#### **EXECUTIVE SUMMARY**

One model, called the "best fit" model, was used to project future enrollment in Hermon. The "best fit" model is a standard statistical model which projects enrollment based on historical trends, and is considered to be the most likely scenario to occur in Hermon IF future enrollment follows historical patterns of enrollment.

- The term "best fit" refers to the strongest statistical correlation between historical trends. The reader should keep in mind the "best fit" model is not always the best fit for predicting future enrollment. This is often the case in situations where the "best fit" model does not adequately account for the impact of resident development, when residential development, economic or population changes are occurring in the area, or when significant changes in migration trends or resident births trends occur.
- When looking at the enrollment figures it is important for the reader to pay close attention to the type of enrollment being discussed, i.e., whether the data is referring to resident enrollment, resident attending enrollment, non-resident students attending district schools, resident students attending non-district schools, or total attending enrollment. Additionally, due to limitations on availability of certain types of enrollment data, these figures do not include 100% home schooled students, or students attending privately paid for schools, but do include students at Charter Schools.

To provide reasonable cushions for use in planning school facilities, the enrollment projections are presented in the report **Appendix** within ranges of plus and minus 10% for the PreK-8 grade groups, and plus and minus 5% for grades 9-12. In addition, more conservative ranges of plus and minus 3% across all grade levels are supplied. In completing the enrollment projections for Hermon, the major findings of this study are as follows:

# **Resident Birth Trends:**

Resident births during the ten-year period influencing first grade enrollment over the last ten years (2001-02 to 2010-11), increased, on average. The average number of births over the last five years of the period, (2006-07 to 2010-11), was 55 births, which was higher than the previous five-year period (2001-02 to 2005-06), or 47 births. What this means is, on average, Hermon had 8 more children born to residents. Over the last ten-year period of available resident birth data, 2007-08 to 2016-17, births to residents of Hermon averaged 65 births annually, with births fluctuating year-to-year, to range between 51 and 80 births. The most recent five-year period (2012-13 to 2016-17) averaged 73 births, while over the last three years (2014-15 to 2016-17) the average of births to residents increased slightly, to average 76 births. The increase in births over the last ten years is notable, with births over the last five years (2012-13 and 2016-17) increasing by an average of 15 births per year compared to the previous five-year period (2007-08 to 2011-12.) The "best fit" projections used the five-year average (2012-13 to 2016-17) of births to estimate future births, or the 2017-18 "best fit" model assumes resident births should average about 73 births annually.

## **Preschool Migration Trends:**

In the first five years of the last decade, (2008-09 to 2012-13), Hermon experienced an in-migration of preschool-aged children. The level of preschool migration remained fairly stable over last five years (2013-14 to 2017-18), and over the last three years, (2015-16 to 2017-18).

Taken together, an increase in the average level of resident births along with an average preschool in-migration resulted in entering first grade class sizes that, on average, have increased significantly over the last five years. In addition, fluctuations in the level of resident births and preschool migration levels caused year-to-year fluctuations in first grade class sizes.

### **Elementary Migration Trends:**

Over the last three years one grade level experienced a significantly higher level of in-migration when compared with previous trends, and then another grade level experienced an out-migration compared with the in-migration trends seen previously. Additionally, a few other grade levels also had notable migration changes, with some grades experiencing an out-migration compared with a previous historical in-migration, and then some grade levels experienced an in-migration compared to an out-migration. The changes in migration trends mean the school population outlook would likely have been somewhat different five years ago compared with what the outlook is today.

### **Economic Influences on Enrollment:**

A decline in the unemployment rate indicates recovery from the recession has occurred, and an increase in the Civilian Labor Force has also increased the number of workers in the area. In addition, while the increase in the Civilian Labor Force may have had an impact on school enrollment over the last five years, any impact would already be accounted for in the last three to five-year historical enrollment trends used to make projections.

### New Housing Development Impact on Enrollment:

While it appears new housing unit development has had some impact on preschool in-migration, there was no correlation found between elementary migration and housing unit development. In addition, the 2017-18 "best fit" model adequately accounted for the in-migration of preschool-aged students. Therefore, an additional model based on new housing unit development was not needed.

• 2017-18 Best Fit Projections for Hermon Resident Students:

The 2017-18 "best fit" model is based on average births occurring between 2012-13 and 2016-17, and on a continuation of preschool in-migration similar to the level occurring over the last four years. Since no strong correlation between first and births was found, and due skewing of the trends from the small population sizes involved, the more recent four-year first to birth preschool migration trends were used to project future first grade enrollment.

#### First Grade Class Size:

Under the 2017-18 "best fit" model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with enrollment ranging between 80 and 106 students, and averaging 95 students annually through 2027-28.

### **Grade Group Enrollment:**

- PreK-4 resident attending enrollment will increase yearly from the current enrollment of 439 students to reach 530 students by 2021-22. Following 2021-22, enrollment will increase further but should level off to range between 548 and 560 students through 2027-28. Another 5 to 7 Hermon resident students are projected to attend non-district schools each year through 2027-28.
- Grades 5-8 resident attending enrollment will increase from the current enrollment of 296 students to reach 419 students by 2027-28. Another 5 to 6 Hermon resident students are projected to attend non-district schools each year through 2027-28.
- Grades 9-12 resident attending enrollment is projected to decline from the current enrollment of 282 students to range between 266 and 280 students through 2020-21. Following 2020-21, enrollment is projected to increase, reaching 350 students in 2027-28. Another 6 to 7 Hermon resident students are projected to attend non-district schools each year through 2027-28.

### Recommendations:

Outside forces such as changes in the economy, housing prices and/or new housing starts, job losses or changes, or unexpected national, state or local events can have an impact on enrollment trends which could in turn alter the outlook of enrollment in Hermon. Future enrollment should routinely be monitored for potential changes in trends, specifically looking to see if future enrollment deviates significantly from what is projected. In addition, the School Department should continue to routinely monitor births to residents, preschool migration trends, grade-to-grade migration trends, and local housing development trends for any notable changes.

School Year	Grades PreK-4			t Projection Ranges (+/-5% and + Grades 5-8			Grades 9-12			Total All Grades PreK-12		
	-10%	Proje	+10%	-10%	Proj.	+10%	-5%	Firoj.	+5%	-Range	Proj	+Range
2017-18	4:8		30,1			52%			1,261			
2018-19	416	462	508	273	303	333	481	506	531	1,170	1,271	1,372
2019-20	439	488	537	282	318	344	490	516	542	1,211	1,317	1,423
2020-21	462	513	564	285	317	349	499	525	551	1,246	1,355	1,464
2021-22	481	534	587	283	314	345	516	543	570	1,280	1,391	1,502
2022-23	495	550	605	301	334	367	514	591	568	1,310	1,425	1,540
2023-24	497	552	607	320	395	391	530	558	586	1,347	1,465	1,584
2024-25	507	563	619	329	366	403	535	563	591	1,371	1,492	1,613
2025-26	500	595	611	356	B95	435	524	592	580	1,380	1,502	1,626
2026-27	495	550	605	377	419	461	546	575	604	1,418	1,544	1,670
2027-28	495	550	605	380	422	464	570	600	630	1,445	1,572	1,699
			Enro	llment Proj		nges (+/-3%	) - Octobe					1,033
School Year	Grades PreK-4			Grades 5-8			Grades 9-12			Total All Grades PreK-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18		438			301			522			1,261	
2018-19	448	462	476	294	303	312	491	506	521	1,233	1,271	1,309
2019-20	473	488	503	304	318	322	501	516	531	1,278	1,917	1,356
2020-21	498	513	528	307	317	327	509	525	541	1,314	1,355	1,396
2021-22	518	534	550	305	314	323	527	543	559	1,350	1,391	1,432
2022-23	534	550	567	324	334	344	525	561	557	1,383	17425	1,468
2023-24	535	552	569	344	955	366	541	558	575	1,420	1,465	1,510
2024-25	546	568	580	355	366	377	546	569	580	1,447	1,492	1,537
2025-26	538	555	572	383	395	407	535	592	S69	1,456	1,502	1,548
2026-27	534	550	567	406	419	432	558	575	592	1,498	1,544	1,591
2027-28	534	550	567	409	422	435	582	600	618	1,525	1,572	

Notes: Enrollment data contains all resident students and non-resident students attending district schools,

2017-18 Best Fit Model Enrollment Projections for Hermon, Completed April 2018

Data produced by Wandell Consulting