



Cheshire Public Schools

Revised Enrollment Projections
And School Capacities

October 21, 2020



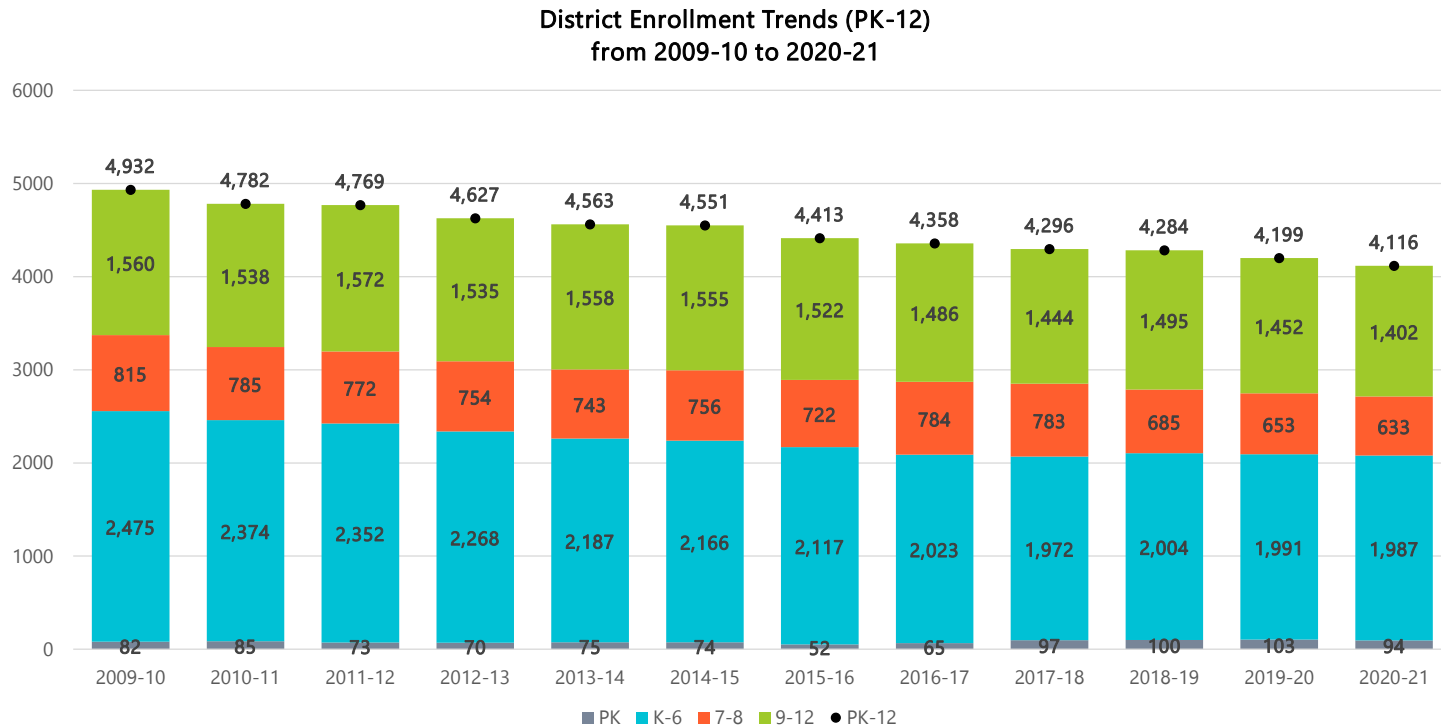


Contents

- Projections Recap
- School Capacity and Utilization



Enrollment Trends: District



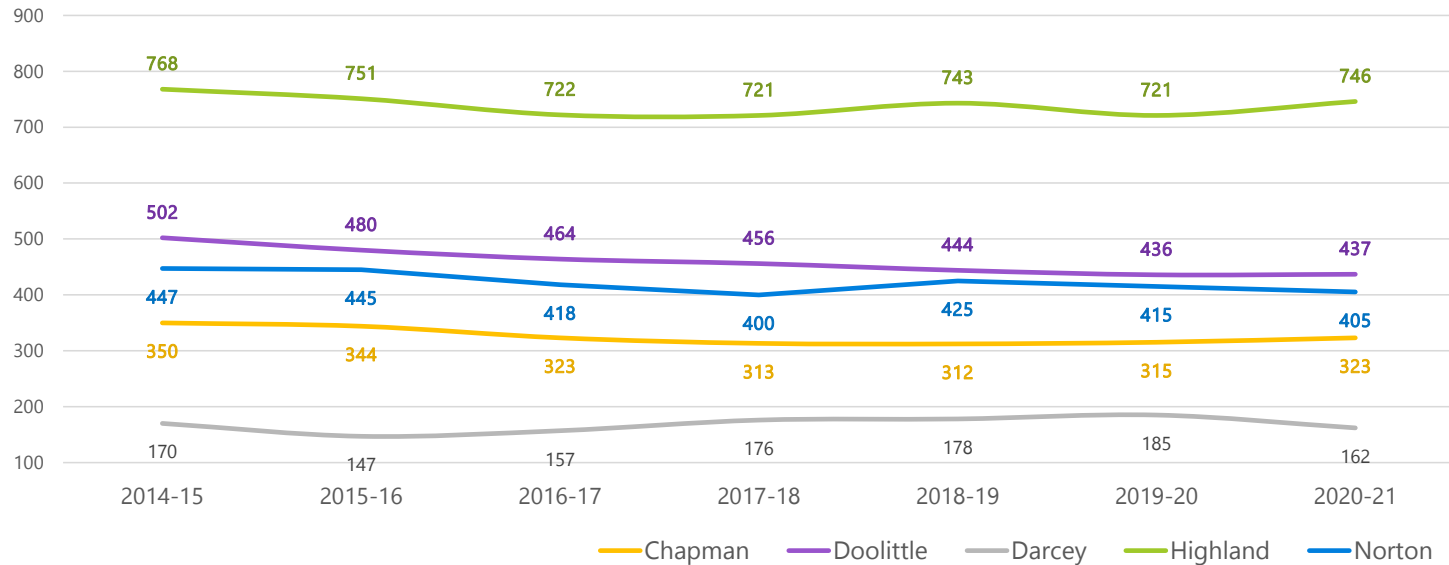
Source: EdSight and CPS for 2020-21

- Updated 2020-21 numbers
- Despite pandemic, many similar patterns in enrollment trends



Enrollment Trends: Elementary

Elementary School Enrollment
2014-15 to 2020-21



Source: EdSight, Cheshire Public Schools

Doolittle grades 1-6; Chapman, Highland, Norton grades K-6; Darcey grades PK-K

2020-21 data is estimated as of September 2020, and includes an assumed 100 PK at Darcey

- Pre-pandemic, elementary school enrollments had declined by 165 students or 7% between 2014-15 and 2019-20
 - Above numbers do not reflect autism program at Highland or Bridges program at Doolittle
 - Enrollment at Chapman and Doolittle decreased most significantly by 10% and 13% respectively
 - Enrollment at Highland and Norton decreased by 6% and 7% respectively
 - Increase in PreK largely responsible for growth at Darcey, down this year (delayed enrollment, home-schooling or private schooling of youngest cohorts seen around the state this year)



Persistence Ratios

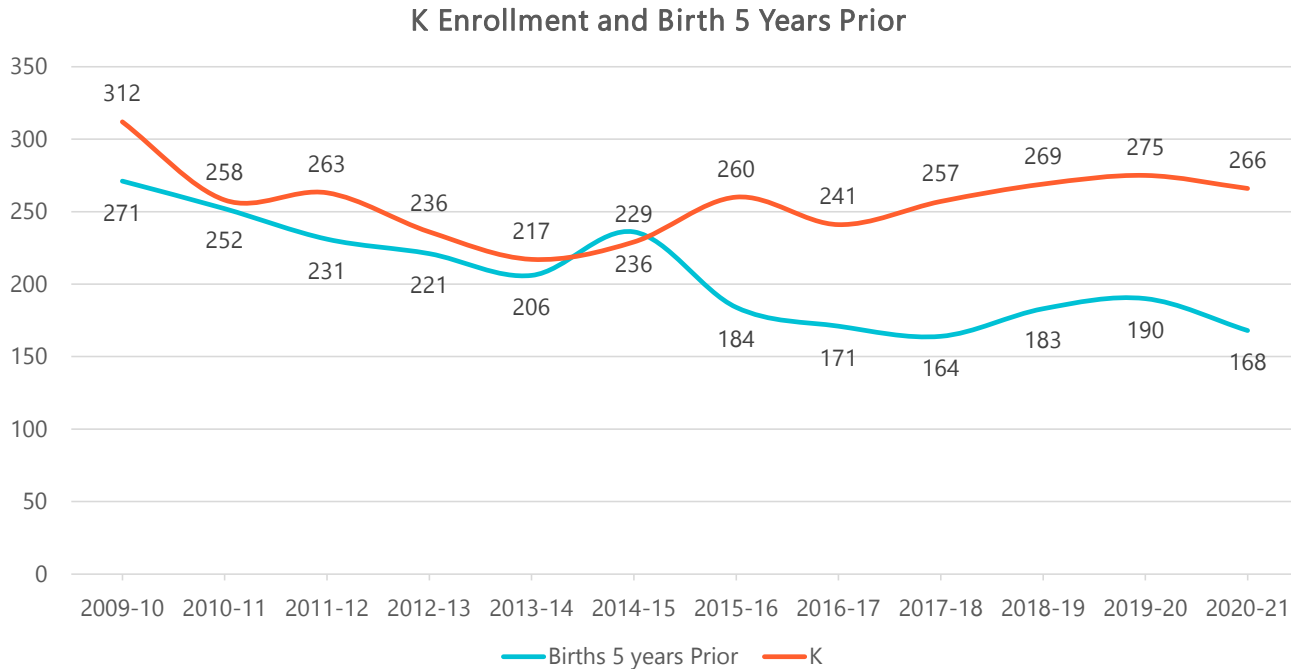
Kindergarten through 12th Grade Persistence Ratios by School Year 2005-06 to 2020-21

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
2005-06	1.0423	1.1465	1.0162	1.0314	0.9950	1.0213	1.0248	0.9948	1.0092	0.9853	1.0094	0.9824	0.9976	1.31%
2006-07	1.0226	1.1182	1.0111	1.0212	1.0127	1.0303	1.0286	1.0387	1.0209	0.9498	1.0000	1.0140	1.0179	2.37%
2007-08	1.1429	1.1104	1.0272	1.0110	1.0052	1.0000	1.0172	1.0025	0.9977	0.9718	1.0048	1.0075	0.9816	0.81%
2008-09	1.0909	1.1655	0.9886	0.9882	1.0326	0.9948	0.9900	1.0048	1.0126	0.9790	1.0000	0.9761	0.9752	0.19%
2009-10	1.1513	1.1400	1.0377	1.0230	1.0238	1.0105	0.9844	1.0127	0.9952	0.9501	0.9833	0.9683	0.9804	1.15%
2010-11	1.0238	1.1090	1.0088	0.9721	0.9831	0.9855	1.0104	1.0026	1.0125	0.9108	0.9790	1.0000	1.0218	-0.31%
2011-12	1.1385	1.2481	1.0434	1.0029	1.0316	1.0229	1.0118	0.9923	1.0184	0.9802	1.0212	1.0107	1.0000	1.72%
2012-13	1.0679	1.0380	0.9938	1.0194	1.0173	0.9749	1.0307	1.0321	1.0390	0.9819	1.0000	0.9922	0.9947	1.58%
2013-14	1.0534	1.1483	1.0110	1.0563	1.0326	1.0170	0.9914	1.0515	1.0028	0.9900	0.9947	1.0076	1.0026	2.35%
2014-15	0.9703	1.1290	1.0443	1.0761	1.0355	1.0289	1.0363	1.0288	1.0284	0.9887	1.0404	0.9894	1.0450	3.82%
2015-16	1.4130	1.1004	1.0490	1.0495	1.0135	1.0086	1.0153	0.9811	1.0028	0.9599	0.9915	0.9709	1.0455	1.44%
2016-17	1.4094	1.0346	1.0794	1.0233	1.0471	1.0199	1.0198	1.0327	1.0275	0.9609	0.9974	0.9971	1.0325	3.42%
2017-18	1.5671	1.0415	1.0520	1.0000	1.0608	1.0257	1.0130	1.0139	1.0195	0.9599	0.9971	0.9921	1.0461	2.51%
2018-19	1.4699	1.0739	1.0438	1.0318	1.0441	1.0430	1.0345	1.0129	1.0137	0.9211	1.0167	1.0146	1.0475	3.08%
2019-20	1.4474	1.0743	1.0362	1.0382	0.9966	0.9930	1.0172	1.0121	1.0127	0.9351	0.9922	0.9945	1.0374	1.46%
2020-21	1.5833	1.0073	1.0277	1.0350	1.0221	1.0103	0.9894	1.0068	1.0030	0.9655	0.9624	0.9974	1.0468	1.32%
10-Year	1.2561	1.0997	1.0362	1.0270	1.0262	1.0119	1.0180	1.0160	1.0177	0.9589	1.0030	0.9969	1.0273	
5-Year	1.4614	1.0649	1.0521	1.0286	1.0324	1.0180	1.0200	1.0105	1.0152	0.9474	0.9990	0.9938	1.0418	
4-Year	1.4735	1.0561	1.0529	1.0233	1.0372	1.0204	1.0211	1.0179	1.0184	0.9443	1.0009	0.9996	1.0409	
3-Year	1.4948	1.0632	1.0440	1.0233	1.0338	1.0206	1.0216	1.0130	1.0153	0.9387	1.0020	1.0004	1.0437	
3-Year Wgt	1.4749	1.0687	1.0414	1.0297	1.0231	1.0151	1.0223	1.0127	1.0142	0.9346	1.0012	1.0008	1.0422	

- 2020-21 persistency ratios not too far from 2019-20
- Especially strong Birth-K ratio



Birth-K Persistence Ratios

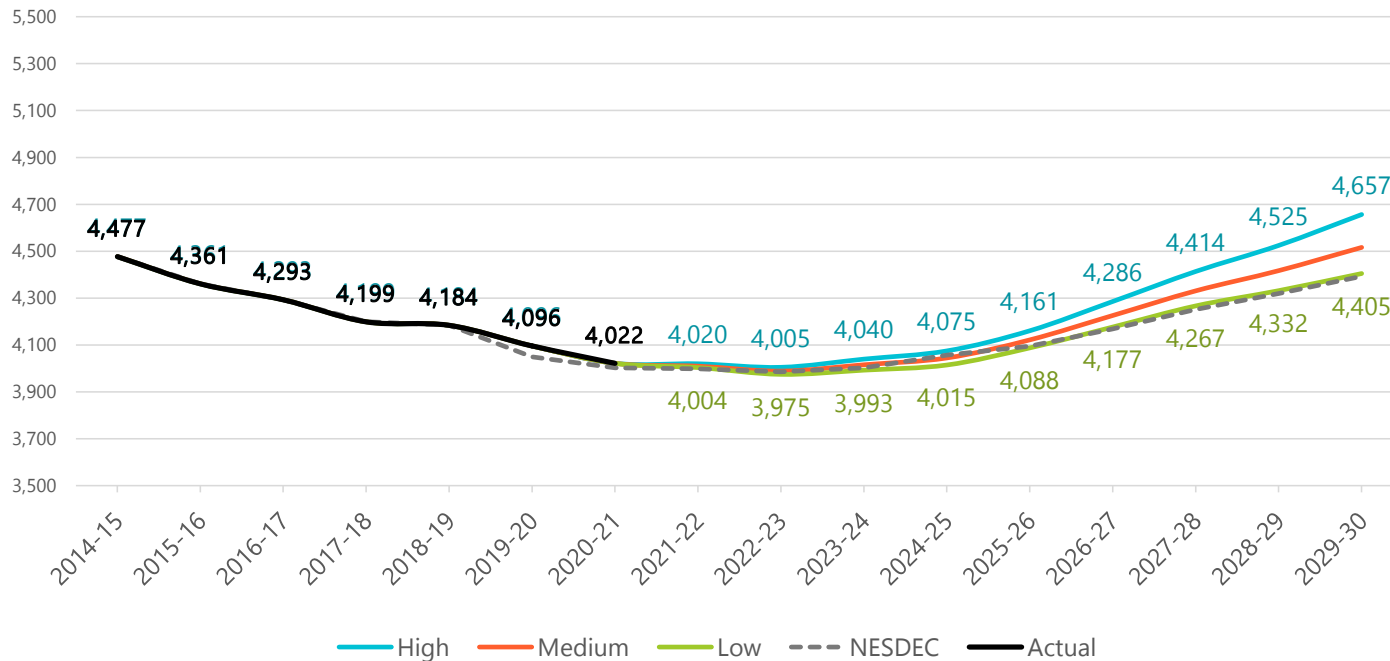


- Full-day K introduced in 2014-15 – changed Birth to K pattern
- Normal to see year of implementation have a skewed Birth –K ratio
- Since 2015-16, however, highly consistent trend
- Births to K ratio over the last five years has averaged 1.46 – or 146 kindergarteners enroll in CPS for every 100 births 5-years prior
- This year Birth-K ratio reached highest level of the last decade



Revised Districtwide Projections

Cheshire Actual and Projected K-12 Enrollments
2014-15 to 2029-30



- Note that 2020-21 persistency ratios were not included in the model due to influence of pandemic; however, they were used as starting point of projections for subsequent years
- All models largely agree over the next five years, then vary on degree of rebound
- High model is recommended for space planning purposes
- Low model largely in keeping with previous NESDEC projections



Districtwide Projections

Low Model Change Table from 19-20						
Five Year	#	-79	-81	244	-38	-287
	%	-2%	-2%	11%	-6%	-25%
Ten Year	#	311	309	419	102	-212
	%	7%	7%	17%	14%	-17%

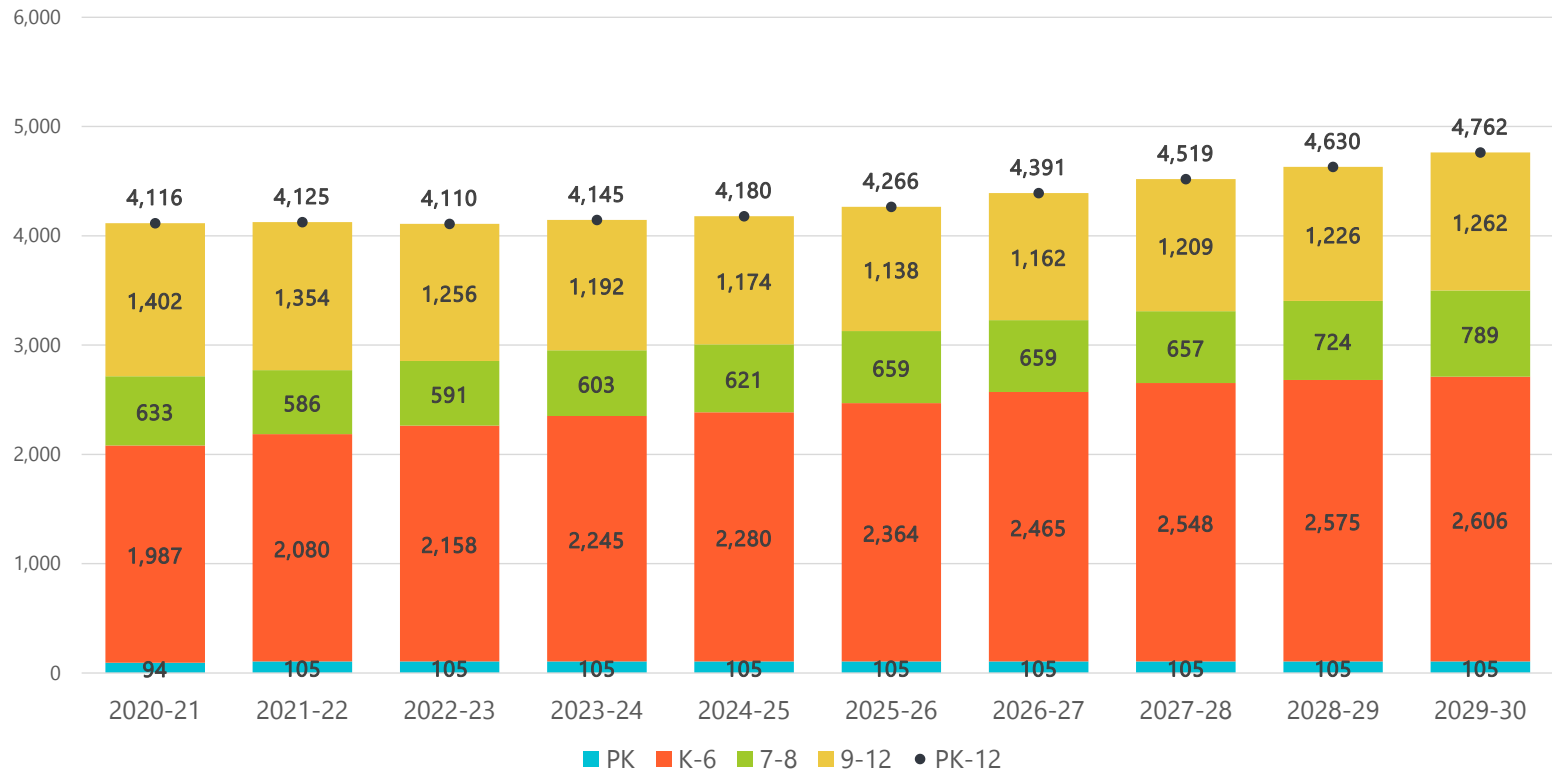
Medium Model Change Table from 19-20						
Five Year	#	-49	-51	267	-36	-282
	%	-1%	-1%	12%	-6%	-24%
Ten Year	#	422	420	503	119	-202
	%	9%	9%	20%	15%	-16%

High Model Change Table from 19-20						
Five Year	#	-19	-21	289	-32	-278
	%	0%	-1%	13%	-5%	-24%
Ten Year	#	563	561	615	136	-190
	%	12%	12%	24%	17%	-15%



Districtwide Projections (High)

PK-12 Actual and Projected Enrollment (2020-21 to 2029-30)
High Projection Model



- High model projects 12% enrollment growth through 2029-30
- Elementary (K-6) enrollment to rebound first, with 13% growth in the first five years followed by middle and high school enrollments later in the projection horizon



Elementary Projections (High)

School	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30
Darcey	170	147	157	176	178	185	156	198	201	199	184	207	209	203	204	206
Chapman	350	344	323	313	312	315	320	345	364	385	388	408	430	440	445	453
Doolittle	502	480	464	456	444	436	433	423	442	469	477	487	504	545	550	552
Highland	768	751	722	721	743	721	746	782	814	850	872	908	942	963	973	974
Norton	447	445	418	400	425	415	403	437	442	447	464	459	485	502	508	526
Total	2,237	2,167	2,084	2,066	2,102	2,072	2,058	2,185	2,263	2,350	2,385	2,469	2,570	2,653	2,680	2,711

- Significant uptick in births in 2016 through 2018 (209-212 birth annually) contributes to immediate and sustained projected increase
- Delayed impact to Doolittle School because its Kindergarten class is not physically in the building
- All districts projected to grow; however, Chapman and Highland are projected to experience strongest growth trends



School Capacities

- Reviewed prior studies
- Talked with building administrators on current programming and classroom use
- Capacities largely in line with the Perkins Eastman 2016 study of "Practical School Capacities" and reflect current programming in buildings
- Noted increasing special education programming needs and subsequent need for appropriate spaces
- Concerns beyond classroom availability due to core spaces and site constraints



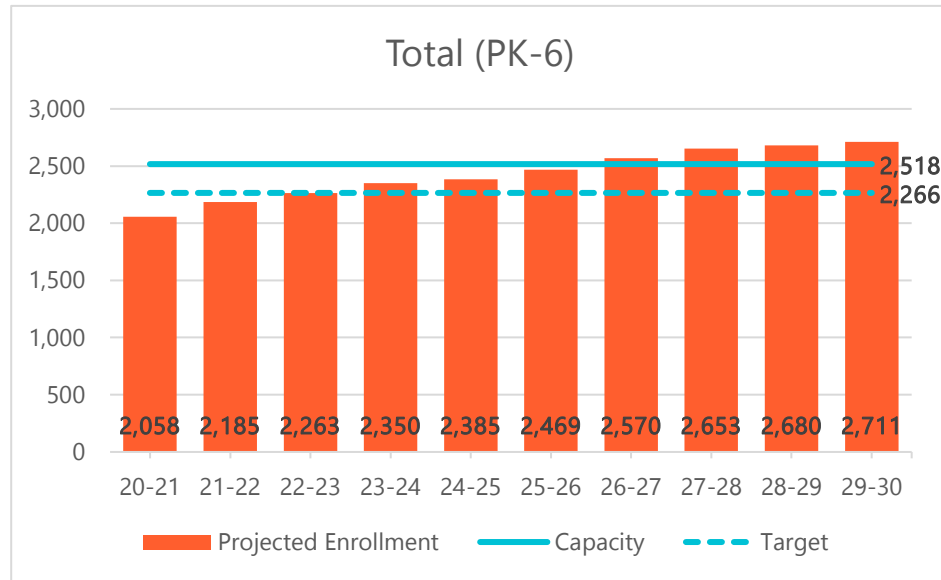
Elementary School Capacities

School	Grade-Level Classrooms	Other Full-Size Rooms Contributing to Enrollment	Functional Capacity
Darcey	8	1	180
Chapman	20	0	411
Doolittle	27	5	606
Norton	24	0	494
Highland	39	3	827
Total PK-6	118	9	2,518

- Assumed average class sizes of 20-21 for regular ed, 8-15 for special ed and PK
- Darcey – Mix of full and half-day PK, Intensive program and K. Several rooms in building currently devoted to Birth-3 program and 1 classroom used for parent center, reducing functional capacity numbers.
- Doolittle – Special Ed and districtwide programs contributing towards enrollment (Bridges program). Note that Kindergarten not located in building.
- Highland - Special Ed and districtwide programs contributing towards enrollment (autism program).
- “Target” enrollments for elementary schools are usually 90% of capacity to ensure flexibility for accommodating enrollment bubbles



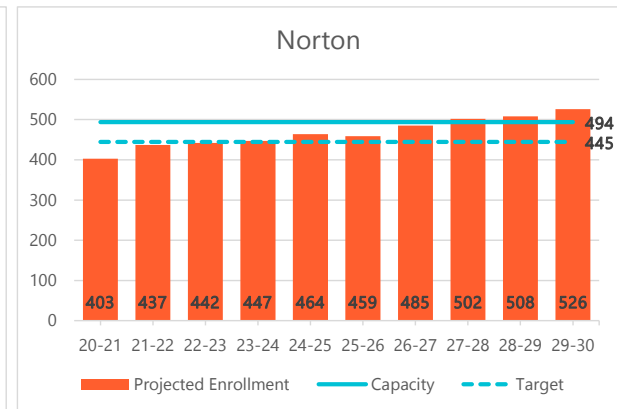
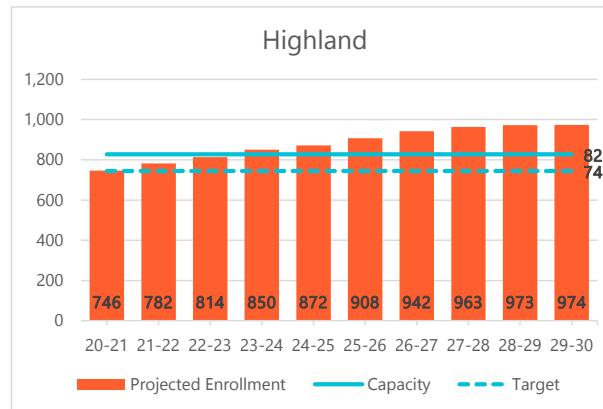
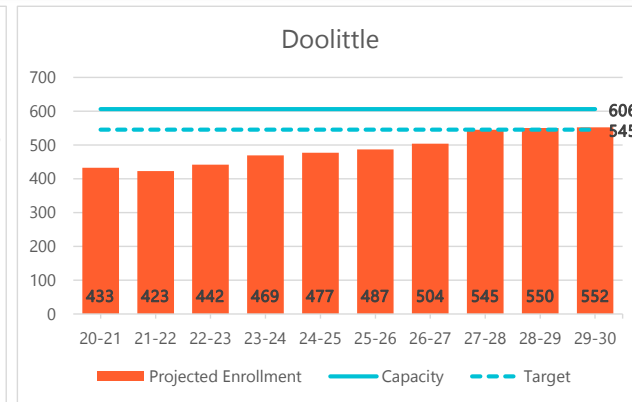
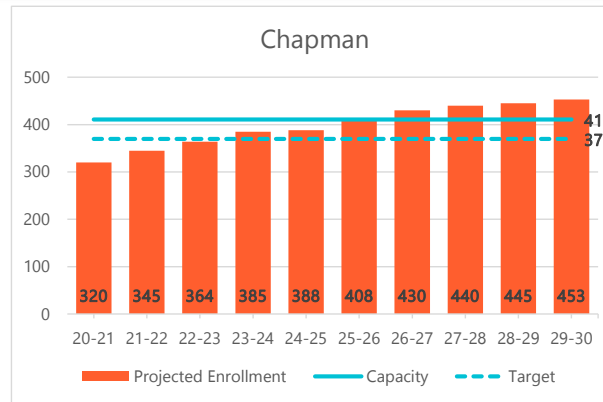
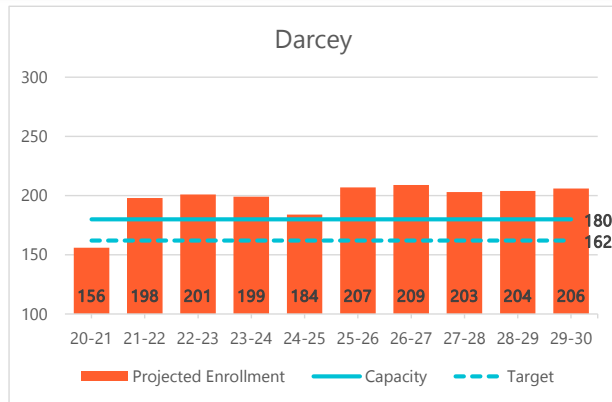
Projected Elementary Utilization



- Elementary system currently operating within capacity and target enrollments with shifts in programming, such as Doolittle’s K class at Darcey
- With projected rapid increase in enrollment, elementary system is projected to exceed target enrollment in 2023-24, and exceed the system’s functional capacity in 2026-27, based on current programming



Projected Elementary Utilization



- Darcey projected to exceed target enrollment and functional capacity next year with the additional programming currently located in building
- Chapman projected to exceed target in three years and capacity in six years
- Doolittle projected to remain within target enrollment; however, this assumes its K class remains at Darcey
- Highland projected to exceed target next year and exceed functional capacity within three years
- Norton projected to be roughly at targeted enrollment until it starts to exceed in 26-27, and approaches functional capacity by 29-30



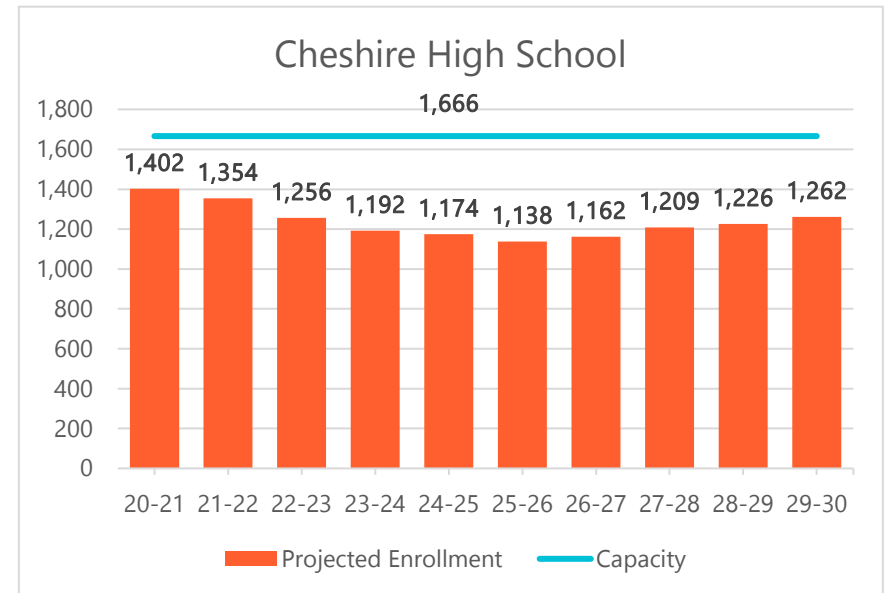
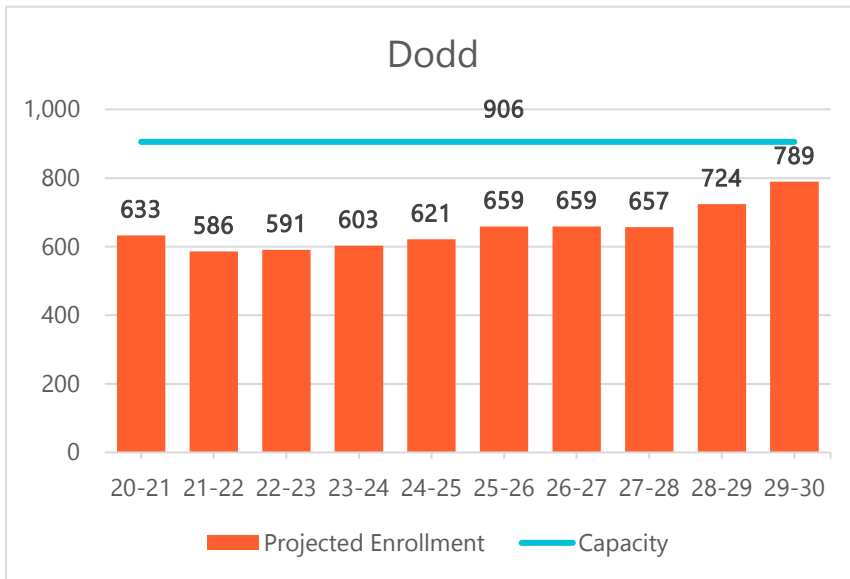
Middle and High School Capacities

School	Grade-Level Classrooms	Functional Capacity
Dodd	45	906
CHS	98	1,666

- Assumed average class sizes of 20 at middle school, and 17 at high school (due to electives)



Projected Middle and High School Utilization



- Both schools' enrollments are projected to remain well within functional capacity over the next decade