

# **Bloomingdale School District 13**

Estimates of Additional Kindergarten Enrollment with

District-wide and Individual School

Enrollment Projections

under the Assumption that a

Full-Day Kindergarten Program

Commences in Fall 2023

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May 2023

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## Introduction

Bloomingdale School District 13 plans to offer full-day kindergarten classes beginning in fall 2023. To aid the District in planning for future space, staffing and program needs, in this supplementary report, we assess prospective increments to total kindergarten enrollment at District 13 should it offer full-day kindergarten classes as planned. This is followed with revised annual grade-bygrade enrollment projections for both of District 13's as a whole and each of its schools, again, under the assumption that the district introduces full-day kindergarten in fall 2023.

This supplementary report is in two parts. In Part I, we examine annual enrollment trends in private schools at the national level and compare those with annual enrollment trends at selected greater Bloomingdale area private and parochial schools. After reviewing the market for private daycare of kindergarten-age children in the greater Bloomingdale area, we synthesize these analyses with the status quo, part-time kindergarten enrollment projections for the district to estimate the likely annual numbers of additional kindergarten students to anticipate over the next decade if the district offers full-day kindergarten as conceived.

Part II builds upon Part I to estimate likely increments in district-wide kindergarten enrollment at both of District 13's elementary schools with the

introduction of full-day kindergarten classes. We then unify these estimates with projections from the first report<sup>1</sup> to provide revised annual grade-by-grade enrollment projections for both of District 13's elementary schools, Westfield Middle School, and District 13 as a whole contingent on the district commencing full-day kindergarten classes in school year 2023–24.

Because there are so many unknowns and uncontrollable factors that can impact future total kindergarten enrollment at District 13, we follow the prior report and present a range from anticipated low to high full-day kindergarten estimates and annual grade-by-grade enrollment projections over the next five years for both of the elementary schools and over the coming decade for the Westfield Middle School and District 13 as a whole through 2032–33. Even here, though, great risk remains because we are operating in uncharted, turbulent waters.

<sup>1</sup> Kasarda, John D. *Bloomingdale School District* 13. *Demographic Trends and Enrollment Projections*, April 30, 2023.

#### Part I.

# Estimates of Total Future Kindergarten Enrollment when Full-Day Kindergarten Classes Are Offered at Bloomingdale School District 13

In this first part, we examine and analyze annual enrollment trends in private schools at the national level and compare those with annual enrollment trends at selected private schools that offer kindergarten classes in the greater Bloomingdale area as well as compare trends in private and parochial school enrollments with enrollment trends at District 13. Following a brief review of the market for private daycare of kindergarten-age children in the greater Bloomingdale area, we synthesize these analyses with recent kindergarten enrollment projections for District 13 based on the status quo² to estimate the likely numbers of additional kindergarten students to expect over the coming decade should the District offer full-day kindergarten classes as planned.

### **National Trends in Private School Enrollment**

The National Center for Education Statistics, in collaboration with the U.S. Bureau of the Census, conducts a biennial survey of private (including parochial) schools in the 50 States and District of Columbia. According to the most recently

<sup>2</sup> Kasarda, 2023. Op. Cit.

available survey in the fall of 2019, there were 30,492 private elementary and secondary schools serving 4,652,904 students<sup>3</sup>.

Conducted on the odd-numbered years, the survey provides estimates of the number of students by grade level (K–12) in private schools on a biennial basis. While these grade-by-grade data do not actually follow cohorts progressing through the grades over the years, they can serve as a rough approximation to cohort survival trends.

# Distribution of Private School Students by Year, Type, and Grade Level

Table 1 shows the total number (N) of students nationally by type of private school and by grade level (kindergarten through fifth grade) for the survey years 2015, 2017 and 2019. This is followed by Tables 2 and 3 which show (1) the within-year grade-to-grade differences in the number of students and (2) the within-year percentages of students in each grade (first through fifth) relative to the preceding grade (kindergarten through fourth). For example, in 2015 there were 6,803 fewer first grade students than in kindergarten in the combined Catholic schools in the survey, or put another way, first grade enrollment was 95.4 percent of kindergarten enrollment that year. Trends in these data will be more apparent when we examine grouped mean values next.

<sup>3</sup> Broughman, S., Kincel, B., Willinger, J., and Peterson, J. 2021. *Characteristics of Private Schools in the United States: Results From the 2019–20 Private School Universe Survey First Look* (NCES 2021-061). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Table 1.

Private School Enrollment Nationally by Type of School, Year and Grade

Year	Туре	K.	1st	2nd	3rd	4th	5th
2015	Catholic	148,249	141,446	144,702	144,158	143,145	143,178
2017	Catholic	144,990	137,974	138,214	141,644	142,805	145,551
2019	Catholic	132,847	120,848	119,749	122,542	122,701	127,481
2015	Nonsecterian	127,685	66,510	64,389	63,244	62,177	63,307
2017	Nonsecterian	125,633	66,414	62,697	62,781	62,948	66,383
2019	Nonsecterian	118,830	67,110	64,418	65,014	65,026	68,301
2015	Other religious	190,541	165,897	159,361	156,886	152,498	148,221
2017	Other religious	186,253	156,639	151,221	149,978	149,899	146,785
2019	Other religious	181,936	151,261	146,564	145,905	143,574	143,868

Table 2.

Within-year Grade to Grade Enrollment Difference Nationally by Type of School, Year and Grade Transition

Year	Туре	K to 1	1 to 2	2 to 3	3 to 4	4 to 5
2015	Catholic	-6,803	3,256	-544	-1,012	32
2017	Catholic	-7,016	240	3,430	1,161	2,745
2019	Catholic	-11,999	-1,099	2,792	160	4,780
2015	Nonsecterian	-61,174	-2,121	-1,145	-1,067	1,130
2017	Nonsecterian	-59,218	-3,718	85	167	3,435
2019	Nonsecterian	-51,720	-2,692	596	11	3,276
2015	Other religious	-24,644	-6,536	-2,475	-4,387	-4,277
2017	Other religious	-29,615	-5,418	-1,243	-79	-3,114
2019	Other religious	-30,676	-4,697	-659	-2,331	294

Table 3.

Within-year Grade to Grade Percent Enrollment Difference Nationally by Type of School, Year and Grade Transition

Year	Туре	K to 1	1 to 2	2 to 3	3 to 4	4 to 5
2015	Catholic	95.4	102.3	99.6	99.3	100.0
2017	Catholic	95.2	100.2	102.5	100.8	101.9
2019	Catholic	91.0	99.1	102.3	100.1	103.9
2015	Nonsecterian	52.1	96.8	98.2	98.3	101.8
2017	Nonsecterian	52.9	94.4	100.1	100.3	105.5
2019	Nonsecterian	56.5	96.0	100.9	100.0	105.0
2015	Other religious	87.1	96.1	98.4	97.2	97.2
2017	Other religious	84.1	96.5	99.2	99.9	97.9
2019	Other religious	83.1	96.9	99.6	98.4	100.2

## Mean Within-year Grade-to-Grade Percents Differences

In Table 4 and Figure 1, we collapse the years to the mean values by school type. Here we can see that all types of private schools nationally experience enrollment loses between kindergarten and the first grade. By second grade, enrollment tends to stabilize. On average, first grade enrollment at private schools regardless of type tends to be 79.2% that of kindergarten enrollment. After the first grade, grade-to-grade enrollment percents loses (or gains) are much smaller and fairly consistent.

Nationally, the largest kindergarten to first grade losses occur at nonsectarian schools. On average, first grade enrollment at nonsectarian private schools is only 53.8% that of their kindergarten enrollment, or roughly a 46.2% loss of their students between kindergarten and first grade. Some of this loss is

due to out-migration presumably, but the majority is likely due to transfer to area public schools since enrollment change stabilizes in the higher grades. While Catholic and other religious schools also tend to lose students between kindergarten and the first grade, they do so at noticeably lower rates, 6.2% and 15.2%, respectively (see K to 1 in Table 4).

These trends are consistent with the practice of paying to enroll children in full-day kindergarten programs at private schools then transferring them to (free) public schools in the first grade, especially in nonsectarian schools. As noted, this trend is observable to a lesser extent in religious schools where parental desires for faith-based instruction may be offsetting financial factors.

As will be discussed later, faith-based instruction is not the only motivating factor when deciding to keep children enrolled in a particular private school. Special programs and instruction can also play an important role. For instance, some parents may choose to enroll their children in a nonsectarian private school because instruction is offered in a second language, emphasis on a particular curriculum, or because of the instructional method or philosophy.

Table 4.

Mean Within-year Grade to Grade Percent Enrollment Difference Nationally by Type of School, Year and Grade Transition

Туре	K to 1	1 to 2	2 to 3	3 to 4	4 to 5
Catholic	93.8	100.5	101.5	100.1	101.9
Nonsecterian	53.8	95.7	99.8	99.5	104.1
Other religious	84.8	96.5	99.1	98.5	98.4
Total	79.2	97.9	100.1	99.3	100.8

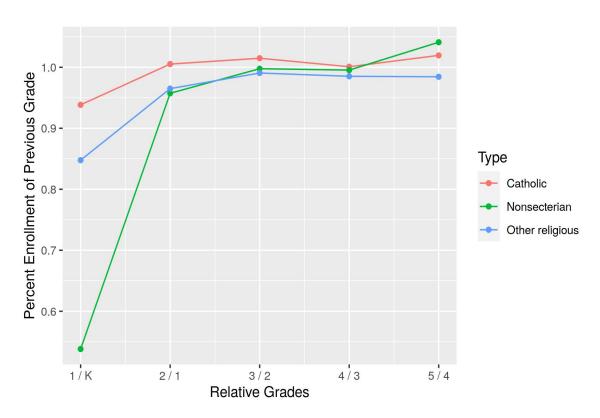


Figure 1. Mean Within-year Grade to Grade Percent Enrollment Difference Nationally by Type of School

# Private School Enrollment Trends in the Bloomingdale area.

Having examined enrollment trends in private schools at the national level, we turn now to enrollment trends in private (including parochial) schools in the greater Bloomingdale area. For the purposes of our study, this will include private schools operating in DuPage County, in general, and the greater Bloomingdale area, in particular.

While there is no central repository of annual enrollment for private schools, the Illinois State Board of Education (ISBE) "registers" some private schools. However, because registration is voluntary, enrollment data for *all* nonpublic schools are not available nor are the same schools represented every year. Additionally, in recent years, the ISBE redacts counts of less than ten making enrollment analysis not always possible. Of the nonpublic schools offering kindergarten in the Bloomingdale area registered with the ISBE in recent years, the following participate with sufficient data for reliable for analysis: St Isidore School, St Matthew School, St Philip the Apostle School, St Walter School, and Trinity Lutheran School. (Annual grade-by-grade enrollments for these private schools are presented in Appendix A.) Other nonpublic schools in the greater Bloomingdale area, but with infrequent participation in ISBE registration or excessive redaction include: Lutheran School of St Luke and Sunrise Montessori Academy. Again, it should be recognized that is in not a comprehensive list of

nonpublic schools in the Bloomingdale area, rather those that were registered with the ISBE at some point since 2012. In addition, there are numerous private daycare providers in the Bloomingdale area, most of which offer care for kindergarten-age children (discussed below).

All the registered nonpublic schools for which there are sufficient years and data to analyze trends are religious schools. Table 5 presents the mean grade-tograde cohort retention ratios for these select parochial schools based on enrollment figures from the ISBE. As may be observed, the mean retention ratios at two of the four Catholic schools (St Philip the Apostle and St Walter) follow trends similar to the within-year grade-over-grade percentages shown above for Catholic schools from the NCES survey, while the two remaining Catholic schools (St Isidore and St Matthew) display perceptibly lower kindergarten to first grade retention. In that regard, trends at these two schools are more in line with those at Trinity Lutheran School which follow trends similar to the withinyear grade-over-grade percentages shown above for "other religious" schools from the NCES survey. These five schools combined retained 88.3% of their students on average between kindergarten and the first grade (or a loss of about 14 students annually). Although not shown in Table 5, Lutheran School of St Luke has lost roughly three students annually between kindergarten and the first grade in recent years.

Table 5.

Mean Retention Ratios for Select Area Private Schools

School	K to 1	1 to 2	2 to 3	3 to 4	4 to 5
St Isidore School	85.2	129.6	98.1	93.2	94.6
St Matthew School	79.7	101.3	81.3	89.0	84.4
St Philip the Apostle School	95.2	97.5	99.5	89.0	102.8
St Walter School	93.5	100.1	99.3	109.9	102.8
Trinity Lutheran School	85.2	100.0	85.6	97.4	96.4
Mean	88.3	103.3	94.0	98.0	97.8

# **Private Daycare**

As noted above, in addition to private schools, there are a number of private daycare facilities and daycare homes in the greater Bloomingdale area that offer services for kindergarten-age children. There is no central source of information about the numbers of children housed nor their ages at these facilities. However, the Illinois Department of Children and Family Services does maintain a database of currently licensed daycare providers, including age ranges served and capacity. Regrettably, we do know how close to capacity the facilities are running nor the distribution of children served by age.

Recognizing that children over age 5 will likely be served by a private or public school during regular school hours, it is reasonable to assume that the majority of children in the private daycare facilities will be preschool-age and, to a lesser extent, kindergarten-age, with the majority of the latter being children enrolled in full-day programs. Also, while we do not know the precise numbers

of children by age at the private daycare facilities, the impact of full-day kindergarten-age children from private daycare enrolling in public school for first grade the following year will be partially reflected in the kindergarten to first grade student migration/transfer figures. We will return to this in the section on District 13 enrollment trends. At this time, there are more than 330 licensed daycare providers in DuPage County. While many of these private daycare facilities are outside of District 13's boundaries, nearly a quarter are within five miles of a District 13 elementary school (see Table 6).

Table 6.
Selected Licensed Daycare Providers in DuPage County

PROVIDER	AGES	CAPACITY
Arellano, Maria	0 TO 12Y	12
Arzeta, Maria Y	0 TO 12Y	7
Balfe, Linda A	0 TO 12Y	8
Begum, Meher S	0 TO 12Y	8
Bos, Mary A	0 TO 12Y	8
Bright Horizons Child Care And Early Lea	6W TO 12Y	112
Brown, Patricia F	0 TO 12Y	8
Buliox, Vernea	0 TO 12Y	8
Bullocks, Joyce A	0 TO 12Y	8
Capo, Ada T	0 TO 12Y	12
Cortez, Debbie V	0 TO 12Y	7
Cortez, Edith	0 TO 12Y	12
Daylight Learning Center	6W TO 12Y	49
Dellapolla, Laura A	0 TO 12Y	8
Espinoza, Nathaly	0 TO 12Y	7
Ewald-Brandle, Jill M	0 TO 12Y	12
Frank, Margaret E	0 TO 12Y	8
Gebis, Debra S	0 TO 12Y	8
Goddard School/Early Childhood Development	6W TO 12Y	138
Good Shepherd Catholic Day Care Center	2Y TO 6Y	75
Greenbrook Montessori School	15M TO 3Y	28

Hurtado, Maria E	0 TO 12Y	12
Johnson, Roshel	0 TO 12Y	6
Kent, Kathy A	6W TO 12Y	12
Khan, Susan	0 TO 12Y	12
Khoraishi, Fatima	30M TO 12Y	8
Kiddie Academy	6W TO 12Y	139
Kids Island Adventures	2Y TO 12Y	135
Kindercare Learning Center 000011	6W TO 12Y	107
Kindercare Learning Center 000042	6W TO 12Y	103
Kindercare Learning Center 000315	6W TO 12Y	141
Kindercare Learning Center 000026	6W TO 12Y	145
Kindercare Learning Center 000171	6W TO 12Y	120
Kindercare Learning Ctr 301382	6W TO 12Y	102
Kouvelis, Clea L	0 TO 12Y	8
Koverman, Bethany A	0 TO 12Y	7
Lawrence, Christina D	0 TO 12Y	6
Little Prince Day Care Ii, Llc	6W TO 12Y	142
Macias, Diana G	6W TO 12Y	7
Martinez, Edith O	0 TO 12Y	8
Master's Christian Pre-School	3Y TO 5Y	37
Mendoza, Dora	0 TO 12Y	7
Mendoza, Graciela	0 TO 12Y	8
Mendoza, Raquel	0 TO 12Y	8
Metropolitan Fam Srvs Outreach Community	3Y TO 5Y	20
Metropolitan Fam Srvs St Andrews	3Y TO 5Y	40
Metropolitan Family Services Addison Chi	6W TO 3Y	50
Metropolitan Family Services	3Y TO 5Y	39
Mfs-Hall Elementary - Preschool For All	3Y TO 5Y	40
Mfs-Winnebago-Pfa	3Y TO 5Y	20
Mini Steps	6W TO 12Y	74
Montessori Academy Of Glen Ellyn	2Y TO 3Y	15
Murillo, Yaneli	0 TO 12Y	6
Nava, Rocio	0 TO 12Y	12
Navar, Antonia	6W TO 12Y	8
Ontiveros, Guadalupe	0 TO 12Y	8
Orzechowski, Andrew	0 TO 12Y	12
Pals Care Inc	6W TO 3Y	12
Pauling, Tawney L	0 TO 12Y	10
Pixie & Dixie Day Care Ctr Inc	15M TO 12Y	87
Primrose School Of Carol Stream	6W TO 12Y	186
Reyes, Alma I	0 TO 12Y	12
Rhodes, Sheena P	0 TO 12Y	6

Rios, Maria Del C	0 TO 12Y	12
Ruiz Conejo, Blanca E	0 TO 12Y	8
Salahuddin, Mujeeb F	6W TO 12Y	8
Schick's Crossing Preschool	2Y TO 5Y	32
Simba Child Care Center	15M TO 12Y	54
Sobota, Justyna	0 TO 12Y	6
Stepping Stones Early Childhood Center	6W TO 12Y	48
Stich, Sandy	0 TO 12Y	8
Tender Loving Care Professional	15M TO 5Y	40
Teuthorn, Rocio A	0 TO 12Y	12
The Ark Preschool	2Y TO 6Y	60
The Goddard School	6W TO 12Y	139
Thomas, Cynthia D	0 TO 12Y	8
Tle At Addison Llc	6W TO 5Y	118
Tt Acquisition Llc	6W TO 12Y	144
Tutor Time Child Care Learning Center	6W TO 12Y	123
Tutor Time Child Care Learning Center	6W TO 12Y	145
Villegas, Maria G	0 TO 12Y	8
Walls, Jean F	0 TO 12Y	12
Wilson, Sharese S	0 TO 12Y	11
Zebrowski, Anna M	0 TO 12Y	8

# **Enrollment Trends at District 13**

In the previous sections we saw that private schools, both nationally and in the greater Bloomingdale area, tend to experience enrollment losses between kindergarten and the first grade. This pattern is reversed at Bloomingdale School District 13.

Figure 2 depicts average enrollment by grade (kindergarten through fifth grade) from 2015 to 2019. These years correspond to the pre-COVID years discussed above for the private schools analyses. From this chart it may be observed that, on average, there tends to be a sizable difference between

kindergarten and first-grade class sizes (around 20 students pre-COVID and 19 students the past two years) and, while mean class sizes from first grade to fifth grade tend to increase slightly, the differences are considerably smaller. Note that these are within-year comparisons, which mask the effect of cohorts progressing through the grades over the years. However, this is more comparable with the presentations above using NCES private school data.

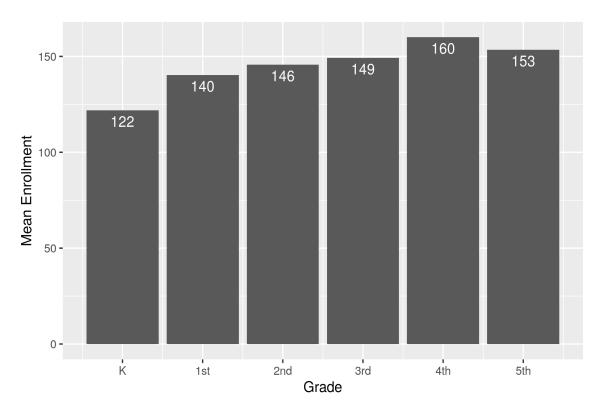


Figure 2. District 13 Mean Annual Enrollment by Grade (pre-COVID)

# Net Annual Student Migration/Transfer

In the two decades since 2002, annual first-grade class sizes in Bloomingdale School District 13 have been consistently larger than the preceding year's kindergarten class sizes, with the single exception being from fall 2018 to fall 2019. Again, focusing on the pre-COVID years of 2015 to 2019, Figure 3 reveals relatively large average positive net student migration/transfer between kindergarten and the first grade (20.4) compared with the relatively smaller migration/transfer figures of the remaining grade transitions.

As noted, during the same time frame, the combined Bloomingdale area private schools listed above experienced an average kindergarten to first-grade loss of 17 children. This leaves roughly three or four kindergarten children, on average, unaccounted for annually who either transfer from area private daycare (or private schools not included in this study) to District 13 who or move into the District 13 attendance area from outside the district. Because of the generally positive net student migration/transfer values among the higher-grade transitions (1st to 2nd grade through 4th to 5th grade), it is reasonable to assume that some of these unaccounted-for kindergarten to first-grade students are children in-migrating from outside the District 13 attendance area rather transfers from area private daycare (or other area private schools).

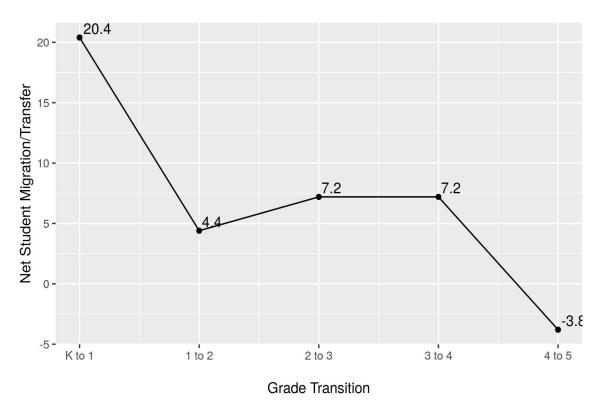


Figure 3. District 13 Mean Net Annual Student Migration/Transfer (pre-COVID)

#### **Cohort Retention Rates**

Analogous to net annual student migration/transfer, cohort retention ratios indicate the year-to-year proportional or rate of change in enrollment between adjacent grade levels. Figure 4 shows the mean retention ratios for grade transitions kindergarten to first grade through fourth grade to fifth grade for the same pre-COVID years 2015 to 2019 at District 13. Naturally, the retention ratios follow a similar pattern as net student migration/transfer; however, since the retention ratios are expressed as proportions, they are more comparable with the NCES PSS data when also expressed as percent enrollment differences grade-to-grade; albeit only roughly because the NCES survey is not taken every year.

Limitations of this distinction should remain present for the following discussion.

Recall from the previous discussion of the NCES PSS data that the mean within-year enrollment difference between kindergarten and first grade for all types of private schools was 79.2 percent (a net loss). In contrast, the mean kindergarten to first grade retention ratio at District 13 for the same time period was 117.3 percent (a net gain). The reciprocal of 117.3 percent is 85 percent, which is closer the NCES kindergarten versus first-grade enrollment value of 84.3 percent for "other religious" schools than to the "total" mean of 79.2. Likewise, the reciprocals of the retention ratios for the other grade transitions at District 13 closely mirror the NCES PSS within-year grade-over-grade percent differences for "other religious" schools. This is not surprising given the composition of the private-school landscape in the District 13 area and the relative distance to the nearest Catholic school.

While national grade-over-grade trends in the NCES PSS data roughly inversely mirrored retention ratio trends at District 13, retention ratios trends for the combined selected private schools in the Bloomingdale area do so to a lesser degree, especially between kindergarten and first grade. However, the same basic pattern of large differences between kindergarten and first grade followed by much smaller differences between the adjacent higher grades remains. (Some of this discrepancy may be accounted for by area private schools for which there

were insufficient enrollment data for analysis and the several private daycare facilities in the area that serve kindergarten-age children, as well as migration of families with school-age children.)

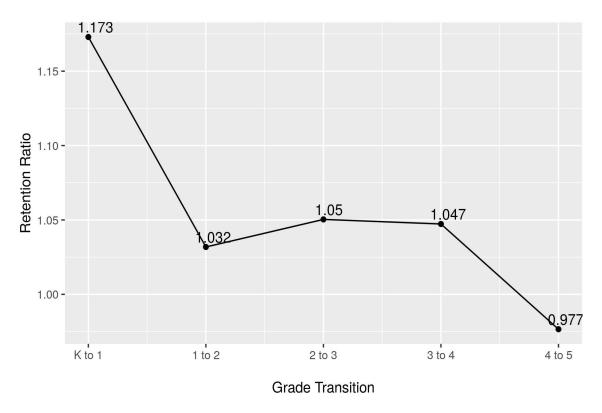


Figure 4. District 13 Mean Retention Ratios (pre-COVID)

# Impact Potential on Future Kindergarten Enrollment from Offering Full-Day Classes at District 13

According to the NCES survey, nationwide the overwhelming majority of private schools that serve kindergarten-age children offer either full-day or full-day and half-day classes. Similarly, the selected Bloomingdale area private schools listed above offer either full-day or both full-day and half-day

kindergarten classes, as do most of the other area private schools that were not directly included in this study due to insufficient enrollment history data.

When District 13 offers full-day kindergarten it will undoubtedly attract a proportion of kindergarten-age children from the area's private schools and daycare centers. The critical question is, how many? To answer this question, it is important to understand why parents enroll their kindergarten-age children in private school or daycare.

Parents choose to enroll their children in private school for manifold reasons<sup>4</sup>. Among the key reasons addressed here are the desire for a faith-based education, specific curriculum or environment, and the need for daycare, especially in preschool and kindergarten. These factors are not mutually exclusive, as we shall see, but can carry different weights when first deciding to enroll a child in private kindergarten versus continuing to enroll the child in private school over the succeeding grades.

As illustrated previously from the NCES private school survey data, there tend to be notable enrollment loses between kindergarten and first grade for all type of private schools. Catholic schools experience the smallest losses followed by other type of religious schools. Much larger loses between kindergarten and

<sup>4</sup> Davis, Ava M. 2011. Why Do Parents Choose to Send Their Children To Private Schools? Electronic Theses and Dissertations. 382. Available at https://digitalcommons.georgiasouthern.edu/etd/382

first grade tend to occur on average at nonsecular private schools at the national level.

To reiterate once more, after the first grade, cohort retention rates tend to stabilize close to unity in private schools. Recalling that most private elementary schools offer full-day kindergarten, this suggests that the availability of full-day kindergarten is a motivating factor for a significant number of parents when electing to enroll their kindergarten-age children in private school. The relatively smaller loses between kindergarten and first grade at the religious schools compared with loses at the nonsecular private schools suggests that, at the national level, the desire for a faith-based education tends to be a stronger motivating factor than the specific curriculum or environment offered at nonsecular private schools. (Though not shown here, deviations from this trend in retention stability may occur at the grade-level transitions between elementary school and middle school or middle school and high school.)

Turning to the Bloomingdale area, we showed that among the religious private schools, the Catholic schools also tend to experience kindergarten to first grade losses smaller or on par with losses at other religious private schools. As noted previously, in terms of enrollment counts, these Bloomingdale area religious schools tended to lose a combined 14 students on average between kindergarten and the first grade before COVID-19.

Regrettably, there were not sufficient historical enrollment data for the nonsecular private schools in the Bloomingdale area identified in this study to make reliable statements about enrollment gains or losses between kindergarten and the first grade, as well as possible key motivating factors for parents electing to enroll their children at these schools. However, looking specifically at Sunrise Montessori Academy, given the comparatively small number children enrolled at this school, the nature of its educational philosophy, and its distance, this private school is unlikely to be a significant source of potential additional full-day kindergarten students.

Based on the analysis above, when Bloomingdale School District 13 implements full-day kindergarten, it certainly will attract kindergarten-age children who would have otherwise attended one of the area's private (including parochial) schools or private daycare. In terms of numbers, the largest impact will be from the area non-Catholic religious schools, followed by the Catholic schools. District 13 may also attract a very small number of kindergarten-age children from area nonsecular private schools. While enrollment-trend data are not available for area private daycare centers, comparison of historical kindergarten to first grade losses at the private schools with kindergarten to first grade gains at District 13 reveal the potential for smaller but perhaps not insignificant kindergarten enrollment gains at District 13 from private daycare.

## Total Kindergarten Enrollment Estimates with Full-Day Option

To assess the potential impact on enrollment at District 13 by offering full-day kindergarten, we have analyzed annual grade-by-grade enrollment trends at the national level from surveys of private schools by the National Center for Education Statistics. Likewise, we analyzed annual grade-by-grade enrollment trends at selected private and parochial schools that offer kindergarten classes in the greater Bloomingdale area using available historical enrollment data of private schools that are registered with the Illinois State Board of Education. In addition, we reviewed the availability of private daycare for kindergarten-age children in DuPage County based on daycare centers licensed with the State of Illinois, as well as trends in public-school and private-school enrollment for the District 13 area, and area population age composition using data from the Bureau of the Census America Community Survey. (Summary tables from America Community Survey are provided in Appendix B.) We then compared these analyses with historical enrollment trends at District 13, along with the recent (April 2023) enrollment projections for the district, to estimate the likely numbers of additional kindergarten students to expect over the coming decade on a yearby-year basis when the district begins offering full-day kindergarten classes.

Before elaborating the forecasts, it is important to stress that we are in extraordinary and uncharted times making the estimation of future year-by-year kindergarten enrollments very risky. Complicating the analyses were the impacts

of COVID-19 on enrollment in recent at Bloomingdale School District 13, especially on kindergarten enrollment in school year 2020–21.

Independent national research done on the impact of COVID-19 on 2020-21 enrollment revealed that impacts were greatest in school districts where in-class instruction was halted for extended periods and that most of the drops in enrollment could be attributed to more students being home schooled or transferring from public schools to private and parochial schools which offered in-person instruction. Additionally, it was found that declines in both pre-K and kindergarten enrollment resulted from many families opting out of remote learning at public schools in these non-compulsory grades and either home schooling or choosing other education means which offered in-person instruction. For these reasons, the preceding analyses and discussions focused on pre-COVID trends with the assumption that, with the easing of COVID restrictions, matriculation patterns in the Bloomingdale area will again approach those before the pandemic (the addition of full-day kindergarten at District 13 notwithstanding).

In producing the following future kindergarten estimates, we also assumed that increases in kindergarten enrollment resulting from offering full-day classes will be essentially instantaneous. This assumption is based on observations at other school districts in Northern Illinois that have introduced full-day kindergarten classes in recent years. Note, however, that these observations are

anecdotal and may not generalize to District 13, which adds further risk to the annual estimates.

As was done with the recent projections for District 13 under status quo conditions, estimates of kindergarten enrollment incorporating full-day classes will be presented in the form of separate series based on the following assumptions:

Series A

Total SD 13 kindergarten enrollment estimates assuming the district commences offering full-day kindergarten classes in fall 2023, annual resident births remain near present levels (through 2027) and that housing development, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools *are less than anticipated* through 2032–33;

Series B

Total SD 13 kindergarten enrollment estimates assuming the district commences offering full-day kindergarten classes in fall 2023, annual resident births remain near present levels (through 2027) and that housing development, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools *occur as anticipated* through 2032–33;

Series C

Total SD 13 kindergarten enrollment estimates assuming the district commences offering full-day kindergarten classes in fall 2023, annual resident births remain near present levels (through 2027) and that housing development, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools *are greater than anticipated* through 2032–33.

Tables 7, 8 and 9 present the annual total numbers of additional kindergarten students to anticipate at District 13 under the three series of assumptions, as well status quo kindergarten enrollment projections and the combined totals. Our assumption is that District 13 will retain all estimated half-day kindergarten students as either full-day or optionally half-day students (shown here as status quo) from the April 2023 report should full-day kindergarten classes commence as planned in fall 2023.

Based on our analyses of national, state and local data we assembled, should student in-migration and transfer from private and parochial schools be less than anticipated (Series A, low estimates), Table 7 shows that kindergarten enrollment should increase above status quo levels by 14 students in school year 2023–24, move up to 15 additional kindergarten students annually by 2026–27 and then stabilize just above that number through 2032–33. If student in-migration and transfer from private and parochial schools occur as anticipated (Series B, the most likely series in our opinion), Table 8 reveals kindergarten enrollment should increase above status quo levels by 20 students in school year 2023–24 and fluctuate between 20 and 22 students through school year 2032–33. Should student in-migration and transfer from private and parochial schools be greater than anticipated (Series C, high estimates), kindergarten enrollment should increase above status quo levels by 26 students in school year 2023–24 then

inconsistently climb to 29 additional kindergarten students on average above the status quo by 2030–31 and roughly stabilize neat that number.

Table 7.

Total SD 13 Kindergarten Enrollment Estimates Assuming the District Commences Offering Full-day Kindergarten in Fall 2023, Annual Resident Births Remain near Present Levels (through 2027) and that Housing Development, Housing Turnover and Resulting In-Migration of Families with Preschool-Age and School-Age Children, and Transfer from Private and Parochial Schools *Are Less than Anticipated* through 2032–33

School Year	Status Quo	Additional K	Total K
2022–23	94	0	94
2023–24	102	14	116
2024–25	105	14	119
2025–26	102	14	116
2026–27	112	15	127
2027–28	107	15	122
2028–29	110	16	126
2029–30	108	15	123
2030–31	110	16	126
2031–32	108	15	123
2032–33	109	16	125

Table 8.

Total SD 13 Kindergarten Enrollment Estimates Assuming the District Commences Offering Full-day Kindergarten in Fall 2023, Annual Resident Births Remain near Present Levels (through 2027) and that Housing Development, Housing Turnover and Resulting In-Migration of Families with Preschool-Age and School-Age Children, and Transfer from Private and Parochial Schools Occur as Anticipated through 2032–33

School Year	Status Quo	Additional K	Total K
2022–23	94	0	94
2023–24	119	20	139
2024–25	123	21	144
2025–26	118	20	138
2026–27	128	21	149
2027–28	123	21	144
2028–29	126	22	148
2029–30	123	21	144
2030–31	125	22	147
2031–32	124	21	145
2032–33	126	22	148

Table 9.

Total SD 13 Kindergarten Enrollment Estimates Assuming the District Commences Offering Full-day Kindergarten in Fall 2023, Annual Resident Births Remain near Present Levels (through 2027) and that Housing Development, Housing Turnover and Resulting In-Migration of Families with Preschool-Age and School-Age Children, and Transfer from Private and Parochial Schools *Are Greater than Anticipated* through 2032–33

School Year	Status Quo	Additional K	Total K
2022–23	94	0	94
2023–24	134	26	160
2024–25	137	27	164
2025–26	133	26	159
2026–27	143	27	170
2027–28	140	27	167
2028–29	144	28	172
2029–30	142	28	170
2030–31	144	29	173
2031–32	143	28	171
2032–33	145	29	174

#### Part II.

# District-wide and Individual School Enrollment Projections under the Assumption that a Full-Day Kindergarten Program Commences in Fall 2023

Building on the analyses in Part I, this part commences with a geo-spatial and capacity analysis of Bloomingdale area private (including parochial) schools and daycare providers for both District 13 elementary schools' attendance areas. This analysis is used to estimate the relative influence each private school and daycare center might have on kindergarten enrollment at District's 13's two elementary schools, and particularly from which of District 13 elementary school attendance areas these private schools and daycare providers likely attract kindergarten-age children.

The geo-spatial and capacity analysis is followed by a comparative study of grade-to-grade student retention rate trends at both District 13 elementary schools. These annual grade-to-grade retention rate trend analyses are used to estimate and account for the effect of migration of families with younger, schoolage children to or from the elementary schools' attendance areas and its contribution to annual enrollment change, especially between kindergarten and the first grade.

Lastly, we synthesize the geo-spatial and capacity analyses and the retention trends analyses for both District 13 elementary schools with the enrollment kindergarten projections from Part I of this report to produce grade-by-grade, year-by-year enrollment projections for both District 13 elementary schools through school year 2027–28, and the middle school and District 13 as a whole though school year 2032–33 contingent on District 13 offing full-day kindergarten classes beginning in fall 2023.

# **Geo-spatial Analysis of District 13 Area Private Schools and Daycare Centers**

Unlike public school districts and their individual schools, private schools and daycare centers tend not have well-defined attendance boundaries. Hence, it is difficult to ascertain with any confidence to which public school a child otherwise attending a particular private (including parochial) school or daycare center might transfer were full-day kindergarten offered at the public school. To address this challenge, we invoke Tobler's first law of geography: *everything is related to everything else, but near things are more related than distant things.*<sup>5</sup> Similar to the effect of gravity, interactions or relationships between two separate locations tend to decay inversely with distance. In this study, it is assumed that the nearer a private school or daycare center is to any given District 13

<sup>5</sup> Tobler W. R. (1970) "A Computer Movie Simulating Urban Growth in the Detroit Region", Economic Geography, 46 (Supplement): 234-240.

elementary school, the greater its tendency is to attract children from that elementary school's attendance area.

For both of the two elementary schools in District 13, the geo-spatial relations between the elementary school and the identified private schools and daycare providers in the greater Bloomingdale area are examined. These distance relations are combined with historical enrollment trends at the area private schools and data on ages served and capacities at the private daycare facilities to assess the impact these private facilities likely currently have on kindergarten enrollment at District 13's elementary schools and the relative potential for increased kindergarten class sizes should District 13 commence full-day kindergarten classes in the 2023–24 school year.

#### **DuJardin School**

Staring at the southeastern-most portion of District 13, we examine the spatial relationships between DuJardin Elementary School and the identified Bloomingdale area private schools and daycare centers. This discussion of DuJardin will go into greater detail than Erickson Elementary School since the methodology also applies to Erickson.

Figure 5 maps the locations of each identified private school and daycare provider along with displaying the attendance boundaries of District 13's two elementary schools. To provide a sense of distance, three-mile and five-mail

radius buffers are placed around the district's two elementary schools.

Combined with data on enrollment trends or enrollment capacity and ages served at each private school or daycare provider (Table 10), the distances impart a rough indication of the relative degree these private schools and daycare centers potentially attract kindergarten-age children from each of District 13's elementary school attendance areas.

From this map one may observe that the majority of area private schools and daycare centers are outside the DuJardin attendance area (some most likely drawing predominantly from outside of District 13) or share proximity with and likely draw from Erickson, as well. In fact, only one, small, registered daycare provider is sited within the DuJardin attendance area. There are, however, a number of daycare providers just south of DuJardin's attendance area, including the two larger Kindercare Learning Center and one Tutor Time Child Care Learning Center. While within Erickson's attendance area, there is another large Tutor Time Child Care Learning Center just over a mile and a half to the northwest of DuJardin. Additionally, all of the parochial schools included in this study are within three miles of the DuJardin attendance area. Closest of these are Trinity Lutheran School and St Walter School, both to the north of the district. St Walter School, as we have seen, tends to lose only 6.5 percent of its students, on average, between kindergarten and the first grade. Trinity Lutheran, on the other hand, exhibits annual kindergarten to first-grade losses of roughly 15 percent. It

should be kept in mind that not all students leaving these two parochial schools will transfer to District 13 nor will all those that do transfer be to DuJardin. In fact, both of these parochial schools (sited outside District 13 boundaries) are slightly closer to Erickson Elementary School. Two and a half miles south of DuJardin, St Matthew School experiences even larger annual kindergarten to first-grade losses of around 20 percent on average.

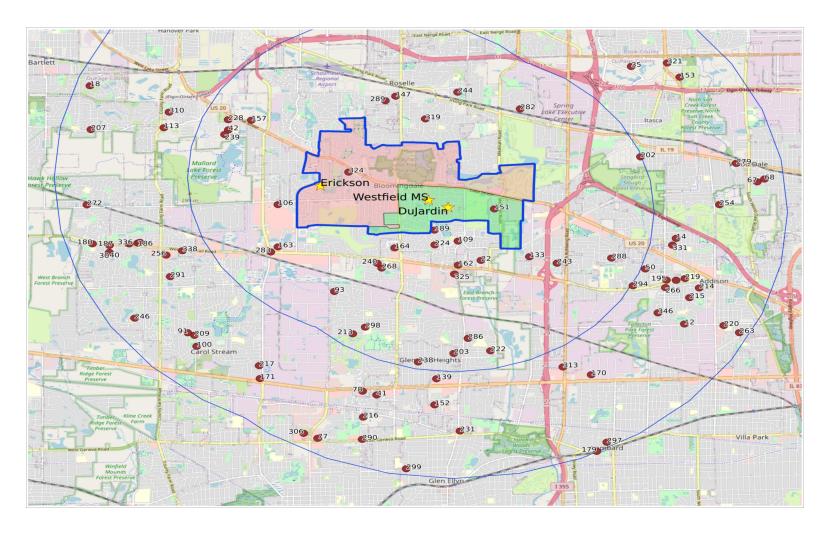


Figure 5. Locations of Private Schools and Daycare Centers in DuPage County within Three and Five Miles of a District 13 Elementary School

The map in Figure 5 allows for a sense of the spatial relations between District 13's elementary schools and the area's private schools and daycare centers at a macro level. Continuing with the examination of DuJardin, in addition to serving as a key, Table 10 builds on that map, providing the distances in increasing order from the geographic center (centroid) of the DuJardin attendance area to each area private/parochial school and daycare provider, the names of the private schools or daycare centers, and the map ID reference numbers. This table also includes the ages served and capacities of the daycare providers<sup>6</sup>. As an example, the nearest large daycare facility, Good Shepherd Catholic Day Care Center (map ID 109), is located approximately 0.6 miles from the geographic centroid of the DuJardin attendance area.

The geographic centroid represents the average position of all the points within an elementary school attendance area. The reason for computing the geographic centroid of both District 13 elementary school attendance areas is that it is not possible to know the home addresses of each child enrolled in private school or daycare. As such, one cannot specify with certainty which District 13 elementary school a child (who otherwise would have attended private school or daycare) would attend should the parents elect to enroll their child in District 13 full-day kindergarten. The elementary school attendance area centroids serve as

<sup>6</sup> Capacity at the parochial schools represents total enrollment as reported by the Illinois State Board of Education for the 2021–22 school year; the latest year available.

an average home address for the purpose of computing distances to area private schools and daycare centers.

Table 10.

Select Characteristics of Area Public Schools and Daycare Centers and within 5 Miles Distance from DuJardin Elementary School

DISTANCE (miles)	SCHOOL / DAYCARE	MAP ID	AGES	CAPACITY
0.5	Lawrence, Christina D		0 TO 12Y	6
0.6	Good Shepherd Catholic Day Care Center		2Y TO 6Y	75
0.7	Khan, Susan	151	0 TO 12Y	12
0.7	Mfs-Winnebago-Pfa	224	3Y TO 5Y	20
1.1	Kindercare Learning Center #000011	162	6W TO 12Y	107
1.1	Kindercare Learning Center #000315	164	6W TO 12Y	141
1.1	Begum, Meher S	22	0 TO 12Y	8
1.2	Tutor Time Child Care Learning Center	325	6W TO 12Y	123
1.5	Navar, Antonia	240	6W TO 12Y	8
1.5	Salahuddin, Mujeeb F	268	6W TO 12Y	8
1.5	Hurtado, Maria E	133	0 TO 12Y	12
1.6	Tutor Time Child Care Learning Center	324	6W TO 12Y	145
1.7	Trinity Lutheran School	319	_	194
1.9	Ontiveros, Guadalupe	243	0 TO 12Y	8
2.1	Sobota, Justyna	282	0 TO 12Y	6
2.2	Orzechowski, Andrew	244	0 TO 12Y	12
2.2	St Walter School	289	_	406
2.2	Kent, Kathy A	147	6W TO 12Y	12
2.3	Ewald-Brandle, Jill M	93	0 TO 12Y	12
2.5	St Matthew School	286	_	142
2.5	Goddard School/Early Childhood Development	106	6W TO 12Y	138
2.6	Teuthorn, Rocio A	298	0 TO 12Y	12
2.6	St Philip The Apostle School	288	_	235
2.7	Kindercare Learning Center #000042	163	6W TO 12Y	103
2.7	Macias, Diana G	203	6W TO 12Y	7
2.8	Mfs-Hall Elementary - Preschool For All	222	3Y TO 5Y	40
2.8	Mendoza, Dora	213	0 TO 12Y	7
2.8	St Isidore School	283	_	212
2.9	Murillo, Yaneli	238	0 TO 12Y	6
3.0	Lutheran School Of St Luke	202	_	94
3.1	Sunrise Montessori Academy	294	_	13
3.2	Capo, Ada T	50	0 TO 12Y	12
3.2	Johnson, Roshel	139	0 TO 12Y	6
3.4	Kids Island Adventures	157	2Y TO 12Y	135
3.4	Villegas, Maria G	331	0 TO 12Y	8
3.4	Tle At Addison Llc	313	6W TO 5Y	118
3.5	Arzeta, Maria Y	14	0 TO 12Y	7
3.5	Little Prince Day Care Ii, Llc	195	6W TO 12Y	142
3.6	Ruiz Conejo, Blanca E	266	0 TO 12Y	8

DISTANCE (miles)	SCHOOL / DAYCARE	MAP ID	AGES	CAPACITY
3.6	Bullocks, Joyce A		0 TO 12Y	8
3.6	Nava, Rocio		0 TO 12Y	12
3.7	Buliox, Vernea		0 TO 12Y	8
3.7	Dellapolla, Laura A	78	0 TO 12Y	8
3.7	Rios, Maria Del C	265	0 TO 12Y	12
3.7	Mini Steps	228	6W TO 12Y	74
3.7	Khoraishi, Fatima	152	30M TO 12Y	8
3.7	Zebrowski, Anna M	346	0 TO 12Y	8
3.8	Metropolitan Family Services	219	3Y TO 5Y	39
3.8	Kindercare Learning Center 000026	170	6W TO 12Y	145
3.8	Bright Horizons Child Care And Early Lea	35	6W TO 12Y	112
4.0	Mendoza, Raquel	215	0 TO 12Y	8
4.1	Mendoza, Graciela	214	0 TO 12Y	8
4.1	Wilson, Sharese S	338	0 TO 12Y	11
4.1	Pixie & Dixie Day Care Ctr Inc	254	15M TO 12Y	87
4.1	Metropolitan Fam Srvs St Andrews	217	3Y TO 5Y	40
4.1	Metropolitan Fam Srvs Outreach Community	216	3Y TO 5Y	20
4.2	Arellano, Maria	12	0 TO 12Y	12
4.2	Montessori Academy Of Glen Ellyn	231	2Y TO 3Y	15
4.2	Kiddie Academy	153	6W TO 12Y	139
4.3	Tt Acquisition Llc	321	6W TO 12Y	144
4.3	Kindercare Learning Center 000171	171	6W TO 12Y	120
4.3	Primrose School Of Carol Stream	256	6W TO 12Y	186
4.4	Stich, Sandy	291	0 TO 12Y	8
4.4	Simba Child Care Center	279	15M TO 12Y	54
4.5	Master's Christian Pre-School	209	3Y TO 5Y	37
4.5	Greenbrook Montessori School	113	15M TO 3Y	28
4.5	Stepping Stones Early Childhood Center	290	6W TO 12Y	48
4.5	Thomas, Cynthia D	310	0 TO 12Y	8
4.5	Espinoza, Nathaly	91	0 TO 12Y	7
4.6	Frank, Margaret E	100	0 TO 12Y	8
4.7	Cortez, Debbie V	67	0 TO 12Y	7
4.7	Rhodes, Sheena P	264	0 TO 12Y	6
4.7	Metropolitan Family Services Addison Chi	220	6W TO 3Y	50
4.7	Kouvelis, Clea L	186	0 TO 12Y	8
4.7	Daylight Learning Center	77	6W TO 12Y	49
4.7	The Goddard School	306	6W TO 12Y	139
4.8	Cortez, Edith	68	0 TO 12Y	12
4.8	Walls, Jean F	336	0 TO 12Y	12
4.9	The Ark Preschool	299	2Y TO 6Y	60
5.0	Reyes, Alma I	263	0 TO 12Y	12
5.0	Tender Loving Care Professional	297	15M TO 5Y	40

Using the distances between greater District 13 area private/parochial schools and private daycare centers, we can identify "clusters" of facilities that are geographically similar (i.e., within a particular cluster) while being geographically dissimilar from facilities in other clusters. Figure 6 illustrates this for the area private schools and daycare centers. The number of clusters is not inherently fixed but depends on the *distance threshold* selected. For example, if the distance threshold is set to zero miles, each individual school or daycare center will be identified as a unique, trivial cluster; that is, the number of clusters will equal the number of schools and daycare centers. At the other extreme, if the distance threshold is set to a very large distance encompassing the entire study area, all the schools and daycare centers will be identified as belonging to a single cluster (i.e., the number of clusters will be one).

One goal of cluster analysis is to determine the optimal number of clusters that best groups like items while separating dissimilar items. The six identified clusters of private/parochial schools and daycare centers in Figure 6 approach that goal for the purpose of this study. These clusters roughly group daycare facilities, and private and parochial schools that share similar proximity to District 13, while separating those that are more geographically similar to surrounding area elementary school districts. Even though capture areas of the private/parochial facilities identified as members in each of these six clusters typically do not conform to public school district boundaries, these clusters aid in

identifying those private daycare facilities and private/parochial schools with more potential to draw kindergarten-age children residing within District 13 versus those more likely to draw kindergarten-age children from other nearby public schools districts.

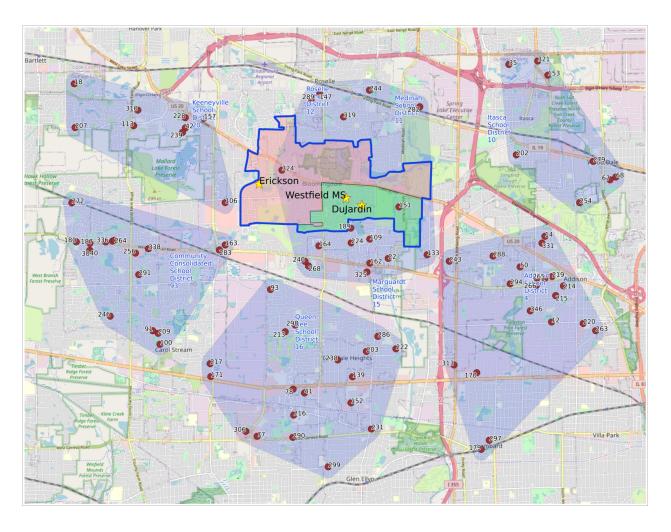


Figure 6. Private School and Daycare Centers Geographic Clusters in the District 13 Area

Continuing with DuJardin Elementary School, there are seventeen private/
parochial schools or private daycare facilities in the geographically nearest
(central) cluster, only one of which is actually within DuJardin's attendance area.

Nine of these are smaller daycare homes (DCH) or group daycare homes (GDC).

Additional COVID-19 restrictions notwithstanding, daycare homes are limited in
capacity by the State to eight children plus an additional four school-age children
with a caregiver assistant, whereas group daycare homes may accommodate up
to twelve children plus an additional four school-age children with a caregiver
assistant. These smaller daycare homes are not expected to attract significant
numbers of kindergarten-age students from District 13. The remaining members
in this central cluster are either parochial schools or private daycare centers
(DCC). Maximum capacity for daycare centers is determined by age-specific
minimum child-to-staff ratios and maximum group sizes.<sup>7</sup>

Larger members of this central cluster include Good Shepherd Catholic Day Care Center (map ID 109), Mfs-Winnebago-Pfa (224), two Kindercare Learning Centers (162 and 164), two Tutor Time Child Care Learning Centers (324 and 325), Trinity Lutheran School (319), and St Walter School (289). As will be discussed shortly, out-of-cluster private schools or daycare centers may still have an impact on enrollment at DuJardin, especially religious schools.

<sup>7</sup> Illinois Department of Children & Family Services. https://sunshine.dcfs.illinois.gov/Content/Licensing/Welcome.aspx

The physically closest of larger private facilities, Good Shepherd Catholic Day Care Center (map ID 189), has a daytime capacity of 75 children ages two to six years. Given its direct proximity to DuJardin, its capacity, and the fact that it serves kindergarten-age children, a small number of kindergarten students who otherwise would have enrolled at this daycare center can reasonably be expected to enroll instead at DuJardin should District 13 introduce full-day kindergarten.

The next closest private daycare center in this cluster is Mfs-Winnebago-Pfa (224). Located just south the district and with a total capacity of only 20 three- to five-year-old children, this facility presents trivial opportunity in terms of numbers of kindergarten students likely attracted by the introduction of full-day classes at DuJardin (and possibly to Erickson).

The two Kindercare Learning Centers (162 and 164) are located just over a mile south from the center of DuJardin's attendance area. Both of these daycare centers serve kindergarten-age children and boast daytime capacities of over 100 children. Likewise, the two nearby Tutor Time Child Care Learning Centers (324 and 325) serve kindergarten-age children and report daytime capacities well over 100. One of these centers one (map ID 325) located about a mile south of DuJardin while the other (map ID 324) is located about a mile and a half away within Erickson's attendance area. Though not a member of this central cluster, Goddard School (map ID 106) is located under three miles west from the center of DuJardin's attendance area. With a daytime capacity of well over 100,

Goddard School also serves kindergarten-age children. Among the area's private daycare providers, these five daycare centers (DCC) taken together represent the greatest likely draw from DuJardin of kindergarten-age children whose families seek full-day daycare.

Turning to the religious schools, the two nearest to DuJardin are Trinity Lutheran School (map ID 319) and St Walter School (289). Although both being physically located outside of District 13 and to the north of Erickson, these two religious schools are potential sources for additional full-day kindergarten students at DuJardin who otherwise would have attended these two parochial schools. Despite St Walter School having reported total enrollments more than twice that of Trinity Lutheran School, St Walter School also has higher mean kindergarten to first-grade retention rates, suggesting both schools lose approximately the same number of children between kindergarten and the first grade. Based on mean retention rates and recent enrollments, these two parochial schools combined tend to lose between three and nine, and typically about six students between kindergarten and first grade. Not all of the children should be expected to transfer to DuJardin, however. Some likely also transfer to Erickson, as well as neighboring public school districts.

Other, more distant religious schools may also be drawing a small number of children from the DuJardin attendance area, particularly St Matthew. This is because religious schools tend to have less steep matriculation decay rates with distance than other types of private school.

Considering the relative distances to area private/parochial schools and daycare centers, the student capacities at those facilities, and the fact that some of the relatively larger private facilities in this cluster likely draw predominately from outside of DuJardin attendance area, DuJardin should expect to see an increase in kindergarten enrollment by the introduction of full-day kindergarten classes that is quite close to or slightly less than that experienced at Erickson Elementary School. The specific impact in terms of the annual numbers of additional kindergarten students to expect at DuJardin will be addressed later in this report.

### Erickson Elementary School

Located directly north and west of DuJardin, Erickson Elementary School shares similar proximity to many of same private and parochial schools and daycare centers, albeit not in the same distance order. The nearest daycare provider, Tutor Time Child Care Learning Center (map ID 324), is a large daycare center (DCC) serving children ages six weeks to twelve years. With a capacity of 145 children (see Table 11) and being physically within the Erickson attendance, this daycare center likely draws kindergarten-age children from the Erickson attendance area.

Just outside of Erickson's attendance area, Goddard School/Early

Childhood Development (map ID 106) is not a member of the nearest (central)

cluster of daycare providers and private/parochial schools (see Figure 6).

Nonetheless, as a large daycare center with a capacity of nearly 140 children ages six weeks to twelve years, Goddard School is quite close to Erickson Elementary

School and likely draws kindergarten-age children whose families residing in the Erickson attendance area seek full-day daycare.

Two Kindercare Learning Centers (map IDs 163 and 164) are both larger daycare centers with capacities of 103 and 143, respectively, and serve children ages six weeks to twelve years. The smaller Kindercare Learning Center (163), while not in the central cluster of daycare providers and private/parochial schools, is closer to Erickson than the other one (164) and may also draw kindergarten-age children from the Erickson attendance.

Also outside of Erickson's attendance area and not members of the central cluster, Kids Island Adventures (map ID 157) and Mini Steps (228), with capacities of 135 and 75 children, respectively, both serve kindergarten-age children. Both of these daycare centers have potential to draw small numbers children from the Erickson attendance area; however, they are closer to School District 20.

Rounding out the private daycare centers in relatively close proximity to Erickson Elementary School are three that likely draw more from DuJardin, but

given their sizes, may also attract kindergarten-age children from the Erickson attendance area. These are Good Shepherd Catholic Day Care Center (map ID 109), Kindercare Learning Center (162), and Tutor Time Child Care Learning Center (325). These centers serve kindergarten-age children and have capacities of 75, 107, and 123 children, respectively.

Returning to the area's religious schools, St Isidore School (map ID 283), though not in the central cluster of private/parochial schools and daycare providers (see Figure 6), is just southwest of District 13 and is the nearest parochial school to Erickson Elementary. With a roughly 85 percent retention rate, St Isidro School experiences kindergarten to first-grade losses that are atypically large, percentage-wise, for Catholic schools at the national level. However, in terms of actual students, recent enrollment trends at St Isidore School indicate it loses only about three students annually, on average, between kindergarten and the first grade. Recent years have seen a slight reversal, with St Isidore School experiencing modest gains.

Following St Isidore School are St Walter School (289) and Trinity Lutheran School (319), both north of the district and roughly two miles from the center of Erickson's attendance area. As noted previously, St Walter School reports total enrollments more than twice that of Trinity Lutheran School; however, St Walter School also has higher mean kindergarten to first-grade retention rates. As such, both schools lose approximately the same number of children between

kindergarten and the first grade, for a combined annual loss of about six students on average.

Children who otherwise would have attended any of three of these religious schools represent potential additional full-day kindergarten students at Erickson should District 13 introduce full-day classes. In addition, other religious schools in the area may also be drawing small numbers of children from the Erickson attendance area. This is because, as described previously, religious schools tend to have less steep matriculation decay rates with distance than other types of private schools.

Considering the relative distances to area private and parochial schools and private daycare facilities, as well as the student capacities and those facilities, Erickson Elementary School should expect increases in kindergarten enrollment by the introduction of full-day classes that are slightly greater then increases expected at DuJardin Elementary School.

Table 11.

Select Characteristics of Area Public Schools and Daycare Centers and within 5 Miles Distance from Erickson Elementary School

DISTANCE (miles)	SCHOOL / DAYCARE	MAP ID	AGES	CAPACITY
0.5	Tutor Time Child Care Learning Center		6W TO 12Y	145
0.7	Goddard School/Early Childhood Development		6W TO 12Y	138
1.3	Kindercare Learning Center #000042	163	6W TO 12Y	103
1.4	St Isidore School	283	_	212
1.6	Kindercare Learning Center #000315	164	6W TO 12Y	141
1.6	Kids Island Adventures	157	2Y TO 12Y	135
1.7	Navar, Antonia	240	6W TO 12Y	8
1.7	Nava, Rocio	239	0 TO 12Y	12
1.7	Bullocks, Joyce A	42	0 TO 12Y	8
1.8	Salahuddin, Mujeeb F	268	6W TO 12Y	8
1.9	Mini Steps	228	6W TO 12Y	74
1.9	St Walter School	289	<u> </u>	406
1.9	Lawrence, Christina D	189	0 TO 12Y	6
2.0	Ewald-Brandle, Jill M	93	0 TO 12Y	12
2.0	Trinity Lutheran School	319	_	194
2.0	Kent, Kathy A	147	6W TO 12Y	12
2.0	Mfs-Winnebago-Pfa	224	3Y TO 5Y	20
2.3	Good Shepherd Catholic Day Care Center	109	2Y TO 6Y	75
2.4	Wilson, Sharese S	338	0 TO 12Y	11
2.5	Kindercare Learning Center #000011	162	6W TO 12Y	107
2.6	Greenbrook Montessori School	113	15M TO 3Y	28
2.6	Tutor Time Child Care Learning Center	325	6W TO 12Y	123
2.6	Khan, Susan	151	0 TO 12Y	12
2.6	Primrose School Of Carol Stream	256	6W TO 12Y	186
2.7	Thomas, Cynthia D	310	0 TO 12Y	8
2.7	Orzechowski, Andrew	244	0 TO 12Y	12
2.7	Teuthorn, Rocio A	298	0 TO 12Y	12
2.8	Begum, Meher S	22	0 TO 12Y	8
2.8	Mendoza, Dora	213	0 TO 12Y	7
2.8	Stich, Sandy	291	0 TO 12Y	8
2.9	Rhodes, Sheena P	264	0 TO 12Y	6
2.9	Kouvelis, Clea L	186	0 TO 12Y	8
3.1	Walls, Jean F	336	0 TO 12Y	12
3.3	Sobota, Justyna	282	0 TO 12Y	6
3.3	Koverman, Bethany A	187	0 TO 12Y	7
3.4	Master's Christian Pre-School	209	3Y TO 5Y	37
3.4	Espinoza, Nathaly	91	0 TO 12Y	7
3.4	Brown, Patricia F	40	0 TO 12Y	8
3.4	Hurtado, Maria E	133	0 TO 12Y	12

DISTANCE (miles)	SCHOOL / DAYCARE	MAP ID	AGES	CAPACITY
3.4	Bos, Mary A		0 TO 12Y	8
3.5	Metropolitan Fam Srvs St Andrews	217	3Y TO 5Y	40
3.5	Schick's Crossing Preschool	272	2Y TO 5Y	32
3.5	Frank, Margaret E	100	0 TO 12Y	8
3.6	Kindercare Learning Ctr 301382	180	6W TO 12Y	102
3.6	Martinez, Edith O	207	0 TO 12Y	8
3.6	Murillo, Yaneli	238	0 TO 12Y	6
3.6	St Matthew School	286	_	142
3.7	Kindercare Learning Center 000171	171	6W TO 12Y	120
3.7	Macias, Diana G	203	6W TO 12Y	7
3.7	Pals Care Inc	246	6W TO 3Y	12
3.8	Ontiveros, Guadalupe	243	0 TO 12Y	8
3.9	Dellapolla, Laura A	78	0 TO 12Y	8
3.9	Balfe, Linda A	18	0 TO 12Y	8
4.0	Buliox, Vernea	41	0 TO 12Y	8
4.0	Mfs-Hall Elementary - Preschool For All	222	3Y TO 5Y	40
4.0	Johnson, Roshel	139	0 TO 12Y	6
4.4	Metropolitan Fam Srvs Outreach Community	216	3Y TO 5Y	20
4.4	Khoraishi, Fatima	152	30M TO 12Y	8
4.6	St Philip The Apostle School	288		235
4.6	Gebis, Debra S	102	0 TO 12Y	8
4.6	The Goddard School	306	6W TO 12Y	139
4.7	Daylight Learning Center	77	6W TO 12Y	49
4.8	Stepping Stones Early Childhood Center	290	6W TO 12Y	48
4.8	Lutheran School Of St Luke	202	<u>—</u>	94
4.9	Pauling, Tawney L	248	0 TO 12Y	10
5.0	Tle At Addison Llc	313	6W TO 5Y	118

## **Analysis of Student Retention Rate Trends**

In the first part of this report, we described how trends in enrollment losses between kindergarten each year and the first grade the following year at private and parochial schools complement trends in enrollment gains between kindergarten and the first grade at public schools, both at the national level and the District 13 area. To review briefly, for two decades, first-grade class sizes in Bloomingdale School District 13 have been mostly larger than the preceding year's kindergarten class sizes. Focusing on the five transition years prior to COVID-19, the mean retention rate between kindergarten and the first grade at District 13 was 117.3% (see Figure 7). In contrast, the average kindergarten to first-grade retention rate at the combined private/parochial schools in the Bloomingdale area was only 87 percent. At both District 13 and the combined area private schools, average retention rates for the higher grade-level transitions promptly approached roughly 100 percent, suggesting that the majority of annual kindergarten to first-grade enrollment changes were largely due to transfers to the first grade at District 13 from either local private schools or daycare centers rather than migration of families with elementary-school-age children to and from the District 13 area.

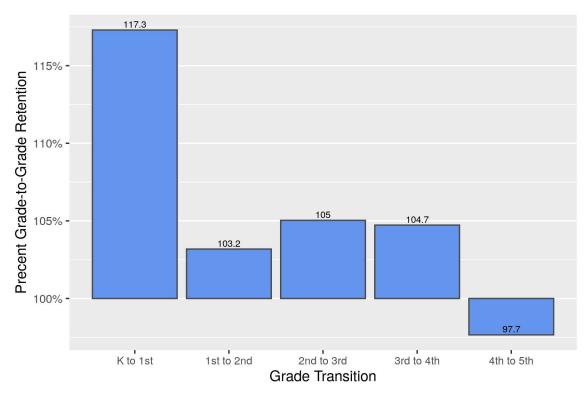


Figure 7. District 13 Mean retention rates (pre-COVID)

Also discussed in the first part of this report were the differences in kindergarten to first-grade retention rates by type of private school. Recall that, in the greater Bloomingdale area, two of the Catholic schools had the highest mean retention rates (roughly 94 to 95 percent), while the other Catholic schools experienced mean retention rates around 81 percent, which is lower than that at the other religious schools (roughly between 82 to 88 percent), bucking national trends. Annual age-level enrollment data were not available for the area's private daycare centers, making direct estimates of kindergarten-age children transfers from private daycare centers to the first grade at District 13 not possible. However, along with that from area private schools, the latent net impact of

kindergarten-age children transferring from private daycare centers to the first grade the following year at District 13 will be partially reflected in the kindergarten to first grade retention rates at the public elementary schools.

As discussed earlier, the relative degree each of the area's private schools and daycare centers might draw kindergarten-age children from District 13's elementary school attendance areas depends on a number for factors; among them the type of private school (e.g., Catholic, other religious, nonsectarian), the curriculum offered, daytime capacity and ages served, and the distance from each elementary school attendance area). In this section, we examine the mean pre-COVID-19 grade-to-grade retention rates at both District 13 elementary schools and assess the likely net effects private schools and daycare providers in the greater Bloomingdale area have had on kindergarten enrollment at both District 13 elementary schools, as well as evaluate the potential implication for future kindergarten class sizes if full-day kindergarten classes are offered at District 13 commencing in fall 2023.

## **DuJardin Elementary School**

Starting again at the southeastern portion of District 13, DuJardin Elementary School has experienced kindergarten to first-grade retention rates that fluctuated considerably, but remained at or above 100 percent in 16 of the past 20 transition years. In the five years before COVID, the mean kindergarten to first-grade

retention at this school was 116.9 percent. After dipping to only 98 percent between fall 2019 and fall 2020, kindergarten to first-grade retention at DuJardin has rebounded to near pre-COVID levels. DuJardin is also characterized as having mean retention rates over most of the higher grade-level transitions modestly above 100 percent, the exception being between the fourth and fifth grades.

Figure 8 presents the pre-COVID-19 mean retention rates at DuJardin Elementary School for grade transitions kindergarten to first grade through fourth grade to fifth grade. For comparison, mean retention rates for District 13 as a whole are also presented. Most noticeable is large difference between mean net student retention rates between kindergarten to first grade compared with retention rates of the higher-grade transitions. Also standing out is the lower mean fourth-grade to fifth-grade retention rate at DuJardin of just 96.2 percent; although this compares only slightly lower with the mean rate of the district (97.7%), which is being pulled up by Erickson.

The sizable net kindergarten to first-grade retention rate at DuJardin indicates that, percentage-wise, more children tend to either migrate into the DuJardin attendance area from outside the attendance area or transfer from private and parochial schools (including daycare providers) to DuJardin between kindergarten and the first grade than transfer from the DuJardin attendance area or transfer to area private and parochial schools. The question now becomes one

of assessing the degree to which migration and transfer each play a role in net kindergarten to first-grade retention. Notice also that retention rates for the higher-grade-level transitions (from the second grade onward) mostly indicate modest net student gains, with the exception, as noted, being between the fourth and fifth grades. These gains across the higher grade transitions, while inconsistent, are considerably lower than the mean gains observed between kindergarten to first-grade. This suggests that the majority of enrollment gains between kindergarten and the first grade at DuJardin can be accounted for by transfers from local area private and parochial schools or daycare centers; however, a small amount is also likely due to the in-migration of families with school-age children to the DuJardin attendance area.

Compared with District 13 as a whole, the somewhat lower kindergarten to first-grade retention rate at DuJardin, implies that, percentage-wise, slightly fewer children tend to either migrate into the DuJardin attendance area from outside the area or transfer from private and parochial schools or daycare centers to DuJardin between kindergarten and the first grade than for the district as a whole. Taking this into consideration, as well as the geo-spatial assessment of area private schools and daycare centers, DuJardin Elementary School may be expected to see annual additional full-day kindergarten student counts slightly less than at Erickson.

Table 12 provides the annual estimates of additional full-day kindergarten students to expect at DuJardin Elementary School from 2023–24 to 2027–28 under three series of assumptions based on District 13 commencing full-day kindergarten classes in 2023, as well as future fertility rates, new housing development, housing turnover and family migration to/from the DuJardin attendance area. These assumptions are elaborated later in the Enrollment Future section. Also shown in Table 12 are the annual status quo (without full-day classes) kindergarten projections for DuJardin and the total number of status quo and additional full-day kindergarten students combined.

Should student in-migration of families with younger school-age children and transfer from private schools and daycare centers be less than anticipated (Series A estimates) at DuJardin Elementary School, Table 12 shows that kindergarten enrollment should increase above status quo levels by five students in school year 2023–24 then edge up to six additional kindergarten students annually by 2026–27. If student in-migration and transfer from private schools and daycare centers occur as anticipated (Series B estimates, the most likely series in our opinion), Table 12 further reveals kindergarten enrollment should increase above status quo levels by nine students in school year 2023–24, rise to ten additional kindergarten the following year, and roughly stabilize near that number of students above the status quo through school year 2027–28. Should student in-migration and transfer from private schools and daycare centers be

greater than anticipated (Series C estimates) at DuJardin, kindergarten enrollment should increase above status quo levels by thirteen students in school year 2023–24 then climb to an additional fourteen kindergarten students on average above the status quo in 2024–25 and, again, roughly stabilize. Annual grade-by-grade projections incorporating these estimates of additional full-day kindergarten students are provided in the Enrollment Future section of this report.

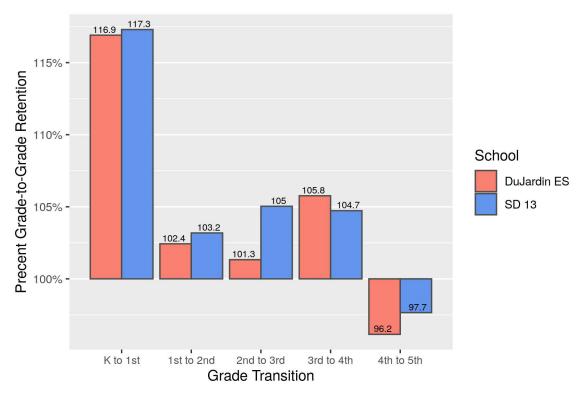


Figure 8. Mean retention Rates at DuJardin Elementary School versus the other District 13 Elementary School.

Kindergarten Enrollment Estimates for DuJardin Elementary School Assuming District 13 Commences Offering Full-day Kindergarten in 2023, under Series A, Series B, and Series C Assumptions through 2031–32

Table 12.

Series A Estimates					
School Year	Status Quo	Additional K	Total K		
2022–23	40	_	_		
2023–24	45	5	50		
2024–25	46	5	51		
2025–26	44	5	49		
2026–27	49	6	55		
2027–28	47	6	53		
	Series B L	Estimates			
School Year	Status Quo	Additional K	Total K		
2022–23	40	_	_		
2023–24	56	9	65		
2024–25	59	10	69		
2025–26	54	9	63		
2026–27	60	10	70		
2027–28	57	10	67		
Series C Estimates					
School Year	Status Quo	Additional K	Total K		
2022–23	40	_	_		
2023–24	62	13	75		
2024–25	64	14	78		
2025–26	61	13	74		
2026–27	66	14	80		
2027–28	65	14	79		

#### Erickson Elementary School

Erickson Elementary School, just northwest of DuJardin and sharing similar proximities to area private and parochial schools and daycare centers, experienced a slightly higher pre-COVID mean kindergarten to first-grade retention rate (117.7%) compared with the mean of the district (117.3%). Mean retention rates of successive grade-level transitions at Erickson, while mixed, also tended to be higher than those of the district as a whole, but much lower than the kindergarten to first-grade retention rate (see Figure 9). This suggests that transfers from area private schools and daycare centers to the first grade at Erickson are largely responsible for the kindergarten to first-grade gains at this school rather than migration of families with school-age children to the Erickson attendance area; however, in-migration of families with school-age children is also playing a slightly larger part.

Since the early 2000s, kindergarten to first-grade retention rates at Erickson have shown modest annual swings but little bias compared with the annual means of at DuJardin. In fact, before 2015, annual kindergarten to first-grade retention rates at the two elementary schools tended to complement each other, but, in more recent years, tending to follow each other closely.

Considering factors likely contributing to the relatively lower kindergarten to first-grade retention rates in recent years, such as the proximities and

compositions of nearby private schools and daycare centers, as well as its historically larger kindergarten class sizes, Erickson Elementary School may expect to see modestly larger annual additional numbers of full-day kindergarten students than will DuJardin. Table 13 provides the annual estimates of additional full-day kindergarten students to expect Erickson Elementary School from 2023–24 to 2027–28 under the three series of assumptions based on District 13 commencing full-day kindergarten classes in 2023, as well as future fertility rates, new housing development, housing turnover and family migration to/from the Erickson attendance area.

If in-migration of families with younger school-age children and transfer of students from private schools and daycare centers are lower than expected (Series A estimates) at Erickson Elementary School, Table 13 shows that kindergarten enrollment should increase above the status quo by seven students in school year 2023–24 and remain at that level through 2027–28. If in-migration and transfer of students from private schools and daycare centers occur as expected (series B estimates), Table 13 further reveals that kindergarten enrollment should increase above status quo levels by eleven students in school year 2023–24 and stabilize at the number of additional kindergarten students per year, on average, above the status quo thereafter. If, on the other hand, inmigration and transfer of students from private schools and daycare centers are higher than expected (C series estimates) at Erickson, kindergarten enrollment

should increase by fifteen students above the status quo in the 2023–24 school year and, again, remain that number of additional kindergarten students above the status quo through school year 2027–28. Detailed grade-by-grade annual enrollment projections incorporating these estimates of additional full-time kindergarten students are provided in the Future Entries section of this report.

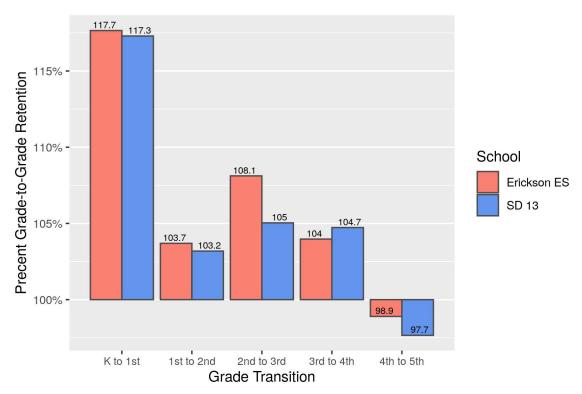


Figure 9. Mean retention Rates at Erickson Elementary School versus the other District 13 Elementary School.

Kindergarten Enrollment Estimates for Erickson Elementary School Assuming District 13 Commences Offering Full-day Kindergarten in 2023, under Series A, Series B, and Series C Assumptions through 2031–32

Table 13.

Series A Estimates					
School Year	Status Quo	Additional K	Total K		
2022–23	54	_	_		
2023–24	57	7	64		
2024–25	59	7	66		
2025–26	58	7	65		
2026–27	63	7	70		
2027–28	60	7	67		
	Series B I	Estimates			
School Year	Status Quo	Additional K	Total K		
2022–23	54	_	_		
2023–24	63	11	74		
2024–25	65	11	76		
2025–26	63	11	74		
2026–27	68	11	79		
2027–28	66	11	77		
Series C Estimates					
School Year	Status Quo	Additional K	Total K		
2022–23	54	_	_		
2023–24	72	15	87		
2024–25	74	15	89		
2025–26	72	15	87		
2026–27	77	15	92		
2027–28	74	15	89		

# Enrollment Future at Bloomingdale School District 13 and Its Individual Schools with Full-Day Kindergarten Option

Following on the first report<sup>8</sup>, the critical question, becomes, what exactly will happen to enrollment in District 13 and its individual schools over the coming years if full-day kindergarten classes commence in school year 2023–24? Which schools will be most impacted and by how much?

Our analysis of private (including parochial) schools and daycare centers in the Bloomingdale area, trends in annual grade-to-grade student retention rates, combined with analyses of kindergarten enrollments, housing turnover, student migration/transfer patterns, and enrollment projections in the report, point to a modest 47-student increase in District 13's total enrollment over the next five years, followed by slower growth and occasional minor annual declines totaling 42 students the following five years, for a net increase of 89 students during the coming decade. While Erickson is expected to see the larger increase in additional kindergarten students as a result of offering full-day kindergarten classes at District 13, DuJardin Elementary School is expected to experience the greater growth in total enrollment, adding around 25 students over the coming five years, whereas Erickson is expected, after a one-year drop, remain very close

<sup>8</sup> Kasarda, 2023. Op. Cit.

to its current enrollment. Before presenting and elaborating these projections for all District 13 individual schools, let us describe how they were derived.

Enrollment projections from the April 2023 report<sup>9</sup> served as baseline projections for this study. Methods for producing those projections and the factors underlying them are detailed in that report. Based on the geo-spatial analysis of private and parochial schools and daycare centers in the greater Bloomingdale areas, and the comparative analyses of annual grade-to-grade student retention rates at both of District 13's elementary schools, the annual district-wide estimates of additional kindergarten students to expect from implementing full-day classes were allocated to the individual elementary schools. Because the majority of these annual additional kindergarten students are expected to progress to the first grade the following year, the retention progressions used in the April 2023 study had to be revised.

Updated grade-to-grade retention progressions were estimated consulting the comparative analyses of annual grade-to-grade student retention rates at each school, again adjusting for likely impacts of in- and out-migration of families with school-age children to or from each elementary school attendance area. Adjusting for annual perturbations, especially during COVID-19, these revised retention progressions and additional kindergarten estimates were applied to the baseline projections to produce new, annual, grade-by-grade

<sup>9</sup> Kasarda 2023. Op. cit.

enrollment projections for District 13 and each school assuming full-day kindergarten classes will commence in fall 2023.

As mentioned in the previous report, pre-kindergarten classes are always difficult to forecast and experience with numerous districts in the Chicago suburban area suggests that their annual enrollment change is not correlated with any school district attribute and is often administratively set. For those reasons, and the fact that preschool precedes kindergarten, it will be assumed that any effect from implementing full-day kindergarten will be de minimis and, therefore, pre-K forecasts will remain unchanged from the first report.

As with the prior report, enrollment projections for District 13 and each school, incorporating the likely impacts of incorporating full-day classes, will be presented in the form of separate series based on the following assumptions:

- Series A District 13 commences offering full-day kindergarten classes in 2023, future fertility rates remain fairly stable (through 2027), housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools are less than currently anticipated through 2032–33;
- Series B District 13 commences offering full-day kindergarten classes in 2023, future fertility rates remain fairly stable (through 2027), housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools occur as currently anticipated through 2032–33;

Series C District 13 commences offering full-day kindergarten classes in 2023, future fertility rates remain fairly stable (through 2027), housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools are greater than currently anticipated through 2032–33.

Tables 14 through 22 present the annual grade-by-grade enrollment projections under the three series of assumptions for each of Bloomingdale School District 13's individual schools. Because the precise annual projected numbers for every school by grade may be observed in their respective tables, we will comment only on projected total enrollment trends at each school, focusing on Series B, which we believe to be the most likely.

If full-day kindergarten classes commence in 2023, future fertility rates remain fairly stable, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools occur as anticipated in each elementary school attendance area, the Series B projections (Table 15) show total enrollment at DuJardin Elementary School growing from 390 this past fall to 417 in school year 2026–27 and slightly dipping the following year. Total enrollment at Erickson (Table 18), which stood at 507 students in fall 2022, should still drop next school year to under 500 students, then rebound to 506 in 2025–26 and remain quite close to that figure through 2027–28.

Should the most likely Series B assumptions eventuate, after a one-year boost from 492 students in 2022–23 to 507 students in 2024–25, total enrollment at Westfield Middle School (Table 21) will commence a roller-coaster pattern peaking at 511 students in 2027–28 and bottoming out at 474 students in 2030–31 before returning again to 507 students in 2032–33.

Tables 23, 24, and 25 present, respectively, the Series A, Series B, and Series C projections, by year and by grade, for District 13 as a whole through school year 2032–33 assuming full-day kindergarten classes commence in school years 2023–24. As explained in the first report, these aggregate projections were made based on district-wide data and analysis, independent of the individual school enrollment projections. Consequently, the Series B sum of the individual school projections comes quite close to the independently projected District 13 Series B total K–8 amounts. However, the Series A District totals will be higher than the sum of individual school Series A projections since it is unlikely that all schools will simultaneously follow the low Series. Conversely, the district-wide Series C projections will be lower than the sum of the individual schools Series C

Should full-day kindergarten classes commence in fall 2023, future fertility rates remain fairly stable, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools be less than anticipated (Series A), Table 23 reveals that

total District 13 enrollment (including pre-K), which this stood at 1,389 in fall 2022, will decline each year to 1,136 students in 2030–31. Total District enrollment will then annually inch up to 1,166 students in 2032–33.

If full-day kindergarten classes commence in fall 2023, future fertility rates remain fairly stable, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools occur as anticipated, the Series B projections presented in Table 24 show that total K–8 District enrollment will increase to 1,420 students in 2025–26. After a one-year dip to 1,414 students in 2026–27, total district enrollment will rise to just above 1,440 students in 2028–29 and remain close to that figure for two more years before rising again to 1,478 students in school year 2032–33.

Assuming full-day kindergarten classes commence in fall 2023, future fertility rates remain fairly stable, housing turnover and resulting in-migration of families with preschool-age and school-age children, and transfer from private and parochial schools exceed current expectations, Series C projections presented in Table 25 show total District enrollment climbing each year to 1,750 students in 2032–33.

As stated, while we believe the Series B projections to be the most likely to eventuate in the longer term, the Series A and Series B projection should not be dismissed out of hand. If we slip back into a prolonged recession or if mortgage interest rates continue to climb and remain high, Series A could become reality.

Likewise, even though the Series C projections represent the upper limit enrollment parameter for District 13 over the coming decade, they could be realized should the economy grow significantly in the next five years and mortgage rates return to more favorable levels.

# **Concluding Remarks**

Let us conclude with a caveat that we are in unpredictable economic times with no crystal ball. The impact of COVID-19 on enrollment trends and matriculation patterns makes estimating future kindergarten numbers and projecting future enrollment at the elementary school level risky, especially considering the potential impact of a program yet to be implemented. This risk is exacerbated at the individual elementary school level because of the smaller, less stable samples compared with the district as a whole. It is for these reasons that it will be wise to update all projections within no more than two years of District 13 commencing a full-day kindergarten program.

In this second report, we have analyzed considerable pertinent data from state and local sources, combined with a variety of data described in the previous report, and applied our best professional judgment to provide estimates of the annual numbers of additional kindergarten students and enrollment projections for District 13 and each of its individual schools contingent on the District offering full-day kindergarten classes starting in school year 2023–24. Given a number of unknowns in the coming years, we have presented what we believe are reasonable annual ranges of future enrollments. At this time, it is our hope that the full-day kindergarten estimates, enrollment projections and other demographic information contained in this and the prior report will be helpful to

the District 13 Board of Education, administrators, teachers, and concerned citizens as plans are made for future space, staff, and program needs at district's schools.

John D. Kasarda, Ph.D.
San Diego, California
and
Patrick Howell, Ph.D.
Chapel Hill, North Carolina
May, 2023

Table 14.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Less than Anticipated* through 2026–27

### **DuJardin Elementary School**

		Se	eries A Projectio	on		
Grade	2022–23	2023–24 2024–25 202			2026–27	2027–28
K	40	50	51	49	55	53
1	69	44	50	51	49	55
2	73	71	46	52	53	51
3	73	75	73	48	54	55
4	65	73	75	73	48	54
5	70	61	69	71	69	44
K–5	390	374	364	344	328	312
PK	0	0	0	0	0	0
Total	390	374	364	344	328	312

Table 15.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Occur as Anticipated* through 2026–27

### **DuJardin Elementary School**

		Se	eries B Projecti	on		
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28
K	40	65	69 63		70	67
1	69	47	65	69	63	70
2	73	74	52	70	74	68
3	73	77	78	56	74	78
4	65	75	79	80	58	76
5	70	63	73	77	78	56
K–5	390	401	416	415	417	415
PK	0	0	0	0	0	0
Total	390	401	416	415	417	415

Table 16.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Greater than Anticipated* through 2026–27

### **DuJardin Elementary School**

		Se	eries C Projecti	on		
Grade	2022–23	2023–24 2024–25 2025–2		2025–26	2026–27	2027–28
K	40	75	78	74	80	79
1	69	50	75	78	74	80
2	73	77	58	83	86	82
3	73	79	83	64	89	92
4	65	77	83	87	68	93
5	70	65	77	83	87	68
K–5	390	423	454	469	484	494
PK	0	0	0	0	0	0
Total	390	423	454	469	484	494

Table 17.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Less than Anticipated* through 2026–27

### **Erickson Elementary School**

		Se	eries A Projectio	on		
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28
K	54	64	66 65		70	67
1	78	57	61	63	62	67
2	79	78	57	61	63	62
3	77	80	79	58	62	64
4	77	78	81	80	59	63
5	105	80	81	84	83	62
K–5	470	437	425	411	399	385
PK	37	25	24	27	25	26
Total	507	462	449	438	424	411

Table 18.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Occur as Anticipated* through 2026–27

### **Erickson Elementary School**

		Se	eries B Projecti	on		
Grade	2022–23	2023–24 2024–25 2025–26		2025–26	2026–27	2027–28
K	54	74	76 74		79	77
1	78	63	74	76	74	79
2	79	80	65	76	78	76
3	77	82	83	68	79	81
4	77	80	85	86	71	82
5	105	82	85	90	91	76
K–5	470	461	468	470	472	471
PK	37	34	33	36	34	35
Total	507	495	501	506	506	506

Table 19.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Greater than Anticipated* through 2026–27

### **Erickson Elementary School**

		Se	eries C Projecti	on		
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28
K	54	87	89 87		92	89
1	78	68	87	89	87	92
2	79	82	72	91	93	91
3	77	84	87	77	96	98
4	77	82	89	92	82	101
5	105	84	89	96	99	89
K–5	470	487	513	532	549	560
PK	37	38	37	39	39	40
Total	507	525	550	571	588	600

Table 20.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Less than Anticipated* through 2031–32

### Westfield Middle School

			Series A Projection												
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33				
6	151	175	142	151	157	155	110	122	125	122	133				
7	170	152	176	143	152	158	156	111	123	126	123				
8	171	172	154	178	145	154	159	157	112	124	127				
Total	492	499	472	472	454	467	425	390	360	372	383				

Table 21.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Occur as Anticipated* through 2031–32

### Westfield Middle School

	Series B Projection												
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33		
6	151	178	148	160	169	170	135	163	167	160	171		
7	170	155	182	152	164	173	173	138	166	170	163		
8	171	174	159	186	156	168	176	176	141	169	173		
Total	492	507	489	498	489	511	484	477	474	499	507		

Table 22.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Greater than Anticipated* through 2031–32

### Westfield Middle School

		Series C Projection												
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33			
6	151	181	154	168	180	184	154	197	199	191	200			
7	170	158	188	161	175	187	188	158	201	203	195			
8	171	177	165	195	168	182	191	192	162	205	207			
Total	492	516	507	524	523	553	533	547	562	599	602			

Table 23.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Less than Anticipated* through 2031–32

### Bloomingdale School District 13

					Series A I	Projection					
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33
K	94	116	119	116	127	122	126	123	126	123	125
1	147	101	112	115	112	123	119	123	120	123	120
2	152	150	104	115	118	115	126	122	126	123	126
3	150	156	154	108	119	122	119	130	126	130	127
4	142	151	157	155	109	120	123	120	131	127	131
5	175	142	151	157	155	109	121	124	121	132	128
6	151	175	142	151	157	155	110	122	125	122	133
7	170	152	176	143	152	158	156	111	123	126	123
8	171	172	154	178	145	154	159	157	112	124	127
K-5	860	816	797	766	740	711	734	742	750	758	757
6–8	492	499	472	472	454	467	425	390	360	372	383
K–8	1,352	1,315	1,269	1,238	1,194	1,178	1,159	1,132	1,110	1,130	1,140
PK	37	25	24	27	26	26	26	26	26	26	26
Total	1,389	1,340	1,293	1,265	1,220	1,204	1,185	1,158	1,136	1,156	1,166

Table 24.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Occur as Anticipated* through 2031–32

### Bloomingdale School District 13

					Series B	Projection					
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33
K	94	139	144	138	149	144	148	144	147	145	148
1	147	112	141	146	140	151	146	150	146	149	147
2	152	153	118	147	152	146	157	152	156	152	155
3	150	159	160	125	154	159	152	163	158	162	158
4	142	154	163	164	129	158	162	155	166	161	165
5	175	145	157	166	167	132	160	164	157	168	163
6	151	178	148	160	169	170	135	163	167	160	171
7	170	155	182	152	164	173	173	138	166	170	163
8	171	174	159	186	156	168	176	176	141	169	173
K-5	860	862	883	886	891	890	925	928	930	937	936
6–8	492	507	489	498	489	511	484	477	474	499	507
K-8	1,352	1,369	1,372	1,384	1,380	1,401	1,409	1,405	1,404	1,436	1,443
PK	37	34	33	36	34	35	34	35	35	35	35
Total	1,389	1,403	1,405	1,420	1,414	1,436	1,443	1,440	1,439	1,471	1,478

Table 25.

Enrollment Projection Assuming District 13 Commences Offering Full-day Kindergarten Classes in 2023, Future Fertility Rates Remain Fairly Stable (through 2027), Housing Turnover and Resulting In-migration of Families with Preschool-age and School-age Children, and Transfer from Private and Parochial Schools *Are Greater than Anticipated* through 2031–32

### Bloomingdale School District 13

					Series C	Projection					
Grade	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	2029–30	2030–31	2031–32	2032–33
K	94	160	164	159	170	167	172	170	173	171	174
1	147	119	164	168	163	174	171	176	174	177	175
2	152	156	128	173	177	172	181	178	183	181	184
3	150	162	166	138	183	187	179	188	185	190	188
4	142	156	168	172	144	189	191	183	192	189	194
5	175	148	162	174	178	150	193	195	187	196	193
6	151	181	154	168	180	184	154	197	199	191	200
7	170	158	188	161	175	187	188	158	201	203	195
8	171	177	165	195	168	182	191	192	162	205	207
K-5	860	901	952	984	1,015	1,039	1,087	1,090	1,094	1,104	1,108
6–8	492	516	507	524	523	553	533	547	562	599	602
K–8	1,352	1,417	1,459	1,508	1,538	1,592	1,620	1,637	1,656	1,703	1,710
PK	37	38	37	39	39	40	39	40	40	40	40
Total	1,389	1,455	1,496	1,547	1,577	1,632	1,659	1,677	1,696	1,743	1,750

# **Appendix A: Enrollment Trends at Select Bloomingdale Area Private Schools**

The following tables provide annual grade-by-grade enrollments for Bloomingdale area privates schools registered with the Illinois State Board of Education from 2015 to 2021 (the most recent year available).

### Enrollment History at Lutheran School of St Luke

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	58	30	6	8	7	5	7	63	121
2016	49	27	<10	<10	<10	<10	<10	NA	NA
2017	63	<10	<10	<10	<10	<10	<10	NA	NA
2018	56	18	<10	<10	<10	<10	<10	NA	NA
2019	50	15	14	<10	<10	<10	<10	NA	NA
2020	38	15	13	15	5	8	4	60	98
2021	30	17	<10	13	12	<10	<10	NA	NA

### Enrollment History at St Isidore School

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	20	24	17	24	28	25	32	150	170
2016	32	16	18	23	24	27	25	133	165
2017	33	16	10	24	21	21	24	116	149
2018	33	23	12	17	24	18	18	112	145
2019	26	18	20	17	15	23	13	106	132
2020	19	16	20	23	18	15	25	117	136
2021	21	19	18	19	24	17	18	115	136

# **Enrollment History at St Matthew School**

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	78	28	22	23	32	31	31	167	245
2016	39	35	25	26	25	30	29	170	209
2017	33	28	26	22	26	23	27	152	185
2018	38	20	22	27	19	24	19	131	169
2019	21	21	13	19	21	13	18	105	126
2020	9	15	17	16	10	16	9	83	92
2021	20	14	14	16	12	12	16	84	104

# Enrollment History at St Philip the Apostle School

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	33	17	22	24	21	28	21	133	166
2016	35	23	16	20	23	20	25	127	162
2017	37	16	25	17	22	23	19	122	159
2018	36	31	16	31	18	17	26	139	175
2019	32	22	26	15	27	14	16	120	152
2020	30	22	21	22	15	27	19	126	156
2021	37	27	20	19	22	13	26	127	164

# Enrollment History at St Philip the Apostle School

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	58	38	56	43	52	50	56	295	353
2016	54	34	36	51	45	56	54	276	330
2017	60	26	33	38	54	47	56	254	314
2018	49	35	27	34	32	52	51	231	280
2019	63	31	30	23	29	32	54	199	262
2020	20	39	26	30	26	36	26	183	203
2021	65	29	38	31	32	34	43	207	272

# Enrollment History at Sunrise Montessori Academy

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	16	2	0	0	0	0	0	2	18
2016	15	<10	0	0	0	0	0	NA	NA
2017	18	<10	0	0	0	0	0	NA	NA
2018	16	<10	0	0	0	0	0	NA	NA
2019	17	<10	<10	<10	<10	<10	<10	NA	NA
2020	<10	3	<10	<10	<10	<10	<10	NA	NA
2021	11	<10	0	0	0	0	0	NA	NA

# Enrollment History at Trinity Lutheran School

Year	PK	K	1st	2nd	3rd	4th	5th	K-5	Total
2015	43	30	18	23	16	25	24	136	179
2016	37	22	21	15	17	11	19	105	142
2017	48	13	14	20	14	19	12	92	140
2018	58	13	14	15	16	13	18	89	147
2019	56	20	13	14	13	19	13	92	148
2020	27	20	20	18	16	14	17	105	132
2021	53	18	16	17	13	15	16	95	148

# Appendix B: Public and Private Pre-K and Kindergarten Enrollment and Children by Select Ages in the District 13 Area

The following tables, adapted from the American Community Survey, provide estimates of the annual numbers and percentages of pre-kindergarten and kindergarten students attending public and private school in the District 13 area. Margins of error (MOE) are also provided where noted. The Bureau of the Census explains that their margins of error "can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value." Because of the relatively small sample sizes used for the District 13 area surveys and the resulting wide margins of error, the following reported values should be interpreted with due caution.

Number of Prekindergarten and 90% Margin of Error (MOE) by Type of School in District 13 Area

Year	Total	Total MOE	Public	Public MOE	Private	Private MOE
2010	71	±50	71	±50	0	±119
2011	39	±37	39	±37	0	±89
2012	70	±16	12	±16	58	±58
2013	83	±15	8	±15	75	±66
2014	87	±21	10	±21	77	±64
2015	88	±22	12	±22	76	±66
2016	92	±22	21	±22	71	±59
2017	69	±28	34	±28	35	±34
2018	65	±26	36	±26	29	±31
2019	70	±18	26	±18	44	±39
2020	61	±20	20	±20	41	±32
2021	75	±14	7	±14	68	±37

# Percent Prekindergarten by Public and Private in District 13 Area

Year	Public %	Private %
2010	100.0	0.0
2011	100.0	0.0
2012	17.1	82.9
2013	9.6	90.4
2014	11.5	88.5
2015	13.6	86.4
2016	22.8	77.2
2017	49.3	50.7
2018	55.4	44.6
2019	37.1	62.9
2020	32.8	67.2
2021	9.3	90.7

Source: Bureau of the Census. American Community Survey.5-Year Estimates. Table B14002.

Number of Kindergarten Students and 90% Margin of Error by Type of School in District 13 Area

Year	Total	Total MOE	Public	Public MOE	Private	Private MOE
2010	24	±24	15	±18	9	±17
2011	39	±31	27	±27	12	±19
2012	85	±52	72	±42	13	±24
2013	62	±39	54	±36	8	±15
2014	86	±43	86	±43	0	±17
2015	82	±43	82	±43	0	±17
2016	56	±36	56	±36	0	±17
2017	52	±35	52	±35	0	±17
2018	57	±37	57	±37	0	±17
2019	78	±48	71	±46	7	±11
2020	72	±44	59	±41	13	±17
2021	81	±41	62	±40	19	±22

# Percent Kindergarten by Public and Private in District 13 Area

Year	Public %	Private %
2010	62.5	37.5
2011	69.2	30.8
2012	84.7	15.3
2013	87.1	12.9
2014	100.0	0.0
2015	100.0	0.0
2016	100.0	0.0
2017	100.0	0.0
2018	100.0	0.0
2019	91.0	9.0
2020	81.9	18.1
2021	76.5	23.5

Source: Bureau of the Census. American Community Survey.5-Year Estimates. Table B14002.

# Number of Children by Age under 9 Years in District 13 Area

The following table, also adapted from the American Community Survey, provides the estimated annual numbers of children by age under 9 years and margins of error (in parentheses) in the District 13 attendance area. Again, because of the relatively small sample sizes used for the District 13 area surveys and the resulting wide margins of error, the following reported values should be interpreted with due caution.

Number of Children by Age and 90% Margin of Error in District 13 Area

Year	Under 3 years	3 to 4 years	5 years	6 to 8 years
2010	504 (±192)	204 (±100)	61 (±52)	372 (±154)
2011	286 (±135)	159 (±73)	95 (±68)	376 (±141)
2012	278 (±141)	202 (±97)	225 (±117)	371 (±125)
2013	324 (±150)	322 (±143)	166 (±80)	408 (±125)
2014	354 (±119)	263 (±100)	227 (±84)	361 (±86)
2015	379 (±111)	303 (±107)	238 (±98)	391 (±101)
2016	414 (±120)	310 (±95)	272 (±91)	495 (±98)
2017	436 (±118)	354 (±89)	197 (±79)	351 (±98)
2018	499 (±153)	372 (±125)	188 (±79)	387 (±115)
2019	496 (±139)	387 (±118)	203 (±83)	383 (±120)
2020	455 (±128)	355 (±96)	187 (±70)	506 (±237)
2021	451 (±121)	330 (±110)	186 (±72)	415 (±279)

Source: Bureau of the Census. American Community Survey.5-Year Estimates. Table B09001.