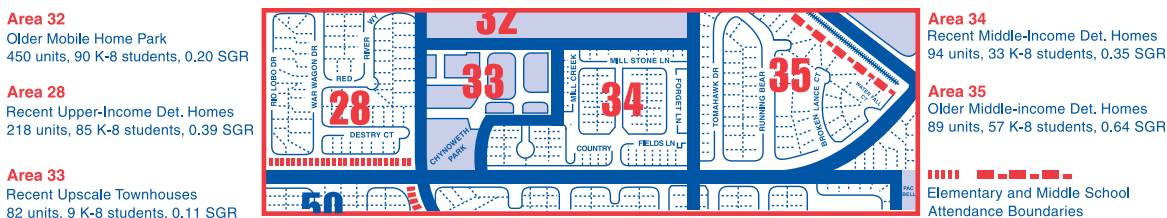


# ENROLLMENT PROJECTION CONSULTANTS

*Providing School Districts with Accurate Enrollment Forecasts by Location*



Superintendent Cheryl Jordan  
Milpitas Unified School District  
1331 E. Calaveras Blvd.  
Milpitas, CA 95035

January 12, 2017

Dear Superintendent Jordan:

This is the concluding documentation to the latest forecast update. As in our recent reports, we begin with the summary below and then provide some background information. Subsequent sections follow the order of the tables, starting with the updated projections in Tables 1 and 2 and then the underlying factors to those numbers in Tables 3 to 7. The appendices provide more detail for those who want to delve further into the data.

## Projections Summary

The total Milpitas Unified School District (henceforth “MUSD” or “district”) TK-12 enrollment is forecast to rise by 283 students between October of 2016 and 2021. The expected growth in the next twelve months is by just 44 students and that is followed by an offsetting decline of 46 students in 2018.<sup>1</sup> The largest projected single-year increase occurs in 2019, with growth by 132, for a net three-year rise by 130. Another 153 are added between 2019 and 2021, resulting in a projected 2021 enrollment of 10,557 students, compared to the “current” (October 5, 2016) total of 10,274.

This enrollment increase will not occur in proportionate balance between grade levels. Nuances in the current student distribution through the grades should lead to greater 2017 growth at the high school level, with just four grades covered, than at the elementary level, with over seven grades included (with TK), and the middle school total should decline. The specific projected differences to next fall are a gain of only 34 elementary students, a loss of 55 middle school students and the addition of 65 high school students. These divergent directions of gains and reductions flip by grade level in the following year, with a drop by five elementary students (for a two-year net of 29 more TK-6 students than today), a more significant 108 high school student reduction (to a net of 43 below the current figure) and a rebound by 67 middle school students (for a net rise by 12). The net differences from the current enrollment are moderately negative in the secondary grade levels over the following three years, but the elementary total soars to 170 students higher in 2019 and a cumulative 338 to 2021.

The projected evolutions in the “resident” (home school) elementary student totals differ greatly between (1) the attendance areas that include the southwest part of the district and (2) those elsewhere. The largest changes forecast in the resident K-6 totals for next year are 31 more students in the Rose region and 15 added in the Zanker area. Both of those gains come from student growth in the southwest. The planned opening of a new elementary on McCandless Drive in 2018, with significant sections taken from both of the current Rose and Zanker areas, then dramatically lowers the residual resident totals in the latter two schools. That new school could be opening with around 440 resident K-6 students (taken from those other two regions) in 2018, but any “grandfathering” of students could lessen the enrollment differences in the first year or two. None of the other

<sup>1</sup> Whenever just a year is stated, such as 2018, the reference is in the twelve months to, or for, early October of that year.

elementary attendance areas has projected changes by more than 31 resident students in the next three years, including differences of by no more than ten students for any of those schools for next year. Intra-district (across attendance area) shifts may create greater enrollment differences than these resident student amounts.<sup>2</sup>

While there are a lot of issues with projecting beyond five-years hence in the current high-housing-costs situation, we nonetheless are providing general estimates for 2026 to help the district plan for facility needs. If (1) all of the projected residences are built, with the expected student numbers in those units, and (2) the kindergarten totals do not significantly decline from the established neighborhoods, then the 2026 district total could exceed 11,000 students. The latter could include around 800 more students overall, with close to 700 added in the elementary grades. That elementary increase could be entirely in the attendance area of the new school. The district-wide gains in the secondary grade levels still could be modest, however, due to the pending graduation of the relatively large student numbers now in those grades. An economic recession or other potential negative factors may create less long-range enrollment growth, including net ten-year reductions in the middle and high school totals.

### **Background Information and Forecast Accuracy**

I have provided in-depth enrollment forecasts since 1985 for the MUSD. My firm specializes in these thorough studies, where every key component of the recent trends is determined, analyzed, compared to the knowledge gained from our experience in over 350 previous studies (including 20+ for your district), and then projected. I drove literally every street in my first MUSD study to learn the community and divide it into suitable planning areas. These areas represent a single dominant housing type wherever feasible, including by subjective price ranges and average home and parcel sizes. We have found that even subtle differences in residential type and value can generate divergent enrollment trends in some districts.

The current enrollment is only 25 students above what we had projected in our last study, for a difference of ¼ of 1%, so our latest calculations were accurate in aggregate.<sup>3</sup> The largest divergence by grade level occurred in the high school grades, with only 22 more than were projected (a deviation by less than 1%). Nonetheless, with (1) the 2014 birth figures having just been obtained for Milpitas and many nearby locations, with some consequential findings in that data, (2) a jump in the expected in-district new housing amounts and (3) a reduction in the expected student ratios from the new units, there are some factors that have changed for this updated forecast.

### **District-Wide Projected Enrollments from 2016 to 2021**

The MUSD enrollment is projected to increase by 283 students in the next five years (see far right column in the bold box in Table 1 on page 3). The total rises by 44 in 2017, but that is offset by a decline by 46 in the following year, for a net 24-month difference of two fewer students. The largest single-year gain occurs in 2019, with 132 added. Growth by another 153 students is projected from 2019 to 2021. The five-year result is a potential district enrollment of 10,557 students. That compares to a “current” (October 5, 2016) total of 10,274.

This overall enrollment rise is concentrated in different grade levels over the next five years. The largest increase in 2017 is projected for the high school total (in grades 9-12, including Calaveras Hills students), with 65 students added. The elementary level (TK-6) is forecast to gain just 34 students, while the middle schools (7-8) could have a 55-student reduction. That is the only one-year period, however, with significant high school growth expected. The projected high school difference from 2017 to 2018 is 108 fewer students (for a net of 43 less than at present) while the middle total rebounds by 67 students (to a net of 12 above the current figure) and the elementary count

<sup>2</sup> “TK” (Transitional Kindergarten) is excluded from these resident figures because that program is not currently assigned to all elementaries. We do not know whether TK will be offered at the new elementary location.

<sup>3</sup> All figures in this report are of MUSD-attending students in the relevant grades, including SDC (Special Education) students, but excluding any Community Day School, NPS (Non Public School), preschool SDC and Adult Education students included in some State reports of the district enrollment. Actual totals are based on student files provided to EPC by the MUSD.

**Table 1: Summary of Actual and Projected District Enrollments, 2016 to 2021, with a General Estimate for 2026**

Enrollment Subject	Total Enrollment by Grade Group*			District TK-12 Total*
	TK-6	7-8	9-12	
Actual on October 5, 2016	5,444	1,547	3,283	10,274
Projected for October 1, 2017	5,478	1,492	3,348	10,318
Projected for October 1, 2018	5,473	1,559	3,240	10,272
Projected for October 1, 2019	5,614	1,542	3,248	10,404
Projected for October 1, 2020	5,713	1,506	3,272	10,491
Projected for October 1, 2021	5,832	1,525	3,200	10,557
General Estimate for October 1, 2026**	6,131	1,649	3,300	11,080
<b>Change in One Year, to October 2017</b>	<b>34</b>	<b>-55</b>	<b>65</b>	<b>44</b>
<b>Change in Two Years, to October 2018</b>	<b>29</b>	<b>12</b>	<b>-43</b>	<b>-2</b>
<b>Change in Three Years, to October 2019</b>	<b>170</b>	<b>-5</b>	<b>-35</b>	<b>130</b>
<b>Change in Four Years, to October 2020</b>	<b>269</b>	<b>-41</b>	<b>-11</b>	<b>217</b>
<b>Change in Five Years, to October 2021</b>	<b>388</b>	<b>-22</b>	<b>-83</b>	<b>283</b>
<b>Change in Ten Years, to October 2026**</b>	<b>687</b>	<b>102</b>	<b>17</b>	<b>806</b>

\* Figures include MUSD-attending TK-12 SDC (Special Education) and Calaveras Hills students but exclude any Community Day School, NPS, preschool SDC and Adult Ed. students that may be included in some State reports.

\*\* The ten-year estimate could be overly optimistic in the elementary grades if pending birth totals decline in older housing. The 9-12 total, however, will become higher after 2027, as the larger amounts in TK-7 in 2026 start to enter 9th in 2028.

declines by a nominal five students. The cumulative net middle and high school differences then become entirely negative amounts, but by only modest amounts, over the following three years. The elementary total, by contrast, rises significantly from 2018 to 2021, to 388 over the current figure.

The principal reasons for these grade-level variances are (1) extrapolations of the current enrollment distribution through the grades and (2) the projected kindergarten amounts. We have noted in past reports how your district has a tendency to add students as each class graduates through the grades, so it has been the norm for your smallest totals to be in the lowest grades. Nonetheless, the totals now in fifth, eighth, ninth and eleventh are unusually large even in that context.<sup>4</sup> Note that three of these four grades already are in the secondary grades, with the class now in eleventh being the largest, by far, that has been in any MUSD high school grade in decades (aside from that same class when it was in tenth last year and ninth in the year before). Among the other grades, the most consequential distributional differences are how low the current relative totals are in second, fourth, sixth, seventh and twelfth. The graduation of that small twelfth grade class and the addition of the large class now in eighth should create a temporary jump in the high school enrollment for next year. That will be the only year, however, that the 9-12 total will contain three of the four largest current classes. For 2018, the graduation of that exceptionally large class now in eleventh, along with the addition of the small class now in seventh, should result in a dramatic drop in the high school total. The reverse happens in the middle school figures as those large and small classes graduate from eighth for the next two school years. For next year, a large class will have graduated out and the small class now in sixth will have become a part of the middle school total. A year later there instead will be a small eighth grade class that graduated and a large incoming class (the current fifth graders). The loss of that current fifth grade class for 2018 is the reason that a nominal drop is forecast in the elementary total, but

<sup>4</sup> Only grade-level totals are shown in Table 1 for the sake of clarity. The figures by individual grade are shown in Appendix A1.

over the following three years the combination of small classes having graduated from fifth and rising kindergarten amounts should create much higher elementary totals. We explain the reasons for this expected kindergarten growth later in this report.

In 2021, the small classes now in second, fourth and sixth will be entirely out of the elementary grades and into the secondary grades, with none of the four largest current classes still being in the middle schools and only one being in the high schools (including Calaveras Hills). The three other large classes will have graduated. That one remaining large class will be more than offset in the difference in the 9-12 total by the small classes that are now in fourth, sixth and seventh (when they will be in ninth, eleventh and twelfth). This has corresponding impacts by grade level, with a much higher elementary total and net secondary losses.

Even though this comparison of the totals by grade is an oversimplification of all of the factors that go into the forecast, it does provide a good quick insight into why enrollment differences vary by year between grade levels.

### **District-Wide Potential Enrollment in 2026**

While the enrollment evolution beyond the fifth forecast year is always more open to conjecture, there are a few key factors that should impact the grade level enrollments after 2021. The common finding elsewhere is that when a new elementary or TK-8 school opens in a section of a district that previously lacked a nearby assigned facility, the main rise in students starts in the lower elementary grades.<sup>5</sup> This suggests only moderate impact on the high school grades until the end of the forecast period. The second key factor related to the 2026 numbers is that the small total now in second will be in twelfth grade then. The third key factor is the potential cumulative effect of the projected 5,200 new dwelling units. A significant percentage of these will be high-density apartments and condos, within which students often are concentrated in the lower grades.

Our best estimate, based on these factors, is for there to be significant growth from 2021 to 2026 at primarily the elementary level. Essentially 300 more elementary students are projected during that time, resulting in a TK-6 total that is close to 700 students above the current amount. The middle school figure could rise by around 120 from 2021 to 2026, for a net ten-year difference of about 100 more students. The high school level, by contrast, may not have its most significant increase until after the forecast period, with only 100 added between 2021 and 2026, to 17 greater than at present. (The much higher amounts in TK-7 in 2026 will start to enter ninth in 2028.)

The big caveats to these enrollment estimates in 2026 are (1) the potential for fewer new housing units to be built in the next decade, if a major recession occurs, and (2) a possible decline in births in the older parts of the district, with the existing dwellings becoming progressively less affordable for families of limited economic means. There thus is the possibility that consequentially lower numbers, particularly in the elementary grades, will occur in 2026.

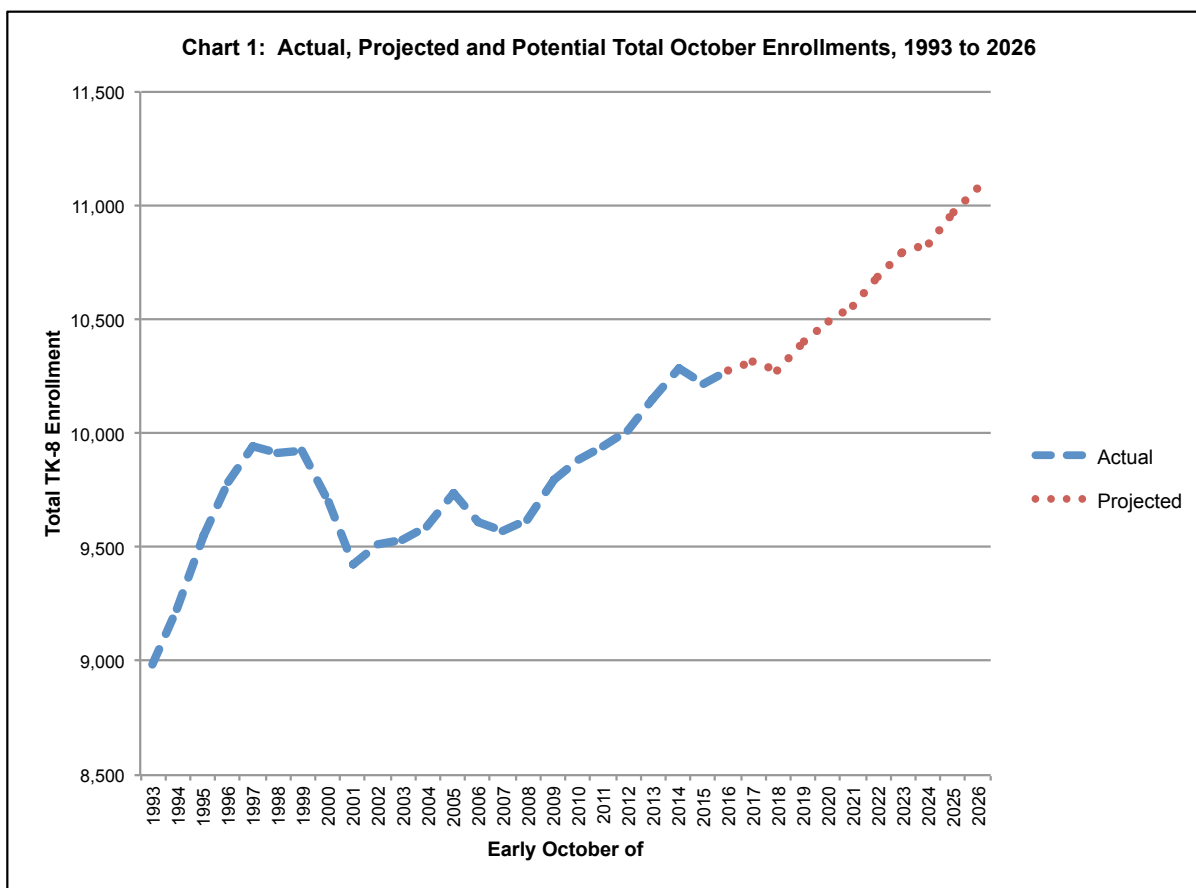
### **Projected Resident Student Populations by Attendance Area**

This forecast is again based on an analysis of where the students live (the resident population<sup>6</sup>) rather than the schools they happen to attend (the attending enrollment). Resident populations differ from enrollments mainly because of (1) known intra-district enrollment (across MUSD attendance areas) and (2) known inter-district enrollment (from addresses that are outside the MUSD region). By coding all of the student addresses to planning areas that represent various housing types and locations, we have been able to identify and evaluate how the student population is evolving in each situation. We flip back-and-forth between these "resident" and "enrollment" amounts in the following text and it is important to remember the distinction between these two types.

Table 2, on page 6, presents the key resident and enrollment findings and projections for each attendance area.

<sup>5</sup> A textbook example of this occurred with the opening of the Dan Callejon elementary in the Rivermark area of the SCUSD.

<sup>6</sup> "Resident" throughout this report means physical resident, not legal resident.



### Understanding the Data in Table 2

Table 2 contains two data sets for each school. The figures on the left (under *“Actual Resident and Enrollment part”*) show both (1) the amounts by which the resident school totals changed in the last year and (2) how the current enrollment at each school differs from the resident population. There are 509 MUSD-enrolled K-6 students (i.e., excluding TK because that is not assigned by these attendance areas), for instance, with home addresses in the current Weller region. Weller’s K-6 enrollment, however, is 452, which is 57 less than that resident total.<sup>7</sup> This net difference is shown by the “-57” in the top row of the “Attending Adjust” column in the table. The second set of data, on the right side of Table 2 (under *“Projected Resident Student Population part”*), has the projected resident amounts. These are not projected enrollments. They do indicate, however, the extent to which the current areas might continue to be suitable without any revisions. In Rose’s case, the resident K-6 total rises by 31 for next year and theoretically could be up by 96 (cumulative) in 2018 if the new school is not open then, as is shown in the columns on the right side of the table. By contrast, if the new school is operating in 2018 with the adopted boundaries, then the remaining resident total for Rose instead falls to a projected 390 students in K-6, or 41 below this year’s 431 in the current region. The Rose enrollment should be higher than 390 in 2018, however, based on both (1) TK students continuing to be enrolled there and (2) the probable ongoing net intra- and inter-district attendance gains (currently a total of 32 students in K-6).

We should note that these numbers are based on the new school operating in 2018 with the adopted boundaries. If it is not open that year, then the projected numbers shown for the current Rose area may be too high in 2018.

<sup>7</sup> Some of this difference is due to students “grandfathered” at Pomeroy from the areas transferred to Weller before the start of the 2015-16 school year. Those “grandfathered” amounts should become lower through housing turnover and as students graduate into the middle school grades.

**Table 2: Actual and Projected Resident Student Populations for the Current and Planned Attendance Areas\***  
with color highlight for actual and projected resident shifts by 30+; pink for negative and yellow for positive differences

Grade Level and Location	Actual Resident and Enrollment part				Projected Resident Student Population part					
	Actual Res. Diff. from Oct. 2015*	Actual October 2016 (excl. TK)*			Projected MUSD Students Residing in the Attendance Area in Relevant Grades (excl. TK)					
		Resident Students	Attending Adjust**	Attending Enrollment	Early October of			Change to Oct. of***		
					2017	2018	2019	2017	2018	2019
<b>Elementary (K-6) by Attendance Area</b>										
Weller	6	509	-57	452	514	528	520	5	19	11
Pomeroy	12	655	76	731	649	633	638	-6	-22	-17
Curtner	14	742	-3	739	734	718	722	-8	-24	-20
Spangler	8	550	15	565	557	552	563	7	2	13
Burnett	-61	516	38	554	516	512	504	0	-4	-12
Zanker - now	53	721	-41	680	736	744	753	15	23	32
Zanker - to be	24	439			444	440	442	5	1	3
New School***	47	322			356	441	531	34	119	209
Rose - now***	25	431	32	463	462	527	616	31	96	185
Rose - to be	7	391			398	390	396	7	-1	5
Randall	-31	372	8	380	362	352	353	-10	-20	-19
Sinnott	11	749	4	753	748	718	745	-1	-31	-4
All In-District	37	5,245	72	5,317	5,278	5,284	5,414	33	39	169
Other K-6****	8	72	-72	NA	74	64	62	2	-8	-10
<b>Middle School (7-8) by Attendance Area</b>										
Russell	-45	800	23	823	764	780	779	-36	-20	-21
Rancho Milpitas	1	725	-1	724	711	759	743	-14	34	18
All In-District	-44	1,525	22	1,547	1,475	1,539	1,522	-50	14	-3
Other 7-8****	7	22	-22	NA	17	20	20	-5	-2	-2
<b>High School (9-12)</b>										
Milpitas High				3,164						
Calaveras Cont.				119						
All In-District	46	3,212	14	3,226	3,281	3,175	3,188	69	-37	-24
Other 9-12****	11	71	-71	NA	67	66	60	-4	-5	-11

\* Resident student populations are those students listed at addresses known to be in each attendance area in the relevant grades, except that TK is excluded from the elementary figures because that program is not operating at all elementaries. See Appendices A2 to A4 for breakdown by grade, with TK included in the elementary numbers. All figures include SDC.

\*\* Net attending adjustments include (1) intra-district enrollment, (2) incoming inter-district enrollment and (3) a few students listed at residentially unlocatable addresses.

\*\*\* Figures for 2018 and thereafter are based on assumption that the new elementary opens in 2018. Lower student totals would be forecast for the current Rose area in 2018 and 2019 if the new school is not operating then. The projected resident K-6 totals for the New School region are 690 in 2021 and 827 in 2026, which is the only area we are willing to forecast beyond 2019. TK students would be additional amounts. This may be an optimistic forecast for the new school.

\*\*\*\* Other represents incoming inter-district students and a few students listed at unlocatable addresses.

Notes: (1) Projections include hidden fractions, so the amounts here may not exactly match those elsewhere. (2) Figures exclude TK and any NPS, pre-K SDC and Adult Ed. students that may be counted in some reports of MUSD enrollment.

Key Findings in the Latest Shifts by Attendance Area

The most unexpected finding in this data is where the latest resident changes were greatest, with corresponding impacts on the projections. The Burnett region, as a déjà vu from our last report, has 61 fewer K-6 students than in 2015, after having declined by 56 in the prior year (which is not shown in this table). That is more than an 18% reduction in two years. We only had projected, in our last study, a decline by 28 students from a year ago. Also down significantly is the resident K-6 total in the current (post adjustment with Rose) Randall region. That figure fell by 31 (-8%) in the last year. Only a loss of seven students was projected. Deviating in the opposite direction is the resident K-6 growth by 53 in the current Zanker region, when 21 more students were forecast. Pomeroy's region added twelve rather than losing a projected twelve. The Rancho Milpitas area only added one student in 7-8 despite all of the new housing that was just occupied there. We instead had expected those new dwellings would contribute to a growth by 22 middle school students. All of the other attendance area totals, by grade level, evolved as expected, with most having current numbers within eight of, and none being off by more than 14 from, their projected resident amounts. The resident 7-8 drop by 45 for Russell, for instance, is within four of what was projected.

Key Findings in the Projections by Attendance Area

The biggest projected resident changes, as would be expected, are for Zanker and Rose after some of their regions are transferred to the attendance area of the new school. These differences are not shown directly in Table 2, but instead can be seen by comparing the "now" and "to be" resident amounts. The current Zanker region has 721 resident K-6 students, with 15 more (to 736) forecast for next year. In the following year, however, the "to be" region has 440 K-6 students, or 281 fewer than the current amount in today's region. "Grandfathering" of some students, such as sixth graders, at Zanker probably will make the enrollment difference be much less than that 281-student reduction for 2018, but there clearly will be far less students at Zanker than at present. Rose's net resident decline between the current and adopted 2018 region will not be as severe, but there still will be around 40 fewer resident students. The intervening year (2017) could have a one-year spike by 31 prior to that decline occurring.

The new elementary on McCandless Drive is forecast to have 441 resident K-6 students in October of the likely first operating year (2018), with significant growth in every subsequent year through 2026.<sup>8</sup> The projected resident K-6 totals for 2019 and 2021 and the potential total for 2026 are 531, 690 and 827, respectively. The enrollments in that school should be lower in 2018 and 2019 because of students "grandfathered" elsewhere. There also is high probability of a meaningfully lower resident figure than 827 in 2026, but we are stating that as a potential maximum vicinity to help the District plan for what *could* occur. The possible range that far into the future for a single elementary region with huge numbers of future housing as a student source, however, is especially wide. Anywhere from the upper 600s (if less housing is built due to such things as a recession) to the mid 800s is possible for the resident K-6 total in the new school region in 2026.

Otherwise the projected resident amounts stay relatively close to the current figures for each attendance area. The biggest resident elementary change for next year, aside from Zanker and Rose, is a loss of ten students in the Randall region. Larger but mostly temporary shifts are forecast in the two middle school regions, with the Russell area losing 36 and the Rancho Milpitas area having 14 fewer students (in 7-8). Thereafter the net Russell reduction becomes smaller and the Rancho Milpitas difference becomes a net gain, but not by a large amount. Even at three years hence in the relevant grades, the greatest net resident shifts, aside from those between Zanker, Rose and the new school, are forecast to be just 24 fewer high school students, 21 fewer students for Russell, 18 more students for Rancho Milpitas, and 20 less students in the Curtner region. All of the other (unadjusted) elementary attendance areas are forecast, in 2019, to have within 20 students of their current resident totals. While intra- and inter-district evolutions could create larger enrollment shifts for a few schools, these nonetheless are relatively stable (net) expectations other than for the Zanker-Rose-new-school situation.

<sup>8</sup> This is the only attendance area that we are willing to provide 2021 and 2026 estimates for.

### **Underlying Factors to the Projections: Recent Enrollment Shifts in Many Santa Clara County Districts**

We mentioned in our last report, after a surprising drop occurred in 2015 in the total district enrollment, that such a recent change to either an enrollment decline or a greater decline was not unique to the MUSD. There also were significant negative shifts since 2013 in most of our Santa Clara County client districts. We again are not going to dwell on this subject, for the sake of keeping this document to a reasonable length and degree of depth, but we want mention that the differences did not improve in many districts in 2016. Even among the districts that reverted to having overall enrollment growth in the last year, those gains occurred primarily if not entirely at the high school level. Your district, for example, added 60 students in 2016, but only three of those were in TK-8 and 57 were in 9-12. The Santa Clara USD, with literally thousands of new housing units going in annually, added 31 in grades 9-12 in 2016, but lost 21 in TK-8. The Fremont Union HSD added 164 this year while its two feeder elementary districts (Cupertino and Sunnyvale) together lost 443 students. And although we are not evaluating changes in the East Side UHSD total or two of its major feeders, namely the Alum Rock and Franklin – McKinley ESDs, due to other issues occurring, the remaining major feeders there are all in significant student decline. Since just 2013, there have been greater-than-before rates of student reductions totaling 637 students (-8%) in Berryessa ESD, 1,342 (-10%) in Evergreen ESD and 767 (-7%) in Oak Grove ESD.

This is the result of the dramatic recent rise in housing costs (including rents) making it much more difficult for many young families to be able to live locally. With just three students added in TK-8 in the MUSD in the last year, despite nearly 500 new residences having been moved into, your TK-8 total from existing dwellings clearly went down and housing costs factored into that.<sup>9</sup>

### **Underlying Factors to the Projections: Recent Trends by Housing Situation**

All of the trend findings in “existing housing” have been recalculated for this study, including by several value classifications of (1) single-family-detached (“SFD”) homes and (2) the combination of attached units (“ATT”, for apartments, condos, townhouses and plexes) and mobile homes (“MH”).<sup>10</sup> We are again using October 1, 2011, as the cutoff date for “existing housing” locations (i.e., all areas with virtually no additional residences occupied since then). This information is presented in summary in Tables 3A and 3B, with additional details provided in Appendices B1 and B2.

#### **Understanding the Data in Tables 3A and 3B**

The figures in Table 3A, on page 10, are for the resident totals of district-enrolled students in October of the last three years (2013 to 2016) coming from areas of existing housing. The purpose of this data is to identify how the student population is evolving in the established neighborhoods, by type and general value levels. The counts are provided in groups of three grades each (K-2, 3-5, 6-8 and 9-11, as well as in TK-12) so that we can easily show both (1) how the populations have changed as those students graduated upward by three grades in three years and (2) the general age distribution of the students. Existing “Most Affordable & Affordable” ATT and MH units, for instance, had 312 students in K-2 in 2013 and also have 312 in grades 3-5 this year, which was a net difference of zero students in that population as it graduated forward by three grades. This is shown as “0” in the table (see lowest row in top section of page 10). We also show how the K-2 group itself has changed during that time, which was a net loss of 27 students due to a decline from 312 to 285. That shift in K-2 is “boxed” because it is an important indication of whether the families of the students are getting older, with declining kindergartens likely, or are instead becoming younger (through turnover), thereby generating potential kindergarten growth.

<sup>9</sup> Readers wanting to see more figures on this subject in the MUSD and in nearby districts should go to Appendices B3 and B4. This includes showing the only two local districts that bucked this trend, with Fremont Unified continuing to add large numbers of students due to thousands of new housing units being occupied. The other is the Union ESD in southwest San Jose and northeast Los Gatos, which had student growth, although at a much slower recent rate, in a location with little new housing.

<sup>10</sup> These relative value levels are from a standardized, but nonetheless subjective, EPC evaluation of the housing in each area.



Table 3B, on page 11, has the same structure as Table 3A but the comparison is between the aggregations of all existing housing and all new residences, along with the changes occurring in incoming inter-district attendance.

#### Key Findings Related to the Data in Table 3A

Out of the three aggregate value categories shown in each of the existing SFD and combined ATT and MH types, only two have more TK-12 students, and only one has more K-2 students, in 2016 than 2013. These exceptions are the “Modest and Moderate” ATT and MH units and the existing “High Amenity” ATT dwellings. The former has 65 more students overall (+4%) but 17 fewer in K-2 (in net since 2013). The latter added 68 total students (+12%) in net, with 25 more in K-2. Those gains were more than offset, however, by losses from neighborhoods of SFD homes (in aggregate by value category). Among those detached dwellings, the “Modest and Moderate” group lost 113 overall (-5%) and 21 in K-2, “Middle Income” has 86 fewer (-4%) in TK-12 and 59 less in K-2, and “Upper Middle and Upper Income” has a TK-12 decline by 52 (-3%) and a K-2 reduction by 11. Collectively that is a loss of 84 K-2 students and 251 TK-12 students from existing SFD homes in just the last three years. And declines by 27 and 65 (-4%) in K-2 and TK-12, respectively, occurred in the least expensive ATT and MH units.

A year ago we wrote that despite these declining K-2 and TK-12 totals, there were some gains evidently coming from families with slightly older children who had moved into the existing detached homes. This could be seen in the notable growth that had occurred as the student populations graduated from K-2 to 3-5 and 3-5 to 6-8 over the preceding three years.

This finding now occurs only for the “Modest and Moderate” SFD category, where 27 students were added, in net, in the graduation into 3-5 and another 25 were added in the advancement into 6-8.<sup>11</sup> In the other two categories of detached homes, however, the gains and losses between the graduations into 3-5 and 6-8 are nearly offsetting, so there is no longer an indication that more families of already school-age children are moving in, in net, in the higher priced SFD neighborhoods.

#### Key Findings Related to the Data in Table 3B

Within the last three years, the K-2 amount from all existing housing has steadily declined, while the TK-12 total rose and fell, but both grade groups are meaningfully lower in net. The former is down by 112 students (-5%) and the overall figure has lost 173 students (-2%). What this table does not show is that the K-2 and TK-12 totals were rising from all existing housing in the years immediately before 2013. This is another indication of the shift that has occurred as residential prices and rents have soared.

The student gains coming from new dwellings essentially offset these recent reductions from existing housing. Units built in the last five years added 86 K-2 and 219 TK-12 students since 2013. These findings have corresponding impacts on the attendance areas that do (for growth) or do not (for decline) have large amounts of recent and/or pending new residences.

One recent source of student growth that is unlikely to continue after 2018, however, is inter-district attendance. The opening of new schools in 2019 in a nearby part of the SCUSD could reduce those numbers for the MUSD.

<sup>11</sup> Gains from 6-8 to 9-11 are believed to be mainly due to students enrolling in Milpitas High after having graduated from private K-8 schools. While that is an important forecast component for the high school enrollment, it is not related to changes in K-8.

Table 3A: Recent Student Population Trends in Existing Housing by General Value Level\*

Category**/ Data Subject***	Fall of	Resident District-Enrolled Students****					TK-12 Change
		K-2	3-5	6-8	9-11	TK-12	
ATT and MH: Most Affordable and Affordable	2013	312	340	343	351	1,466	
	2014	314	337	337	362	1,485	
	2015	276	342	327	373	1,453	
	2016	285	312	312	352	1,401	
	3-Year Change Within Group	-27				-65	-4%
	3-Year Change from Prior Group		0	-28	9		
ATT and MH: Modest and Moderate	2013	421	372	361	326	1,606	
	2014	420	409	354	338	1,662	
	2015	412	430	343	352	1,661	
	2016	404	424	365	341	1,671	
	3-Year Change Within Group	-17				65	4%
	3-Year Change from Prior Group		3	-7	-20		
ATT: High Amenity (Middle Income)	2013	172	167	130	86	587	
	2014	174	165	131	101	612	
	2015	174	162	137	108	618	
	2016	197	167	134	117	655	
	3-Year Change Within Group	25				68	12%
	3-Year Change from Prior Group		-5	-33	-13		
SFD: Modest and Moderate	2013	504	527	599	626	2,507	
	2014	507	533	561	640	2,480	
	2015	508	534	555	592	2,453	
	2016	483	531	552	625	2,394	
	3-Year Change Within Group	-21				-113	-5%
	3-Year Change from Prior Group		27	25	26		
SFD: Middle Income	2013	492	554	506	518	2,281	
	2014	451	515	533	538	2,248	
	2015	453	489	536	515	2,186	
	2016	433	522	532	518	2,195	
	3-Year Change Within Group	-59				-86	-4%
	3-Year Change from Prior Group		30	-22	12		
SFD: Upper Middle and Upper Income	2013	286	321	376	385	1,523	
	2014	278	324	358	399	1,511	
	2015	263	294	361	398	1,453	
	2016	275	295	313	432	1,471	
	3-Year Change Within Group	-11				-52	-3%
	3-Year Change from Prior Group		9	-8	56		

\* Value levels (and interpolated income levels) are subjective EPC evaluations of the dominant residential type in each of the planning areas with virtually no new housing units first occupied since September 2011.

\*\* SFD = single family detached; ATT = attached, incl. condos, townhouses, plexes and apartments; MH = mobile homes

\*\*\* Changes are over three years for groupings of three grades, with K-2 compared to the prior K-2, 3-5 to the prior K-2, 6-8 to the prior 3-5, 9-11 to the prior 6-8, and TK-12 to the prior TK-12 (for Milpitas-USD-enrolled students).

\*\*\*\* Due to a gradual shift of the birthdate cutoff for kindergarten eligibility, the following total birth months are officially covered by K-2: 2013 = 34, 2014 = 33, 2015 = 34, and 2016 = 35. The 2016 data thus has the longest K-2 birth period in this table. That shift also has 3-5 covering 36 birth months in 2013 and 2014, 35 months in 2015 and 34 in 2016.

Table 3B: Comparison of Student Trends between Areas of Existing and New Housing and from Outside MUSD\*

Category*/ Data Subject**	Fall of	Resident District-Enrolled Students***					TK-12 Change
		K-2	3-5	6-8	9-11	TK-12	
<b>Total for Areas with Virtually No New Housing since September 2011</b> (including categories not shown in Table 3A, such as areas with a mix of housing types)	2013	2,195	2,284	2,324	2,298	9,998	
	2014	2,151	2,287	2,282	2,390	10,033	
	2015	2,092	2,261	2,263	2,352	9,862	
	2016	2,083	2,260	2,215	2,399	9,825	
<b>3-Year Change Within Group</b>		<b>-112</b>				<b>-173</b>	<b>-2%</b>
<b>3-Year Change from Prior Group</b>			65	-69	75		
<b>Total for Areas with New Housing added since September 2011</b>	2013	19	14	14	11	65	
	2014	50	26	36	24	143	
	2015	69	49	43	41	213	
	2016	105	51	56	54	284	
<b>3-Year Change Within Group</b>		<b>86</b>				<b>219</b>	NA
<b>3-Year Change from Prior Group</b>			32	42	40		
<b>Incoming Inter-District Attendance</b>	2013	13	10	15	29	79	
	2014	17	15	18	34	98	
	2015	26	21	20	31	122	
	2016	27	27	21	26	127	
<b>3-Year Change Within Group</b>		<b>14</b>				<b>48</b>	NA
<b>3-Year Change from Prior Group</b>			14	11	11		
<b>Total Enrollment</b> (incl. a few students at unlocatable addresses)	2013	2,228	2,309	2,355	2,340	10,150	
	2014	2,219	2,329	2,339	2,450	10,282	
	2015	2,193	2,335	2,328	2,427	10,214	
	2016	2,225	2,342	2,297	2,493	10,274	
<b>3-Year Change Within Group</b>		<b>-3</b>				<b>124</b>	<b>1%</b>
<b>3-Year Change from Prior Group</b>			114	-12	138		

\* "Existing housing" covers all planning areas with less than six net additional residences first occupied since September 2011 and includes some residual categories not shown in Table 3A, such as mixed-value and mixed-type areas. "New housing" covers all planning areas with at least six net additional units first occupied since September 2011 and can include students in older residences, especially those that the more recent units replaced. "Incoming Inter-District Attendance" covers students with stated home addresses outside the MUSD region.

\*\* Changes are over three years for groupings of three grades, with K-2 compared to the prior K-2, 3-5 to the prior K-2, 6-8 to the prior 3-5, 9-11 to the prior 6-8, and TK-12 to the prior TK-12 (for Milpitas-USD-enrolled students).

\*\*\* Due to a gradual shift of the birthdate cutoff for kindergarten eligibility, the following total birth months are officially covered by K-2: 2013 = 34, 2014 = 33, 2015 = 34, and 2016 = 35. The 2016 data thus has the longest K-2 birth period in this table. That shift also has 3-5 covering 36 birth months in 2013 and 2014, 35 months in 2015 and 34 in 2016.

### Advancement Rates from Existing Housing

Grade-to-grade advancement rates are calculations of the net change in the number of students in each grade as they graduate into the next grade in the following school year. These figures, which are sometimes called cohort survival rates, are most applicable to an accurate forecast when they are determined specifically for students from existing dwellings. For example, if there had been a total of 100 students in kindergarten last year and 105 in first grade this year from the same group of homes, that would be a +5% (1.05) net advancement rate gain. Such rates usually are averaged over the last several years within each single-grade advancement to avoid giving too much influence to nuances that may have occurred in any one year.

For this study, we again determined the unweighted averages over both the last three and four years. The recent population counts by grade and the resultant calculated rates are provided in Appendix B2 for each major housing category. This includes the “cumulative rates” that are the result of a compounding of the latest individual grade-to-grade “advancement rates” from first to eighth.

Although these rates are a key forecast component, we feel focusing on the SGRs from existing housing will be more beneficial in this update. Readers who want a greater understanding of advancement rates and cumulative rates should read our last report for that information, along with reviewing the figures in this report’s Appendix B1.

The only rate findings that need to be mentioned here are that while the ratios entering ninth have changed only slightly between the latest three-year period and the recent preceding three-year periods, some of the elementary cumulative rates fell significantly. This is especially true for (1) the least expensive ATT and MH units and (2) the High Amenity ATT dwellings, as is shown in Appendix B1.

### **Comparison of Student Generation Rates (SGRs) by Type in the MUSD and Select Nearby Locations**

With so many of the K-2 student totals having declined significantly since 2013 in the existing housing categories, we decided evaluations of the average student generation rates (SGRs) were warranted. Although we present some 9-12 figures on this issue in Tables 4A and 4B on the following pages, our focus is on the data in K-2 and TK-8 because that is where the more dramatic student shifts have happened. There are general parameters to how high or low a TK-8 SGR will go in each housing type before it will stabilize or reverse direction. The usual TK-8 SGR range in large samples of older SFD homes, for example, is between 0.20 and 0.40 (or between one and two students in every five residences), with locations of less acclaimed schools being below 0.30 and neighborhoods in attendance areas of the highest rated schools often being well above 0.30. The TK-8 SGRs in established ATT units have a broader range, due to such things as percentages of multiple-bedroom vs. studio and one-bedroom units in the sample taken. The norm, however, is for the older and generally more affordable attached complexes to have relatively high ATT SGRs and the more recently built “Modern ATT” developments to have relatively low ATT SGRs, but with nearly all ATT SGRs being below those from SFD homes in sufficiently large samples.<sup>12</sup>

### **SFD SGR Findings in the MUSD and in Select Nearby EPC Client Districts**

We have both positive and negative findings from the SFD SGR sample taken in the MUSD. The positives are that these 6,710 existing homes collectively still have a high TK-8 SGR of 0.36 that has declined only slightly, by 0.01, since 2012. Most of the other districts listed in Table 4A (page 13) both (1) had a greater reduction and (2) now have a lower TK-8 SGR. Berryessa’s SFD SGR fell by 0.04 to 0.32, Oak Grove’s dropped by 0.03 to 0.33 and Orchard’s (in a small sample) went down by 0.02 to an incredibly low 0.11. The few districts that had higher-than-0.37 SGRs from existing SFD homes in 2012 also had much greater declines than the MUSD, including Cupertino by 0.07 to 0.34, Gilroy by 0.04 to 0.37 and Evergreen by a huge 0.11 to 0.51. (The latter SGR is so high because that district has a large percentage of detached homes built in the 15 years before 2012, which is often the period with the highest SGRs.) And in all six of these other districts, along with in most of the remaining districts listed, the K-2 declines since 2012 were by far greater degrees than in the MUSD. Your K-2 sample has only 29 fewer students, in falling from 750 to 721 (-4%). By contrast, Berryessa has 96 fewer (-12%), Evergreen is down by 281 (-27%) and Cupertino is lower by 243 (-23%) in K-2. These findings, along with the less severe current distributional differences between the K-2, 3-5 and 6-8 totals in your district, compared to most other districts listed, means that less of a pending K-8 reduction is likely here than elsewhere.

<sup>12</sup> The main exception is that designated “below-market-rate” (BMR) “non-SRO” developments commonly have the highest SGRs, regardless of whether they are ATT, SFD or mobile home types, in comparison to any primarily market-rate samples. “Modern ATT” covers intermediate and upscale locations of mainly market-rate apartment, condo, townhouse and plex units with amenities such as relatively secure parking, spas, pools, exercise rooms and “green” common and/or private areas.

Table 4A: SGR Trends in Large Samples of Existing SFD Dwellings in Select Locations\*

Districts	Sampled Units	Oct. of	Resident Student Population					TK-8 SGR	9-12 SGR	SGR Shift Since 2012	
			K-2	3-5	6-8	TK-8	9-12			TK-8	9-12
Milpitas	6,710	2012	750	876	858	2,498	1,238	0.37	0.18		
		2015	740	799	894	2,481	1,187	0.37	0.18		
		2016	721	830	849	2,442	1,264	0.36	0.19	-0.01	0.00
Orchard	487	2012	23	23	19	67	NA	0.14			
		2015	14	17	21	52	NA	0.11			
		2016	13	19	24	56	NA	0.11		-0.02	
Berryessa	7,584	2012	827	901	968	2,715	NA	0.36			
		2015	735	782	903	2,466	NA	0.33			
		2016	731	767	859	2,408	NA	0.32		-0.04	
Evergreen**	5,670	2012	1,031	1,273	1,226	3,530	NA	0.62			
		2015	765	1,082	1,146	3,026	NA	0.53			
		2016	750	991	1,139	2,914	NA	0.51		-0.11	
Oak Grove	19,229	2012	2,205	2,345	2,272	6,880	NA	0.36			
		2015	1,959	2,070	2,196	6,358	NA	0.33			
		2016	1,928	2,093	2,066	6,321	NA	0.33		-0.03	
Sunnyvale - Fremont HSD	5,151	2012	560	566	480	1,606	680	0.31	0.13		
		2015	543	524	459	1,553	637	0.30	0.12		
		2016	527	514	484	1,544	679	0.30	0.13	-0.01	0.00
Cupertino - Fremont HSD	9,923	2012	1,039	1,377	1,579	4,007	1,977	0.40	0.20		
		2015	883	1,193	1,445	3,558	2,092	0.36	0.21		
		2016	796	1,139	1,396	3,361	2,086	0.34	0.21	-0.07	0.01
Campbell ESD	7,457	2012	477	504	453	1,442	NA	0.19			
		2015	435	457	430	1,353	NA	0.18			
		2016	423	459	448	1,361	NA	0.18		-0.01	
Union	4,357	2012	471	536	440	1,456	NA	0.33			
		2015	486	516	573	1,602	NA	0.37		0.03	
Gilroy	3,550	2012	437	480	523	1,444	700	0.41	0.20		
		2015	381	451	454	1,305	749	0.37	0.21		
		2016	366	466	445	1,298	700	0.37	0.20	-0.04	0.00

Table 4, page 1 of 2, with footnotes at the bottom of the final page

Table 4B: SGR Trends in Large Samples of Existing Modern ATT Dwellings in Select Locations\*

Districts Section	Sampled Units	Oct. of	Resident Student Population					TK-8 SGR	9-12 SGR	SGR Shift Since 2012	
			K-2	3-5	6-8	TK-8	9-12			TK-8	9-12
Milpitas	1,905	2012	193	148	119	470	150	0.25	0.08		
		2015	203	191	129	551	180	0.29	0.09		
		2016	233	180	139	583	195	0.31	0.10	0.06	0.02
Orchard	4,952	2012	71	54	35	167	NA	0.03			
		2015	68	65	49	190	NA	0.04			
		2016	82	59	41	185	NA	0.04		0.00	
Berryessa***	883	2012	41	27	19	89	NA	0.10			
		2015	79	45	25	157	NA	0.18			
		2016	93	58	29	184	NA	0.21		0.11	
Santa Clara North San Jose	1,578	2012	32	19	7	60	24	0.04	0.02		
		2015	26	24	17	70	15	0.04	0.01		
		2016	31	22	25	79	13	0.05	0.01	0.01	-0.01
Santa Clara All Other Areas	2,947	2012	194	114	39	349	32	0.12	0.01		
		2015	172	131	73	388	44	0.13	0.01		
		2016	169	148	69	391	42	0.13	0.01	0.01	0.00
Oak Grove	5,011	2012	295	241	212	757	NA	0.15			
		2015	296	266	183	760	NA	0.15			
		2016	264	250	190	738	NA	0.15		0.00	
Sunnyvale - Fremont HSD	4,221	2012	122	84	36	242	95	0.06	0.02		
		2015	110	87	55	256	76	0.06	0.02		
		2016	120	90	70	288	89	0.07	0.02	0.01	0.00
Cupertino - Fremont HSD	4,931	2012	779	685	460	1,932	519	0.39	0.11		
		2015	729	736	580	2,082	514	0.42	0.10		
		2016	769	738	587	2,141	544	0.43	0.11	0.04	0.01
Campbell ESD	4,016	2012	109	109	91	280	NA	0.07			
		2015	113	101	85	292	NA	0.07			
		2016	144	119	88	346	NA	0.09		0.02	
Union	2,112	2012	229	190	208	629	NA	0.30			
		2015	196	232	217	653	NA	0.31		0.01	

\* Existing housing is for as of no later than Sept. 2010 for each EPC client district listed. "Modern ATT" is intermediate and upscale locations of mainly market-rate apartment, condo, townhouse and plex units with amenities such as secure parking, spas, pools, exercise rooms and "green" common and/or private areas.

\*\* Evergreen sample includes many homes built from five-to-15 years before 2012, which is often the peak SGR age.

\*\*\* This growth occurred mainly in the "Crossings at Montague" apartment complex in the Milpitas part of Berryessa UESD.

Notes: Large samples have not been assembled (to date) for SFD homes in Santa Clara USD and for ATT units in the Berryessa Union and Evergreen ESDs and Gilroy USD. Some 2016 student counts have not been identified.

Table 4, page 2 of 2

There are two negative findings, however, in this SFD SGR data for the MUSD. The first is that while your K-2 decline, and the current distributional tilt toward the upper grades, are not as great as elsewhere, those negative indicators for future kindergartners nonetheless do exist. They are just to a lesser degree than in districts such as Berryessa, Cupertino, Evergreen and Oak Grove, where we are projecting reductions by more than one thousand students each in the next five years. The other negative finding is that with such a high current TK-8 SGR (0.36), there is greater likelihood for significant student decline in the long run from these existing SFD neighborhoods (in aggregate).

#### *“Modern ATT” SGR Findings in the MUSD and in Select Nearby EPC Client Districts*

The MUSD has some of the highest existing “Modern ATT” SGRs that we have calculated in sufficiently large samples. Among the districts listed, only the Cupertino Union ESD region (and that part of the Fremont Union HSD) has higher SGRs and those are the highest that we have ever determined from large samples of mainly market-rate “Modern ATT” units. The Union ESD’s current “Modern ATT” SGR is comparable to the MUSD’s at 0.31, but Union’s SGR only rose by 0.01 since 2012, with all of that gain occurring above K-2 (as in Cupertino). Your district’s rate, by contrast, jumped by 0.04 from 2012 to 2015 and another 0.02 in the last year, with most of those gains being in K-2. With a distribution of 233 now in K-2 and just 139 in 6-8, there is the potential for further growth in this TK-8 SGR, despite already being so high (0.31).<sup>13</sup> By comparison, the majority of the other districts listed have TK-8 SGRs that are at 0.15 or lower. This clearly shows how desirable Milpitas is for families of school-age children.

#### **Comparison of Local Birth Counts to Corresponding Kindergarten Populations**

One method for estimating the pending kindergarten enrollments is to review local birth statistics. While we feel that identifying the evolving trends in each neighborhood and housing category are just as important, birth data is useful if there is (1) a consistent correlation between births and the corresponding (five years later) kindergarten populations in the local area and/or (2) the direction of change in the local birth totals is noteworthy, even when a strong births-to-kindergartners correlation does not exist. These figures are provided in Table 5 on page 16.

#### *Understanding the Data in Table 5*

Two types of data are of importance in this table: (1) how the birth totals have changed and (2) how the ratio between births and kindergartners has evolved. In the top data row in Table 5, for example, there were 957 births in “2006” (as adjusted) to mothers with home addresses in the Milpitas zip code area (95035). Essentially five years later, in October 2011, there were 731 MUSD kindergartners from the district portion of that zip code. That is a 76% ratio for the resultant kindergartners. We only show the ratios in earlier periods, however, mainly as an FYI on past trends. Our focus is on how the birth counts have changed, especially in relation to the next three kindergarten totals, and on how the ratio has evolved in the last three kindergartens (including current).<sup>14</sup>

One adjustment first made in this table a year ago, compared to versions in our prior reports, is that the annual birth numbers have been pro-rated from the two calendar years relevant to each kindergarten eligibility period. So the “2006” birth figure shown, for instance, actually represents eleven-twelfths of the 2006 total and one-twelfth of the 2005 total to better correlate to the birth period relevant to the October 2011 kindergarten enrollment (i.e., for all births theoretically occurring from December 2005 through November 2006). The ratios between years then shift after the 2006 births to match the evolution of the kindergarten eligibility birthdate cutoff from December 2 to September 1.

<sup>13</sup> Attached units commonly have more students in the lower grades, on average, than in the upper grades, as such dwellings are more suitable for younger children. This severe of a distributional difference, however, exceeds that normal pattern.

<sup>14</sup> The 2012 K count includes 100% of TK, 2013 K has 50% of TK and 2014 has 33% of TK so that the data covers 12 months.

**Table 5: Comparison of Births in 95035 Zip Code Region to Corresponding Kindergarten Populations**

Birth Year* and School Enrollment Date	Total Births in Zip Code 95035	Dist.-Enrolled Resident Kindergarten Population**	Ratio of Kindergarten Population to Births
"2006" Births and Oct. 2011 Kindergarten Students	957	731	76%
"2007" Births and Oct. 2012 Kindergartners plus 100% of TK***	978	701	72%
"2008" Births and Oct. 2013 Kindergartners plus 50% of TK***	1,001	741	74%
"2009" Births and Oct. 2014 Kindergartners plus 33.3% of TK***	960	754	79%
"2010" Births and Oct. 2015 Kindergartners (excluding TK)	910	702	77%
"2011" Births and Oct. 2016 Kindergartners (excluding TK)	875	724	83%
<b>Average Relevant to Last Three School Years</b>			<b>79.5%</b>

	note births in 2010 and 2011 above and in 2012 and 2013 below are low but 2014 is up	Potential District-Enrolled Resident Kindergarten Total (excluding TK)****	
		at Three-Year Average Ratio	at Current Ratio
"2012" Births and Potential October 2017 Kindergartners	917	729	759
"2013" Births and Potential October 2018 Kindergartners	879	699	728
"2014" Births and Potential October 2019 Kindergartners	970	771	803

\* These are proportionate birth amounts from the listed year and the preceding year so as to properly correlate to the kindergarten eligibility period shown, such as "2004 births" representing one-twelfth of the birth total in 2003 and eleven-twelfths (all but December) of the birth total in 2004. The ratios shift after the 2006 births to match the evolution of the kindergarten eligibility birthdate cutoff from December 2 before 2012 to September 1 starting in 2014.

\*\* These are the resident kindergarten totals in the MUSD region, which excludes a small 95035 section in the BUSD.

\*\*\* 100% of TK students in 2012, 50% of TK students in 2013 and 33.3% of TK students in 2014 are included so that the totals correlate to 12-month birth periods.

\*\*\*\* New housing factors into the higher most recent ratios and should continue to do so in the future.

Note: These figures are one of many factors in the kindergarten projections. Student trends by location, new housing and socioeconomic issues are also key factors, with modest revisions made to those findings where warranted based on the above data.

#### Key Findings Related to the Data in Table 5

We decided in our last study that the births-to-kindergartners correlative ratio had varied too greatly over the years shown to have much statistical meaning, but we no longer have that opinion. We now believe that the recent rise in that ratio is sufficiently in sync with when large numbers of new housing units were built in the intervening years between births and kindergartners.<sup>15</sup> Future in-district (resident) kindergarten totals thus can be expected to have as much as 83% of the birth numbers from five years earlier as long as significant new housing amounts are added in the intervening periods. The average of 79.5% in the correlation for the three latest kindergartens (including current) could be considered the minimum that will occur for the pending kindergartens.

The combination of (1) this rise to an 83% current correlative ratio and (2) the jump in births in 2014 (the latest year that birth counts by zip code are available) made a major difference in our kindergarten forecasts from 2019 on. We had expected a rebound from the low birth numbers that correlate to the 2015 through 2018 (i.e., two

<sup>15</sup> This rise also suggests fewer losses to private schools and/or from families moving out of Milpitas in the intervening years.



latest and two pending) kindergartens, but this 2014 birth figure (970) greatly exceeds that expectation. There do appear to be more families now having children and this presumably is occurring mainly in the newest homes, considering our previously discussed findings regarding the trends in existing dwellings. And the current 83% correlative ratio in the first year that a new private Stratford School is operating by the Great Mall suggests that the losses of kindergarten-age children to that school was not significant this year for the MUSD. If anything, this higher correlative ratio implies fewer kindergarten-age Milpitas children attending private schools. That Stratford School may instead have had a greater net negative impact on other private schools in Milpitas and/or on public schools in nearby districts.

### **Projected Impacts of New Housing**

New dwellings impact enrollment through a combination of (1) the number of residences expected in the various housing types, by year and location, and (2) the projected number of students in each of those units. The latter includes timing and local school considerations. These components are discussed in the following subsections, for which the first three, other than the updated SGRs, are repeated from past reports. Readers already familiar with this SGR discussion may want to skip ahead to the “*Projected New Housing*” subsection on page 18.

### **Average Student Generation Rates (SGRs)**

Student generation rates are the average rates at which residences “yield” students, such as one student in every two homes (a 0.50 SGR). Public school SGRs usually are calculated by identifying the number of district-enrolled students in a suitable sample of residential units from the local area. SGRs identified from recently built housing are often considered the best estimation of what similar future homes will generate, at least in the first few years of occupation. As is explained below, however, that often is less than what the total impact will be over time.

### **Delayed Enrollment Impacts of New Housing**

When a major development is being built, the first units occupied can be surrounded by construction for an extended period of time. Such activity is less-than-optimal for families, especially of young children, with the result being that the earliest occupants often have relatively few students. That development can be more appealing to families after it is completed and all of the construction activity has ended, and even more so after it has an “established feel” with shading trees, etcetera. This can lead to more families moving in via turnover. Often the TK-12 SGR high point is not reached until around the tenth year after a development is completed.

This tendency probably is a key reason why relatively few district-enrolled students are currently residing in the nearly 2,400 new housing units completed in the MUSD in the last three years, but there also is a factor of the school location. Being assigned to an older elementary that is several miles away (i.e., Rose or Randall) is less appealing to some families than having a new school in closer proximity. We suspect that the SGRs will rise as both (1) these latest units will have been occupied for a couple of years and (2) the new school opens nearby.

### **Current SGRs in Recently Built Housing**

Only two SGRs from recently built units in the MUSD were determined necessary for the forecast. Previously we had identified separate SGRs from recent mainly market-rate SFD and ATT locations. The updated samples of units in those types, however, with the latest completed developments included and complexes built before 2013 excluded, do not currently provide meaningful differences between those types (in aggregate for those samples). As is shown in Table 6 on page 18, these 2,393 units in mainly market-rate developments now have 280 MUSD-enrolled students, for a 0.12 SGR. The distribution through the grades, however, with 113 in TK-2 and just 51 in 3-5 and 54 in 6-8, indicates young families, on average, with large numbers of children under age five. The SGR thus should rise in the immediate future and could reach the 0.20 vicinity during the ten-year forecast period.

**Table 6: Average Student Generation Rates (SGRs) from Recently Built Housing Units**

Housing Situation (Developments of)	Number of Units in Sample	Current MUSD-Enrolled Resident Student Population by Grade Range					Current TK-12 SGR
		TK-2	3-5	6-8	9-12	TK-12	
Mainly Market-Rate Locations	2,393	113	51	54	62	280	0.12
Mainly BMR Locations	101	20	24	11	24	79	0.78

Nonetheless, this is a much lower first-year SGR than we identified a year ago from a moderately older sample of SFD homes (i.e., 0.25), but many of those homes were bought when housing prices were lower. This updated SGR in the current high-housing-cost situation thus is more appropriate for estimating the first-year SGRs that will come from future SFD homes and mainly market-rate ATT developments.

Only one complex of mainly “BMR” (below-market-rate) units has been built in the district in recent years (i.e., in 2010). That has 79 students in 101 units, for a 0.78 TK-12 SGR, which is well within the norm for BMR housing.

#### Projected New Housing

The projected and potential new housing amounts are much higher in this update than in our recent reports. There are four principal reasons for this. One is that the market for new housing remains “hot” in the South Bay, as could be expected considering the latest jump in prices and rents. The second reason is that the openings of both the new MUSD school and the nearby BART station are one year closer (i.e., 2018 is now just two years off), with many developments now being built based on those timings. The third is that the planners for the City of Milpitas have identified additional sites where new housing is expected in the near future. Previously some of those sites were considered unlikely to residentially develop within the following five years. The fourth reason is that clarification of the unit totals in some active projects caused a rise in the amounts forecast in those locations.

The result is that we are now projecting 3,100 units will become occupied in the next five years, from 2016 to 2021, rather than the 2,200 units forecast a year ago for the 2015-to-2020 period. And the ten-year projections, which we did not provide in our last update, have a total of 5,200 new units (see Table 7 on page 19).

These new residences will be concentrated primarily in 2018 and 2019 (for first occupancies), with 740 projected in each of those years, and secondarily in 2020 to 2022. The totals forecast in the latter years are between 680 and 600 annually. Thereafter much slower, but still consequential, annual new housing amounts are expected, with 375 projected in each of 2023 through 2026. It is possible, especially if a major economic recession occurs at some point in the next decade, that smaller annual amounts will be completed after 2019.

The specific locations for projected new housing move-ins this year, aside from two individual homes, are:

- (1) 84 SFD homes now being built in the northwest corner of the district in the “Waterstone” development, with 65 forecast for move-ins by next October (i.e., in the twelve months from October 1, 2016, through September 30, 2017);
- (2) 31 detached homes under-construction on South Milpitas Blvd. just south of Calaveras Blvd. in the “Cobblestone” development, with all occupied by next October;
- (3) The final 126 townhouses and condos to be occupied in the “Traverse” development by Trade Zone Blvd. at the southern district edge; and
- (4) The 46 SFD homes in the “Villas at Metro” tract by South Milpitas Blvd. near Montague Expressway.

Table 7: Summary of Projected New Housing Units

Housing Type (Developments of)	Projected Additional Units in 12 Months to Oct. 1 of*										Total to	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2021	2026
Mainly Market-Rate Locations	270	740	740	665	655	580	355	355	355	355	3,070	5,070
Locations of at least 50% BMR Units	0	0	0	15	15	20	20	20	20	20	30	130
<b>Total</b>	270	740	740	680	670	600	375	375	375	375	3,100	5,200

\* These figures are from site-specific projections based on EPC fieldwork, including visits to all active developments, and info from the Milpitas city planning department. Totals are for "first occupancy" dates rather than permit or sales dates.

Note: New housing estimates are shown in 2022 through 2026 because these are mostly relevant to the future school.

The first of these four developments is in the Weller elementary and Russell middle school attendance areas, while the others are in the Rose elementary and Rancho Milpitas middle school attendance areas.


Much larger developments should start having their first occupancies after next October 1. This includes a total of 2,235 units forecast in the immediate vicinity of the new school, with 350 in 2018 and the rest in similar annual amounts over the following five years (to 2023). There also are 1,177 more residences projected just east of the Great Mall, with 279 forecast for occupancies in 2018, 283 in 2019 and 200-to-210 in each of the following three years (to 2022). All of these are in the current Rose and planned new school attendance areas. There also are another 144 units projected in the northwest corner of the district in the Weller region, with 65 forecast in 2018 and 79 in 2019. But that is the only location outside of the planned new school attendance area with more than 100 additional units forecast between 2017 and 2023. It is only after 2023 that some major additional sites elsewhere in the MUSD, such as for a high-rise tower on Barber Lane west of Interstate 880, are included in the forecast.

Totals of just over 400 and 800 district-enrolled TK-12 students are forecast in 2021 and 2026, respectively, from these projected new residences (see lowest data rows in Appendix A1 on page 20).

### Concluding Commentary

These could be overly optimistic four-to-five-year and ten-year projections, but such enrollments could occur and we want the District to be aware of what the facility needs could be in those years. Although we remain confident, within the stated "real potential" ranges shown in Appendix A1, of both the overall forecast for the next five years and continued growth thereafter for the new school, there is the potential for large reductions after 2019 in the kindergarten populations from some of the more established parts of the district. (The severity of the declining birth totals in some other parts of the county is shown in Appendix B5.) And if a major recession and/or other factors reduce the ten-year new housing amount, then the total district enrollment could be lower as well.

Sincerely,



Thomas R. Williams, principal demographer for Enrollment Projection Consultants

Appendix A1: Detail for Actual and Projected October Enrollments, 2016 to 2021, plus General Estimate for 2026																		
Oct. of	Actual and Projected Enrollment by Grade, including SDC and Calaveras Hills Students														Actual and Projected Totals			
	TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-6	7-8	9-12	TK-12
2016 *	127	738	741	746	769	743	830	750	742	805	825	781	887	790	5,444	1,547	3,283	10,274
2017	129	752	765	757	748	769	748	810	751	741	843	820	782	903	5,478	1,492	3,348	10,318
2018	126	732	792	790	768	753	779	733	807	752	776	841	824	799	5,473	1,559	3,240	10,272
2019	136	791	768	818	800	773	763	765	736	806	789	775	842	842	5,614	1,542	3,248	10,404
2020	136	792	825	791	828	806	783	752	769	737	847	788	776	861	5,713	1,506	3,272	10,491
2021	137	797	826	850	802	834	816	770	756	769	773	845	789	793	5,832	1,525	3,200	10,557
2026 **	142	825	852	865	866	862	870	849	852	797	863	830	804	803	6,131	1,649	3,300	11,080
<b>Total Grade-Level Change in One Year, to October of 2017</b>																		
<b>Total Grade-Level Change in Two Years, to October of 2018</b>																		
<b>Total Grade-Level Change in Three Years, to October of 2019</b>																		
<b>Total Grade-Level Change in Four Years, to October of 2020</b>																		
<b>Total Grade-Level Change in Five Years, to October of 2021</b>																		
<b>Total Grade-Level Change General Estimate in Ten Years, to October of 2026**</b>																		
<i>Real Potential Lower Total in 2017 (essentially -1% within footnote caveats***)</i>																		
<i>Real Potential Higher Total in 2017 (essentially +1% within footnote caveats***)</i>																		
<i>Real Potential Lower Total in 2021 (essentially -4% within footnote caveats and with declining kindergarten numbers in existing housing)</i>																		
<i>Real Potential Higher Total in 2021 (essentially +4% within footnote caveats and with greater student growth due to a new school opening)</i>																		
Projected 2021 and General Estimate of 2026 Students from New Housing:																		
2021	6	37	39	39	39	37	34	31	28	25	24	23	22	21	262	53	90	405
2026	11	66	68	69	69	68	67	63	61	57	56	53	49	46	481	118	204	803
* Actual Oct. 5, 2016, enrollment using student files provided to EPC by MUSD. Community Day, NPS, pre-school SDC and Adult Ed. students are excluded.																		
** The ten-year estimate could be overly optimistic in the elementary grades if the pending birth totals decline in older housing (in aggregate).																		
*** Transitional Kindergarten (TK) and Kindergarten (K) fluctuations from the forecast in any one year can be more significant than are likely on an ongoing basis. Whenever a forecast is generated prior to spring, the District always should review subsequent TK and K registration counts and adjust the next year's staffing accordingly.																		
Note: Projections and real potential ranges are for the currently operating MUSD facilities and programs, other than for a new TK-6 school in 2018. The most probable approx. new housing amounts are under current City of Milpitas guidelines. The potential ranges cover essentially an 80% probability within those assumptions. Under such a scenario, there still would be approximately 10% possibilities for each of even lower or higher totals than the ranges shown.																		

<b>Appendix A2(a)</b> <b>Actual October 5, 2016, Resident Students versus Attending Enrollments for Elementary Schools</b>										
School	Subject	Actual MUSD-Enrolled Students by Grade								Total
		TK	K	1	2	3	4	5	6	
<b>Weller</b>	Actual Attendance	24	48	68	70	61	71	64	70	476
	Resident Population	13	57	73	75	78	87	65	74	522
	<b>Net Difference (A-R)</b>	11	-9	-5	-5	-17	-16	-1	-4	<b>-46</b>
<b>Pomeroy</b>	Actual Attendance	0	97	90	98	124	103	116	103	731
	Resident Population	11	81	82	93	111	92	104	92	666
	<b>Net Difference (A-R)</b>	-11	16	8	5	13	11	12	11	<b>65</b>
<b>Curtner</b>	Actual Attendance	0	96	120	86	106	107	118	106	739
	Resident Population	14	86	121	94	113	103	117	108	756
	<b>Net Difference (A-R)</b>	-14	10	-1	-8	-7	4	1	-2	<b>-17</b>
<b>Spangler</b>	Actual Attendance	21	92	79	87	70	78	88	71	586
	Resident Population	11	77	76	90	73	74	85	75	561
	<b>Net Difference (A-R)</b>	10	15	3	-3	-3	4	3	-4	<b>25</b>
<b>Zanker</b>	Actual Attendance	0	100	96	93	93	110	93	95	680
	Resident Population	12	126	107	97	93	108	99	91	733
	<b>Net Difference (A-R)</b>	-12	-26	-11	-4	0	2	-6	4	<b>-53</b>
<b>Burnett</b>	Actual Attendance	22	74	73	79	77	90	81	80	576
	Resident Population	14	65	69	76	69	82	78	77	530
	<b>Net Difference (A-R)</b>	8	9	4	3	8	8	3	3	<b>46</b>
<b>Randall</b>	Actual Attendance	12	56	49	57	54	47	60	57	392
	Resident Population	9	49	46	52	47	54	59	65	381
	<b>Net Difference (A-R)</b>	3	7	3	5	7	-7	1	-8	<b>11</b>
<b>Rose</b>	Actual Attendance	27	75	59	66	64	56	77	66	490
	Resident Population	19	68	58	57	61	56	72	59	450
	<b>Net Difference (A-R)</b>	8	7	1	9	3	0	5	7	<b>40</b>
<b>Sinnott</b>	Actual Attendance	21	100	107	110	120	81	133	102	774
	Resident Population	24	115	97	101	115	80	136	105	773
	<b>Net Difference (A-R)</b>	-3	-15	10	9	5	1	-3	-3	<b>1</b>
<b>Total</b>	Actual Attendance	127	738	741	746	769	743	830	750	5,444
	Resident Population	127	724	729	735	760	736	815	746	5,372
	<b>Net Difference (A-R)</b>	0	14	12	11	9	7	15	4	<b>72</b>

Note: All figures based on MUSD-provided student files of actual enrollment.

Appendix A2(b)										
Projected Elementary Resident Students and Potential Attending Enrollments in October 2017										
School	Subject	Projected MUSD-Enrolled Students by Grade								Total
		TK	K	1	2	3	4	5	6	
Weller	Resident Population	12	71	59	74	76	79	89	66	526
	Potential Net Adjustment	11	-11	-9	-5	-5	-16	-16	-1	-52
	<b>Potential Attendance</b>	23	60	50	69	71	63	73	65	<b>474</b>
Pomeroy	Resident Population	15	88	86	85	91	108	91	100	664
	Potential Net Adjustment	-15	12	15	8	5	13	11	12	61
	<b>Potential Attendance</b>	0	100	101	93	96	121	102	112	<b>725</b>
Curtner	Resident Population	17	100	90	123	93	113	102	113	751
	Potential Net Adjustment	-17	0	10	-2	-8	-7	4	1	-19
	<b>Potential Attendance</b>	0	100	100	121	85	106	106	114	<b>732</b>
Spangler	Resident Population	13	77	79	77	91	74	75	84	570
	Potential Net Adjustment	10	3	15	3	-3	-3	4	3	32
	<b>Potential Attendance</b>	23	80	94	80	88	71	79	87	<b>602</b>
Zanker	Resident Population	18	103	130	109	97	93	108	96	754
	Potential Net Adjustment	-18	-7	-26	-11	-4	0	2	-6	-70
	<b>Potential Attendance</b>	0	96	104	98	93	93	110	90	<b>684</b>
Burnett	Resident Population	13	75	67	69	78	68	82	77	529
	Potential Net Adjustment	9	5	9	4	3	8	8	3	49
	<b>Potential Attendance</b>	22	80	76	73	81	76	90	80	<b>578</b>
Randall	Resident Population	9	53	50	47	53	47	54	58	371
	Potential Net Adjustment	6	3	7	3	5	7	-7	1	25
	<b>Potential Attendance</b>	15	56	57	50	58	54	47	59	<b>396</b>
Rose	Resident Population	13	74	71	63	59	63	59	73	475
	Potential Net Adjustment	13	7	7	1	8	3	0	4	43
	<b>Potential Attendance</b>	26	81	78	64	67	66	59	77	<b>518</b>
Sinnott	Resident Population	18	103	120	99	100	114	81	131	766
	Potential Net Adjustment	3	-3	-15	10	9	5	1	-3	7
	<b>Potential Attendance</b>	21	100	105	109	109	119	82	128	<b>773</b>
Total	Resident Population	128	744	752	746	738	759	741	798	5,406
	Potential Net Adjustment	2	9	13	11	10	10	7	14	76
	<b>Potential Attendance</b>	130	753	765	757	748	769	748	812	<b>5,482</b>

Notes: (1) Projected amounts contain hidden fractions, so the totals above may not sum exactly to those in other tables. (2) Potential attendance if current net adjustments continue next year, but advanced by one grade and fine-tuned as needed to match the overall forecast. These are simply theoretical numbers that have been provided to help the District determine what changes to these net adjustment levels may be warranted. The actual levels permitted next year will be driven by capacity constraints and other factors.

Appendix A3(a)								
Actual October 5, 2016, Resident Students versus Attending Enrollments for Middle Schools								
School	Subject	Actual MUSD-Enrolled Students by Grade						7-8
		4	5	6	7	8	Total	
Russell	Actual Attendance				395	428	823	
	Resident Population	388	410	379	385	415	800	
	Net Difference (A-R)				10	13	23	
Rancho Milpitas	Actual Attendance				347	377	724	
	Resident Population	348	405	367	346	379	725	
	Net Difference (A-R)				1	-2	-1	
Total	Actual Attendance				742	805	1,547	
	Resident Population	736	815	746	731	794	1,525	
	Net Difference (A-R)				11	11	22	

Note: All figures based on MUSD-provided student files of actual enrollment.

Appendix A3(b)								
Projected Middle School Resident Students and Potential Attending Enrollments in October 2017								
School	Subject	Projected MUSD-Enrolled Students by Grade						7-8 Total
		4	5	6	7	8		
Russell	Resident Population	401	389	400	381	383	764	
	Potential Net Adjustment				7	11	18	
	Potential Attendance				388	394	782	
Rancho Milpitas	Resident Population	358	352	396	365	346	711	
	Potential Net Adjustment				-2	1	-1	
	Potential Attendance				363	347	710	
Total	Resident Population	759	741	796	746	729	1,475	
	Potential Net Adjustment				5	12	17	
	Potential Attendance				751	741	1,492	

Notes: (1) Projected amounts contain hidden fractions, so the totals above may not sum exactly to those in other tables. (2) Potential attendance if current net adjustments continue next year, but advanced by one grade and fine-tuned as needed to match the overall forecast. These are simply theoretical numbers that have been provided to help the District determine what changes to these net adjustment levels may be warranted. The actual levels permitted next year will be driven by capacity constraints and other factors.

**Appendix A4(a)**  
**Actual October 5, 2016, Ratios of High School Students Attending MUSD High Schools**

School	Subject	Actual MUSD Students by Grade				9-12 Total
		9	10	11	12	
<b>Milpitas High</b>	Actual Attendance	825	778	848	713	3,164
	Percent of Total Enrollment	100%	100%	96%	90%	
<b>Calaveras Hills High</b>	Actual Attendance	0	3	39	77	119
	Percent of Total Enrollment	0%	0%	4%	10%	
<b>Total</b>	Total Attending Enrollment	825	781	887	790	3,283

Note: All figures based on MUSD-provided student files of actual enrollment.

**Appendix A4(b)**  
**Potential High School Attending Enrollments in October 2017**

School	Subject	Actual MUSD Students by Grade				9-12 Total
		9	10	11	12	
<b>Milpitas High</b>	Potential Attendance	843	817	748	815	3,222
	Percent of Total Enrollment	100%	100%	96%	90%	
<b>Calaveras Hills High</b>	Potential Attendance	0	3	34	88	126
	Percent of Total Enrollment	0%	0%	4%	10%	
<b>Total</b>	Total Attending Enrollment	843	820	782	903	3,348



## Appendix B1: Summary of Recent Cumulative Advancement Rates by Category of Existing Housing\*

Residential Category**	Current Students	Advancement Rate Subject	Three-Year Average Advancement Rate				Normal Range
			2013 - 2016	2012 - 2015	2011 - 2014	2010 - 2013	
<b>ATT and MH: Lower Cost</b>	1,401	<b>Cum. 1st to 8th***</b>	<b>0.90</b>	<b>1.00</b>	<b>1.10</b>	<b>1.11</b>	0.70 - 1.10
		<b>From 8th to 9th</b>	1.03	1.06	1.07	1.08	NA
<b>ATT and MH: Intermediate (Modest and Moderate)</b>	1,671	<b>Cum. 1st to 8th***</b>	<b>0.95</b>	<b>0.95</b>	<b>0.86</b>	<b>0.92</b>	0.75 - 1.15
		<b>From 8th to 9th</b>	1.00	0.99	0.97	1.03	NA
<b>ATT: High Amenity (small student population)</b>	655	<b>Cum. 1st to 8th***</b>	<b>0.72</b>	<b>0.84</b>	<b>0.93</b>	<b>1.20</b>	0.80 - 1.20
		<b>From 8th to 9th</b>	0.99	0.94	0.99	0.99	NA
<b>SFD: Modest and Moderate ("Moderate" in Table 3A)</b>	2,394	<b>Cum. 1st to 8th***</b>	<b>1.11</b>	<b>1.10</b>	<b>1.09</b>	<b>1.05</b>	0.75 - 1.15
		<b>From 8th to 9th</b>	1.05	1.05	1.06	1.05	NA
<b>SFD: Middle Income</b>	2,195	<b>Cum. 1st to 8th***</b>	<b>1.00</b>	<b>0.95</b>	<b>1.02</b>	<b>1.06</b>	0.85 - 1.25
		<b>From 8th to 9th</b>	1.07	1.05	1.04	1.03	NA
<b>SFD: Higher Value</b>	1,471	<b>Cum. 1st to 8th***</b>	<b>1.04</b>	<b>1.08</b>	<b>1.28</b>	<b>1.28</b>	0.90 - 1.30
		<b>From 8th to 9th</b>	1.09	1.07	1.05	1.05	NA

\* These figures are from aggregate counts of planning areas with virtually no net increase in dwelling units since Sept. 2011 for the 2011-to-2014 through 2013-to-2016 rates and since Sept. 2007 for the 2010-to-2013 rates.

\*\* "SFD" = single family detached; "ATT" = attached, including condominiums, townhouses, plexes and apartments; "MH" = mobile homes; Value levels (and interpolated income levels) are subjective EPC evaluations of the dominant residential type in each of the planning areas with virtually no net additional housing units first occupied since Sept. 2011.

\*\*\* Cumulative rates are the cumulative impact from first to eighth grades of the individual grade-to-grade net advancement (a.k.a., cohort survival) rates averaged over several recent years. For example, "SFD: Modest and Moderate" homes, in aggregate, have averaged net gains in the number of students in the graduation from most grades into the next. The latest cumulative impact of those rates is 1.11 (+11%). This means that, if these rates continue, then there would be 11% more eighth graders from these same homes as there had been first graders seven years earlier. The rates of change between (1) kindergarten and first and (2) eighth and ninth are excluded from these cumulative rates because those are often impacted by students coming out of private schools. While those transfers from private schools are an important forecast component, that is a separate issue from evaluating the impact of housing turnover, which is the main purpose in determining these cumulative rates. The "Normal Range" is the recent vicinity that over 80% of our clients are in for the categories listed. A few districts have figures well outside these ranges.

Notes: The figures shown are the updated actual calculations. The underlying grade-to-grade rates have been adjusted where warranted in the forecast, especially based on alternative four-year averages shown in Appendix B2.

Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																			
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students												Cumulative Impact from 1st to 8th***					
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12			
Most Affordable ATT (incl. farm labor res. but excl. mainly BMR)	2012	2	58	67	52	70	51	53	73	63	65	59	55	44	60	772			
	2013	10	48	60	65	57	71	53	48	72	62	68	61	54	42	771			
	2014	9	54	53	62	69	54	66	56	52	68	69	66	60	56	794			
	2015	7	43	48	46	67	66	55	71	54	51	68	67	66	62	771			
	2016	11	44	44	50	45	59	60	49	62	52	54	63	72	67	732			
3-Year Average Incoming Advancement Rate**		1.01 0.98 1.04 0.93 0.95 1.01 0.97 0.96 0.97 0.96 1.06 0.96 1.02 1.03 1.03																	
4-Year Average Incoming Advancement Rate**		1.01 0.98 1.05 0.95 0.97 0.98 0.98 0.97 0.98 0.98 1.05 0.98 1.01 1.01 1.01																	
Affordable ATT (excl. mainly BMR)	2012	1	32	28	37	34	38	34	43	44	31	51	39	43	43	498			
	2013	6	25	37	29	37	37	39	30	41	43	37	47	36	45	489			
	2014	9	34	26	34	30	39	37	41	30	42	42	38	47	39	488			
	2015	9	34	31	27	34	36	37	36	42	30	46	41	38	44	485			
	2016	7	30	35	27	25	33	40	35	33	45	32	45	42	38	467			
Mixed Lower Cost (areas of mainly lower cost ATT & a few SFD) (excl. mainly BMR)	2012	0	1	0	1	0	1	1	2	1	3	1	1	1	2	15			
	2013	0	2	1	0	1	1	2	2	2	1	3	2	2	2	21			
	2014	0	0	1	0	0	1	0	1	1	1	1	2	1	2	11			
	2015	0	0	0	1	0	0	1	0	1	1	1	1	2	2	10			
	2016	0	2	0	0	1	1	0	0	0	2	0	1	1	2	10			
Affordable MH (mainly single-wide)	2012	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2			
	2013	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3			
	2014	0	0	1	0	0	0	0	0	1	0	0	2	0	0	4			
	2015	0	0	0	1	0	0	0	0	0	1	0	1	0	0	3			
	2016	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2			
ATT Complexes of Mainly BMR Units	2012	0	18	15	14	14	14	12	18	13	11	10	17	12	17	185			
	2013	3	13	15	17	13	11	18	14	14	12	13	8	19	12	182			
	2014	2	21	10	18	20	11	10	16	14	14	12	13	9	18	188			
	2015	2	17	17	11	18	17	11	10	16	14	14	13	15	9	184			
	2016	2	16	19	18	12	17	18	8	10	16	12	16	13	13	190			

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Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																			
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students																Cumulative Impact from 1st to 8th***	
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12			
Combination of Most Affordable & Affordable ATT & MH (incl. Mixed Lower Cost & Mainly BMR)	2012	3	109	110	104	118	104	100	137	121	111	121	112	100	122	1,472			
	2013	19	88	113	111	108	120	112	95	130	118	122	118	111	101	1,466			
	2014	20	109	91	114	119	105	113	114	98	125	124	121	117	115	1,485			
	2015	18	94	96	86	119	119	104	117	113	97	129	123	121	117	1,453			
	2016	20	92	98	95	84	110	118	92	105	115	98	125	129	120	1,401			
3-Year Average Incoming Advancement Rate**		0.99 0.98 1.03 0.97 0.97 0.98 0.97 0.99 0.99 0.97 0.99 1.03 0.98 1.01 1.01 1.01																0.90	
4-Year Average Incoming Advancement Rate**		1.00 0.99 1.03 0.98 1.00 0.97 0.97 0.99 0.99 0.97 0.99 1.05 0.98 1.01 1.01 1.01																0.93	
Modest ATT	2012	7	73	102	83	79	82	90	74	87	81	65	74	82	70	1,049			
	2013	13	81	83	92	87	75	79	86	78	76	79	75	68	73	1,045			
	2014	17	76	89	80	93	90	79	74	82	78	78	82	71	68	1,057			
	2015	17	75	81	100	83	88	90	72	80	77	75	79	80	68	1,065			
	2016	13	86	79	83	99	87	86	85	79	73	84	69	79	81	1,083			
3-Year Average Incoming Advancement Rate**		1.07 1.04 1.01 1.01 1.02 0.99 1.01 0.93 1.04 0.95 1.03 0.99 0.97 0.99 0.99																0.99	
4-Year Average Incoming Advancement Rate**		1.09 1.00 1.00 1.02 0.99 1.00 0.94 1.05 0.93 1.01 1.03 0.96 0.97 1.01 1.03 0.96 0.97																0.93	
Moderate ATT	2012	3	44	42	39	31	24	36	33	38	30	20	32	29	7	408			
	2013	3	56	42	40	43	33	26	35	33	32	29	19	30	26	447			
	2014	12	41	59	49	38	46	35	24	37	34	29	32	19	32	487			
	2015	7	37	42	53	49	38	43	31	25	32	35	26	34	19	471			
	2016	5	58	36	43	50	41	32	42	31	26	28	37	22	27	478			
Modest MH (mainly double-wide)	2012	0	10	6	9	9	9	5	9	6	9	7	7	10	14	110			
	2013	0	9	12	6	11	10	8	5	11	5	10	8	8	11	114			
	2014	4	4	9	13	6	12	10	7	8	10	6	10	11	8	118			
	2015	2	9	5	10	14	10	15	10	7	9	9	4	10	11	125			
	2016	1	6	7	6	8	14	7	14	10	5	9	8	5	10	110			
Combination Modest & Moderate ATT & MH	2012	10	127	150	131	119	115	131	116	131	120	92	113	121	91	1,567			
	2013	16	146	137	138	141	118	113	126	122	113	118	102	106	110	1,606			
	2014	33	121	157	142	137	148	124	105	127	122	113	124	101	108	1,662			
	2015	26	121	146	136	146	136	148	113	112	118	119	109	124	98	1,661			
	2016	19	150	122	132	157	142	125	141	120	104	121	114	106	118	1,671			
3-Year Average Incoming Advancement Rate**		1.05 1.04 0.99 1.00 0.99 0.93 1.05 0.95 1.00 0.99 0.99 0.99 0.99 0.98 0.98																0.95	
4-Year Average Incoming Advancement Rate**		1.06 1.01 1.02 1.00 0.99 0.94 1.05 0.93 1.00 1.02 0.98 1.00 1.02 0.98 0.96 0.96																0.92	

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Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																	
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students															Cumulative Impact from 1st to 8th**
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12	
<b>Modest SFD</b>																	
	2012	1	30	26	42	36	38	37	25	32	41	37	35	32	38	450	
	2013	7	28	27	26	42	30	36	36	23	34	43	40	37	32	441	
	2014	4	32	24	27	25	43	32	35	33	23	33	40	37	34	422	
	2015	11	37	36	24	30	25	42	35	34	24	37	36	42	447		
	2016	7	31	35	35	23	30	29	42	31	35	31	22	35	44	430	
<b>Moderate SFD</b>																	
	2012	6	126	152	137	128	138	154	152	182	139	175	173	189	183	2,034	
	2013	17	136	135	152	147	124	148	161	156	189	146	183	177	195	2,066	
	2014	26	146	142	136	153	151	129	145	163	162	206	138	186	175	2,058	
	2015	28	126	146	139	130	155	152	138	147	167	168	196	131	183	2,006	
	2016	19	118	122	142	144	144	161	144	149	151	180	167	190	133	1,964	
3-Year Average Incoming Advancement Rate**		1.00 0.99 1.00 1.00 1.05 1.03 1.00 1.04 1.03 1.07 0.96 0.98 1.00															1.13
4-Year Average Incoming Advancement Rate**		1.02 0.99 1.02 1.03 1.04 1.01 1.03 1.03 1.06 0.98 0.99 1.00															1.16
<b>Combination Modest &amp; Moderate SFD</b>																	
	2012	7	156	178	179	164	176	191	177	214	180	212	208	221	221	2,484	
	2013	24	164	162	178	189	154	184	197	179	223	189	223	214	227	2,507	
	2014	30	178	166	163	178	194	161	180	196	185	239	178	223	209	2,480	
	2015	39	163	182	163	160	180	194	173	181	201	192	233	167	225	2,453	
	2016	26	149	157	177	167	174	190	186	180	186	211	189	225	177	2,394	
3-Year Average Incoming Advancement Rate**		1.00 0.99 1.00 1.00 1.04 1.03 1.00 1.01 1.01 1.03 1.05 0.97 0.97 1.02															1.11
4-Year Average Incoming Advancement Rate**		1.01 0.99 1.02 1.02 1.04 1.01 1.01 1.03 1.05 0.99 0.98 1.02															1.12
<b>Combination Modest &amp; Moderate SFD, ATT &amp; MH</b>																	
	2012	17	283	328	310	283	291	322	293	345	300	304	321	342	312	4,051	
	2013	40	310	299	316	330	272	297	323	301	336	307	325	320	337	4,113	
	2014	63	299	323	305	315	342	285	285	323	307	352	302	324	317	4,142	
	2015	65	284	310	326	306	316	342	286	293	319	311	342	291	323	4,114	
	2016	45	299	279	309	324	316	315	327	300	290	332	303	331	295	4,065	
3-Year Average Incoming Advancement Rate**		1.02 1.01 1.00 1.00 1.02 1.01 0.97 1.03 1.00 1.03 0.99 1.03 0.98 0.98 1.00															1.04
4-Year Average Incoming Advancement Rate**		1.03 1.00 1.01 1.01 1.01 1.02 0.98 1.03 1.03 0.99 1.03 1.00 0.98 1.00															1.04

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Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																											
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students												Cumulative Impact from 1st to 8th***													
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12											
Middle Income SFA Plex (large plex units with 2-car garages each & private areas) (excludes similar TH)	2012	0	30	53	32	39	33	28	30	27	27	27	22	23	28	399											
	2013	2	32	39	59	33	42	38	27	36	29	21	25	20	25	428											
	2014	9	48	35	44	57	29	40	39	25	34	33	21	26	20	460											
	2015	6	46	48	38	40	56	30	37	36	24	32	31	21	25	470											
	2016	11	50	47	47	36	39	55	29	38	32	24	34	26	20	488											
Middle Income Non-SFA-Plex ATT	2012	0	19	12	22	20	22	15	10	14	5	7	10	5	7	168											
	2013	1	15	17	10	18	18	18	16	9	13	6	4	10	4	159											
	2014	3	12	16	19	8	13	18	15	11	7	10	7	4	9	152											
	2015	2	16	10	16	19	5	12	15	12	13	7	11	6	4	148											
	2016	3	18	21	14	13	17	7	12	10	13	13	7	13	6	167											
Combination of Middle Income ATT	2012	0	49	65	54	59	55	43	40	41	32	34	32	28	35	567											
	2013	3	47	56	69	51	60	56	43	45	42	27	29	30	29	587											
	2014	12	60	51	63	65	42	58	54	36	41	43	28	30	29	612											
	2015	8	62	58	54	59	61	42	52	48	37	39	42	27	29	618											
	2016	14	68	68	61	49	56	62	41	48	45	37	41	39	26	655											
3-Year Average Incoming Advancement Rate**		1.05												1.08		0.93		0.90		0.99		1.02		0.98		0.97	
4-Year Average Incoming Advancement Rate**		1.07												1.07		0.93		0.93		1.00		0.96		0.94		0.98	
Middle Income SFD	2012	7	147	169	164	163	224	174	151	188	163	177	171	195	200	2,293											
	2013	21	154	163	175	165	168	221	172	145	189	171	175	172	190	2,281											
	2014	33	129	160	162	178	168	169	220	167	146	197	171	170	178	2,248											
	2015	25	149	134	170	142	179	168	167	208	161	154	197	164	168	2,186											
	2016	24	146	150	137	186	148	188	162	162	208	179	147	192	166	2,195											
3-Year Average Incoming Advancement Rate**		1.03												1.03		1.00		1.02		1.02		0.98		0.97		1.01	
4-Year Average Incoming Advancement Rate**		1.05												1.03		1.00		1.02		1.01		0.96		0.99		1.00	

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Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																	
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students												Cumulative Impact from 1st to 8th***			
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12	
Combination of Middle Income ATT & SFD	2012	7	196	234	218	222	279	217	191	229	195	211	203	223	235	2,860	
	2013	24	201	219	244	216	228	277	215	190	231	198	204	202	219	2,868	
	2014	45	189	211	225	243	210	227	274	203	187	240	199	200	207	2,860	
	2015	33	211	192	224	201	240	210	219	256	198	193	239	191	197	2,804	
	2016	38	214	218	198	235	204	250	203	210	253	216	188	231	192	2,850	
3-Year Average Incoming Advancement Rate**		1.03 1.04 0.98 0.99 1.01 0.97 0.95 0.98 1.05 0.99 0.97 1.00												0.93			
4-Year Average Incoming Advancement Rate**		1.05 1.04 0.98 1.00 1.01 0.98 0.96 0.99 1.04 0.99 0.98 1.00												0.95			
Upper Middle & Upper Income SFD	2012	7	73	104	86	113	111	120	115	130	127	111	138	146	134	1,515	
	2013	7	89	92	105	99	112	110	127	111	138	135	113	137	148	1,523	
	2014	17	81	101	96	109	105	110	114	132	112	147	133	119	135	1,511	
	2015	13	85	86	92	93	104	97	105	119	137	122	139	137	124	1,453	
	2016	13	82	97	96	101	84	110	101	100	112	153	126	153	143	1,471	
3-Year Average Incoming Advancement Rate**		1.11 1.02 1.03 0.97 0.99 1.01 1.01 1.00 1.09 0.99 1.06 1.02												1.04			
4-Year Average Incoming Advancement Rate**		1.15 1.02 1.06 0.98 0.99 1.02 1.00 1.01 1.08 1.00 1.04 1.02												1.09			
Mixed-Value SFD (remote hillside areas; mainly middle+ income)	2012	1	5	2	1	1	1	4	1	5	0	2	1	2	3	29	
	2013	1	2	4	1	0	1	2	3	1	4	2	2	2	1	26	
	2014	0	1	3	3	1	0	2	2	2	1	5	2	3	2	27	
	2015	1	3	1	2	4	2	2	2	1	1	4	4	2	3	32	
	2016	0	3	3	0	2	3	3	1	3	2	3	4	4	1	32	
Combination of Middle Income ATT & Middle & Upper Middle Income SFD	2012	15	274	340	305	336	391	341	307	364	322	324	342	371	372	4,404	
	2013	32	292	315	350	315	341	389	345	302	373	335	319	341	368	4,417	
	2014	62	271	315	324	353	315	339	390	337	300	392	334	322	344	4,398	
	2015	47	299	279	318	298	346	309	326	376	336	319	382	330	324	4,289	
	2016	51	299	318	294	338	291	363	305	313	367	372	318	388	336	4,353	
3-Year Average Incoming Advancement Rate**		1.06 1.03 1.00 0.99 1.01 0.98 0.97 0.99 1.07 0.99 1.00 1.01												0.96			
4-Year Average Incoming Advancement Rate**		1.08 1.03 1.01 0.99 1.00 0.99 0.97 1.00 1.07 0.99 1.00 1.01												0.99			

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Appendix B2(a): Recent Grade-to-Grade Average Advancement Rates and Student Population Counts from Areas of Existing Housing as of October 1, 2011*																	
Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students												Cumulative Impact from 1st to 8th***			
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12	
<b>Total for all ATT &amp; MH (incl. SFA Plex &amp; a few SFD in Mixed Lower)</b>																	
2012	13	285	325	289	296	274	274	293	293	263	247	257	249	248	248	3,606	
2013	38	281	306	318	300	298	281	264	297	273	267	249	247	240	240	3,659	
2014	65	290	299	319	321	295	295	273	261	288	280	273	248	252	248	3,759	
2015	52	277	282	303	324	316	294	282	273	252	287	274	272	244	244	3,732	
2016	53	310	288	288	290	308	305	274	273	264	256	280	274	264	264	3,727	
3-Year Average Incoming Advancement Rate**		1.03 1.03 0.99 0.97 0.98 0.95 0.99 0.97 1.01 0.99 1.00 0.99 0.99 0.98															
4-Year Average Incoming Advancement Rate**		1.04 1.01 1.01 0.98 0.99 0.96 0.99 0.96 1.01 1.00 0.99 1.00 0.99 0.98															
<b>Total for all SFD</b>																	
2012	22	381	453	430	441	512	489	444	537	470	502	518	564	558	558	6,321	
2013	53	409	421	459	453	435	517	499	436	554	497	513	525	566	566	6,337	
2014	80	389	430	424	466	467	442	516	497	444	588	484	515	524	524	6,266	
2015	78	400	403	427	399	465	461	447	509	500	472	573	470	520	520	6,124	
2016	63	380	407	410	456	409	491	450	445	508	546	466	574	487	487	6,092	
3-Year Average Incoming Advancement Rate**		1.03 1.01 1.01 1.02 1.02 1.02 1.00 0.99 1.01 1.07 0.98 0.99 1.00 1.01 1.01															
4-Year Average Incoming Advancement Rate**		1.05 1.01 1.02 1.01 1.02 1.00 0.99 1.01 1.07 0.99 1.00 1.00 1.01 1.01															
<b>Other Existing (areas of almost solely non-residential uses; prior to 2016 also for students at school adr.)</b>																	
2012	0	0	3	0	0	1	0	1	1	0	0	1	0	0	0	7	
2013	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	
2014	1	0	0	0	0	1	0	0	1	2	1	1	0	1	0	8	
2015	0	0	0	0	0	1	1	0	0	0	1	3	0	0	0	6	
2016	1	0	0	0	0	0	1	1	0	0	0	1	2	0	0	6	
<b>Total for All Areas of Almost Exclusively Existing Housing as of Oct. 1, 2011 (incl. non-res. areas)</b>																	
2012	35	666	781	719	737	787	763	738	831	733	749	776	813	806	806	9,934	
2013	91	690	727	778	753	733	798	763	733	828	764	762	772	806	806	9,998	
2014	146	679	729	743	787	763	737	789	759	734	869	758	763	777	777	10,033	
2015	130	677	685	730	723	782	756	729	782	752	760	850	742	764	764	9,862	
2016	117	690	695	698	746	717	797	725	718	772	802	747	850	751	751	9,825	
3-Year Average Incoming Advancement Rate**		1.03 1.01 1.00 1.00 1.00 1.01 0.98 0.99 0.99 1.05 0.98 0.99 1.01 1.01 1.01															
4-Year Average Incoming Advancement Rate**		1.05 1.01 1.01 1.01 1.00 1.01 0.98 0.99 0.99 1.05 0.99 0.99 1.00 1.00 1.00															

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**Appendix B2(b): Recent Student Population Counts from Incoming Inter-District Attendance, Residentially Unlocatable Addresses and Areas of New Housing\***

Subject	Early Oct. of	Data for Resident District-Enrolled Students from Planning Areas with Virtually No Net Additional Housing Units Since September 2011, including SDC and Cal Hills Students														Change from 2012 to 2016
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	
Incoming Inter-district	2012	0	4	3	2	2	1	3	0	5	8	10	3	11	19	71
	2013	1	1	5	7	3	3	4	6	5	4	10	13	6	11	79
	2014	2	6	3	8	8	4	3	4	8	6	7	12	15	12	98
	2015	0	6	15	5	7	10	4	7	5	8	8	8	15	24	122
	2016	0	9	8	10	9	5	13	4	8	9	5	9	12	26	127
Unlocatable addresses (includes students at school site addresses starting in 2016)	2012	0	0	1	0	0	0	1	0	1	0	1	0	1	1	6
	2013	1	0	0	1	0	0	1	0	0	2	0	2	0	1	8
	2014	0	1	0	0	1	0	0	0	2	1	1	0	1	1	8
	2015	0	3	2	1	2	2	0	0	0	2	0	1	2	2	17
	2016	0	5	4	1	0	2	2	0	3	2	3	3	8	5	38
Total for All Areas with Consequential New Housing Added since Sept. 30, 2011	2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2013	2	4	10	5	5	6	3	4	6	4	3	4	4	5	65
	2014	4	25	6	19	7	13	6	9	11	16	12	5	7	3	143
	2015	2	25	33	11	18	12	19	8	18	17	23	11	7	9	213
	2016	10	34	34	37	14	19	18	21	13	22	15	22	17	8	284

\* "Existing Housing" totals are aggregates of planning area counts for the dominant housing category in each area, excluding those areas with 6+ net units added since Sept. 2011.

\*\* Grade-to-grade advancement rates are the rounded percentage in the average net number of students graduating into each grade from the previous grade. Rates are shown only for categories with over 500 students in each of the last four years. The four-year rates are unweighted, which differs from studies prior to 2015 when those had the latest year of change weighted at 150% in the calculations.

\*\*\* If these rates continue, this would be the net percentage of the students in first grade today that would be in eighth grade seven years from now by category.

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Appendix B3: Comparison of Actual to Projected Enrollments for 2016 and Actual Enrollments Since 1993*																								
Student Subject	Fall of	Total Enrollment Counts by Grade												Four-Grade Subtotals			Difference 1-4 to 9-12	TK-12 Total						
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	1-4			5-8	9-12				
Actual	1993																2899	2797	2380	-519	8862			
Actual	1994	786	703	706	744	746	744	748	673	632	596	578	614	592			2999	2942	2441	-558	9148			
Actual	1995	766	803	723	703	770	748	753	747	694	645	618	561	617			3041	3072	2561	-480	9490			
		816	801	782	724	734	763	779	768	762	657	638	641	625										
Actual	1996	755	841	798	736	723	801	762	759	805	703	662	643			3175	3045	2813	-362	9788				
Actual	1997	752	819	850	774	790	745	737	781	769	832	852	658	587		3233	3032	2929	-304	9946				
Actual	1998	746	760	800	826	767	728	714	782	779	804	811	608		3153	3016	3002	-151	9917					
Actual	1999	720	736	755	813	807	761	697	718	815	828	749	745		3111	2957	3137	26	9925					
Actual	2000	698	733	712	739	800	788	751	676	706	782	774	768		2984	2990	3030	46	9702					
Actual	2001	702	721	741	687	716	755	764	703	729	674	698	761	773		2865	2951	2906	41	9424				
Actual	2002	683	748	736	738	706	742	765	768	709	745	681	702	793		2928	2984	2921	-7	9516				
Actual	2003	676	707	763	733	730	722	747	752	766	744	775	693	723		2933	2987	2935	2	9531				
Actual	2004	669	698	721	761	741	732	719	763	743	800	770	765	706		2921	2957	3041	120	9588				
Actual	2005	734	734	695	739	756	741	751	712	737	767	809	786	780		2924	2941	3142	218	9741				
Actual	2006	637	757	731	696	715	743	729	739	715	773	776	814	787		2899	2926	3150	251	9612				
Actual	2007	644	707	784	716	708	717	764	716	728	741	768	777	801		2915	2925	3087	172	9571				
Actual	2008	699	708	708	788	730	701	735	763	733	738	753	772	795		2934	2932	3058	124	9623				
Actual	2009	660	782	744	716	809	736	731	766	803	772	756	791		3051	2969	3122	71	9802					
Actual	2010	669	722	777	757	712	826	745	738	748	819	817	770	782		2968	3057	3188	220	9882				
Actual	2011	735	686	737	788	770	743	845	732	737	791	812	814	757		2981	3057	3174	193	9947				
Actual	2012	35	670	785	721	739	788	767	738	837	741	760	779	825	826	3033	3083	3190	157	10011				
Actual	2013	95	695	742	791	761	742	806	773	838	777	781	782	823		3036	3161	3163	127	10150				
Actual	2014	152	711	738	770	803	760	746	802	780	889	775	786	793		3091	3085	3243	152	10282				
Actual	2015	132	711	735	747	750	806	779	744	805	779	791	766	799		3038	3107	3226	188	10214				
Actual	2016	127	738	741	746	769	743	830	750	805	825	781	887	790		2999	3127	3283	284	10274				
Projected	2016	134	703	745	752	754	756	811	776	810	813	793	875	780		3007	3144	3261		10249				
Actual 2016 Shift, Graduation to This Grade		NA	30	11	22	-7	-24	-29	-2	0	46	-10	17	24										
2016 Difference, Actual-to-Proj.		-7	35	-4	-6	15	19	-26	-5	-5	12	-12	12	10						25				

\* Figures cover all TK-12 students in files provided to EPC by the MUSD since 2003. Counts prior to 2003 are from the Calif. Dept. of Education website, with 1993 to 1995 excluding a small number of ungraded students. Boxing is applied to differences of 20 or more students (1) for actual advancements from 2015 to 2016 and (2) between actual and projected 2016 amounts, as well as for historic high and low totals of note in comparison to the current amounts. The current grades 2-4 cover only 33 birth months, rather than 36, due to a recent gradual shift in the cutoff date for kindergarten eligibility (from Dec. 2 to Sept. 1), which is the main reason for the current unusually large difference between the 1-4 and 9-12 totals.

\* Figures cover all TK-12 students in files provided to EPC by the MUSD since 2003. Counts prior to 2003 are from the Calif. Dept. of Education website, with 1993 to 1995 excluding a small number of ungraded students. Boxing is applied to differences of 20 or more students (1) for actual advancements from 2015 to 2016 and (2) between actual and projected 2016 amounts, as well as for historic high and low totals of note in comparison to the current amounts. The current grades 2-4 cover only 33 birth months, rather than 36, due to a recent gradual shift in the cutoff date for kindergarten eligibility (from Dec. 2 to Sept. 1), which is the main reason for the current unusually large difference between the 1-4 and 9-12 totals.

## Appendix B4: Comparison of Recent Enrollment Changes in Milpitas USD and Select Other Local Districts\*

		Total Enrollments within TK-8, 9-12 or TK-12 for Each District						
Enrollment Subject	Fall of	Milpitas TK-8	Milpitas 9-12	Fremont USD TK-8	Fremont USD 9-12	Berryessa	Orchard	Evergreen
Actual	2011	6,773	3,174	22,735	10,094	8,059	906	13,347
Actual	2012	6,821	3,190	23,309	10,097	7,995	875	13,373
Actual	2013	6,987	3,163	23,879	10,008	7,933	874	13,159
Actual	2014	7,039	3,243	24,142	10,066	7,742	890	12,861
Actual	2015	6,988	3,226	24,779	10,073	7,453	909	12,287
Actual	2016	6,991	3,283	(NA)	(NA)	7,296	891	11,817
<b>Net Average Annual Difference:</b>								
	2011 to 2013	107	-6	572	-43	-63	-16	-94
	2013 to 2015	1	32	450	33	-240	18	-436
	2015 to 2016	3	57	(NA)	(NA)	-157	-18	-470

		Total Enrollments within TK-8, 9-12 or TK-12 for Each District						
Enrollment Subject	Fall of	Santa Clara TK-8	Santa Clara 9-12	San Jose TK-8	San Jose 9-12	Cupertino	Sunnyvale	Fremont UHSD
Actual	2011	11,008	4,280	22,972	10,334	18,645	6,649	10,496
Actual	2012	11,056	4,128	22,822	10,362	19,028	6,761	10,647
Actual	2013	11,238	4,156	22,718	10,434	19,184	6,849	10,657
Actual	2014	11,059	4,210	22,496	10,442	19,068	6,801	10,734
Actual	2015	11,079	4,273	22,109	10,345	18,924	6,641	10,683
Actual	2016	11,058	4,304	(NA)	(NA)	18,585	6,537	10,847
<b>Net Average Annual Difference:</b>								
	2011 to 2013	115	-62	-127	50	270	100	81
	2013 to 2015	-80	59	-305	-45	-130	-104	13
	2015 to 2016	-21	31	(NA)	(NA)	-339	-104	164

		Total Enrollments within TK-8, 9-12 or TK-12 for Each District						
Enrollment Subject	Fall of	Campbell UESD	Union	Other ESD in CUHSD	Campbell UHSD	Oak Grove	Gilroy TK-8	Gilroy 9-12
Actual	2011	7,659	5,015	7,726	7,408	11,501	7,643	3,508
Actual	2012	7,700	5,292	7,850	7,417	11,348	7,753	3,569
Actual	2013	7,636	5,410	8,019	7,353	11,147	7,784	3,702
Actual	2014	7,611	5,535	8,203	7,453	10,870	7,707	3,748
Actual	2015	7,584	5,689	8,168	7,676	10,610	7,616	3,828
Actual	2016	7,463	5,765	(NA)	(NA)	10,380	7,629	3,831
<b>Net Average Annual Difference:</b>								
	2011 to 2013	-12	198	147	-28	-177	71	97
	2013 to 2015	-26	140	75	162	-269	-84	63
	2015 to 2016	-121	76	(NA)	(NA)	-230	13	3

\* These are the districts from which EPC has obtained the necessary student files (other than districts with "NA" in 2016), with the totals listed coming from those files (except as noted below). All figures exclude preschool SDC (special ed.) students. Most charter school and NPS counts also are excluded from these figures. The highest recent total for each district is highlighted in gray. Negative differences of over 90 students between the 2011-to-2013 and 2013-to-2015 net annual averages are boxed. Fall 2016 totals currently are unavailable from some districts.

Notes: Totals shown from past years that were obtained from the Calif. Dept. of Education, because the necessary student files were unavailable, are (1) Santa Clara USD in 2010 and 2011 and (2) all districts with "NA" in 2016 for all years listed. Some 2016 totals shown are draft district-provided figures. Official early October counts may differ.

## Appendix B5: Birth Trends from 2006 to 2014 in Select Santa Clara County Zip Codes\*

		Live Births by Calendar Year (with annual periods not adjusted to correlate to kindergarten eligibility, so data differs from Table 5)									Percent Change 2006-08
Postal City or Data Subject	Zip Code	Strong Economy (from conception)			Economic Recession			Economic Recovery			to 2012-14
		2006	2007	2008	2009	2010	2011	2012	2013	2014	
Sunnyvale	94085-86	1,402	1,383	1,405	1,308	1,400	1,303	1,381	1,320	1,310	-4.3%
Sunnyvale	94087	697	803	724	672	698	670	708	712	690	-5.1%
Sunnyvale	94089	308	327	314	308	334	326	339	313	323	2.7%
Santa Clara	95050	556	605	576	570	521	545	569	572	522	-4.3%
Santa Clara	95051	1,001	959	937	921	844	889	942	872	907	-6.1%
Santa Clara	95054	447	505	490	482	520	511	515	481	473	1.9%
Alviso	95002	20	30	26	27	26	20	23	28	30	6.6%
San Jose (far north)	95134	343	370	381	448	410	351	425	404	547	25.8%
Milpitas	95035	956	982	1,007	936	897	864	944	847	1,032	-4.1%
North Valley Subtotals and Three-Year Averages		5,730	5,964	5,860	5,672	5,650	5,479	5,846	5,549	5,834	-1.9%
Los Altos & L.A. Hills	94024	189	177	187	143	157	142	128	141	134	
Cupertino	95014	522	560	519	460	513	464	512	446	485	
San Jose (far west)	95129	418	408	362	382	320	346	358	320	342	
Saratoga	95070	183	142	167	145	132	142	135	121	140	
Los Gatos (north/east)	95032	217	252	214	213	243	184	206	194	199	
West Valley Subtotals and Three-Year Averages		1,529	1,539	1,449	1,343	1,365	1,278	1,339	1,222	1,300	-14.5%
Campbell	95008	611	596	630	572	566	562	536	510	580	
San Jose (west)	95117	543	525	549	538	520	498	471	448	488	
San Jose (west)	95128	617	615	570	562	532	522	544	508	512	
San Jose & Campbell	95124	652	645	612	562	538	534	545	528	534	
Central-West Subtotals and Three-Year Averages		2,423	2,381	2,361	2,234	2,156	2,116	2,096	1,994	2,114	-13.4%
San Jose (northeast)	95131	489	514	550	496	493	524	512	527	493	
San Jose (northeast)	95132	538	551	504	520	394	442	480	500	448	
San Jose (northeast)	95133	390	383	418	364	356	328	350	371	389	
San Jose (east)	95127	1,091	1,165	1,155	1,054	918	906	1,007	900	994	
San Jose (southeast)	95121	599	601	576	525	499	467	495	427	444	
San Jose (southeast)	95122	1,265	1,301	1,197	1,065	998	994	957	904	897	
San Jose (southeast)	95135	208	222	178	160	134	125	137	92	114	
San Jose (southeast)	95138	311	339	283	251	235	232	214	220	204	
San Jose (southeast)	95148	680	614	622	575	514	496	553	461	438	
San Jose (south)	95111	1,183	1,213	1,152	1,071	894	965	968	895	873	
San Jose (south)	95119-23	1,069	1,112	1,039	1,009	982	950	974	920	917	
San Jose (south)	95136	810	729	806	715	668	651	644	629	640	
Gilroy	95020	1,026	994	986	979	880	879	819	834	857	
East Valley and Gilroy Subtotals and Three-Year Averages		9,659	9,738	9,466	8,784	7,965	7,959	8,110	7,680	7,708	-18.6%
Totals for Zip Codes Listed and Three-Year Averages		19,341	19,622	19,136	18,033	17,136	16,832	17,391	16,445	16,956	-12.6%

\* These are the zip codes of significant relevance to in-county clients of EPC. Only one zip code shown (95134) had major recent growth, which was due to new housing there.

Birth Data Sources: California Dept. of Health Statistics (all but 2013) and Santa Clara County Health Dept. (for 2013)

Map of Current Elementary Attendance Areas

