

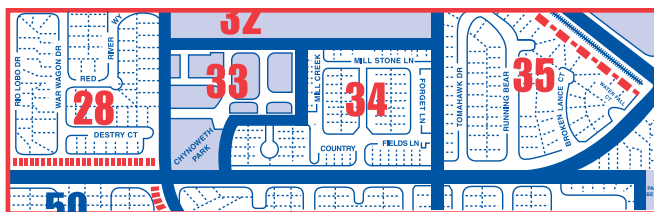
ENROLLMENT PROJECTION CONSULTANTS

Providing School Districts with Accurate Enrollment Forecasts by Location

Area 32
Older Mobile Home Park
450 units, 90 K-8 students, 0.20 SGR

Area 28
Recent Upper-Income Det. Homes
218 units, 85 K-8 students, 0.39 SGR

Area 33
Recent Upscale Townhouses
82 units, 9 K-8 students, 0.11 SGR



Area 34
Recent Middle-Income Det. Homes
94 units, 33 K-8 students, 0.35 SGR

Area 35
Older Middle-income Det. Homes
89 units, 57 K-8 students, 0.64 SGR

Elementary and Middle School
Attendance Boundaries

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

January 16, 2020
revised on May 4, 2020

PLEASE ALSO READ SEPARATE MAY 4, 2020, ADDENDUM TO THIS REPORT

Dear Superintendent Jordan:

This is the concluding documentation to the latest forecast update. 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 8. The appendices provide more detail for those who want to delve further into the data.

Projections Summary

The projected Milpitas Unified School District (henceforth “MUSD” or “district”) enrollment rises by 72 students to next October and by a total of 356 students over the next five years. Virtually all of this increase is forecast at the elementary level, with mainly declines expected in the middle and high school totals. The projected differences from the “current” (October 2, 2019) figures to those on October 1, 2020, for example, are 123 more elementary students, 63 fewer middle school students and twelve additional high school students. The net projected two-year differences to 2021 are 289 additional elementary students but only an overall gain of 168, due to reductions by 105 middle and 16 high school students.¹ The cumulative net projected differences in five years, to 2024, have growth by 448 at the elementary level, just six added at the middle school level and 98 fewer at the high school level (with the latter including both Milpitas High and Calaveras Hills Continuation High).

The projected “resident” (home school) student totals have the issue of evolving grade ranges being covered in each of the Mattos, Zanker, Randall and Rose attendance areas, with the most notable impact being for Mattos. Mattos has 290 MUSD-enrolled students who reside in that attendance area in the current relevant grades of K-3, but only 167 students are enrolled at Mattos due to capacity limits and “grandfathering”. Another grade will be added at Mattos in each of the next three years, resulting in the relevant resident figure in 2022 being in K-6, with a projected total of 729 students in those grades. Since the Mattos facility will have expanded to its full planned capacity by then and housing turnover should notably lower the grandfathered amount, nearly all of those 729 students could be enrolled at Mattos. With this phasing out of those upper grades in the Mattos area from the resident Zanker and Rose data, the projected totals for those schools fall accordingly, including a decline by 53 resident Zanker students from 2019 to 2022. Zanker’s enrollment should drop by more than that, however, as the “grandfathered” and “overflowed” students from the Mattos area are greatly reduced.

The only other elementary areas projected to have major shifts in their resident totals are those for Sinnott, Rose and Randall, but the latter two are mainly offsetting amounts as Randall evolves into solely a magnet school without an attendance area. The combined resident total from the Randall and Rose regions, but with Rose no

¹ Whenever just a year is stated, such as 2021, the reference is for, or in the year or years to, early October of that year.

longer including students in grades 4-6 from part of the Mattos area, declines by 43 over the next three years. The Sinnott region, by contrast, adds 60 students to 2022 for its same ongoing area and grade range, with a resultant resident K-6 total that slightly exceeds 800 students that year. All of the other elementary areas (aside from those for Mattos and Sinnott) have projected resident K-6 totals that are below 700 in 2022.

While there are significant issues in projecting beyond three-years hence by school and five-years hence for the district, we nonetheless are providing long-range estimates to help the district plan for facility needs. If the local birth total does not decline between 2019 and 2024, which is a huge if considering what already is occurring in much of the South Bay, then there could be over 1,200 more MUSD students in 2029 than at present. Around 700 of those could be added (in net from 2019 to 2029) at the elementary level, with much of that gain in just the Mattos area. If this much growth occurs, then the Mattos resident K-6 total could be approaching 1,000 students.

The more realistic figures, however, are for smaller gains. Large amounts of new housing in a short period, with lower amounts thereafter, usually result in a brief “bubble” of higher student totals that starts in the lowest grades and then graduates upward. This situation appears to be occurring in the MUSD, with the elementary total potentially reaching a high in 2025 of around 600 above the current figure. Under this more likely scenario, the Mattos and Sinnott resident K-6 totals will peak in the 800s, followed by declines, and all of the other elementaries could have future resident K-6 totals that are well below 700. The middle school level could have a net ten-year rise by around 150 students. The high school total could be up by around 300 from 2019 to 2029, but with most of that increase occurring in 2028 and 2029. This is because the large current and projected 2020 kindergarten classes will be entering the high school grades then.

Background Information and Forecast Accuracy

I have provided in-depth enrollment forecasts since 1985 for the MUSD. My firm specializes in such 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, and then projected. I drove literally every street in my first MUSD study, in 1985, 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 66 above what we projected in our last study, but 18 of that came from growth by more incoming inter-district students than we had forecast. The resident student difference was thus by 48 students, or just $\frac{1}{2}$ of 1%. Most of that resident divergence is in only the first and second grades, where the largest combined greater-than-forecast amounts are by 16 in the Burnett area, 15 in the Sinnott region and 13 in the Weller area. The Weller area, however, also has 20 fewer-than-projected students in kindergarten, which more than offsets that addition in first and second. These modest differences, including for the housing types in those areas, have been factored into the updated forecast. The much bigger issue, however, is in kindergarten, where the current total matches the projected amount (793), but some of the offsetting locational gains and losses are significant.

District-Wide Projected Enrollments from 2019 to 2024

The projected October enrollments in each of the next five years, compared to the “current” (October 2, 2019) figures, always have more cumulative growth at the elementary level than for the district total, as is shown in Table 1 on page 3. This includes a projected gain for the pending school year of 72 total students, but that is the net of 123 more elementary (TK-6) students, 63 fewer middle school (7-8) students and twelve additional high school students. The net differences to 2021 are 168 more students overall, with 289 added at the elementary level and losses of 105 and 16 students at the middle and high school levels, respectively. Over the following three years the elementary total continues to rise significantly, the middle school total gradually recovers and the

high school total falls a little further. The net projected result from 2019 to 2024 is to have 448 more elementary students, just six more middle school students and 98 fewer high school students.

The main reasons for these projected differences by grade level are (1) extrapolations of the current student distribution through the grades and (2) the potential kindergarten amounts, with the latter explained later in this report. Your district has a tendency to add students to each class as it graduates upward into especially the first, second, ninth and twelfth grades.² Within that trend, the totals now in each of kindergarten through second, along with in eighth, eleventh and twelfth, are relatively large amounts compared to the current totals in the other grades. The lowest relative totals within that trend are now in the fifth and sixth grades. Next year's high school total will lose that large current twelfth grade class, while gaining the large incoming class that is now in eighth, with those offsetting amounts resulting in only a small difference in the 9-12 total from 2019 to 2020. The middle school level will lose that large current eighth grade class while adding the small incoming class that is in sixth, resulting in a projected decline from 2019 to 2020. The elementary level will lose those relatively small totals now in fifth and sixth while gaining two large incoming kindergarten classes in 2020 and 2021. Those same two smallest current classes both will be in the middle school level in 2021 and in the high school level from 2023 through 2025, with corresponding impacts on those grade level totals. While this comparison of the relative amounts in each grade is an oversimplification of the analyses underlying the forecast, it does provide a good quick insight into the reasons for the divergent projected changes by grade level.³

Table 1: Summary of Actual and Projected District Enrollments, 2019 to 2024

Enrollment Subject	Total Enrollment by Grade Group*			District TK-12 Total*
	TK-6	7-8	9-12	
Actual on October 2, 2019	5,510	1,557	3,228	10,295
Projected for October 1, 2020	5,633	1,494	3,240	10,367
Projected for October 1, 2021	5,799	1,452	3,212	10,463
Projected for October 1, 2022	5,879	1,473	3,197	10,549
Projected for October 1, 2023	5,960	1,497	3,175	10,632
Projected for October 1, 2024	5,958	1,563	3,130	10,651
Change in One Year, to October 2020	123	-63	12	72
Change in Two Years, to October 2021	289	-105	-16	168
Change in Three Years, to October 2022	369	-84	-31	254
Change in Four Years, to October 2023	450	-60	-53	337
Change in Five Years, to October 2024	448	6	-98	356

* Figures include MUSD-attending TK-12 SDC 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.

² Table 1 only shows totals by grade level for the sake of clarity. The by-grade amounts are shown in Appendix A1 on page 19.

³ Part of the reason that the current fifth and sixth grade totals are so small is that those classes each officially represent only eleven birth months. This is due to a gradual shift in the cutoff birthdate for kindergarten eligibility in 2012 through 2014. The current seventh grade class also represents only eleven birth months, but that class correlates to a high birth year.

Potential District-Wide Enrollments from 2024 to 2029

To repeat from our last two reports: The socioeconomic upheaval being caused by the soaring housing costs, including rents, in Santa Clara County makes a ten-year enrollment forecast even more “iffy” than usual. We are now only providing five- or six-year projections for most of our clients accordingly. An exception is being made for the MUSD due to your need to have some sense, even with a large plus or minus deviation, of what the facility requirements could be. We therefore are providing forecast estimates in 2029 based on (1) the realistic maximum number of new housing units that could be built by then and (2) extrapolation of the latest birth figures.

We discuss each of these new housing and kindergarten evolution issues later in this report, but there is the potential for the district total to rise by another 800 students between five and ten years hence, to an enrollment that could be around 1,200 above the current count. This includes a possible net gain of around 650 elementary students over the next decade. The middle school total could be around 200 students higher and the total in the high school grades could rise by around 350 from 2019 to 2029.

These, however, are optimistic long-range numbers. If (1) less new housing is built than we have projected and/or (2) the local birth total goes into a multiple-year decline, then the student increase will not be as significant. Most Santa Clara County districts already have falling kindergarten and birth totals, with the MUSD having bucked that trend due to the large recent new housing amounts. The latest year of birth data, however, indicates a birth decline has started in Milpitas as well. The more likely net ten-year growth vicinities are for the TK-12 and TK-6 figures to be up by around 800 and 400, respectively, with the elementary (TK-6) total having declined from about 600 higher in 2025. The net middle and high school gains could be by around 150 and 300, respectively, and whatever that high school increase is, it should occur mainly in 2028 and 2029. That is when the large current and projected 2020 kindergarten classes will have graduated into the high school grades.

Projected Resident Student Populations by Attendance Area

This forecast is again based on analyses of where the students live (the resident population⁴) rather than the schools they happen to attend (the attending enrollment). Resident student populations differ from enrollments mainly because of (1) intra-district enrollment (across MUSD attendance areas) and (2) incoming 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 pages 5 and 6, presents the key resident and enrollment findings and projections by attendance area.

Understanding the Data in Table 2

Table 2 contains two data sets for each school. The figures on the left (under “*Actual Resident Students and Enrollment part*”) show both (1) the amounts by which the resident totals changed in the last year and (2) how the current enrollment at each school differs from the resident total. There are 501 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 468, which is 33 less than that resident total. This net difference is shown by the “-33” in the top row of the “Attending Adjust” column on page 5. The second set of data, on the right side of Table 2 (under “*Projected Resident Students part*”), has the projected resident amounts in the grades (aside from TK) relevant to each school in each year. These are not projected enrollments. They do indicate, however, the extent to which the attendance area and relevant grades in each year may be suitable. In Mattos’ case, the resident total for the current area rises from 290 in K-3 now to a projected 729 in K-6 in 2022.

⁴ “Resident” throughout this report means physical resident, not legal resident, and refers to the total number of district-enrolled students in the relevant grades in each attendance area, regardless of the schools being attended.

Table 2: Actual Resident-to-Attendance Figures and Projected Resident Students by Attendance Area
(with yellow and orange highlighting for net resident differences of 30+: growth in yellow and reduction in orange)

	Actual Resident Students and Enrollment part				Projected Resident Students part					
Grade Level and School Area	Resident Shift from Oct. 2018	Actual October 2019 (excl. TK)			Projected Resident Students (excl. TK)					
		Resident Students	Attending Adjust*	School Enrollment	Early October			Change to October		
					2020	2021	2022	2020	2021	2022
Elementary (K-6 except where identified otherwise) by Attendance Area										
Weller	4	501	-33	468	505	497	479	4	-4	-22
Pomeroy	-29	591	96	687	577	582	577	-14	-9	-14
Curtner	-22	717	-7	710	704	714	692	-13	-3	-25
Spangler	26	605	-11	594	619	615	616	14	10	11
Zanker:										
Interim Area K-6	14	507	59	566	508	521	532			
2019 Add in 4-6**	-28	78	-1	77						
2020 Add in 5-6					53					
2021 Add in 6						30				
Zanker Total	-14	585	58	643	561	551	532	-24	-34	-53
Mattos (Interim):										
2019 in K-3**	124	290	-123	167						
2020 in K-4					425			135		
2021 in K-5						577			287	
2022 in K-6							729			439
Rose:										
Core Area in K-6	3	360	50	410	354	356	347			
2019 Add in K-3**	52	186	-107	79						
2019 Add in 4-6**	3	30	-9	21						
2020 Add in K-4					239					
2020 Add in 5-6					22					
2021 Add in K-5						285				
2021 Add in 6						12				
2022 Add in K-6							329			
Rose Total	58	576	-66	510	615	653	676	39	77	100
Randall:								(above/below offset)		
2019 in 4-6**	-54	143	-2	141						
2020 in 5-6					95			-48		
2021 in 6						47			-96	
None in 2022							0			-143
Burnett	24	526	8	534	532	533	547	6	7	21
Sinnott	31	747	-3	744	768	795	807	21	48	60
Randall in K-3	NA	NA	179	179	NA	NA	NA	NA	NA	NA
All In-District	148	5,281	96	5,377	5,401	5,564	5,655	120	283	517
Other K-6***	17	96	-96	NA	97	99	96	1	3	0

* School net attending adjustments include (1) intra-district attendance, (2) incoming inter-district attendance (IDA) and (3) students at unlocatable addresses. Outgoing inter-district attendance was not identified. See Appendix A for more info.

** Some "Resident Shift from Oct. 2018" figures for Zanker, Mattos, Rose and Randall compare different grade ranges in 2018 and 2019, which creates misleadingly large differences. The Mattos resident total of 290 in K-3 in 2019, for example, is being compared to the resident total of 166 in K-2 in 2018. The K-3 total only rose by 88 from 202 in 2018.

*** 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.

Table 2, page 1 of 2

Table 2: Actual Resident-to-Attendance Figures and Projected Resident Students by Attendance Area
(with yellow and orange highlighting for net resident differences of 30+: growth in yellow and reduction in orange)

	Actual Resident Students and Enrollment part				Projected Resident Students part					
Grade Level and School Area	Resident Shift from Oct. 2018	Actual October 2019			Projected Resident Students					
		Resident Students	Attending Adjust*	School Enrollment	Early October			Change to October		
					2020	2021	2022	2020	2021	2022
Middle School (7-8) by Attendance Area										
Russell	22	808	31	839	783	745	744	-25	-63	-64
Rancho Milpitas	-1	725	-7	718	694	688	702	-31	-37	-23
All In-District	21	1,533	24	1,557	1,477	1,433	1,446	-56	-100	-87
Other 7-8**	-4	24	-24	NA	18	19	26	-6	-5	2
High School (9-12)										
Milpitas High				3,126						
Calaveras Contin.				102						
All In-District	-48	3,183	45	3,228	3,189	3,163	3,148	6	-20	-35
Other 9-12**	0	45	-45	NA	52	49	49	7	4	4

* School net attending adjustments include (1) intra-district attendance, (2) incoming inter-district attendance (IDA) and (3) students at unlocatable addresses. Outgoing inter-district attendance was not identified. See Appendix A for more info.

** 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.

Table 2, page 2 of 2

Key Findings in the Latest Shifts by Attendance Area

Last year's forecast for the resident grade level totals relevant to each elementary (excluding TK) and middle school were within nine students of the current counts in most of those areas, with only one of those regions differing by more than 17. That exception is the Burnett attendance area, with 34 more current K-6 students than were projected. Among the regions with the same relevant grade ranges in 2018 and 2019, the Burnett region also had the third largest resident student gain, with 24 students added in 2019. Most of the 31-student increase in the Sinnott area, by contrast, had been forecast. Also mostly projected was the largest decline among the K-6 totals. This was the 29-student reduction in the Pomeroy area.

Somewhat misleading are the huge resident student differences in the last year in the Zanker, Mattos, Rose and Randall areas, for which the changing relevant grade ranges are a key factor. Mattos, for example, had a relevant resident grade range of K-2 in 2018, with 166 students in those grades then. The current relevant resident grade range of K-3 has 290 students, for a resident student rise by the 124 shown in Table 2 for 2019. The gain in number of students residing in that area in K-3 in 2019, however, was by 88, in increasing from 202. And the Rose "2019 Add in K-3" and Randall "2019 in 4-6" totals changed by comparable offsetting amounts in 2019 (+52 for Rose and -54 for Randall) mainly because the third grade total (43 current students) shifted from the Randall to Rose totals.

With so little deviation from the last forecast for the resident totals by attendance area, the projections for 2020 and 2021 have not changed notably for any of those areas. The bigger issue is the post-2021 totals for Mattos.

Key Findings Related to the Projected Student Data in Table 2

The two most consequential attendance area numbers are probably the gains forecast to 2022 in the Mattos and Sinnott regions. The Mattos “interim” area, which is smaller than the board-adopted planned eventual area, is forecast to have 729 resident K-6 students in 2022.⁵ By contrast, the Zanker “interim” area, which includes the remaining “Tier 3” part of the board-adopted eventual Mattos area, is forecast to have only 532 K-6 students in 2022, with further decline possible in subsequent years. We therefore question whether ever shifting the 130+ “Tier 3” elementary students from the Zanker area to the Mattos region will make optimal use of those facilities.

We should note that the current large net attending adjustments from Mattos to Zanker and Rose should become much smaller by 2022. Mattos has significantly fewer enrolled than resident students this year due to (1) capacity limits requiring “overflows” to Zanker and Rose and (2) “grandfathering” at mainly Zanker. Since the Mattos facility will have expanded to its full planned capacity by 2022 and housing turnover should notably lower the grandfathered amount by then, nearly all of those 729 students could be enrolled at Mattos.

The other major projected increase of potential concern is in the Sinnott region. That K-6 total reaches 807 in 2022, with 60 students added. While that could be the high point, modest further student growth is possible.

As is shown later in this report, both of those areas had large increases in their resident kindergarten totals in 2019. Some of those kindergarten gains were partly offset by lower-than-forecast numbers in the other relevant grades. We now suspect, however, that the much higher Milpitas birth numbers from 2014 to 2016 will result in continued exceptionally high kindergarten totals (compared to their averages in recent years) in almost solely the Sinnott and Mattos areas. This is a key factor in the degree that those two areas are projected to have rising K-6 totals, while most other elementary regions have only modest projected short-term shifts in their K-6 totals.

The largest resident student declines are projected, in the relevant grades, for the two middle school areas and in the high school region. The Russell region could be down by 64 resident students in 2022, while the Rancho Milpitas area could have a net of 23 fewer in 2022. Both resident middle school totals could be in the lower 700s in 2022, which should not be an issue. The resident high school total loses a net of 35 over the next three years, which some could consider beneficial considering the large current enrollment of over 3,100 at Milpitas High.

Possible Mattos Attendance Area Totals after 2022

What is not shown in Table 2 is that further Mattos resident K-6 growth is expected in the following years, due to additional new housing there, with the K-6 total potentially both exceeding 800 by 2024 and approaching 1,000 in 2029. For the latter to occur, however, the birth counts and corresponding (five years later) kindergarten totals in the Mattos area would need to remain exceptionally high, which is unlikely. When a large amount of new housing is occupied in a short period, as has occurred in recent years in the Mattos region, there often is a significant spike in both births and, a few years later, resident kindergartners. The normal pattern we have found elsewhere, however, is that these higher numbers are not ongoing, with birth declines starting roughly around five years after the dwellings are completed and the kindergarten numbers starting to fall around the tenth year after occupancy. We suspect this kindergarten student reduction will occur in the latter half of the next decade in the thousands of residences that were recently occupied in the Mattos area. The resultant Mattos resident K-6 total thus could reach a high in the mid-to-upper 800s in around 2026 and then decline into the upper 700s by 2029.

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

⁵ Whenever just the words “Mattos” or “Zanker” are stated for the attendance areas, the reference is for their “interim” areas.

apartments, condos, townhouses and plexes) and mobile homes (“MH”). 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 Table 3, with additional details provided in Appendix B.

Understanding the Data in Tables 3A and 3B

The figures in Table 3A, on page 9, are for the resident totals of district-enrolled students in early October of the last three years (2016 to 2019) 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 and Affordable” ATT and MH units, for instance, had 285 students in K-2 in 2016 and have 272 in grades 3-5 this year, for a net difference of 13 fewer students in that population as it graduated forward by three grades. This is shown as “-13” in the table (see lowest row in top section of page 9). We also show how the K-2 group itself has changed during that time, which was a net gain of one student due to a rise from 285 to 286. 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.

Table 3B, on page 10, 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 Tables 3A and 3B

All but one of the categories shown in Table 3A had net gains in K-2 from 2016 to 2019, which is a surprising finding. In three of these categories, the current K-2 total also is higher than in any of the three prior years. Most of our other client districts in the county instead had recent K-2 declines in nearly all of their existing housing groupings. While some of these categories in the MUSD have lower kindergarten figures this year, which is not shown in this table (see Appendix B), those were offset in many of the K-2 totals by (1) larger amounts now in the first and second grades and/or (2) small class totals having graduated from second into third recently. The one exception to these larger K-2 numbers is in the Higher Value SFD homes, which lost a net of 30 students in those grades, which is more than a 10% reduction.

Despite these generally modest K-2 gains, several categories had significant declines in their TK-12 totals. The least expensive ATT and MH units have 91 fewer students now than in 2016, for a 6% reduction. The three value levels of SFD homes have TK-12 totals that are down by between 81 and 133 students each. Those are declines by 3% to 9%. In all four of these categories, the losses came from the subsequent graduation of large classes that were in grades 10-12 in 2016. Offsetting only a small part of these TK-12 reductions are the gains of 64 (4%) and 77 (12% in a small student total) in the existing “Modest and Moderate” and “High Amenity” ATT categories.

The aggregate result from all areas of almost exclusively existing dwellings, as is shown in Table 3B on page 10, was a small net gain of 40 in K-2 and a much larger net loss of 265 in TK-12. Nonetheless, having any recent rise in K-2 from established housing diverges from our findings in most other South Bay districts.

The main reason that the total enrollment did not decline since 2016 is because of all of the new residences built in the last eight years. Those dwellings added 144 K-2 students and 284 TK-12 students since 2016. Note that the majority of those additional students are in just K-2, which indicates young families on average, with probably large numbers of children under age five as well. These residences are severely concentrated in the Mattos area.

Also contributing to the recent enrollment growth in all grade levels are the rising inter-district numbers. These totals are due more to decisions made each year by the District rather than to projectable demographic trends.

Table 3A: Recent Student Population Trends in Existing Housing by General Value Level*
(with gray shading for the highest recent totals in K-2 and TK-12)

Category**/ Data Subject***	Oct. 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	2016	285	312	312	352	1,401	
	2017	262	286	331	342	1,371	
	2018	277	269	324	323	1,346	
	2019	286	272	308	327	1,310	
3-Year Change Within Group		1				-91	-6%
3-Year Change from Prior Group			-13	-4	15		
ATT and MH: Modest and Moderate	2016	404	424	365	341	1,671	
	2017	430	407	388	365	1,717	
	2018	440	385	381	376	1,722	
	2019	434	390	379	372	1,735	
3-Year Change Within Group		30				64	4%
3-Year Change from Prior Group			-14	-45	7		
ATT: High Amenity	2016	197	167	134	117	655	
	2017	209	171	155	121	713	
	2018	186	174	150	135	696	
	2019	207	192	153	129	732	
3-Year Change Within Group		10				77	12%
3-Year Change from Prior Group			-5	-14	-5		
SFD: Modest and Moderate	2016	483	531	552	625	2,394	
	2017	486	501	535	590	2,369	
	2018	477	491	539	581	2,313	
	2019	500	517	517	546	2,313	
3-Year Change Within Group		17				-81	-3%
3-Year Change from Prior Group			34	-14	-6		
SFD: Middle Value	2016	433	522	532	518	2,195	
	2017	440	471	514	533	2,183	
	2018	435	459	483	543	2,099	
	2019	443	418	497	539	2,088	
3-Year Change Within Group		10				-107	-5%
3-Year Change from Prior Group			-15	-25	7		
SFD: Higher Value	2016	275	295	313	432	1,471	
	2017	281	292	322	390	1,451	
	2018	248	291	322	383	1,380	
	2019	245	269	317	361	1,338	
3-Year Change Within Group		-30				-133	-9%
3-Year Change from Prior Group			-6	22	48		

* 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: 2016 = 35 and after 2016 = 36. That shift also has (1) 3-5 covering 34 months in 2016, 33 in 2017, 34 in 2018 and 35 in 2019 and (2) 6-8 covering 36 months before 2018, 35 months in 2018 and 34 months in 2019.

Table 3B: Comparison of Trends between Areas of Existing and New Housing and from Outside MUSD*
(with gray shading for the highest recent totals in K-2 and TK-12)

Category*/ Data Subject**	Oct. of	Resident District-Enrolled Students***					TK-12 Change
		K-2	3-5	6-8	9-11	TK-12	
Total for Areas with Virtually No New Housing since September 2011 (including categories not shown in Table 3A, such as areas with a mix of housing types)	2016	2,083	2,260	2,215	2,399	9,825	
	2017	2,114	2,135	2,252	2,351	9,840	
	2018	2,069	2,077	2,209	2,351	9,597	
	2019	2,123	2,065	2,182	2,287	9,560	
	3-Year Change Within Group 3-Year Change from Prior Group	40	-18	-78	72	-265	-3%
Total for Areas with New Housing added since September 2011	2016	105	51	56	54	284	
	2017	118	62	41	67	308	
	2018	159	76	55	72	398	
	2019	249	115	80	77	568	
	3-Year Change Within Group 3-Year Change from Prior Group	144	10	29	21	284	NA
Incoming Inter-District Attendance	2016	27	27	21	26	127	
	2017	28	30	27	22	122	
	2018	32	30	35	22	139	
	2019	42	35	31	29	153	
	3-Year Change Within Group 3-Year Change from Prior Group	15	8	4	8	26	20%
Total Enrollment (including students at unlocatable addresses)	2016	2,225	2,342	2,297	2,493	10,274	
	2017	2,269	2,227	2,322	2,445	10,289	
	2018	2,263	2,188	2,301	2,450	10,150	
	2019	2,422	2,218	2,294	2,394	10,295	
	3-Year Change Within Group 3-Year Change from Prior Group	197	-7	-48	97	21	0%

* "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: 2016 = 35 and after 2016 = 36. That shift also has (1) 3-5 covering 34 months in 2016, 33 in 2017, 34 in 2018 and 35 in 2019 and (2) 6-8 covering 36 months before 2018, 35 months in 2018 and 34 months in 2019.

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.

Understanding the Data in Table 4 and Appendix B

For this study, we have again determined the recent average rates by several aggregate categories of existing housing. The cumulative impacts of those rates (explained below) are shown in Table 4 on page 12, with additional data provided in Appendix B (including the grade-to-grade rates for both the three-year and alternative four-year averages). Included as well in this Table 4 are the advancement rates entering ninth grade. These rates are then evaluated for their likelihood to continue, by degree, in the forecast period.

Small net gains or losses of plus or minus 4% (i.e. between 1.04 and 0.96) in any of the individual grade-to-grade rates shown in Appendix B are not a key factor by themselves. The cumulative impact over several grades is more important, and is a good indication of the net effect that families moving in and out of the district are having on enrollment. This cumulative net adjustment, from the first to eighth grades, is shown in Table 4, both over the last three years and over recent comparable periods.⁶ The student population from the “Most Affordable and Affordable” ATT and MH units, for example, had recent advancement rates through the grades that, if they continue, would result in 99 eighth graders being enrolled seven years hence for every 100 first graders enrolled today. This is shown as “0.99” (a 1% reduction) in the table. The cumulative rates calculated in the three prior, partly overlapping three-year periods were lower at 0.90 to 0.92, so these residences, in aggregate, are retaining more students than before, in net, as those students graduated from first to eighth. Since our latest “normal range” findings are from 0.65 to 1.05 in comparable units elsewhere, this latest 0.99 rate is at the upper end of, but still within, that range. This rate thus could continue, but if it changes again, then it is more likely to go down than up.

Cumulative rates are a different way to evaluate the existing housing trends described in the previous section. There is one key difference, however, which is that the student totals also change due to the class sizes of the incoming kindergarten students and outgoing eighth graders, along with any differences in the high school grades; those differences do not factor into cumulative rates.

Key Findings Related to the Data in Table 4

Some of these housing categories had significant cumulative rate shifts from the prior periods to the latest period shown. The main surprise is the rate increase to 0.99 from the least expensive ATT and MH units. Elsewhere this rate has been declining, with the majority of cases now being at the lower end of the 0.65-to-1.05 normal range. This rate change in the MUSD helped to maintain the resident student totals in especially the Burnett and Rose areas. We doubt, however, that such a high cumulative rate in this category will be ongoing in the MUSD, with the lesser of the three- and four-year averages for each underlying net grade-to-grade advancement (shown in Appendix B) generally applied in the forecast.

The “Modest and Moderate” ATT and MH units had only a small two-point rate increase in the latest period, compared to the immediately preceding overlapping period, but both of those rates are much lower than in the earlier periods. This latest 0.85 rate, however, is realistic to be ongoing, with the underlying grade-to-grade rates mostly applied in the forecast, other than for some minor fine-tuning between adjacent grades.

The existing “High Value” ATT units had the largest cumulative rate shift in the latest period compared to that in the prior overlapping period, but such a small student total (under 800 in TK-12) can have larger rate changes. The latest 0.94 rate is more in the vicinity of what we would expect from this category in the MUSD.

Of greater consequence, in terms of potential changes in student numbers, is the latest cumulative rate shift in the category with the most students. This is the “Modest and Moderate” SFD group, where the rate rose from 1.00 to 1.04 between the two latest periods. The latter is now at the top of the 0.70-to-1.05 normal range from similar

⁶ We exclude the rates entering the first and ninth grades from this cumulative calculation because those are impacted by students coming from private kindergarten and eighth-grade programs. Those factors, while important, are separate issues from identifying the changes occurring through turnover, which is the main reason for identifying cumulative rates.

Table 4: Summary of Recent Cumulative Advancement Rates by Category of Existing Housing*

Residential Category**	Current Students	Advancement Rate Subject	Three-Year Average Advancement Rate				
			2016 - 2019	2015 - 2018	2014 - 2017	2013 - 2016	Normal Range***
ATT and MH: Most Affordable and Affordable	1,310	Cum. 1st to 8th**** From 8th to 9th	0.99 1.02	0.92 1.02	0.90 1.03	0.90 1.03	0.65 - 1.05 NA
ATT and MH: Modest and Moderate***	1,375	Cum. 1st to 8th**** From 8th to 9th	0.85 1.03	0.83 1.04	0.91 1.03	0.95 1.00	0.70 - 1.10 NA
ATT: High Amenity (small student population)	732	Cum. 1st to 8th**** From 8th to 9th	0.94 0.98	0.86 0.99	0.90 0.99	0.72 0.99	0.70 - 1.00 NA
SFD: Modest and Moderate	2,313	Cum. 1st to 8th**** From 8th to 9th	1.04 1.02	1.00 1.04	1.03 1.03	1.11 1.05	0.75 - 1.05 NA
SFD: Middle Value	2,088	Cum. 1st to 8th**** From 8th to 9th	0.94 1.02	1.01 1.04	1.01 1.05	1.00 1.07	0.80 - 1.15 NA
SFD: Higher Value	1,388	Cum. 1st to 8th**** From 8th to 9th	1.06 1.10	1.10 1.10	1.06 1.08	1.04 1.09	0.85 - 1.20 NA
All Existing Housing Areas	1,388	Cum. 1st to 8th**** From 8th to 9th	0.97 1.03	0.95 1.04	0.97 1.04	0.98 1.05	NA NA

* These figures are from aggregate counts of planning areas with virtually no net additional dwelling units since Sept. 2011 in the three latest periods shown and since Sept. 2009 for the earliest period shown.

** "SFD" = single family detached; "ATT" = attached, including condos, 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 units first occupied since the cutoff date for "existing housing".

*** The "Normal Range" is the recent vicinity that over 80% of our clients are in for each of the categories listed. A few districts have figures well outside these ranges. The ranges for the "Most Affordable and Affordable" and "Modest and Moderate" values in "ATT and MH" would be lower without mobile homes included.

**** Cumulative rates are the cumulative impact from 1st to 8th grades of the individual grade-to-grade net advancement (a.k.a., cohort survival) rates averaged over several recent years. For example, the relatively "Higher Value" SFD homes, in aggregate, had average grade-to-grade advancement rates in the latest period that, if they continue, would result in a 6% (1.06) growth in the number of students in each future class graduating from first to eighth. 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.

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 the alternative four-year averages shown in Appendix B.

homes elsewhere, but had been above that range in the 2013-to-2016 period. This is an indication of the desirability of the schools in this district, with more families with school-age children apparently moving into these Milpitas homes than moving out. This category in most other districts has had falling cumulative rates because fewer families could afford the soaring values and rents, but that negative cost impact is not evident here. This latest rate in the MUSD can continue, despite being at the top of the normal range.

Evolving in the opposite direction are the latest cumulative rates in the middle and higher value SFD groups. The "Middle Value" SFD homes, which have the second largest student total of the categories shown, had a significant seven point drop from 1.01 to 0.94 in the latest periods. The "Higher Value" detached residences had a smaller

reduction by four points between the two latest periods, but with the 2016-to-2019 rate being comparable to those in the earlier periods. The latest rates in both of these SFD value categories are reasonable to continue.

The collective findings from these cumulative rates are (1) that the latest gains and losses are mostly offsetting for the differences from our previous trend calculations, with (2) all but one of the latest figures being within six points of 1.00. The latter shows remarkable net stability as the student population is graduating upward from the first to eighth grades in existing dwellings.

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 14.

Understanding the Data in Table 5

Two types of data are of importance in these tables: (1) how the birth totals have changed and (2) how the ratios between births and kindergartners have evolved. In the top data row in Table 5, for example, there were 978 births in “2007” (as adjusted) to mothers with home addresses in the Milpitas 95035 zip code area. Essentially five years later, in October 2012, there were 701 MUSD kindergartners (K) and Transitional Kindergarten (TK) students listed at home addresses in that zip code.⁷ That is a 72% ratio of births to the corresponding relevant students. We only show the ratios in the earlier periods, however, mainly as an FYI on past trends. Our focus is on how the birth counts have changed, particularly in relation to the next three kindergarten totals, and on how the ratio has evolved in the last four kindergartens (including current).

The adjustment made in the annual birth numbers was to prorate the amounts in the two calendar years relevant to each kindergarten eligibility period. So the “2007” birth figure shown, for instance, actually represents eleven-twelfths of the 2007 total and one-twelfth of the 2006 total to better correlate to the birth period relevant to the October 2012 kindergarten enrollment, including the one month of TK eligibility (i.e., for all births theoretically occurring from December 2006 through November 2007).

Key Findings Related to the Data in Table 5

The latest figures in Table 5 are the main reasons for the large projected pending kindergarten classes. The birth totals correlating to the current and next two kindergarten enrollments are much higher than those that correlated to the four preceding kindergartens. While the average annual birth total was under 900 between 2010 and 2013, with none greater than 917, the total relevant to the current kindergarten is 970 and those for the next two kindergartens are over 1,000. The latter are more than a 10% increase over that previous average and occurred in years when the birth totals in nearly all of the other zip codes in Santa Clara County were falling.

We were uncertain in our last report whether these soaring birth numbers could have as high of a correlative ratio for kindergartners as occurred in recent years, for which we now know that there was only a small rate reduction for the current kindergartners. For the relevant kindergartners in 2016 to 2018, the correlative ratio was between 81% and 83% of the births five years earlier. The ratio for the current relevant kindergartners is 79%. If even the latter applies to the 2015 and 2016 birth totals, then there could be around 800 resident kindergartners in each of the next two years. If the 81% average for the four latest kindergartens instead becomes a more accurate indicator of the pending kindergarten classes, then the next two classes will have over 800 resident students

⁷ 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
"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	910	702	77%
"2011" Births and Oct. 2016 Kindergartners	875	724	83%
"2012" Births and Oct. 2017 Kindergartners	917	742	81%
"2013" Births and Oct. 2018 Kindergartners	879	723	82%
"2014" Births and Oct. 2019 Kindergartners (current ratio)	970	769	79%
Average Relevant to Last Four School Years (okay correlation with 4% range from 79% to 83%)			81%

	note that birth totals rose in 2014 to 2016 but fell in 2017	Potential District-Enrolled Resident Kindergarten Total (excluding TK)	
		at Four-Year Average Ratio	at Current Ratio
"2015" Births and Potential October 2020 Kindergartners	1,003	815	795
"2016" Births and Potential October 2021 Kindergartners	1,011	822	801
"2017" Births and Potential October 2022 Kindergartners	931	757	738

* These are proportionate birth amounts in the listed year and the prior year so as to properly correlate to the kindergarten figures shown for each year, such as "2007" births representing one-twelfth of the 2006 birth total and eleven-twelfths (all but December) of the 2007 birth total. The ratios change after the 2007 births to follow the evolution of the birthdate cutoff for kindergarten eligibility from November 1 in 2012 to September 1 starting in 2014, but with a one-month part of the TK student totals added to the 2012 through 2014 kindergarten totals to make those represent twelve birth months.

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

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.

each. By comparison, the resident kindergarten totals from 2012 to 2018 were between 701 and 754, with an average of 727.

A key finding in this update is that the latest available year of birth totals by zip code, which is 2017, had a notable decline. The 931 local births in 2017 are significantly lower than the 1,003 and 1,011 in 2015 and 2016. While that latest total is still above any between 2010 and 2013, it could be the start of a multiple-year decline.

Source Locations of the Higher Birth Totals Starting in 2014

One of the changes in this update, compared to the figures in our last study, is that the projected kindergarten totals are even higher than before in the Mattos area, while those in many other parts of the district are lower. This is because we now know that the huge jump in local births in 2014 correlated to a significant kindergarten spike this year in just the Mattos and Sinnott regions, as is shown in Table 6 on page 15.⁸ A year ago we had

⁸ This kindergarten comparison is between the current resident total and the average resident total from the three prior years.

Table 6: Resident Kindergarten Student Changes Since 2016 by Location

Elementary Attendance Areas*	Total District-Enrolled Resident Kindergartners in Early October				% Change from 2016-to-2018 Average to 2019
	2016	2017	2018	2019	
Weller and Pomeroy (northern area)	138	149	141	131	-8%
Spangler and Curtner (western central area)	163	197	183	176	-3%
Burnett and Rose (eastern central area)	171	171	142	168	4%
Sinnott (southeast area)	115	114	100	119	9%
Zanker (southwest part with no post-2016 new housing)	91	64	92	73	-11%
All but Mattos	678	695	658	667	-1%
Mattos (southwest part with post-2016 new housing)	46	47	65	102	94%

* Some areas have been combined to provide a better regional sense of the latest kindergarten changes. These figures are for regions currently applied in K-3 and exclude inter-district students and a few students at unlocatable addresses.

Note: The majority of the 102 current resident Mattos kindergartners have been overflowed to other schools.

presumed that most of the soaring local birth totals, starting in 2014, were in the Mattos area, but that some of the growth also had occurred across the rest of the district. Instead the current resident Mattos kindergarten total, including significant student overflows to other schools due to capacity limits, has nearly twice as many students (102) as the average from the three preceding years (53), while the current total from the rest of the district is down slightly from that average. New housing built in recent years in mainly the Mattos region is the probable source of these divergent directions in the kindergarten totals. As a result of these findings, the updated forecast has the higher birth totals in 2015 and 2016 adding almost solely to the pending resident Mattos and Sinnott kindergarten amounts.⁹

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.

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.

⁹ There was a big spike in new housing occupancies in 2014 and 2015, when over 1,500 new units were moved into. These were mainly in the current Mattos attendance area, but with significant numbers also in the current Zanker area. The reason that this did not result in a rising resident Zanker kindergarten total in 2019 is because that area, unlike for Mattos, has most of its students coming from older neighborhoods. Those neighborhoods have declining kindergarten numbers. And since 2016, the new housing units have been heavily concentrated in the Mattos region, with no additional units in Zanker’s area.

Table 7: Average Student Generation Rates (SGRs) from Recently Completed Housing Developments

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	
<u>Recently-Built Developments in the MUSD with the Majority of Units being:</u>							
Mainly Market-Rate*	1,708	104	34	32	34	204	0.12
BMR Non-SRO**	101	16	25	23	16	80	0.79
<u>Recently-Built BMR Developments in the SEDS-FUHSD with the Units being***:</u>							
Non-SRO	126	26	17	11	16	70	0.56
SRO (Single-Room Occupancy)	63	1	0	0	0	1	0.02

* Recently built and completed tracts of mainly market-rate "yardless" SFD homes, SFA plexes, townhouses, condos and apartments in the MUSD have virtually the same aggregate SGR within each of those types, so they have been combined in this rate. All sampled developments in these types have at least five units, with no units occupied before 2015 and all occupied by October 2019. No tracts have been built recently in the MUSD with SFD homes that have private yards; residences of that type may have SGRs of around 0.50 in TK-12, based on our findings in some other South Bay districts.

** This most recent BMR location in the MUSD was completed in 2010. It contains entirely multiple-bedroom units.

*** More recently built BMR developments in the combined Sunnyvale ESD and Fremont Union HSD region are included for comparative purposes to the older MUSD sample. "SRO" locations have only small studios with minimal kitchen facilities and limited parking (often similar to motel rooms). The Non-SRO sample includes some one-bedroom units.

Only two SGRs from "recently" built units in the MUSD were determined warranted for the forecast. While we had identified separate SGRs from recent mainly market-rate SFD and ATT locations in some past studies, that no longer is justified. The updated samples of units in those types, with the latest completed tracts included and complexes with any units built before 2015 excluded, do not currently provide meaningful differences between those types (in aggregate for those samples).¹⁰ As is shown in Table 7 above, the sampled 1,708 units in mainly market-rate developments now have 204 MUSD-enrolled students, for a 0.12 SGR. While that may seem too low to some readers, it is in the general vicinity of what have identified recently in some other Bay Area districts.

The most recent complex of mainly "BMR" (below-market-rate) units in the district was completed in 2010. That has 80 students in 101 entirely multiple-bedroom BMR units, for a 0.79 TK-12 SGR. That is well within the norm for strictly BMR "family oriented" (multiple bedroom) dwellings.

For comparative purposes, Table 7 also has samples from more recently built (post 2015) BMR developments in the combined region of the Sunnyvale Elementary and Fremont Union High School districts. These SGRs are in two subcategories: Non-SRO and SRO. SRO is short for "single room occupancy", which refers to small studios that usually have only minimal kitchen facilities and limited parking. SRO locations never have many students, with the one student in 63 such units in the SEDS-FUHSD being a good example. The BMR Non-SRO sample from two locations in these districts, by contrast, has 70 students in 126 units, some of which are one-bedroom units, for a 0.56 SGR. While the forecast has been updated with the 0.79 SGR applied to all but one of the projected BMR sites in the MUSD, if any of those BMR developments is either (1) Non-SRO with a large share of studio and one-bedroom units or (2) SRO, then these alternative SGRs of 0.56 and 0.02 may be more applicable.

¹⁰ The recently built SFD homes in the district are on small lots with only minimal outside private areas for each home. Any future developments of SFD residences with larger outside private areas should have much higher SGRs. We have identified average TK-12 SGRs of around 0.50 from such homes in some other Santa Clara County districts.

Table 8: Projected New Housing Units*

Attendance Area	Housing Type (Developments of)	Projected Additional Housing Units						from 2024 to 2029	Total to	
		in Twelve Months to October 1 of					2024		2029	
		2020	2021	2022	2023	2024				
Mattos**	Mainly Market-Rate	383	354	310	426	400	640	1,873	2,513	
	BMR Non-SRO	0	50	50	50	50	100	200	300	
	Total	383	404	360	476	450	740	2,073	2,813	
Spangler	Mainly Market-Rate	25	25	25	25	25	405	125	530	
	BMR Non-SRO	0	0	0	0	0	50	0	50	
	Total	25	25	25	25	25	455	125	580	
Zanker**	Mainly Market-Rate	0	90	130	0	0	200	220	420	
	BMR Non-SRO	0	0	0	0	0	100	0	100	
	Total	0	90	130	0	0	300	220	520	
Weller	Mainly Market-Rate	72	0	0	32	22	20	126	146	
	BMR Non-SRO	0	0	0	0	0	0	0	0	
	Total	72	0	0	32	22	20	126	146	
All Other**	Mainly Market-Rate	8	20	20	2	6	85	56	141	
	BMR Non-SRO	0	0	0	0	0	0	0	0	
	Total	8	20	20	2	6	85	56	141	
Total	Mainly Market-Rate	488	489	485	485	453	1,350	2,400	3,750	
	BMR Non-SRO	0	50	50	50	50	250	200	450	
	Total	488	539	535	535	503	1,600	2,600	4,200	

* 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.

** The Mattos, Zanker and All Other areas are for the regions that are currently applied in K-3.

Projected New Housing

After having had brief new housing "booms" (1) in 2014 and 2015, with over 1,500 additional units having been occupied, and (2) in 2019, when over 900 new units were first moved into, a more stable rate of around 530 per year is forecast in 2020 to 2024. The projected total over the next five years is 2,650 new units, with 2,400 being in mainly market-rate developments, which often include small BMR percentages. Thereafter a slower annual rate of new units is forecast, for a total 1,600 more residences in 2025 to 2029. The result is projected total of 435 MUSD students in 2024 coming from new housing units occupied in the next five years, with an estimate of around 900 students in 2029 from the new housing units completed in the next decade. The latter total includes student growth after 2024 from units moved into before 2024.

These units are heavily concentrated in the Mattos region, with 2,107, or 80%, of the projected total over the next five years. The Zanker area has the second largest total with just 236 projected residences during that time. All of these projected housing amounts come from site-specific estimates that are based on meetings with developer representatives, information from Milpitas city planners and our evaluation of the status of each active location.¹¹

The one BMR location that is not forecast to have the 0.79 SGR is at 308 Sango Court. All but 15 of those 134 units are planned to be studios and one-bedrooms, so we have estimated an SGR at one-fourth of the 0.79 rate.

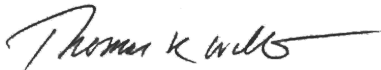
¹¹ Appreciation for their insights into planned and potential housing is due to planners Jessica Garner and Michael Fossati for the City of Milpitas. All final decisions on the timing and amounts by location, however, were made by EPC.

Concluding Commentary

While there is a wide and increasing possible range to what the annual local birth totals will be after 2020, the much greater probability is for significantly declining birth totals by 2022 and corresponding falling kindergarten enrollments by 2027, if not sooner, in the MUSD. Areas of mainly existing housing already are having major birth and resident kindergarten reductions in virtually every Santa Clara County district. Even some districts that had thousands of housing units added in the last decade have had declining birth and kindergarten totals in the latest years. With lower new housing amounts in the MUSD in the next five years compared to the last five years, and even smaller annual housing totals after 2024, the district is highly unlikely to avoid having this declining birth and kindergarten trend in the long run.

We suspect that there will be either one or two “bubbles” of relatively large class totals graduating upward through the grades in the district. The first, and higher (and perhaps only) bubble will come from the current and two pending kindergarten classes. Those three classes will be entirely in the secondary grades starting in 2028. Lower birth totals in 2017 and probably 2018 will result in lower kindergarten totals in 2022 and 2023. The one-year spike of over 900 new homes in 2019 then might create a second birth increase in 2019 and 2020. That could result in a second smaller bubble entering kindergarten in 2024 and especially 2025. By 2022, however, there probably will be declining birth totals from all of the new housing built in the last five years, along with continued declining birth counts in the older neighborhoods, as already is occurring elsewhere. The reduced future housing amounts will not be the source of sufficient additional births to offset these birth declines occurring in all other MUSD dwellings (in aggregate). This likely evolution is why we do not expect the elementary total to rise significantly after 2024, with a greater potential for that total to be declining before 2029.

Sincerely,



Thomas R. Williams, principal demographer for Enrollment Projection Consultants

Appendix A1: Detail for Actual and Projected October Enrollments, 2019 to 2024

(with color highlighting in blue for relatively large class totals that were or will be over 800 when in ninth, pink for totals of between 770 and 799 when in ninth, and green for less than 770 when in ninth; gray highlighting of grade level totals is for the highest recent amount in each level and in the overall total)

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
2015 *	132	711	735	747	750	806	779	744	805	779	791	870	766	799	5,404	1,584	3,226	10,214
2016 *	127	738	741	746	769	743	830	750	742	805	825	781	887	790	5,444	1,547	3,283	10,274
2017 *	134	753	759	757	733	746	748	818	750	754	823	829	793	892	5,448	1,504	3,337	10,289
2018 *	122	733	786	744	748	719	721	761	798	742	787	835	828	826	5,334	1,540	3,276	10,150
2019 *	133	793	803	826	750	753	715	737	761	796	769	792	833	834	5,510	1,557	3,228	10,295
2020	135	805	833	822	825	746	748	719	731	763	826	774	792	848	5,633	1,494	3,240	10,367
2021	136	808	852	860	823	823	742	755	716	736	795	833	776	808	5,799	1,452	3,212	10,463
2022	129	768	855	879	860	821	819	748	752	721	767	802	836	792	5,879	1,473	3,197	10,549
2023	129	770	810	880	878	856	813	824	742	755	749	772	804	850	5,960	1,497	3,175	10,632
2024	129	771	812	834	878	872	846	816	818	745	784	755	773	818	5,958	1,563	3,130	10,651
Total Grade-Level Change in One Year, to October of 2020																		
Total Grade-Level Change in Two Years, to October of 2021																		
Total Grade-Level Change in Three Years, to October of 2022																		
Total Grade-Level Change in Four Years, to October of 2023																		
Total Grade-Level Change in Five Years, to October of 2024																		
Real Potential Lower Total in 2020 (essentially -1% within footnote caveats**)																		
Real Potential Higher Total in 2020 (essentially +1% within footnote caveats**)																		
Real Potential Lower Total in 2024 (essentially -4% within footnote caveats and with declining kindergarten numbers in existing housing)																		
Real Potential Higher Total in 2024 (essentially +4% within footnote caveats and with greater-than-forecast numbers from new housing)																		

Projected Students from New Housing:

2024	7	44	47	48	47	43	37	32	27	23	22	20	19	19	305	50	80	435
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* These are the actual totals from students files provided to EPC by the MUSD. Community Day, NPS, pre-school SDC and Adult Ed. students are excluded.

** 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 solely the real potential higher total having Mattos evolve to covering TK-6. The most probable approximate new housing amounts are from 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.

Appendix A2(a)										
Actual October 2, 2019, Resident Students versus Attending Enrollments for Elementary Schools										
School	Subject	Actual MUSD-Enrolled Students by Grade								Total
		TK	K	1	2	3	4	5	6	
Weller	Actual Attendance	6	60	66	76	54	83	63	66	474
	Resident Population	7	53	67	86	63	83	77	72	508
	Net Difference (A-R)	-1	7	-1	-10	-9	0	-14	-6	-34
Pomeroy	Actual Attendance	23	92	101	102	94	95	89	114	710
	Resident Population	14	78	87	95	80	82	76	93	605
	Net Difference (A-R)	9	14	14	7	14	13	13	21	105
Curtner	Actual Attendance	0	95	96	97	94	117	94	117	710
	Resident Population	9	96	105	102	95	116	91	112	726
	Net Difference (A-R)	-9	-1	-9	-5	-1	1	3	5	-16
Spangler	Actual Attendance	45	78	99	100	76	83	91	67	639
	Resident Population	21	80	97	95	83	83	92	75	626
	Net Difference (A-R)	24	-2	2	5	-7	0	-1	-8	13
Mattos (in Mattos TK-3 interim area)	Actual Attendance	0	48	71	25	23				167
	Resident Population	19	102	71	56	61				309
	Net Difference (A-R)	-19	-54	0	-31	-38				-142
Zanker (in it's part Mattos 4-6 interim area)	Act Attend from This Area						31	23	23	77
	Resident Population						31	23	24	78
	Net Difference (A-R)						0	0	-1	-1
Zanker (not from Mattos interim area)	Act Attend All but Above #s	0	95	89	90	106	62	61	63	566
	Resident Population	15	73	97	66	73	69	65	64	522
	Net Difference (A-R)	-15	22	-8	24	33	-7	-4	-1	44
Rose (in it's part Mattos 4-6 interim area)	Act Attend from This Area						5	8	8	21
	Resident Population						8	10	12	30
	Net Difference (A-R)						-3	-2	-4	-9
Rose (in recent Randall area in TK-3)	Act Attend from This Area	6	20	13	30	16				85
	Resident Population	15	48	42	53	43				201
	Net Difference (A-R)	-9	-28	-29	-23	-27				-116
Rose (not in either of the above areas)	Act Attend All but Above #s	17	66	47	57	55	62	65	58	427
	Resident Population	12	49	48	49	48	56	51	59	372
	Net Difference (A-R)	5	17	-1	8	7	6	14	-1	55
Randall (from recent Randall area in 4-6)	Actual Attendance						39	55	47	141
	Resident Population						47	48	48	143
	Net Difference (A-R)						-8	7	-1	-2
Randall (for magnet TK-3)	Actual Attendance	15	52	46	33	48				194
Burnett	Actual Attendance	21	91	78	86	67	71	69	72	555
	Resident Population	6	71	77	91	73	64	78	72	532
	Net Difference (A-R)	15	20	1	-5	-6	7	-9	0	23
Sinnott	Actual Attendance	0	96	97	130	117	105	97	102	744
	Resident Population	13	119	99	120	119	100	92	98	760
	Net Difference (A-R)	-13	-23	-2	10	-2	5	5	4	-16
Total	Actual Attendance	133	793	803	826	750	753	715	737	5,510
	Resident Population	131	769	790	813	738	739	703	729	5,412
	Net Difference (A-R)	2	24	13	13	12	14	12	8	98

Appendix A2(b): Projected Elem. Resident Students and Potential Attending Enrollments in October 2020										
School	Subject	Projected MUSD-Enrolled Students by Grade								Total
		TK	K	1	2	3	4	5	6	
Weller	Resident Population	9	66	57	71	87	63	83	78	514
	Potential Net Adjustment	2	5	7	-1	-10	-9	0	-14	-20
	Potential Attendance	11	71	64	70	77	54	83	64	494
Pomeroy	Resident Population	14	81	80	89	94	78	80	75	591
	Potential Net Adjustment	10	11	14	14	7	14	13	13	96
	Potential Attendance	24	92	94	103	101	92	93	88	687
Curtner	Resident Population	16	95	101	106	101	95	115	91	720
	Potential Net Adjustment	-16	-3	-1	-9	-5	-1	1	3	-31
	Potential Attendance	0	92	100	97	96	94	116	94	689
Spangler	Resident Population	16	83	85	99	94	82	83	93	635
	Potential Net Adjustment	29	-3	-2	1	5	-7	0	-1	22
	Potential Attendance	45	80	83	100	99	75	83	92	657
Mattos (in Mattos TK-4 interim area)	Resident Population	19	111	110	79	61	64			444
	Potential Net Adjustment	-19	-39	-54	0	-31	-38			-181
	Potential Attendance	0	72	56	79	30	26			263
Zanker (in it's part Mattos 5-6 interim area)	Resident Population							30	23	53
	Potential Net Adjustment							0	0	0
	Part Potential Attendance							30	23	53
Zanker (not from Mattos interim area)	Resident Population	12	71	74	96	64	72	67	64	520
	Potential Net Adjustment	-12	21	22	-8	24	31	-7	-4	67
	Part Potential Attendance	0	92	96	88	88	103	60	60	587
Zanker total	Total Potential Attendance	0	92	96	88	88	103	90	83	640
Rose (in it's part Mattos 5-6 interim area)	Resident Population							10	12	22
	Potential Net Adjustment							-3	-2	-5
	Potential Attendance							7	10	17
Rose (in recent Randall area in TK-4)	Resident Population	15	51	50	42	53	43			254
	Potential Net Adjustment	-9	-29	-28	-29	-23	-27			-145
	Part Potential Attendance	6	22	22	13	30	16			109
Rose (not in either of the above areas)	Resident Population	8	47	52	49	49	48	57	52	362
	Potential Net Adjustment	5	0	17	-1	8	7	6	14	56
	Part Potential Attendance	13	47	69	48	57	55	63	66	418
Rose total	Total Potential Attendance	19	69	91	61	87	71	70	76	544
Randall (from recent Randall area in 5-6)	Resident Population							47	48	95
	Potential Net Adjustment							-8	7	-1
	Part Potential Attendance							39	55	94
Randall (for magnet TK-4)	Part Potential Attendance	15	52	52	46	33	48			246
Randall total	Total Potential Attendance	15	52	52	46	33	48	39	55	340
Burnett	Resident Population	10	71	76	78	91	73	64	79	542
	Potential Net Adjustment	11	19	20	1	-5	-6	7	-9	38
	Potential Attendance	21	90	96	79	86	67	71	70	580
Sinnott	Resident Population	14	117	124	101	118	118	98	92	782
	Potential Net Adjustment	-14	-22	-23	-2	10	-2	5	5	-43
	Potential Attendance	0	95	101	99	128	116	103	97	739
Total	Resident Population	133	793	809	810	812	736	734	707	5,534
	Potential Net Adjustment	2	12	24	12	13	10	14	12	99
	Potential Attendance	135	805	833	822	825	746	748	719	5,633

Appendix A3(a)							
Actual October 2, 2019, 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				412	427	839
	Resident Population	385	368	383	404	404	808
	Net Difference (A-R)				8	23	31
Rancho Milpitas	Actual Attendance				349	369	718
	Resident Population	354	335	346	348	377	725
	Net Difference (A-R)				1	-8	-7
Total	Actual Attendance				761	796	1,557
	Resident Population	739	703	729	752	781	1,533
	Net Difference (A-R)				9	15	24

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 2020							
School	Subject	Projected MUSD-Enrolled Students by Grade					7-8
		4	5	6	7	8	Total
Russell	Resident Population	345	382	369	380	403	783
	Potential Net Adjustment				8	8	16
	Potential Attendance				388	411	799
Rancho Milpitas	Resident Population	391	352	337	343	351	694
	Potential Net Adjustment				0	1	1
	Potential Attendance				343	352	695
Total	Resident Population	736	734	706	723	754	1,477
	Potential Net Adjustment				8	9	17
	Potential Attendance				731	763	1,494

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 2, 2019, Ratios of High School Students Attending MUSD High Schools

School	Subject	Actual MUSD Students by Grade				9-12 Total
		9	10	11	12	
Milpitas High	Actual Attendance	769	791	796	770	3,126
	Percent of Total Enrollment	100%	100%	96%	92%	
Calaveras Hills High	Actual Attendance	0	1	37	64	102
	Percent of Total Enrollment	0%	0%	4%	8%	
Total	Total Attending Enrollment	769	792	833	834	3,228

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

Appendix A4(b)
Potential High School Attending Enrollments in October 2020

School	Subject	Actual MUSD Students by Grade				9-12 Total
		9	10	11	12	
Milpitas High	Potential Attendance	826	773	757	783	3,139
	Percent of Total Enrollment	100%	100%	96%	92%	
Calaveras Hills High	Potential Attendance	0	1	35	65	101
	Percent of Total Enrollment	0%	0%	4%	8%	
Total	Total Attending Enrollment	826	774	792	848	3,240

Appendix B1: 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)	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	
	2017	6	36	45	40	50	48	58	64	46	63	54	47	61	75	693	
2018	10	42	42	47	41	53	47	58	60	46	66	51	45	64	672		
2019	15	45	49	39	47	41	49	49	56	53	45	65	50	47	650		
3-Year Average Incoming Advancement Rate**		1.12 0.96 1.01 1.04 0.96 1.04 0.95 0.97 1.02 0.93 0.97 1.05														0.92	
4-Year Average Incoming Advancement Rate**		1.09 0.98 1.00 1.00 0.95 1.00 0.93 0.97 1.03 0.93 1.00 1.04														0.84	
Affordable ATT (excl. mainly BMR)	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	
	2017	7	32	28	29	25	23	34	40	38	38	50	30	49	40	463	
2018	5	24	35	25	30	27	24	33	40	39	37	49	32	47	447		
2019	5	23	27	36	23	32	24	23	33	39	38	38	49	35	425		
Mixed Lower Cost (areas of mainly lower cost ATT & a few SFD) (excl. mainly BMR)	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	
	2017	0	0	3	0	1	1	1	0	0	1	2	0	1	1	11	
2018	0	1	0	1	0	0	1	1	1	0	0	1	2	0	1	8	
2019	0	0	2	0	2	0	0	1	1	1	0	0	1	2	0	9	
Affordable MH (mainly single-wide)	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	
	2017	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
2018	1	1	0	0	0	0	0	0	0	2	0	0	1	0	5		
2019	0	1	1	0	0	0	0	0	1	0	3	1	0	0	1	8	
ATT Complexes of Mainly BMR Units	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	
	2017	8	16	14	19	15	12	18	18	8	13	15	13	19	13	201	
2018	5	24	16	19	18	16	12	17	19	9	11	17	11	20	214		
2019	4	25	22	16	19	18	17	11	20	18	11	9	18	10	218		

Appendix B, Page 1 of 7, with footnotes on the final page

Appendix B, Page 1 of 7, with footnotes on the final page

Appendix B1: 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 BMIR)	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			
	2017	21	84	90	88	91	84	111	124	92	115	121	91	130	129	1,371			
	2018	21	92	93	92	89	96	84	109	121	94	115	119	89	132	1,346			
2019	24	94	101	91	91	91	91	90	85	110	113	95	113	119	93	1,310			
3-Year Average Incoming Advancement Rate**		1.06 0.97 0.99 1.03 0.98 1.01 0.99 1.02 1.02 0.96 1.01 1.02																	
4-Year Average Incoming Advancement Rate**		1.06 0.97 0.98 1.00 0.98 0.98 0.97 1.02 1.02 0.97 1.02 1.01															0.99 0.91		
Modest ATT	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			
	2017	15	98	89	82	89	86	85	81	91	79	80	99	69	77	1,120			
	2018	18	89	88	91	74	86	79	83	72	79	78	81	98	70	1,086			
2019	15	85	95	94	87	87	74	84	77	82	78	78	78	85	95	1,107			
Moderate ATT	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			
	2017	5	43	55	43	40	42	38	34	38	33	25	30	38	27	491			
	2018	2	53	50	51	42	42	40	37	37	35	36	28	30	41	524			
2019	11	49	49	46	47	39	38	38	40	40	36	36	34	28	31	522			
Modest MH (mainly double-wide)	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			
	2017	0	5	7	8	6	7	14	7	15	10	7	9	8	3	106			
	2018	1	7	6	5	9	6	7	14	9	15	9	7	9	8	112			
2019	1	6	5	5	5	5	9	7	7	13	8	16	9	8	7	106			
Combination Modest & Moderate ATT & MH	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	128	163	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			
	2017	20	146	151	133	135	135	137	122	144	122	112	138	115	107	1,717			
	2018	21	149	144	147	125	134	126	134	118	129	123	116	137	119	1,722			
2019	27	140	149	145	139	122	129	122	122	135	122	130	121	121	133	1,735			
3-Year Average Incoming Advancement Rate**		1.00 1.02 0.97 0.94 0.95 0.97 1.00 0.98 1.03 1.05 1.01 1.01																	
4-Year Average Incoming Advancement Rate**		1.00 1.03 0.97 0.95 0.94 0.97 1.01 0.97 1.03 1.03 1.00 0.99															0.85 0.85		

Appendix B, Page 2 of 7, with footnotes on the final page

Appendix B1: 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		
Modest SFD	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	34	37	36	42	447		
	2016	7	31	35	35	23	30	29	42	31	35	31	22	35	44	430		
	2017	7	36	32	35	32	22	35	29	36	33	37	33	24	39	430		
	2018	3	27	35	27	38	29	22	33	25	39	34	34	35	25	406		
2019	5	25	30	40	25	37	30	21	28	23	33	33	34	29	32	392		
Moderate SFD	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		
	2017	19	128	124	131	140	134	138	154	144	139	150	176	170	192	1,939		
	2018	23	122	138	128	134	138	130	147	155	140	147	154	177	174	1,907		
2019	18	116	135	154	137	139	149	143	148	154	145	157	148	178	1,921			
3-Year Average Incoming Advancement Rate**		1.08 1.07 1.03 0.98 1.00 1.04 1.00 0.97 1.03 1.02 0.99 1.01																1.10
4-Year Average Incoming Advancement Rate**		1.05 1.05 1.03 1.02 1.01 1.02 1.02 0.98 1.04 1.02 0.99 1.01																1.13
Combination Modest & Moderate SFD	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		
	2017	26	164	156	166	172	156	173	183	180	172	187	209	194	231	2,369		
	2018	26	149	173	155	172	167	152	180	180	179	181	188	212	199	2,313		
2019	23	141	165	194	162	176	179	164	176	177	178	191	177	210	2,313			
3-Year Average Incoming Advancement Rate**		1.07 1.06 1.02 0.98 1.01 1.03 0.98 0.98 1.02 1.02 0.99 1.01																1.04
4-Year Average Incoming Advancement Rate**		1.04 1.04 1.02 1.00 1.02 1.01 0.99 0.99 1.03 1.01 0.99 1.03																1.08
Combination Modest & Moderate SFD, ATT & MH	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		
	2017	46	310	307	299	307	291	310	305	324	294	299	347	309	338	4,086		
	2018	47	298	317	302	297	301	278	314	298	308	304	304	349	318	4,035		
2019	50	281	314	339	301	298	308	286	311	299	308	312	298	343	4,048			
3-Year Average Incoming Advancement Rate**		1.03 1.04 0.99 0.96 0.99 1.00 0.99 0.98 1.02 1.03 1.00 1.01																0.95
4-Year Average Incoming Advancement Rate**		1.02 1.03 0.99 0.98 0.99 1.00 0.99 1.03 1.02 0.99 1.01																0.97
Appendix B, Page 3 of 7, with footnotes on the final page																		

Appendix B1: 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)	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
	2017	10	45	52	47	44	39	38	56	27	39	32	24	32	27	512
	2018	6	35	50	48	49	41	38	34	51	31	36	35	28	34	516
2019	3	59	32	56	52	51	39	38	34	28	50	29	37	31	30	535
Middle Income Non-SFA-Plex ATT	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
	2017	9	24	19	22	17	15	18	8	12	13	14	13	6	11	201
	2018	5	19	17	17	18	16	12	16	7	11	13	10	13	6	180
2019	3	25	18	17	16	19	15	12	16	16	9	12	11	9	15	197
Combination of Middle Income ATT	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	61	61	49	56	62	41	48	45	37	41	39	26	655
	2017	19	69	71	69	61	54	56	64	39	52	46	37	38	38	713
	2018	11	54	67	65	67	57	50	50	58	42	49	45	41	40	696
2019	6	84	50	73	68	70	54	50	50	44	59	41	48	40	45	732
3-Year Average Incoming Advancement Rate**		0.98 1.01 1.01 1.01 1.03 0.96 0.98 0.98 0.91 1.06 1.03 0.98 0.99 1.00 0.97 1.04														0.94
4-Year Average Incoming Advancement Rate**		1.01 1.02 0.98 1.01 0.97 0.98 0.92 1.03 0.99 1.00 0.96 1.02														0.90
Middle Income SFD	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
	2017	25	133	153	154	132	189	150	179	164	171	171	175	151	200	2,183
	2018	21	147	137	151	148	131	180	154	166	163	173	204	166	158	2,099
2019	26	144	159	140	145	144	129	180	155	162	162	172	166	201	165	2,088
3-Year Average Incoming Advancement Rate**		1.05 1.01 0.96 0.99 0.98 0.99 0.98 0.99 0.98 1.01 1.01 1.02 0.97 0.99 1.03														0.94
4-Year Average Incoming Advancement Rate**		1.04 1.01 0.99 1.01 1.00 0.99 0.98 1.01 1.04 0.97 0.98 1.02														0.99

Appendix B, Page 4 of 7, with footnotes on the final page

Appendix B1: 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	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								
	2017	44	202	224	223	193	243	206	243	203	223	253	212	189	238	2,896								
	2018	32	201	204	216	215	188	230	204	224	205	222	249	207	198	2,795								
2019	32	228	209	213	213	214	183	230	199	221	213	214	241	210	2,820									
3-Year Average Incoming Advancement Rate**															0.94									
4-Year Average Incoming Advancement Rate**															0.96									
Upper Middle & Upper Income SFD	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								
	2017	16	89	90	102	98	100	94	115	104	103	117	149	124	150	1,451								
	2018	7	65	101	82	101	91	99	98	116	108	118	124	141	129	1,380								
2019	6	68	76	101	83	101	85	97	102	118	119	117	125	140	1,338									
3-Year Average Incoming Advancement Rate**															1.06									
4-Year Average Incoming Advancement Rate**															1.07									
Mixed-Value SFD (remote hillside areas; mainly middle+ income)	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								
	2017	0	1	2	3	0	2	3	2	1	3	2	3	4	4	30								
	2018	1	1	2	2	3	1	2	3	1	1	3	3	4	5	32								
2019	0	2	1	2	2	2	1	3	4	1	4	3	4	5	34									
Combination of Middle Income ATT & Middle & Upper Middle Income SFD	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								
	2017	60	292	316	328	291	345	303	360	308	329	372	364	317	392	4,377								
	2018	40	267	300	307	319	280	331	305	341	314	343	376	352	332	4,207								
2019	38	298	286	316	298	317	269	330	305	340	336	334	370	355	4,192									
3-Year Average Incoming Advancement Rate**															0.97									
4-Year Average Incoming Advancement Rate**															1.00									

Appendix B, Page 5 of 7, with footnotes on the final page

Appendix B, Page 5 of 7, with footnotes on the final page

Appendix B1: 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	
Total for all IATT & MH																	
(incl. SFA Plex & a few SFD in Mixed Lower)	2013	38	281	306	318	300	298	281	264	297	273	267	249	247	240	3,659	
	2014	65	290	299	319	321	295	295	273	261	288	280	273	248	252	3,759	
	2015	52	277	282	303	324	316	294	282	273	252	287	274	272	244	3,732	
	2016	53	310	288	288	290	308	305	274	273	264	256	280	274	264	3,727	
	2017	60	299	312	290	287	273	304	310	275	289	279	266	283	274	3,801	
	2018	53	295	304	304	281	287	260	293	297	265	287	280	267	291	3,764	
	2019	57	318	300	309	298	283	273	257	289	294	266	282	280	271	3,777	
3-Year Average Incoming Advancement Rate**			1.01	1.00	0.98	0.98	0.96	0.99	0.98	1.00	0.99	1.02	1.01	1.00	1.01		0.91
4-Year Average Incoming Advancement Rate**			1.02	1.00	0.98	0.97	0.96	0.98	0.98	0.99	1.00	1.02	1.00	1.00	1.00		0.87
Total for all SFD																	
	2013	53	409	421	459	453	435	517	499	436	554	497	513	525	566	6,337	
	2014	80	389	430	424	466	467	442	516	497	444	588	484	515	524	6,266	
	2015	78	400	403	427	399	465	461	447	509	500	472	573	470	520	6,124	
	2016	63	380	407	410	456	409	491	450	445	508	546	466	574	487	6,092	
	2017	67	387	401	425	402	447	420	479	449	449	513	536	473	585	6,033	
	2018	55	362	413	390	424	390	433	435	463	451	475	519	523	491	5,824	
	2019	55	355	401	437	392	423	394	444	437	458	473	477	507	520	5,773	
3-Year Average Incoming Advancement Rate**			1.08	1.02	0.99	0.98	1.00	1.01	0.99	1.00	1.04	1.00	0.99	1.02	1.02		1.01
4-Year Average Incoming Advancement Rate**			1.06	1.02	1.01	0.99	1.02	1.00	0.99	1.00	1.05	1.00	0.99	1.02	1.02		1.04
Other Existing																	
(areas of almost solely non-residential uses; prior to 2016 also for students at school adr.)	2013	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	
	2014	1	0	0	0	0	1	0	0	1	2	1	1	0	1	8	
	2015	0	0	0	0	0	1	1	0	0	0	1	3	0	0	6	
	2016	1	0	0	0	0	0	1	1	0	0	0	1	2	0	6	
	2017	0	0	0	0	0	1	0	1	0	1	0	0	1	2	6	
	2018	0	1	0	0	0	2	0	3	1	1	1	0	0	1	9	
	2019	0	0	2	1	1	0	1	0	1	2	1	0	1	0	10	
Total for All Areas of Almost Exclusively Existing Housing as of Oct. 1, 2011																	
(incl. non-res. areas)	2013	91	690	727	778	753	733	798	763	733	828	764	762	772	806	9,998	
	2014	146	679	729	743	787	763	737	789	759	734	869	758	763	777	10,033	
	2015	130	677	685	730	723	782	756	729	782	752	760	850	742	764	9,862	
	2016	117	690	695	698	746	717	797	725	718	772	802	747	850	751	9,825	
	2017	127	686	713	715	690	720	725	789	725	738	792	802	757	861	9,840	
	2018	108	658	717	694	705	679	693	731	761	717	762	799	790	783	9,597	
	2019	112	673	703	747	691	706	668	701	727	754	740	759	788	791	9,560	
3-Year Average Incoming Advancement Rate**			1.05	1.01	0.99	0.98	0.99	1.00	0.99	1.00	1.03	1.00	0.99	1.02	1.02		0.97
4-Year Average Incoming Advancement Rate**			1.04	1.02	1.00	0.99	0.99	0.99	0.99	1.00	1.04	1.00	1.00	1.00	1.02		0.97

Appendix B, Page 6 of 7, with footnotes on the final page

Appendix B, Page 6 of 7, with footnotes on the final page

Appendix B2: 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 2013 to 2018
		TK	K	1	2	3	4	5	6	7	8	9	10	11	12	TK-12	
Incoming inter-district	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	
	2017	0	8	13	7	13	11	6	13	8	6	5	8	9	15	122	
	2018	3	9	11	12	9	13	8	8	17	10	6	5	11	17	139	
	2019	2	18	13	11	11	12	12	8	8	15	10	8	11	14	153	
																60	
Unlocatable addresses	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	0	0	3	2	3	3	8	5	38	
	2017	0	3	3	0	0	2	0	2	0	0	0	3	2	3	19	
	2018	0	1	1	1	2	2	1	1	1	0	0	0	5	1	16	
	2019	0	6	0	2	1	2	0	0	1	0	0	1	0	1	14	
																8	
Total for All Areas with Consequential New Housing Added since Sept. 30, 2011	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	
	2017	7	56	30	32	30	15	17	14	17	10	26	16	25	13	308	
	2018	11	65	57	37	32	25	19	21	19	15	19	31	22	25	398	
	2019	19	96	87	66	47	33	35	28	25	27	19	24	34	28	568	
																333	

* "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.

Appendix B, Page 7 of 7