## Enrollment Trends

## at Virginia's Public <br> Colleges and Universities

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## EXECUTIVE SUMMARY

Since its inception in 1956, the State Council of Higher Education for Virginia (SCHEV) has examined enrollment trends at Virginia public institutions. This report takes an in-depth look at what has transpired on the Commonwealth's campuses over the last 20 years as compared with national trends. Such data analysis should prove useful in determining the impact of past policies, as well as highlighting areas for further discussion, examination, and planning. Therefore, this report is not intended to provide recommendations or solutions, but rather to make data available to assist policymakers in addressing the many important issues facing Virginia higher education.

The enrollment growth and make-up at Virginia's public institutions reflect many of the trends occurring at the national level. Statistics presented on page 6 highlight the comparisons. Both the nation and Virginia have experienced increased enrollment at all levels of public higher education. In addition, the demographic make-up of undergraduates at the national and state level has become less traditional in terms of ethnicity/race and gender and more traditional in terms of age of students and the proportion of students enrolled full-time.

Over the past 20 years, Virginia’s public four-year institutions have steadily increased their enrollments. In 2006, the 15 institutions which comprise Virginia's four-year system accommodated 46,431 more students than they did in 1987. Detailed tables and charts depicting the numbers are provided on page 14. At the undergraduate level, growth has been steady for both in-state and out-ofstate students. As a result, the proportion of in-state to out-of-state students in the public four-year system has remained relatively constant, shifting up $2 \%$ to $81 \%$ in-state (compared to $19 \%$ out-of-state). The graph on page 15 shows the steady growth and stable residency status of undergraduates at public four-year institutions.

This increased growth is echoed in nearly all regions of the Commonwealth. Demographic characteristics underlying undergraduate trends over the last 10 years show that enrollment at public four-year institutions increased from every Virginia geographic region except for the Eastern Shore. The table and chart on page 31 illustrate not only the percent growth over the past 10 years, but also the percentage of undergraduate students in the public four-year sector from each region. In 2006, 29\% of the undergraduate students at four-year institutions came from Northern Virginia, while . $3 \%$ of students came from the Eastern Shore. In part, these numbers mirror the population density of the region.

Another demographic characteristic of interest is the ethnicity/race of the students who comprise this enrollment growth. Since 1996, the proportion of minority students at public four-year institutions rose $1 \%$ to $27 \%$ of total undergraduate enrollment in 2006. As seen in the table on page 26 , enrollment of Hispanic students has grown at the fastest rate and now comprises $4 \%$ of the total undergraduate population. In contrast, Black, non-Hispanic enrollment has grown at a modest rate of $9 \%$. Though this group still constitutes the largest proportion of minority students, their population in relation to other minority groups has gone down slightly.

Another aspect of enrollment growth explored in this report is the transfer student population. The table on page 20 shows that while the overall number of transfer students at public four-year institutions has remained relatively constant since 1993, more students are transferring from the twoyear system. The table on page 21 takes a closer look at the two-year transfer students. The majority of Virginia’s two-year transfer students enter Virginia’s public four-year institutions prior to completing
their associate's degree. However, in recent years there is a clear trend towards completing the associate's degree before transfer. Whether a result of state policies concerning guaranteed enrollment agreements or individual institutional articulation agreements, growing numbers of students are opting to complete their associate's degree prior to transfer.

As more students have entered Virginia's public four-year system, the institutions have done a notable job of accommodating the growth while maintaining or somewhat modifying their missions. Four institutions have absorbed the majority of in-state undergraduate growth: George Mason University, James Madison University, Old Dominion University, and Virginia Commonwealth University. (See the appendices for statistics on individual institutions.) While exhibiting little enrollment increase, Christopher Newport University has dramatically changed the character of its student body. The institution has moved away from a commuter, non-traditional student population to more of an on-campus, full-time, traditional population. Enrollment growth at Virginia's two Historically Black Colleges and Universities (HBCUs) is also worth noting. Over the last 20 years, Norfolk State University has seen declining enrollment while Virginia State University has seen a modest increase. As these two institutions continue to evolve and adapt to the changing landscape for HBCU institutions, their strategies could provide models for the nation.

Enrollment growth in the public four-year sector is mirrored in the public two-year sector. Over the last 20 years, Virginia’s two-year sector, comprised of the 23 Virginia Community College System (VCCS) institutions and Richard Bland College, enrolled 34,291 more in-state students in Fall 2006 than in Fall 1987. As depicted in the chart on page 35, the proportion of in-state to out-of-state students in the two-year sector has remained constant at $95 \%$ in-state to $5 \%$ out-of-state. Minority enrollment in the Commonwealth's two-year institutions has also increased. The largest increases were among Hispanic and Black, non-Hispanic students. The table and chart on page 41 provide statistics on the overall rate of growth for each racial/ethnic group, as well as the proportion of total enrollment each ethnic group constitutes in the years 1996, 2001, and 2006. Over this same time period, the number of students from six of the seven Virginia regions grew by more than $10 \%$. The sole exception was the Southwest regions which grew by 7\%. The table and chart on page 45 display public two-year sector statistics for each region.

In addition to the standard fall headcount enrollment and demographic trends, this report examines two important areas of interest: high school dual enrollment and Science, Technology, Engineering, and Mathematics (STEM) enrollment. The table and chart presented on page 47 reveal that high school dual enrollment has increased sharply since 1992. The growth has occurred primarily in the VCCS system. The table on page 48 highlights the institutions which service the most high school dual-enrolled students and which institutions have experienced the largest rates of growth. Virginia enrollment in STEM programs has increased by $11 \%$ since 1995, but there are some noteworthy downward trends in specific areas, such as computer science and conservation and renewable sciences. These data are presented on pages 51 and 52. Virginia STEM completion statistics are highlighted on page 56.

## KEY FINDINGS

## PUBLIC FOUR-YEAR INSTITUTIONS

- Between 1987-88 and 2005-06, total undergraduate FTE increased by $25.1 \%$. In-state undergraduate FTE grew by $28.2 \%$ whereas out-of-state undergraduate FTE grew by $14.6 \%$ during this time period.
- The systemwide increase in total undergraduate FTE can be largely attributed to the strong expansion of three institutions: James Madison University (59.2\%), George Mason University (58.5\%), and Virginia Commonwealth University (46.9\%).
- Over the past 20 years, total undergraduate fall headcount enrollments have gone up by 32,419 students. By 2006, the public four-year institutions accommodated 27,931 more in-state students and 4,488 additional out-of-state students.
- The University of Virginia’s College at Wise (81.0\%), James Madison University (69.9\%), George Mason University (44.9\%) and Virginia Commonwealth University (43.6\%) exhibited the largest percent increase in total undergraduate enrollments. The latter three institutions together enrolled an additional 18,695 undergraduates which represents $58 \%$ of the 32,419 student total.
- From 1992 to 2006, new freshmen fall headcount enrollment increased $36.2 \%$ for in-state students and $25.7 \%$ for out-of-state students.
- Four institutions accounted for the majority of in-state new freshman growth: Christopher Newport University (632 students), James Madison University (1,071 students), Virginia Commonwealth University (1,719 students), and Virginia Tech (764 students).
- In 2006, 9,769 students transferred into public 4-year institutions. Three institutions enrolled more than half of these transfer students: George Mason University ( 2,084 students), Virginia Commonwealth University (1,754 students), and Old Dominion University (1,691 students).
- Transfers with associate's degrees (baccalaureate credit) from Virginia public two-year institutions have grown $45.7 \%$ since 1993. The majority of this increase has occurred since 2002. Ten of the 15 public four-year institutions in Virginia report a gain in associate's degree transfers.
- In 2006, the total undergraduate minority population at Virginia's public four-year institutions was $26.5 \%$. Excluding Virginia's two Historically Black Colleges and Universities (HBCU), three institutions have over one-third undergraduate minority populations: George Mason University (32.6\%), Old Dominion University (31.8\%), and Virginia Commonwealth University (33.5\%).
- Between 1996 and 2006, the strongest minority growth occurred among Hispanic students (up 86.7\%), followed by Asian/Pacific Islander (35.4\%), Black, non-Hispanic (up 9.4\%), and American Indian/Native American (up 2.2\%).
- In 2006, 55\% of the undergraduate students at Virginia public four-year institutions were women. Four institutions enroll less than 40\% men: James Madison University ( $39.1 \% \mathrm{men}$ ), Longwood University ( $34.6 \%$ men), Norfolk State University ( $37.7 \%$ men), and University of Mary Washington ( $34.1 \%$ men).
- Undergraduate enrollment at public four-year institutions increased from every Virginia geographic region, except for the Eastern Shore. However, enrollment of students from the Eastern Shore increased by $28.6 \%$ at Virginia’s public two-year institutions.


## PUBLIC TWO-YEAR INSTITUTIONS

- Between 1987 and 2006, total enrollment at Virginia’s public two-year institutions grew by $29.5 \%$ or 36,583 students.
- First-time freshmen headcount enrollment at public two-year institutions experienced a $95.4 \%$ increase from 1992 to 2006.
- Seven out of the 23 community colleges grew by more than 500 in-state new freshmen between 1992 and 2006: Central Virginia CC (501 students), Germanna CC (749 students), J. Sargeant Reynolds CC (657 students), John Tyler CC (648 students), Lord Fairfax CC (571 students), Northern Virginia CC (2,976 students), and Tidewater CC (2,745 students).
- The number of transfers to two-year Virginia institutions has declined by 4\% since 1992.
- Total minority enrollment at Virginia's public two-year institutions rose by 19,139 students or 63.4\%. The largest increase was among Hispanic students (up 105.1\%), followed by Black, nonHispanic (up 63.3\%), American Indian/Native American (up 52.6\%), and Asian/Pacific Islander (up 40.2\%).
- In Fall 2006, women comprised $58.7 \%$ of the undergraduate population at Virginia public twoyear institutions.
- Between 1996 and 2006, the number of students from six of the seven Virginia regions attending public two-year institutions grew more than $10 \%$. The one exception was the Southwest region with a percent increase of $6.9 \%$.


## INTRODUCTION AND OVERVIEW

The State Council of Higher Education for Virginia (SCHEV) is the Commonwealth’s higher education coordinating agency, and the agency's mission is to "promote the development of an educationally and economically sound, vigorous, progressive, and coordinated system of higher education in Virginia." SCHEV is required by the Code of Virginia (§ 23-9.6:1.4) to review and approve the enrollment projections of the public institutions each biennium prior to the "long" or even-year session of the General Assembly. SCHEV requires these enrollment projections to extend six years.

In 2005, Virginia’s Governor and General Assembly approved the Higher Education Restructuring Act (§ 23-38.88). This Act sets forth 12 state goals for public higher education and requires each public institution to develop six-year academic, enrollment, and financial management plans. Under the Restructuring Act, public institutions are to address areas such as access, affordability, accountability, retention and progression, shortage areas, transfer, dual enrollment, research, increased participation with K-12 and the business community, and campus safety. SCHEV is charged with reviewing and certifying the institutions’ progress toward addressing these goals.

Given SCHEV's responsibility to plan for Virginia's higher education system, it is important for the agency to take an in-depth look at areas of growth, need, or change in the enrollment patterns of the system. This report is not intended to provide recommendations or solutions, but rather to make data available to assist policymakers in addressing the many important issues facing Virginia higher education. To that end, this report provides a look at enrollment trends at both the systemwide and institutional level over the last 20 years.

Specifically, this report presents public four- and two-year sector aggregated enrollment data consisting of full-time-equivalent (FTE) enrollments by level and by residency from 1987-88 to 200506, fall headcount enrollment by level and by residency from 1987 to 2006, new freshmen and new undergraduate transfer enrollment by residency from 1992 to 2006. Additionally, the report provides snapshots of undergraduate student demographic data for three years - 1996, 2001, and 2006 by ethnicity/race, gender, age distribution, student load, students living on/off campus, and geographic region. This report also includes a special section of trends in two focus areas: high school dual enrollment and Science, Technology, Engineering, and Mathematics (STEM) enrollments. It should be noted that new student enrollment and undergraduate student demographic data only goes back to 1992, the year the Council began collecting student-specific data. The report's appendices include the same enrollment data for each public four-year institution, the Virginia Community College System, and Richard Bland College.

## NATIONAL ENROLLMENT TRENDS

Postsecondary education participation has been on the rise nationally. According to the National Center of Education Statistics' Digest of Educational Statistics 2005, total enrollment at public four-year institutions increased 1.3 million between the years 1987 and 2004, an increase of $24 \%{ }^{1}$ During this same time period, Virginia's total headcount enrollment at public four-year institutions grew at a slightly stronger rate of $26 \%$ ( 38,968 students). Public two-year institutions also exhibited strong gains nationally, growing 1.7 million (37\%) from 1987 to $2004 .{ }^{2}$ However, Virginia’s public two-year undergraduate enrollment did not experience the same growth rate, expanding only $24 \%$ or 29,739 students during this same time period.

Nationally, total undergraduate enrollment at public four-year institutions grew by 1 million students or $24 \%$ between 1987 and 2004. ${ }^{3}$ Virginia's public four-year institutions expanded at a similar rate, growing by $23 \%$ or 25,854 students in the same time period.

Between 1987 and 2004, graduate enrollment at public institutions grew by $26 \%$ nationally. ${ }^{4}$ The percent increase for female graduate students was much higher than for male graduate students, $37 \%$ and $13 \%$ respectively. Graduate enrollment at Virginia public institutions grew by $39 \%$ during these same years. As with the national trends, Virginia experienced differences in the rate of growth by gender in graduate student enrollment. Between the years 1992 and 2004, female graduate enrollment increased $26 \%$ while male graduate enrollment increased $10 \%$.

Nationally, first-professional enrollment at public institutions grew by $23 \%$ from 1987 to $2004 .{ }^{5}$ This growth in enrollment is comprised primarily of women. Female first-professional enrollment at public universities rose by $70 \%$ while male first-professional enrollment fell $5 \%$ during this time period. During this same time frame, enrollment at the five Virginia institutions which offer first professional programs grew by $14 \%$. From 1992 to 2004, women enrolled in Virginia first-professional programs at a faster rate than did men, $35 \%$ to $4 \%$ respectively.

The following table displays national and Virginia enrollment growth by level at public four- and two-year sector between 1987 and 2004.

| Enrollment Growth by Public Four- and Two-Year Sector between 1987 and 2004 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | National |  | Virginia |  |
|  | Public Four-Year | Public Two-Year | Public Four-Year | Public Two-Year |
| Total Enrollment | 24\% | 37\% | 26\% | 24\% |
| Undergraduate Enrollment | 24\% | N/A | 23\% | N/A |
| Graduate Enrollment | 26\% | N/A | 39\% | N/A |
| First Professional Enrollment | 23\% | N/A | 14\% | N/A |

Between 1992 and 2004, enrollment of first-time freshmen at public four-year universities increased by $33 \%$ nationally. ${ }^{6}$ In Virginia, first-time freshmen enrollment at public four-year institutions grew by $29 \%$ during the same time period. National first-time freshmen growth at public two-year institutions was nearly flat, increase only $2 \%$ from 1992 to $2004 .{ }^{7}$ Public two-year first-time freshmen growth in Virginia was substantially stronger, increasing 50\% during the years 1992 to 2004.

There are significant gender differences in the undergraduate growth rate at public four-year institutions as well. Nationally between 1990 and 2004, male enrollment at public four-year institutions grew $9 \%$, while female enrollment grew by $20 \% .^{8}$ Virginia also exhibited differences in gender undergraduate public four-year enrollment, though not as pronounced as the national figures. From

1992 to 2004, male undergraduate enrollment at public four-year institutions in Virginia grew by 12\%, while female enrollment expanded by $18 \%$. At public two-year institutions, gender differences were not as pronounced as those at public four-year universities nationally. At the national level, male enrollment at public two-year institutions grew by $21 \%$, while female enrollment expanded by $28 \%$ between 1990 and 2004. ${ }^{9}$ Following the national two-year institution trends, Virginia public two-year colleges also exhibited different growth rates among men and women. From 1992 to 2004, male enrollment at Virginia's public two-year colleges grew by $10 \%$ while female enrollment expanded by $18 \%$.

Total minority enrollment at public four-year institutions nation-wide rose $73 \%$ from 1990 to 2004. ${ }^{10}$ This figure includes not only undergraduate enrollment, but also graduate and first-professional students. Among the ethnic groups, Hispanic students showed the largest increase, rising 112\% during that time period, followed by Asian/Pacific Islander (79\%), American Indian/Native American (76\%), and Black, non-Hispanic (50\%). White, non-Hispanic enrollment at public four-year institutions rose by only $1 \%$ during these years. Total growth in ethnic group enrollment at Virginia public four-year institutions mirrors the national numbers. Total minority (undergraduate, graduate and first professional) enrollment increased by 32\% between 1992 and 2004. Hispanic enrollment had the largest increase at $113 \%$, followed by Asian/Pacific Islander at 61\%, American Indian/Native American at 31\%, and Black, non-Hispanic at $14 \%$.

Nationally, students enrolling full-time at public two-year institutions have outpaced those enrolling part-time, rising $41 \%$ and $16 \%$ respectively between 1990 and $2004 .{ }^{11}$ During this same time period, minority enrollment at public two-year institutions has gone up dramatically, increasing 95\%. Increases varied among the ethnic groups, with Hispanic students experiencing the largest increase at 125\%, followed by Asian/Pacific Islander (99\%), Black, non-Hispanic (73\%), and American Indian (48\%). ${ }^{12}$ White, non-Hispanic enrollment rose only 3\% during these years. In Virginia from 1992 to 2004, students enrolled full-time at public two-year institutions grew by $31 \%$, while students enrolled part-time grew by 8\%. During these same years, minority enrollment at Virginia two-year institutions expanded by $66 \%$. American Indian/Native American growth in Virginia was much larger than at the national level, increasing by 155\%. Hispanic growth was also notable increasing 134\%, followed by Black, non-Hispanic at $61 \%$ and Asian/Pacific Islander at $44 \%$.

VIRGINIA ENROLLMENT TRENDS

## TOTAL PUBLIC FOUR-YEAR SUMMARY

## Annualized Full-Time Equivalent (FTE) Enrollment

## Total Annualized FTE Enrollment:

From 1987-88 to 2005-06, the total FTE enrollment at Virginia public four-year institutions has grown by 38,848 FTE students, or $28.8 \%$. In-state total FTE enrollment grew at a greater rate than did out-of-state total FTE, $30.8 \%$ and $22.9 \%$ respectively. As a result, the proportion of in-state to out-ofstate total FTE enrollment shifted over the last 19 years by $1 \%$ to $76.5 \%$ in-state total FTE and $23.5 \%$ out-of-state total FTE.

Seventy-nine percent of the total FTE enrollment at public four-year institutions is from undergraduate FTE, 18\% is from graduate FTE, and 3\% is from first-professional FTE enrollment.

The table and chart below display the total FTE enrollment at Virginia public four-year institutions from 1987-88 to 2005-06.

| Total <br> Annualized FTE Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1987-88 | 101,590 | 33,202 | 134,792 |
| 1988-89 | 104,990 | 34,008 | 138,998 |
| 1989-90 | 108,563 | 33,884 | 142,447 |
| 1990-91 | 110,255 | 34,104 | 144,359 |
| 1991-92 | 112,324 | 33,837 | 146,161 |
| 1992-93 | 113,459 | 32,310 | 145,769 |
| 1993-94 | 112,375 | 32,515 | 144,890 |
| 1994-95 | 112,606 | 31,923 | 144,529 |
| 1995-96 | 112,146 | 32,608 | 144,754 |
| 1996-97 | 114,347 | 33,764 | 148,111 |
| 1997-98 | 116,759 | 34,567 | 151,326 |
| 1998-99 | 118,592 | 34,831 | 153,423 |
| 1999-00 | 118,393 | 35,225 | 153,618 |
| 2000-01 | 117,490 | 36,765 | 154,255 |
| 2001-02 | 120,531 | 37,726 | 158,257 |
| 2002-03 | 124,248 | 38,778 | 163,026 |
| 2003-04 | 126,821 | 39,778 | 166,599 |
| 2004-05 | 129,272 | 39,975 | 169,247 |
| 2005-06 | 132,850 | 40,790 | 173,640 |
| $\begin{gathered} \text { \% Change } \\ \text { from } \\ 1987-88 \\ \hline \end{gathered}$ | 30.8\% | 22.9\% | 28.8\% |
| \% Change Accounted for by the Last 5 Years | 39.4\% | 40.4\% | 39.6\% |

Public Four-Year Institutions
Total Annualized FTE Enrollment
From 1987-88 to 2005-06


Figure 1 : Public Four-Year Total FTE Enrollment from 1987-88 to 2005-06

## Undergraduate Annualized FTE Enrollment:

Over the last 19 years, the total undergraduate FTE enrollment at public four-year institutions increased 27,627 FTE. This represents a $25.1 \%$ increase. The percent change for in-state FTE doubled that of out-of-state FTE, at $28.2 \%$ and $14.6 \%$ respectively. During the same time period, the proportion of total undergraduate in-state FTE rose $2 \%$ to $79.5 \%$, while out-of-state undergraduate FTE declined to 20.5\%.

Except for Virginia Military Institute (-2.9\%) and Norfolk State University (-32.5\%), all of the Commonwealth's public four-year institutions experienced positive total FTE growth over the 19-year period. However, the systemwide increase in total undergraduate FTE can be largely attributed to the strong expansion of three institutions: James Madison University (59.2\%), George Mason University (58.5\%), and Virginia Commonwealth University (46.9\%). These three institutions account for $63 \%$ of the total undergraduate FTE increase. Several campuses experienced a shift in their in-state to out-ofstate undergraduate FTE ratios. The largest downward shift in proportion of in-state undergraduate FTE occurred at the University of Mary Washington (down $10 \%$ to $72.3 \%$ in-state FTE), and James Madison University (down $6 \%$ to $69.8 \%$ in-state FTE). In contrast, five institutions saw larger increases in the proportion of in-state students: Old Dominion University (up 9\% to $89.6 \%$ in-state FTE), Virginia State University (up 9\% to 66.8\% in-state FTE), Norfolk State University (up 7\% to 74.9\% in-state FTE), Christopher Newport University (up 6\% to $97.1 \%$ in-state FTE), and University of Virginia (up 6\% to 67.5\% in-state FTE).

The table and chart below illustrate the total undergraduate FTE enrollment at Virginia public four-year institutions from 1987-88 to 2005-06.

| Undergraduate <br> Annualized FTE Enrollment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | In- State | Out-ofState | Total | \% InState | \% Out-ofState |
| 1987-88 | 85,303 | 24,561 | 109,864 | 77.6\% | 22.4\% |
| 1988-89 | 88,103 | 25,130 | 113,233 | 77.8\% | 22.2\% |
| 1989-90 | 90,210 | 25,204 | 115,414 | 78.2\% | 21.8\% |
| 1990-91 | 91,363 | 24,962 | 116,325 | 78.5\% | 21.5\% |
| 1991-92 | 92,499 | 24,605 | 117,104 | 79.0\% | 21.0\% |
| 1992-93 | 92,336 | 23,363 | 115,699 | 79.8\% | 20.2\% |
| 1993-94 | 91,013 | 23,158 | 114,171 | 79.7\% | 20.3\% |
| 1994-95 | 90,475 | 22,680 | 113,154 | 80.0\% | 20.0\% |
| 1995-96 | 89,920 | 23,070 | 112,990 | 79.6\% | 20.4\% |
| 1996-97 | 91,637 | 24,239 | 115,876 | 79.1\% | 20.9\% |
| 1997-98 | 93,624 | 24,938 | 118,562 | 79.0\% | 21.0\% |
| 1998-99 | 95,593 | 25,396 | 120,989 | 79.0\% | 21.0\% |
| 1999-00 | 96,363 | 25,495 | 121,858 | 79.1\% | 20.9\% |
| 2000-01 | 96,050 | 26,252 | 122,302 | 78.5\% | 21.5\% |
| 2001-02 | 99,011 | 26,734 | 125,745 | 78.7\% | 21.3\% |
| 2002-03 | 101,805 | 27,365 | 129,171 | 78.8\% | 21.2\% |
| 2003-04 | 103,506 | 27,674 | 131,180 | 78.9\% | 21.1\% |
| 2004-05 | 105,964 | 27,584 | 133,549 | 79.3\% | 20.7\% |
| 2005-06 | 109,348 | 28,143 | 137,491 | 79.5\% | 20.5\% |
| \% Change from 1987-88 | 28.2\% | 14.6\% | 25.1\% |  |  |
| \% Change Accounted for by the Last 5 Years |  |  |  |  |  |
| 5 Years | 43.0\% | 39.3\% | 42.5\% |  |  |



Figure 2: Public Four-Year Undergraduate FTE Enrollment from 1987-88 to 2005-06

## Graduate Annualized FTE Enrollment:

Total graduate FTE enrollments at Virginia public four-year institutions rose by 10,348 FTE or 49.8\%. Both in-state and out-of-state FTE enrollments saw larger increases, 52.6\% and 44.9\% respectively. The proportion of in-state to out-of-state FTE enrollments remained relatively unchanged with only a $1 \%$ rise in the proportion of in-state graduate FTE enrollment going to $65.2 \%$ in-state and $34.8 \%$ out-of-state in the 2005-06 academic year.

The University of Mary Washington and Christopher Newport University experienced the largest percent increase in graduate FTE enrollment (926.4\% and 770.5\% respectively). However, Christopher Newport University did not begin offering graduate programs until 1991 and the University of Mary Washington added programs in the 2000-01 academic year resulting in large increases. In terms of total graduate FTE enrollment, both institutions remain among the smaller ones in the system. Of the larger institutions in the Virginia public higher education system, George Mason University exhibited the largest rise of $158.8 \%$ in the 19 -year period.

The majority of public four-year institutions had larger percent increases in graduate FTE enrollments for out-of-state than for in-state. Several institution saw bigger shifts in their proportion of in-state to out-of-state graduate FTE enrollments: Norfolk State University (down $13 \%$ to $77.7 \%$ instate), James Madison University (down $11 \%$ to $76.2 \%$ in-state), College of William and Mary (down $9 \%$ to $55.7 \%$ in-state), Virginia State University (down $7 \%$ to $84.8 \%$ in-state), and George Mason University (down 6\% to 73.6\% in-state).

The table and chart below display the graduate annualized FTE enrollment trends from 1987-88 to 2005-06.

| Graduate Annualized FTE Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | In- <br> State | $\begin{aligned} & \text { Out- } \\ & \text { of- } \\ & \text { State } \end{aligned}$ | Total |
| 1987-88 | 13,306 | 7,467 | 20,773 |
| 1988-89 | 14,007 | 7,664 | 21,671 |
| 1989-90 | 15,433 | 7,478 | 22,911 |
| 1990-91 | 15,882 | 7,947 | 23,829 |
| 1991-92 | 16,779 | 8,107 | 24,886 |
| 1992-93 | 17,905 | 7,958 | 25,863 |
| 1993-94 | 18,197 | 8,307 | 26,504 |
| 1994-95 | 18,978 | 8,124 | 27,102 |
| 1995-96 | 19,065 | 8,298 | 27,363 |
| 1996-97 | 19,288 | 8,359 | 27,647 |
| 1997-98 | 19,639 | 8,463 | 28,102 |
| 1998-99 | 19,483 | 8,253 | 27,736 |
| 1999-00 | 18,561 | 8,446 | 27,007 |
| 2000-01 | 18,108 | 9,167 | 27,276 |
| 2001-02 | 18,206 | 9,562 | 27,769 |
| 2002-03 | 19,140 | 9,879 | 29,019 |
| 2003-04 | 20,056 | 10,476 | 30,533 |
| 2004-05 | 20,135 | 10,624 | 30,759 |
| 2005-06 | 20,303 | 10,818 | 31,121 |
| \% Change from 198788 | 52.6\% | 44.9\% | 49.8\% |
| \% Change Accounted for by the Last 5 Years | 30.0\% | 37.5\% | 32.4\% |

[^0]Public Four-Year Institutions Graduate Annualized FTE Enrollment From 1987-88 to 2005-06


Figure 3: Public Four-Year Graduate FTE Enrollment from 1987-88 to 2005-06

First Professional Annualized FTE Enrollment:
Total first-professional FTE enrollment at Virginia public four-year institutions grew by 874 FTE or $21.0 \%$ over the past 19 years. Out-of-state FTE enrollment grew at a larger rate than did in-state first-professional FTE enrollments, $54.2 \%$ to $7.8 \%$ respectively. Overall, the proportion of in-state to out-of-state FTE enrollment decreased $8 \%$ to $63.6 \%$ in-state for academic year 2005-06. Five institutions - College of William and Mary, George Mason University, University of Virginia, Virginia Commonwealth University, and Virginia Tech — offer first-professional education. Of these five, only Virginia Tech had a larger percent increase for in-state than out-of-state FTE first-professional. As a result, Virginia Tech's proportion of in-state to out-of-state FTE rose $27 \%$ to $89 \%$ in-state.

The table and chart below highlight the first professional annualized FTE enrollment data over the past 19 years.

| First Professional Annualized FTE Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1987-88 | 2,969 | 1,186 | 4,155 |
| 1988-89 | 2,890 | 1,204 | 4,094 |
| 1989-90 | 2,906 | 1,216 | 4,122 |
| 1990-91 | 3,020 | 1,185 | 4,205 |
| 1991-92 | 3,056 | 1,115 | 4,171 |
| 1992-93 | 3,218 | 989 | 4,207 |
| 1993-94 | 3,165 | 1,050 | 4,215 |
| 1994-95 | 3,153 | 1,119 | 4,272 |
| 1995-96 | 3,161 | 1,240 | 4,401 |
| 1996-97 | 3,422 | 1,166 | 4,588 |
| 1997-98 | 3,496 | 1,165 | 4,662 |
| 1998-99 | 3,515 | 1,182 | 4,698 |
| 1999-00 | 3,469 | 1,285 | 4,753 |
| 2000-01 | 3,332 | 1,345 | 4,677 |
| 2001-02 | 3,313 | 1,430 | 4,744 |
| 2002-03 | 3,303 | 1,534 | 4,837 |
| 2003-04 | 3,258 | 1,628 | 4,886 |
| 2004-05 | 3,173 | 1,767 | 4,940 |
| 2005-06 | 3,200 | 1,829 | 5,029 |
| \% Change from 1987-88 | 7.8\% | 54.2\% | 21.0\% |
| \% Change Accounted for by the Last 5 Years | -49.3\% | 62.0\% | 32.6\% |

Table 5: Public Four-Year First-Professional FTE Enrollment from 1987-88 to 2005-06

Public Four-Year Institutions First Professional Annualized FTE Enrollment From 1987-88 to 2005-06


Figure 4: Public Four-Year First-Professional FTE Enrollment from 1987-88 to 2005-06

## Fall Headcount Enrollment

## Total Fall Headcount Enrollment:

From 1987 to 2006, the total fall headcount enrollments at Virginia's public four-year institutions grew by 46,431 students, or $30.8 \%$. The system is now serving 36,737 more in-state students than it did in 1987. The rate of change for both in-state and out-of-state was fairly steady at $31.3 \%$ and $29.1 \%$ respectively. There was no change in the proportion of in-state to out-of-state students, remaining at $78.2 \%$ in-state and $21.8 \%$ out-of-state.

The total headcount population is comprised of $75 \%$ undergraduate students, $23 \%$ graduate students, and $2 \%$ first-professional students. The table and chart below depict the total fall enrollment numbers over the last 20 years.

| Total <br> Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1987 | 117,508 | 33,348 | 150,856 |
| 1988 | 119,789 | 33,887 | 153,676 |
| 1989 | 123,456 | 34,346 | 157,802 |
| 1990 | 125,614 | 34,303 | 159,917 |
| 1991 | 128,896 | 33,924 | 162,820 |
| 1992 | 130,926 | 32,492 | 163,418 |
| 1993 | 130,218 | 32,349 | 162,567 |
| 1994 | 130,389 | 32,043 | 162,432 |
| 1995 | 131,753 | 33,029 | 164,782 |
| 1996 | 132,917 | 34,586 | 167,503 |
| 1997 | 135,964 | 35,091 | 171,055 |
| 1998 | 137,210 | 35,707 | 172,917 |
| 1999 | 138,909 | 36,366 | 175,275 |
| 2000 | 137,904 | 37,838 | 175,742 |
| 2001 | 141,102 | 39,692 | 180,794 |
| 2002 | 145,257 | 40,724 | 185,981 |
| 2003 | 147,574 | 40,992 | 188,566 |
| 2004 | 148,913 | 40,911 | 189,824 |
| 2005 | 152,460 | 41,948 | 194,408 |
| 2006 | 154,245 | 43,042 | 197,287 |
| $\begin{gathered} \hline \text { \% Change } \\ \text { from } \\ 1987 \\ \hline \end{gathered}$ | 31.3\% | 29.1\% | 30.8\% |
| \% Change Accounted for by the Last 5 Years | 24.5\% | 23.9\% | 24.4\% |

Public Four-Year Institutions Total Fall Headcount Enrollment From 1987 to 2006


Figure 5 : Public Four-Year Total Fall Headcount Enrollment from 1987 to 2006

## Undergraduate Fall Headcount Enrollment:

The total undergraduate fall headcount enrollments have gone up $28.3 \%$ since 1987. The public four-year system is now serving an additional 32,419 students. In-state growth has been stronger than out-of-state growth at $30.7 \%$ and $18.8 \%$ respectively. By 2006, the system was accommodating 27,931
more in-state undergraduate students than it did in 1987. The proportion of in-state to out-of-state students has remained relatively constant, shifting $2 \%$ in favor of in-state students to $80.7 \%$ in-state and $19.3 \%$ out-of-state.

Norfolk State University is the only public four-year institution which saw an overall decline in enrollments, down $23.3 \%$ in the 20-year period. The decline was sharper for out-of-state students (down $43.6 \%$ ) than for in-state students (down 14.5\%). The institutions which saw the largest percent increase in total undergraduate student enrollments were: University of Virginia at Wise (81.0\%), James Madison University (69.9\%), George Mason University (44.9\%), and Virginia Commonwealth University (43.6\%). In terms of student numbers, the latter three institutions together enrolled an additional 18,695 students, which represents $58 \%$ of the total increase of 32,419 students. Three fouryear institutions had a large increase in out-of-state enrollments: James Madison University (111.1\%), University of Mary Washington (88.6\%), and Virginia Commonwealth University (82.5\%). As a result, these institutions, along with Virginia Tech, saw a shift in their proportion of in-state to out-of state students. The largest shift was at the University of Mary Washington (down 8\% to $75.4 \%$ in-state) followed by James Madison University (down 6\% to $70.4 \%$ in-state), Virginia Commonwealth University (down $2 \%$ to $91.0 \%$ in-state), and Virginia Tech (down $2 \%$ to $73.5 \%$ in-state). Several institutions experienced a proportional shift in the other direction. The largest shift occurred at Norfolk State University (up 9\% to 78.8\% in-state), Old Dominion University (up 9\% to 90.3\% in-state), Virginia State University (up 9\% to 65.9\% in-state), and Christopher Newport University (up 6\% to $96.5 \%$ in-state).

In Fall 2006, the public four-year undergraduate fall headcount in-state to out-of-state ratio was $80.7 \%$ in-state to $19.3 \%$ out-of-state. Eight of the 15 public four-year institutions fell below that public mean: College of William and Mary ( $66.5 \%$ in-state), James Madison University ( $70.4 \%$ in-state), Norfolk State University (78.8\% in-state), University of Mary Washington (75.4\% in-state), University of Virginia ( $66.8 \%$ in-state), Virginia Military Institute ( $55.2 \%$ in-state), Virginia State University ( $65.9 \%$ in-state), and Virginia Tech (73.5\% in-state).

The chart and table below highlight the undergraduate fall headcount changes over the past 20 years.

Public Four-Year Institutions Undergraduate Fall Headcount Enrollment From 1987 to 2006


| Undergraduate <br> Fall Headcount Enrollment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total | \% In- <br> State | \% Out-ofState |
| 1987 | 90,835 | 23,856 | 114,691 | 79.2\% | 20.8\% |
| 1988 | 92,837 | 24,365 | 117,202 | 79.2\% | 20.8\% |
| 1989 | 94,993 | 24,539 | 119,532 | 79.5\% | 20.5\% |
| 1990 | 96,238 | 24,239 | 120,477 | 79.9\% | 20.1\% |
| 1991 | 98,217 | 24,078 | 122,295 | 80.3\% | 19.7\% |
| 1992 | 98,909 | 23,044 | 121,953 | 81.1\% | 18.9\% |
| 1993 | 97,879 | 22,600 | 120,479 | 81.2\% | 18.8\% |
| 1994 | 97,324 | 22,185 | 119,509 | 81.4\% | 18.6\% |
| 1995 | 97,818 | 22,703 | 120,521 | 81.2\% | 18.8\% |
| 1996 | 98,905 | 24,074 | 122,979 | 80.4\% | 19.6\% |
| 1997 | 100,931 | 24,510 | 125,441 | 80.5\% | 19.5\% |
| 1998 | 102,609 | 25,131 | 127,740 | 80.3\% | 19.7\% |
| 1999 | 105,613 | 25,692 | 131,305 | 80.4\% | 19.6\% |
| 2000 | 105,286 | 26,519 | 131,805 | 79.9\% | 20.1\% |
| 2001 | 107,731 | 27,426 | 135,157 | 79.7\% | 20.3\% |
| 2002 | 110,693 | 27,791 | 138,484 | 79.9\% | 20.1\% |
| 2003 | 111,714 | 27,694 | 139,408 | 80.1\% | 19.9\% |
| 2004 | 113,120 | 27,425 | 140,545 | 80.5\% | 19.5\% |
| 2005 | 116,873 | 27,897 | 144,770 | 80.7\% | 19.3\% |
| 2006 | 118,766 | 28,344 | 147,110 | 80.7\% | 19.3\% |
| \% Change from 1987 | 30.7\% | 18.8\% | 28.3\% |  |  |
| \% Change Accounted for by the Last 5 Years | 28.9\% | 12.3\% | 26.6\% |  |  |

## New Freshmen Fall Headcount Enrollment:

Enrollment trends for this section only go back 15 years to 1992 when SCHEV began collecting student unit record data needed to analyze demographic characteristics of first-time freshmen.

In Fall 2006, new freshmen constituted $20 \%$ of undergraduates at the four-year public institutions. From 1992 to 2006, new freshmen fall headcount enrollment increased by $33.6 \%$ or 7,255 students. In-state new freshmen enrollment grew at a faster rate than did out-of-state new freshmen enrollment. Specifically, in-state first-time freshmen enrollment increased by 5,871 students or $36.2 \%$, while out-of-state first-time freshmen enrollment grew by 1,384 students or $25.7 \%$. Nine out of 15 public four-year institutions saw a greater percent increase in out-of-state new freshmen enrollment than in-state new freshmen enrollment between 1992 and 2006. However, a few institutions have small enrollment numbers that account for large out-of-state percent increases. The following institutions had the largest percent increases in out-of-state new freshmen enrollment over the last 15 years: Virginia Commonwealth University (268.8\%), University of Virginia College at Wise (157.1\%), George Mason University (116.7\%), James Madison University (103.6\%), and Longwood University (92.6\%). In contrast, out-of-state new freshmen enrollment declined at Norfolk State University (56.9\%), Radford University (53.7\%), and Virginia State University (20.7\%).

The table and chart below display the total new freshmen enrollment by residency at public fouryear institutions from 1992 to 2006.

| New Freshmen <br> Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1992 | 16,221 | 5,381 | 21,602 |
| 1993 | 15,701 | 5,370 | 21,071 |
| 1994 | 16,168 | 5,318 | 21,486 |
| 1995 | 17,000 | 5,678 | 22,678 |
| 1996 | 17,665 | 6,329 | 23,994 |
| 1997 | 18,117 | 6,059 | 24,176 |
| 1998 | 18,392 | 5,917 | 24,309 |
| 1999 | 18,828 | 6,177 | 25,005 |
| 2000 | 19,246 | 6,585 | 25,831 |
| 2001 | 19,743 | 6,923 | 26,666 |
| 2002 | 20,382 | 6,758 | 27,140 |
| 2003 | 21,174 | 6,847 | 28,021 |
| 2004 | 21,306 | 6,574 | 27,880 |
| 2005 | 22,392 | 6,926 | 29,318 |
| 2006 | 22,092 | 6,765 | 28,857 |
| \% Change from 1992 | 36.2\% | 25.7\% | 33.6\% |
| \% Change Accounted for by the Last 5 Years | 29.1\% | 0.5\% | 23.7\% |

Public Four-Year Institutions
New Freshmen Fall Headcount Enrollment From 1992 to 2006


$$
\text { םIn-State } \quad \text { Out-of-State }
$$

Table 8: Public Four-Year New Freshmen Fall Headcount Enrollment
Figure 7: Public Four-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

The table below displays the total in-state new freshmen enrollment at each public four-year institution for years 1992, 1998, and 2006.

| Public Four-Year Institutions, I n-State New Freshmen Fall Headcount |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Institution | 1992 | 1998 | 2006 | \% change from 1992 | Student Difference from 1992 |
| Christopher Newport University | 472 | 677 | 1,104 | 133.9\% | 632 |
| College of William and Mary | 825 | 790 | 888 | 7.6\% | 63 |
| George Mason University | 1,532 | 1,860 | 1,938 | 26.5\% | 406 |
| James Madison University | 1,429 | 2,015 | 2,500 | 74.9\% | 1,071 |
| Longwood University | 660 | 774 | 935 | 41.7\% | 275 |
| Norfolk State University | 952 | 749 | 806 | -15.3\% | -146 |
| Old Dominion University | 1,296 | 1,407 | 1,847 | 42.5\% | 551 |
| Radford University | 1,495 | 1,258 | 1,579 | 5.6\% | 84 |
| University of Mary Washington | 483 | 489 | 639 | 32.3\% | 156 |
| University of Virginia | 1,724 | 1,920 | 1,969 | 14.2\% | 245 |
| University of Virginia - College at Wise | 322 | 277 | 383 | 18.9\% | 61 |
| Virginia Commonwealth University | 1,419 | 2,078 | 3,138 | 121.1\% | 1,719 |
| Virginia Military Institute | 217 | 180 | 217 | 0\% | 0 |
| Virginia State University | 496 | 517 | 486 | -2\% | -10 |
| Virginia Tech | 2,899 | 3,401 | 3,663 | 26.4\% | 764 |
| Total | 16,221 | 18,392 | 22,092 | 36.2\% | 5,871 |

Regarding in-state new freshmen enrollment growth at the individual institutions, Christopher Newport University, James Madison University, Virginia Commonwealth University and Virginia Tech accounted for most of the total in-state growth between 1992 and 2006. In contrast, in-state new
freshmen enrollment decreased at both Norfolk State University by $15.3 \%$ or 146 students and at Virginia State University by 2\% or 10 students.

The following chart and table show the proportion of in-state and out-of-state new freshmen enrollment at the public four-year institutions between the years 1992 and 2006.

| New Freshmen |  |  |
| :---: | ---: | ---: |
| Percentage of In-State to Out-of-State |  |  |
| Year | In-State | Out-of-State |
| 1992 | $75.1 \%$ | $24.9 \%$ |
| 1993 | $74.5 \%$ | $25.5 \%$ |
| 1994 | $75.2 \%$ | $24.8 \%$ |
| 1995 | $75.0 \%$ | $25.0 \%$ |
| 1996 | $73.6 \%$ | $26.4 \%$ |
| 1997 | $74.9 \%$ | $25.1 \%$ |
| 1998 | $75.7 \%$ | $24.3 \%$ |
| 1999 | $75.3 \%$ | $24.7 \%$ |
| 2000 | $74.5 \%$ | $25.5 \%$ |
| 2001 | $74.0 \%$ | $26.0 \%$ |
| 2002 | $75.1 \%$ | $24.9 \%$ |
| 2003 | $75.6 \%$ | $24.4 \%$ |
| 2004 | $76.4 \%$ | $23.6 \%$ |
| 2005 | $76.4 \%$ | $23.6 \%$ |
| 2006 | $76.6 \%$ | $23.4 \%$ |



Figure 8: Public Four-Year Percentage of In-State to Out-of-State New Freshmen Fall Headcount Enrollment, 1992 and 2006

The proportion of in-state to out-of-state first-time freshmen has remained relatively constant over the last 15 years. In 2006, more than $75 \%$ of total first-time freshmen enrollment at public fouryear institutions came from the Commonwealth. However, seven public four-year institutions’ proportion of in-state new freshmen fell below the total public four-year mark. These individual institutions are: the College of William and Mary ( $66 \%$ in-state), James Madison University ( $67 \%$ instate), University of Mary Washington ( $69 \%$ in-state), University of Virginia ( $64 \%$ in-state), Virginia Military Institute (56\% in-state), Virginia State University (59\% in-state), and Virginia Tech (72\% instate).

In addition, there were other notable proportional shifts at specific institutions. For example, the proportion of new in-state freshmen declined at George Mason University by 8\% and at Virginia Military Institute by 6\%. In contrast, Norfolk State University and Radford University’s proportion of new in-state freshmen increased $14 \%$ and $9 \%$ respectively.

## New Undergraduate Transfer Fall Headcount Enrollment:

From 1992 to 2006, the total number of new undergraduate transfers to public four-year institutions declined $1.1 \%$. Between 1999 and 2000, there was a systemwide decrease of $9 \%$ in transfers. New transfer enrollments bounced back in 2001 and have since returned to previous levels.

The number of transfer students accepted varies widely among institutions based on both institutional size and mission. In 2006, three institutions, George Mason University ( 2,084 students), Virginia Commonwealth University (1,754 students), and Old Dominion University (1,691 students) accounted for more than half of total four-year transfers. Of the 15 public four-year institutions, Christopher Newport University has seen the largest decrease in number of transfers, declining 85.5\% (763 students) since 1992. That decrease has largely been offset by a $66.4 \%$ ( 675 students) increase at Old Dominion University during the same time period.

The following chart and table show new undergraduate transfers enrollment at the public fouryear institutions from 1992 to 2006.

| New Undergraduate Transfers Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1992 | 8,409 | 1,466 | 9,875 |
| 1993 | 8,472 | 1,333 | 9,805 |
| 1994 | 8,539 | 1,401 | 9,940 |
| 1995 | 8,364 | 1,382 | 9,746 |
| 1996 | 8,352 | 1,502 | 9,854 |
| 1997 | 8,518 | 1,449 | 9,967 |
| 1998 | 8,108 | 1,438 | 9,546 |
| 1999 | 8,153 | 1,420 | 9,573 |
| 2000 | 7,407 | 1,288 | 8,695 |
| 2001 | 7,805 | 1,425 | 9,230 |
| 2002 | 7,977 | 1,469 | 9,446 |
| 2003 | 8,040 | 1,283 | 9,323 |
| 2004 | 8,326 | 1,233 | 9,559 |
| 2005 | 8,385 | 1,329 | 9,714 |
| 2006 | 8,572 | 1,197 | 9,769 |
| \% Change from 1992 | 1.9\% | -18.3\% | -1.1\% |
| \% Change Accounted for by the Last 5 Years | 365.0\% | 101.1\% | -304.7\% |

Public Four-Year Institutions New Undergraduate Transfers Fall Headcount Enrollment From 1992 to 2006


Figure 9: Public Four-Year New Undergraduate Transfers Fall Enrollment from 1992 to 2006

Proportionally, there has been a shift toward in-state students. Since 1992, the proportion of instate transfers to out-of-state transfers shifted $3 \%$ to $87.7 \%$ in-state and to $12.3 \%$ out-of-state transfers. Three institutions experienced larger shifts toward in-state transfer students: Norfolk State University (up $21 \%$ to $80.9 \%$ in-state transfer), Christopher Newport University (up 12\% to $94.6 \%$ in-state transfer), and Old Dominion University (up 11\% to 88.7\% in-state transfer).

| New Undergraduate Transfers Percentage of In-State to Out-of-State |  |  |
| :---: | :---: | :---: |
| Year | In-State | Out-of-State |
| 1992 | 85.2\% | 14.8\% |
| 1993 | 86.4\% | 13.6\% |
| 1994 | 85.9\% | 14.1\% |
| 1995 | 85.8\% | 14.2\% |
| 1996 | 84.8\% | 15.2\% |
| 1997 | 85.5\% | 14.5\% |
| 1998 | 84.9\% | 15.1\% |
| 1999 | 85.2\% | 14.8\% |
| 2000 | 85.2\% | 14.8\% |
| 2001 | 84.6\% | 15.4\% |
| 2002 | 84.4\% | 15.6\% |
| 2003 | 86.2\% | 13.8\% |
| 2004 | 87.1\% | 12.9\% |
| 2005 | 86.3\% | 13.7\% |
| 2006 | 87.7\% | 12.3\% |
| Table 12: Public Four-Year Percentage of In-State to Out-of-State New Undergraduate Transfers Fall Headcount Enrollment from 1992 to 2006 |  |  |

New Undergraduate Transfers: In-State to Out-of-State


1992


- In-State
${ }^{\square}$ Out-of-State

Figure 10: Public Four-Year Percentage of In-State to Out-of-State New Undergraduate Transfers Fall Headcount Enrollment, 1992 and 2006

## Transfer from Virginia Two-Year Institutions: In-depth

While the overall number of transfer students at public four-year institutions has remained relatively constant since 1993, a greater proportion of these students are now coming from the Virginia public two-year institutions. The number of Virginia two-year transfers to the Commonwealth's public four-year institutions increased 13.7\% (551 students) from 1993 to 2006. The proportion of two-year transfer students to all other transfers grew by $6 \%$ to $46.9 \%$ in 2006.

| Transfers from Virginia Two-Year Publics to Virginia Four-Year Publics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Total Two-Year Transfers | Total Other Transfers | Total Transfers | \% Two-Year Transfers | \% Other Transfers |
| 1993 | 4,032 | 5,773 | 9,805 | 41.1\% | 58.9\% |
| 1994 | 4,186 | 5,754 | 9,940 | 42.1\% | 57.9\% |
| 1995 | 4,077 | 5,669 | 9,746 | 41.8\% | 58.2\% |
| 1996 | 4,162 | 5,692 | 9,854 | 42.2\% | 57.8\% |
| 1997 | 4,238 | 5,729 | 9,967 | 42.5\% | 57.5\% |
| 1998 | 4,130 | 5,416 | 9,546 | 43.3\% | 56.7\% |
| 1999 | 3,991 | 5,582 | 9,573 | 41.7\% | 58.3\% |
| 2000 | 3,748 | 4,947 | 8,695 | 43.1\% | 56.9\% |
| 2001 | 4,041 | 5,189 | 9,230 | 43.8\% | 56.2\% |
| 2002 | 4,211 | 5,235 | 9,446 | 44.6\% | 55.4\% |
| 2003 | 4,280 | 5,043 | 9,323 | 45.9\% | 54.1\% |
| 2004 | 4,253 | 5,306 | 9,559 | 44.5\% | 55.5\% |
| 2005 | 4,430 | 5,284 | 9,714 | 45.6\% | 54.4\% |
| 2006 | 4,583 | 5,186 | 9,769 | 46.9\% | 53.1\% |
| \% Change from 1993 | 13.7\% | -10.2\% | -0.4\% |  |  |

Between 1993 and 2006, three public four-year institutions had the largest increase in enrollment of students from Virginia public two-year institutions: Old Dominion University (389 students), George Mason University (207 students), and James Madison University (147 students). As noted
earlier, Christopher Newport University has seen a significant reduction in enrollment of new undergraduate transfers. This trend is also reflected in transfer data from two-year institutions. In Fall 2006, Christopher Newport University enrolled 43 Virginia two-year college transfers, down from a high of 283 Virginia two-year college transfers in 1997. This decrease represents a policy choice made by Christopher Newport University prior to the Restructuring Act. In contrast, Old Dominion University, also located in the Hampton Roads region, is increasing its enrollment of two-year college transfers from 509 students in 1993 to 898 students in 2006.

| Transfers from Virginia Two-Year Publics to Virginia Four-Year Publics: By Degree Details |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | AA Degree (BA Credit) | AA Degree (Occ/ Tech Credit) | No AA Degree | Total TwoYear Transfers | \% AA <br> Degree <br> Transfers | \% No AA Degree Transfers |
| 1993 | 906 | 202 | 2,924 | 4,032 | 27.5\% | 72.5\% |
| 1994 | 892 | 246 | 3,048 | 4,186 | 27.2\% | 72.8\% |
| 1995 | 872 | 212 | 2,993 | 4,077 | 26.6\% | 73.4\% |
| 1996 | 861 | 238 | 3,063 | 4,162 | 26.4\% | 73.6\% |
| 1997 | 962 | 228 | 3,048 | 4,238 | 28.1\% | 71.9\% |
| 1998 | 935 | 214 | 2,981 | 4,130 | 27.8\% | 72.2\% |
| 1999 | 868 | 187 | 2,936 | 3,991 | 26.4\% | 73.6\% |
| 2000 | 894 | 188 | 2,666 | 3,748 | 28.9\% | 71.1\% |
| 2001 | 970 | 189 | 2,882 | 4,041 | 28.7\% | 71.3\% |
| 2002 | 979 | 216 | 3,016 | 4,211 | 28.4\% | 71.6\% |
| 2003 | 1,100 | 195 | 2,985 | 4,280 | 30.3\% | 69.7\% |
| 2004 | 1,118 | 185 | 2,950 | 4,253 | 30.6\% | 69.4\% |
| 2005 | 1,264 | 165 | 3,001 | 4,430 | 32.3\% | 67.7\% |
| 2006 | 1,320 | 203 | 3,060 | 4,583 | 33.2\% | 66.8\% |
| \% Change from 1993 | 45.7\% | 0.5\% | 4.7\% | 13.7\% |  |  |
| AA: Associate's degree; BA: Bachelor's degree |  |  |  |  |  |  |

Virginia Two-Year Transfer Students to Virignia Public Four-Year Institutions By Degree Detail from 1993 to 2006


Figure 11: Transfers from Virginia Two-Year Public to Virginia Four-Year Public by Degree Details from 1993 to 2006
As seen in the table above, the majority of Virginia two-year transfer students enter Virginia public four-year institutions prior to completing their associate's degree. However, the proportion of non-associate's degree transfers has declined by 6\% to 66.8\% in 2006.

The number of Occupational/Technical associate’s degree graduates who transfer to a Virginia public four-year institution has remained stable over the years, accounting for $4 \%$ to $6 \%$ of two-year transfers. Transfers with an associate's degree (baccalaureate credit) have grown 45.7\% since 1993. Most of this increase has occurred since 2002. This appears to be a statewide trend. Except for Virginia Military Institute which does not typically accept transfers, 10 of the 15 public four-year institutions reported a gain in associate's degree (baccalaureate credit) transfers.

## Graduate Fall Headcount Enrollment:

From 1987 to 2006, total graduate fall headcount enrollment rose $41.5 \%$. As a system, the public four-year institutions accommodated an additional 13,260 graduate students, of which 8,876 were instate residents. Out-of-state graduate enrollment increased at a somewhat higher rate than did in-state, $52.8 \%$ to $37.6 \%$ respectively. Due to a greater increase in out-of-state students, there was a $2 \%$ shift in the proportion of in-state to out-of-state graduate students to $71.9 \%$ in-state and $28.1 \%$ out-of-state.

The University of Virginia's College at Wise and Virginia Military Institute do not offer graduate programs. The largest percent increases in graduate enrollment occurred at University of Mary Washington (485.3\%) and Christopher Newport University (314.6\%), reflecting the fact that they either began to offer graduate programs or significantly expanded their program offerings during the past 20 years. Both programs are still among the smaller ones in the system, with University of Mary Washington enrolling 679 graduate students and Christopher Newport University enrolling 170 graduate students in Fall 2006. The College of William and Mary and Virginia State University both saw a percent decrease in their total graduate fall enrollment, $-6.7 \%$ and $-6.8 \%$ respectively.

Nine of the 13 public four-year institutions which offer graduate programs saw a downward shift in the proportion of in-state graduate students they serve. The largest change occurred at Norfolk State University (down $20 \%$ to $72.2 \%$ in-state), James Madison University (down $14 \%$ to $75.2 \%$ in-state), the College of William and Mary (down $12 \%$ to $60.3 \%$ in-state), and University of Virginia (down $7 \%$ to $61.2 \%$ in-state). The biggest positive shifts were at Radford University (up $7 \%$ to $90.1 \%$ in-state) and University of Mary Washington (up 6\% to 97.8\% in-state).

The following table and chart highlight the 20-year graduate enrollment trends at Virginia public four-year universities.

| Graduate <br> Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | In-State | Out-ofState | Total |
| 1987 | 23,618 | 8,300 | 31,918 |
| 1988 | 23,947 | 8,325 | 32,272 |
| 1989 | 25,447 | 8,568 | 34,015 |
| 1990 | 26,254 | 8,857 | 35,111 |
| 1991 | 27,509 | 8,714 | 36,223 |
| 1992 | 28,876 | 8,418 | 37,294 |
| 1993 | 29,169 | 8,728 | 37,897 |
| 1994 | 29,919 | 8,777 | 38,696 |
| 1995 | 30,774 | 9,111 | 39,885 |
| 1996 | 30,705 | 9,320 | 40,025 |
| 1997 | 31,665 | 9,389 | 41,054 |
| 1998 | 31,238 | 9,327 | 40,565 |
| 1999 | 29,918 | 9,391 | 39,309 |
| 2000 | 29,409 | 9,960 | 39,369 |
| 2001 | 30,157 | 10,819 | 40,976 |
| 2002 | 31,361 | 11,355 | 42,716 |
| 2003 | 32,691 | 11,647 | 44,338 |
| 2004 | 32,744 | 11,676 | 44,420 |
| 2005 | 32,490 | 12,191 | 44,681 |
| 2006 | 32,494 | 12,684 | 45,178 |
| \% Change from 1987-88 | 37.6\% | 52.8\% | 41.5\% |
| \% Change Accounted for by the Last 5 Years | 12.8\% | 30.3\% | 18.6\% |



Figure 12: Public Four-Year Graduate Fall Headcount Enrollment from 1987 to 2006

## First Professional Fall Headcount Enrollment:

Five institutions in the Commonwealth offer first-professional education: the College of William and Mary, George Mason University, University of Virginia, Virginia Commonwealth University, and Virginia Tech. Over the past 20 years, total first-professional fall headcount enrollment grew by 752 students or $17.7 \%$. Growth for out-of-state students was quite strong at $69 \%$, while in-state firstprofessional enrollment declined by $2.3 \%$. As a result, the proportion of in-state to out-of-state firstprofessional enrollment shifted downward by $12 \%$ to $59.7 \%$ in-state and $40.3 \%$ out-of-state in Fall 2006.

All five institutions saw positive total growth in their first-professional student population; however Virginia Commonwealth University exhibited the largest expansion with a $54.3 \%$ change from 1987 to 2006. Three institutions - College of William and Mary, George Mason University, and University of Virginia - decreased their number of in-state first-professional students. Examining the proportion of in-state to out-of-state students, four institutions saw their percent in-state shift downward: the College of William and Mary (down 21\% to 44.9\% in-state), George Mason University (down 24\% to $66.0 \%$ in-state), University of Virginia (down 13\% to $49.7 \%$ in-state), and Virginia Commonwealth University (down $14 \%$ to $66.8 \%$ in-state). At Virginia Tech, the proportion of in-state to out-of-state shifted up $25 \%$ in favor of in-state to $87.8 \%$ in-state.

The table and chart below highlight the first professional enrollment at Virginia public four-year universities from 1987 to 2006.

| First Professional <br> Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | In-State | Out-ofState | Total |
| 1987 | 3,055 | 1,192 | 4,247 |
| 1988 | 3,005 | 1,197 | 4,202 |
| 1989 | 3,016 | 1,239 | 4,255 |
| 1990 | 3,122 | 1,207 | 4,329 |
| 1991 | 3,170 | 1,132 | 4,302 |
| 1992 | 3,141 | 1,030 | 4,171 |
| 1993 | 3,170 | 1,021 | 4,191 |
| 1994 | 3,146 | 1,081 | 4,227 |
| 1995 | 3,161 | 1,215 | 4,376 |
| 1996 | 3,307 | 1,192 | 4,499 |
| 1997 | 3,368 | 1,192 | 4,560 |
| 1998 | 3,363 | 1,249 | 4,612 |
| 1999 | 3,378 | 1,283 | 4,661 |
| 2000 | 3,209 | 1,359 | 4,568 |
| 2001 | 3,214 | 1,447 | 4,661 |
| 2002 | 3,203 | 1,578 | 4,781 |
| 2003 | 3,169 | 1,651 | 4,820 |
| 2004 | 3,049 | 1,810 | 4,859 |
| 2005 | 3,097 | 1,860 | 4,957 |
| 2006 | 2,985 | 2,014 | 4,999 |
| \% Change from 1987-88 | -2.3\% | 69.0\% | 17.7\% |
| \% Change Accounted for by the Last 5 Years | 311.4\% | 53.0\% | 29.0\% |

Public Four-Year Institutions
First Professional Fall Headcount Enrollment From 1987 to 2006


Figure 13: Public Four-Year First-Professional Fall Headcount Enrollment from 1987 to 2006

## Fall Headcount Undergraduate Enrollment Demographics

This section presents undergraduate demographic data at the public four-year institutions for academic years 1996, 2001, and 2006 by race/ethnicity, gender, age distribution, student load, students living on/off campus, and geographic region.

## Race/Ethnicity:

Examining the years 1996, 2001, and 2006, the total undergraduate minority population increased by 7,163 students or $22.5 \%$. The largest percent change in the 10 -year period occurred with Hispanic students, increasing $86.7 \%$, followed by Asian/Pacific Islander students with a percent increase of $35.4 \%$. The number of foreign/international students enrolled at Virginia public four-year institutions has grown substantially, increasing $70.6 \%$ to 3,350 students. It should be noted that prior to Fall 2000, institutions were not permitted to report "Unknown" race/ethnicity data to SCHEV. Therefore, for data submitted before the year 2000, all students of unknown race/ethnicity were reported under the predominant race/ethnic group of the institution. For all institutions except for Norfolk State University
and Virginia State University, the Commonwealth’s two Historically Black Colleges and Universities (HBCU), unknown race/ethnicity was reported under "White, non-Hispanic." Despite this caveat and excluding both foreign and unknown ethnicity students, the proportion of undergraduate minority students at public four-year institutions has increased to $26.5 \%$ in 2006, up almost $1 \%$ since 1996. The proportion of Hispanic students in 2006 was up one percentage point to $3.5 \%$, while the proportion of Black, non-Hispanic students was down one percentage point to $15.2 \%$.

In Fall 2006, excluding Virginia’s two HBCU institutions, three public four-year institutions had undergraduate populations where at least one-third of their students were minority students: George Mason University (32.6\%), Old Dominion University (31.8\%) and Virginia Commonwealth University ( $33.5 \%$ ). Over the 10 -year period, the percent change in total minority population for non-HBCU institutions increased for all institutions except for Christopher Newport University (down 41\% to $13 \%$ minority). Several institutions saw a large percent increase in their total minority population: University of Virginia at Wise (up 154.7\%), Virginia Commonwealth University (up 57.2\%), Radford University (up 55.1\%), Old Dominion University (up 46.9\%), and George Mason University (up 40.7\%).

All institutions, including the two HBCU institutions, saw their Hispanic populations increase. Five institutions had a particularly large percent increase in Hispanic students over the 10 -year period: Virginia Commonwealth University (up 165.5\%), College of William and Mary (up 156.8\%), University of Virginia (up 119.9\%), Old Dominion University (up 114.8\%), and Virginia Military Institute (up 100\%). During this same time period, several non-HBCU institutions experienced decline in their Black, non-Hispanic student population. These institutions are: Christopher Newport University (down 56.4\%), University of Mary Washington (down 27.4\%), Virginia Military Institute (down 20.8\%), Longwood University (down 12.7\%), and James Madison University (down 10.6\%).

Comparing the proportion distribution in 1996 to the distribution in 2006, there were some shifts in the ethnicity/race ratios. Several institutions saw a decline in the proportion of White, non-Hispanic students. However, some of this decline can be accounted for by the change in reporting instituted in Fall 2000 with the introduction of the "unknown" category. All institutions experienced an increase in the proportion of Hispanic students on campus. Conversely, the proportion of Black, non-Hispanic students on campus declined for several institutions, namely Christopher Newport University (down $10 \%$ to $7.2 \%$ Black, non-Hispanic), George Mason University (down 1\% to 7.5\% Black, non-Hispanic), James Madison University (down 2\% to 3.6\% Black, non-Hispanic), Longwood University (down 3\% to $6.5 \%$ Black, non-Hispanic), University of Mary Washington (down 2\% to 3.1\% Black, non-Hispanic), University of Virginia (down $2 \%$ to $8.1 \%$ Black, non-Hispanic), Virginia Commonwealth University (down 1\% to $19.8 \%$ Black, non-Hispanic), and Virginia Military Institute (down 2\% to 4.4\% Black, non-Hispanic).

The table and chart below illustrate the trends and proportion changes over the 10-year period of undergraduate enrollment by race/ethnicity for public four-year institutions.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Race/Ethnicity For Years 1996, 2001, 2006

| Year | American Indian/ Native American | Asian/ Pacific Islander | Black | Foreign/ Int'I | Hispanic | Unknown | White | Total Minority | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 543 | 8,015 | 20,480 | 1,964 | 2,751 | 0 | 89,226 | 31,789 | 122,979 |
| \% of Total | 0.4\% | 6.5\% | 16.7\% | 1.6\% | 2.2\% | 0.0\% | 72.6\% | 25.8\% |  |
| 2001 | 482 | 9,248 | 22,186 | 3,127 | 3,687 | 2,251 | 94,176 | 35,603 | 135,157 |
| \% of Total | 0.4\% | 6.8\% | 16.4\% | 2.3\% | 2.7\% | 1.7\% | 69.7\% | 26.3\% |  |
| 2006 | 555 | 10,853 | 22,409 | 3,350 | 5,135 | 9,931 | 94,877 | 38,952 | 147,110 |
| \% of Total | 0.4\% | 7.4\% | 15.2\% | 2.3\% | 3.5\% | 6.8\% | 64.5\% | 26.5\% |  |
| \% Change from 1996 | 2.2\% | 35.4\% | 9.4\% | 70.6\% | 86.7\% | >100\% | 6.3\% | 22.5\% | 19.6\% |



Figure 14: Public Four-Year Undergraduate Fall Headcount Enrollment by Race/Ethnicity, 1996, 2001, and 2006

## Gender:

Over the past 10 years, undergraduate women enrolling at Virginia public four-year institutions increased at a faster rate than undergraduate men, $22.2 \%$ to $16.6 \%$ respectively. However, the relative proportion of men to women has only decreased one percentage point since 1996 to $45.0 \%$ men and 55.0\% women in 2006.

Except for Norfolk State University, which has had declining undergraduate enrollments for both men and women, all other Virginia public four-year institutions observed percent increases in the number of men enrolled. The percent of undergraduate women increased at all Virginia public four-year institutions except for two: Christopher Newport University (down 4.7\%) and the College of William and Mary (down 6.5\%). In 2006, among the public four-year institutions, Virginia Military Institute has the highest percent of men at 91.6\%. However, it should be noted that Virginia Military Institute did not begin admitting women until Fall 1997. Of the remaining 14 institutions, Virginia Tech enrolled the highest proportion of men at 58.3\%. Four institutions enrolled less than $40 \%$ men in 2006: James Madison University ( $39.1 \%$ men), Longwood University ( $34.6 \%$ men), Norfolk State University (37.7\% men), and University of Mary Washington ( $34.1 \%$ men).

The table and charts below highlight the systemwide trends of undergraduate enrollment by gender for public four-year institutions for years 1996, 2001, and 2006.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Gender For Years 1996, 2001, 2006

| Year | Men | Women | Total | \% Men | \% Women |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 1996 | 56,714 | 66,265 | 122,979 | $46.1 \%$ | $53.9 \%$ |
| 2001 | 60,813 | 74,344 | 135,157 | $45.0 \%$ | $55.0 \%$ |
| 2006 | 66,147 | 80,963 | 147,110 | $45.0 \%$ | $55.0 \%$ |
| \% Change <br> from 1996 | $16.6 \%$ | $22.2 \%$ | $19.6 \%$ |  |  |
|  |  |  |  |  |  |

Table 18: Public Four-Year Undergraduate Fall Headcount Enrollment by Gender, 1996, 2001, and 2006


Figure 15: Public Four-Year Undergraduate Fall Headcount Enrollment by Gender, 1996, 2001, and 2006

## Age Distribution:

Between 1996 and 2006, the number of undergraduate students age 24 and under in Virginia’s public four-year system increased by 29,102 students or $29.1 \%$. During that same time frame, the total population 25 and over decreased by 20.9\%. Accordingly, there has been a steady shift in the proportion of students in the 24 and under group (up $7 \%$ to $87.9 \%$ in 2006).

Except for Norfolk State University which has had declining enrollment during this time period, all four-year institutions saw percent increases in students age 24 and under. All institutions exhibited a decline in their 25 and over undergraduate student population, except for George Mason University (up $3.3 \%$ ), Old Dominion University (up 5.8\%), and University of Virginia at Wise (up 25.5\%). All institutions had their proportion of 24 and under aged students increase. Two institutions experienced large shifts: Christopher Newport University (up $35 \%$ to $95.2 \%$ age 24 and under) and Virginia Commonwealth University (up 16\% to 82.3\% age 24 and under).

The following table and chart demonstrate the systemwide trends of undergraduate enrollment by age distribution for the snapshot years 1996, 2001, and 2006.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Age Distribution For Years 1996, 2001, 2006

| Year | Total 24 and Under | Total 25 and Above | Age Unknown | Total | $\begin{gathered} \text { \% } \\ \text { Total } 24 \\ \text { and Under } \end{gathered}$ | $\begin{gathered} \text { \% } \\ \text { Total } 25 \\ \text { and Above } \end{gathered}$ | \% Age Unknown |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 100,163 | 22,551 | 265 | 122,979 | 81.4\% | 18.3\% | 0.2\% |
| 2001 | 114,136 | 20,271 | 750 | 135,157 | 84.4\% | 15.0\% | 0.6\% |
| 2006 | 129,265 | 17,845 | 0 | 147,110 | 87.9\% | 12.1\% | 0.0\% |
| \% Change from 1996 | 29.1\% | -20.9\% | -100.0\% | 19.6\% |  |  |  |


81.4\%

2001


87.9\%
-Total 24 and Under

- Total 25 and Above
- Age Unknown

Figure 16: Public Four-Year Undergraduate Fall Headcount Enrollment by Age Distribution, 1996, 2001, and 2006

## Student Load:

For years 1996, 2001, and 2006, full-time undergraduate enrollment rose at a steady pace, increasing 23.8\% over the last decade. Part-time enrollment, however, has decreased 3.7\% since 1996. In 2001, part-time enrollment showed an increase over 1996 levels, but has since declined.

Proportionally, full-time undergraduate enrollment now comprises $87.7 \%$ of public four-year enrollment, whereas part-time enrollment now constitutes $12.3 \%$ of public four-year enrollments. Three public four-year institutions saw larger proportional shifts in favor of full-time student enrollment: Christopher Newport University (up 28\% to 93.7\% full-time), Virginia Commonwealth University (up 9\% to 79.9\% full-time), and George Mason University (up 6\% to 76.4\% full-time).

The following table and chart illustrate undergraduate enrollment at public four-year institutions by student load for years 1996, 2001 and 2006.

Public Four-Year Institutions
Undergraduate Fall Enrollment By Student Load
For Years 1996, 2001, 2006

| Year | Full- <br> Time | Part- <br> Time | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 104,154 | 18,825 | 122,979 | 84.7\% | 15.3\% |
| 2001 | 114,360 | 20,797 | 135,157 | 84.6\% | 15.4\% |
| 2006 | 128,980 | 18,130 | 147,110 | 87.7\% | 12.3\% |
| \% Change from 1996 | 23.8\% | -3.7\% | 19.6\% |  |  |


$\square$ Full-Time

- Part-Time

Figure 17: Public Four-Year Undergraduate Fall Headcount Enrollment by Student Load, 1996, 2001, and 2006

## Students Living On/Off Campus:

From 1996 to 2006, undergraduate students at public four-year institutions living on campus increased $31.7 \%$, while students living off campus, increased by only $13.5 \%$. Of the public four-year institutions, Christopher Newport University experienced the largest percent increase of students living on campus, up $624.9 \%$. Their resulting proportion of students living on-campus was up $51 \%$ to a total of $59.7 \%$ of students living on campus in 2006.

Other institutions saw a larger percent change in students living on campus, including Virginia Commonwealth University (up 129.1\%), Old Dominion University (up 79.3\%), Virginia State University (up 75.7\%), and George Mason University (up 73.6\%). Institutions with the highest ratio of students living on campus are Virginia Military Institute (100\%), College of William and Mary (75.3\%), and Longwood University (70.9\%). Old Dominion University (21.5\%), Virginia Commonwealth University (21.7\%), and George Mason University (22.6\%) have the lowest percentage of students living on-campus.

The following table and chart depict undergraduate enrollment at public four-year institutions by students living on/off campus residency for the years 1996, 2001, and 2006.

| Public Four-Year Institutions <br> Undergraduate Fall Enrollment By Living On/ Off Campus <br> For Years 1996, 2001, 2006 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | OnCampus | OffCampus | Total | \% OnCampus | \% OffCampus |
| 1996 | 41,498 | 81,481 | 122,979 | 33.7\% | 66.3\% |
| 2001 | 49,107 | 86,050 | 135,157 | 36.3\% | 63.7\% |
| 2006 | 54,660 | 92,450 | 147,110 | 37.2\% | 62.8\% |
| \% Change from 1996 | 31.7\% | 13.5\% | 19.6\% |  |  |



## Geographic Region:

Overall, undergraduate enrollment at public four-year institutions increased from every Virginia geographic region (see appendix 1 for a map of Virginia regions) except for the Eastern Shore, which recorded a decrease of $2.6 \%$. Although enrollment at public four-year institutions from the Eastern Shore decreased in the last decade, enrollments from this region increased $28.6 \%$ at the public two-year institutions. At public four-year institutions in Virginia enrollments from Northern Virginia (28.2\%), Valley (24.1\%) and Central (15.1\%) regions grew at a faster rate than the remaining geographic regions in the state.

The geographic composition of students enrolled at Christopher Newport University changed dramatically over the past 10 years. Christopher Newport University experienced a 57\% decrease in students from Hampton Roads, but saw enormous percent change increases in students from the following regions: Valley (3460.0\%), Northern Virginia (2507.4\%), and Southern Piedmont (1500.0\%). Given these large percent increase Christopher Newport University has experienced some shifts in the proportion of students from the various regions of the state. Between 1996 and 2006, the largest proportional shifts occurred in students from Hampton Roads (down 48\% to 32.6\%), Northern Virginia (up 37\% to 38.4\%), and Central (up 8\% to 17.8\%).

The following table and chart depict undergraduate enrollment at public four-year institutions by geographic region for the years 1996, 2001, and 2006.

## Public Four-Year Institutions

## Undergraduate Fall Enrollment By Geographic Region

 For Years 1996, 2001, and 2006

Figure 19: Public Four-Year Undergraduate Fall Headcount Enrollment by Geographic Region, 1996, 2001, and 2006

| Year | Central | Eastern Shore | Hampton Roads | Northern Virginia | Southern Piedmont | Southwest | Valley | In-State, Unknown | Out-ofState | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 21,821 | 381 | 24,722 | 33,379 | 5,023 | 2,949 | 8,081 | 2,549 | 24,074 | 122,979 |
| \% of Total | 17.7\% | 0.3\% | 20.1\% | 27.1\% | 4.1\% | 2.4\% | 6.6\% | 2.1\% | 19.6\% |  |
| 2001 | 23,273 | 463 | 25,197 | 36,716 | 5,085 | 3,059 | 9,772 | 4,166 | 27,426 | 135,157 |
| \% of Total | 17.2\% | 0.3\% | 18.6\% | 27.2\% | 3.8\% | 2.3\% | 7.2\% | 3.1\% | 20.3\% |  |
| 2006 | 25,118 | 371 | 26,160 | 42,785 | 5,636 | 3,014 | 10,025 | 5,657 | 28,344 | 147,110 |
| \% of Total | 17.1\% | 0.3\% | 17.8\% | 29.1\% | 3.8\% | 2.1\% | 6.8\% | 3.7\% | 19.3\% |  |
| \% Change from 1996 | 15.1\% | -2.6\% | 5.8\% | 28.2\% | 12.2\% | 2.2\% | 24.1\% | 121.9\% | 17.7\% | 19.6\% |

## TOTAL PUBLIC TWO-YEAR SUMMARY

## Annualized FTE Enrollment

## Undergraduate Annualized FTE Enrollment:

Since 1987-88, total FTE enrollment at public two-year institutions increased by 35,159 FTE or 59.6\%. In-state FTE enrollment at public two-year colleges increased by 33,587 FTE or $59.9 \%$, while out-of-state FTE grew by 1,573 FTE or 53.9\%. Out-of-state FTE enrollment grew steadily until 200304, when FTE enrollment dropped from 6,158 FTE to 4,907 FTE. In 2004-05, out-of-state FTE continued its decline. However, 2005-06 saw a reversal and out-of-state FTE rose to 4,493 FTE. It should be noted that these years coincide with a data system conversion at the Virginia Community College System (VCCS), and these numbers likely contain errors regarding student domicile status. Nevertheless, with the decline and slight upward trend in 2005-06 FTE enrollments, out-of-state enrollments represent less than 5\% of overall FTE enrollment. Virginia residents still represent 95\% of annualized FTE enrollment at these institutions. This ratio has remained relatively constant over the 19year period.

The following table and chart show total undergraduate FTE enrollment at public two-year institutions from 1987-88 to 2005-06.

| Undergraduate Annualized FTE Enrollment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{aligned} & \text { In- } \\ & \text { State } \end{aligned}$ | Out-ofState | Total | \% InState | \% Out-of-State |
| 1987-88 | 56,101 | 2,920 | 59,021 | 95.1\% | 4.9\% |
| 1988-89 | 59,976 | 2,826 | 62,802 | 95.5\% | 4.5\% |
| 1989-90 | 66,962 | 3,495 | 70,457 | 95.0\% | 5.0\% |
| 1990-91 | 69,477 | 3,422 | 72,899 | 95.3\% | 4.7\% |
| 1991-92 | 72,215 | 3,851 | 76,066 | 94.9\% | 5.1\% |
| 1992-93 | 73,147 | 3,767 | 76,914 | 95.1\% | 4.9\% |
| 1993-94 | 72,999 | 3,806 | 76,806 | 95.0\% | 5.0\% |
| 1994-95 | 71,187 | 3,909 | 75,096 | 94.8\% | 5.2\% |
| 1995-96 | 69,843 | 4,082 | 73,925 | 94.5\% | 5.5\% |
| 1996-97 | 68,437 | 4,245 | 72,682 | 94.2\% | 5.8\% |
| 1997-98 | 71,042 | 4,480 | 75,522 | 94.1\% | 5.9\% |
| 1998-99 | 73,673 | 4,886 | 78,560 | 93.8\% | 6.2\% |
| 1999-00 | 76,399 | 5,368 | 81,768 | 93.4\% | 6.6\% |
| 2000-01 | 78,273 | 5,606 | 83,879 | 93.3\% | 6.7\% |
| 2001-02 | 84,538 | 5,948 | 90,486 | 93.4\% | 6.6\% |
| 2002-03 | 87,640 | 6,158 | 93,799 | 93.4\% | 6.6\% |
| 2003-04 | 88,412 | 4,907 | 93,319 | 94.7\% | 5.3\% |
| 2004-05 | 89,966 | 3,806 | 93,773 | 95.9\% | 4.1\% |
| 2005-06 | 89,688 | 4,493 | 94,180 | 95.2\% | 4.8\% |
| \% Change from 1987-88 | 59.9\% | 53.9\% | 59.6\% |  |  |
| \% Change Accounted for by the Last 5 Years | 15.3\% | -92.6\% | 10.5\% |  |  |



## Fall Headcount Enrollment

## Undergraduate Fall Headcount Enrollment:

Total enrollment at public two-year institutions increased from 123,987 students in Fall 1987 to 160,570 students in Fall 2006, an increase of $29.5 \%$. During the same time period, in-state fall headcount grew by $29.2 \%$, accommodating an additional 34,291 students. Out-of-state fall headcount also grew at a strong rate of $35.3 \%$ or 2,292 students.

The proportion of in-state to out-of-state fall headcount enrollment has remained constant at 95\% in-state to 5\% out-of-state. In Fall 2004 and Fall 2005, the proportion varied from that norm, but again this variation may be due to errors incurred during VCCS data system conversion. Data from Richard Bland College did not impact the 2004 and 2005 proportional deviation.

The table and chart below display total undergraduate enrollment at public two-year institutions from 1987 to 2006.

| Undergraduate <br> Fall Headcount Enrollment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total | \% InState | \% Out-of-State |
| 1987 | 117,488 | 6,499 | 123,987 | 94.8\% | 5.2\% |
| 1988 | 110,267 | 5,933 | 116,200 | 94.9\% | 5.1\% |
| 1989 | 122,147 | 7,216 | 129,636 | 94.2\% | 5.6\% |
| 1990 | 124,443 | 6,640 | 131,083 | 94.9\% | 5.1\% |
| 1991 | 127,865 | 7,009 | 134,874 | 94.8\% | 5.2\% |
| 1992 | 127,103 | 7,001 | 134,104 | 94.8\% | 5.2\% |
| 1993 | 124,197 | 7,046 | 131,243 | 94.6\% | 5.4\% |
| 1994 | 123,403 | 7,330 | 130,733 | 94.4\% | 5.6\% |
| 1995 | 120,887 | 7,458 | 128,345 | 94.2\% | 5.8\% |
| 1996 | 117,237 | 7,366 | 124,603 | 94.1\% | 5.9\% |
| 1997 | 122,615 | 7,797 | 130,412 | 94.0\% | 6.0\% |
| 1998 | 124,523 | 8,008 | 132,531 | 94.0\% | 6.0\% |
| 1999 | 127,960 | 8,301 | 136,261 | 93.9\% | 6.1\% |
| 2000 | 129,842 | 8,197 | 138,039 | 94.1\% | 5.9\% |
| 2001 | 137,359 | 8,606 | 145,965 | 94.1\% | 5.9\% |
| 2002 | 142,615 | 8,706 | 151,321 | 94.2\% | 5.8\% |
| 2003 | 145,741 | 7,844 | 153,585 | 94.9\% | 5.1\% |
| 2004 | 147,861 | 5,865 | 153,726 | 96.2\% | 3.8\% |
| 2005 | 150,431 | 4,538 | 154,969 | 97.1\% | 2.9\% |
| 2006 | 151,779 | 8,791 | 160,570 | 94.5\% | 5.5\% |
| \% Change from 1987-88 | 29.2\% | 35.3\% | 29.5\% |  |  |
| \% Change Accounted for by the Last 5 Years | 26.7\% | 3.7\% | 25.3\% |  |  |

Public Two-Year Institutions Undergraduate Fall Headcount Enrollment From 1987 to 2006


Figure 21: Public Two-Year Undergraduate Fall Headcount Enrollment from 1987 to 2006

## Fall Headcount New Freshmen Enrollment:

The following table and chart illustrate total new freshmen at public two-year institutions from 1992 to 2006.

| New Freshmen <br> Fall Headcount Enrollment |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | InState | Out-ofState | Total |
| 1992 | 12,396 | 900 | 13,296 |
| 1993 | 12,353 | 924 | 13,277 |
| 1994 | 12,238 | 858 | 13,096 |
| 1995 | 11,662 | 822 | 12,484 |
| 1996 | 11,409 | 810 | 12,219 |
| 1997 | 11,560 | 827 | 12,387 |
| 1998 | 12,671 | 913 | 13,584 |
| 1999 | 12,525 | 928 | 13,453 |
| 2000 | 12,742 | 977 | 13,719 |
| 2001 | 13,839 | 1,041 | 14,880 |
| 2002 | 13,890 | 1,049 | 14,939 |
| 2003 | 16,092 | 961 | 17,053 |
| 2004 | 19,295 | 667 | 19,962 |
| 2005 | 18,936 | 543 | 19,479 |
| 2006 | 23,862 | 2,117 | 25,979 |
| \% Change from 1992 | 92.5\% | 135.2\% | 95.4\% |
| \% Change Accounted for by the Last 5 Years | 87.0\% | 87.8\% | 87.0\% |

Public Two-Year Institutions New Freshmen Fall Headcount Enrollment From 1992 to 2006


Figure 22: Public Two-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

First-time freshmen headcount enrollment at the public two-year institutions experienced a $95.4 \%$ increase from 1992 to 2006. This increase is primarily driven by the VCCS. Between 1992 and 2002, the growth in total new freshmen enrollment was mostly minimal. However, between 2002 and 2003, total new freshmen enrollment grew by $14 \%$, ( 2,114 students) and between 2003 and 2004, total new freshmen enrollment increased by 17\%, (2,909 students).

In 2006, the VCCS changed its reporting of new freshmen to comply with the Integrated Postsecondary Reporting Data System (IPEDS) and SCHEV's reporting guidelines. For at least the past decade, VCCS has misreported freshmen who entered during summer term. In addition, entering freshmen who had participated in high school dual enrollment programs were not counted as first-time freshmen in their first fall semester of regular community college enrollment. As a result, the 33\% increase in total public two-year new freshmen enrollment between the years 2005 and 2006 should be interpreted as inaccurate. While it is clear the VCCS is enrolling more new freshmen, the rate of increase is not as steep as it appears.

Over the last 15 years, in-state first-time freshmen enrollment grew at a slower rate than out-ofstate first-time freshmen enrollment. Specifically, in-state new freshmen enrollment increased by 11,466 students, or $92.5 \%$, while out-of-state first-time student enrollment grew by 1,217 students, or
$135.2 \%$. In the public two-year sector, a substantial amount of the in-state first-time freshmen enrollment growth from 1992 to 2006 can be attributed to the Virginia community colleges rather than Richard Bland College. In-state new freshmen enrollment at the community colleges increased by $96 \%$ (11,496 students), whereas out-of-state first-time freshmen grew by $137.5 \%$ ( 1,224 students). Concurrently, Richard Bland College experienced a $7.1 \%$ decrease in in-state new freshmen enrollment, 30 students in total. Out-of-state new freshmen enrollment at Richard Bland College decreased by 70\%, 7 students in total.

The table below shows the total in-state new freshmen enrollment at each community college for years 1992, 1998, and 2006. As noted above, due to errors in previous VCCS new freshmen reporting, the data for 1992 and 1998 should be interpreted with caution.

| Virginia Community Colleges, In-state New Freshmen Fall Headcount |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I nstitution | 1992 | 1998 | 2006 | \% change from 1992 | Student <br> Difference from 1992 |
| Blue Ridge | 292 | 297 | 729 | 149.7\% | 437 |
| Central Virginia | 209 | 319 | 710 | 239.7\% | 501 |
| Dabney S. Lancaster | 225 | 155 | 213 | -5.3\% | -12 |
| Danville | 371 | 298 | 540 | 45.6\% | 169 |
| Eastern Shore | 103 | 125 | 175 | 69.9\% | 72 |
| Germanna | 267 | 444 | 1,016 | 280.5\% | 749 |
| J. Sargeant Reynolds | 559 | 964 | 1,216 | 117.5\% | 657 |
| J ohn Tyler | 250 | 240 | 898 | 259.2\% | 648 |
| Lord Fairfax | 339 | 436 | 910 | 168.4\% | 571 |
| Mountain Empire | 568 | 428 | 506 | -10.9\% | -62 |
| New River | 433 | 332 | 534 | 23.3\% | 101 |
| Northern Virginia | 3,112 | 2,258 | 6,088 | 95.6\% | 2,976 |
| Patrick Henry | 298 | 164 | 468 | 57.0\% | 170 |
| Paul D Camp | 184 | 179 | 256 | 39.1\% | 72 |
| Piedmont Virginia | 350 | 311 | 657 | 87.7\% | 307 |
| Rappahannock | 21 | 162 | 362 | 1623.8\% | 341 |
| Southside Virginia | 459 | 224 | 586 | 27.7\% | 127 |
| Southwest Virginia | 569 | 492 | 513 | -9.8\% | -56 |
| Thomas Nelson | 978 | 964 | 1,442 | 47.4\% | 464 |
| Tidewater | 1,236 | 2,316 | 3,981 | 222.1\% | 2,745 |
| Virginia Highland | 328 | 316 | 364 | 11\% | 36 |
| Virginia Western | 646 | 631 | 929 | 43.8\% | 283 |
| Wytheville | 174 | 181 | 374 | 114.9\% | 200 |
| Total | 11,971 | 12,236 | 23,467 | 96.0\% | 11,496 |

Seven out of the 23 community colleges grew by more than 500 in-state new freshmen between 1992 and 2006: Central Virginia CC (501 students), Germanna CC (749 students), J. Sargeant Reynolds CC (657 students), John Tyler CC (648 students), Lord Fairfax CC (571 students), Northern Virginia CC (2,976 students), and Tidewater CC ( 2,745 students). A significant amount of in-state new freshmen growth has come from community colleges positioned along the I-95/I-64 crescent, where much of the Commonwealth's growth in overall population is occurring. The notable exception is Central Virginia CC, which is not located along this corridor.

The table and chart below display the proportion of in-state to out-of-state first-time freshmen from the public two-year sector from 1992 to 2006.

| New Freshmen |  |  |
| :---: | ---: | ---: |
| Percentage of In-State to Out-of-State |  |  |
| Year | In-State | Out-of-State |
| 1992 | $93.2 \%$ | $6.8 \%$ |
| 1993 | $93.0 \%$ | $7.0 \%$ |
| 1994 | $93.4 \%$ | $6.6 \%$ |
| 1995 | $93.4 \%$ | $6.6 \%$ |
| 1996 | $93.4 \%$ | $6.6 \%$ |
| 1997 | $93.3 \%$ | $6.7 \%$ |
| 1998 | $93.3 \%$ | $6.7 \%$ |
| 1999 | $93.1 \%$ | $6.9 \%$ |
| 2000 | $92.9 \%$ | $7.1 \%$ |
| 2001 | $93.0 \%$ | $7.0 \%$ |
| 2002 | $93.0 \%$ | $7.0 \%$ |
| 2003 | $94.4 \%$ | $5.6 \%$ |
| 2004 | $96.7 \%$ | $3.3 \%$ |
| 2005 | $97.2 \%$ | $2.8 \%$ |
| 2006 | $91.9 \%$ | $8.1 \%$ |
| Table 27: Public Two-Year Percentage of In-State to Out-of-State New |  |  |
| Freshmen Fall Headcount Enrollment from 1992 to 2006 |  |  |

New Freshmen: In-State to Out-of-State


Figure 23: Public Two-Year Percentage of In-State to Out-of-State New Freshmen Fall Headcount Enrollment, 1992 and 2006

Between 1992 and 2006, the proportion of in-state to out-of-state first-time freshmen at the public two-year institutions has remained relatively constant, with a one percentage-point decrease in the proportion of in-state first-time freshmen. In 2006, the proportion of in-state to out-of-state first-time freshmen was $92 \%$ in-state to $8 \%$ out-of-state students.

The table below displays in-state new freshmen enrolled at the public four-year and two-year sectors between 1992 and 2006. The in-state new freshmen figures are further divided to show the number of matriculants who graduated high school in the past 12 months and the number who graduated high school more than 12 months prior to entering postsecondary education.

| Virginia In-State New Freshmen Fall Headcount By Public Sector |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Four-Year |  |  | Two-Year |  |  | Grand Total |
| Fall Term | $\begin{gathered} \text { Grad HS } \\ \text { within } 12 \\ \text { Months } \\ \hline \end{gathered}$ | Did Not Grad HS within 12 Months | Total New Freshmen | $\begin{gathered} \text { Grad HS } \\ \text { within } 12 \\ \text { Months } \\ \hline \end{gathered}$ | Did Not Grad HS within 12 Months | Total New Freshmen |  |
| 1992 | 15,463 | 758 | 16,221 | 5,910 | 6,486 | 12,396 | 28,617 |
| 1993 | 13,256 | 2,445 | 15,701 | 5,793 | 6,560 | 12,353 | 28,054 |
| 1994 | 15,351 | 817 | 16,168 | 6,286 | 5,952 | 12,238 | 28,406 |
| 1995 | 16,014 | 986 | 17,000 | 6,876 | 4,786 | 11,662 | 28,662 |
| 1996 | 16,775 | 890 | 17,665 | 6,731 | 4,678 | 11,409 | 29,074 |
| 1997 | 17,310 | 807 | 18,117 | 7,002 | 4,558 | 11,560 | 29,677 |
| 1998 | 17,591 | 801 | 18,392 | 7,834 | 4,837 | 12,671 | 31,063 |
| 1999 | 18,100 | 728 | 18,828 | 7,767 | 4,758 | 12,525 | 31,353 |
| 2000 | 18,791 | 455 | 19,246 | 6,514 | 6,228 | 12,742 | 31,988 |
| 2001 | 19,148 | 595 | 19,743 | 8,340 | 5,499 | 13,839 | 33,582 |
| 2002 | 19,835 | 547 | 20,382 | 6,591 | 7,299 | 13,890 | 34,272 |
| 2003 | 20,551 | 623 | 21,174 | 8,730 | 7,362 | 16,092 | 37,266 |
| 2004 | 20,303 | 1,003 | 21,306 | 11,091 | 8,204 | 19,295 | 40,601 |
| 2005 | 21,413 | 979 | 22,392 | 10,317 | 8,619 | 18,936 | 41,328 |
| 2006 | 19,538 | 2,554 | 22,092 | 14,639 | 9,223 | 23,862 | 45,954 |

It is interesting to note that the overall proportion of new in-state freshmen enrollment at the public four-year institutions declined from $57 \%$ to $48 \%$ while public two-year enrollment increased from $43 \%$ to $52 \%$ from 1992 to 2006. Of the in-state new freshmen who graduated high school within the past 12 months, most still begin at public four-year institutions, but the two-year sector has made substantial gains with this sub-population. As noted previously, the VCCS altered its classification of
new freshmen in 2006 in order to comply with national and state reporting standards. Therefore the public two-year new freshmen numbers displayed in the above table contain inaccurate data and should be interpreted with caution.

## New Undergraduate Transfer Fall Headcount Enrollment:

The number of transfers to two-year colleges has declined $4 \%$ since 1992. A large reduction in enrolled transfers occurred between 2002 and 2003 at both Virginia community colleges and Richard Bland College resulting in a substantial $24 \%$ decrease in transfers to public two-year institutions. Instate transfers bounced back in 2004 and have since returned to previous levels. Out-of-state transfers, however, experienced another significant decline in 2004, dropping nearly in half from the previous year. Despite a significant increase in out-of-state transfers in 2006, the number of out-of-state new undergraduate transfers is $20 \%$ lower than 2001 levels. These years coincide with the VCCS data system conversion and these numbers may contain errors.

The following table and chart illustrate the total undergraduate new transfer enrollment from the public two-year sector from 1992 to 2006.

| New Undergraduate Transfers <br> Fall Headcount Enrollment |  |  |  |
| :---: | ---: | ---: | ---: |
| Year | In- <br> State | Out-of- <br> State | Total |
| 1992 | 11,422 | 1,964 | 13,386 |
| 1993 | 10,736 | 1,950 | 12,686 |
| 1994 | 11,088 | 2,129 | 13,217 |
| 1995 | 10,821 | 2,076 | 12,897 |
| 1996 | 10,252 | 2,002 | 12,254 |
| 1997 | 11,005 | 2,216 | 13,221 |
| 1998 | 11,133 | 2,208 | 13,341 |
| 1999 | 10,994 | 2,093 | 13,087 |
| 2000 | 11,111 | 2,090 | 13,201 |
| 2001 | 11,137 | 2,096 | 13,233 |
| 2002 | 11,068 | 2,062 | 13,130 |
| 2003 | 8,660 | 1,280 | 9,940 |
| 2004 | 10,526 | 646 | 11,172 |
| 2005 | 12,170 | 744 | 12,914 |
| 2006 | 11,165 | 1,688 | 12,853 |
| \% Change |  |  |  |
| \% <br> from 1992 | $-2.3 \%$ | $-14.1 \%$ | $-4.0 \%$ |
| \% Change <br> Accounted <br> for by the <br> Last 5 Years | $-37.7 \%$ | $135.5 \%$ | $52.0 \%$ |

Public Two-Year Institutions
New Undergraduate Transfers Fall Headcount Enrollment From 1992 to 2006

Figure 24: Public Two-Year New Undergraduate Transfer Fall Headcount Enrollment from 1992 to 2006

The table and chart below display the proportion of in-state to out-of-state new undergraduate transfers from the public two-year institutions from 1992 to 2006.

| New Undergraduate Transfers Percentage of In-State to Out-of-State |  |  |
| :---: | :---: | :---: |
| Year | In-State | Out-of-State |
| 1992 | 85.3\% | 14.7\% |
| 1993 | 84.6\% | 15.4\% |
| 1994 | 83.9\% | 16.1\% |
| 1995 | 83.9\% | 16.1\% |
| 1996 | 83.7\% | 16.3\% |
| 1997 | 83.2\% | 16.8\% |
| 1998 | 83.4\% | 16.6\% |
| 1999 | 84.0\% | 16.0\% |
| 2000 | 84.2\% | 15.8\% |
| 2001 | 84.2\% | 15.8\% |
| 2002 | 84.3\% | 15.7\% |
| 2003 | 87.1\% | 12.9\% |
| 2004 | 94.2\% | 5.8\% |
| 2005 | 94.2\% | 5.8\% |
| 2006 | 86.9\% | 13.1\% |
| Table 30: Public Two-Year Percentage of In-State to Out-of-State New Undergraduate Transfer Fall Headcount Enrollment from 1992 to 2006 |  |  |

## New Undergraduate Transfers: In-State to Out-of-State



Figure 25: Public Two-Year Percentage of In-State to Out-of-State New Undergraduate Transfer Fall Headcount Enrollment, 1992 and 2006

Between 1992 and 2006, the proportion of in-state to out-of-state new undergraduate transfers at the public two-year institutions has remained relatively constant, with a two percentage-point increase in the proportion of in-state undergraduate new transfers. The years 2004 and 2005 vary from the pattern with a large decrease in out-of-state new undergraduate transfers. Again these numbers coincide with the years of VCCS data system conversion and may contain errors. In 2006, the proportion of in-state to out-of-state undergraduate new transfers returned to a more consistent $87 \%$ in-state to $13 \%$ out-of-state students.

## Fall Headcount Enrollment Demographics

This section presents undergraduate demographic data at the public two-year institutions for academic years 1996, 2001, and 2006 by race/ethnicity, gender, age distribution, student load, students living on/off campus, and geographic region.

## Ethnicity/Race:

Total minority enrollment increased by 19,139 students or $63.4 \%$ at public two-year institutions. The largest increases were among Hispanic students (105.1\%) and Black, non-Hispanic students (63.3\%). Enrollment among Foreign/International students declined significantly from 2,007 students in 2001 to 1,460 students in 2006.

The Virginia community college undergraduate population mirrors the overall public two-year ethnicity/race trends. The total number of minority students at the community colleges grew by $64.3 \%$ between 1996 and 2006. However, at Richard Bland College, total minority enrollment declined slightly by 2\%. Richard Bland College’s largest decreases in specific minority categories include Asian/Pacific Islander students (28.0\%) and Black, non-Hispanic students (7\%). In contrast, Hispanic (88\%) and White, non-Hispanic (14\%) student enrollment has increased during this time period.

The table and chart below show undergraduate fall enrollment at public two-year institutions by ethnicity and race for 1996, 2001 and 2006.

Public Two-Year Institutions
Undergraduate Fall Enrollment By Ethnicity/ Race
For Years 1996, 2001, 2006

- 2001
- 2006


Figure 26: Public Two-Year Undergraduate Fall Headcount Enrollment by Ethnicity/Race, 1996, 2001, and 2006

| Year | American Indian/ Native American | Asian/ Pacific I slander | Black | Foreign/ Int'I | Hispanic | Unknown | White | Total Minority | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 645 | 6,325 | 19,424 | 1,081 | 3,778 | 0 | 93,350 | 30,172 | 124,603 |
| \% of Total | 0.5\% | 5.1\% | 15.6\% | 0.9\% | 3.0\% | 0.0\% | 74.9\% | 24.2\% |  |
| 2001 | 1,248 | 7,330 | 27,641 | 2,007 | 5,794 | 0 | 101,945 | 42,013 | 145,965 |
| \% of Total | 0.9\% | 5.0\% | 18.9\% | 1.4\% | 4.0\% | 0.0\% | 69.8\% | 28.8\% |  |
| 2006 | 984 | 8,865 | 31,713 | 1,460 | 7,749 | 0 | 109,799 | 49,311 | 160,570 |
| \% of Total | 0.6\% | 5.5\% | 19.8\% | 0.9\% | 4.8\% | 0.0\% | 68.4\% | 30.7\% |  |
| \% Change from 1996 | 52.6\% | 40.2\% | 63.3\% | 35.1\% | 105.1\% | 0.0\% | 17.6\% | 63.4\% | 28.9\% |

## Gender:

Female undergraduate enrollment at public two-year institutions continues to outnumber the enrollment of men, with 66,354 men to 94,216 women in Fall 2006. However, over the 10 -year period, the proportion of men and women at the public two-year colleges has remained unchanged at $41 \%$ men to $59 \%$ women. Once again, the Virginia Community College System mirrors the statistics for the public two-year data. Richard Bland College has a larger gender gap, enrolling $36.3 \%$ men to $63.7 \%$ women in Fall 2006.

These trends in gender enrollment are depicted in the following tables and charts for years 1996, 2001 and 2006.

| Public Two-Year Institutions Undergraduate Fall Enrollment By Gender For Years 1996, 2001, 2006 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Men | Women | Total | $\begin{aligned} & \text { \% } \\ & \text { Men } \end{aligned}$ | \% Women |
| 1996 | 51,495 | 73,108 | 124,603 | 41.3\% | 58.7\% |
| 2001 | 59,845 | 86,120 | 145,965 | 41.0\% | 59.0\% |
| 2006 | 66,354 | 94,216 | 160,570 | 41.3\% | 58.7\% |
| \% Change from 1996 | 28.9\% | 28.9\% | 28.9\% |  |  |



Figure 27: Public Two-Year Undergraduate Fall Headcount Enrollment by Gender 1996, 2001, and 2006

## Age Distribution:

Enrollment patterns by age distribution at public two-year institutions from 1996 to 2006 indicate that students age 24 and under enrolled at a faster rate than students 25 and above. Specifically, undergraduate students age 24 and under increased by $70.1 \%$, while students 25 and older decreased by 6.1\% during that same time period.

In 1996, students 25 and above comprised $54.1 \%$ of the total undergraduate population at public two-year institutions. However, 10 years later students 25 and above constituted only $39.4 \%$ of the total undergraduate population at public two-year institutions. This represents a decline of $15 \%$. The Virginia community colleges account for much of the change in the proportion of non-traditional-aged to traditional-aged students at the public two-year institutions. Though Richard Bland College reflects similar age distribution trends, its proportion of students age 24 and under has been much larger than students in the Virginia Community College System. In Fall 2006, students age 24 and under at Richard Bland College made up $87.2 \%$ of the population, while students 25 and above comprised $12.8 \%$ of the population.

The following table and chart display age distribution enrollment at public two-year institutions for years 1996, 2001 and 2006.

Public Two-Year Institutions
Undergraduate Fall Enrollment By Age Distribution
For Years 1996, 2001, 2006

| Year | Total 24 and Under | Total 25 and Above | Age Unknown | Total | \% <br> Total 24 and Under | \% <br> Total 25 and Above | \% Age Unknown |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 57,208 | 67,372 | 23 | 124,603 | 45.9\% | 54.1\% | 0.0\% |
| 2001 | 76,087 | 69,877 | 1 | 145,965 | 52.1\% | 47.9\% | 0.0\% |
| 2006 | 97,310 | 63,260 | 0 | 160,570 | 60.6\% | 39.4\% | 0.0\% |
| \% Change from 1996 | 70.1\% | -6.1\% | -100.0\% | 28.9\% |  |  |  |



Figure 28: Public Two-Year Undergraduate Fall Headcount Enrollment by Age Distribution, 1996, 2001, and 2006

## Student Load:

Over the last decade, full-time undergraduate enrollment at public two-year institutions increased by $47.7 \%$, while part-time undergraduates enrollment increased by $21.6 \%$. However, even though fulltime undergraduate students grew at a greater rate than part-time students, there has only been a slight increase of $4 \%$ in the proportion of full-time undergraduate students enrolled at public two-year institutions between 1996 and 2006. Currently, undergraduate students enrolled part-time still make up $68.3 \%$ of the public two-year population. While Richard Bland College enrolls more full-time than parttime students, the institution has seen a decrease in full-time enrollment (down $4 \%$ to $58.6 \%$ full-time) during this period.

The table and chart below outline student load enrollment at public two-year institutions for years 1996, 2001 and 2006.

Public Two-Year Institutions Undergraduate Fall Enrollment By Student Load

For Years 1996, 2001, 2006

| Year | Full- <br> Time | Part- <br> Time | Total | \% Full- <br> Time | \% Part- <br> Time |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 1996 | 34,465 | 90,138 | 124,603 | $27.7 \%$ | $72.3 \%$ |
| 2001 | 43,228 | 102,737 | 145,965 | $29.6 \%$ | $70.4 \%$ |
| 2006 | 50,918 | 109,652 | 160,570 | $31.7 \%$ | $68.3 \%$ |
| \% Change <br> from 1996 | $47.7 \%$ | $21.6 \%$ | $28.9 \%$ |  |  |
| Table 34: Public Two-Year Undergraduate Fall Headcount Enrollment by Student Load 1996, 2001, and 2006 |  |  |  |  |  |

1996



2001

2006

$\square$ Full-Time

- Part-Time

Figure 29: Public Two-Year Undergraduate Fall Headcount Enrollment by Student Load, 1996, 2001, and 2006

## Student Living On/Off Campus:

There is currently no on-campus housing at the public two-year institutions. Therefore, $100 \%$ of undergraduate students enrolled at both Virginia community colleges and Richard Bland College live off campus. However, Richard Bland College is in the process of building student housing.

The table below shows undergraduate fall enrollment at public two-year institutions by students living on/off campus for years 1996, 2001 and 2006.

Public Two-Year Institutions
Undergraduate Fall Enrollment By Students Living On/ Off Campus For Years 1996, 2001, 2006

| Year | OnCampus | OffCampus | Total | \% OnCampus | \% OffCampus |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 0 | 124,603 | 124,603 | 0.0\% | 100.0\% |
| 2001 | 0 | 145,965 | 145,965 | 0.0\% | 100.0\% |
| 2006 | 0 | 160,570 | 160,570 | 0.0\% | 100.0\% |
| \% Change from 1996 | 0.0\% | 28.9\% | 28.9\% |  |  |

## Geographic Region:

Between 1996 and 2006, the number of students attending public two-year institutions from six of the seven Virginia regions grew by $10 \%$. (See Appendix 1 for map of Virginia regions.) The Southwest region is the one exception, as the number of students from this region increased by only $6.9 \%$. Students from the Hampton Roads region had the largest percent increase in enrollment (48.3\%), followed by Central Virginia (36.6\%), Southern Piedmont (34.1\%), Valley (31.0\%), Eastern Shore (28.6\%), and Northern Virginia (15.3\%).

While the students from the Northern Virginia region still constitute the largest proportion of undergraduate students enrolled at public two-year institutions (25.4\%), this proportion has decreased $3 \%$ over the last decade. The Central and Hampton Roads regions have made the most gains in the proportion of undergraduate students enrolled at public two-year institutions, $1 \%$ and $3 \%$ respectively.

The table and chart below display undergraduate enrollment at public two-year institutions by geographic region for years 1996, 2001 and 2006.


Figure 30: Public Two-Year Undergraduate Fall Headcount Enrollment by Geographic Region, 1996, 2001, and 2006

| Year | Central | Eastern Shore | Hampton Roads | Northern Virginia | Southern Piedmont | Southwest | Valley | In-State, Unknown | Out-ofState | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 20,297 | 737 | 21,863 | 35,434 | 13,185 | 10,689 | 15,029 | 3 | 7,366 | 124,603 |
| \% of Total | 16.3\% | 0.6\% | 17.5\% | 28.4\% | 10.6\% | 8.6\% | 12.1\% | 0.0\% | 5.9\% |  |
| 2001 | 23,478 | 942 | 27,608 | 39,995 | 16,243 | 11,793 | 17,300 | 0 | 8,606 | 145,965 |
| \% of Total | 16.1\% | 0.6\% | 18.9\% | 27.4\% | 11.1\% | 8.1\% | 11.9\% | 0.0\% | 5.9\% |  |
| 2006 | 27,729 | 948 | 32,422 | 40,849 | 17,687 | 11,425 | 19,683 | 1,036 | 8,791 | 160,570 |
| \% of Total | 17.3\% | 0.6\% | 20.2\% | 25.4\% | 11.0\% | 7.1\% | 12.3\% | 0.6\% | 5.5\% |  |
| \% Change from 1996 | 36.6\% | 28.6\% | 48.3\% | 15.3\% | 34.1\% | 6.9\% | 31.0\% | >100\% | 19.3\% | 28.9\% |

VIRGINIA TRENDS: FOCUS AREAS

## VIRGINIA TRENDS IN FOCUS AREAS: HIGH SCHOOL DUAL ENROLLMENT

The number of students in high school dual enrollment programs is on the rise. Dual enrollment programs involve high school students who are concurrently enrolled in courses for high school and college credit. Experts view dual enrollment as "providing high school students benefits such as greater access to a wider range of rigorous academic and technical courses, savings in time and money on a college degree, promoting efficiency of learning, and enhancing admission to and retention in college". ${ }^{13}$ Policymakers on the national and regional level advocate such programs as a means of strengthening the high school curriculum and encouraging both high school and college completion.

Virginia has been working with dual enrollment policies for more than two decades. According to Catron (1998), Virginia has had a plan for Dual Enrollment since 1988. In 2005, then Secretary of Education Wheelan, Superintendent of Instruction DeMary, and Virginia Community College System Chancellor DuBois, signed an updated Virginia Plan for Dual Enrollment Between Virginia Public Schools and Community Colleges. ${ }^{14}$ Further, the recently published Virginia P-16 Council final report includes dual enrollment plans as one of its strategies for furthering the educational outcomes of high school and college students. Goal 4 reads, in part, "Increase the number of students completing rigorous courses in high school...Increase the proportion of students successfully completing AP, IB, or dual enrollment courses from 17 percent in 2005 to 25 percent in 2010." ${ }^{15}$

The Commonwealth's focus on and support for dual enrollment programs has clearly had a positive effect on participation in such programs. Since 1992, the number of high school students enrolled in college dual enrollment courses has steadily risen, increasing 539.9\%. By 2006, 20,582 more high school students were taking dual enrollment classes than in 1992. It should be noted that the numbers in the table below are somewhat higher due to some community colleges incorrectly reporting older students as high school dual enrolled. However, the effect of these errors is small and does not alter the trends or subsequent analysis.

| High School Dual Enrollment Trends at <br> Public Two- and Four-Year Institutions <br> Year |  |
| :---: | ---: |
| 1992 | Total |
| 1993 | 3,812 |
| 1994 | 3,770 |
| 1995 | 4,539 |
| 1996 | 5,405 |
| 1997 | 6,012 |
| 1998 | 7,620 |
| 1999 | 8,225 |
| 2000 | 9,185 |
| 2001 | 9,844 |
| 2002 | 11,726 |
| 2003 | 12,947 |
| 2004 | 16,137 |
| 2005 | 18,041 |
| 2006 | 20,111 |
| \% Change | 24,394 |
| from 1992 | $539.9 \%$ |

## High School Dual Enrollment Trends at Public Two- and Four-Year Institutions, Fall 1992 to Fall 2006



Figure 31: High School Dual Fall Headcount Enrollment Trends at Public Two and Four-Year Institutions from 1992 to 2006

Since 1992, nine of the 23 community colleges have seen very large percent increases in dual enrollment students: Germanna CC (5631\%), John Tyler CC (5193\%), Thomas Nelson CC (4381\%), Lord Fairfax CC (2740\%), Virginia Highlands CC (2610\%), Northern Virginia CC (1441\%), J. Sargeant Reynolds CC (1320\%), Rappahannock CC (1237\%), and Tidewater CC (1106\%). In Fall 2006, J. Sargeant Reynolds CC enrolled the most dual enrolled high school students ( 2,514 students), followed by Virginia Western CC ( 2,153 students). Seven additional community colleges enrolled over 1,000 high school students: Southside Virginia CC (1,801 students), Lord Fairfax CC (1,619 students), Northern Virginia CC (1,618 students), Thomas Nelson CC (1,613 students), John Tyler CC (1,429 students), Rappahannock CC (1,350 students), and Central Virginia CC (1,104 students).

Nearly all of the dual enrollment courses are offered by the Virginia community college system. However, $1 \%$ to $2 \%$ of dual enrolled students are served by seven of the 15 public four-year institutions: Christopher Newport University, George Mason University, James Madison University, Longwood University, University of Mary Washington, University of Virginia Wise, and Virginia Commonwealth University. Richard Bland College has also experienced a large percent increase in the number of dual enrollment students (6775\%), even though it serves a relatively small dual enrollment population (275 students in Fall 2006).

| High School Dual Enrollment at Virginia Public Two-Year Institutions: 1992 through 2006 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Institutions | $\begin{gathered} \text { Fall } \\ 1992 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 1994 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 1996 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 1998 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2000 \end{gathered}$ | $\begin{aligned} & \text { Fall } \\ & 2002 \end{aligned}$ | $\begin{gathered} \text { Fall } \\ 2004 \end{gathered}$ | $\begin{gathered} \text { Fall } \\ 2006 \end{gathered}$ |  |
| Blue Ridge | 312 | 164 | 185 | 194 | 160 | 205 | 309 | 300 | -4\% |
| Central Virginia | 349 | 312 | 383 | 391 | 562 | 639 | 832 | 1,104 | 216\% |
| Dabney S. Lancaster | 125 | 110 | 145 | 240 | 284 | 301 | 298 | 363 | 190\% |
| Danville | 527 | 710 | 831 | 767 | 827 | 639 | 828 | 983 | 87\% |
| Eastern Shore | 26 | 32 | 71 | 87 | 90 | 120 | 156 | 145 | 458\% |
| Germanna | 13 | 195 | 474 | 613 | 646 | 730 | 747 | 745 | 5631\% |
| J Sargeant Reynolds | 177 | 177 | 247 | 567 | 794 | 931 | 1,840 | 2,514 | 1320\% |
| John Tyler | 27 | 56 | 46 | 299 | 423 | 629 | 835 | 1,429 | 5193\% |
| Lord Fairfax | 57 | 49 | 120 | 218 | 233 | 266 | 1,254 | 1,619 | 2740\% |
| Mountain Empire | 168 | 151 | 185 | 264 | 283 | 392 | 377 | 673 | 301\% |
| New River | 169 | 111 | 218 | 260 | 366 | 378 | 511 | 580 | 243\% |
| Northern Virginia | 105 | 138 | 207 | 352 | 341 | 284 | 833 | 1,618 | 1441\% |
| Patrick Henry | 85 | 12 | 44 | 360 | 372 | 448 | 623 | 596 | 601\% |
| Paul D Camp | 130 | 151 | 308 | 220 | 365 | 395 | 353 | 476 | 266\% |
| Piedmont Virginia | 81 | 97 | 131 | 201 | 227 | 451 | 721 | 836 | 932\% |
| Rappahannock | 101 | 138 | 195 | 99 | 178 | 1,092 | 1,133 | 1,350 | 1237\% |
| Richard Bland College | 4 | 17 | 35 | 157 | 230 | 245 | 207 | 275 | 6775\% |
| Southside Virginia | 591 | 829 | 560 | 958 | 800 | 1,235 | 1,230 | 1,801 | 205\% |
| Southwest Virginia | 68 | 53 | 84 | 141 | 183 | 309 | 363 | 534 | 685\% |
| Thomas Nelson | 36 | 44 | 40 | 139 | 87 | 117 | 713 | 1,613 | 4381\% |
| Tidewater | 81 | 210 | 252 | 211 | 344 | 307 | 653 | 977 | 1106\% |
| Virginia Highlands | 20 | 44 | 40 | 212 | 395 | 384 | 483 | 542 | 2610\% |
| Virginia Western | 287 | 369 | 601 | 819 | 1,073 | 1,601 | 1,861 | 2,153 | 650\% |
| Wytheville | 219 | 322 | 311 | 357 | 438 | 726 | 793 | 870 | 297\% |

Given the large upward trend of high school dual enrollment participation, future reports could examine the extent to which these students subsequently enroll in Virginia postsecondary institutions. Do they continue at the two- or four-year institution where they earned their dual enrollment credit or enter the postsecondary system at another institution? Are students who receive high school dual
enrollment credit more likely to remain in college and graduate with a bachelor's degree in a timely manner? Further research on this population of students seems warranted.

## VIRGINIA TRENDS IN FOCUS AREAS: STEM ENROLLMENT

The United States is considered the world leader in scientific and technological innovation. ${ }^{16}$ Continued growth in student enrollment and degree attainment in Science, Technology, Engineering, and Mathematics (STEM) programs is vital if the United States is to maintain a competitive advantage. The Government Accountability Office (GAO) reports that in fiscal year 2004, federal agencies spent approximately $\$ 2.8$ billion to fund nearly 200 programs to increase the number of students in STEM fields, to increase the number of employees in STEM occupations, and to improve educational related programs. ${ }^{17}$ The bulk of this funding went to programs providing financial support to students or providing infrastructure support to institutions. Yet, there is a general concern that the United States will have difficulty maintaining its global technological advantage as other nations have also enhanced their research investments, and large proportions of U.S secondary students fail to reach proficiency in math and science as measured by the National Assessment of Educational Progress (NAEP). ${ }^{18}$

The National Science Foundation (NSF) reports that the United States ranks $20^{\text {th }}$ among all nations in the proportion of 24-year-olds who have degrees in engineering or natural sciences. ${ }^{19}$ NSF collects data on the share of first university degrees awarded in STEM fields for several countries. ${ }^{20}$ The U.S. has one of the lowest rates of STEM to non-STEM degree production in the world. In 2002, 16.8\% of first university degrees awarded in the United States were in STEM majors. Only Brazil at $15.5 \%$ had a smaller proportion of STEM degrees awarded. The nations with the highest percentage of first university degrees awarded in STEM fields were Japan (64.0\%), China (52.1\%), and South Korea ( $40.6 \%$ ). It should be noted, however, that even though the United States ranks near the bottom in the percent of STEM degrees awarded, it ranks third in actual number of students receiving their first university degree in a STEM field. ${ }^{21}$

The $110^{\text {th }}$ Congress in its current session is considering a number of legislative proposals to strengthen STEM education, research, and training at all levels of the educational pipeline. Many of these proposals are in response to a report issued by the National Academy of Sciences (NAS), entitled Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future. ${ }^{22}$ The report proposes five recommendations: increase the supply of new STEM teachers, improve the skills of current STEM teachers, enlarge the pre-collegiate pipeline, increase postsecondary degree attainment, and enhance support for graduate and early-career research.

Virginia has also set an ambitious goal of increasing its research capacities by promoting research-based entrepreneurship and STEM attainment. Virginia is home to many technology companies located primarily in the northern corridor of the state. Given its close proximity to Washington, D.C, Virginia is perfectly located to take advantage of the many federal grants and opportunities available for technology programs. In its 2003 strategic plan, SCHEV identified as a priority the goal of strengthening Virginia's academic research capacities to improve the state's leadership position in a growing technologically-driven economy. ${ }^{23}$ The focus on strengthening Virginia's research capacity continues in SCHEV's 2007 strategic plan, Advancing Virginia: Access, Alignment, Investment. In the 2007 plan, goal 11, Enhance Research through Investment in Targeted Consortia, and goal 12, Enhance Research through Investment in Infrastructure, delineate strategies to keep moving scientific research endeavors forward. ${ }^{24}$

Virginia has a number of highly rated programs in science and engineering, but to compete with the top programs nationally the state must have the ability to attract graduate students and renowned faculty in these fields. ${ }^{25}$ According to the Digest of Education Statistics, 17\% of bachelor's degrees
awarded in Virginia were in natural sciences, computer, and engineering fields. ${ }^{26}$ Five states had 20\% of their total bachelor's degrees awarded in these fields: District of Columbia (20\%), Georgia (20\%), Maryland (20\%), Montana (21\%), and South Dakota (20\%). At the master’s level, 15\% of the degrees awarded in Virginia were in natural sciences, computer, and engineering fields. States with the highest proportion of master's degrees in these areas include Colorado (19\%), Maryland (19\%), South Dakota (20\%), and Wyoming (20\%). ${ }^{27}$

While a great deal has been written about STEM enrollments, there has been no comprehensive review of enrollment numbers and characteristics of STEM majors in Virginia's public four- and twoyear institutions. What follows is a first step towards illustrating where Virginia is in STEM enrollment and completions. These data then can be used as a springboard for further analysis and policy development.

## Fall Headcount Enrollment:

At Virginia public institutions, STEM enrollment at the doctoral level increased by $41.3 \%$ over the last decade. Enrollment at the bachelor's level grew from 22,127 in 1995 to 25,040 in 2005, up $13.2 \%$. STEM enrollment at the master's degree level fluctuated during the past decade. Total enrollment across program levels increased from 38,101 in 1995 to 42,245 in 2005, representing a $10.9 \%$ growth.

Enrollment in engineering bachelor's degree programs grew from 5,534 students in 1995 to 8,413 students in 2005, an increase of more than $50 \%$. A similar trend has emerged for students enrolled in the biological sciences, with enrollment increasing from 6,584 in 1995 to 7,253 in 2005. Such trends are parallel to national STEM enrollments which have increased due to growth of students at the bachelor's and master's levels. ${ }^{28}$ In 2005, 44\% of STEM doctoral student were enrolled in engineering programs. Engineering enrollment at the doctoral level moved from 1,115 in 1995 to 1,693 in 2005. Total enrollment in computer and informational sciences peaked in 2001, but between 2001 and 2005 there has been a steady decline of students at the associate's (56\% decrease), bachelor's ( $44 \%$ decrease), and master's (19\% decrease) degree level.

The table below presents undergraduate enrollment data for STEM majors at Virginia public four- and two-year institutions for academic years 1995, 2001, and 2005.

| Enrollment in STEM Fields by Program Level at Virginia Public Four- and Two-Year Institutions: 1995, 2001 and 2005 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Program Area | Program Level | 1995 | 2001 | 2005 | \% Change from 1995 |
| Agricultural Business | Associate's | 601 | 691 | 713 | 18.6\% |
|  | Bachelor's | 76 | 91 | 808 | 963.2\% |
|  | Master's | 23 | 20 | 91 | 295.7\% |
|  | Doctoral | 20 | 0 | 49 | 145.0\% |
|  | Total | 720 | 802 | 1,661 | 130.7\% |
| Agricultural Services | Associate's | 0 | 0 | N/A* | N/A* |
|  | Bachelor's | 788 | 739 | N/A* | N/A* |
|  | Master's | 82 | 101 | N/A* | N/A* |
|  | Doctoral | 43 | 38 | N/A* | N/A* |
|  | Total | 913 | 878 | 0 | N/ $\mathbf{A}^{*}$ |


| Enrollment in STEM Fields by Program Level at Virginia Public Four- and Two-Year Institutions: 1995, 2001 and 2005 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Program Area | Program Level | 1995 | 2001 | 2005 | \% | Change from 1995 |
| Biological Sciences | Associate's | 0 | 0 | 0 |  | 0\% |
|  | Bachelor's | 6,584 | 6,055 | 7,253 |  | 10.2\% |
|  | Master's | 485 | 422 | 573 |  | 18.1\% |
|  | Doctoral | 770 | 731 | 1,022 |  | 32.7\% |
|  | Total | 7,839 | 7,208 | 8,848 |  | 12.9\% |
| Computer and Information Sciences | Associate's | 1,006 | 1,827 | 799 |  | -20.6\% |
|  | Bachelor's | 3,072 | 5,752 | 3,243 |  | 5.6\% |
|  | Master's | 1,132 | 1,571 | 1,280 |  | 13.1\% |
|  | Doctoral | 115 | 195 | 311 |  | 170.4\% |
|  | Total | 5,325 | 9,345 | 5,633 |  | 5.8\% |
| Conservation and Renewable | Associate's | 87 | 51 | 44 |  | -49.4\% |
|  | Bachelor's | 1,330 | 780 | 607 |  | -54.4\% |
|  | Master's | 108 | 157 | 215 |  | 99.1\% |
|  | Doctoral | 93 | 90 | 96 |  | 3.2\% |
|  | Total | 1,618 | 1,078 | 962 |  | -40.5\% |
| Engineering | Associate's | 1,601 | 1,451 | 1,656 |  | 3.4\% |
|  | Bachelor's | 5,534 | 6,750 | 8,413 |  | 52.0\% |
|  | Master's | 2,417 | 2,472 | 2,121 |  | -12.2\% |
|  | Doctoral | 1,115 | 1,190 | 1,693 |  | 51.8\% |
|  | Total | 10,667 | 11,863 | 13,883 |  | 30.1\% |
| Engineering Related Technologies | Associate's | 3,967 | 3,702 | 4,233 |  | 6.7\% |
|  | Bachelor's | 971 | 782 | 900 |  | -7.3\% |
|  | Master's | 0 | 0 | 0 |  | 0\% |
|  | Doctoral | 0 | 0 | 0 |  | 0\% |
|  | Total | 4,938 | 4,484 | 5,133 |  | 3.9\% |
| Mathematics | Associate's | 0 | 0 | 0 |  | 0\% |
|  | Bachelor's | 1,291 | 1,006 | 1,365 |  | 5.7\% |
|  | Master's | 278 | 395 | 216 |  | -22.3\% |
|  | Doctoral | 143 | 116 | 130 |  | -9.1\% |
|  | Total | 1,712 | 1,517 | 1,711 |  | -0.1\% |
| Physical Sciences | Associate's | 1,115 | 1,104 | 1,092 |  | -2.1\% |
|  | Bachelor's | 2,481 | 1,957 | 2,451 |  | -1.2\% |
|  | Master's | 325 | 297 | 278 |  | -14.5\% |
|  | Doctoral | 448 | 410 | 581 |  | 29.7\% |
|  | Total | 4,369 | 3,768 | 4,402 |  | 0.8\% |
| Science Technologies | Associate's | 0 | 0 | 12 |  | >100\% |
|  | Bachelor's | 0 | 0 | 0 |  | 0\% |
|  | Master's | 0 | 0 | 0 |  | 0\% |
|  | Doctoral | 0 | 0 | 0 |  | 0\% |
|  | Total | 0 | 0 | 12 |  | >100\% |
| Total | Associate's | 8,377 | 8,826 | 8,549 |  | 2.1\% |
|  | Bachelor's | 22,127 | 23,912 | 25,040 |  | 13.2\% |
|  | Master's | 4,850 | 5,435 | 4,774 |  | -1.6\% |
|  | Doctoral | 2,747 | 2,770 | 3,882 |  | 41.3\% |
|  | Total | 38,101 | 40,943 | 42,245 |  | 10.9\% |
| *Due to CIP2000 changes Agricultural Services programs were subsumed under Agricultural Business and Biological Sciences <br> Table 39: Enrollment in Stem Fields by Program Level at Virginia Public Four- and Two-Year Institutions, 1995, 2001 and 2005 |  |  |  |  |  |  |

## STEM Enrollment by Program Level and Gender:

Disparities in gender enrollment, particularly in the STEM fields, have received considerable attention in recent years. Several institutions and organizations have sponsored programs to improve the science and education participation of young women. ${ }^{29}$ Overall, women's enrollment has increased in some program areas during the last decade. In the biological sciences, the number of women grew at every degree level: bachelor's (23.6\%), master's (43.1\%), and doctor's (47.7\%). However, the number of men enrolled in biological sciences at the bachelor's and master's level declined by $8.4 \%$ and $7.5 \%$ respectively. Computer and information sciences has exhibited a large drop in the number of women enrolled at the bachelor's level, down 30.1\%. Enrollment has also decreased at the master's level, though not quite as strongly. However, the number of men enrolled in computer and information sciences has continued to increase at every level except at the associate's level. Enrollment in engineering has increased for men and women at all levels except for the master's degree level.

The following table shows undergraduate enrollment data for STEM majors by gender at Virginia public four- and two-year institutions for academic years 1995 and 2005.


| STEM Enrollment by Program Level and Gender at Virginia Public Four- and Two-Year Institutions: 1995 and 2005 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1995 |  | 2005 |  |  |  |
| Program Area | Program Level | Men | Women | Men | Women | \% Change in Men from 1995 | \% <br> Change <br> in <br> Women <br> from <br> 1995 |
| Engineering | Associate's | 1,382 | 219 | 1,414 | 242 | 2.3\% | 10.5\% |
|  | Bachelor's | 4,614 | 920 | 6,886 | 1,527 | 49.2\% | 66.0\% |
|  | Master's | 1,941 | 476 | 1,664 | 457 | -14.3\% | -4.0\% |
|  | Doctoral | 943 | 172 | 1,342 | 351 | 42.3\% | 104.1\% |
|  | Total | 8,880 | 1,787 | 11,306 | 2,577 | 27.3\% | 44.2\% |
| Engineering Related Technologies | Associate's | 3,467 | 500 | 3515 | 718 | 1.4\% | 43.6\% |
|  | Bachelor's | 876 | 95 | 788 | 112 | -10.0\% | 17.9\% |
|  | Master's | 0 | 0 | 0 | 0 | 0.0\% | 0.0\% |
|  | Doctoral | 0 | 0 | 0 | 0 | 0.0\% | 0.0\% |
|  | Total | 4,343 | 595 | 4,303 | 830 | -0.9\% | 39.5\% |
| Mathematics | Associate's | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Bachelor's | 647 | 644 | 696 | 669 | 7.6\% | 3.9\% |
|  | Master's | 160 | 118 | 118 | 98 | -26.3\% | -16.9\% |
|  | Doctoral | 100 | 43 | 80 | 50 | -20.0\% | 16.3\% |
|  | Total | 907 | 805 | 894 | 817 | -1.4\% | 1.5\% |
| Physical Sciences | Associate's | 444 | 671 | 380 | 712 | -14.4\% | 6.1\% |
|  | Bachelor's | 1,446 | 1,035 | 1,383 | 1,068 | -4.4\% | 3.2\% |
|  | Master's | 222 | 103 | 171 | 107 | -23.0\% | 3.9\% |
|  | Doctoral | 332 | 116 | 401 | 180 | 20.8\% | 55.2\% |
|  | Total | 2,444 | 1,925 | 2,335 | 2,067 | -4.5\% | 7.4\% |
| Science Technologies | Associate's | 0 | 0 | 6 | 6 | >100\% | >100\% |
|  | Bachelor's | 0 | 0 | 0 | 0 | 0.0\% | 0.0\% |
|  | Master's | 0 | 0 | 0 | 0 | 0.0\% | 0.0\% |
|  | Doctoral | 0 | 0 | 0 | 0 | 0.0\% | 0.0\% |
|  | Total | 0 | 0 | 6 | 6 | >100\% | >100\% |
| Total | Associate's | 6,330 | 2,047 | 6,247 | 2,302 | -1.3\% | 12.5\% |
|  | Bachelor's | 13,910 | 8,217 | 15,710 | 9,330 | 12.9\% | 13.5\% |
|  | Master's | 3,477 | 1,373 | 3,292 | 1,482 | -5.3\% | 7.9\% |
|  | Doctoral | 1,986 | 761 | 2,654 | 1,228 | 33.6\% | 61.4\% |
|  | Total | 25,703 | 12,398 | 27,903 | 14,342 | 8.6\% | 15.7\% |

Table 40: STEM Enrollment by Program Level and Gender at Virginia Public Four- and Two-Year Institutions, 1995 and 2005

## STEM Enrollment by Program Level and Foreign/International Students:

According to the NSF survey of earned doctorates, foreign students earned one-third of all doctoral degrees awarded in STEM fields in 2003. ${ }^{30}$ There is some concern in the scientific community about the increased participation of foreign students in graduate science and engineering programs given that U.S citizen enrollment in these programs has not kept pace. ${ }^{31}$ However, the GAO found that while STEM enrollments of foreign students increased by 57\% from 1995-1996 to 2003-2004, most of this growth occurred at the bachelor's level. ${ }^{32}$ At Virginia's public four-year institutions, enrollment of foreign/international students increased at all program levels from 1995 to 2005.

The table below displays the enrollment totals of foreign/international students across the bachelor's, master's, and doctoral level for years 1995 and 2005.

| Foreign/ I nternational Students Enrolled in STEM Programs by Program Level at Virginia Public Four-Year Institutions from 1995 to 2005 |  |  |  |
| :---: | :---: | :---: | :---: |
| Program level | 1995 | 2005 | \% change from 1995 |
| Bachelor's | 103 | 244 | 136.8\% |
| Master's | 277 | 582 | 110.1\% |
| Doctoral | 157 | 220 | 40.1\% |
| Total | 537 | 1,046 | 94.7\% |

## STEM Completions:

In the last decade, minority degree attainment in STEM majors has grown steadily. At the associate's level, minority degree attainment grew over $50 \%$ for Black, non-Hispanic and Hispanics. Asian/Pacific Islander saw a slight increase of $1.5 \%$ in associate's degree attainment during the last 10 years. Degree awards at the bachelor's level for Black, non- Hispanic students increased from 374 to 501, representing a $34 \%$ increase. Likewise, Black, non- Hispanic students' master’s degree attainment grew by nearly two-thirds from 49 students in 1995-96 to 80 in 2005-06. Doctoral degree attainment in STEM degrees remained steady for Black, non-Hispanic students during the same time period.

Hispanic degree attainment in STEM majors has increased sharply in the last decade. At the bachelor's level Hispanic students earned a total of 63 degrees in 1995-96. By 2005-06 that figure grew to 131, an increase of 107.9\%. Degree attainment in STEM at the master's degree level increased close to 50\% growing from 20 master’s degrees in 1995-96 to 29 degrees in 2005-06.

Among Asian/Pacific Islander students, STEM degree attainment had a smaller growth rate at the bachelor's and master's level. In 1995-96, Asian/Pacific Islander students earned 506 bachelor's degrees; by 2005-06 that figure increased to 620. Similarly, master’s degree attainment went from 143 in 1995-96 to 166 in 2005-06. Doctoral degree attainment grew by 23.5\% over the past decade.

From 1995-96 to 2005-06, American Indian/Native American STEM degree attainment at the bachelor's level decreased by 26.7\%. However, STEM degree attainment at the master's level increased. By 2005-06, six American Indian/Native American students earned a master’s degree in a STEM field. The doctoral degree attainment in STEM programs remained the same.

The table below displays the number of minority graduates in STEM fields across all degree levels since 1995.

| Completions in STEM Programs by Minority Students and Degree Level At Virginia Public Four- and Two-Year Institutions: 1995-96 and 2005-06 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ethnicity/ Change | Degree Level | 1995-96 | 2005-06 | \% Change from 1995-96 |
| Black, Non Hispanic | Associate's | 79 | 146 | 84.8\% |
|  | Bachelor's | 374 | 501 | 34.0\% |
|  | Master's | 49 | 80 | 63.3\% |
|  | Doctoral | 11 | 11 | 0.0\% |
|  | Total | 513 | 738 | 43.9\% |
| Hispanic | Associate's | 14 | 24 | 71.4\% |
|  | Bachelor's | 63 | 131 | 107.9\% |
|  | Master's | 20 | 29 | 45.0\% |
|  | Doctoral | 4 | 5 | 25.0\% |
|  | Total | 101 | 189 | 87.1\% |
| Asian/ Pacific Islander | Associate's | 65 | 66 | 1.5\% |
|  | Bachelor's | 506 | 620 | 22.5\% |
|  | Master's | 143 | 166 | 16.1\% |
|  | Doctoral | 17 | 21 | 23.5\% |
|  | Total | 731 | 873 | 19.4\% |
| American Indian/ Native American | Associate's | 8 | 8 | 0.0\% |
|  | Bachelor's | 15 | 11 | -26.7\% |
|  | Master's | 0 | 6 | >100.0\% |
|  | Doctoral | 2 | 2 | 0.0\% |
|  | Total | 25 | 27 | 8.0\% |
| Total Minority | Associate's | 166 | 244 | 47.0\% |
|  | Bachelor's | 958 | 1,263 | 31.8\% |
|  | Master's | 212 | 281 | 32.5\% |
|  | Doctoral | 34 | 39 | 14.7\% |
|  | Total | 1,370 | 1,827 | 33.4\% |

## Future Directions:

Virginia enrollment and degree attainment in STEM fields are increasing. However there are noteworthy downward trends in certain areas. For example, enrollment of women in engineering and computer information sciences declined at the master's degree level, though it increased at the bachelor's and doctoral degree level. Future analysis could focus on whether women are enrolling in doctoral programs first versus pursuing a terminal master’s degree.

Minority enrollment in STEM fields has climbed steadily since 1995. In the past decade, STEM degree attainment by Black, non-Hispanic, Hispanic, and Asian/Pacific Islanders students at the bachelor's degree level showed notable increases. Future reports could explore the intersection of race and gender, examining degree attainment of minority men and women. The issue of STEM persistence and retention rates can also be examined to determine whether a significant number of students who enroll in STEM fields ultimately obtain a degree in their selected area.

There are several additional issues to explore in future reports. Some of these include: examining degree attainment among foreign/international students in the STEM fields, determining the percentage
of STEM and non-STEM degrees awarded in the state, gathering information on the number of STEM employers in the state, and ultimately determining how many of Virginia's STEM graduates are employed in the state.

Since 1987, the Commonwealth has seen an increase of 83,014 students in the fall enrollments of its 15 public four-year institutions, Richard Bland College, and the 23 colleges of the Virginia Community College System. Of these, 46,431 students were in the four-year sector ( 32,419 of which were undergraduates), while the remaining 36,583 were in two-year colleges. After a few years of rising enrollments, the years 1992-1995 were relatively flat, with a minor dip in 1994 in both the public fouryear and two-year sectors. However, since 1997, enrollment has increased steadily at Virginia’s higher education institutions.

Data show that total undergraduate fall headcount enrollment increased about $29 \%$ or by 69,002 students from 1987 to 2006. During that same time period, in-state undergraduate enrollment grew at a faster rate than out-of-state undergraduate enrollment, $30 \%$ ( 62,222 students) and $22 \%$ ( 6,780 students) respectively. During the last 20 years, the percentage of resident undergraduate students at Virginia's public institutions has remained relatively constant at about 85\%.

At public four-year institutions, undergraduate fall headcount enrollment increased by $28 \%$ from 1987 to 2006. In-state undergraduate enrollment grew faster than undergraduate out-of-state enrollment, $30.7 \%$ and $18.8 \%$ respectively. In-state undergraduate enrollment growth can largely be attributed to four institutions: George Mason University, James Madison University, Old Dominion University, and Virginia Commonwealth University. Out-of-state undergraduate enrollment increased at a much slower rate than out-of-state graduate (52.8\%) and first professional (69\%) enrollment between 1987 and 2006. Both graduate and first professional out-of-state enrollment increased more than in-state graduate and first professional enrollment over the last 20 years. In fact, in-state first professional enrollment decreased by $2.3 \%$ during that time period. Additionally, data indicate that in-state graduate and first professional enrollment now make up less of the total graduate and first professional population than it did in 1987. In 2006, in-state graduate enrollment constituted $72 \%$ of the total graduate enrollment (down 2\% since 1987). The proportion of in-state first professional enrollment was $60 \%$ in 2006, down 12\% since 1987.

Over the last 20 years, undergraduate enrollment trends at public two-year institutions mirror most of the trends at public four-year institutions. Total undergraduate enrollment at the public twoyears grew close to $30 \%$ overall, with in-state undergraduate enrollment increasing $29.2 \%$. One trend not consistent with the public four-year sector is that the public two-year sector's out-of-state enrollment increased slightly faster than in-state enrollment from 1987 to 2006. Even with these increases in out-ofstate enrollments, the percentage of out-of-state students at the two-year institutions remains less than 6\%.

Total new freshmen fall headcount enrollment at the public institutions grew by $57 \%$ or by 19,938 students from 1992 to 2006. During this period, in-state new freshmen enrollment increased by $61 \%$ or by 17,337 students, while out-of-state new freshmen grew by $41 \%$ or by 2,601 students. Over the last 15 years, in-state new freshmen have made up the majority of the new freshmen population at public four-year and two-year institutions, $77 \%$ and $92 \%$ respectively.

Data indicate that the number of new undergraduate transfers within Virginia's public higher education system remained flat between 1992 and 2006. During the last 15 years, proportionally twothirds of the two-year transfer students were non-associate's degree transfer students. However, the number of students transferring with associate's degrees to the public four-year sector has increased at faster rate than that of the non-associate's degree transfer during that same time period. This increase in
associate's degree transfers is particularly evident during the years 2002 to 2006 where associate's degree students transferring into public four-year institutions increased by $27 \%$, compared to $2 \%$ by non-associate's degree transfer.

In looking at demographic data, there are several interesting trends, some of which mirror national changes. For example, Virginia's undergraduate students are becoming more diverse as the proportion of minority enrollment now represents $29 \%$ of the undergraduate population. This statistic is up $4 \%$ from 1996. Hispanic student enrollments grew at a rate of $97 \%$, the largest growth among all the ethnic groups from 1996 to 2006. Another interesting trend involves the enrollment of Foreign/International students. While the proportion of Foreign/International undergraduate enrollment remained relatively constant over the last 10 years, Foreign/International undergraduate enrollment decreased by 6\% between 2001 and 2006. This decrease could be due to federal changes in visa requirements after the events of September 11, 2001. Women still continue to make up a majority of the undergraduate population at $57 \%$ (up $1 \%$ from 1996). Traditional-aged students are also more predominant than non-traditional-aged students, as the proportion of students age 24 and under now accounts for $88 \%$ of undergraduate enrollment at the public four-year (up $6 \%$ from 1996) and $61 \%$ at the two-year institutions (up 15\% from 1996). These demographic changes, along with the growing number and proportion of full-time students statewide, show that Virginia's undergraduate population reflects national trends. Lastly, report findings indicate that undergraduate students from the Hampton Roads and Northern Virginia region still constitute the largest proportion of undergraduate students at public institutions, close to $50 \%$.

Also noteworthy are the changes occurring at Christopher Newport University and Norfolk State University. Over the last 20 years, Christopher Newport University's student body has become less diverse and more traditional, reflecting a change in the institution's mission. Since 1996, key changes in Christopher Newport University's undergraduate population include: a decrease in the number of minorities (down 10\% to $13 \%$ total minorities); a decrease in the number of women (down $6 \%$ to $54 \%$ women); an increase in the number of traditional-aged students (up 35\% to $95 \%$ age 24 and under); an increase in the number of students living on campus (up $51 \%$ to $60 \%$ on campus); and an increase in the number of full-time students (up $28 \%$ to $94 \%$ full-time). Furthermore, Christopher Newport University's enrollment of new undergraduate transfers decreased by $85.5 \%$ (or 763 students) between 1992 and 2006. Just as Christopher Newport University is re-shaping its undergraduate population, the institution has also focused on building a graduate population. Christopher Newport University began offering graduate programs in 1991, and since that time, the university's graduate enrollment has increased by $314.6 \%$ (or 129 students). In the coming years an analysis could be conducted to determine how much further Christopher Newport University will shift its student population away from a commuter, non-traditional student body to a more on-campus, full-time, traditional one.

Norfolk State University enrollment trends tell a very different story. Over the past 20 years, total FTE enrollment and fall headcount enrollment have declined. Specifically from 1987 to 2006, the institution's fall headcount enrollment of in-state undergraduates decreased by $14.5 \%$, the number of out-of-state undergraduates decreased by $43.6 \%$, and the number of in-state graduate students decreased by $3.1 \%$. The growth of out-of-state graduate students by $346.2 \%$ has not been enough to offset Norfolk State University's steady decline in total enrollment during that time period. Although the number of undergraduate students living on campus has increased at a faster rate than undergraduate students living off campus and traditional-aged undergraduate students are more predominant than non-traditional-aged undergraduate students, the institution's enrollment of full-time undergraduates decreased by $29.3 \%$ from 1996 to 2006. A further in-depth analysis of Norfolk State University’s declining enrollments may shed some light, not only on Virginia's higher education system, but also on HBCU institutions in other states that may be experiencing similar trends.

The two focus areas examined in this report - dual enrollment and STEM majors - raise interesting questions for further research. Because high school dual enrollment programs are often viewed as beneficial and increasing numbers of high school students participate in these programs, continued analysis of this population seems warranted. Additionally, the second focus area, increasing the number of students who major in STEM areas, is at the forefront of national educational debates. These majors are seen as critical to the future economic development of Virginia. Over the last decade, Virginia enrollment in STEM program areas has increased by 11\%, but there are noteworthy downward trends in specific areas. Continued in-depth analysis of STEM majors and characteristics may provide useful information to inform policy.

What data should be examined and what questions must be asked to assist policymakers in addressing important issues facing Virginia higher education? First, enrollment has been steadily increasing at both the public four-year and two-year sectors in Virginia's higher education system. If enrollment continues to grow at a steady pace, will institutions be able to continue managing total enrollment demand? Or will the demand taper off as the current peak of graduating high school seniors begins to diminish? This question may be answered when the 2007 enrollment projections are presented to Council and when SCHEV finishes their annual review of institutional plans and targets.

Secondly, growth of out-of-state undergraduate and new freshmen enrollment is not as significant as might be expected. In fact, the proportion of out-of-state undergraduates and new freshmen enrolled at public four-year institutions has declined over the last 20 years. In contrast, there has been a notable shift in the graduate and first professional enrollment populations, where out-of-state graduate and first professional students have gained ground. Based on individual institutions’ 2005 enrollment projections, the shift away from in-state to out-of-state graduate and first professional students may be a result of institutional policies. Additional contributing factors could be Virginia's healthy economy as more Virginia residents are seeking employment opportunities instead of applying to graduate and first professional school. Furthermore, many graduate and first professional programs at Virginia institutions may be gaining a national reputation and thereby attracting increasingly greater numbers of out-of-state students. A closer look at why the system seems to be enrolling fewer in-state students at these levels may be warranted.

Finally, what will be the implications of public four-year institutions taking more associate's degree transfers? This recent trend gained momentum in the last five years and will continue to grow as the institutions attempt to meet the Restructuring Act requirement to make more transfer opportunities available. In fact, articulation agreements being instituted between public four-year and two-year institutions not only target associate's degree transfers, but also establish dual enrollment programs between institutions. These programs allow students to major in a program at a two-year institution that corresponds to a program at a four-year institution. This type of agreement could assist the two-year institutions in more closely aligning their courses of study to that of the four-year institutions, which in turn could help transfer students complete their education programs more efficiently. In addition, with the 2007 General Assembly passing the Two-Year Transfer Grant program (applicable to associate's degree graduates who want to transfer to a four-year institution and who meet the merit and financial need requirements), there could be a greater financial incentive for students to enroll in the associate's degree track at community colleges and Richard Bland College. Again, only time will tell if these latest changes in transfer and financial aid policy will have any effect on enrollment patterns at Virginia's college and universities.

Ultimately, this report may raise more questions than it answers, yet it should help policymakers as they analyze the results of recent policy decisions, such as additional requirements in the area of
transfer. This report should also provide data and trends useful in the development of future policies related to Virginia's system of higher education.
${ }^{1}$ Synder, T.D., Tan A.G., and Hoffman, C.M. (2006). Digest of Education Statistics 2005 (NCES 2006-030), U.S. Department of Education, National Center for Education Statistics, Washington D.C.: U.S. Government Printing Office, August 2006, Table 171.
${ }^{2}$ Ibid, Table 171.
${ }^{3}$ Ibid, Table 185, Table 171, Table 175.
${ }^{4}$ Ibid, Table 186.
${ }^{5}$ Ibid, Table 187.
${ }^{6}$ Ibid, Table 179.
${ }^{7}$ Ibid, Table 179.
${ }^{8}$ Ibid, Table 177, Table 185, Table 186, Table 187.
${ }^{9}$ Ibid, Table 177.
${ }^{10}$ Ibid, Table 206.
${ }^{11}$ Ibid, Table 177.
${ }^{12}$ Ibid, Table 206.
${ }^{13}$ Kleiner, Brian and Lewis, Laurie. "Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03," Education Statistics Quarterly, volume 7, issues 1\&2, Topic: Elementary and Secondary Education, 2006, p. 1.
${ }^{14}$ Virgnia Plan for Dual Enrollment Between Virginia Public Schools and Community Colleges, 2005, Attachment A to Supts Memo Informational No. 073
${ }^{15}$ Report to the Governor and General Assembly, Virginia's P-16 Education Council, October 2006, p.22.
${ }^{16}$ Government Accountability Office (GAO), Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends, GAO-06-114, Washington D.C., October 12, 2005.
${ }^{17}$ Government Accountability Office (GAO), Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends, GAO-06-114, Washington D.C., October 12, 2005.
${ }^{18}$ Shettle, C., Roey, S., Mordica, J., Perkins, R., Nord, C., Teodorovic, J., Brown, J., Lyons, M., Averett, C., and Kastberg, D. (2007). The Nation's Report Card: America's High School Graduates (NCES 2007-467), U.S. Department of Education Statistics, Washington D.C., U.S. Government Printing Office.
${ }^{19}$ Kuenzi, J.J, Matthews, C.M., Mangan, B.F. Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006.
${ }^{20}$ National Science Foundation, Science and Engineering Indicators, 2006, Volume 1, NSB 06-01, January 2006, Table 2-37.
${ }^{21}$ Kuenzi, J.J, Matthews, C.M., Mangan, B.F (2006). Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006, page 17.

[^1]Associate's Degree (Baccalaureate Credit): An award that normally requires two years of full-time equivalent college-level work. Credit can normally be applied towards bachelor's degree completion

Associate's Degree (Occupational/Technical Credit): An award that normally requires two years of full-time equivalent college-level work. Occupational/Technical degrees normally prepare the student for immediate employment.

First Professional Student: A student enrolled in any of the following degree programs: Dentistry (D.D.S. or D.M.D, Medicine (M.D.), Veterinary Medicine (D.V.M.), Law (L.L.B. or J.D.), Pharmacy (Pharm.D.), Theology (M.Div. or M.H.L. or B.D.)

First-time Freshmen (New Freshmen): A student who has no prior postsecondary experience attending any institution for the first-time at the undergraduate level. Source: IPEDS

First University Degree: Completion of a terminal undergraduate degree program; these degrees are classified as level 5A in the International Standard Classification of Education, although individual countries use different names for the first terminal degree. Level 5A degrees usually require less than five years to complete. Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 2: Higher Education in Science and Engineering.

Full-Time-Equivalent Student (FTE): A statistic derived from the student-credit hour productivity of an institution. For undergraduate students, this is the total annual credit hours divided by 30.

Full-Time Student (undergraduate): A student enrolled for 12 or more semester credits, 12 or more quarter credits, or 24 or more contact hours a week each term. Source: CDS

Graduate Student: A student who holds a bachelor's or first professional degree, or equivalent, and is taking courses at the post-baccalaureate level. A student enrolled in a master's, certificate of advanced graduate study, specialist, or doctoral program, not including candidates for first professional degrees. Source: CDS, IPEDS

In-State: A student whose domicile in the Commonwealth of Virginia.
Headcount: A student enrolled for more than zero credit hours in courses offered for degree or certificate credit, or a student who meets the criteria for classification as a remedial student. NOTE: Headcount data prior to 1997 includes study abroad students not reported in later years.

High School Dual Enrollment: A high school student who is concurrently enrolled in courses for high school and college credit.

Minority Students: United States citizens and resident aliens who fall into one of the ethnicity/race categories: American Indian/Native American, Asian/Pacific Islander, Black, non-Hispanic, and Hispanic.

New Undergraduate Transfer: A student entering the institution for the first time but known to have previously attended a postsecondary institution at the undergraduate level. Source: IPEDS/CDS

Non-Traditional-Aged: Students who are age 25 and above.

Off-Campus (housing): A student enrolled for more than zero credit hours living off-campus.
On-Campus (housing): A student enrolled for more than zero credit hours living on-campus.
Out-Of-State: A student whose domicile is not the Commonwealth of Virginia.
Part-time Student (undergraduate): A student enrolled for fewer than 12 credits per semester or quarter, or fewer than 24 contact hours a week each term. Source: CDS

Percent Change: A statistic used to calculate relative change over a period of time.
Percent Change Accounted For By Given Years: A statistic used to calculate how much relative change can be accounted for by a period of time.

STEM Majors: Science, Technology, Engineering, and Mathematics majors.
Traditional-Aged: Students who are aged 24 and under.
Undergraduate Student: A student enrolled in a four- or five-year bachelor’s degree program, an associate degree program, or a vocational or technical program below the baccalaureate. Source: CDS

Virginia Regions: For reporting purposes Virginia is divided into seven regions: Central, Eastern Shore, Hampton Roads, Northern Virginia, Southern Piedmont, Southwest, and Valley.

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## Christopher Newport University

College of William and Mary
George Mason University
James Madison University
Longwood University
Norfolk State University
Old Dominion University
Radford University
Richard Bland College
University of Mary Washington
University of Virginia
University of Virginia's College at Wise
Virginia Commonwealth University
Virginia Community College System
Virginia Military Institute
Virginia Polytechnic Institute and State University
Virginia State University


[^0]:    2005-06

[^1]:    ${ }^{22}$ Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future, Committee on Prospering the Global Economy of the $21^{\text {st }}$ Century: An Agenda for American Science, Committee on Science, Engineering and Public Policy, National Academy of Science, National Academy of Engineering, Institute of Medicine, Washington D.C.: The National Academics Press, 2007.
    ${ }^{23}$ Advancing Virginia Through Higher Education: The Systemwide Strategic Plan for Higher Education, State Council of Higher Education for Virginia, December 2002.
    ${ }^{24}$ Advancing Virginia: Access, Alignment, Investment: The 2007-13 Strategic Plan for Higher Education in Virginia, State Council of Higher Education for Virginia, July 2007.
    ${ }^{25}$ US News and World Report, 2003 Graduate School Rankings.
    ${ }^{26}$ Table 304 in the Digest of Educational Statistics reports degrees in 7 broad categories: humanities, social and behavioral sciences, natural sciences, computer sciences and engineering, education, business/management, and other fields. For the statistics reported here, data from the natural sciences and computer science and engineering were combined. Some STEM majors as agricultural sciences and natural resources and conservation are classified under "other fields" and therefore, are not included in the reported statistics for this paragraph.
    ${ }^{27}$ Synder, T.D., and Tan A.G. (2005). Digest of Education Statistics 2004 (NCES 2006-005), U.S. Department of Education, National Center for Education Statistics, Washington D.C.: U.S. Government Printing Office, October 2005, Table 304.
    ${ }^{28}$ Government Accountability Office (GAO), Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends, GAO-06-114, Washington D.C., October 12, 2005.
    ${ }^{29}$ AAUW Educational Foundation: Under the Microscope, A decade of gender equity projects in the sciences, 081-04-4K 3/04.
    ${ }^{30}$ National Science Foundation, Science and Engineering Indicators, 2006. Volume 1, Arlington, VA NSB-06-01, January 2006, table 2-32.
    ${ }^{31}$ Kuenzi, J.J, Matthews, C.M., Mangan, B.F (2006) : Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006.
    ${ }^{32}$ Government Accountability Office (GAO), Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends, GAO-06-114, Washington D.C., October 12, 2005, page 21.

