

# Projecting Public School Enrollment in Wisconsin, 2023

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Every three to five years, the Applied Population Laboratory at the University of Wisconsin-Madison prepares a statewide enrollment projections study to provide public school administrators, regional planners, and state officials with information regarding the past, current, and future direction of public school enrollment in Wisconsin.

This report examines public school enrollment decline since the 2013-14 school year and projects future enrollment incorporating demographic trends and the pandemic's impact. Projections are provided in total; by elementary, middle, and high schools; and by city, suburb, town, and rural locale through 2032-2033.

## Executive Summary

Between 2013-14 and 2022-23, 69% of Wisconsin's school districts experienced enrollment decline, a higher percentage than the prior ten years, when 59% of districts decreased. Wisconsin's public school enrollment fell by nearly 53,000 (-5.8%) from 2013-14 to 2022-23. The decline accelerated during the three years of the pandemic, dropping 3% in the first year alone. Since the 2019-20 school year, Wisconsin's public schools have over 33,500 fewer students or a -3.8% decline.

Across the past decade, the number of kindergarteners enrolling in school is fewer than the number of graduating high school seniors with the gap widening each year. The popularity of the four-year old kindergarten program in many districts throughout the state has meant that declines in total enrollment have not been as severe as they may have been without the program. However, during the pandemic the state saw a considerable decline of four-year old kindergartners as well as five-year-old kindergarten.

Enrollment decline has not occurred uniformly across the state over the last ten years. Suburban districts have seen the least amount of decline with only 43% of districts decreasing. Other locations have fared worse: 68% of town districts, 72% of rural districts, and 89% of city districts experienced enrollment decline over the last ten years. Many rural districts rebounded from the pandemic much better than other areas of the state.

Based on the cohort progression method, projections are provided for statewide 4K-12 enrollment by grade grouping and by city, suburb, town, and rural locale. The projection models suggest that there will be a decrease in total enrollment for the state with an annual decline of 1.4%. Most of the decline is predicted to be in high schools followed by elementary schools. Middle school enrollment will decline the least of the conventional grade groupings.

Although some individual districts will see growth, collectively each locale type will experience enrollment decline for the foreseeable future. In aggregate, city school districts are projected to decrease the most, dropping by 2.3% annually. Town and rural districts are projected to decline annually by 1.3% and 1.0%, respectively. Suburban districts are projected to experience the least amount of decline with an annualized decrease of 0.8%.



## Past Public School Enrollment

The most recent peak in public school enrollment was in the 1997-98 school year when the majority of the Millennial generation was school age. Since that time, statewide enrollment has declined as smaller cohorts advanced to school age. Examining the last ten years of 3<sup>rd</sup> Friday enrollment in the 421 school districts, an annual decline of 0.4% occurred through 2019-20, then a more significant drop happened during the pandemic with public school enrollment decreasing by 3.8% between 2019-20 and 2022-23. Enrollment of all grade groupings has been declining over the last ten years, especially in the elementary grades K-5.

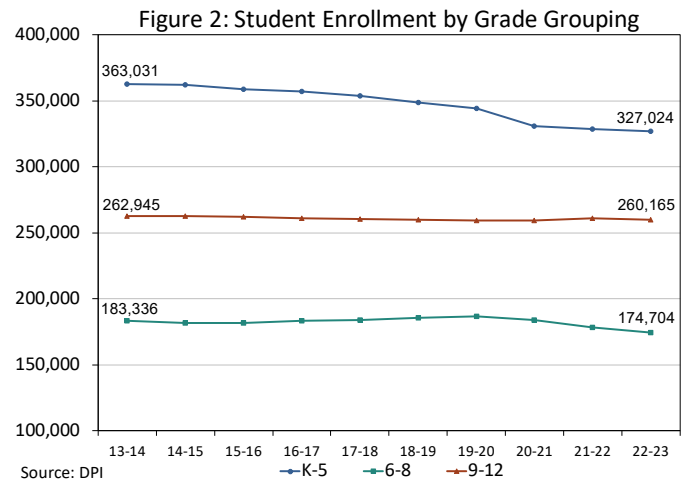
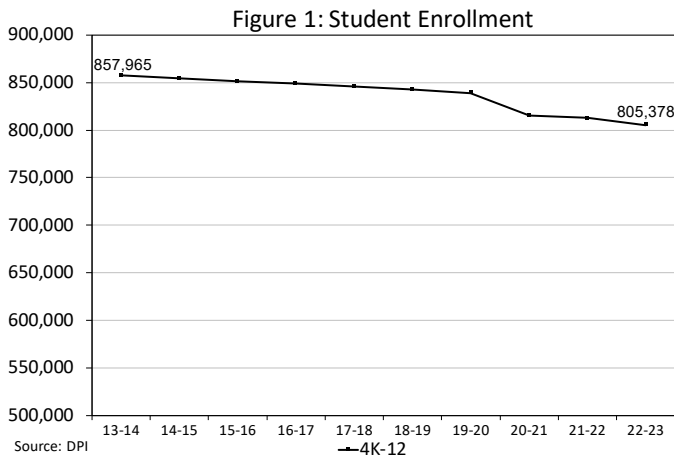
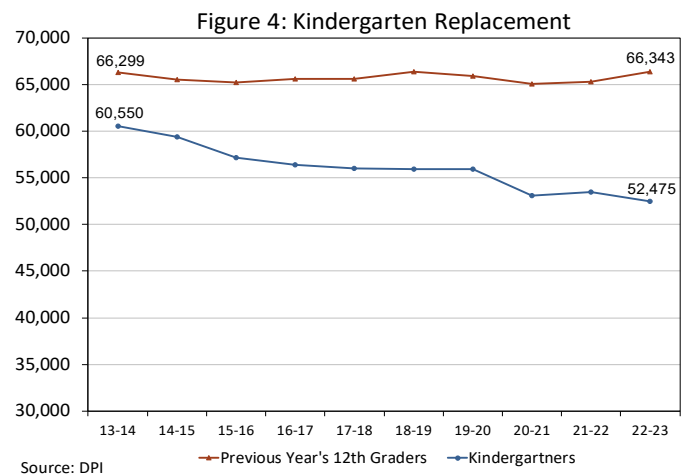
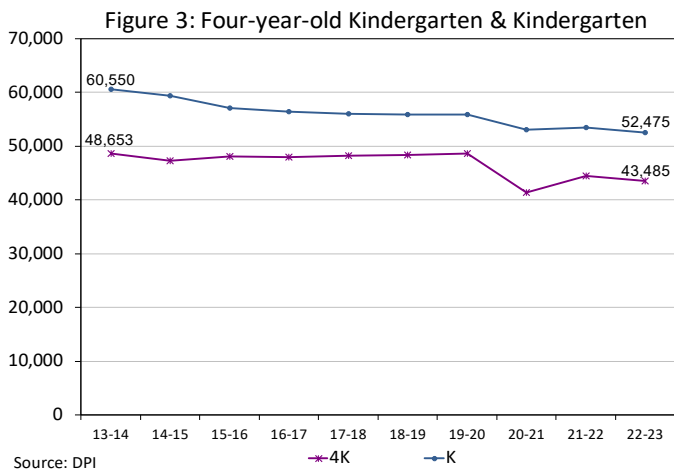


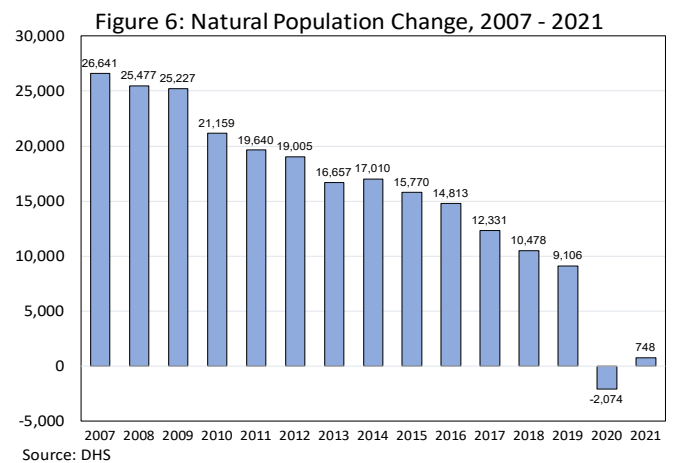
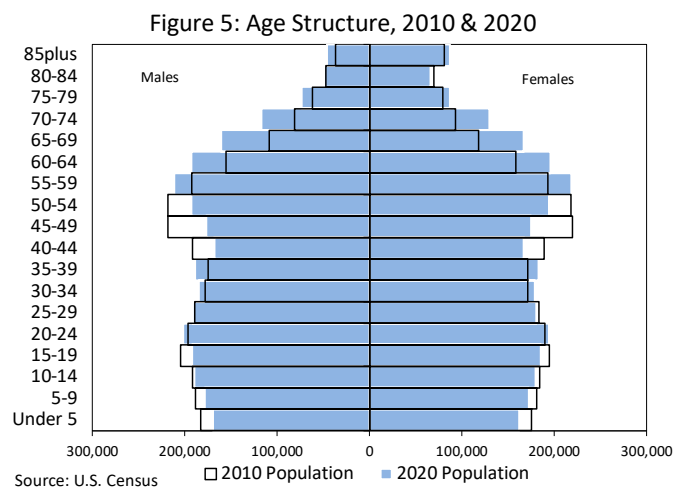
Figure 3 shows four-year-old kindergarten enrollment holding steady until the first year of the pandemic when a significant drop occurred. Conversely, kindergarten enrollment has steadily decreased, especially during the pandemic. In Figure 4, kindergarten replacement offers a snapshot of how the age structure of the state's enrollment is shifting. Districts tend to experience overall growth when kindergarten enrollment outpaces outgoing seniors, and they see decline when kindergartners do not fully replace the number of graduates. In the past ten years, the gap between statewide incoming kindergartners and outgoing 12<sup>th</sup> graders has widened from approximately 5,750 in 2013-14 to nearly 14,000 in 2022-23. This demonstrates one of the main causes of Wisconsin's enrollment decline as fewer numbers of young children enroll in public schools.



## Components of Population Change

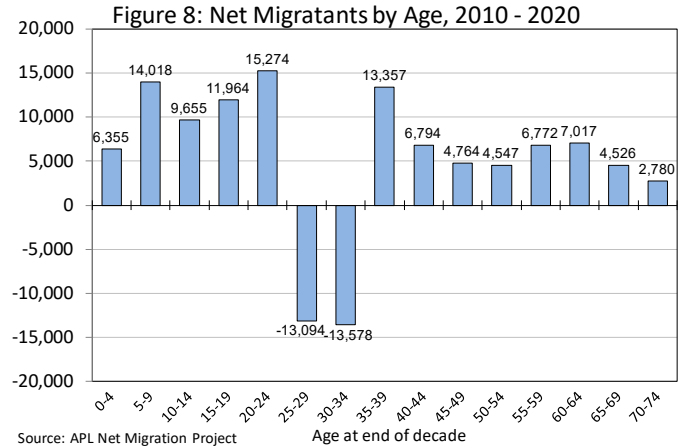
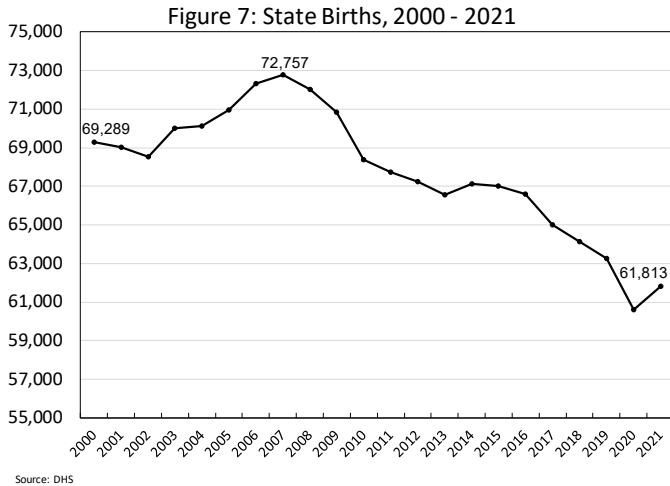
The shifting age structure of the general population, trends in migration, and births impact the number of school-age children in the state. Figure 5 shows Wisconsin's population by age and sex in the form of population pyramids for 2010 and 2020. These pyramids illustrate how the state's population is aging. Population counts age 55 and older increased, while population counts ages 0 to 19 declined from 2010 to 2020. Wisconsin's total population increased by 323,000 (6.0%) in the 2000s but only grew by 207,000 (3.6%) in the 2010s. In 2020, while Wisconsin ranked 20<sup>th</sup> in the United States for total population, it ranked 11<sup>th</sup> among all states for its population age 55 and older.

One component of population change is natural change (i.e., births minus deaths). Figure 6 illustrates Wisconsin's natural change from 2007 to 2021. Until 2019, a natural population increase diminished as births declined each year. Then, in 2020, the state experienced its first documented year of natural decrease when deaths exceeded births in the first year of the pandemic. In 2021, only a small natural increase occurred.



On the following page, Figure 7 shows the total number of births by Wisconsin mothers from 2000 to 2021. Births increased for a short period of time in the early 2000s, but beginning with the 2007-2009 Great Recession, births began to decline. The state experienced a considerable drop in births during 2020, followed by a slight rebound in 2021.

The other component of population change is net migration (i.e., incoming migrants minus outgoing migrants). Figure 8 provides the net migrants, by age, for the 2010s. Although there was positive net migration among school-age children, the state experienced negative net migration among people ages 25 to 34. This latter change has an important impact on future projections as women ages 25 to 34 currently have the highest fertility rates among those of childbearing age. A smaller proportion of residents in this age group may result in fewer young children in Wisconsin.



In sum, Wisconsin’s population is shifting older. While the Baby Boom population continues to age in place, Millennials are delaying or have forgone having children, and the following generation, only recently advancing to their childbearing years, maintain attitudes that may signify fewer children being born. As the nation emerges from the pandemic and the economy improves there may be the potential for increasing numbers of births over the next five years. However, if current birth trends continue, fewer students in Wisconsin’s public schools will likely endure.

### Data and Projections Methodology

The Applied Population Laboratory’s projections are based on observed and projected state births along with 4K-12 public school enrollment histories (public charter schools are not included). Enrollment is composed of student counts in public schools, by grade, on the third Friday of each September from the 2013-14 school year through the 2022-23 school year, as reported by the [Wisconsin Department of Public Instruction \(DPI\)](#). Data on past births are from the annual tabulations from [Wisconsin Department of Health Services \(DHS\)](#).

Projections are generated for statewide 4K-12 public school enrollment by grade grouping and by locale code and include a five-year and a three-year trend model. Historical and projected birth data is used to predict the number of four-year old kindergartners and five-year-old kindergarten students who will enroll in public schools. A linear regression based on the last seven years of observed births was used for projecting future births. Actual births (2015-2021) and projected births from the regression (2022-2028) determine future kindergartners.

Enrollment projections are separated by location utilizing the [National Center for Education Statistics \(NCES\)](#) locale codes. As defined by NCES, 18 are classified as city (except Kenosha has been shifted from suburb to city), followed by 76 as suburb, 91 as town, and 236 as rural. On the following page, the map (Figure 9) and the bar charts (Figure 10) show the breakdown of the number of districts classified as city, suburb, town, and rural and the percentage of public school students enrolled in these district locations in 2022-23.

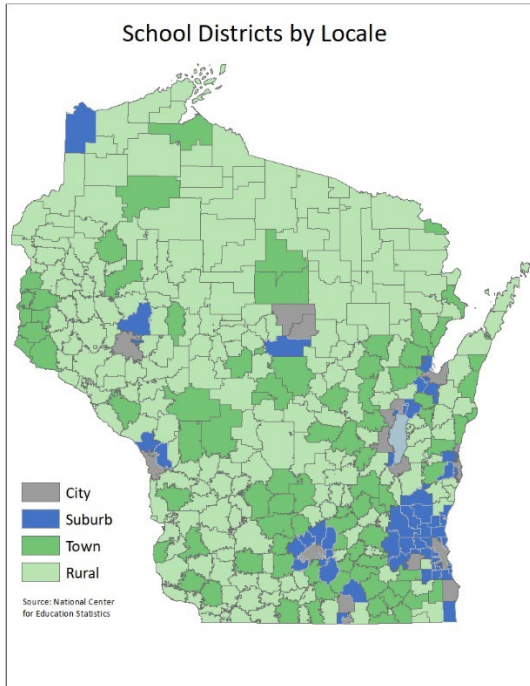


Figure 9

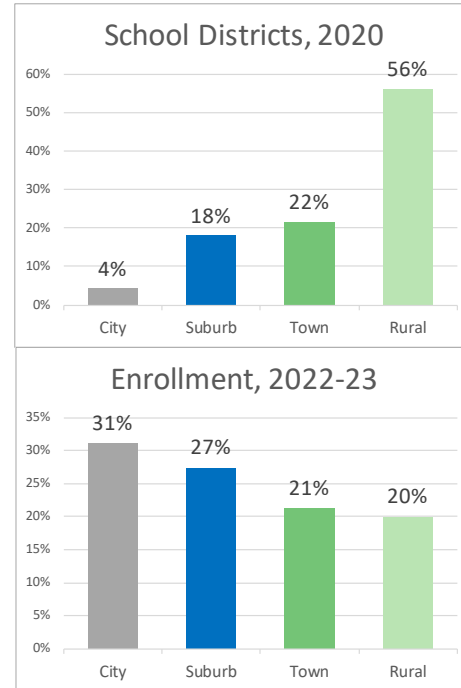


Figure 10

Although the majority of land in the state is rural, the majority of students attend city or suburban schools. City districts make up only 4% of the total number of districts, but their enrollment comprises 31% of public school students. Suburban districts make up 18% of districts and 27% of students. Town districts are roughly equal in their percentage of districts and percentage of students, comprising 22% of districts and 21% of students. Rural districts are over half of all districts, making up 56% of districts but only 20% of students.

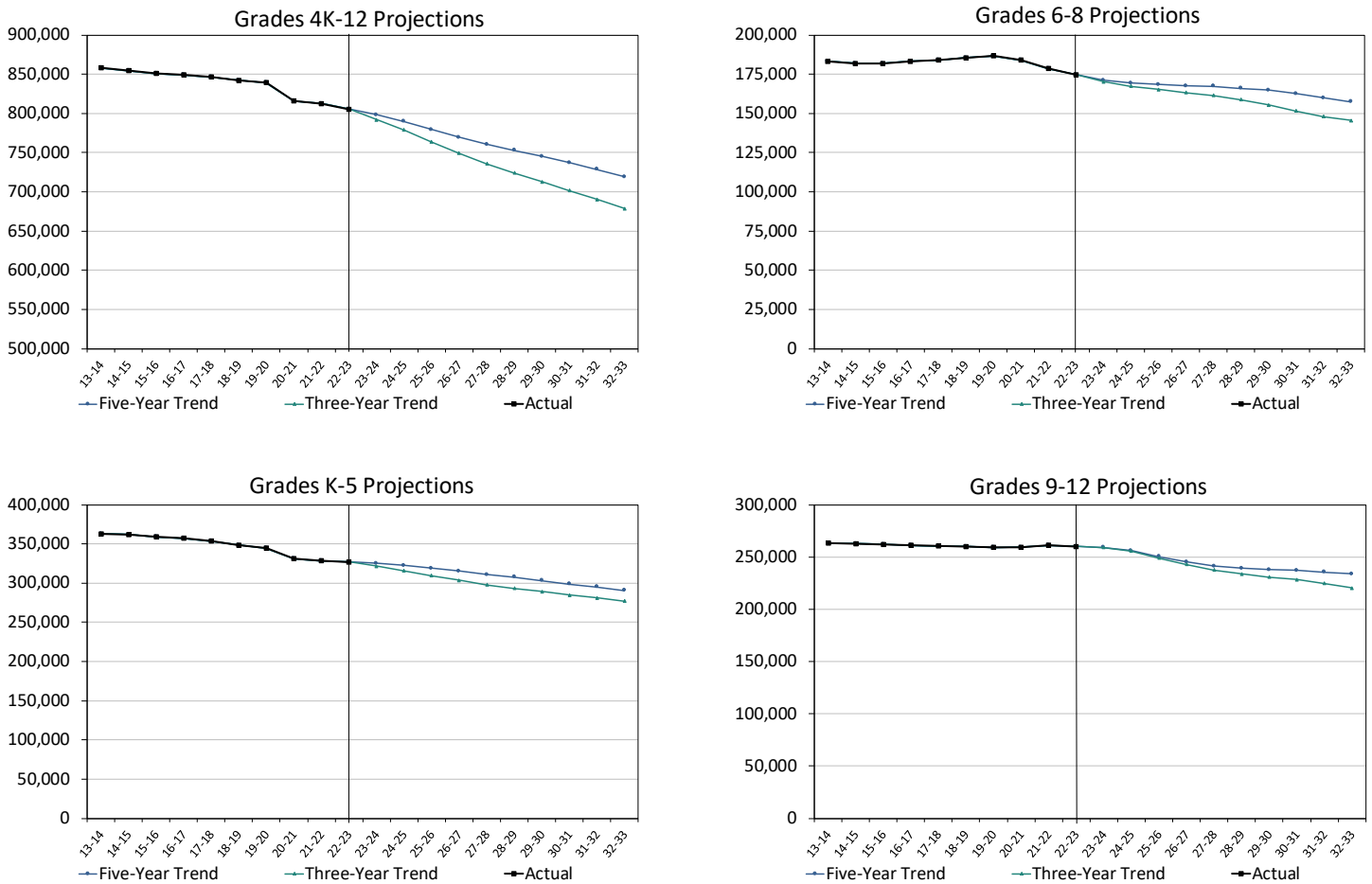
The cohort progression method is used to project school enrollment, by grade, ten years into the future. Specifically, the average ratio of grade progression from one grade to the next is generated in order to progress cohorts of students through the school system over time. A ratio of births to kindergarteners is used to project kindergarten enrollment. These average ratios (five-year and three-year) are used to project future enrollment.

Because the pattern of entry and exit from grade to grade are relatively consistent over time at the state level, the grade progression ratios for each grade transition remain relatively stable. To moderate the significant enrollment decline of the first year of the pandemic, these ratios are excluded in the five-year trend model. The ratios remain in the three-year trend model. The five-year trend can be viewed as the “best case” scenario of higher enrollment, while the three-year trend can be considered the “worst case” scenario of lower enrollment.

## Future Public School Enrollment

Figure 11 shows the total (4K-12) statewide enrollment projections, as well as the conventional grade groupings (K-5, 6-8, and 9-12). From 2022-23, public school enrollment is projected to decline by 6% to 9% in five years, dropping by over 10,000 students annually. Grades K-5 are predicted to decrease by 5% to 9%, grades 6-8 by 4% to 8%, and 9-12 by 7% to 9%. School projections are most reliable over a five-year time horizon because most future students have already been born or are already in school. Nonetheless, by trending births forward and extending the projections time frame, total 4K-12 enrollment may fall 11% to 16%, grades K-5 by 11% to 15%, grades 6-8 by 10% to 17%, and grades 9-12 by 10% to 15% in ten years. Tables in Appendix A (page 8) show the projected numerical enrollment totals.

Figure 11

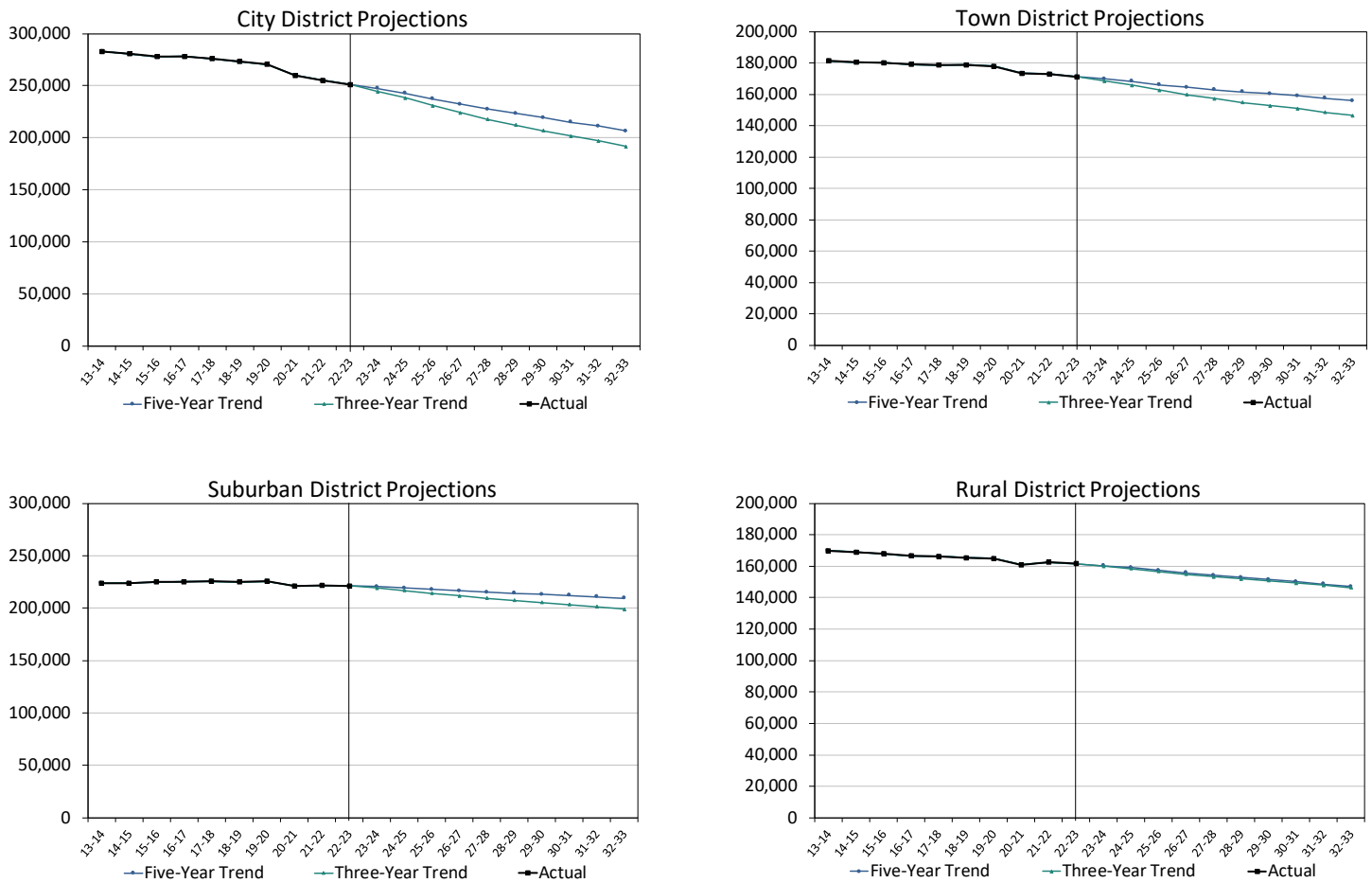


## Future Enrollment by Location

Below, Figure 12 illustrates the projections by NCES locale code. From 2022-23, city districts are projected to decrease the most in five years, declining by 10% to 13%, while suburban districts are predicted to decrease the least, dropping by 3% to 5%. Town districts are projected to fall by 5% to 8%, and rural districts may lose about 5%. As noted above, longer-range projections are less reliable, but if patterns hold true, city districts

may decline 18% to 24%, suburban districts 5% to 10%, town districts 9% to 14%, and rural districts 9% in ten years. Tables in Appendix A (page 8) show the projected numerical enrollment totals.

Figure 12



## Conclusion

As Wisconsin faces the demographic realities of an aging population, declining births, and fewer public school students due to the pandemic, many traditional 4K-12 school districts will face challenges in the coming years. Decline will likely occur at all grade levels, and no area of the state will be spared from some decline. The total statewide public school projections may be viewed with confidence over the next few years. As with nearly all types of forecasts, reliability in these enrollment projections decreases over time.

*The Applied Population Laboratory (APL) is a group of research professionals at the University of Wisconsin-Madison specializing in population studies and geographic data analysis. For twenty-seven years, the APL has been working with Wisconsin's individual school districts on demographic analyses and school enrollment projections. For more information contact Sarah Kemp, Researcher, at the Applied Population Laboratory, Department of Community and Environmental Sociology at (608) 265-6189 or [kemp@wisc.edu](mailto:kemp@wisc.edu).*

## Appendix A

**TABLE 1**  
**Summary of 4K-12 Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	795,031	784,342	771,325	759,479	748,131	738,371	729,016	719,410	709,344	698,866
Five-Year Trend	798,292	789,867	779,166	769,591	760,395	752,659	745,128	737,136	728,466	719,197
Three-Year Trend	791,770	778,817	763,483	749,366	735,866	724,082	712,903	701,684	690,222	678,535

**TABLE 2**  
**Summary of K-5 Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	323,247	319,257	314,057	309,407	304,463	300,323	296,099	291,726	288,178	283,863
Five-Year Trend	325,018	322,592	318,736	315,174	311,012	307,437	303,111	298,634	295,015	290,605
Three-Year Trend	321,477	315,921	309,379	303,641	297,913	293,209	289,087	284,818	281,342	277,122

**TABLE 3**  
**Summary of 6-8 Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	170,627	168,389	166,922	165,372	164,437	162,348	160,128	157,064	153,938	151,485
Five-Year Trend	171,101	169,410	168,499	167,550	167,318	165,939	164,833	162,567	159,994	157,443
Three-Year Trend	170,154	167,368	165,345	163,193	161,555	158,758	155,424	151,560	147,881	145,527

**TABLE 4**  
**Summary of 9-12 Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	258,954	255,863	249,575	244,053	239,242	236,403	234,186	232,711	230,012	226,995
Five-Year Trend	259,005	256,095	250,226	245,289	241,159	239,087	237,697	237,157	235,389	233,790
Three-Year Trend	258,904	255,630	248,923	242,817	237,325	233,719	230,674	228,265	224,635	220,200

**TABLE 5**  
**Summary of City District Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	245,848	240,521	234,042	228,198	222,537	217,754	213,132	208,498	204,009	199,178
Five-Year Trend	247,304	242,870	237,261	232,246	227,341	223,268	219,255	215,141	211,098	206,661
Three-Year Trend	244,392	238,172	230,823	224,150	217,733	212,240	207,009	201,854	196,920	191,696

**TABLE 6**  
**Summary of Suburban District Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	219,739	217,948	216,017	214,096	212,282	210,849	209,316	207,723	205,990	204,245
Five-Year Trend	220,405	219,139	217,768	216,402	215,113	214,214	213,183	212,059	210,743	209,348
Three-Year Trend	219,073	216,756	214,265	211,790	209,452	207,485	205,448	203,388	201,238	199,141

**TABLE 7**  
**Summary of Town District Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	169,346	167,138	164,510	162,164	160,215	158,305	156,654	155,115	153,067	151,273
Five-Year Trend	170,031	168,317	166,224	164,432	163,027	161,622	160,416	159,256	157,534	155,999
Three-Year Trend	168,661	165,959	162,797	159,896	157,403	154,989	152,891	150,973	148,601	146,546

**TABLE 9**  
**Summary of Rural District Projections**

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33
Average	160,118	158,754	156,914	155,363	153,699	152,370	151,146	149,692	148,259	146,662
Five-Year Trend	160,316	159,049	157,280	155,762	154,119	152,769	151,527	150,052	148,595	146,993
Three-Year Trend	159,919	158,458	156,549	154,965	153,279	151,971	150,766	149,333	147,923	146,330

