The Nevada Millennium Scholarship

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Impact on Student Access and Success at the State’s Land-Grant University

Part II

May 2005

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The Millennium Scholarship
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Clark County vs. Washoe County
New Freshmen
New Full-Time Freshmen by Millennium Status
Fall Semesters 2000-2003, NV High School Graduates

Clark vs. Washoe County by High School Preparation

High school preparation quartile:
- Top Q
- 2nd Q
- 3rd Q
- Bottom Q

Millennium status:
- Yes
- No

Clark vs. Washoe
New Full-Time Freshmen by Second-Year Retention
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of First Semester

<table>
<thead>
<tr>
<th>Student Residence</th>
<th>Yes</th>
<th>No</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County</td>
<td>66</td>
<td>31.9</td>
<td>47.5</td>
</tr>
<tr>
<td>Washoe County</td>
<td>68.6</td>
<td>24.5</td>
<td>40.6</td>
</tr>
</tbody>
</table>

- Eligible, no initial Mill.
- Maintains eligibility (w/ %)
- Lost eligibility
- HS grad ineligible
New Full-Time Freshmen by Second-Year Retention
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of Second Semester

<table>
<thead>
<tr>
<th>Student Residence</th>
<th>Clark County</th>
<th>Washoe County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>63.6%</td>
<td>64.1%</td>
</tr>
<tr>
<td>No</td>
<td>10.1%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Transfer</td>
<td>24.1%</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

- Eligible, no initial Mill: Blue
- Maintains eligibility (w/ %): Blue
- Regains eligibility: Light Blue
- Continues ineligibility: Orange
- Lost eligibility: Yellow
- HS grad ineligible: Light Yellow
- Not enrolled in spring (w/ %): Tan

Residence:
- Clark County
- Washoe County
New Full-Time Freshmen by Parent Income
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of First Semester
for Clark (C) and Washoe (W) Counties

Parent income:  
- < $30K  
- $30-50K  
- $50-80K  
- > $80K

- Eligible, no Millennium
- Maintained eligibility
- Lost eligibility
- HS grad ineligible
New Full-Time Freshmen by High School Preparation
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of First Semester
for Clark (C) and Washoe (W) Counties

<table>
<thead>
<tr>
<th>HS Preparation:</th>
<th>C</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom Q</td>
<td>51.1%</td>
<td>42.9%</td>
</tr>
<tr>
<td>3rd Q</td>
<td>12.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>2nd Q</td>
<td>15.6%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Top Q</td>
<td>7.6%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

- Eligible, no Millennium
- Maintained eligibility
- Lost eligibility
- HS grad ineligible
New Full-Time Freshmen and Financial Need
Fall Semesters 2000-2003, NV High School Graduates

Average First-Year Unmet Need by Parent Income

- Washoe County students
- Clark County students
Conclusion
Conclusion

Access since start of the Millennium Scholarship
- Significant rise in the college-going rate statewide, with faster enrollment growth among minority students
- Little change in enrollment composition by ethnicity/race or income background at the institutional level

Millennium participation
- Majority of all students receive it, ranging from 60 percent for African Americans to 80 percent for Asian Americans
- Upper-income students participate at slightly greater rate than low-income students

Millennium impact on financial support
- Millennium Scholarship has become principal source of aid for most new freshmen, reducing reliance on other types of aid
- Grant aid to low-income students has been maintained and the average Pell Grant amount and proportion of students using it is up
- Low-income students, regardless of academic preparation, rely less on debt-incurring aid such as loans
- Unmet need for low-income students has been reduced, but trend of growing unmet need remains unaffected as cost of living outpaces growth in aid; it is not clear, however, whether unmet need outpaces disposable income after the expected family contribution (EFC)
Conclusion

- Academic preparation since start of the Millennium Program
  - On average, the level of high school preparation remains the same, except for a slight drop among African Americans
  - Standard test scores and first-semester credit load remain largely unaffected
  - Millennium students are somewhat better prepared than out-of-state students; still, at least 40 percent are in need of remediation

- Millennium eligibility status after initial enrollment
  - Second-semester ineligibility is strongly associated with low academic preparation, but not with income background
  - Nearly 40 percent of new freshmen in 2003 lost the Scholarship at the end of the first year—a rate that almost doubled since 2000 as the college GPA eligibility requirement increased from 2.0 to 2.6 in 2003.
  - Minorities (except Asian Americans) are more likely to lose the Scholarship due to low academic preparation compared to Caucasians
  - Academically well-prepared students are three times more likely to retain scholarship eligibility throughout the first year compared to low-prepared students—regardless of ethnicity/race, income background, or socioeconomic status of the high school attended
Conclusion

Millennium eligibility status after initial enrollment (cont.)

- Those losing the Scholarship face higher levels of initial unmet financial need, possibly indicating employment obligations that compete with a requisite academic focus.
- Millennium students transferring to out-of-state universities that are ranked higher than UNR are academically better prepared than those Millennium students that are retained—suggesting that the Scholarship fails to keep the best students in the state.

Millennium Scholarship impact on Clark County students

- Scholarship participation and continued eligibility does not differ between students from Clark County and those residing close to UNR.
- However, Clark County students face greater levels of unmet need, which is a dropout risk factor for those from middle-income backgrounds (see http://www.unr.edu/ia/research/)
Millennium-Based Results vs. Critics of State-Funded Scholarships
Scholarship participation:

Eighty-four percent of low-income students from in-state high schools received the Millennium Scholarship, about 2 percentage points lower than high-income students.

Lower-income students are not disadvantaged, as critics charge, though long-term scholarship solvency may be better secured through targeted eligibility (e.g., income caps, tiered benefits).

Equitable college access:

Growth in minority student enrollment did not slow down with introduction of the Millennium Scholarship.

Minorities received Millennium offers at almost the same rate as Caucasian students.

Millennium results do not support charges that state-funded merit scholarships exacerbate enrollment gaps.

Growing unmet financial need:

Millennium aid does alleviate the burden of unmet need for lower-income students, but does not reverse the trend of growing unmet need due to its fixed award amount.
Growing unmet financial need (cont.):

Further research is needed to determine whether the growing unmet need constitutes a larger percentage of disposable family/student income after factoring in the EFC.

Substitution for need-based grant aid:

Need-based grants and the number of lower-income students receiving them has been maintained since start of the Millennium Scholarship, and needy students rely less on loans.

Introduction of the Millennium Scholarship did not reduce availability of other grant aid for lower-income students, as charged by critics.

Exacerbating the dropout rate of students from inferior high schools:

Academic preparation is key to continued scholarship eligibility, regardless of a high school’s socioeconomic status; the latter, based on data from the institution’s primary capture area, is not associated with the level of academic preparation of new freshmen.

Socioeconomic background does not trump academic preparation as key factor in retention, as critics charge. (e.g., ACSFA, 2001, p.13)
Insufficient statistical control over key determinants of college access and success leads to different variable emphasis and, hence, questionable conclusions.

Perceived Determinants vs. Empirical Results

1. Student ethnicity/race
2. Socioeconomic background
3. Academic preparation

Critics cited

1. Academic preparation
2. Socioeconomic background
3. Student ethnicity/race

Results from this study

Primary importance of academic preparation is corroborated in Choy (2002), Cabrera and La Nasa (2001), Adelman (1999), and Berkner and Chavez (1997).
References:
Appendices:
Additional Supporting Data
Pell vs. Non-Pell Students: Aid Offers by Size and Proportion of Beneficiaries

(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

<table>
<thead>
<tr>
<th>Type of Aid Offers</th>
<th>Pre-Millennium ('96-'99) Non-Pell</th>
<th>Mill. Years ('00-02) Non-Pell</th>
<th>Pre-Millennium ('96-'99) Pell</th>
<th>Mill. Years ('00-02) Pell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pell Grant</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>All Grants</td>
<td>+1.7</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Millennium</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>All S'ships</td>
<td>-5.1</td>
<td></td>
<td>-5.1</td>
<td></td>
</tr>
<tr>
<td>Subs-Loans</td>
<td>+5.5</td>
<td></td>
<td>+5.5</td>
<td></td>
</tr>
<tr>
<td>Uns.-Loans</td>
<td>-3.9</td>
<td></td>
<td>-3.9</td>
<td></td>
</tr>
<tr>
<td>Inst.-based</td>
<td>+4.2</td>
<td></td>
<td>+4.2</td>
<td></td>
</tr>
</tbody>
</table>

*Pell students make up larger proportion of grant-aided and subsidized loan students after start of Millennium Scholarship, and they benefited from larger amounts of gift aid, but represented a smaller proportion of scholarship students.
Grant Offers: Size and Proportion of Beneficiaries
(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

Size of grants went up after start of Millennium Scholarship, while proportion of students relying on them declined due to available Millennium support.
Subsidized Loan Offers: Size and Proportion of Beneficiaries
(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

<table>
<thead>
<tr>
<th>Race</th>
<th>Pre-Millennium ('96-'99)</th>
<th>Millennium Years ('00-02)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Am.</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Asian Am.</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>African Am.</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Hispanic</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Caucasian</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Unknown</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

Size of subsidized loans and proportion of students relying on them dropped after start of the Millennium Scholarship program
Unsubsidized Loan Offers: Size and Proportion of Beneficiaries

(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

<table>
<thead>
<tr>
<th></th>
<th>Native Am.</th>
<th>Asian Am.</th>
<th>African Am.</th>
<th>Hispanic</th>
<th>Caucasian</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>2200</td>
<td>3000</td>
<td>4000</td>
<td>5000</td>
<td>6000</td>
<td>7000</td>
</tr>
<tr>
<td>Proportion</td>
<td>10%</td>
<td>3%</td>
<td>14%</td>
<td>10%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Size of unsubsidized loans and proportion of students relying on them dropped for most students after start of the Millennium Scholarship program.
Institutional Aid Offers: Size and Proportion of Beneficiaries

(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

<table>
<thead>
<tr>
<th></th>
<th>% '96-'99</th>
<th>% '00-'02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Am.</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>Asian Am.</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>African Am.</td>
<td>44</td>
<td>31</td>
</tr>
<tr>
<td>Hispanic</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>Caucasian</td>
<td>33</td>
<td>25</td>
</tr>
<tr>
<td>Unknown</td>
<td>36</td>
<td>26</td>
</tr>
</tbody>
</table>

Size of institutional-based aid and proportion of students relying on it declined after start of the Millennium Scholarship.
## Aid Offers: Size and Proportion of Beneficiaries

(New Full-Time Freshmen, Fall Semesters, NV High School Graduates)

<table>
<thead>
<tr>
<th>Year</th>
<th>Subsidized Loans</th>
<th>Unsubsidized Loans</th>
<th>Institutional Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>'96</td>
<td>12</td>
<td>5</td>
<td>33</td>
</tr>
<tr>
<td>'97</td>
<td>12</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>'98</td>
<td>12</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>'99</td>
<td>14</td>
<td>9</td>
<td>33</td>
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<tr>
<td>'00</td>
<td>10</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>'01</td>
<td>9</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>'02</td>
<td>9</td>
<td>4</td>
<td>25</td>
</tr>
</tbody>
</table>

Reliance on loans and institutional aid went down after start of the Millennium Scholarship in 2000.
New Full-Time Freshmen by Pell Grant Status
(Fall Semesters, NV High School Graduates)

*Pell students make up larger proportion of grant-aided and subsidized loan students after start of Millennium Scholarship, and they benefited from larger amounts of gift and need-based aid, but represented a smaller proportion of scholarship students.*
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

First-semester college GPA

Asian Am.  African Am.  Hispanics  Caucasians
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

High school cumulative GPA

- Asian Am.
- African Am.
- Hispanics
- Caucasians
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

First Semester Credit Load

Credit Hours

Low Income (<$30K)  
Lower Middle-Income ($30-50K)  
Upper Middle-Income ($50-80K)  
Upper Income (>=$80K)
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

ACT Composite Score

- Low Income (<$30K)
- Lower Middle-Income ($30-50K)
- Upper Middle-Income ($50-80K)
- Upper Income (>=$80K)
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

High School GPA

- Low Income (<$30K)
- Lower Middle-Income ($30-50K)
- Upper Middle-Income ($50-80K)
- Upper Income (>80K)
Upper-income freshmen experienced the largest jump in scholarship participation after start of the Millennium Scholarship, but at a lower amount level than low-income students.

* Over $80,000 annual income
Upper-middle income freshmen had the second largest growth in scholarship participation after start of the Millennium program, with comparable amounts offered as upper-income students.

* $50,000 to $80,000 annual income
New Full-Time Freshmen and Financial Need
Fall Semesters 2000-2003

Average First-Year Unmet Need by Parent Income

Constant $.

> $80K  $50-80K  $30-50K  < $30K

Millennium students  Non-Millennium students
New Full-Time Freshmen by Academic Indicators
Fall Semesters, NV High School Graduates

Percent of first-semester credits completed

Asian Am.  African Am.  Hispanics  Caucasians
Millennium vs. Out-of-State Freshmen
Fall Semesters 2000-2003, First Semester Experience

Math performance

Math level: remedial Foundation Algebra Trig Advanced

Out-of-state freshmen (N=1,258) Millennium freshmen (N=6,189)
Millennium vs. Out-of-State Freshmen
Fall Semesters 2000-2003, First Semester Experience

Retention-related factors

<table>
<thead>
<tr>
<th></th>
<th>Out-of-state freshmen (N=1,258)</th>
<th>Millennium freshmen (N=6,189)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math TR</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
<tr>
<td>Math W/I</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
<tr>
<td>Calc 1</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
<tr>
<td>Science</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
<tr>
<td>Math P</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
<tr>
<td>Math</td>
<td>[Diagram showing data]</td>
<td>[Diagram showing data]</td>
</tr>
</tbody>
</table>

Math TR: math transfer credits; Math W/I: withdrawal/incomplete math grade
Calc 1: major requires Calculus 1; Science: took at least one science course
Math P: passed first-year math course; Math: took at least one math course
Millennium vs. Out-of-State Freshmen
Fall Semesters 2000-2003, First Semester Experience

Retention-related factors

Out-of-state freshmen (N=1,258)

<table>
<thead>
<tr>
<th></th>
<th>Millennial freshmen (N=6,189)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engl TR</td>
<td></td>
</tr>
<tr>
<td>Engl W/I</td>
<td></td>
</tr>
<tr>
<td>Engl &lt; B</td>
<td></td>
</tr>
<tr>
<td>AP/IB</td>
<td></td>
</tr>
<tr>
<td>Any TR</td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td></td>
</tr>
</tbody>
</table>

Engl TR: English transfer credits; Engl W/I: withdrawal/incomplete English grade
Engl < B: received less than ‘B’ grade; AP/IB: has advanced placement and/or Inter’l. Baccalaureate credits; Any TR: has transfer credits; Summer: took summer courses prior to initial fall matriculation
New Full-Time Freshmen by Remediation Need
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of First Semester

- Needs Both
- English only
- Math only
- No need

Eligible, no Millennium
Maintained eligibility
Lost eligibility
HS grad ineligible
New Full-Time Freshmen by Remediation Need
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of Second Semester

<table>
<thead>
<tr>
<th>Remediation Need</th>
<th>Eligible, no initial Mill.</th>
<th>Maintains eligibility (w/ %)</th>
<th>Regains eligibility</th>
<th>Continues ineligibility (w/ %)</th>
<th>Lost eligibility</th>
<th>HS grad ineligible (w/ %)</th>
<th>Did not return (w/ %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs both</td>
<td>21.2</td>
<td>8.6</td>
<td>14.9</td>
<td>7.6</td>
<td>22.7</td>
<td>14.9</td>
<td>23.3</td>
</tr>
<tr>
<td>English only</td>
<td>12.6</td>
<td>15</td>
<td>18.2</td>
<td>7.6</td>
<td>16.5</td>
<td>18.2</td>
<td>40.4</td>
</tr>
<tr>
<td>Math only</td>
<td>12.5</td>
<td>8.6</td>
<td>15</td>
<td>7.6</td>
<td>16.5</td>
<td>15</td>
<td>52.4</td>
</tr>
<tr>
<td>No need</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>7.6</td>
<td>66.8</td>
</tr>
</tbody>
</table>
New Full-Time Freshmen by Parent Income
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of First Semester

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Eligible, no Millennium</th>
<th>Maintained eligibility (w/ %)</th>
<th>Lost eligibility (w/ %)</th>
<th>HS grad ineligible (w/ %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $30K</td>
<td>52%</td>
<td>60.7%</td>
<td>16.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td>$30-50K</td>
<td>60.7%</td>
<td>64.9%</td>
<td>13.8%</td>
<td>19.1%</td>
</tr>
<tr>
<td>$50-80K</td>
<td>64.9%</td>
<td>66.2%</td>
<td>12.1%</td>
<td>13.2%</td>
</tr>
<tr>
<td>&gt; $80K</td>
<td>66.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New Full-Time Freshmen by Parent Income
Fall Semesters 2000-2003, NV High School Graduates

Millennium Scholarship Status at End of Second Semester

<table>
<thead>
<tr>
<th>Parent Income</th>
<th>Eligible, no initial Mill.</th>
<th>Maintains eligibility (w/ %)</th>
<th>Regains eligibility</th>
<th>Continues ineligibility (w/ %)</th>
<th>Lost eligibility</th>
<th>HS grad ineligible</th>
<th>Did not return (w/ %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $30K</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td>13.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30-50K</td>
<td>54.2</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$50-80K</td>
<td>59.4</td>
<td></td>
<td></td>
<td></td>
<td>9.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; $80K</td>
<td>60.9</td>
<td></td>
<td></td>
<td></td>
<td>8.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Those losing the Millennium Scholarship due to insufficient academic performance have greater financial need, particularly low-income students.
New Full-Time Freshmen Retention
Fall Semesters, NV High School Graduates

Low Income (< $30K)

% retained

2nd semester
3rd semester
4th semester
5th semester

New Full-Time Freshmen Retention
Fall Semesters, NV High School Graduates

Lower Middle-Income ($30K-$50K)
New Full-Time Freshmen Retention
Fall Semesters, NV High School Graduates

Upper Middle-Income ($50K-$80K)
New Full-Time Freshmen Retention
Fall Semesters, NV High School Graduates

Upper Income (> $80K)

% retained


2nd semester 3rd semester 4th semester 5th semester
New Full-Time Freshmen by ACT Score Difference
NV High School Graduates vs. Out-of-State High School Graduates

Positive difference = Nevada high school graduates with higher scores
Negative difference = Nevada high school graduates with lower scores