

SCARBOROUGH
MAINE



Enrollment

Scarborough School Building
Committee (SBAC2)

January 13, 2025

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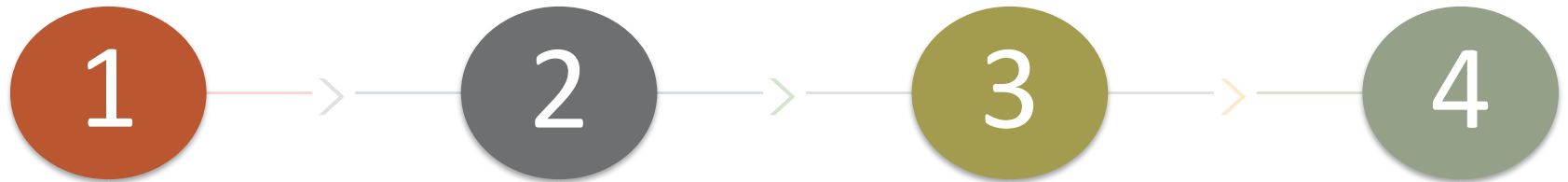
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2022-23 Enrollment Projection Models

Change in school enrollment derives from two sources: changes in the number of births to residents and the net migration of pre school and school age children into and out of a community. The consultant's projections reflect both sources of change.



BEST FIT MODEL

- Standard statistical model which projects enrollment based on historical trends.
- Usually considered to be the most likely scenario to occur IF future enrollment follows historical patterns (i.e. does NOT account for major residential development or changes in birth trends.)

BEST FIT MODEL + COVID ADJUSTMENT

- The “best fit” model was adjusted for historical birth trends after 2019.
- Accounts for increased homeschooling trend.
- No adjustments were made to factor in increased housing development. Accounts for 142 housing units (< 3-year average).

HOUSING IMPACT MODEL

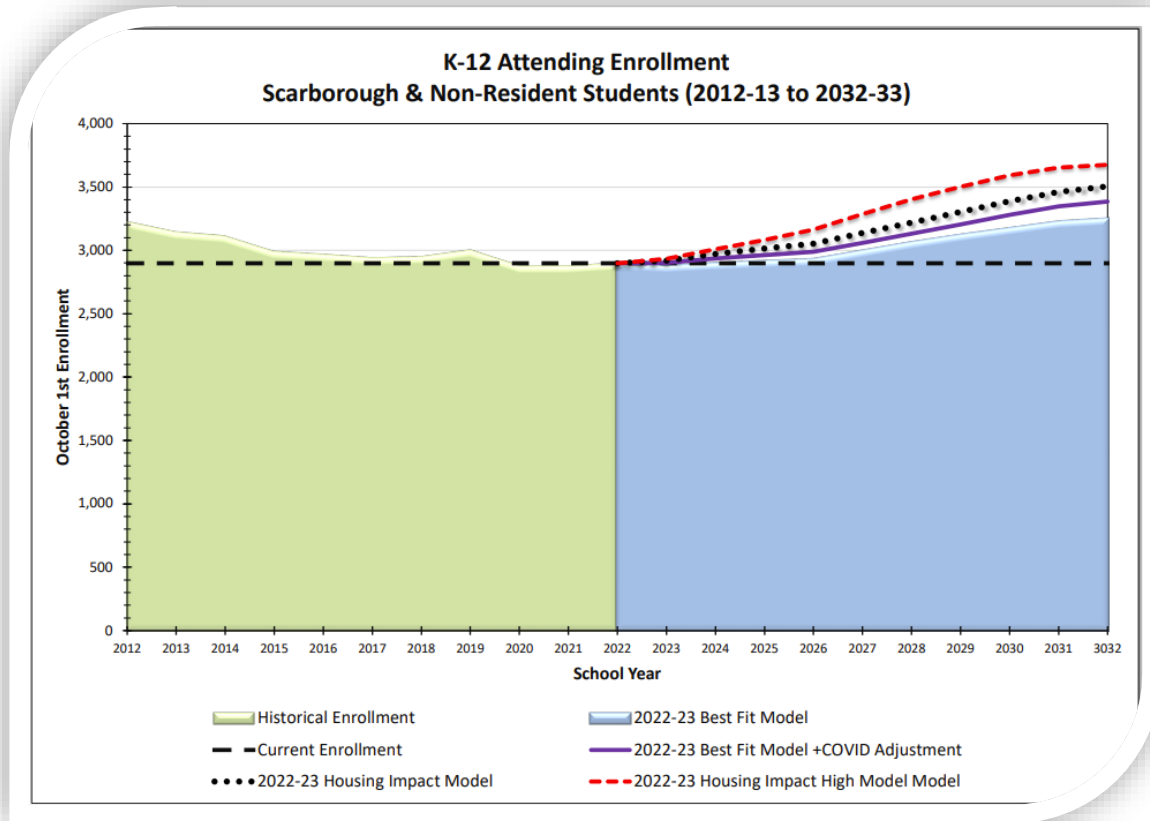
- The two housing models are based off the Covid Adjustment Model, and then factor in potential increased housing development.
- Accounts for additional grade-to-grade migration based on estimated future development levels of 190 housing units.

HOUSING IMPACT HIGH MODEL

- Reflects the maximum allowable single family home development under the Growth Management Ordinance along with estimated multifamily housing development (244 units).
- Note: the GMO has been updated since this analysis was completed.

** February 2023 School Board Presentation – Consultant favored somewhere in between the Covid Adjustment and Housing Impact Models but noted that if births continued to hover around 200, future projections would be too low.*

2022-23 Enrollment Projection Models



How does the “Best Fit” base model compare to the others?

Projected 10-Year Average vs. "Best Fit"	
BEST FIT + COVID	2.4%
HOUSING IMPACT	4.9%
HOUSING IMPACT HIGH	9.2%

* February 2023 School Board Presentation – Consultant favored somewhere in between the Covid Adjustment and Housing Impact Models but noted that if births continued to hover around 200, future projections would be too low.

Enrollment Factor: Birth Rate Trends

Since this enrollment study was completed, 10, 5, and 3-year birth rate averages have all increased **3 – 10%**

Annual Birth Rate Averages

As of 2022 (Consultant) :

10 Years – 161

5 Years – 167

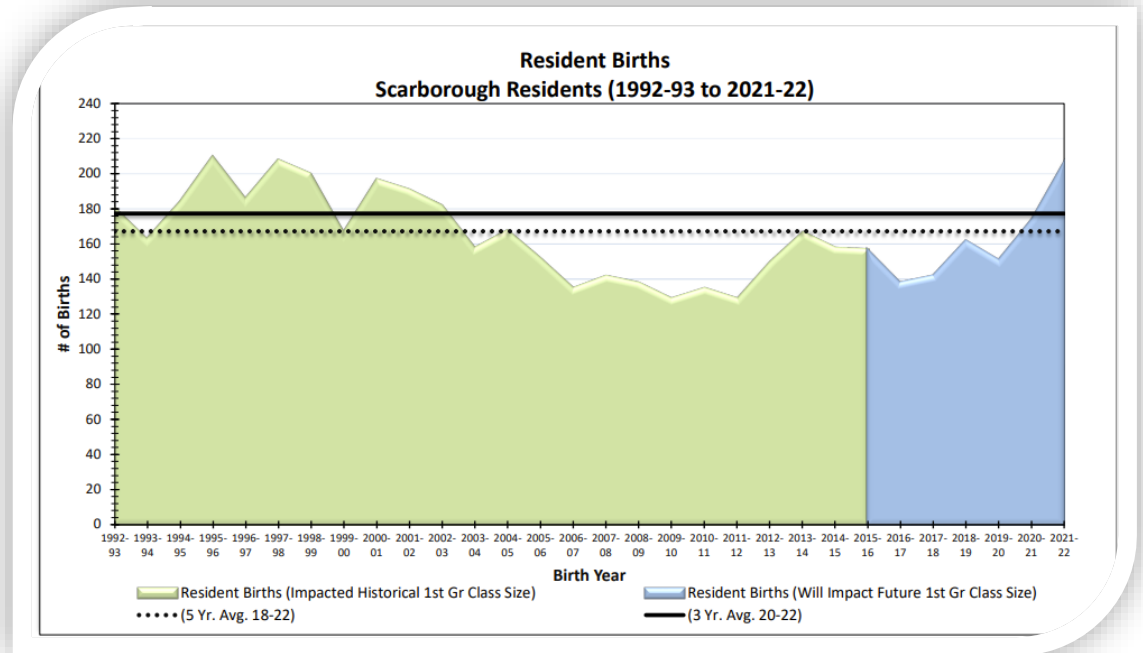
3 Years - 177

As of 2024 (SBAC2) :

10 Years – 166 (+3.1%)

5 Years – 181 (+8.4%)

3 Years – 194 (+9.6%)



The consultant’s “best fit” model assumes resident births would be 177 annually go-forward (3-year average). The “best fit + Covid” and housing models use a 3-year rolling average of predicted future births.

★ *For the committee’s projections, we used this same “rolling average” method with the up-to-date birth rates to project out future births.*

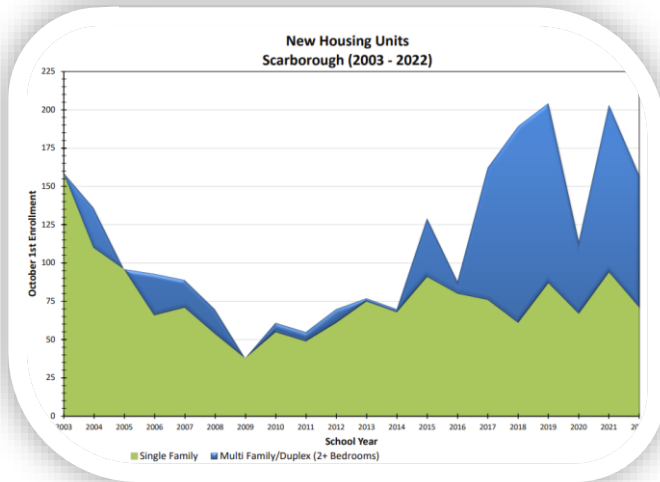
Enrollment Factor: Migration Trends

- In the past 5 years Scarborough experienced an average in-migration ratio of 1.37, meaning that first grade experienced an average increase of about +37% from the number of births six years prior to the number of children enrolled.
- Grade-to-grade migration averages fluctuate between 0.98 (7th to 8th grade) to 1.04 (1st to 2nd grade).
- ★ • *These grade-specific migration ratios (historical averages used by the consultant) were used by the committee to update enrollment projections, with up-to-date birth rates and 2023-2024 enrollment.*

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Migration Ratios:	1.36	1.02	1.04	1.02	1.03	1.03	1.02	0.99	0.98	0.99	1.03	1.00	1.02
*1.37 (1st / Birth Ratio)													

Enrollment Factor: Residential Growth Trends

- On average, 113 new non-senior housing units have been added annually in Scarborough since 2003. During the years 2020 to 2022, an average of 158 housing units were added annually.
- The increase in new housing was driven largely by the addition of new multi-family projects in town, while the average number of single-family homes added annually remained stable, averaging between 76 and 78 units per year.



The impact of a 3-bedroom multi-family unit is the same as a single-family home:

Single Family Housing: 0.77 students / unit avg
 2-Bedroom Units: 0.25 students / unit avg
 3-Bedroom Units: 0.8 students / unit avg

- The “housing Impact” model estimates the impact of 190 new housing units annually. This level of development is “reasonably consistent” with what the Town Planner expected for future development and is higher than the last five-year average of annual development. “Best Fit” / “best fit covid” models account for 142 units annually.
- ★ *For the committee’s projections, we did not make any further housing adjustments to the “best fit + Covid” model. Analysis of the new GMO would need to be done by a consultant.*

Updated Enrollment Projections: **Executive Summary**

1

Methodology: With up-to-date birth rates through 2023-24 and enrollment rates through 2024-25, we:

- **Updated future birth rate projections**, using the same 3-year “rolling average” method the consultant used for the Covid and housing models
- **Updated grade-to-grade projections**, with the consultant’s historical grade migration ratios (fluctuates from 0.98 to 1.04)
- **Did NOT make further housing adjustments** to the “best fit + Covid” model. Analysis of the new GMO would require further work by the consultant.

2

For K-2, the committee should plan for a projected peak enrollment of around 817 (Yr 2028-29).

SBAC2 Enrollment Projections

- = Updated birth rate and enrollment
- = Committee's projections for birth rates and enrollment (using consultant's 3-yr rolling avg birth rate and migration ratios)
- = Enrollment projections for future birth years / Grade grouping totals inclusive of >50% future birth years.
- = Max grade range enrollment, historical or projected

Birth Year	Births	Ratio K / Birth	Ratio 1st/Birth
2006-07	135	1.50	1.47
2007-08	142	1.44	1.49
2008-09	138	1.50	1.51
2009-10	129	1.21	1.34
2010-11	135	1.43	1.47
2011-12	129	1.44	1.45
2012-13	150	1.39	1.49
2013-14	167	1.43	1.32
2014-15	158	1.13	1.23
2015-16	157	1.27	1.36
2016-17	138	1.58	1.51
Averages:			
10 Year (14-24)	166		
5 Year (19-24)	181		
3 Year (21-24)	194		

Scarborough Enrollment Trends & Projections																		
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-2	Total 3-5	Total 6-8	Total 9-12	Total K-12
Historical																		
2012-13	202	206	216	241	240	261	286	243	276	253	242	278	280	624	742	805	1053	3224
2013-14	204	199	225	211	252	240	267	282	234	255	249	241	283	628	703	783	1028	3142
2014-15	207	212	198	223	223	250	247	263	289	226	258	260	254	617	696	799	998	3110
2015-16	156	209	216	199	222	218	240	244	262	263	228	259	271	581	639	746	1021	2987
2016-17	193	173	219	238	206	226	224	247	244	249	261	227	257	585	670	715	994	2964
2017-18	186	199	181	231	238	206	228	238	251	230	250	257	238	566	675	717	975	2933
2018-19	209	187	212	188	237	235	209	228	236	247	238	250	266	608	660	673	1001	2942
2019-20	238	223	188	218	203	242	252	213	229	237	251	243	256	649	663	694	987	2993
2020-21	179	221	206	195	207	209	245	253	211	214	228	253	246	606	611	709	941	2867
2021-22	199	195	235	204	210	213	210	246	245	207	222	227	254	629	627	701	910	2867
2022-23	218	213	208	239	218	218	222	207	240	240	211	222	235	639	675	669	908	2891
Projected - "Best Fit + Covid" updated with latest birth rates / committee's enrollment projections																		
2023-24	194	209	205	213	238	225	218	224	205	235	239	214	229	608	676	647	917	2848
2024-25	211	192	219	210	216	245	222	215	228	208	239	242	220	622	671	665	909	2867
2025-26	205	215	200	224	217	222	250	220	210	225	213	239	246	620	663	680	924	2886
2026-27	236	208	224	205	231	223	227	247	215	208	231	213	243	668	658	689	895	2910
2027-28	280	240	217	229	211	237	227	224	242	212	213	231	217	738	677	693	873	2981
2028-29	280	286	251	222	236	217	242	225	219	239	218	213	235	817	675	686	904	3082
2029-30	226	286	298	256	229	243	221	239	220	217	245	218	217	810	728	681	896	3114
2030-31	262	230	298	304	264	236	248	219	234	217	222	245	221	791	804	701	905	3201
2031-32	256	267	240	304	314	272	240	245	214	231	223	222	249	764	890	700	925	3278
2032-33	248	261	279	246	314	323	277	238	240	212	237	223	226	788	882	754	897	3322
2033-34	256	252	272	285	253	323	329	274	233	237	217	237	227	781	861	836	917	3395
2034-35	253	261	264	278	294	261	329	326	268	230	243	217	241	778	832	923	931	3463

Migration Ratios:	1.36	1.02	1.04	1.02	1.03	1.03	1.02	0.99	0.98	0.99	1.03	1.00	1.02
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*1.37 (1st / Birth Ratio)

Historic high enrollment projected in K-2 (817), 3-5 (890), and 6-8 (923).

These projected max enrollments are for actual births thru 2023/24. *If migration ratios remain at historic averages, enrollment will be 800+ vs. around 600 today.*

Questions + Discussion



Appendix



2022-23 Enrollment Projection Study for the Scarborough Schools

2022-23 Enrollment Projection Study – Prepared in March 2023 by Wandell Consulting [STUDY](#)

Sources:

- Resident births by month by year - *Maine Center for Disease Control and Prevention, Data Research and Vital Statistics*
- Enrollment Data - *Oct 1st data from MDOE*
- Housing Data - *From Scarborough Planning Office: Annual # of Permits Issued, Multi-Family Project Info including bedrooms per unit*

School Board Meeting re: Enrollment Data (*Starting around 34:50*) [VIDEO](#)

Scarborough Public Schools Enrollment Data [HISTORY](#)

SBAC1 Sub-Committee Projections

- = Updated birth rate and enrollment
- = Committee's projections for birth rates and enrollment (using consultant's 3-yr rolling avg birth rate and migration ratios)
- = Max grade range enrollment, historical or projected

Birth Year	Births	Ratio K / Birth	Ratio 1st/Birth
2006-07	135	1.50	1.47
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2015-16	157	1.27	1.36
2016-17	138	1.58	1.51
2017-18	142	1.37	1.39
2018-19	162	1.36	1.38
2019-20	151	1.36	1.38
2020-21	174	1.36	1.38
2021-22	207	1.36	1.38
2022-23	207	1.36	1.38
2023-24	196	1.36	1.38
2024-25	203	1.36	1.38
2025-26	202	1.36	1.38
2026-27	200	1.36	-
Averages:			
10 Year (13-23)	166		
5 Year (18-23)	180		
3 Year (20-23)	196		

Scarborough Enrollment Trends & Projections																			
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-2	Total 3-5	Total 6-8	Total K-8	Total 9-12	Total K-12
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2018-19	209	187	212	188	237	235	209	228	236	247	238	250	266	608	660	673	1941	1001	2942
2019-20	238	223	188	218	203	242	252	213	229	237	251	243	256	649	663	694	2006	987	2993
2020-21	179	221	206	195	207	209	245	253	211	214	228	253	246	606	611	709	1926	941	2867
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2025-26	205	224	206	223	216	226	250	227	211	216	208	241	243	635	665	688	1988	908	2896
2026-27	236	209	234	211	230	222	230	247	222	208	222	208	245	679	662	700	2041	883	2924
2027-28	281	240	218	239	217	236	226	228	242	219	214	222	211	739	693	696	2128	866	2994
2028-29	280	286	251	223	246	223	241	224	223	239	225	214	226	817	692	688	2198	903	3101
2029-30	266	286	299	257	230	254	228	239	219	220	245	225	217	850	741	685	2277	907	3184
2030-31	275	270	298	305	265	237	259	225	233	216	226	245	229	844	807	718	2368	916	3284
2031-32	274	280	282	304	315	273	241	258	220	230	222	226	249	836	892	719	2448	927	3375
2032-33	271	279	292	288	314	324	278	241	253	218	236	222	230	842	926	772	2540	906	3446

Migration Ratios:	1.36	1.02	1.04	1.02	1.03	1.03	1.02	0.99	0.98	0.99	1.03	1.00	1.02
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*1.38 (1st / Birth Ratio)



Historic high enrollment projected in K-2 (850) and 3-5 (926).

Projected 2028/29 K-2 enrollment of 817 is for actual births thru 2022/23. If migration ratios remain at historic averages, enrollment will be 800+ vs. around 600 today.

FAQ:

Why wasn't the new GMO factored into the sub-committee's projections?

Due to the complexities in the housing aspect of the projections, analysis of the new GMO would require further work by the consultant.

For example:

- The consultant partnered with Town Planning to exclude Senior housing (55+) and one-bedroom / studio units from her analysis, so housing units did not align directly with the GMO totals. For instance, 2022 data in the study is showing 157 new housing units, but the total was really 306.
- She studied enrollment by address to see which of the new neighborhoods students were coming from.
- Her estimates included single family homes that have been built in the Downs, but timing and bedroom number for remaining multi-family units is not finalized.

While the current GMO does slow the number of multi-family units, the previous GMO allowed for only 20% to be 3-bedroom units, while the current allows up to 35%. The enrollment impact of this decrease in the total units, while allowing for a larger 3-bedroom percent, is unknown.

FAQ:

What is the current GMO?

CURRENT

Calendar Year July - June	EXEMPTIONS			AREA 1	AREA 2	AREA 3	TOWN WIDE AFFORDABLE & WORKFORCE HOUSING	Totals 800+
	ADU Gift Lots Repair & Replace	Manufactured Housing	CEO Single Family	25 per year	210 every 3 years	400 every 3 years	100 every 3 years	
3 Bedroom Max	NA	NA	NA	NA	20%	20%	20%	
Total per 3 year period	open	open	15	75	42	85	20	237 + 79 per year
2023 - 2024	open	open	5	25	70	133	33	266+
2024 - 2025	open	open	5	25	70	133	33	266+
2025 - 2026	open	open	5	25	70	134	34	268+

- ~79, 3 bedroom+ units on average per year
- 11% lower rate of growth compared to current plan (301)
- 30% lower than highest growth year in past 10 years (380)



Per Town Council, while the current GMO does slow the number of MF units, the previous GMO allowed only 20% 3 BR units, while the current allows up to 35%.

The enrollment impact of this decrease in the total units, while allowing for larger 3 BR % is unknown at this time.

OLD (Used in Enrollment Projections)

Calendar Year	Current GMO Exemptions				AREA 1 - Rural and SF Districts & Running Hill	AREA 2 - Growth Areas	AREA 3 - CPD		Total Units (plus exemptions) 851+
	Affordable	Manufactured Housing	Workforce	100 - One Bedroom Units	Up to 30 per year	Up to 144 per year	(SF) existing GMO	CPD (MU & MF) existing GMO 289	
2023	open	open	10	50	30	71	43	97	301+
2024	open	open	10	50	30	71	43	96	300+
2025	open	open	10		30	71	43	96	250+