# Population Estimates 

## REVISED PROJECTIONS OF SCHOOL AND COLLEGE ENROLLMENT IN THE UNITED STATES TO 1985

The projections in this report supersede similar projections previously published in<br>Current Population Reporte, Series P-25, No. 338)

This report presents revised projections Wof school enroliment by age, sex, and level of school to 1985. Figures are given for fall enrollment of the civilian noninstitutional population 5 to 34 years old at the elementary Wchool (incluaing kindergarten), nigh school, and college levels. These figures supersede finilar projections previously published in Jur-集ent Population Reports, Series P-25, No. 338.

Four series of enrolment projections, dased on different combinations of assumptions boout future trends in the size of the population of school age and the proportion of the population in each age group which will be enrolled in school ("enrollment rates"); are shown in this report. Two series of population projections have each been combined with each of two series of enrollment rates to derive the four series of enroliment projections. The tour series of enrollment projections given nere are only a few of the many reasonably possible series for the fiture size of the Errolled population; they are specifically deSlgned to illustrate the variety of posstibilites. Other population series and other series enrollment rates could reasonably have been unloyed in these calculations. At ages from to 15 , where enrollment rates are already dite high, different assumptions about the
trend in enrollment rates have little effect on the enrollment numbers generated. At the older school and college ages, the effect of different assumptions about the trend in enrollment rates could be pronounced. Alternative population projections begin to have a prom nounced effect on empollment as soon as large numbers of the children born after 1.966 begin to reach school age.

The method chosen for preparing these projections of enrollment took account of the detailed enroliment statistics compiled annually on the basis of the october supplement of the Census Bureau's national sample survey, the Current Population Survey. The general method used involved projecting enrollment rates by single years of age and sex for October of each year to 1985 and applying these rates to projections of the population by single years of age and sex. The application of this method necessitated making two sets of assumptions, one pertaining to the future trend of population growth among persons of school age (i.e., ages 5 to 34 years) and one pertaining to the future trend of enrollment pates.

For the present purpose, two of the four series of population projections recently pubIishea in the Census Bureau's Current Population Reports, Series P-25, No. 359 ("Projections

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Ior sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, 15 cents.
Annual subscription (Series P-20, P-29, P-25, P-27, P-28 summaries, $P-60$, and $P-65$, combined), $\$ 4.00$; foreign mailing, $\$ 5.25$,
of the Population of the United States, by Age, Sex, and Color to 1990, with Extensions of Total Population to 201.5"), Series B and D, were employed in the computations. These projec. tions are based on estimates of the population by single years of age and sex for July I, 1.966, and take account of actual fertility changes through the midde of 1966 . The various serles of population projections given in the report named differ only with respect to the projected level of fertility; the assumptions regarding mortality and net immigration are the same from one series to another. "In Series $B$ the anmal total fertility rate rises gradually from its present level of about 2,888 children per 1,000 wonen in 1965-66 to a level of 3,129 children in 1985; in series $D$ the annual total fertility rate falls gradually to a level of 2,435 children in 1985 . Both series of population prom jections assume a net immigration of 400,000 per year and slightly decreasing mortality as defined in Serjes P-25, No. 359.

These population projections relate to the total population including Armed Forces overseas as of July ] of each year. The statistics on enrollment and the enroliment rates from the Current Population Survey, and hence the enrollment rates projected here, relate to the civilian noninstitutional population as of October of each year. It was necessary, therefore, to adjust the population projections to a basis corresponding to that of the enrollment rates. Accordingly, the midyear population figures were interpolated to October 1 and then the population in institutions and the Armed Forces were removed. For this purpose, it was assumed, for 1966 and later years, that the population in institutions would make up the same percentage of the total population at each age at the estimate date as at the time of the 1960 Census. It was further assumed that the total size of the Armed forces would be the same at each estimate date as on July 1,1966 , and that the age distribution of the Armed Forces would corre. spond to that on January 1, 1966. These data on Armed Forces were the latest available when the population projections were prepared, and no attempt was made to project changes in the size and age distribution of the Armed Forces.

Both series of projected enrollment rates employed in combination with the population projections, designated Series 1 and Series 2 , were designed to show increases at all ages after 1965, the effective base date for the projection of enrollment rates. Series leflects a relatively rapid increase in future
emrolment rates and Series 2 reflects a mod. arate increase in the rates, about half as great as in Series 1. Past trends in enroll. ment, rates were determined on the basis of the experience betweer $1950-52$ and $1963-65$. To represent $1950-52$, rates for October 1950,1952 , and 1.952 were averaged; and, to represent 1963-65, rates for October 1963, 1964, and 1965 were averaged. The use of average rates was intended to reduce the large sampling varia. bility of the rates for single ages for individual calendar yeare and, herce, to provide a more stable base for the projoctions of enroll. ment. The specific assumptiors made in deriving the two series of enrollment rates are ae follows:

Series 2: The average annual percent reduction in the percent not enrolled at each age between 1950-52 (centered on 1951) and 1963-65 (centered on 1964) would apply to the period 1964 to 1985 . The resulting "nonenrollment rates" were then adjusted to tie in with the survey estimates for 1965 based on the Current Population Survey by (1) substituting the estimated rates for 1965 for the projected rates for that year; (2) retaining the original projected rates for 1985 ; and (3) reducing the difference between the projected rates and the estimated rates in 1965 Inearly to zero in 1985.

Series 2: Enrollment rates at each age would be the average of the Series 1 enrollment rates and the enrollment rates of 1965.1

It was assumed that enroliment rates could not exceed 99.8 percent at any age; hence, in deriving series 1 , at those ages where enrollment rates in excess of 99.8 percent resulted for some years from the method described, this value was substituted for the values initially calculated. This modification was made at sev. eral ages in the range 7 to 15 years, where enrollment rates are already near the peak level.

Altemative projections of the total number of persons enrolied in school by single years of age and sex for october of each year, 1966 to 1985 , were obtained by multiplying each series of projected enroliment rates against each series of population projections. The resulting projections of enrollment were designated Series $B-1, B-2, D-1$, and $D-2$.

[^0]The projections of the numbers enrolled at each level of school--kindergarten and elementary school, high school, and college-were then derived by applying projected percentage distributions of enrollment by level of school at each age in each year to the projections of total enrollment. The specific assumptions made in deriving the percentage distributions of enrollment by level of school for each age are as f0.110ws:

Series 1: The proportion of enrollment at a given level of school would shift between 1963-65 and 1990. by the same overall percent change as between 1950-52 and 1963-65. In effect, since the profection period was about twice as long as the base period, the proportions were assumed to change abolat one-half as rapidly in the future as in the recent past. This specific assumption was applied directiy to the proportion for that school level which decreased between 1950-52 and 1963-65 at a given age, and the proportion for the other school level was obtained as a residual. (At most ages, one or two levels accounted for all. persons enrolled.) Proportions for years between 1964 and 1990 wexe obtained by linear Interpolation. In order to tie in the projected aistributions by level of school with the "actual" figures for 1965 from the Current Fopulation Survey, the differences between the projected distribution for 1965 and the estimated distribution for that year were gradually Freduced to zero by 1970.

Series 2: The proportion of enroliment at a given level of school would be the average of the projected proportion in Series $I$ and the groportion in 1965.

These projections take account of unpubHished statistics, through 1965, of enrollment for single years of age, sex, and level of
school, and enrollment rates by single years of age and sex, derived from the Current Population Survey for each october. This was the latest year for which such data were available when the projections were prepared. The data for 1966 corresponding to the categories shown in the tables of this report are now avallable and are presented in the tables instead of the projections for this year originally salculated.

The enroliment figures presented here relate to the civilian noninstitutional population enrolled in "regular" schools or colleges. Both full-time and partwtime enrollment in the regular school system is included. For further information on the definition of enrollment, reference may be made to recent Series P-20 reports giving enrollment data, e.g., "School Enrollment: October 1965," Series P-20, No. 162. The projections in the present report are con m sistent with enrollment data provided by the Cirrent Population Survey; they are notentirely consistent with decennial census data on enrollment or data on enrollment published by the Office of Education.

Table $I$ presents annual projections of school enroliment by level of school and sex to 1985. Table 2 presents projections of school enrollment by age, sex, and level of school, for every fifth year, 1970 to 1985. The enrollment rates corresponding to the projections of enroliment by age group and sex presented in table 2 are shown in appendix table $A$.

*     *         * 

The figures in this report have been rounded independently to the nearest thousand from figures computed to the last digit; hence the sums of parts may differ from the totals showr.

Table 1.-PROJECTIONS OF FALL SCHOOL ENROLLMENT, BY LEVEL OF SCHOOL AND SEX: 1967 TO 1985
(In thousands. Civilian noniastithtional population 5 to 34 years old, as of Oatober. Projections take account of aurvey data on enrollment through 1965. See text for assumptions underdying each series)


Table 1.-PROJECTIONS OF FALL SCHOOL ENROLLMENT, BY LEVEL OF SCHOOL AND SEX: 1967 TO 1985 -Continued
(In thousands, Civilitan noninstitutional population 5 to 3 years old, as of October. Profections take account of survey data on enrolment through 1965. See text for assumptions maderlyting ach series)


Tahie 2.--PROJECTIONS OF FALL SCHOOL ENROLLMENT, BY LEVEL OF SCHOOL, AGE, AND SEX: 1970, 1975, 1980, AND 1985
(In thousands. Civilian noninetitutional population 5 to 34 yeare old, as of october. See text for assumptions underlying each series)

| Seriee, age, and year | Both sexes |  |  |  | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total enrolled | Elemer tary school or kindergarten | $\begin{gathered} \text { Hijgh } \\ \text { school } \end{gathered}$ | College | Total enrolled | Eiemerim tary sohool or kindergerten | $\begin{gathered} \text { High } \\ \text { school } \end{gathered}$ | College | $\begin{gathered} \text { Total } \\ \text { enrolled } \end{gathered}$ | Hiemen tary school or kinder garten | $\begin{gathered} \text { High } \\ \text { school } \end{gathered}$ | College |
| FSTTMATES $1960$ <br> Total, 5 to 34 years.. | 46,259 | 32,441 | 10,249 | 3,570 | 24,234 | 16,711 | 5,184 | 2,339 | 22,025 | 15,730 | 5,065 | 1,231 |
| and 6 years. $\qquad$ to 13 years. $\qquad$ 14 to 17 years. . . . . . . . . . . 18 to 24 years. $\qquad$ 18 to 21 years.......... 25 to 34 years. | $\begin{array}{r} 6,438 \\ 25,621 \\ 10,242 \\ 3,167 \\ 2,634 \\ 792 \end{array}$ | 6,438 24,996 999 6 6 2 | 625 9,021 563 539 40 | 222 2,598 2,089 750 | 3,292 13,074 5,248 1,999 1,580 621 | $\begin{array}{r}3,292 \\ 12,780 \\ 635 \\ 4 \\ 4 \\ \hline\end{array}$ | 294 4,514 347 339 29 | 99 1,648 1,237 592 | 3,146 32,547 4,994 1,168 1,054 171 | 3,146 12,216 364 2 2 2 | 331 4,507 216 200 11 | 123 950 852 158 |
| W紬 Totai, 5 to 34 years.. | 55,070 | 35,624 | 13,364 | 6,085 | 28,733 | 18,297 | 6,791 | 3,749 | 26,337 | 17,425 | 6,574 | 2,337 |
| WXS anc 6 years | 7,156 | 7,156 | - |  | 3,619 | 3,629 | - | - | 3,537 | 3,537 | $\cdots$ | - |
| \%6 to to 23 years................ | 27,894 | 27,405 | 489 | $\cdots$ | 14,1,39 | 13,941 | 198 | - 05 | 13,755 | 13,464 | 291 | 149 |
| \% ${ }^{\text {d } 4 \text { to } 17}$ to years. . . . . . . . | 13,295 | 1,033 | 12,008 | 254 | 6,772 | 629 | 6,038 | 105 | 6,523 | 404 | 5,970 | 149 |
| V10 to 24 years. | 5,724 | - 20 | 805 | 4,899 | 3,509 | 4 | 529 | 2,976 | 2,215 | 16 | 276 | 1,923 |
| \%6s I8 to 21 years.......... | 4,710 | 14 | 784 | 3,912 | 2,773 | 4 | 515 | 2,254 | 1,937 | 10 | 269 | 1,658 |
| \% 45 to 34 years. | 1,004 | 8 | 63 | 933 | 698 |  | 26 | 668 |  |  |  |  |

- Represente zero or rounds to zero.

Table 2.- PROJECTIONS OF FALL. SCHOOL ENROLLMENT, BY LEVEL OF SCHOOL, AGE, AND SEX: 1970, 1975, 1980, AND 1985-Continued
(In thousande. Givilian noninstitutional popuiation 5 to 34 years old, as of october. See text for ascumptions underlythe each gexies)


[^1]Tonle 2.-PROJECTIONS OF FALL SOHOOL ENROL LMENT, BY LEVEL OF SCHOOL, AGE, AND SEX: 1970, 1975, 1980, AND 1985-COntinued
(In thousands, Givilian noninstitutitonal population 5 to 34 years old, ag of otober. See text for assumptions underiying each series)


[^2]Table 2.-PROJECTIONS OF FALL SCHOOL ENROLLMENT, BY LEVEL. of SCHOOL, AGE, AND SEX: 1970, 1975, 1980, AND 1985-Continued
(In thousands, Givilian nondmetitutional population 5 to 3f years old, as of October, See text for assumptions underdying each series)

| Serdes, age, and year | Both dexes |  |  |  | Maje |  |  |  | Femele |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Total } \\ \text { enrolled } \end{gathered}$ | Elemeritayy school. on kindergarten | High school | College | $\begin{gathered} \text { Total } \\ \text { enrolled } \end{gathered}$ | Hlemer: thary school or kd.ndergarten | High school | Gollege | $\begin{gathered} \text { Total } \\ \text { enroliced } \end{gathered}$ | Elementary sehool ox kindergarten | High school | 0ollege |
| Prorecrions--Continued |  |  |  |  |  |  |  |  |  |  |  |  |
| Seriea D-2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Total, ${ }^{5} 5$ to 34 years..5 and 6 years.......... | 58,228 | 36,429 | 14,762 | 7,047 | 30,542 | 18,739 | 7,417 | 4,386 | 27,686 | 17,679 | 7,344 | 2,662 |
|  | 6,737 | 6,737 |  |  | 3,439 | 3,439 | - | " | 3,298 | 3,298 | - |  |
| 7 to 13 years. | 28,967 | $\begin{gathered} 28,442 \\ 1,21,218 \end{gathered}$ | $\begin{array}{r} 525 \\ 13,270 \end{array}$ | 283 | 14,726 | 14,503 | 223 | - | 14,241 | 13,939 | 6,693 |  |
| 1.4 to 17 years. | 14,771. |  |  |  | 7,492 | - 782 | 6,577 | 1.33 | 7,280 | 4.35 |  | 2,281 |
| 18 to 24 years. | 6,502 | $1{ }^{14}$ | $\begin{aligned} & 882 \\ & 837 \end{aligned}$ | 5,605 | 4,005 | 9 | 576 | 3,420 | 2,496 | 4 | 306 |  |
| 18 to 22 years | 5,177 |  |  | 4,333 | 3,025 | 4 | 554 | 2,467 | 2,2,52 | 3 | 283 |  |
| 25 to 34 years.. | 1,251 | 9 | 84 | 1,158 | 880 | 6 | 41 | 833 | 377 | 3 | 43 | -325 |
| 1975 |  |  |  |  |  |  |  |  |  |  |  |  |
| Total, 5 to 34 years.5 and 6 years........... | 58,041 | 3,2,5 | 25,903 | 8,565 | 30,702 | 17,333 | 8,022 | 5,346 | 27,339 | 16,239 | 7,882 | 3,219 |
|  | 6,081 | 6,081 |  | - | 3,106 | 3,108$1.3,405$ | 223 | - - | 2,975 | 2,975 | ${ }^{298}$ | - |
| 7 to 13 years.. | 26,740 | 2,245 | $\begin{array}{r} 521 \\ 34,273 \end{array}$ | $30^{-}$ | $\begin{array}{r} 13,628 \\ 8,036 \end{array}$ |  |  | 145 | 13,112 | $\begin{aligned} & 12,81.5 \\ & 4,40 \end{aligned}$ | 298 |  |
| 14 to 17 years. | 15,823 |  |  | 305 |  | - 804 | 7,083 |  | 7,787 |  | 7,186 | 16. |
| 18 to 24 years. | 7,696 | 16 | 2.001 | 6,679 | 4,735 |  | 657 | 4,066 | 2,961 | 5 | 344 | 2,613 |
| 18 to 21 years | 6,151 | 8 | 949 | 5,194 | 3,595 | 5 | 632 | 2,958 | 2,555 | 3 | 317 | 2,236 |
| 25 to 34 years. | 1,701 | 12 | 104 | 1,580 | 1,197 | 8 | 55 | 1,135 | 504 | 4 | 54 | 445 |
| 1980 |  |  |  |  |  |  |  |  |  |  |  |  |
| rotal, 5 to 34 years.. | 57,050 | 32,233 | 15,099 | 9,718 | 30,402 | 16,628 | 7,677 | 6,097 | 26,648 | 15,605 | 7,422 | 3,622 |
|  | 6,650 | $\begin{array}{r} 6,650 \\ 24,496 \\ 1,055 \\ 27 \\ 8 \\ 15 \end{array}$ | - | - | 3,398 | $\begin{array}{r} 3,398 \\ 12,524 \end{array}$ | 284 | - | 3,252 | $\begin{array}{r} 3,252 \\ 21,972 \end{array}$ | ${ }^{24} 5$ | - |
|  | 24,924 |  | 428 | - | 12,707 |  |  | - | 12,217 |  |  |  |
|  | 14,863 |  | 13,507 | 301 | -7,574 | 686 | 6,744 | 145 | 7,289 | 369 | 6,763 | 156 |
|  | 8,502 |  | $\begin{array}{r} 1,036 \\ 977 \\ 129 \end{array}$ | $\begin{aligned} & 7,448 \\ & 5,775 \\ & 1,969 \end{aligned}$ | $\begin{aligned} & 5,243 \\ & 3,916 \\ & 1,480 \end{aligned}$ | 122 | $\begin{array}{r} 685 \\ 656 \\ 65 \end{array}$ | $\begin{aligned} & 4,546 \\ & 3,254 \\ & 1,406 \end{aligned}$ | $\begin{aligned} & 3,259 \\ & 2,784 \end{aligned}$ | 3 | $352$ | 2,9022,460563 |
|  | 6,700 |  |  |  |  |  |  |  |  |  | $\begin{array}{r} 321 \\ 63 \end{array}$ |  |
|  | 2,112 |  | 128 |  |  |  |  |  | 632 |  |  |  |
| 1985 |  |  |  |  |  |  |  |  |  |  |  |  |
| Totail, 5 to 34 years.. | 58,880 | 35,404 | 13,781 | 9,695 | 31,344, | 18,243 | 6,985 | 6,115 | 27,536 | 17,160 | 6,796 | 3,580 |
| 5 and 6 years. | 7,633 | $\begin{array}{r} 7,6,33 \\ 26,764 \end{array}$ |  | -- | 3,90113,869 | 3,90113,683 | 185 |  | $\left.\begin{gathered} 3,731 \\ 13,326 \end{gathered} \right\rvert\,$ | $\begin{array}{r} 3,731 \\ 13,080 \end{array}$ | 246 | - |
| 7 to 13 years. | 27,195 |  | $\begin{array}{r} 432 \\ 12,323 \end{array}$ |  |  |  |  |  |  |  |  |  |
| 14 to 17 years. | 13,550 | 974 |  | $\begin{array}{r} 254 \\ 7,1,49 \\ 5,296 \end{array}$ | $\begin{array}{r} 6,905 \\ 4,959 \end{array}$ | 635 | 6,147 | $123$ | 6,645 | 338 | 6,176 | $\begin{array}{r} 130 \\ 2,7,3 \\ 2,309 \end{array}$ |
| 1.8 to 24 years. | 8,051 |  | $\begin{array}{r} 12,323 \\ 885 \\ 825 \end{array}$ |  |  |  | 582 | 4,366 | 3,092 |  | 304 |  |
| 18 to 21 years.......... | 6,128 |  |  |  | 3,544 | 5 | $552$ | $\begin{aligned} & 2,987 \\ & 1,626 \end{aligned}$ | $\begin{array}{r} 2,584 \\ \quad 742 \\ \hline \end{array}$ | ${ }_{6}$ | 273 |  |
| 25 to 34 years,.. | 2,451 | 17 | 241 | $\begin{array}{r} 5,296 \\ 2,292 \\ \hline \end{array}$ | $1,708$ | 11 | $71$ |  |  |  |  |  |

[^3]
## APPENDIX

Table A.-ESTIMATED AND PROJECTED FALL ENROLLMENT RATES, BY AGE AND SEX: 1960 TO 1985
(Ftgures represent the percent of the civilian noninstitutional population enrolled in school or college as of October. Enrollment rates for future years are based on, the $B$ series of population projections; rates based on the deries differ onty sidghtily except for the age group 5 to 34 as a whole. See text for method of deriving each serdes

${ }^{1}$ Enrollment rates corresponding to the Series D projections are as follows: Both gexes, Series 1, 53.0, and Series 2, 50.7 ; male, Beries 1 , 57.2 , and Sertec 2, 54.7; female, Series 1, 48.8, and Series 2, 46.9.


[^0]:    ${ }^{2}$ An alternative statement of the assumption made for Series 2, paralleling that given for Series 1 , is that the percents not enrolled at each age would be the average of the percents not enrolled according to Series 1 and the percents not enrolled in 1965 .

[^1]:    - Represents zero or rounds to zero.

[^2]:    - Remresente gero or romde to gero.

[^3]:    - Represents zero or rounds to zero.

