as defined in NC GC 143-63.1) Specify $\qquad$
3. Other Services (accounting, legal services, IT consulting, janitorial services, auto repair, maintenance services, etc.) Specify $\qquad$
4. Goods \& Supplies (vehicles, office supplies, furniture, equipment, etc.) Specify $\qquad$
5. Other: Specify

Q2. How many combined years of experience do you or the primary owner(s) of your firm have in your primary line of business?

O 0-5 years 1
O 6-10 years 2
O 11-15 years 3
O 16-20 years 4
O $20+$ years 5
Q3. Between July 1, 2013 and June 30, 2018, what was the average number of employees on your company's payroll, including full-time and part-time staff?

O 0-10 1
O 11-20 2
O 21-30 3
O 31-40 4
O $41+5$

Q4. Is more than $\mathbf{5 0}$ percent of your company woman-owned and controlled?
O Yes 1
O No 2
O Don't Know 3

Q5. Is more than $\mathbf{5 0}$ percent of the company owned and controlled by one of the following racial or ethnic groups? [Get as much detail as possible.]

O Anglo/Caucasian/White 1
O African American 2
O Asian American 3
O Hispanic American 4
O Native American 5
O Don't Know 6
O Other 7 Specify: $\qquad$

Q6. In what year was your business established or purchased by the most recent owner(s)?
Q7. What is the highest level of education completed by the primary owner of your company? [REQUIRE ANSWER]

O Some high school 1
O High school graduate 2
O Trade or technical education 3
O Some college 4
O College degree 5
O Post graduate degree 6
O Don't know 7
Q8. Does your company bid/quote/propose primarily as a prime contractor/consultant or vendor? Subcontractor? OR both?

O Prime Contractor/Consultant or Vendor 1
O Subcontractor or subconsultant 2
O Both 3
O None of the above 4

Q9. Have you ever submitted a bid, quote, or proposal with the City or a prime on a City contract?
O Yes
1
O No
2
O Don't Know 3

Q9a. Have you won a contract with the City as a prime or subcontractor?
O Yes
1
O No
2
O Don't Know
3

Q9b. If response is "no": What bid, or proposal requirement was a barrier to successfully winning the bid or proposal?

Q10. Have you ever protested a bid, proposal, or contract awarded by the City?
O Yes
1
O No
2
O Don't Know
3

Q10a. If response is "yes": Please provide as much detail as possible on why and the results.
Q11. Which of the following categories best approximates your company's gross revenues for calendar years 2013-2018 combined?

O Up to $\$ 50,000$ ? 1
O $\$ 50,001$ to $\$ 100,000$ ? 2
O \$100,001 to \$300,000? 3
O $\$ 300,001$ to $\$ 500,000$ ? 4
O $\$ 500,001$ to $\$ 1$ million? 5
O $\$ 1,000,001$ to $\$ 3$ million? 6
O $\$ 3,000,001$ to $\$ 5$ million? 7
O $\$ 5,000,001$ to $\$ 10$ million? 8
O Over $\$ 10$ million? 9
O Don't Know 10

Q12. What percentage of these gross revenues was earned from the City, the private sector, and other public government sector projects? (Must total 100\%)

| City of Winston-Salem: | $\%$ |
| :--- | :---: |
| Private Sector: | $\%$ |
| Non-City/County Public Government Sector: | $\%$ |
| Total: | $\%$ |

Q13. Does your company hold any of the following state of NC HUB certifications? (Check all that apply.)

|  | Yes (1) | No (2) | Don't Know <br> (3) |
| :--- | :--- | :--- | :--- | :--- |
| a. Minority Business Enterprise (MBE) |  |  |  |
| b. Woman Business Enterprise (WBE) |  |  |  |
| c. Small Business Enterprise (SBE) |  |  |  |
| d. Disadvantaged Business Enterprise (DBE) |  |  |  |
| e. Don't Know |  |  |  |
| f. None |  |  |  |
| g. Other: Specify |  |  |  |

## IF INTERVIEWEE IS A PRIME: (BASED ON Q8)

Q14. Between July 1, 2013 and June 30, 2018, indicate a range of the number of times you have been awarded a contract or purchase order with the City as a prime contractor/consultant or vendor?

O None 1
O 1-10 times 2
O 11-25 times 3
O 26-50 times 4
O 51-100 times 5
O Over 100 times 6
O Don't Know 7

Q15. As an MWBE prime, do you believe you are receiving fair treatment once you are awarded the contract/purchase order and performing at the approved worksite? (IF APPLICABLE)
O Yes
1
O No
2
O Don't Know 3

Q16. As a prime contractor/consultant or vendor did you experience discriminatory behavior by the City staff when attempting to do work or working on their projects between July 1, 2013 and June 30, 2018?
$\begin{array}{ll}\text { O Yes } & 1 \\ \text { O No } & 2 \\ \text { O Don't Know } & 3\end{array}$
Q16a. If the response is "yes": Please explain how you believe you were discriminated against and why? (Ask if they have documented evidence to support their response)

Q16b. Did you file a complaint? If so, what was the result?
Q16c. If response to Q15b is "no": Why didn't you file a complaint?

Q17. In your experience, have any of the following been a barrier to attempting to do work or working on any of the City's projects as a prime contractor/consultant or vendor:

|  |  | Yes | No | Don't <br> Know | Not <br> Applicable |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. Prequalification requirements |  |  |  |  |  |
| b. Bid bond requirement |  |  |  |  |  |
| c. Performance/payment bond requirement |  |  |  |  |  |
| d. Cost of bidding/proposing |  |  |  |  |  |
| e. Financing |  |  |  |  |  |
| f. $\quad$ Insurance (general liability, professional liability, etc.) |  |  |  |  |  |
| g. Price of supplies/materials |  |  |  |  |  |
| h. Proposal/Bid specifications |  |  |  |  |  |
| i. Short or limited time given to prepare bid package or |  |  |  |  |  |
| quote | Limited knowledge of purchasing contracting policies |  |  |  |  |
| and procedures |  |  |  |  |  |
| k. Lack of experience |  |  |  |  |  |
| l. Lack of personnel |  |  |  |  |  |
| m. Contract too large |  |  |  |  |  |
| n. Selection process/evaluation criteria |  |  |  |  |  |
| o. Unnecessary restrictive contract specifications |  |  |  |  |  |
| p. Slow payment or nonpayment |  |  |  |  |  |
| q. Competing with large companies |  |  |  |  |  |
| r. Changes in the scope of work (after work began) |  |  |  |  |  |
| s. Meeting HUB-certified requirements or good faith effort |  |  |  |  |  |
| requirements |  |  |  |  |  |
| t. Ease of identifying HUB firms to partner with on City |  |  |  |  |  |
| projects |  |  |  |  |  |

Q17u. Please explain why the items you selected are barriers and which agency presents the barrier.

## IF INTERVIEWEE IS A SUBCONTRACTOR: (BASED ON Q8)

Q18. Between July 1, 2013 and June 30, 2018, indicate a range of the number of times you have been awarded a subcontract with primes on City projects or contracts.

O None
O 1-10 times

- 11-25 times
- 26-50 times

O 51-100 times
O Over 100 times
O Don't Know
Q19. As an MWBE subcontractor, do you believe you are receiving fair treatment once you are awarded a subcontract and are performing your scope of work?

O Yes
1
O No
2
O Don't Know 3

Q19a. If response is "no": Why do you believe you were treated unfairly?

Q20. How often do prime contractors/consultants or vendors contract with your firm to satisfy the City 's MWBE requirements then not utilize your services once the contract has been awarded?

O Very Often 1
O Sometimes 2
O Seldom 3
O Never 4
O Don't know 5
Q20a. If response is "very often" or "sometimes": At what point did you realize that the prime was awarded the project and your firm was not included?

Q21. Between July 1, 2013 and June 30, 2018, have you ever submitted a bid with a prime contractor for a project with the City to satisfy the "good faith effort" requirements, were informed that you were the successful subcontractor, and then found out that another subcontractor was doing the work?

O Yes 1
O No 2
O Don't Know 3
Q20a. If response is yes: Please provide details of what happened.

Q22. As a subcontractor, did you experience discriminatory behavior between July 1, 2013 and June 30, 2018 from a prime contractor/consultant or vendor when attempting to do work or while working on City projects?

O Yes 1
O No 2
O Don't Know 3
Q22a. If response is "yes": Please explain how you believe you were discriminated against and why? (Ask if they have documented evidence to support their response)

Q22b. Did you file a complaint? If so, what was the result?
Q22c. If response to Q21b is "no": Why didn't you file a complaint?

Q23. In your experience, have any of the following been a barrier to attempting to work or working on projects as a subcontractor with primes on any City project:

|  |  | Yes | No | Don't <br> Know |
| :--- | :--- | :--- | :--- | :--- |
| a. Performance/payment bond requirement |  | Not <br> Applicable |  |  |
| b. Cost of bidding/proposing |  |  |  |  |
| c. Financing |  |  |  |  |
| d. Insurance (general liability, professional liability, etc.) |  |  |  |  |
| e. Price of supplies/materials |  |  |  |  |
| f. Short or limited time given to prepare bid estimate or |  |  |  |  |
| guote | Lack of experience |  |  |  |
| h. Lack of personnel |  |  |  |  |
| i. Contract too large |  |  |  |  |
| j. Slow payment or nonpayment |  |  |  |  |
| k. Competing with large companies |  |  |  |  |
| l. Solicitation of subcontractor bids after contract award |  |  |  |  |
| m. Awarded scope of work changed, reduced, or eliminated |  |  |  |  |

Q23n. Please explain why you think the items you selected are barriers and which agency created the barrier.

Q24. Do you believe there is an informal network of prime contractors or vendors that has excluded your company from doing business in the private sector?

O Yes 1
O No 2
Q24a. If the response is "yes": Please explain why you think that informal network exists. (Ask them to provide details on what they experienced or observed. Ask if they have documented evidence to support their response.)

Q25. How often do prime contractors/consultants or vendors who contract with your firm as a subcontractor on public-sector projects with MWBE goals solicit your firm on projects (private or public) without MWBE goals? (public-sector: government agencies)

O Very Often 1
O Sometimes 2
O Seldom 3
O Never 4
O Don't know 5
Q26. As a subcontractor, did you experience discriminatory behavior when attempting to do work or working in the private sector between July 1, 2013 and June 30, 2018 from a prime contractor/consultant or vendor?

O Yes 1
O No 2
O Don't Know 3
Q26a. If the response is "yes": Please explain how you believe you were discriminated against and why?

## ALL INTERVIEWEES

Q27. Have you experienced access to capital as being an impediment to securing contracts with the City or subcontracts on City projects?

O Yes 1
O No 2
Q27a. If the response is "yes": Please describe how access to capital is an impediment?
Q28. Have you experienced bonding as being an impediment to securing contracts with the City or subcontracts on City projects?

O Yes 1
O No 2
Q27a. If the response is "yes": Please describe how bonding is an impediment?
Q29. Do you have any recommendations on how the City can improve the tracking and utilization of MWBE-firms on City projects and purchases?

Q30. In your opinion, what are the biggest obstacles faced by MWBE businesses in securing contracts with the City or prime contractors/vendors contracted with the City? Please specify each obstacle.

Q31. How do you find out about bid, proposal, or quote opportunities with the City?
Q32. Is there anything that we have not covered that you feel will be helpful to this study?

APPENDIX H. AREA TRADE ASSOCIATIONS \& BUSINESS ORGANIZATIONS

2019 Disparity Study

City of Winston-Salem, North Carolina

Trade associations and business organizations identified below were contacted to share information regarding the disparity study with its members and many were contacted to provide their insight on the City's M/WBE Program and procurement policies, as well as M/WBE utilization in the private sector marketplace.

## ORGANIZATIONS

American Institute of Architects of Piedmont
American Subcontractors Association of Carolinas
Association of Building Contractors of the Carolinas
Carolinas Asian American Chamber of Commerce
Carolinas Associated General Contractors
Forsyth Technical Community College Entrepreneurial Ecosystem
Forsyth Technical Community College Small Business Center
Greater Women's Business Council
Greensboro Chamber of Commerce of Greater Greensboro
Guilford County MWBE Office
Guilford County Schools
Guilford Technical Community College
Hispanic Contractors Association of the Carolinas
HUSTLE Winston-Salem
NAACP Alamance-Burlington Chapter
NAACP Greensboro Branch
NAACP Winston-Salem Branch
National Association of Minority Architects
National Association of Women Business Owners (NAWBO)
National Association of Women in Construction (NAWIC)-Piedmont Chapter
NC Indian Economic Development Initiative
North Carolina Institute of Minority Economic Development
North Carolina MWBE Coordinators Network


# APPENDIX I. MWSBE SELECTED PRACTICES <br> 2019 Disparity Study 

City of Winston-Salem, North Carolina

Appendix J provides an overview of the program design and practices of federal, state and local government minority, women, small, disadvantaged, and veteran-owned business enterprise (MWSDVBE) programs. The following covers MWSDVBE program design, small business size standards, and policies and practices used by agencies to stimulate MWSDVBE utilization.

Most state and local government agencies have some policy promoting local small business development. Such assistance may include direct subsidies to businesses, funds for management and technical assistance to small and new entrepreneurs, mentor-protégé programs, diversity training, and bonding assistance, as well as collaboration with and support for organizations that provide management and technical assistance to businesses.

The following provides a menu of policies. Some policies have worked in some localities and some have been in effective in others. Some policies have been discontinued for budget reasons. In many instances, it is difficult to determine whether a particular policy is directly responsible for the success of a program. Where possible sections begin with policies of public utilities.

## I.I MANDATORY DIVERSITY TRAINING

Training designed to specifically address diversity and inclusion related topics for procurement staff and/or individuals involved in the selection process has been a tool utilized by some agencies with success. The goal of the training is to educate personnel on policies and procedures related to diversity as well as to address process related implementation.

The School Board of Miami-Dade County, Florida. The School Board of Miami-Dade County, Florida created a Diversity, Equity, and Inclusion in Business Operations and Practices policy. ${ }^{33}$ The policy requires that, "The Superintendent or designee shall provide mandatory anti-discrimination, diversity, and inclusion training to all District staff involved in any and all District procurement processes, business operations and practices."

## I.2 SMALL BUSINESS ASPIRATIONAL GOALS

Commitment from the top leadership is a core element of most summaries of policies in other S/M/WBE programs. ${ }^{1}$ One starting point for such commitment is setting overall aspirational goals separate from project goals. Some agencies use fairly straightforward methods to calculate aspirational goals and other agencies use more involved methodologies.

The City of Charlotte, North Carolina. The City of Charlotte sets annual Citywide Aspirational SBE and MWBE Goals for Prime Contracts. At the beginning of each fiscal year, the Program Manager will recommend to the City Manager annual, Citywide goals for SBEs and MWBEs for certain, designated

[^12]categories of Prime Contracts. The initial categories shall be Construction, Architecture, Engineering and Surveying, Professional Services, Other Services and Goods \& Commodities. The annual SBE and MWBE goals may be combined or separate and are collectively referred to as the "MWSBE Goals." ${ }^{34}$

Office of Community Investment and Infrastructure (San Francisco, CA). In the City and County of San Francisco, the Office of Community and Investment and Infrastructure (OCII) is a state-authorized local entity serving as the successor to the former San Francisco Redevelopment Agency. OCCl's Small Business Enterprise Policy has established SBE participation goals (for prime contracts) at $50 \%$ for Construction, Professional Services, and Suppliers. ${ }^{35}$ The overall goal may be adjusted either upward or downward on a contract-by-contract basis depending on the availability of SBEs to perform the requested work.

Metropolitan Sewer District of Greater Cincinnati (MSD). At MSD, the annual goal for SBE participation is to award to SBEs, directly or indirectly through contracting, subcontracting and/or procurement activities of Contractors, contracts and procurements that represent at least $30 \%$ for Construction, $15 \%$ for Supplies/Services, and $10 \%$ for Professional Services, of the aggregate dollars spent annually by MSD. Attainment of the annual SBE Goal is based on contract dollars spent ad not contracts awarded. ${ }^{36}$

State of Maryland. In 2012, the General Assembly in Maryland passed legislation authorizing the Governor's Office of Minority Affairs (GOMA), in consultation with the Maryland Department of Transportation (MDOT) and the Office of the Attorney General, to set the overall aspirational MBE goal every two years. Currently, MBE regulations direct 70 participating State agencies to make every effort to award an overall minimum goal of $29 \%$ of the total dollar value of their procurement contracts directly (prime contractors) or indirectly (subcontractors) to certified MBE firms.

Orange County Government (Orlando, FL). Orange County Code §17-321 established initial goals for participation each year by MWBEs on County Contract in the following categories: Construction (25\%), Professional Services (27\%) Goods (10\%), and Services (24\%).

## I. 3 SMALL BUSINESS PRIME CONTRACTING PROGRAMS

## ROTATION OF BIDDERS

Some political jurisdictions use rotation of bidder schemes to limit habit purchases from majority firms and to ensure MWSDVBEs have an opportunity to bid along with majority firms. A number of agencies, including the City of Indianapolis, Indiana; Fairfax County, Virginia; the Port Authority of New York and New Jersey; and Miami-Dade County, Florida, use bid rotation to encourage MWSDVBE utilization,

[^13]particularly in architecture and engineering. Some examples of bidder rotation from these agencies include:

Metropolitan Sewer District of Greater Cincinnati (MSD). MSD's Small Business Manager shall establish a Small Contract Rotation Pool for certified SBEs, including procedures applicable to construction, supplies/services, and professional services for contracts between \$5,000 and \$50,000. Each certified SBE is grouped by its commodity codes based on the type of business. ${ }^{37}$

Miami-Dade County, Florida. Miami-Dade County uses small purchase orders for the Small Business Enterprise program and rotates on that basis. In addition, Miami-Dade County utilizes an Equitable Distribution Program, whereby a pool of qualified architecture and engineering professionals are rotated awards of county miscellaneous architecture and engineering services as prime contractors and subcontractors.

## SMALL BUSINESS SET-ASIDES/SHELTERED MARKETS

Miami-Dade County Government. On March 6, 2012, The Board of County Commissioners in Miami, Florida adopted Ordinance No. 12-13, which requires the County to shelter all purchases for goods and services valued up to $\$ 100,000$ for competition among certified SBE firms.

State of New Jersey. The State of New Jersey Small Business Set-Aside Program was established with the goal of awarding 25 percent of state contracting and purchase order dollars to small businesses. ${ }^{38}$

At least 10 percent of the State contracts shall be awarded to small businesses whose gross revenues do not exceed $\$ 500,000$; at least an additional 15 percent shall be awarded to additional categories of small businesses whose gross revenues do not exceed $\$ 12$ million or the applicable Federal revenue standards.

State of Maryland (Small Business Reserve Program). Maryland's Small Business Reserve Program (SBR) provides prime contracting opportunities in an exclusive environment where small businesses compete against other small businesses. This race- and gender-neutral set aside program applies to 23 designated agencies that are required to spend at least 10 percent of their total fiscal year procurement expenditures with SBR vendors. ${ }^{39}$ During Fiscal Year 2016, the SBR Program achieved 7.70 percent participation with total payments of $\$ 301.8$ million to SBR vendors.

City of St. Petersburg, Florida. The City of St. Petersburg's Sheltered Market program is used when it is determined that there are sufficient SBEs to afford effective competition and where necessary to meet the annual city-wide goals for SBE participation, both for construction and the purchase of supplies and services. ${ }^{40}$ For construction sheltered market contracts, SBE prime contractors or subcontractors collectively shall perform at least 20 percent of the contracting effort, including the costs of materials, goods and supplies, with their own organization and resources.

[^14]San Francisco Municipal Transportation Agency (SFMTA). SFMTA has established an SBE Set-Aside Program for Professional and Technical Services.

## RACE-NEUTRAL JOINT VENTURES

Atlanta, Georgia. The City of Atlanta requires establishment of joint ventures on large projects of over $\$ 10$ million. ${ }^{41}$ Primes are required to create a joint venture with a firm from a different ethnic/gender group in order to ensure prime contracting opportunities for all businesses. This rule applies to womenand minority-owned firms as well as nonminority firms. This rule has resulted in tens of millions of dollars in contract awards to women- and minority-owned firms.

Washington Suburban Sanitation Commission (WSSC). The WSSC Competitive Business Demonstration Project has required joint ventures between a local SBE and an established firm in procurement areas that do not generate enough SBE bids.

## CONSTRUCTION MANAGEMENT, REQUEST FOR PROPOSALS, AND DESIGN-BUILD

One method of debundling in construction is through the use of multi-prime construction contracts in which a construction project is divided into several prime contracts which are then managed by a construction manager at risk (CM at Risk or CMAR). For example, this approach has been used on projects where each prime contractor is responsible for installation and repair in particular areas. The construction manager is responsible for obtaining materials at volume discounts based upon total agency purchases. If one contractor defaults, a change order is issued to another prime contractor working in an adjacent area. The construction manager at risk is responsible for cost overruns that result from prime contractor default.

Construction management also facilitates the rotation of contracts within an area of work. For example, if several subcontractors have the capacity of bidding on an extended work activity (e.g., concrete flat work, traffic control, hauling), the construction manager can rotate contracting opportunities over the duration of the activity.

Using a request for proposal process can provide the flexibility for including M/WBE participation in prime contractor requirements and selection. One of the nonfinancial criteria can be the proposer's approach and past history with M/WBE subcontractor utilization as well as women and minority workforce participation.

A number of agencies around the country, the Charlotte-Mecklenburg School System, Miami-Dade County Public Schools, the Tri-County Metropolitan Transportation District of Oregon, and the City of Columbia, have had some success with this approach. ${ }^{42}$

[^15]The Colorado Department of Transportation (DOT) has required DBE and Emerging Small Business (ESB) performance plans for bidders on design-build projects. Colorado DOT achieved $\$ 187$ million in DBE utilization on the $\$ 1.2$ billion T-REX project using this approach. ${ }^{43}$

## PURCHASING CARDS

A number of agencies promote the utilization of M/WBEs on purchasing cards. The Commonwealth of Virginia and the City of Hampton, Virginia, for example, require the purchasing card vendor to report on M/WBE utilization by agency staff. A number of universities, including the University of Wisconsin at Madison, target M/WBE vendors for transactions under \$5,000.

## OTHER SBE PRIME CONTRACTORS ASSISTANCE

North Carolina Department of Transportation (NCDOT) Fully Operated Rental Agreements. Under these arrangements, a firm may bid an hourly rate for using certain equipment and the necessary staff. In these field-let contracts, engineers select the firm with the appropriate equipment and the lowest bid rate. If that firm is not available, the engineers select the next lowest hourly rate. This rental agreement technique is used primarily to supplement NCDOT equipment in the event of NCDOT equipment failure or peak demand for NCDOT services. The rental agreement technique is attractive to small contractors because the typical small firm has much better knowledge of its own hourly costs than it does of the costs to complete an entire project.

Florida Department of Transportation (Florida DOT) Business Development Initiative. The Florida DOT has undertaken a stepped-up small business initiative with the following principle components:

- Reserving certain construction, maintenance, and professional services contracts for small businesses.
- Providing bid preference points to small businesses, and to firms offering subcontracts to small businesses on professional services contracts.
- Waiving performance and bid bond requirements for contracts under \$250,000.
- Using a modified pre-qualification process for certain construction and maintenance projects.


## I. 4 SMALL BUSINESS PROGRAM FOR SUBCONTRACTS

## SMALL BUSINESS PROJECT GOALS

Cook County Government (Illinois). In Cook County, the Compliance Contract Director (CCD), following the compilation and stringent review of the most current data that is feasibly and practicably available relative to the availability of MBEs and WBEs who have the capacity to successfully supply the relevant

[^16]goods and services, and in consultation with the User Agency, shall establish Project Specific Goals for construction, which shall be incorporated into each bid and RFP. ${ }^{44}$

Sacramento Municipal Utility District (SMUD). All prime bids that include 20 percent SBE subcontract utilization with SEED vendors will receive a 5 percent bid preference (capped at $\$ 250,000$ ) and 10 points on RFP evaluations. Proposals with less than 20 percent SBE subcontract utilization are awarded a 5 percent bid preference on the part of their bid that includes SBE subcontractors.

City of Charlotte, North Carolina. The City of Charlotte, which includes public utilities, has a comprehensive SBE program including SBE set asides and business assistance. ${ }^{45}$ In addition, the City sets department goals for SBE utilization, sets SBE goals on formal and informal contracts, and makes SBE utilization part of department performance review utilization numbers. The City has a waiver provisions for bidders, but has rejected bids for bidder noncompliance with the SBE program. Charlotte achieved 28.9 percent M/WBE subcontractor utilization in construction and 33.1 percent M/WBE subcontractor utilization in architecture and engineering through small business subcontracting goals. ${ }^{46}$

The State of Maryland has goals set for the DBE program for contracts funded by the USDOT. Individual DBE Program goals are only established for each of MDOT's federally funded business units; SHA, MAA, and MTA.

## I. 5 S/ M/ WBE INCLUSION IN FINANCIAL AND PROFESSIONAL SERVICES

New York Con Edison. In 2012, two MBE fund managers handled $\$ 490$ million for the U.S. small-cap and U.S. large-cap equity funds for the Con Ed pension fund. ${ }^{47}$ Con Edison has used minority insurance brokers for business travel/employee crime protection, liability and property insurance, lease obligations, and special liability insurance required by railroads.

Port Authority of New York and New Jersey. The Port Authority has encouraged the use of S/M/WBEs in finance through its financial advisory call-in program which targets small firms to serve as a pool of advisors for the Port Authority Chief Financial Officer. The financial advisors address debt issuance, financial advisory services, real estate transactions, and green initiatives. There are three to four firms in each of these categories in the financial advisory call-in program.

The Port Authority of New York and New Jersey's Specialty Insurance Program sets aside five sets of insurance policies to small brokers, and the Port's Financial Advisors Call In program pre-qualifies small

[^17]firms for task orders in financial advisory services, real estate transactions, debt issuance, and green initiatives.

## I.6 M/WBE PROJECT GOAL SETTING

North Carolina DOT. The NCDOT regulations emphasize that goals should be set on projects "determined appropriate by the Department [of Transportation]." ${ }^{48}$ Individual goals are set based on a project's geographic location, characteristics of the project, the percentage of the type of work typically performed by M/WBEs, the areas in which M/WBEs are known to provide services, and the goals set by the North Carolina General Assembly. ${ }^{49}$ The statues authorizing this program provides that, except to the extent the Secretary determines otherwise, not less than 10 percent of the authorized funds are to be expended with DBEs. The NCDOT M/WBE regulations specify (although they do not limit to) particular areas for M/WBE goals: clearing and grubbing, hauling and trucking, storm drainage, concrete and masonry construction, guardrail, landscaping, erosion control, reinforcing steel, utility construction, and pavement marking.

The NCDOT goal setting process begins with an engineering estimate of the project to determine what items might reasonably be subcontracted. Next estimates of the percentage of work that could be potentially performed by DBEs and M/WBEs are developed. ${ }^{50}$ These estimates are confidential and made available only to the Estimator (and staff), the Provisions Engineer in the Proposals and Contracts Section (and staff), and members of the DBE/M/WBE Committee at the DBE/M/WBE Committee meetings.

Next NCDOT looks at whether there are M/WBEs available based on the NCDOT DBE/M/WBE directory and the location of the project. The NCDOT Directory is a searchable database that classifies firms by location, prime contractor/subcontractor status and six-digit work type. ${ }^{51}$ The Goal Setting Committee is assisted in this process by Equal Employment Opportunity (EEO) Compliance staff in the Office of Civil Rights.

Prime contractors then submit documentation of good faith efforts to achieve the individual project goal. A statement of how they will make efforts to achieve the goal satisfies the good faith effort requirements.

The NCDOT Goal Setting Committee (in collaboration with the EEO Compliance staff) seeks to set goals relative to where there is interest, availability and capacity, beyond mere looking at the certification lists. NCDOT relies on the EEO Compliance staff to provide input on whether existing businesses are fully occupied. However, if EEO Compliance says M/WBEs are not fully occupied, but prime contractors submit evidence that M/WBEs are fully occupied (for example, with invoices), then NCDOT accepts those explanations.

[^18]As part of goal setting NCDOT regulations provide:

- A documented excessive subcontractor bid constitutes a basis for not subcontracting with an M/WBE.
- A documented record of poor experience constitutes a basis for not subcontracting with an M/WBE. ${ }^{52}$

In addition, a review of NCDOT DBE and M/WBE goals has been a regular topic at the Associated General Contractors (AGC)-DOT Joint Cooperative Committee meetings. ${ }^{53}$

City of Greensboro - Evaluation Preference - A Program Element that may be applied by the Goal Setting Committee to Construction, Professional Services, Goods and Other Services contracts that are to be awarded on a basis that includes factors other than lowest price (i.e., Best Value Contracting), and wherein responses that are submitted to the City by M/WBE firms may be awarded additional Points in the evaluation process in the scoring and ranking of their proposals against those submitted by other prime Respondents or Bidder / Participants

City of Greensboro - Contract Specification Review Goal Setting Committees assigned to review each prospective bid solicitation in advance of public release for purposes of considering the application of Program Elements to the bid solicitation shall also review proposed bid specifications for purposes of determining whether they are unnecessarily restrictive and whether they will likely adversely affect the ability of M/WBEs to compete. In making such determinations, the Goal Setting Committees shall especially focus upon unreasonably burdensome experience requirements, proprietary name brand specifications that preclude like grade and quality substitutions, and authorized dealership and distributorship requirements that effectively preclude participation of M/WBE firms. If the Goal Setting Committee determines one or more bid specifications are unnecessarily restrictive or have the effect of giving unfair advantage to incumbent firms, it shall direct the Originating Department to modify the solicitation accordingly to make it more inclusive. In the event no consensus can be reached by the Goal Setting Committee regarding amendment of the specifications to make them more inclusive, the final determination shall be made by the City Manager or his designee.

## I. 7 COMBINED RACE NEUTRAL AND RACE CONSCIOUS PROGRAMS

A number of agencies (Tampa, Florida; Hillsborough County, Florida; Jacksonville, Florida; Port Authority of New York and New Jersey; and State of Connecticut) combine race neutral and race conscious program features.

City of St. Paul, Minnesota. The City of Saint Paul Vendor Outreach program requires that contractors document their solicitation of bids from SBEs, MBEs, and WBEs, in addition to listing subcontracting

[^19]opportunities, attending pre-bid conferences and seeking assistance from M/WBE organizations. ${ }^{20}$ St. Paul achieved 10.4 percent SBE spending (out of $\$ 113.2$ million in total spending). In the SBE program, 62.5 percent of SBE spending went to WBEs, 21.2 percent to nonminority males and 16.3 percent to MBEs. ${ }^{54}{ }_{21}$

San Francisco Bay Area Rapid Transit (BART). BART's goal is to determine the race neutral and race conscious portions of a particular goal and to attain as much of the goal by race neutral means as possible. The basis for BART's methodology centers on the past level of race-neutral DBE attainment and the past level of race-conscious DBE attainment. The race neutral DBE attainment stems from either DBE prime contractors or from DBE participation as subcontractors on contracts without DBE goals.

City and County of Durham develop and use race- and gender-neutral measures to facilitate the participation of UBEs in city contracting activities. These measures may include, but are not limited to: Page 4 (1) Arranging solicitation times for the presentations of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of interested persons. (2) Providing timely information on contracting procedures, bid preparation, and specific contracting opportunities. (3) Holding pre-bid conferences, where appropriate, to explain the projects and to encourage potential bidders to solicit available UBEs as subcontractors or as joint venturers. (4) Adopting prompt payment procedures, including requiring by contract that contractors pay their direct subcontractors within a stated period of receipt of payment from the city, subject to appropriate exceptions. (5) Reviewing bonding and insurance requirements to eliminate unnecessary barriers to contracting with the city. (6) Maintaining a bidders list, consisting of all persons bidding on city prime contracts and bidding or quoting on city-funded subcontracts. (7) Providing technical assistance.

## I. 8 OUTREACH

New York Con Edison. Con Edison partnered with the National Minority Supplier Development Council's Corporate Plus Program to identify M/WBEs with the experience and capacity. Con Edison new vendors have provided services in nontraditional areas of opportunity, such as dry-ice blasting, real-estate, environmental remediation, gas pipe, and fuel. Con Edison also co-hosted Minority Supplier Development Council's Sustainability Summit to recruit M/WBEs who provide energy-efficient and environmentally friendly goods and services. Finally, Con Edison supported the Construction Mentorship Program, a ninemonth executive education program for M/WBEs. Con Edison reported spending over $\$ 1.5$ billion with M/WBEs from 2008 to 2012.

Florida State Minority Supplier Development Council (FSMSDC). In 2018, FSMSDC in conjunction with various private and public organizations will host its annual Business Expo designed to provide minorityowned and small business enterprises with technical assistance as well as networking opportunities. The Business Expo features hundreds of business appointments, power-packed workshops, and industry group gathering. Programming includes the following:

1. Loan-A-Thon Financing for Business Growth: Vendors can meet one-on-one with bankers and alternative lenders.
2. Elevator Pitch Competition
3. Buyers and Sellers Lounge
4. MasterClasses
5. CEO Forum
6. B2B Trade Fair
7. Youth Entrepreneur Workshops

## I. 9 SERVICE-DISABLED VETERANS/VETERANS PROGRAMS

Miami-Dade County, Government. Sec. 2-8.5.1 of Miami-Dade County's municipal ordinances establishes procedures to provide preferences to Local Certified Veteran Business Enterprises in County contracts. ${ }^{55}$

In Miami, a Local Certified Veteran Business Enterprise that submits a bid for a contract shall receive a bid preference of five percent of the bid price. Further a local VBE that submits a proposal in response to an RFP, RFQ, RFI, or a Notice to Professional Consultants that assigns weights to evaluation and selection criteria shall receive an additional five percent of the evaluation points scored on the technical portion of such bidder's proposal.

The City University of New York (CUNY). Article 17-B of the NYS Executive Law and Parts 252 of Title 9 of the New York Codes, Rules and Regulations require CUNY along with State Agencies and Authorities, and the vendors and contractors with whom they do business, to make good faith efforts to procure contracted labor, services (including legal, financial, and professional services), supplies, equipment, and materials from New York State certified Service Disabled Veteran-Owned Businesses. ${ }^{56}$ The participation goal for SDVOBs are set by Executive Law Article 17-B at 6\%.

State of Tennessee. The State of Tennessee defines a "Service-disabled veteran" as any person who served honorably on active duty in the armed forces of the United States with at least a twenty percent (20\%) disability that is service-connected, meaning that such disability was incurred or aggravated in the line of duty in the active military, naval or air service;

The State further defines as "Service-disabled veteran-owned business" as:

A veteran-owned business that is a continuing, independent, for profit business located in the state that performs a commercially useful function, and:

[^20](A) Is at least fifty-one percent (51\%) owned and controlled by one (1) or more service-disabled veterans;
(B) In the case of a business solely owned by one (1) service-disabled veteran and such person's spouse, is at least fifty percent ( $50 \%$ ) owned and controlled by the service-disabled veteran; or
(C) In the case of any publicly owned business, at least fifty-one percent (51\%) of the stock of which is owned and controlled by one (1) or more service-disabled veterans and whose management and daily business operations are under the control of one (1) or more service-disabled veterans; ${ }^{57}$
T.C.A. §12-3-1106(b) requires agencies and departments to establish agency internal goals for participation of veteran owned business enterprises.

City of Gainesville. In 2016, to help Service-Disabled Veteran Businesses be more successful, the City of Gainesville adopted the Small and Service-Disabled Veteran Business Program. The program provides significant opportunities for qualified local small businesses to participate on a nondiscriminatory basis in all aspects of the City's contracting and procurement programs as well as providing other needed business services. The program provides SDVB's the following:

1. Listing in the City's online directory of certified firms;
2. Technical assistance in preparing bids;
3. Bid documents available at no cost;
4. Purchases more than $\$ 5,000$ and less than $\$ 50,000$ require three written quotes and require one of the quotes to come from a certified small and/or service-disabled veteran business, if they exist; and
5. The City's procurement policy includes points at the competitive level (above $\$ 50,000$ ) if you are a certified small and/or service-disabled veteran business ( $5 \%$ of total points).

City of Orlando. Under Florida statutes Section 295.187 a "veteran business enterprise" (VBE) is defined as:

An independently owned and operated business:

1. Employs 200 or fewer permanent full-time employees;
2. Together with its affiliates has a net worth of $\$ 5$ million or less or, if a sole proprietorship, has a net worth of $\$ 5$ million or less including personal and business investments;
3. Is organized to engage in commercial transactions;
4. Is domiciled in this state;
5. Is at least 51 percent owned by one or more wartime veterans or service-disabled veterans; and

[^21]6. the management and daily business operations of which are controlled by one or more wartime veterans or service-disabled veterans or, for a service-disabled veteran having a permanent and total disability, by the spouse or permanent caregiver of the veteran. ${ }^{58}$

For solicitations by competitive sealed bidding and requests for quotations the City of Orlando provides the following bid incentives for VBEs:

1. Fifteen percent ( $15 \%$ ) on bids up to $\$ 1,500$;
2. Ten percent ( $10 \%$ ) non bids from $\$ 1,500.01$ to $\$ 19,999.99$;
3. Nine percent (9\%) on bids from $\$ 20,000$ to $\$ 39,999.99$;
4. Eight percent (8\%) on bids from $\$ 40,000$ to $\$ 59,999.99$;
5. Seven percent(7\%) on bids from $\$ 60,000$ to $\$ 79,999.99$;
6. Six percent (6\%)on bids from $\$ 80,000$ to $\$ 99,999.99$;
7. Five percent (5\%) on bids from $\$ 100,000$ to $\$ 149,999.99$;
8. Four percent(4\%) on bids from $\$ 150,000$ to $\$ 249,999.99$;
9. Three percent (3\%)on bids from $\$ 250,000$ to $\$ 499,999.99$;
10. Two percent (2\%)on bids from $\$ 500,000$ to $\$ 999,999.99$ and
11. One percent ( $1 \%$ ) on bids for $\$ 1,000,000$ or more. ${ }^{59} 30$

## I. 10 PROGRAM SUNSET

City and County of Durham -- Program review and sunset. (a) The city manager shall make an annual report to the city council, detailing the city's performance under the program department by department for the preceding fiscal year. (b) The city council will review this report, including the annual participation goals and the city's progress towards meeting the annual participation goals and eliminating discrimination in its marketplace, and revise the program as necessary to meet legal and program requirements. (c) If the city council finds that the objectives of the program have been achieved, the city shall discontinue the program. (d) The program shall continue in effect until 11:59 p.m. on March 31, 2021 at which time it shall be deemed repealed without further action by the city council.

City of Greensboro - the program plan includes a clause to conduct a disparity study every five years and after the review of the findings, the City Council can propose modifications of, or sunset of, the MWBE Program.

[^22]
[^0]:    ${ }^{1}$ Croson, 488 U.S. at 492.
    ${ }^{2}$ Coral Construction, 941 F.2d at 922 (citing Croson, 488 U.S. at 492) (emphasis added).
    ${ }^{3}$ See Croson; see generally I. Ayres and F. Vars, "When Does Private Discrimination Justify Public Affirmative Action?" 98 Columbia Law Review 1577 (1998).
    ${ }^{4}$ Concrete Works IV, 321 F.3d at 984-85.
    ${ }^{5}$ Adarand v. Slater, 228 F.3d at 1169-70 (10 ${ }^{\text {th }}$ Cir. 2000).

[^1]:    ${ }^{6}$ Concrete Works IV, 321 F.2d at 977. The district court rejected evidence of credit market discrimination as adequate to provide a factual predicate for an M/WBE program. Concrete Works v. City and County of Denver, 86 F. Supp. 2d 1042 (D. Colo. 2000) (Concrete Works I).
    ${ }^{7}$ Adarand v. Slater, 228 F.3d 1147 (10th Cir. 2000).
    ${ }^{8} \mathrm{Id}$. at 977.
    ${ }^{9}$ H.B. Rowe, Inc. v. Tippet, 589 F.Supp. 2d 587 (ED NC 2008). The court, however, was very brief in discussing what factors in the study accounted for its ruling. The program was subsequently found to be unconstitutional as applied to women. H.B. Rowe, Inc. v. Tippet, 615 F. 3 d 233 (4 $4^{\text {th }}$ Cir. 2010).

[^2]:    ${ }^{10}$ These represent the most recent available data provided through the SBO program and were released in 2016.
    ${ }^{11}$ Sales includes total shipments, receipts, revenue, or business done by the firm.
    ${ }^{12}$ The two-digit NAICS code level was utilized as those codes are the most prevalent level across all the 2012 SBO data.

[^3]:    ${ }^{13}$ All firms, a compilation of employer firms and non-employer firms, were examined since non-employer firms can provide services at the subcontractor/subconsultant level, as well hire independent contractors to increase capacity.
    ${ }^{14}$ Employer firms include firms with payroll at any time during 2012.

[^4]:    ${ }^{15}$ Based on all sectors (NAICS codes 00), there was a total of 131,277 firms (all firms) in the Winston-Salem area marketplace compared to 805,985 for the State of North Carolina marketplace. Therefore, the following results by NAICS code may present data (such as the number of firms, firm sales) lower than the State of North Carolina marketplace.
    ${ }^{16}$ All firms include firms with and without payroll at any time during 2012.
    ${ }^{17}$ Employer firms include firms with payroll at any time during 2012.

[^5]:    ${ }^{18}$ Concrete Works v. City and County of Denver, 321 F. 3950 (10 th Cir. 2003).
    ${ }^{19}$ See Journal of Econometrics, Vol. 61, Issue 1, devoted entirely to the econometrics of labor market discrimination and segregation.
    ${ }^{20}$ Minority groups here refers to African American, Asian Americans, Hispanic Americans and Native Americans.

[^6]:    ${ }^{21}$ Logistical regression, or logit, models generate predicted probabilities that are almost identical to those calculated by a probit procedure, used in Concrete Works v. City and County of Denver case. Logit, however, has the added advantage of dealing more effectively with observations at the extremes of a distribution. For a complete explanation, see Interpreting Probability Models (T.F. Liao, Text 101 in the Sage University series). ${ }^{22}$ ACS PUMS data does not include county geographic breaks so the Winston-Salem, NC Market Area was used as it is similar to the relevant market area.
    ${ }^{23}$ Due to inadequate sample size for all races in the architecture and engineering PUMS 2015 data, the architecture and engineering categories were merged with the professional services category.

[^7]:    ${ }^{24}$ The variables used in this analysis were modeled after those incorporated in the same analysis from Concrete Works v. City and County of Denver.

[^8]:    ${ }^{25}$ Statistically significant is the likelihood that a relationship between two or more variables is caused by something other than random chance. MGT incorporates the statistical $95 \%$ confidence interval. This means that if the same population is sampled on numerous occasions and interval estimates are made on each occasion, the resulting intervals would bracket the true population parameter in approximately $95 \%$ of the cases.

[^9]:    ${ }^{26}$ In order to provide an accurate and complete regression analysis some responses had to be removed. For example, if a person surveyed did not answer questions on revenue, race, or other variables in the model, the response was removed. This number reflects those changes.
    ${ }^{27}$ Becker, Gary. 1971, second edition. "The Economics of Discrimination." The University of Chicago Press, Chicago, p. 167.

[^10]:    28 "Race and Gender Discrimination Across Urban Labor Markets," 1996. Ed. Susan Schmitz. Garland Publishers, New York, New York, p. 184.
    ${ }^{29}$ Gunderson, Morley. 1994. "Male-Female Wage Differentials and Policy Responses." In "Equal Employment Opportunity: Labor Market Discrimination and Public Policy," pp. 207-227.
    30 "Federal Acquisition Regulations for Small Disadvantaged Businesses; Notice and Rules." June 30, 1998. Memorandum for Office of Federal Procurement Policy, Economic and Statistics Administration, Department of Commerce.
    ${ }^{31}$ Bates, Timothy. "The Declining Status of Minorities in the New York City Construction Industry." Reprinted from Economic Development Quarterly, Vol. 12, No. 1, February 1998, pp. 88-100.

[^11]:    ${ }^{32}$ Multicollinearity refers to excessive intercorrelation among the independent variables in a multiple regression model, which obscures the effect of each on the dependent variable to the extent that they behave as one variable and may measure two highly correlated components of the same theoretical factor. Outliers are observations in a data set that are substantially different from the bulk of the data, perhaps because of a data entry error or some other cause that would reasonably explain a data anomaly.

[^12]:    33 MDCPS School Board Policy 6320.06.

[^13]:    ${ }^{34}$ Section 2.1 of the Charlotte Business Inclusion Program Policy.
    ${ }^{35}$ See, e.g., National Women's Business Council, 2006 NWBC Best Practices Guide: Contracting with Women (June 2006); R. Auskalnis, C. Ketchum and C. Carter, Purchasing From Minority Business Enterprise: Best Practices, Center For Strategic Supply Research 1995). OCII Small Business Enterprise Policy Paragraph IV (B). Adopted November 16, 2004. Amended and Restated July 21,2009. Second Amendment July 7, 2015. ${ }^{36}$ Metropolitan Sewer District of Greater Cincinnati Small Business Enterprise Program Rules and Guidelines Section 4(A).

[^14]:    ${ }^{37}$ Metropolitan Sewer District of Greater Cincinnati Small Business Enterprise Program Rules and Guidelines Section 4(F).
    ${ }^{38}$ N.J.A.C. 17:13.
    ${ }^{39}$ (Md. Code Ann., State Fin. \& Proc. Art. §14-501 - 14-505 (2011 Supp.))
    ${ }^{40}$ City of St. Petersburg Municipal Code Section 2-239 to 2-246 of Division 4, Article 5, Chapter 2.

[^15]:    ${ }^{41}$ City of Atlanta Ordinance Sec. 2-1450 and Sec. 2-1451.
    42 Federal Transit Administration, Lessons Learned \#45 (May 2002). www.fta.dot.gov/library/program/II/man/II45.html.

[^16]:    ${ }^{43}$ D. Wilson, Colorado Department of Transportation Statewide Transportation Disparity Study, 2009, at 3-20.

[^17]:    ${ }^{44}$ Cook County Ord. No. 14-1232, 3-12-2014; Ord. No. 16-3598, 6-29-2016; Ord. No. 17-3217, 6-7-2017.
    ${ }^{45}$ A description of the Charlotte SBE program can be found at www.charmeck.org/Departments/Economic+Development/Small+Business/Home.htm.
    ${ }^{46}$ MGT, The City of Charlotte Update Disparity Study, 2011, Exhibit 7-1.
    ${ }^{47}$ New York Con Edison, Diversity Annual Report, 2012.

[^18]:    48 19A NCAC 02D.1108(a).
    ${ }^{49}$ 19A NCAC 02D.1108(a).
    50 NCDOT, Division of Highways, Roadway Design and Design Services Unit, Policy and Procedure Manual, Chapter 10, at 4.
    ${ }^{51}$ http://apps.dot.state.nc.us/constructionunit/directory/.

[^19]:    52
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[^20]:    55 Ord. No. 09-68, § 1, 9-1-09; Ord. No. 15-24, § 1, 4-21-15.
    ${ }^{56}$ CUNY Administrative Procedures \& Guidance, University Office of Budget and Finance-January 2018.

[^21]:    ${ }^{57}$ T.C.A. §12-3-1102

[^22]:    58 Fl Stat Sec.295.187(c). Florida Veteran Business Enterprise Opportunity Act.
    59 Orlando Code, Chapter 7, Article XI, Sec. 7.1102(C).

