Demographic Change in the U.S. and Connecticut Related to the College-Bound Population

Presented to the CCSU Enrollment Management Team

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Director of Institutional Research & Assessment

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Overview

- Population Change in the US, New England & Connecticut with Resulting Pressures on State Funding
- Change in CT Public HS Graduates
- Change in CCSU Fall headcount enrollment 2001-2007
- Qualitative indicators (SAT – first-time undergraduates)
- Implications
Population Change – United States

US Population By Age and Sex, 1900

Population Change – United States

US Population By Age and Sex, 1950

Population Change – United States

US Population By Age and Sex, 2000

Population Change – United States

US Population By Age and Sex, 2010

Population Change – United States

US Population By Age and Sex, 2020

Source: U.S. Census Bureau - [http://www.census.gov/ipc/www/idbpyr.html](http://www.census.gov/ipc/www/idbpyr.html)
Population Change – United States

US Population By Age and Sex, 2030

Population Change – United States

US Population By Age and Sex, 2040

Population Change – United States

US Population By Age and Sex, 2050

Population Change - Connecticut

CT Population By Age and Sex, 2000

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Population Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 to 04</td>
<td></td>
</tr>
<tr>
<td>05 to 09</td>
<td></td>
</tr>
<tr>
<td>10 to 14</td>
<td></td>
</tr>
<tr>
<td>15 to 19</td>
<td></td>
</tr>
<tr>
<td>20 to 24</td>
<td></td>
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<tr>
<td>25 to 29</td>
<td></td>
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<tr>
<td>30 to 34</td>
<td></td>
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<tr>
<td>35 to 39</td>
<td></td>
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<tr>
<td>40 to 44</td>
<td></td>
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<tr>
<td>45 to 49</td>
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<tr>
<td>50 to 54</td>
<td></td>
</tr>
<tr>
<td>55 to 59</td>
<td></td>
</tr>
<tr>
<td>60 to 64</td>
<td></td>
</tr>
<tr>
<td>65 to 69</td>
<td></td>
</tr>
<tr>
<td>70 to 74</td>
<td></td>
</tr>
<tr>
<td>75 to 79</td>
<td></td>
</tr>
<tr>
<td>80 to 84</td>
<td></td>
</tr>
<tr>
<td>85 Over</td>
<td></td>
</tr>
</tbody>
</table>

Female
Male
CT Population By Age and Sex, 2010

- Female
- Male
Population Change - Connecticut

CT Population By Age and Sex, 2020

- Female
- Male

Population Count

Age:
- 00 to 04
- 05 to 09
- 10 to 14
- 15 to 19
- 20 to 24
- 25 to 29
- 30 to 34
- 35 to 39
- 40 to 44
- 45 to 49
- 50 to 54
- 55 to 59
- 60 to 64
- 65 to 69
- 70 to 74
- 75 to 79
- 80 to 84
- 85 Over
Population Change - Connecticut

CT Population By Age and Sex, 2030

- Female
- Male

Population Count
Implications of Population Change

- Shift in budget priorities from education to health care

<table>
<thead>
<tr>
<th></th>
<th>Change in US Pop (from 2007)</th>
<th>Change in CT Pop (from 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>∆ 20-24</td>
<td>∆ 70+</td>
</tr>
<tr>
<td>2010</td>
<td>715,139</td>
<td>1,006,323</td>
</tr>
<tr>
<td>2020</td>
<td>-210,467</td>
<td>9,948,301</td>
</tr>
<tr>
<td>2030</td>
<td>2,174,964</td>
<td>24,407,889</td>
</tr>
<tr>
<td>2040</td>
<td>3,936,260</td>
<td>34,746,966</td>
</tr>
<tr>
<td>2050</td>
<td>5,335,960</td>
<td>39,196,494</td>
</tr>
</tbody>
</table>

- Shift in mission of higher education to provide continuing education throughout the lifespan

*Source: U.S. Census Bureau - http://www.census.gov/ipc/www/idbpyr.html*
Projected Change in Numbers of High-School Graduates by State, 2004-5 to 2021-22

Projections of Graduates of Public High Schools, by Racial and Ethnic Group

Actual & Projected CT Public HS Graduates by Race/Ethnicity

SOURCE: *Knocking at the College Door* (2008, Western Interstate Commission for Higher Education)
CT Public HS Grads & CCSU* Entering Class by Race/Ethnicity

Actual*

Projected

SOURCE: Knocking at the College Door (2008, Western Interstate Commission for Higher Education)
* CCSU data exclude categories of Non-Resident Alien and Race/Ethnicity Unknown
CCSU Fall Headcount Enrollment by Level and Status

- Graduate Non-Matriculated
- Graduate Part-Time
- Graduate Full-Time
- Undergraduate Non-Matriculated
- Undergraduate Part-Time
- Undergraduate Full-Time
CCSU Fall Headcount Enrollment of Non-Matriculated Students

Graduate Non-Matriculated

Undergraduate Non-Matriculated
## Change in Fall Headcount

### Enrollment by Level and Status

- Significant declines were observed between 2001 and 2007 in non-matriculated students and part-time undergraduates.
- Part-time grad students peaked at 1777 in 2003 and have since declined 14% to slightly below 2001 levels*

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>2001</th>
<th>2007</th>
<th>Change (N)</th>
<th>Change (Pct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate, Non-Matriculated</td>
<td>742</td>
<td>334</td>
<td>-408</td>
<td>-55%</td>
</tr>
<tr>
<td>Graduate, Part-Time* (matriculated)</td>
<td>1548</td>
<td>1528</td>
<td>-20</td>
<td>-1%</td>
</tr>
<tr>
<td>Graduate, Full-Time (matriculated)</td>
<td>497</td>
<td>520</td>
<td>23</td>
<td>5%</td>
</tr>
<tr>
<td>Undergraduate, Non-Matriculated</td>
<td>1013</td>
<td>543</td>
<td>-470</td>
<td>-46%</td>
</tr>
<tr>
<td>Undergraduate, Part-Time (matriculated)</td>
<td>1902</td>
<td>1532</td>
<td>-370</td>
<td>-19%</td>
</tr>
<tr>
<td>Undergraduate, Part-Time (matriculated)</td>
<td>6636</td>
<td>7629</td>
<td>993</td>
<td>15%</td>
</tr>
</tbody>
</table>
Headcount Enrollment by Age: Full-Time Undergraduates (Matriculated)

Headcount (N)

- Other
- 55 and Over
- 50 to 54
- 45 to 49
- 40 to 44
- 35 to 39
- 30 to 34
- 25 to 29
- 20 to 24
- 15 to 19

Headcount (Pct)

- Other
- 55 and Over
- 50 to 54
- 45 to 49
- 40 to 44
- 35 to 39
- 30 to 34
- 25 to 29
- 20 to 24
- 15 to 19
Headcount Enrollment by Age: Part-Time Undergraduates (Matriculated)
Headcount Enrollment by Age:
Full-Time Grad Students
(Matriculated)
Headcount Enrollment by Age: Part-Time Grad Students (Matriculated)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>15 to 19</td>
<td>420</td>
<td>450</td>
<td>480</td>
<td>510</td>
<td>540</td>
<td>570</td>
<td>600</td>
</tr>
<tr>
<td>20 to 24</td>
<td>200</td>
<td>220</td>
<td>240</td>
<td>260</td>
<td>280</td>
<td>300</td>
<td>320</td>
</tr>
<tr>
<td>25 to 29</td>
<td>100</td>
<td>120</td>
<td>140</td>
<td>160</td>
<td>180</td>
<td>200</td>
<td>220</td>
</tr>
<tr>
<td>30 to 34</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>35 to 39</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
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<td>40 to 44</td>
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<td>25</td>
<td>30</td>
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<td>40</td>
<td>45</td>
</tr>
<tr>
<td>45 to 49</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>50 to 54</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>55 and Over</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

Yearly distribution chart showing the number of students enrolled in part-time graduate programs by age group for each year from 2001 to 2007.
Where CT SAT Takers Sent Scores

- UConn
- Central CSU
- Southern CSU
- Eastern CSU
- Quinnipiac
- Western CSU

Where CT SAT Takers Sent Scores

<table>
<thead>
<tr>
<th>Year</th>
<th>UConn</th>
<th>Central CSU</th>
<th>Southern CSU</th>
<th>Eastern CSU</th>
<th>Western CSU</th>
<th>Quinnipiac</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>40.0</td>
<td>15.0</td>
<td>10.0</td>
<td>5.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2002</td>
<td>45.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
<td>5.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2003</td>
<td>50.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2004</td>
<td>40.0</td>
<td>30.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2005</td>
<td>35.0</td>
<td>35.0</td>
<td>30.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2006</td>
<td>30.0</td>
<td>30.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2007</td>
<td>25.0</td>
<td>25.0</td>
<td>20.0</td>
<td>15.0</td>
<td>10.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

SAT Score Comparison CCSU to Connecticut by Race & Gender

SOURCE: College Bound Seniors (2007, Educational Testing Service)
## CCSU SAT Student Percentiles within Race and Gender Category

SAT percentiles of CCSU students WITHIN their own race/ethnicity & gender category

<table>
<thead>
<tr>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>Critical Reading</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>Asian</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Black or Afr. American</td>
<td>64</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>61</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Women</td>
<td>Asian</td>
<td>39</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Black or Afr. American</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>42</td>
<td>45</td>
</tr>
</tbody>
</table>
Assume that mean SAT scores for students for each race/ethnicity and gender category remain at CCSU 2007 levels.

* Assumes all HS grads complete all required coursework for college entry
Predictive power of SAT Scores (1)

- SAT Scores have predicted power for students who graduate in the top half of their HS class.

- SAT is not predictive for students who graduate in the bottom of their HS class – they perform equally poorly regardless of SAT score.
Predictive power of SAT Scores (2)

First Semester GPA by SAT Score and HS Class Rank
(First-Time, Full-Time Students, 1999-2001)
Implications

- Population shift will change the demographic profile of CCSU
  - Student body will become more diverse
  - Increased competition for qualified students among all institutions
- Additional effort and new recruitment strategies will likely be needed simply to maintain enrollment and quality indicators at current levels