

Update to Demographic Study and Enrollment Projections

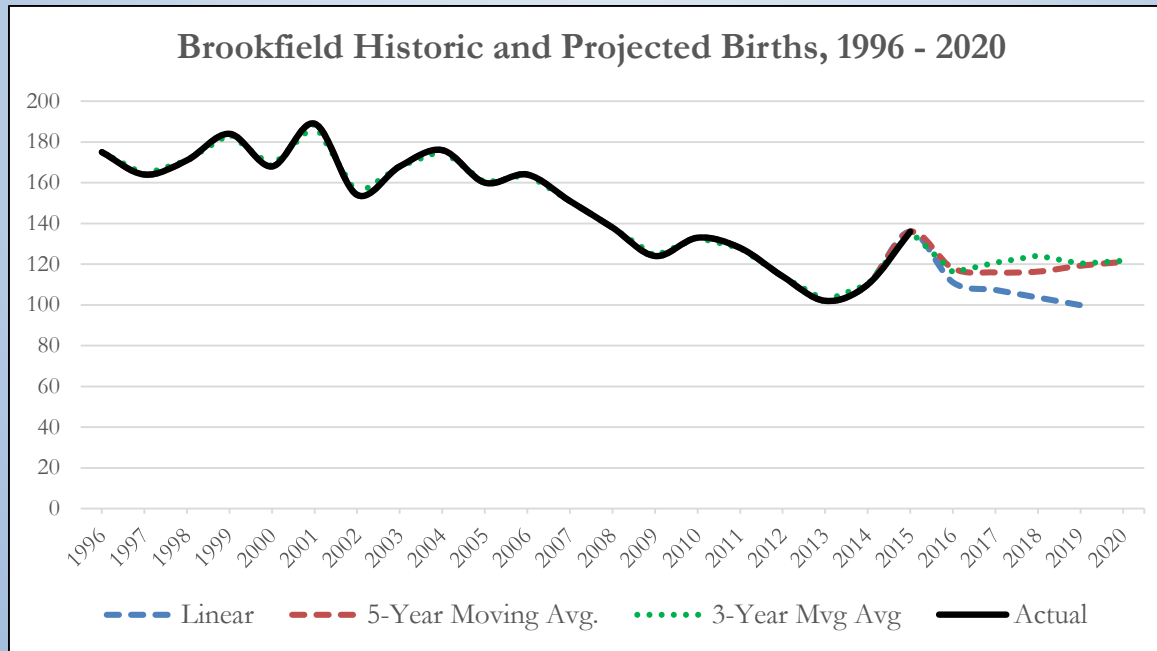
August 2016

Introduction

- Updated Key Data Points Since June 2015 Enrollment Analysis and Projections
- Updated Enrollment Projections
- Projections Continue to Show Enrollment Decline, But At Moderated Level

Updated Birth Projections

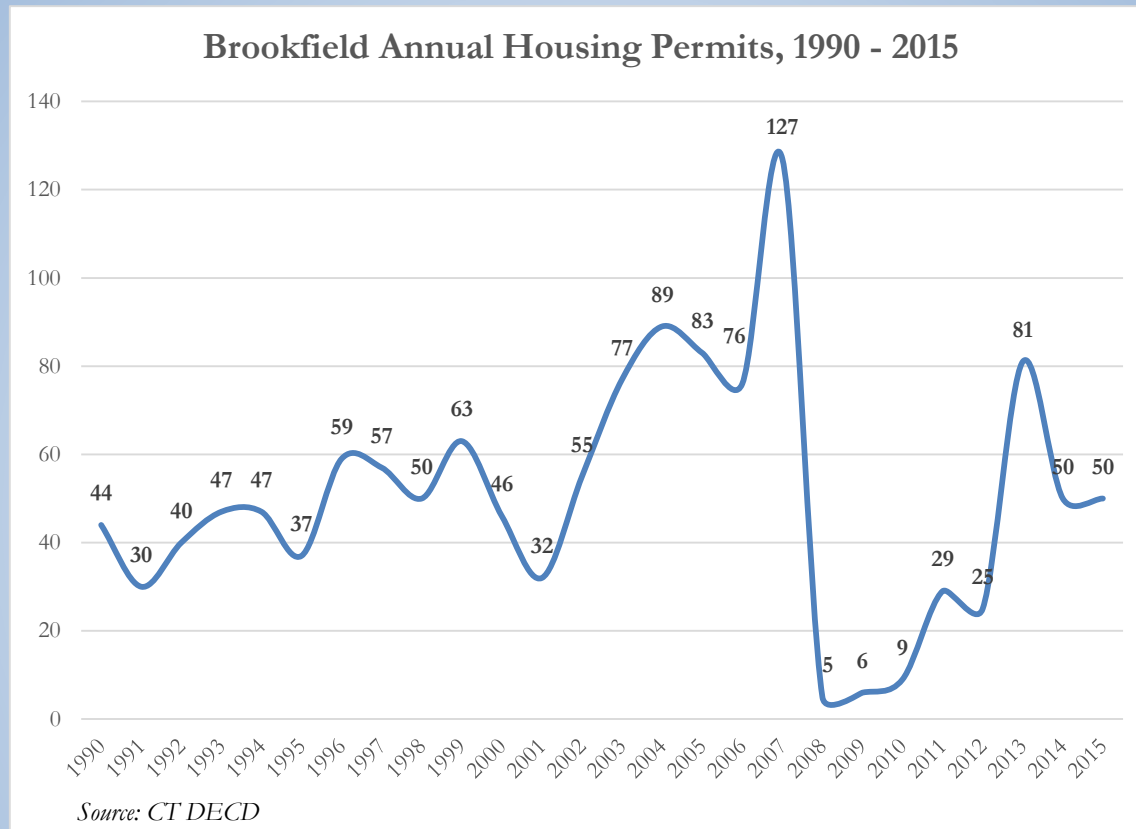
- 2015 Preliminary Births Data Shows Significant Increase
- Historically, Significant Spikes in a Birth Year Have Not Been Sustained
- Projecting Births Higher than Previous Enrollment Projections, But Still 25% Below Births of 10 Years Ago



Housing Change Review

- **New Developments Geared Towards Seniors, and Are Less Attractive to Families (1-2 bedroom apartments)**
- **Availability of Units Appropriate for Downsizing Older Householders May Be Precipitating Turnover in Existing Housing**
- **Upticks in Single-Family Housing Sales Could Bring Student In-Migration**
- **Anecdotal Information from Local Realtors Indicates a Mix of Local Residents and Area Non-Residents Moving to New Developments**

Housing Permits



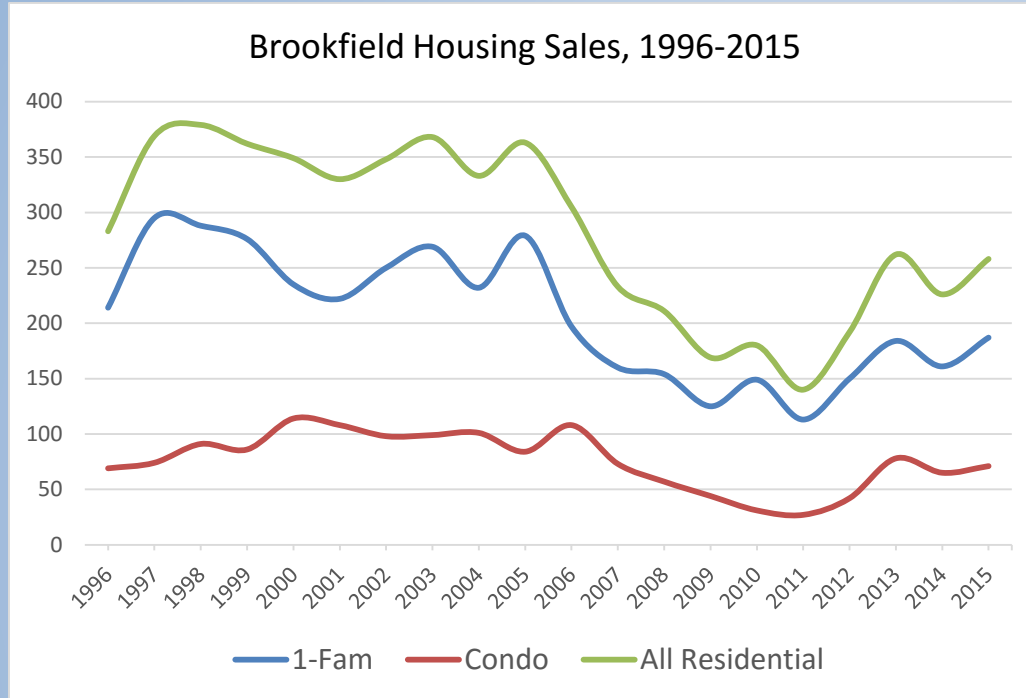
- Annual New Residential Construction Permits Rebounded Strongly in 2013
- Relatively Strong 2014 and 2015 Permitting Activity

Residential Developments

- Consulted with Brookfield Town Planner to Assess Anticipated/ Recent Residential Developments
- Total of About 1,100 Units Approved, Under Construction, or Built in Recent Years

Recent and Approved Residential Developments			
Name	Location	Units	Current Status
Oak Meadows	546 Federal Road	125 townhomes	~60 units built, new units under construction
Mill River Views	793 Federal Road	22 condos	Built
Riverview Townhouses	871 Federal Road	42 townhomes and condos	Built
Residences at Laurel Hill	40 & 64 Laurel Hill	72 apartments	Built
Brookfield Village	802 & 806 Federal Road	72 apartments (36 1-bedroom, 36 2-bedroom)	Approved
Greene Acres	857 Federal Road	100 apartments (1-2 bedrooms)	Approved
Newbury Village	901 Federal Road	119 condos	~90% built
Barnbeck Place	398 Federal Road	165 apartments	Under construction, ~80% complete
101, 103 & 105 Laurel Hill		98 apartments	Approved
The Renaissance	777 Federal Rd.	120 apartments (studio, 1-2 bedrooms) – 12 affordable	Approved
The Enclave	854-874 Federal Rd.	181 apartments (1-3 bedrooms) – 55 affordable	Approved

Housing Sales

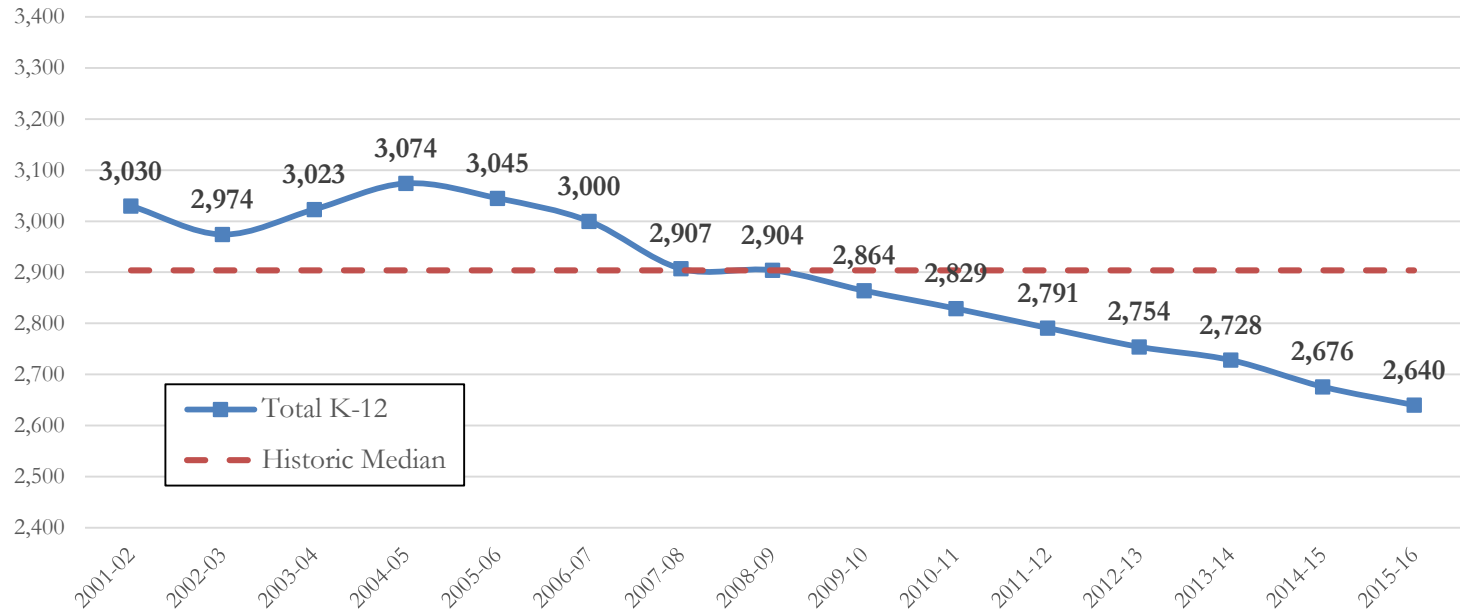


Year	Period	1-Fam	Condo	All
2012	Jan - Jun	62	21	83
2013	Jan - Jun	64	24	88
2014	Jan - Jun	73	34	107
2015	Jan - Jun	70	34	104
2016	Jan - Jun	85	31	116

- Housing Sales Rebound Continues
- 2016 Looks On Pace for Increased Sales of Single-Family

Enrollment Trends

Total (K-12) Historic Enrollments
Brookfield Public Schools

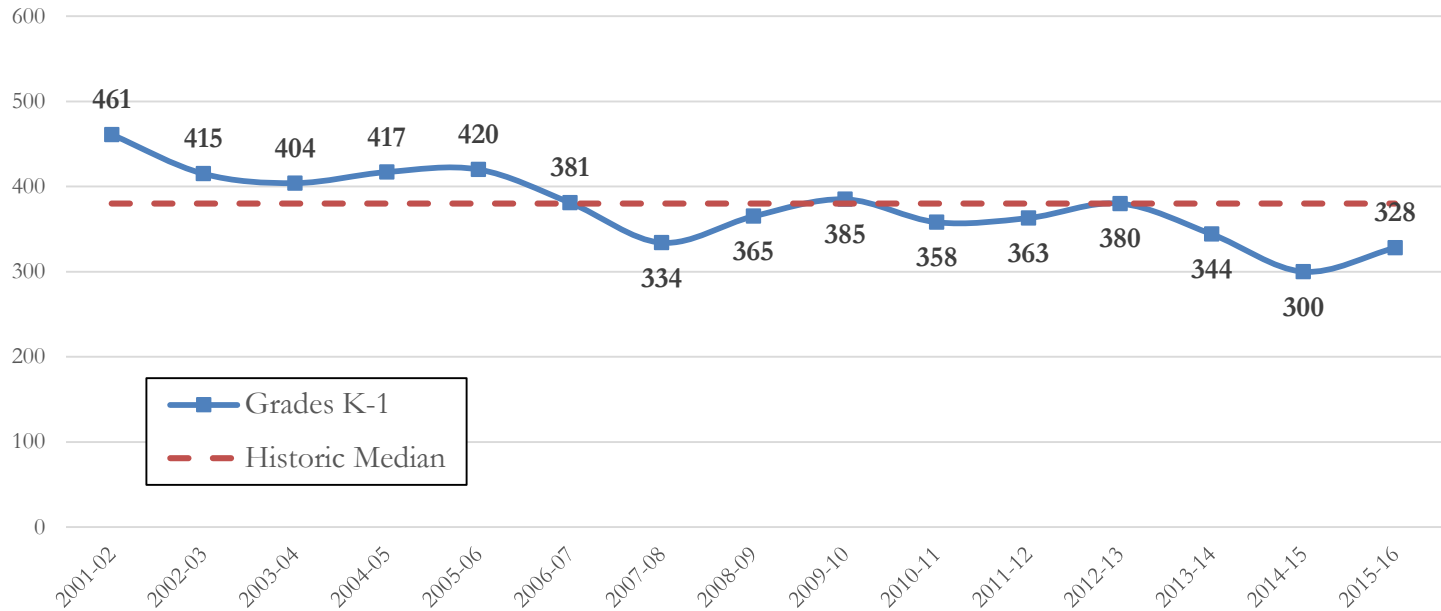


Sources: CT Dept. of Education CeDar and Brookfield Public Schools

- In 2014, Projected 2.9% Decline by 2015-16
- Actual Decline Was 3.2% (Projections Were Off by 5 Students or 0.2%)

Enrollment Trends

Center Elementary (K-1) Historic Enrollments
Brookfield Public Schools

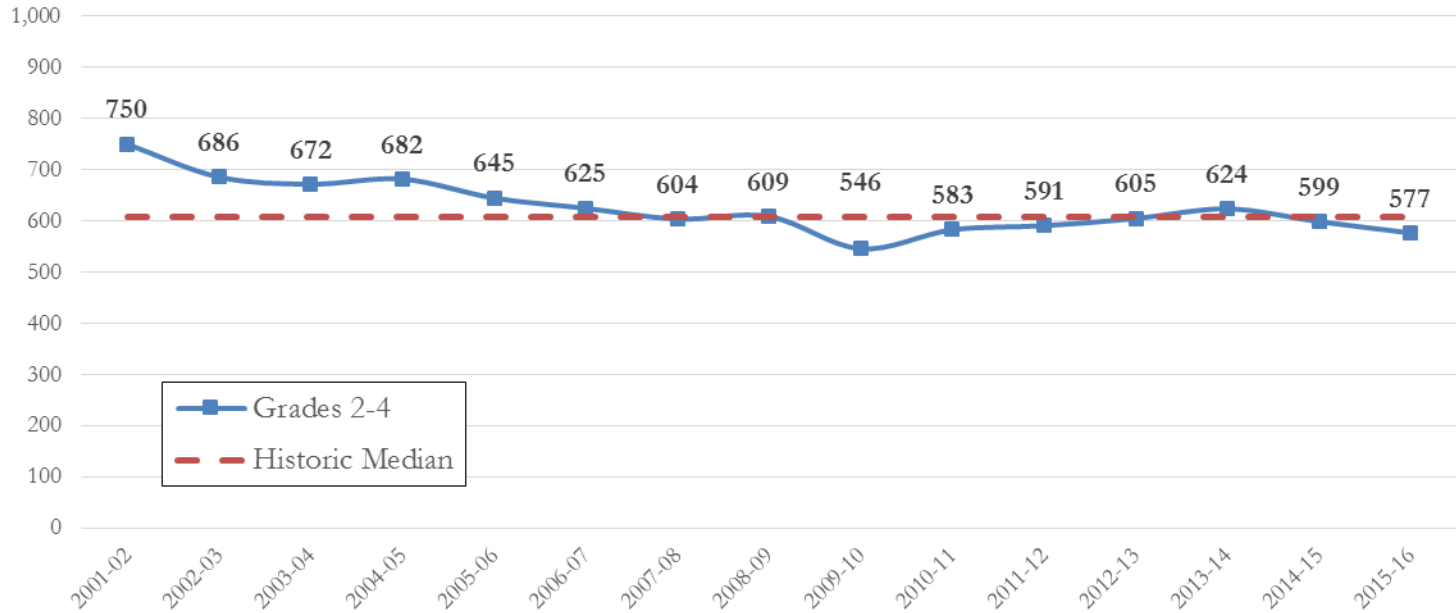


Sources: CT Dept. of Education CeDar and Brookfield Public Schools

- Recent Downward Trend Reversed in 2015-16, Due to Larger Kindergarten Class Coupled with a 10% Increase in K-1 Persistency

Enrollment Trends

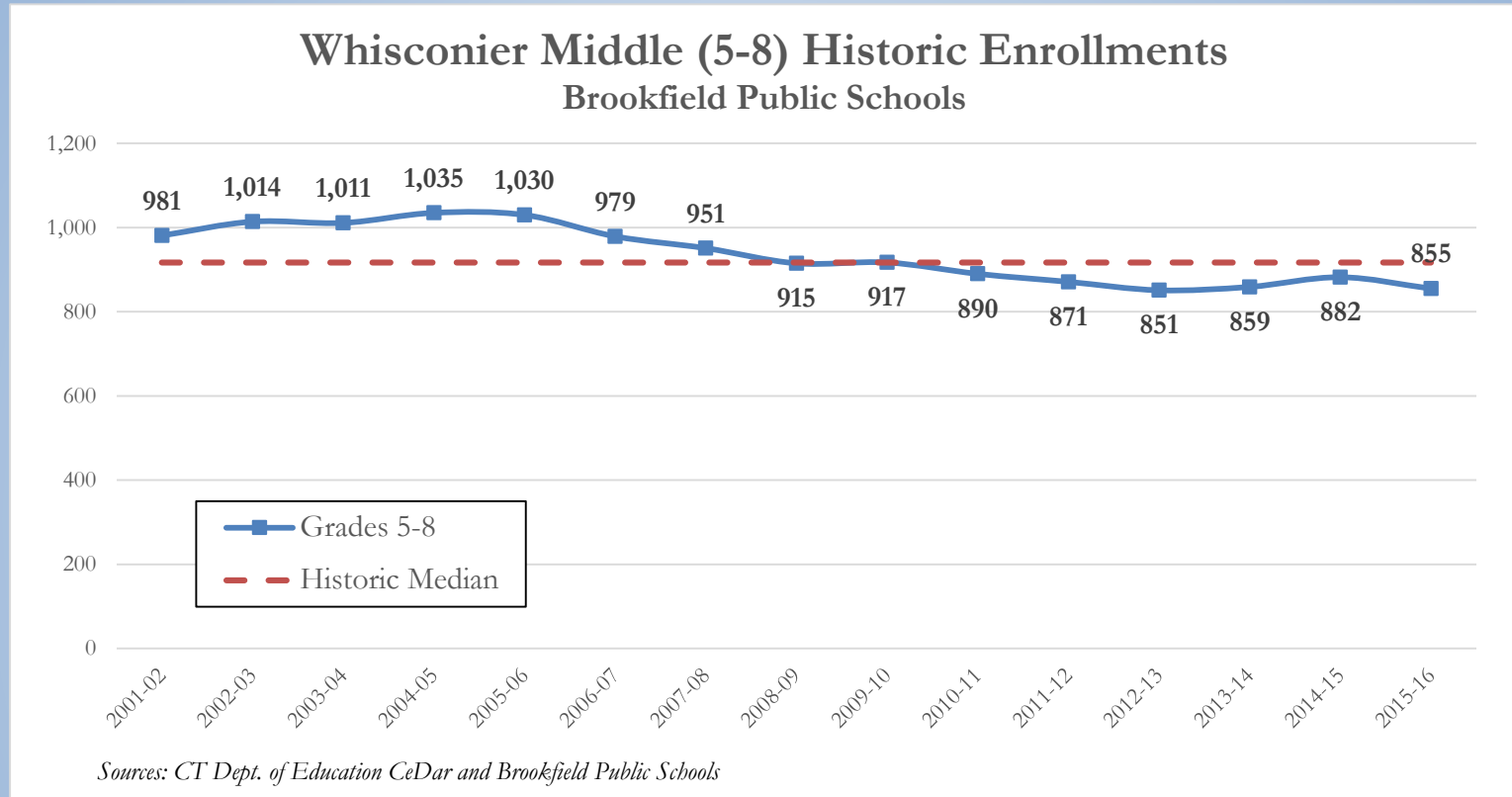
Huckleberry Hill Elementary (2-4) Historic Enrollments
Brookfield Public Schools



Sources: CT Dept. of Education CeDar and Brookfield Public Schools

➤ Gradual Decline Last Two Years

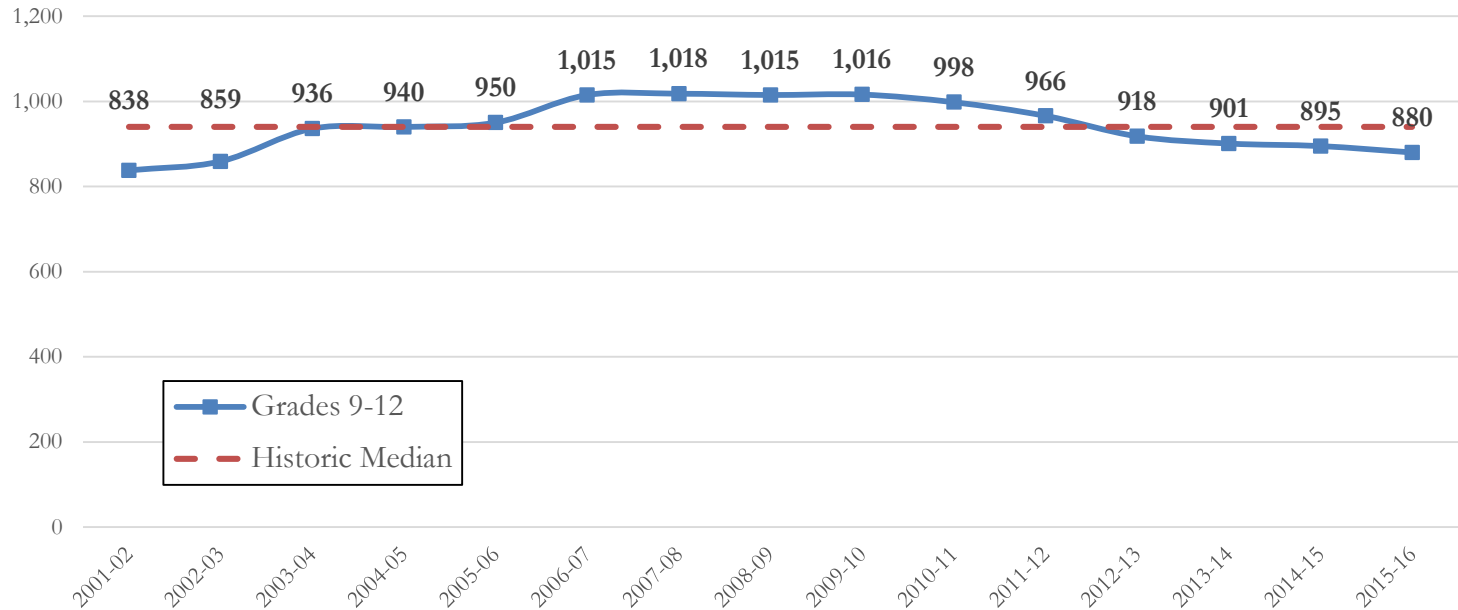
Enrollment Trends



➤ Relatively Stable Enrollments Last Five Years

Enrollment Trends

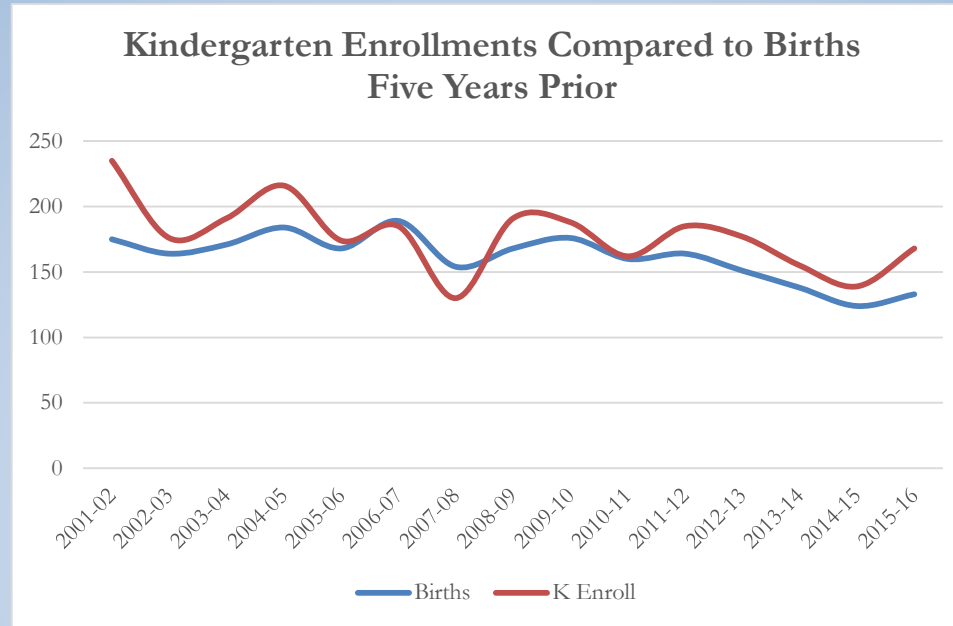
Brookfield High (9-12) Historic Enrollments
Brookfield Public Schools



Sources: CT Dept. of Education CeDar and Brookfield Public Schools

➤ Gradual Decline Last Five Years

Cohort Trends



- Birth to K Ratio Has Historically Varied
- Stable 2011-12 to 2014-15
- Uptick in 2015-16 – Difficult to Determine Whether New Trend, or Anomaly

Other Enrollments

- **Incomplete 2014-15 Data Available from CT State Dept. of Education**
 - **Appears Decline in Private/ Parochial School Enrollment Has Stabilized**
 - **Magnet School and Vo-Tech Enrollments Assumed to Be Stable**

Updated Persistency Ratios

Kindergarten through 12th Grade Persistency Ratios by School Year
2002-03 to 2015-16

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	Migration Estimate
2002-03	1.0732	1.0170	0.9779	0.9874	0.9914	1.0036	0.9922	1.0000	0.9748	0.9333	0.9544	0.9833	0.9713	-0.80%
2003-04	1.1170	1.2102	0.9121	1.0000	0.9915	0.9957	1.0249	0.9647	1.0081	1.0259	1.0759	1.0304	0.9322	-0.20%
2004-05	1.1739	1.0524	0.9671	1.1101	1.0588	1.0687	1.0393	1.0278	1.0244	0.9960	1.0630	0.8880	0.9536	5.30%
2005-06	1.0357	1.1389	0.9701	1.0146	0.9959	1.0427	0.9960	1.0420	0.9797	1.0198	1.0040	0.9368	0.9720	1.02%
2006-07	0.9788	1.1264	0.9431	0.9744	0.9713	0.9751	1.0000	1.0161	1.0000	0.9655	1.0078	0.9798	0.9831	-0.94%
2007-08	0.8442	1.1027	0.9133	0.9871	1.0316	1.0345	1.0170	1.0000	1.0238	1.0444	0.9714	0.9537	0.9877	1.47%
2008-09	1.1369	1.3385	0.9412	1.0615	0.9913	1.0459	1.0381	1.0293	1.0082	0.9574	1.0077	0.9816	0.9717	2.70%
2009-10	1.0682	1.0314	0.8908	1.0417	1.0053	1.0176	1.0341	1.0505	0.9959	0.9715	0.9960	0.9885	1.0225	2.35%
2010-11	1.0125	1.0426	1.0508	1.0774	1.0450	1.0471	1.0390	1.0094	1.0306	0.9918	1.0209	1.0366	0.9922	3.94%
2011-12	1.1280	1.0988	1.0612	1.0048	1.0479	1.0191	1.0400	0.9917	0.9907	0.9746	0.9835	1.0000	0.9922	1.37%
2012-13	1.1722	1.0973	1.0225	1.0048	1.0288	1.0000	1.0423	1.0192	1.0168	0.9858	1.0043	0.9707	1.0082	1.92%
2013-14	1.1232	1.0678	1.0591	1.0440	1.0478	1.0561	1.1086	1.0180	1.0047	0.9298	1.0239	1.0043	0.9914	4.45%
2014-15	1.1210	1.0387	1.0000	1.0279	0.9947	1.0183	1.0575	1.0103	0.9912	1.0282	1.0133	1.0047	1.0043	1.73%
2015-16	1.2632	1.1511	1.0311	0.9841	1.0181	1.0106	1.0090	1.0000	1.0204	0.9509	0.9909	1.0132	1.0186	0.72%
Long Term Avg.	1.0891	1.1081	0.9814	1.0228	1.0157	1.0239	1.0313	1.0128	1.0049	0.9839	1.0084	0.9837	0.9858	
5-Year Avg.	1.1615	1.0907	1.0348	1.0131	1.0275	1.0208	1.0515	1.0078	1.0047	0.9738	1.0032	0.9986	1.0029	
3-Year Avg.	1.1691	1.0859	1.0301	1.0187	1.0202	1.0283	1.0584	1.0094	1.0054	0.9696	1.0094	1.0074	1.0048	
3-yr wgt	1.1924	1.0997	1.0254	1.0087	1.0153	1.0207	1.0418	1.0064	1.0080	0.9731	1.0039	1.0089	1.0093	
2-Yr Wgt Avg.	1.1217	1.0484	1.0197	1.0333	1.0124	1.0309	1.0745	1.0129	0.9957	0.9954	1.0169	1.0046	1.0000	

Source: Calculated by MMI from State Department of Education, Public School Information System (2001-2012), Brookfield School District (2012-13 through 2014-15 enrollments), and CT Department of Public Health (CT DPH) Birth Data. This study was approved by the DPH HIC. Certain data used in this study were obtained from DPH. MMI assumes full responsibility for analyses and interpretation of this data.

- Significant Increases in Both Birth-K and K-1 Persistencies
- Decline in Migration Estimate

Projection Methodology

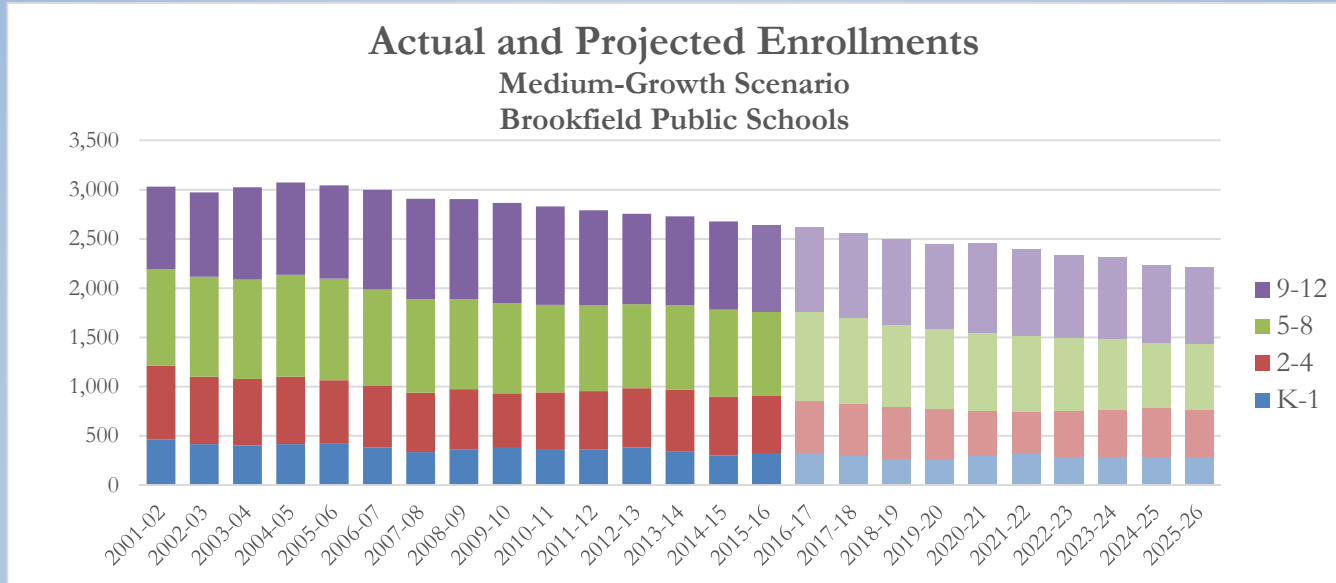
- The cohort survival methodology relies on observed data from the recent past in order to project the near future
- Persistency Ratios calculated from historic enrollment data to determine growth or loss in a class as it progresses through school system
- Persistency Ratios account for the various external factors affecting enrollments: housing characteristics, residential development, economic conditions, student transfers in and out of system, and student mobility
- Changes in population, housing stock and tenure, and economic conditions help explain persistency ratios
- Recent instability in economic climate adds variability to enrollments, births, and residential mobility

Projection Assumptions

- Projections based on:
 - 3-Year Average Persistency Ratios Across All Grade Cohorts, As Used in Previous Projections
 - 5-Year Moving Average Birth Projections
 - Constant PK Enrollment of 42
 - No Change in Current Program Deployment

**Caveat: Rise in Birth-K Ratio Bears Watching,
Given Housing Sales and Construction Trends**
– Not Enough Information to Alter
Assumptions At This Time

District Projections



- Updated Projections Show a Slightly Moderated Decline in Total Enrollment Over Ten-Year Horizon (-16.3%)
- Elementary (K-4) Enrollments Anticipated to Begin Recovery in 2022-23
- Middle (5-8) Projected to Increase Slightly Before Beginning Significant Decline in 2018-19
- High School Enrollments Fluctuate Between 850 and 900 Before Beginning Period of Decline in 2021-22

District Projections

School Year	Birth Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	PK-12 Total	K-12 Total	K-1 Total	2-4 Total	5-8 Total	9-12 Total
2015-16	2010	133	168	160	166	186	225	191	225	239	200	213	217	231	219	40	2,680	2,640	328	577	855	880
2016-17	2011	128	150	182	165	169	190	231	202	227	240	194	215	219	232	42	2,658	2,616	332	524	901	860
2017-18	2012	114	133	162	188	168	173	195	245	204	228	233	196	217	220	42	2,603	2,561	296	528	872	865
2018-19	2013	102	119	145	167	191	171	177	207	247	205	221	235	197	218	42	2,544	2,502	264	530	836	871
2019-20	2014	110	129	129	149	171	195	176	188	208	249	199	223	237	198	42	2,493	2,451	258	515	821	857
2020-21	2015	136	159	140	133	152	174	201	186	190	210	241	201	225	238	42	2,491	2,449	299	459	786	905
2021-22	2016	118	138	173	144	136	155	179	213	188	191	203	243	202	226	42	2,432	2,390	311	435	770	875
2022-23	2017	116	136	150	178	147	139	159	189	215	189	185	205	245	203	42	2,381	2,339	285	463	752	838
2023-24	2018	116	136	147	154	181	149	143	169	191	216	183	186	207	246	42	2,351	2,309	283	485	718	823
2024-25	2019	119	139	148	152	157	185	154	151	170	192	209	185	188	208	42	2,280	2,238	287	494	667	790
2025-26	2020	121	142	151	152	155	160	190	163	152	171	186	211	187	189	42	2,251	2,209	293	467	676	773