FOR THE

NORTH CALDWELL

PUBLIC SCHOOLS

STATISTICAL FORECASTING LLC

January 31, 2017

STATISTICAL FORECASTING

- Provide demographic services for school districts in the New York-New Jersey metropolitan area.
- Performed demographic studies for approximately 100 school districts in NY & NJ.
- Demographic consultant for the NYC Public Schools since 2006.

RICHARD S. GRIP ED.D.

- Executive Director
- Doctorate from Rutgers University Graduate
 School of Education in Educational
 Statistics and Measurement
- Numerous publications on school demography and presentations nationally
- Testified as an expert witness in school demography in several Administrative Law court hearings.

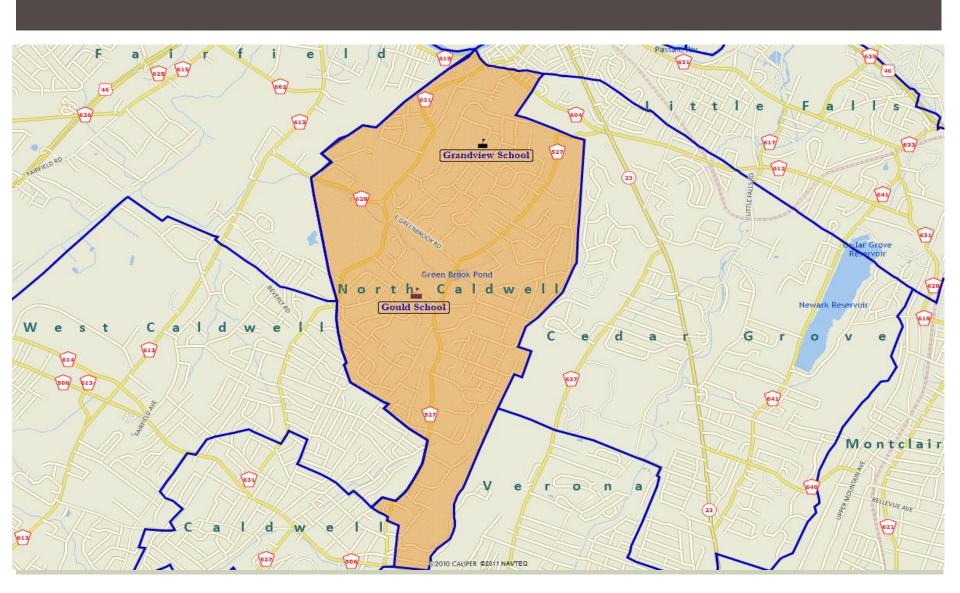
PURPOSE OF THE STUDY

- □Update to demographic study completed in April 2014.
- □ Project grade-by-grade enrollments from 2017-18 through 2021-22.
- Analyze district's historical enrollments, birth counts, home sales
- Impact of new developments on enrollment

RESULTS FROM APRIL 2014 REPORT

Year	Actual	Projected (CSR 5-Yr)	Difference (CSR 5-Yr)	% Error (CSR 5-Yr)	Projected (CSR 6-Yr)	Difference (CSR 6-Yr)	% Error (CSR 6-Yr)
2014-15	658	653	-5	-0.8%	679	+21	+3.2%
2015-16	673	661	-12	-1.8%	689	+16	+2.4%
2016-17	685	654	-31	-4.5%	697	+12	+1.8%

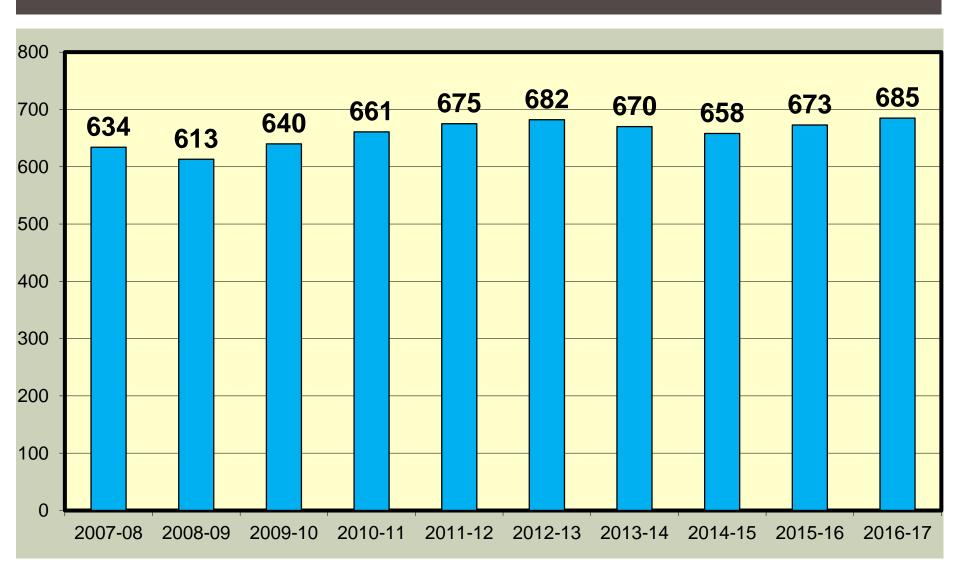
SCHOOL LOCATIONS



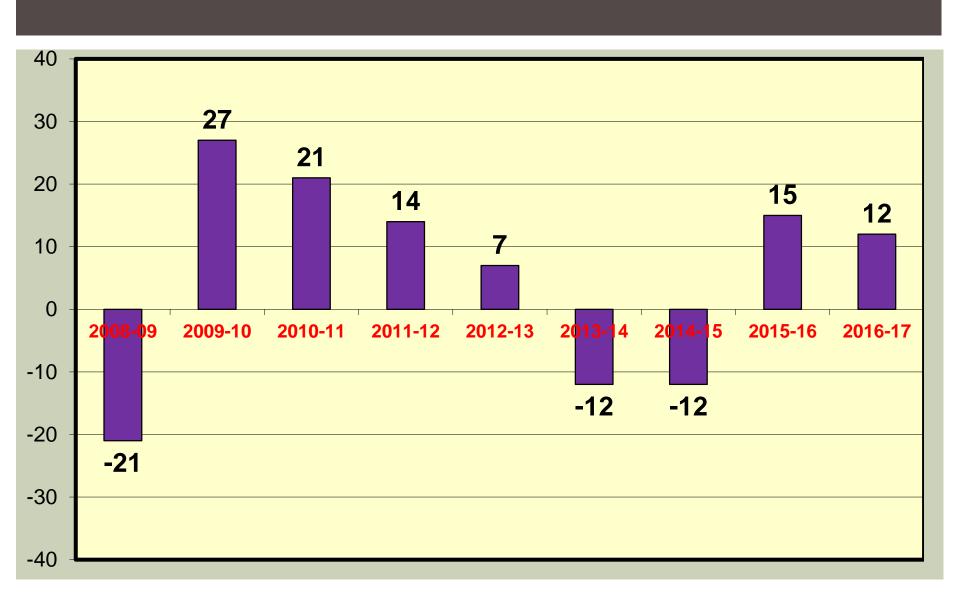
HISTORICAL ENROLLMENT TRENDS

- □ District's 2016-17 enrollment is 685.
- Total enrollment has been within a narrow band in last 7 years (658-685).
- □ Cohort-Survival Ratio Method (CSR) was used to project enrollment five years into the future.

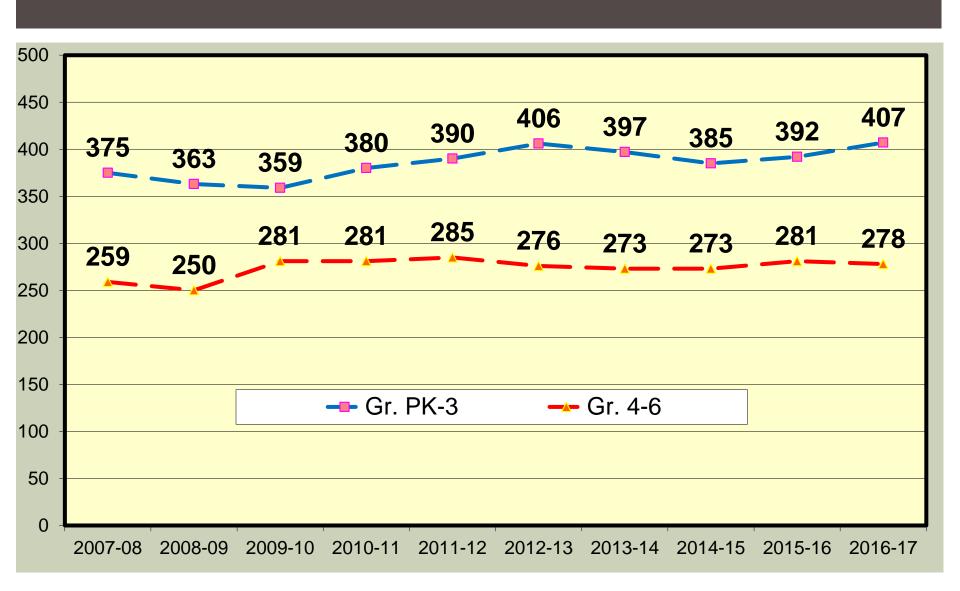
HISTORICAL ENROLLMENT 2007-08 TO 2016-17



ANNUAL PK-6 ENROLLMENT CHANGE



HISTORICAL ENROLLMENT BY LEVEL



ENROLLMENT PROJECTION METHOD COHORT SURVIVAL RATIO

- □ Ratios are calculated for each grade progression. (Ex. 100 1st graders in 2015-16 become 95 2nd graders in 2016-17 = 0.95)
- Survival ratios were computed for ten historical years.
- Six of 7 average ratios were above 1.000.
- Averages were then computed and used to project future enrollments.

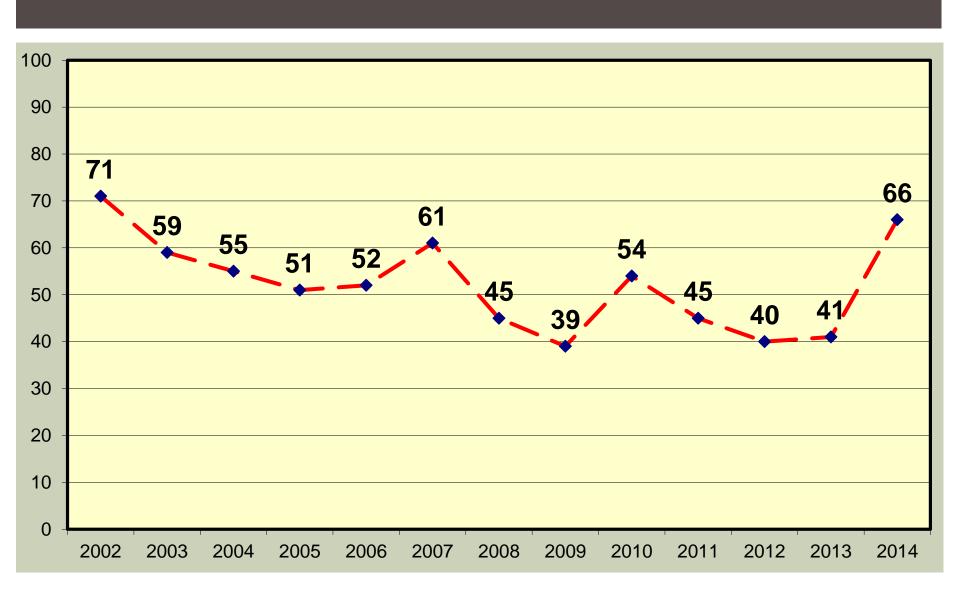
BIRTHS

- Births have been declining, in general.
- ☐ 2002-2008: Birth average = 56
- 2009-2014: Birth average = 48
- Births are typically used to project kindergarten students 5 years later.

BIRTH RATES AND BIRTH-TO-KINDERGARTEN SURVIVAL RATIOS

Birth Year	Number of Births- North Caldwell	Kindergarten Students Five Years Later	Birth-to-Kindergarten Survival Ratio
2002	71	88	1.239
2003	59	79	1.339
2004	55	76	1.382
2005	51	92	1.804
2006	52	93	1.788
2007	61	80	1.311
2008	45	89	1.978
2009	39	82	2.103
2010	54	86	1.593
2011	45	96	2.133
2012	40	N/A	N/A
2013	41	N/A	N/A
2014	66	N/A	N/A

NORTH CALDWELL HISTORICAL BIRTHS 2002-2014



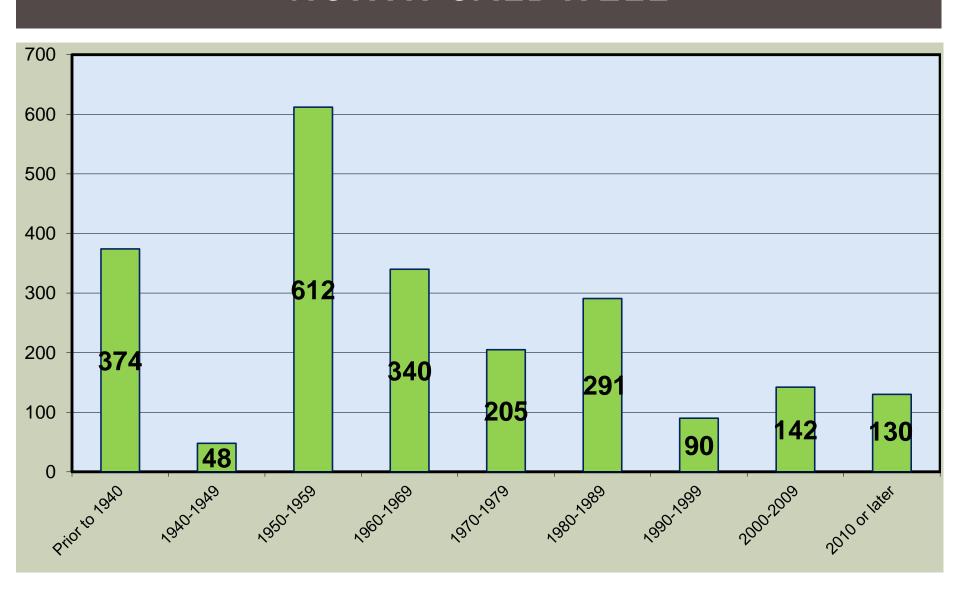
NEW HOUSING

- Hilltop 3: 62 SF homes, 50 affordable apartments. Final approval expected soon with possible occupancy beginning in 2018.
- Two small subdivisions (on Mountain and Grandview Avenues) of 5 SF each. Both are under construction with 1 CO.

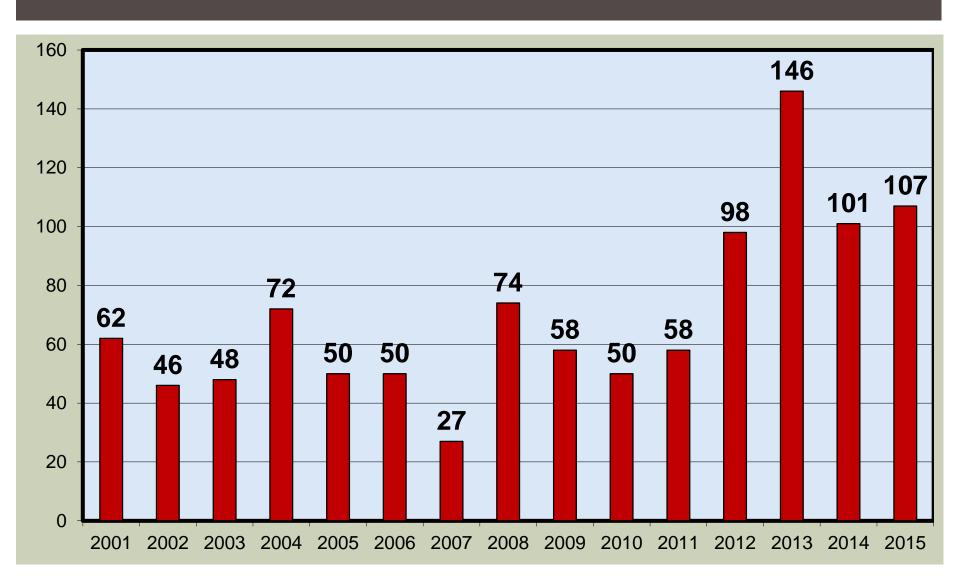
STUDENT YIELDS

- Student yields for single-family homes were computed in the 2014 demographic study.
- Yields were compiled by length of ownership of home. Avg. = 0.71, Max = 1.04 (Arbor Rd.)
- Approximately 52-75 children (grades K-6) are projected from 72 new SF homes.
- Affordable Housing used Rutgers data, since no comparable properties exist in North Caldwell. A total of 21 children (grades K-6) are anticipated from affordable apts.

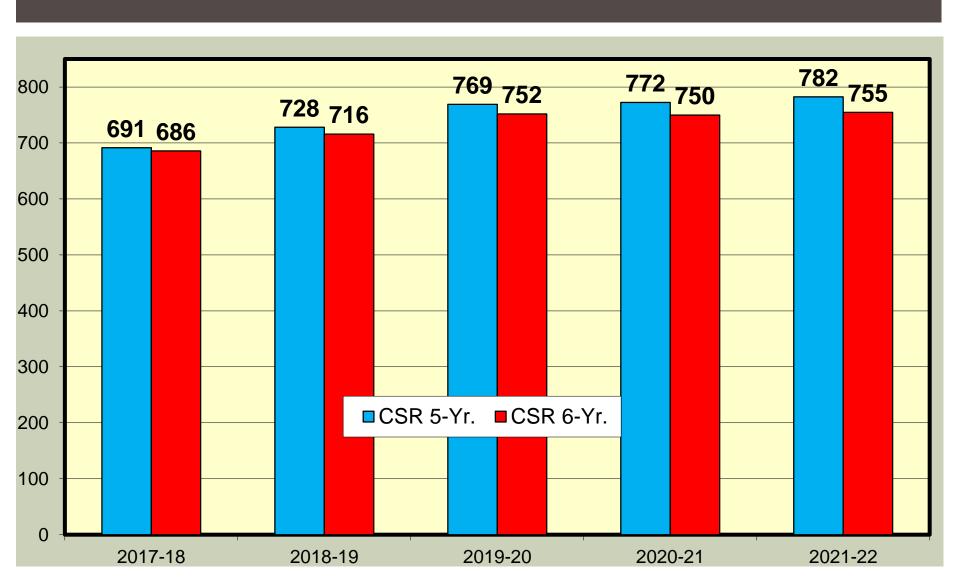
HOMES BUILT BY DECADE NORTH CALDWELL



NORTH CALDWELL HOME SALES 2001-2015



ENROLLMENT PROJECTIONS ADJUSTED FOR HOUSING GROWTH



PROJECTED ENROLLMENT BY GRADE CONFIGURATION

Historical	PK-3		4-6		
2016-17	40	07	278		
Projected	PK-3 CSR 5-YR	PK-3 CSR 6-YR	4-6 CSR 5-YR	4-6 CSR 6-YR	
2017-18	410	405	281	281	
2018-19	443	431	285	285	
2019-20	466	449	303	303	
2020-21	461	441	311	309	
2021-22	457	438	325	317	
5-year Change	+50	+31	+47	+39	

CAPACITY ANALYSIS

School	Capacity	Actual Enrollment 2016-17	Difference	Projected Enrollment 2021-22	Difference
Grandview School (PK-3)	315	407	-92	457	-142
Gould School (4-6)	270	278	-8	325	-55