LOW-INCOME STUDENTS IN WEST VIRGINIA:
Findings from the 2010 Senior High School Opinions Survey

Key Findings

- About 25 percent of respondents reported coming from families that earned $30,000 or less per year. About 27 percent reported annual family incomes of $60,000 or more.

- Students whose families earned $30,000 or less reported being less prepared for college as measured by high school GPA, ACT scores, curriculum taken, and math courses. For example, about 50 percent of the lowest income students reported taking a four-year college preparatory curriculum compared to 75 percent of the highest income students.

- College aspirations differed by income level for the Class of 2010. Overall, a higher proportion (88%) of students from families with incomes greater than $60,000 planned to attend college than students from lower income families (about 79%).

- Brochures, college planning websites, CFWV.com, and the radio were reported as important or very important sources of information by lower income students more often than by higher income students. Parents and guardians were the most commonly cited influence across all income groups.

- The lowest income students cited affordability most often as an important factor in their choice of college. The highest income students listed academic offerings most often as an important factor in college choice.

Overview

In spring 2010, a sample of West Virginia’s seniors was asked to respond to a series of questions about their high school experiences and their plans after graduation. The questions were intended to provide teachers, principals, counselors, faculty, administrators, and policy makers across the state with the most current snapshot of the students’ perspectives, experiences, and plans as they transitioned to life beyond high school.

The sample was designed to be representative of the seniors enrolled in public high schools in 2010. In addition, because of considerable variation in the size of high schools, the sample was drawn to be representative across both small and large schools. A random sample...
of high schools was drawn from the 117 high schools across the state. In addition, all GEAR UP and GEAR UP comparison schools were purposefully sampled, resulting in a final sample of 61 schools. In total, 47 of the 61 (about 77%) high schools had respondents. Responses are representative of the 18,472 high school seniors enrolled in 2010. A detailed description of the survey and methods used for this report can be found in the methodological appendix. All frequencies reported here represent weighted distributions.

**Academic Preparation**

Students were asked a series of questions to get a sense of their academic preparation for college-level coursework. Overall, the lowest income students (those who reported family incomes of $30,000 or less) were more likely to report lower high school GPAs and ACT scores than higher income peers (See Table 1). In addition, lower income students were less likely to report taking a four-year college preparatory curriculum and also reported taking fewer high level courses. For example, whereas nearly 22 percent of the highest income students reported taking calculus in high school, just under 6 percent of the lowest income students did the same.

**Table 1: Academic Preparation**

<table>
<thead>
<tr>
<th></th>
<th>$30,000 or less</th>
<th>$30,001-$60,000</th>
<th>&gt; $60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Column %</td>
<td>Column %</td>
<td>Column %</td>
</tr>
<tr>
<td>Cumulative High School GPA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>16.2</td>
<td>15.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Less than 2.0</td>
<td>9.1</td>
<td>8.2</td>
<td>6.7</td>
</tr>
<tr>
<td>2.0 to 2.99</td>
<td>21.7</td>
<td>16.4</td>
<td>12.7</td>
</tr>
<tr>
<td>3.0 or Higher</td>
<td>53.0</td>
<td>59.6</td>
<td>67.3</td>
</tr>
<tr>
<td>High School Curriculum Path</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional (prep 4-year college)</td>
<td>50.3</td>
<td>64.0</td>
<td>75.8</td>
</tr>
<tr>
<td>Skilled (prep 2-year college)</td>
<td>27.8</td>
<td>23.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Entry (prep work-force)</td>
<td>7.9</td>
<td>5.3</td>
<td>5.9</td>
</tr>
<tr>
<td>Unsure</td>
<td>14.0</td>
<td>7.0</td>
<td>5.7</td>
</tr>
<tr>
<td>ACT Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not reported</td>
<td>51.2</td>
<td>38.9</td>
<td>26.7</td>
</tr>
<tr>
<td>Bottom Quartile, &lt;19</td>
<td>15.5</td>
<td>12.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Third Quartile, 19-21</td>
<td>15.8</td>
<td>14.8</td>
<td>16.4</td>
</tr>
<tr>
<td>Second Quartile, 22-23</td>
<td>6.5</td>
<td>13.5</td>
<td>14.0</td>
</tr>
<tr>
<td>Top Quartile, &gt;=24</td>
<td>11.0</td>
<td>20.0</td>
<td>31.9</td>
</tr>
<tr>
<td>Highest Math Level Completed Successfully</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than Algebra 1</td>
<td>1.5</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Algebra 1</td>
<td>3.0</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Geometry</td>
<td>12.5</td>
<td>5.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Algebra 2</td>
<td>41.8</td>
<td>38.2</td>
<td>27.6</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>22.9</td>
<td>27.0</td>
<td>25.3</td>
</tr>
<tr>
<td>Pre-calculus</td>
<td>12.5</td>
<td>15.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Calculus or above</td>
<td>5.8</td>
<td>11.6</td>
<td>21.8</td>
</tr>
</tbody>
</table>

*Differences statistically significant at the 95% confidence level.*
**College Aspirations**

The level of self-reported family income was significantly related to students’ aspirations for college as well as what steps they had taken to attend. Lower income students tended to report thinking about college attendance later in their education than higher income students (See Table 2). About 54 percent of higher income students reported first considering college attendance in elementary school compared to nearly 33 percent of lowest income students.

Overall, a higher proportion (88%) of students from families with incomes greater than $60,000 planned to attend college than students from lower income families (about 79%). Higher income students were more likely to report that they had applied for college already and had also visited a college campus during their senior year.

**Table 2: College Aspirations**

<table>
<thead>
<tr>
<th></th>
<th>$30,000 or less</th>
<th>$30,001-$60,000</th>
<th>&gt; $60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Column %</td>
<td>Column %</td>
<td>Column %</td>
</tr>
<tr>
<td>First considered attending college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>32.5</td>
<td>43.3</td>
<td>54.1</td>
</tr>
<tr>
<td>Middle school</td>
<td>23.6</td>
<td>25.8</td>
<td>21.8</td>
</tr>
<tr>
<td>Freshman year of HS</td>
<td>11.7</td>
<td>9.4</td>
<td>6.7</td>
</tr>
<tr>
<td>Sophomore year of HS</td>
<td>4.0</td>
<td>3.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Junior year of HS</td>
<td>8.7</td>
<td>6.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Senior year of HS</td>
<td>8.2</td>
<td>4.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Never considered going</td>
<td>11.3</td>
<td>6.8</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have decided to attend college</td>
<td>78.9</td>
<td>87.0</td>
<td>88.0</td>
</tr>
<tr>
<td>I have decided to attend college next fall</td>
<td>67.9</td>
<td>79.4</td>
<td>83.7</td>
</tr>
<tr>
<td>I have already applied to college</td>
<td>64.4</td>
<td>74.8</td>
<td>80.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of times visited college campus past 12 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>31.5</td>
<td>24.3</td>
<td>18.7</td>
</tr>
<tr>
<td>One</td>
<td>23.7</td>
<td>22.8</td>
<td>21.0</td>
</tr>
<tr>
<td>Two</td>
<td>21.0</td>
<td>22.1</td>
<td>19.4</td>
</tr>
<tr>
<td>Three</td>
<td>12.3</td>
<td>14.9</td>
<td>14.0</td>
</tr>
<tr>
<td>Four</td>
<td>4.5</td>
<td>5.4</td>
<td>8.7</td>
</tr>
<tr>
<td>Five or more</td>
<td>7.0</td>
<td>10.4</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest academic degree student hopes to obtain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No academic degree</td>
<td>3.6</td>
<td>2.3</td>
<td>1.5</td>
</tr>
<tr>
<td>High School diploma/GED</td>
<td>11.9</td>
<td>7.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Vocational or undergraduate certificate</td>
<td>5.8</td>
<td>6.1</td>
<td>5.2</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>14.0</td>
<td>9.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>31.5</td>
<td>34.0</td>
<td>22.1</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>21.7</td>
<td>28.5</td>
<td>35.4</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>11.5</td>
<td>12.8</td>
<td>23.4</td>
</tr>
</tbody>
</table>

*Differences statistically significant at the 95% confidence level.*
**College Influences**

Students were asked a series of questions regarding what people influenced their college aspirations, what their sources of information about college were, and how informed they felt about certain financing options (see Table 3). These are all important factors that can influence whether or not a student decides to attend college.

Parents or guardians were cited most frequently across all income levels as an important or very important influence on college aspirations. Interestingly, lower income students were more likely than higher income students to report that teachers, guidance counselors and principals were an important or very important influence on aspirations.

Institutional websites were cited most frequently across all income groups as important or very important sources of information about college. Brochures, college planning websites, CFWV.com, and the radio were reported as important or very important sources of information by the lowest income students more often than by higher income students.

Students reported feeling most informed about the PROMISE Scholarship as a source of college financing. Lower income students reported feeling more informed about need-based grants and loans than their higher income peers. For example, about 59 percent of the lowest income students said they felt informed or very informed about the Pell Grant compared to about 46 percent of the highest income students.

**Table 3: College Influences**

<table>
<thead>
<tr>
<th>Influences on College Aspirations</th>
<th>$30,000 or less</th>
<th>$30,001-$60,000</th>
<th>&gt; $60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent/Guardian</td>
<td>76.6%</td>
<td>86.0%</td>
<td>91.0%</td>
</tr>
<tr>
<td>Friend</td>
<td>60.8%</td>
<td>64.6%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Grandparent</td>
<td>57.3%</td>
<td>58.2%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Teacher</td>
<td>63.5%</td>
<td>63.6%</td>
<td>56.2%</td>
</tr>
<tr>
<td>Other family member</td>
<td>51.7%</td>
<td>49.4%</td>
<td>51.2%</td>
</tr>
<tr>
<td>Sibling</td>
<td>40.8%</td>
<td>42.4%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Guidance counselor</td>
<td>51.6%</td>
<td>47.4%</td>
<td>44.0%</td>
</tr>
<tr>
<td>College admissions counselor</td>
<td>39.1%</td>
<td>40.3%</td>
<td>37.1%</td>
</tr>
<tr>
<td>Coach</td>
<td>24.9%</td>
<td>28.8%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Principal</td>
<td>35.6%</td>
<td>32.7%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Religious leader</td>
<td>28.1%</td>
<td>27.3%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Community outreach counselor</td>
<td>17.2%</td>
<td>14.8%</td>
<td>16.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources of Information about College</th>
<th>$30,000 or less</th>
<th>$30,001-$60,000</th>
<th>&gt; $60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>College websites</td>
<td>72.8%</td>
<td>77.4%</td>
<td>79.0%</td>
</tr>
<tr>
<td>Direct mail</td>
<td>59.8%</td>
<td>64.0%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Brochures</td>
<td>60.1%</td>
<td>57.7%</td>
<td>57.1%</td>
</tr>
<tr>
<td>E-mail</td>
<td>53.2%</td>
<td>53.9%</td>
<td>56.1%</td>
</tr>
<tr>
<td>College fairs</td>
<td>52.6%</td>
<td>49.3%</td>
<td>47.5%</td>
</tr>
<tr>
<td>College planning websites</td>
<td>47.2%</td>
<td>44.4%</td>
<td>43.2%</td>
</tr>
<tr>
<td>Television</td>
<td>36.1%</td>
<td>32.7%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Signs</td>
<td>33.7%</td>
<td>31.1%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Magazines</td>
<td>31.6%</td>
<td>29.1%</td>
<td>29.9%</td>
</tr>
<tr>
<td>CFWV.com</td>
<td>33.6%</td>
<td>30.7%</td>
<td>28.8%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>26.9%</td>
<td>26.0%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Radio</td>
<td>25.8%</td>
<td>22.1%</td>
<td>23.3%</td>
</tr>
</tbody>
</table>
finally, students were asked a series of questions regarding how they planned to finance college and what factors influence their particular choice of institution if they did plan to go to college.

with respect to financing college, lower income students were less likely to have reported filling out a fafsa (necessary for receiving all forms of state and federal aid). at the same time, lower income students were more likely to report that they would finance college through state and federal need-based grants as well as federal loans. affordability was cited most often by lower income students as important or very important to their choice of college. interestingly, however, a higher proportion of students from families that earned more than $60,000 per year reported affordability as a factor affecting college choice. about 72 percent of lowest income students were concerned about affordability compared to just over 78 percent of higher income students. nonetheless, higher income students cited academic offerings most frequently as an important or very important factor affecting their choice of college.
## Table 4: College Choice

<table>
<thead>
<tr>
<th></th>
<th>$30,000 or less</th>
<th>$30,001-$60,000</th>
<th>&gt; $60,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Column %</td>
<td>Column %</td>
<td>Column %</td>
</tr>
<tr>
<td>Submitted a FAFSA</td>
<td>77.6</td>
<td>81.2</td>
<td>84.9</td>
</tr>
<tr>
<td>Plans to attend Full-time</td>
<td>80.1</td>
<td>88.7</td>
<td>92.7</td>
</tr>
<tr>
<td>Plan to attend Part-time</td>
<td>19.9</td>
<td>11.3</td>
<td>7.3</td>
</tr>
<tr>
<td><strong>Sources of Financing College</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents/relatives</td>
<td>58.5</td>
<td>78.0</td>
<td>86.6</td>
</tr>
<tr>
<td>Personal savings</td>
<td>52.9</td>
<td>62.7</td>
<td>62.0</td>
</tr>
<tr>
<td>Scholarship from the college</td>
<td>47.1</td>
<td>52.7</td>
<td>61.4</td>
</tr>
<tr>
<td>PROMISE Scholarship</td>
<td>25.0</td>
<td>34.9</td>
<td>44.1</td>
</tr>
<tr>
<td>Other loans</td>
<td>47.3</td>
<td>42.3</td>
<td>36.0</td>
</tr>
<tr>
<td>Federal loans</td>
<td>50.0</td>
<td>48.8</td>
<td>35.2</td>
</tr>
<tr>
<td>Scholarship from private source</td>
<td>25.9</td>
<td>33.2</td>
<td>34.9</td>
</tr>
<tr>
<td>Work-study</td>
<td>40.3</td>
<td>34.5</td>
<td>26.3</td>
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<tr>
<td>State need-based aid</td>
<td>46.8</td>
<td>37.4</td>
<td>17.9</td>
</tr>
<tr>
<td>Pell Grant</td>
<td>57.9</td>
<td>45.4</td>
<td>17.8</td>
</tr>
<tr>
<td>Military programs</td>
<td>12.6</td>
<td>8.8</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Institution Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-state, Baccalaureate-granting</td>
<td>34.6</td>
<td>45.1</td>
<td>52.0</td>
</tr>
<tr>
<td>Missing or Did Not Reply</td>
<td>37.7</td>
<td>27.7</td>
<td>22.4</td>
</tr>
<tr>
<td>Out-of-state</td>
<td>7.8</td>
<td>9.2</td>
<td>9.8</td>
</tr>
<tr>
<td>In-state, Community &amp; Technical College</td>
<td>15.3</td>
<td>12.3</td>
<td>8.4</td>
</tr>
<tr>
<td>In-state, Independent</td>
<td>4.6</td>
<td>5.6</td>
<td>7.2</td>
</tr>
<tr>
<td>On-line</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Factors influencing college choice</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Academic Offerings</td>
<td>68.8</td>
<td>79.5</td>
<td>82.6</td>
</tr>
<tr>
<td>Affordability</td>
<td>72.0</td>
<td>80.7</td>
<td>78.4</td>
</tr>
<tr>
<td>Academic Reputation of Institution</td>
<td>51.9</td>
<td>63.0</td>
<td>69.7</td>
</tr>
<tr>
<td>Scholarship Offer</td>
<td>53.2</td>
<td>59.4</td>
<td>65.5</td>
</tr>
<tr>
<td>Marketing Material from Institution</td>
<td>56.6</td>
<td>60.0</td>
<td>61.1</td>
</tr>
<tr>
<td>Attractive Social Life</td>
<td>44.8</td>
<td>55.6</td>
<td>60.8</td>
</tr>
<tr>
<td>PROMISE Scholarship Accepted at the Institution</td>
<td>40.3</td>
<td>47.7</td>
<td>56.2</td>
</tr>
<tr>
<td>Size of Student Body</td>
<td>46.0</td>
<td>50.4</td>
<td>53.1</td>
</tr>
<tr>
<td>Close to Home</td>
<td>49.2</td>
<td>53.0</td>
<td>50.7</td>
</tr>
<tr>
<td>Friends Attending Same Institution</td>
<td>37.3</td>
<td>43.9</td>
<td>47.6</td>
</tr>
<tr>
<td>Attractive Athletics Program</td>
<td>31.3</td>
<td>36.5</td>
<td>46.7</td>
</tr>
<tr>
<td>Part-time Employment Available at Institution</td>
<td>53.7</td>
<td>52.7</td>
<td>46.5</td>
</tr>
<tr>
<td>Parent Preferences</td>
<td>31.3</td>
<td>39.7</td>
<td>46.3</td>
</tr>
<tr>
<td>Honors Programs</td>
<td>34.3</td>
<td>39.5</td>
<td>45.9</td>
</tr>
<tr>
<td>Plan to Live and Work in Same State Post-Graduation</td>
<td>44.1</td>
<td>47.1</td>
<td>44.1</td>
</tr>
<tr>
<td>Easy to Gain Admission</td>
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<td>44.5</td>
<td>40.4</td>
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<tr>
<td>Near Enough to Live at Home</td>
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<td>45.0</td>
<td>38.6</td>
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<td>National Rankings</td>
<td>22.5</td>
<td>25.7</td>
<td>35.0</td>
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<tr>
<td>Attractive Religious Affiliation or Program</td>
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<td>29.6</td>
<td>31.6</td>
</tr>
<tr>
<td>Institution Recommended by Teacher or Counselor</td>
<td>27.9</td>
<td>28.5</td>
<td>27.0</td>
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<tr>
<td>Legacy</td>
<td>15.3</td>
<td>16.6</td>
<td>19.8</td>
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* Differences statistically significant at the 95% confidence level.
One reason lower income students might not cite affordability as a concern as frequently as their higher income peers is that lower income students appear to follow enrollment pathways that reduce cost of attendance. For example, lower income students were more likely to report plans to enroll in a community or technical college and to attend part-time. Although it is difficult to draw conclusions about the relationship between affordability and college choice from the results of this survey, prior research suggests that enrollment decisions and affordability are intertwined.

**Methodological Appendix**

The target population for the survey was all West Virginia students who were high school seniors in spring 2010. Respondents were selected through a random, stratified sample. High schools were the primary sample unit, with the sampling frame constructed from a list of all high schools (n=117 in 2010) maintained by the West Virginia Department of Education. High schools were stratified by the size of the senior class as well as the three U.S. Congressional districts in West Virginia in order to make the sample as representative as possible. High schools were assigned to Congressional districts based on the address of their main administrative office. To stratify by senior class size, each high school was assigned to a quartile. The lowest quartile had fewer than 86 students in the senior class, followed by 86 to 137, 138 to 197, and 197 or more. Data on senior class size were obtained from the U.S. Department of Education’s Common Core of Data for 2009.

In addition, all Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) schools (n=18) in West Virginia as well as their comparison schools (n=18) were sampled. GEAR UP schools are those that participate in the GEAR UP program administered by the West Virginia Higher Education Policy Commission. Comparison schools for GEAR UP were selected prior to survey administration using Euclidean distance similarity measures. The percentage of tenth-grade students who achieved proficient levels in reading and math in 2008 W.E.S.T. were used as matching factors (except Lincoln County High School, for which the 2009 data were used). Other key school level indicators (e.g., school size, graduation rates, percentage of low-income students, and proportion minority students) were also generally matched for each pair of schools.

Sampling was implemented via PROC SURVEYSELECT in SAS version 9.1. In total, 61 schools—including all GEAR UP and comparison schools were selected to receive the survey. The survey was administered via high school guidance counselors who were asked to distribute hard copies of the instrument during the homeroom period. To elicit a high response rate, three follow-up contacts were made with guidance counselors and principals. In total, 47 of the 61 (about 77%) of high schools had respondents. Overall, 4,592 students responded to the survey, representing about 25 percent of the target population (n=18,472) and 51 percent of the sample (n=9,071).