

EDINA PUBLIC SCHOOLS

ISD#273

RESIDENT ENROLLMENT PROJECTIONS

Hazel H. Reinhardt

August 22, 2023

COVID-19 AFFECTS

- Minnesota public school enrollment in 2020-21
 - Kindergarten classes smaller as students were homeschooled, attended nonpublic schools or were “redshirted”
 - 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 (and U.S.) public school enrollment is below pre-Pandemic numbers

COVID-19 AFFECTS

- Edina Public Schools
 - 2020-21 resident kindergarten slightly smaller than its “expected” size. However, since the Pandemic, kindergarten is at its “expected” size
 - Students shifted to other education options
 - Pandemic stimulated a substantial increase in residents attending nonpublic schools
 - Resident nonpublic enrollment has been increasing for some time
 - Since Pandemic, resident nonpublic enrollment has continued to increase
 - There is a substantial increase in nonresidents; however, may not be Pandemic related

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

RESIDENT ENROLLMENT HISTORY

- From 2012-13 to 2022-23—Resident enrollment decline; more competition
 - Resident enrollment (excluding Early Childhood) decreased by 476 students or -6.8%
 - **Estimated school-age population in district increased by 295 students or 3.5% (overstated)**
 - Total enrollment (excluding Early Childhood) increased by 188 students or 2.3%
 - Nonresidents make up 22.5% of enrollment in 2022-23
 - Excluding tuition agreement students, the Edina Public Schools had a net gain of 1,395 students from other public options in 2022-23
 - Market share is 75.3%
 - Competition for students increased since the Pandemic

EDUCATION CHOICES

2021-22

	Minnesota	Edina Public Schools
Nonpublic settings	10.1%	19.1%
Traditional schools	7.2%	18.7%
Home schools	2.9%	0.4%
Public Options		
Open enrollment	9.0%	
In		22.0%
Out		2.2%
Charter schools	6.9%	1.6%
Capture Rate	74.0%	75.3%

CHANGES SINCE 2012-13

ESTIMATED ENROLLED SCHOOL AGE POPULATION IN DISTRICT #191

Year	Number
2012-13*	8,433
2022-23	8,728
2012-13 overstated	

ENROLLMENT

Year	Total	Resident	Nonresident
2012-13	8,290	7,047	1,243
2013-14	8,342	7,081	1,261
2014-15	8,404	7,082	1,322
2015-16	8,249	6,983	1,266
2016-17	8,474	7,195	1,279
2017-18	8,477	7,218	1,259
2018-19	8,390	7,085	1,305
2019-20	8,329	6,938	1,391
2020-21	8,244	6,639	1,605
2021-22	8,376	6,537	1,839
2022-23	8,478	6,571	1,907

Excludes Early Childhood

COMPONENTS OF RESIDENT ENROLLMENT CHANGE

Fall to Fall	Total		Natural Increase/Decrease	Net Migration
	#	%		
2012 to 2013	34	0.5	-2	36
2013 to 2014	1	0.0	-31	32
2014 to 2015	-99	-1.4	-123	24
2015 to 2016	212	3.0	30	182
2016 to 2017	23	0.3	-14	37
2017 to 2018	-133	-1.8	-46	-87
2018 to 2019	-147	-2.1	-78	-69
2019 to 2020	-299	-4.3	-76	-223
2020 to 2021	-102	-1.5	-71	-31
2021 to 2022	34	0.5	-9	43
Total	-476	---	-420	-56
Excludes Early Childhood				

RESIDENT 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	476	516	490	415	524	523	505	500	469	478	504
1	482	501	549	499	481	553	525	523	495	488	504
2	557	505	511	573	527	497	551	527	494	509	508
3	548	574	517	526	588	528	507	545	503	500	510
4	579	550	587	523	529	598	537	499	520	502	502
5	557	592	559	591	534	529	589	550	477	534	508
6	570	559	589	576	593	536	542	570	523	468	533
7	584	571	567	609	575	579	515	523	541	502	458
8	550	577	572	568	599	581	565	516	504	529	512
9	548	540	550	577	576	585	542	551	500	495	524
10	558	538	529	523	577	580	582	535	534	496	494
11	520	537	524	509	555	578	547	554	530	523	495
12	518	521	538	494	537	551	578	545	549	513	519
Total	7,047	7,081	7,082	6,983	7,195	7,218	7,085	6,938	6,639	6,537	6,571

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

- 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 Suburban Hennepin County will result in smaller kindergartens in the next several years
 - Suburban Hennepin County's share of Minnesota resident births likely to remain at current level or increase
 - Edina Public Schools' resident share of Suburban Hennepin County resident births will remain near its current level or decrease in the next five years
 - Competition likely to increase

RESIDENT LIVE BIRTHS

Year	Minnesota	Hennepin County	Suburban Hennepin County
2006	73,515	16,780	10,223
2007	73,675	16,848	10,532
2008	72,382	16,566	10,212
2009	70,617	16,334	10,017
2010	68,407	15,955	9,854
2011	68,416	15,943	9,894
2012	68,783	16,345	10,294
2013	69,183	16,584	10,468
2014	69,916	16,770	10,536
2015	69,835	16,829	10,626
2016	69,746	16,485	10,400
2017	68,603	16,333	10,451
2018	67,348	15,844	10,152
2019	66,033	15,430	9,908
2020	63,451	14,835	9,541
2021	64,398	n.a.	n.a.

DECLINE IN RESIDENT LIVE BIRTHS

- 2006-2020
 - -13.7% Minnesota
 - -11.6% Hennepin County
 - -6.7% Suburban Hennepin County
- 2021 U.S. up 1%. Minnesota up to 64,398 resident live births, no county data to date
- 2022 U.S. births 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	
2017 Actual	68,603	
2018	70,395	
2018 Actual	67,348	
2019	70,373	
2019 Actual	66,033	
2020	70,325	65,965
2020 Actual	63,451	
2021	70,274	65,917
2021 Actual	64,398	
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 SUBURBAN HENNIPEN COUNTY KINDERGARTEN POOL

Birth Years	Pool	Percentage	Kindergarten Year
2006; 2007	10,430	4.56%	2012-13
2007; 2008	10,318	5.00%	2013-14
2008; 2009	10,081	4.86%	2014-15
2009; 2010	9,908	4.19%	2015-16
2010; 2011	9,881	5.30%	2016-17
2011; 2012	10,162	5.15%	2017-18
2012; 2013	10,411	4.85%	2018-19
2013; 2014	10,513	4.76%	2019-20
2014; 2015	10,596	4.43%	2020-21
2015; 2016	10,475	4.56%	2021-22
2016; 2017	10,534	4.78%	2022-23
2017; 2018	10,251		2023-24
2018; 2019	10,037		2024-25
2019; 2020	9,662		2025-26

RESIDENT KINDERGARTEN/BIRTH RATIOS

- Resident kindergarten assumptions
 - Resident kindergarten/birth ratios
 - Low is 4.77% (average of the past eleven years)
 - High is 4.80% (average of the past eleven years omitting the Pandemic year)
 - Longer-term—2026-27 through 2032-33
 - In past 15 years, Suburban Hennepin County resident births fluctuated but increased from 13.91% to 15.04% of Minnesota resident births. Assumed Suburban Hennepin County's share would be 15.04 percent (average of past three years) in the next five years

RESIDENT KINDERGARTEN PROJECTIONS

Year	@4.77%	@4.80%
2022-23	504	504
2023-24	489	492
2024-25	479	482
2025-26	461	464
2026-27	467	470
2027-28	473	476
2028-29	472	475
2029-30	472	475
2030-31	472	475
2031-32	472	475
2032-33	472	475
Total	4,729	4,759
Past ten years 4,989 resident kindergarten students		

RESIDENT NET MIGRATION

- Resident net migration
 - Positive pre-2017-18 and again this past year
 - Most years a large inflow between K and Grade 1 and Grade 1 and Grade 2
 - No consistent net inflow at the beginning of middle school or high school. Atypical in Minnesota
 - Beginning in 2016-17, net out migration between Grade 6 and Grade 7 and Grade 7 and Grade 8

RESIDENT 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	25	33	9	66	29	2	18	-5	19	26
1 to 2	23	10	24	28	16	-2	2	-29	14	20
2 to 3	17	12	15	15	1	10	-6	-24	6	1
3 to 4	2	13	6	3	10	9	-8	-25	-1	2
4 to 5	13	9	4	11	0	-9	13	-22	14	6
5 to 6	2	-3	17	2	2	13	-19	-27	-9	-1
6 to 7	1	8	20	-1	-14	-21	-19	-29	-21	-10
7 to 8	-7	1	1	-10	6	-14	1	-19	-12	10
8 to 9	-10	-27	5	8	-14	-39	-14	-16	-9	-5
9 to 10	-10	-11	-27	0	4	-3	-7	-17	-4	-1
10 to 11	-21	-14	-20	32	1	-33	-28	-5	-11	-1
11 to 12	1	1	-30	28	-4	0	-2	-5	-17	-4
Total	36	32	24	182	37	-87	-69	-223	-31	43

PROJECTED RESIDENT SURVIVAL RATES

Grade	Low (Past 5 Years Omitting Pandemic Year)	High (Past 4 Years Omitting Pandemic Year)
K to 1	1.034	1.044
1 to 2	1.017	1.024
2 to 3	1.006	1.001
3 to 4	1.001	0.995
4 to 5	1.012	1.021
5 to 6	0.993	0.982
6 to 7	0.966	0.968
7 to 8	0.994	1.000
8 to 9	0.970	0.983
9 to 10	0.993	0.992
10 to 11	0.968	0.976
11 to 12	0.989	0.985

EFFECT OF SURVIVAL RATES IN TEN YEARS WITH LOW K ASSUMPTION

Survival Rates	Total	K-5	6-8	9-12
Past 5 Years Omitting Pandemic Year	6,325	2,962	1,460	1,900
Past 4 Years Omitting Pandemic Year	6,401	2,991	1,470	1,940

RESIDENT ENROLLMENT PROJECTIONS

- In ten years (2032-33)
 - Resident enrollment projected to decrease
 - 2022-23 6,571
 - 2032-33
 - 6,323 to 6,432 or -3.8% to -2.1%
 - Resident kindergarten projected to be larger than the previous year's Grade 12 (natural increase). Projected natural increase a change from the recent past
 - Resident net out migration projected to continue. Less than in the recent past

RESIDENT ENROLLMENT PROJECTIONS

Year	Low K Low Mig	High K Low Mig	Low K High Mig	High K High Mig
2022-23	6,571	6,571	6,571	6,571
2023-24	6,512	6,515	6,525	6,528
2024-25	6,473	6,479	6,503	6,509
2025-26	6,433	6,442	6,473	6,483
2026-27	6,374	6,387	6,426	6,438
2027-28	6,347	6,362	6,404	6,419
2028-29	6,370	6,389	6,431	6,450
2029-30	6,341	6,363	6,403	6,425
2030-31	6,337	6,362	6,406	6,432
2031-32	6,333	6,362	6,406	6,434
2032-33	6,323	6,354	6,401	6,432

RESIDENT ENROLLMENT PROJECTIONS

	K-5	6-8	9-12	Total
2022-23	3,036	1,503	2,032	6,571
2027-28				
Low K/Low Mig	3,005	1,508	1,833	6,347
High K/Low Mig	3,021	1,508	1,833	6,362
Low K/ High Mig	3,035	1,499	1,870	6,404
High K/High Mig	3,050	1,499	1,870	6,419
2032-33				
Low K/Low Mig	2,962	1,460	1,900	6,323
High K/Low Mig	2,981	1,470	1,903	6,354
Low K/ High Mig	2,991	1,470	1,940	6,401
High K/High Mig	3,010	1,479	1,943	6,432
Excludes Early Childhood				

ENROLLMENT PROJECTIONS

What could make these projections

- Too high
 - Projected kindergarten is too high
 - More students opt for nonpublic schools
- Too low
 - Projected kindergarten is too low

RESIDENT K-5 PROJECTIONS BY SCHOOL

- Background
 - From 2017-18 to 2022-23, resident K-5 decreased by 192 students or -5.9 percent
 - Dual Spanish Immersion at Countryside
 - Two sections of resident kindergarten added in 2022-23. Will ramp up to Grade 5
 - Increases enrollment at Countryside
 - Normandale resident kindergarten not held at a constant number

COHORT SURVIVAL METHOD PROJECTIONS RESIDENT K-5

High Kindergarten/High Migration

School	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Concord	558	546	531	518	513	509
Cornelia	453	444	439	430	419	411
Countryside	431	470	512	543	582	621
Creek Valley	505	525	535	540	527	534
Highlands	437	431	428	416	420	413
Normandale	636	631	623	612	593	566
Edina Virtual Pathways	16					
Sum	3,036	3,047	3,068	3,059	3,054	3,054
District-wide	3,036	3,063	3,075	3,063	3,058	3,050
Difference	0	-16	-7	-4	-4	4

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