

MEDFORD PUBLIC SCHOOLS

ISD#763

ENROLLMENT PROJECTIONS

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COVID-19 AFFECTS

- Affects of Pandemic
 - Medford Public Schools
 - 2020-21 kindergarten capture rate lower than pre-Pandemic but has since bounced back and is higher than any time in the past ten years (except for this year)
 - Students shifted to other education options
 - The number of students enrolled in other education options is back to pre-Pandemic levels
 - Pandemic no longer affecting enrollment in the Medford Public Schools

PROJECTION ENVIRONMENT

- Low fertility
 - Fertility below replacement (2.11 children per woman at the end of childbearing). Minnesota at 1.73 in 2020 and falling
 - Number of births decreasing in U.S. and Minnesota
 - 2020 U.S. births lowest since 1979 but births up 1% in 2021; flat in 2022; 2023 remains low
 - Fertility varies by race/ethnicity
- Population aging
 - Housing mix different; more apartments, condos, and townhomes. Unit types with few school age children per unit
 - Smaller percentage of households have children

PROJECTION ENVIRONMENT

- Less mobility
 - U.S. fewer than 10 percent (8.4 percent) moved last year
 - Was 20 per cent per year since WWII
 - Mobility creates demand for housing
- Immigration from abroad slowed
 - Minnesota was very dependent on immigration for population growth in the past 25 years
- Minnesota population back to pattern of net out migration
 - Losing young adults—affects number of births
- Competition for students increasing in Minnesota

KEY FINDINGS

- **Nonresidents make up 46.6% of enrollment in 2023-24**
 - The Medford Schools had a net gain 345 students from other public options in 2023-24
- From 2013-14 to 2023-24
 - **District's school age population decreased by 94 students or -14.2%.**
 - **Resident K-12 enrollment decreased by 99 students or -17.2%**
 - **Yet, Medford enrollment increased by 33 students or 3.9%**
- **Market share is 83.9%**

KEY FINDINGS

- **Medford Public Schools experienced both net *in* and *out* migration in the past ten years. Migration appears unpredictable**
- **In recent years, Medford Public Schools experienced natural decrease, which depresses enrollment growth**

CHANGE IN OTHER EDUCATION OPTIONS

Year	Nonpublic	Home School	Open Out	Charters
2013-14	4	11	51	11
2019-20	7	7	69	9
2023-24	8	6	65	5

EDUCATION CHOICES

2022-23

	Minnesota	Medford Public Schools
Nonpublic settings	10.2%	2.5%
Traditional schools	7.5%	1.5%
Home schools	2.7%	1.0%
Public Options		
Open enrollment	9.2%	
In		45.1%
Out		10.6%
Charter schools	7.0%	0.8%
Capture Rate	73.6%	83.9%

K-12 ENROLLMENT

Year	Total	Resident	Nonresident
2013-14	857	574	283
2014-15	855	555	300
2015-16	898	572	326
2016-17	896	556	340
2017-18	912	558	354
2018-19	888	550	338
2019-20	928	566	362
2020-21	894	530	364
2021-22	900	526	374
2022-23	911	500	411
2023-24	890	475	415

COMPONENTS OF K-12 ENROLLMENT CHANGE

Fall to Fall	Total		Natural Increase/Decrease	Net Migration
	#	%		
2013 to 2014	-2	-0.2%	12	-14
2014 to 2015	43	5.0%	12	31
2015 to 2016	-2	-0.2%	14	-16
2016 to 2017	16	1.8%	12	4
2017 to 2018	-24	-2.6%	-10	-14
2018 to 2019	40	4.5%	15	25
2019 to 2020	-34	-3.7%	-8	-26
2020 to 2021	6	0.7%	-6	12
2021 to 2022	11	1.2%	-8	19
2022 to 2023	-21	-2.3%	-1	-20
Total	33	---	32	1

K-12 ENROLLMENT

Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
K	71	62	71	65	66	69	64	57	67	68	64
1	61	67	58	78	64	61	76	58	62	69	68
2	65	62	72	63	76	65	61	76	66	69	65
3	71	65	65	65	66	74	69	65	75	74	72
4	71	78	73	64	69	65	82	69	64	77	74
5	70	72	83	69	66	67	69	81	65	65	78
6	73	71	76	81	72	65	67	69	82	69	69
7	56	71	73	73	79	68	73	63	75	81	66
8	85	60	74	73	73	81	68	71	63	77	80
9	68	79	58	75	75	80	78	65	68	67	72
10	54	61	82	58	72	75	79	71	65	69	65
11	62	48	62	78	55	69	77	76	72	61	63
12	50	59	51	54	79	49	65	73	76	65	54
Total	857	855	898	896	912	888	928	894	900	911	890

COHORT SURVIVAL METHOD PROJECTIONS

- Cohort Survival Method
 - Both simple and complex
 - Ages each grade by moving it to the next higher grade in the following year
 - Requires making kindergarten projections
 - Resident births are a proxy
 - Requires making assumptions about net migration or the survival rates from grade to grade

DISTRICT PROJECTIONS

- Assumptions underlying these projections
 - The decline in resident births in Minnesota and Steele County will result in smaller kindergartens in the next several years
 - Steele County's share of Minnesota resident births is not likely to increase
 - Medford Public Schools' share of Steele County resident births not likely to increase
 - Competition remains at its current percentages

DECLINE IN RESIDENT LIVE BIRTHS

- 2007-2021
 - -12.5% Minnesota
 - -20.6% Steele County
- 2021 U.S. up 1%, Minnesota up to 64,444 resident live births; Steele County up as well
- 2022 U.S. flat; Minnesota likely to follow this pattern
- WHY?
 - Decline in fertility rates
 - Aging of the population

RESIDENT BIRTHS

Years	Minnesota	Steele County
2007	73,675	549
2008	72,382	568
2009	70,617	509
2010	68,407	480
2011	68,416	480
2012	68,783	451
2013	69,183	473
2014	69,916	509
2015	69,835	469
2016	69,746	422
2017	68,603	421
2018	67,348	385
2019	66,033	417
2020	63,451	375
2021	64,444	436

PROJECTED MINNESOTA 0-YEAR OLDS

Year	Projected Number	Adjusted Number
2019	70,373	
2019 Actual	66,033	
2020	70,325	
2020 Actual	63,451	
2021	70,274	
2021 Actual	64,444	
2022	64,897	
2023	65,396	
2024	65,895	
2025	66,195	
2026	66,352	
2027	66,509	
2028	66,666	
2029	66,823	
2030	66,890	

KINDERGARTEN PROJECTIONS

- Projected births (0-year-olds) statewide are very flat
- Medford Public Schools' share of Steele County resident births not likely to increase

KINDERGARTEN AS A PERCENTAGE OF THE STEELE COUNTY KINDERGARTEN POOL

Birth Years	Pool	Percentage	Kindergarten Year
2007; 2008	562	12.63%	2013-14
2008; 2009	528	11.74%	2014-15
2009; 2010	490	14.49%	2015-16
2010; 2011	480	13.54%	2016-17
2011; 2012	460	14.35%	2017-18
2012; 2013	466	14.81%	2018-19
2013; 2014	497	12.88%	2019-20
2014; 2015	482	11.83%	2020-21
2015; 2016	438	15.30%	2021-22
2016; 2017	421	16.15%	2022-23
2017; 2018	397	16.12%	2023-24
2018; 2019	406	(56) 13.79%	2024-25
2019; 2020	389		2025-26
2020; 2021	416		2026-27

KINDERGARTEN PROJECTIONS

- Kindergarten assumptions
 - Kindergarten/birth ratios
 - Low is 13.99% (average of the past eleven years)
 - High is 15.86% (average of the past three years)
 - Longer-term—2027-28 through 2033-34
 - In past 15 years, Steele County resident births decreased from 0.75% to 0.68% of Minnesota resident births
 - Steele County births based on 2024 population projections by the Minnesota State Demographic Center for Steele County

STEELE COUNTY KINDERGARTEN POOL

Year	Pool
2023-24	397
2024-25	406
2025-26	389
2026-27	416
2027-28	412
2028-29	407
2029-30	412
2030-31	413
2031-32	416
2032-33	416
2033-34	418
Bold based on actual births	

KINDERGARTEN PROJECTIONS

- In the next ten years, the projected number of kindergarten students is smaller than in the past ten years

KINDERGARTEN PROJECTIONS

Year	@13.99%	@15.86%
2023-24	64	64
2024-25	57	64
2025-26	54	62
2026-27	58	66
2027-28	57	65
2028-29	58	65
2029-30	58	65
2030-31	58	66
2031-32	58	66
2032-33	58	66
2033-34	58	66
Total	574	651
Past ten years 653 Kindergarten students		

NET MIGRATION

- Net migration is a mix of both in and out. Seems very unpredictable
- There is no consistent net inflow of students at any grade
- However, secondary grades tend to have net out migration more often than the elementary grades
 - Result, e.g., 2013-14 kindergarten had 71 members but by the time this cohort reached Grade 10 in 2023-24, there were only 65 members

NET MIGRATION YEAR TO YEAR

Grade	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	22 to 23
K to 6	6	21	-2	9	-10	23	-3	8	24	4
7-12	-20	10	-14	-5	-4	2	-23	4	-5	-24
Total	-14	31	-16	4	-14	25	-26	12	19	-20

NET MIGRATION

YEAR TO YEAR

Grade	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	22 to 23
K to 1	-4	-4	7	-1	-5	7	-6	5	2	0
1 to 2	1	5	5	-2	1	0	0	8	7	-4
2 to 3	0	3	-7	3	-2	4	4	-1	8	3
3 to 4	7	8	-1	4	-1	8	0	-1	2	0
4 to 5	1	5	-4	2	-2	4	-1	-4	1	1
5 to 6	1	4	-2	3	-1	0	0	1	4	4
6 to 7	-2	2	-3	-2	-4	8	-4	6	-1	-3
7 to 8	4	3	0	0	2	0	-2	0	2	-1
8 to 9	-6	-2	1	2	7	-3	-3	-3	4	-5
9 to 10	-7	3	0	-3	0	-1	-7	0	1	-2
10 to 11	-6	1	-4	-3	-3	2	-3	1	-4	-6
11 to 12	-3	3	-8	1	-6	-4	-4	0	-7	-7
Total	-14	31	-16	4	-14	25	-26	12	19	-20

PROJECTED SURVIVAL RATES

Grade	Low Past Ten Years	Past Five Years	High Past Two Years
K to 1	1.001	1.025	1.015
1 to 2	1.036	1.039	1.028
2 to 3	1.025	1.056	1.082
3 to 4	1.037	1.024	1.014
4 to 5	1.005	1.004	1.015
5 to 6	1.021	1.027	1.062
6 to 7	0.998	1.019	0.973
7 to 8	1.013	0.998	1.008
8 to 9	0.991	0.975	0.999
9 to 10	0.978	0.977	0.993
10 to 11	0.962	0.974	0.926
11 to 12	0.947	0.936	0.894

EFFECT OF SURVIVAL RATES IN TEN YEARS WITH LOW K ASSUMPTION

Survival Rates	Total	K-6		7-12
Past 10 Years	829	431		398
Past 5 Years	860	446		414
Past 2 Years	864	447		417

EFFECT OF SURVIVAL RATES IN TEN YEARS

- Difference in survival rates
 - Past 5 years and past 2 years almost no difference
 - Between lowest and highest
 - 35 students in total enrollment
 - 16 students K-6 (2.3 per grade)
 - 19 students Grades 7-12 (3.2 per grade)

K-12 ENROLLMENT PROJECTIONS

- In ten years (2032-33)
 - K-12 enrollment projected to increase except for two low kindergarten assumption projections
 - 2023-24 = 890
 - 2033-34
 - 829 to 951 or -6.9% to 6.9%
 - All depends on the size of kindergarten
 - Low K projection results in enrollment decline; high K projection results in enrollment growth
 - However, with high migration, large enrollment decrease is avoided even with low K

K-12 ENROLLMENT PROJECTIONS

Year	Low K Low Mig	Low K High Mig	High K Low Mig	High K High Mig
2023-24	890	890	890	890
2024-25	894	895	901	902
2025-26	890	894	905	909
2026-27	889	897	912	921
2027-28	882	894	914	927
2028-29	870	887	909	928
2029-30	868	890	915	938
2030-31	864	890	920	948
2031-32	850	879	915	947
2032-33	840	871	914	949
2033-34	829	864	912	951

K-12 ENROLLMENT PROJECTIONS

	K-6		7-12	Total
2023-24	490		400	890
2028-29				
Low K/Low Mig	443		426	870
Low K/High Mig	460		428	887
High K/ Low Mig	483		426	909
High K/High Mig	500		428	928
2033-34				
Low K/Low Mig	431		398	829
Low K/High Mig	447		417	864
High K/ Low Mig	488		425	912
High K/High Mig	507		445	951

K-12 ENROLLMENT PROJECTIONS

What could make these district wide projections

- Too high
 - Projected kindergarten is too high (county kindergarten pool too large; Medford's capture rate decreases)
 - Fewer nonresident students enroll into the Medford Public Schools
- Too low
 - Projected kindergarten is too low (county kindergarten pool too small; Medford's capture rate increases)
 - More net in migration due to more nonresidents through open enrollment

WHAT ABOUT HOUSING?

- Relationship between housing and K-12 enrollment is complex
 - **Unit type** affects school age child per unit yield
 - Single-family detached units have the highest student yield per unit
 - 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

HOUSING UNIT CHANGE

County	Past Five Years		2023-2027	
	Single-Family Detached	Apartment Units	Single-Family Detached	Apartment Units
Steele	11	32	n.a.	n.a.
Rice	4	0	5	0
Waseca	0	0	0	0

NEW HOUSING VERSUS ENROLLMENT

- In the past five years
 - Resident enrollment decrease by 91 students with a very modest increase in housing units
- Future
 - Enrollment more depended on nonresidents than on housing unit increases in the district
 - Retaining more secondary students would increase enrollment or slow decline



THANK YOU