



COOPERATIVE
STRATEGIES

COMPLETE FINANCIAL & DEMOGRAPHIC PLANNING FOR EDUCATION

PITTSBURGH PUBLIC SCHOOLS

ENROLLMENT PROJECTIONS

NOVEMBER 4, 2019



ENROLLMENT PROJECTIONS

BY WHERE STUDENTS LIVE & ATTEND

- Cooperative Strategies developed two sets of enrollment projections for Pittsburgh Public Schools
 - Based on where students live (by ES Boundary)
 - Reviewed historical student data from 2013-14 through 2018-19 of students tracked by PPS living within the PPS boundary
 - Based on where students attend (by School)
 - Reviewed historical enrollment from 2009-10 through 2018-19



ENROLLMENT PROJECTIONS BY BOUNDARY

- Based on where students live
- Includes students who attend charter & non-PPS schools
- Does NOT reflect actual school enrollment
- Useful for planning based on projected growth / decline in areas of a district
- Does not account for open enrollment / transfers
- Ideal for:
 - Districts preparing for or recently completed redistricting
 - Growing districts
 - Districts planning school facilities



ENROLLMENT PROJECTIONS BY SCHOOL

- Projects student enrollment in school facilities (regardless of residence)
- Useful for planning / budgeting / staffing based on projected growth / decline in schools within a district
- Accounts for open enrollment / transfers
- Ideal for:
 - Districts that have multiple schools and want projections by school (not for districts that have only one ES, one MS, one HS)
 - Districts planning facilities but do NOT have good student data



ENROLLMENT PROJECTIONS

BY WHERE STUDENTS LIVE & ATTEND

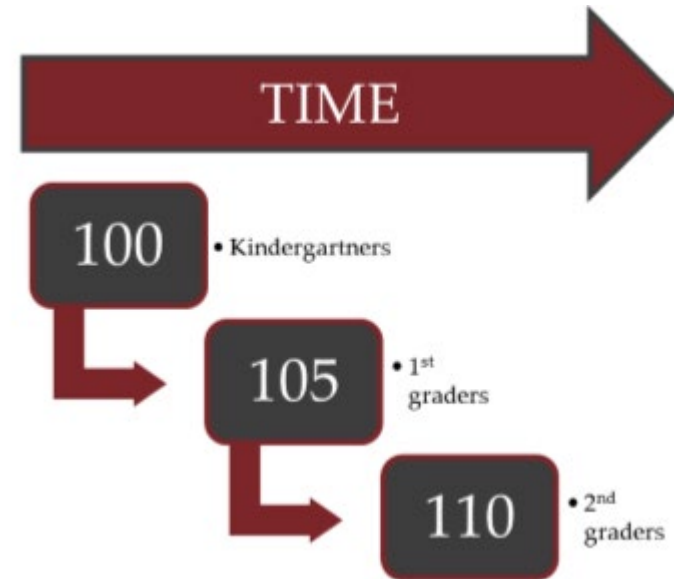
- Recommended, low, moderate, and high projections were developed
- Recommended = based on more recent trends in the District
- Low = conservative approach
- Moderate projection = in this case reflects a 3 year weighted average of survival ratios
- High projection = liberal approach



COHORT SURVIVAL METHOD

BY WHERE STUDENTS LIVE & ATTEND

- Uses *historical* live birth data and *historical* student enrollment to “age” (or progress) a known population (cohort) throughout the school grades
- Survival ratios analyzed
- Projection ratios developed





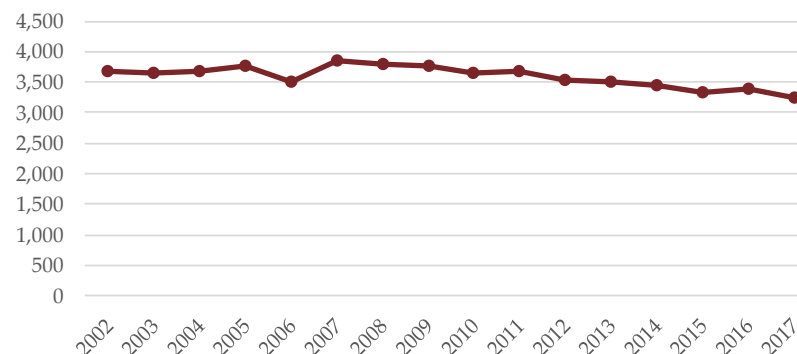
BIRTH DATA

- Birth data is used to project kindergarten enrollment 5 years later

RESIDENT LIVE BIRTH COUNTS
PITTSBURGH

Year	# of live births
2002	3,685
2003	3,647
2004	3,671
2005	3,769
2006	3,493
2007	3,855
2008	3,791
2009	3,752
2010	3,639
2011	3,672
2012	3,545
2013	3,503
2014	3,442
2015	3,335
2016	3,394
2017	3,246

RESIDENT LIVE BIRTH COUNTS
PITTSBURGH



Source: Pennsylvania Department of Health

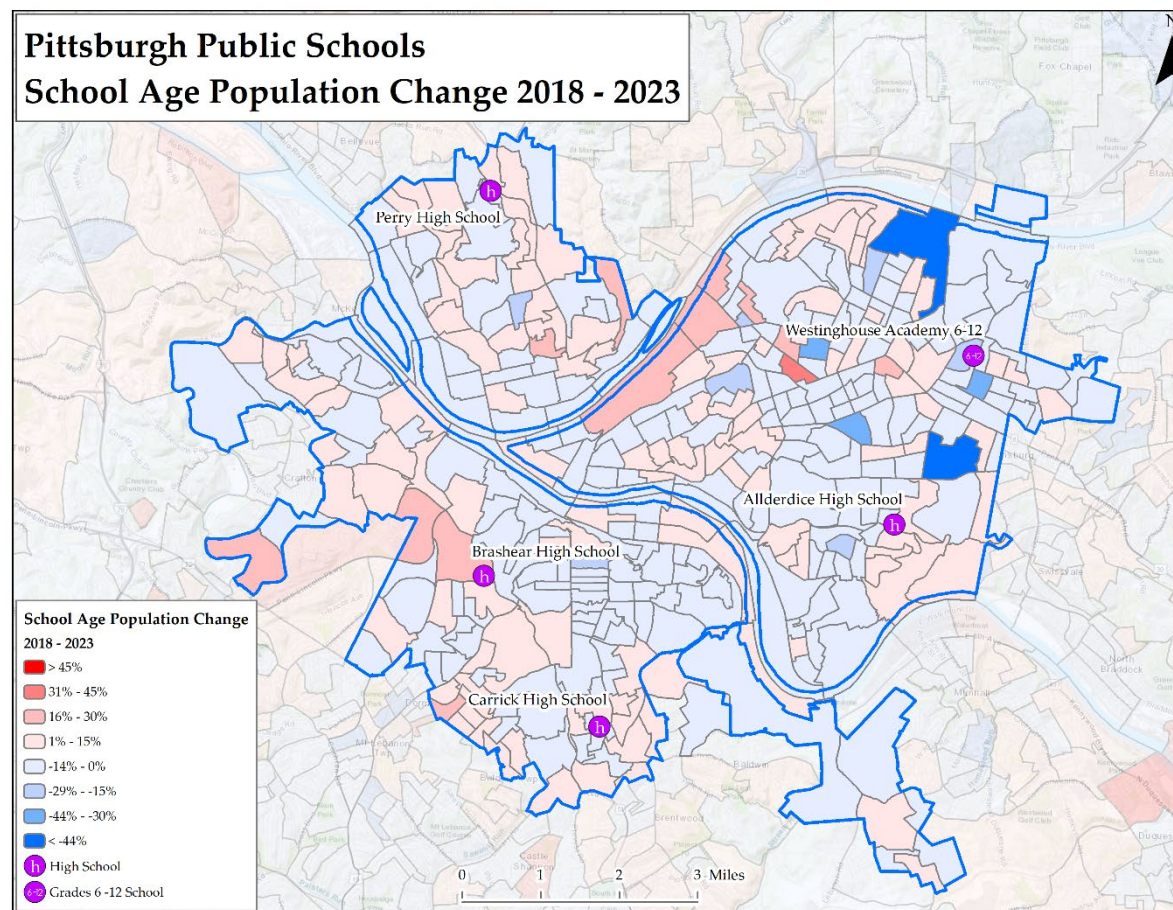
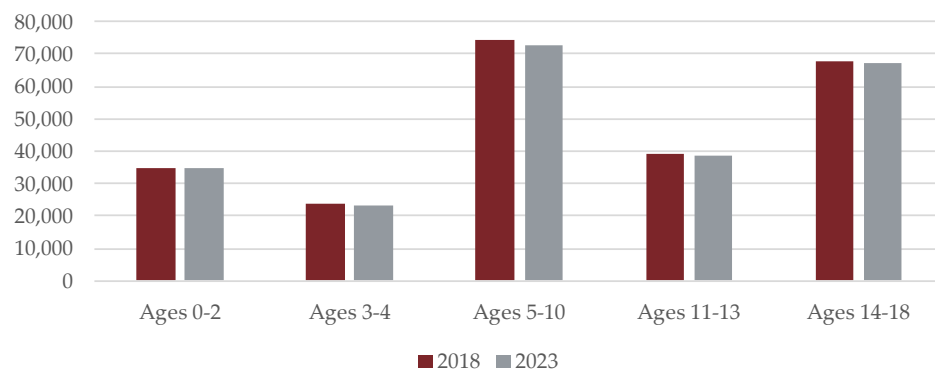


SCHOOL-AGED POPULATION CHANGE

2018-2023

- Total population in Allegheny County is estimated to increase by less than 1% from 2018 to 2023.
- School age population (ages 5-18) in Lucas County is estimated to decrease by 2,382 children, or approximately 1% from 2018 to 2023.

ALLEGHENY COUNTY
POPULATION ESTIMATES





BUILDING PERMITS

- Building permits are tracked to determine their effect on student enrollment

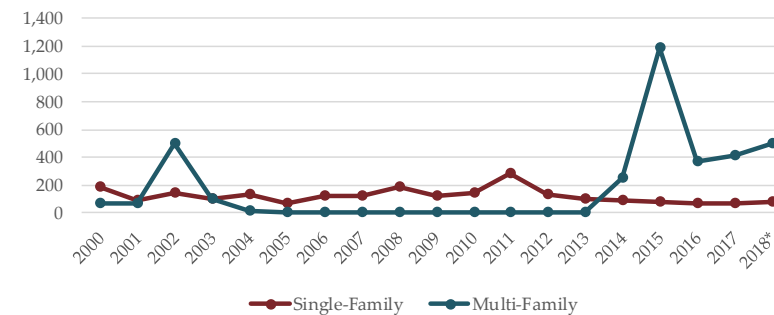
BUILDING PERMITS
PITTSBURGH, PA

Year	Single-Family	Multi-Family
2000	182	67
2001	86	65
2002	145	496
2003	106	103
2004	131	15
2005	65	0
2006	123	6
2007	117	0
2008	185	0
2009	118	0
2010	147	0
2011	284	0
2012	137	0
2013	100	0
2014	89	249
2015	82	1,188
2016	63	373
2017	66	410
2018*	80	496

Source: SOCDs Building Permits Database

*preliminary through October 2018

BUILDING PERMITS
PITTSBURGH, PA





ENROLLMENT PROJECTIONS BY ELEMENTARY BOUNDARY (WHERE STUDENTS LIVE)



HISTORICAL ENROLLMENT BY BOUNDARY

BASED ON STUDENT DATA

Historical Enrollment - District-wide

Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
PK	6,202	5,395	1,810	1,773	1,572	1,820
K	3,015	2,860	2,616	2,546	2,512	2,589
1	3,027	2,969	2,763	2,555	2,558	2,518
2	2,715	2,892	2,781	2,635	2,461	2,613
3	2,705	2,664	2,704	2,636	2,586	2,503
4	2,642	2,635	2,518	2,613	2,571	2,555
5	2,582	2,559	2,490	2,401	2,568	2,621
6	2,619	2,541	2,378	2,386	2,296	2,553
7	2,570	2,557	2,414	2,310	2,347	2,356
8	2,664	2,541	2,452	2,323	2,264	2,429
9	2,713	2,759	2,558	2,527	2,459	2,485
10	2,652	2,583	2,503	2,396	2,368	2,410
11	2,468	2,582	2,347	2,370	2,277	2,348
12	2,541	2,405	2,508	2,374	2,347	2,330
Grand Total	41,115	39,942	34,842	33,845	33,186	34,130

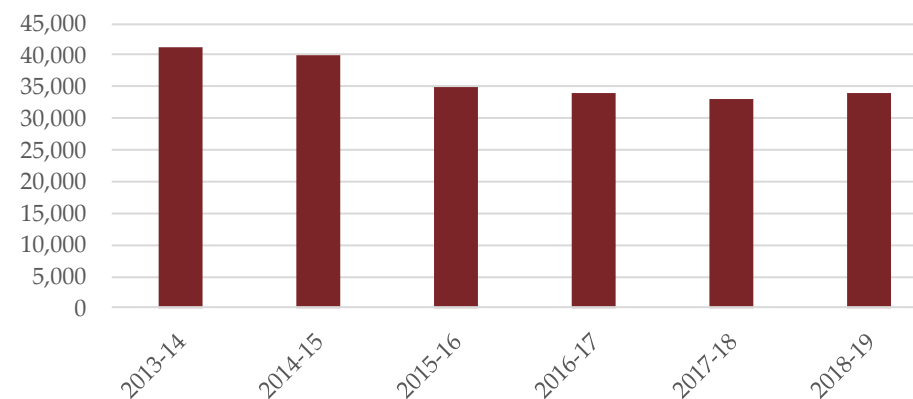
Source: Pittsburgh Public Schools

Historical Enrollment - District-wide

Grade	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
PK	6,202	5,395	1,810	1,773	1,572	1,820
K - 5	16,686	16,579	15,872	15,386	15,256	15,399
6 - 8	7,853	7,639	7,244	7,019	6,907	7,338
9 - 12	10,374	10,329	9,916	9,667	9,451	9,573
K - 12	34,913	34,547	33,032	32,072	31,614	32,310
Grand Total	41,115	39,942	34,842	33,845	33,186	34,130

Source: Pittsburgh Public Schools

HISTORICAL ENROLLMENT - DISTRICT-WIDE



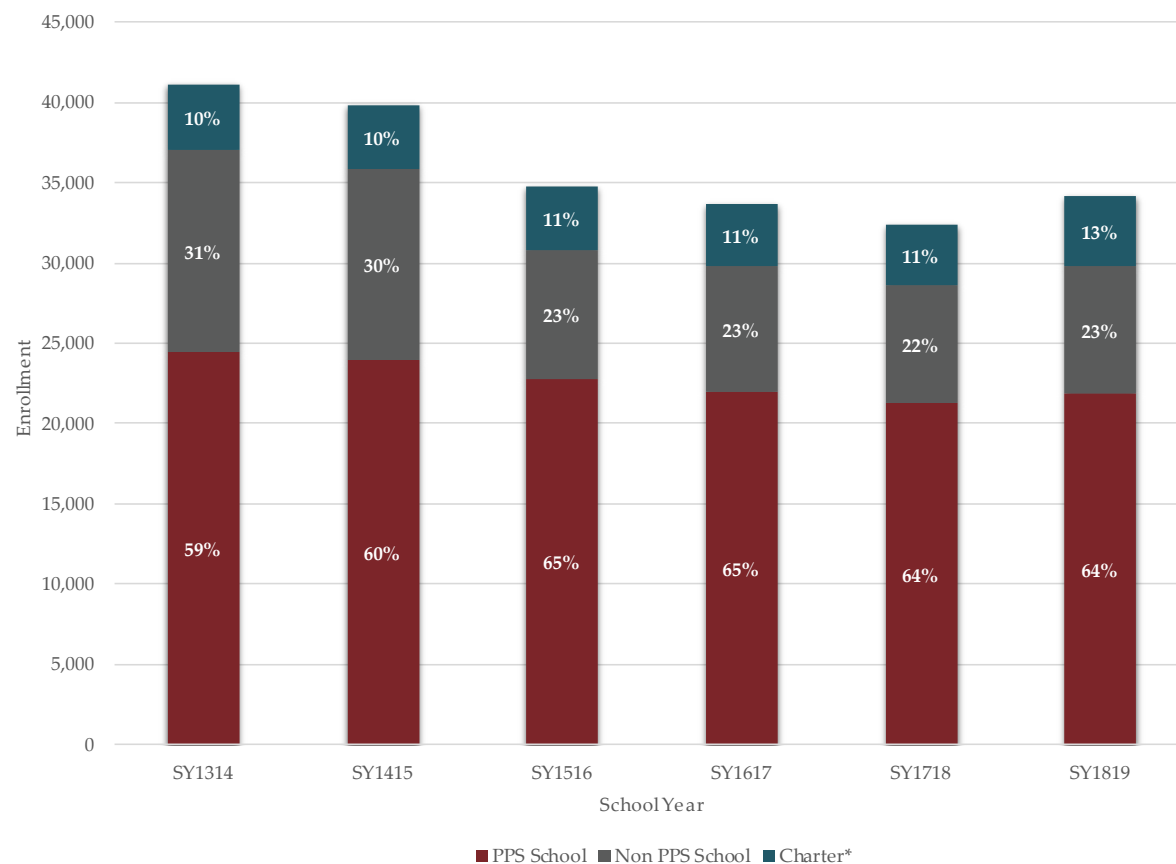
****Based on students tracked by PPS – not a projection of actual PPS student enrollment**



HISTORICAL ENROLLMENT BY BOUNDARY

- 2018-19 School Year Breakdown
 - total 34,130 students tracked by PPS living within the PPS boundary:
 - 64% PPS students
 - 13% charter students
 - 23% non-PPS & non-charter students

Pittsburgh Public Schools, Enrollment by Organization and School Year

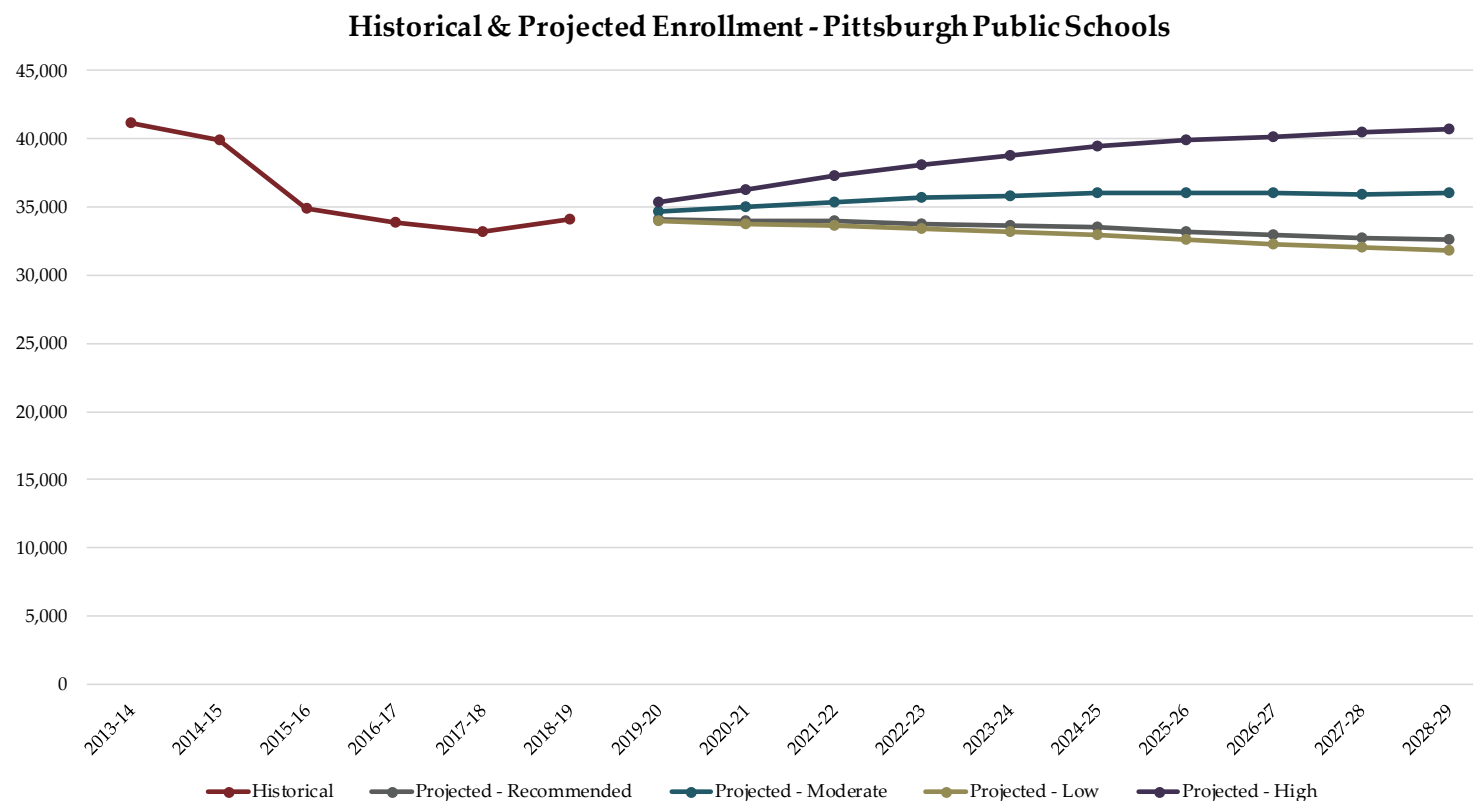


*Charters are considered Non PPS but are counted separately from Non PPS in this graph

****Based on students tracked by PPS – not a projection of actual PPS student enrollment**



PROJECTED ENROLLMENT BY BOUNDARY



****Based on students tracked by PPS – not a projection of actual PPS student enrollment**



PROJECTED ENROLLMENT BY BOUNDARY

RECOMMENDED

Projected Enrollment - Recommended - District-wide

Grade	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
PK	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820
K	2,516	2,435	2,482	2,368	2,428	2,428	2,428	2,428	2,428	2,428
1	2,587	2,513	2,435	2,478	2,368	2,429	2,429	2,429	2,429	2,429
2	2,476	2,546	2,471	2,394	2,435	2,330	2,386	2,386	2,386	2,386
3	2,593	2,453	2,522	2,450	2,375	2,415	2,313	2,368	2,368	2,368
4	2,453	2,541	2,401	2,474	2,397	2,325	2,365	2,261	2,318	2,318
5	2,551	2,449	2,533	2,402	2,470	2,393	2,321	2,358	2,256	2,312
6	2,556	2,483	2,381	2,470	2,339	2,408	2,330	2,261	2,298	2,199
7	2,581	2,584	2,507	2,407	2,495	2,361	2,435	2,357	2,285	2,322
8	2,358	2,580	2,581	2,508	2,413	2,500	2,364	2,440	2,359	2,286
9	2,583	2,489	2,732	2,730	2,654	2,551	2,637	2,505	2,573	2,495
10	2,374	2,456	2,373	2,599	2,601	2,527	2,428	2,515	2,383	2,446
11	2,336	2,301	2,382	2,302	2,520	2,522	2,445	2,359	2,439	2,315
12	2,350	2,340	2,303	2,380	2,305	2,519	2,526	2,450	2,361	2,450
Grand Total	34,134	33,990	33,923	33,782	33,620	33,528	33,227	32,937	32,703	32,574

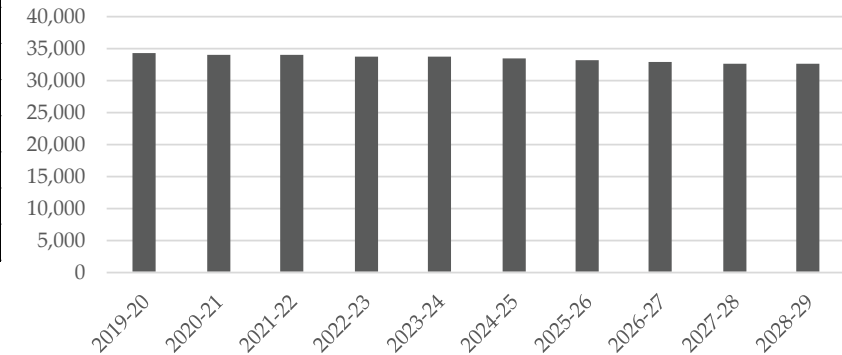
Source: Cooperative Strategies

Projected Enrollment - Recommended - District-wide

Grade	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
PK	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820
K - 5	15,176	14,937	14,844	14,566	14,473	14,320	14,242	14,230	14,185	14,241
6 - 8	7,495	7,647	7,469	7,385	7,247	7,269	7,129	7,058	6,942	6,807
9 - 12	9,643	9,586	9,790	10,011	10,080	10,119	10,036	9,829	9,756	9,706
K - 12	32,314	32,170	32,103	31,962	31,800	31,708	31,407	31,117	30,883	30,754
Grand Total	34,134	33,990	33,923	33,782	33,620	33,528	33,227	32,937	32,703	32,574

Source: Cooperative Strategies

PROJECTED ENROLLMENT -
RECOMMENDED - DISTRICT-WIDE



****Based on students tracked by PPS – not a projection of actual PPS student enrollment**



ENROLLMENT PROJECTIONS BY SCHOOL (WHERE STUDENTS ATTEND)



HISTORICAL ENROLLMENT BY SCHOOL

Historical Enrollment - District-wide

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
PK	1,910	2,012	1,735	1,602	1,612	1,569	1,317	1,927	1,328	1,490
K	2,142	2,143	2,064	2,282	2,310	1,996	1,985	1,943	1,832	1,864
1	2,136	2,169	2,042	2,044	2,226	2,089	1,969	1,790	1,898	1,731
2	2,046	2,070	1,974	1,927	1,914	1,964	2,044	1,781	1,754	1,776
3	2,006	2,048	1,902	1,903	1,820	1,747	1,933	1,832	1,752	1,669
4	2,046	1,964	1,947	1,831	1,841	1,720	1,764	1,834	1,782	1,665
5	1,937	2,022	1,901	1,923	1,765	1,704	1,697	1,643	1,775	1,729
6	1,963	1,918	1,962	1,842	1,860	1,685	1,727	1,624	1,586	1,701
7	1,849	1,992	1,842	1,948	1,808	1,732	1,683	1,681	1,645	1,590
8	2,004	1,847	1,926	1,787	1,916	1,697	1,732	1,606	1,655	1,619
9	2,110	2,188	1,913	1,958	1,856	1,838	1,873	1,852	1,803	1,713
10	2,072	2,027	1,803	1,765	1,785	1,712	1,704	1,701	1,715	1,639
11	1,849	1,882	1,806	1,697	1,645	1,695	1,590	1,554	1,613	1,595
12	1,875	1,700	1,836	1,783	1,683	1,509	1,649	1,484	1,552	1,550
Grand Total	27,945	27,982	26,653	26,292	26,041	24,657	24,667	24,252	23,690	23,331

Source: Pittsburgh Public Schools

Historical Enrollment - District-wide

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
PK	1,910	2,012	1,735	1,602	1,612	1,569	1,317	1,927	1,328	1,490
K - 5	12,313	12,416	11,830	11,910	11,876	11,220	11,392	10,823	10,793	10,434
6 - 8	5,816	5,757	5,730	5,577	5,584	5,114	5,142	4,911	4,886	4,910
9 - 12	7,906	7,797	7,358	7,203	6,969	6,754	6,816	6,591	6,683	6,497
K - 12	26,035	25,970	24,918	24,690	24,429	23,088	23,350	22,325	22,362	21,841
Grand Total	27,945	27,982	26,653	26,292	26,041	24,657	24,667	24,252	23,690	23,331

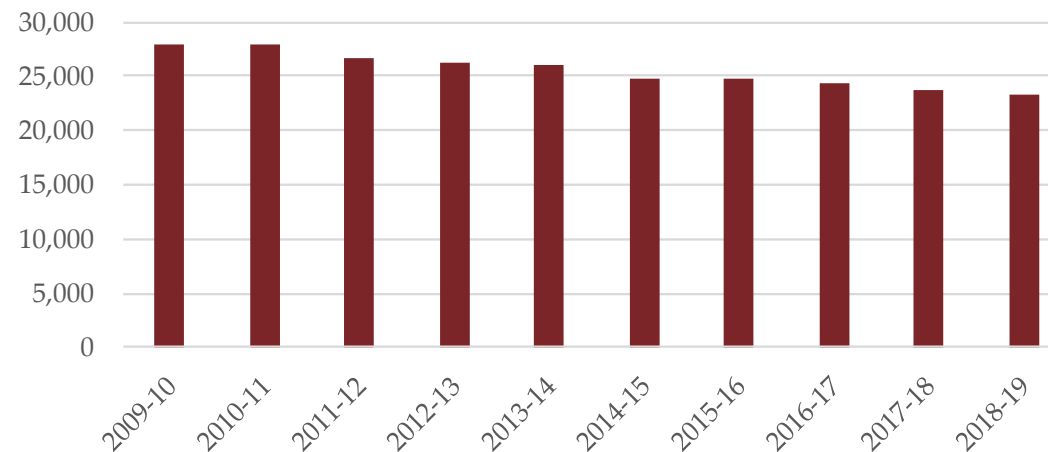
Source: Pittsburgh Public Schools



HISTORICAL ENROLLMENT BY SCHOOL

- PK-12 enrollment decreased by 4,614 students from the 2009-10 to 2018-19 school year
- 2018-19 enrollment (PK-12) was 23,331

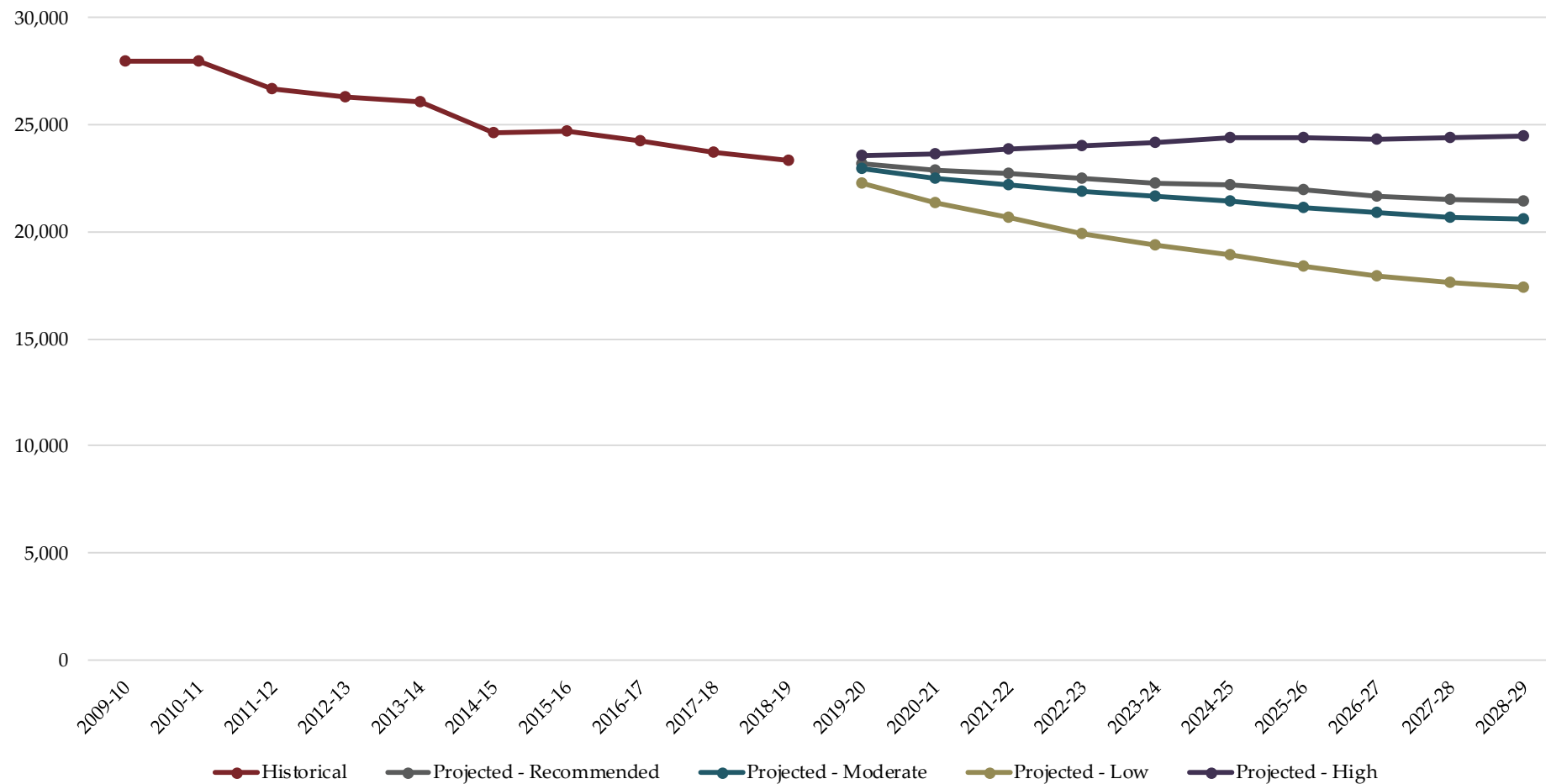
HISTORICAL ENROLLMENT - DISTRICT-WIDE





PROJECTED ENROLLMENT BY SCHOOL

Historical & Projected Enrollment - Pittsburgh Public Schools





PROJECTED ENROLLMENT BY SCHOOL

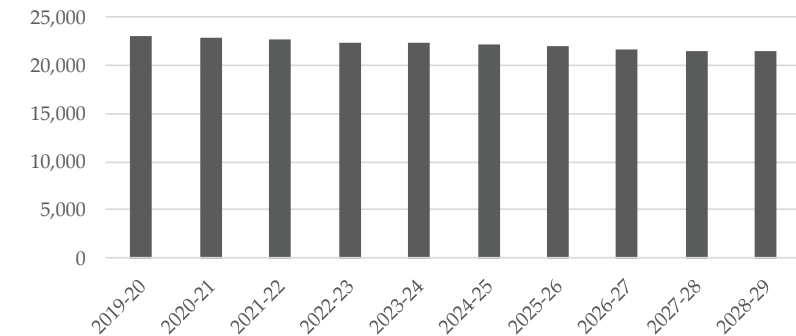
RECOMMENDED

Projected Enrollment - Recommended - District-wide

Grade	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
PK	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490
K	1,855	1,797	1,831	1,751	1,794	1,794	1,794	1,794	1,794	1,794
1	1,781	1,771	1,714	1,743	1,670	1,712	1,712	1,712	1,712	1,712
2	1,648	1,698	1,690	1,636	1,661	1,590	1,630	1,630	1,630	1,630
3	1,713	1,589	1,641	1,625	1,575	1,603	1,533	1,572	1,572	1,572
4	1,615	1,660	1,542	1,588	1,578	1,529	1,555	1,489	1,524	1,524
5	1,610	1,560	1,604	1,492	1,532	1,523	1,476	1,501	1,435	1,469
6	1,738	1,598	1,544	1,592	1,478	1,518	1,504	1,458	1,482	1,415
7	1,728	1,765	1,626	1,573	1,620	1,502	1,544	1,533	1,480	1,507
8	1,537	1,682	1,712	1,577	1,523	1,573	1,459	1,498	1,485	1,435
9	1,686	1,647	1,803	1,826	1,687	1,632	1,684	1,560	1,603	1,591
10	1,586	1,545	1,517	1,660	1,677	1,551	1,501	1,547	1,436	1,475
11	1,547	1,501	1,460	1,431	1,567	1,585	1,464	1,420	1,461	1,355
12	1,609	1,564	1,522	1,475	1,445	1,586	1,604	1,484	1,434	1,478
Grand Total	23,143	22,867	22,696	22,459	22,297	22,188	21,950	21,688	21,538	21,447

Source: Cooperative Strategies

PROJECTED ENROLLMENT -
RECOMMENDED - DISTRICT-WIDE



Projected Enrollment - Recommended - District-wide

Grade	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
PK	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490	1,490
K - 5	10,222	10,075	10,022	9,835	9,810	9,751	9,700	9,698	9,667	9,701
6 - 8	5,003	5,045	4,882	4,742	4,621	4,593	4,507	4,489	4,447	4,357
9 - 12	6,428	6,257	6,302	6,392	6,376	6,354	6,253	6,011	5,934	5,899
K - 12	21,653	21,377	21,206	20,969	20,807	20,698	20,460	20,198	20,048	19,957
Grand Total	23,143	22,867	22,696	22,459	22,297	22,188	21,950	21,688	21,538	21,447

Source: Cooperative Strategies



FACTORS TO CONSIDER

- It is important to continue to monitor enrollment trends and live birth trends as these factors impact future enrollment
- The following factors can also cause significant change in projected student enrollment
 - Boundary changes
 - New school openings
 - Changes / additions in program offerings
 - Preschool programs
 - Change in grade configuration
 - Student transfer policy changes
 - Interest rates / unemployment shifts
 - Magnet / charter / private school opening or closure
 - Zoning changes
 - Unplanned new housing activity
 - Planned, but not built, housing
 - School voucher programs
 - School closure



QUESTIONS