

## Enrollment Projections

through 2027-28
Update

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## Introduction

The Onteora Central School District comprises five (5) schools of which two (2) are K-3 elementary schools; one (1) is a 4-6 elementary; one (1) is a middle school housing grades 7 and 8; and a high school housing grades $9-12$. The Onteora Central School District serves students from the Towns of Shandaken, Olive and parts of Woodstock, Hurley, Marbletown and Lexington. As of the 2022-23 school year, as per the data provided by the Onteora Central School District, the total enrollment is 1,110 on BEDS Day.


## Methodology

This study used the cohort survival method for enrollment projections, which projects future students by grade. The Cohort Survival model is considered very reliable and is utilized by several Departments of Education in their student projections and the U.S. Census Bureau for their reports. The model uses an "aging" concept that moves a group, or cohort, of students into the future and increases or decreases their numbers according to past experience through history. The Cohort Survival methodology relies on historical enrollment and live birth data to capture the effects of in and out-migration, housing changes, and natural trends in population. In essence, the model derives a growth factor or ratio for student survival matriculation to the next grade based upon previous survival numbers to the same grade of students in each district. This model derives the growth factor by applying a non-weighted average survivor rate over a historical period ranging from the previous 2 to 7 years. To account for other external factors that could influence future enrollment, this model allows for an "Additional Adjustment Factor" (entered as a \%) to account for the net effect of all known external factors.

## Data Sources

1. Enrollment data for the years 2013-14 through 2022-23 was taken from the New York State Department of Education (http://www.p12.nysed.gov/irs/statistics/enroll-n-staff/home.html).
2. Live Birth by Zip Codes
3. Historical Live Birth rates and Survival rates

## Executive Summary

1. The total enrollment in the Onteora Central School District decreased from 1,392 students in 2013-14 (not including ungraded) to 1,110 in 2022-23. This is a decrease of 282 students or approximately $21 \%$. The enrollment is projected to decrease from the current 1,110 to 934 in 2027-28. This is a decrease of another 166 students or approx. 15.1\%. or approximately
2. The enrollment in grades K-3 decreased from 408 students in 2013-14 to 280 in 2022-23. This is a decline of 128 students or approximately $31.4 \%$. The K-3 enrollment is to remain stable through 2027-28 (289 in 2027-28) showing no further decline.
3. The grade 4-6 enrollment declined from 316 students in 2013-14 to 214 students in 2022-23. This is decrease of 102 students or approximately $32.3 \%$. The $4-6$ enrollment is projected to decline to 185 in 2027-28, which is a decrease of another 29 students or approximately $13.5 \%$.
4. The middle school enrollment decreased from 207 in 2013-14 to 192 in 2022-23. This is a slight decrease 15 students or approximately $7.3 \%$. The middle school enrollment is projected to decrease from the current 192 to 147 in 2027-28. This is a decrease of 45 students or approximately 23.4\%.
5. The High School enrollment declined from 461 students in 2013-14 to 424 students in 2022-23. This is a decline of 37 students or approximately $8 \%$. The High School enrollment is projected to decrease from the current 424 to 315 in 2027-28. This is a decrease of another 109 students or approximately $25.7 \%$.

Table 1: Summary of Enrollment History and Projection K-12
Table 1 shows the changes in enrollment for the District in each of the schools in five-year increments. The table shows an overall decline in enrollment with the exception of grades 5-8 which appear to be stable.

|  | Enrollment <br> $2013-14$ | Enrollment <br> $2022-23$ | \# student <br> change | \% student <br> change | Enrollment <br> $2027-28$ | \# student <br> change | \% student <br> change |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| K-3 | 408 | 280 | -128 | $-31.4 \%$ | 289 | +9 | $+3.2 \%$ |
| $4-6$ | 316 | 214 | -102 | -32.3 | 185 | -29 | $-13.6 \%$ |
| $7-8$ | 207 | 192 | -15 | $-7.3 \%$ | 147 | -45 | $-23.4 \%$ |
| $9-12$ | 461 | 424 | -34 | $-8 \%$ | 315 | -109 | $-25.7 \%$ |
| Total | 1392 | 1110 | -282 | $-20.3 \%$ | 936 | -174 | $-15.7 \%$ |

## Tables and Charts

|  | History |  |  |  |  |  |  |  |  |  | Projected |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | 2013 | 2014 | 2015 | \# | 2017 | 2018 | 2019 | 2020 | 2021 | \# | 2023 | 2024 | \# | 2026 | 2027 |
| Kindergarten | 116 | 96 | 87 | 80 | 79 | 79 | 85 | 79 | 67 | 65 | 77 | 71 | 83 | 73 | 74 |
| 1 | 81 | 126 | 91 | 91 | 90 | 70 | 80 | 83 | 75 | 64 | 62 | 73 | 68 | 79 | 69 |
| 2 | 85 | 93 | 123 | 94 | 88 | 85 | 67 | 79 | 84 | 71 | 63 | 61 | 71 | 67 | 78 |
| 3 | 106 | 93 | 99 | 126 | 93 | 92 | 83 | 67 | 86 | 80 | 72 | 64 | 62 | 73 | 68 |
| 4 | 121 | 103 | 95 | 94 | 129 | 84 | 88 | 79 | 61 | 81 | 74 | 67 | 59 | 57 | 68 |
| 5 | 86 | 119 | 110 | 89 | 94 | 128 | 79 | 90 | 82 | 61 | 83 | 75 | 68 | 60 | 58 |
| 6 | 101 | 94 | 119 | 103 | 90 | 90 | 130 | 86 | 97 | 72 | 60 | 81 | 74 | 67 | 59 |
| 7 | 104 | 102 | 98 | 128 | 105 | 97 | 91 | 129 | 90 | 95 | 73 | 60 | 82 | 75 | 68 |
| 8 | 106 | 105 | 101 | 103 | 126 | 102 | 101 | 99 | 135 | 97 | 101 | 77 | 64 | 87 | 79 |
| 9 | 114 | 114 | 113 | 106 | 109 | 128 | 103 | 114 | 106 | 134 | 100 | 104 | 80 | 66 | 90 |
| 10 | 114 | 107 | 107 | 106 | 105 | 100 | 114 | 92 | 106 | 99 | 125 | 93 | 97 | 74 | 62 |
| 11 | 132 | 11. | 103 | 105 | 103 | 96 | 95 | 108 | 91 | 91 | 91 | 115 | 86 | 90 | 69 |
| 12 | 129 | 129 | 115 | 100 | 101 | 106 | 99 | 96 | 107 | 100 | 95 | 96 | 121 | 90 | 94 |
| Ungraded |  | 5 | 5 | - | - | 1 | - | - | - | - | 0 | 0 | 0 | 0 | 0 |
| Total K-12 | 1,396 | 1,397 | 1,366 | 1,325 | 1,312 | 1,258 | 1,215 | 1,201 | 1,18才 | 1,110 | 1,075 | 1,038 | 1,016 | 958 | 934 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Annual Chanae | -3.9\% | 0.1\% | -2.2\% | -3.0\% | -1.0\% | -4.1\% | -3.4\% | -1.2\% | -1.2\% | -6.5\% | -3.1\% | -3.4\% | -2.2\% | -5.7\% | -2.5\% |

Chart 1: District Wide Enrollment History and Projection

Table 3: District Wide Enrollment History and Projection


## Grade Levels

Table 4: K-3 Enrollment History and Projection

| Year | K | 1 | 2 | 3 | Total |
| :---: | ---: | ---: | ---: | ---: | ---: |
| $2014-15$ | 96 | 126 | 93 | 93 | 408 |
| $2015-16$ | 87 | 91 | 123 | 99 | 400 |
| $2016-17$ | 80 | 91 | 94 | 126 | 391 |
| $2017-18$ | 79 | 90 | 88 | 93 | 350 |
| $2018-19$ | 79 | 70 | 85 | 92 | 326 |
| $2019-20$ | 85 | 80 | 67 | 83 | 315 |
| $2020-21$ | 79 | 83 | 79 | 67 | 308 |
| $2021-22$ | 67 | 75 | 84 | 86 | 312 |
| $2022-23$ | 65 | 64 | 71 | 80 | 280 |
| $2023-24$ | 77 | 62 | 63 | 72 | 274 |
| $2024-25$ | 71 | 73 | 61 | 64 | 269 |
| $2025-26$ | 83 | 68 | 71 | 62 | 284 |
| $2026-27$ | 73 | 79 | 67 | 73 | 292 |
| $2027-28$ | 74 | 69 | 78 | 68 | 289 |

## Chart 2: K-3 Enrollment History and Projection



Table 6: 4-6

## Enrollment History and Projection

Chart 4: 4-6 Enrollment History and Projection

| Year | 4 | 5 | 6 | Total |
| :---: | ---: | ---: | ---: | ---: |
| $2014-15$ | 103 | 119 | 94 | 316 |
| $2015-16$ | 95 | 110 | 119 | 324 |
| $2016-17$ | 94 | 89 | 103 | 286 |
| $2017-18$ | 129 | 94 | 90 | 313 |
| $2018-19$ | 84 | 128 | 90 | 302 |
| $2019-20$ | 88 | 79 | 130 | 297 |
| $2020-21$ | 79 | 90 | 86 | 255 |
| $2021-22$ | 61 | 82 | 97 | 240 |
| $2022-23$ | 81 | 61 | 72 | 214 |
| $2023-24$ | 74 | 83 | 60 | 217 |
| $2024-25$ | 67 | 75 | 81 | 223 |
| $2025-26$ | 59 | 68 | 74 | 201 |
| $2026-27$ | 57 | 60 | 67 | 184 |
| $2027-28$ | 68 | 58 | 59 | 185 |



Table 7: 7-8 School Enrollment History and Projection

| Year | 7 | 8 | Total |
| :---: | ---: | ---: | ---: |
| $2014-15$ | 102 | 105 | 207 |
| $2015-16$ | 98 | 101 | 199 |
| $2016-17$ | 128 | 103 | 231 |
| $2017-18$ | 105 | 126 | 231 |
| $2018-19$ | 97 | 102 | 199 |
| $2019-20$ | 91 | 101 | 192 |
| $2020-21$ | 129 | 99 | 228 |
| $2021-22$ | 90 | 135 | 225 |
| $2022-23$ | 95 | 97 | 192 |
| $2023-24$ | 73 | 101 | 174 |
| $2024-25$ | 60 | 77 | 137 |
| $2025-26$ | 82 | 64 | 146 |
| $2026-27$ | 75 | 87 | 162 |
| $2027-28$ | 68 | 79 | 147 |

Chart 5: 7-8 School Enrollment History and Projection


Table 8: 9-12 School Enrollment History and Projection

| Year | 9 | 10 | 11 | 12 | Total |
| :---: | ---: | ---: | ---: | ---: | ---: |
| $2014-15$ | 114 | 107 | 111 | 129 | 461 |
| $2015-16$ | 113 | 107 | 103 | 115 | 438 |
| $2016-17$ | 106 | 106 | 105 | 100 | 417 |
| $2017-18$ | 109 | 105 | 103 | 101 | 418 |
| $2018-19$ | 128 | 100 | 96 | 106 | 430 |
| $2019-20$ | 103 | 114 | 95 | 99 | 411 |
| $2020-21$ | 114 | 92 | 108 | 96 | 410 |
| $2021-22$ | 106 | 106 | 91 | 107 | 410 |
| $2022-23$ | 134 | 99 | 91 | 100 | 424 |
| $2023-24$ | 100 | 125 | 91 | 95 | 411 |
| $2024-25$ | 104 | 93 | 115 | 96 | 408 |
| $2025-26$ | 80 | 97 | 86 | 121 | 384 |
| $2026-27$ | 66 | 74 | 90 | 90 | 320 |
| $2027-28$ | 90 | 62 | 69 | 94 | 315 |

## Chart 6: 9-12 School Enrollment History and Projection

## School Enrollment History \& Projection K-5

| Year | K | 1 | 2 | 3 | 4 | 5 | Total |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2014-15$ | 96 | 126 | 93 | 93 | 103 | 119 | 630 |
| $2015-16$ | 87 | 91 | 123 | 99 | 95 | 110 | 605 |
| $2016-17$ | 80 | 91 | 94 | 126 | 94 | 89 | 574 |
| $2017-18$ | 79 | 90 | 88 | 93 | 129 | 94 | 573 |
| $2018-19$ | 79 | 70 | 85 | 92 | 84 | 128 | 538 |
| $2019-20$ | 85 | 80 | 67 | 83 | 88 | 79 | 482 |
| $2020-21$ | 79 | 83 | 79 | 67 | 79 | 90 | 477 |
| $2021-22$ | 67 | 75 | 84 | 86 | 61 | 82 | 455 |
| $2022-23$ | 65 | 64 | 71 | 80 | 81 | 61 | 422 |
| $2023-24$ | 77 | 62 | 63 | 72 | 74 | 83 | 431 |
| $2024-25$ | 71 | 73 | 61 | 64 | 67 | 75 | 411 |
| $2025-26$ | 83 | 68 | 71 | 62 | 59 | 68 | 411 |
| $2026-27$ | 73 | 79 | 67 | 73 | 57 | 60 | 409 |
| $2027-28$ | 74 | 69 | 78 | 68 | 68 | 58 | 415 |



## School Enrollment History \& Projections 6-8

| Year | 6 | 7 | 8 | Total |
| :---: | ---: | ---: | ---: | ---: |
| $2014-15$ | 94 | 102 | 105 | 301 |
| $2015-16$ | 119 | 98 | 101 | 318 |
| $2016-17$ | 103 | 128 | 103 | 334 |
| $2017-18$ | 90 | 105 | 126 | 321 |
| $2018-19$ | 90 | 97 | 102 | 289 |
| $2019-20$ | 130 | 91 | 101 | 322 |
| $2020-21$ | 86 | 129 | 99 | 314 |
| $2021-22$ | 97 | 90 | 135 | 322 |
| $2022-23$ | 72 | 95 | 97 | 264 |
| $2023-24$ | 60 | 73 | 101 | 234 |
| $2024-25$ | 81 | 60 | 77 | 218 |
| $2025-26$ | 74 | 82 | 64 | 220 |
| $2026-27$ | 67 | 75 | 87 | 229 |
| $2027-28$ | 59 | 68 | 79 | 206 |



