

September 13, 2022

Harrisburg Area School District Enrollment Projections



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ECONOMY LEAGUE
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Pennsylvania Economy League

- Pennsylvania's leading independent, nonprofit, public policy research organization for over 85 years.
- PEL provides technical assistance, independent research and civic education.
- Since 1986, on more than 220 occasions PEL has examined demographics, housing and related activity, and enrollment trends in Pennsylvania school districts and, using the techniques employed in this analysis, generated projections of enrollments covering a 10-year period.
- PEL enrollment projections average approx. 1% error per projection year
 - ~ 1% in year 1, 2% in year 2, etc.

Methodology

Demographics

Housing

Birth Patterns

Migration
Patterns

Other
Enrollments

Grade Level
Progression

Demographics Summary

Population

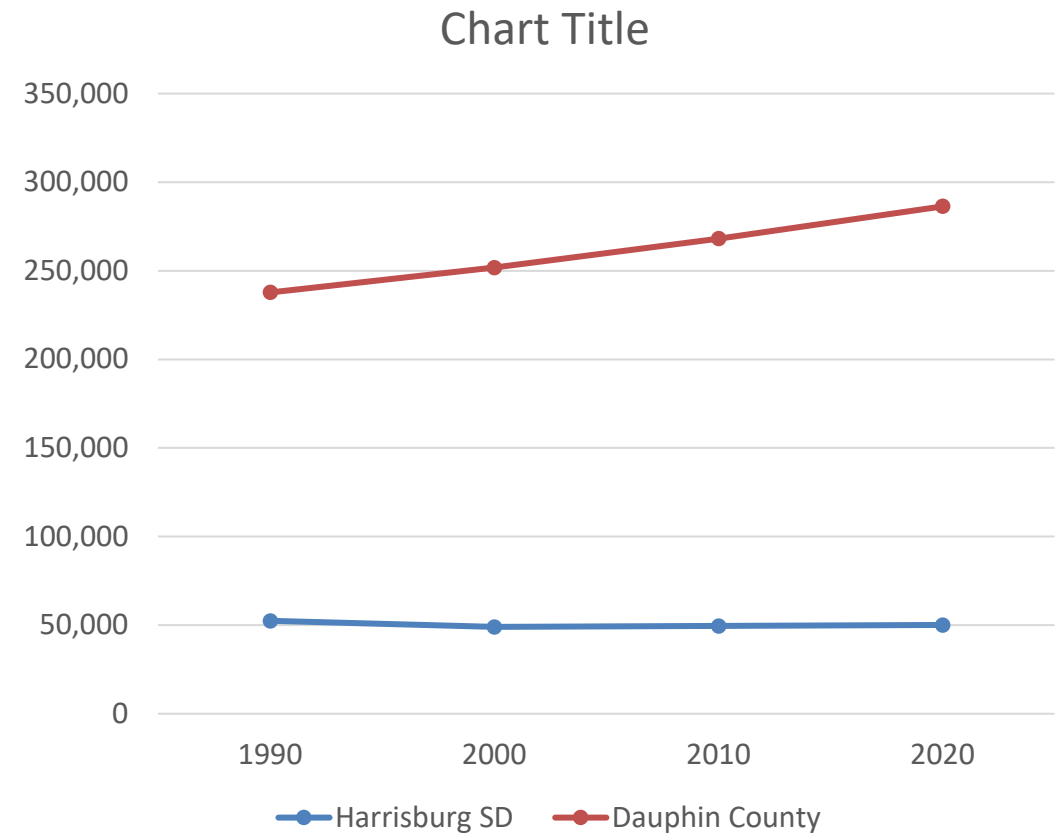
- Population has steadily increased since 2000 after dropping significantly from 1990.
- Out-migration of Harrisburg residents has counteracted natural population growth in this timeframe.

Housing

- Housing units have increased by 413 from 2000 to 2020
- Students per housing units decreased from 0.333 to 0.299 in the same period

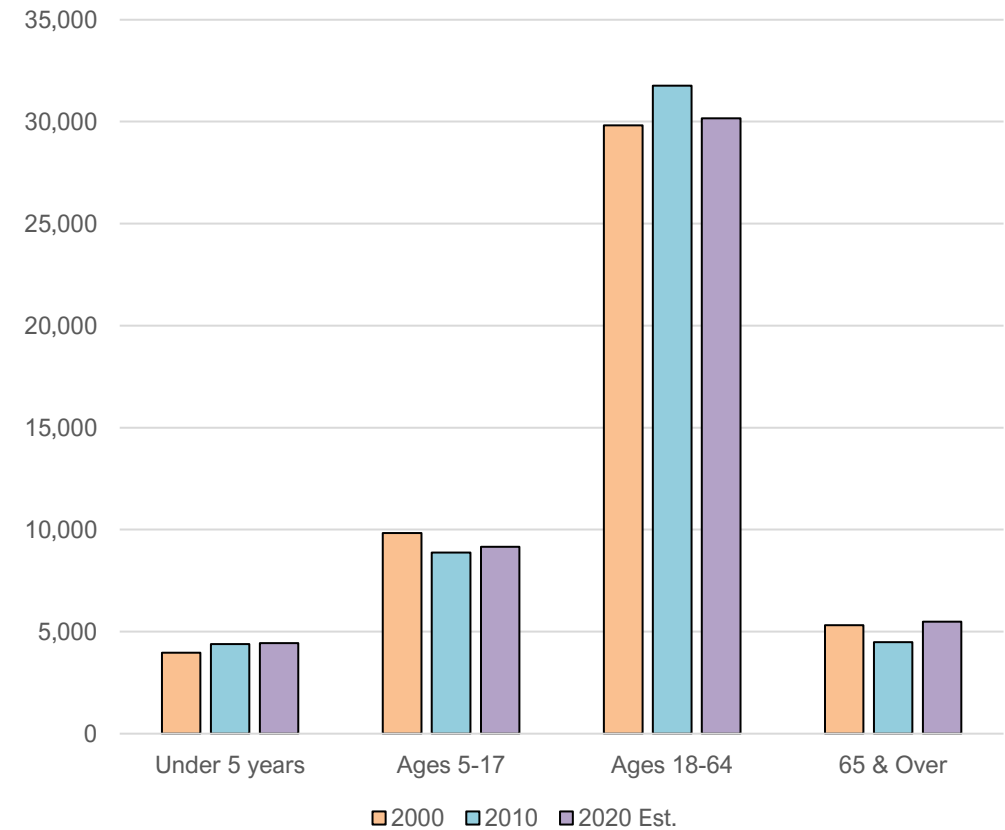
Population Trends 1990-2020

		Harrisburg SD	Dauphin County
Population	1990	52,376	237,813
	2000	48,950	251,798
	2010	49,528	268,100
	2020	50,099	286,401
Population Change	1990 - 2000	-3,426	13,985
	2000 - 2010	578	16,302
	2010 - 2020	571	18,301
	1990 - 2020	-2,277	48,588
Population Percent Change	1990 - 2000	-6.5%	5.9%
	2000 - 2010	1.2%	6.5%
	2010 - 2020	1.2%	6.8%
	1990 - 2020	-4.3%	20.4%



Population by Age

Age Group	Total Population				Percent of Total		
	2000	2010	2020 Est.	Change 2000 - 2020	2000	2010	2020
Under 5 years	3,968	4,392	4,438	470	8.1	8.9	9.0
Ages 5-17	9,838	8,882	9,159	-679	20.1	17.9	18.6
Ages 18-64	29,824	31,767	30,168	344	60.9	64.1	61.3
65 & Over	5,320	4,487	5,482	162	10.9	9.1	11.1
Total	48,950	49,528	49,247	297	100.0	100.0	100.0
	Total Change			Percent Change			
	2000 - 2010	2010 - 2020	2000 - 2020	2000 - 2010	2010 - 2020	2000 - 2020	
Under 5 years	424	46	470	10.7	1.0	11.8	
Aged 5-17	-956	277	-679	-9.7	3.1	-6.9	
Ages 18-64	1,943	-1,599	344	6.5	-5.0	1.2	
65 & Over	-833	995	162	-15.7	22.2	3.0	
Total	578	-281	297	1.2	-0.6	0.6	

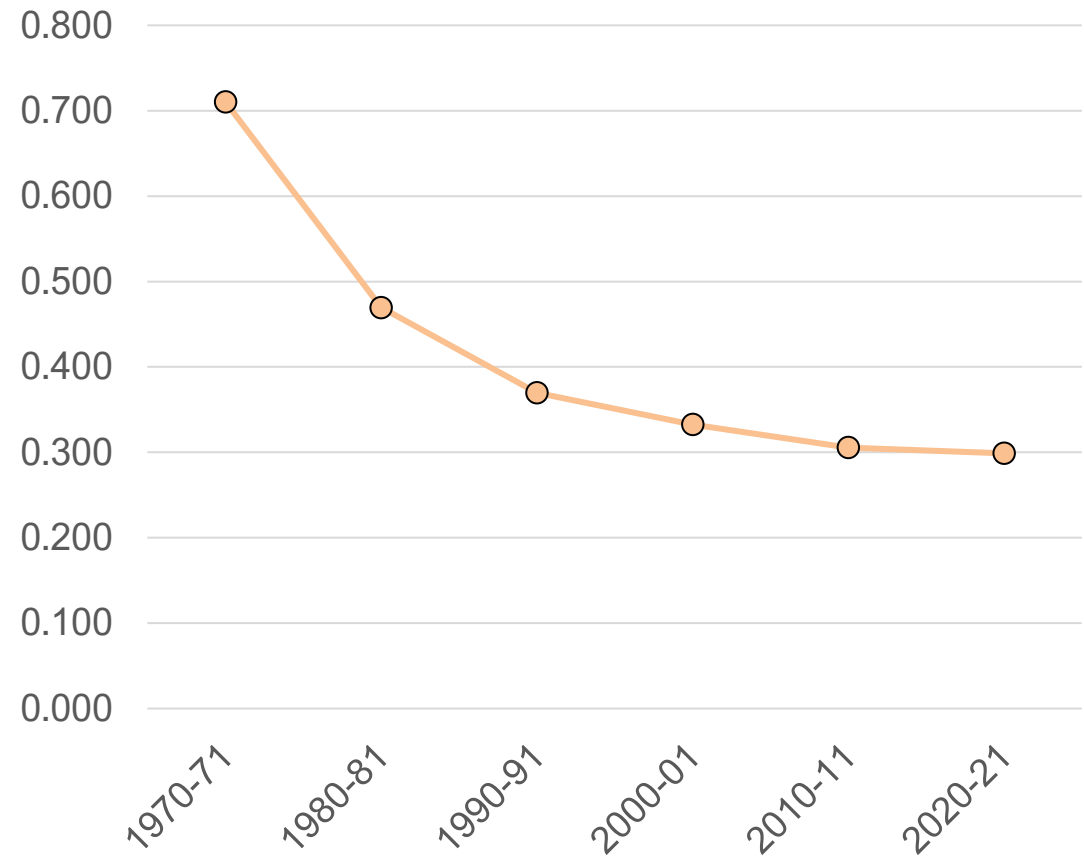


Housing Trends

<u>Housing Units</u>	2000	2010	2020	
Harrisburg City	24,314	24,269	24,727	
Dauphin County	111,133	120,406	126,514	
<u>Change in Housing Units</u>		2000 - 2010	2010 - 2020	2000 - 2020
Harrisburg City		-45	458	413
Dauphin County		9,273	6,108	15,381

Relationship of Public School Enrollments to Housing Units

	1970-71	1980-81	1990-91	2000-01	2010-11	2020-21
Number of Housing Units	14,616	18,525	21,443	23,780	28,666	30,245
District Enrollments						
Grades K-5	4,791	3,785	3,670	3,706	4,120	3,959
Grades 6-8	2,446	1,995	1,781	1,827	2,050	2,171
Grades 9-12	3,147	2,920	2,475	2,377	2,593	2,909
Total K-12	10,384	8,700	7,926	7,910	8,763	9,039
Pupils per Unit						
Grades K-5	0.328	0.204	0.171	0.156	0.144	0.131
Grades 6-8	0.167	0.108	0.083	0.077	0.072	0.072
Grades 9-12	0.215	0.158	0.115	0.100	0.090	0.096
Total K-12	0.710	0.470	0.370	0.333	0.306	0.299



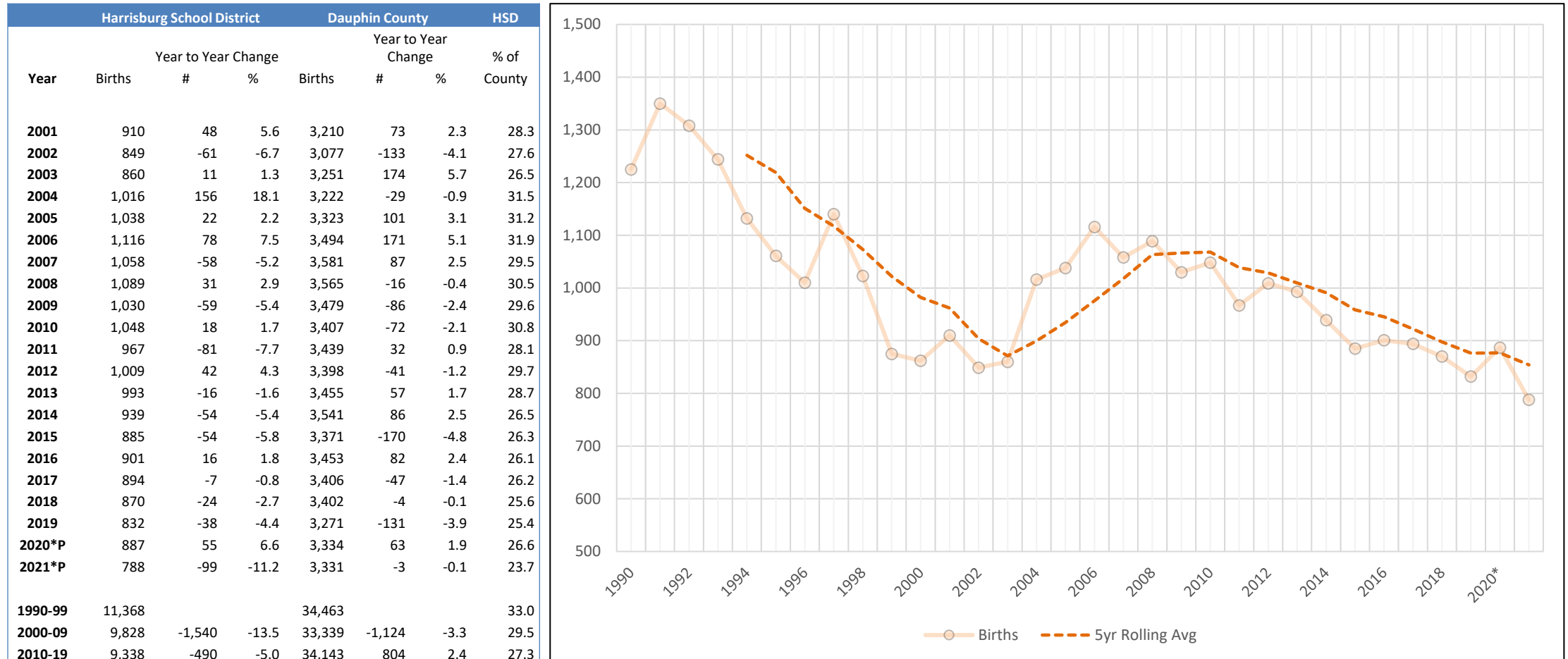
Development	Type of Housing ¹	Units to be Completed ²	Units Per Year ²	Start Date ²	Estimated Completion Date ²
APPROVED					
21 South 2 nd Street	APT	9		?	
25 North Front Street	APT	8		6/1/2021	March 2022
130 State Street	APT	5		?	March 2022
260 Boas Street	APT	8		1/18/2022	
321 North Front	APT	6		10/21/2021	
1507 North 3 rd Street	APT	5		5/12/2021	
1605-1609 Swatara Street	TH	3		?	
430 Reily Street	APT	85		?	
112 Market Street	APT	30-35		?	
238-248 Hummel Street	TH	6		?	
1122 Green Street	APT	16		?	
28-38 North Cameron Street	APT	6		?	
1103 South Front Street	OTHER	15		?	
Bethel Village (55+) (1012 North 6 th Street)	APT	49		?	
Capital Heights, Phase I (1600 block of North 3 rd Street)	MIX	20		?	
1402 North 3 rd Street	APT	5		?	
2463 Jefferson Street	APT	22		?	
100 North 13 th Street	APT	12		?	
1500 block of North 6 th Street	?	~40	?	?	

Development	Type of Housing ¹	Units to be Completed ²	Units Per Year ²	Start Date ²	Estimated Completion Date ²
PROPOSED					
1600 North 7 th Street	APT	~50	?	?	
1175 Bailey Street	APT	~30	?	?	
1400 & 1406 Sycamore Street	APT	?	?	?	
UNDER DISCUSSION					
1500 block of North 6 th Street	?	~40	?	?	

1/ Housing codes are as follows: SFD = Single-Family Detached; DUP = Two-unit Buildings; APT = Rental Apartments; TH = Townhouses; MIX = Single-Family Detached, Townhouses, Duplexes, and/or Apartments; and ? = Unknown 2/Estimating the starting date and/or the pace of the build-out at the district's various developments is difficult given the various uncertainties involved; these figures reflect the best judgments of the parties involved based on what is known at this time. Not all units identified are expected to be built within the next 10 years. U = Underway; and ? = Unknown

Approved and Proposed Developments

Birth Trends in the Harrisburg Area School District



Natural Population Growth & Migration Patterns

	1990 to 1999	2000 to 2009	2010 to 2019	1990 to 2019
Total Population (start)	52,376	48,950	49,528	52,376
Total Population (end)	48,950	49,528	50,099	50,099
Total Population Change (a)	-3,426	578	571	-2,277
Births	11,368	9,828	9,338	30,534
Deaths	6,726	5,802	4,402	16,930
Natural Pop. Change (b)	4,642	4,026	4,936	13,604
Net Migration (a minus b)	-8,068	-3,448	-4,365	-15,881

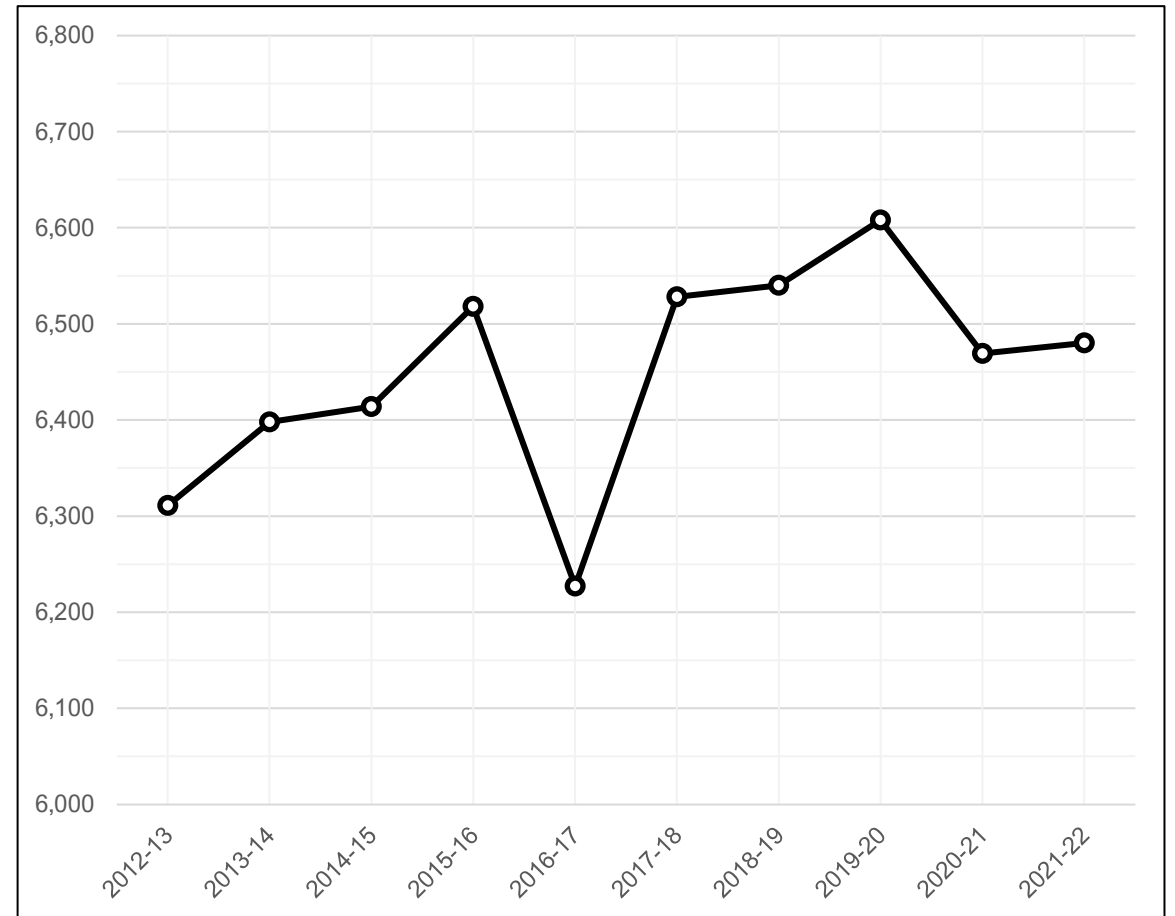
- Births exceeded deaths by over 4,000 in each decade, totaling a net natural population growth of 13,604 since 1990.
- Out-migration of Harrisburg residents has counteracted natural population growth in this timeframe.
- Out-migration was largest in the 1990s and has continued to be a significant factor in district population trends.

Historical Enrollments Summary

- Enrollments in the Harrisburg School District rose from 2012-13 to 2021-22 by 169 students or 2.7 percent, ending the ten-year period at a total pupil count of 6,480 students.
- Enrollments peaked in 2019-20 at 6,608.
- The district's total pupil count fell by 139 total students (-2.1 percent) from 2019-20 to 2020-21, the first full school year impacted by the COVID-19 pandemic.
- Total enrollments were effectively the same from 2020-21 to 2021-22 (+11 students, 0.2 percent).
- Harrisburg typically shows increases in grades 1,9,12 with highest in grade 9 averaging 76 additional students.
- Enrollment decreases are highest in grades 10, 11 averaging a drop of 156 and 128 students respectively.

Historical Enrollments K-12

School Year	Enrollment	Change	
		#	%
2012-13	6,311		
2013-14	6,398	87	1.4
2014-15	6,414	16	0.3
2015-16	6,518	104	1.6
2016-17	6,227	-291	-4.5
2017-18	6,528	301	4.8
2018-19	6,540	12	0.2
2019-20	6,608	68	1.0
2020-21	6,469	-139	-2.1
2021-22	6,480	11	0.2
Change 2012-13 to 2021-22		169	2.7



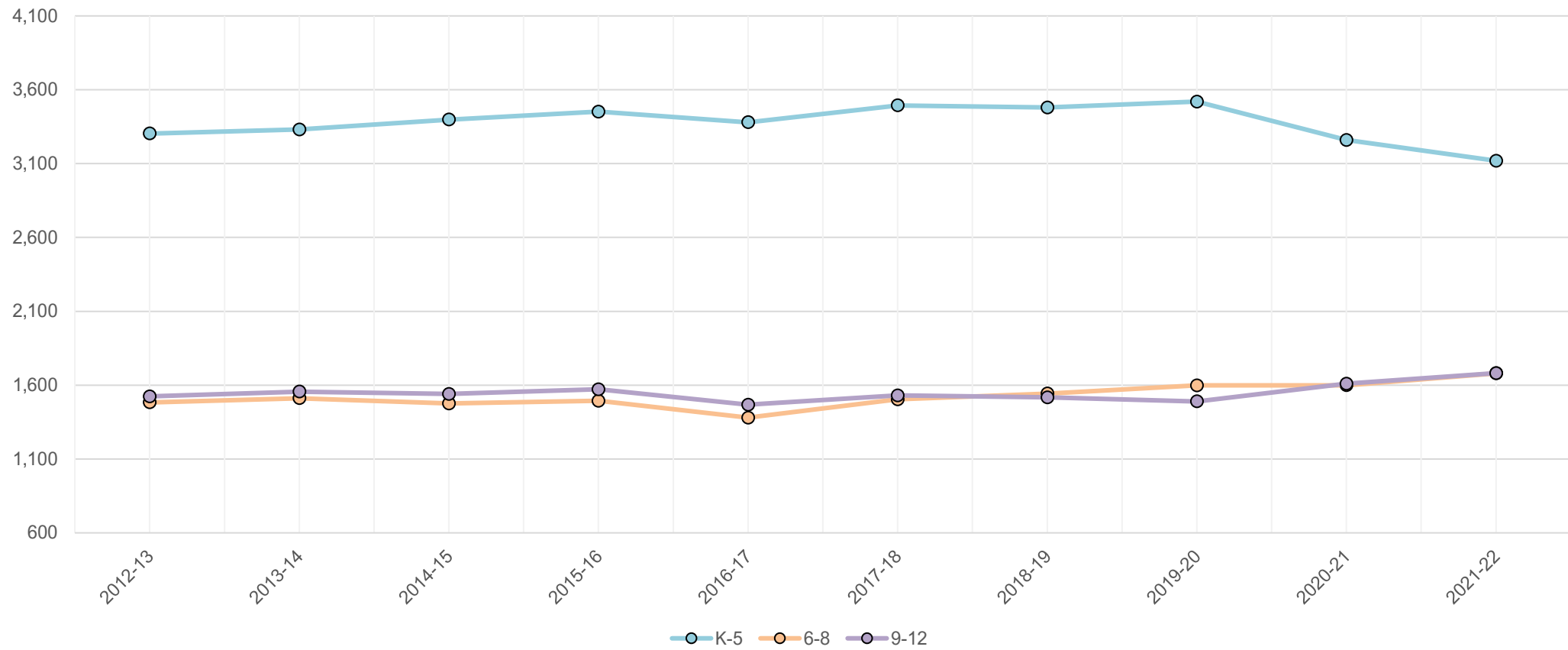
Historical Enrollments Including Private, Parochial, and other Program Types

School Year	HASD Enrollments		Other Enrollments		Total Enrollments	Cumulative Births	% of Cumulative Births
	#	% of Total Enrollments	#	% of Total Enrollments			
2012-13	6,311	78.9	1,690	21.1	8,001	12,818	62.4
2013-14	6,398	77.7	1,835	22.3	8,233	12,846	64.1
2014-15	6,414	76.8	1,941	23.2	8,355	12,866	64.9
2015-16	6,518	76.8	1,967	23.2	8,485	12,774	66.4
2016-17	6,227	77.5	1,809	22.5	8,036	12,718	63.2
2017-18	6,528	77.6	1,885	22.4	8,413	12,852	65.5
2018-19	6,540	77.0	1,954	23.0	8,494	12,983	65.4
2019-20	6,608	76.8	1,992	23.2	8,600	13,012	66.1
2020-21	6,469	74.7	2,194	25.3	8,663	13,048	66.4
2021-22	6,480	73.6	2,330	26.4	8,810	13,089	67.3

Historical Enrollments by Grade Level

School Year	K-5			6-8			9-12		
	Enrollment #	Change #	%	Enrollment #	Change #	%	Enrollment #	Change #	%
2012-13	3,304			1,483			1,524		
2013-14	3,331	27	0.8	1,511	28	1.9	1,556	32	2.1
2014-15	3,398	67	2.0	1,476	-35	-2.3	1,540	-16	-1.0
2015-16	3,452	54	1.6	1,494	18	1.2	1,572	32	2.1
2016-17	3,380	-72	-2.1	1,380	-114	-7.6	1,467	-105	-6.7
2017-18	3,494	114	3.4	1,504	124	9.0	1,530	63	4.3
2018-19	3,480	-14	-0.4	1,543	39	2.6	1,517	-13	-0.8
2019-20	3,520	40	1.1	1,598	55	3.6	1,490	-27	-1.8
2020-21	3,260	-260	-7.4	1,599	1	0.1	1,610	120	8.1
2021-22	3,119	-141	-4.3	1,680	81	5.1	1,681	71	4.4
Change 2012-13 to 2021-22		-185	-5.6		197	13.3		157	10.3

Enrollments by Grade Level



Total Enrollments by Grade, 2008-09 to 2021-22

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2009-10	626	609	640	592	553	566	569	577	504	746	607	480	618	7,687
2010-11	631	606	605	624	586	575	536	548	557	776	591	393	518	7,546
2011-12	642	601	543	555	551	576	518	502	498	664	362	304	375	6,691
2012-13	523	636	557	529	509	550	531	496	456	563	388	258	315	6,311
2013-14	603	596	586	500	522	524	514	520	477	559	423	274	300	6,398
2014-15	636	669	561	546	472	514	483	506	487	502	422	303	313	6,414
2015-16	567	657	651	544	517	516	485	479	530	570	364	299	339	6,518
2016-17	584	573	595	606	509	513	516	447	417	521	392	249	305	6,227
2017-18	580	613	566	581	610	544	562	517	425	511	433	301	285	6,528
2018-19	608	600	598	550	532	592	541	525	477	489	393	314	321	6,540
2019-20	592	630	604	566	557	571	574	518	506	506	389	287	308	6,608
2020-21	398	587	592	581	546	556	563	547	489	474	447	347	342	6,469
2021-22	469	445	544	563	554	544	554	577	549	604	410	350	317	6,480

Change in Enrollments by Grade 2008-09 to 2021-22

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2009-10														0
2010-11		-20	-4	-16	-6	22	-30	-21	-20	272	-155	-214	38	-154
2011-12		-30	-63	-50	-73	-10	-57	-34	-50	107	-414	-287	-18	-979
2012-13		-6	-44	-14	-46	-1	-45	-22	-46	65	-276	-104	11	-528
2013-14		73	-50	-57	-7	15	-36	-11	-19	103	-140	-114	42	-201
2014-15		66	-35	-40	-28	-8	-41	-8	-33	25	-137	-120	39	-320
2015-16		21	-18	-17	-29	44	-29	-4	24	83	-138	-123	36	-150
2016-17		6	-62	-45	-35	-4	0	-38	-62	-9	-178	-115	6	-536
2017-18		29	-7	-14	4	35	49	1	-22	94	-88	-91	36	26
2018-19		20	-15	-16	-49	-18	-3	-37	-40	64	-118	-119	20	-311
2019-20		22	4	-32	7	39	-18	-23	-19	29	-100	-106	-6	-203
2020-21		-5	-38	-23	-20	-1	-8	-27	-29	-32	-59	-42	55	-229
2021-22		47	-43	-29	-27	-2	-2	14	2	115	-64	-97	-30	-116
Average Change		18.6	-31.3	-29.4	-25.8	9.3	-18.3	-17.5	-26.2	76.3	-155.6	-127.7	19.1	-308.4
# of Years with Additions		8	1	0	2	5	1	2	2	10	0	0	9	1
# of Years with Reductions		4	11	12	10	7	10	10	10	2	12	12	3	11

Projection Methodology

**Birth
Patterns**

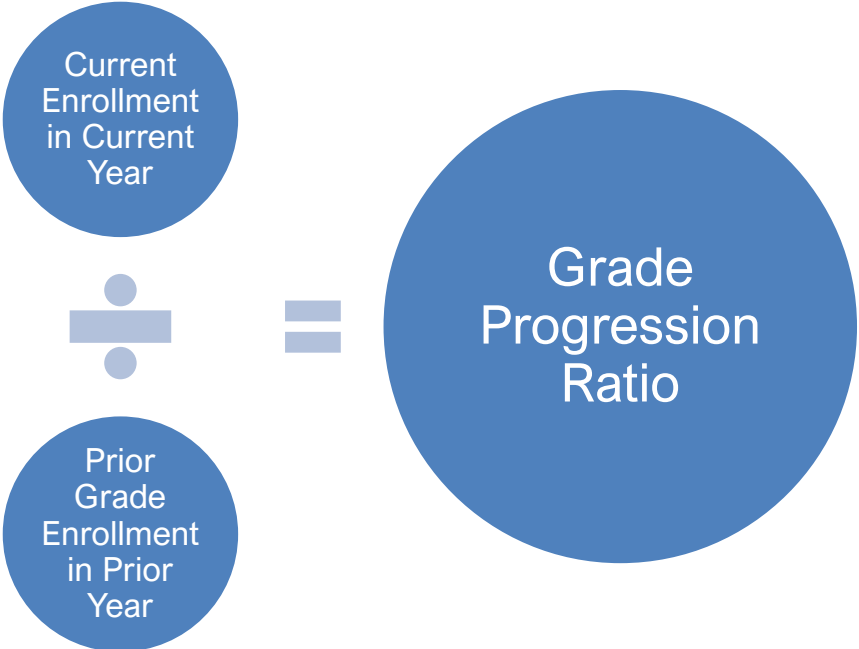
**Grade Level
Progression**

Ratio of Kindergarten Entries to Births

- HASD typically enrolls 3 kindergarten students for every 5 live births in the corresponding year.
- Many PA districts witnessed lower-than-typical birth-to-K rates in 2020-21.
- 2021-22 K-to-birth ratio was **0.4677**, leading to a class size approximately **100 students less** than we would typically anticipate given the # of births.

Birth Year	Births	School Year	Kindergarten Enrollments	Ratio
2008-09	1,051	2014-15	636	0.6051
2009-10	1,051	2015-16	567	0.5395
2010-11	995	2016-17	584	0.5869
2011-12	951	2017-18	580	0.6099
2012-13	1,003	2018-19	608	0.6062
2013-14	1,014	2019-20	592	0.5838
2014-15	851	2020-21	398	0.4677
2015-16	905	2021-22	469	0.5182

Recent Grade Progression Ratios



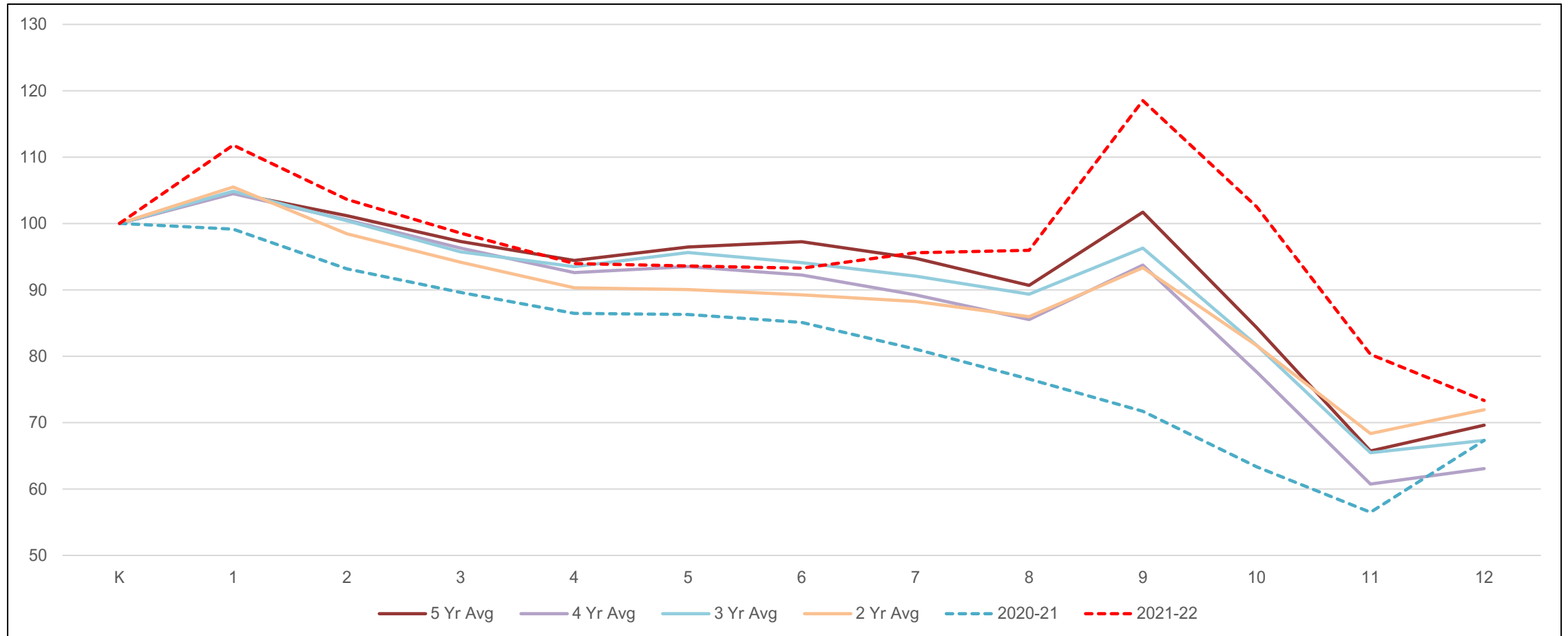
Grades	2017-18	2018-19	2019-20	2020-21	2021-22	5-Year Average
1/K	1.0497	1.0345	1.0362	0.9916	1.1181	1.0460
2/1	0.9878	0.9755	1.0067	0.9397	0.9267	0.9673
3/2	0.9765	0.9717	0.9465	0.9619	0.9510	0.9615
4/3	1.0066	0.9157	1.0127	0.9647	0.9535	0.9706
5/4	1.0688	0.9705	1.0733	0.9982	0.9963	1.0214
6/5	1.0955	0.9945	0.9696	0.9860	0.9964	1.0084
7/6	1.0019	0.9342	0.9575	0.9530	1.0249	0.9743
8/7	0.9508	0.9226	0.9638	0.9440	1.0037	0.9570
9/8	1.2254	1.1506	1.0608	0.9368	1.2352	1.1217
10/9	0.8311	0.7691	0.7955	0.8834	0.8650	0.8288
11/10	0.7679	0.7252	0.7303	0.8920	0.7830	0.7797
12/11	1.1446	1.0664	0.9809	1.1916	0.9135	1.0594

Relationship Between Senior Classes and Entering First Grade Classes in the Following Year

Senior Class		First Grade Class		Change	
Year	Students	Year	Students	Students	%
2011-12	375	2012-13	636	261	69.6
2012-13	315	2013-14	596	281	89.2
2013-14	300	2014-15	669	369	123.0
2014-15	313	2015-16	657	344	109.9
2015-16	339	2016-17	573	234	69.0
2016-17	305	2017-18	613	308	101.0
2017-18	285	2018-19	600	315	110.5
2018-19	321	2019-20	630	309	96.3
2019-20	308	2020-21	587	279	90.6
2020-21	342	2021-22	445	103	30.1

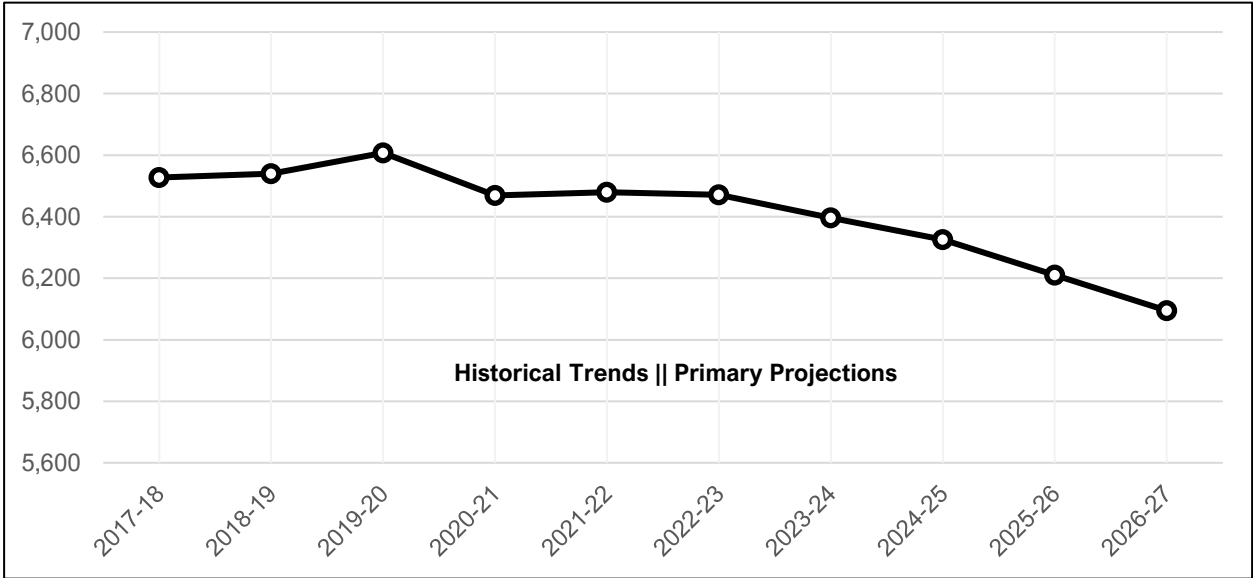
School Year	Districtwide Grades 7-12			Harrisburg High School		
	Enrollment	Dropouts	Rate (%)	Enrollment	Dropouts	Rate (%)
2011-12	2,705	158	5.8	1,318	158	12.0
2012-13	2,476	236	9.5	1,158	207	17.9
2013-14	2,553	236	9.2	1,146	207	18.1
2014-15	2,533	189	7.5	1,165	176	15.1
2015-16	2,581	184	7.1	1,170	126	10.8
2016-17	2,331	105	4.5	1,056	72	6.8
2017-18	2,472	146	5.9	1,051	125	11.9
2018-19	2,519	153	6.1	1,024	105	10.3
2019-20	2,514	83	3.3	992	68	6.9

Progression Examples of 100 Kindergarten Students under Different Ratios



Primary Projections Total Enrollments K-12

School Year	Enrollment	Change	
		#	%
2021-22 (actual)	6,480		
2022-23	6,471	-9	-0.1
2023-24	6,396	-75	-1.2
2024-25	6,326	-70	-1.1
2025-26	6,210	-116	-1.8
2026-27	6,095	-115	-1.9
Change 2021-22 to 2026-27		-385	-5.9



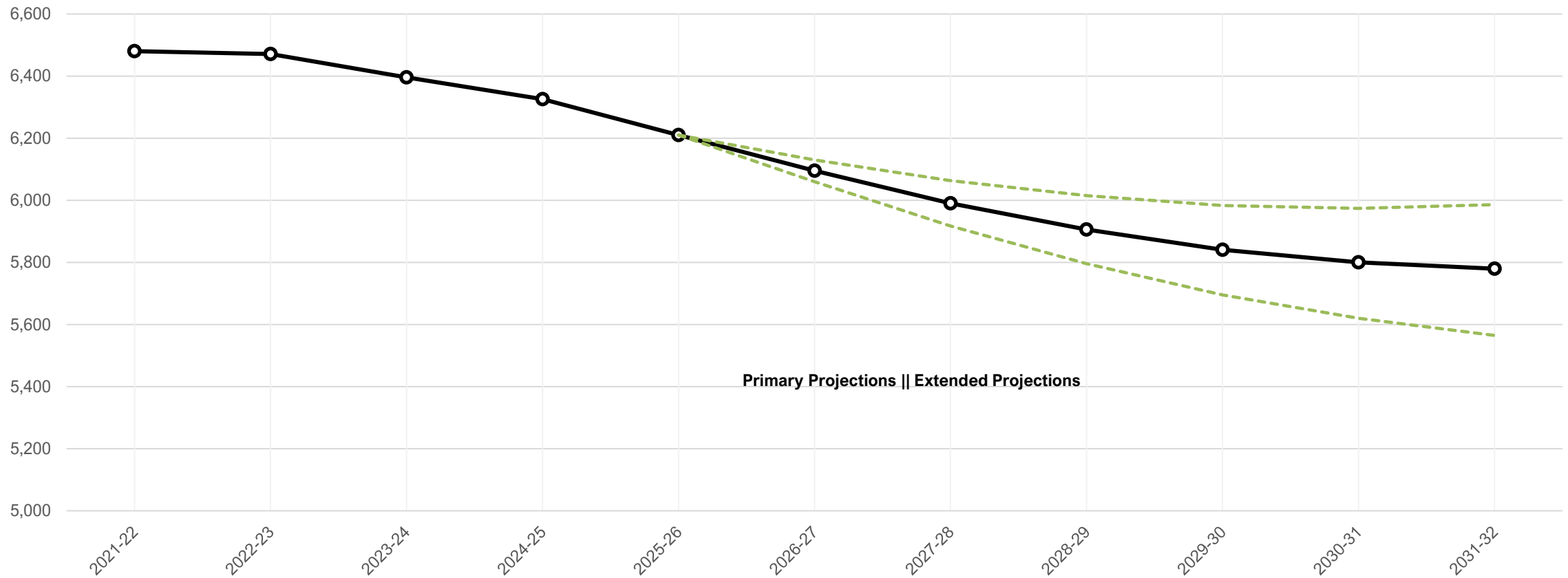
Primary Enrollment Projections by Grade Level

School Year	K-5			6-8			9-12		
	Enrollment #	Change #	%	Enrollment #	Change #	%	Enrollment #	Change #	%
2021-22 (actual)	3,119			1,680			1,681		
2022-23	3,069	-50	-1.6	1,623	-57	-3.4	1,779	98	5.8
2023-24	3,014	-55	-1.8	1,579	-44	-2.7	1,803	24	1.3
2024-25	2,934	-80	-2.7	1,558	-21	-1.3	1,834	31	1.7
2025-26	2,906	-28	-1.0	1,520	-38	-2.4	1,784	-50	-2.7
2026-27	2,971	65	2.2	1,359	-161	-10.6	1,765	-19	-1.1
Change 2021-22 to 2026-27		-148	-4.7		-321	-19.1		84	

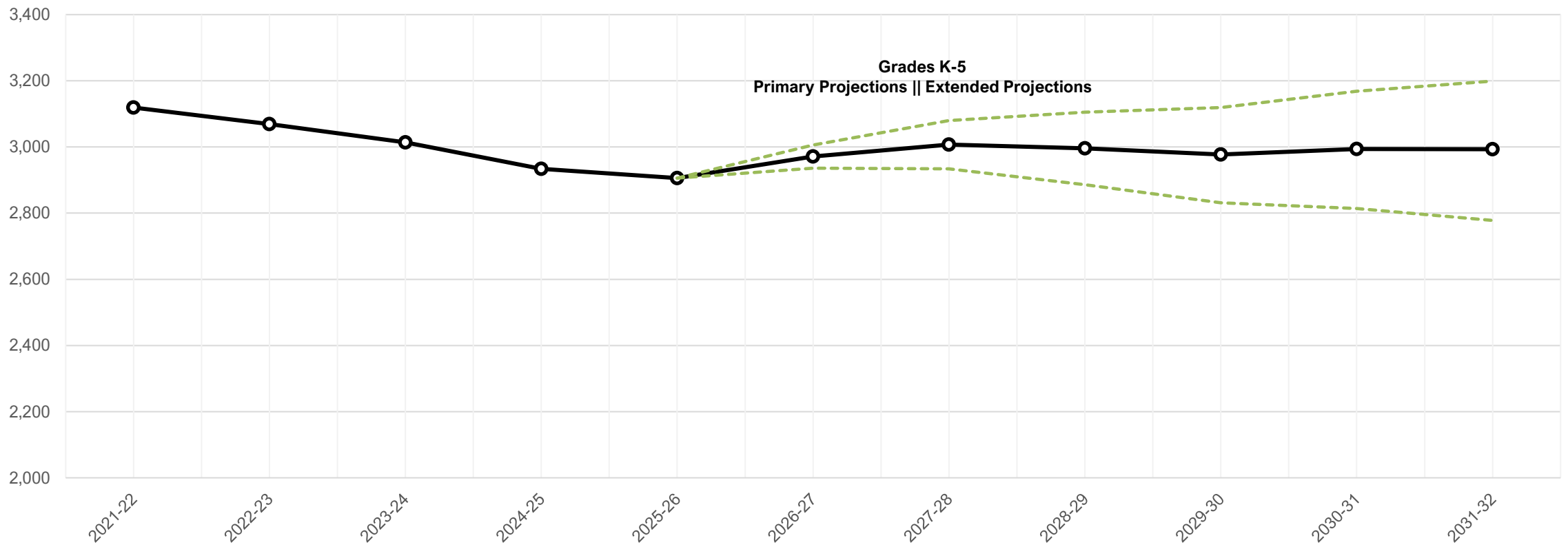
Primary & Extended Enrollment Projections by Grade Level

School Year	K-5			6-8			9-12			Total		
	Enrollment #	Change #	Change %	Enrollment #	Change #	Change %	Enrollment #	Change #	Change %	Enrollment #	Change #	Change %
2021-22 (actual)	3,119			1,680			1,681			6,480		
2022-23	3,069	-50	-1.6	1,623	-57	-3.4	1,779	98	5.8	6,471	-9	-0.1
2023-24	3,014	-55	-1.8	1,579	-44	-2.7	1,803	24	1.3	6,396	-75	-1.2
2024-25	2,934	-80	-2.7	1,558	-21	-1.3	1,834	31	1.7	6,326	-70	-1.1
2025-26	2,906	-28	-1.0	1,520	-38	-2.4	1,784	-50	-2.7	6,210	-116	-1.8
2026-27	2,971	65	2.2	1,359	-161	-10.6	1,765	-19	-1.1	6,095	-115	-1.9
2027-28	3,007	36	1.2	1,258	-101	-7.4	1,725	-40	-2.3	5,990	-105	-1.7
2028-29	2,977	-30	-1.0	1,250	-8	-0.6	1,660	-65	-3.8	5,906	-84	-1.4
2029-30	2,977	0	0.0	1,367	117	9.4	1,515	-145	-8.7	5,841	-65	-1.1
2030-31	2,994	17	0.6	1,367	0	0.0	1,439	-76	-5.0	5,800	-41	-0.7
2031-32	2,993	-1	0.0	1,358	-9	-0.7	1,429	-10	-0.7	5,780	-20	-0.3
Change 2021-22 to 2031-32		-126	-4.0		-322	-19.2		-252	-15.0		-700	-10.8

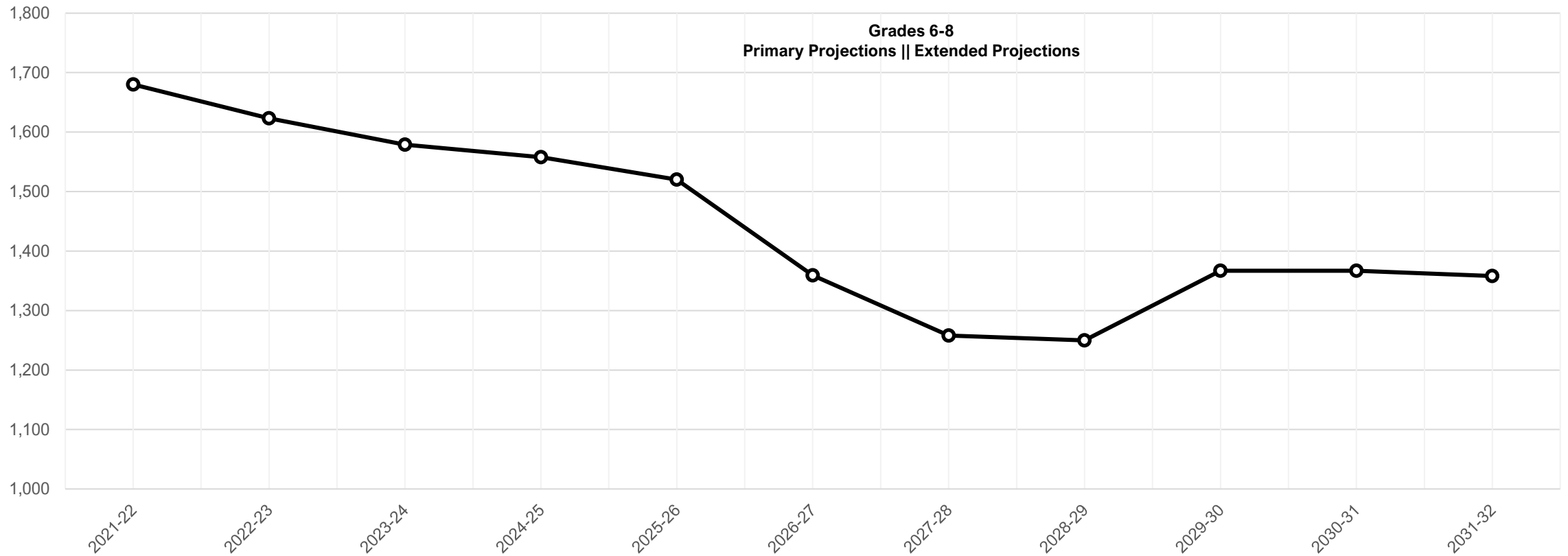
Extended Projections Total Enrollments K-12



Extended Projections Total Enrollments K-5



Extended Projections Total Enrollments 6-8



Extended Projections Total Enrollments 9-12

