

# ENROLLMENT PROJECTIONS

## Stoughton Area School District

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# Enrollment Projections Process

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- ❑ Past Projections
  - ✓ How do the projections compare to current enrollment?
- ❑ Background
  - ✓ What data is required for the projections?
- ❑ Methodology
  - ✓ What method and models are used to project students?
- ❑ Projections
  - ✓ How many students should the district expect?



# Past Projections: Percent Error

4K-12 Enrollment		
School Year	2020-21	2019-20
Baseline	4.8%	1.5%
5 Year Trend	5.1%	1.6%
2 Year "Trend"	3.9%	1.0%
Kindergarten	5.9%	1.9%

6-8 Enrollment		
School Year	2020-21	2019-20
Baseline	5.5%	2.6%
5 Year Trend	4.0%	1.9%
2 Year "Trend"	-1.2%	-0.4%
Kindergarten	3.6%	1.9%

K-5 Enrollment		
School Year	2020-21	2019-20
Baseline	7.2%	1.3%
5 Year Trend	6.3%	0.9%
2 Year "Trend"	4.7%	-0.2%
Kindergarten	8.3%	1.6%

9-12 Enrollment		
School Year	2020-21	2019-20
Baseline	0.4%	0.2%
5 Year Trend	3.6%	1.6%
2 Year "Trend"	5.2%	2.6%
Kindergarten	3.6%	1.6%

- Overall, Two-Year "Trend" projection model was the most reliable.
- Models over-projected the current school year in elementary school.
- Middle school projections under projected enrollment.
- High school projections were off by only a few students (Baseline).

# Enrollment Projections Process

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## □ Background

- ✓ How is district enrollment changing?
- ✓ Is the kindergarten population continuing to decline?
- ✓ How have birth rates changed over time?
- ✓ What are the trends in the general population?
- ✓ What are the housing development trends?



Figure 1-A

# Stoughton Area School District Student Enrollment

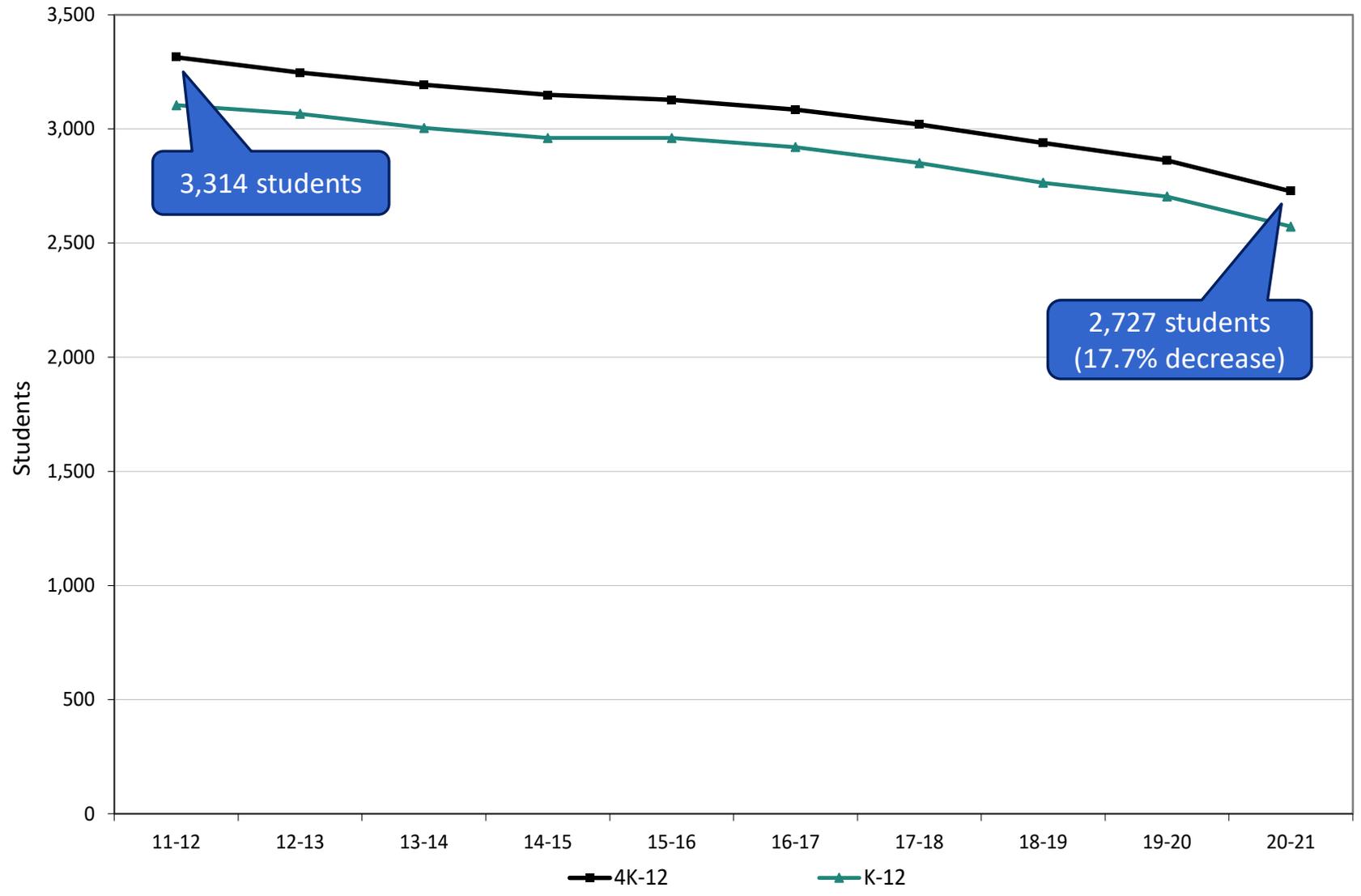


Figure 1-B

## Stoughton Area School District Enrollment by Grade Grouping

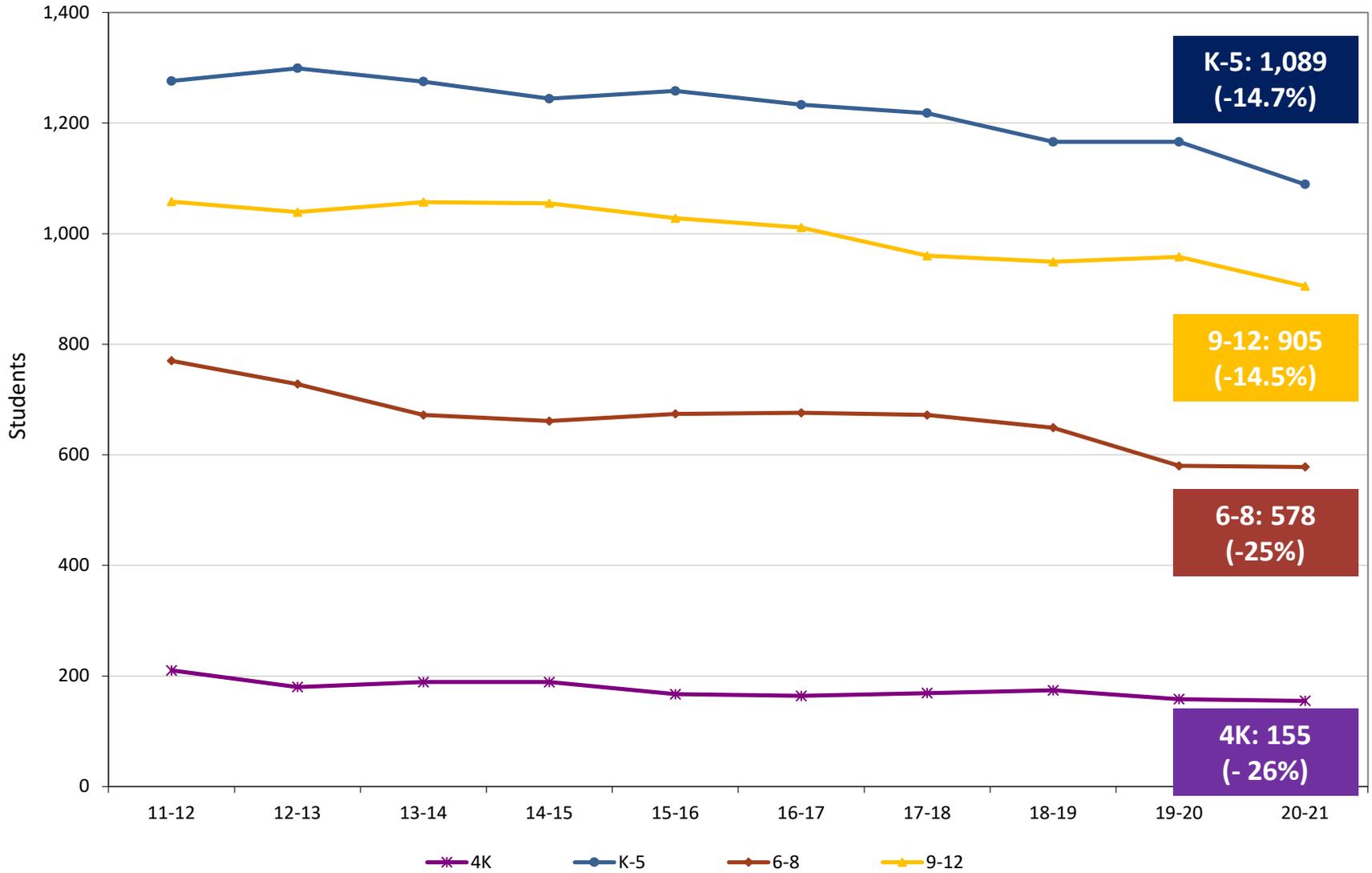


Figure 2-A

# Stoughton Area School District Kindergarten Enrollment

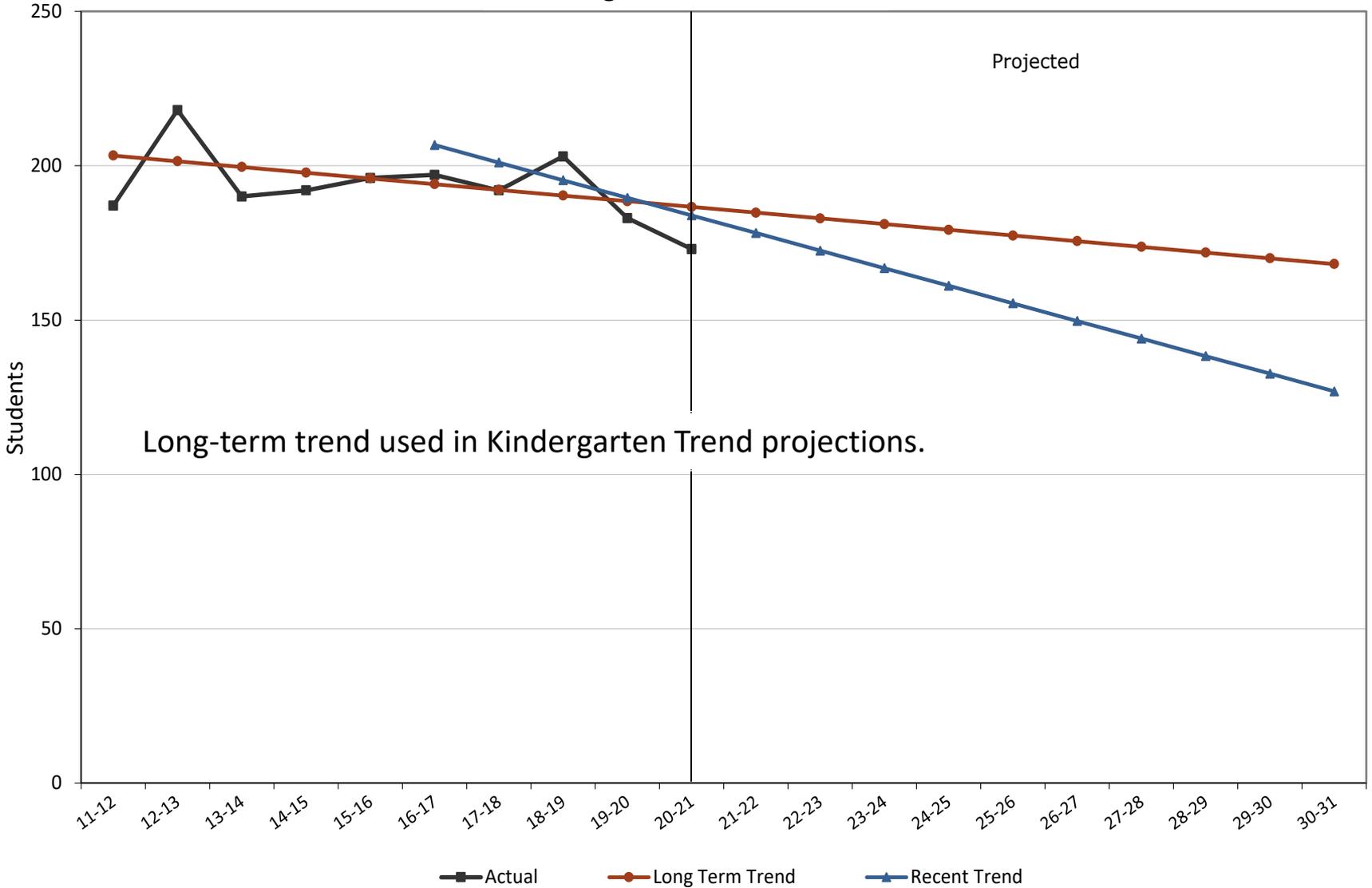


Figure 3

### Stoughton Area School District Area Births

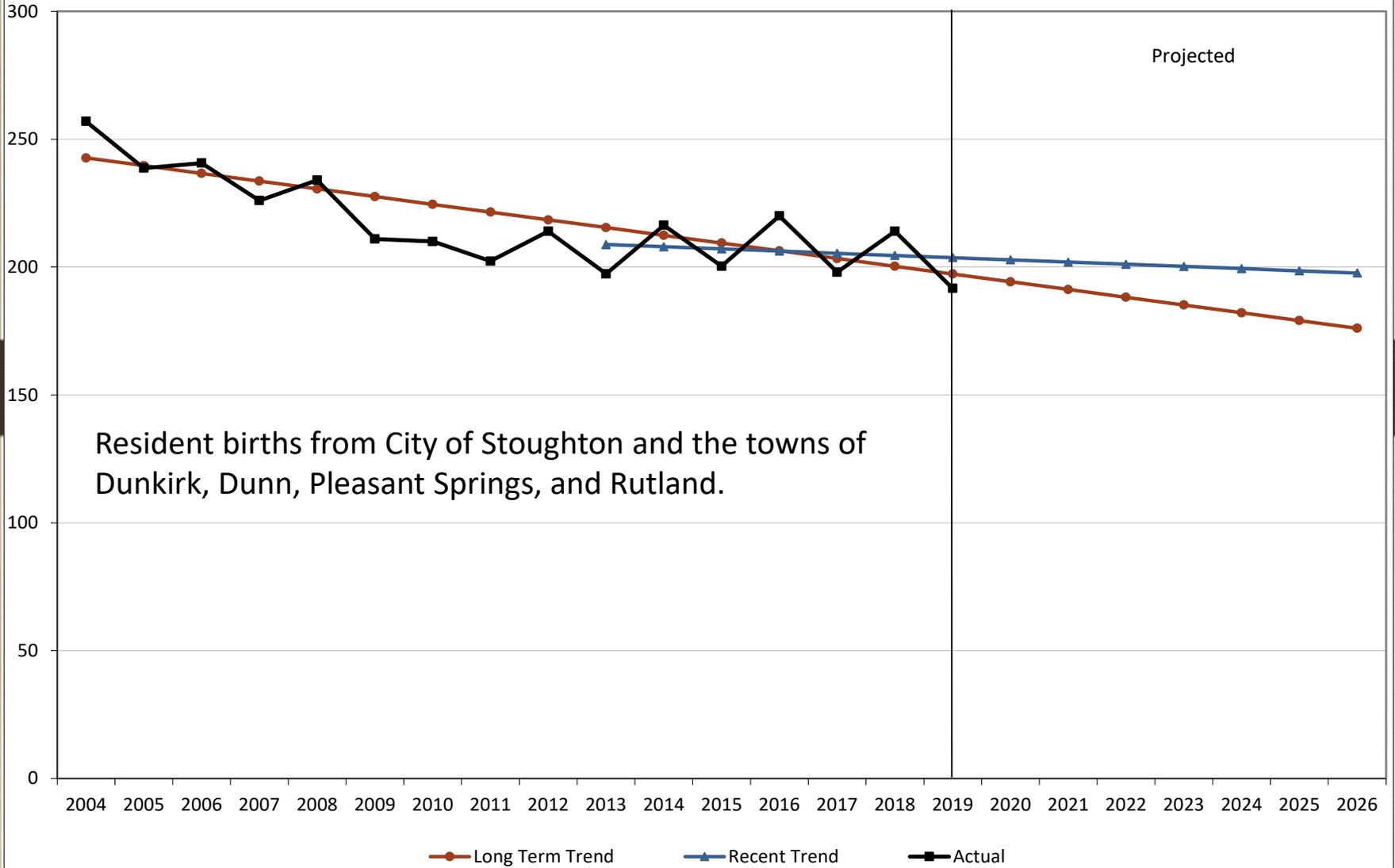


Figure 4

### Stoughton Area School District 2010-2018 Age Structure

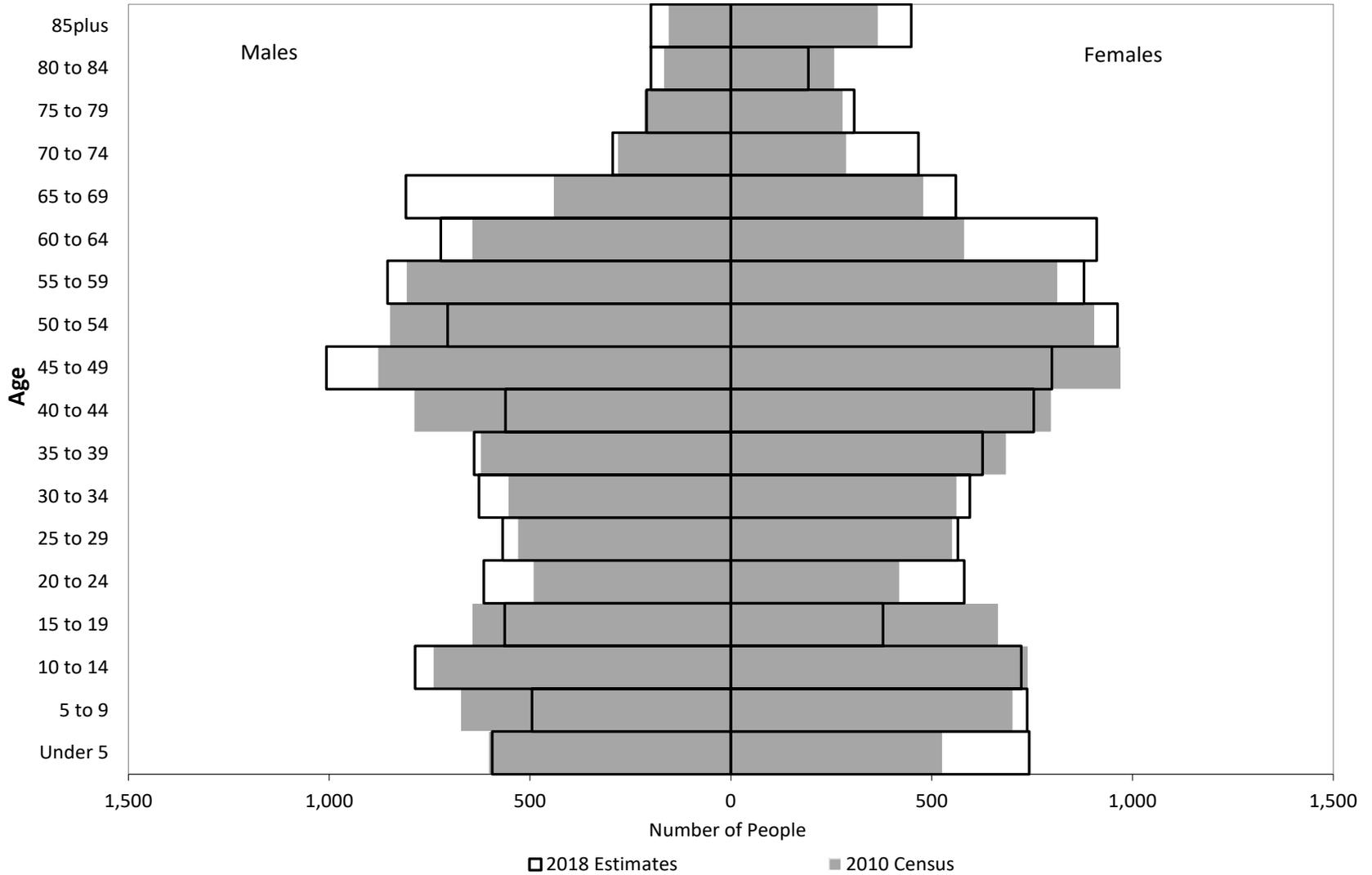


Figure 5-A

## Stoughton Area School District New Housing by Municipality

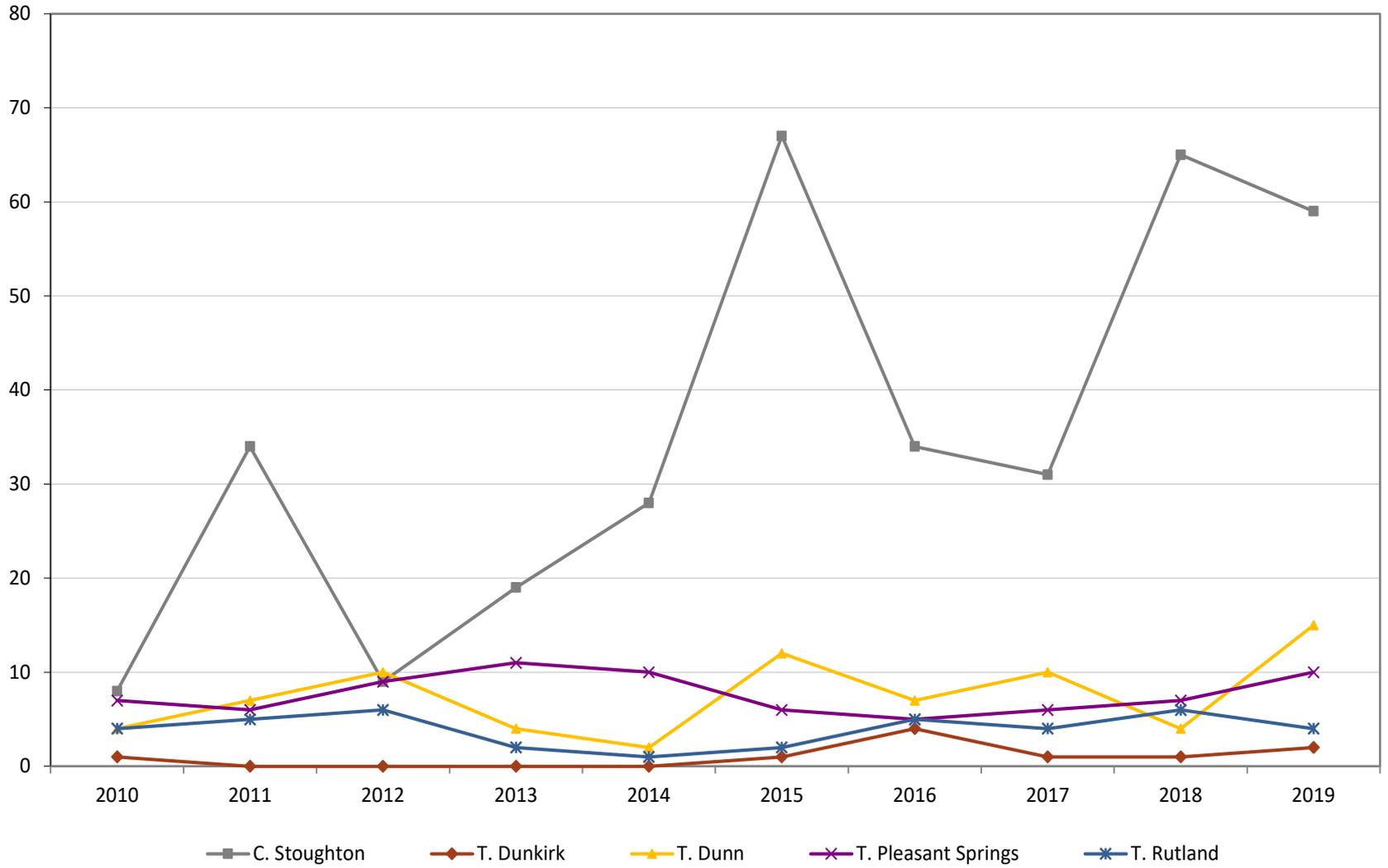
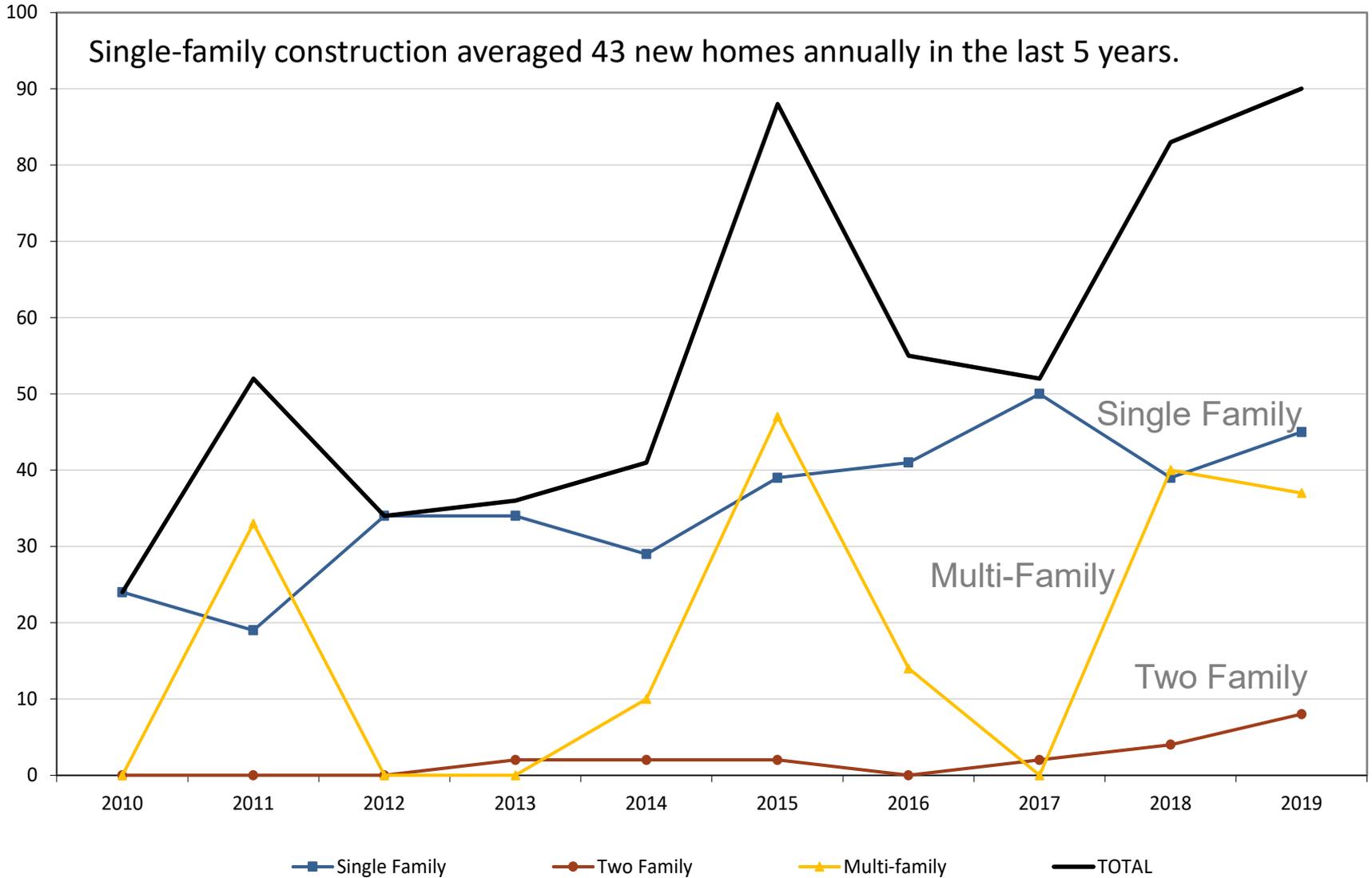


Figure 5-B

### Stoughton Area School District New Housing by Type



# Enrollment Projections Process

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## □ Methodology

- ✓ What method does APL use to project students?
- ✓ What projection models are provided?



# Grade Progression Ratio Method

TABLE 6  
Grade Progression Ratios  
Stoughton Area School District

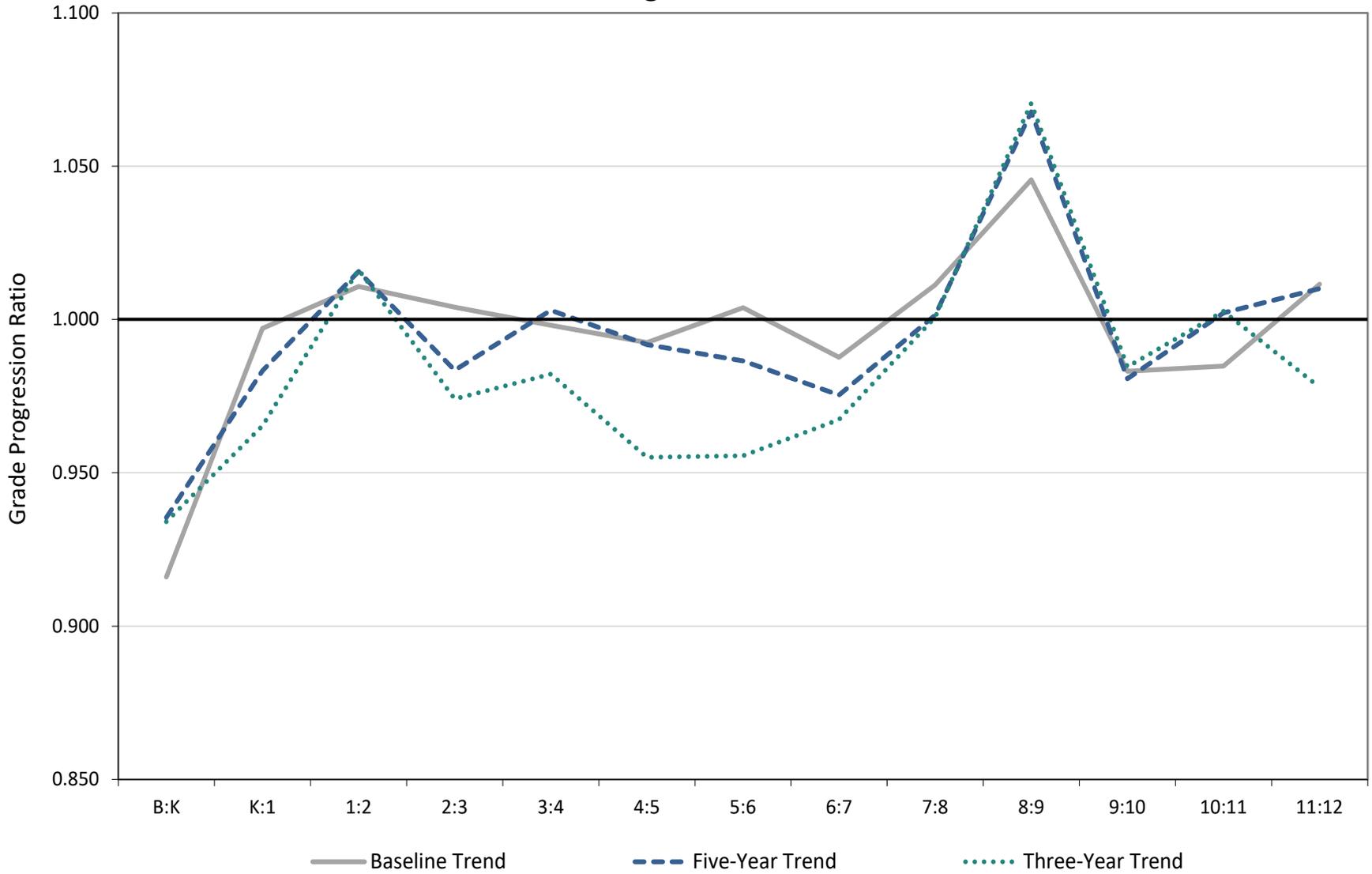
YEAR CHANGES	B:K	K:1	1:2	2:3	3:4	4:5	5:6	6:7	7:8	8:9	9:10	10:11	11:12
11-12/12-13	0.908	1.005	1.043	1.023	1.010	1.000	1.023	0.987	1.025	1.000	0.966	0.965	1.011
12-13/13-14	0.823	0.995	1.016	1.012	0.991	1.014	1.009	1.018	1.009	1.014	0.989	0.984	1.028
13-14/14-15	0.830	1.011	0.986	1.010	0.967	0.973	0.990	1.018	1.023	1.105	0.990	0.996	1.028
14-15/15-16	0.896	1.057	1.047	1.037	1.026	1.004	1.046	1.000	1.062	1.035	1.016	0.986	0.985
15-16/16-17	0.937	1.000	1.015	0.980	1.023	1.061	1.021	0.991	1.005	1.013	0.974	0.977	1.028
16-17/17-18	0.937	1.020	1.015	1.015	0.985	0.982	0.995	0.984	1.000	1.115	0.975	1.026	1.020
17-18/18-19	0.966	0.948	1.005	0.935	1.005	0.943	0.946	0.938	1.013	1.076	0.970	1.042	1.000
18-19/19-20	0.902	0.975	1.027	1.020	1.000	0.981	0.984	0.981	0.985	1.037	0.992	0.987	0.992
19-20/20-21	0.824	0.973	0.949	0.968	0.942	0.941	0.937	0.983	1.005	1.098	0.992	0.979	0.942
Baseline	0.916	0.997	1.011	1.004	0.998	0.993	1.004	0.988	1.011	1.046	0.983	0.985	1.012
Five-Year Trend	0.935	0.983	1.016	0.983	1.003	0.992	0.987	0.975	1.001	1.068	0.981	1.002	1.010
Three-Year Trend	0.934	0.965	1.016	0.974	0.982	0.955	0.956	0.967	1.001	1.071	0.985	1.003	0.978

\*Shaded progression ratios are excluded from the Baseline Average

- Average ratios (10, 5, & 3 year) determined for each projection model.
- 19-20/20-21 low GPRs are excluded from the 5-year and 3-year trends.
- 5-Year Trend: 2020 kindergartners x .983 = 2021 first graders

Figure 6

# Stoughton Area School District Grade Progression Ratios



# 4K Grade Progression Ratio (GPR)

**TABLE 7**  
**4K Grade Progression Ratios**  
**Stoughton Area School District**

	<b>B:4K</b>	<b>4K:K</b>
<b>11-12/12-13</b>	0.780	1.038
<b>12-13/13-14</b>	0.817	1.056
<b>13-14/14-15</b>	0.864	1.016
<b>14-15/15-16</b>	0.794	1.037
<b>15-16/16-17</b>	0.800	1.180
<b>16-17/17-18</b>	0.804	1.171
<b>17-18/18-19</b>	0.858	1.201
<b>18-19/19-20</b>	0.752	1.052
<b>19-20/20-21</b>	0.754	1.095
<b>Baseline</b>	<b>0.809</b>	<b>1.094</b>
<b>Five-Year Trend</b>	<b>0.804</b>	<b>1.140</b>
<b>Three-Year Trend</b>	<b>0.805</b>	<b>1.116</b>

\*Shaded progression ratios are excluded

- ❑ 80.4 - 81% of births in the district entered 4K.
- ❑ 10-year GPRs used for Baseline model.
- ❑ 5-year GPRs used for Five-Year kindergarten trend models.
- ❑ 3-year GPRs used for Three-Year trend model.

# Projection Models

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- **Baseline:** 10-year grade progression ratios  
(long-term birth trends to project kindergarten)
- **Five-Year Trend:** 5-year grade progression ratios  
(recent birth trends to project kindergarten)
- **Three-Year Trend:** 3-year grade progression ratios  
(recent birth trends to project kindergarten)
- **Kindergarten Trend:** 5-year grade progression ratios for  
grades 1<sup>st</sup>-12<sup>th</sup> (long-term K trends to project kindergarten)

# Enrollment Projections Process

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## □ Enrollment Projections

- ✓ How many students can the district expect?
- ✓ How projections were modified to address COVID?



Figure 7

# Stoughton Area School District District-wide Projections

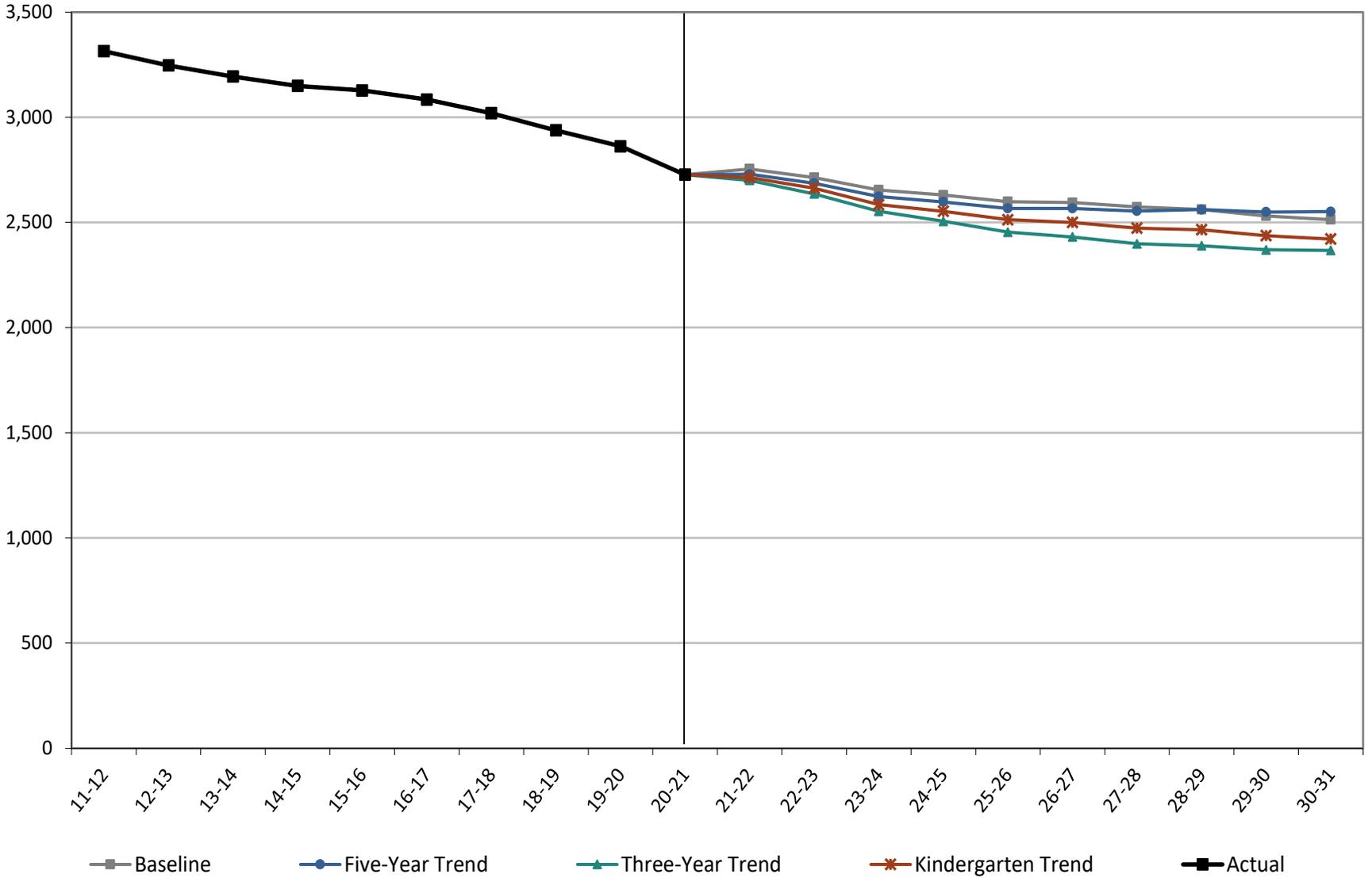


Figure 9

# Stoughton Area School District Elementary School Projections

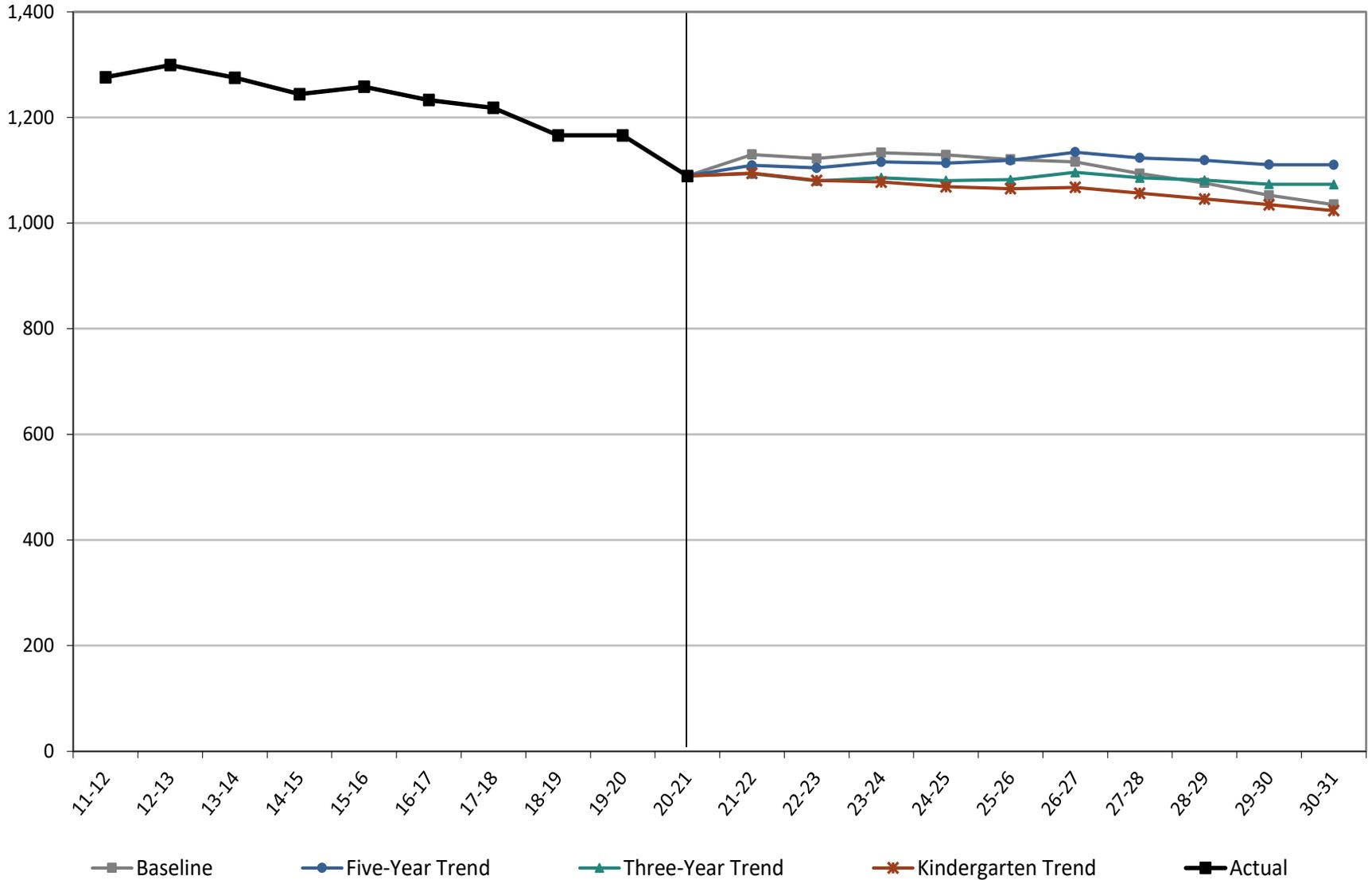


Figure 10

## Stoughton Area School District Middle School Projections

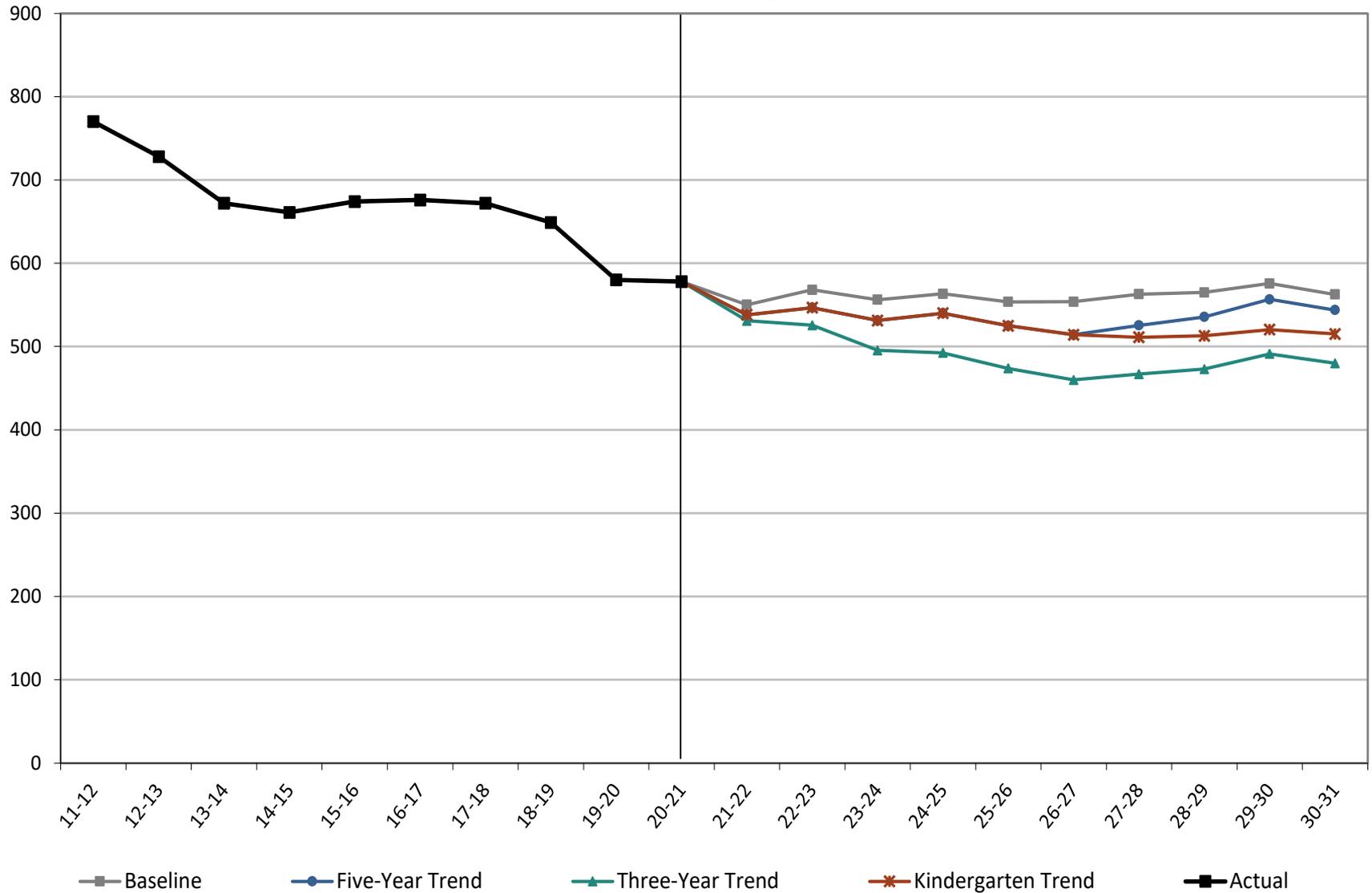
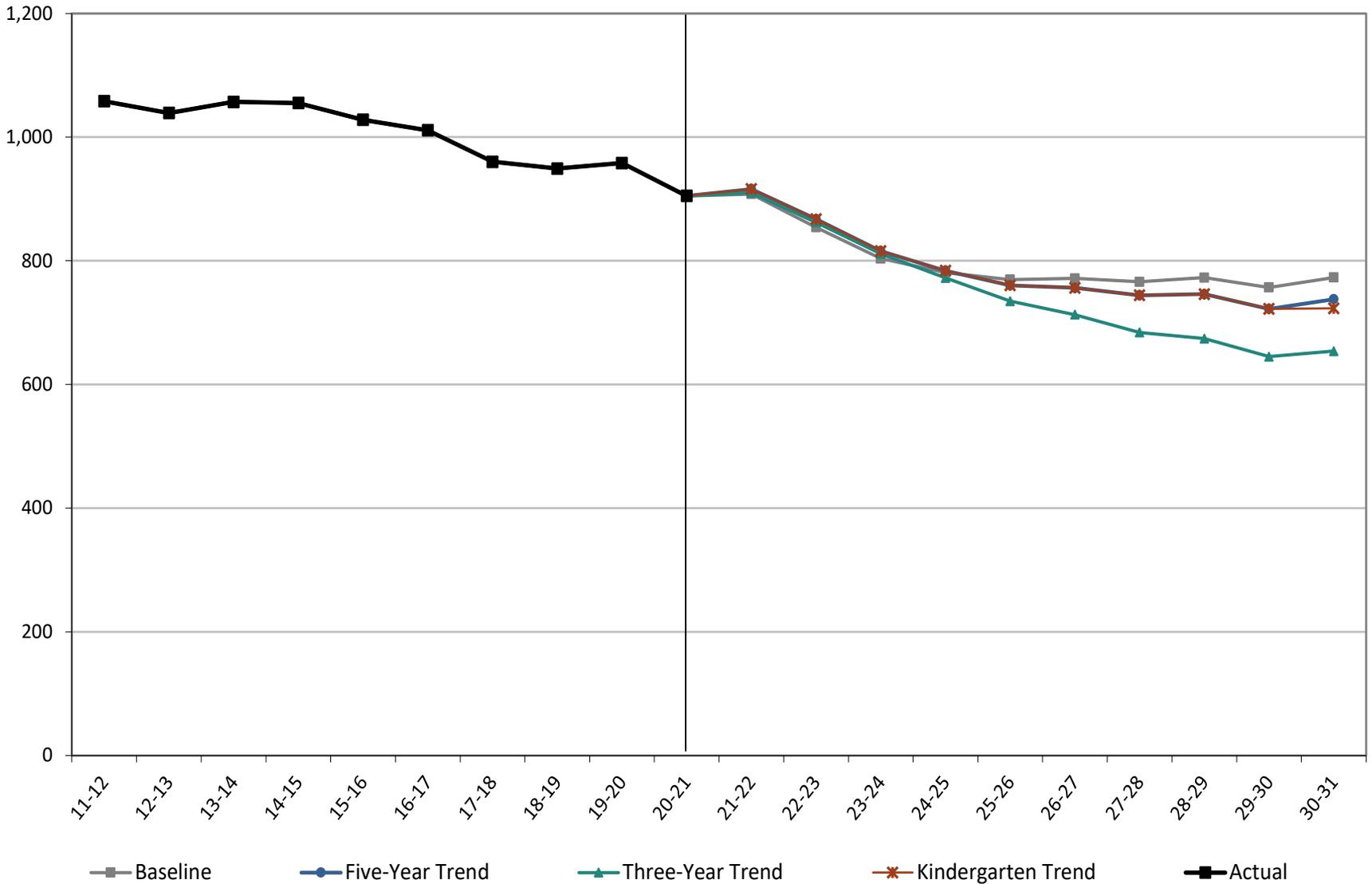


Figure 11

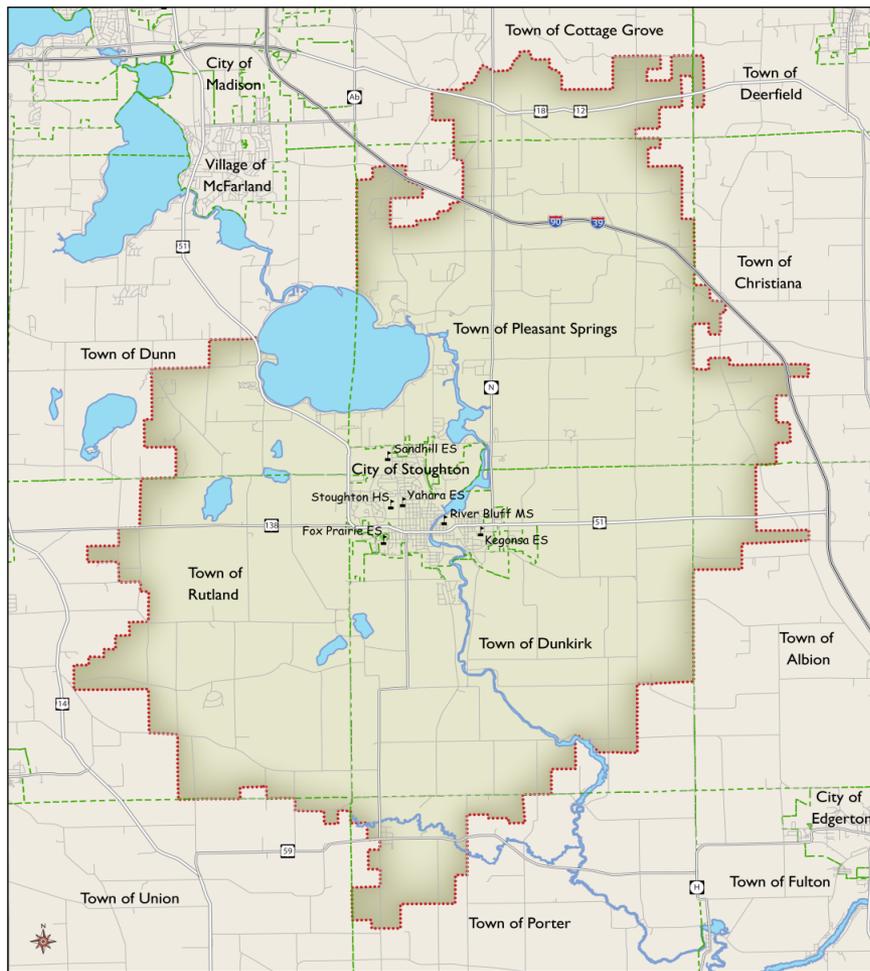
# Stoughton Area School District High School Projections



# Future Trends

Models show decreasing enrollment and over the next five years:

- ❖ Districtwide enrollment will likely decrease by 128 to 274 students, averaging a 7% decline.
- ❖ Grades K-5 are projected to decrease by 24 students or increase by 31 students, averaging a 0.7% growth.
- ❖ Grades 6-8 are projected to decrease by 24 to 104 students, averaging a 10% decrease.
- ❖ Grades 10-12 are projected to decrease by 136 to 170 students, averaging a 16.5% decline.



Stoughton Area School District

- ▲ Stoughton Area Schools
- - - Municipalities
- ▬ School District
- Water

0 0.5 1 Miles

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# Thank You!

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