
ANALYSIS OF ENROLLMENT PROJECTIONS

FALL 2024

PREPARED FOR:
NAZARETH AREA SCHOOL DISTRICT

PREPARED BY:



SUBMITTED: AUGUST 14, 2024

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NAZARETH AREA SCHOOL DISTRICT

EXECUTIVE SUMMARY

ENROLLMENT PROJECTIONS - FALL 2024

PowerSchool Predictive Enrollment Analytics is pleased to present this report of findings to the Board of Education and Executive Staff of Nazareth Area School District. Both a Conservative and Moderate projection have been generated for the district. Assuming district revenue is generated on a per pupil basis, the Conservative projection is more suitable for budget planning purposes while the Moderate projection is more suitable for facilities planning purposes.

KINDERGARTEN ENROLLMENT

In general, Kindergarten enrollment over the past four years has been somewhat erratic. The data also show that the difference between the graduating cohort and the incoming cohort has been somewhat erratic. Note that both studies project a significant increase at the Kindergarten level.

COHORT PATTERNS

A typical student cohort ages from grade to grade relatively unchanged from the previous year. Historically, 3 cohorts show more than a 5% annual change.

NEW HOUSING DEVELOPMENT

Approximately 1,000 new residential units are projected to be occupied over the next 10 years. During that period, the annual impact in any given year, based on the Moderate Study, is estimated in peak years to be 106 students.

DISTRICT-WIDE ENROLLMENT PROJECTION

Overall the projections forecast a significant increase across the 10-year period based upon the historical enrollment trends and any projected new residential development.

MORE INFORMATION

A richer and more comprehensive review of both studies is contained in the Final Report accompanying this Executive Summary. A wealth of more detailed information and analysis regarding both studies is also quickly and easily accessible online.

Respectfully Prepared and Submitted by:

The Predictive Enrollment Analytics Team

August 14, 2024

NAZARETH AREA SCHOOL DISTRICT

HISTORICAL ANALYSIS

RECENT CHANGES IN ENROLLMENT

Familiarity with recent historical enrollment patterns and trends establishes the foundation for understanding projected enrollment. Percentages in the table below compare the current year enrollment to that of three years ago.

4 Year History Change	
Kindergarten	114%
Gr K-5	109%
Gr 6-8	97%
Gr 9-12	105%
District (K-12)	105%

FIGURE 1

KINDERGARTEN IMPACT

Kindergarten enrollment is a significant driver of overall future district-wide enrollment. A trend at Kindergarten from year to year, or a trend in the difference between the district's graduating cohort in a given year and the Kindergarten cohort the subsequent year, will eventually be reflected in the total district enrollment count.

In general, Kindergarten enrollment over the past four years has been somewhat erratic. The data in the table below also show that the difference between the graduating cohort and the incoming cohort has been somewhat erratic.

[More details: Enrollment > Historical > District-Wide > History Years Enrollment]

	Percent Change of Previous Year		
	2021	2022	2023
Kindergarten	120%	84%	113%
Grade 12 to K	86%	77%	87%
Total K-12	103%	101%	101%

FIGURE 2

LIVE BIRTH TRENDS

Live birth trends have an impact in large geographies, and on long range projections. However, in smaller areas of study, such as a school district, population mobility is often a mitigating if not an overriding factor, thereby reducing the effectiveness of live births as a predictor of enrollment. Consequently, PowerSchool Predictive Enrollment Analytics has found that recent Kindergarten enrollment trends by sub-geographies to be a better, more reliable predictor of future Kindergarten enrollment.

COHORT IMPACT

A typical student cohort ages from grade to grade relatively unchanged from the previous year. By contrast, the cohort matriculating from Kindergarten to Grade 1 is a common example of a cohort increase, typically attributable to students returning from a private school.

In the following table, cohort changes with more than a 2% variance from static are marked accordingly. Those with more than a 5% changed are marked as 'Significant'.

Average Cohort Change Past Three Years			
Cohort	Percent	+/-	Significant
K > 1	108%	++++	SSSS
1 > 2	108%	++++	SSSS
2 > 3	104%	++++	
3 > 4	104%	++++	
4 > 5	104%	++++	
5 > 6	102%		
6 > 7	106%	++++	SSSS
7 > 8	101%		
8 > 9	102%	++++	
9 > 10	101%		
10 > 11	100%		
11 > 12	101%		

FIGURE 3

INCOMING OUT-OF-DISTRICT TRANSFER IMPACT

The number of students served from outside the district boundaries can impact enrollment. It is a factor over which the district may have some control. For the past two years, the number of out-of-district students served annually has been approximately 18, and has been declining.

[More details: [Enrollment > Historical > District-Wide > Out of District](#)]

KEY VARIABLES IN PROJECTING DISTRICT ENROLLMENT

Both a Conservative and Moderate projection have been generated for the district. Assuming district revenue is generated on a per pupil basis, the Conservative projection is more suitable for budget planning purposes while the Moderate projection is more suitable for facilities planning purposes.

As a matter of standard practice, PowerSchool Predictive Enrollment Analytics does not typically include specialized schools or programs such as Home and Hospital Programs, Community Day Schools or Independent Study Programs in the Enrollment Projections. Our work is focused on projecting grade level enrollment for typical schools that are reported to the state.

The major variables that distinguish the Conservative projection from the Moderate are described in the table below.

Key Variables Controlling the Projections Algorithm	
Kindergarten Enrollment Change	Applies the lesser or greater of 3-4 year history trend in each studyblock to the appropriate study.
Cohort Change	Applies the lesser or greater of 3-4 year history trend in each studyblock to the appropriate study.
K Enrollment Change Cap	Restricts the effect of anomalous spikes in Kindergarten history
K Enrollment Change Floor	Restricts the effect of anomalous spikes in Kindergarten history
Incoming Out-of-District Transfers	For each grade level span, applies the lesser or greater of 1-2 year history to the lograde; ages through existing students.
Dwelling Units	Moderate study assumes developer's phasing calendar. Conservative study shifts the developer's calendar toward the out-years.
Student Generation Rates	Typical of recent history by product type.

FIGURE 4

IMPACT OF PROJECTED NEW DWELLING UNITS

PROJECTED OCCUPANCY

Approximately 1,000 new residential units are projected to be occupied over the next 10 years. The tables below show the mix of proposed units across the three dwelling unit types. The Moderate table summarizes the plans described by developers while the Conservative table estimates a more likely scenario based on anticipated market conditions. The most recent residential research was completed in June 2024 by .

[More details: Enrollment > Residential > District-Wide > Proposed Dwelling Units]

New Dwelling Units Projected to be Occupied by Year (Moderate)										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Multi-family										
Attached			50	50	50	50	38			
Detached	27	80	212	190	124	75	63			
Totals:	27	80	262	240	174	125	101	0	0	0

FIGURE 5

New Dwelling Units Projected to be Occupied by Year (Conservative)										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Multi-family										
Attached			40	40	40	40	40	38		
Detached	20	71	175	158	125	99	60	58	5	
Totals:	20	71	215	198	165	139	100	96	5	0

FIGURE 6

The graph below depicts visually the differences between the phasing projected in the Moderate and Conservative studies.

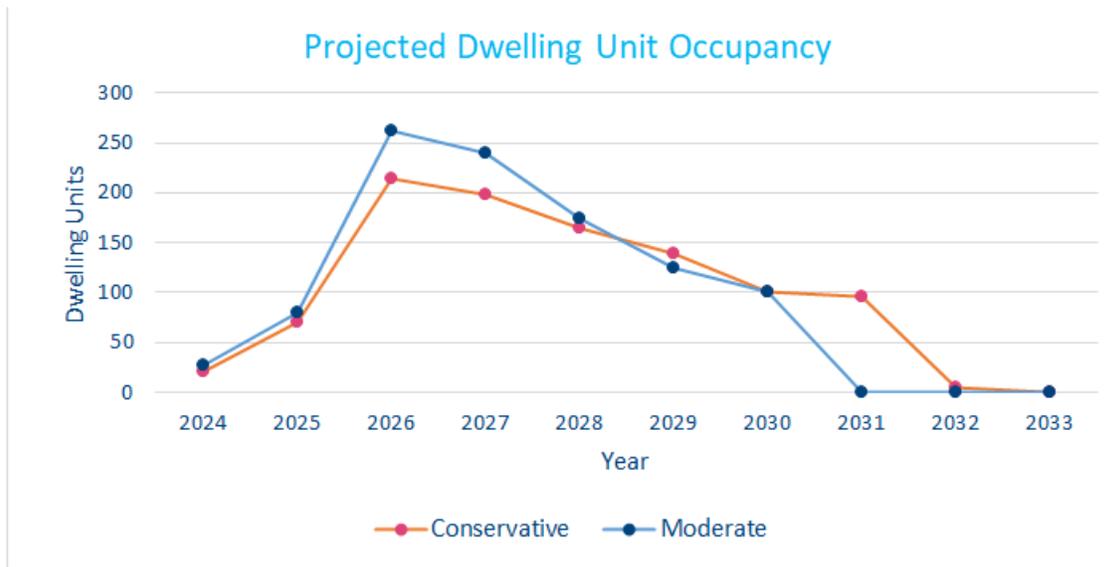


FIGURE 7

STUDENTS GENERATED

Over the period of years during which these units will become occupied, the impact, based on the Moderate scenario, is shown in the table below. The “Annual” row projects the number of students new to the district from these units each year. The “Aggregate” row projects the accumulated increase in students served by the district through the year indicated and includes matriculation through and eventually out of the district for students introduced in previous years.

Students Generated by Residential Development (Moderate)										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Aggregate		56	162	263	332	374	414	430	446	461
Annual	12	44	106	101	69	42	40	16	16	15

FIGURE 8

The table below reflects the students generated using the Conservative estimate of projected Dwelling Units.

Students Generated by Residential Development (Conservative)										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Aggregate		49	138	218	285	341	375	415	432	446
Annual	11	38	89	80	67	56	34	40	17	14

FIGURE 9

STUDENT GENERATION RATES

Moderate student generation rates are typical of students enrolled from existing developments of similar product type. Conservative student generation rates, if different, are designed to anticipate a diminution in family size.

[More details: [Enrollment > Residential > District-Wide > Student Generation Rates](#)]

A complete report regarding new residential development is available online in our platform under “Home > Administration and Tools > District Documents”. This report includes a map of proposed dwelling unit projects, the phasing by dwelling unit type in each project, students generated by new development by studyblock, student generation rates. Additional individual reports can be found online under “Enrollment > Residential”.

PROJECTED ENROLLMENT CHANGES BY GRADE LEVEL

The tables below display the five-year district-wide projections by grade level and allow a comparison to enrollment in the current year.

CONSERVATIVE 5 YEAR DISTRICT-WIDE PROJECTION BY GRADE LEVEL

Grade	2023	2024	2025	2026	2027	2028
K	333	343	350	360	367	366
1	313	348	361	373	382	388
2	386	328	368	386	397	396
3	361	399	342	387	405	409
4	376	375	417	362	408	418
5	364	390	392	438	380	419
6	390	369	397	403	449	388
7	380	409	388	420	426	463
8	366	387	417	398	430	432
9	410	368	392	427	407	439
10	407	414	375	402	437	414
11	425	409	418	382	409	442
12	385	427	411	422	386	412
Subtotals:	4896	4966	5028	5160	5283	5386
Pct Chg:	0.9%	1.4%	1.2%	2.6%	2.4%	1.9%
SDC:	0	0	0	0	0	0
Totals:	4896	4966	5028	5160	5283	5386

FIGURE 10

MODERATE 5 YEAR DISTRICT-WIDE PROJECTION BY GRADE LEVEL

Grade	2023	2024	2025	2026	2027	2028
K	333	356	368	386	395	397
1	313	352	378	398	414	420
2	386	331	376	410	428	431
3	361	403	349	400	434	442
4	376	379	425	374	427	449
5	364	394	401	452	399	440
6	390	373	405	417	469	411
7	380	414	398	435	447	486
8	366	391	427	413	451	456
9	410	373	401	443	428	464
10	407	419	384	417	459	437
11	425	413	429	397	431	466
12	385	431	419	438	405	435
Subtotals:	4896	5029	5160	5380	5587	5734
Pct Chg:	0.9%	2.7%	2.6%	4.3%	3.8%	2.6%
SDC:	0	0	0	0	0	0
Totals:	4896	5029	5160	5380	5587	5734

FIGURE 11

As the following graph illustrates, overall the projections forecast a significant increase across the 10-year period based upon the historical enrollment trends and any projected new residential development

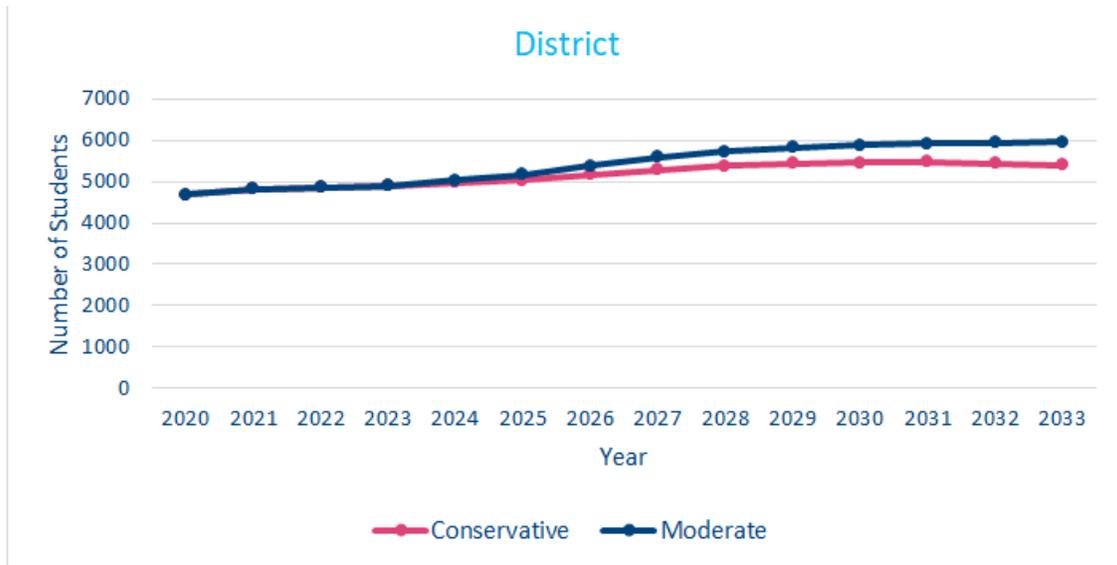


FIGURE 12

The tables below compare the Conservative and Moderate enrollment projections by key grade level groupings. Projected changes in enrollment at Kindergarten or lower grade level groupings will eventually impact total district enrollment.

5 YEAR ENROLLMENT TRENDS: MODERATE AND CONSERVATIVE COMPARED

Change by Level	Cnsv	Mod
Kindergarten	366	397
Change	110%	119%
Gr K-5	2396	2579
Change	112%	121%
Gr 6-8	1283	1353
Change	113%	119%
Gr 9-12	1707	1802
Change	105%	111%
District (K-12)	5386	5734
Change	110%	117%

FIGURE 13

Note that an averaging of both studies project a significant increase at the Kindergarten level.

The table below compares the ten-year projections. In the 10-year future at Kindergarten, both studies, averaged together, project an increase.

10 YEAR ENROLLMENT TRENDS: MODERATE AND CONSERVATIVE COMPARED

Change by Level	Cnsv	Mod
Kindergarten	344	385
Change	103%	116%
Gr K-5	2296	2552
Change	108%	120%
Gr 6-8	1319	1457
Change	116%	128%
Gr 9-12	1793	1948
Change	110%	120%
District (K-12)	5408	5957
Change	110%	122%

FIGURE 14

The graphs below compare the Conservative and Moderate enrollment projections by key grade level groupings.

ELEMENTARY SCHOOL LEVEL

The projected elementary school enrollment shows a significant increase.

[More details: Enrollment > Projections > Selected Schools > All Elementary Schools]

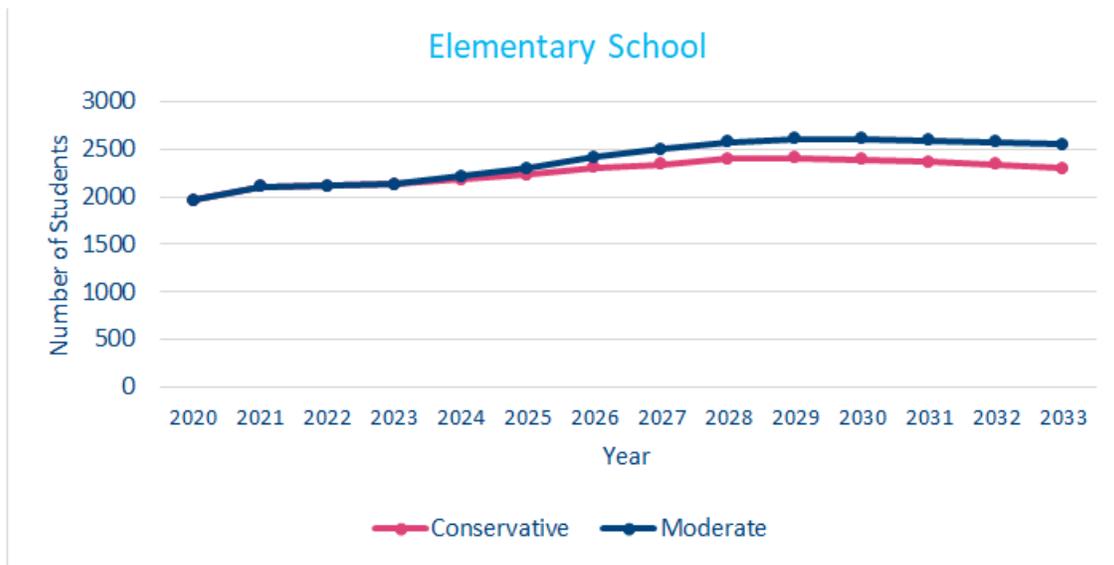


FIGURE 15

MIDDLE SCHOOL LEVEL

The projected middle school enrollment shows a significant increase.

[More details: Enrollment > Projections > Selected Schools > All Middle Schools]

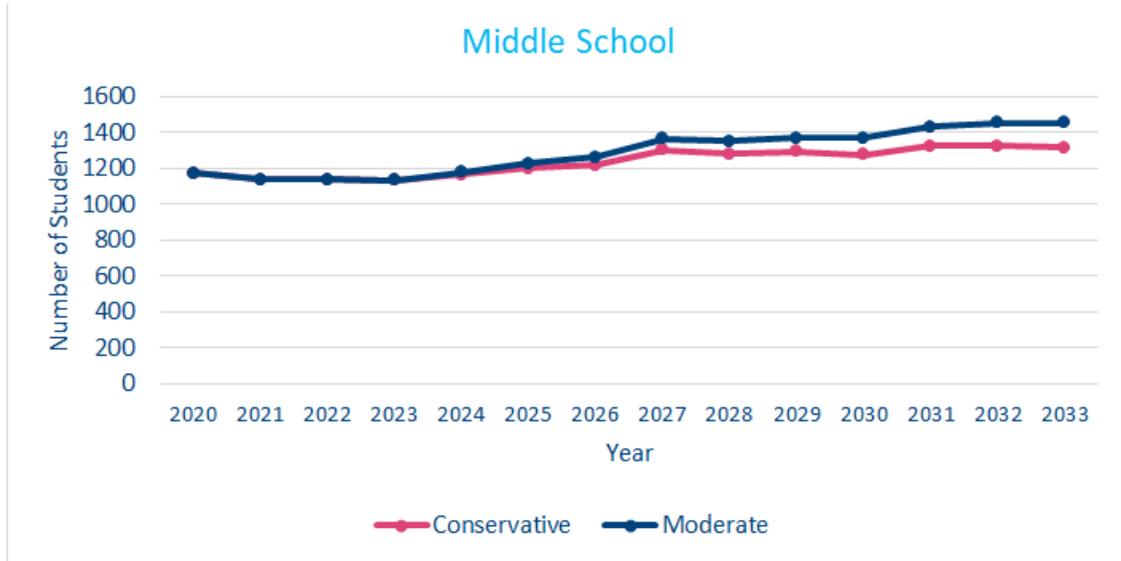


FIGURE 16

HIGH SCHOOL LEVEL

The projected high school enrollment shows a significant increase.

[More details: Enrollment > Projections > Selected Schools > All High Schools]

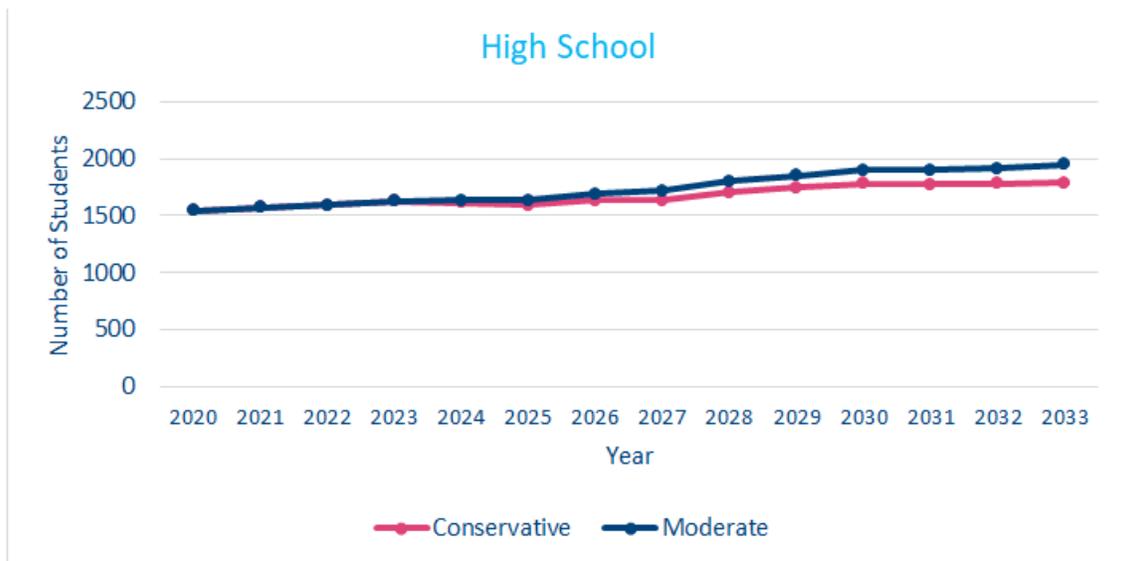


FIGURE 17

SUMMARY OF DISTRICT PROJECTIONS BY YEAR

The complete district-wide projection table for each study is available online. Corresponding sets of individual School Projections are available online as well.

The tables below present a more detailed annual view of projected changes by grade level clusters for both projections. The “Pct Prev Yr” row represents the percent of the previous year’s enrollment in each grade cluster that is projected in the subsequent year. The “5-Yr Change” row represents the percent change projected over the enrollment five years prior.

CONSERVATIVE PROJECTION

Change by Level	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Kindergarten	333	343	350	360	367	366	364	360	356	350	344
Pct Prev Yr	113%	103%	102%	103%	102%	100%	99%	99%	99%	98%	98%
5-Yr Change						110%					94%
Gr K-5	2133	2183	2230	2306	2339	2396	2405	2390	2369	2337	2296
Pct Prev Yr	101%	102%	102%	103%	101%	102%	100%	99%	99%	99%	98%
5-Yr Change						112%					96%
Gr 6-8	1136	1165	1202	1221	1305	1283	1296	1277	1325	1325	1319
Pct Prev Yr	100%	103%	103%	102%	107%	98%	101%	99%	104%	100%	100%
5-Yr Change						113%					103%
Gr 9-12	1627	1618	1596	1633	1639	1707	1745	1782	1779	1782	1793
Pct Prev Yr	102%	99%	99%	102%	100%	104%	102%	102%	100%	100%	101%
5-Yr Change						105%					105%
District (K-12)	4896	4966	5028	5160	5283	5386	5446	5449	5473	5444	5408
Pct Prev Yr	101%	101%	101%	103%	102%	102%	101%	100%	100%	99%	99%
5-Yr Change						110%					100%

NOTE: The gray column is the most recent history year.

FIGURE 18

MODERATE PROJECTION

Change by Level	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Kindergarten	333	356	368	386	395	397	397	396	392	389	385
Pct Prev Yr	113%	107%	103%	105%	102%	101%	100%	100%	99%	99%	99%
5-Yr Change						119%					97%
Gr K-5	2133	2215	2297	2420	2497	2579	2607	2612	2594	2576	2552
Pct Prev Yr	101%	104%	104%	105%	103%	103%	101%	100%	99%	99%	99%
5-Yr Change						121%					99%
Gr 6-8	1136	1178	1230	1265	1367	1353	1370	1370	1434	1454	1457
Pct Prev Yr	100%	104%	104%	103%	108%	99%	101%	100%	105%	101%	100%
5-Yr Change						119%					108%
Gr 9-12	1627	1636	1633	1695	1723	1802	1850	1900	1903	1917	1948
Pct Prev Yr	102%	101%	100%	104%	102%	105%	103%	103%	100%	101%	102%
5-Yr Change						111%					108%
District (K-12)	4896	5029	5160	5380	5587	5734	5827	5882	5931	5947	5957
Pct Prev Yr	101%	103%	103%	104%	104%	103%	102%	101%	101%	100%	100%
5-Yr Change						117%					104%

NOTE: The gray column is the most recent history year.

FIGURE 19

GRADE LEVEL PROFILE COMPARISON

Another view of grade level enrollment can be seen in the chart below. The current grade level enrollment profile is compared with the projected grade level profile in the five and ten-year future.

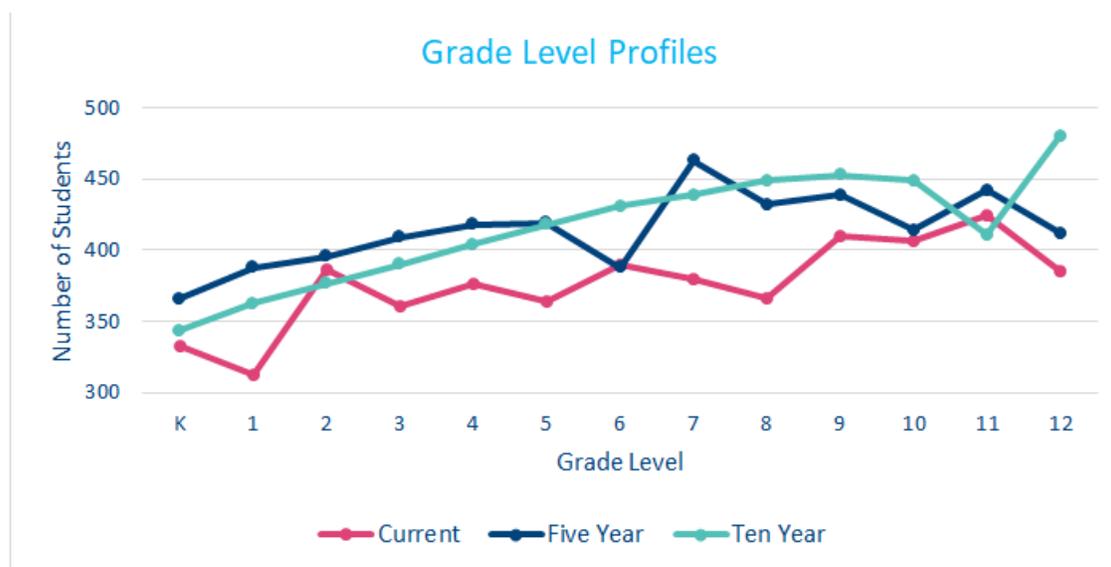


FIGURE 20

PROJECTING SCHOOL ENROLLMENT

School projections are primarily a function of the proportion of district students who enroll at a given school, modified by intra-district transfers within a given school level that may occur after initial enrollment, and augmented by inter-district transfer students.

SCHOOL DRAW IMPACT

A draw rate is the percentage of students who enroll in a grade level in a school from a specified geographic area. Open enrollment among district schools is projected using this concept. Except for changes in school boundaries or other changes in policy, historical draw rates from a given geographic area to a specific school (including out-of-district students) are assumed in the projections.

INTRA-DISTRICT TRANSFERS

Transfers within the district are incorporated into the projections to anticipate the movement of students from one district school to another within the same level, e.g., transfer from a neighborhood school to a special school. Recent historical transfer patterns are typically assumed in the projections.

[More details: Enrollment > Historical > All Schools > Open Enrollment]

INTER-DISTRICT TRANSFERS

Transfers into the district by out-of-district students, sometimes referred to as 'permit students', are an integral part of the district and school projections. Recent historical transfer patterns are typically assumed in the projections.

[More details: Enrollment > Historical > District-Wide > Out of District]

INDIVIDUAL SCHOOL PROJECTION TABLES

The complete set of individual school projection tables for each study is available online.

[More details: Enrollment > Projections > All Schools > Projections]

MY SCHOOL LOCATOR

MySchoolLocator is a web-based service accessible to PowerSchool Predictive Enrollment Analytics clients. This service allows online users to enter a residential address and find out which district schools are assigned to serve them. Public access to MySchoolLocator is via a unique URL on the District's web site. The URL for integration into your district's website can be requested via Support at any time. Additionally, requests can be submitted to apply custom messages for various geographies which will then be seen by those using MySchoolLocator.

IMPACT OF THE PROJECTIONS ON SCHOOL CAPACITY

Facility challenges, if any, may exist if projected numbers exceed the current school capacity data. These challenges may also manifest differently in a Moderate or Conservative projection. The Moderate projection shows 6 schools with a potential capacity challenge.

[More details: Enrollment > Projections > All Schools > Over Capacity]

The table below lists up to five schools that are projected to experience the most change in enrollment in the 5-year future based on the Conservative projection.

[More details: Enrollment > Projections > All Schools > Ten Percent Change]

School	5-Yr Pct Change	10-Yr Pct Change
Lower Nazareth ES	24%	20%
Nazareth Area MS	20%	19%
Nazareth Area IS	7%	13%
Nazareth Area HS	5%	10%

FIGURE 21

ANALYZING/STUDYING/REVIEWING THE ENROLLMENT PROJECTIONS

The projections of district and school enrollment are based on a complex mix of historical data, the projection of recent trends, and specific assumptions regarding the future. We strongly encourage our clients to actively engage with the data with the aim of better understanding, further refining, and using the results to inform decisions about to be made. We believe increased effectiveness for both the district and PowerSchool Predictive Enrollment Analytics comes with increased and welcome dialogue.

Graphs or tables may be copied from the PDF version of this document using the Snapshot Tool inside PDF Reader.

Please do not hesitate to contact PowerSchool Predictive Enrollment Analytics regarding any questions or suggestions that may arise regarding these studies.

Respectfully Prepared and Submitted by:

The PowerSchool Predictive Enrollment Analytics Team

August 14, 2024

APPENDIX

ASSUMPTIONS AND METHODOLOGY

All projections are based on assumptions, and when read or shared are best prefaced with the phrase, “Based on these assumptions...”, or “Based on these historical trends...”. Particularly for projections more than 5 years out, “Enrollment Trend” is a far more accurate descriptor.

Three major factors drive district-wide student enrollment projections. These include:

1. recent kindergarten enrollment trends,
2. changes in the grade level cohorts of students served as they age through, and
3. changes in the number of residential units within the district.

District-wide projections are disaggregated to school projections based on the historical patterns of:

1. the rates at which each school draws enrollment from various sections of the district, and
2. the pattern of transfers within the district at a given level from one school to another.

DISTRICT PROJECTIONS

Studyblocks

For enrollment projections the district is divided into studyblocks. A studyblock is a custom unit of geography created by PowerSchool Predictive Enrollment Analytics for the purpose of generating reliable projections. They are generally based on elementary boundaries or some portion thereof. A studyblock serves as the basis for the analysis of students served by the district and by schools. The objective is to do analysis with a small enough geographic unit to sense small area changes but large enough to allow for reliable projection. Studyblocks typically encompass 500-1000 students.

Kindergarten Enrollment

The projected Kindergarten enrollment is a key variable in projecting K-12 enrollment. The base Kindergarten projection is determined by the trend of Kindergartners served in each studyblock in the previous 3 or 4 years. Depending on the circumstances, a growth trend in Kindergarten enrollment may be capped. Steep straight-line trends are mathematically moderated to avoid unrealistic results.

School Capacities

School capacities provided by the district are compared to projected enrollments. Districts are invited to calculate school capacities in a manner that best serves the enrollment projection environment and provide them to us via Support for entry into the platform.

A Special Day Class (SDC) student at the elementary level is calculated by default as requiring 1 seat. This value, at district option, may be changed to 3, on the assumption that a class of 10 SDC students will occupy a typical classroom.

Students in the Projections

Enrollment projections are limited to typical K-12 students. SDC students are projected as a stable percentage of the typical population unless all SDC students are mainstreamed. Excluded from the projections are students enrolled in Non-Public School (NPS), Adult High School, Home School, Adult Ed, Independent Study programs and other special schools.

Attendance Boundaries

Attendance boundaries are assumed to remain constant, unless otherwise noted by the district.

Closed Schools

Opportunities for open enrollment (intra-district) are assumed to remain unchanged, unless otherwise noted by the district.

Inter-district Enrollment

Students enrolled from other school districts are treated in aggregate in separate studyblocks. Students in Kindergarten and the initial grade at each level are projected only to the extent they exist in recent years. Students enrolled in other grade level cohorts are aged through to the highest grade at each level. These defaults may be modified at district request.

Cohort Percent Change

Cohort percentage changes are calculated to assure sensitivity to perennial changes in students served by the district as they age from one grade level to the next. If every cohort were stable as it ages, the cohort percent change, from one grade to the next in each studyblock, would be calculated as 100%. For each studyblock, a cohort weighted average percent change over a defined number of years is calculated based on the change in the enrollment served as it ages from the previous grade level.

Average cohort percentages above 100% might, for example, reflect students returning from private schools. Cohort percentages below 100% might reflect dropouts.

Growth studyblocks are those showing unusually high increases in enrollment and/or cohort percent change in recent years—due, typically, to new housing development. Once growth studyblocks are identified, their default cohort percent change rate is set to 100% so as not to over-project new residential growth. By default, growth is not predicted to continue unless new occupied dwelling units are projected.

Dwelling Unit Impact

The predicted impact of new dwelling units on school enrollment is based on three factors: 1) new dwelling units, 2) the student generation rate for each unit type, and 3) the grade level distribution of newly generated students.

1. Dwelling Units

New dwelling units are categorized into 3 housing types: Single Family Detached, Single Family Attached, and Multifamily. Developers and builders are contacted for information relative to their plans for occupancy of new dwelling units.

2. Student Generation

Student generation rates are determined for each product type for each level: elementary, middle school and high school. Student generation rates are based on similar product types where such exist; otherwise, a default generation rate is used.

3. Grade Level Distribution

For each level, students generated by new dwelling units are distributed across grade levels. These percentages are based on historical patterns where they exist; otherwise, default percentages are used.

SCHOOL PROJECTIONS

Projecting enrollment at the school level is based on the concept of a school draw rate, i.e., the percent of students from a given studyblock who enroll in a school at its lowest grade. Draw rates reflect the impact of open enrollment within a district. For example, if one-half the sixth graders from a given

studyblock enroll in a particular 6–8 middle school, that school has a draw rate of 50% from that studyblock.

The draw rate for the most recent year is applied by default to the projected district enrollment for that grade from a given studyblock. The draw rate ages with the cohort. In this way, if the underlying cohort changes, the number of students enrolled at the school will change accordingly.

Draw rates can be adjusted if necessary. Manipulation of draw rates is used, for example, to project the impact of changes in attendance boundaries, or the impact of closing a school to open enrollment.

Intra-district Transfers

Grade-level transfers within or across schools are included in the projections to accommodate fluctuations like retention, transfer to continuation school, or any other special programs a district may offer that result in students changing schools at other than the typical grade configuration shifts. Transfers are calculated by applying the percent of a grade level population at one school that is transferred in the following year to another school or continued at the same grade level at a given school in the following year.

CAVEATS ON PROJECTIONS AND METHODOLOGY

On Projections

Enrollment projections are based upon two critical factors: the student and school data from the school district and the mathematical formulas that are applied to those data. Projections fundamentally look at recent history as reflected in the student data and assume that past patterns and trends will continue. The calculations assume that the historical data provided is at one-year intervals based on enrollment at the beginning of each school year.

PowerSchool Predictive Enrollment Analytics takes great care in preparing a district's projections. A range of unpredicted anomalies, however, can cause reality to vary from the historical patterns. These include, but are not limited to, rapid changes in the economy, mortgage interest rates, the housing market, the job market, residential development plans, rental rates, global pandemics, etc. Anomalous changes that occur between the last set of student data and the first projection are not reflected in the projections unless the district works with PowerSchool Predictive Enrollment Analytics to amend the projections.

In the projections, calculations are mathematically precise. Each result is rounded to a whole number for ease of reading. This rounding sometimes results in the displayed whole numbers in a column not adding exactly to the displayed total of the column. This phenomenon, which is a result of rounding and not of any inaccuracy in the calculations, occurs both in the enrollment projections, residential reports, and community demographics.

On Student Data

PowerSchool Predictive Enrollment Analytics obtains historical student data files from the district. To the extent that the student data files are internally inconsistent from year to year, or the count of students in the files does not reflect the count of actual enrollees, errors are introduced to the projection calculations. For optimum results, the student data files must also consistently capture the same categories of students annually.

The calculations assume that the historical data provided is at one-year intervals based on enrollment near the beginning of each school year. It is important that the student files obtained from the district are close to a common date each year, typically near the beginning of the school year. The snapshot of

historical data near the beginning of the school year is best suited to our goal of projecting enrollment for the beginning of subsequent school years. To the extent the historical student data provided is not at one-year intervals or is not at a common date near the beginning of the school year, projections may reflect monthly fluctuations in enrollment that will diminish the accuracy of the projections.