



Fairfield Public Schools

Ten-Year Enrollment Projections 2018-19 to 2027-28

November 28, 2017



Projections Buildings Blocks

Starting Data

Critical to the overall accuracy of the projections, as each year builds upon the last

District Projections

**Town of
Fairfield
Births**

*Obtained from CT
DPH*

**Historic
Enrollment
Trends**

*Obtained from FPS
and CT SDE*

Individual School Projections

**Geolocated
Birth Data**

*Obtained from CT
DPH and address
matched*

**Geolocated
Enrollment
Data**

*Obtained from FPS
and address matched*

Projection Assumptions

Several projection models are developed by applying different persistency ratios to building blocks

**5-Year
Average**

**3-Year
Average**

**3-Year
Weighted**

Blended

Demographic and Housing Data

Used to inform model selection and birth projections

**Unemployment
(Town, Region)**

**Housing Permit
Activity**

**Home Sales
(1-family,
condos)**

**Women of Child-
Bearing Age +
Fertility Rates**

**Population
Projections &
Development
Capacity**



Projections Primer

Cohort Survival Method

- Based on Cohort Survival Methodology - Standard method for enrollment projections
- Methodology accepted by CSDE School Construction Projects (CGS 10-283)
- The Cohort Survival Methodology 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
- Developed High (Maximum), Medium (Best Fit), and Low (Minimum) set of projections with different assumptions for births, housing markets, economic conditions, and in-migration rates



Projections Primer

Persistency Ratios

- Persistency ratios are calculated from historic enrollment data to determine growth or loss in a class as it progresses through school system
- Persistency ratios 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
- Persistency Ratio of 1.0 means cohort size remains the same; 1.05 means the cohort size increases by 5%, or a cohort of 100 grows to 105 the following year
- Changes in population, housing stock and tenure, and economic conditions help explain persistency ratios



Persistence Ratios

Kindergarten through 12th Grade Persistence Ratios by School Year
2002-2003 to 2017-18

Year	Birth-K	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Est. of Migration
2002-03		1.0367	1.0127	1.0056	1.0030	1.0000	1.0123	0.9958	1.0000	0.9213	0.9715	0.9728	1.0109	0.27%
2003-04		1.0388	1.0105	0.9972	0.9834	0.9760	0.9871	1.0046	0.9789	0.9485	0.9984	0.9780	0.9795	-1.22%
2004-05		1.0013	1.0097	1.0013	0.9734	1.0154	1.0108	1.0174	1.0015	0.9497	0.9885	0.9836	1.0150	0.31%
2005-06	0.9558	1.0577	0.9899	0.9822	0.9948	0.9899	1.0097	1.0061	1.0043	0.9849	0.9652	0.9750	0.9799	-0.23%
2006-07	1.0579	1.0062	0.9839	1.0281	1.0209	1.0013	1.0174	0.9945	1.0000	0.9986	0.9508	1.0047	0.9778	1.06%
2007-08	1.0839	1.0328	1.0037	1.0366	1.0409	1.0233	1.0078	1.0114	1.0152	0.9985	0.9957	0.9919	0.9922	2.30%
2008-09	1.0370	1.0204	0.9929	1.0087	0.9951	1.0072	1.0094	1.0065	1.0282	0.9620	0.9803	0.9772	1.0163	0.87%
2009-10	1.1334	1.0166	1.0027	1.0119	1.0123	1.0024	1.0118	1.0146	1.0128	0.9822	0.9746	0.9969	1.0190	1.09%
2010-11	1.1017	1.0263	1.0125	1.0093	0.9941	1.0048	1.0049	0.9883	1.0026	0.9861	0.9832	0.9957	1.0233	0.04%
2011-12	1.1747	1.0208	0.9919	1.0025	1.0039	1.0035	1.0157	0.9951	1.0166	0.9727	0.9576	0.9986	1.0087	0.63%
2012-13	1.1197	1.0513	0.9860	1.0095	1.0123	1.0092	1.0141	1.0166	1.0085	0.9709	0.9906	1.0214	1.0242	1.18%
2013-14	1.2090	1.0293	1.0202	1.0052	1.0094	1.0049	1.0130	0.9873	1.0093	0.8936	0.9436	0.9932	0.9974	0.46%
2014-15	1.1726	1.0387	1.0114	1.0140	1.0064	1.0093	0.9806	1.0128	0.9988	0.9225	1.0014	1.0089	0.9959	0.35%
2015-16	1.2602	1.0102	1.0107	1.0267	1.0034	0.9885	1.0119	1.0087	1.0063	0.9201	0.9662	0.9919	0.9761	0.72%
2016-17	1.2693	1.0416	1.0130	1.0211	1.0068	1.0149	1.0168	1.0078	0.9877	0.9258	0.9949	1.0104	1.0313	0.91%
2017-18	1.3312	1.0515	1.0311	1.0242	0.9948	1.0109	1.0079	0.9886	1.0208	0.9466	0.9796	0.9949	1.0308	0.75%

- Relatively stable in-migration of between 0% and 1% over the last decade
- Rising Birth-K ratio indicates greater in-migration of young children prior to enrolling in kindergarten
 - Partially explained by smaller-than-average birth cohorts over the last few years



Projections Assumptions

High (Maximum)

Assumes immediate and sustained increase in home sales, rapid and sustained increase in births, and continued economic growth

No observed conditions indicate these assumed improvements are likely

- Assumes **23% increase** in births over the next 6 years
- Assumes **33% increase** in single-family home sales
- Assumes **30% reduction** in unemployment rate

Medium (Best)

Assumes status quo – moderate home sales, modest growth in births, and stable economic conditions

Best supported by demographic, economic, and housing data

- Assumes **10% increase** in births over the next 6 years
- Assumes **stable** single-family home sales
- Assumes **stable** unemployment rate

Low (Minimum)

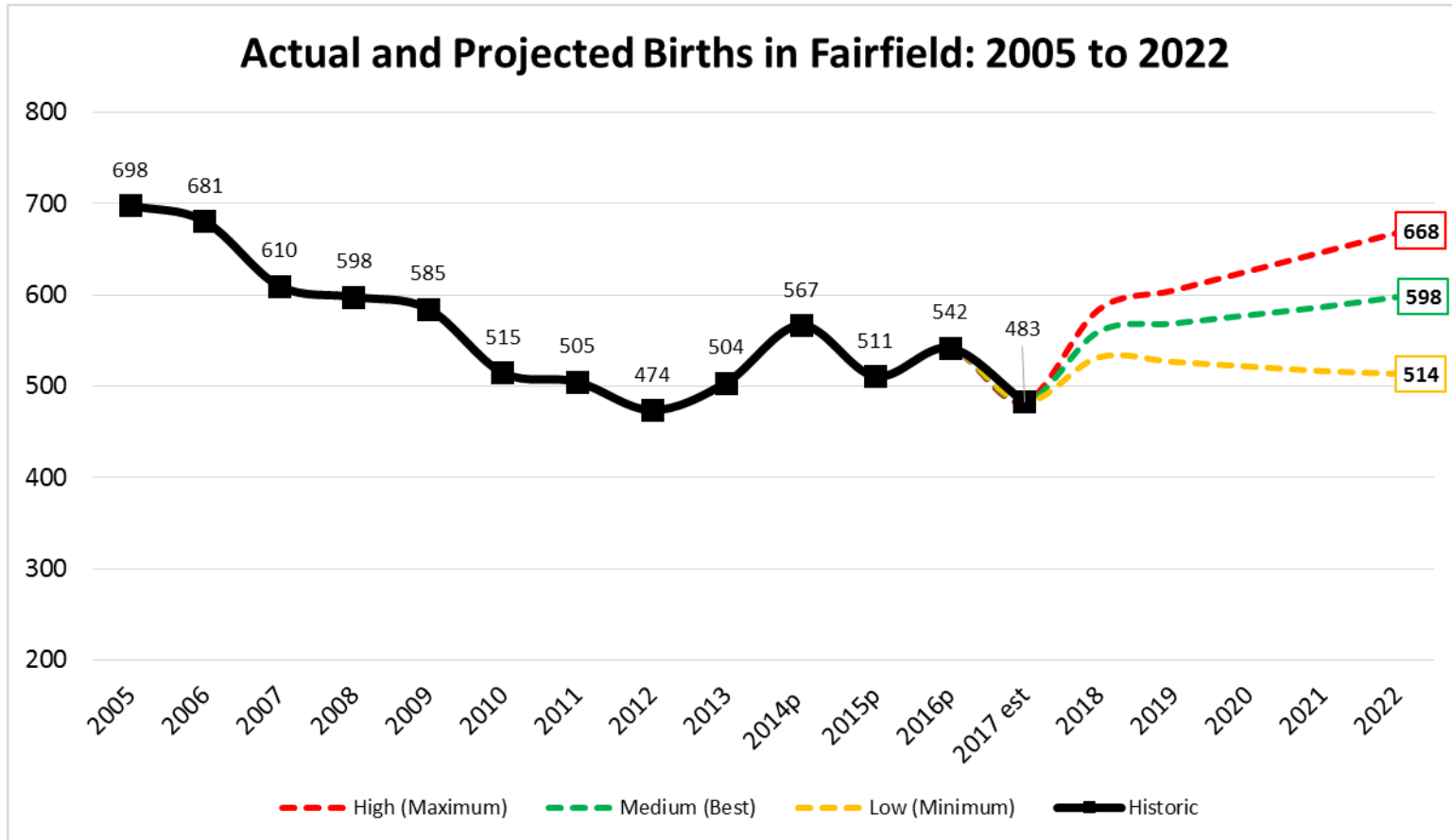
Assumes decrease in home sales, stagnant births, and worsening economic conditions

No observed conditions indicate these declines are likely

- Assumes **5% decrease** in births over the next 6 years
- Assumes **20% decrease** single-family home sales
- Assumes **50% increase** in unemployment rate



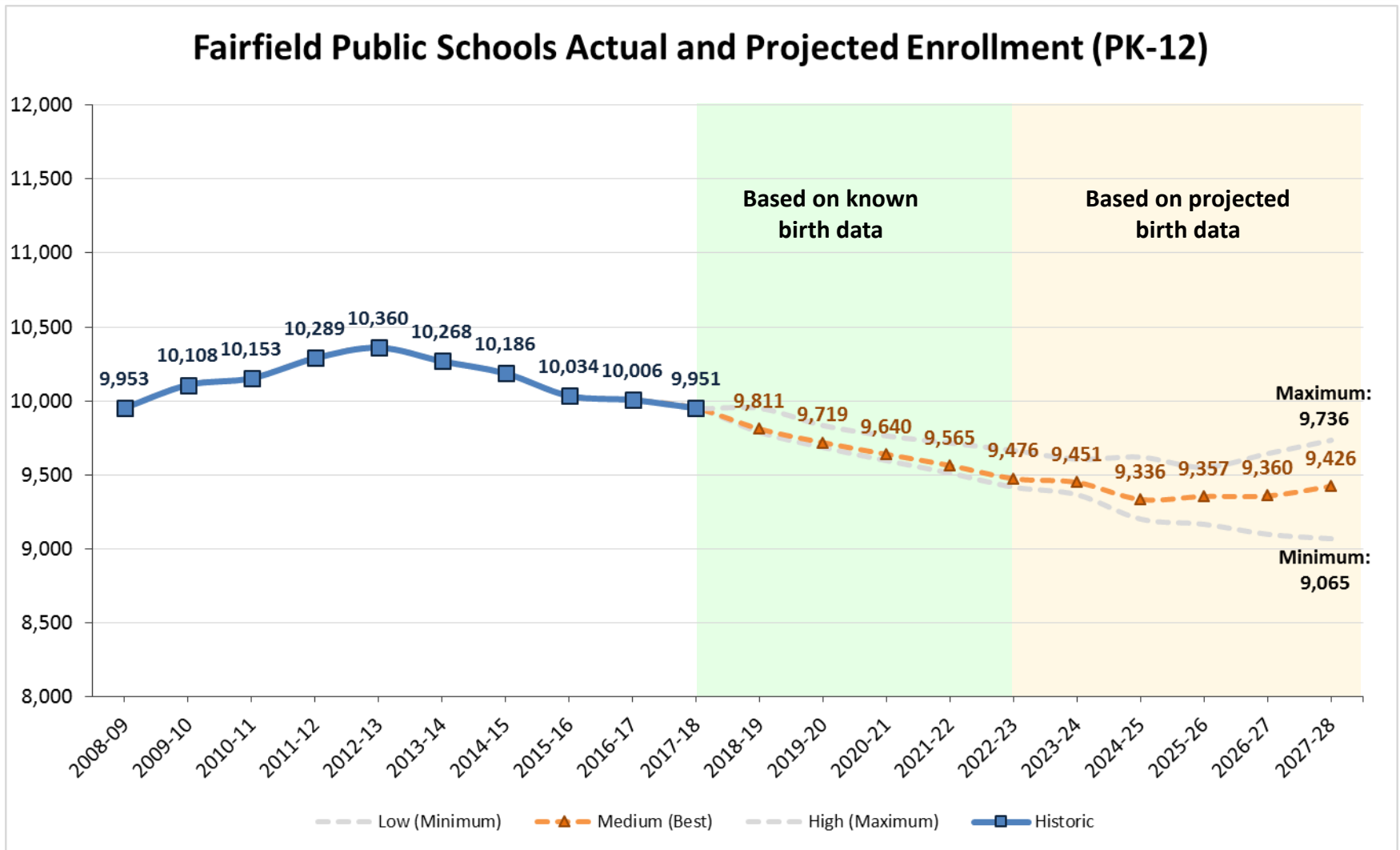
Birth Projections



High, medium, and low birth projections developed from regression models based on assumed unemployment rate and single-family home sales.



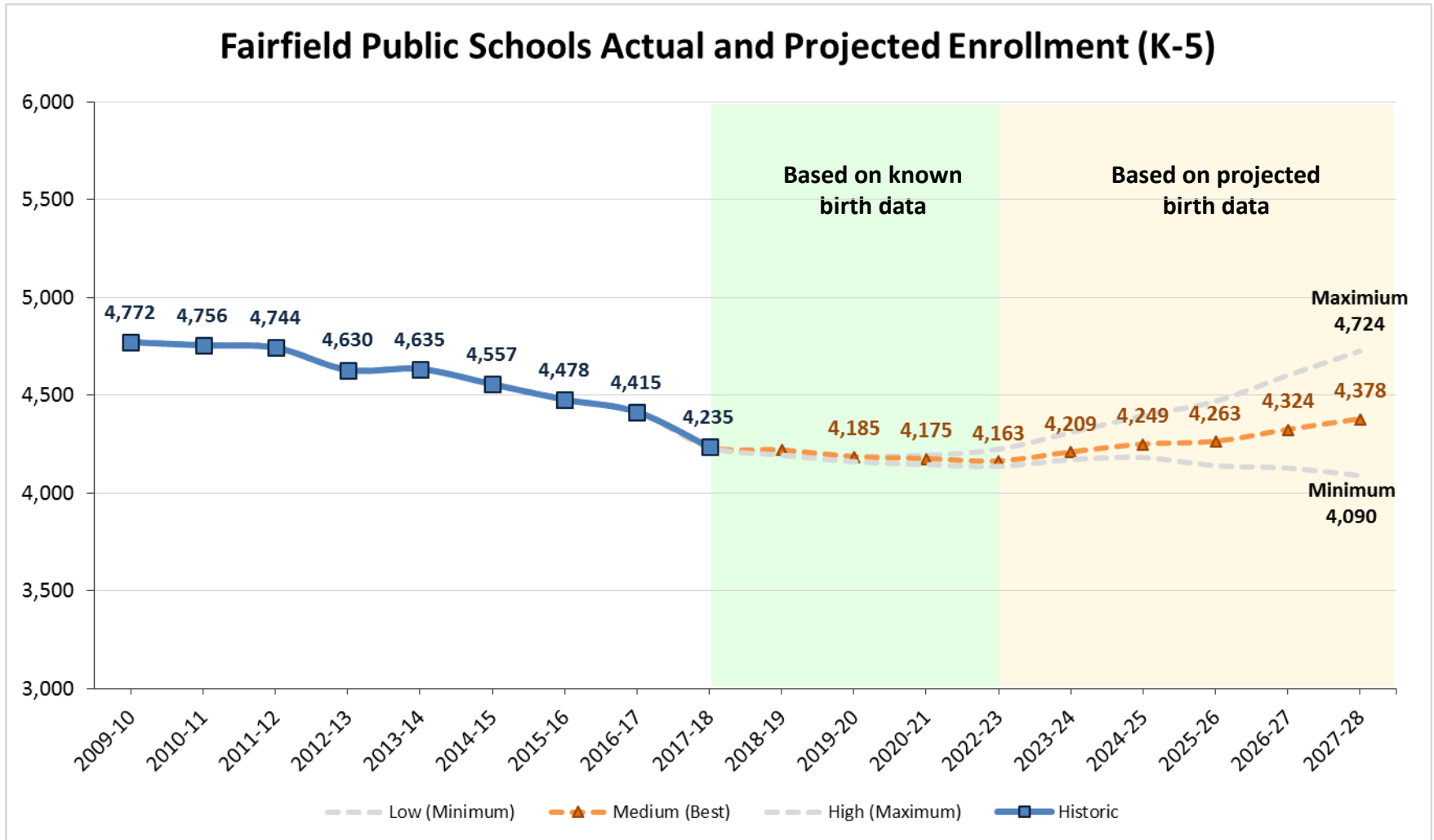
District Projections



Medium Projections are supported by demographic, housing, and economic data



K-5 Projections



Medium Projections are supported by demographic, housing, and economic data



District By-Grade Projections

Fairfield Public Schools Enrollment Projections by Grade: 2018-19 to 2027-28

School Year	Birth Yr	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	PK-12	K-5	6-8	9-12
2018-19	2013	504	655	661	689	713	720	781	752	891	781	726	744	721	780	197	9,811	4,219	2,424	2,971
2019-20	2014	567	691	677	673	706	714	724	790	754	895	720	709	744	725	197	9,719	4,185	2,439	2,898
2020-21	2015	511	658	714	689	689	707	718	733	792	758	825	703	709	748	197	9,640	4,175	2,283	2,985
2021-22	2016	542	676	680	727	706	690	711	727	734	796	699	806	703	713	197	9,565	4,190	2,257	2,921
2022-23	2017	483	628	699	692	744	707	693	720	728	738	734	683	806	707	197	9,476	4,163	2,186	2,930
2023-24	2018	560	683	649	712	709	745	711	701	721	732	680	717	683	811	197	9,451	4,209	2,154	2,891
2024-25	2019	569	694	706	661	729	710	749	720	702	725	675	664	717	687	197	9,336	4,249	2,147	2,743
2025-26	2020	578	705	718	719	677	730	714	758	721	706	668	659	664	721	197	9,357	4,263	2,185	2,712
2026-27	2021	587	716	729	731	736	678	734	723	760	725	651	653	659	668	197	9,360	4,324	2,208	2,631
2027-28	2022	598	729	740	742	749	737	681	743	724	764	668	636	653	663	197	9,426	4,378	2,231	2,620

Based on known birth data

Based on preliminary birth data

Based on projected births

Medium Projections Model



Elementary School Projections

K-5 Enrollment Projections, by School

School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Burr	378	367	364	364	355	357	358	359	369	369
Dwight	333	337	326	311	309	321	311	312	328	351
Holland Hill	375	385	388	384	397	403	407	402	400	404
Jennings	297	297	288	289	291	300	303	297	299	304
McKinley	432	424	415	420	395	408	408	410	416	418
Mill Hill	341	347	361	367	366	368	374	384	382	382
North Stratfield	379	374	373	386	389	384	391	390	390	392
Osborn Hill	401	381	370	376	378	372	379	384	396	399
Riverfield	417	420	426	441	455	455	461	461	469	462
Roger Sherman	469	471	486	473	453	465	469	465	471	482
Stratfield	397	382	378	379	375	376	388	399	404	415
Total	4,219	4,185	4,175	4,190	4,163	4,209	4,249	4,263	4,324	4,378

Medium (Best Fit) Projections Model

* Opt-in program influences the accuracy of the individual school projections at participating schools



Elementary School Projections

Fairfield Public Schools Elementary School Enrollment Projections 2018-19							
School	K	1	2	3	4	5	K-5th
Burr	59	59	66	66	57	71	378
Dwight	54	40	55	61	62	61	333
Holland Hill	64	61	49	71	67	63	375
Jennings	44	40	45	50	58	60	297
McKinley	67	56	93	68	71	77	432
Mill Hill	52	60	59	61	60	49	341
North Stratfield	57	68	57	55	68	74	379
Osborn Hill	60	73	60	59	65	84	401
Riverfield	65	74	59	74	74	71	417
Roger Sherman	70	64	84	86	67	98	469
Stratfield	63	66	62	62	71	73	397
TOTAL	655	661	689	713	720	781	4219

Fairfield Public Schools Elementary School Enrollment Projections 2019-20							
School	K	1	2	3	4	5	K-5th
Burr	60	60	60	66	65	56	367
Dwight	48	59	42	60	64	64	337
Holland Hill	73	62	62	51	70	67	385
Jennings	52	47	42	47	50	59	297
McKinley	67	67	58	93	67	72	424
Mill Hill	52	59	59	58	60	59	347
North Stratfield	63	58	70	59	55	69	374
Osborn Hill	66	61	71	59	60	64	381
Riverfield	74	67	76	59	71	73	420
Roger Sherman	79	76	66	91	90	69	471
Stratfield	57	61	67	63	62	72	382
TOTAL	691	677	673	706	714	724	4185

Fairfield Public Schools Elementary School Enrollment Projections 2020-21							
School	K	1	2	3	4	5	K-5th
Burr	52	61	62	61	65	63	364
Dwight	39	51	62	46	63	65	326
Holland Hill	70	70	64	64	50	70	388
Jennings	45	54	49	44	46	50	288
McKinley	66	66	69	58	90	66	415
Mill Hill	62	58	61	61	59	60	361
North Stratfield	63	65	59	71	59	56	373
Osborn Hill	55	67	59	71	59	59	370
Riverfield	68	76	69	79	61	73	426
Roger Sherman	72	84	76	67	92	95	486
Stratfield	66	62	59	67	63	61	378
TOTAL	658	714	689	689	707	718	4175

Fairfield Public Schools Elementary School Enrollment Projections 2021-22							
School	K	1	2	3	4	5	K-5th
Burr	61	53	63	63	60	64	364
Dwight	35	41	53	68	49	65	311
Holland Hill	65	67	72	66	64	50	384
Jennings	45	46	56	51	44	47	289
McKinley	69	65	69	71	57	89	420
Mill Hill	63	69	58	59	60	58	367
North Stratfield	63	64	68	61	70	60	386
Osborn Hill	67	56	65	59	71	58	376
Riverfield	79	70	78	72	80	62	441
Roger Sherman	70	77	86	77	68	95	473
Stratfield	59	72	59	59	67	63	379
TOTAL	676	680	727	706	690	711	4190



Elementary School Projections

Fairfield Public Schools Elementary School Enrollment Projections 2022-23							
School	K	1	2	3	4	5	K-5th
Burr	54	62	54	64	62	59	355
Dwight	46	37	44	59	72	51	309
Holland Hill	61	63	69	74	66	64	397
Jennings	43	46	48	59	50	45	291
McKinley	62	68	68	70	70	57	395
Mill Hill	54	70	69	57	57	59	366
North Stratfield	56	65	67	70	61	70	389
Osborn Hill	60	68	55	65	60	70	378
Riverfield	66	81	72	82	73	81	455
Roger Sherman	66	76	78	85	78	70	453
Stratfield	60	63	68	59	58	67	375
TOTAL	628	699	692	744	707	693	4163

Fairfield Public Schools Elementary School Enrollment Projections 2023-24							
School	K	1	2	3	4	5	K-5th
Burr	59	55	64	55	63	61	357
Dwight	49	49	39	48	62	74	321
Holland Hill	67	59	65	72	74	66	403
Jennings	48	44	48	50	59	51	300
McKinley	68	61	72	69	68	70	408
Mill Hill	58	61	70	67	56	56	368
North Stratfield	60	57	68	69	68	62	384
Osborn Hill	66	61	66	55	66	58	372
Riverfield	70	67	83	76	84	75	455
Roger Sherman	72	71	76	80	86	80	465
Stratfield	66	64	61	68	59	58	376
TOTAL	683	649	712	709	745	711	4209

Fairfield Public Schools Elementary School Enrollment Projections 2024-25							
School	K	1	2	3	4	5	K-5th
Burr	60	61	56	65	54	62	358
Dwight	50	51	51	44	51	64	311
Holland Hill	68	64	61	67	72	75	407
Jennings	48	48	46	50	50	61	303
McKinley	69	66	63	74	68	68	408
Mill Hill	59	65	61	68	66	55	374
North Stratfield	61	62	60	70	69	69	391
Osborn Hill	67	67	59	66	56	64	379
Riverfield	72	73	69	86	77	84	461
Roger Sherman	73	79	72	78	79	88	469
Stratfield	67	70	63	61	68	59	388
TOTAL	694	706	661	729	710	749	4249

Fairfield Public Schools Elementary School Enrollment Projections 2025-26							
School	K	1	2	3	4	5	K-5th
Burr	61	61	63	57	64	53	359
Dwight	50	53	54	57	46	52	312
Holland Hill	69	65	66	63	67	72	402
Jennings	49	49	50	48	50	51	297
McKinley	69	68	70	63	72	68	410
Mill Hill	60	67	65	60	67	65	384
North Stratfield	62	63	64	62	69	70	390
Osborn Hill	69	69	65	59	67	55	384
Riverfield	73	74	75	72	89	78	461
Roger Sherman	74	78	80	73	78	82	465
Stratfield	69	71	67	63	61	68	399
TOTAL	705	718	719	677	730	714	4263



Elementary School Projections

Fairfield Public Schools Elementary School Enrollment Projections 2026-27							
School	K	1	2	3	4	5	K-5th
Burr	62	63	63	63	55	63	369
Dwight	51	54	56	60	59	48	328
Holland Hill	70	65	67	69	62	67	400
Jennings	49	49	50	53	47	51	299
McKinley	71	68	71	71	63	72	416
Mill Hill	61	67	67	63	58	66	382
North Stratfield	63	64	66	66	61	70	390
Osborn Hill	69	70	67	65	59	66	396
Riverfield	74	75	76	78	76	90	469
Roger Sherman	76	80	79	81	75	80	471
Stratfield	70	74	69	67	63	61	404
TOTAL	716	729	731	736	678	734	4324
Fairfield Public Schools Elementary School Enrollment Projections 2027-28							
School	K	1	2	3	4	5	K-5th
Burr	63	63	64	64	61	54	369
Dwight	52	55	57	63	63	61	351
Holland Hill	70	67	67	69	69	62	404
Jennings	50	49	51	53	53	48	304
McKinley	72	69	72	72	70	63	418
Mill Hill	63	68	67	65	62	57	382
North Stratfield	65	65	66	68	65	63	392
Osborn Hill	70	70	68	67	66	58	399
Riverfield	75	76	77	79	80	75	462
Roger Sherman	79	83	82	80	81	77	482
Stratfield	70	75	71	69	67	63	415
TOTAL	729	740	742	749	737	681	4378



Middle School Projections

Middle School Projected Enrollment

School	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Fairfield Woods	941	921	908	835	806	738	727	729	786	784	803
Roger Ludlowe	861	846	883	826	850	852	848	840	850	867	866
Tomlinson	656	657	648	622	601	596	577	578	549	557	562
District Total	2,458	2,424	2,439	2,283	2,257	2,186	2,154	2,147	2,185	2,208	2,231

Medium (Best Fit) projections model



Middle School Projections

Fairfield Woods Middle School

Year	Grade			6-8
	6	7	8	Total
2017-18	343	304	294	941
2018-19	273	341	307	921
2019-20	292	272	344	908
2020-21	269	291	275	835
2021-22	244	268	294	806
2022-23	224	243	271	738
2023-24	259	222	246	727
2024-25	246	258	225	729
2025-26	280	245	261	786
2026-27	258	278	248	784
2027-28	264	257	282	803

Roger Ludlowe Middle School

Year	Grade			6-8
	6	7	8	Total
2017-18	327	247	287	861
2018-19	272	327	247	846
2019-20	282	274	327	883
2020-21	268	284	274	826
2021-22	297	269	284	850
2022-23	284	299	269	852
2023-24	264	285	299	848
2024-25	289	265	286	840
2025-26	294	291	265	850
2026-27	280	296	291	867
2027-28	287	282	297	866

Tomlinson Middle School

Year	Grade			6-8
	6	7	8	Total
2017-18	223	227	206	656
2018-19	207	223	227	657
2019-20	216	208	224	648
2020-21	196	217	209	622
2021-22	186	197	218	601
2022-23	212	186	198	596
2023-24	178	212	187	577
2024-25	185	179	214	578
2025-26	184	185	180	549
2026-27	185	186	186	557
2027-28	192	185	185	562

Medium (Best Fit) projections model



High School Projections

High School Projected Enrollment

School	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Fairfield Warde	1,507	1,455	1,425	1,456	1,420	1,433	1,386	1,304	1,285	1,233	1,212
Fairfield Ludlowe	1,523	1,485	1,442	1,498	1,470	1,466	1,474	1,408	1,396	1,367	1,377
Alternative Ed.	31	31	31	31	31	31	31	31	31	31	31
District Total	3,061	2,971	2,898	2,985	2,921	2,930	2,891	2,743	2,712	2,631	2,620

Medium (Best Fit) projections model

* Assumes that Alternative High School enrollment remains the same as 2017-18 levels over the next ten years



High School Projections

Fairfield Warde High School

Year	Grade				9-12
	9	10	11	12	Total
2017-18	376	351	389	391	1,507
2018-19	349	365	349	392	1,455
2019-20	373	339	363	350	1,425
2020-21	391	364	336	365	1,456
2021-22	341	380	361	338	1,420
2022-23	360	332	378	363	1,433
2023-24	328	349	329	380	1,386
2024-25	307	319	347	331	1,304
2025-26	321	298	317	349	1,285
2026-27	306	313	296	318	1,233
2027-28	306	298	310	298	1,212

Fairfield Ludlowe High School

Year	Grade				9-12
	9	10	11	12	Total
2017-18	381	368	376	398	1,523
2018-19	372	377	362	374	1,485
2019-20	342	368	371	361	1,442
2020-21	429	337	363	369	1,498
2021-22	353	424	332	361	1,470
2022-23	369	349	418	330	1,466
2023-24	347	366	344	417	1,474
2024-25	363	343	360	342	1,408
2025-26	342	359	337	358	1,396
2026-27	340	338	353	336	1,367
2027-28	357	336	333	351	1,377

Medium (Best Fit) projections model