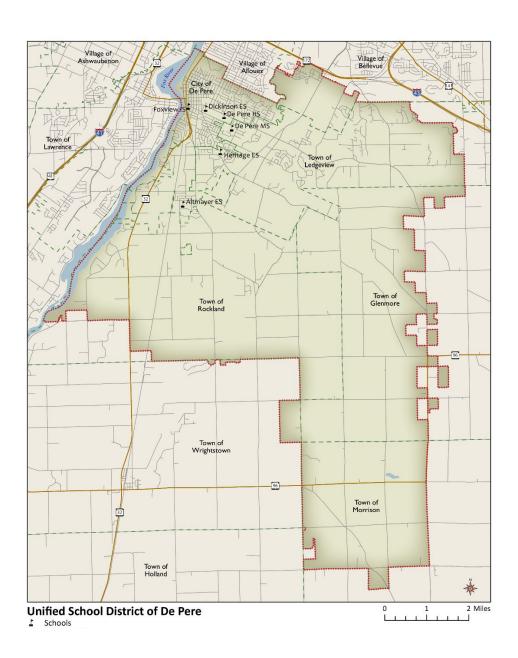
# **Planning for the Schools of Tomorrow**



School Enrollment Projections Series Unified School District of De Pere

January 2023

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#### **Executive Summary**

This report provides an enrollment projections analysis for the Unified School District of De Pere by the Applied Population Laboratory, University of Wisconsin-Madison. The district-wide enrollment for the current 2022/23 school year was 4,455 students. The report takes into consideration past enrollment, current and projected births, and overall trends in population and housing to determine future student enrollment.

- In the last five years, the district has experienced an increase of 0.3% for grades 4K-12. Grades K-4 decreased by 0.8%, while grades 5-6 have increased by 0.2%. Grades 6-8 and grades 9-12 have increased by 1.2% and 1.7%, respectively.
- Long-term trends in municipal births and kindergarten show increases. However, the recent trends in births and kindergarten show decline. An average of 112 new single-family homes have been built annually in the last five years.
- When averaging the four models 4K-12 enrollment will likely decline by 1.5% in five years. The
  Three-Year Trend model projects the greatest decrease in enrollment, while the Baseline model
  projects a slight increase.
- Elementary school enrollment is likely to see enrollment decreases of 5.8%, and intermediate school enrollment will likely decrease by 7.2% over the next five years. Middle school enrollment will likely increase by 4.2%, and high school enrollment will increase with an average growth of 3.0% in five years.
- District-level projections should be viewed as having high reliability over the next five years, but increasingly enrollment will likely deviate from the projections over time, especially at the younger grades.

## **District-wide Projections**

Enrollment projections for Unified School District of De Pere are presented district-wide, individually for each grade and for grade groupings. The projection process uses a combination of historical enrollment data, birth trends and projections, and overall housing and population trends to create reasonable assumptions about future enrollment scenarios.

# **District Enrollment History**

Figure 1-A and Tables 1 and 2 display the last ten years of enrollment (seat count) in the Unified School District of De Pere. District 4K-12 enrollment has increased overall in the past ten years, from 4,025 students in the 2013/14 school year to 4,455 students in 2022/23. This is an increase of 430 students, or a 10.7% growth in the number of students attending De Pere area schools.

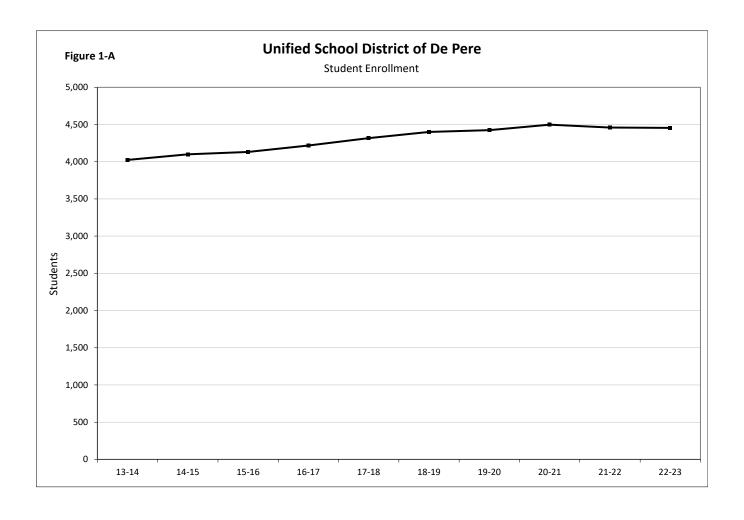


TABLE 1
Student Enrollment
Unified School District of De Pere

					SCHOO	L YEAR				
	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23
4K	158	189	208	228	225	219	202	212	209	196
K	262	280	274	294	299	320	328	303	272	272
1	247	265	285	276	291	312	328	336	311	276
2	256	256	273	294	288	302	307	326	327	307
3	283	261	277	277	315	294	302	312	327	324
4	265	293	262	292	284	323	301	310	315	323
5	301	268	294	282	300	314	337	307	317	314
6	299	315	288	314	291	318	325	347	317	323
7	319	316	311	297	317	311	323	333	344	327
8	346	325	314	316	306	328	315	317	326	343
9	314	363	344	330	343	336	360	364	354	373
10	322	311	365	340	336	348	337	367	359	359
11	329	321	308	372	342	333	333	329	349	353
12	324	336	329	306	380	343	327	335	333	365
TOTAL	4,025	4,099	4,132	4,218	4,317	4,401	4,425	4,498	4,460	4,455
K-4	1,313	1,355	1,371	1,433	1,477	1,551	1,566	1,587	1,552	1,502
5-6	600	583	582	596	591	632	662	654	634	637
7-8	665	641	625	613	623	639	638	650	670	670
9-12	1,289	1,331	1,346	1,348	1,401	1,360	1,357	1,395	1,395	1,450

TABLE 2 Student Enrollment Changes Unified School District of De Pere

	ABS	SOLUTE CHAI	NGE	PEI	RCENT CHAN	GE	AVERAGE ANNUAL PERCENT CHANGE			
GRADE	'13 to '22	'13 to '17	'18 to '22	'13 to '22	'13 to '17	'18 to '22	'13 to '22	'13 to '17	'18 to '22	
4K	38	67	-23	24.1	42.4	-10.5	2.7	10.6	-2.6	
K	10	37	-48	3.8	14.1	-15.0	0.4	3.5	-3.8	
1	29	44	-36	11.7	17.8	-11.5	1.3	4.5	-2.9	
2	51	32	5	19.9	12.5	1.7	2.2	3.1	0.4	
3	41	32	30	14.5	11.3	10.2	1.6	2.8	2.6	
4	58	19	0	21.9	7.2	0.0	2.4	1.8	0.0	
5	13	-1	0	4.3	-0.3	0.0	0.5	-0.1	0.0	
6	24	-8	5	8.0	-2.7	1.6	0.9	-0.7	0.4	
7	8	-2	16	2.5	-0.6	5.1	0.3	-0.2	1.3	
8	-3	-40	15	-0.9	-11.6	4.6	-0.1	-2.9	1.1	
9	59	29	37	18.8	9.2	11.0	2.1	2.3	2.8	
10	37	14	11	11.5	4.3	3.2	1.3	1.1	0.8	
11	24	13	20	7.3	4.0	6.0	0.8	1.0	1.5	
12	41	56	22	12.7	17.3	6.4	1.4	4.3	1.6	
TOTAL	430	292	54	10.7	7.3	1.2	1.2	1.8	0.3	
K-4	189	164	-49	14.4	12.5	-3.2	1.6	3.1	-0.8	
5-6	37	-9	5	6.2	-1.5	0.8	0.7	-0.4	0.2	
7-8	5	-42	31	0.8	-6.3	4.9	0.1	-1.6	1.2	
9-12	161	112	90	12.5	8.7	6.6	1.4	2.2	1.7	



Figure 1-B shows enrollment history from the last ten years broken down by grade groupings (K-4, 5-6, 7-8, and 9-12). Four-year-old kindergarten has increased by 2.7% annually over the last ten years. Elementary school enrollment has increased annually by 1.6% and intermediate school enrollment has increased annually by 0.7% in the last ten years. Middle school enrollment has increased annually by 0.1% and high school enrollment has increased by 1.4% annually in the last ten years.

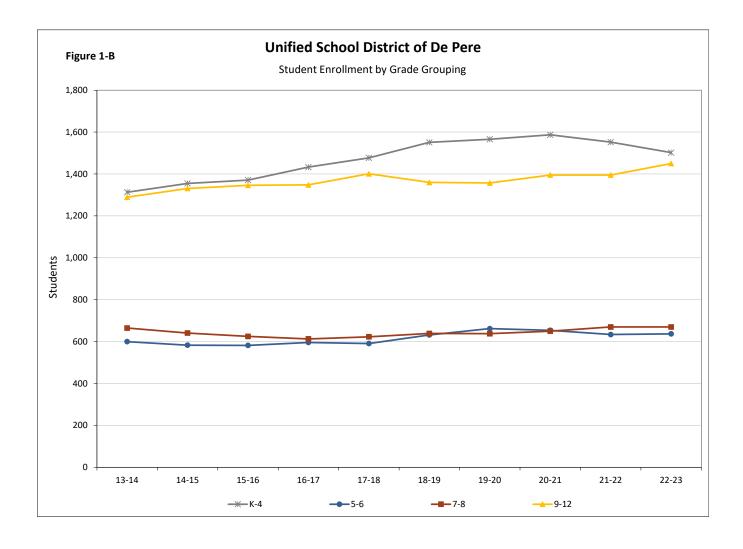
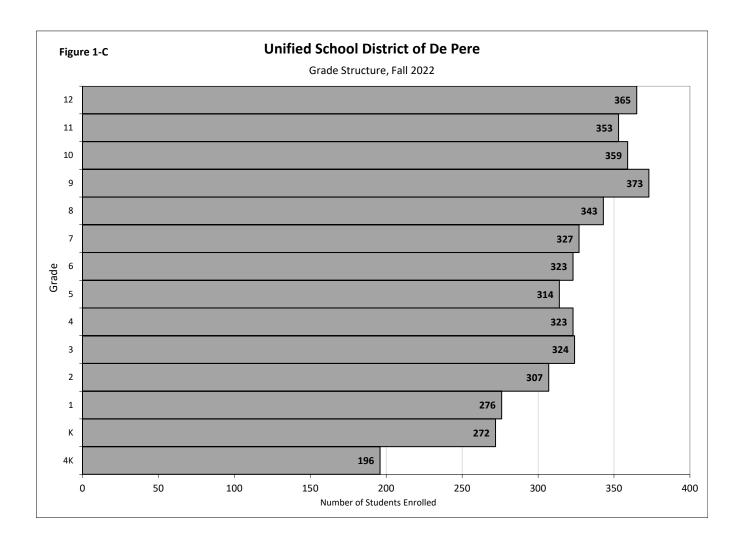


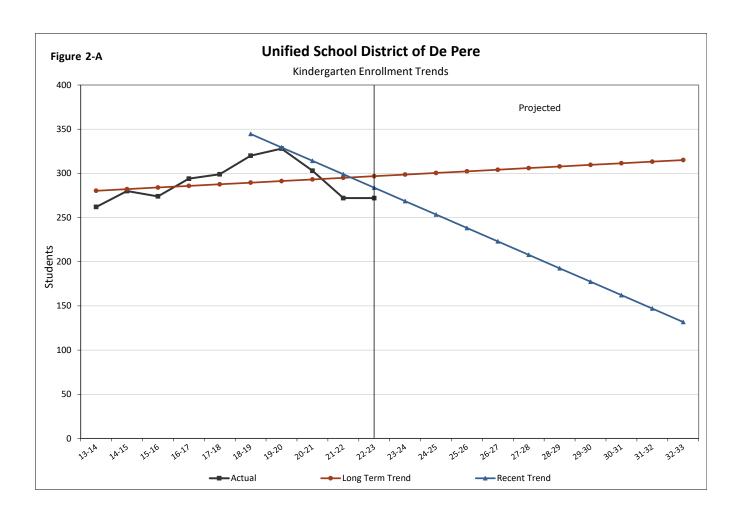
Figure 1-C shows the grade structure in Fall 2022 with the number of 4K at the bottom and the number of 12<sup>th</sup> graders at the top. The average grade size for grades 9-12 is 363 with 9<sup>th</sup> grade being the largest among high school grades. Grades 5-8 average grade size is at 327 with 8<sup>th</sup> grade being the largest of the intermidate and middle school grades. Grades K-4 average grade size is 300 with 3<sup>rd</sup> grade being largest among elementary school grades.



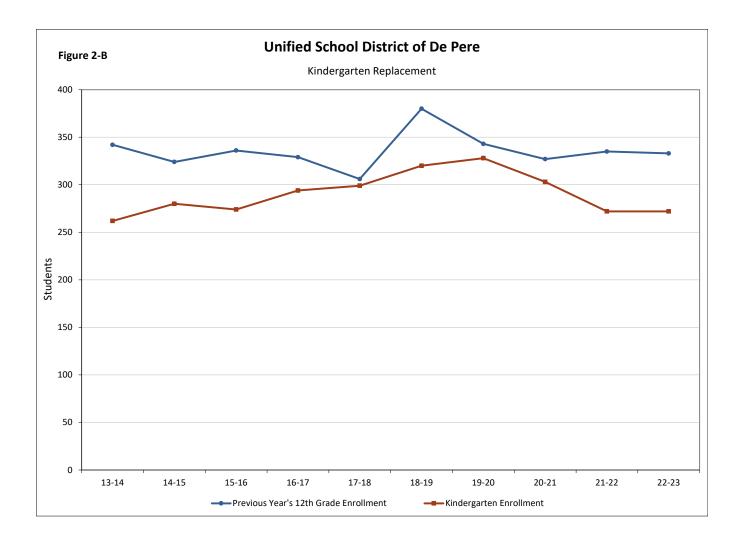
#### **Kindergarten Enrollment Trends**

Examining trends in kindergarten enrollment is particularly informative for gaining perspective on future district enrollment, as today's kindergarteners will gradually make up tomorrow's students at the higher grade levels as they age and move through the school system. When kindergarten enrollment is decreasing, elementary and middle school enrollment might be expected to decrease in the future, while high school enrollment may decrease farther in the future.

Figure 2-A shows kindergarten enrollment history in black, and trend lines depicting kindergarten enrollment in red and blue. The "Long Term Trend" line (shown in red) averages kindergarten enrollment changes between 2013/14 and 2022/23. The "Recent Trend" (shown in blue) line emphasizes kindergarten enrollment changes over the last five years. In the Unified School District of De Pere, long-term kindergarten trends indicate increasing enrollment, while recent kindergarten trends indicate decreasing enrollment. A steady number of kindergartners will be used to project kindergartners for the Kindergarten Trend model.

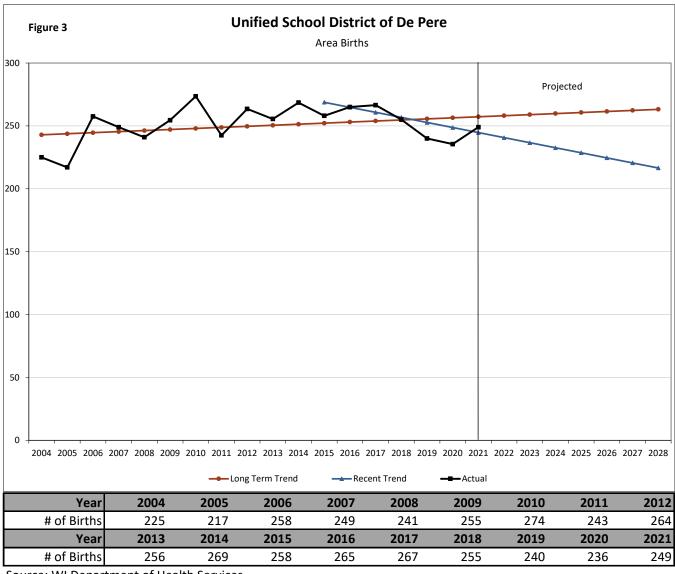


In addition to examining kindergarten enrollment on its own, comparing incoming kindergarteners to the previous year's outgoing 12<sup>th</sup> graders offers a snapshot of how the age structure of district enrollment is shifting either from older to younger, or younger to older. Districts tend to experience overall growth when kindergarten enrollment outpaces outgoing students, and they tend to experience decline when kindergarteners do not fully replace the number of graduates. As illustrated in Figure 2-B, kindergarteners did not replace outgoing 12<sup>th</sup> graders in the last ten years.



#### **Birth Trends and Projections**

We use historical and projected birth data to forecast the number of 4K and 5K students who will enroll in the Unified School District of De Pere in future years. Birth data, as collected and summarized by the Wisconsin Department of Health Services, is available at the municipal level. Figure 3 shows the number of births from the towns in the district and half of the City of De Pere by year, from 2004 through 2021. Births for 2021 are an average of the last three years of births.



Source: WI Department of Health Services

We extrapolate long- and short-range birth trends into the future to correspond with our baseline and recent trend models. The long-term birth trend is increasing, while the recent birth trend shows a decline in birth rates. The red line represents the birth trends over the past eighteen years and is utilized in the Baseline model. The blue line denotes birth patterns for the last seven years and is applied in the Five-Year and Three-Year trend models.

## **Population Estimates**

This section examines population trends of the recent past for the municipalities within the district. Municipalities included in the table are municipalities that are mostly contained within the school district boundaries. Changes in the total population of the district area, particularly when examined by age, provide clues into how the school-age population may be changing.

Table 3 provides the U.S. Census population counts for 2010 and 2020 and the Wisconsin Department of Administration's estimates on a biennial basis for 2012 to 2022. Overall, the district area population increased by 11% from 2010 to 2020.

Table 3

Total Population by Municipality: 2010-2022

Unified School District of De Pere

				POPULATION			
	Census	est. est.		est.	est.	Census	est.
Municipality	2010	2012	2014	2016	2018	2020	2022
C. De Pere	23,800	23,944	24,180	24,592	24,699	25,410	25,525
T. Glenmore	1,135	1,131	1,114	1,132	1,128	1,045	1,054
T. Ledgeview	6,555	6,967	7,337	7,558	7,948	8,820	9,373
T. Morrison	1,599	1,597	1,591	1,620	1,611	1,689	1,698
T. Rockland	1,734	1,735	1,753	1,815	1,834	1,775	1,779
District Area	34,823	35,374	35,975	36,717	37,220	38,739	39,429
<b>Brown County</b>	248,007	250,281	253,156	257,897	260,616	268,740	273,160
State of Wisconsin	5,686,986	5,703,525	5,732,981	5,775,120	5,816,231	5,893,718	5,947,500

			PE	RCENT CHAN	GE		
	2010 to	2012 to	2014 to	2016 to	2018 to	2010 to	2020 to
Municipality	2012	2014	2016	2018	2020	2020	2022
C. De Pere	0.6%	1.0%	1.7%	0.4%	2.9%	6.8%	0.5%
T. Glenmore	-0.4%	-1.5%	1.6%	-0.4%	-7.4%	-7.9%	0.9%
T. Ledgeview	6.3%	5.3%	3.0%	5.2%	11.0%	34.6%	6.3%
T. Morrison	-0.1%	-0.4%	1.8%	-0.6%	4.8%	5.6%	0.5%
T. Rockland	0.1%	1.0%	3.5%	1.0%	-3.2%	2.4%	0.2%
District Area	1.6%	1.7%	2.1%	1.4%	4.1%	11.2%	1.8%
<b>Brown County</b>	0.9%	1.1%	1.9%	1.1%	3.1%	8.4%	1.6%
State of Wisconsin	0.3%	0.5%	0.7%	0.7%	1.3%	3.6%	0.9%

Source: U. S. Census Bureau & Demographic Services Center, WIDOA



Figure 4 compares the population for the Unified School District of De Pere by age from the 2010 Census and the 2016-20 American Community Survey (detailed age data from the 2020 Census is not yet available). When reviewing this table ages 0 to 24 are in five-year increments, while ages 25 and older are in ten-year increments. Children under the age of 5 to age 9 have increased in this ten-year timeframe. The school-age population from age 10 to 14 decreased, while age 15-19 youth have remained the same.

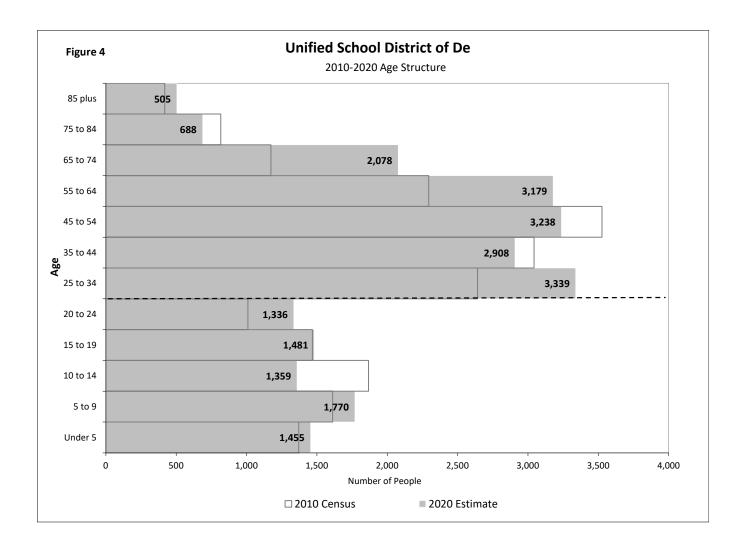


Table 4 also provides the population as enumerated in 2010 by the decennial Census and estimated over the 2016-20 period by the American Community Survey, showing the change in age structure. In specific age groups:

- The number of children (under age 20) decreased by 253 young people.
- Young adults (ages 20-34) increased by 1,023 people.
- The adult population ages 35-64 has seen an increase of 461 residents.
- Older adults, age 65 and over, have increased by 862 residents.

TABLE 4
Population by Age, 2010-2020
Unified School District of De Pere

Age	2010	2020	Difference
Under 5	1,371	1,455	84
5 to 9	1,612	1,770	158
10 to 14	1,867	1,359	-508
15 to 19	1,468	1,481	13
20 to 24	1,010	1,336	326
25 to 34	2,642	3,339	697
35 to 44	3,043	2,908	-135
45 to 54	3,526	3,238	-288
55 to 64	2,295	3,179	884
65 to 74	1,173	2,078	905
75 to 84	817	688	-129
85 plus	419	505	86
Total	21,243	23,336	2,093

Source: U. S. Census Bureau



## **Past Housing Trends**

Table 5-A shows the number of new housing starts in the Unified School District of De Pere over the past ten years. New housing includes the entire municipality, although only portions of the city and the towns are in the district.

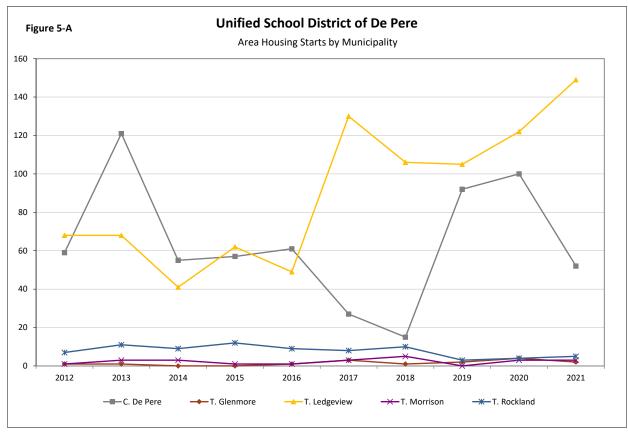
TABLE 5-A
School District Area Housing Starts
Unified School District of De Pere

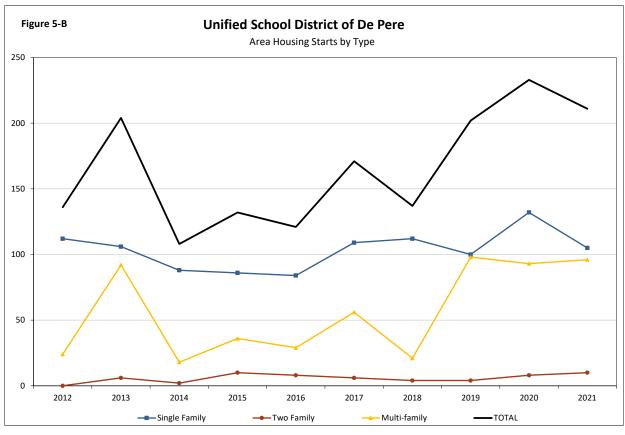
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
District Area										
TOTAL	136	204	108	132	121	171	137	202	233	211
Single Family	112	106	88	86	84	109	112	100	132	105
Two Family	0	6	2	10	8	6	4	4	8	10
Multi-family	24	92	18	36	29	56	21	98	93	96
C. De Pere										
TOTAL	59	121	55	57	61	27	15	92	100	52
Single Family	51	55	35	29	26	23	13	32	54	44
Two Family	0	6	2	4	6	4	2	4	6	8
Multi-family	8	60	18	24	29	0	0	56	40	0
T. Glenmore										
TOTAL	1	1	0	0	1	3	1	2	4	2
Single Family	1	1	0	0	1	3	1	2	4	2
Two Family	0	0	0	0	0	0	0	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0
T. Ledgeview										
TOTAL	68	68	41	62	49	130	106	105	122	149
Single Family	52	36	41	44	47	72	83	63	67	51
Two Family	0	0	0	6	2	2	2	0	2	2
Multi-family	16	32	0	12	0	56	21	42	53	96
T. Morrison										
TOTAL	1	3	3	1	1	3	5	0	3	3
Single Family	1	3	3	1	1	3	5	0	3	3
Two Family	0	0	0	0	0	0	0	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0
T. Rockland										
TOTAL	7	11	9	12	9	8	10	3	4	5
Single Family	7	11	9	12	9	8	10	3	4	5
Two Family	0	0	0	0	0	0	0	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0

Source: Demographic Services Center, WIDOA

Single-family home construction has seen a low of 84 homes in 2016 and a high of 132 homes in 2020 with an average of 112 new single-family homes annually in the last five years. Figure 5-A shows the number of residential building permits issued by municipality for communities that fall within the Unified School District of De Pere. Figure 5-B shows housing starts in the area by type of housing unit: single-family home, duplex, and multi-family housing units.









Examining trends in recent housing development can help to explain how in-migration into the Unified School District of De Pere area might be affecting school enrollment. Households in single-family homes, on average, contain more school-aged children than in multi-family homes. If the number of new homes is expected to be reasonably consistent for the next several years, then we assume that in-migration of school-age children will also remain relatively consistent. If the number of housing starts is expected to increase significantly above and beyond recent levels, in-migration may play an increasing role in school district enrollment.

It is also important to consider that turnover in ownership of existing housing stock also contributes to changes in enrollment. Enrollment may change depending upon the cycle of resident homeowners. For instance, a younger community will have a higher child-per-household ratio, whereas an older community will have a lower child-per-household ratio. Several factors make predicting housing turnover difficult. These include variables like attractiveness to young families (demand), as well as suitable and available rental and owner-occupied housing (supply). In addition, housing turnover depends on even more elusive variables determined by housing market conditions, the economy, and individual choices of homeowners.

Turnover in ownership in an older community may result in an increase in the child-per-household number. As younger families move into the area, the school district will tend to see new students enrolling into the district's schools. A change in home ownership may happen over the course of several years at varying rates and may differ between neighborhoods. Absent new housing development or housing turnover, householders age in place and the number of school-aged children ultimately declines.

Table 5-B shows the in-migration of the Unified School District of De Pere from the 2016-2020 American Community Survey. 84% of district residents live in the home they lived in one year ago. This percentage is higher for owner-occupied homes at almost 90.5%, while predictably a smaller percentage of renters at 66.5% lived at their residence one year ago.

TABLE 5-B
In-migration, one year ago (2020)
Unified School District of De Pere

	% Living in the Same House	% Moved within Same County	% Moved in from Different County	% Moved in from Different State or Country
Total	84.2	10.8	2.9	2.1
Owner-occupied	90.5	6.8	1.1	1.6
Renter-occupied	66.5	21.9	8.0	3.6
Median age (years)	38.1	28.3	27.1	24.9
Median income (dollars)	\$37,449	\$31,156	\$35,111	\$54,917

Source: ACS 2016-2020



## **Projection Method**

To generate school enrollment projections, we rely on a commonly used demographic technique called the "cohort survival" method or the "grade progression ratio" method. This method advances current students through the school system over time and applies rates of transfer (or "survival") as the students who are now in school age from year-to-year and grade-to-grade. It is through these rates of transfer that we make assumptions about how migration into and out of the district and transfers to and from different school districts will impact future enrollment.

#### **Grade Progression Ratios**

Grade progression ratios are used to measure district enrollment changes that have occurred within the school district in the recent past. By examining these, we can better understand recent changes in enrollment. We use these ratios as the rates of transfer to inform future student projections.

The ratios measure the effects of in- and out-migration and the transfer of students between private and public schools. The ratios are calculated for several pairs of years and then averages of these based on different time frames are calculated for each grade.

To predict future enrollment under different growth assumptions, three sets of grade progression ratios are calculated:

- Baseline averages ten years of progression ratios with outlying ratios excluded (those outside of one standard deviation of the mean).
- Five-Year Trend averages the past five years of progression ratios.
- Three-Year Trend averages the past three years of progression ratios.

When the ratio is above 1.0 this indicates that enrollment tends to increase from year to year as each cohort of students advances. When the ratio is below 1.0 this indicates that enrollment tends to decrease from year to year.

Table 6 and Figure 6, on the following page, show the grade progression ratios for the Unified School District of De Pere. The grade progression ratios can be interpreted in the following manner. The Baseline ratio for 5:6 is 1.039. This means that on average, the sixth-grade class is 3.9% larger than the fifth-grade class from the previous year. Grades 1:2 Three-Year Trend ratio of .985 indicates that, on average, almost 98.5% of first graders progress to second grade.

TABLE 6
Grade Progression Ratios
Unified School District of De Pere

YEAR													
CHANGES	В:К	K:1	1:2	2:3	3:4	4:5	5:6	6:7	7:8	8:9	9:10	10:11	11:12
13-14/14-15	1.149	1.011	1.036	1.020	1.035	1.011	1.047	1.057	1.019	1.049	0.990	0.997	1.021
14-15/15-16	1.096	1.018	1.030	1.082	1.004	1.003	1.075	0.987	0.994	1.058	1.006	0.990	1.025
15-16/16-17	1.101	1.007	1.032	1.015	1.054	1.076	1.068	1.031	1.016	1.051	0.988	1.019	0.994
16-17/17-18	1.182	0.990	1.043	1.071	1.025	1.027	1.032	1.010	1.030	1.085	1.018	1.006	1.022
17-18/18-19	1.248	1.043	1.038	1.021	1.025	1.106	1.060	1.069	1.035	1.098	1.015	0.991	1.003
18-19/19-20	1.270	1.025	0.984	1.000	1.024	1.043	1.035	1.016	1.013	1.098	1.003	0.957	0.982
19-20/20-21	1.147	1.024	0.994	1.016	1.026	1.020	1.030	1.025	0.981	1.156	1.019	0.976	1.006
20-21/21-22	1.040	1.026	0.973	1.003	1.010	1.023	1.033	0.991	0.979	1.117	0.986	0.951	1.012
21-22/22-23	1.036	1.015	0.987	0.991	0.988	0.997	1.019	1.032	0.997	1.144	1.014	0.983	1.046
Baseline	1.135	1.018	1.020	1.012	1.021	1.021	1.039	1.023	1.008	1.091	1.009	0.991	1.012
Five-Year Trend	1.123	1.027	0.995	1.006	1.015	1.038	1.035	1.026	1.001	1.122	1.007	0.972	1.010
Three-Year Trend	1.074	1.022	0.985	1.003	1.008	1.013	1.027	1.016	0.986	1.139	1.007	0.970	1.021

<sup>\*</sup>Shaded progression ratios are excluded from the Baseline Average  $\,$ 

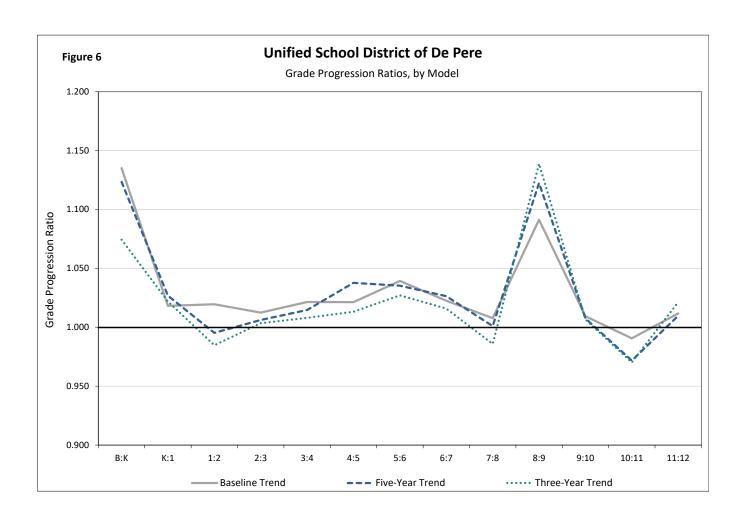


Table 7 shows the observed grade progression ratios between births and 4K and between 4K and kindergarten over the last ten years. The 4K:K ratios are not used in the projection calculations, but they provide an indication that kindergarten classes range from 36% to 44% larger than the prior year's four-year old kindergarten classes.

To generate 4K enrollment projections, the ten-year grade progression ratio average will be used to project 4K enrollment in the Baseline model. The five-year grade progression ratio average will be used to project 4K enrollment in the Five-Year and Kindergarten Trend models. The three-year grade progression ratio average will be used to project 4K enrollment in Three-Year Trend model.

TABLE 7

4K Grade Progression Ratios
Unified School District of De Pere

	B:4K	4K:K
13-14/14-15	0.756	1.772
14-15/15-16	0.779	1.450
15-16/16-17	0.902	1.413
16-17/17-18	0.877	1.311
17-18/18-19	0.848	1.422
18-19/19-20	0.765	1.498
19-20/20-21	0.811	1.500
20-21/21-22	0.796	1.283
21-22/22-23	0.737	1.301
Baseline	0.792	1.439
Five-Year Trend	0.791	1.401
Three-Year Trend	0.781	1.361

<sup>\*</sup>Shaded progression ratios are excluded from the Baseline Average

#### **School Enrollment Projections**

When considering all the projections provided in this report for decision-making, it is important to recognize that population projections of all types, including school enrollment projections, are more accurate in the immediate future than they are farther into the future. This is especially true for grades 4K-4, because the students who will enter four-year-old kindergarten after 2025 and kindergarten after 2026 have not yet been born. Overall, our projections are more reliable over the next five years (up to the 2027/28 school year) than they are in the latter half of the next decade.

#### **Baseline Projections**

The Baseline model (Table 8) projects enrollment using the assumption that long-term average trends year-to-year, grade-to-grade, will continue. This model assumes that the ten-year trend in enrollment, migration, and births will be representative of future trends in the district. This model projects that 4K-12 enrollment will increase from 4,455 students in 2022/23 to 4,460 students in 2027/28, or an increase by only 0.1%.

TABLE 8

Baseline Projection Model
Unified School District of De Pere

					SCHOO	L YEAR				
	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
4K	194	188	194	202	205	206	206	207	208	208
K	294	278	269	277	289	294	295	296	296	297
1	277	299	283	274	283	295	299	300	301	302
2	281	282	305	289	279	288	301	305	306	307
3	311	285	286	309	292	283	292	304	309	310
4	331	317	291	292	315	299	289	298	311	315
5	330	338	324	297	298	322	305	295	304	317
6	326	343	351	337	309	310	335	317	306	316
7	330	334	351	359	345	316	317	342	324	313
8	330	333	336	353	362	347	318	319	345	326
9	374	360	363	367	386	395	379	347	348	376
10	376	378	363	367	370	389	399	382	351	352
11	356	373	374	360	363	367	385	395	379	347
12	357	360	377	379	364	367	371	390	400	383
TOTAL	4,468	4,467	4,468	4,461	4,460	4,477	4,490	4,497	4,487	4,471
K-4	1,494	1,462	1,434	1,441	1,459	1,458	1,474	1,502	1,522	1,531
5-6	656	681	675	634	607	632	640	612	611	634
7-8	660	667	687	712	707	663	635	662	669	640
9-12	1,464	1,470	1,478	1,472	1,483	1,518	1,534	1,515	1,477	1,459

The Five-Year Trend model (Table 9) uses the grade progression ratios from the last five years and recent trends in the number of births in the district area to project what future enrollment would look like if more recent patterns were representative of future trends.

With recent migration rates and birth trends weighted more heavily, enrollment in the school district is projected to decrease over time, decreasing from 4,455 students in 2022/23 to 4,412 students in 2027/28, or a 1.0% decline.

TABLE 9
Five-Year Trend Projection Model
Unified School District of De Pere

					SCHOO	L YEAR				
GRADE	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
4K	194	188	193	193	188	185	182	179	176	172
K	291	275	266	275	273	267	263	258	254	249
1	279	299	283	273	282	281	274	270	265	261
2	275	278	297	281	272	281	279	273	269	264
3	309	276	280	299	283	274	282	281	275	270
4	329	313	280	284	303	287	278	286	285	279
5	335	341	325	291	294	315	298	288	297	296
6	325	347	353	337	301	305	326	308	298	308
7	332	334	356	362	346	309	313	334	317	306
8	327	332	334	356	363	346	309	313	335	317
9	385	367	372	375	400	407	388	347	352	376
10	376	388	370	375	378	403	410	391	350	354
11	349	365	377	360	365	367	392	399	380	340
12	356	352	369	381	363	368	371	396	403	384
TOTAL	4,461	4,455	4,456	4,442	4,412	4,395	4,366	4,325	4,255	4,176
K-4	1,482	1,442	1,406	1,412	1,414	1,390	1,377	1,369	1,348	1,323
5-6	660	688	678	628	596	620	624	597	596	604
7-8	659	666	690	719	708	655	622	648	651	623
9-12	1,466	1,473	1,488	1,490	1,506	1,546	1,561	1,533	1,484	1,454

The Three-Year Trend model (Table 10) uses the grade progression ratios from the last three years to project what future enrollment would look like if even more recent patterns were representative of future trends. For the Three-Year Trend model, enrollment is projected to decrease from 4,455 students in 2022/23 to 4,235 students in 2027/28, or a 4.9% decrease.

TABLE 10
Three-Year Trend Projection Model
Unified School District of De Pere

					SCHOO	L YEAR				
GRADE	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
4K	191	185	191	190	186	183	180	176	173	170
K	278	263	255	263	262	256	251	247	243	238
1	278	284	269	260	268	267	261	257	252	248
2	272	274	280	265	256	264	263	257	253	249
3	308	273	275	281	266	257	265	264	258	254
4	327	310	275	277	283	268	259	267	266	260
5	327	331	315	278	280	287	271	263	271	270
6	322	336	340	323	286	288	294	279	270	278
7	328	328	341	345	328	291	293	299	283	274
8	322	323	323	337	340	324	286	288	295	279
9	391	367	368	368	383	388	368	326	328	336
10	375	393	370	371	370	386	390	371	328	331
11	348	364	381	359	360	359	374	378	360	319
12	361	356	372	390	366	367	367	382	387	368
TOTAL	4,429	4,388	4,354	4,305	4,235	4,184	4,124	4,056	3,967	3,872
K-4	1,462	1,404	1,353	1,345	1,335	1,312	1,300	1,292	1,272	1,249
5-6	650	667	654	602	566	575	566	541	540	548
7-8	650	651	664	682	668	614	579	588	578	553
9-12	1,475	1,480	1,491	1,487	1,479	1,500	1,500	1,458	1,403	1,353

For this method we perform a trend analysis to project the number of future kindergarten students, rather than relying upon the traditional birth to kindergarten (B:K) progression ratio. Then, the five-year grade progression ratios are used for projecting the other grades (1st-12th) in the district. In other words, this model assumes that the number of new kindergarteners each year over the next decade will continue to remain steady, regardless of the number of observed births in the school district area.

According to this hybrid projection model (Table 11), the Kindergarten Trend projects enrollment will decrease from 4,455 students in 2022/23 to 4,452 students in 2027/28 or decrease by only 0.1%.

TABLE 11
Kindergarten Trend Projection Model
Unified School District of De Pere

GRADE	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
4K	194	188	193	193	188	185	182	179	176	172
К	284	284	284	284	284	284	284	284	284	284
1	279	291	292	292	292	292	292	292	292	292
2	275	278	290	290	290	290	290	290	290	290
3	309	276	280	292	292	292	292	292	292	292
4	329	313	280	284	296	296	296	296	296	296
5	335	341	325	291	294	307	307	307	307	307
6	325	347	353	337	301	305	318	318	318	318
7	332	334	356	362	346	309	313	326	327	327
8	327	332	334	356	363	346	309	313	327	327
9	385	367	372	375	400	407	388	347	352	367
10	376	388	370	375	378	403	410	391	350	354
11	349	365	377	360	365	367	392	399	380	340
12	356	352	369	381	363	368	371	396	403	384
TOTAL	4,454	4,457	4,476	4,471	4,452	4,452	4,445	4,431	4,393	4,350
K-4	1,475	1,443	1,426	1,441	1,454	1,454	1,454	1,454	1,454	1,454
5-6	660	688	678	628	596	612	625	626	626	626
7-8	659	666	690	719	708	655	622	639	653	654
9-12	1,466	1,473	1,488	1,490	1,506	1,546	1,561	1,533	1,484	1,445

## **Comparison of Projection Models**

Figures 7-10 and Tables 12-15 compare the four enrollment projection models broken down by 4K-12 enrollment and by grade groupings (K-4, 5-6, 7-8, and 9-12).

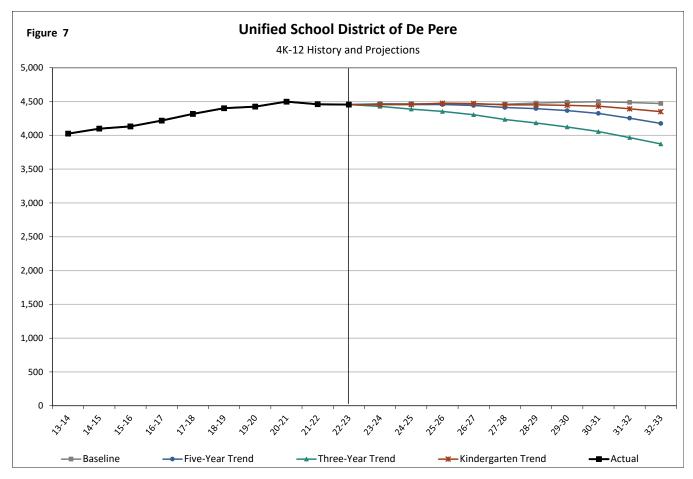


TABLE 12
Summary of 4K-12 Projections
Unified School District of De Pere

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Baseline	4,468	4,467	4,468	4,461	4,460	4,477	4,490	4,497	4,487	4,471
Five-Year Trend	4,461	4,455	4,456	4,442	4,412	4,395	4,366	4,325	4,255	4,176
Three-Year Trend	4,429	4,388	4,354	4,305	4,235	4,184	4,124	4,056	3,967	3,872
Kindergarten Trend	4,454	4,457	4,476	4,471	4,452	4,452	4,445	4,431	4,393	4,350

From the 2022/23 4K-12 enrollment of 4,455, all models, except the Baseline model, show decreasing enrollment over the next five years. The Three-Year Trend model projects the greatest enrollment decline, while the Baseline model projects a slight increase. The projections five years from now (2027/28) range from 4,235 to 4,460 to students.

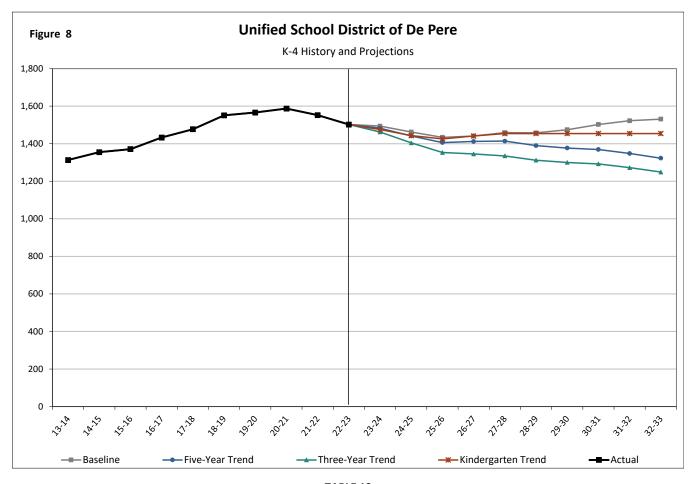


TABLE 13
Summary of K-4 Projections
Unified School District of De Pere

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Baseline	1,494	1,462	1,434	1,441	1,459	1,458	1,474	1,502	1,522	1,531
Five-Year Trend	1,482	1,442	1,406	1,412	1,414	1,390	1,377	1,369	1,348	1,323
Three-Year Trend	1,462	1,404	1,353	1,345	1,335	1,312	1,300	1,292	1,272	1,249
Kindergarten Trend	1,475	1,443	1,426	1,441	1,454	1,454	1,454	1,454	1,454	1,454

From the 2022/23 K-4 enrollment of 1,502, the models show declining enrollment over the next five years. Over time, the Baseline model projects enrollment increases, while the Three-Year Trend model projects the greatest enrollment decline. Five years from now (2027/28) the projections range from 1,335 to 1,459 students.

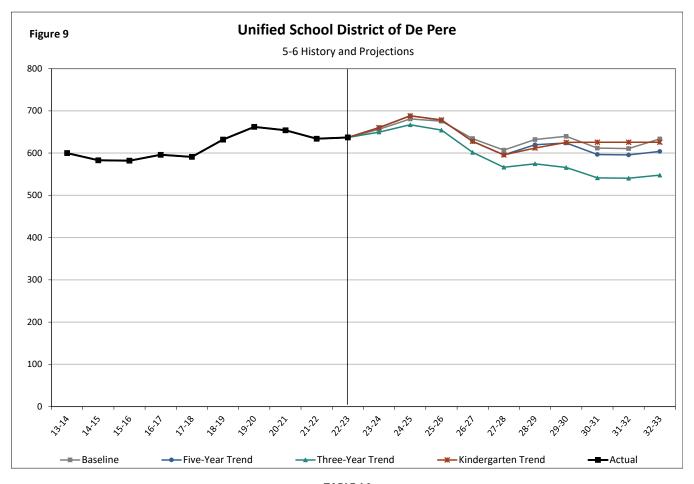


TABLE 14
Summary of 5-6 Projections
Unified School District of De Pere

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Baseline	656	681	675	634	607	632	640	612	611	634
Five-Year Trend	660	688	678	628	596	620	624	597	596	604
Three-Year Trend	650	667	654	602	566	575	566	541	540	548
Kindergarten Trend	660	688	678	628	596	612	625	626	626	626

From the 2022/23 5-6 enrollment of 637, the models show increasing enrollment in the next three years followed by decline. Five years from now (2027/28) the projections range from 566 to 607 students.

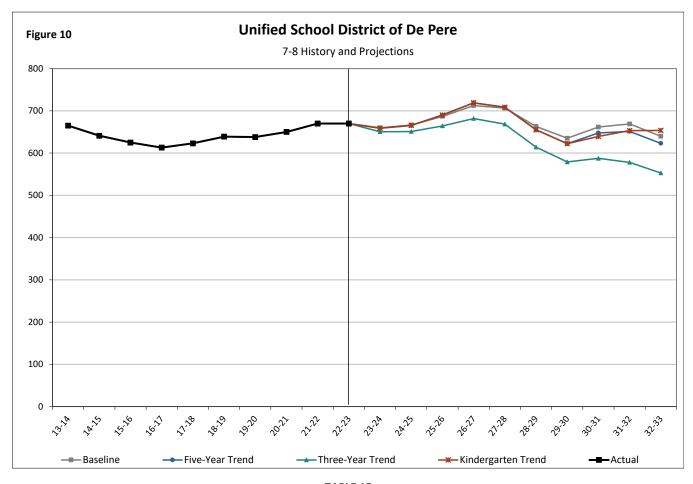


TABLE 15
Summary of 7-8 Projections
Unified School District of De Pere

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Baseline	660	667	687	712	707	663	635	662	669	640
Five-Year Trend	659	666	690	719	708	655	622	648	651	623
Three-Year Trend	650	651	664	682	668	614	579	588	578	553
Kindergarten Trend	659	666	690	719	708	655	622	639	653	654

From the 2022/23 7-8 enrollment in 2022/23 is 670, all models for middle school project that enrollment will increase in the next four years followed by some enrollment decline. The Tree-Year Trend model projects greatest decline over time. Enrollment projections five years from now (2027/28) project a range of enrollment from 668 to 708.

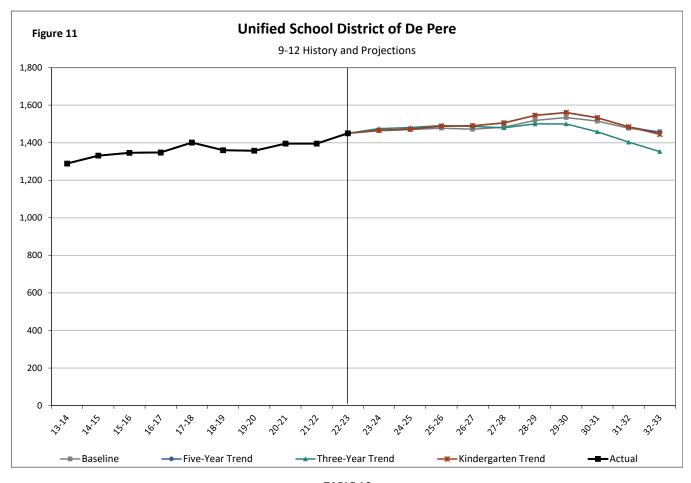


TABLE 16
Summary of 9-12 Projections
Unified School District of De Pere

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Baseline	1,464	1,470	1,478	1,472	1,483	1,518	1,534	1,515	1,477	1,459
Five-Year Trend	1,466	1,473	1,488	1,490	1,506	1,546	1,561	1,533	1,484	1,454
Three-Year Trend	1,475	1,480	1,491	1,487	1,479	1,500	1,500	1,458	1,403	1,353
Kindergarten Trend	1,466	1,473	1,488	1,490	1,506	1,546	1,561	1,533	1,484	1,445

From the 2022/23 9-12 enrollment in 2022/23 is 1,450, all projection models forecast increasing enrollment in five years. Enrollment projections five years from now (2027/28) project a range of enrollment from 1,479 to 1,506.

#### **District Conclusion**

These district-level enrollment projections are based on models that incorporate past and current demographic information and the district's own enrollment. Because most of the students in the district's schools over the next few years have already been born or are already in school, and because their grade progression from one year to another is reasonably predictable, the total district-level projections should be viewed as having high accuracy over the next few years.

After a few years, and increasingly for the lower elementary grades, actual enrollment figures will likely deviate from these projections by ever-increasing amounts. The reason for this divergence is that birth trends, in-migration of pre-school age children, and transfers into the district are more difficult to predict, making meaningful incorporation into enrollment projections a challenge. As with nearly all types of forecasts, accuracy in these enrollment projections increases over time.

Because the projections found in this report incorporate the consequences of migration to and from the district, any significant and sustained interruption of current or recent migration patterns will erode these models' accuracy from the initiation point of the new pattern.

District-wide enrollment projections point to the Unified School District of De Pere experiencing increased enrollment in the near term. Over the next five years, the district might expect:

- 4K-12 enrollment will likely gain as many as 5 students or lose as many as 220 students, averaging a 1.5% decline.
- With recent decreasing trends in births and kindergarten enrollment, grades K-4 enrollment will lose as many as 43 to 167 students, declining by 5.8%.
- As elementary school students progress to intermediate school, grades 5-6 enrollment will likely lose from 30 to 71 students or averaging a 7.2% decline.
- As intermediate school students move to middle school, grades 7-8 enrollment will likely lose as many as 2 students or gain as many as 38 students or averaging a 4.2% increase.
- High school enrollment (grades 9-12) will likely gain from 29 to 56 students or averaging a 3.0% increase.

The district should continue to monitor enrollment change and compare it with these projections, to assess the district's trajectory of future growth and the best-fitting projections model.