**APPENDIX D**

**2019 NSCG**

 **Coefficient of Variation (CV) Target**

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| **Table 1. 2019 NSCG Desired CV Levels - Broad Occupation by Demographic Group** |  |  |  |  |  |
| **BROAD OCCUPATION** | **DEMOGRAPHIC GROUP** |
| **USCAB or High Probability** **of U.S. Earned Degree** | **Low Probability****of U.S. Earned Degree** |
| **Hispanic** | **Black** | **Asian** | **AIAN/NHPI** | **Disabled** | **White** | **Hispanic** | **Asian** | **Residual** |
| **Mathematician** | 8.1% | 6.6% | 5.0% | 11.3% | 8.1% | 2.9% | 19.7% | 4.4% | 6.4% |
| **Computer Scientists** | 8.0% | 10.0% | 9.0% | 16.0% | 18.4% | 2.5% | 22.0% | 6.6% | 6.4% |
| **Life Scientists** | 11.1% | 11.8% | 12.1% | 25.8% | 15.5% | 4.0% | 21.0% | 6.9% | 7.3% |
| **Physical Scientists** | 10.0% | 12.0% | 11.0% | 18.0% | 20.4% | 4.5% | 24.0% | 8.6% | 8.4% |
| **Social Scientists, Except Psychologists** | 13.0% | 14.6% | 15.5% | 30.0% | 21.1% | 5.5% | 30.0% | 17.8% | 15.6% |
| **Psychologists** | 13.3% | 18.7% | 15.8% | 25.0% | 16.1% | 5.1% | 24.1% | 30.0% | 21.9% |
| **Engineers** | 5.6% | 8.0% | 4.0% | 15.3% | 7.8% | 4.0% | 12.4% | 5.0% | 6.7% |
| **Health-Related Occupations** | 11.3% | 16.7% | 13.8% | 23.0% | 14.1% | 3.1% | 22.1% | 28.0% | 19.9% |
| **S&E-Related non-Health Occupations** | 11.3% | 16.7% | 13.8% | 23.0% | 14.1% | 3.1% | 22.1% | 28.0% | 19.9% |
| **Postsecondary teacher, S&E FOD** | 6.2% | 6.9% | 6.3% | 14.9% | 8.9% | 4.0% | 15.7% | 6.6% | 7.5% |
| **Postsecondary teacher, Non-S&E FOD** | 20.7% | 15.9% | 26.1% | 29.2% | 17.5% | 5.4% | 29.5% | 20.3% | 11.7% |
| **Secondary Teacher, S&E FOD** | 3.4% | 3.1% | 3.7% | 7.3% | 4.8% | 4.0% | 8.9% | 3.9% | 4.8% |
| **Secondary teacher, Non-S&E** | 20.7% | 15.9% | 26.1% | 29.2% | 17.5% | 5.4% | 29.5% | 20.3% | 11.7% |
| **Non-S&E High Interest Occup, S&E FOD** | 3.2% | 4.4% | 2.4% | 8.1% | 4.3% | 2.4% | 6.6% | 2.9% | 3.8% |
| **Non-S&E Low Interest Occup, S&E FOD** | 3.7% | 3.4% | 4.0% | 7.6% | 5.1% | 4.3% | 9.2% | 4.2% | 5.1% |
| **Non-S&E Occupations, Non-S&E FOD** | 20.7% | 15.9% | 26.1% | 29.2% | 17.5% | 5.4% | 29.5% | 20.3% | 11.7% |
| **Not Working, S&E FOD** | 6.8% | 6.9% | 6.1% | 13.2% | 6.2% | 2.8% | 16.3% | 7.3% | 7.2% |
| **Not Working, Non-S&E FOD** | 26.0% | 24.3% | 19.2% | 30.0% | 13.5% | 8.6% | 30.0% | 17.0% | 12.0% |
| *Notes:* |  |  |  |  |  |  |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |  |  |  |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |  |  |  |  |  |
|  *(3) USCAB = U.S. Citizen at Birth* |  |  |  |  |  |  |  |  |  |
|  *(4) AIAN/NHPI = American Indian, Alaska Native / Native Hawaiian, Pacific Islander* |  |  |  |  |  |  |
|  *(5) S&E = Science and Engineering* |  |  |  |  |  |  |  |  |  |
|  *(6) FOD = Field of Degree* |  |  |  |  |  |  |  |  |  |

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| **Table 2. 2019 NSCG Desired CV Levels - Broad Occupation by Highest Degree Level** |
| **BROAD OCCUPATION** | **HIGHEST DEGREE LEVEL** |
| **Bachelor's** | **Master's** | **Doctorate** |
| **Mathematician** | 2.7% | 3.4% | 10.7% |
| **Computer Scientist** | 3.5% | 3.9% | 7.7% |
| **Life Scientists** | 4.5% | 5.1% | 6.6% |
| **Physical Scientists** | 5.5% | 5.9% | 8.9% |
| **Social Scientists, Except Psychologists** | 6.4% | 6.9% | 12.5% |
| **Psychologists** | 15.4% | 4.9% | 16.4% |
| **Engineers** | 3.0% | 4.0% | 9.7% |
| **Health-Related Occupations** | 13.4% | 2.9% | 14.4% |
| **S&E-Related non-Health Occupations** | 13.4% | 2.9% | 14.4% |
| **Postsecondary Teacher, S&E FOD** | 3.0% | 4.0% | 14.7% |
| **Postsecondary Teacher, Non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Secondary Teacher, S&E FOD** | 4.0% | 4.0% | 7.3% |
| **Secondary teacher, non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Non-S&E High Interest Occupations, S&E FOD** | 1.7% | 2.2% | 5.2% |
| **Non-S&E Low Interest Occupations, S&E FOD** | 4.3% | 4.3% | 7.6% |
| **Non-S&E Occupation, Non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Not Working, S&E FOD** | 4.0% | 5.0% | 13.0% |
| **Not Working, Non-S&E FOD** | 13.4% | 15.0% | 19.0% |
| *Notes:* |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |
|  *(3) S&E = Science and Engineering* |  |  |  |
|  *(4) FOD = Field of Degree* |  |  |  |
|  *(5) The Bachelor's degree column includes respondents with a Professional degree* |  |

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| **Table 3. 2019 NSCG Desired CV Levels - Detailed Occupation by Highest Degree Level** |
| **DETAILED OCCUPATION** | **HIGHEST DEGREE LEVEL** |
| **Bachelor's** | **Master's** | **Doctorate** |
| **Mathematician** | 2.7% | 3.4% | 10.7% |
| **Computer Scientist** | 3.5% | 3.9% | 7.7% |
| **Biological/medical scientists** | 5.5% | 6.0% | 7.0% |
| **Agriculture and other life scientists** | 5.5% | 5.8% | 6.7% |
| **Chemists, except biochemists** | 3.0% | 4.0% | 12.3% |
| **Physicists and other physical scientists**  | 3.0% | 4.0% | 13.0% |
| **Psychologists** | 15.4% | 4.9% | 16.4% |
| **Economics**  | 3.1% | 4.0% | 12.0% |
| **Other social scientists**  | 3.0% | 4.0% | 13.4% |
| **Chemical engineers**  | 3.0% | 4.0% | 25.8% |
| **Civil and architectural engineers** | 3.0% | 4.0% | 30.0% |
| **Electrical and computer engineers**  | 3.0% | 4.0% | 14.2% |
| **Mechanical engineers** | 3.0% | 4.0% | 27.2% |
| **Other engineers** | 6.0% | 8.0% | 14.9% |
| **Health-Related Occupations** | 13.4% | 2.9% | 14.4% |
| **S&E-Related non-Health Occupations** | 13.4% | 2.9% | 14.4% |
| **Postsecondary teacher, S&E FOD** | 3.0% | 4.0% | 14.7% |
| **Postsecondary teacher, Non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Secondary Teacher, S&E FOD** | 4.0% | 4.0% | 7.3% |
| **Secondary Teacher, Non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Non-S&E High Interest Occupations, S&E FOD** | 1.7% | 2.2% | 5.2% |
| **Non-S&E Low Interest Occupations, S&E FOD** | 4.3% | 4.3% | 7.6% |
| **Non-S&E Occupation, Non-S&E FOD** | 20.5% | 10.0% | 14.0% |
| **Not Working, S&E FOD** | 4.0% | 5.0% | 13.0% |
| **Not Working, Non-S&E FOD** | 13.4% | 15.0% | 19.0% |
| *Notes:* |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |  |
|  *(3) S&E = Science and Engineering* |  |  |  |
|  *(4) FOD = Field of Degree* |  |  |  |
|  *(5) The Bachelor's degree column includes respondents with a Professional degree* |  |

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| **Table 4. 2019 NSCG Desired CV Levels for Young Graduate Oversampling Strata - Broad Occupation by Demographic Group** |  |
| **BROAD OCCUPATION** | **DEMOGRAPHIC GROUP** |
| **USCAB or High Probability of U.S. Earned Degree** | **Low Probability of U.S. Earned Degree** |
| **Hispanic** | **Black** | **Asian** | **AIAN/NHPI** | **Disabled** | **White** | **Hispanic** | **Asian** | **Residual** |
| **Mathematician** | 43.8% | 49.8% | 18.6% | 72.7% | 98.2% | 24.3% | 100.0% | 100.0% | 100.0% |
| **Computer Scientists** | 15.6% | 14.4% | 6.0% | 25.0% | 27.0% | 5.1% | 100.0% | 100.0% | 100.0% |
| **Life Scientists** | 20.2% | 23.0% | 15.9% | 45.4% | 68.8% | 8.3% | 100.0% | 100.0% | 100.0% |
| **Physical Scientists** | 30.7% | 34.6% | 18.2% | 46.6% | 41.6% | 9.8% | 100.0% | 100.0% | 100.0% |
| **Social Scientists, Except Psychologists** | 33.2% | 32.4% | 20.0% | 63.0% | 100.0% | 12.1% | 100.0% | 100.0% | 100.0% |
| **Psychologists** | 24.4% | 40.9% | 25.5% | 64.6% | 74.0% | 13.6% | 100.0% | 100.0% | 100.0% |
| **Engineers** | 11.4% | 12.1% | 6.4% | 19.8% | 27.5% | 3.7% | 100.0% | 100.0% | 100.0% |
| **Health-Related Occupations** | 10.1% | 9.8% | 9.5% | 15.2% | 18.2% | 3.1% | 100.0% | 100.0% | 100.0% |
| **S&E-Related non-Health Occupations** | 10.8% | 12.3% | 13.9% | 22.3% | 24.6% | 5.8% | 100.0% | 100.0% | 100.0% |
| **Postsecondary teacher, S&E FOD** | 17.1% | 21.1% | 13.3% | 31.7% | 38.0% | 8.6% | 100.0% | 100.0% | 100.0% |
| **Secondary Teacher, S&E FOD** | 19.9% | 21.7% | 24.2% | 39.2% | 69.1% | 9.7% | 100.0% | 100.0% | 100.0% |
| **Non-S&E High Interest Occup, S&E FOD** | 10.8% | 11.0% | 6.8% | 20.5% | 25.6% | 4.6% | 100.0% | 100.0% | 100.0% |
| **Non-S&E Low Interest Occup, S&E FOD** | 7.5% | 7.8% | 7.0% | 16.2% | 20.6% | 2.9% | 100.0% | 100.0% | 100.0% |
| **Not Working, S&E FOD** | 28.8% | 34.7% | 12.8% | 94.8% | 51.3% | 21.0% | 100.0% | 100.0% | 100.0% |
| *Notes:* |  |  |  |  |  |  |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |  |  |  |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |  |  |  |  |  |
|  *(3) USCAB = U.S. Citizen at Birth* |  |  |  |  |  |  |  |  |  |
|  *(4) AIAN/NHPI = American Indian, Alaska Native / Native Hawaiian, Pacific Islander* |  |  |  |  |  |  |
|  *(5) S&E = Science and Engineering* |  |  |  |  |  |  |  |  |  |
|  *(6) FOD = Field of Degree* |  |  |  |  |  |  |  |  |  |

**Table 5. 2019 NSCG Desired CV Levels for Young Graduate Oversampling Strata - Broad Occupation by Highest Degree Level**

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| **BROAD OCCUPATION** | **HIGHEST DEGREE LEVEL** |  |
| **Bachelor's** | **Master's** |  |
| **Mathematician** | 24.6% | 14.2% |  |
| **Computer Scientist** | 4.6% | 4.4% |  |
| **Life Scientists** | 10.1% | 8.1% |  |
| **Physical Scientists** | 12.0% | 8.8% |  |
| **Social Scientists, Except Psychologists** | 12.8% | 9.8% |  |
| **Psychologists** | 20.5% | 11.4% |  |
| **Engineers** | 2.7% | 3.7% |  |
| **Health-Related Occupations** | 3.0% | 3.7% |  |
| **S&E-Related non-Health Occupations** | 5.0% | 6.7% |  |
| **Postsecondary Teacher, S&E FOD** | 9.2% | 7.0% |  |
| **Secondary Teacher, S&E FOD** | 9.5% | 12.0% |  |
| **Non-S&E High Interest Occupations, S&E FOD** | 3.8% | 6.4% |  |
| **Non-S&E Low Interest Occupations, S&E FOD** | 2.4% | 7.2% |  |
| **Not Working, S&E FOD** | 12.5% | 15.5% |  |
| *Notes:* |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |  |
|  *(3) S&E = Science and Engineering* |  |  |  |
|  *(4) FOD = Field of Degree* |  |  |  |
|  *(5) The Bachelor's degree column includes respondents with a Professional degree* |  |  |

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| **Table 6. 2019 NSCG Desired CV Levels for Young Graduate Oversampling Strata - Detailed Occupation by Highest Degree Level** |
| **DETAILED OCCUPATION** | **HIGHEST DEGREE LEVEL** |  |  |
| **Bachelor's** | **Master's** |  |  |
| **Mathematician** | 24.6% | 14.2% |  |  |
| **Computer Scientist** | 4.6% | 4.4% |  |  |
| **Biological/medical scientists** | 10.4% | 8.8% |  |  |
| **Agriculture and other life scientists** | 25.9% | 18.7% |  |  |
| **Chemists, except biochemists** | 14.5% | 18.9% |  |  |
| **Physicists and other physical scientists**  | 18.4% | 10.3% |  |  |
| **Psychologists** | 20.5% | 11.4% |  |  |
| **Economics**  | 37.3% | 22.6% |  |  |
| **Other social scientists**  | 14.1% | 11.0% |  |  |
| **Chemical engineers**  | 9.3% | 13.8% |  |  |
| **Civil and architectural engineers** | 6.9% | 7.6% |  |  |
| **Electrical and computer engineers**  | 8.9% | 10.8% |  |  |
| **Mechanical engineers** | 5.9% | 8.9% |  |  |
| **Other engineers** | 6.2% | 5.9% |  |  |
| **Health-Related Occupations** | 3.0% | 3.7% |  |  |
| **S&E-Related non-Health Occupations** | 5.0% | 6.7% |  |  |
| **Postsecondary teacher, S&E FOD** | 9.2% | 7.0% |  |  |
| **Secondary Teacher, S&E FOD** | 9.5% | 12.0% |  |  |
| **Non-S&E High Interest Occupations, S&E FOD** | 3.8% | 6.4% |  |  |
| **Non-S&E Low Interest Occupations, S&E FOD** | 2.4% | 7.2% |  |  |
| **Not Working, S&E FOD** | 12.5% | 15.5% |  |  |
| *Notes:* |  |  |  |  |
|  *(1) CV = Coefficient of Variation* |  |  |  |  |
|  *(2) The total row and column CVs are approximated by the assumption of strata independence.* |  |  |
|  *(3) S&E = Science and Engineering* |  |  |  |  |
|  *(4) FOD = Field of Degree* |  |  |  |  |
|  *(5) The Bachelor's degree column includes respondents with a Professional degree* |  |  |  |