RESIDENT ENROLLMENT PROJECTIONS

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EDINA PUBLIC SCHOOLS RESIDENT ENROLLMENT PROJECTIONS

Executive Summary

Since 2008-09

- Edina Public Schools enrollment (excluding Early Childhood) increased by 525 students or 6.7 percent
- Resident enrollment (excluding Early Childhood) increased by 385 students or 5.7 percent
- Nonresidents make up 15.4 percent of total enrollment in 2018-19
- The market share of the Edina Public Schools is 81.6 percent, a high percentage for a Twin Cities Metro Area School District. However, the market share would be lower if District residents attending District #287 were included in the District's enrolled school age population
 - The Edina Public Schools had a net gain of 972 students from public options in
 2018-19; however, more students are opting for other public options than in the past

In ten years, that is, in 2028-29

- Edina Public Schools resident enrollment (excluding Early Childhood) is projected to range from 7,393 to 7,499, an increase of 4.0 to 5.5 percent from the 2018-19 resident enrollment of 7,111 (excluding Early Childhood)
- Resident K-5 enrollment is projected to increase as is resident Grade 6 to 8 enrollment. Resident high school enrollment is projected to decrease in the first five projection years and then return to today's numbers in ten years
- Resident Kindergarten is projected to be smaller than the previous year's resident Grade 12, which depresses enrollment growth. This is a continuation of the existing trend
- Net in migration is projected to be about the same as in the recent past

In five years, that is, in 2023-24

- Concord Elementary School is projected to have a substantial increase in resident students (129 students), largely the result of high net in migration (survival rates). Countryside is projected to have a decrease in resident students because an exceptionally large Grade 5 ages out of the elementary grades. The other elementary schools show small gains or have flat resident enrollment
 - The housing unit method projects more resident K-5 students than the cohort method

Housing Data

• Changes in single-family detached housing stock (newly built units from tear downs and the sales of existing units) have a significant positive affect on resident enrollment in the Edina

Public Schools. Edina's per single-family detached unit student yields look more like a developing area than a first ring suburb

- The per unit student yield of newly built single-family detached units is high (0.75)
- Per unit student yield is higher in single-family detached units that sold versus those that did not sell (0.62 versus 0.52)
- Eighty-eight (88.0) percent of Edina Public Schools' resident students live in single-family detached units

What could occur to make these projections too high or too low

- Too high
 - Projected kindergarten is too high
 - Net out migration in high school grades is higher than projected
 - A recession, which would slow growth
- Too low
 - Projected kindergarten too low
 - The rate of tear downs increases

RESIDENT ENROLLMENT PROJECTIONS

Introduction

Attending school is compulsory; therefore, the number of enrolled students is a demographic phenomenon. Public school enrollment is affected by the size of a school district's school age population and the education choices available to district residents. A district's school age population is closely related to other population characteristics of the district, especially the age of the district's population. For example, the age of adults, especially the number of women of prime childbearing age, effects the number of births, which translates into kindergarten classes five to six years later. The age of adults also effects population mobility because older people move less frequently than younger people. The movement of families with children under 18 years also effects enrollment and in a mobile society, enrollment changes throughout the school year as families with children move. While most population trends find expression in school districts, there is also change that is unpredictable and sometimes very local.

While population changes affect the total number of school age children residing in a school district, Minnesota students and their families have education choices. These choices also effect enrollment in a district's schools. Therefore, when analyzing public school enrollment, choice must be considered as well as population dynamics. Choice includes nonpublic schools, home schools, and the public options of open enrollment, charter schools and alternative schools. Two other choices exist: a) dropping out of high school, and b) delaying starting kindergarten (academic redshirting).

Enrollment Trends

Enrollment in the Edina Public Schools

Current Enrollment/Past Trends

Enrollment trends play out over extended periods of time. Over the past ten years, total enrollment increased by 525 students or 6.7 percent while resident enrollment increased by 385 students or 5.7 percent. Total enrollment got a boost from an increase in nonresident enrollment, which increased from 1,153 to 1,293 students. In 2018-19, nonresidents make up 15.4 percent of total enrollment. The percentage of nonresidents was 14.6 percent in 2008-09.

	ENROLLMENT									
2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
7,879	7,990	8,188	8,249	8,326	8,385	8,443	8,438	8,501	8,522	8,404

Source: Edina Public Schools, Fall Enrollment. Excludes Early Childhood

RESIDENT ENROLLMENT										
2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
6,726	6,810	7,022	7,062	7,091	7,146	7,107	7,125	7,239	7,274	7,111

Source: Edina Public Schools, Fall Enrollment. Excludes Early Childhood

To better understand resident enrollment change, it is important to understand the components of this change. Like all population change, school enrollment changes result from two different phenomena—natural increase/decrease and net migration. The difference between the size of the incoming kindergarten class and the previous year's Grade 12, called natural increase or decrease, measures the change in past birth numbers or cohort change. For example, the Baby Boom (1946-1964) and the Baby Bust (1965-1976) set in motion cycles of rising and falling enrollment that are reflected as natural increase/decrease. As the next table shows, since 2008-09, Edina Public Schools' resident Kindergarten classes were smaller than the previous year's resident Grade 12 every year. Natural decrease reduced enrollment by 373 students since 2008-09.

COMPONENTS OF RESIDENT ENROLLMENT CHANGE							
October			Natural				
То	То	tal	Increase/	Net			
October	#	%	Decrease	Migration			
2008 to 2009	84	1.2%	-22	106			
2009 to 2010	212	3.1%	-19	231			
2010 to 2011	40	0.6%	-37	77			
2011 to 2012	29	0.4%	-48	77			
2012 to 2013	55	0.8%	-19	74			
2013 to 2014	-39	-0.5%	-54	15			
2014 to 2015	18	0.3%	-80	98			
2015 to 2016	114	1.6%	-12	126			
2016 to 2017	35	0.5%	-19	54			
2017 to 2018	-163	-2.2%	-63	-100			
Total	385		-373	758			

The other phenomenon affecting school enrollment is migration, an indirectly derived estimate. Migration is the term used when people move across a boundary or border, in this case, the school district's boundaries. Net migration is calculated by the progression from grade-to-grade of public-school students. For example, public school Kindergarten students are moved to Grade 1 in the following year, Grade 1 students to Grade 2, etc. Because the probability of death is very low among children, the same number of students is expected in the next higher grade the following year. Therefore, if the number of students changes, migration is assumed to have occurred. A positive number indicates a net flow into the public schools and a negative number reflects a net flow out of the public schools.

This method for estimating migration does not distinguish between physical movement across the district's boundaries and education choices, such as transferring from a nonpublic school to a public school, transferring to a charter school or open enrolling in a public school outside the district. Further, students who move into or out of a school district but never enroll in the district's public schools are not reflected in the migration numbers in this report.

Based on the described methodology, except for the past year, resident net migration was positive every year since 2008-09. Since 2008-09, resident net migration added 758 students. The combination of net migration and natural increase/decrease is the change in enrollment.

Student Choices in the Edina Public Schools

The number of education options available affects enrollment in a district's public schools. Nonpublic schools have been an option for many years. More recently, home schools became another option. Since their inception, public school options are attracting more students every year. Open enrollment allows residents of one district to attend the public schools in another district. Charter schools are another public option. All these choices mean competition for students.

Nonpublic Enrollment and Home Schools

Today, nonpublic enrollment falls into two categories—traditional nonpublic schools and home schools. Most traditional nonpublic schools are associated with religious institutions and many home school curriculums are faith based as well.

In Minnesota, 6.9 percent of all enrolled students were enrolled in traditional nonpublic schools and 2.0 percent of enrolled students were homeschooled in 2017-18. In the Edina School District, 14.5 percent of enrolled students were in traditional nonpublic schools. Homeschooled students accounted for 0.5 percent of all enrolled students.

NONPUBLIC SETTINGS							
	Traditional						
Year	Nonpublic Schools	Home Schools	Total				
2008-09	1,133	29	1,162				
2009-10	1,122	35	1,157				
2010-11	1,099	34	1,133				
2011-12	1,134	40	1,174				
2012-13	1,157	24	1,181				
2013-14	1,166	24	1,190				
2014-15	1,295	25	1,320				
2015-16	1,257	36	1,293				
2016-17	1,241	37	1,278				
2017-18	1,281	42	1,323				
2018-19	1.255	29	1.284				

The increase in traditional nonpublic enrollment between 2013-14 and 2014-15 may be a function of data sources Source: Eding Public Schools

The proportion of ISD #273 residents in nonpublic settings is higher than the statewide percentages. Combining home school students and nonpublic students, 15.0 percent of Edina School District residents were in nonpublic settings. In Minnesota, 9.0 percent were enrolled in nonpublic

settings. In the past ten years, traditional nonpublic enrollment decreased statewide while homeschooled children increased. In the Edina School District, traditional nonpublic enrollment increased, and the number of homeschooled students fluctuated but was the same in 2018-19 as in 2008-09.

Public Options

Open Enrollment. Open enrollment allows Minnesota students to attend public schools outside their district of residence. The application to open enroll is made by the student and his/her parents and families generally provide their own school transportation. No tuition is charged.

Some students attend public schools outside their home district because their home district enters into an agreement with another district, usually to provide specialized services. This is called a tuition agreement, but this arrangement is not technically a student choice.

Since its beginning, open enrollment has attracted more and more students statewide and, in the Edina, Public Schools. In 2017-18, 1,248 nonresident students enrolled into the Edina Public Schools while 126 district residents attended public schools elsewhere through open enrollment. In 2018-19, 1,293 nonresidents were enrolled in the Edina Public Schools while 130 residents (estimate) attended a public school elsewhere through open enrollment. (See Appendix)

PUBLIC OPTIONS								
	l	In		Out				
	Open	Tuition	Open	Tuition	Charter			
Year	Enrollment	Agreements	Enrollment*	Agreements	Schools	Net		
2008-09	1,153		78^		48^	1,027		
2009-10	1,180		78		51	1,051		
2010-11	1,166		78		54	1,034		
2011-12	1,191		78		54	1,059		
2012-13	1,235		75		106	1,054		
2013-14	1,239		73		98	1,068		
2014-15	1,336		89		95	1,152		
2015-16	1,313		118		100	1,095		
2016-17	1,262		120		53	1,089		
2017-18	1,248		126		124	998		
2018-19	1,293		130^		191^	972		

*Minnesota Department of Education

Source: Edina Public Schools

Nonresident students who enroll in the Edina Public Schools accounted for 14.6 percent of Edina's total enrollment in 2017-18. Students leaving the district to attend public schools elsewhere through open enrollment represented 1.4 percent of the district's school age residents. In 2017-18, 8.5 percent of Minnesota students chose open enrollment.

[^]Estimate

Charter Schools. Charter schools are another public education option. While 6.0 percent of Minnesota students attended charter schools in 2017-18, 1.4 percent of Edina School District residents attended charter schools.

As the education choice data show, in 2017-18, the District had a net gain of 972 students from other public options, excluding tuition agreements. However, other public options are capturing more students than in the past.

K-12 Market Share of District School Age Residents

Estimating market share requires an estimate of a school district's school age population. The best estimate results from summing resident students in the district's schools with district residents attending traditional nonpublic schools, residents being homeschooled and residents opting for open enrollment out, charter schools and other public options.

Based on 2008-09 and 2018-19, the estimated resident school age population increased from 8,014 to 8,716 students, an increase of 702 students or 8.8 percent. Resident enrollment in the Edina Public Schools increased by 385 students or 5.7 percent during the same period. These percentages indicate that the Edina Public Schools' market share decreased, which is typical in Minnesota. Based on the estimated 2018-19 enrolled population of 8,716, the Edina Public Schools captured 81.6 percent of the district's school age population. In 2008-09, market share was 83.9 percent. The 2018-19 market share is higher than that of most Twin Cities Metro Area school districts, although District #287 students are not included.

EDINA PUBLIC SCHOOLS ESTIMATED RESIDENT SCHOOL AGE POPULATION								
	Edina Public							
	Schools							
	Resident	Nonpublic	Public					
Year	Enrollment	Settings	Options	Other*	Total			
2008-09	6,726	1,162	126	n.a.	8,014			
2009-10	6,810	1,157	129	n.a.	8,096			
2010-11	7,022	1,133	132	n.a.	8,287			
2011-12	7,062	1,174	132	n.a.	8,368			
2012-13	7,091	1,181	181	n.a.	8,453			
2013-14	7,146	1,190	171	n.a.	8,507			
2014-15	7,107	1,320	184	n.a.	8,611			
2015-16	7,125	1,293	218	n.a.	8,636			
2016-17	7,239	1,278	173	n.a.	8,690			
2017-18	7,274	1,323	250	n.a.	8,847			
2018-19	7,111	1,284	321	n.a.	8,716			

Other is students at Intermediate District #287. Number of students not readily available

History of Resident Enrollment by Grade

The history of resident enrollment contains several patterns with implications for future enrollment. First, resident kindergarten class size fluctuated from year to year, but the resident

kindergarten class is 14 students larger than ten years ago. The resident kindergarten classes in the past three years have been larger than all but two years in the past ten.

The number of resident students per grade varies in the Edina Public Schools. A way of expressing the differences by grade is to look at the "average" number of resident students per grade. For example, in 2018-19, the average resident elementary grade (K-5) has 536 students. The average resident middle school grade (6-8) has 542 students and the average resident high school grade is 567 students. There is no pronounced net in migration at the beginning of middle school or at the beginning of high school. Based on current resident grade sizes, natural decrease is likely to continue. Thus, without resident net in migration and larger resident kindergarten classes, future resident enrollment would be flat.

Minnesota's largest graduating high school class since 1978 graduated in 2009. State wide, graduating classes will be getting smaller. Based on Edina's enrollment history, Edina's largest recent resident senior class will graduate in 2019 or later.

	RESIDENT ENROLLMENT										
Grade	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
К	492	478	507	468	482	517	486	454	515	526	506
1	510	538	532	542	484	507	545	482	484	551	526
2	529	512	568	544	562	509	510	573	530	501	551
3	539	544	547	572	550	572	518	528	592	522	505
4	524	535	571	556	577	552	590	514	533	596	539
5	533	532	551	569	561	592	557	590	540	530	590
6	535	522	547	575	571	564	594	578	594	536	542
7	512	543	550	551	580	575	572	617	578	579	518
8	509	510	557	538	548	579	583	574	600	592	566
9	505	532	524	552	547	544	566	593	595	599	546
10	516	521	538	523	563	549	532	551	577	584	586
11	522	517	525	542	530	546	520	544	556	589	553
12	500	526	505	530	536	540	534	527	545	569	583
Total	6,726	6,810	7,022	7,062	7,091	7,146	7,107	7,125	7,239	7,274	7,111

Source: Edina Public Schools, Fall Enrollment. Excludes Early Childhood

Enrollment Projections

Projection Background

Some factors affecting future school enrollment are known. However, other crucial factors are less clear. The difficulty in quantifying the effect of these factors is a challenge. First, the trends around which there is confidence.

Trends Where Confidence is High

- Aging. The population in the U.S. and Minnesota is aging. By 2020, 16-17 percent of Minnesota's population will be 65 years old or older. In 2010, the elderly made up 12.9 percent of the population. Around 2020, for the first time in history, Minnesota's 65+ population is expected to exceed the 5-17 population (K-12 population). There is no historical precedent for this high proportion of older population; therefore, society is entering uncharted waters as to the effects of this change. However, we know that aging will affect the housing market and reduce geographic mobility because older people move less frequently than younger people. Further, the percentage of households with school age children will decline.
- Fertility. Today, completed fertility is near the replacement level and there is little reason to think that will be reversed. Completed fertility refers to the number of children born per woman throughout her childbearing years. In Minnesota, White non-Hispanic women have below replacement fertility. (Replacement is 2.11 children per female at the end of childbearing.) Fertility rates for Asian and Hispanic women are now near replacement. Black women (African-American and African-born) have the highest fertility level, just below 3, that is, just less than 3 children per woman at the end of childbearing.

<u>Unknowns</u>

The unknowns reflect changes in the housing market, the economy and international immigration.

- Recovery of the housing market. The recovery of the housing market results in more mobility and this influences enrollment. Home prices are back to prerecession levels, resales are up, and residential construction has returned to prerecession levels.
- The economy. While the recovery from the Great Recession was slow, today the economy is robust, and unemployment is low. However, another recession is likely sometime in the next ten years, i.e. in the projection period.
- Immigration. Both the economy and public policy are affecting international immigration. Future births and future students from international immigration are impossible to predict.
- Delay/postponement of childbearing. The Millennials are delaying marriage, childbearing and home ownership. The long-term effects of these delays are unclear; however, the decline in 2017 births has led demographers to conclude that births delayed by the Great Recession appear to be births foregone.
- Competition. The establishment of charter schools is hard to predict, and open enrollment continues to increase.

Cohort Survival Method

The most common and most robust model for projecting school enrollment is the cohort survival method. The first step in the cohort survival method is aging the population. In a standard cohort survival model, aging the population involves estimating the number of deaths expected in an

age group before it reaches the next older age group. When the cohort survival method is used to project school enrollment, the first step is to move a grade to the next higher grade. Because mortality is so low in the school age population, the entire grade is assumed to "survive" to the next higher grade in the following year.

After aging the current enrollment, two key assumptions must be made. These assumptions concern the size of future kindergarten classes and the number of students who will move in or out of the district's schools. Some of these students may physically move in or out of the district. Other students may transfer between the Edina Public Schools and other education options available to them. Both these phenomena effect the "survival rates."

Once a grade or cohort has been "aged" to the next higher grade, net migration is added to or subtracted from that grade. Using survival rates accomplishes both "aging" and migration in a single step. <u>Over time, the size of a cohort will increase or decrease because of migration as its progresses through the grades</u>. For example, the 2008-09 kindergarten class had 492 members. This same cohort has 586 members in Grade 10 in 2018-19.

The future size of kindergarten classes is especially important in long-term enrollment projections because these students will be in school over the life of the projections. If a school census exists, it is a resource for short-term kindergarten projections, i.e., a couple of years. However, school censuses are notoriously inaccurate for children less than four years of age, in part, because the preschool population is more mobile than the school age population.

To project kindergarten, the best theoretical approach, but the least practical, is to project births based on the age of the female population. These birth projections then must be survived to age five and then adjusted for migration to yield kindergarten projections. Determining the age of females in a school district is the first challenge, and then many assumptions must be made, making this approach impractical.

A simpler approach is to use resident births as a <u>proxy</u> for kindergarten five to six years later. Of course, not every child born in the district will enter the district's kindergarten classes five to six years later. However, some "district born" children who move out before enrolling in kindergarten will be replaced by children born elsewhere who move in before entering kindergarten. If the number of "ins" and "outs" are equal, the net effect is zero and the kindergarten class would be 100 percent of resident births. However, no public-school system captures all the potential students. Some kindergarten students attend private schools or are homeschooled. Others may attend a charter school or open enroll at another district. Therefore, a public school's kindergarten to birth ratio is expected to be less than 100 percent. If the ratio is 100 percent or higher, more preschool children are moving into the district or open enrolling into the district (in migration) than leaving (out migration).

If births are used as a kindergarten proxy, kindergarten projections are available for only a few years into the future. To extend kindergarten projections another five years, Edina Public Schools' resident kindergarten will be projected based on the Minnesota State Demography Center's projections of Minnesota 0-year-olds.

Resident Kindergarten Assumptions

After 1990, births fell in the U.S. and in Minnesota; however, from 2003 through 2007, births increased and in 2007, U.S. births were higher than at any time since 1964. In 2008, 2009, 2010 and 2011, births fell in the U.S. and Minnesota. These declines are attributed to the poor economy. Beginning in 2012, Minnesota resident births began to increase but they have not returned to the 2007 level. Further, 2016 Minnesota resident births were lower than births in 2014 and 2015.

As the history of resident births shows, from 2001 to 2016, resident births in Minnesota increased by 3,129 or 4.7 percent. Resident births in Hennepin County increased 1.0 percent while resident births in Suburban Hennepin County increased 6.9 percent. Resident births in Edina City increased 2.7 percent.

About one-third (33 percent) of births occur between September 1 and December 31 every year. Therefore, about two-thirds of those eligible for kindergarten were born 5 years earlier and one-third were born 6 years earlier. Adjusting resident births to fit the school year will be referred to as the kindergarten pool.

RESIDENT LIVE BIRTHS						
		Hennepin	Suburban	Edina		
Year	Minnesota	County	Hennepin County	City		
2001	66,617	16,327	9,729	449		
2002	68,037	16,112	9,738	429		
2003	70,053	16,440	9,941	461		
2004	70,617	16,718	10,258	454		
2005	70,950	16,348	10,101	442		
2006	73,515	16,780	10,223	435		
2007	73,675	16,848	10,532	484		
2008	72,382	16,566	10,212	413		
2009	70,617	16,334	10,017	431		
2010	68,407	15,955	9,854	425		
2011	68,416	15,943	9,894	458		
2012	68,783	16,345	10,294	481		
2013	69,183	16,584	10,468	486		
2014	69,916	16,770	10,536	468		
2015	69,835	16,829	10,626	534		
2016	69,746	16,485	10,400	461		
2017	n.a.	n.a.	n.a.	n.a.		

Suburban Hennepin County is Hennepin County minus Minneapolis City Source: Minnesota Department of Health

DISTRICT RESIDENT LIVE BIRTHS SEPTEMBER 1 TO AUGUST 31					
Year	District				
2003-2004	372				
2004-2005	403				
2005-2006	368				
2006-2007	369				
2007-2008	377				
2008-2009	334				
2009-2010	299				
2010-2011	321				
2011-2012	295				
2012-2013	329				
2013-2014	339				
2014-2015	402				
2015-2016	363				
2016-2017	380				
2017-2018	379				

Source: Minnesota Department of Health

Upon special request, the Minnesota Department of Health will provide resident births by address, so births can be geocoded to a school district's boundaries. However, "out-of-wedlock" births may be withheld because unmarried parents can choose whether to make birth information by address public. This policy results in under reporting of births by address. Thus, using address data adds two additional sources of annual fluctuation to resident births—the percentage of "out-of-wedlock" births and the percentage of parents withholding reporting by address. Therefore, the advantage of an additional year of data needs to be evaluated against the potential negative effects of these additional sources of variability. Based on these limitations, Suburban Hennepin County resident live births will be used as the proxy for Edina School District resident live births. However, none of the proxies for District resident births is ideal.

The next table shows the Suburban Hennepin County kindergarten pool along with the percentage the Edina Public Schools' resident kindergarten was of the pool. Like many other percentages, the ratio of resident kindergarten students to the pool fluctuates. Typically, a more stable trend appears when rates are averaged. (Calculating an average of the kindergarten to birth ratio for two or more years smooth out annual fluctuations and produces a more "typical" ratio for that period.)

As the percentages show, Edina Public Schools' resident kindergarten share has increased slightly in the past five to six years. The average of the ratios for the past six years is 4.94, the average of the past five years is 4.93 and the average of the past four years is 4.96 percent. The average for the past three years is 5.08 percent and the average of the past two years is 5.02 percent. The lowest ratio was 4.60 percent, which occurred in 2011-12. Based on these numbers the average of the past four years' ratios (4.96 percent) will be used as the low kindergarten assumption and the average of the past two years (5.02 percent) will be used as the high kindergarten assumption.

EDINA PUBLIC SCHOOLS RESIDENT KINDERGARTEN								
AS A PERCENTAGE OF THE SUBURBAN HENNEPIN COUNTY								
	KINDERGARTEN POOL							
	Kindergarten		Kindergarten					
Birth Years	Pool	Percentage	Year					
2002; 2003	9,874	4.98%	2008-09					
2003; 2004	10,154	4.71%	2009-10					
2004; 2005	10,153	4.99%	2010-11					
2005; 2006	10,182	4.60%	2011-12					
2006; 2007	10,430	4.62%	2012-13					
2007; 2008	10,318	5.01%	2013-14					
2008; 2009	10,081	4.82%	2014-15					
2009; 2010	9,908	4.58%	2015-16					
2010; 2011	9,881	5.21%	2016-17					
2011; 2012	10,162	5.18%	2017-18					
2012; 2013	10,411	4.86%	2018-19					
2013; 2014	10,513		2019-20					
2014; 2015	10,596		2020-21					
2015; 2016	10,475		2021-22					
2016; 2017	n.a.		2022-23					

To extend kindergarten projections beyond 2021-22, projected Minnesota 0-year-olds will be used as a guide. The number of resident births in 2016 is 403 births lower than the projected 0-year-olds in 2016. Note that the projections of Minnesota 0-year-olds is essentially flat between 2016 and 2025. Even when extending the projections to 2050, the number of projected Minnesota 0-year-olds rarely reaches 70,600. Statewide projections show births as "flat" for many years. Not every part of the state will have no increase in births but places with increases will be exceptions.

PROJECTED MINNESOTA O-YEAR OLDS					
Year	Number				
2016 Actual	69,746				
2016	70,149				
2017	70,312				
2018	70,395				
2019	70,373				
2020	70,325				
2021	70,274				
2022	70,227				
2023	70,191				
2024	70,164				
2025	70,164				

Source: Minnesota Demographic Center

In the past sixteen years, Suburban Hennepin County resident births increased from 14.60 percent of Minnesota births to 14.91 percent of Minnesota births in 2016; however, the average of the

past five years is 15.06 percent. If Suburban Hennepin County resident births are 15.06 percent of Minnesota's 0-year-olds for the next several years, the kindergarten pool would be as shown in the next table. The projections show how "flat" these numbers are likely to be.

SUBURBAN HENNEPIN COUNTY					
KINDERGARTEN POOL					
2019-20	10,513				
2020-21	10,596				
2021-22	10,475				
2022-23	10,527				
2023-24	10,397				
2024-25	10,599				
2025-26	10,593				
2026-27	10,586				
2027-28	10,578				
2028-29	10,573				

Pool based on actual births bolded

When the kindergarten to birth ratio is applied to the kindergarten pool, kindergarten projections result. Through 2021-22, the kindergarten projections are based on actual births. The lowest kindergarten projection (based on the 4.96 percent ratio) results in 5,245 resident kindergarten students over ten years while the highest kindergarten projection (5.02 percent ratio) yields 5,309 resident kindergarten students over ten years. This compares with 4,939 resident kindergarten students over the past ten years. The last projection years will not have the same number of resident kindergarten students every year as shown below, but resident kindergarten is likely to fluctuate around these numbers.

RESIDENT KINDERGARTEN							
PROJECTIONS							
	@4.96% @5.02%						
2018-19	506	506					
2019-20	522	528					
2020-21	526	532					
2021-22	526	532					
2022-23	525	532					
2023-24	525	531					
2024-25	525	531					
2025-26	524	531					
2026-27	524	531					
2027-28	524	531					
2028-29	524	530					
Total	5,245	5,309					

Resident Net Migration Assumptions

The method for calculating migration was explained earlier in this report. However, the limitations of the methodology are worth repeating. The method of calculating migration does not distinguish between physical movement across a district's boundaries and education choices, such as transferring from a nonpublic school to a public school, transferring to a charter school or open enrolling in another district's public schools. Further, students who move into or out of a school district but never enroll in the district's public schools are not reflected in the migration numbers in this report.

The next two tables show resident net migration in raw numbers. Except for the past year, resident net migration has been positive every year. In the past five years, there was one large net in migration year and the one year with net out migration. As the table shows, the large resident net out migration this past year was concentrated in the transitions from Grade 8 to Grade 9 and from Grade 10 to Grade 11. There is also net out migration in the middle school grades. This net out migration occurs at the same time there was an increase in Charter school students. (See page 6) Based on the grades with net out migration, there may have been an increase in students attending District #287 as well.

The next table shows resident net migration for every grade transition. In the Edina Public Schools, resident net migration is almost always positive between Kindergarten and Grade 1 and the numbers tend to be large. Most years, there is also a large inflow between Grade 1 and Grade 2 as well. This pattern suggests that families move into the District with children in these grades.

Unlike many other public schools, there is no consistent net inflow of residents at Grade 9, the beginning of high school. This pattern suggests that once families decide on private schools, they stay with that choice throughout their students' K-12 years. Like many other Minnesota schools, there is resident net out migration during the high school years when some students transfer to Alternative Learning Centers or drop out of school.

	RESIDENT NET MIGRATION										
OCTOBER TO OCTOBER											
	08 to 09	09 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	
K to 1	46	54	35	16	25	28	-4	30	36	0	
1 to 2	2	30	12	20	25	3	28	48	17	0	
2 to 3	15	35	4	6	10	9	18	19	-8	4	
3 to 4	-4	27	9	5	2	18	-4	5	4	17	
4 to 5	8	16	-2	5	15	5	0	26	-3	-6	
5 to 6	-11	15	24	2	3	2	21	4	-4	12	
6 to 7	8	28	4	5	4	8	23	0	-15	-18	
7 to 8	-2	14	-12	-3	-1	8	2	-17	14	-13	
8 to 9	23	14	-5	9	-4	-13	10	21	-1	-46	
9 to 10	16	6	-1	11	2	-12	-15	-16	-11	-13	
10 to 11	1	4	4	7	-17	-29	12	5	12	-31	
11 to 12	4	-12	5	-6	10	-12	7	1	13	-6	
Total	106	231	77	77	74	15	98	126	54	-100	
Percent	1.6	3.4	1.1	1.1	1.0	0.2	1.4	1.8	0.7	-1.4	

The next table summarizes resident net migration by aggregating net migration by the elementary grades (Kindergarten-Grade 5), the middle school grades (6-8) and the high school grades (9-12). Resident net migration is positive at K-5 with most years posting large numbers. At the middle school grades, resident net migration has been positive, except for the past three years. At the high school grades, resident net migration is usually positive; however, this past year resident net out migration was exceptionally large (96 resident students).

	RESIDENT NET MIGRATION									
	08 to 09 09 to 10 10 to 11 11 to 12 12 to 13 13 to 14 14 to 15 15 to 16 16 to 17 17 to 18									17 to 18
K-5	67	162	58	52	77	63	38	128	46	15
5-8	5-8 -5 57 11 13 2 18 46 -13 -5 -19								-19	
9-12	44	12	8	12	-5	-66	14	11	13	-96
Total	106	231	77	77	74	15	98	126	54	-100

Resident net migration numbers when compared to the number of resident students in a grade result in the percent of students retained, that is, survival rates. Survival rates are an effective way to analyze the number of students retained, added or lost each year at each grade. For example, 1.000 indicates no change or 100 percent of the grade progressed to the next highest grade. Any number over 1.000 reflects the percentage increase while a number below 1.000 reflects the percentage decrease. For example, 0.98 indicates a -2 percent decrease.

	RESIDENT SURVIVAL RATES OCTOBER TO OCTOBER										
	08 to 09	09 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	
K to 1	1.093	1.113	1.069	1.034	1.052	1.054	0.992	1.066	1.070	1.000	
1 to 2	1.004	1.056	1.023	1.037	1.052	1.006	1.051	1.100	1.035	1.000	
2 to 3	1.028	1.068	1.007	1.011	1.018	1.018	1.035	1.033	0.985	1.008	
3 to 4	0.993	1.050	1.017	1.009	1.004	1.031	0.992	1.009	1.007	1.033	
4 to 5	1.015	1.030	0.997	1.009	1.026	1.009	1.000	1.051	0.994	0.990	
5 to 6	0.979	1.028	1.044	1.004	1.005	1.003	1.038	1.007	0.993	1.023	
6 to 7	1.015	1.054	1.007	1.009	1.007	1.014	1.039	1.000	0.975	0.996	
7 to 8	0.996	1.026	0.978	0.995	0.998	1.014	1.003	0.972	1.024	0.978	
8 to 9	1.045	1.027	0.991	1.017	0.993	0.978	1.017	1.037	0.998	0.922	
9 to 10	1.032	1.011	0.998	1.020	1.004	0.978	0.973	0.973	0.982	0.978	
10 to 11	1.002	1.008	1.007	1.013	0.970	0.947	1.023	1.009	1.021	0.947	
11 to 12	1.008	0.977	1.010	0.989	1.019	0.978	1.013	1.002	1.023	0.990	

For the Edina Public Schools, resident survival rates are usually above 1.000. However, like many other enrollment measures, survival rates fluctuate from year to year. Calculating an average of two or more years is a way to smooth out these annual fluctuations. Survival rates were averaged for

several different time periods (the past five years, the past four years, the past three years and the past two years). The survival rate averages of the past five years and the past four years result in a 15-student difference in ten years, while the average of the past three years is only 36 students lower than the average of the past four years. Therefore, these three schedules of survival rates will result in similar projections. The average of the past two years' survival rates results in projections that are 400 students less than the other three sets of survival rates. This lower projection results from the weight given to the past year in the average of the past two years. The average of the past two years are assumption for a ten-year projection.

COMPARISON OF RESIDENT SURVIVAL RATES									
AVERAGED									
Grade	Past 5 years	Past 4 years	Past 3 years	Past 2 years					
K to 1	1.036	1.032	1.045	1.035					
1 to 2	1.038	1.047	1.045	1.018					
2 to 3	1.016	1.015	1.009	0.997					
3 to 4	1.014	1.010	1.016	1.020					
4 to 5	1.009	1.009	1.012	0.992					
5 to 6	1.013	1.015	1.008	1.008					
6 to 7	1.005	1.003	0.990	0.986					
7 to 8	0.998	0.994	0.991	1.001					
8 to 9	0.990	0.994	0.986	0.960					
9 to 10	0.977	0.977	0.978	0.980					
10 to 11	0.989	1.000	0.992	0.984					
11 to 12	1.001	1.007	1.005	1.007					

COMPARISON OF RESIDENT SURVIVAL RATES								
ON A								
HYPOTHETIC	HYPOTHETICAL KINDERGARTEN CLASS OF							
	1,000							
Grade	Past 5 years	Past 4 years						
К	1,000	1,000						
1	1,036	1,032						
2	1,076	1,081						
3	3 1,092							
4	1,107	1,108						
5	1,117	1,118						
6	1,132	1,135						
7	1,138	1,138						
8	1,136	1,131						
9	1,125	1,124						
10	1,099	1,098						
11	11 1,087 1,098							
12	1,088	1,106						

A way to understand the differences between these survival rates is to calculate the effect of each of the survival rates on a hypothetical kindergarten population of 1,000 students as it progresses through the grades (13 years). As the next table shows, the averages of selected time periods result in similar numbers by Grade 6 and Grade 9, but the numbers are different by Grade 12. <u>The average of the past four years will result in more high school students</u>.

SUMMARY COMPARSIONS OF RESIDENT SURVIVAL RATES ON A									
HYPOTHETICAL KINDERGARTEN CLASS OF 1,000									
Survival	By Gr	/ Grade 6 By Grade 9			By Gra	ade 12			
Rates	#	%	#	%	#	%			
Past 5 years	1,132	13.2%	1,125	12.5%	1,088	8.8%			
Past 4 years	1,135	13.5%	1,124	12.4%	1,106	10.6%			

The next table shows the survival rates used in the projections.

PROJECTED RESIDENT SURVIVAL RATES						
	Low	High				
Grade	(Past 5 years)	(Past 4 Years)				
K to 1	1.036	1.032				
1 to 2	1.038	1.047				
2 to 3	1.016	1.015				
3 to 4	1.014	1.010				
4 to 5	1.009	1.009				
5 to 6	1.013	1.015				
6 to 7	1.005	1.003				
7 to 8	0.998	0.994				
8 to 9	0.990	0.994				
9 to 10	0.977	0.977				
10 to 11	0.989	1.000				
11 to 12	1.001	1.007				

Projection Results

The kindergarten and net migration assumptions are trend lines, which remove annual fluctuations. However, the future, like the past, will be characterized by annual fluctuation, sometimes *large*. Because there is no reasonable way to forecast when fluctuations around trend lines will occur, it is arbitrary to project them. Furthermore, long-term projections are designed to approximate a future

point in time not to yield the best projection for each intervening year between the present and the projection end date. For this reason, <u>long-term projections should not be used for annual budgeting purposes</u>. The district should continue to use its version of the cohort survival methodology for annual enrollment projections.

Four cohort projections are shown in the next table. In ten years, there is a 106-student difference between the lowest projection and the highest projection. The kindergarten assumptions account for a 70 to 71 student difference in the ten years. The migration assumptions account for a 35 to 36 student difference in ten years. These numbers show that the kindergarten assumptions account for more of the difference among the projections than the migration assumptions.

The lowest projection is based on the low kindergarten and low migration assumptions. In this projection, resident enrollment increases by 282 students or 4.0 percent by 2028-29. In five years, resident enrollment is 30 students or 0.4 percent higher than today. Note that resident enrollment decreases until 2022-23.

The highest projection, based on the high kindergarten and high migration assumptions, shows resident enrollment increasing by 388 students or 5.5 percent between 2018-19 and 2028-29. In five years, resident enrollment increases by 112 students or 1.6 percent.

In between the highest and lowest resident projections are two other projections. In 2028-29, these two projections differ by 35 students. As a group, the four resident projections reflect a range of possibilities with all four projections showing resident enrollment increasing.

RESIDENT ENROLLMENT PROJECTIONS								
	Low K	Low K	High K	High K				
Year	Low Mig	High Mig	Low Mig	High Mig				
2018-19	7,111	7,111	7,111	7,111				
2019-20	7,089	7,104	7,095	7,110				
2020-21	7,099	7,128	7,111	7,140				
2021-22	7,083	7,119	7,102	7,138				
2022-23	7,118	7,163	7,144	7,190				
2023-24	7,141	7,190	7,174	7,223				
2024-25	7,215	7,268	7,255	7,308				
2025-26	7,271	7,321	7,319	7,369				
2026-27	7,276	7,317	7,331	7,373				
2027-28	7,322	7,359	7,386	7,422				
2028-29	7,393	7,429	7,464	7,499				

Excludes Early Childhood

The projections from 2018-19 to 2028-29 reflect the following changes in the components of enrollment change. The Edina Public Schools will experience natural decrease, that is, the incoming resident Kindergarten classes will be smaller than the previous years' resident Grade 12. This is a continuation of the pattern of the past ten years when natural decrease averaged 37 per year. In the next ten years, natural decrease averages 13 to 24 per year in the low kindergarten projections and 7 to 18 per year in the high kindergarten projections. Natural decrease will be less severe than in the past.

COMPONENTS OF PROJECTED RESIDENT ENROLLMENT CHANGE							
Oct. to Oct.			Natural				
	То	tal	Increase/	Net			
2018 to 2028	#	%	Decrease	Migration			
Low K/Low Mig	282	4.0%	-133	149			
Low K/High Mig	318	4.5%	-239	79			
High K/Low Mig	353	5.0%	-69	284			
High K/High Mig	388	5.5%	-175	213			

Excludes Early Childhood

Net in migration continues throughout the projection period. The projections show resident net in migration averaging 15 to 28 students per year in the low migration projections and 8 to 21 students per year in the high migration projections. Net migration averaged 39 students per year in the past five years but only 27 per year in the past three years. The migration assumptions put projected net migration near that of the recent past.

Looking at the resident projections based on the elementary, middle school and high school grades is instructive. All four projections show resident K-5 increasing in the next five and next ten years. Note that the low migration assumption results in more resident K-5 students than the high migration assumption. Resident K-5 enrollment is projected to increase by 139 to 201 students in the next five years. For the first five projection years, the kindergarten students have already been born; therefore, the different resident K-5 projections are largely the result of the different assumptions about the percentage of the kindergarten pool attending the Edina Public Schools and the net migration assumptions.

RESIDENT ENROLLMENT PROJECTIONS								
	K-5	6-8	9-12	Total				
2018-19	3,217	1,626	2,268	7,111				
2023-24								
Low K/Low Mig	3,385	1,659	2,097	7,141				
Low K/High Mig	3,356	1,679	2,155	7,190				
High K/Low Mig	3,418	1,659	2,097	7,174				
High K/High Mig	3,389	1,679	2,155	7,223				
2028-29								
Low K/Low Mig	3,404	1,784	2,206	7,393				
Low K/High Mig	3,374	1,789	2,266	7,429				
High K/Low Mig	3,446	1,805	2,213	7,464				
High K/High Mig	3,416	1,811	2,273	7,499				

Excludes Early Childhood

In the first five projection years, resident middle school enrollment is 33 to 53 students higher than today, that is, resident middle school enrollment is essentially flat. In the second five projection years, middle school enrollment increases. In the second five projection years, the kindergarten assumptions effect the middle school projections but in the first five years only the current grade size and the migration assumptions are affecting the size of the middle school grades.

Resident high school enrollment is projected to decrease 113 to 171 students in the first five projection years. In the second five projection years, resident high school enrollment is below its current level in the low migration assumption projections and at today's numbers in the high migration assumption projections. The high school projections are almost totally a result of the migration assumptions. The kindergarten assumptions have only a small effect on the high school projections. In 2028-29, the 2018-19 kindergarten class will be in Grade 10, which means that all the grades below Grade 10 are products of the projection assumptions.

The cohort survival projections show enrollment increasing with the amount of growth varying modestly, that is, by 106 resident students in ten years. The projected natural decrease depresses resident enrollment growth.

Housing Data

It could be said that housing stock is like DNA. It determines the size and characteristics of the <u>resident</u> school age population.

After dwelling unit type, year built and market value emerge as the most important housing characteristics. Year built reflects how families lived in that era and is a proxy for square feet and characteristics such as number of bedrooms, number of bathrooms and number of garage spaces. The presence of a master suite, walk-in closets, etc. can also be inferred from year built. Value implies some of these same characteristics plus lot size, location and interior amenities such as kitchen and bathroom appointments and finishes.

The relationship between housing unit characteristics and student enrollment and student characteristics has been established by work in four states. Findings based on school districts in four states (Minnesota, Wisconsin, Illinois and Colorado) follow in italic. Remember that the yield measures reflect Edina Public Schools' resident students.

• Dwelling unit type affects the school age child per unit yield. Single-family detached units have the highest school age child per unit yield. Single-family attached, such as townhouses, have significantly fewer children per unit than single-family detached units, while apartment units have even fewer school age children per unit, although there are some local exceptions.

Eighty-eight (88.0) percent of Edina Public Schools' resident students live in single-family detached units. Single-family detached units yield slightly more than half an Edina Public Schools' student (0.54) per unit. Apartment units are home to 8.4 percent of Edina Public Schools' resident students. The per unit apartment student yield is higher than typical. Note the low per unit student yield for townhomes and condominium units.

EDINA PUBLIC SCHOOLS							
Housing Type	Units*	Students	Yield				
Single-Family Detached	11,643	6,253	0.54				
Single-Family Attached**	372	46	0.12				
Apartments	2,639	599	0.23				
Duplex Units	310	88	0.28				
Split Duplex	223	70	0.31				
Condominium Units	1,690	53	0.03				
Total	18,002	7,109	0.39				

*As of June 30, 2018

**Townhomes

Source: Hennepin County Geographic Information System and District Student Information System

• Newer single-family detached units yield more students per unit than older single-family detached units.

EDINA PUBLIC SCHOOLS								
SINGLE-FAMILY	SINGLE-FAMILY DETACHED RESIDENT STUDENT YIELD BY YEAR BUILT							
Resident K-12								
Year Built	Units	#	Yield					
1980 or Later	1,522	1,098	0.72					
1960-79	3,526	1,945	0.55					
1950-59	4,181	2,093	0.50					
Pre 1950	2,414	1,117	0.46					
Total	11,643	6,253	0.54					

Like most other school districts, the Edina Public Schools' resident student per unit yield is highest in the newest units, that is, in units built in 1980 or later (0.72). The student yields from units built prior to 1980 decrease with the age of the unit.

• As single-family detached units sell (turnover), student yield usually increases in the newer units. In older units, yield is likely to decrease.

For the Edina Public Schools, newly built single-family detached units have a per unit student yield of 0.75, a high yield, and well above the yield of existing units. Furthermore, existing units that sold recently had a higher student yield (0.62) than units that did not sell recently (0.52). Therefore, changes in the housing stock and the sale of units have a positive effect on resident enrollment in the Edina Public Schools.

EDINA PUBLIC SCHOOLS							
SINGLE	SINGLE-FAMILY DETACHED UNITS						
	BY SALES STATUS						
(Sold Ja	nuary 1, 2016—June 30,	2018)					
Status	Status Units K-12 Yield						
New*	191	0.75					
Existing (pre-2016)							
Not Sold	Not Sold 10,055 0.52						
Sold 1,397 0.62							
Total	11,643	0.54					

*Built January 1, 2016—June 30, 2018

Source: Hennepin County Geographic Information System and District Student Information System

• The market value of single-family detached units affects the school age child per unit yield. Moderately priced to higher priced units yield more school age children than the lowest priced units.

Source: Hennepin County Geographic Information System and District Student Information System

The resident student yield is correlated with the value of the unit. Single-family detached units valued at \$750,000 or more have the highest per unit student yield (0.69) while units valued at less than \$300,000 have the lowest student yield per unit (0.23).

EDINA PUBLIC SCHOOLS								
SINGLE-FAMILY DETACHED RESIDENT STUDENT YIELD BY								
	MARKET VALUE							
Estimated	Single-Family	Resid	ent K-12					
Market Value	Units	#	Yield					
\$750,000 or More	2,497	1,727	0.69					
\$500,000 -\$749,999	3,439	2,034	0.59					
\$300,000 - \$499,999	5,102	2,354	0.46					
Less than \$300,000	605	138	0.23					
Total	11,643	6,253	0.54					

Source: Hennepin County Geographic Information System and District Student Information System

• As the population ages, more dwelling units are being built for mature adults (55+ years) and for seniors. These units will have zero school age children per unit.

Currently, 50 percent of the district's single-family detached units contain at least one person age 55 or older, while 31 percent of single-family detached units contain an Edina Public Schools student.

Looking further at the age of at least one adult in single-family detached units shows that 3,252 (27.9 percent) have at least one person age 65 or above. Twelve (12.3) percent of single-family units (1,435) have at least one person age 75 or above. Four (3.9) percent of single-family detached units (453) have at least one person 85 years of age or above. These percentages suggest that advanced age will have some effect on the turnover of single-family housing units in the next ten years.

SINGLE-FAMILY DETACHED HOMES WITH PUBLIC SCHOOL K-12 STUDENTS									
	OR REGISTERED VOTERS AGE 55+								
			Percentage		Percentage				
		With K-12	with K-12	With	with				
Attendance	Single-Family	Public School	Public School	Registered	Registered				
Area	Detached	Students	Students	Voter 55+	Voter 55+				
District-wide	11,643	3,597	31%	5,769	50%				

Source: Hennepin County Geographic Information System and District Student Information System

• Different racial/ethnic groups and/or major language groups have different housing patterns by unit type.

EDINA PUBLIC SCHOOLS HOUSING TYPE BY RACE/ETHNICITY										
	Resident Students									
	То	tal	Single- Deta	Family ched	Single-Family Attached		Apartments		Oth	er*
Race/Ethnicity	#	%	#	%	#	%	#	%	#	%
White	5,604	100%	5,337	95%	34	1%	134	2%	99	2%
Students of Color	1,505	100%	916	61%	12	1%	465	31%	112	7%

*Duplexes

Source: Hennepin County Geographic Information System and District Student Information System

Twenty-one percent of Edina Public Schools' resident students are students of color. Among students of color, 61 percent reside in single-family detached units while 31 percent reside in apartment units. Among White resident students, 95 percent live in single-family detached units and 12 percent live in apartment units.

EDINA PUBLIC SCHOOLS STUDENT YIELD BY LOCATION								
		Median Value of						
	Single-Family	Single-Family		K-12 Student				
City	Detached Homes	Detached Homes	K-12 Students	Yield				
Edina	11,643	\$506,000	6,253	0.54				

Source: Hennepin County Geographic Information System and Student Information System

PROJECTED NEW DEVELOPMENT FOR NEXT THREE YEARS							
	Single-Family						
City	Detached	Condominium Units	Apartment Units				
Edina	198*	70	523**				

*Tear down, new build

** Units proposed not yet approved, and units approved not yet built

The relationship between school enrollment and housing units is complex because housing stock does not provide many clues about the age of its inhabitants. Type of unit is very important for enrollment projections. Units with an entrance from the outdoors yield more students than units where the entrance is from a common interior hallway. Therefore, the single-family detached units and townhomes yield more students per unit than apartments and condominium units. Single-family detached units have the highest student yield per unit. Usually, duplexes have a higher per unit student yield than townhomes, however, no duplexes are expected to be built.

The final table shows that in the Edina Public Schools, the per unit yield is higher for resident 9-12 than in many other school districts. This supports the cohort survival finding of natural decrease in the coming years.

RESIDENT STUDENT YIELD BY DWELLING UNIT TYPE								
Dwelling Type Number K-5 Yield 6-8 Yield 9-12 Yield								
Single-Family Detached	11,643	0.24	0.12	0.17				
Townhomes	372	0.08	0.02	0.03				
Apartments	3,764	0.09	0.03	0.04				

CHAPTER 2 RESIDENT ENROLLMENT PROJECTIONS FOR ELEMENTARY SCHOOLS AND ATTENDANCE AREAS

Projecting resident K-5 enrollment by school is fraught with potential errors because the enrollment at any one school is small, which magnifies annual fluctuations in kindergarten class size and net migration. For this reason, along with the brief time that existing students are part of the K-5 student body, projections will be made for five years rather than ten years. This chapter focuses on the Edina Public Schools' six elementary schools and the five elementary attendance areas. Normandale, a French immersion school, is a district-wide school with no attendance area.

RESIDENT ENROLLMENT GRADES K-5									
School	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19			
Concord		627	595	600	627	631			
Cornelia		488	481	510	501	502			
Countryside		476	460	468	467	460			
Creek Valley		500	496	502	486	501			
Highlands		521	511	511	524	504			
Normandale		594	598	603	621	619			
Total		3,206	3,141	3,194	3,226	3,217			

Past Trends

Enrollment by year reflects boundaries in effect that year

Resident K-5 enrollment is 11 students or 0.3 percent higher in 2018-19 than in 2014-15. Despite this very modest increase, Normandale increased by 25 students and Cornelia grew by 14 students. Concord and Creek Valley had negligible growth. Countryside and Highlands experienced a decrease in resident enrollment.

RESIDENT KINDERGARTEN									
School	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19			
Concord		74	88	97	108	109			
Cornelia		86	59	86	84	78			
Countryside		78	58	79	69	65			
Creek Valley		57	73	68	68	74			
Highlands		86	72	77	89	72			
Normandale		105	104	108	108	108			
Total		486	454	515	526	506			

The previous table shows a five-year history of resident kindergarten enrollment. The 2018-19, resident kindergarten is 20 students larger than the 2014-15 resident kindergarten. During this time, Concord and Creek Valley experienced large increases in their resident kindergarten classes. At Highland, Countryside and Cornelia, resident kindergarten classes were smaller than in 2014-15.

Since 2014-15, district-wide, resident K-5 net migration was positive every year. Resident K-5 net in migration was very large between fall 2015 and fall 2016 and very small between fall 2017 and fall 2018. Fluctuations from year to year are common and large swings are not unusual. However, it would be helpful to know if any event is related to these swings.

RESIDENT NET MIGRATION								
		GRADES K-5						
	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to			
School	2014-15	2015-16	2016-17	2017-18	2018-19			
Concord		-2	41	36	-2			
Cornelia		12	35	-5	0			
Countryside		6	4	13	8			
Creek Valley		31	34	18	28			
Highlands		2	18	-5	-11			
Normandale	Normandale -11 -4 -11 -8							
Total		38	128	46	15			

Resident K-5 Projections

Individual Elementary Schools

Individual school projections will be made using the cohort survival method. The advantage of this method is that it begins by aging the student population. Therefore, any differences in grade size are reflected in the projections when these classes leave elementary school. Further, this method is sensitive to the number of births in the immediate past.

<u>Kindergarten</u>

The next table shows resident births by attendance area. While these data will not be used as a basis for kindergarten projections because students do not always attend the school in their attendance area, the data are informative. The birth data show that the number of resident births has increased since 2014, although the number has fluctuated since.

RESIDENT BIRTHS									
Attandance Area	2012, 2012	3eptember	1-August 51	2015, 2016	2016, 2017	2017. 2010			
Attendance Area	2012; 2013	2013; 2014	2014; 2015	2015; 2016	2016; 2017	2017; 2018			
Concord	78	94	119	94	99	112			
Cornelia	112	93	124	104	95	104			
Countryside	48	52	47	57	59	55			
Creek Valley	53	48	62	62	78	66			
Highlands	38	52	50	46	49	42			
Normandale									
Total	329	339	402	363	380	379			

RESIDENT KINDERGARTEN PROJECTIONS				
Year	Low	High		
2019-20	522	528		
2020-21	526	532		
2021-22	526	532		
2022-23	525	532		
2023-24	525	531		

Kindergarten projections by school will be based on the district-wide high kindergarten projections because in five years, the difference between the low and high kindergarten projections is only 6 students. Distributed over six schools, this small difference does not warrant separate projections based on the low kindergarten projections. The next table shows that some school's kindergarten shares fluctuated more than the shares of other schools. After analyzing several averages, future kindergarten students will be allocated to individual schools based on the past two-years' average of each school's kindergarten share with modifications to reflect the trends at specific schools. Further, resident kindergarten was capped at Normandale at 108 resident students.

PERCENT OF RESIDENT KINDERGARTEN AT EACH SCHOOL								
School	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2 yr. average	Projection
Concord		15.2	19.4	18.8	20.6	21.6	21.1	21.3
Cornelia		17.7	13.0	16.7	16.0	15.4	15.7	15.4
Countryside		16.1	12.8	15.3	13.1	12.9	13.0	13.0
Creek Valley		11.7	16.0	13.2	12.9	14.6	13.8	14.2
Highlands		17.7	15.9	15.0	16.9	14.2	15.5	15.2
Normandale		21.6	22.9	21.0	20.5	21.3	20.9	20.4
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0

The resident kindergarten projections show less annual fluctuation than the historical data. Because there is no way to project annual fluctuations, a smooth trend is the only reasonable option. However, future resident kindergarten classes by school will not be "constant" as shown in the next table.

RESIDENT KINDERGARTEN PROJECTIONS BY SCHOOL							
School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Concord	109	112	113	113	113	113	
Cornelia	78	83	84	84	84	83	
Countryside	65	69	69	69	69	69	
Creek Valley	74	75	76	76	76	76	
Highlands	72	81	82	82	82	82	
Normandale	108	108	108	108	108	108	
Total	506	528	532	532	532	531	

Migration

Migration rates (survival rates) by school are based on the average of the past four years, which is the same assumption used in the district-wide high migration assumption. By averaging the survival rates, some of the year to year fluctuations are removed. Only one grade transition rate had to be modified for Creek Valley due to an anomaly (outlier).

SURVIVAL RATES USED IN THE RESIDENT PROJECTIONS							
School	K to 1	1 to 2	2 to 3	3 to 4	4 to 5		
Concord	1.063	1.055	1.038	1.033	1.023		
Cornelia	1.071	1.073	0.984	1.008	1.010		
Countryside	1.003	1.021	1.027	1.030	1.021		
Creek Valley	1.067	1.070	1.058	1.043	1.070		
Highlands	1.046	1.040	0.991	0.992	0.953		
Normandale	0.974	0.993	1.002	0.972	0.974		

Projection Results

The 2018-19 kindergarten will be in Grade 5 in 2023-24. Therefore, enrollment in the last projection year is largely derived from the assumptions. This means that individual school projections are heavily influenced by the kindergarten class size every year. A summary of the cohort survival projections by school is shown in the next table and annual projections are in a following table. (Background data are in the Appendix)

The sum of the individual schools' resident kindergarten classes equals the district-wide high resident kindergarten projection. Other grades, however, were not controlled to the district-wide total for those grades. The kindergarten and migration assumptions are smoothed trend lines seeking to approximate five years in the future, which means that any single year may differ from the projections. In some years, enrollment may be higher than the projections while in other years it may be lower.

COHORT SURVIVAL METHOD PROJECTIONS BY SCHOOL							
RESIDENT K-5							
Change							
School	bol 2018-19 2023-24 #						
Concord	631	760	129	20.4%			
Cornelia	502	549	47	9.4%			
Countryside	460	428	-32	-7.0%			
Creek Valley	501	530	29	5.8%			
Highlands	504	505	1	0.2%			
Normandale	619	623	4	0.6%			
District-wide	3,217	3,389	172	5.3%			

Resident K-5 enrollment increases by 172 students or 5.3 percent in five years compared to almost no change in the past five years. The largest enrollment increase is at Concord (129 students or 20.4 percent) while Cornelia increases by 9.4 percent and Creek Valley by 5.8 percent. The increases at Highlands and Normandale are less than 1 percent. Countryside is projected to decrease. The amount of change by school occurs for different reasons. For example, the large projected increase at Concord is the result of very high net in migration (survival rates) at every grade transition. (See table with survival rates on the previous page) Cornelia and Creek Valley have high survival rates at some grades. Countryside's decrease stems from a large Grade 5 in 2018-19 that ages out and is not replaced by a similar size cohort. Resident enrollment at Highlands initially decreases slightly but then returns to its current level. The cap on resident kindergarten and relatively stable survival rates results in "flat" enrollment at Normandale.

COHORT SURVIVAL METHOD PROJECTIONS BY SCHOOL BY YEAR							
		RESID	ENT K-5				
	HIGH I	KINDERGARTE	N/HIGH MIG	RATION			
School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Concord	631	664	695	724	736	760	
Cornelia	Cornelia 502 512 518 547 547 549						
Countryside	460	431	429	438	429	428	
Creek Valley	501	498	515	510	522	530	
Highlands	504	493	489	500	506	505	
Normandale	619	614	618	623	626	623	
Sum	Sum 3,217 3,212 3,264 3,342 3,366 3,395						
District-wide	3,217	3,214	3,262	3,341	3,365	3,389	
Difference	0	-2	2	1	1	6	

Comparing the sum of the individual school projections to the district-wide high kindergarten/high migration projection shows the individual school projections are a good fit with the independently-made district-wide projections. The sum of the individual schools is only 6 students higher than the high kindergarten/high migration projection in 2023-24. However, future enrollment at individual elementary schools may differ from the projected enrollment for those schools for a couple of reasons. Resident kindergarten may be different and migration (survival) rates may change.

Attendance Area Projections

Attendance area projections will be made using the housing starts method. These projections show the potential of each attendance area to produce <u>resident</u> K-5 students. The housing starts method shows the effect of new housing units and the sale of existing units.

<u>Method</u>

The Housing Occupancy and Enrollment Study for the Edina Public Schools provides resident K-5 yields for existing units and new units. Yield data for existing units are specific for recently sold units and units that did not turnover.

The housing starts method will be calculated as follows:

New Single-Family Detached Units X K-5 yield = Projected students (A)

Existing Single-Family Detached Units X Percent Sold Annually = Units with movers (new residents) and units with non-movers (no change)

--Existing Single-Family Detached Units (not sold) X K-5 yield = Projected students (B) --Existing Single-Family Detached Units (sold) X K-5 yield = Projected students (C)

Add Projected Students from A, B and C = Projected students from Single-Family Detached Units

Add Projected Students from Single-Family Detached Units to Projected Students from Non-Single-Family Detached Units = K-5 Resident Students

The housing unit method produces reasonable results for school districts when enrollment is stable or increasing. (The housing unit performs best when hay fields, corn fields or wheat fields are converted into residential units in a rapidly growing district.) The method's greatest weakness is its inability to detect trends that signal enrollment decline. For school districts with declining enrollment, the housing unit method is unreliable and over projects enrollment. As mentioned earlier, housing stock doesn't provide many clues about the age of the inhabitants, which is vital for school enrollment projections. Further, the housing unit method doesn't reflect existing differences in grade size or how these differences will affect grade size in the future (natural increase/decrease). Projected smaller kindergarten classes are not reflected either. When either of these factors is present, the housing unit method cannot detect them because yield per unit remains at today's level throughout the projection period. This makes the housing unit method more "static" than the cohort survival method.

Another challenge with the housing unit method is the assumption surrounding new units. It is often assumed that new units mean new residents to the district. Sometimes this is true, but sometimes it is not. People also move within a school district. Even if the occupants of new housing units are "new" to the district, they don't necessarily translate into additional school enrollment because the population in existing units is changing as well.

PROJECTED NEW SINGLE-FAMILY DETACHED UNITS*						
Attendance Area	2019	2020	2021		Total	
Concord	30	30	30		90	
Cornelia	2	2	2		6	
Cornelia (North)	10	10	10		30	
Countryside	9	9	9		27	
Creek Valley	4	4	4		12	
Highlands	6	6	6		18	
Highlands (North)	5	5	5		15	
District	66	66	66		198	

*Tear down, new build

Source: City officials

The previous table shows projected single-family detached units by attendance area. The increase in new (tear down) single-family detached units of 198 in 36 months is like the past 30 months when 191 new single-family detached units were erected (tear downs).

The next two tables show estimated annual sales of single-family detached units by attendance area. The sales data are based on sales from January 1, 2016 through June 30, 2018. (The sales data are for units built pre-2016.)

PERCENT OF EXISTING SINGLE-FAMILY				
DETACHED UNITS WITH TURNOVER				
ANNUALLY				
(January 1, 2016—June	30, 2018)			
Attendance Area %				
Concord	5.6%			
Cornelia	4.8%			
Cornelia (North)	6.8%			
Countryside	5.6%			
Creek Valley	4.8%			
Highlands	5.2%			
Highlands (North)	6.0%			
District	5.2%			

Annual sales based on a 30-month period The North portions are not contiguous to the remainder of

their respective attendance area

The annual rate of sales by attendance area varies from 4.8 percent in the Cornelia and Creek Valley attendance areas to 6.8 percent in the Cornelia (North) area, which is not contiguous to the remainder of the Cornelia attendance area. District-wide the annual rate of sales in the 30-month period was 5.2 percent.

K-5 RESIDENT STUDENT YIELD FROM SINGLE-FAMILY UNITS						
	Existing Units (Pre-2016)					
Attendance Area	Non-Movers		Movers (New Residents)		New Units (Jan. 2016 – June 2018))	
	#	Yield	#	Yield	#	Yield
Concord	2,983	0.23	405	0.39	91	0.46
Cornelia	1,131	0.20	148	0.45	8	0.88
Cornelia (North)	496	0.21	84	0.36	17	0.06
Countryside	1,912	0.22	281	0.34	28	0.46
Creek Valley	2,223	0.19	300	0.41	12	0.50
Highlands	836	0.20	111	0.39	18	0.61
Highlands (North)	474	0.27	68	0.56	17	0.59
District	10,055	0.21	1,397	0.39	191	0.47

As the above table shows, resident K-5 yield per single-family detached unit increases after a unit is sold both district-wide and in every attendance area. Units that turned over have a significantly higher resident student yield than those that did not. The yield from newly built units is even higher. The sale of existing units and the construction of new units results in enrollment growth.

RESIDENT STUDENTS FROM OTHER				
DWELLING UNIT TYPES*				
2018-19				
K-5 Resident				
Attendance Area	Students			
Concord 29				
Cornelia	232			
Cornelia (North)	8			
Countryside	21			
Creek Valley	118			
Highlands	46			
Highlands (North) 1				
District 455				

*Townhomes, Split Duplex, Condominium, Duplexes and Apartments

Students also reside in non-single-family detached units. Rather than trying to project resident students from non-single-family detached units, the 2018-19 student numbers will be used throughout the projection period. This assumption has some weaknesses, but overall is less problematic than trying to project students in these units.

HOUSING UNIT METHOD PROJECTIONS						
RESIDENT K-5 EDINA PUBLIC SCHOOLS STUDENTS						
	BY ATTENDAM	NCE AREA				
	2018-2	19				
	F	Resident K-5 Student	S			
	Single-Family					
Attendance Area	Units	All Other Units	Total			
Concord	875	29	904			
Cornelia	432	240	672			
Countryside	536	21	557			
Creek Valley	548 118 666					
Highlands	393 47 440					
District-wide	2,784	455	3,239			

Note that K-5 resident fall enrollment was 3,217 (not by address)

The housing unit method projections show the K-5 resident potential of current and projected new units. With this method, the district total is the sum of the attendance area projections. In 2018-

19, there were 3,239 resident K-5 students by address. Based on these data, there were 2,784 resident K-5 students residing in single-family detached units with another 455 resident K-5 students living in other unit types.

For 2021-22, the housing unit method projects an increase of 301 resident K-5 students living in single-family units. Because the number of students from other unit types is projected to remain at the 2018-19 level, resident K-5 enrollment increases by 301 students. Although the 2021-22 projections do not increase the number of resident students residing in other housing unit types, these units are likely to yield more students in the future.

While the housing unit method projects 3,540 <u>resident</u> K-5 students in 2021-22, the high kindergarten/high migration assumptions in the cohort survival method project <u>resident</u> K-5 enrollment to be 3,341 or 199 fewer resident K-5 students than the housing unit method. The housing unit method often overstates future enrollment. However, the housing unit method projections show that if the rate of sales and tear downs continues at its current pace, resident K-5 enrollment could exceed the cohort survival projections.

It is important to remember that the housing unit method projections: 1) do not recognize any change in births/kindergarten, and 2) do not recognize the aging out of large elementary grades such as occurs with the 2018-19 Grade 5 class at Countryside Elementary School.

HOUSING UNIT METHOD							
RESIDENT K-5 EDINA PUBLIC SCHOOLS STUDENTS							
	BY A	TTENDANCE ARE	A				
	2018	3-19 AND 2021-2	2				
	201	8-19	202	1-22			
Attendance Area	Single-Family	Total	Single-Family	Total			
Concord	875	904	968	997			
Cornelia	432	672	481	721			
Countryside	536 557 568 589						
Creek Valley	548 666 620 738						
Highlands	ilands 393 440 448 495						
District-wide	2,784	3,239	3,085	3,540			

School and Attendance Area Projections

It is very difficult to meaningfully compare the individual school cohort projections with the attendance area projections because Normandale has no attendance area. Further, many residents do not attend the elementary school in the attendance area where they live. The next table shows the number and percentage of resident students attending the elementary school in their attendance area. Highland attendance area residents are the most likely to attend the school (Highland) in their attendance area (81.4 percent). Concord attendance area residents are the least likely to attend the

school (Concord) in their attendance area (65.3 percent). Seventy-one to 73 percent of residents in the remaining three attendance areas attend their "local" elementary school.

The next table shows resident students by attendance area and the school attended in 2018-19. As these data show, many students attend an elementary school outside their attendance area of residence.

EDINA PUBLIC SCHOOLS K-5 STUDENTS BY ATTENDANCE AREA AND BY SCHOOL ATTENDED										
		ŀ	Attendance Are	а						
School	Concord	Cornelia	Countryside	Creek Valley	Highland	Total				
Concord	590	24	4	3	9	630				
Cornelia	9	9 490 7 5 1 512								
Countryside	8	22	397	33	5	465				
Creek Valley	7	4	11	474	6	502				
Highland	52	32	30	35	358	507				
Normandale	238	100	108	116	61	623				
Total	904	904 672 557 666 440 3,239								
% in Area	65.3%	72.9%	71.3%	71.2%	81.4%					

CHAPTER 3

ENROLLMENT PROJECTIONS FOR MIDDLE SCHOOLS

The Edina Public Schools operate two middle schools. The following elementary schools "feed" each of the following middle schools.

South View Middle School

- Concord
- Cornelia
- Highlands

Valley View Middle School

- Countryside
- Creek Valley
- Normandale

Past Trends

Prior to 2017-18 middle school included Grade 9. To understand enrollment in Grades 6 to 8, the next table shows resident enrollment for those grades only. Since 2014-15, Grade 6-8 resident enrollment decreased by 123 students or -7.0 percent.

ENROLLMENT									
		MIDDLE S	CHOOL						
School 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19									
Grades 6-8 only									
South View MS		841	858	875	829	789			
Valley View MS 908 911 897 878 837									
District-wide		1,749	1,769	1,772	1,707	1,626			

In 2017-18 and 2018-19 middle school was Grades 6-8, prior years included Grade 9

Individual Middle School Projections

Individual middle school projections will be made using the cohort survival method. Grade 5 from the respective feeder schools will flow into each middle school and survival rates will be applied for each middle school grade progression.

Grade 5

The independently projected Grade 5 from the respective feeder schools will be the starting point for the middle school projections. As the next table shows, the number of 5th Graders decreases by 24 students in the district-wide high kindergarten/high migration projection and by 22 students when the individual schools are summed. Because the number of 5th Graders from the independently made elementary school projections is so close to the district-wide projections, no adjustment will be made when making the middle school projections. Therefore, the number of middle school students at each middle school grade may vary slightly from the district-wide high kindergarten/high migration projections.

GRADE 5 BY FEEDER SCHOOLS										
School	School 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24									
South View MS	279	284	249	301	294	297				
Valley View MS	311	259	268	271	274	271				
Sum	590	543	517	572	568	568				
District-wide 590 544 515 570 570 566										
Difference	0	-1	2	2	-2	2				

Migration

The next table shows the survival rates used in the projections. The average of survival rates for the past four years was used. This is the same assumption used in the district-wide high kindergarten/high migration projections. Note the relatively low survival rate for the Grade 5 to Grade 6 transition for South View and the relatively high survival rate at this same grade transition for Valley View.

PROJECTED SURVIVAL RATES								
School 5 to 6 6 to 7 7 to 8								
South View MS	0.969	0.985	0.986					
Valley View MS 1.063 1.005 1.003								

Projection Results

As the next table shows, the sum of the individual middle school projections is a good fit with the district-wide resident high kindergarten/high migration projections. Note that while the total middle school projections fit the district-wide projections, individual grades may not sum to the district-wide projection for each grade.

In five years, middle school resident enrollment will increase by 53 students district-wide. Both middle schools will experience an increase in resident enrollment, but the increase is larger at Valley View Middle School.

ENROLLMENT PROJECTIONS									
		IVIIDDLE S	CHOOLS						
School	School 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24								
South View MS	789	758	788	775	797	807			
Valley View MS	837	898	898	895	852	868			
Sum	1,626	1,656	1,686	1,670	1,649	1,675			
District-wide 1,626 1,657 1,693 1,673 1,653 1,679									
Difference	0	-1	-7	-3	-4	-4			

COHORT SURVIVAL METHOD PROJECTIONS BY SCHOOL								
	Change							
School	2018-19	2023-24	#	%				
South View MS	789	807	18	2.3%				
Valley View MS	837	868	31	3.7%				
Sum 1,626 1,675 49 3.0								
District-wide	1,626	1,679	53	3.3%				

CHAPTER 4

TOTAL ENROLLMENT PROJECTIONS

Total enrollment in the Edina Public Schools will be the sum of resident enrollment and the number of open enrolled students. This latter number is managed by the District.

APPENDIX A

EDINA PUBLIC SCHOOLS

ENROLLMENT HISTORY										
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19				
К		74	88	97	108	109				
1		96	78	98	113	99				
2		92	92	93	103	115				
3		109	101	94	96	103				
4		138	103	101	104	104				
5		118	133	117	103	101				
Total		627	595	600	627	631				

CONCORD ELEMENTARY SCHOOL

NET MIGRATION									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		4	10	16	-9				
1 to 2		-4	15	5	2				
2 to 3		9	2	3	0				
3 to 4		-6	0	10	8				
4 to 5		-5	14	2	-3				
Total		-2	41	36	-2				

SURVIVAL RATES										
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to					
Progression	2015-16	2015-16	2016-17	2017-18	2018-19					
K to 1		1.054	1.114	1.165	0.917					
1 to 2		0.958	1.192	1.051	1.018					
2 to 3		1.098	1.022	1.032	1.000					
3 to 4		0.945	1.000	1.106	1.082					
4 to 5		0.964	1.136	1.020	0.971					

ENROLLMENT HISTORY										
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19				
К		86	59	86	84	78				
1		78	83	68	97	87				
2		77	90	92	70	97				
3		78	77	97	84	66				
4		91	80	79	89	89				
5		78	92	88	77	85				
Total		488	481	510	501	502				

CORNELIA ELEMENTARY SCHOOL

NET MIGRATION									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		-3	9	11	3				
1 to 2		12	9	2	0				
2 to 3		0	7	-8	-4				
3 to 4		2	2	-8	5				
4 to 5		1	8	-2	-4				
Total		12	35	-5	0				

SURVIVAL RATES										
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to					
Progression	2015-16	2015-16	2016-17	2017-18	2018-19					
K to 1		0.965	1.153	1.128	1.036					
1 to 2		1.154	1.108	1.029	1.000					
2 to 3		1.000	1.078	0.913	0.943					
3 to 4		1.026	1.026	0.918	1.060					
4 to 5		1.011	1.100	0.975	0.955					

ENROLLMENT HISTORY									
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19			
К		78	58	79	69	65			
1		88	75	57	83	70			
2		75	96	74	60	79			
3		77	79	96	73	64			
4		78	77	79	102	77			
5		80	75	83	80	105			
Total		476	460	468	467	460			

COUNTRYSIDE ELEMENTARY SCHOOL

NET MIGRATION									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		-3	-1	4	1				
1 to 2		8	-1	3	-4				
2 to 3		4	0	1	4				
3 to 4		0	0	6	4				
4 to 5		-3	6	1	3				
Total		6	4	13	8				

SURVIVAL RATES									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2013-10	2013-10	2010-17	2017-18	2018-19				
K to 1		0.962	0.983	1.051	1.014				
1 to 2		1.091	0.987	1.053	0.952				
2 to 3		1.053	1.000	0.986	1.067				
3 to 4		1.000	1.000	1.063	1.055				
4 to 5		0.962	1.078	1.013	1.029				

CREEK VALLEY ELEMENTARY SCHOOL

ENROLLMENT HISTORY									
Grade	2013-14 2014-15 2015-16 2016-17 2017-18 2018								
К		57	73	68	68	74			
1		84	60	78	71	75			
2		75	90	72	90	76			
3		92	83	95	73	95			
4		84	94	87	97	79			
5		108	96	102	87	102			
Total		500	496	502	486	501			

NET MIGRATION								
Grade	2013-14 to 2015-16	2014-15 to 2015-16	2015-16 to 2016-17	2016-17 to	2017-18 to			
Progression	2013 10	2013 10	2010 17	2017-18	2018-19			
K to 1		3	5	3	7			
1 to 2		6	12	12	5			
2 to 3		8	5	1	5			
3 to 4		2	4	2	6			
4 to 5		12	8	0	5			
Total		31	34	18	28			

SURVIVAL RATES									
Grade	2013-14 to 2014-15 to 2015-16 to 2016-17 to 2017-1								
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		1.053	1.068	1.044	1.103				
1 to 2		1.071	1.200	1.154	1.070				
2 to 3		1.107	1.056	1.014	1.056				
3 to 4		1.022	1.048	1.021	1.082				
4 to 5		1.143	1.085	1.000	1.052				

HIGHLANDS ELEMENTARY SCHOOL

ENROLLMENT HISTORY									
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19			
К		86	72	77	89	72			
1		91	85	82	83	87			
2		88	97	97	78	83			
3		75	84	100	96	77			
4		97	78	84	97	92			
5		84	95	71	81	93			
Total		521	511	511	524	504			

NET MIGRATION									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		-1	10	6	-2				
1 to 2		6	12	-4	0				
2 to 3		-4	3	-1	-1				
3 to 4		3	0	-3	-4				
4 to 5		-2	-7	-3	-4				
Total		2	18	-5	-11				

SURVIVAL RATES									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		0.988	1.139	1.078	0.978				
1 to 2		1.066	1.141	0.951	1.000				
2 to 3		0.955	1.031	0.990	0.987				
3 to 4		1.040	1.000	0.970	0.958				
4 to 5		0.979	0.910	0.964	0.959				

NORMANDALE ELEMENTARY SCHOOL

ENROLLMENT HISTORY									
Grade	2013-14 2014-15 2015-16 2016-17 2017-18 201								
К		105	104	108	108	108			
1		108	101	101	104	108			
2		103	108	102	100	101			
3		87	104	110	100	100			
4		102	82	103	107	98			
5		89	99	79	102	104			
Total		594	598	603	621	619			

NET MIGRATION									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		-4	-3	-4	0				
1 to 2		0	1	-1	-3				
2 to 3		1	2	-2	0				
3 to 4		-5	-1	-3	-2				
4 to 5		-3	-3	-1	-3				
Total		-11	-4	-11	-8				

SURVIVAL RATES									
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to				
Progression	2015-16	2015-16	2016-17	2017-18	2018-19				
K to 1		0.962	0.971	0.963	1.000				
1 to 2		1.000	1.010	0.990	0.971				
2 to 3		1.010	1.019	0.980	1.000				
3 to 4		0.943	0.990	0.973	0.980				
4 to 5		0.971	0.963	0.990	0.972				

SOUTH VIEW MIDDLE SCHOOL

ENROLLMENT HISTORY							
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
5 Feeders		280	320	276	261	279	
6		275	279	312	257	254	
7		295	289	279	297	241	
8		271	290	284	275	294	
9		264	296	290			
Total		1,105	1,154	1,165	829	789	

NET MIGRATION						
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to	
Progression	2015-16	2015-16	2016-17	2017-18	2018-19	
5 to 6		-1	-8	-19	-7	
6 to 7		14	0	-15	-16	
7 to 8		-5	-5	-4	-3	
8 to 9		25	0			
Total		33	-13	-38	-26	

SURVIVAL RATES						
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to	
Progression	2015-16	2015-16	2016-17	2017-18	2018-19	
5 to 6		0.996	0.975	0.931	0.973	
6 to 7		1.051	1.000	0.952	0.938	
7 to 8		0.983	0.983	0.986	0.990	
8 to 9		1.092	1.000			

VALLEY VIEW MIDDLE SCHOOL

ENROLLMENT HISTORY							
Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
5 Feeders		277	270	264	269	311	
6		319	299	282	279	288	
7		277	328	299	282	277	
8		312	284	316	317	272	
9		302	297	305			
Total		1,210	1,208	1,202	878	837	

NET MIGRATION						
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to	
Progression	2015-16	2015-16	2016-17	2017-18	2018-19	
5 to 6		22	12	15	19	
6 to 7		9	0	0	-2	
7 to 8		7	-12	18	-10	
8 to 9		-15	21			
Total		23	21	33	7	

SURVIVAL RATES						
Grade	2013-14 to	2014-15 to	2015-16 to	2016-17 to	2017-18 to	
Progression	2015-16	2015-16	2016-17	2017-18	2018-19	
5 to 6		1.079	1.044	1.057	1.071	
6 to 7		1.028	1.000	1.000	0.993	
7 to 8		1.025	0.963	1.060	0.965	
8 to 9		0.952	1.074			

OPEN ENROLLMENT 2017-18

OPEN ENROLLMENT IN				
District of Residence	Number			
Minneapolis	411			
Hopkins	227			
Richfield	209			
Bloomington	110			
St. Louis Park	91			
Eden Prairie	68			
Robbinsdale	25			
Burnsville	21			
Minnetonka	15			
St. Paul	14			
Shakopee	12			
Eastern Carver County	9			
Rosemount-Apple Valley-Eagan	7			
West St. Paul-Mendota Hts-Eagan	6			
Prior Lake-Savage	6			
Lakeville	4			
Osseo	4			
Brooklyn Center	4			
Wayzata	3			
Mounds View	2			
Roseville	2			
Tri-City United	2			
Orono	1			
Northfield	1			
Chisago Lakes	1			
Total	1,255			

Source: Minnesota Department of Education

OPEN ENROLLMENT OUT				
EDINA DISTRICT RESIDENTS				
District Attending	Number			
Minnetonka	23			
Hopkins	22			
Minneapolis	15			
Eden Prairie	15			
Bloomington	14			
Richfield	12			
St. Louis Park	7			
Houston	7			
Eastern Carver	2			
Robbinsdale	2			
St. Paul	2			
Mankato	1			
Lakeville	1			
Brooklyn Center	1			
Park Rapids	1			
South Washington County	1			
Total	126			

Source: Minnesota Department of Education