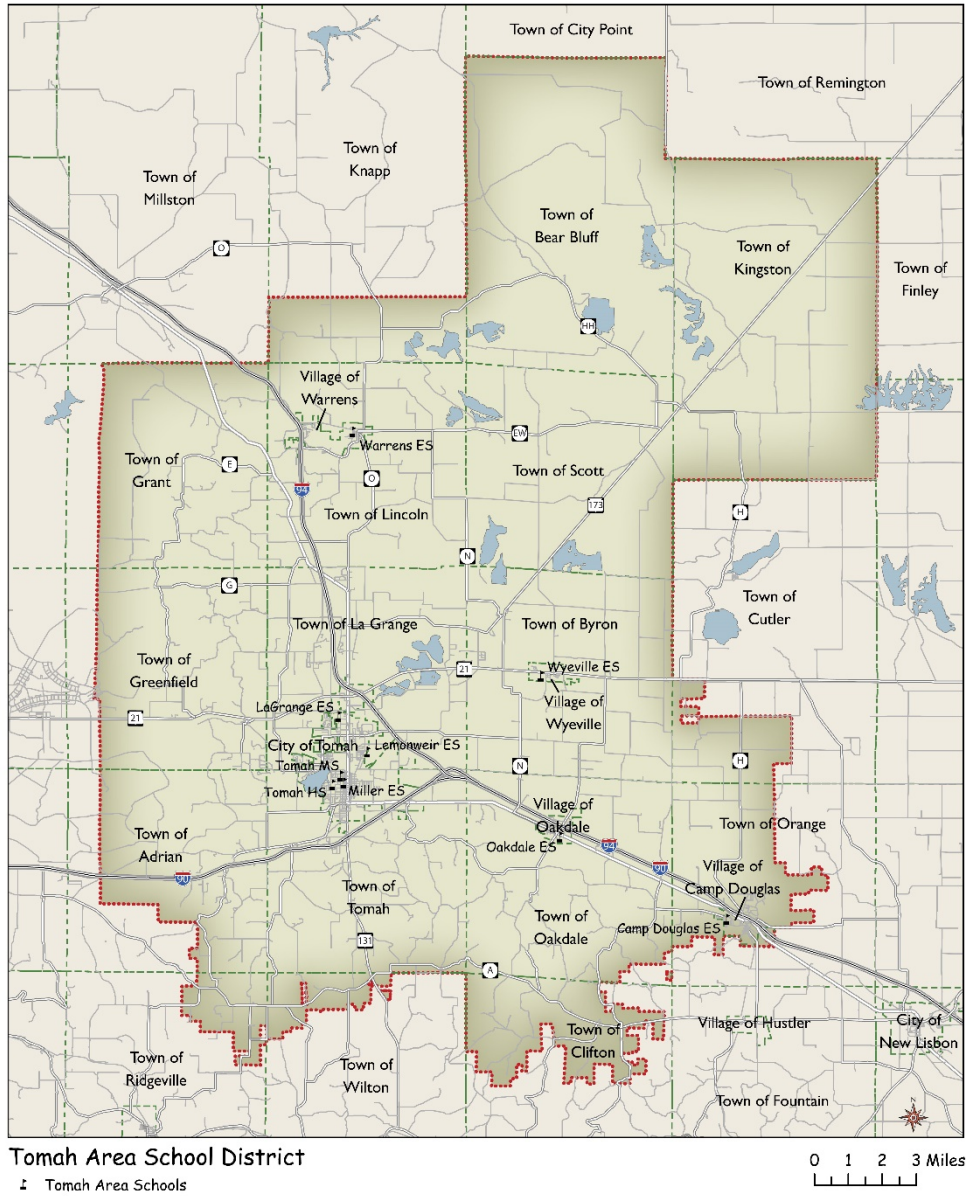


Planning for the Schools of Tomorrow



School Enrollment Projections Series Tomah Area School District

March 2015

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Table of Contents

Introduction	1
District Enrollment History	1
Kindergarten Enrollment Trends	7
Birth Trends and Projections	8
Population Trends.....	9
Past Housing Development.....	12
Method	15
School Enrollment Projections.....	18
4K Enrollment and Projections.....	17
Baseline Projections	18
5 Year Trend Projections	19
2 Year “Trend” Projections.....	20
Kindergarten Trend Projections	21
Comparison of Projection Models	22
Conclusions	27



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Introduction

This report offers a summary of the Enrollment Projection Analysis completed for the Tomah Area School District by the Applied Population Laboratory, University of Wisconsin-Madison. Projections from 2015/16 to 2024/25 are provided for the district as a whole, and for each grade and grade grouping. The projection process uses a combination of historical enrollment data, birth trends and projections, housing starts data, and population trends to create reasonable assumptions about future growth scenarios and the likely impact on the school district.

District Enrollment History

Figure 1-A and Table 1-A display the last ten years of enrollment for the Tomah Area School District. Total district enrollment has remained within a range of 2,950 to 3,150 over the past 10 years, although the peak years of 2009/10 and 2010/11 were boosted by the new 4K program. K-12 provides a better comparable measure across time: the number of K-12 students in Tomah's schools has decreased relatively steadily since 2005/06, falling by 172 or 6% across the decade.

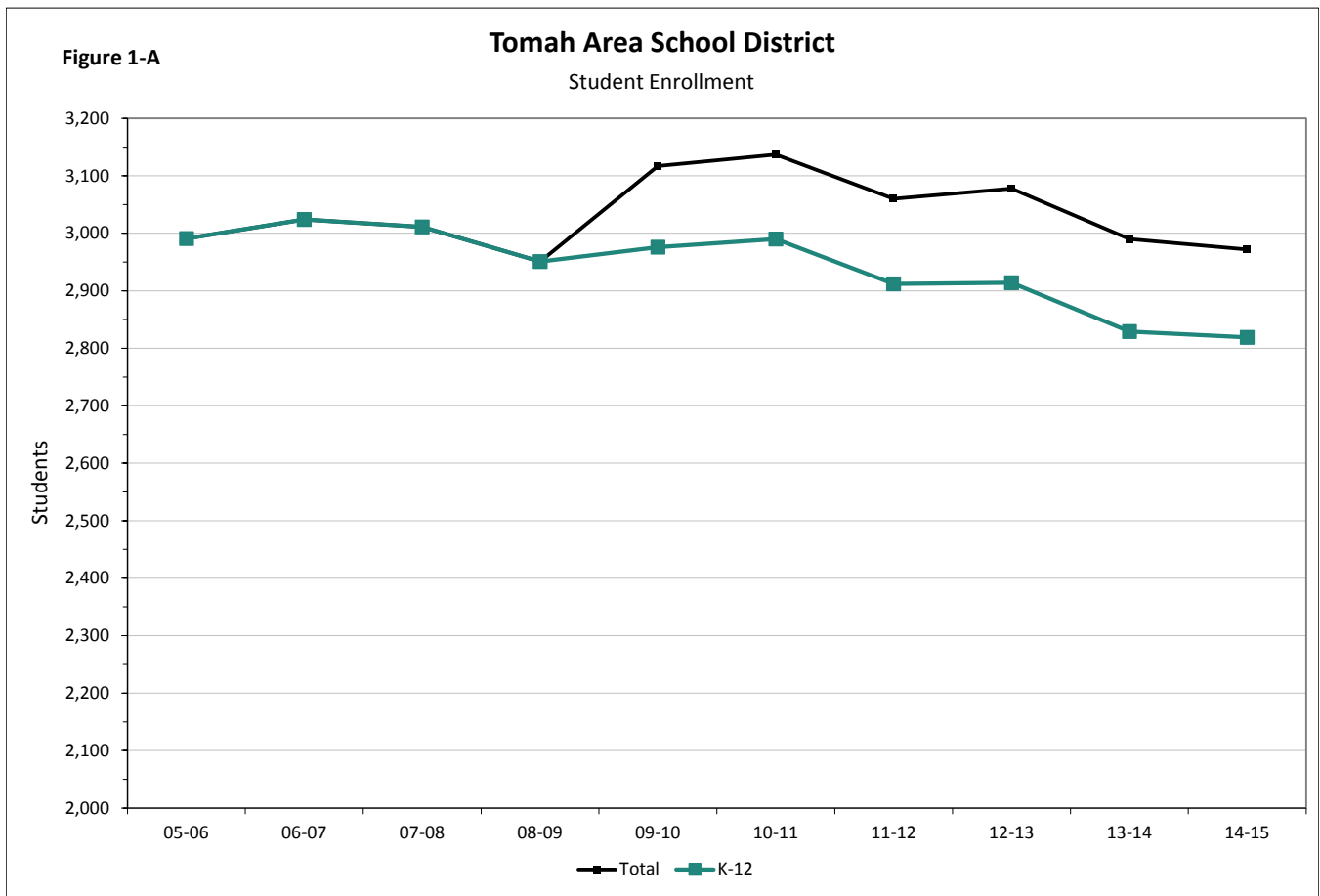


TABLE 1-A
Student Enrollment
Tomah Area School District

	SCHOOL YEAR									
	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15
4K	0	0	0	0	141	147	148	164	161	153
K	208	229	178	195	235	198	217	210	202	215
1	214	211	231	181	202	243	190	207	216	204
2	189	217	218	233	189	206	241	190	211	225
3	195	192	222	222	228	198	199	235	188	213
4	220	194	197	233	226	237	199	207	222	190
5	214	220	202	192	226	232	229	196	199	221
6	214	225	243	217	191	228	233	238	189	198
7	229	211	220	248	216	202	232	228	237	183
8	248	222	223	222	247	220	198	225	223	232
9	248	288	267	242	246	263	224	223	240	246
10	288	240	285	271	238	246	248	227	222	235
11	275	280	237	265	258	233	246	254	229	219
12	249	295	288	230	274	284	256	274	251	238
TOTAL	2,991	3,024	3,011	2,951	3,117	3,137	3,060	3,078	2,990	2,972
K-12	2,991	3,024	3,011	2,951	2,976	2,990	2,912	2,914	2,829	2,819
K-5	1,240	1,263	1,248	1,256	1,306	1,314	1,275	1,245	1,238	1,268
6-8	691	658	686	687	654	650	663	691	649	613
9-12	1,060	1,103	1,077	1,008	1,016	1,026	974	978	942	938

Some of the district's loss is traceable to the Open Enrollment Program; both the in- and out-transfers of students have increased across the past decade. Table 1-B displays the Open Enrollment transfers for the district since 2005/06 (2014/15 is not yet available). The change in the net difference through 2013/14 was -40, or -1.3% of the total enrollment that year. Thus, Open Enrollment is having only a minor negative effect on the district's enrollment.

TABLE 1-B
Open Enrollment Transfers
Tomah Area School District

School Year	In	Out	Net
2005-06	14	39	-25
2006-07	14	49	-35
2007-08	26	64	-38
2008-09	26	60	-34
2009-10	31	82	-51
2010-11	27	73	-46
2011-12	25	79	-54
2012-13	44	93	-49
2013-14	34	99	-65

Source: Tomah Area School District



Finally, the Tomah Area School District has contained four private schools in the past 10 years, three of which continue to operate. Pre-kindergarten and secondary class offerings in these schools have varied. For the most consistent comparison, K-8 enrollment over the past seven years has stayed in a relatively narrow range from 292 to 329. Furthermore, these schools' aggregate K-8 counts are equal to approximately 15-17% of the public district's enrollment for the same grades, although it is impossible to ascertain the number of private school students who reside within the district's boundaries. The impact of these schools for the district is seen primarily in the 8th to 9th grade transition, which will be described later in the section on Grade Progression Ratios.

TABLE 1-C
Enrollment in Private Schools
within Tomah Area School District

School Year	Total	K-8
2005-06	402	370
2006-07	411	375
2007-08	374	329
2008-09	348	309
2009-10	339	306
2010-11	340	311
2011-12	338	292
2012-13	357	311
2013-14	360	315

Source: Tomah Area School District

Table 2 on the next page displays the numeric and percentage changes in specific grade enrollments and grade groupings since 2005/06. Much of the district's loss is concentrated in the past four years (2010/11 to 2014/15); K-5 actually increased in the early part of the past decade, but the pattern has reversed.



TABLE 2
Student Enrollment Changes
Tomah Area School District

GRADE	ABSOLUTE CHANGE			PERCENT CHANGE			AVERAGE ANNUAL PERCENT CHANGE		
	'05 to '14	'05 to '09	'10 to '14	'05 to '14	'05 to '09	'10 to '14	'05 to '14	'05 to '09	'10 to '14
4K	153	141	6			4.1			1.0
K	7	27	17	3.4	13.0	8.6	0.4	3.2	2.1
1	-10	-12	-39	-4.7	-5.6	-16.0	-0.5	-1.4	-4.0
2	36	0	19	19.0	0.0	9.2	2.1	0.0	2.3
3	18	33	15	9.2	16.9	7.6	1.0	4.2	1.9
4	-30	6	-47	-13.6	2.7	-19.8	-1.5	0.7	-5.0
5	7	12	-11	3.3	5.6	-4.7	0.4	1.4	-1.2
6	-16	-23	-30	-7.5	-10.7	-13.2	-0.8	-2.7	-3.3
7	-46	-13	-19	-20.1	-5.7	-9.4	-2.2	-1.4	-2.4
8	-16	-1	12	-6.5	-0.4	5.5	-0.7	-0.1	1.4
9	-2	-2	-17	-0.8	-0.8	-6.5	-0.1	-0.2	-1.6
10	-53	-50	-11	-18.4	-17.4	-4.5	-2.0	-4.3	-1.1
11	-56	-17	-14	-20.4	-6.2	-6.0	-2.3	-1.5	-1.5
12	-11	25	-46	-4.4	10.0	-16.2	-0.5	2.5	-4.0
TOTAL	-19	126	-165	-0.6	4.2	-5.3	-0.1	1.1	-1.3
K-12	-172	-15	-171	-5.8	-0.5	-5.7	-0.6	-0.1	-1.4
K-5	28	66	-46	2.3	5.3	-3.5	0.3	1.3	-0.9
6-8	-78	-37	-37	-11.3	-5.4	-5.7	-1.3	-1.3	-1.4
9-12	-122	-44	-88	-11.5	-4.2	-8.6	-1.3	-1.0	-2.1



Figure 1-B shows enrollment history broken down by grade groupings (4K, K-5, 6-8, and 9-12). 4K enrollment has remained relatively constant since the program was initiated in 2009/10. The elementary grades have displayed some variation but the range has been relatively narrow, from 1,240 to 1,314, over the past 10 years. Middle school enrollment remained fairly steady through 2012/13 but has fallen rather sharply in the past two years (-78 students, or -11%). Finally, high school enrollment, after holding constant for three years, has been in a pattern of decline since then; the total decline since 2007/08 has been -139 students or -13%.

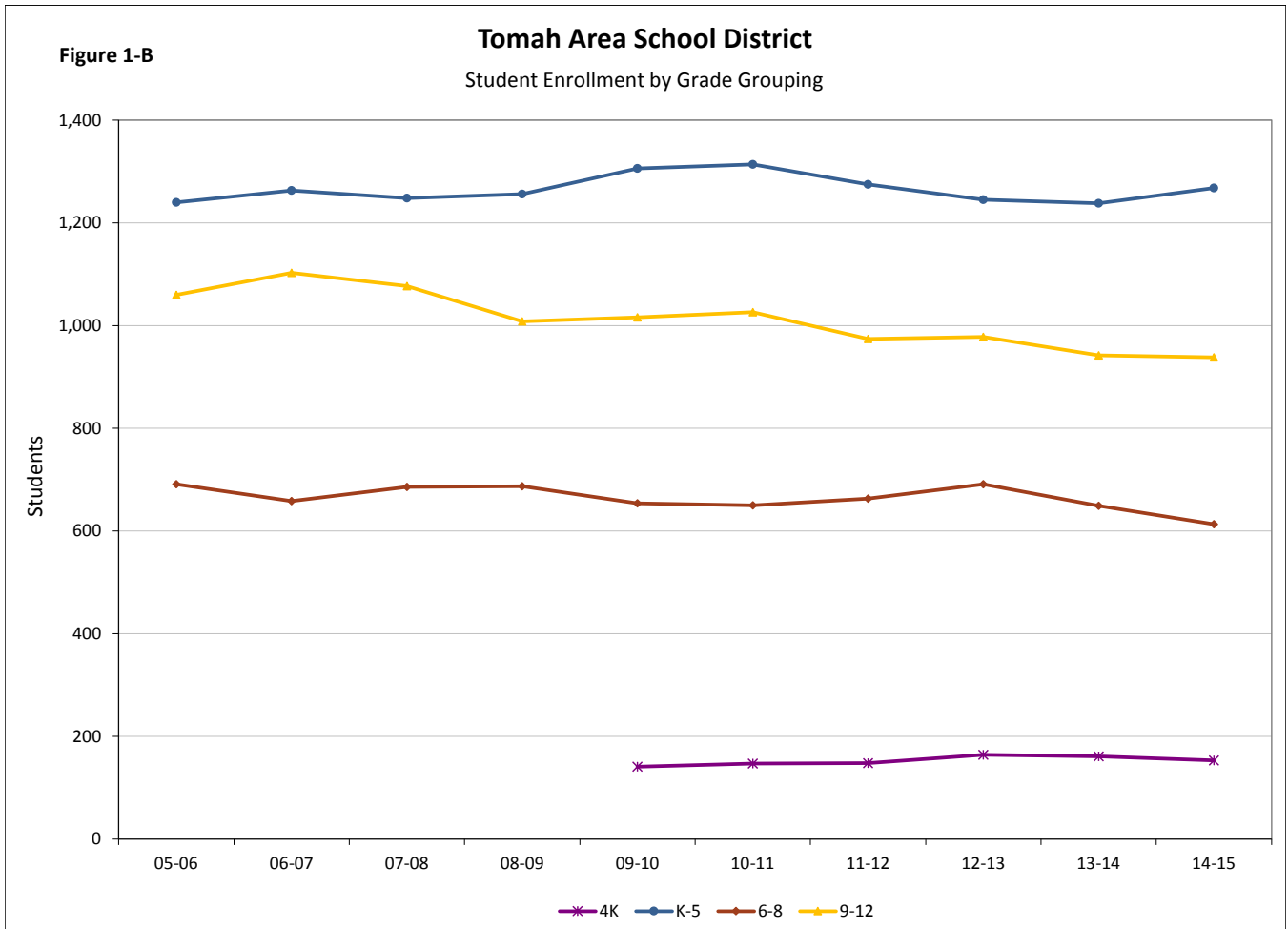
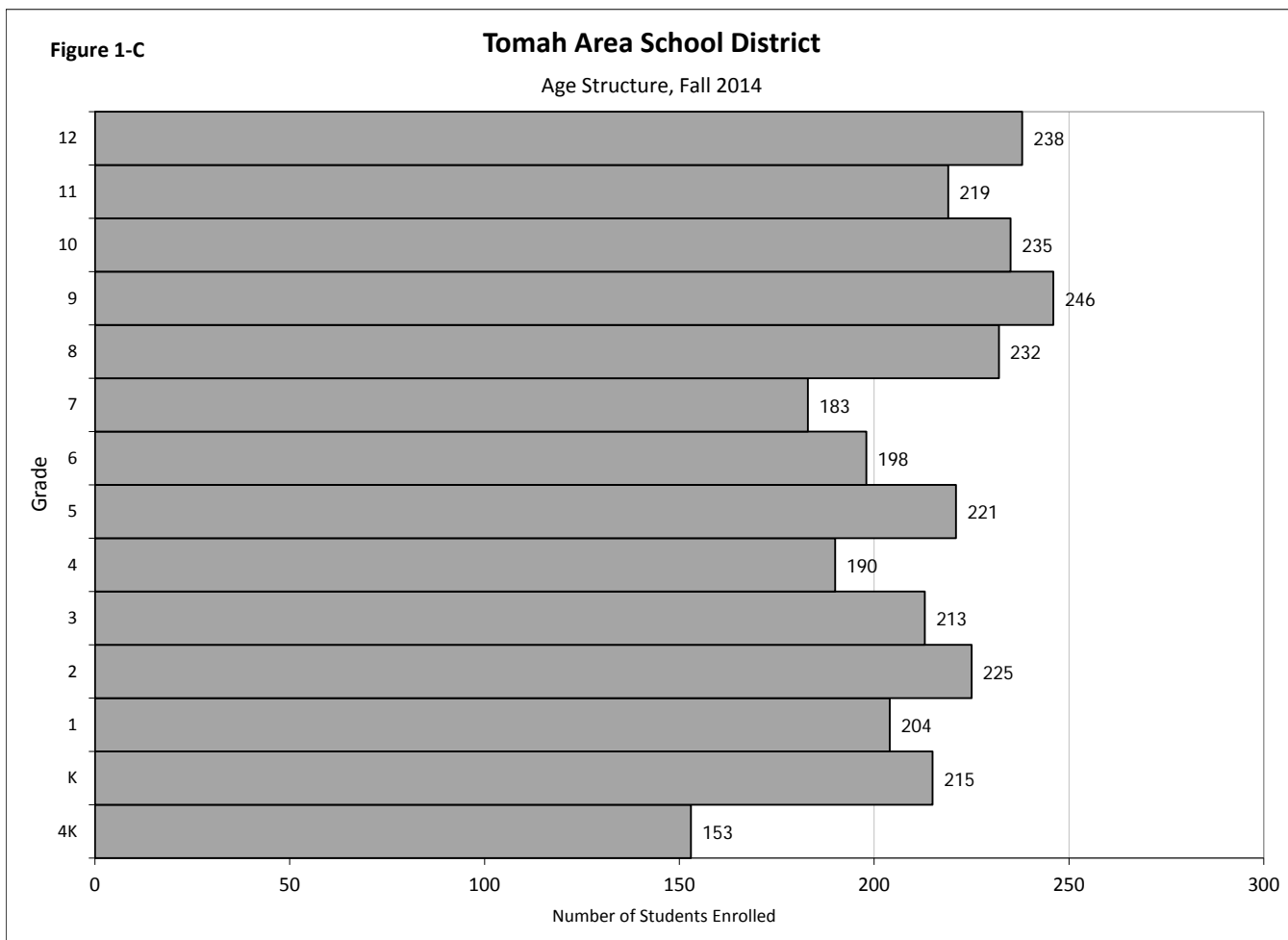


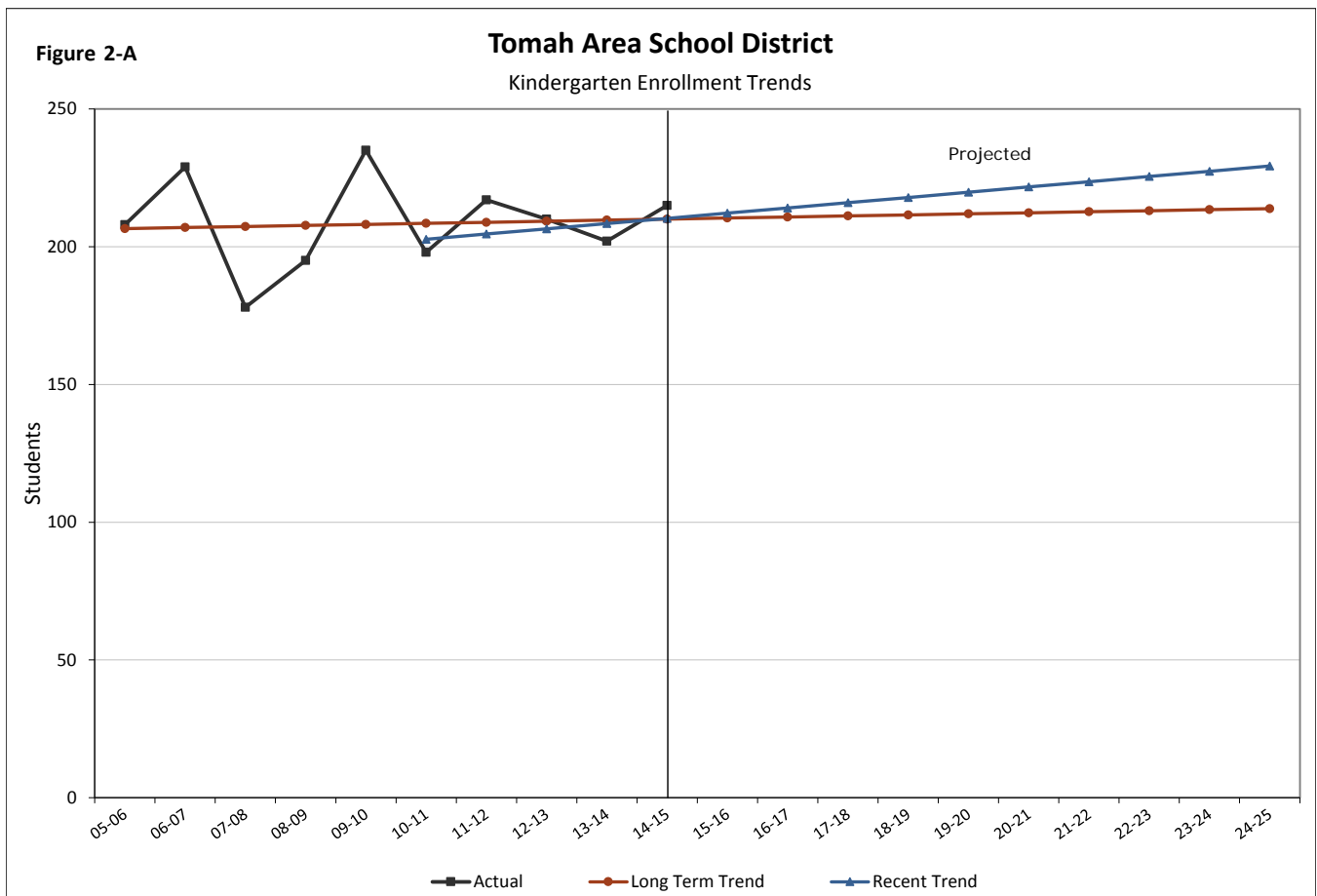
Figure 1-C shows the age structure in Fall 2014 of the student population with the number of 4-year-old kindergarteners at the bottom and the number of 12th graders at top. As can be seen, lower grade enrollments in the current school year were generally smaller than those of the upper grades, although the presence of the four private schools in the district influence this variation. The average size of grades K-8 is 209 compared to the average of 235 for grades 9-12.



Kindergarten Enrollment Trends

Examining trends in kindergarten enrollment is particularly informative for gaining perspective on future district enrollment, as today’s kindergarteners will gradually make up tomorrow’s students at the higher grade levels as they age and move through the school system. When kindergarten enrollment is increasing, elementary and middle school enrollment might be expected to increase in the near future, while high school enrollment may increase further in the future.

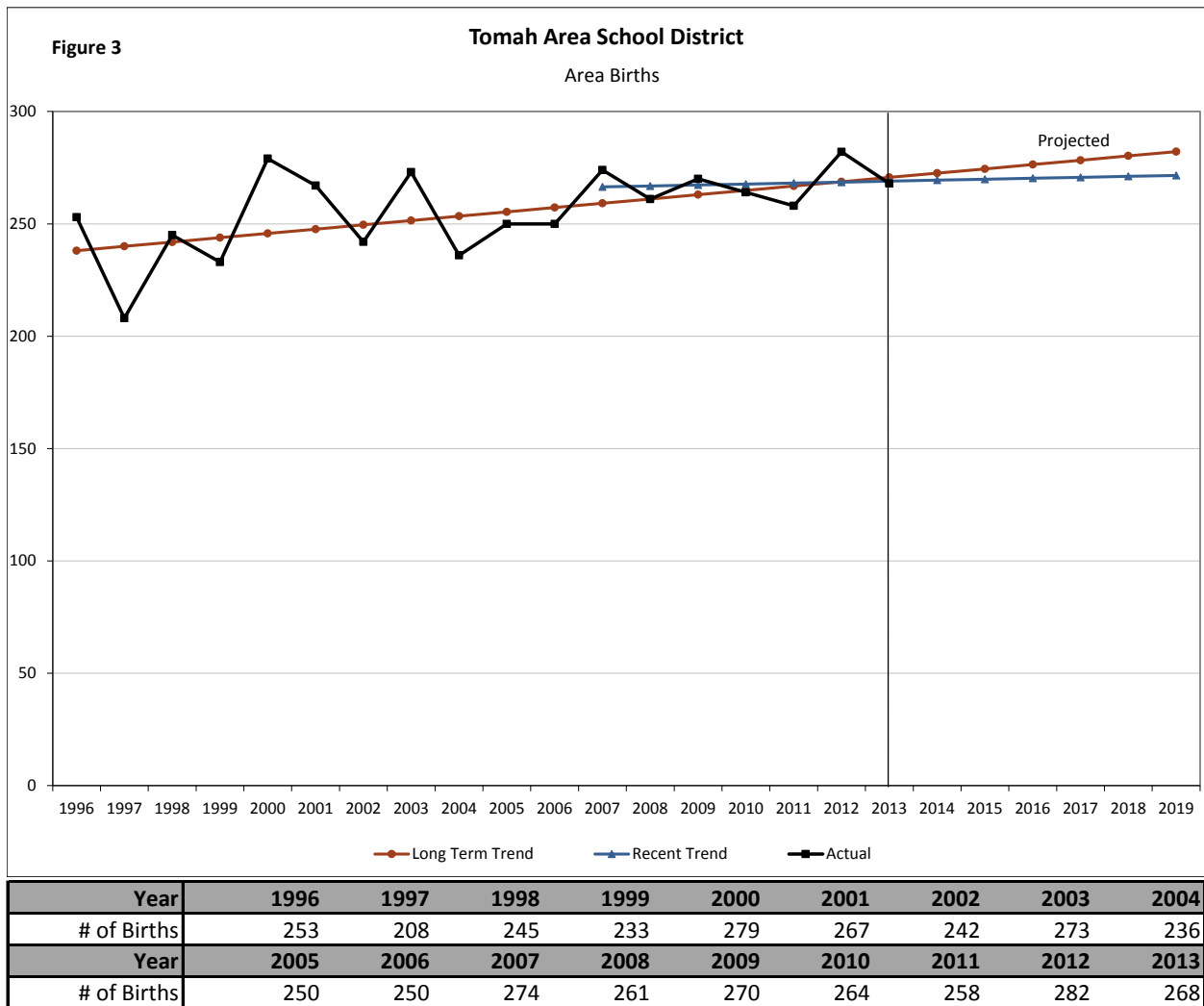
Figure 2-A shows kindergarten enrollment history in black, and trend lines depicting future kindergarteners in red and blue. The “Long Term Trend” line (shown in red) averages kindergarten enrollment changes between 2005/06 and 2014/15. The “Recent Trend” line emphasizes kindergarten enrollment changes over the last five years. There has been sizeable variability in the Tomah Area School District’s kindergarten enrollment, particularly in the years 2005/06 through 2010/11, and the up-and-down pattern has been present but more muted since then. The long-term trend will be used to project future kindergarteners in the Kindergarten Trend model found later in the report.



Birth Trends and Projections

We use historical and projected birth data to forecast the number of kindergarten students who will enroll in the Tomah Area School District in future years. Birth data, as collected and summarized by the Wisconsin Department of Health Services, is available only at the municipal level. Thus, the birth history for the district presented here includes 18 municipalities that are completely within or have more than one-half of their land area in the district.

We extrapolate these birth trends into the future to correspond with our Baseline and Recent Trend projection models, using the B:K grade progression ratios to transform births (B) into future kindergarteners (K). The red line in Figure 3 represents birth trends over the longer term (between 1996 and 2013) and is utilized in the Baseline method projections later in this report. The blue line examines birth patterns for the last seven years and corresponds to the two Recent Trend projection models shown later. Both trend lines display a predicted upward pattern for births in the district area over the next six years.



Source: WI Department of Health Services



Population Trends

This section examines population trends of the recent past for the Tomah Area School District. Changes in the total population of the district area, particularly when examined by age, provide clues into how the school age population may be changing.

Table 3 provides the Census population counts for 2010 and Wisconsin Department of Administration (DOA) estimates for 2011 to 2014 for the district's municipalities, summarized to City of Tomah, villages (Camp Douglas, Oakdale, Warrens and Wyeville) and towns (Adrian, Bear Bluff, Byron, Clifton, Grant, Greenfield, Kingston, La Grange, Lincoln, Oakdale, Orange, Scott and Tomah). The district's municipalities, in aggregate, are estimated to have increased just more than 1 percent since 2010, with the growth concentrated in the City of Tomah and the towns; the four villages have stayed the same. The district's growth rate is slightly lower than Monroe County but higher than the state.

TABLE 3
Total Population by Municipality Type: 2010-2014
Tomah Area School District

Municipality Types	POPULATION				
	Census 2010	est. 2011	est. 2012	est. 2013	est. 2014
Tomah city	9,093	9,138	9,174	9,192	9,204
Villages	1,408	1,408	1,407	1,408	1,405
Towns	9,944	9,964	10,002	10,036	10,051
District Area	20,445	20,510	20,583	20,636	20,660
Monroe County	44,673	44,877	45,056	45,198	45,339
State of Wisconsin	5,686,986	5,694,236	5,703,525	5,717,110	5,732,981

Municipality Types	PERCENT CHANGE				
	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2010 to 2014
Tomah city	0.5%	0.4%	0.2%	0.1%	1.2%
Villages	0.0%	-0.1%	0.1%	-0.2%	-0.2%
Towns	0.2%	0.4%	0.3%	0.1%	1.1%
District Area	0.3%	0.4%	0.3%	0.1%	1.1%
Monroe County	0.5%	0.4%	0.3%	0.3%	1.5%
State of Wisconsin	0.1%	0.2%	0.2%	0.3%	0.8%

Source: Demographic Services Center, WI DOA



Table 4 and Figure 4 illustrate the population for the Tomah Area School District itself at Census 2000 and Census 2010, showing the change in age structure. In the school district, the total population grew by 1,500 residents or 8.1%, better than the state's increase of 6.0% across the decade. While the number of young children under age 10 rose 5% from 2000 to 2010, youth ages 10-14 were fewer at 2010 than at 2000 by 258, or -9%. This latter decrease parallels the enrollment decline for the high school and recent years at the middle school that was illustrated and discussed in Figure 1-B earlier. In contrast, the number of young adults, ages 20-34, rose quite solidly: a gain of 331 or 11% in the 2000s. The apparent decrease in ages 35-44 and increase in ages 45-64 is related to the aging of the Baby Boom generation (from ages 35-54 at 2000). Finally, the age 65-and-over population grew at about the same rate as young adults, 10%. Elderly residents comprised 14.5% of the district's population at 2010, slightly higher than the state percentage (13.7%).

TABLE 4
Population by Age and Gender, 2000-2010
Tomah Area School District

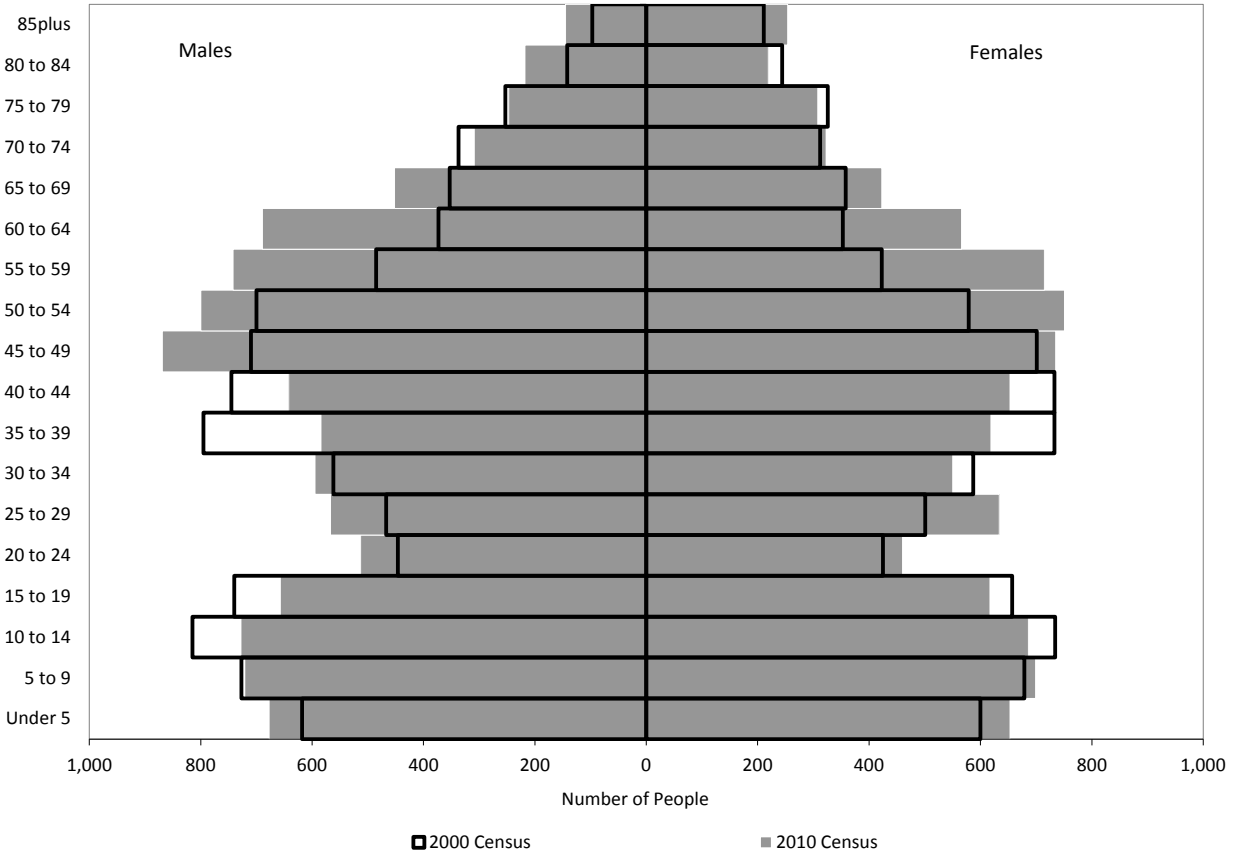
Age	2010 Total			Age	2000 Total		
	Males	Females	Total		Males	Females	Total
Under 5	677	653	1,330	Under 5	618	600	1,218
5 to 9	721	699	1,420	5 to 9	727	679	1,406
10 to 14	728	686	1,414	10 to 14	815	734	1,549
15 to 19	657	617	1,274	15 to 19	740	657	1,397
20 to 24	513	460	973	20 to 24	446	425	871
25 to 29	567	634	1,201	25 to 29	467	501	968
30 to 34	595	550	1,145	30 to 34	562	587	1,149
35 to 39	584	619	1,203	35 to 39	795	733	1,528
40 to 44	642	653	1,295	40 to 44	745	733	1,478
45 to 49	869	735	1,604	45 to 49	710	701	1,411
50 to 54	800	751	1,551	50 to 54	700	579	1,279
55 to 59	742	715	1,457	55 to 59	485	423	908
60 to 64	689	566	1,255	60 to 64	373	353	726
65 to 69	452	423	875	65 to 69	353	358	711
70 to 74	309	323	632	70 to 74	337	312	649
75 to 79	247	308	555	75 to 79	253	326	579
80 to 84	218	219	437	80 to 84	142	244	386
85plus	145	254	399	85plus	97	211	308
	10,155	9,865	20,020		9,365	9,156	18,521

Source: U. S. Census Bureau



Figure 4-B

Age Structure Tomah Area School District



Past Housing Development

Table 5 shows the number of housing starts in the Tomah Area School District's primary municipalities over the past ten years; similar to the population change earlier in this report, housing stock change is summarized to the City of Tomah, the four villages and thirteen towns.

TABLE 5
School District Area Housing Starts
Tomah Area School District

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
District Area										
TOTAL	128	148	177	100	98	77	64	54	43	34
Single Family	101	100	120	70	40	31	28	30	35	28
Two Family	6	8	16	14	6	18	18	4	8	6
Multi-family	21	40	41	16	52	28	18	20	0	0
C. Tomah										
TOTAL	51	75	73	42	62	54	39	26	14	19
Single Family	24	27	18	12	4	10	5	2	8	13
Two Family	6	8	14	14	6	16	16	4	6	6
Multi-family	21	40	41	16	52	28	18	20	0	0
Villages*										
TOTAL	3	2	55	13	2	3	1	2	4	0
Single Family	3	2	53	13	2	1	1	2	2	0
Two Family	0	0	2	0	0	2	0	0	2	0
Multi-family	0	0	0	0	0	0	0	0	0	0
Towns										
TOTAL	74	71	49	45	34	20	24	26	25	15
Single Family	74	71	49	45	34	20	22	26	25	15
Two Family	0	0	0	0	0	0	2	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0

Source: Demographic Services Center, WIDOA

*Villages' data for 2006 and 2007 includes units constructed at Three Bears Resort in Warrens

Not unlike the rest of Wisconsin and the country, a great deal of housing growth occurred in the school district area prior the start of the Great Recession, and new construction has tapered off since then. Housing stock change in the City of Tomah has accounted for nearly one-half of the growth in the district's municipalities.

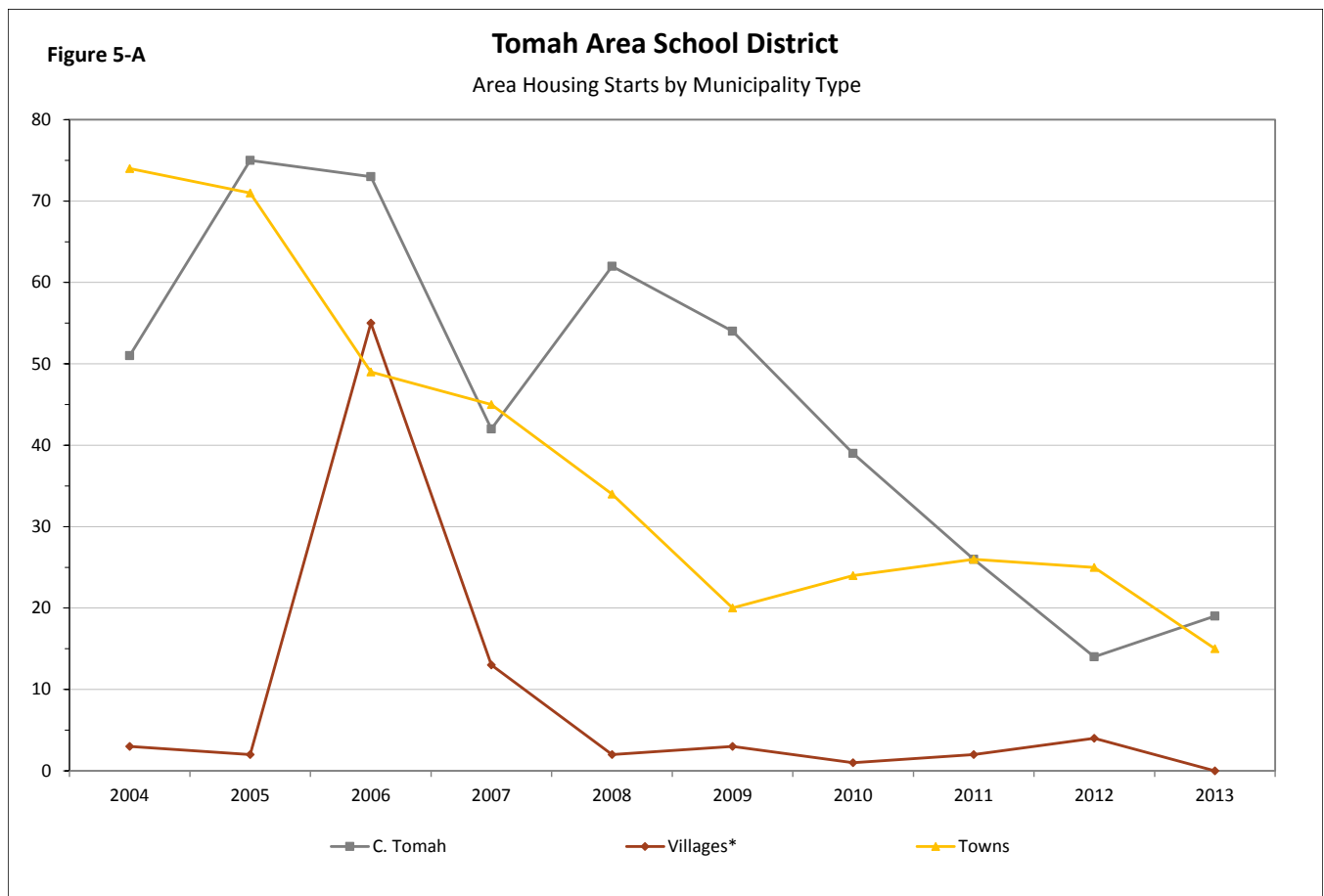
Examining trends in recent housing development can help to explain how in-migration into the Tomah Area School District area might be affecting school enrollment. If the number of housing starts in the district area is expected to be reasonably consistent for the next several years, then we assume that in-migration of school-age children will also remain relatively consistent. If the number of housing starts is expected to increase significantly above and beyond recent levels, in-migration may play an increasing role in school district enrollment. However, it is important to recognize that the number of



housing starts in any given year is dependent upon a large number of confounding variables (decisions of local, county, and state policy makers, residential developers, interest rates, demand for housing, etc.), making future growth patterns difficult to predict.

It is also important to consider that turnover in ownership of existing housing stock also contributes to changes in enrollment. A district can maintain or even increase enrollment depending upon the cycle of resident homeowners, regardless of housing starts. For instance, a younger community will have a higher child-per-household ratio, whereas an older community will have a lower child-per-household ratio. However, within a few years a turnover in ownership in an older community may result in an increase in the child-per-household number. As younger families move into the area, the school district will tend to see new students enrolling into the district’s schools. Absent new housing development or housing turnover, local families age in place and the number of school-aged children eventually declines. Turnover in ownership does not happen overnight, however, and slow turnover may happen for several years at varying rates depending on the economy, retirees choosing to stay in their homes, etc.

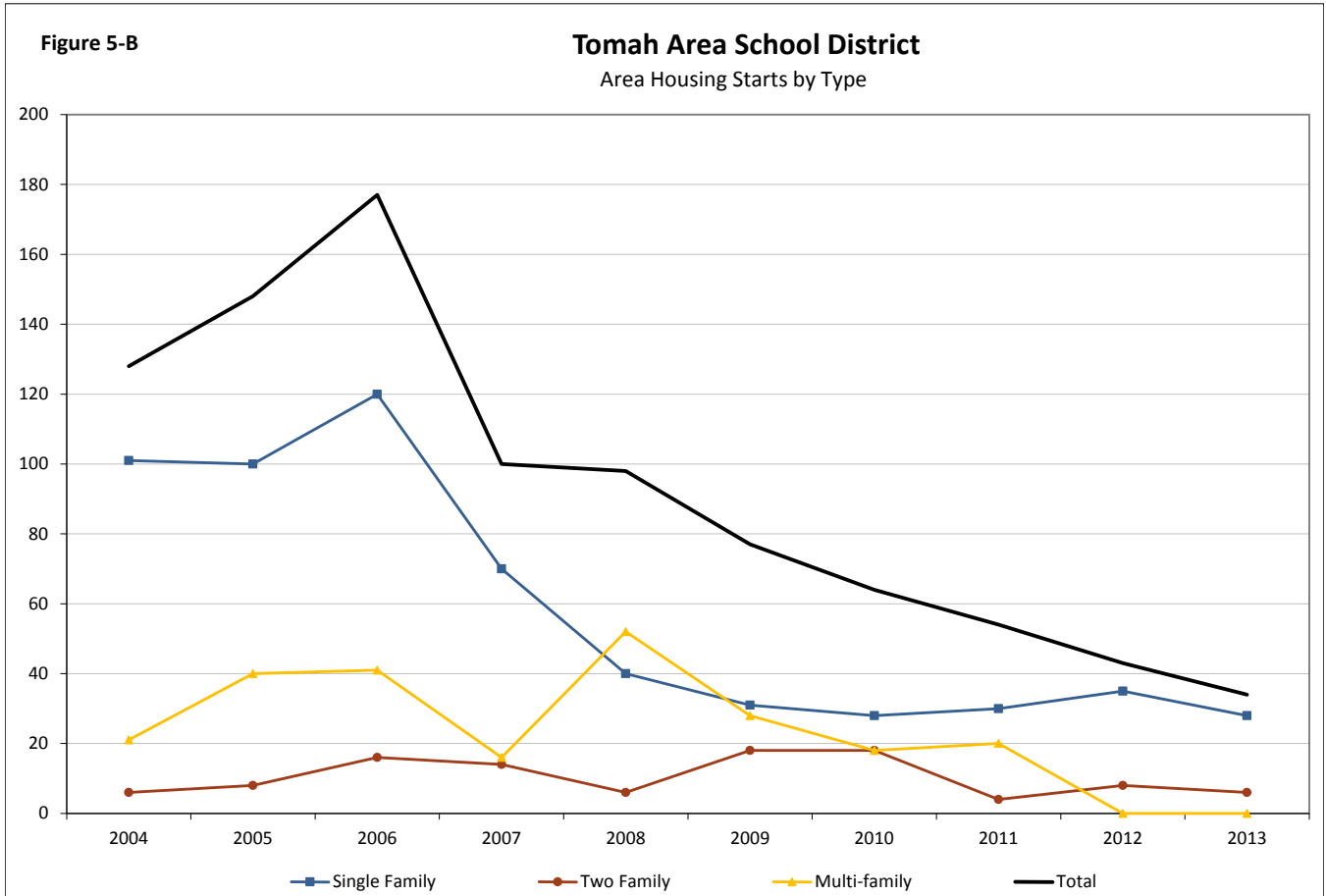
Figure 5-A shows the number of residential building permits issued by municipality type.



*Villages’ data for 2006 and 2007 includes units constructed at Three Bears Resort in Warrens.



Figure 5-B shows housing starts in the area by type of housing unit—single family home, duplex, and multi-family housing unit. All of the multi-family housing in the area has been constructed in the City of Tomah over the past 10 years.



Data for 2006 and 2007 includes units constructed at Three Bears Resort in Warrens.



Method

In order to generate school enrollment projections, we rely on a commonly used demographic technique called the “cohort survival method.” This method advances current students through the school system over time and applies rates of transfer (or “survival”) as the students who are now in school age from year to year and grade to grade. It is through these rates of transfer that we make assumptions about how migration into and out of the district and transfers to and from different schools or home schooling will impact future enrollment. In order to project incoming kindergarten students, we gather data on births from the Wisconsin Department of Health Services and assume that a certain percentage of the children born to mothers residing in the school district area will enroll as kindergarteners five to six years later.

Grade Progression Ratios

Grade progression ratios are used to measure district enrollment changes, year to year and grade to grade, that have occurred within the school district in the recent past. The ratios measure the effects of in- and out-migration and the transfer of students between private and public schools. By examining these, we can better understand recent changes in enrollment, and we use these ratios as the rates of transfer mentioned above to inform projections of future students.

In order to predict future enrollment under different growth assumptions, three sets of grade progression ratios are calculated:

- Baseline: averages ten years of progression ratios, with outlying ratios (those outside of one standard deviation of the mean) excluded;
- Five-year Trend: averages the past five years of progression ratios with no exclusions;
- Two-year Trend: averages the past two years of progression ratios with no exclusions.

These long-, medium- and short-range bases produce varying projections that indicate a range of likely enrollment outcomes in the future.

Table 6 on the next page shows the grade progression ratios for the Tomah Area School District.



TABLE 6
Grade Progression Ratios
Tomah 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
05-06/06-07	0.869	1.014	1.014	1.016	0.995	1.000	1.051	0.986	0.969	1.161	0.968	0.972	1.073
06-07/07-08	0.657	1.009	1.033	1.023	1.026	1.041	1.105	0.978	1.057	1.203	0.990	0.988	1.029
07-08/08-09	0.779	1.017	1.009	1.018	1.050	0.975	1.074	1.021	1.009	1.085	1.015	0.930	0.970
08-09/09-10	0.895	1.036	1.044	0.979	1.018	0.970	0.995	0.995	0.996	1.108	0.983	0.952	1.034
09-10/10-11	0.797	1.034	1.020	1.048	1.039	1.027	1.009	1.058	1.019	1.065	1.000	0.979	1.101
10-11/11-12	0.885	0.960	0.992	0.966	1.005	0.966	1.004	1.018	0.980	1.018	0.943	1.000	1.099
11-12/12-13	0.840	0.954	1.000	0.975	1.040	0.985	1.039	0.979	0.970	1.126	1.013	1.024	1.114
12-13/13-14	0.759	1.029	1.019	0.989	0.945	0.961	0.964	0.996	0.978	1.067	0.996	1.009	0.988
13-14/14-15	0.810	1.010	1.042	1.009	1.011	0.995	0.995	0.968	0.979	1.103	0.979	0.986	1.039
Baseline	0.809	1.021	1.019	1.006	1.019	0.982	1.016	0.996	0.988	1.092	0.986	0.989	1.055
5 Year Trend	0.818	0.997	1.015	0.998	1.008	0.987	1.002	1.004	0.985	1.076	0.986	1.000	1.068
2 Year "Trend"	0.785	1.019	1.030	0.999	0.978	0.978	0.980	0.982	0.978	1.085	0.987	0.998	1.014

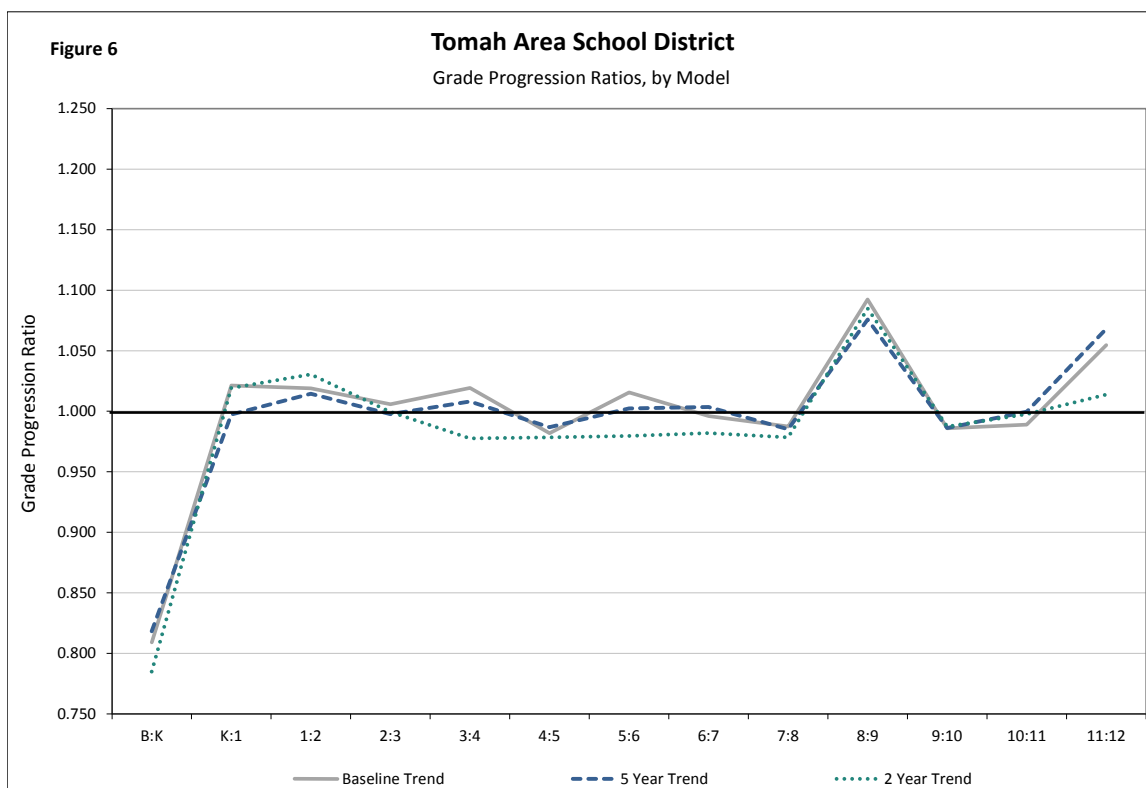
*Shaded progression ratios are excluded from the Baseline Average

As examples, the grade progression ratios can be interpreted in the following manner:

- The Baseline ratio for 1:2 is 1.019. This means that, in the Tomah Area School District, the second grade is on average 1.9% larger (about 2 students per 100) than the first grade class of the previous year, the result of transfers from other schools and net in-migration into the district.
- The B:K (birth to kindergarten) five-year ratio of 0.818 indicates that, on average over the past five years, the district's kindergarten enrollment equals approximately 82% of the births in the area from five years previously.
- The presence of private schools in the district—the largest two run through 8th grade only—helps to explain the 8-9% gain that the public district makes in the 8:9 transition across the three models.

Figure 6 shows the differences between these three sets of grade progression ratios. While the three sets are fairly similar, some differentiation is apparent between the two-year trend for grade transitions 3:4 through 7:8, which have been less than 1 (indicating a decline in class size from year to year), while the corresponding Baseline and five-year trend ratios have often been slightly more than 1 (indicating an increase in class size from year to year).





4K Enrollment and Projections

To generate 4K enrollment projections, we assume that the number of children born in the district area who will enter the 4K program will be similar to birth-to-4K trend progression ratios of the recent past. Table 7 shows observed progression ratios between birth to 4K and 4K to kindergarten for the school years since the district’s 4K program began, and the grade progression ratio trends.

For these 4K progression ratios, the birth-to-4K results are very similar across all three models. The 4K:K ratios are not used in the enrollment projections that follow but illustrate that kindergarten classes on average are about 28-37% larger than 4K.

TABLE 7
4K Grade Progression Ratios
Tomah Area School District

	B:4K	4K:K
08-09/09-10	0.568	
09-10/10-11	0.599	1.404
10-11/11-12	0.592	1.476
11-12/12-13	0.617	1.419
12-13/13-14	0.607	1.232
13-14/14-15	0.573	1.335
Average (6 yrs)	0.593	
5 Year Trend	0.598	1.373
2 Year "Trend"	0.590	1.284



School Enrollment Projections

When considering all of the projections provided in this report for decision-making, it is important to recognize that population projections of all types, including school enrollment projections, are more accurate in the immediate future than they are further into the future. This is especially true for grades K-5, because the students who will enter kindergarten after 2018/19 have not yet been born. Overall, our projections are more reliable over the next five years (up to the 2019/20 school year) than they are in the latter half of the next decade.

Baseline Projections

The Baseline model (Table 8) projects enrollments using the assumption that relatively long-term progression ratios, year to year and grade to grade, will continue into the future. This model assumes that longer-range patterns in enrollment, migration, and births will be representative of future trends in the district. This model projects that 4K-12 enrollment in the Tomah Area School District will increase modestly over the next five years, from 2,972 students in 2014/15 to 3,020 students in 2019/20, a rise of 48 students or approximately 2%, and about 244 or 8% through 2024/25.

TABLE 8
Baseline Projection Model
Tomah Area School District

	SCHOOL YEAR									
	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
4K	156	164	163	162	164	165	166	168	169	170
K	215	210	222	221	219	222	223	225	226	228
1	220	220	215	226	225	224	226	228	229	231
2	208	224	224	219	231	230	228	231	232	234
3	226	209	225	225	220	232	231	230	232	234
4	217	231	213	229	230	224	236	235	234	236
5	187	213	226	209	225	225	220	232	231	230
6	224	189	216	230	212	229	229	224	236	235
7	197	224	189	216	229	212	228	228	223	235
8	181	195	221	186	213	226	209	225	225	220
9	253	197	213	241	204	233	247	228	246	246
10	243	250	195	210	238	201	229	244	225	242
11	232	240	247	192	207	235	198	227	241	223
12	231	245	253	261	203	219	248	209	239	254
TOTAL	2,990	3,011	3,022	3,028	3,020	3,076	3,120	3,132	3,188	3,216
K-12	2,834	2,847	2,858	2,866	2,856	2,911	2,954	2,965	3,019	3,047
K-5	1,273	1,307	1,325	1,330	1,350	1,357	1,365	1,380	1,385	1,392
6-8	602	608	626	632	654	667	666	677	684	690
9-12	959	932	907	904	852	887	923	908	951	965



5 Year Trend Projections

The 5 Year Trend model (Table 9) uses the grade progression ratios from the last five years and recent birth trends in the school district area to project what future enrollments would look like if more recent patterns were representative of future trends. With recent progression ratios and birth trends weighted more heavily, 4K-12 enrollment in the Tomah Area School District is projected to remain essentially unchanged, from 2,972 students in 2014/15 to 2,967 students in 2019/20, a decrease of five students or less than 1%. A modest gain of 115 students or 4% is predicted through 2024/25.

TABLE 9
5 Year Trend Projection Model
Tomah Area School District

GRADE	SCHOOL YEAR									
	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
4K	155	164	163	161	161	161	162	162	162	162
K	218	213	224	223	220	221	221	221	222	222
1	214	217	212	224	223	219	220	220	221	221
2	207	218	220	215	227	226	223	223	224	224
3	224	206	217	220	215	226	225	222	223	223
4	215	226	208	219	221	216	228	227	224	225
5	188	212	223	205	216	219	214	225	224	221
6	222	188	212	224	206	216	219	214	226	225
7	199	222	189	213	225	207	217	220	215	226
8	180	196	219	186	210	221	204	214	217	212
9	250	194	211	236	200	226	238	219	230	233
10	243	246	191	208	232	197	223	235	216	227
11	235	243	246	191	208	232	197	223	235	216
12	234	251	259	263	204	222	248	211	238	251
TOTAL	2,983	2,995	2,995	2,986	2,967	3,010	3,038	3,036	3,075	3,087
K-12	2,827	2,831	2,832	2,826	2,806	2,848	2,876	2,874	2,912	2,925
K-5	1,266	1,292	1,305	1,306	1,321	1,327	1,331	1,339	1,337	1,336
6-8	600	606	620	623	640	644	640	648	657	663
9-12	961	934	907	897	844	877	906	887	919	926



2 Year "Trend" Projections

The 2 Year "Trend" model (Table 10) averages the grade progression ratios from the last two years to project what future enrollments would look like if even more recent patterns were representative of future trends. This model should be interpreted with some caution; if migration and transfer patterns continue at the lower rate experienced in the past two to three years, only then should this model be appropriate.

For the 2 Year Trend model, 4K-12 enrollment in the Tomah Area School District is projected to decrease from 2,972 students in 2014/15 to 2,866 students in 2019/20, a loss of 106 or approximately -4%. Total enrollment is then predicted to improve slightly to 2,932 through 2024/25, a decline of 40 or -1% from 2014/15.

TABLE 10
2 Year "Trend" Projection Model
Tomah Area School District

GRADE	SCHOOL YEAR									
	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
4K	155	164	163	161	161	161	162	162	162	162
K	209	204	215	214	211	212	212	212	213	213
1	219	213	208	219	218	215	216	216	216	217
2	210	226	219	214	226	225	222	222	223	223
3	225	210	226	219	214	226	225	222	222	223
4	208	220	205	221	214	209	221	220	217	217
5	186	204	215	201	216	210	205	216	215	212
6	216	182	200	211	197	211	205	201	212	211
7	194	213	179	196	207	193	208	202	197	208
8	179	190	208	175	192	202	189	203	197	193
9	252	194	206	226	190	208	220	205	220	214
10	243	249	192	204	223	187	205	217	203	218
11	234	242	248	191	203	222	187	205	216	202
12	222	238	246	251	194	206	225	190	208	219
TOTAL	2,954	2,948	2,930	2,903	2,866	2,889	2,901	2,892	2,921	2,932
K-12	2,798	2,784	2,767	2,742	2,705	2,728	2,740	2,730	2,759	2,769
K-5	1,257	1,276	1,289	1,288	1,299	1,296	1,300	1,308	1,306	1,305
6-8	590	585	586	582	596	607	602	606	606	611
9-12	951	923	892	872	810	824	838	817	847	853



Kindergarten Trend Projections

For this method, we perform a trend analysis to project the number of future kindergarten students, rather than relying upon the traditional birth to kindergarten (B:K) grade progression ratio. Then, the 5 Year Trend progression ratios are used for projecting the other grades (1-12) in the district. In other words, this model assumes that the number of new kindergarteners each year over the next decade will continue to follow a trend similar to the historical kindergarten enrollment pattern, regardless of the number of observed births in the school district area. According to this hybrid projection model (Table 11), 4K-12 enrollment in the Tomah Area School District is projected to decrease from 2,972 students in 2014/15 to 2,925 students in 2019/20, a loss of 47 or slightly less than 2%. Total enrollment is then predicted to improve slightly to 3,003 through 2024/25, an increase of 31 or 1% from 2014/15.

TABLE 11
Kindergarten Trend Projection Model
Tomah Area School District

GRADE	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
4K	155	164	163	161	161	161	162	162	162	162
K	210	211	211	212	212	212	213	213	213	214
1	214	210	210	211	211	211	212	212	212	213
2	207	218	213	213	214	214	214	215	215	216
3	224	206	217	212	213	213	214	214	214	215
4	215	226	208	219	214	214	215	215	216	216
5	188	212	223	205	216	211	212	212	212	213
6	222	188	212	224	206	216	212	212	213	213
7	199	222	189	213	225	207	217	212	213	213
8	180	196	219	186	210	221	204	214	209	210
9	250	194	211	236	200	226	238	219	230	225
10	243	246	191	208	232	197	223	235	216	227
11	235	243	246	191	208	232	197	223	235	216
12	234	251	259	263	204	222	248	211	238	251
TOTAL	2,975	2,986	2,973	2,953	2,925	2,959	2,979	2,968	2,999	3,003
K-12	2,820	2,822	2,810	2,792	2,764	2,798	2,817	2,807	2,837	2,840
K-5	1,258	1,283	1,283	1,272	1,279	1,277	1,279	1,281	1,283	1,286
6-8	600	606	620	623	640	644	632	639	635	636
9-12	961	934	907	897	844	877	906	887	919	919



Comparison of Projection Models

Figures 7-11 and Tables 12-16 compare the four enrollment projection models broken down by total 4K-12 and K-12 district enrollment and by grade groupings.

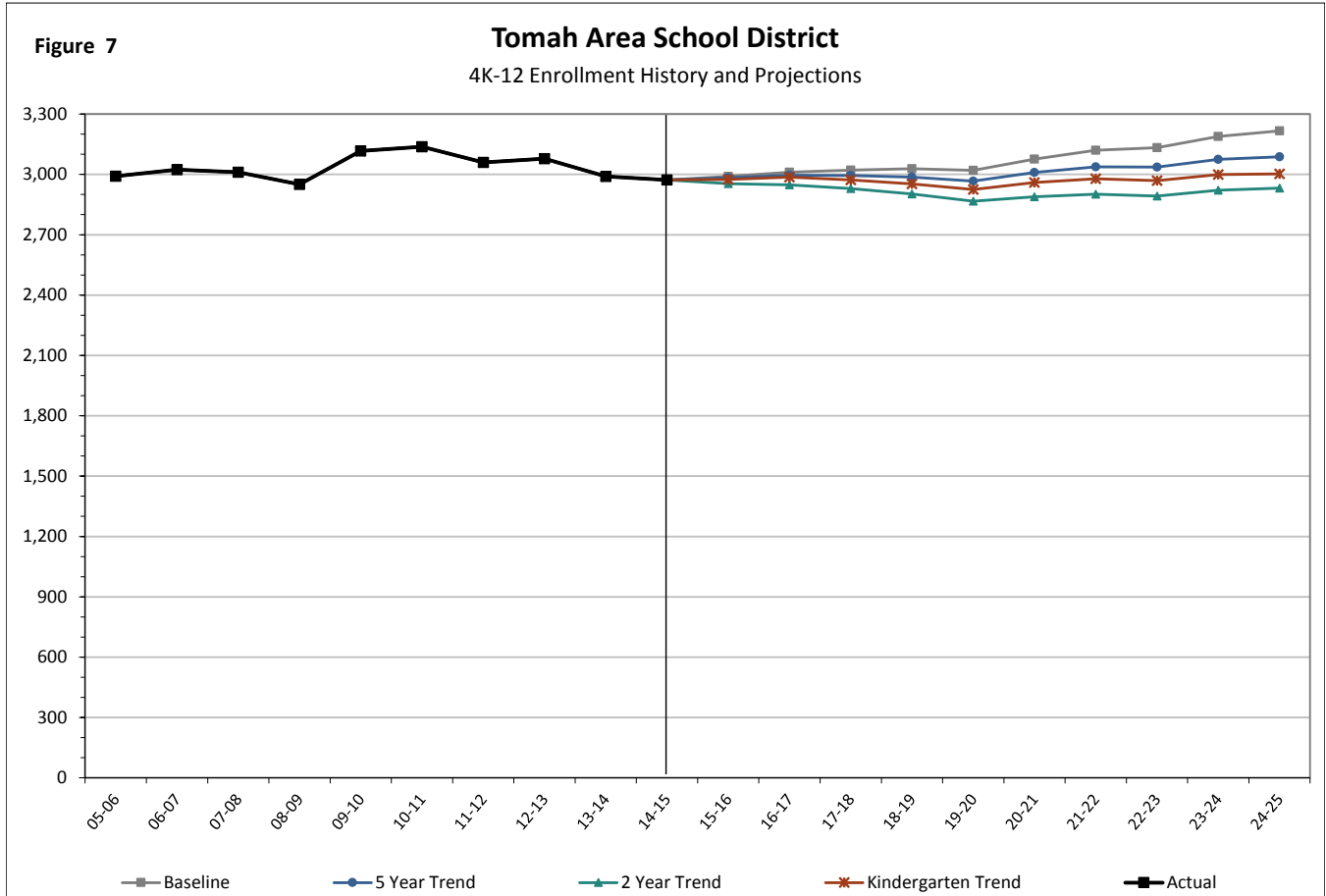


TABLE 12
Summary of 4K-12 Enrollment Projections
Tomah Area School District

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
Baseline	2,990	3,011	3,022	3,028	3,020	3,076	3,120	3,132	3,188	3,216
5 Year Trend	2,983	2,995	2,995	2,986	2,967	3,010	3,038	3,036	3,075	3,087
2 Year "Trend"	2,954	2,948	2,930	2,903	2,866	2,889	2,901	2,892	2,921	2,932
Kindergarten Trend	2,975	2,986	2,973	2,953	2,925	2,959	2,979	2,968	2,999	3,003



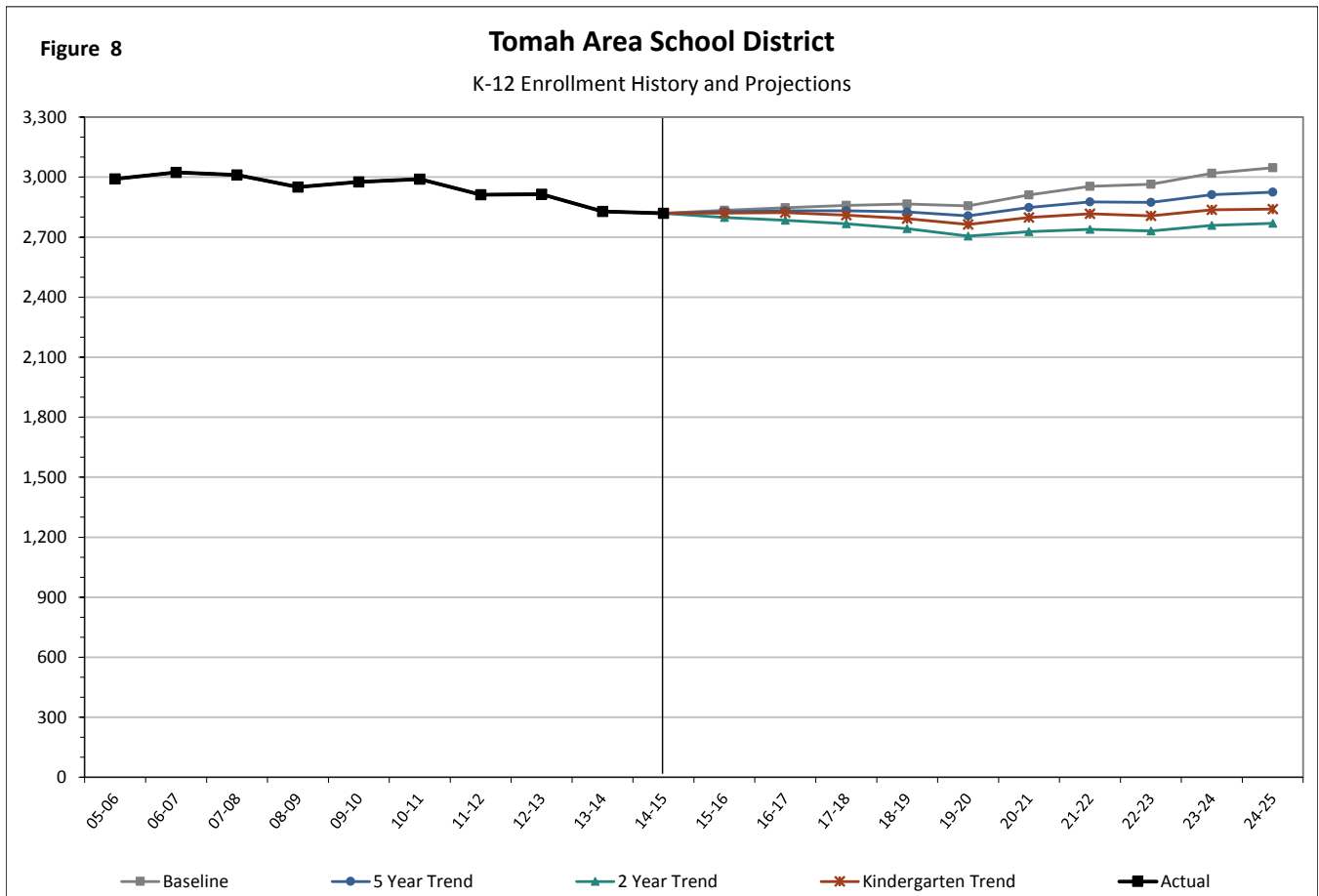


TABLE 13
Summary of K-12 Enrollment Projections
Tomah Area School District

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
Baseline	2,834	2,847	2,858	2,866	2,856	2,911	2,954	2,965	3,019	3,047
5 Year Trend	2,827	2,831	2,832	2,826	2,806	2,848	2,876	2,874	2,912	2,925
2 Year "Trend"	2,798	2,784	2,767	2,742	2,705	2,728	2,740	2,730	2,759	2,769
Kindergarten Trend	2,820	2,822	2,810	2,792	2,764	2,798	2,817	2,807	2,837	2,840

4K-12 enrollment is 2,972 and K-12 enrollment is 2,819 for 2014/15. The Baseline model projects modest increasing enrollment over the next five years, while the other three models predict moderate decline. The four models project an enrollment range five years from now (2019/20) from 2,866 to 3,020 for grades 4K-12 and from 2,705 to 2,856 for grades K-12.



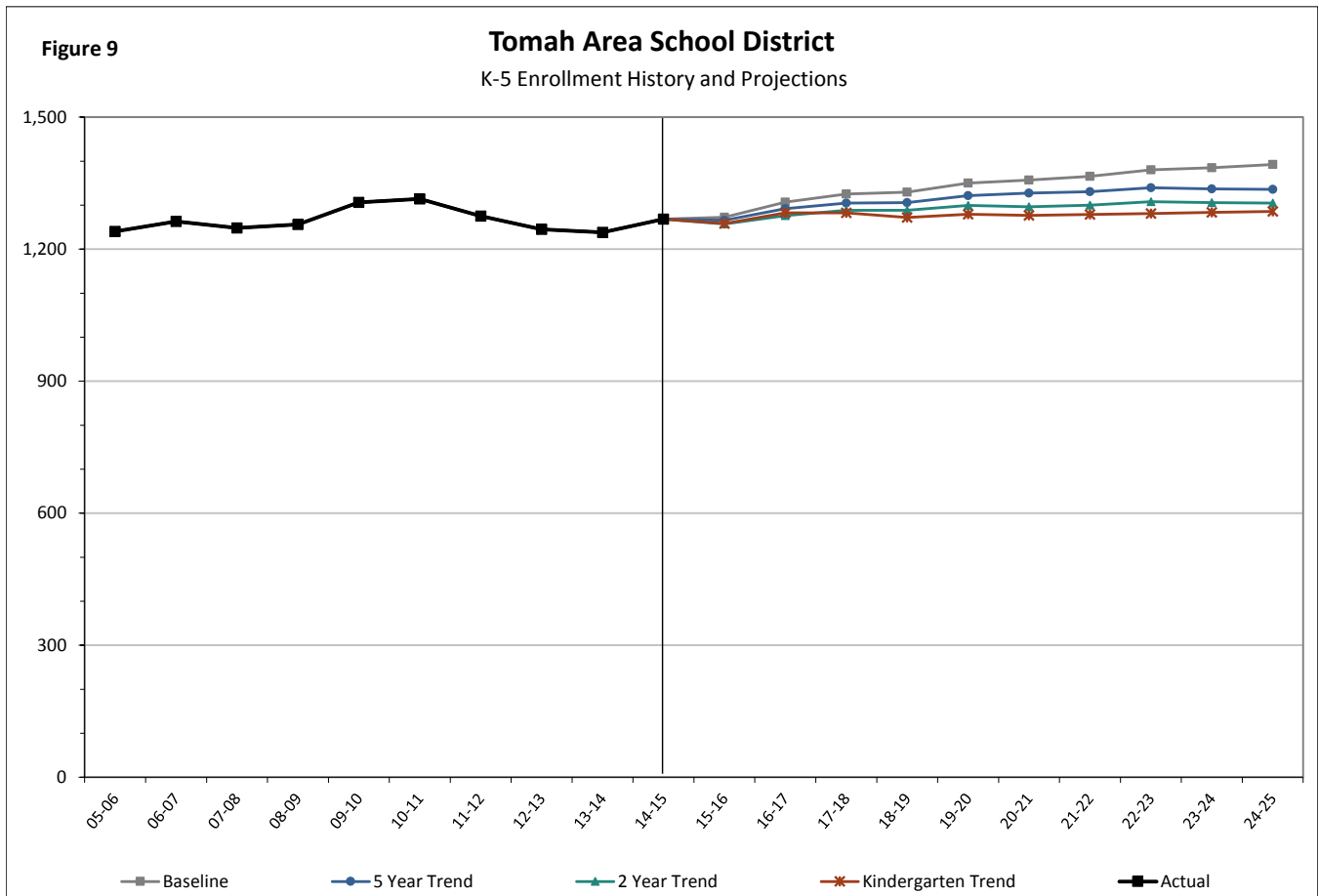


TABLE 14
Summary of K-5 Enrollment Projections
Tomah Area School District

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
Baseline	1,273	1,307	1,325	1,330	1,350	1,357	1,365	1,380	1,385	1,392
5 Year Trend	1,266	1,292	1,305	1,306	1,321	1,327	1,331	1,339	1,337	1,336
2 Year "Trend"	1,257	1,276	1,289	1,288	1,299	1,296	1,300	1,308	1,306	1,305
Kindergarten Trend	1,258	1,283	1,283	1,272	1,279	1,277	1,279	1,281	1,283	1,286

Enrollment in grades K through 5 for 2014/15 is 1,268. All models project increasing enrollment over the next five years to ten years, with the range five years from now (2019/20) predicted to be 1,279 to 1,350.



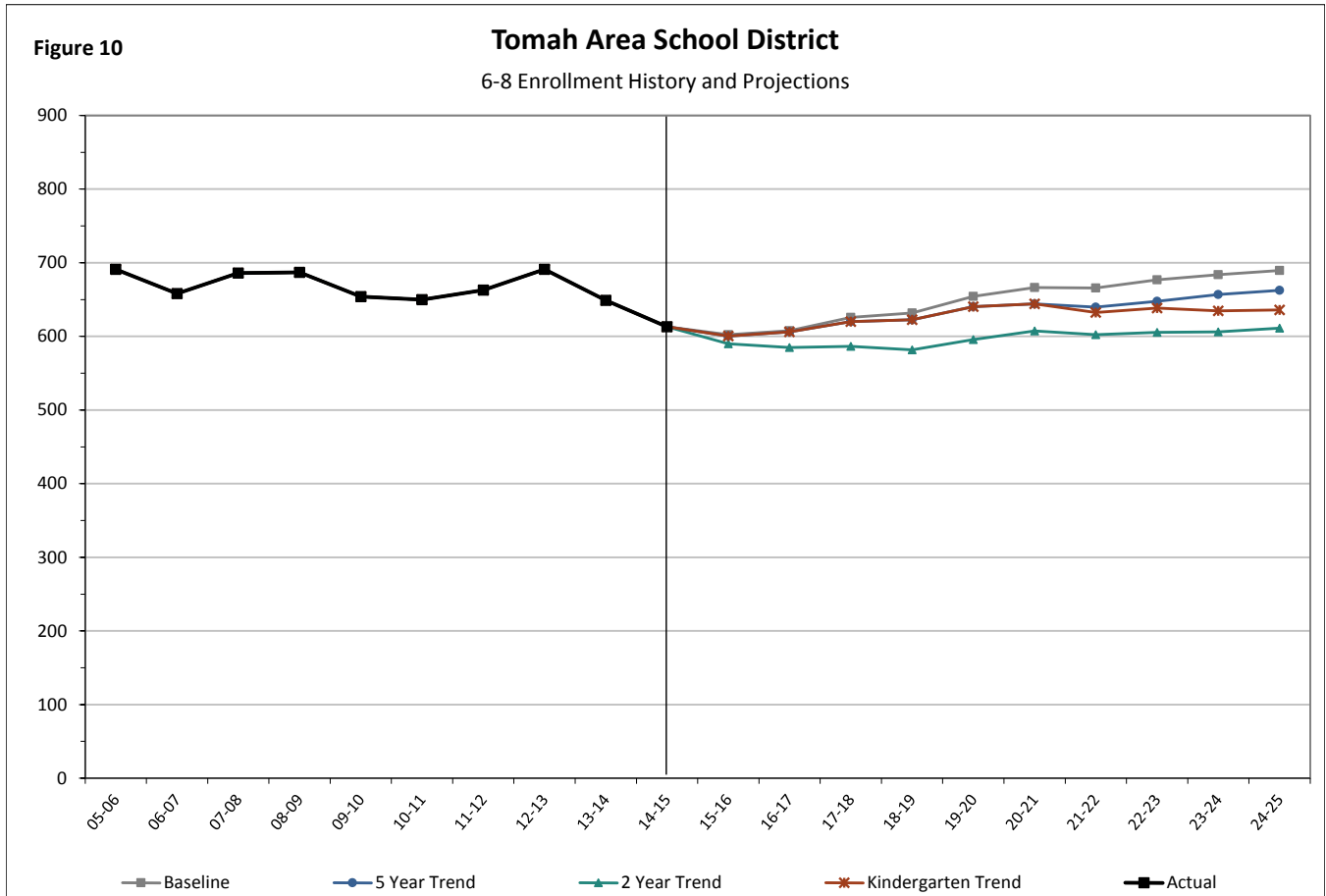


TABLE 15
Summary of 6-8 Enrollment Projections
Tomah Area School District

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
Baseline	602	608	626	632	654	667	666	677	684	690
5 Year Trend	600	606	620	623	640	644	640	648	657	663
2 Year "Trend"	590	585	586	582	596	607	602	606	606	611
Kindergarten Trend	600	606	620	623	640	644	632	639	635	636

Enrollment in grades 6 through 8 for 2014/15 is 613. While the projection models indicate that the middle school's enrollment will be lower for another two years, enrollment is predicted to remain level or grow gradually beyond that. Grades 6-8 enrollment projections five years from now (2019/20) forecast a range from 596 to 654.



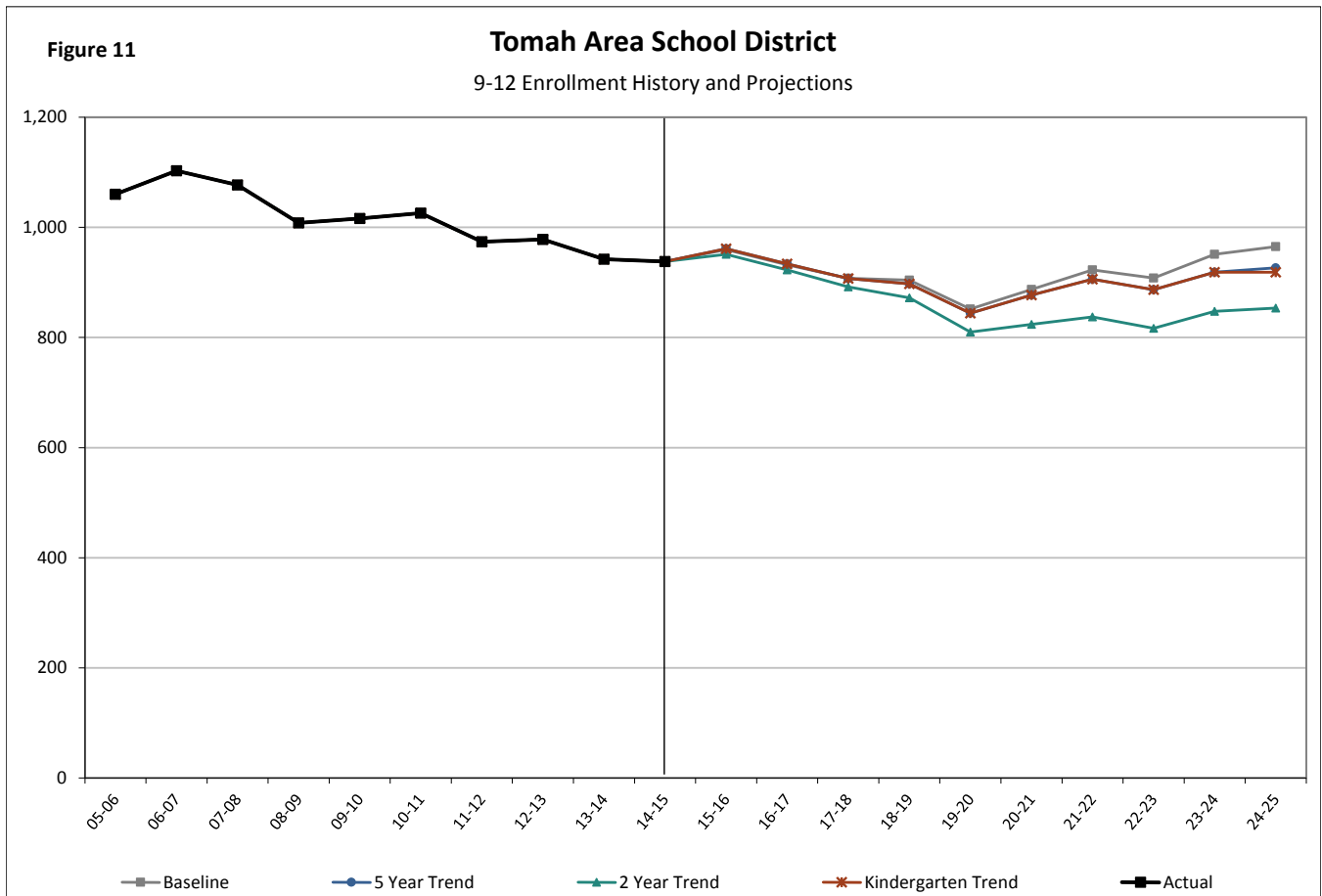


TABLE 16
Summary of 9-12 Enrollment Projections
Tomah Area School District

	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
Baseline	959	932	907	904	852	887	923	908	951	965
5 Year Trend	961	934	907	897	844	877	906	887	919	926
2 Year "Trend"	951	923	892	872	810	824	838	817	847	853
Kindergarten Trend	961	934	907	897	844	877	906	887	919	919

Enrollment in grades 9 through 12 for 2014/15 is 938. At the high school level, the general projection pattern is one of decline through 2019/20, followed by stable enrollment to moderate growth through 2024/25. Grades 9-12 enrollment projections five years from now (2019/20) predict a range of enrollment from 810 to 852.



Conclusions

These district-level enrollment projections are based on models that incorporate past and current demographic information as well as the district's own enrollment data and assumptions about future births and housing development in the school district area. Because most of the students in the district's schools over the next few years have already been born or are already in school, and because their grade progression from one year to another is fairly predictable, the total district-level projections should be viewed as having high accuracy over the next few years. After a few years, and increasingly for the lower elementary grades, actual enrollment figures will likely deviate from these projections by ever increasing amounts. The reason for this is that birth trends, in- or out-migration of pre-school age children, and transfers into the district are more difficult to predict; this makes meaningful incorporation of these patterns into enrollment projections a challenge. As with nearly all types of forecasts, accuracy in these enrollment projections decreases over time.

In sum, the information provided in this school enrollment projection report points to level to modestly increasing enrollment in the Tomah Area School District over the next five to ten years. The Two Year "Trend", influenced by lower grade progression ratios for 3rd through 7th grades, generally indicates the lowest future enrollments, both for the district as a whole and for the middle and high schools. The Baseline model, bringing longer-term patterns to bear on the projections, generally predicts the highest future enrollments.

Because the projections found in this report incorporate the consequences of migration to and from the district, any significant and sustained interruption of current or recent migration patterns will erode these models' accuracy from the initiation point of the new pattern. The various projection models provide a realistic range of migration and transfer effects on the school district. Enrollment change—particularly for grades 3 through 7—should be closely monitored for the next few years, and compared with these projections, to determine the trajectory of future growth. This type of monitoring program might help the district to determine which of the models seems to be the most realistic to use for planning purposes.

