



## Special Meeting Agenda

Diamondhead Education Center  
200 W. Burnsville Parkway  
Burnsville, MN 55337  
August 17, 2023  
5:00 PM

### Strategic Directions:

- Creating space and opportunity for each and every voice to be heard
- Actively leading by developing and sustaining a diverse and equitable education system
- Supporting and leveraging innovation to improve student outcomes and district culture
- Engaging our community to ensure common understanding of our Strategic Roadmap and the district work to support it

I. Welcome

II. Ten-Year Enrollment Report

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**Speaker(s):** Stacey Sovine, Executive Director of Administrative Services, and Hazel H. Reinhardt

III. Adjourn



**Agenda II**  
**August 17, 2023**

**To:** Board of Education  
Dr. Theresa Battle, superintendent

**From:** Stacey Sovine, executive director of administrative services, and Hazel H. Reinhardt

**Date:** August 17, 2023

**Re:** Ten-Year Enrollment Report

Receive a Ten-Year Enrollment Report from Stacey Sovine, executive director of administrative services, and Hazel H. Reinhardt.

# BURNSVILLE-EAGAN-SAVAGE SCHOOLS ISD#191

ENROLLMENT PROJECTIONS

Hazel H. Reinhardt

August 17, 2023

# COVID-19 AFFECTS

- Minnesota public school enrollment in 2020-21
  - Kindergarten classes smaller as students attended no school or were homeschooled or attended nonpublic schools
  - Other elementary grades also lost students to home schools or nonpublic schools
  - Middle school and high school enrollment less affected
- 2022-23 marks the third year that Minnesota public school enrollment is below pre-Pandemic numbers

# COVID-19 AFFECTS

- Burnsville-Eagan-Savage Schools
  - 2020-21 kindergarten larger than its “expected” size. However, since the Pandemic, kindergarten is below its “expected” size
  - Students shifted to other education options
    - Home school increased but decreased some since the Pandemic high
    - Charter school enrollment increased; however, some of this increase predates the Pandemic
    - Open enrollment out continued to increase

# PROJECTION ENVIRONMENT

- Low fertility
  - Number of births decreasing in U.S. and Minnesota
    - Consensus among demographers that Pandemic will result in fewer births
      - 2020 U.S. births lowest since 1979 but births up 1% in 2021; flat in 2022
    - Fertility varies by race/ethnicity
- Population aging
  - Housing mix different; more apartments, condos, and townhomes
  - Smaller percentage of households have children
- Population growing very slowly

# PROJECTION ENVIRONMENT

- Less mobility
  - U.S. fewer than 10 percent (8.4 percent) moved last year
    - Was 20 per cent per year since WWII
- Immigration from abroad slowed
- Minnesota population back to pattern of net out migration
- Competition for students increasing

# ENROLLMENT HISTORY

- From 2012-13 to 2022-23—Enrollment decline; more competition
  - Enrollment (excluding Early Childhood) decreased by 2,082 students or -22.0%
  - **Estimated school-age population in district decreased by 545 students or -4.8%**
  - Resident enrollment (excluding Early Childhood) decreased by 2,239 students or -25.4%
  - Nonresidents make up 11.0% of enrollment in 2022-23
    - Excluding tuition agreement students, the Burnsville-Eagan-Savage Schools had a net loss of 2,239 students to other public options in 2022-23
  - Market share is 60.6%
    - Competition for students increased since the Pandemic

# CHANGES SINCE 2012-13

## ENROLLMENT BECAME MINORITY MAJORITY

Year	Total	White	% White	Minority	% Minority
2012-13	9,478	5,258	55.5%	4,220	44.5%
2022-23	7,399	2,196	29.7%	5,203	70.3%

Source: Minnesota Department of Education

# CHANGES SINCE 2012-13

OTHER EDUCATION OPTIONS		
Year	Open Enrollment Out	Charter School Enrollment
2012-13	1,320	275
2022-23	2,592	706

# EDUCATION CHOICES

2021-22

	Minnesota	Burnsville-Eagan-Savage Schools
Nonpublic settings	10.1%	7.3%
Traditional schools	7.2%	4.5%
Home schools	2.9%	2.8%
Public Options		
Open enrollment	9.0%	
In		10.7%
Out		24.4%
Charter schools	6.9%	5.6%
Capture Rate	74.0%	60.6%

# CHANGES SINCE 2012-13

ESTIMATED ENROLLED SCHOOL AGE POPULATION IN DISTRICT #191	
Year	Number
2012-13	11,388
2022-23	10,843

# ENROLLMENT

Year	Total	Resident	Nonresident
2012-13	9,468	8,811	657
2013-14	9,316	8,591	725
2014-15	9,170	8,573	597
2015-16	8,979	8,334	645
2016-17	8,895	8,309	586
2017-18	8,517	7,878	639
2018-19	8,281	7,641	640
2019-20	8,052	7,410	642
2020-21	7,559	6,899	660
2021-22	7,331	6,542	789
2022-23	7,386	6,572	814

Excludes Early Childhood

# COMPONENTS OF ENROLLMENT CHANGE

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Fall to Fall	Total		Natural Increase/Decrease	Net Migration
	#	%		
2012 to 2013	-152	-1.6%	-17	-135
2013 to 2014	-146	-1.6%	-97	-49
2014 to 2015	-191	-2.1%	-142	-49
2015 to 2016	-84	-0.9%	-147	63
2016 to 2017	-378	-4.2%	-163	-215
2017 to 2018	-236	-2.8%	-157	-79
2018 to 2019	-229	-2.8%	-113	-116
2019 to 2020	-493	-6.1%	-162	-331
2020 to 2021	-228	-3.0%	-185	-43
2021 to 2022	55	0.85	-166	221
Total	-2,082	---	-1,349	-733

Excludes Early Childhood

# ENROLLMENT

Grade	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K	859	789	722	679	638	635	616	651	599	577	580
1	733	803	733	719	668	595	590	612	606	583	592
2	734	708	791	709	707	625	556	597	559	572	579
3	735	706	702	758	686	672	598	535	542	538	571
4	710	691	702	674	738	634	661	573	517	535	536
5	672	709	672	695	664	730	614	635	542	490	549
6	694	653	691	656	679	615	675	558	565	497	462
7	679	669	643	652	635	668	615	638	522	540	510
8	705	686	679	651	678	609	660	585	578	490	553
9	686	696	666	660	665	638	627	644	541	587	512
10	712	685	689	656	672	654	658	620	632	553	590
11	743	702	659	685	667	669	647	643	594	623	599
12	806	819	821	785	798	773	764	761	762	746	753
Total	9,468	9,316	9,170	8,979	8,895	8,517	8,281	8,052	7,559	7,331	7,386

Excludes Early Childhood

# ENROLLMENT PROJECTIONS

- Both simple and complex
- Cohort Survival Method
  - Students added
    - Incoming kindergarten
    - Students moving into the district or district residents transferring from other education options to the district's schools
  - Students subtracted
    - Graduating seniors
    - Students leaving the district's schools either by moving out of the district or opting for a different education option

# COHORT SURVIVAL METHOD PROJECTIONS

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- Ages each grade by moving it to the next higher grade in the following year
- Must make kindergarten projections
  - Resident births are a proxy
- Must make assumptions about net migration
  - Survival rates

# PROJECTIONS

- Assumptions underlying these projections
  - The decline in resident births in Minnesota and Dakota and Scott Counties will result in smaller kindergartens in the next several years
  - Dakota County's share of Minnesota resident births not likely to increase in the next five years. The county's population is aging
  - Burnsville-Eagan-Savage Schools' share of Dakota County resident births will remain near its current level in the next five years
  - Competition will remain intense

# RESIDENT LIVE BIRTHS

Year	Minnesota	Dakota County	Scott County
2006	73,515	6,021	2,118
2007	73,675	5,592	2,179
2008	72,382	5,570	2,062
2009	70,617	5,453	1,968
2010	68,407	5,173	1,923
2011	68,416	5,103	1,899
2012	68,783	5,264	2,005
2013	69,183	5,148	1,880
2014	69,916	5,326	1,860
2015	69,835	5,277	1,826
2016	69,746	5,301	1,891
2017	68,603	5,144	1,835
2018	67,348	5,140	1,717
2019	66,033	5,180	1,691
2020	63,451	4,952	1,641

# DECLINE IN RESIDENT LIVE BIRTHS

- 2006-2020
  - -13.7% Minnesota
  - -17.8% Dakota County
  - -22.5% Scott County
- 2021 U.S. up 1%. Minnesota up to 64,398 resident live births, no county data to date
- 2022 U.S. flat; Minnesota likely to follow this pattern
- WHY?
  - Decline in fertility rates
  - Aging of the population

# PROJECTED MINNESOTA 0-YEAR OLDS

Year	Projected Number	Adjusted Number
2017	70,312	
<b>2017 Actual</b>	<b>68,603</b>	
2018	70,395	
<b>2018 Actual</b>	<b>67,348</b>	
2019	70,373	
<b>2019 Actual</b>	<b>66,033</b>	
2020	70,325	65,965
<b>2020 Actual</b>	<b>63,451</b>	
2021	70,274	65,917
<b>2021 Actual</b>	<b>64,398</b>	
2022	70,227	65,873
2023	70,191	65,814
2024	70,164	65,811
2025	70,161	65,811

Adjusted number is 93.8 percent of projected number

# KINDERGARTEN AS A PERCENTAGE OF THE DAKOTA COUNTY KINDERGARTEN POOL

Birth Years	Pool	Percentage	Kindergarten Year
2006; 2007	5,734	14.98%	2012-13
2007; 2008	5,577	14.15%	2013-14
2008; 2009	5,492	13.15%	2014-15
2009; 2010	5,265	12.90%	2015-16
2010; 2011	5,126	12.45%	2016-17
2011; 2012	5,211	12.19%	2017-18
2012; 2013	5,186	11.88%	2018-19
2013; 2014	5,267	12.36%	2019-20
2014; 2015	5,294	13.20%	<b>2020-21</b>
2015; 2016	5,293	10.90%	2021-22
2016; 2017	5,195	11.16%	2022-23
2017; 2018	5,142		2023-24
2018; 2019	5,167		2024-25
2019; 2020	5,027		2025-26

# KINDERGARTEN/BIRTH RATIOS

- Kindergarten assumptions
  - Kindergarten/birth ratios
    - Low is 11.03% (average of the past two years)
    - High is 11.58% (average of the past five years omitting the Pandemic year)
  - Longer-term—2026-27 through 2032-33
    - In past 15 years, Dakota County resident births decreased from 8.19% to 7.80% of Minnesota resident births. Assumed Dakota County's share would be 7.82 percent (average of past two years) in the next five years

# KINDERGARTEN PROJECTIONS

Year	@11.03%	@11.58%
2022-23	580	580
2023-24	567	595
2024-25	570	598
2025-26	554	582
2026-27	561	589
2027-28	568	597
2028-29	568	596
2029-30	568	596
2030-31	568	596
2031-32	568	596
2032-33	568	596
Total	5,660	5,941
Past ten years 6,486 Kindergarten students		

# NET MIGRATION

- Net out migration is the trend
  - Eight of the past ten years showed net out migration
- No consistent net inflow at the beginning of middle school or high school. Atypical
- Large net “inflow” at Grade 12, which is expressed as net in migration but is retention due to 13-year seniors, ALC, and other special programs
- Net in migration the past year concentrated in middle school and high school grades

# NET MIGRATION YEAR TO YEAR

Grade	12 to 13	13 to 12	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22
K to 1	-56	-56	-3	-11	-43	-45	-4	-45	-16	15
1 to 2	-25	-12	-24	-12	-43	-39	7	-53	-34	-4
2 to 3	-28	-6	-33	-23	-35	-27	-21	-55	-21	-1
3 to 4	-44	-4	-28	-20	-52	-11	-25	-18	-7	-2
4 to 5	-1	-19	-7	-10	-8	-20	-26	-31	-27	14
5 to 6	-19	-18	-16	-16	-49	-55	-56	-70	-45	-28
6 to 7	-25	-10	-39	-21	-11	0	-37	-36	-25	13
7 to 8	7	10	8	26	-26	-8	-30	-60	-32	13
8 to 9	-9	-20	-19	14	-40	18	-16	-44	9	22
9 to 10	-1	-7	-10	12	-11	20	-7	-12	12	3
10 to 11	-10	-26	-4	11	-3	-7	-15	-26	-9	46
11 to 12	76	119	126	113	106	95	114	119	152	130
Total	-135	-49	-49	63	-215	-79	-116	-331	-43	221

# PROJECTED SURVIVAL RATES

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Grade	Low (2 Years Prior to Pandemic Year)	High (Past 5 Years)
K to 1	0.962	0.971
1 to 2	0.973	0.959
2 to 3	0.960	0.957
3 to 4	0.971	0.978
4 to 5	0.965	0.970
5 to 6	0.917	0.917
6 to 7	0.973	0.972
7 to 8	0.970	0.962
8 to 9	1.003	0.998
9 to 10	1.010	1.006
10 to 11	0.983	0.999
11 to 12	1.159	1.194

# EFFECT OF SURVIVAL RATES IN TEN<sup>28</sup> YEARS WITH LOW K ASSUMPTION

Survival Rates	Total	K-5	6-8	9-12
2 Years Prior to Pandemic	6,204	3,130	1,265	1,809
Past 5 Years	6,211	3,130	1,266	1,815
Past 5 Years but Omitting the Pandemic Year	6,560	3,208	1,350	2,002

# ENROLLMENT PROJECTIONS

- In ten years (2032-33)
  - Enrollment projected to decrease
    - 2022-23 7,386
    - 2032-33
      - 6,204 to 6,449 or -16.0% to -12.7%
  - Kindergarten projected to be smaller than the previous year's Grade 12 (natural decrease). Projected natural decrease smaller than in recent past
  - Net out migration projected to continue. Brackets the recent past

# ENROLLMENT PROJECTIONS

Year	Low K Low Mig	Low K High Mig	High K Low Mig	High K High Mig
2022-23	7,386	7,386	7,386	7,386
2023-24	7,122	7,145	7,150	7,173
2024-25	6,923	6,949	6,978	7,004
2025-26	6,718	6,733	6,799	6,814
2026-27	6,613	6,624	6,719	6,731
2027-28	6,460	6,465	6,592	6,597
2028-29	6,367	6,372	6,523	6,527
2029-30	6,351	6,359	6,528	6,536
2030-31	6,285	6,295	6,483	6,493
2031-32	6,255	6,266	6,473	6,484
2032-33	6,204	6,211	6,443	6,449

# ENROLLMENT PROJECTIONS

	K-5	6-8	9-12	Total
<b>2022-23</b>	<b>3,407</b>	<b>1,525</b>	<b>2,454</b>	<b>7,386</b>
<b>2027-28</b>				
Low K/Low Mig	3,122	1,403	1,936	6,460
Low K/High Mig	3,121	1,406	1,938	6,465
High K/ Low Mig	3,253	1,403	1,936	6,592
High K/High Mig	3,253	1,406	1,938	6,597
<b>2032-33</b>				
Low K/Low Mig	3,130	1,265	1,809	6,204
Low K/High Mig	3,130	1,266	1,815	6,211
High K/ Low Mig	3,285	1,328	1,830	6,443
High K/High Mig	3,285	1,329	1,836	6,449

Excludes Early Childhood

# ENROLLMENT PROJECTIONS

What could make these projections

- Too high
  - Projected kindergarten is too high
  - More students chose other education options
- Too low
  - Projected kindergarten is too low because the kindergarten capture rate returns to pre-Pandemic levels
  - Net out migration slows

# NEW HOUSING

- Relationship between housing and K-12 enrollment is complex
  - **Unit type** affects school age child per unit yield
  - Newer single-family detached units yield more students per unit than older single-family detached units
  - As single-family detached units sell, student yield usually increases in the new units. In older units, yield is likely to decrease
  - Market value of single-family detached units affect yield. Moderately to higher priced units have higher per unit yield
  - Senior units—no students

# YIELD PER UNIT TYPE

- Results of studies in four states—Minnesota, Wisconsin, Illinois, and Colorado
  - **Single family detached K-12 yield varies by school district and by attendance area within school districts**
  - Townhome yield is very consistent across all school districts across states—0.22
  - Apartments yield is very consistent across all school districts across states—0.11 to 0.15
  - Condominiums yield almost no school age children—0.02 to 0.05

# BURNSVILLE-EAGAN- SAVAGE SCHOOLS ISD#191

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## ENROLLMENT PROJECTIONS

Hazel H. Reinhardt

5/30/2023

Updated 6/14/2023

## BURNSVILLE-EAGAN-SAVAGE SCHOOLS ENROLLMENT PROJECTIONS

### Executive Summary

Since 2012-13—Enrollment decline and increased competition, especially open enrollment

- Burnsville-Eagan-Savage Schools' enrollment (excluding Early Childhood) decreased by 2,082 students or -22.0 percent
- Nonresidents make up 11.0 percent of total enrollment in 2022-23
- The district's enrolled school age population decreased by 545 students or -4.8 percent
  - Resident enrollment (excluding Early Childhood) decreased by 2,239 students or -25.4 percent
  - Excluding tuition agreement students, the Burnsville-Eagan-Savage Schools had a net loss of 2,490 students to other public options in 2022-23
  - The market share of the Burnsville-Eagan-Savage Schools is 60.6 percent

In ten years, that is, in 2032-33—Enrollment decline concentrated in the high school grades

- Burnsville-Eagan-Savage Schools' enrollment (excluding Early Childhood) is projected to decrease, ranging from 6,204 to 6,449 or -16.0 percent to -12.7 percent less than the 2022-23 enrollment of 7,386 students
- Kindergarten is projected to be smaller than the previous year's Grade 12, a continuation of the current trend
- Net out migration is projected to continue

In five years, that is, in 2027-28

- K-5 enrollment is projected to be 154 to 286 students lower than in 2022-23. (All kindergarten students have been born)
- Middle school enrollment is 119 to 122 students lower than today
- High school enrollment projected to be 516 to 518 students less than today

Assumptions underlying these projections

- The decline in resident births in Minnesota and in Dakota County will result in smaller kindergartens in the next several years
- Dakota County's share of Minnesota resident births not likely to increase
- Burnsville-Eagan-Savage's share of Dakota County resident births will remain near its current level
- Competition will remain intense

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

- Too high
  - Projected kindergarten is too high or more students chose other education options
- Too low
  - Projected kindergarten is too low because the kindergarten capture rate returns to pre-Pandemic levels or out migration slows

## COVID-19 AFFECTS

In 2020-21, Minnesota public school enrollment was affected by the COVID-19 Pandemic. Kindergarten classes were smaller and elementary students, in general, were lost to home schools and/or private schools. Middle school and high school enrollment was less affected by the Pandemic.

2022-23 marks the third year that Minnesota public school enrollment is below pre-Pandemic numbers.

In 2020-21, the COVID-19 Pandemic affected Burnsville-Eagan-Savage Schools' enrollment as follows:

- The 2020-21 kindergarten was larger than its "expected" size. However, since the Pandemic, kindergarten is below its "expected" size
- Students shifted to other educational options
  - Home school enrollment increased but has decreased some since Pandemic high
  - Charter school enrollment increased; however, some of this increase predates the Pandemic

## 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 affects population mobility because older people move less frequently than younger people. The movement of families with children under 18 years also affects 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 affect 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 Burnsville-Eagan-Savage Schools

##### Current Enrollment/Past Trends

Enrollment trends play out over extended periods of time. Total enrollment and resident enrollment both decreased since 2012-13. In the past ten years, total enrollment decreased by 2,082 students or -22.0 percent while resident enrollment decreased by 2,239 students or -25.4 percent, with the decreases occurring year after year except for the past year which saw an increase of 55 students. Total enrollment decreased less than resident enrollment because nonresident enrollment increased from 657 students to 814 students. In 2022-23, nonresidents make up 11.0 percent of total enrollment. The percentage of nonresidents was 6.9 percent in 2012-13.

ENROLLMENT										
2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9,468	9,316	9,170	8,979	8,895	8,517	8,281	8,052	7,559	7,331	7,386

*Source: Burnsville-Eagan-Savage School District, Fall Enrollment. Excludes Early Childhood*

RESIDENT ENROLLMENT										
2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
8,811	8,591	8,573	8,334	8,309	7,878	7,641	7,410	6,899	6,542	6,572

Resident enrollment is total enrollment less open enrollment in and tuition enrollment in (see page 6)  
 Source: Burnsville-Eagan-Savage School District, Fall Enrollment. Excludes Early Childhood

Like all population change, school enrollment change results 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, Burnsville-Eagan-Savage Schools’ Kindergarten was smaller than the previous year’s Grade 12 every year and as a result, natural decrease cost the Burnsville-Eagan-Savage Schools 1,349 students since 2012-13.

COMPONENTS OF ENROLLMENT CHANGE				
October To October	Total		Natural Increase/ Decrease	Net Migration
	#	%		
2012 to 2013	-152	-1.6%	-17	-135
2013 to 2014	-146	-1.6%	-97	-49
2014 to 2015	-191	-2.1%	-142	-49
2015 to 2016	-84	-0.9%	-147	63
2016 to 2017	-378	-4.2%	-163	-215
2017 to 2018	-236	-2.8%	-157	-79
2018 to 2019	-229	-2.8%	-113	-116
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2021 to 2022	55	0.8%	-166	221
Total	-2,082	---	-1,349	-733

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 exceptionally 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, net migration cost the Burnsville-Eagan-Savage Schools 733 students since 2012-13. Except for the past year and one earlier year, net out migration was present every year. However, both natural decrease and net migration are distorted by the substantial number of 13-year seniors and other special programs at the high school grades. The combination of net migration and natural increase/decrease is the change in enrollment.

### **Student Choices in the Burnsville-Eagan-Savage School District**

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 have become another option. Since their inception, public school options have been 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, 7.2 percent of all enrolled students were enrolled in traditional nonpublic schools and 2.9 percent of enrolled students were homeschooled in 2021-22. In the Burnsville-Eagan-Savage School District, 4.5 percent of students attended a traditional nonpublic school. Homeschooled students accounted for 2.8 percent of all enrolled students.

NONPUBLIC SETTINGS			
Year	Traditional Nonpublic Schools	Home Schools	Total
2012-13	698	198	896
2013-14	695	201	896
2014-15	602	206	808
2015-16	603	227	830
2016-17	580	227	807
2017-18	615	240	855
2018-19	543	234	777
2019-20	549	262	811
2020-21	510	328	838
2021-22	480	297	777
2022-23	559	309	868

*Source: Burnsville-Eagan-Savage School District*

The proportion of ISD #191 residents in nonpublic settings is smaller than the statewide percentage. Combining home school students and nonpublic students, 7.3 percent of Burnsville-Eagan-Savage School District residents were in nonpublic settings. In Minnesota, 10.1 percent of all students

were enrolled in nonpublic settings. Until the Pandemic, traditional nonpublic enrollment decreased statewide, while the number of homeschooled students increased. In the Burnsville-Eagan-Savage School District, the number of students in traditional nonpublic schools decreased until this past year. The number of homeschooled children increased significantly in the Pandemic year (2020-21) and remains higher than in the pre-Pandemic years.

### 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 ever more students statewide as well as in the Burnsville-Eagan-Savage School District. In 2021-22, 783 nonresident students open enrolled in the Burnsville-Eagan-Savage Schools while 2,597 district residents open enrolled in public schools elsewhere. In 2022-23, 808 nonresidents enrolled in the Burnsville-Eagan-Savage Schools while 2,592 residents attend a public school elsewhere through open enrollment.

PUBLIC OPTIONS						
Year	In		Out			Net
	Open Enrollment	Tuition Agreements	Open Enrollment	Tuition Agreements	Charter Schools	
2012-13	649	8	1,320	86	275	-946
2013-14	711	14	1,458	76	264	-1,011
2014-15	588	9	1,715	103	281	-1,408
2015-16	634	11	1,976	88	304	-1,646
2016-17	578	8	1,988	93	294	-1,704
2017-18	629	10	2,014	105	352	-1,737
2018-19	628	12	2,165	103	477	-2,014
2019-20	631	11	2,319	104	560	-2,248
2020-21	647	13	2,480	96	664	-2,497
2021-22	783	6	2,597	110	596	-2,410
2022-23	808	6	2,592	105	706	-2,490

Tuition agreements excluded from the net

Source: Burnsville-Eagan-Savage School District

Nonresident students who open enrolled in the Burnsville-Eagan-Savage Schools accounted for 10.7 percent of Burnsville's total enrollment in 2021-22. Students leaving the district via open enrollment to attend public schools elsewhere represented 24.4 percent of the district's school age residents. In 2021-22, 9.0 percent of Minnesota students chose open enrollment.

**Charter Schools.** Charter schools are another public education option. While 6.9 percent of Minnesota students attended charter schools in 2021-22, 5.6 percent of Burnsville-Eagan-Savage School District residents attended a charter school.

As the education choice data show, in 2022-23, excluding tuition agreement students, the district has a net loss of 2,490 students to other public options.

### 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 adding Burnsville-Eagan-Savage Schools' resident students to the district residents attending traditional nonpublic schools, being homeschooled, and opting for open enrollment out, charter schools and other public options.

Based on 2012-13 and 2022-23, **the estimated resident enrolled school age population decreased from 11,388 to 10,843 students, a decrease of 545 students or -4.8 percent.** Resident enrollment in the Burnsville-Eagan-Savage Schools (excluding Early Childhood) decreased by 2,239 students or -25.4 percent during the same period. Based on the estimated 2022-23 enrolled population of 10,843 the Burnsville-Eagan-Savage Schools (excluding Early Childhood) captured 60.6 percent of the district's school age population. In 2012-13, market share was 77.4 percent. A decreasing market share is typical in Minnesota, but this is a larger decline than is typical.

BURNSVILLE-EAGAN-SAVAGE SCHOOL DISTRICT ESTIMATED RESIDENT SCHOOL AGE POPULATION					
Year	Burnsville-Eagan-Savage Schools Resident Enrollment	Nonpublic Settings	Public Options	Other	Total
2012-13	8,811	896	1,681	n.a.	11,388
2013-14	8,591	896	1,798	n.a.	11,285
2014-15	8,573	808	2,099	n.a.	11,480
2015-16	8,334	830	2,368	n.a.	11,532
2016-17	8,309	807	2,375	n.a.	11,491
2017-18	7,878	855	2,471	n.a.	11,204
2018-19	7,641	777	2,745	n.a.	11,163
2019-20	7,410	811	2,983	n.a.	11,204
2020-21	6,899	838	3,240	n.a.	10,977
2021-22	6,542	777	3,303	n.a.	10,622
2022-23	6,572	868	3,403	n.a.	10,843

### History of Enrollment by Grade

The history of enrollment contains patterns with implications for future enrollment. First, kindergarten size fluctuated from year to year as did the corresponding birth years. Nonetheless, Burnsville's kindergarten is smaller due to the competition from other education choices. The 2022-23 kindergarten is below its expected size.

The number of students per grade varies in the Burnsville-Eagan-Savage Schools. A way of expressing grade size differences is to calculate the “average” number of students per grade. For example, in 2022-23, the average elementary grade (K-5) has 568 students. The average middle school (6-8) has 508 students per grade while high school (9-12) has 614 students per grade. **There is no consistent net inflow of students at any grade transition;** however, the retention of 13-year seniors and other special programs at the high school grades increases the average size of high school grades with all additional students concentrated in Grade 12. The average size of Grades 9-11 is 567. Average grade size is not a good predictor of future enrollment for the Burnsville-Eagan-Savage Schools because historically the survival rates are below 1.000 for nearly all grades.

Minnesota's largest graduating high school class since 1978 graduated in 2009. Statewide, graduating classes will be getting smaller. Based on Burnsville’s enrollment history, its largest recent graduating class may well have occurred around the same time.

ENROLLMENT											
Grade	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K	859	789	722	679	638	635	616	651	599	577	580
1	733	803	733	719	668	595	590	612	606	583	592
2	734	708	791	709	707	625	556	597	559	572	579
3	735	706	702	758	686	672	598	535	542	538	571
4	710	691	702	674	738	634	661	573	517	535	536
5	672	709	672	695	664	730	614	635	542	490	549
6	694	653	691	656	679	615	675	558	565	497	462
7	679	669	643	652	635	668	615	638	522	540	510
8	705	686	679	651	678	609	660	585	578	490	553
9	686	696	666	660	665	638	627	644	541	587	512
10	712	685	689	656	672	654	658	620	632	553	590
11	743	702	659	685	667	669	647	643	594	623	599
12	806	819	821	785	798	773	764	761	762	746	753
Total	9,468	9,316	9,170	8,979	8,895	8,517	8,281	8,052	7,559	7,331	7,386

Source: Burnsville-Eagan-Savage School District, 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. In 2020, 15.6 percent of Minnesota’s population was 65 years old or older. In 2010, the elderly made up 12.9 percent of the population. In this decade, 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 (1.73) is below replacement level and there is little reason to think this will change soon. Completed fertility refers to the number of children born per woman throughout her childbearing years. (Replacement is 2.11 children per female at the end of childbearing.) In Minnesota, White non-Hispanic women have below replacement fertility. 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.

### Unknowns

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

- Long-term effects of the COVID-19 Pandemic and economic shutdown. Unknown; however, births have fallen, unemployment is low, and several economic sectors have been hit hard. Some changes due to the Pandemic seem to be lasting, e.g., remote work and education choices.
- The housing markets. The district may see more multi-family units built, but otherwise it is not likely to see much single-family detached unit growth. A robust housing market results in more mobility and this can influence enrollment.
- Immigration. Both the economy and public policy affect international immigration. Future students from international migration are impossible to predict.
- Delay/postponement of childbearing. The Millennials delayed marriage, childbearing, and home ownership. More recently, a higher percentage of 18–49-year-olds report that it is not likely they will have children or have additional children.
- 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 Burnsville-Eagan-Savage 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. Over time, the size of a cohort will increase or decrease because of migration as it progresses through the grades. For example, the 2012-13 kindergarten class had 859 members. This same cohort had 590 members in Grade 10 in 2022-23.

The future size of kindergarten 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 proxy 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 in 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, Burnsville-Eagan-Savage Schools' kindergarten will be projected based on the Minnesota State Demography Center's projections of Minnesota 0-year-olds.

#### 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. Then from 2008 through 2011, births fell in the U.S. and Minnesota. These declines are attributed to the poor economy (Great Recession). Beginning in 2012, Minnesota resident births began to increase but did not return to their 2007 level. Then, births began to decline again. From 2015 through 2020 Minnesota resident births were lower than in 2014.

As the history of resident births shows, in 2020, Minnesota resident births were 10,064 births or -13.7 percent lower than in 2006. Dakota County resident births were 1,069 births or -17.8 percent lower fourteen years later while Scott County resident births were 477 or -22.5 percent lower.

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 calendar year resident births to fit the age requirement for kindergarten will be referred to as the kindergarten pool.

RESIDENT LIVE BIRTHS			
Calendar Year	Minnesota	Dakota County	Scott County
2006	73,515	6,021	2,118
2007	73,675	5,592	2,179
2008	72,382	5,570	2,062
2009	70,617	5,453	1,968
2010	68,407	5,173	1,923
2011	68,416	5,103	1,899
2012	68,783	5,264	2,005
2013	69,183	5,148	1,880
2014	69,916	5,326	1,860
2015	69,835	5,277	1,826
2016	69,746	5,301	1,891
2017	68,603	5,144	1,835
2018	67,348	5,140	1,717
2019	66,033	5,180	1,691
2020	63,451	4,952	1,641

*Source: Minnesota Department of Health*

Dakota County resident births will be used as a proxy for Burnsville-Eagan-Savage's resident births. The next table shows the Dakota County kindergarten pool along with Burnsville-Eagan-Savage Schools' kindergarten percentage (capture rate) of that pool. Like many other percentages, the ratio of kindergarten students to the pool fluctuates. Typically, a more stable trend appears when rates are averaged. (Calculating the average of the kindergarten to birth ratio for two or more years smooths out annual fluctuations and produces a more "typical" ratio for that period.)

Burnsville-Eagan-Savage's share of the Dakota County kindergarten pool has fluctuated between about 12 percent to 13 percent of the pool most years during the past 11 years. Atypically, in the Pandemic year (2020-21) the kindergarten capture rate was higher than in the immediately preceding year and in the subsequent years. The lowest share occurred in 2021-22 (10.90 percent). Normally, the Pandemic year (2020-21) should be omitted from the calculation of future ratios; however, that year is not the lowest year for Burnsville-Eagan-Savage. The average of the past five years is 11.90 percent while the average of the past five years omitting the Pandemic years is 11.58 percent. The average for the past two years is 11.03 percent. The average of 11.03 percent will be used for the low kindergarten assumption. The high kindergarten assumption will use the ratio of 11.58 percent.

BURNSVILLE'S KINDERGARTEN AS A PERCENT OF THE DAKOTA COUNTY KINDERGARTEN POOL			
Birth Years	Dakota County Pool	Percentage	Kindergarten Year
2006; 2007	5,734	14.98%	2012-13
2007; 2008	5,577	14.15%	2013-14
2008; 2009	5,492	13.15%	2014-15
2009; 2010	5,265	12.90%	2015-16
2010; 2011	5,126	12.45%	2016-17
2011; 2012	5,211	12.19%	2017-18
2012; 2013	5,186	11.88%	2018-19
2013; 2014	5,267	12.36%	2019-20
2014; 2015	5,294	13.20%	2020-21
2015; 2016	5,293	10.90%	2021-22
2016; 2017	5,195	11.16%	2022-23
2017; 2018	5,142		2023-24
2018; 2019	5,167		2024-25
2019; 2020	5,027		2025-26

PROJECTED MINNESOTA 0-YEAR OLDS		
Year	Projected Number	Adjusted Number
<b>2017 Actual</b>	<b>68,603</b>	
2017	70,312	
<b>2018 Actual</b>	<b>67,348</b>	
2018	70,395	
<b>2019 Actual</b>	<b>66,033</b>	
2019	70,373	
<b>2020 Actual</b>	<b>63,451</b>	
2020	70,325	65,965
2021	70,274	65,917
2022	70,227	65,873
2023	70,191	65,814
2024	70,164	65,811
2025	70,161	65,811
2026	70,161	65,811

Source: Minnesota Demographic Center

To extend kindergarten projections beyond 2025-26, projected Minnesota 0-year-olds will be used as a guide. In 2019, resident births were 4,340 births lower than the projected 2019 0-year-olds or 93.8 percent of the projected number while 2020 births were only 90.2 percent of the projected number. However, the Pandemic lowered 2020 births. Still, there is no reason to believe that births will increase to equal the 2019 projection. Therefore, the projected number of 0-year-olds will be adjusted to be 93.8 percent of the projections for 2021 and beyond. **Note that the projections of Minnesota 0-year-olds are essentially flat between 2020 and 2026.** Even these projections may be too high. Most

demographers predict the global pandemic will depress births in the United States and worldwide for several years, although U.S. births were up by one percent in 2021, but flat in 2022.

In the past fourteen years, Dakota County resident births fluctuated but were 8.19 percent of Minnesota births in 2006 and 7.80 percent in 2020. During this period, the percentages ranged from a low of 7.44 in 2013 to a high of 8.19 in 2006. In the past two years Dakota County's share averaged 7.82 percent. Assuming Dakota County's share of Minnesota 0-year-olds is 7.82 percent for the next several years, the kindergarten pool would be as shown below. Although the projections show how "flat" these numbers are likely to be, these numbers are sensitive to minor changes in the assumptions.

DAKOTA COUNTY KINDERGARTEN POOL	
<b>2022-23</b>	<b>5,195</b>
<b>2023-24</b>	<b>5,142</b>
<b>2024-25</b>	<b>5,167</b>
<b>2025-26</b>	<b>5,027</b>
2026-27	5,088
2027-28	5,152
2028-29	5,148
2029-30	5,146
2030-31	5,146
2031-32	5,146
2032-33	5,146

Pool based on actual births bolded

KINDERGARTEN PROJECTIONS		
	@11.03%	@11.58%
<b>2022-23</b>	<b>580</b>	<b>580</b>
2023-24	567	595
2024-25	570	598
2025-26	554	582
2026-27	561	589
2027-28	568	597
2028-29	568	596
2029-30	568	596
2030-31	568	596
2031-32	568	596
2032-33	568	596
Total	5,660	5,941

When the kindergarten to birth ratio is applied to the kindergarten pool, kindergarten projections result. Through 2025-26, the kindergarten projections are based on actual births. The lowest kindergarten projection (based on the 11.03 percent ratio) results in 5,660 kindergarten students over ten years while the highest kindergarten projection (11.58 percent ratio) yields 5,941 kindergarten students over ten years. In the past ten years there were 6,486 kindergarten students. **These projections show fewer kindergarten students than in the past.**

### 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 net migration in raw numbers. As these numbers show, except for two years, net migration has been negative every year. The large inflow in the past year probably reflects a return of students, especially high school students, lost in the Pandemic.

The next table shows net migration for every grade transition. Net migration between Kindergarten and Grade 1 follows a similar pattern, that is, net migration is negative except for the past year. The other elementary grades show a similar pattern of outflows. **There is no consistent inflow of students at any grade transition, which is atypical.** Note the large net in migration from Grade 11 to Grade 12, which is an artifact of 13-year seniors and other special programs at the high school grades. It is unlikely that students will move into the district to attend Grade 12.

NET MIGRATION YEAR TO YEAR										
	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22
K to 1	-56	-56	-3	-11	-43	-45	-4	-45	-16	15
1 to 2	-25	-12	-24	-12	-43	-39	7	-53	-34	-4
2 to 3	-28	-6	-33	-23	-35	-27	-21	-55	-21	-1
3 to 4	-44	-4	-28	-20	-52	-11	-25	-18	-7	-2
4 to 5	-1	-19	-7	-10	-8	-20	-26	-31	-27	14
5 to 6	-19	-18	-16	-16	-49	-55	-56	-70	-45	-28
6 to 7	-25	-10	-39	-21	-11	0	-37	-36	-25	13
7 to 8	7	10	8	26	-26	-8	-30	-60	-32	13
8 to 9	-9	-20	-19	14	-40	18	-16	-44	9	22
9 to 10	-1	-7	-10	12	-11	20	-7	-12	12	3
10 to 11	-10	-26	-4	11	-3	-7	-15	-26	-9	46
11 to 12	76	119	126	113	106	95	114	119	152	130
Total	-135	-49	-49	63	-215	-79	-116	-331	-43	221
Percent	-1.4	-0.5	-0.5	0.7	-2.4	-0.9	-1.4	-4.1	-0.6	3.0

*Excludes Early Childhood.*

The next table summarizes net migration by aggregating net migration to the elementary grades (K-5), the middle school grades (6-8) and the high school grades (9-12). Except for the past year, net migration was negative at K-5 every year and net out migration occurs at the middle school grades as well. As mentioned earlier, the net in migration at 9-12 is the result of 13-year seniors and other special programs. Without this artificial net in migration, net out migration would be much greater.

NET MIGRATION YEAR TO YEAR										
	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22
K-5	-154	-97	-95	-76	-181	-142	-69	-202	-105	22
6-8	-37	-18	-47	-11	-86	-63	-123	-166	-102	-2
9-12	56	66	93	150	52	126	76	37	164	201
Total	-135	-49	-49	63	-215	-79	-116	-331	-43	221

*Excludes Early Childhood.*

Net migration numbers when compared to the number of 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.

SURVIVAL RATES YEAR TO YEAR										
	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22
K to 1	0.935	0.929	0.996	0.984	0.933	0.929	0.994	0.931	0.973	1.026
1 to 2	0.966	0.985	0.967	0.983	0.936	0.934	1.012	0.913	0.944	0.993
2 to 3	0.962	0.992	0.958	0.968	0.950	0.957	0.962	0.908	0.962	0.998
3 to 4	0.940	0.994	0.960	0.974	0.924	0.984	0.958	0.966	0.987	0.996
4 to 5	0.999	0.973	0.990	0.985	0.989	0.968	0.961	0.946	0.948	1.026
5 to 6	0.972	0.975	0.976	0.977	0.926	0.925	0.909	0.890	0.917	0.943
6 to 7	0.964	0.985	0.944	0.968	0.984	1.000	0.945	0.935	0.956	1.026
7 to 8	1.010	1.015	1.012	1.040	0.959	0.988	0.951	0.906	0.939	1.024
8 to 9	0.987	0.971	0.972	1.022	0.941	1.030	0.976	0.925	1.016	1.045
9 to 10	0.999	0.990	0.985	1.018	0.9+83	1.031	0.989	0.981	1.022	1.005
10 to 11	0.986	0.962	0.994	1.017	0.996	0.989	0.977	0.958	0.986	1.083
11 to 12	1.102	1.170	1.191	1.165	1.159	1.142	1.176	1.185	1.256	1.209

*Excludes Early Childhood.*

Burnsville-Eagan-Savage Schools' survival rates are usually below 1.000. 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.

Calculating survival rates for projections should avoid the Pandemic year; however, the past year also looks atypical. Averaging the past five years will result in these two atypical years canceling each other. The average of the survival rates for the two years prior to the Pandemic looks like another reasonable option for projections. While another possibility is averaging the past five years but omitting the Pandemic year, this option gives a lot of weight to the past year, which does not appear to be typical and will result in higher middle and high school projections.

PROJECTED SURVIVAL RATES			
Grade	Low (2 Years Prior Pandemic Year)	High (Past 5 Years)	Past 5 years but Omitting the Pandemic Year
K to 1	0.962	0.971	0.981
1 to 2	0.973	0.959	0.971
2 to 3	0.960	0.957	0.970
3 to 4	0.971	0.978	0.981
4 to 5	0.965	0.970	0.976
5 to 6	0.917	0.917	0.924
6 to 7	0.973	0.972	0.982
7 to 8	0.970	0.962	0.976
8 to 9	1.003	0.998	1.017
9 to 10	1.010	1.006	1.012
10 to 11	0.983	0.999	1.009
11 to 12	1.159	1.194	1.196

The differences between these survival rates can be seen in the projections below. By using the low kindergarten assumption, the number of kindergarten students is the same in all the projections, so the differences are solely the result of the survival rates.

There is a 7-student difference between the two most reasonable migration assumptions. In these projections, there is no difference at K-5. The difference is 1 student at Grades 6-8 and 6 students at Grades 9-12. While these two migration assumptions differ slightly at each grade transition, these differences cancel out and the end result is the same.

The projections using the past five years but omitting the Pandemic year show much higher enrollment and are probably unrealistic.

SUMMARY OF EFFECTS OF SURVIVAL RATES IN TEN YEARS WITH LOW KINDERGARTEN ASSUMPTION				
Survival Rates	Total	K-5	6-8	9-12
2 Years Prior to Pandemic	6,204	3,130	1,265	1,809
Past 5 Years	6,211	3,130	1,266	1,815
Past 5 Years but Omitting the Pandemic Year	6,560	3,208	1,350	2,002

Because the reasonable options are limited, the average of the two years prior to the Pandemic will be the low assumption and the average of the past five years will be the high assumption for enrollment projections.

### 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, long-term projections should not be used for annual budgeting purposes. 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 245-student difference between the lowest projection and the highest projection. The kindergarten assumptions account for a 238-239-student difference in the ten years while the migration assumptions account for a 6-7-student difference in ten years. These numbers show that the kindergarten assumptions account for more of the differences among the four projections than the migration assumptions. Thus, selecting the “best” projection requires considering both the assumptions, but especially the kindergarten assumptions.

The lowest projection is based on the low kindergarten and low migration assumptions. In this projection, enrollment decreases by 1,185 students or -16.0 percent by 2032-33. In five years, enrollment is 926 students or -12.5 percent lower than today.

The highest projection, based on the high kindergarten and high migration assumptions, shows enrollment decreasing by 937 students or -12.7 percent between 2022-23 and 2032-33. In five years, enrollment decreases by 789 students or -10.7 percent.

In between the highest and lowest projections are two other projections. In 2032-33, these two projections differ by 232 students. As a group, the four projections reflect a range of possibilities with all four projections showing enrollment decreasing with the largest decreases occurring in the first five projection years, which are based on actual not projected births.

ENROLLMENT PROJECTIONS				
Year	Low K Low Mig	Low K High Mig	High K Low Mig	High K High Mig
<b>2022-23</b>	<b>7,386</b>	<b>7,386</b>	<b>7,386</b>	<b>7,386</b>
2023-24	7,122	7,145	7,150	7,173
2024-25	6,923	6,949	6,978	7,004
2025-26	6,718	6,733	6,799	6,814
2026-27	6,613	6,624	6,719	6,731
2027-28	6,460	6,465	6,592	6,597
2028-29	6,367	6,372	6,523	6,527
2029-30	6,351	6,359	6,528	6,536
2030-31	6,285	6,295	6,483	6,493
2031-32	6,255	6,266	6,473	6,484
2032-33	6,204	6,211	6,443	6,449

*Excludes Early Childhood*

The projections from 2022-23 to 2032-33 reflect the following components of enrollment change. The Burnsville-Eagan-Savage Schools will experience **natural decrease** as it has since 2012-13. (Natural decrease results from the incoming Kindergarten being smaller than the previous years’ Grade

12.) Since 2012-13, natural decrease averaged 135 students per year; however, in the past five years the average was 157 students per year. In the next ten years, natural decrease averages 36 to 55 students per year in the low kindergarten projections and 8 to 27 per year in the high kindergarten projections. **Burnsville-Eagan-Savage Schools is projected to experience less natural decrease than in the recent past.**

COMPONENTS OF PROJECTED ENROLLMENT CHANGE				
Oct. to Oct. 2021 to 2031	Total		Natural Increase/ Decrease	Net Migration
	#	%		
Low K/Low Mig	-1,185	-16.0%	-359	-826
Low K/High Mig	-1,175	-15.9%	-547	-628
High K/Low Mig	-943	-12.8%	-78	-865
High K/High Mig	-937	-12.7%	-266	-671

*Excludes Early Childhood*

Net **out** migration continues. The low migration assumption averages out migration of 83-87 students per year. The high migration assumption averages 63-67 students per year. Net out migration averaged 73 students per year in the past ten years and 70 students per year in the past five years. **Projected net out migration brackets that of the recent past.**

ENROLLMENT PROJECTIONS				
	K-5	6-8	9-12	Total
<b>2021-22</b>	<b>3,407</b>	<b>1,525</b>	<b>2,454</b>	<b>7,386</b>
<b>2027-28</b>				
Low K/Low Mig	3,122	1,403	1,936	6,460
Low K/High Mig	3,121	1,406	1,938	6,465
High K/Low Mig	3,253	1,403	1,936	6,592
High K/High Mig	3,253	1,406	1,938	6,597
<b>2032-33</b>				
Low K/Low Mig	3,130	1,265	1,809	6,204
Low K/High Mig	3,130	1,266	1,815	6,211
High K/Low Mig	3,285	1,328	1,830	6,443
High K/High Mig	3,285	1,329	1,836	6,449

*Excludes Early Childhood*

Looking at the projections based on the elementary, middle school and high school grades is instructive. In the first five projection years, K-5 enrollment is from 154 to 286 students lower than today. In ten years, K-5 enrollment ranges from 122 to 277 students than today. **For the first five projection years, the kindergarten students have already been born.**

In the first five projection years, middle school enrollment is 119 to 122 students lower than today. In the second five projection years, middle school enrollment ranges from 196 to 260 fewer students than today. In the second five projection years, the kindergarten assumptions affect 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.**

High school (Grades 9-12) enrollment is projected to be 516 to 518 students less in the first five projection years. In 2032-33, high school enrollment ranges from 618 to 645 fewer students than today. **Grades 9-12 projections are almost totally a result of the migration assumptions because the kindergarten assumptions have only a small effect on the high school projections.**

In 2032-33, the 2022-23 kindergarten will be in Grade 10, which means that all the grades below Grade 10 are products of the projection assumptions.

### Housing Unit Method

The housing unit method provides another way of projecting population and school enrollment. While the number of dwelling units (housing units) is related to the number of school age children, dwelling units alone do not determine the number of school age children. The number of school age children per unit is also a key variable in the projection equation.

The main reason to use the housing unit method is to understand the effect of additional housing units on enrollment. It could be said that housing stock is like DNA. It influences the size and characteristics of the resident 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 enrollment has been established by findings based on school districts in four states (Minnesota, Wisconsin, Illinois, and Colorado). These findings are in italics.

- *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.*
- *Newer single-family detached units yield more students per unit than older single-family detached units.*
- *As single-family detached units sell (turnover), student yield usually increases in the newer units. In older units, yield is likely to decrease.*
- *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.*

- *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.*

Analyzing housing unit change is valuable, especially the increase in single-family detached housing units. Housing stock is like DNA. It influences the size and characteristics of the resident school age population. This makes projecting enrollment from housing units seem simple; however, the limitations of the housing unit method as an enrollment projection method must be kept in mind. While this method can highlight the number of students in new housing units, these students do not automatically translate into additional students. No housing unit method is sensitive to changes in births or to the difference in grade sizes as they age out of school. Further, the per unit student yields remain at today's level throughout the projection period, making the assumptions static. Overall, the housing unit method usually over projects enrollment.

As new housing units are built it is important to remember that **the K-12 yield for single-family detached units varies by school district and by attendance area within school districts**. However, the yield of 0.22 students per townhome is very consistent across all school districts across states. Multi-family units (apartments) have a typical yield of 0.11 to a maximum yield of 0.15, which is consistent across all school districts across states. Condominiums yield almost no school age children per unit (0.02 to 0.05).