

Princeton Public Schools

Executive Summary Enrollment Projections Update



Live to Learn, Learn to Live

February 7th 2023



Contents

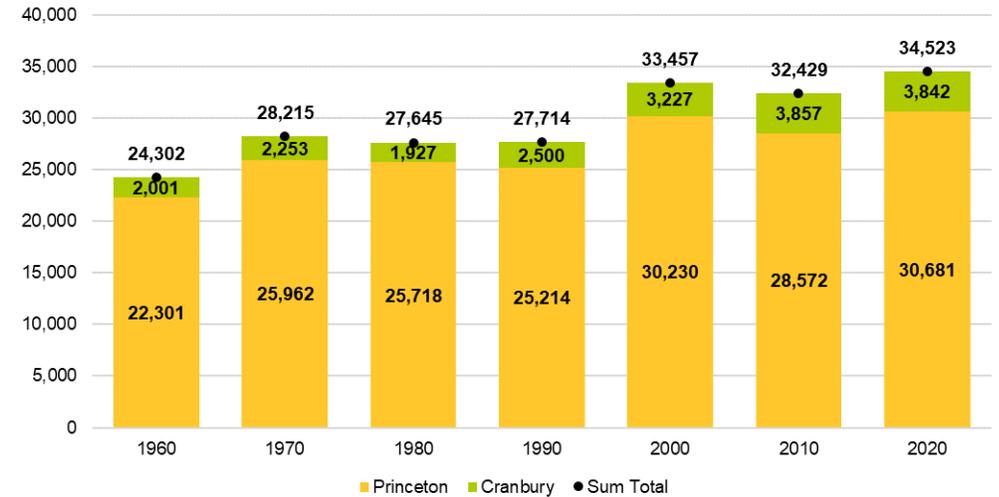
- Enrollment Drivers Summary
- Enrollment Trends Summary
- Enrollment Projection Update
- Appendix

[Enrollment Drivers]

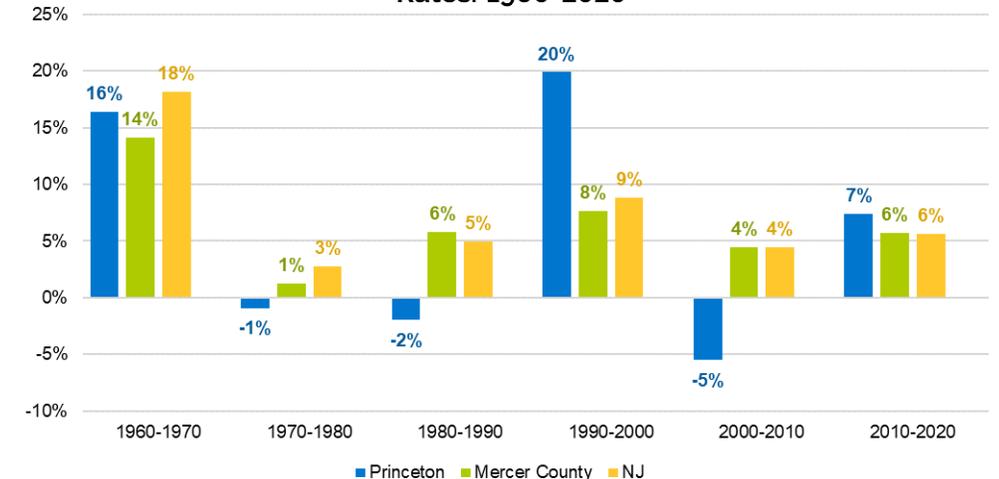
Demographic Trends

- Historically, Princeton has experienced cyclical population trends, with periods of growth followed by periods of stability or contraction.
- Between 2010 and 2020, Princeton experienced a 7.4% increase in population, which was greater than the county and state growth rate.
- Cranbury's population was stable over the last decade.
- Please note, Impacts from the pandemic are not captured in 2020 census counts
- Declining births both locally and regionally.
 - Princeton births between 2018 and 2020 averaged 169 annually, compared to an average of 197 annually between 2014 and 2017
 - These smaller birth cohorts will begin entering kindergarten next year.

Population Trends: 1960-2020



Comparison of Local, County, and State Population Growth Rates: 1960-2020

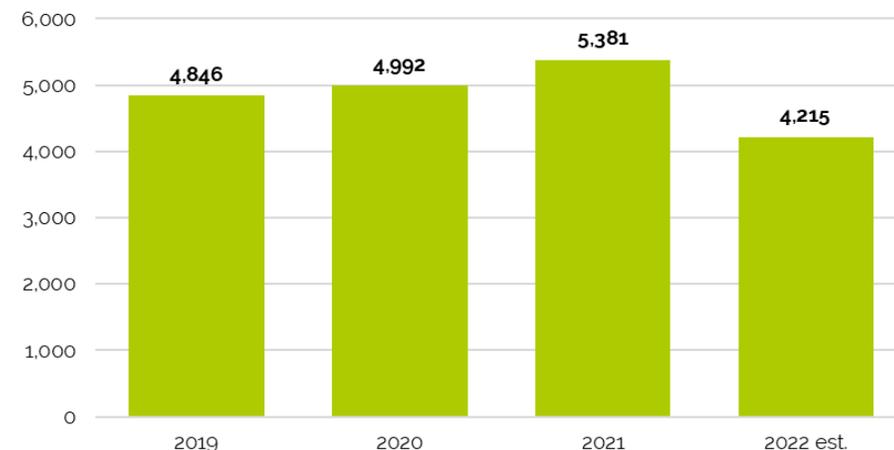


Source: U.S. Census Bureau

Housing Market: Sales

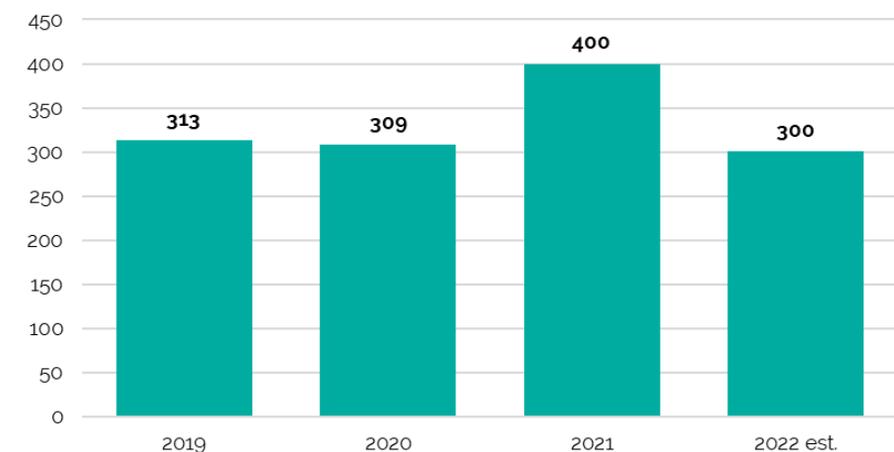
- After strong housing market activity in 2021, market is beginning to decelerate both locally and regionally.
- 2022 home sales for Mercer County are trending well below pre-pandemic levels based on YTD data at an estimated 4,215 for the full year.
- Princeton home sales are trending slightly below pre-pandemic levels with an estimated 300 sales for the full 2022 year.
- Continued tight housing market, with active inventory down ~19% compared to last year.
- Limited inventory continues to drive up median sale prices. Regionally, prices are up 35% compared to 2019.¹

Mercer County Home Sale Trends: 2019-2022



Source: Otteau Group. 2022 home sales estimated for full year based on Jan-Oct YTD data

Princeton Home Sale Trends: 2019-2022

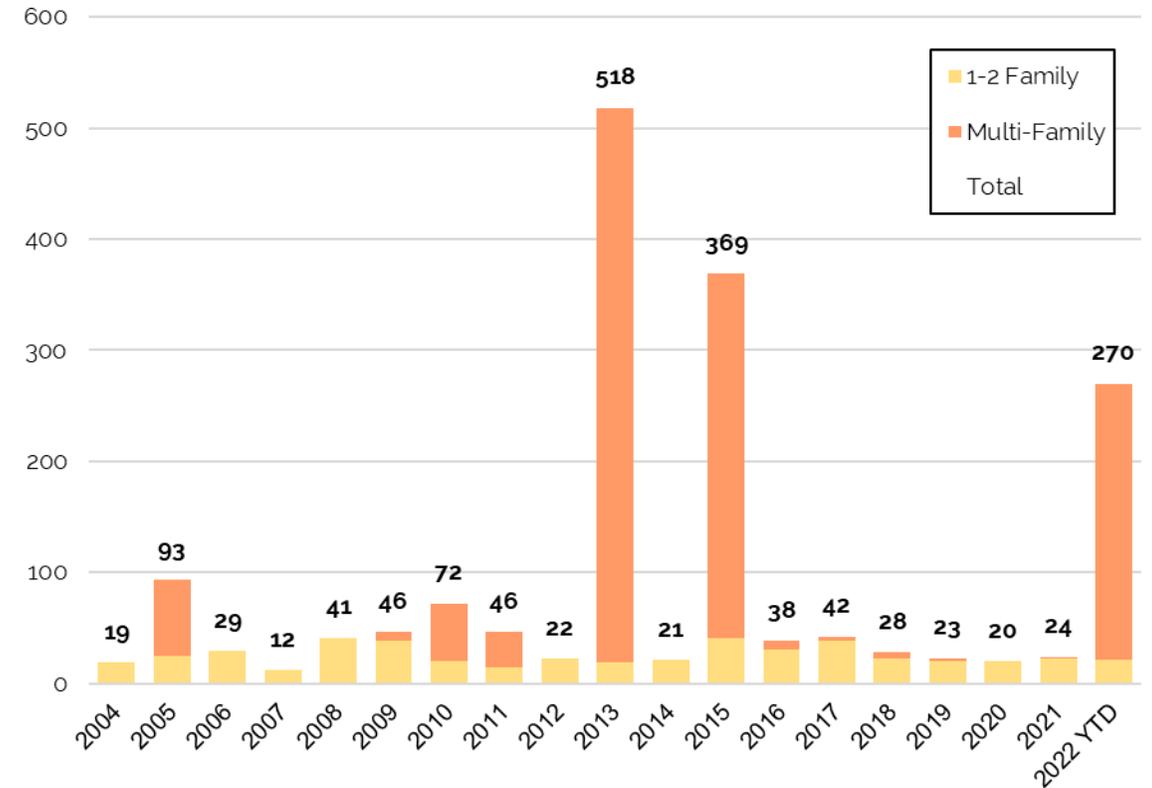


Source: Otteau Group. 2022 home sales estimated for full year based on Jan-Oct YTD data

Housing Market: Permit Activity

- Since 2004, over 1,700 housing units have been permitted in Princeton.
 - ~1,250 multi-family permits issued
 - ~475 single-family permits issued.
- Consistent 1-2 family permit activity, averaging about 25 permits annually
- Large “spikes” in multi-family permits corresponding with large development projects such as Stanworth, Copperwood, and Avalon Princeton
 - Lag between when units are permitted and when they are fully occupied
- Over the last five years, Cranbury has averaged ~10 1-2 family permits and ~21 multi-family permits annually

Princeton Housing Permits: 2004 to 2022 YTD



Source: NJ Department of Community Affairs - Building Permit Data for Princeton
2022 YTD data is through August

Anticipated Future Housing

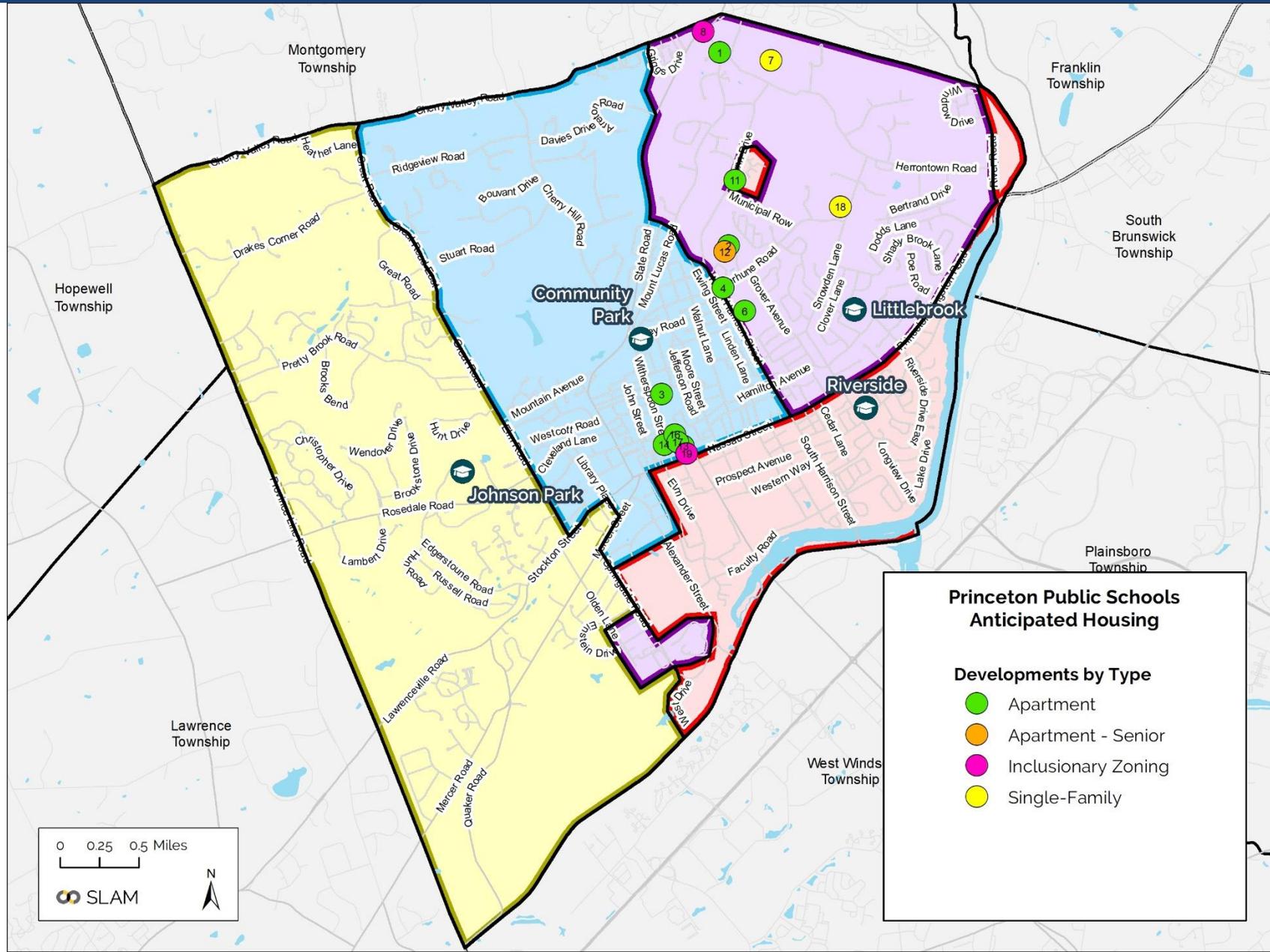
Development	Type	Total Units	Estimated Public School-Aged Children				Estimated Completion
			Total	K-5	6-8	9-12	
900 Herrontown Rd/SAVE	Apartment	65	40	21	11	9	2025
Thanet Rd. Avalon Bay	Apartment	221	90	51	23	16	2024
Franklin/Maple	Apartment	160	80	43	20	17	2026
351 Terhune & Harrison Winn Development	Apartment	125	80	43	20	17	2025
Princeton Shopping Center Edens - Avalon Bay	Apartment	200	57	34	13	9	2025
Lanwin @ Ridge Herrontown Rd	Single-Family	30	20	8	7	5	2026
Princeton Community Village	Apartment	25	15	8	4	3	2024
Supportive & Special Needs/Group Homes	Apartment	16	0	0	0	0	-
Thanet Rd Senior Project (AvalonBay)	Apartment - Senior	80	0	0	0	0	2025
Nelson Spring	Apartment	6	3	2	1	1	2023
Griggs Corner/Wetherspoon	Apartment	8	3	2	1	0	2025
21 Wiggins	Apartment	18	6	4	2	0	2025
40-42 North Tulane	Apartment	14	5	3	1	1	2025
Landmark at Princeton - Snowden	Single-Family	7	5	2	2	1	2025
Inclusionary Overlay Zone - Nassau St.	Inclusionary Zoning	52	20	12	5	3	after 2025
Inclusionary Overlay Zone - Herrontown Rd S-2	Inclusionary Zoning	94	35	21	9	6	after 2025
Total All Projects		1,121	459	254	119	88	

- Over 1,100 units in the housing pipeline, including units from the Final Fair Share Housing 3rd round agreement
- Does not include anticipated 4th round agreement projects
- Cranbury's 3rd round family projects are complete, with no anticipated 4th round projects due to prior round surplus

Anticipated Future Housing, by School Zone

Map Key	Development
1	900 Herrontown Rd/SAVE
2	Thanet Rd. Avalon Bay
3	Franklin/Maple
4	351 Terhune & Harrison Winn Development
6	Princeton Shopping Center Edens - Avalon Bay
7	Lanwin @ Ridge Herrontown Rd
8	Inclusionary Overlay Zone - Herrontown Rd S-2
11	Princeton Community Village
12	Thanet Rd Senior Project (AvalonBay)
13	Nelson Spring
14	Griggs Corner/Wetherspoon
15	23 Humbert
16	21 Wiggins
17	40-42 North Tulane
18	Landmark at Princeton - Snowden
19	Inclusionary Overlay Zone - Nassau St.

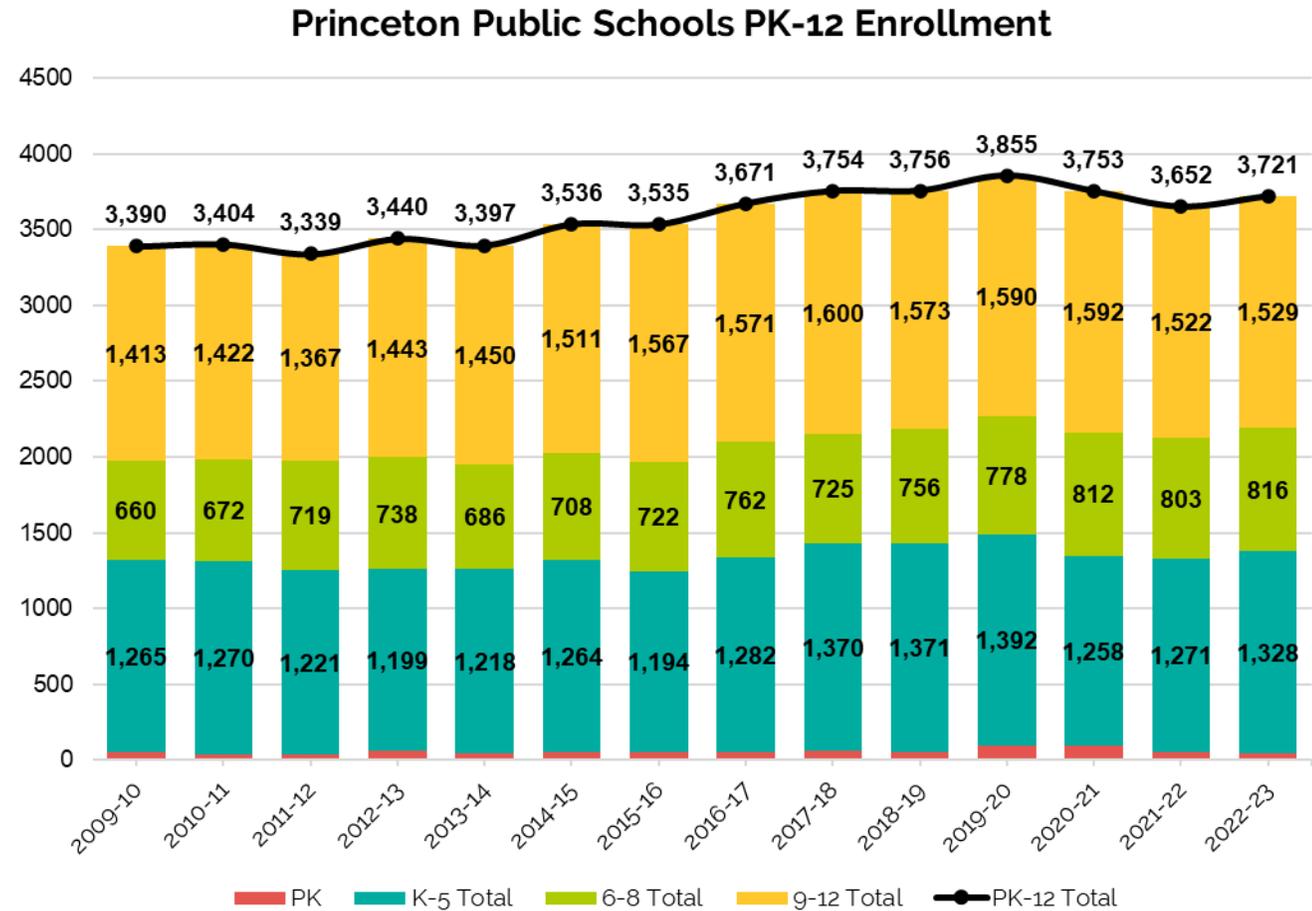
Future housing is concentrated in the current Littlebrook attendance zone, with a smaller number of units in Community Park and Riverside



[Enrollment Trends]

Princeton Public Enrollment Trends

- Over the last ten years, total PK-12 enrollment has increased by 324 students or 9.5%
- Most recent enrollment peak of 3,855 students in 2019-20, followed by two years of declining enrollment primarily at the elementary level.
 - Enrollment rebounded in the 2022-23 school year, although still below 2019-20 levels.
- Increases felt across all grade groupings over the last decade
 - Elementary (K-5) enrollment has increased 9%
 - Middle School (6-8) enrollment has increased 19%
 - High School (9-12) enrollment has increased 5%
- Enrollment growth disrupted by pandemic, especially at the elementary level



Source: Princeton Public Schools

Princeton Public Enrollment Trends

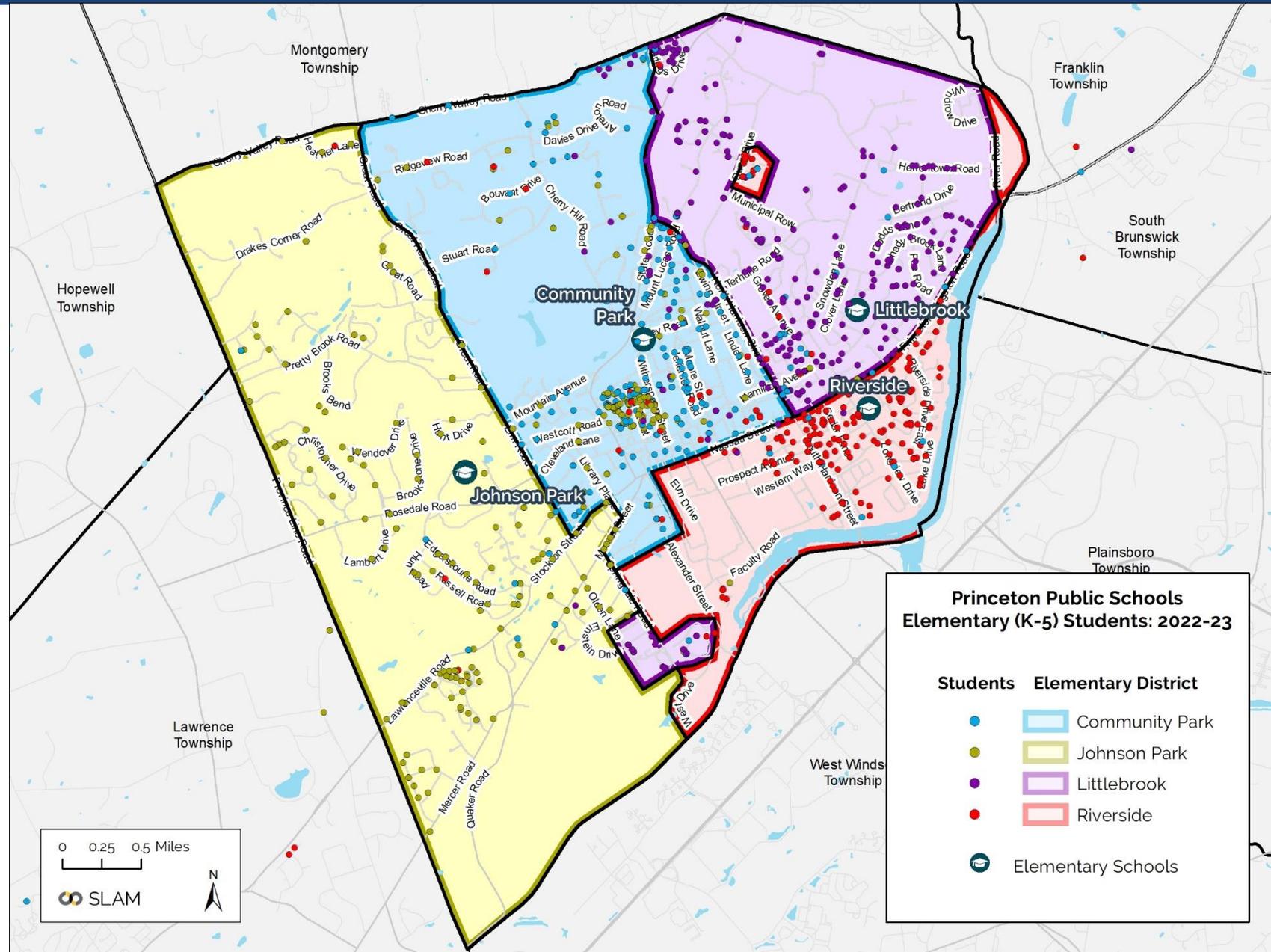
School	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	5-Year Change	10-Year Change
Community Park	300	323	319	359	370	378	381	319	333	286	-22.7%	-4.7%
Johnson Park	320	329	318	334	363	339	326	312	338	388	6.9%	21.3%
Littlebrook	343	352	325	322	358	367	393	339	336	380	6.1%	10.8%
Riverside	255	260	232	267	279	287	292	277	264	274	-1.8%	7.5%

Source: Princeton Public Schools

- All schools experienced a significant enrollment decrease between 2019-20 and 2020-21 school year due to pandemic.
- Only Johnson Park has seen its enrollment increase compared to pre-pandemic levels with a 19.0% increase since 2019-20
- The other three schools have yet to return to pre-pandemic levels, with the greatest decline at Community Park (25%) and more modest declines at Riverside (6.2%) and Littlebrook (3.3%) since 2019-20
- Elementary enrollment trends not necessarily reflective of demographic & enrollment trends within attendance zone.

Princeton Public ES Enrollment Trend

- Between 85% and 90% of students who live within the Johnson Park, Riverside, and Littlebrook attendance zones attend their zoned school.
- Less than half of students who live in the Community Park attendance zone attend Community Park. Most of these students attend Johnson Park.



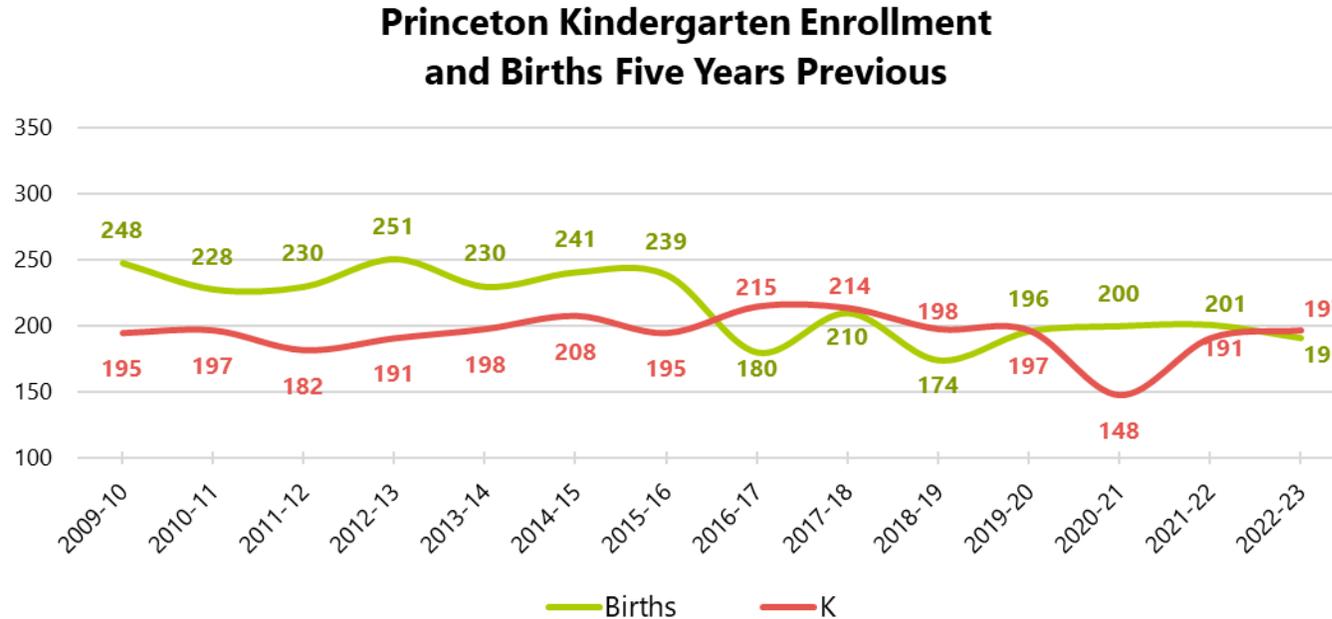
PPS Enrollment History Detail

School Year	Births (Y-5)	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	K-12 Total	PK-12 Total	K-5 Total	6-8 Total	9-12 Total
2009-10	248	195	242	184	201	233	210	208	236	216	353	365	344	351	52	3,338	3,390	1,265	660	1,413
2010-11	228	197	205	248	165	217	238	221	213	238	354	366	358	344	40	3,364	3,404	1,270	672	1,422
2011-12	230	182	202	216	230	161	230	251	238	230	319	347	343	358	32	3,307	3,339	1,221	719	1,367
2012-13	251	191	184	198	209	240	177	231	265	242	375	368	353	347	60	3,380	3,440	1,199	738	1,443
2013-14	230	198	181	194	197	210	238	180	231	275	379	376	360	335	43	3,354	3,397	1,218	686	1,450
2014-15	241	208	211	212	197	199	237	247	208	253	404	379	375	353	53	3,483	3,536	1,264	708	1,511
2015-16	239	195	207	211	195	189	197	243	260	219	400	415	383	369	52	3,483	3,535	1,194	722	1,567
2016-17	180	215	220	223	207	222	195	224	257	281	358	411	421	381	56	3,615	3,671	1,282	762	1,571
2017-18	210	214	230	235	223	237	231	219	246	260	413	365	407	415	59	3,695	3,754	1,370	725	1,600
2018-19	174	198	230	231	223	242	247	261	231	264	387	428	349	409	56	3,700	3,756	1,371	756	1,573
2019-20	196	197	208	248	239	237	263	262	270	246	390	422	421	357	95	3,760	3,855	1,392	778	1,590
2020-21	200	148	193	201	236	237	243	270	259	283	349	388	418	437	91	3,662	3,753	1,258	812	1,592
2021-22	201	191	187	200	214	247	232	254	289	260	402	356	368	396	56	3,596	3,652	1,271	803	1,522
2022-23	191	197	206	219	208	243	255	256	263	297	391	409	353	376	48	3,673	3,721	1,328	816	1,529

Source: Princeton Public Schools

- Current 11th grade cohort has been smaller throughout their matriculation, despite consistent in-migration.
- Larger cohorts that entered in 2016-17 and 2017-18 are now approximately the same size as the prior four cohorts.
- Small kindergarten cohort from 2020-21 has largely recovered (currently in 2nd grade) and is slightly smaller than historic cohort size.
- This year's 8th grade cohort is the largest in recent memory and will transition into high school next year.

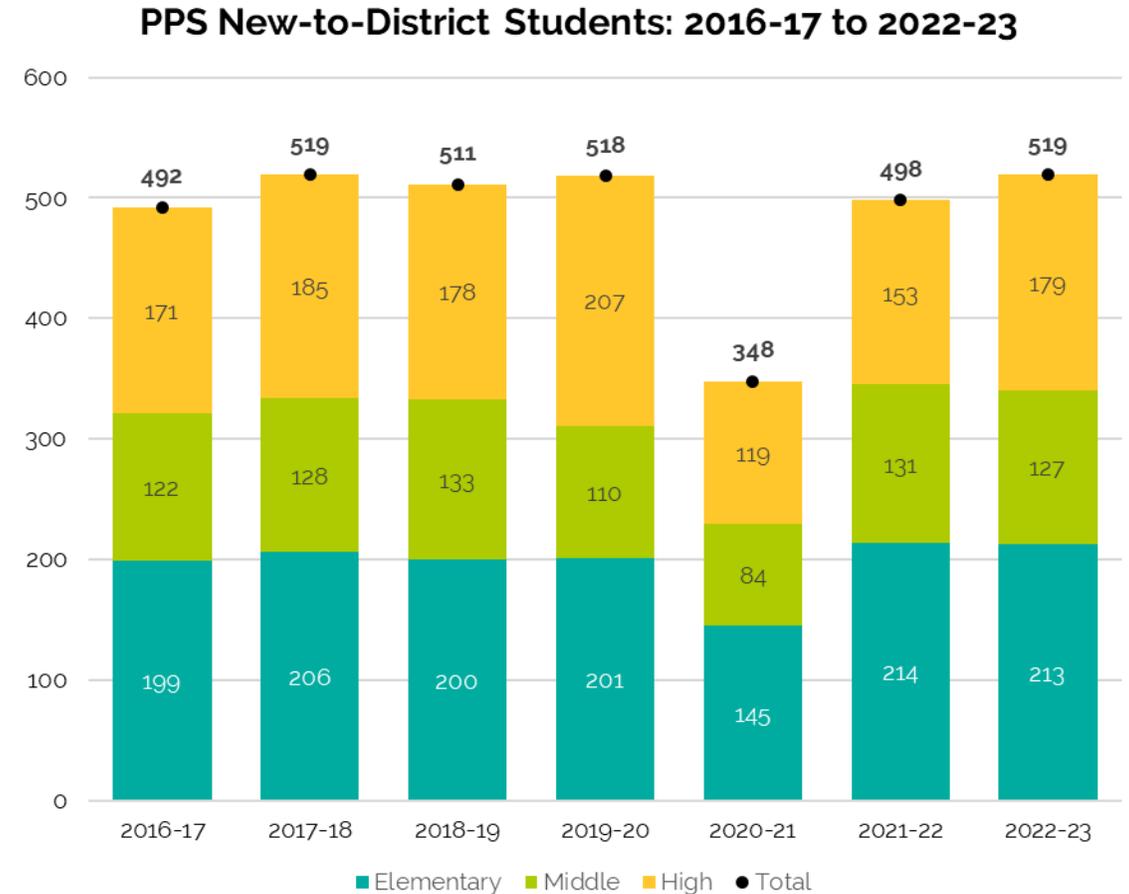
Births and Kindergarten Enrollment



- Significant shift in Birth – Kindergarten persistency ratios occurred between 2015-16 and 2016-17
 - Previously, PPS saw about 80 – 85 % of a birth cohort enter Kindergarten five years later
 - Most recent years, PPS enrolls more students in Kindergarten than were present in the birth cohort five years previous
 - Anomaly in 2020-21 due to pandemic with significantly fewer kindergarten students compared to corresponding birth cohort.
- Moreover, the trend in kindergarten enrollment is not as responsive to trends in birth cohorts as in the past, as is apparent in graph above for years 2016-17 onward
 - In-migration of families with children 0-4 influencing enrollment trends more so than birth trends

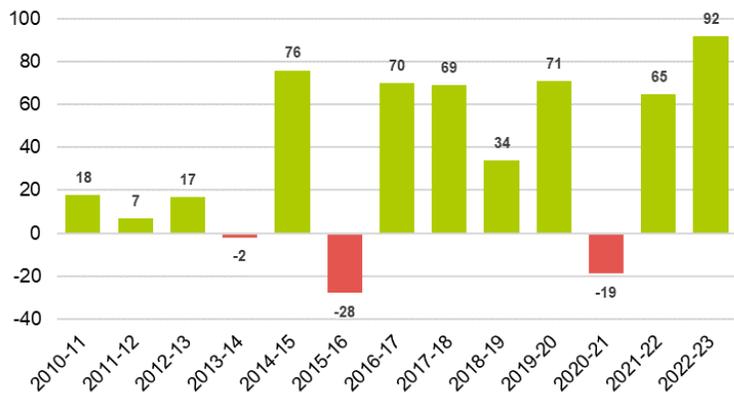
New to District Students

- Analysis comparing student IDs from one year to next – any ID not present in prior year considered new-to-district (NTD)
 - PK and K excluded
 - Cranbury entering 9th graders excluded
- Except for 2020-21 anomaly, very consistent number of new-to-district students since 2016-17, ranging from 490 to 520 annually.
- 2022-23 NTD students have returned to pre-pandemic levels
- Over the last five years, the number of new-to-district elementary students has increased slightly while the number of new-to-district middle and high school students has decreased slightly.

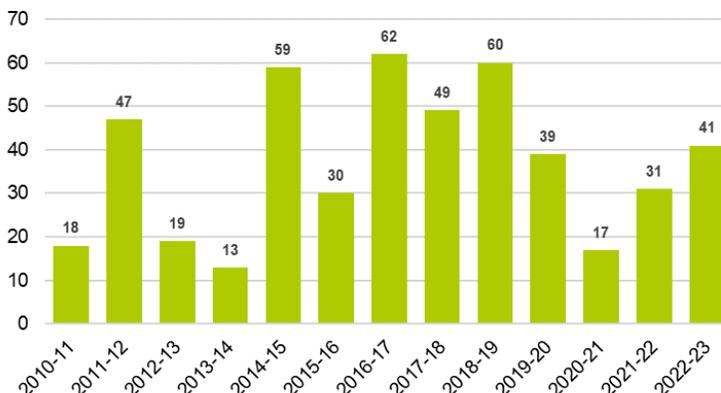


Net Migration

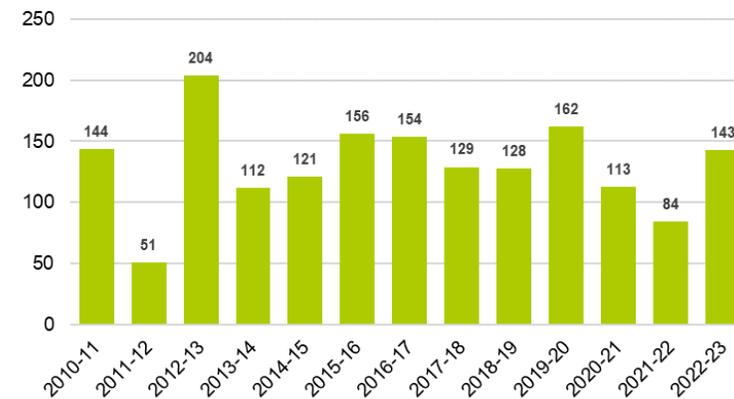
Elementary Net Migration: 2010-11 to 2022-23



Middle School Net Migration: 2010-11 to 2022-23



High School Net Migration: 2010-11 to 2022-23



- Net migration accounts for both new-to-district students as well as student withdrawals.
- Over the last five years, the elementary grades have averaged net in-migration of ~49 students annually, which is above the historic average of ~36 students. Net in-migration for 2022-23 is 92 students, which is highest level over the last decade.
- Over last five years, Princeton Middle School has averaged a net in-migration of ~38 students annually, which is in line with the historic average.
- Princeton High School sees the highest level of net-in-migration, driven by entry of PCS and Cranbury students in 9th grade.
- Over the last five years, PHS has averaged a net in-migration of ~126 students, which is slightly lower than the historic average of ~131 students.

Enrollment Projections Update

Projections Primer

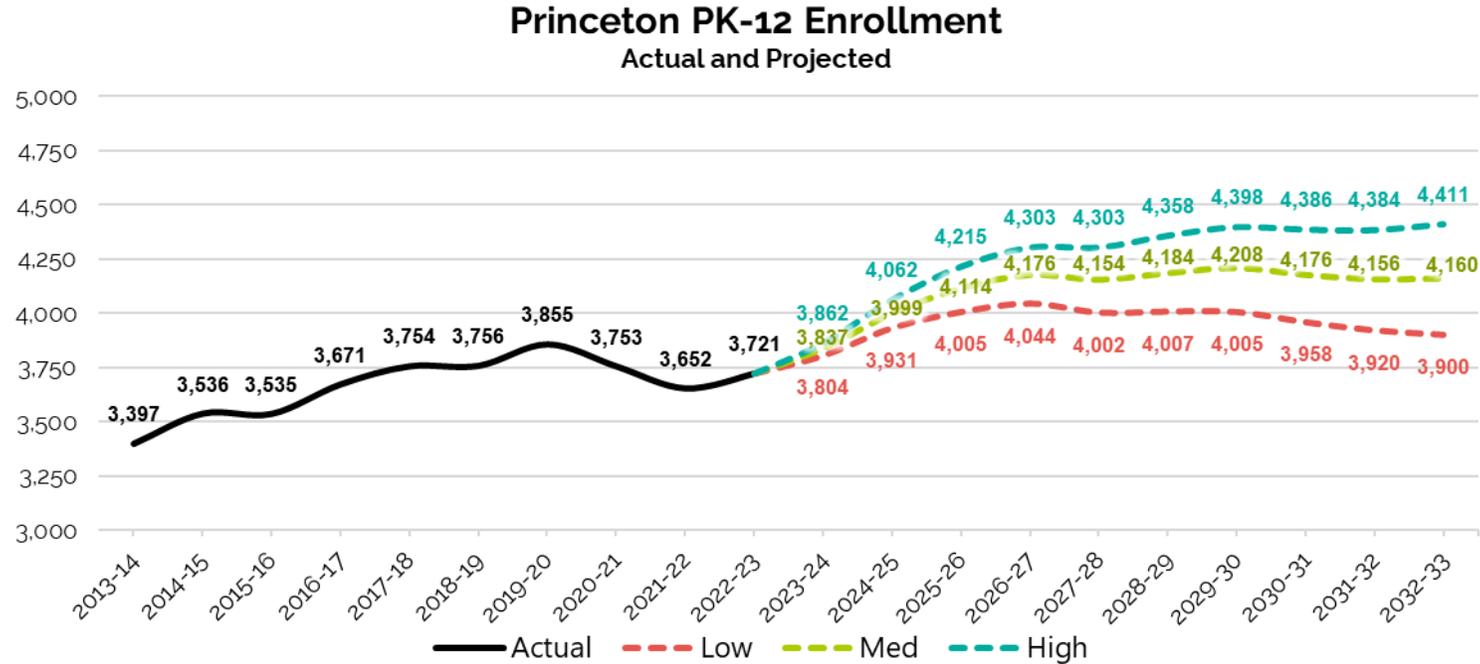
- Based on CSM - standard method for enrollment projections
- Relies on **observed data from the recent past in order to predict the near future**
- Methodology works well for stable populations, including communities that are growing or declining at a steady rate
- Based on persistency/grade progression ratios as a grade matriculates
 - These rates account for the various external factors affecting enrollments, including housing characteristics, residential development, economic conditions, student transfers in and out of the system, and student mobility
 - NJ standard is to use six-year average of persistency ratios
- Changes in population, housing stock and tenure, and economic conditions help explain persistency ratios
- Changes in programming (e.g. dual language immersion program expansion) affect persistency ratios of individual schools
- **Students generated from future housing development were added to the baseline projections for all three models based on the assumptions contained on the following slide.**

Model Assumptions

These projections are predicated on the following assumptions:

- Pre-K enrollment 75 students annually over the next decade
- Housing, student generation, and future birth assumptions at the districtwide level will prove accurate
- For individual school projections, the attendance zone boundaries, programs and policies influencing student placement will not change during the projected time horizon
- Housing Multipliers for developments provided by Nassau Capital Partners hold true. Multipliers have been applied to all projection models (assumes 85% new-to-district students for high, 75% for medium, and 65% for low). Does not include students generated from Fourth Round Fair Share Housing Agreement.
- **High projections:** Assumes increase in births (avg. 190 annually), student in-migration averages 5.2%, which is above the historic average, and 85% of students from new housing are new-to-district.
- **Medium projections:** Assumes stable births (avg. 174 annually), student in-migration averages 4.8%, which is in line with historic average, and 75% of students from new housing are new-to-district.
- **Low projections:** Assumes decrease in births (avg. 159 annually), student in-migration averages 4.4%, which is lower than historic average, and 65% of students from new housing are new-to-district.

Districtwide Projections

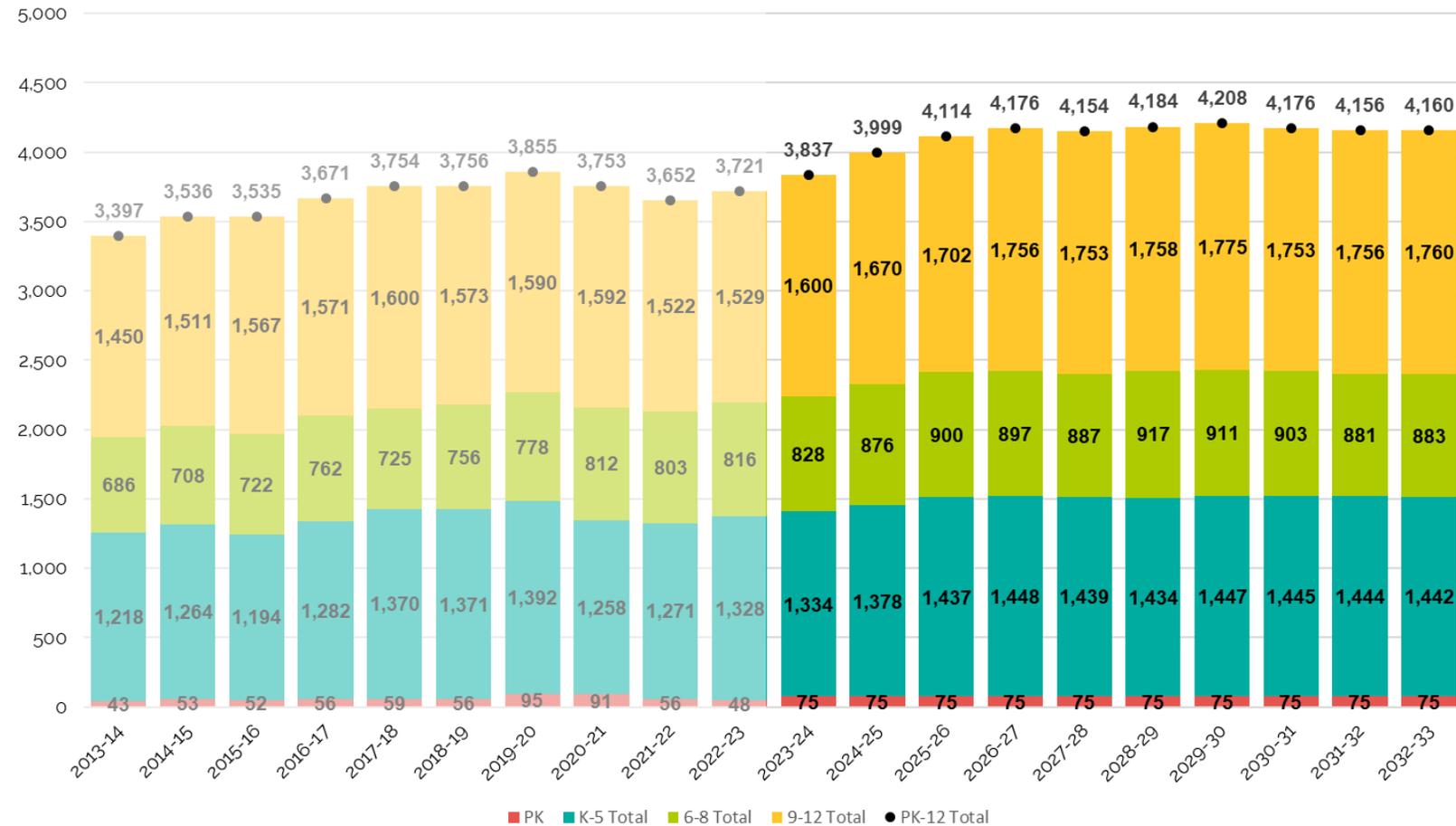


- Three projections models prepared showing a range of possible future outcomes. While medium model is recommended, all three models should be considered as part of long-term planning efforts.
- Greatest confidence in first five years due to known enrollments and birth data
- All three models show growth over the first five years of the projections:
 - Growth rates range from 7.6% for the low model, 11.6% for the medium, and 15.6% for the high.
- Over the final five years, districtwide growth is projected to slow down and taper off.
 - Low (-2.5%) model projects slight declining enrollment over the final five years, the medium model projects stable enrollment (0.1%), while the high model projects slow growth (2.5%)

Districtwide Projections

- Medium model best fits current data and assumes significant build out and occupancy of Fair Share Housing units
- Projects growth over the next four years before stabilizing at between 4,150 and 4,200 students.
- In first five years, growth is felt across all grades:
 - Elementary School 8.4%
 - Middle School (PMS) 8.7%
 - High School (PHS) 14.7%

Princeton Public Schols Actual and Projected Enrollment: 2013-14 to 2032-33



Districtwide Projection Components

- Recommended medium projections model comprised of two components:
 - 1) Baseline projections** account for “natural” community growth rate based on births and persistency ratios.
 - Baseline projections show PK-12 enrollment growing moderately over the next four years, peaking at 3,888 students in 2026-27 followed by a small decrease to 3,829 students by 2032-33
 - 2.) Student Generation Multipliers** were added on top of the baseline projections accounting for students generated from new housing developments.
 - Housing multipliers add an additional 331 students to the projections, with gradual phase in of new units between 2023-24 and 2029-30.
 - Accounts for student growth from housing developments not captured in baseline projections
- Some near-term growth due to natural increase (baseline projection), however, vast majority of projected growth is due to future housing development.**

Enrollment Projection Components (Medium Model)



Multipliers developed by Nassau Capital Advisors for Princeton Public Schools (2022).
Medium model assumes 75% of these students are new-to-district

Model Assumptions: Individual Elementary Schools

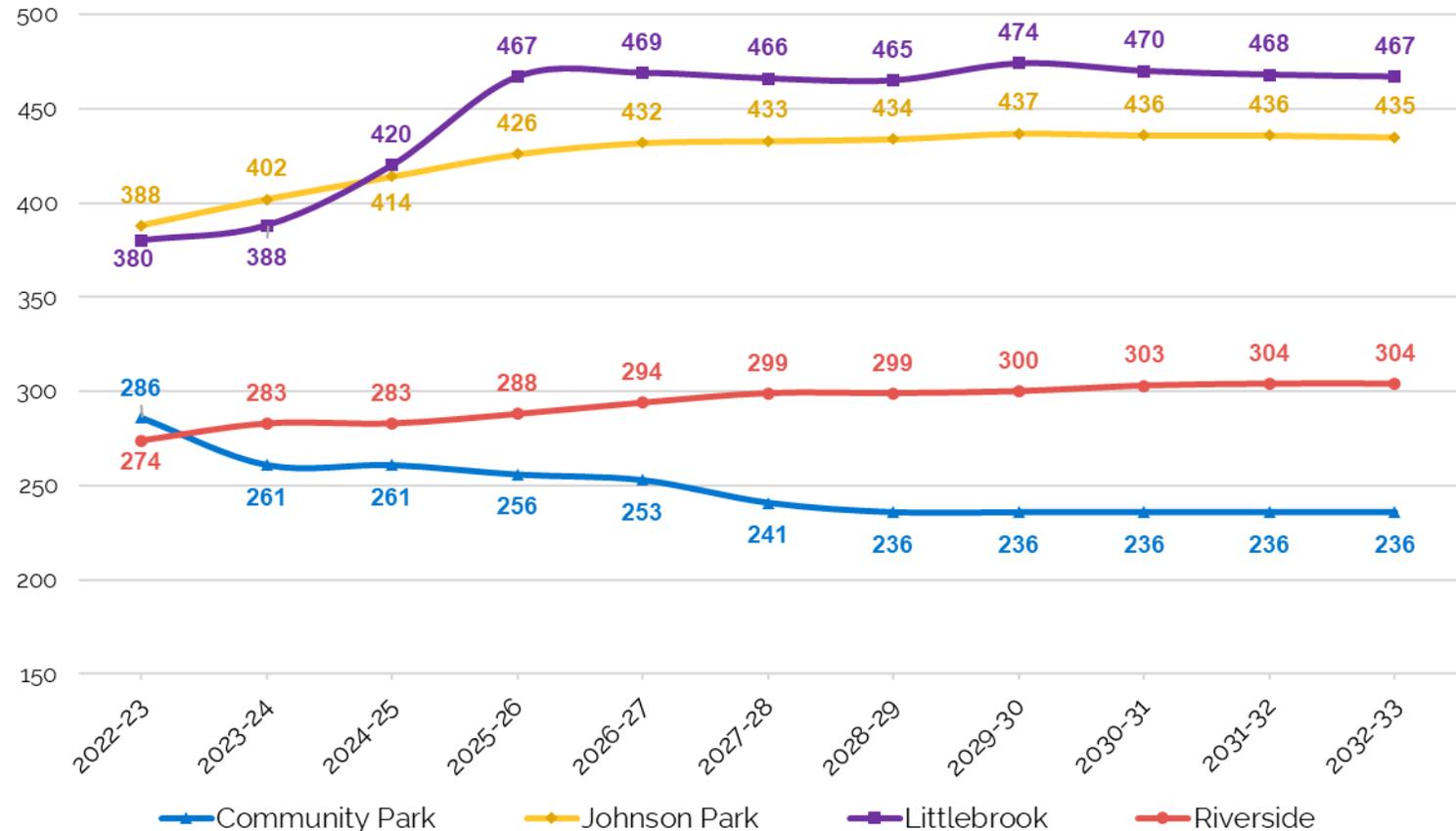
Individual Elementary School Projections are Predicated on the Following Assumptions:

- Assumes continuation of DLI program and policy placements at Community Park
 - Assumes 18 students per classroom for kindergarten and 20 students per classroom for grades 1-5, with two sections at each grade for a total program enrollment of 236 students.
- For students who live in the Community Park attendance zone who do not attend the DLI program, it was assumed that recent placement trends continue, with a majority of these students attending Johnson Park.
- Students generated from future housing developments in Community Park were proportionally allocated to the other three elementary schools based on the share of students in the Community Park attendance zone attending that school.
- Changes to districtwide programs and policies impact individual school projections.

Elementary (K-5) Medium Projections

- Littlebrook is projected to increase by 87 students (~23%) over the next three years, driven by new housing coming online, before stabilizing at about 470 students
- Johnson Park is projected to continue growing over the next four years, reaching a peak enrollment of 437 students in 2029-30.
- Riverside is projected to grow slowly over the next five years before stabilizing at just over 300 students.
- Community Park enrollment decreases as current cohorts matriculate to the middle school, eventually stabilizing at 236 students, in alignment with the 2-section per grade DLI program.
- **Changes to districtwide programs and policies impact individual school projections.**

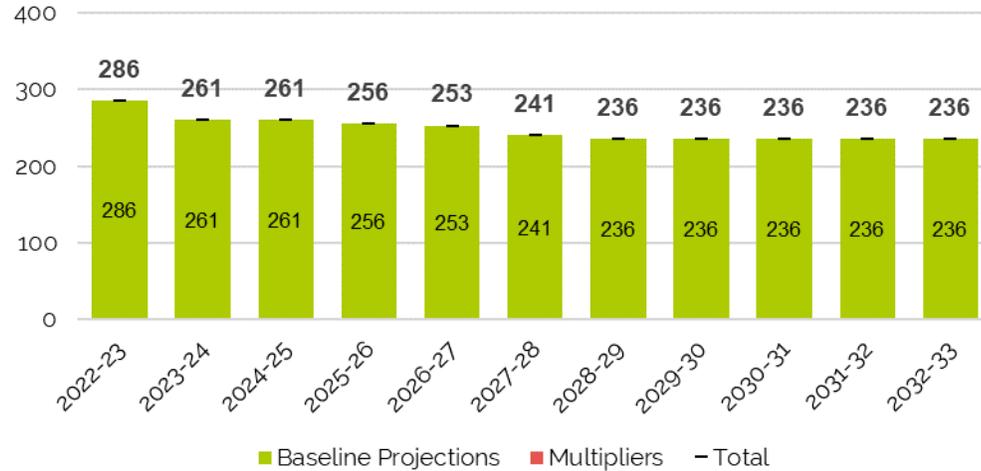
Princeton Public Schools Projected K-5 Enrollment by School



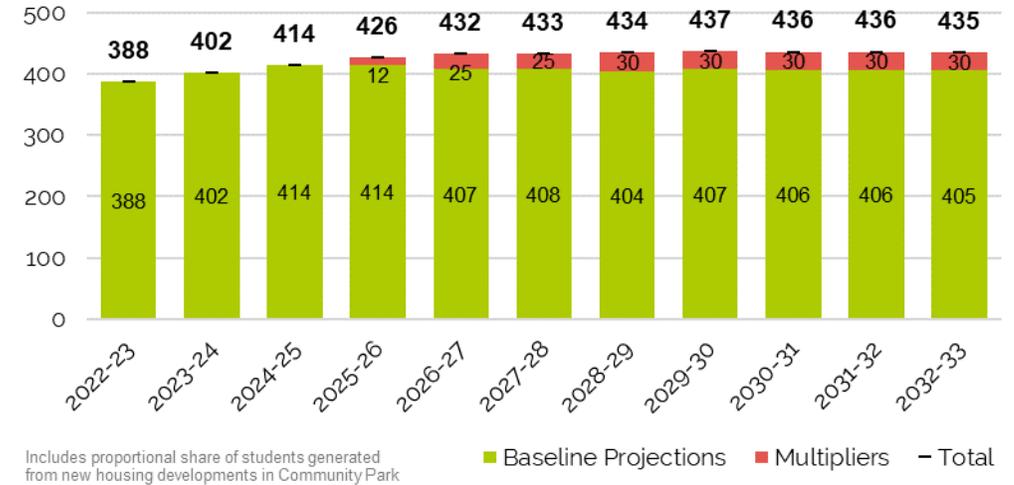
It was assumed that some students generated from future housing in the LB attendance zone are assigned to RS

Elementary (K-5) Medium Projection Components

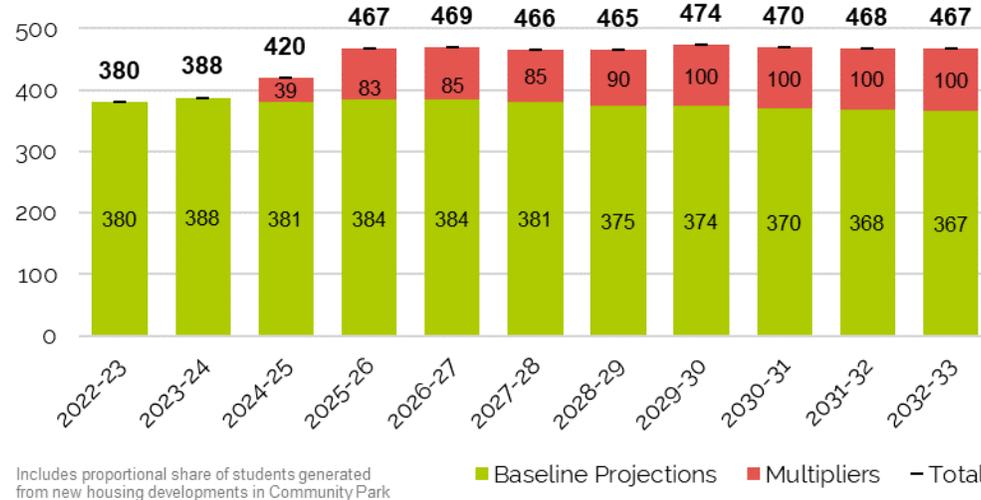
Community Park Projection Components (Medium)



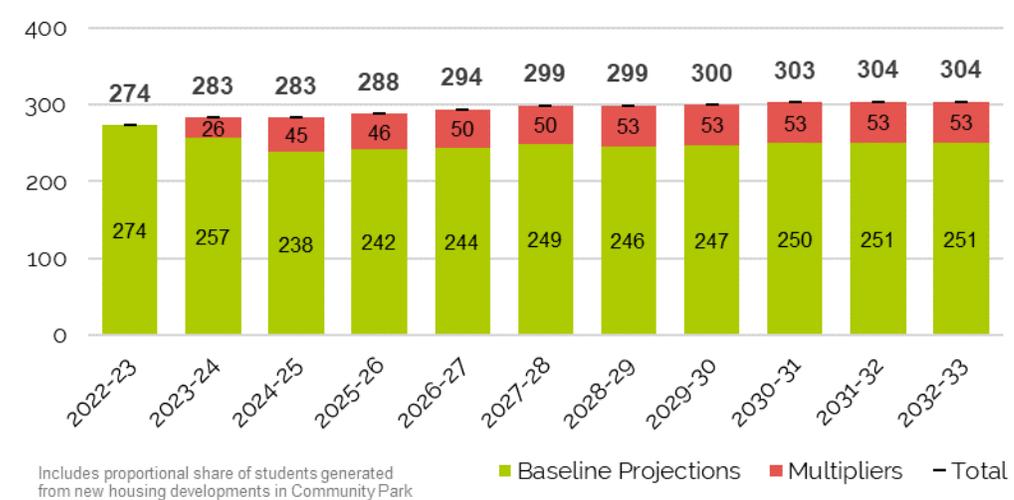
Johnson Park Projection Components (Medium)



Littlebrook Projection Components (Medium)



Riverside Projection Components (Medium)



It was assumed that some students generated from future housing in the LB attendance zone are assigned to RS

Questions?

Detailed Districtwide Medium Projections

School Year	Births 5-Years Previous	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	K-12 Total	PK-12 Total	K-5 Total	6-8 Total	9-12 Total
2022-23	191	197	206	219	208	243	255	256	263	297	391	409	353	376	48	3,673	3,721	1,328	816	1,529
2023-24	177	187	219	221	224	228	255	280	272	276	437	405	402	356	75	3,762	3,837	1,334	828	1,600
2024-25	160	199	213	240	231	250	245	285	302	289	408	455	401	406	75	3,924	3,999	1,378	876	1,670
2025-26	169	209	225	232	249	256	266	274	306	320	423	423	450	406	75	4,039	4,114	1,437	900	1,702
2026-27	164	213	227	237	235	269	267	291	288	318	457	433	415	451	75	4,101	4,176	1,448	897	1,756
2027-28	180	211	228	236	237	250	277	289	302	296	450	466	423	414	75	4,079	4,154	1,439	887	1,753
2028-29	177	214	228	240	238	254	260	303	302	312	419	460	456	423	75	4,109	4,184	1,434	917	1,758
2029-30	174	217	230	240	241	255	264	283	316	312	441	427	450	457	75	4,133	4,208	1,447	911	1,775
2030-31	172	216	231	240	239	256	263	285	294	324	438	450	416	449	75	4,101	4,176	1,445	903	1,753
2031-32	171	216	230	241	239	254	264	284	296	301	456	446	439	415	75	4,081	4,156	1,444	881	1,756
2032-33	172	216	230	240	240	254	262	285	295	303	422	465	435	438	75	4,085	4,160	1,442	883	1,760