2020-2029
Maryland Public Colleges and Universities

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Lawrence J. Hogan, Jr.
Governor

# Maryland Higher Education Commission 

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## ENROLLMENT PROJECTIONS - MARYLAND PUBLIC COLLEGES AND UNIVERSITIES

The Maryland Higher Education Commission has prepared enrollment projections for Maryland public colleges and universities through Fall 2029. The projections include headcount projections for each institution, with separate analyses for full- and part-time undergraduates and, as applicable, full- and part-time graduate/professional students. Full-time equivalent (FTE) and full-time day equivalent (FTDE) projections were calculated by applying a mathematical formula to the headcount figures. Projections have also been developed for state-funding-eligible FTE noncredit continuing education enrollments at the community colleges.

These projections provide perspective to higher education policy discussions at the state level, including facilities planning, tuition and fees issues, articulation, funding priorities, and retention and graduation rates. The Department of Budget and Management and the General Assembly use the Commission's forecasts as the State's official enrollment projections.

The Commission used separate but similar methodologies for projecting credit enrollments at the community colleges and public four-year institutions. A third method was applied to produce the projections of noncredit continuing education enrollments at the community colleges. All three models involve the application of a linear regression analysis to demographic and economic factors.

These projections do not incorporate any data tied to COVID-19 and the resulting disruptions the pandemic has caused colleges in relation to enrollment of new and returning students. The data used were collected between December 2019 and February 2020 and reflect projected and actual data that, similarly, would not incorporate the effects of COVID-19. These data should be used with caution.
Assessing the one-year accuracy of the model reveals several overestimation patterns. Last year, the enrollment projections forecast a Fall 2019 credit enrollment at the community colleges of 115,275 and the actual enrollment in Fall 2019 was 113,288, a difference of 1,987 (or 2\%). In addition, the projections estimated that the credit enrollment at the public four-year institutions in Fall 2019 would be 189,962 and the actual enrollment in Fall 2019 was 181,490, a difference of 8472 or 5\%. Similarly, last year's statewide FTE and FTDE figures forecast projections that were approximately $3 \%$ higher than the actual data.

Assessing the projections 10-year accuracy is more complex. An analysis using the projections from the 2010-2019 Enrollment Projections Report (published in 2010) projected 357,615 in total headcount credit enrollment, which is 62,837 (17.5\%) higher than the actual data for Fall 2019. The primary driver of these differences is an overestimation of the community college enrollment (170,178 estimated versus 113,288 actual). The public four-year projections ( 187,437 estimated versus 181,490 actual) was much more accurate. Similar patterns play out for the FTE and FTDE figures, with the 2010 report greatly over-projecting the community college counts and much more accurately projecting the public-four year FTE and FTDE counts. Likely the overestimation of the community college data was due, in part, by the surge of enrollment at the community colleges, which began in 2008 and peaked in 2011.

## Assumptions of the Projection Models

- Credit enrollments among Maryland residents can be predicted by applying the historical relationship between the state's population and past in-state enrollments to future population projections.
- The ratio of in-state to out-of-state students in Maryland will be relatively constant over time.
- The number of full-time undergraduates at both the community colleges and public four-year campuses will be affected by the trends in high school graduates.
- The number of full-time undergraduates at public four-year campuses will be influenced by the number of full-time students enrolling at the state's community colleges.
- Tuition increases will have an impact on full- and part-time community college enrollments.
- The number of part-time undergraduates at both the community colleges and public four-year campuses will be impacted by changes in the per capita disposable income, in constant dollars, of Maryland residents.
- Noncredit continuing education enrollments at community colleges can be forecasted by applying the historical relationship between the adult population 20 years of age or older in the county or service area of each two-year institution and past noncredit enrollments at each campus to future population projections.

Students were distributed among the community colleges chiefly on the basis of recent market share, growth rate of each institution, and the anticipated change in the college-age population in each campus' county or counties. The predicted number of students for the fouryear campuses was determined largely by an examination of historical trends, although the recent market share and growth rate of each campus and institution-provided projections were also considered.

## Highlights of the Enrollment Projections

- These projections do not incorporate any data tied to COIVID-19 and the resulting disruptions the pandemic has caused colleges in relation to enrollment of new and returning students. The data used were collected between December 2019 and February 2020 and reflect projected and actual data that, similarly, would not incorporate the effects of COVID-19.
- Total headcount credit enrollment at Maryland public institutions is projected to be 314,570 in Fall 2020, an increase of 7\% (19,792 students) over Fall 2019 actual enrollment.
- The projections estimated that Fall 2019 enrollment would be 305,237, which was 10,459 (3.4\%) more students than actual Fall 2019 enrollment.
- Total headcount credit enrollment at Maryland public colleges and universities is projected to be 339,942 in Fall 2029, an increase of 15\% ( 45,164 students) over Fall 2019. Total enrollment at community colleges is expected to be 143,167, an increase of $26 \%$ ( 29,879 students) from Fall 2019 to Fall 2029, and enrollment at public four-year colleges and universities is projected to be 196,775, an increase of $8 \%(15,285$ students) during the same period.
- Statewide, undergraduate enrollment is projected to grow by 41,983 students by 2029 , an increase of $17 \%$, reaching a total of 295,608 .
- Over 10 years, MHEC projects that the number of full-time undergraduate students at community colleges will grow at a higher rate than the number of part-time students. Full-time enrollment at community colleges is expected to increase to 48,298 , an increase of 12,393 or $35 \%$, while part-time student enrollments are expected to grow to 94,869 , an increase of 17,486 students or $23 \%$.
- The 10 -year projections for public four-year institutions, full-time undergraduate enrollment is projected to increase by $9 \%$ (to 100,975 students, an increase of 8,547 students) while part-time undergraduate enrollment is expected to grow by $7 \%$ (to 51,466 students, an increase of 3,557 students).
- Over 10 years, graduate and professional student enrollment is expected to grow to 44,334 students, an increase of $3,181(8 \%)$. The number of full-time graduate students is projected to grow by $10 \%$ ( 1,926 students) to 20,283 , and the number of part-time students is expected to increase by $6 \%(1,255$ students) to 24,051 .
- Full-time equivalent enrollment (FTE) and full-time day equivalent enrollment (FTDE) at community colleges are expected to grow between Fall 2019 and Fall 2029. FTEs are expected to reach 89,805, an increase of 20,101 or 29\%, and FTDE enrollment will increase 28\% or 13,036 to reach 59,375 (FTE total corrected July 2020).
- At public four-year institutions, FTEs and FTDEs are projected to both grow by $9 \%$ from 2019 to 2029; the FTE figures are projected to reach 151,267, while FTDEs are expected to total 94,218 .The University of Maryland University College is not included in the FTDE projections.
- State-funded noncredit FTE continuing education enrollment at the community colleges is projected to increase by $4 \%$ to 24,534 by FY 2029, an increase of 828 equivalent students compared to FY 2019.
- An analysis using the projections from the 2010-2019 Enrollment Projections Report (published in 2010) projected a Fall 2019 total headcount credit enrollment 357,615 , which is 62,837 ( $17.5 \%$ ) higher than the actual data for Fall 2019. The primary driver of these differences is an overestimation of the community college enrollment ( 170,178 estimated versus 113,288 actual). The public four-year projections ( 187,437 estimated versus 181,490 actual) was much more accurate. Similar patterns play out for the FTE and FTDE figures, with the 2010 report greatly over-projecting the community college counts and much more accurately projecting the public-four year FTE and FTDE counts. Likely the overestimation of the community college data was due, in part, by the surge of enrollment at the community colleges, which began in 2008 and peaked in 2011.


## Projections of Headcount Enrollment at Maryland Public Four-Year Institutions



| Bowie |  |
| :---: | :---: |
|  | Undergraduate |
|  | Full-time Part-time |
|  | Total Undergraduate |
|  | Graduate |
|  | Full-time Part-time |
|  | Total Graduate |
| Total Headcount |  |



## Projections of Headcount Enrollment at Maryland Public Four-Year Institutions



## Projections of Headcount Enrollment at Maryland Public Four-Year Institutions



## Projections of Headcount Enrollment at Maryland Public Four-Year Institutions



## Projections of Headcount Enrollment at Maryland Public Four-Year Institutions



Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Public Four-Year Institutions


Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Public Four-Year Institutions

|  | $\begin{aligned} & \text { FALL } 20 \\ & \text { FY } 21 \\ & \text { Projected } \end{aligned}$ | FALL 21 <br> FY 22 <br> Projected | $\begin{gathered} \text { FALL } 22 \\ \text { FY } 23 \\ \text { Projected } \\ \hline \end{gathered}$ | FALL 23 <br> FY 24 <br> Projected | FALL 24 <br> FY 25 <br> Projected | $\begin{gathered} \text { FALL } 25 \\ \text { FY } 26 \\ \text { Projected } \\ \hline \end{gathered}$ | FALL 26 <br> FY 27 <br> Projected | FALL 27 <br> FY 28 <br> Projected | $\begin{gathered} \text { FALL } 28 \\ \text { FY } 29 \\ \text { Projected } \end{gathered}$ | FALL 29 <br> FY 30 <br> Projected | $\begin{gathered} \text { \% Change } \\ \text { 20-30 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UM College Park |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 34,465 | 34,718 | 35,154 | 35,579 | 35,992 | 36,393 | 36,546 | 36,682 | 36,806 | 36,911 | 7\% |
| FTDES | 30,403 |  |  |  |  |  |  |  |  | 32,561 | 7\% |
| UMES |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 2,692 | 2,713 | 2,750 | 2,786 | 2,824 | 2,860 | 2,878 | 2,896 | 2,912 | 2,930 | 9\% |
| FTDES | 2,076 |  |  |  |  |  |  |  |  | 2,259 | 9\% |
| UM Global Campus |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 34,849 | 35,037 | 35,443 | 35,856 | 36,268 | 36,680 | 36,793 | 36,912 | 37,024 | 37,144 | 7\% |
| FTDES | n/a |  |  |  |  |  |  |  |  |  |  |
| TOTAL SYSTEM OF MD. |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 131,060 | 132,067 | 133,770 | 135,475 | 137,179 | 138,888 | 139,633 | 140,385 | 141,132 | 141,893 | 8\% |
| FTDES (except UMUC) | 79,578 |  |  |  |  |  |  |  |  | 86,748 | 9\% |
| M organ State |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 6,997 | 7,056 | 7,157 | 7,260 | 7,363 | 7,469 | 7,527 | 7,587 | 7,649 | 7,713 | 10\% |
| FTDES | 5,397 |  |  |  |  |  |  |  |  |  | 10\% |
| St. Mary's College |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 1,548 | 1,558 | 1,580 | 1,599 | 1,619 | 1,637 | 1,645 | 1,651 | 1,655 | 1,661 | 7\% |
| FTDES | 1,417 |  |  |  |  |  |  |  |  |  | 7\% |
| TOTAL 4-YEAR PUBLIC |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 139,605 | 140,681 | 142,507 | 144,334 | 146,161 | 147,994 | 148,805 | 149,623 | 150,436 | 151,267 | 8\% |
| FTDES (except UMUC) | 86,392 |  |  |  |  |  |  |  |  | 94,218 | 9\% |

## MARYLAND HIGHER EDUCATION COMMISSION Enrollment Projection Model - Four Year Colleges and Universities

These are the assumptions and steps used in projecting the headcount enrollments at Maryland's public four-year colleges and universities.

## ASSUMPTIONS

1. Enrollments of Maryland residents can be forecast by matching the historical relationship between the state's population and past in-state enrollments, then incorporating population projections for the state.
2. The ratio of in-state to out-of-state students in Maryland will remain relatively constant.
3. The number of full-time undergraduates will be affected by trends in high school graduates and the number of full-time students enrolling at the state's community colleges.
4. The number of part-time undergraduates will be impacted by changes in the per capita disposable income, calculated in constant dollars, of Maryland residents.

## STEPS

1. Total enrollment at Maryland's public four-year campuses during the past ten years were categorized by gender, age (11 groupings), and enrollment status (full- and part-time, undergraduate and graduate/professional). Students whose age was unknown were distributed in the other age categories on a proportional basis.
2. The percentage of students who were Maryland residents was determined for each gender and enrollment group.
3. The state's population during the ten-year period was categorized by gender and the same age groupings. The actual and projected population figures were obtained from the Maryland Office of Planning.
4. A least-squares fit regression analysis was used to examine the relationship between the in-state enrollment (dependent variable) and the state's population (independent variable). This relationship was then applied to the population projections through the year 2028 to determine the projected enrollments of Maryland residents.
5. Out-of-state enrollments were projected to be consistent with the ratio of in-state to out-of-state students in the last year in which actual enrollment figures were available. Separate ratios were used for each of the gender and enrollment categories.
6. The annual percentage change in the number of Maryland full-time community college students over ten years, with a twoyear time lag, was integrated into the regression model as an independent variable for predicting the number of full-time undergraduates.
7. The annual projected change in the number of Maryland high school graduates through spring 2029 was integrated into the regression model as an independent variable for predicting the number of full-time undergraduates. Projections for Maryland high school graduates were obtained from the Western Interstate Commission for Higher Education.
8. The annual percentage change in the per capita disposable income, in constant dollars, of Maryland residents over five years, with a two-year time lag, was integrated into the regression model as an independent variable for predicting the number of part-time undergraduates. The income information was obtained from the Bureau of Economic Analysis.
9. The projected number of full-time equivalent students (FTES) at each public four-year institution was calculated from the headcount enrollments. This conversion was made by: 1) computing headcount-driven FTES figures for each campus for each year (the total number of full-time students plus one-third of the part-time), and 2) multiplying these figures by the average ratio of headcount- to credit hour-driven FTES over the past three years. A separate ratio was obtained for each college, and these ratios were applied to each year through 2029 (FY 2030).
10. The projected number of full-time day equivalent students (FTDES) at each public four-year institution was calculated by multiplying the FTES enrollment for each campus by the average ratio of credit hour-driven FTES to FTDES over the past three years. A separate ratio was obtained for each campus, and these ratios were applied to each year through 2029. A figure equaling the most recent first- and second-year headcount enrollment at the University of Maryland School of Medicine was added to the FTDES of University of Maryland, Baltimore (UMB) in each year. The standard formula understates the FTDES at UMB since the School of Medicine does not operate on a credit hour basis.

## Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{gathered} \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \\ \hline \end{gathered}$ | FALL 20 <br> FY 21 <br> Projected | FALL 21 <br> FY 22 <br> Projected | FALL 22 <br> FY 23 <br> Projected | FALL 23 FY 24 Projected | FALL 24 <br> FY 25 <br> Projected | FALL 25 <br> FY 26 <br> Projected | FALL 26 <br> FY 27 <br> Projected | FALL 27 <br> FY 28 <br> Projected | FALL 28 <br> FY 29 <br> Projected | FALL 29 <br> FY 30 <br> Projected | $\begin{gathered} \text { \% Change } \\ \text { 20-30 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allegany College of Md. |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,032 | 1,266 | 1,290 | 1,296 | 1,319 | 1,332 | 1,315 | 1,313 | 1,307 | 1,299 | 1,288 | 25\% |
| Part-time | 1,552 | 1,751 | 1,797 | 1,820 | 1,844 | 1,855 | 1,888 | 1,902 | 1,915 | 1,929 | 1,943 | 25\% |
| Total Headcount | 2,584 | 3,017 | 3,087 | 3,116 | 3,163 | 3,187 | 3,203 | 3,215 | 3,222 | 3,228 | 3,231 | 25\% |
| Anne Arundel CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 3,604 | 4,428 | 4,532 | 4,585 | 4,614 | 4,659 | 4,743 | 4,795 | 4,847 | 4,902 | 4,952 | 37\% |
| Part-time | 9,051 | 10,197 | 10,427 | 10,501 | 10,560 | 10,798 | 10,716 | 10,672 | 10,611 | 10,533 | 10,438 | 15\% |
| Total Headcount | 12,655 | 14,625 | 14,959 | 15,086 | 15,174 | 15,457 | 15,459 | 15,467 | 15,458 | 15,435 | 15,390 | 22\% |
| Baltimore City CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,579 | 1,950 | 2,015 | 2,069 | 2,032 | 2,051 | 2,238 | 2,331 | 2,439 | 2,565 | 2,710 | 72\% |
| Part-time | 3,330 | 3,784 | 3,937 | 4,070 | 4,238 | 4,008 | 4,492 | 4,713 | 4,980 | 5,300 | 5,679 | 71\% |
| Total Headcount | 4,909 | 5,734 | 5,952 | 6,139 | 6,270 | 6,059 | 6,730 | 7,044 | 7,419 | 7,865 | 8,389 | 71\% |
| Carroll CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,088 | 1,340 | 1,376 | 1,400 | 1,396 | 1,409 | 1,474 | 1,507 | 1,544 | 1,586 | 1,630 | 50\% |
| Part-time | 2,027 | 2,287 | 2,348 | 2,377 | 2,409 | 2,422 | 2,466 | 2,483 | 2,501 | 2,520 | 2,538 | 25\% |
| Total Headcount | 3,115 | 3,627 | 3,724 | 3,777 | 3,805 | 3,831 | 3,940 | 3,990 | 4,045 | 4,106 | 4,168 | 34\% |
| CCBC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 5,053 | 6,204 | 6,341 | 6,401 | 6,465 | 6,527 | 6,578 | 6,622 | 6,662 | 6,697 | 6,724 | 33\% |
| Part-time |  |  |  |  |  |  |  |  |  |  |  | 25\% |
| Total Headcount | 17,732 | 20,514 | 21,028 | 21,273 | 21,531 | 21,681 | 22,007 | 22,156 | 22,307 | 22,455 | 22,599 | 27\% |
| Cecil CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 762 | 935 | 955 | 964 | 974 | 985 | 989 | 995 | 999 | 1,003 | 1,005 | 32\% |
| Part-time | 1,615 | 1,822 | 1,868 | 1,889 | 1,911 | 1,929 | 1,953 | 1,961 | 1,969 | 1,977 | 1,984 | 23\% |
| Total Headcount | 2,377 | 2,757 | 2,823 | 2,853 | 2,885 | 2,914 | 2,942 | 2,956 | 2,968 | 2,980 | 2,989 | 26\% |

## Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{gathered} \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \\ \hline \end{gathered}$ | FALL 20 FY 21 Projected | FALL 21 <br> FY 22 <br> Projected | FALL 22 <br> FY 23 <br> Projected | FALL 23 FY 24 Projected | FALL 24 <br> FY 25 <br> Projected | FALL 25 <br> FY 26 <br> Projected | FALL 26 FY 27 Projected | FALL 27 <br> FY 28 <br> Projected | FALL 28 <br> FY 29 <br> Projected | FALL 29 FY 30 Projected | $\begin{gathered} \hline \text { \% Change } \\ 20-30 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CSM |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 2,257 | 2,763 | 2,809 | 2,813 | 2,880 | 2,908 | 2,823 | 2,797 | 2,761 | 2,718 | 2,664 | 18\% |
| Part-time | 4,094 | 4,621 | 4,743 | 4,803 | 4,865 | 4,893 | 4,982 | 5,016 | 5,051 | 5,089 | 5,126 | 25\% |
| Total Headcount | 6,351 | 7,384 | 7,552 | 7,616 | 7,745 | 7,801 | 7,805 | 7,813 | 7,812 | 7,807 | 7,790 | 23\% |
| Chesapeake CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 563 | 691 | 708 | 716 | 721 | 727 | 742 | 751 | 759 | 768 | 776 | 38\% |
| Part-time | 1,621 | 1,828 | 1,875 | 1,896 | 1,918 | 1,936 | 1,960 | 1,968 | 1,976 | 1,984 | 1,991 | 23\% |
| Total Headcount | 2,184 | 2,519 | 2,583 | 2,612 | 2,639 | 2,663 | 2,702 | 2,719 | 2,735 | 2,752 | 2,767 | 27\% |
| Frederick CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,843 | 2,262 | 2,311 | 2,330 | 2,357 | 2,380 | 2,387 | 2,397 | 2,406 | 2,411 | 2,414 | 31\% |
| Part-time | 4,286 |  | 4,964 | 5,027 | 5,093 | 5,122 | 5,216 | 5,251 | 5,289 | 5,327 | 5,366 | 25\% |
| Total Headcount | 6,129 | 7,100 | 7,275 | 7,357 | 7,450 | 7,502 | 7,603 | 7,648 | 7,695 | 7,738 | 7,780 | 27\% |
| Garrett |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 412 | 506 | 517 | 523 | 527 | 532 | 538 | 541 | 545 | 548 | 551 | 34\% |
| Part-time | 239 | 270 | 277 | 279 | 283 | 286 | 290 | 291 | 293 | 294 | 296 | 24\% |
| Total Headcount | 651 | 776 | 794 | 802 | 810 | 818 | 828 | 832 | 838 | 842 | 847 | 30\% |
| Hagerstown CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,061 | 1,306 | 1,340 | 1,362 | 1,361 | 1,374 | 1,429 | 1,457 | 1,489 | 1,524 | 1,561 | 47\% |
| Part-time | 2,787 | 3,145 | 3,228 | 3,269 | 3,312 | 3,331 | 3,391 | 3,414 | 3,439 | 3,463 | 3,490 | 25\% |
| Total Headcount | 3,848 | 4,451 | 4,568 | 4,631 | 4,673 | 4,705 | 4,820 | 4,871 | 4,928 | 4,987 | 5,051 | 31\% |
| Harford CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 1,932 | 2,369 | 2,416 | 2,430 | 2,469 | 2,492 | 2,471 | 2,469 | 2,463 | 2,453 | 2,437 | 26\% |
| Part-time |  |  |  |  |  |  | 4,527 |  | $4,534$ | $4,532$ | $4,527$ | 20\% |
| Total Headcount | 5,705 | 6,624 | 6,774 | 6,831 | 6,910 | 6,998 | 6,998 | 7,001 | 6,997 | 6,985 | 6,964 | 22\% |

## Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{gathered} \hline \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \\ \hline \end{gathered}$ | FALL 20 <br> FY 21 <br> Projected | FALL 21 <br> FY 22 <br> Projected | FALL 22 FY 23 Projected | FALL 23 FY 24 Projected | FALL 24 FY 25 Projected | FALL 25 FY 26 Projected | FALL 26 FY 27 Projected | FALL 27 <br> FY 28 <br> Projected | FALL 28 <br> FY 29 <br> Projected | FALL 29 FY 30 Projected | $\begin{gathered} \hline \text { \% Change } \\ 20-30 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Howard CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 3,194 | 3,922 | 4,011 | 4,051 | 4,087 | 4,127 | 4,172 | 4,205 | 4,236 | 4,265 | 4,291 | 34\% |
| Part-time | 5,916 | 6,677 | 6,853 | 6,940 | 7,030 | 7,071 | 7,199 | 7,248 | 7,300 | 7,353 | 7,407 | 25\% |
| Total Headcount | 9,110 | 10,599 | 10,864 | 10,991 | 11,117 | 11,198 | 11,371 | 11,453 | 11,536 | 11,618 | 11,698 | 28\% |
| M ontgomery |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 7,305 | 8,938 | 9,073 | 9,065 | 9,314 | 9,404 | 9,034 | 8,908 | 8,749 | 8,557 | 8,331 | 14\% |
| Part-time | 13,955 | 15,703 | 16,020 | 16,076 | 16,089 | 16,629 | 16,231 | 16,048 | 15,825 | 15,560 | 15,256 | 9\% |
| Total Headcount | 21,260 | 24,641 | 25,093 | 25,141 | 25,403 | 26,033 | 25,265 | 24,956 | 24,574 | 24,117 | 23,587 | 11\% |
| Prince George'sCC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 3,508 | 4,333 | 4,481 | 4,601 | 4,516 | 4,559 | 4,984 | 5,199 | 5,451 | 5,739 | 6,076 | 73\% |
| Part-time | 8,280 | 9,345 | 9,592 | 9,714 | 9,838 | 9,897 | 10,075 | 10,146 | 10,216 | 10,289 | 10,370 | 25\% |
| Total Headcount | 11,788 | 13,678 | 14,073 | 14,315 | 14,354 | 14,456 | 15,059 | 15,345 | 15,667 | 16,028 | 16,446 | 40\% |
| Wor-Wic CC |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 712 | 872 | 889 | 895 | 909 | 918 | 907 | 905 | 902 | 896 | 888 | 25\% |
| Part-time | 2,178 | 2,455 | 2,514 | 2,536 | 2,557 | 2,600 | 2,604 | 2,602 | 2,599 | 2,593 | 2,583 | 19\% |
| Total Headcount | 2,890 | 3,327 | 3,403 | 3,431 | 3,466 | 3,518 | 3,511 | 3,507 | 3,501 | 3,489 | 3,471 | 20\% |
| Total Community Colleges |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-time | 35,905 | 44,085 | 45,064 | 45,501 | 45,941 | 46,384 | 46,824 | 47,192 | 47,559 | 47,931 | 48,298 | 35\% |
| Part-time | 77,383 | 87,288 | 89,488 | 90,470 | 91,454 | 92,437 | 93,419 | 93,781 | 94,143 | 94,501 | 94,869 | 23\% |
| Total Headcount | 113,288 | 131,373 | 134,552 | 135,971 | 137,395 | 138,821 | 140,243 | 140,973 | 141,702 | 142,432 | 143,167 | 26\% |

## MARYLAND HIGHER EDUCATION COMMISSION <br> Enrollment Projection Model - Community Colleges

These are the assumptions and steps used in projecting the headcount enrollments at Maryland's public community colleges.

## ASSUMPTIONS

1. Enrollments of Maryland residents can be forecast by matching the historical relationship between the state's population and past in-state enrollments, then incorporating population projections for the state.
2. The ratio of in-state to out-of-state students in Maryland will remain relatively constant.
3. Tuition increases will have an impact on full- and part-time community college enrollments.
4. The number of full-time students will be affected by trends in high school graduates.
5. The number of part-time students will be impacted by changes in the per capita disposable income, calculated in constant dollars, of Maryland residents.

## STEPS

1. Total enrollment at Maryland's community colleges during the past ten years were categorized by gender, age (11 groupings), and enrollment status (full- and part-time). Students whose age was unknown were distributed in the other age categories on a proportional basis.
2. The percentage of students who were Maryland residents was determined for each gender and enrollment group.
3. The state's population during the ten-year period was categorized by gender and the same age groupings. The actual and projected population figures were obtained from the Maryland Office of Planning.
4. A least-squares fit regression analysis was used to examine the relationship between the in-state enrollment (dependent variable) and the state's population (independent variable). This relationship was then applied to the population projections through the year 2029 to determine the projected enrollments of Maryland residents.
5. Out-of-state enrollments were projected to be consistent with the ratio of in-state to out-of-state students in the last year in which actual enrollment figures were available. Separate ratios were used for each of the gender and enrollment categories.
6. The annual percentage change over ten years in the resident tuition and fees at Maryland community colleges, with a twoyear lag time, was integrated inversely into the regression model as an independent variable for predicting the number of fulltime students.
7. The annual percentage change over ten years in the credit hour tuition and fees of residents in community college service areas, with a two-year lag time, was integrated inversely into the regression model as an independent variable for predicting the number of part-time students.
8. The annual projected change in the number of Maryland high school graduates through spring 2029 was integrated into the regression model as an independent variable for predicting the number of full-time students. Projections for Maryland high school graduates were obtained from the Western Interstate Commission for Higher Education.
9. The annual percentage change in the per capita disposable income, in constant dollars, of Maryland residents over five years, with a two-year time lag, was integrated into the regression model as an independent variable for predicting the number of part-time students. The income information was obtained from the Bureau of Economic Analysis.
10. The projected number of full-time equivalent students (FTES) at each community college was calculated from the headcount enrollments. This conversion was made by: 1) computing headcount-driven FTES figures for each college for each year (the total number of full-time students plus one-third of the part-time), and 2) multiplying these figures by the average ratio of headcount- to credit hour-driven FTES over the past three years. A separate ratio was obtained for each college, and these ratios were applied to each year through 2029 (FY 2030).
11. The projected number of full-time day equivalent students (FTDES) at each community college was calculated by multiplying the FTES enrollments for each campus by the average ratio of credit hour-driven FTES to FTDES over the past three years. A separate ratio was obtained for each campus, and these ratios were applied to each year through 2029.

Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{array}{\|c} \hline \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \\ \hline \end{array}$ | FALL 20 <br> FY 21 <br> Projected | FALL 21 FY 22 Projected | FALL 22 FY 23 Projected | $\begin{gathered} \text { FALL } 23 \\ \text { FY } 24 \\ \text { Projected } \\ \hline \end{gathered}$ | FALL 24 FY 25 Projected | FALL 25 <br> FY 26 <br> Projected | FALL 26 <br> FY 27 <br> Projected | FALL 27 <br> FY 28 <br> Projected | FALL 28 FY 29 Projected | FALL 29 FY 30 Projected | \% Change 20-30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allegany College of M d. |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 1,531 | 1,828 | 1,867 | 1,880 | 1,911 | 1,927 | 1,921 | 1,924 | 1,922 | 1,919 | 1,913 | 25\% |
| FTDES | 1,037 | 1,238 |  |  |  |  |  |  |  |  | 1,295 | 25\% |
| Anne Arundel CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 7,502 | 8,868 | 9,073 | 9,161 | 9,216 | 9,357 | 9,421 | 9,464 | 9,499 | 9,532 | 9,553 | 27\% |
| FTDES | 4,826 | 5,705 |  |  |  |  |  |  |  |  | 6,146 | 27\% |
| Baltimore City CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 3,299 | 3,940 | 4,083 | 4,203 | 4,227 | 4,156 | 4,583 | 4,788 | 5,029 | 5,315 | 5,648 | 71\% |
| FTDES | 2,040 | 2,436 |  |  |  |  |  |  |  |  | 3,492 | 71\% |
| Carroll CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 2,019 | 2,406 | 2,471 | 2,509 | 2,517 | 2,537 | 2,628 | 2,672 | 2,721 | 2,777 | 2,834 | 40\% |
| FTDES | 2,368 | 2,822 |  |  |  |  |  |  |  |  | 3,324 | 40\% |
| CCBC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 10,510 | 12,429 | 12,727 | 12,865 | 13,010 | 13,114 | 13,275 | 13,365 | 13,452 | 13,534 | 13,609 | 29\% |
| FTDES | 6,134 | 7,254 |  |  |  |  |  |  |  |  | 7,942 | 29\% |
| Cecil CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 1,354 | 1,606 | 1,643 | 1,660 | 1,678 | 1,696 | 1,708 | 1,717 | 1,724 | 1,731 | 1,735 | 28\% |
| FTDES | 920 | 1,091 |  |  |  |  |  |  |  |  | 1,179 | 28\% |
| CSM |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 3,930 | 4,670 | 4,764 | 4,790 | 4,885 | 4,926 | 4,866 | 4,850 | 4,824 | 4,791 | 4,745 | 21\% |
| FTDES | 2,422 | 2,878 |  |  |  |  |  |  |  |  | 2,924 | 21\% |
| Chesapeake CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 1,177 | 1,387 | 1,422 | 1,438 | 1,451 | 1,464 | 1,488 | 1,501 | 1,512 | 1,524 | 1,536 | 31\% |
| FTDES |  | 961 |  |  |  |  |  |  |  |  | 1,064 | 31\% |

Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{array}{\|c} \hline \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \end{array}$ | $\begin{array}{\|c\|} \hline \text { FALL } 20 \\ \text { FY } 21 \\ \text { Projected } \\ \hline \end{array}$ | FALL 21 <br> FY 22 <br> Projected | FALL 22 <br> FY 23 <br> Projected | FALL 23 <br> FY 24 <br> Projected | $\begin{array}{\|c} \hline \text { FALL } 24 \\ \text { FY } 25 \\ \text { Projected } \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { FALL } 25 \\ \text { FY } 26 \\ \text { Projected } \\ \hline \end{array}$ | FALL 26 FY 27 Projected | $\begin{array}{\|c\|} \hline \text { FALL } 27 \\ \text { FY } 28 \\ \text { Projected } \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { FALL } 28 \\ \text { FY } 29 \\ \text { Projected } \\ \hline \end{array}$ | FALL 29 <br> FY 30 <br> Projected | $\begin{gathered} \hline \text { \% Change } \\ 20-30 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frederick CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 3,467 | 4,106 | 4,202 | 4,245 | 4,297 | 4,331 | 4,372 | 4,395 | 4,418 | 4,436 | 4,453 | 28\% |
| FTDES | 2,228 | 2,638 |  |  |  |  |  |  |  |  | 2,861 | 28\% |
| Garrett |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 455 | 552 | 564 | 571 | 575 | 581 | 588 | 591 | 595 | 598 | 602 | 32\% |
| FTDES | 331 | 401 |  |  |  |  |  |  |  |  | 438 | 32\% |
| Hagerstown CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 2,538 | 3,002 | 3,081 | 3,126 | 3,143 | 3,168 | 3,264 | 3,309 | 3,361 | 3,416 | 3,474 | 37\% |
| FTDES | 1,497 | 1,771 |  |  |  |  |  |  |  |  | 2,049 | 37\% |
| Harford CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 3,490 | 4,144 | 4,233 | 4,264 | 4,322 | 4,371 | 4,355 | 4,355 | 4,349 | 4,337 | 4,318 | 24\% |
| FTDES | 2,331 | 2,768 |  |  |  |  |  |  |  |  | 2,884 | 24\% |
| Howard CC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 5,936 | 7,064 | 7,234 | 7,313 | 7,389 | 7,451 | 7,552 | 7,608 | 7,664 | 7,717 | 7,768 | 31\% |
| FTDES | 4,027 | 4,792 |  |  |  |  |  |  |  |  | 5,270 | 31\% |
| M ontgomery |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 13,591 | 16,110 | 16,383 | 16,395 | 16,683 | 16,990 | 16,419 | 16,206 | 15,941 | 15,623 | 14,560 | 7\% |
| FTDES | 10,034 | 11,893 |  |  |  |  |  |  |  |  | 10,749 | 7\% |
| Prince George'sCC |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 7,306 | 8,682 | 8,950 | 9,138 | 9,087 | 9,160 | 9,724 | 10,003 | 10,324 | 10,688 | 11,112 | 52\% |
| FTDES | 4,188 | 4,977 |  |  |  |  |  |  |  |  | 6,370 | 52\% |
| Wor-Wiccc |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 1,599 | 1,879 | 1,920 | 1,935 | 1,958 | 1,984 | 1,973 | 1,970 | 1,966 | 1,957 | 1,945 | 22\% |
| FTDES | 1,141 | 1,341 |  |  |  |  |  |  |  |  | 1,388 | 22\% |

Projections of Full-Time Equivalent and Full-Time Day Equivalent Enrollment at Maryland Community Colleges

|  | $\begin{gathered} \text { FALL } 19 \\ \text { FY } 20 \\ \text { Actual } \\ \hline \end{gathered}$ | FALL 20 <br> FY 21 <br> Projected | FALL 21 <br> FY 22 <br> Projected | FALL 22 <br> FY 23 <br> Projected | $\begin{array}{\|c} \hline \text { FALL } 23 \\ \text { FY } 24 \\ \text { Projected } \\ \hline \end{array}$ | FALL 24 FY 25 Projected | FALL 25 <br> FY 26 <br> Projected | FALL 26 <br> FY 27 <br> Projected | FALL 27 FY 28 Projected | FALL 28 <br> FY 29 <br> Projected | FALL 29 FY 30 Projected | $\begin{array}{c\|} \hline \text { \% Change } \\ 20-30 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Community Colleges |  |  |  |  |  |  |  |  |  |  |  |  |
| FTES | 69,704 | 82,673 | 84,617 | 85,493 | 86,349 | 87,213 | 88,137 | 88,718 | 89,301 | 89,895 | 89,805 | 29\% |
| FTDES | 46,339 | 54,966 |  |  |  |  |  |  |  |  | 59,375 | 28\% |

## MARYLAND HIGHER EDUCATION COMMISSION

 Noncredit Continuing Education Enrollment Projection Model - Community CollegesThese are the assumptions and steps used in projecting the state-eligible full-time equivalent (FTE) noncredit continuing education enrollments at Maryland community colleges.

## ASSUMPTIONS

1. The adult population 20 years of age or older in a community college's county or service area is a key predictor of noncredit continuing education enrollments.
2. Continuing education enrollments can be forecast by matching the historical relationship between state-funded FTE enrollments at each college and the adult population in the above age group in each college's respective county or service area to the population projections in each location.

## STEPS

1. Total FTE noncredit continuing education enrollments at Maryland community colleges that are eligible for state funding were assembled for the past three years categorized by gender and age (11 groupings).
2. The number of residents in each Maryland county for the past three years was categorized by gender and the same age groupings. The actual population figures were obtained from the Maryland Office of Planning.
3. A least-squares fit regression analysis was used to examine the relationship between the noncredit enrollment (dependent variable) and the population (independent variable). A separate regression analysis was performed for each college, using its own enrollment figures and the population in its county or service area.
4. Each of the 16 statistical relationships was then applied to the population projections for the appropriate county or service area through FY 2028 to determine the projected noncredit FTE continuing education enrollments for the individual community colleges. The projected population figures were obtained from the Maryland Office of Planning.
5. Projected noncredit full-time day equivalent (FTDE) continuing education enrollments were calculated by taking a ratio of the total FTE noncredit enrollments and total FTDE noncredit enrollments for the past three years and multiplying the projected FTE noncredit enrollments by the average three-year ratio.

| PROJECTED STAT MARYLAND COMM FISCAL YEARS 2020 |  | IT FUL | EQUIV | T TREND |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| College | Actual FY 19 | $\begin{array}{r} \text { Projected } \\ \text { FY } 20 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 21 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 22 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 23 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 24 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 25 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 26 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 27 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 28 \\ \hline \end{array}$ | $\begin{array}{r} \text { Projected } \\ \text { FY } 29 \\ \hline \end{array}$ | Percent Change FY 20FY 29 |
| Allegany | 512 | 514 | 516 | 518 | 520 | 522 | 524 | 526 | 528 | 530 | 532 | 4\% |
| Anne Arundel | 3,048 | 3,059 | 3,070 | 3,081 | 3,092 | 3,103 | 3,114 | 3,126 | 3,138 | 3,150 | 3,162 | 4\% |
| Baltimore City | 1,505 | 1,511 | 1,517 | 1,523 | 1,529 | 1,535 | 1,541 | 1,547 | 1,553 | 1,559 | 1,565 | 4\% |
| Baltimore County | 4,622 | 4,639 | 4,656 | 4,673 | 4,690 | 4,707 | 4,724 | 4,741 | 4,759 | 4,777 | 4,795 | 4\% |
| Carroll | 432 | 434 | 436 | 438 | 440 | 442 | 444 | 446 | 448 | 450 | 452 | 5\% |
| Cecil | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 3\% |
| Chesapeake | 648 | 650 | 652 | 654 | 656 | 658 | 660 | 662 | 664 | 666 | 668 | 3\% |
| Frederick | 639 | 641 | 643 | 645 | 647 | 649 | 651 | 653 | 655 | 657 | 659 | 3\% |
| Garrett | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 5\% |
| Hagerstown | 760 | 763 | 766 | 769 | 772 | 775 | 778 | 781 | 784 | 787 | 790 | 4\% |
| Harford | 853 | 856 | 859 | 862 | 865 | 868 | 871 | 874 | 877 | 880 | 883 | 4\% |
| Howard | 1,395 | 1,400 | 1,405 | 1,410 | 1,415 | 1,420 | 1,425 | 1,430 | 1,435 | 1,440 | 1,445 | 4\% |
| Montgomery | 2,993 | 3,004 | 3,015 | 3,026 | 3,037 | 3,048 | 3,059 | 3,070 | 3,081 | 3,092 | 3,103 | 4\% |
| Prince George's | 4,327 | 4,343 | 4,359 | 4,375 | 4,391 | 4,407 | 4,423 | 4,439 | 4,455 | 4,471 | 4,488 | 4\% |
| Southern Maryland | 607 | 609 | 611 | 613 | 615 | 617 | 619 | 621 | 623 | 625 | 627 | 3\% |
| Wor-Wic | 813 | 816 | 819 | 822 | 825 | 828 | 831 | 834 | 837 | 840 | 843 | 4\% |
| SYSTEMWIDE | 23,656 | 23,743 | 23,830 | 23,917 | 24,004 | 24,091 | 24,178 | 24,266 | 24,355 | 24,444 | 24,534 | 4\% |

