

APPENDIX D

2019 NSCG

Coefficient of Variation (CV) Target

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

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

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

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
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- (3) USCAB = U.S. Citizen at Birth
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- (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

| 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

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