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CITY OF EMERYVILLE

AGENDA

City Council

Members:

Ruth Atkin	Mayor
Nora Davis	Vice Mayor
Jac Asher	Council Member
Scott Donahue	Council Member
Dianne Martinez	Council Member

Special Joint Study Session Meeting with the Emeryville Planning Commission

Planning Commission:
Sean Moss, Chair
Kairee Tann, Vice Chair
Lawrence C. "Buzz" Cardoza, Commissioner
Gail Donaldson, Commissioner
Brad Gunkel, Commissioner
Steven Keller, Commissioner
Vanessa Kuemmerle, Commissioner

Saturday, May 2, 2015 **10:00 AM** **Council Chambers**

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All matters listed under CONSENT CALENDAR are considered to be routine and will all be enacted by one motion in the form listed below. There will be no separate discussion of these items unless good cause is shown prior to the time the Council votes on the motion to adopt. Persons who wish to speak on matters set for PUBLIC HEARINGS will be heard when the Presiding Officer calls for comments from those persons who are in support of or in opposition thereto. After persons have spoken, the Hearing is closed and brought back to Council level for discussion and action. There is no further comment permitted from the audience unless requested by the Council.

The speaker's time is limited to 3 minutes and can only be extended upon approval of the Presiding Officer. Any person who desires to address the City Council on any item listed on the Agenda under the Consent Calendar, or on a matter not on the Agenda which item is within the subject matter jurisdiction of the City Council, may do so during that portion of the Agenda called Public Comment.

In compliance with the Americans with Disabilities Act, a person requiring an accommodation, auxiliary aid, or service to participate in this meeting should contact the City Clerk's Office or ADA Coordinator at (510) 596-4300, as far in advance as possible but no later than 72 hours before the scheduled event. The best effort to fulfill the request will be made. Assistive listening devices are available for anyone with hearing difficulty from the City Clerk prior to the meeting, and must be returned to the City Clerk at the end of the meeting.

No dogs, cats, birds or any other animal or fowl shall be allowed at or brought in to a public meeting by any person except (i) as to members of the public or City staff utilizing the assistance of a service animal, which is defined as a guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability, or (ii) as to police officers utilizing the assistance of a dog(s) in law enforcement duties.

The AGENDA for this regular meeting is as follows:

1. CALL TO ORDER, ROLL CALL AND PLEDGE OF ALLEGIANCE

2. PUBLIC COMMENTS

3. DISCUSSION OF PROPOSED REGULATIONS, INCENTIVES, AND GUIDELINES FOR MULTI-UNIT RESIDENTIAL DEVELOPMENT

3.1. ID-2015-219 Introduction and Overview. (10 minutes)

Attachments: Staff Report
Attachment 1 - EUSD Enrollment Forecast Report
Attachment 2 - Planning Regulations Development Bonuses

3.2. ID-2015-220 Regulations and Guidelines for Unit Mix and Family-Friendly Design. (90 minutes)

3.3. ID-2015-221 Break. (20 minutes)

3.4. ID-2015-222 Incentives for Affordable and Ownership Housing, Including Bonus Point System. (90 minutes)

3.5. ID-2015-223 Summary Comments, Wrap-Up, and Next Steps. (10 minutes)

4. ADJOURNMENT

CITY OF EMERYVILLE

MEMORANDUM

DATE: May 2, 2015

TO: City Council and
Planning Commission

FROM: Sabrina Landreth, City Manager
Charles S. Bryant, Community Development Director

SUBJECT: **Special Joint Study Session on Proposed Regulations, Incentives, and Guidelines for Multi-Unit Residential Development**

RECOMMENDATION

Staff recommends that the City Council and Planning Commission provide feedback and direction on the proposed regulations, incentives, and guidelines for multi-unit residential development as discussed in this report and presented by staff at the joint study session.

BACKGROUND

For a number of years, concern about family-friendly housing (including unit mix and design), affordable housing, and ownership housing have been issues in Emeryville. With the improving economy and the impending development of several thousand new units in the next few years, the City Council has expressed a desire to review the City's development regulations in order to ensure that future development is in line with the community's desire for more family-friendly, affordable, and ownership housing. The purpose of this study session is to explore these issues and provide staff with direction for the development of new regulations, incentives, and guidelines for multi-unit residential development, to be considered by the Planning Commission and City Council for adoption.

Development Patterns

Emeryville has two lower-density, smaller scale residential neighborhoods on the east side of the city, the Triangle and Doyle Street neighborhoods, which were developed in the early twentieth century and resemble the adjacent neighborhoods of North Oakland and Berkeley. However, most of the city's housing stock is larger in scale and was developed over the last several decades. Staff has analyzed the residential development that has occurred in Emeryville in the last twenty years, as summarized in Table 1.

TABLE 1: RESIDENTIAL DEVELOPMENT IN EMERYVILLE 1994-2015

		Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom	Live/ Work	TOTAL
TOTAL	Number	307	1,360	1,217	151	12	137	3,184
	Percent	9.6%	42.7%	38.2%	4.7%	0.4%	4.3%	100%
	Average Size	426	818	1,186	1,231	1,570	1,038	953
Ownership	Number	23	449	482	10	0	54	1,018
	Percent	2.3%	44.1%	47.3%	1.0%	0.0%	5.3%	100%
	Average Size	533	983	1,359	1,733	0	1,283	1,174
Rental	Number	284	911	735	141	12	83	2,166
	Percent	13.1%	42.1%	33.9%	6.5%	0.6%	3.8%	100%
	Average Size	417	737	1,073	1,195	1,570	879	849

Almost 3,200 units were developed during this period, of which about one-third were ownership and two-thirds were rental. As the figures above indicate, about 52% of these units were studios and one-bedroom, about 38% were two-bedroom, about 5% were three-bedroom or larger, and about 4% were live/work units. The overall average unit size was about 950 square feet, and the average unit had 1.39 bedrooms (not indicated in Table 1). Note that this data does not include earlier development such as the 1,249-unit Watergate condominiums and the 583-unit Pacific Park Plaza condominiums, which were built in the 1970s and 1980s, respectively. However, it does include projects currently under construction (Emme, Parc on Powell, and 3900 Adeline) or approved (3706 San Pablo).

Issues

The City Council has identified several issues to be addressed. These include the need for more large dwelling units in multi-unit residential development (specifically, more units with three or more bedrooms), the need for more family-friendly design of both dwelling units and residential buildings, the need for more affordable rents and sales prices of residential units, the need for more home ownership opportunities, and the need to overhaul the bonus point system that is part of the Planning Regulations.

Available Tools

There are several tools available to address these issues. These tools are summarized in Table 2 and discussed further below. Those that are checked and highlighted are the focus of this report and study session.

TABLE 2: TOOLS TO ADDRESS MULTI-UNIT RESIDENTIAL ISSUES

Tools / Attributes	Design Guidelines	Incentives (Bonus System)	Development Impact Fees	City Subsidies	Inclusionary Zoning without Incentives/ Concessions	State Density Bonus Law	Regulations/ Requirements
Unit Mix		👍/✓					✓
Family-Friendly Units	👍	👍/✓					✓
General Residential Amenities	👍						✓
Affordable Units (rental)		✓	👍	👍/✓	X	👍	
Affordable Units (condo)		✓		👍/✓	👍	👍	
Ownership Units		✓					X

👍 = already in place or in process ✓ = possibility to study

👍/✓ = in place but could be enhanced X = prohibited

Unit Mix and Family-Friendly Units: Emeryville's development bonus system provides points for family-friendly housing in residential projects, and specifies that such units must be three-bedroom or larger and must comply with the City's design guidelines for family-friendly units. To date, no projects have taken advantage of this provision, although several developers have expressed interest in it. The City Attorney advises that requiring a certain unit mix (e.g. that a minimum percentage of units must be three-bedroom or larger), and that units be designed to be family-friendly, is a legitimate exercise of the City's police power. This would require passage of an ordinance to amend the Planning Regulations, which are part of the Emeryville Municipal code. (Revisions to the City's Family Friendly Design Guidelines are currently under consideration by the Planning Commission, and are expected to be presented to the City Council for approval in May or June.)

General Residential Amenities: Certain amenities, such as a community multipurpose room and various design features like placing mailboxes on the path to units from the main pedestrian entrance, are desirable in all residential projects, not just family-friendly

ones. These are included in the General Residential section of the Emeryville Design Guidelines. The Planning Regulations could be amended to make it explicit that such guidelines apply to all residential projects.

Affordable Rental Housing: Due to recent court decisions, "inclusionary zoning" (requiring a certain affordability level in housing projects) has been significantly curtailed for rental housing, as it has been deemed a form of rent control, which is prohibited in California for new development. Nevertheless, the City can require affordable rental units if agreed to by a developer in a written agreement in exchange for the City granting regulatory incentives or concessions that result in identifiable, financially sufficient, and actual cost reductions. However, in response to the changed legal landscape and not wanting to solely depend on the willingness of the development community to provide affordable rental units in exchange for incentives or concessions, the City has enacted an affordable housing fee, whereby developers pay a certain amount towards the City's affordable housing fund (currently $20,000 per unit), or may provide on-site affordable units in lieu of paying the fee (6.9% of units at low income levels, or equivalent). The State Density Bonus Law, which has been incorporated into Emeryville's Planning Regulations, provides a density bonus in exchange for affordable units. While this program has promise for increasing the affordable housing stock, it is quite complicated and is rarely used. There is also a concept known as "voluntary inclusionary zoning", in which development over the base density is only allowed if the project includes affordable units. This approach has real potential to increase Emeryville's affordable housing stock and is discussed later in this report. The City as Housing Successor to the former Redevelopment Agency can also use its limited affordable housing funds to subsidize deeper levels of affordability in private projects, and to fund its own affordable housing projects. This is available to both rental and ownership projects.

Affordable Ownership Housing: Inclusionary zoning is still permitted for ownership housing, and Emeryville's Planning Regulations require that 20% of ownership units be affordable to moderate income households, or equivalent. The State Density Bonus law also applies to ownership housing. In addition, the City may wish to consider including ownership housing in any "voluntary inclusionary zoning" program as a means of providing more affordable units in ownership housing.

Ownership Units: The City Attorney has advised that the City may not legally require that projects be ownership versus rental. However, similar to the "voluntary inclusionary zoning" concept for affordable units, the City may enact incentives for ownership housing by providing that a certain percentage of units must be owner-occupied in order to qualify for a density bonus.

DISCUSSION/ANALYSIS

Family-friendly housing, affordable housing, and ownership housing are closely interrelated, but, to better understand each issue, and because different tools are needed to address each one, they are discussed separately below.

Family Friendly Housing

Two main reasons are commonly cited for wanting to attract more families with children to Emeryville. One is to promote a more "interesting" demographic mix by countering the trend towards smaller childless households, and the other is to support the Emery Unified School District and the heavy investment that the City and School District have made in the Emeryville Center of Community Life. Stories abound of young couples who are forced to move out of Emeryville when they have children because they cannot find housing suitable for their growing families or those who do so voluntarily over concerns about the quality of education their child will receive.

To explore these issues, staff has compiled demographic data from the U.S. Census and enrollment data from the Emery Unified School District, which is discussed below.

Demographic Mix

The demographics of Emeryville are quite different from most other cities. The households are smaller, there are more people living alone, and there are fewer families with children than in virtually any other city in the Bay Area, or even the state or nation. Table 3 compares key household characteristics in Emeryville to other local cities, Alameda County, the Bay Area, California, and the nation. Emeryville's average household size is less than 2.0, more than half of households are single people living alone, and only one-eighth of households are families with children, compared with about 30% in the Bay Area, state, and nation. Barely six percent of Emeryville's residents are school children, compared with 16% in the Bay Area, and about 18% in California and nationally.

TABLE 3: HOUSEHOLD CHARACTERISTICS

	Average household size	Percent single person households	Families with children as percent of all households	Residents enrolled in grades K-12
Emeryville	1.73	53.5%	12.5%	6.1%
Alameda	2.48	31.0%	28.2%	14.7%
Albany	2.59	22.4%	43.7%	18.3%
Berkeley	2.27	36.8%	16.8%	9.4%
Oakland	2.52	35.8%	25.2%	15.5%
Piedmont	3.00	11.0%	44.6%	24.3%
Alameda County	2.76	26.9%	31.3%	16.4%
San Francisco	2.31	38.7%	16.7%	9.1%
Bay Area	2.72	26.6%	30.4%	16.3%
California	2.94	24.2%	32.7%	18.6%
United States	2.63	27.5%	29.6%	17.8%

Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Average

Emeryville's housing stock is likewise different from other cities. There are far more units in multi-unit structures, more studio and 1-bedroom units, and fewer 2-bedroom, 3-bedroom, and larger units, as illustrated below in Table 4.

This is mainly due to Emeryville's history as a former industrial city with large parcels that were previously occupied by massive factories, warehouses, and other industrial uses. As they redeveloped, these parcels lent themselves to large commercial uses such as Pixar, Novartis, and the EmeryStation complex, or large residential developments. While subdivisions with new single family homes suitable for families with children are common in the suburbs, virtually no new single family homes have been built in Emeryville since the early twentieth century. Indeed, this is the case in virtually all inner urban core areas, not just Emeryville. Combined with the close proximity of Emeryville to employment centers in San Francisco, Oakland, and Berkeley, this has led to a population that is predominantly childless.

TABLE 4: DWELLING UNIT CHARACTERISTICS

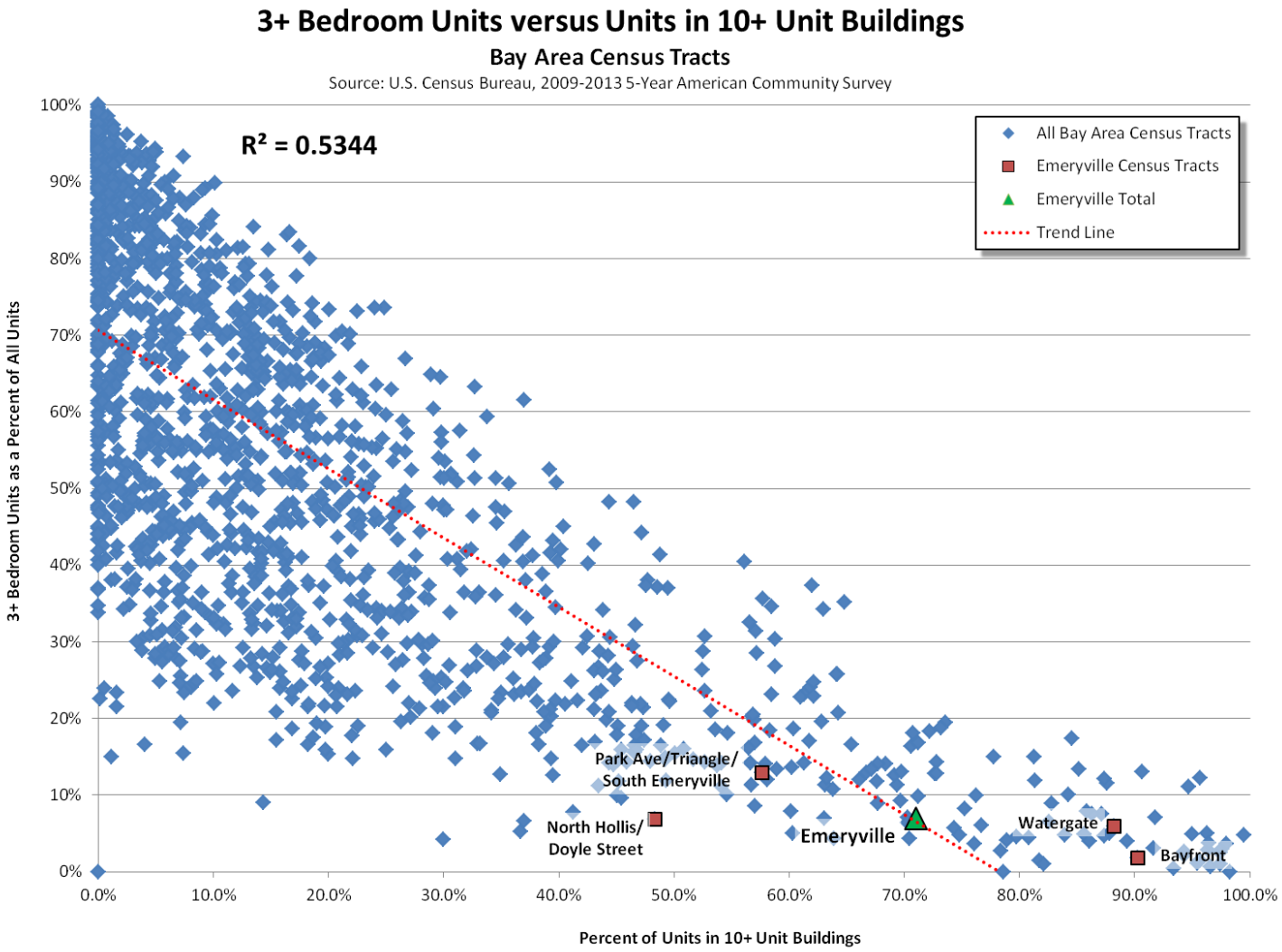
	Average Bedrooms Per Unit	Studio and 1-bedroom units as percent of all units	2+ bedroom units as percent of all units	3+ bedroom units as percent of all units	Units in 10+ unit buildings as percent of all units
Emeryville	1.34	61.6%	38.4%	7.0%	71.0%
Alameda	2.34	23.3%	76.7%	42.2%	21.9%
Albany	2.28	17.2%	82.8%	33.0%	27.8%
Berkeley	2.11	35.0%	65.0%	34.5%	24.6%
Oakland	2.10	31.8%	68.2%	35.1%	25.9%
Piedmont	3.44	4.3%	95.7%	82.8%	0.9%
Alameda County	2.48	21.5%	78.5%	49.6%	21.2%
San Francisco	1.86	40.5%	59.5%	28.1%	35.8%
Bay Area	2.55	19.9%	80.1%	52.9%	19.4%
California	2.58	17.7%	82.3%	54.3%	16.8%
United States	2.69	13.3%	86.7%	60.0%	13.0%

Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Average

Starting with the 1,249 unit Watergate complex on the peninsula in the early 1970s, residential development in Emeryville over the last several decades has been almost exclusively comprised of large buildings with 10 or more units. To better understand the implications of this development pattern for Emeryville's demographic mix, staff has conducted a regression analysis[1] of a number of different variables, using all Census Tracts in the Bay Area (of which there are approximately 1,580) with data from 2009-2013, the most recent U.S. Census American Community Survey five-year averages.

[1] Regression analysis is a statistical method for comparing two variables to determine whether they appear to be related. A series of data points are plotted on an x-y graph, where one variable is represented by x and the other is represented by y. This is sometimes called a "scatter chart" because the dots appear scattered on the page. A "trend line" through these dots indicates the "closest fit" of the points to a linear equation. The degree to which the variables appear to be related (that is, the degree to which they fit the trend line) is expressed by a "correlation coefficient", often represented as R^2. If there is no correlation, and the dots appear totally random, R^2 equals 0. If there is perfect correlation, and the dots appear to all lie on the trend line, R^2 equals 1. If the correlation is negative, that is, one variable increases as the other decreases, R^2 is expressed as a negative number between 0 and 1. Usually R^2 is taken to three or four decimal places to differentiate between various degrees of correlation. For example, an R^2 value of 0.3594 would represent a moderate degree of positive correlation, while an R^2 value of -0.8372 would represent a strong negative correlation. There is no hard and fast rule about how large an R^2 value needs to be before a relationship is established; it depends on the type of data being analyzed. But certainly larger R^2 values indicate a higher degree of correlation than lower values. And the more data points in the universe of data being analyzed, the more reliable the results. This is why all Census Tracts in the Bay Area (1,580) were used for this analysis.

FIGURE 1



An example of such a regression analysis is shown in Figure 1. This illustrates the percent of units with three or more bedrooms versus percent of all units in buildings with 10 or more units. As this diagram illustrates, the more units that are in bigger apartment and condominium buildings, the fewer units tend to have three or more bedrooms. The correlation is moderately strong, -0.5344, meaning that size of building is a fairly reliable indicator of dwelling unit size. Note that Emeryville falls right on the "trend line", meaning that the percent of 3+ bedroom units in Emeryville, about 7%, is what would be expected for a city with about 70% of its units in 10+ unit buildings.

Staff has performed similar analyses on all of the characteristics listed above in Tables 3 and 4 to determine the extent to which they are predicted as a result of the high percentage of units in large apartment and condominium buildings. The results are summarized below in Table 5.

TABLE 5: VARIABLES CORRELATED WITH 10+ UNIT BUILDINGS

Variable	Correlation coefficient	Predicted value	Actual value
Average Household Size	-0.2387	2.02	1.73
Percent single person households	+0.4288	47.5%	53.5%
Families with children as percent of all households	-0.1844	17.9%	12.5%
Residents enrolled in grades K-12	-0.2484	8.5%	6.1%
Average bedrooms per unit	-0.5918	1.30	1.34
Studio and 1-bedroom units as percent of all units	+0.7303	58.0%	61.6%
2+ bedroom units as percent of all units	-0.7303	42.0%	38.4%
3+ bedroom units as percent of all units	-0.5311	6.5%	7.0%

Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Average

As this table illustrates, most of the household and dwelling unit characteristics in Tables 3 and 4 are close to what the regression analysis would predict, although some are closer than others. Of particular note are the numbers for families with children. The data would suggest that Emeryville should have about 17.9% families with children, but in fact there are only 12.5%. However, the correlation for this variable is somewhat weak (-0.1844) meaning that the high percentage of large apartment and condominium buildings in Emeryville should not be a deterrent to attracting more families with children. In fact, the data shows that there are some Census Tracts in the Bay Area that have even more units in large buildings than Emeryville, while having over 35% families with children, almost triple Emeryville's rate. So there is definitely room for more families with children, even with Emeryville's larger residential buildings. Similarly, the data predicts that about 8.5% of Emeryville residents should be school children, while the actual number is only 6.1%. But again, the correlation is fairly weak (-0.2484), implying that there is room for more school age children. Again, the data shows that there are Census tracts in the Bay Area that have even more units in large buildings than Emeryville, and with 10% to 15% school children. So it is certainly possible to have more school children, despite the preponderance of large residential buildings.

Later in this report, the correlation between families with children and dwelling unit size will be explored, in order to determine an appropriate unit mix to strive for in future development projects. First, however the issue of the school district will be discussed.

Emery Unified School District Enrollment Levels

Phase I of the Emeryville Center of Community Life Project (ECCL), currently under construction and due to open in early 2016, is designed for a maximum of 900 K-12 students, and it would be desirable if a high percentage of those were Emeryville residents. This implies that the number of school children living in Emeryville will need to increase. This section explores that issue.

The Emery Unified School District (EUSD) has about 700 students in grades kindergarten through 12, of which about half are interdistrict transfer students who do not live in Emeryville. According to data from the School District, there were 725 students enrolled in grades K-12 in the 2013-14 school year, of which 362 were Emeryville residents and 363 were interdistrict transfers. However, in the current 2014-15 school year, enrollment has dropped to 678; although there was an increase of 36 in students who were Emeryville residents, this was more than offset by a decrease of 83 in interdistrict transfer students. This may be partly due to the high school's temporary relocation to Santa Fe Elementary School in Oakland during construction of ECCL.

In 2008, the school district hired consultants Lapkoff & Gobalet Demographic Research, Inc. to prepare a *Demographic Analysis and Enrollment Forecast for the Emery Unified School District*. Data and findings from this report are included in the discussion below. The full report is attached for reference. (See Attachment 1.)

Figure 2 shows EUSD enrollment levels from 1981 to the present. Students who are residents of Emeryville and interdistrict transfers are shown from 1999 on; no data is readily available before that. Of note is a sharp increase in total enrollment between the fall of 1996 and fall of 1997. The consultants are hard pressed to explain this, attributing it possibly to a sudden increase in interdistrict transfers, or reporting errors. Another possibility is that the pre-1997 numbers do not include interdistrict transfers, in which case the total enrollment numbers between 1981 and 1996 would be higher, making the recent declines more significant. Assuming that interdistrict transfers are included in the earlier numbers, total enrollment grew slightly from 600 to 678 between 1981-82 and 2014-15, a 13% increase in 33 years. From the high of 991 students in the 2001-02 school year to the present, total enrollment has dropped by about 32% in the past 13 years. During the same period, resident enrollment has dropped about 25%, from 530 to 398, and interdistrict transfers have dropped about 39%, from 461 to 280. For the past ten years, resident enrollment levels have held fairly steady at about 400 students, while interdistrict transfers have fluctuated more. The consultants noted that many students move into and out of the district. For example, they note that 20% of out-of-district students between 1999 and 2007 started out as Emeryville residents, and 5% of out-of-district students subsequently moved into the district.

FIGURE 2

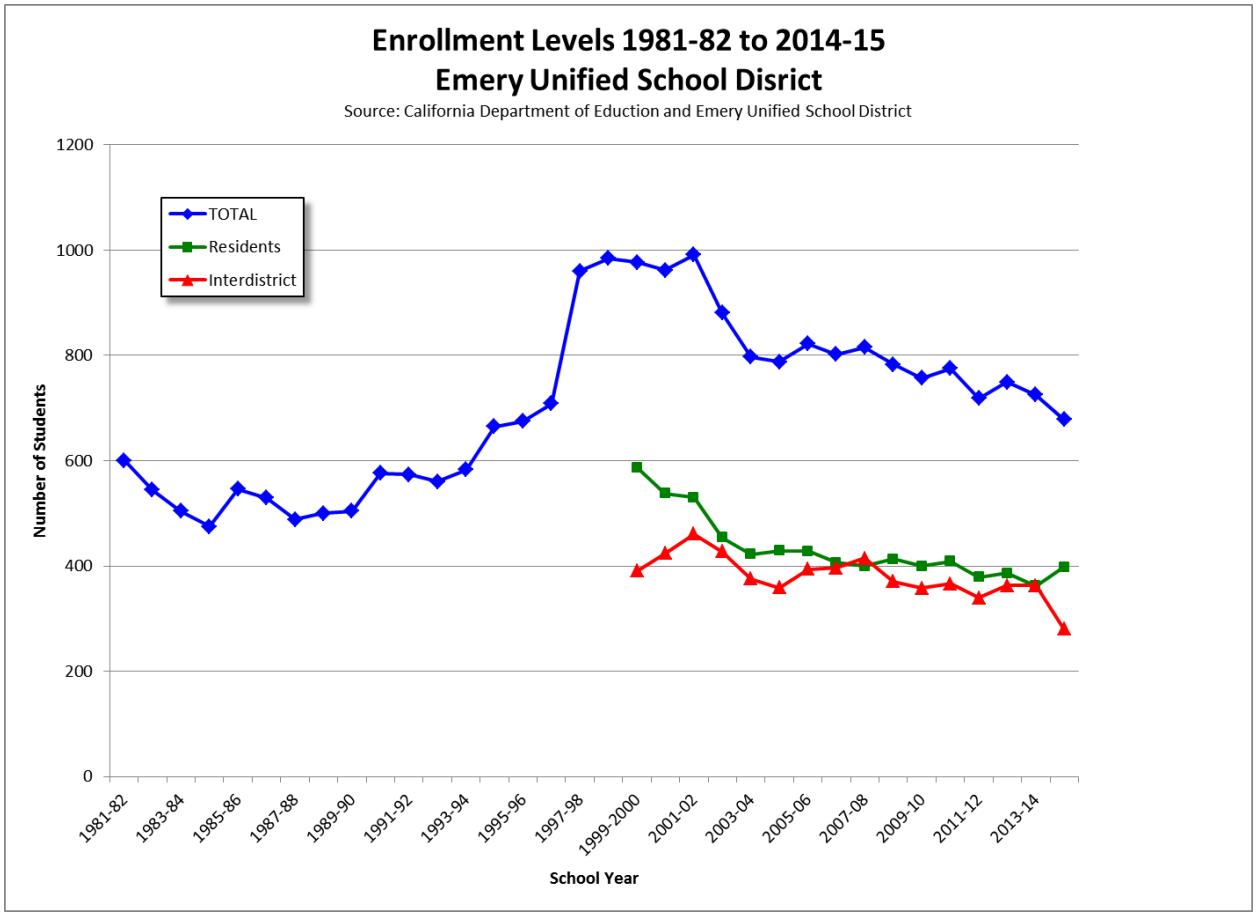
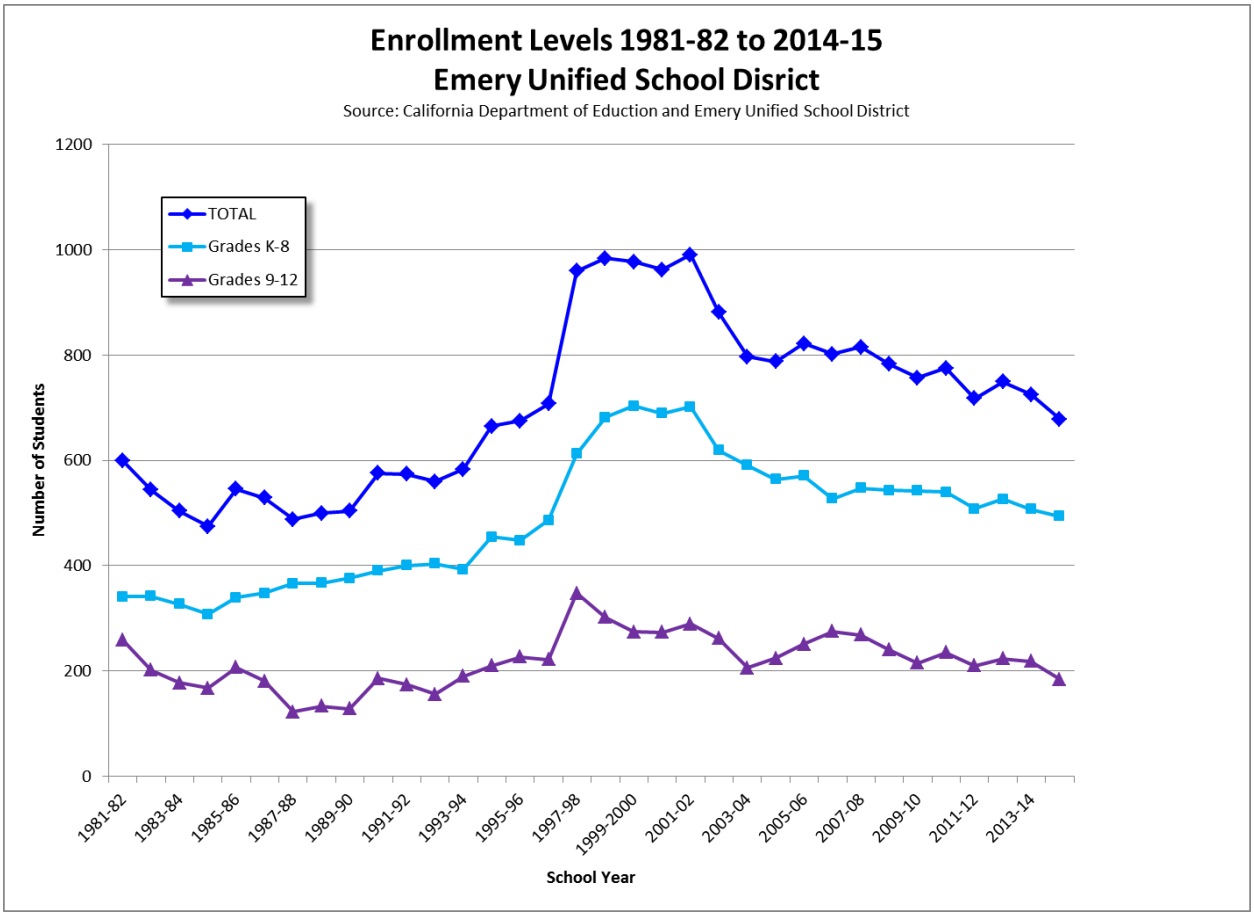


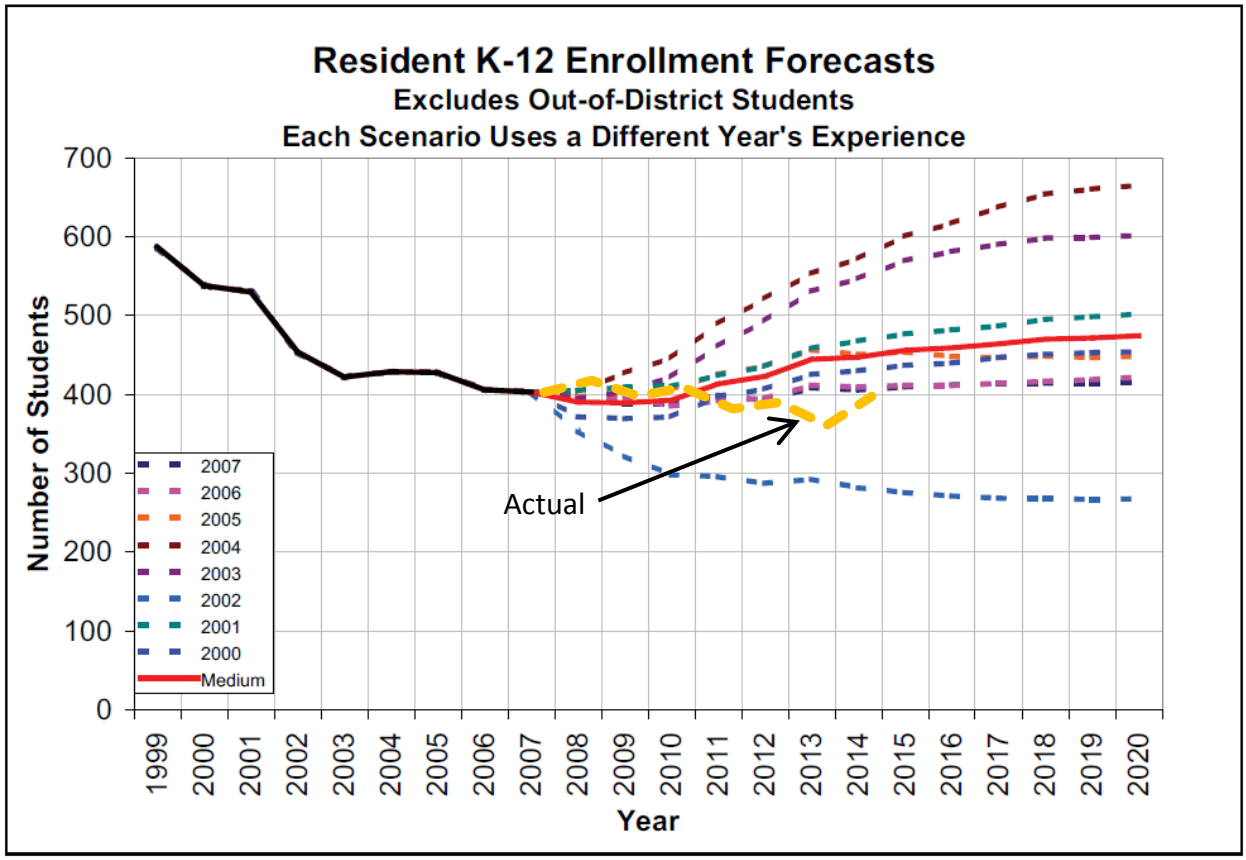
Figure 3 shows enrollment levels broken down by elementary and secondary grade levels. As noted above, total enrollments increased about 13%, from 600 to 678 students in the 33 years from 1981-82 to the present. During the same period, elementary enrollment (grades K-8) grew by about 45%, from 341 to 494, while high school enrollment (grades 9-12) dropped by 29%, from 259 to 184. In 1981-82, high school students accounted for about 43% of total EUSD enrollment; today they account for about 27%.

FIGURE 3



The consultants developed eight alternative forecasts of future resident enrollment levels, each based on a different historical year's patterns for its assumptions. For example, one forecast was based on the assumption that the 2000-01 grade progressions and fall 2001 "kindergarten-to-birth ratio" would exist for the forecast period, while another used the 2001-02 grade progressions and "kindergarten-to-birth ratio", and so on. A "Medium Forecast" used the average grade progressions and average "kindergarten-to-birth ratio". These forecasts are shown in Figure 4. Staff has superimposed on this chart the actual enrollment levels between 2007, the base year for the forecasts, and the present. As this shows, the actual enrollments have been below the Medium Forecast and all but one of the eight other scenarios.

FIGURE 4



Lapkoff & Gobalet note that test scores are an important factor in attracting students to a school district. Table 6 shows the Academic Performance Index (API) test scores for Alameda County schools for the 12 school years from 2002 to 2013. Emery, Oakland, and Hayward have consistently placed in the lowest three every year, except 2005 when San Lorenzo replaced Hayward as third lowest. In four of these years Emery was the lowest, in five years it was second lowest, and in three years, including 2012 and 2013, it was third lowest, beating Oakland and Hayward. However, scores have been improving, and Emery shows the third greatest improvement in scores in the county from 2002 to 2013, behind Oakland and Sunol.

The consultants' report also includes a detailed analysis of existing and anticipated future housing in Emeryville, and the "student yield" that may be expected from this housing. Their analysis includes two scenarios: a "Full Housing Forecast" that includes all of the approved and proposed residential developments, and a "Conservative Housing Forecast", which assumed that only a subset of projects would actually be built. Under the Full Housing Forecast, 83 additional EUSD resident students were projected by 2014, while under the Conservative Housing Forecast, 38 new resident students were projected. Most of the projects in the Conservative Housing Forecast were, in fact,

built and occupied by 2014, but actual enrollment of EUSD resident students did not increase, but rather decreased slightly, from 400 in 2007-08 to 398 in 2014-15.

TABLE 6: ACADEMIC PERFORMANCE INDEX (API) TEST SCORES, ORDERED BY 2013 SCORES

School District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change 2002-2013
Hayward Unified	623	633	652	679	681	674	688	689	707	716	718	721	+98
Oakland Unified	568	592	601	634	651	658	676	693	719	726	728	721	+153
Emery Unified	589	588	627	665	665	656	670	706	709	700	730	722	**+133**
Anna Yates Elementary	--	*650*	*684*	*720*	*732*	*700*	*732*	*772*	*774*	*780*	*814*	*774*	--
Emery Secondary	--	*587*	*572*	*618*	*618*	*626*	*622*	*653*	*645*	*636*	*641*	*625*	--
San Lorenzo Unified	652	669	661	674	694	700	702	722	739	738	748	739	+87
San Leandro Unified	665	682	678	697	696	710	715	714	730	737	742	740	+75
New Haven Unified	712	734	730	742	756	754	768	772	777	775	774	775	+63
Newark Unified	700	708	710	716	727	739	753	747	762	771	784	795	+95
Berkeley Unified	719	731	722	736	752	746	759	767	785	791	811	822	+103
Livermore Valley Joint Unified	769	774	760	785	792	790	793	815	822	832	847	840	+71
Alameda City Unified	733	755	758	784	807	805	810	822	833	841	847	853	+120
Castro Valley Unified	796	811	809	810	826	830	843	845	854	865	870	867	+71
Fremont Unified	797	817	817	833	839	836	849	859	868	876	885	891	+94
Albany City Unified	845	862	854	858	862	860	850	864	878	882	892	894	+49
Dublin Unified	781	802	804	816	827	833	839	854	878	884	901	904	+123
Pleasanton Unified	841	858	861	877	881	893	895	901	906	906	915	910	+69
Piedmont City Unified	900	905	902	920	917	915	916	921	925	930	940	934	+34
Sunol Glen Unified	798	818	821	857	874	879	878	886	909	939	936	937	+139

Rank in Alameda County: **RED** = lowest **BLUE** = second lowest **GREEN** = third lowest

Source: California Department of Education

The report notes: "We were asked to consider what would happen to Emery's enrollments if Emeryville became substantially more attractive to families with children. On the school district's part, this would mean a substantial increase in test scores, and perhaps other programs that, if publicized, would increase the school district's attractiveness. On the city's part, this might mean an increase in parks, programs for youth, and housing that is more attractive to families with children."

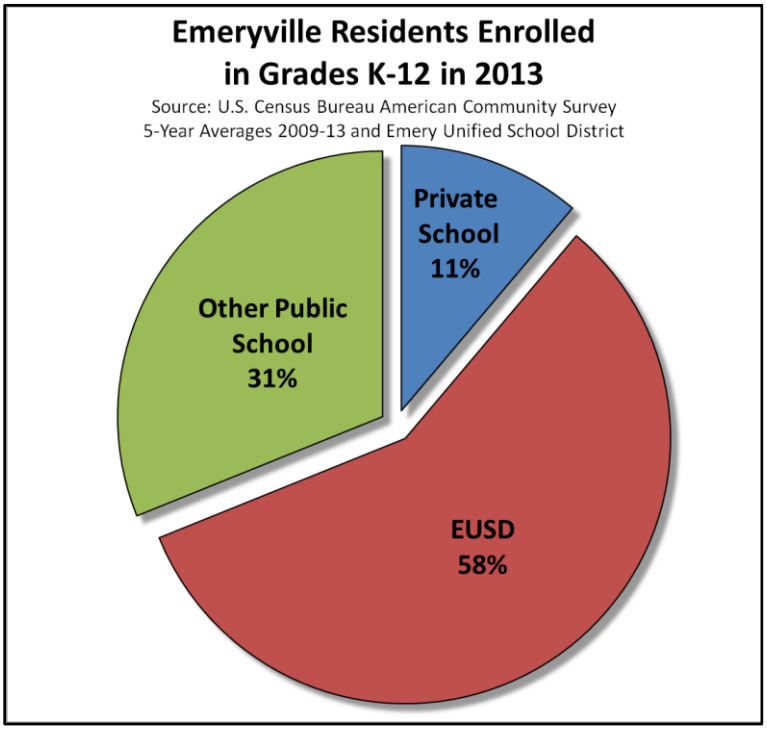
Concerning the importance of large apartments and condominium buildings in producing student yields, the report notes: "We wondered whether the housing mix in

Emeryville made it so unattractive to families with children that even high test scores would not draw families to the District's schools. The city has a large number of condominiums and lofts that are not particularly appealing to large households. We agree with this sentiment for the most part, especially with respect to lofts. In most other districts, we have found low yields in condominiums (less than .10 students per unit). We believe the low yield is because families need substantial resources to purchase condos: families with the financial wherewithal to *buy* a condominium (but not a house) might well choose to *rent* a house instead. We have found that as condominium developments age, units are increasingly likely to be rentals. When this happens, the possibility of more families living in the condominiums increase, for the developments are now like apartment complexes. Finally, Albany Unified has student yields around .20 in the high-rise condominiums on Pierce Street. It is possible for such units to contain many students, but the draw to the district must be strong." As noted above in the section on Demographic Mix, Census data suggests that the high percentage of large apartment and condominium buildings in Emeryville should not be a deterrent to attracting more families with children.

Other factors affecting EUSD enrollment include Emeryville residents of school age that either attend private schools or transfer to public schools in other districts. The Lapkoff & Gobalet report briefly discusses private school enrollment, noting that the rate of private school attendance among Emeryville residents was lower than the County average, based on Census data from 1970 through 2000. The most recent Census data from the 2009-2013 American Community Survey shows that Emeryville's private school attendance rate of 11.2% is slightly higher than Alameda County (10.5%), the same as Oakland, and lower than Berkeley (21.3%) and San Francisco (25.5%).

The Lapkoff & Gobalet report does not address the issue of Emeryville residents transferring out to other public school districts. Their report notes: "children living in Emeryville but attending private schools, charter schools, or a different public school district, are not included in our data, since the District does not have addresses (and other information) about these students." However, this information can be inferred by comparing EUSD enrollment data with U.S. Census data. For example, the 2009-2013 American Community Survey reports that there were 627 Emeryville residents enrolled in grades K-12, of which 70 (11.2%) attended private school and the remaining 557 (88.8%) attended public school. However, data for the 2013-14 school year indicates that only 362 Emeryville residents were enrolled in EUSD. This leaves 195 Emeryville residents enrolled in public K-12 schools, but not enrolled in EUSD. Presumably, these residents are transferring out of Emeryville to other public school districts such as Oakland and Berkeley, possibly including charter schools. This breakdown is illustrated in Figure 5. Of course the Census data and EUSD data are not completely comparable, since they cover slightly different time periods and the EUSD data represents a complete count while the Census is sample data. Nonetheless, this data does suggest that a significant percentage of Emeryville school children may be transferring out to other public school districts.

FIGURE 5



The conventional wisdom is that, to help boost EUSD enrollment levels, more families with children must be attracted to Emeryville, which in turn means that more dwelling units with three or more bedrooms must be developed. However, as the data in Table 7 indicates, there is not always a direct correlation between these factors. Since 1990, the number of 3+ bedroom units, families with children, and residents enrolled in grades K-12 have been steadily increasing. During the same timeframe, EUSD enrollment levels have fluctuated. In the 10-year period between 1990 and 2000, overall enrollment increased by about 67%; however, in the following 13 years between 2000 and 2013, enrollment dropped by almost 25%.

TABLE 7: FAMILY AND SCHOOL-RELATED TRENDS 1990-2013

				Change	
	1990	2000	2013	1990-2000	2000-2013
3+ Bedroom Units	251	303	403	+20.7%	+33.0%
Families with Children	125	500	800	+300.0%	+60.0%
Residents Enrolled in K-12 School	511	525	657	+2.7%	+25.1%
EUSD K-12 Enrollment*	576	962	725	+67.0%	-24.6%

* Includes both residents and interdistrict transfers.

Source: U.S. Census and Emery Unified School District

As noted in the Lapkoff & Gobalet report, developing housing that is more attractive to families with children is only one factor in increasing EUSD enrollment levels. Other factors include an increase in parks and programs for youth, which are being actively pursued by the City, a substantial increase in test scores, and other programs to increase the school district's attractiveness. If all of these factors come to pass, EUSD will hopefully be able to attract not only new households with children to Emeryville, but also students who already live here but are currently pursuing other options.

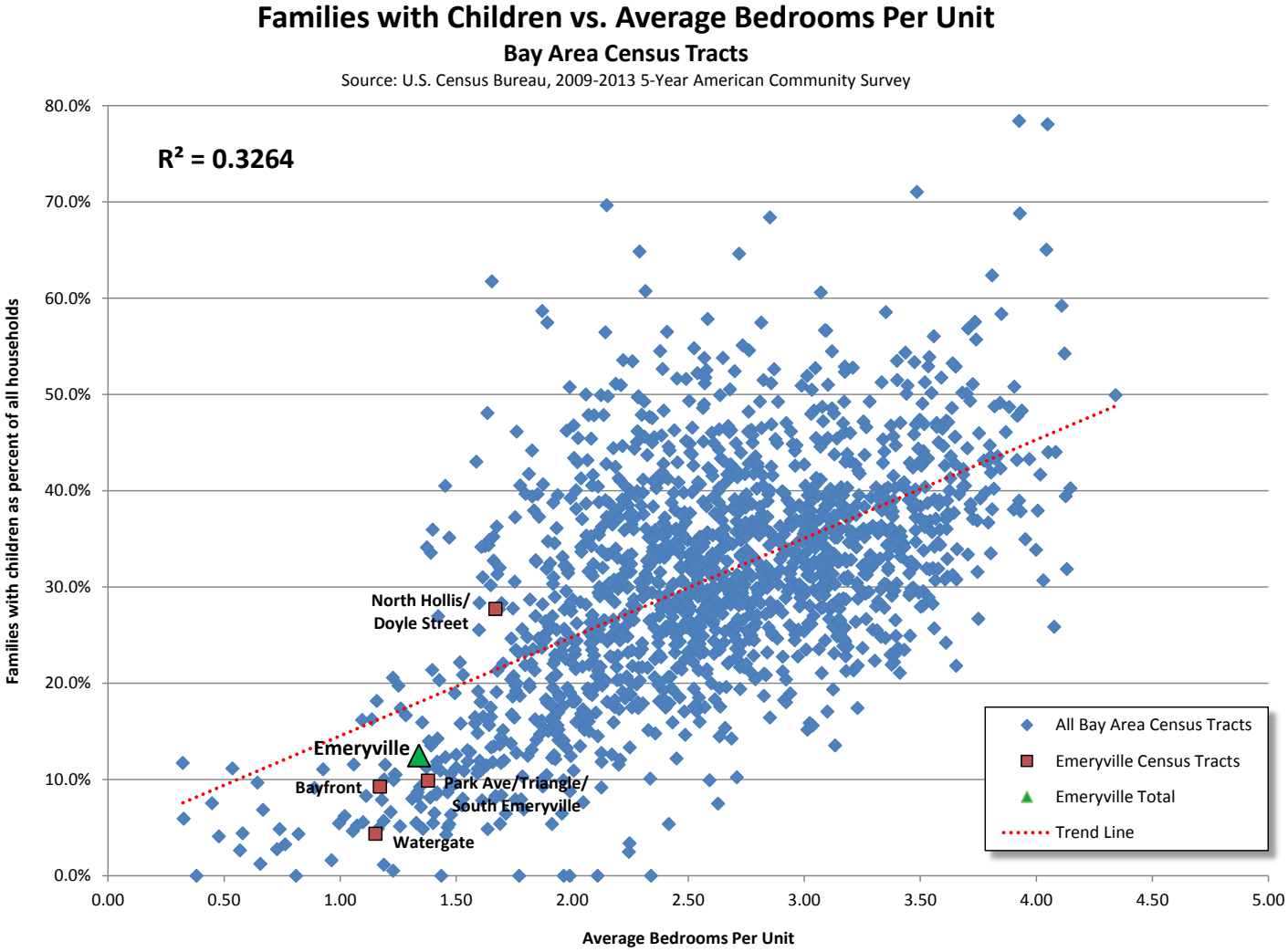
Unit Mix

The Lapkoff & Gobalet report does not discuss unit size (i.e. number of bedrooms) as a factor in attracting families with children. Rather, they use "student yields" per dwelling unit to project future enrollment levels. For each forecast scenario, they describe three alternatives: Alterative 0, Alternative 1, and Alternative 2. Alternative 0 is described as "enrollments based on the District's average student yield during the last nine years, which are greater than current yields [2008]." This results in a yield of about 0.07 to 0.08 students per dwelling unit. Alternative 1 "uses *slightly* higher student yields in condominiums and large apartments, but keeps all other yields the same as in Alternative 0. These alternative yields are what we would expect if Emery's test scores exceeded those in Oakland, Hayward, and San Leandro." This results in a yield of about 0.11 students per dwelling unit. Alternative 2 "uses *substantially* higher student yields. These are like yields we have measured in very popular districts, such as Los Altos, Palo Alto, and Albany. These districts have very high test scores, particularly compared with those in neighboring districts. Perhaps the community also would need to be more family-friendly, with amenities for families such as parks, programs for families, and family shopping areas and neighborhoods." Alternative 2 yields are about 0.18 to 0.19 students per dwelling unit.

Thus, compared to the current situation (in 2008), Alternative 1 yields are about 60% higher while Alternative 2 yields are more than double. Recognizing that this is based on test scores and city attributes as well as housing characteristics, the trick is to try to translate this into dwelling unit mix. Currently, families with children represent about 12.5% of all Emeryville households. Increasing the number of families with children expected in new apartment and condominium buildings by 60% (the difference between Alternative 1 and Alternative 0) seems like a reasonable place to start. This would result in 20% families with children in new developments. Alternatively, the number of families with children could be increased by 100% (i.e. doubled), to 25%, or even by 140% (that is, times 2.4), to 30%, to reach the student yields of Alternative 2. Staff has analyzed the most recent Census data using the regression analysis technique described above to determine the unit mix that would be required for each of these scenarios.

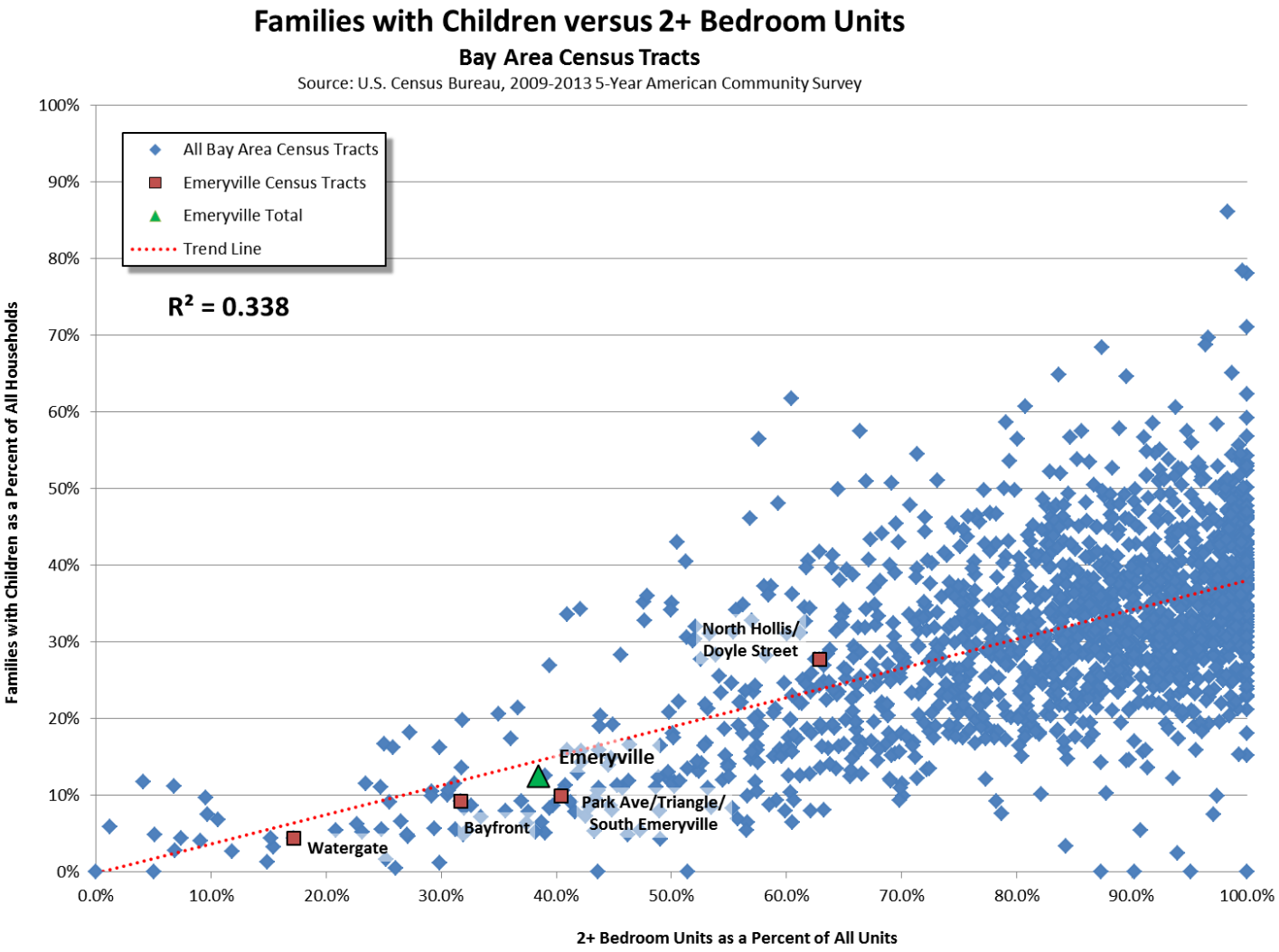
To start, staff plotted average number of bedrooms per unit versus percent of households that are families with children for all Bay Area Census Tracts to determine if these factors are related. The results are shown in Figure 6.

FIGURE 6



As expected, this shows a moderate positive correlation (R^2 =0.3264). Given Emeryville's average unit size of 1.34 bedrooms, about 18% families with children would be expected, while the actual figure is only 12.5% (i.e. below the trend line). In fact, the only Emeryville Census tract in which the actual percentage of families with children is higher than expected (i.e. above the trend line) is in the North Hollis/Doyle Street area, which has 27.7% families with children while only 21.4% would be expected. In general, it can be seen that as average number of bedrooms increases, the percent of families with children likewise increases.

FIGURE 7



Next, staff looked at units with two or more bedrooms and three or more bedrooms to see how those factors correlate with families with children. These results are shown in Figures 7 and 8.

Figure 7 indicates that there is a moderate positive correlation (R^2 =0.3380) between units with two or more bedrooms and families with children. Emeryville has about 38.4% units with two or more bedrooms, which would predict about 14.5% families with children. As can be seen, Emeryville is slightly below the trend line, at 12.5% families with children. This chart illustrates that, in general, the percentage of families with children is likely to increase as the percentage of units with two or more bedrooms increases, up to about 36% families with children when all units have two or more bedrooms.

FIGURE 8

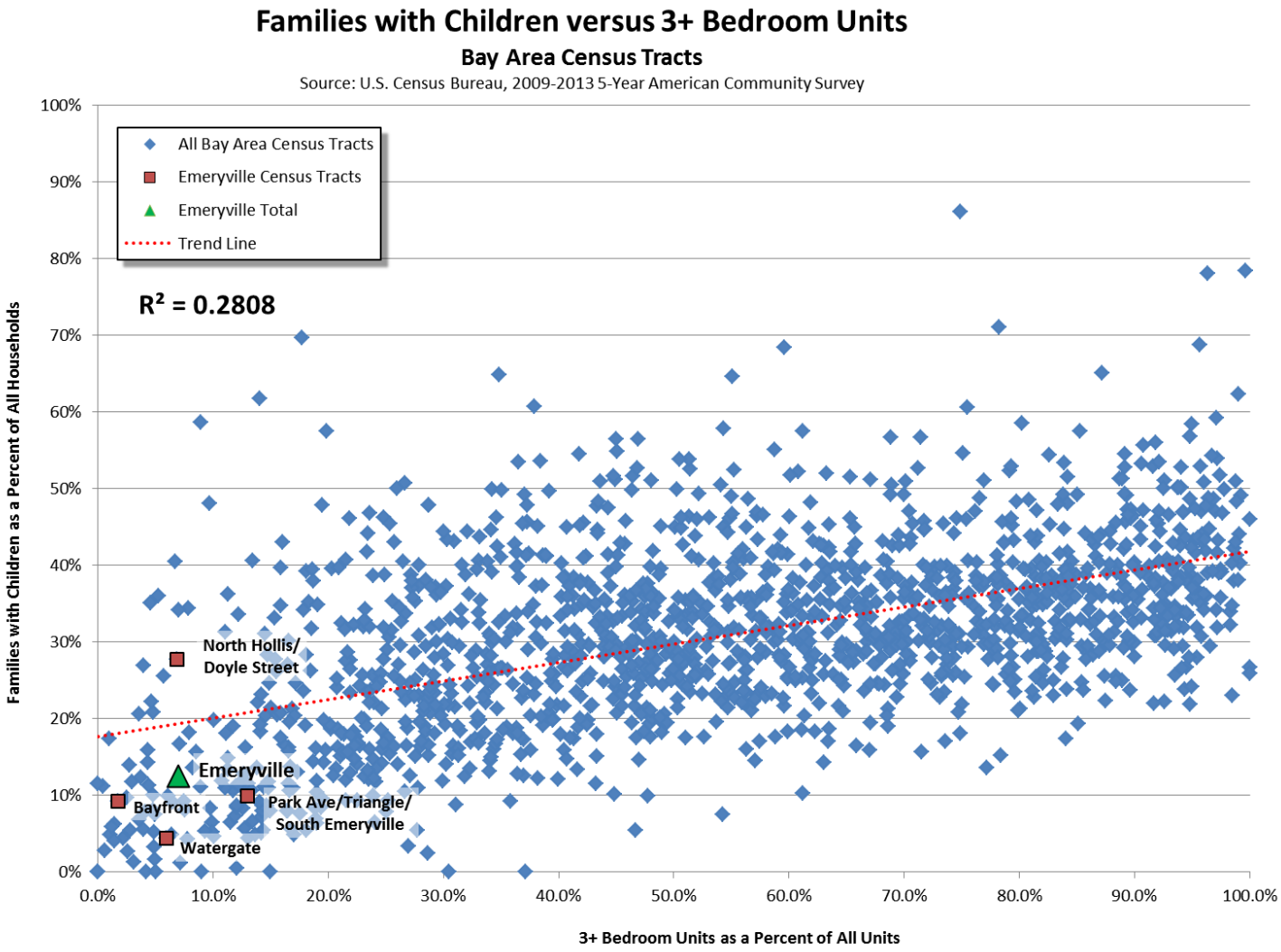


Figure 8 shows the relationship between families with children and units with three or more bedrooms. In this case, Emeryville is well below the trend line; its 7.0% units with three or more bedrooms would predict about 19.3% families with children instead of the actual 12.5%. Note also that the correlation coefficient of 0.2808 indicates a weaker relationship between families with children and units with three or more bedrooms as compared to two or more bedrooms. The data in Figure 8 is not as tightly clustered as the data in Figure 7. In fact, there are some Census tracts with more than 50% units with three or more bedrooms, but with fewer families with children than Emeryville, while at the same time there are Census tracts with less than 10% units with three or more bedrooms, but almost 30% families with children, such as the North Hollis/Doyle Street area of Emeryville.

These results suggest that it is important to consider both units with two or more bedrooms, and units with three or more bedrooms when attempting to attract families

with children. Many families only have one child, and for these families a three bedroom unit may be too large and unaffordable. At the same time, units with three or more bedrooms would be appropriate for those families with two or more children, and who are able to afford larger units for their larger families.

As discussed above, an appropriate target for families with children in new development in Emeryville might be 20% (a bit higher than Berkeley and San Francisco), but targets of 25% (similar to Oakland) or 30% (similar to Alameda County, the Bay Area, and the U.S. average) could also be considered. These would be 60%, 100% and 140% higher than the current ratio of 12.5%, respectively. The percentage of units with two or more bedrooms and units with three or more bedrooms that would be necessary to meet these targets, as suggested by the trend lines in Figures 7 and 8, are shown in Table 8.

TABLE 8: UNIT MIX NEEDED TO MEET VARIOUS FAMILY WITH CHILDREN TARGETS

Families with Children as Percent of All Households	2+ Bedroom Units*	3+ Bedroom Units
12.5% (existing)	38.4%	7.0%
20% (60% increase)	50%	10%
25% (100% increase)	65%	30%
30% (140% increase)	80%	50%

* Inclusive of 3+ bedroom units.

These figures are rounded to the nearest five percent. Note that the 2+ bedroom figures are inclusive of the 3+ bedroom figures. In other words, to attain 20% families with children, it would be necessary to have 50% of units at two bedrooms or larger, including 10% of units at three bedrooms or larger. This could be accomplished by having 40% two-bedroom units and 10% three bedroom or larger units. Similarly, to attain 30% families with children, it would be necessary to have 80% of units at two bedrooms or larger, including 50% of units at three bedrooms or larger. This could be accomplished with 30% two-bedroom units and 50% three bedroom or larger units.

Unit Size

The U.S. Census does not contain information on dwelling unit size in square feet, so data to compare Emeryville's unit sizes with other cities is not readily available. As noted above in Table 1, average unit sizes over the last 20 years have been 426 square feet for studios, 818 square feet for 1-bedroom units, 1,186 square feet for 2-bedroom units, and 1,231 square feet for three bedroom units. In the most recent draft of the Family-Friendly Design Guidelines, presented to the Planning Commission on February 26, 2015, it was suggested that two-bedroom units should be a minimum of 900 square feet and three-bedroom units should be a minimum of 1,100 square feet. A speaker from the public noted that these recommended minimum unit sizes are larger than

typically allowed by funders for affordable housing. Santa Cruz's Affordable Housing Guidelines specify minimum unit sizes of 400 square feet for studios, 550 square feet for one-bedroom units, 850 square feet for two-bedroom units, and 1,050 square feet for 3-bedroom units.

Even without specifying a minimum unit size, the Family Friendly Design Guidelines will result in de facto minimum sizes, taking into account the guidelines for ample living and dining areas, hallways for children to play, indoor storage space, and so forth. The sample unit plans illustrated in the February draft ranged from 1,100 to 1,280 square feet for two-bedroom units and from 1,182 to 1,360 square feet for three-bedroom units.

Given that the average size of units developed in Emeryville over the last 20 years are within the range of those illustrated in the Family Friendly Design Guidelines and well above the suggested minimums mentioned above, specifying minimum unit sizes should not pose an issue for the development community.

Family Friendly Design Guidelines

The Emeryville Design Guidelines were adopted by the City Council on December 7, 2010. The Residential section includes a general policy about family-friendly housing, but nothing specific. In 2012, Economic Development and Housing (EDH) staff developed a separate, more detailed set of design guidelines for family housing. The EDH guidelines included policies specifically addressing family-friendly residential projects, including site design for the entire project, as well as unit design for individual living spaces. These guidelines were used in the Request for Proposals for development of an affordable housing project at 3706 San Pablo Avenue, which was approved by the Planning Commission on January 22, 2015. In 2013, staff proposed amending the Emeryville Design Guidelines to reflect the more detailed concepts regarding family-friendly residential projects from the EDH guidelines. The Planning Commission held a public hearing on staff's proposed guidelines on June 27, 2013, and directed staff to develop them further. Staff then hired a consulting architect to assist with the analysis and develop sample unit plans. On May 17, 2014, the Planning Commission held a special meeting/retreat for a bus tour of four affordable family-friendly housing projects in Berkeley and Oakland. On November 18, 2014, the City Council adopted the 2015-2023 Housing Element of the General Plan, which includes a program to adopt and implement an amendment to the City's Design Guidelines that provides standards for the development of family-friendly housing, addressing site design, unit design, unit layouts, relationship of units to outdoor areas, and other unit and community features.

The most recent iteration of the proposed Family Friendly Design Guidelines was reviewed by the Planning Commission on February 26, 2015. The Commission had a number of concerns about the specifics of the proposal, but was generally supportive. Since then, staff has been working to address the Commission's concerns, and expects to present revised guidelines to the Commission for approval on April 23, 2015.

Assuming the Commission approves the guidelines at that time, they will then be forwarded to the City Council for adoption in May or June. Thus, the Family Friendly Design Guidelines are on a parallel track with the proposed regulations and incentives discussed in this report, and so are not discussed in detail here.

Discussion Questions

Given the information provided above, staff seeks the Council and Commission's direction on the following questions related to family friendly housing:

- Should a minimum percentage of 2+ bedroom and/or 3+ bedroom units be required in new Multi-Unit Residential development? If so, what percentage?

- Should 2+ bedroom units (including 3+ bedroom units) be required to comply with the Family Friendly Design Guidelines? If so, should the guidelines only apply to required 2+ bedroom units, or should they also apply to additional 2+ bedroom units that are not required?

- Should minimum unit sizes be established? If so, what sizes?

- Should there be any exceptions to requirements for unit mix, family friendly design, and minimum unit size? Is so, what should be the basis for such exceptions?

Affordable Housing and Ownership Housing

Affordable Housing

Housing prices have been increasing rapidly in the Bay Area in general, and in Emeryville in particular over the last several years. Table 9, from the Housing Element of the General Plan, shows price increases between 2010 and 2013, averaging over 10% per year for a 2-bedroom unit. In the same time period, median home sales prices in Emeryville increased from $278,250 to $350,000, an average annual increase of 8.6%.

TABLE 9: AVERAGE MONTHLY RENTAL PRICE BY UNIT SIZE, 2010-2013

Number of Bedrooms	2010	2011	2012	2013	Percent Increase 2010-2013	Average Annual Increase
Studio	$1,417	$1,655	$1,664	$1,804	26%	8.7%
1 bedroom	$1,774	$1,894	$1,953	$2,231	26%	8.7%
2 bedroom	$2,183	$2,489	$2,455	$2,869	31%	10.3%
3 bedroom	$3,057	$3,190	$3,153	$3,427	12%	4.0%

Source: City of Emeryville Housing Element 2015-2023

A survey of 847 market rate units in six rental complexes in 2014 showed annual rent increases ranging from 11% for 1- and 2-bedroom units to 19-20% for 3-bedroom units and studios. Rents for designated below market rate (BMR) units are protected from these market trends, as BMR rents may only rise according to annual growth in area median incomes at the county level. The BMR designation is secured by an Affordability Agreement, which is recorded on the property and typically runs for 55 years from initial occupancy of the development.

Like all cities in the Bay Area, Emeryville has been assigned a "Regional Housing Needs Allocation" (RHNA), which is a target for housing development at various affordability levels over the next eight years (2014-2022). Emeryville's RHNA is 1,498 units, broken down by affordability levels as follows:

TABLE 10: 2014–2022 RHNA by Income Category

Income Category	Percent of AMI*	Number of Units	Percentage of Total
Extremely low	Less than 30%	138	9.2%
Very low	30% to 50%	138	9.2%
Low	50% to 80%	211	14.1%
Moderate	80% to 120%	259	17.3%
Above moderate	More than 120%	752	50.2%
Total		**1,498**	**--**

* AMI = Area Median Income

Source: City of Emeryville Housing Element 2015-2023

Compared to cities like Oakland, San Francisco, and San Jose, with RNHAs of 14,765, 28,869, and 35,080, respectively, Emeryville's allocation does not appear large. However, when geographical area is taken into account, it can be seen that Emeryville's RHNA of 1,248 units per square mile (1,498 units/1.2 square miles) is by far the highest in the Bay Area, more than double the next closest city, San Francisco, whose RHNA is 615 per square mile. This high expectation of Emeryville's housing production potential is based largely on our past performance, as indicated in Table 11.

TABLE 11: PROGRESS IN MEETING 2006-2014 RHNA TARGETS

Income Category	Percent of AMI*	RHNA	Permits Issued	Percent of RHNA Met	Bay Area Average
Very low	Less than 50%	186	115	61.8%	27.7%
Low	50% to 80%	174	9	5.2%	24.0%
Moderate	80% to 120%	219	46	21.0%	26.4%
Above moderate	More than 120%	558	683	122.4%	83.6%
Total		**1,137**	**853**	**75.0%**	**50.1%**

* AMI = Area Median Income

Source: City of Emeryville Housing Element 2015-2023 and Association of Bay Area Governments

During the last RHNA cycle, Emeryville did not meet all of its RHNA targets, but was much more successful than the overall Bay Area, meeting 75% of its total RHNA as compared to 50% for the Bay Area as a whole. Emeryville exceeded Bay Area averages for very low income and market rate (i.e. "above moderate") units, was slightly below average for moderate income units, and was well below average for low income units. Implementation of the City's Affordable Housing Set-Aside (ASHA) Program (now known as the Affordable Housing Program) and the former Redevelopment Agency's use of its Low and Moderate Income Housing Funds helped facilitate the production of 170 below market rate (BMR) housing units from 2006 to 2014. Very low-, low-, and moderate-income units were provided in the Glashaus Lofts, Adeline Place, Oak Walk, Magnolia Terrace, Parc on Powell (formerly "Parkside"), Ambassador, and Emme (formerly "64th and Christie") development projects.

Given the current very active housing market, it is expected that Emeryville will be even more successful at meeting its total 2014-2022 RHNA target of 1,498 units. In fact, there is currently more than this number of units under construction, approved, or proposed. Thus, Emeryville should have no trouble meeting the total and market rate ("above moderate") targets. The trick will be to provide BMR units at the moderate, low, very low, and extremely low income levels, since the tools of inclusionary zoning for rental projects have been constrained and Low and Moderate Income Housing Funds generated by property tax increment are no longer available.

Emeryville's previous Affordable Housing Set-Aside Program required rental housing projects to provide 9% of units at moderate income level and 6% of units at very low income, which resulted in many BMR rental units being developed over the years. However, recent court decisions have found that this amounts to a form of rent control, which is illegal for new developments in California. Thus, except for projects that receive assistance from the City, such "inclusionary zoning" is no longer allowed for rental developments. This decision did not affect ownership projects, for which Emeryville's inclusionary requirement is to provide 20% of units at the moderate level. However, no new condominium projects have been proposed recently, and even if they were, this does not address the need for units below the moderate income level.

The State's elimination of Redevelopment as of February 1, 2012 means that less money is available to the City to assist in the development of affordable housing. Previously, 20% of the Redevelopment Agency's property tax increment went to affordable housing. Since almost the entire city was in a redevelopment area, this generated millions of dollars for affordable housing. The Agency used these funds both to subsidize deeper levels of affordability in private projects, and to fund its own affordable housing projects; the most recent example of this is the Ambassador Housing project, a 69-unit, 100% affordable project completed in March 2014. The City as Housing Successor to the former Redevelopment Agency retained certain housing assets as a result of redevelopment dissolution. These assets were comprised of real property (3706 San Pablo Avenue; 36th/Adeline Parcels; 6150 Christie Avenue),

account receivables on first time homebuyer loans, and other miscellaneous funds (Supplemental Educational Revenue Augmentation Fund or SERAF; East BayBridge Housing Trust Fund). However, these funds are finite, and no on-going funding for affordable housing will be generated in the future.

In response to the elimination of these affordable housing tools, the City enacted an Affordable Housing Development Impact Fee that took effect in September 2014. This requires developers of new rental housing to pay an impact fee to the City, currently $20,000 per unit, or to provide 6.9 percent of units at the low income level. The fee for non-residential development (except certain excluded uses) is currently $4 per square foot. The fees increase every year on July 1 based on the Engineering News-Record Construction Cost Index for San Francisco. As of March 31, 2015, approximately $76,000 had been collected in affordable housing impact fees. Since no new residential projects have had building permits issued since the fee took effect six months ago, this represents non-residential projects. When new residential project begin pulling building permits, substantially more affordable housing impact fees will be generated unless the developer agrees to provide the required units on-site. However, these fees will never begin to equal the money that was previously available under redevelopment, nor will they equal the number of BMR units that were previously generated by the City's inclusionary zoning requirements for rental housing.

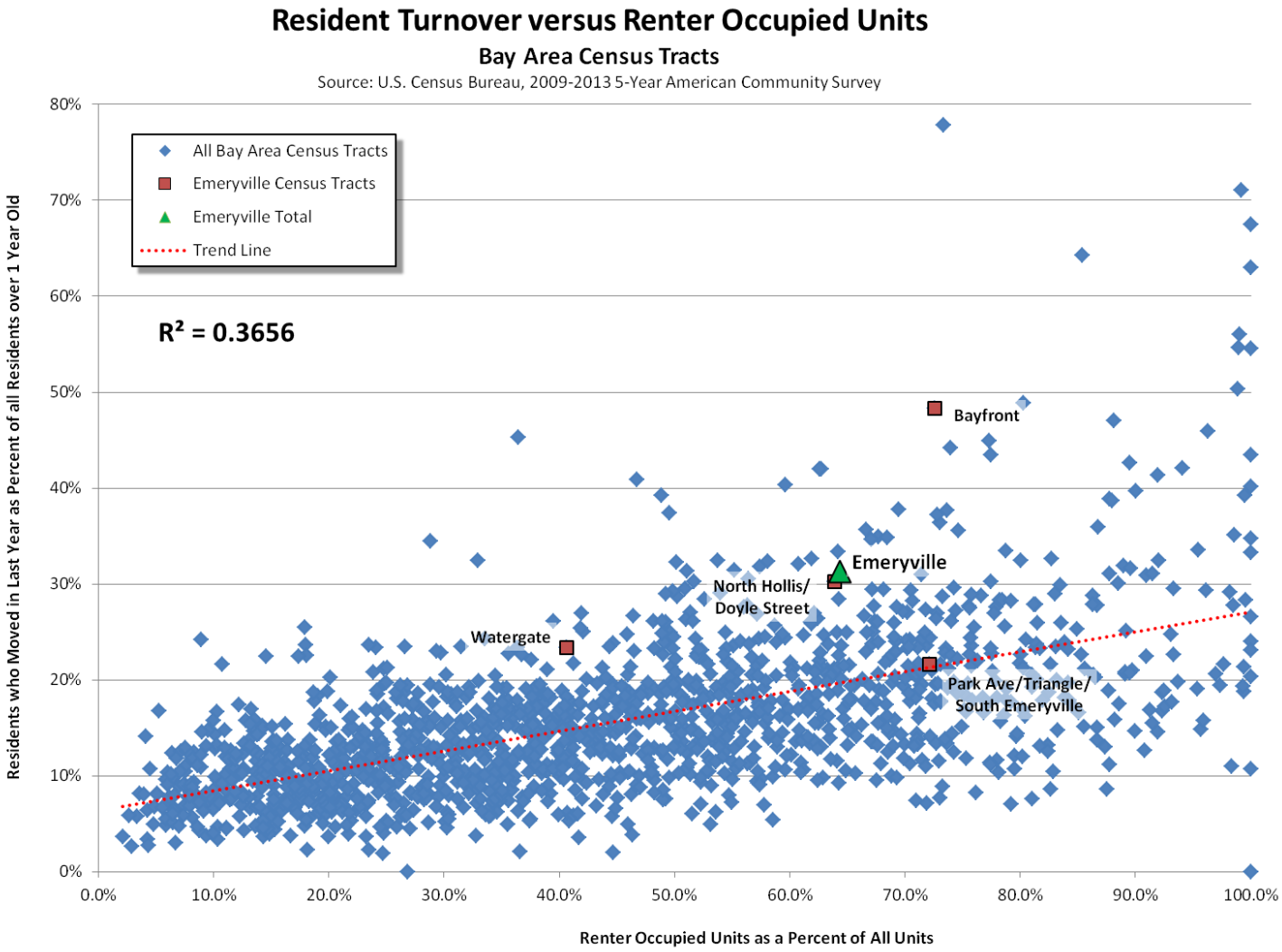
To address the burgeoning affordable housing crisis, staff proposes to incentivize the production of affordable units using the concept of "voluntary inclusionary zoning". Under this concept, development bonuses are contingent upon developers voluntarily providing a certain level of affordability in their projects. This is discussed further below under "Proposed Incentives and Development Bonus System".

Ownership Housing

Ownership housing built in Emeryville during the early 2000s reflected Bay Area-wide market conditions that favored condominium development. Availability of financing and high demand fueled condominium growth. However, the 2008 downturn in the real estate market and the economy significantly changed the outlook for residential development in favor of rental units. Currently, all residential projects in the development "pipeline" are rental projects. Given that almost two-thirds of households in Emeryville are renters, concern has been expressed that such an increase in rental housing will only exacerbate the situation and will further limit opportunities for home ownership.

The conventional wisdom is that homeowners tend to be more stable and more invested and engaged in their communities than renters. Certainly the majority of elected and appointed officials in Emeryville are homeowners. However, several are renters, and some started out as renters in Emeryville before purchasing their homes. Some households are not able to afford homeownership, and so are forced to rent. This leaves them vulnerable to rent increases that are beyond their control and may force them to relocate involuntarily.

FIGURE 9



Staff has analyzed annual turnover in households versus the percent of renter households for Bay Area Census tracts; the results are shown in Figure 9. As expected, this shows a moderate degree of correlation (R2 = 0.3656) between turnover and renter occupied units; as the percentage of renter occupied housing increases, so does the annual turnover rate. (Turnover is measured by the percent of residents who moved in the past year.) Census tracts with very low percentages of rental households have annual turnover rates below 10%, whereas Census tracts approaching 100% rental housing have annual turnover rates approaching 30%. Emeryville is considerably above the trend line with about 64% rental housing and an annual turnover rate of about 31%. This is probably due to the demographics associated with the very high percentage of units in large apartment and condominium buildings, as discussed above under "Demographic Mix."

Data from the Alameda County Assessor shows that there are approximately 3,546 condominium units in Emeryville. The most recent Census data indicates that there are approximately 469 detached single family homes, and approximately 6,591 total housing units in the City. Thus, approximately 4,015 units, or about 61% of the total, are potentially available for home ownership. However, Census data also indicates that only about 2,100 units are actually owner occupied (35.7% of occupied units), while 3,790 units are renter occupied (64.3% of occupied units). This implies that about 40% of condominium units are rented out and are not owner occupied. This can occur when a developer maps condominiums on a project but retains ownership of all units and rents them out, as has occurred at the Bridgewater project (formerly Emery Bay Club and Apartments), the Oak Walk project, and several others. It can also occur when individual condominium owners choose to rent out their units, such as the Watergate complex where Census data indicates that about 40% of units are renter occupied. In some cases, individuals may own several condominium units, living in one and renting out the others. Thus, the sheer creation of new condominium units is not a guarantee of owner occupancy, although at least it makes it possible. In order to ensure some percentage of owner occupancy, homeowners' associations (HOAs) would need to voluntarily revise their Covenant Conditions and Restrictions (CC&Rs) to limit the number of renter-occupied units. This can help with financing, as FHA mortgages might not be available to condominium projects that are more than 50% renter occupied. However, staff is not aware that any HOAs have chosen to do this. (There is funding allocated in the current operating budget for staff to hire a consultant to assist with such efforts.)

There are also issues with affordable ownership units. Staff's experience with the City's affordable housing programs has indicated that BMR ownership units at the low- and very low-income levels tend to be more prone to financial distress (including foreclosure), regardless of the stability of the housing market, as low income households generally do not have the financial resources to cover increases in fixed housing costs such as utilities and HOA dues. If a BMR unit goes into foreclosure, the City's resale restrictions are at risk.

In addition, as noted above, the consultants who prepared the enrollment forecast for the school district in 2008 believe that rental housing is more conducive to attracting families with children. They stated, in part, "…families need substantial resources to purchase condos … We have found that as condominium developments age, units are increasingly likely to be rentals. When this happens, the possibility of more families living in the condominiums increase, for the developments are now like apartment complexes." Thus, if the goal is to attract more families with children to Emeryville in order to bolster EUSD enrollment levels, the development of more ownership projects may, in fact, prove to be counterproductive.

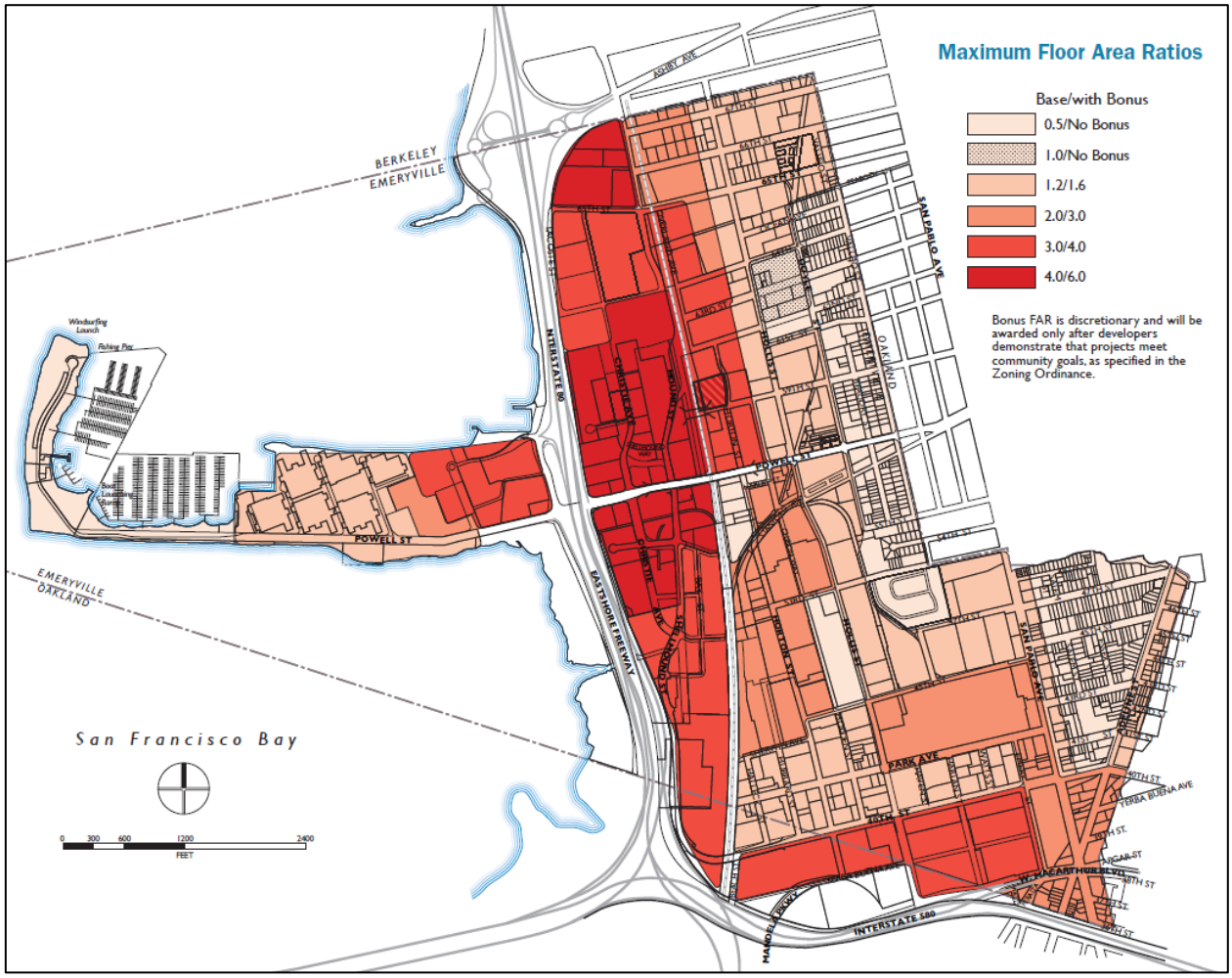
All of this begs the question, what is the appropriate balance between rental and ownership housing? Whatever that balance is, the City cannot legally mandate that

residential projects be developed as ownership housing as opposed to rental housing. Thus, any such goals for ownership housing must rely on voluntary incentives, as discussed below.

Proposed Incentives and Development Bonus System

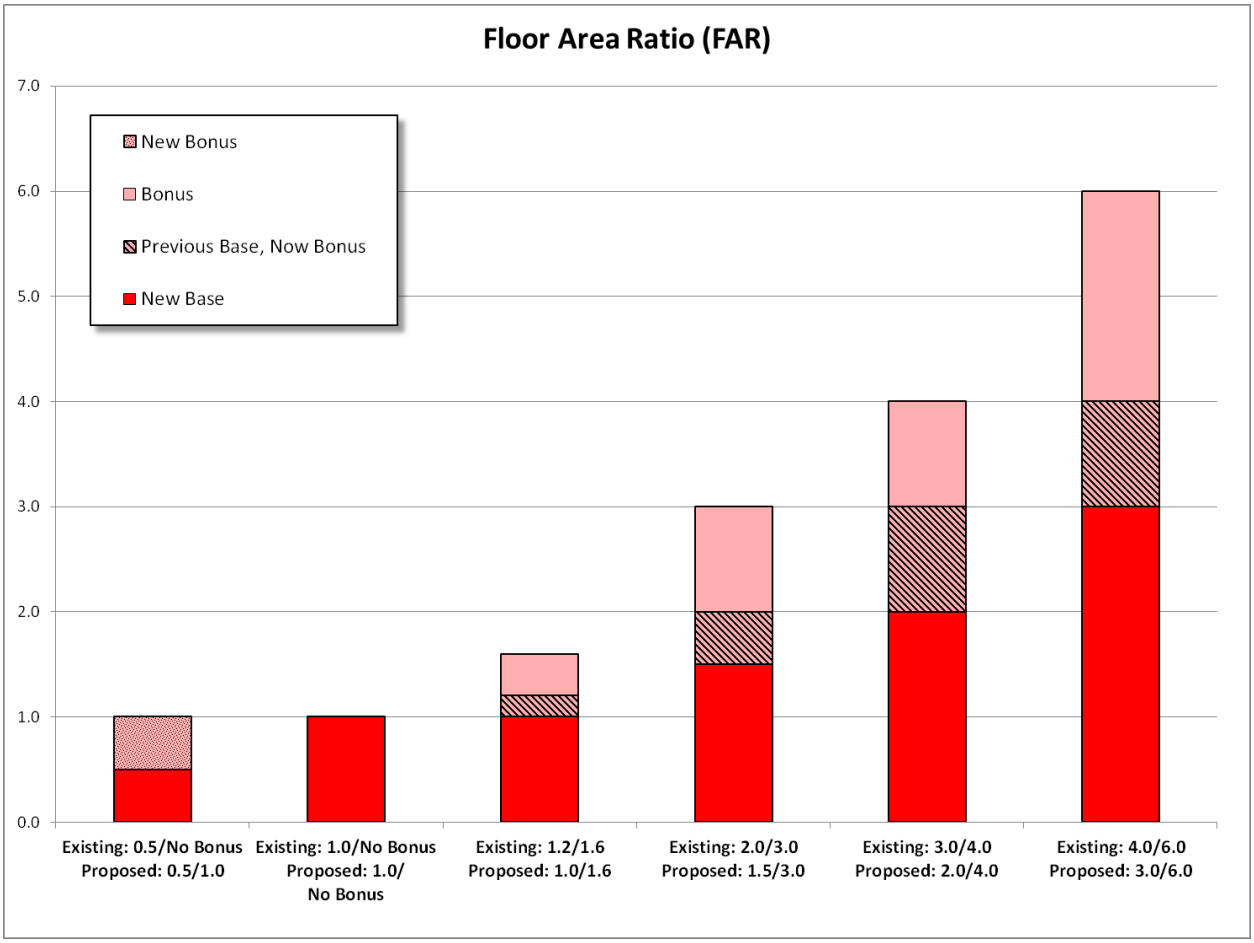
Emeryville's Planning Regulations contain a development bonus system that provides for additional development potential in exchange for providing public benefits. Staff proposes that this development bonus system be modified to make the provision of affordable housing units and/or ownership units a prerequisite to receiving a development bonus. Thus, affordable and ownership housing would not be required for all projects, but the possibility of a development bonus would give developers an incentive to provide such housing. This is sometimes referred to as "voluntary inclusionary zoning" (at least as regards affordable units).

FIGURE 10



Under the current development bonus system, each district on the City's floor area ratio (FAR) map, height limit map, and residential density map has two numbers: a "base" number and a "bonus" number. For example, in the 4.0/6.0 FAR district, the base FAR (the maximum permitted ratio of building floor area to site area) is 4.0, which can be increased to 6.0 with a development bonus. In order to get this bonus, a developer must provide public benefits, which are worth bonus points. To get the full bonus, 100 points must be earned. If fewer points are earned, the bonus is less. For example, in the 4.0/6.0 FAR district, a project that earned 50 points would be eligible for a maximum FAR of 5.0 (half the increment between 4.0 and 6.0). The FAR map is shown in Figure 10. The legend indicates the base and bonus number in each district (note that two of the districts do not provide for a bonus). The height limit and residential density maps are similar.

FIGURE 11



A concept that has been discussed is to reduce the base level in most districts while keeping the bonus level the same. This would not reduce the total development

potential of a site, but would lower the threshold above which a bonus would be required. This would provide greater incentive for developers to seek bonus points and thus trigger the provision of affordable and/or ownership housing as a prerequisite to earning such bonus points. This concept is illustrated in Figure 11. For each district in this diagram, the threshold between base and bonus would be lowered from the top of the cross-hatched area to the bottom of the cross-hatched area. Thus, the cross-hatched area represents development that previously was part of the base but would now require a bonus. The dark red area at the bottom of each bar represents the new base level, while the lighter red area at the top represents development that would continue to require a bonus. For example, in the 4.0/6.0 FAR district, the base would be lowered to 3.0, while the bonus level would still be 6.0. Currently, anything over an FAR of 4.0 requires a bonus in this district. Under the proposed changes, anything over an FAR of 3.0 would require a bonus. Development between 3.0 and 4.0 represents the range that was previously part of the base, but would now require a bonus. In both the existing and proposed situations, the maximum bonus FAR in this district is 6.0, so the development potential is not affected.

(Note the “new bonus” that is proposed in what is currently the 0.5/No Bonus district at the left side of Figure 11. This is to address an anomaly of the current development bonus system affecting the lower density residential neighborhoods. When the General Plan was adopted in October 2009, it included a residential density bonus from 20 units per acre to 35 units per acre in the older residential neighborhoods. However, there was no corresponding FAR bonus; FAR is limited to 0.5 with no bonus available. This results in smaller units for higher density projects. For example, on a one acre site (43,560 square feet), 25 units could be built without a bonus, with a maximum average unit size of 1,089 square feet (43,560 square feet times 0.5 FAR divided by 25 units). However, if the density is increased to 35 units with a bonus, the maximum average unit size decreases to only 622 square feet (43,560 square feet times 0.5 FAR divided by 35 units) because there is no available bonus for allowable floor area. This problem was underscored recently in the Doyle Street Lofts project approved by the City Council on January 20, 2015, which, due to these restrictions, had unit sizes of 525 and 975 square feet. By adding a bonus of 1.0 to this FAR district, the maximum average unit size at 35 units per acre is increased to 1,245 square feet (43,560 square feet times 1.0 FAR divided by 35 units), which would be more conducive to child friendly housing.)

Table 12 summarizes the proposed reduction in base levels for FAR, height, and residential density, and indicates the new range that would become part of the bonus that is currently part of the base. Because the FAR, height, and residential density maps are part of the General Plan, this modification will require a General Plan amendment.

TABLE 12: PROPOSED REDUCTIONS IN DEVELOPMENT BASE LEVELS

	Base/Bonus		Existing Base Range that Would Become Bonus
	Existing	Proposed	
Floor Area Ratio (FAR)	0.5/No Bonus	0.5/1.0	n/a
	1.0/No Bonus	1.0/No Bonus	n/a
	1.2/1.6	1.0/1.6	1.0 - 1.2
	2.0/3.0	1.5/3.0	1.5 - 2.0
	3.0/4.0	2.0/4.0	2.0 - 3.0
	4.0/6.0	3.0/6.0	3.0 - 4.0

	Base/Bonus		Existing Base Range that Would Become Bonus
	Existing	Proposed	
Height	30'/No Bonus	30'/No Bonus	n/a
	30'/55’	30'/55’	n/a
	55'/75’	40'/75’	40' - 55'
	75'/100’	50'/100’	50' - 75'
	100'/100’+	75'/100’+	75' - 100'

	Base/Bonus		Existing Base Range that Would Become Bonus
	Existing	Proposed	
Residential Density (units per acre)	20/35	20/35	n/a
	50/60	35/60	35 - 50
	85/100	50/100	50 - 85
	100/135	65/135	65 - 100
	115/170	80/170	80 - 115

To assess how these changes would impact various projects, staff developed three hypothetical projects on a hypothetical site. The site is one acre (43,560 square feet) located in an area that currently has an FAR of 3.0/4.0, a height limit of 55’/75’, and a residential density of 100/135 units per acre. Under the above proposal, the site would change to an FAR of 2.0/4.0, a height limit of 40’/75’, and a residential density of 65/135 units per acre. Each of the three hypothetical projects would have average net unit sizes of 1,000 square feet, or a gross area of 1,250 square feet per unit. Project 1 would have 65 units (which translates to an FAR of 1.87) and a height of 40 feet. Project 2 would have 100 units (an FAR of 2.87) and a height of 55 feet. Project 3 would have 135 units (an FAR of 3.87) and a height of 75 feet. Table 13 shows the total number of bonus points that each of these projects would need under the existing and proposed base/bonus levels for FAR, height, and residential density.

TABLE 13: EFFECT OF LOWERING BASE ON THREE HYPOTHETICAL PROJECTS

			Existing		Proposed	
		Project	Base/Bonus	Points Needed	Base/Bonus	Points Needed
Project 1	FAR	1.87	3.0/4.0	0	2.0/4.0	0
	Height	40'	55'/75'	0	40'/75'	0
	Residential Density	65	100/135	0	65/135	0
	TOTAL POINTS NEEDED			**0**		**0**

			Existing		Proposed	
		Project	Base/Bonus	Points Needed	Base/Bonus	Points Needed
Project 2	FAR	2.87	3.0/4.0	0	2.0/4.0	44
	Height	55'	55'/75'	0	40'/75'	43
	Residential Density	100	100/135	0	65/135	50
	TOTAL POINTS NEEDED			**0**		**50**

			Existing		Proposed	
		Project	Base/Bonus	Points Needed	Base/Bonus	Points Needed
Project 3	FAR	3.87	3.0/4.0	87	2.0/4.0	94
	Height	75'	55'/75'	100	40'/75'	100
	Residential Density	135	100/135	100	65/135	100
	TOTAL POINTS NEEDED			**100**		**100**

As this shows, the smallest project (Project 1) and the largest project (Project 3) would be unaffected in terms of number of bonus points needed; under both the existing and proposed regulations, Project 1 would need no points and Project 3 would need 100 points. However, the medium sized project (Project 2) would need no points under the existing regulations, but would need 50 points under the proposed regulations. Another difference would be that, under the proposed regulations both Projects 2 and 3 would need to provide affordable and/or ownership units as a prerequisite to earn these bonus points; under the existing regulations there is no such requirement.

During the City Council study session on the Sherwin Williams project on January 20, 2015, the Council expressed interest in reviewing the development bonus system for possible overhaul. As noted above, the provision of “public benefits” is required for a development to earn bonus points. These public benefits must be “significant and clearly beyond what would otherwise be required for the project under applicable code provisions, conditions of approval, and/or environmental review mitigation measures”. For example, if a project intends to earn bonus points for public art, it must provide more public art than is already required under the City’s Art in Public Places program. This is

1% of construction valuation for non-residential projects, so a project that provides public art valued at 2% of construction valuation would be eligible for 10 bonus points. There are 18 categories of public benefits, each worth anywhere from 20 to 50 bonus points, plus a "flexible public benefit" that can be proposed by the applicant for whatever number of points are deemed appropriate by the Planning Commission or City Council, as the case may be. The 19 categories of public benefits, and the maximum number of points available in each category, are summarized in Table 14.

TABLE 14: PUBLIC BENEFITS AND BONUS POINTS

Public Benefit	Maximum Points	Public Benefit	Maximum Points
(1) Public Open Space	50	(10) Neighborhood Centers	35
(2) Sustainable Design*	35	(11) Small Businesses	35
(3) Alternative Energy*	50	(12) Public Art	20
(4) Water Efficiency*	35	(13) Public Parking	35
(5) Energy Efficiency*	35	(14) Bike Station	35
(6) Public Improvements	50	(15) Significant Structures	35
(7) Utility Undergrounding	50	(16) Electric Vehicle (EV) Charging Stations	35
(8) Transportation Demand Management (TDM)	35	(17) Mechanical Equipment Concealed in Penthouse or Inside Building	20
(9) Family Friendly Housing	50	(18) Universal Design	50
		(19) Flexible Public Benefit	N/A**

* Public benefits (2), (3), (4), and (5) are overlapping. Points may not be awarded more than once for what is essentially the same public benefit in more than one category, and a total of no more than 35 points may be awarded in these four categories combined.

** As deemed appropriate by the Planning Commission or City Council, as the case may be.

The development bonus section of the Planning Regulations (Section 9-4.204) is attached for reference, including Table 9-4.204(c), which spells out the method of calculating bonus points and specific requirements for each category. (See Attachment 2.)

The proposed "voluntary inclusionary zoning" system would make the provision of affordable units and/or ownership housing a prerequisite for earning any of the bonus points in Table 9-4.204(c). Alternatively, the public benefits listed above could be eliminated and bonus points could be awarded solely for providing affordable and/or ownership housing. Another possibility would be to reduce the number of points needed for public benefits in recognition of the expense to developers of providing affordable

and/or ownership units. The details of the affordable and/or ownership housing incentives have not yet been developed, but staff has several thoughts on the subject.

One option would be to call for affordable units at various income levels proportional to the City's RHNA, excluding the extremely low income category (less than 30% of Area Median Income), which is better served by stand-alone projects because of the supportive services that are generally required. For example, to earn bonus points a rental housing project might be required to provide 15% affordable units, comprised of 3.4% very low income units, 5.2% low income units, and 6.4% moderate income units, which would be proportional to the City's current RHNA numbers in those categories. (The overall percentage could be proportional to the percent density bonus being requested.) Staff feels that it is desirable to have a mix of units at all income levels within a single project. Otherwise, a household's income may increase to the point where they are no longer eligible for their BMR unit, but cannot afford a market rate unit, and so must move out of the development. A mix of BMRs at various income levels allows households to remain in the same development as their income increases.

Because projects are generally either entirely rental or entirely ownership, it is not practical to require a mix of rental and ownership units within a single project. For reasons discussed above, it is probably not desirable for all new units to be ownership, although that is certainly an option. If projects are required to be ownership as a prerequisite to earning bonus points, their affordable units should be limited to moderate income because of the issues with ownership BMR units mentioned above. However, the number of affordable units might be increased from the base requirement of 20% moderate income units to 25% or 30%. As discussed above, there is no guarantee that condominium units will actually be owner-occupied. To address this, there could be a requirement for CC&Rs that do not allow more than 50% of units to be rented. Alternatively, if ownership of all units is retained by the developer and the units are rented out, the affordability requirement could be the same as for a rental project until the units are actually sold. (There is a similar provision in the City's Affordable Housing Program.)

A hybrid of these two options would be to give the developer the choice of providing rental and/or ownership units, and to require the affordability levels mentioned above for each. (For example, 3.4% very low income units, 5.2% low income units, and 6.4% moderate income units for rental projects and 25% to 30% moderate income units for ownership projects.)

One other issue that must be mentioned is the State Density Bonus Law, which is incorporated into the Emeryville Planning Regulations in Article 5 of Chapter 5. This system is mandated by the State, but is rarely used. It provides for density bonuses for projects that provide at least 5% of units for very low income households, at least 10% of units for low income households, or at least 10% of units for moderate income units in a common interest development. The maximum density bonus is 35%, which is

provided for 11% very low income units, 20% low income units, or 40% moderate income units in a common interest development. (The law also provides density bonuses for senior citizen housing, mobile home parks, donation of land, provision of child care facilities, and conversion of rental projects to condominiums if affordable units are provided.) Under the law, the City must provide one, two, or three "incentives or concessions" to the developer, depending on the percent of affordable units provided at various levels. Such incentives or concessions are not specifically defined, but may include a reduction in site development standards, approval of mixed used zoning, a reduction in parking requirements, and "other regulatory incentives or concessions proposed by the developer or the City that result in identifiable, financially sufficient, and actual cost reductions." The City is required to grant such incentives or concessions unless it makes specific findings. Staff has consulted with other cities in Alameda County and has found that about half have never used this provision of State law and the others have used it only once or twice.

The current bonus point system in the Planning Regulations does not have any provision for affordable or ownership housing. This was intentional in order to avoid overlap and confusion with the State Density Bonus Law. If the development bonus system is modified to provide incentives for affordable and/or ownership housing, staff would suggest that it be made mutually exclusive of the State Density Bonus Law. That is, either system would be available to developers, but not both systems. This would require a modification to language in the Planning Regulations, which currently says that development bonuses pursuant to the City's bonus point system are in addition to any density bonuses for affordable housing pursuant to the State Density Bonus Law.

It should be noted that the maximum density bonus under the State Density Bonus Law is 35%. Under the City's current system, the maximum residential density bonus is about 48% (from 115 units per acre to 170 units per acres in the highest category). Under the proposal discussed above, with a lower bonus threshold, the maximum density bonus would be about 112% (from 80 units per acre to 170 units per acre in the highest category). Thus, it would not seem to be worthwhile for a developer to opt for the State Density Bonus Law when so much higher bonuses would be available under the City's system.

Discussion Questions

Staff seeks the Council and Commission's direction on the following questions related to affordable and ownership housing:

- Should the provision of affordable housing and/or ownership housing be made a prerequisite for earning a development bonus?

- Should the base levels of FAR, height, and residential density be lowered to require more projects to earn development bonuses?

- What is the appropriate mix of rental and ownership housing? Should all future projects be required to be ownership in order to earn development bonuses?

- What percent of units at various levels of affordability should be required for rental and ownership projects? Should this be proportional to the level of bonus being requested?

- What other changes to the development bonus point system are desired?

NEXT STEPS

Following this joint City Council/Planning Commission study session, the Housing Committee will consider the proposed regulations, incentives, and guidelines for multi-unit residential development on May 6, 2015. Proposed amendments to the Planning Regulations and General Plan will be then be prepared for future Planning Commission and City Council consideration. As part of the preparation of these amendments, staff will be assessing the environmental review requirements for the project (it is expected that the amendments will be able to rely on the Environmental Impact Report prepared for the General Plan, since the they will not result in an increase in overall development potential), as well as potential impacts on the recently certified Housing Element to ensure that the amendments to do not affect the ability to achieve the City's Regional Housing Needs Allocation. As noted above, the Family Friendly Design Guidelines are on a parallel track, and are expected to be approved by the Commission in April and by the Council in May or June.

RESPECTFULLY SUBMITTED:

CHARLES S. BRYANT
Community Development Director

APPROVED AND FORWARDED TO THE CITY COUNCIL:

_____

Sabrina Landreth
City Manager

Attachments:
1. *Demographic Analysis and Enrollment Forecast for the Emery Unified School District,* Lapkoff & Gobalet Demographic Research, Inc., July 21, 2008
2. Planning Regulations Section 9-4.204, *Development Bonuses*

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Demographic Analyses and Enrollment Forecast for Emery Unified School District

July 21, 2008

Executive Summary

Emery Unified School District (Emery, EUSD, the District) administrators are in the process of redesigning facilities and determining what properties will be needed to meet the educational needs of the Emeryville community. They requested a thorough analysis of demographic factors affecting enrollments and a professional assessment of likely future enrollment levels.

We developed two different sets of enrollment forecast scenarios for the District. For the first set, we employed a conventional approach to enrollment forecasting, and assumed that the District's reputation will not change substantially in the future. For the second set of scenarios, we assumed that Emeryville will become much more attractive to families with children due to substantial improvement in EUSD test scores and perhaps more family-oriented amenities available to residents.

Before discussing these forecast scenarios, we note a few important demographic trends that have shaped or will shape future enrollments.

Out-of-District Students

Since 1999, about half of EUSD's students have had addresses outside the District.[1] About 20 percent of these out-of-district students were former District residents. Another 20 percent were "Allen Bill" students, meaning that either their parents worked in Emeryville or they had childcare arrangements in Emeryville. When planning facilities, Emery may wish to have sufficient space to accommodate at least the out-of-district students who are former residents and Allen Bill students.

New Housing

More than 1,700 housing units have been built in the City of Emeryville since 2000. Construction continues, but the residential housing market has slowed considerably and it is not clear if all projects that have been proposed, or even all those that have been approved, will actually be built in the foreseeable future. In order to recognize the uncertainty about the pace of construction, we developed two housing forecasts: a "Full Housing Forecast" includes all of the approved and proposed developments, and a "Conservative Housing Forecast" assumes only a subset of projects will actually be built. Because so few EUSD students live in condominiums and large apartment complexes, the future housing will have a relatively small impact on enrollments. In the conventional forecast scenarios, the Conservative Housing Forecast projects an additional 38 students from new housing, while the Full Housing Forecast projects 83 students.

[1] Out-of-district enrollments may have been high before 1999, but we lack the data to check this.

Overall Enrollment Trends

In fall 2007, Emery had 822 students attending their schools, but only 377 students lived within the District boundaries (resident enrollments). However, in 1999, the first year for which we have data on resident enrollments, 587 students lived in the District. When planning facilities, decision-makers should keep in mind that enrollments change over time. The fact that Emery schools once had nearly 600 resident students means that the city's housing stock could certainly hold that many public school students in the future.

Birth data of Emery residents, by ethnicity, show that African American births have been declining, Hispanic and White births have been stable, and Asian births have been rising. African Americans, Hispanics, and White resident enrollments all follow their birth pattern. However, Asian enrollments have been stable, unlike their pattern of rising births.

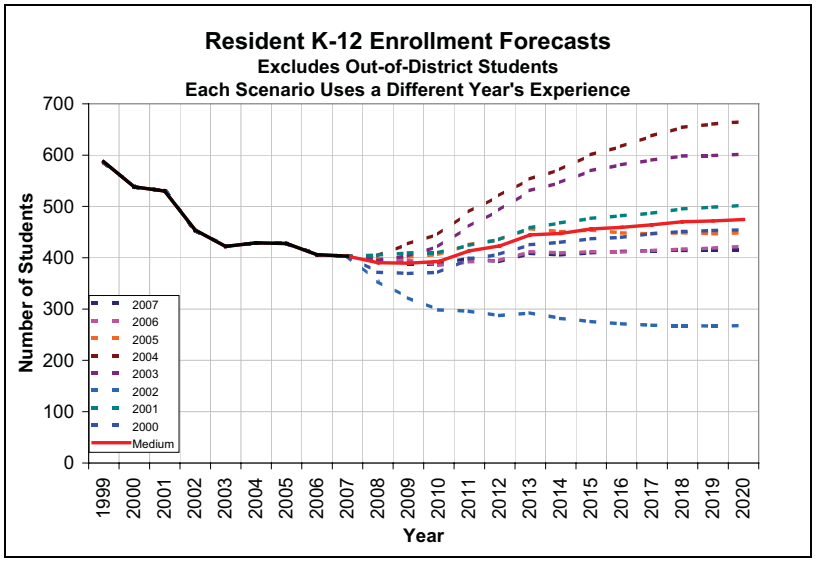
Conventional Enrollment Forecast Scenarios

Applying the standard demographic forecasting method to Emery Unified resulted in forecasts that show a slight increase in resident enrollments, primarily from new housing. Chart 1 shows resident enrollment forecasts. While the Medium (most likely) forecast shows 475 resident students by 2020, there is a range of other forecasts that are possible using various reasonable assumptions (each based on Emery patterns during the last eight years). All of these forecasts assume the Full Housing Forecast. If the Conservative Housing Forecast turns out to be more accurate, the projections should be reduced by 45 students.

Future resident student enrollments under the Medium forecast are less than those in 1999, when the District had 587 resident students. Because in the not too distant past the District had more resident students, it is quite possible that the District will reach this enrollment level again in coming decades. District enrollments naturally change over time, and this change is not always captured by the enrollment forecasts, especially since enrollment forecasts much beyond 10 years are not very reliable. In short, we recommend that the District plan facilities to accommodate at least 600 resident enrollments, even if the Medium forecast does not reach that level within the next decade.

In addition to providing facilities to accommodate resident enrollments, the District may wish to accommodate former residents and Allen Bill students (an additional 200 students).

Chart 1



Alternative Enrollment Forecast Scenarios

We were asked to explore how enrollments might change if the District's standardized test scores improved substantially and/or the community became more attractive to families. We believe that substantially improved test scores would result in higher student yields (numbers of children per housing unit). That is, more of the city's housing, both old and new, would be occupied by families with school-aged children. These forecast scenarios rely on three factors: (1) understanding the housing stock in Emeryville, (2) measuring student yields by type of housing in Emeryville, and (3) knowledge of student yields in other Bay Area school districts to guide our judgment regarding how student yields are likely to increase as test scores improve.

Emeryville is unusual in that it contains relatively few houses. Condominiums and large apartment complexes comprise 78 percent of the city's housing. In most school districts, relatively few students live in condominiums and large apartment complexes, and Emeryville condominiums and market-rate units in large apartment complexes have *extremely* low yields. (The one exception is Emery Bay Village. These townhouse-type condominiums contain a fair number of students.)

When we consider Emeryville's socioeconomic mix, however, the abnormally low condominium (and large apartment complex) yields are not surprising. We have found that yields in higher-priced housing in communities with a large spread in household incomes are usually abnormally low. For example, public school yields are low in the Berkeley Hills where housing prices are high, but normal in the Berkeley flatlands where housing prices are much lower. We found the same socioeconomic pattern when we were working with San Leandro Unified in the 1990s. In Emeryville, condominiums and luxury apartment complexes are the higher-priced housing, and the District's student yields follow the pattern we have observed in other communities with a broad income distribution.

Nonetheless, it is certainly possible that Emery's student yields could increase, including in the condominiums and large apartment complexes. We believe a yield increase is likely if test scores do improve substantially. In recent years, Emery has had the lowest or next-to-lowest scores in the County. We believe yields would increase if Emery could achieve test scores above those in Oakland, Hayward, San Leandro, and San Lorenzo Unified.

Our knowledge of student yields throughout the Bay Area led us to develop two alternative enrollment forecasts. For each, we multiplied the District's housing stock, by type of unit, by the anticipated student yield. Current yields were used to test the model (Alternative 0), and alternative (higher) student yields were used to suggest what enrollments could be if Emeryville attracted more families with children. Under one alternative (Alternative 1), the forecast suggests between 748 and 843 resident students. This alternative seems likely to us if Emery's test scores exceeded those of Oakland, Hayward, San Leandro, and San Lorenzo schools. Under another alternative (Alternative 2), we increased student yields even more, similar to what we have seen in high-performing districts. This forecast suggested, depending on which housing forecast was used, between 1,232 and 1,441 resident students.

Summary

The table below summarizes the resident enrollment forecasts predicted under both the conventional method and the alternative methods.

Summary of Resident Enrollment Forecast Scenarios

Forecast Scenario	Assumptions about District's future reputation	Forecast Under Conservative Housing Forecast	Forecast under Full Housing Forecast
Conventional Forecast (Medium)	no change in District's reputation	425	470
Alternative 0	no change in District's reputation	504	530
Alternative 1	District's test scores exceed those of Oakland, Hayward, San Leandro	748	843
Alternative 2	District has test scores similar to high-performing districts.	1,232	1,441

For facilities purposes, whichever forecast is used, the District might want to add an additional 100 students for former residents and another 100 students (at least) to accommodate Allen Bill students.

Acknowledgments

This report was conducted under the direction of Joe Frantz, Assistant Superintendent for Business Services, Emery Unified School District, and Stephen J. Wesley, Ph.D., Superintendent. We thank District staff members John Perry and Wanda Stewart, as well as consultant Roy C. Miller, AIA, for their assistance and advice.

We thank City of Emeryville staff members Amy Hiestand and Diana Keena, and applaud the city for the wealth of information we were able to obtain on its website. We thank Kris Owens, former Planning Commissioner, for her valuable insights.

Lapkoff & Gobalet Demographic Research, Inc., staff members who contributed to this report include Shelley Lapkoff, Jeanne Gobalet, Robin Merrill, and Alvin Ludwig.

Table of Contents

Introduction

Emery Unified School District (Emery, EUSD, the District) administrators are in the process of redesigning facilities and determining what properties will be needed to meet the educational needs of the Emeryville community. They requested a thorough analysis of demographic factors affecting enrollments and a professional assessment of likely future enrollment levels. They are particularly concerned about the enrollment effects of:

- The large number of new housing units planned by the city;
- Possible improvements in test scores; and
- General demographic trends in the District.

We are pleased to have been asked to help the District, and this report includes discussions of the following:

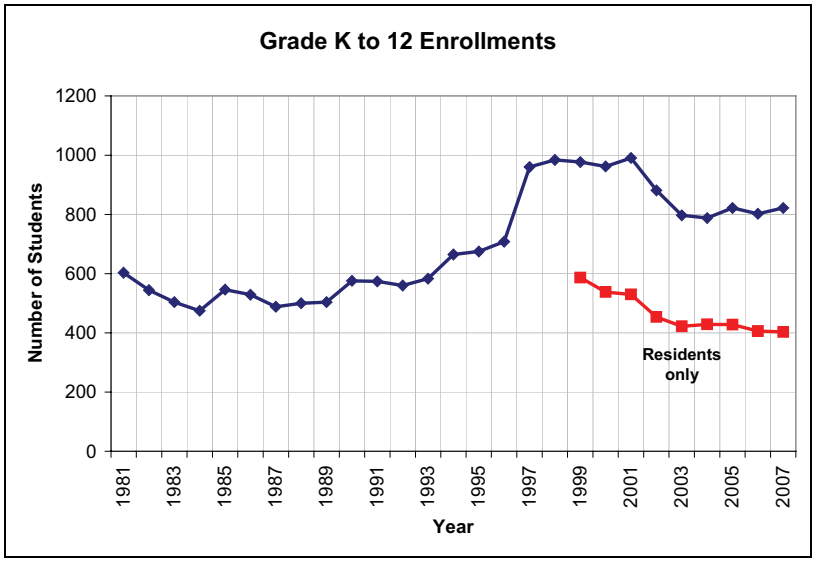
- An enrollment forecast based on the standard demographic method of projecting school populations, using the District's current enrollments, historical rates of students entering and leaving its schools, and births to forecast future kindergarten enrollments;
- Measurements of student yields (the average number of students per housing unit) in Emeryville, by housing type (condominium, apartment, houses, and below market rate units);
- Possible EUSD student yields if its test scores rose;
- An alternative forecast assuming increased student yields; and
- A discussion of private school enrollment rates.

Past Enrollment Trends

Overall Enrollment Trends

Chart 2 shows EUSD's K-12 enrollments from 1981 through 2007. The top line shows total enrollments (both resident and out-of-district students) and the bottom line shows residents only. We have student addresses beginning in 1999, and report "residents only" from that time period onward. About half of the District's students live outside Emeryville.

Chart 2



It is striking that EUSD's enrollments were fairly stable for many years, and then increased between fall 1996 and fall 1997. In just one year, enrollments reported to the State of California[2] jumped from 708 to 960. Although we do not have student address data for 1996 through 1999 to confirm this, we believe that this large increase resulted from an increase in out-of-district students, and not from an increase in the population residing within the city of Emeryville or choosing public schools.

We have seen this kind of dramatic enrollment change in other school districts only as a result of something like the admission of more out-of-district students or perhaps a very sudden change in a school district's reputation. We also wonder whether data collection or reporting errors in the late 1990s were at least partly responsible for the apparent sudden enrollment increase.

[2] These data are from CBEDS reports, and are available online from the California Department of Education (CDE) web site.

That said, because resident enrollments in 1999 were higher than total enrollments during the 1980s and early 1990s, we know there had to have been at least *some* increase in *resident* enrollments sometime during the middle to late 1990s.

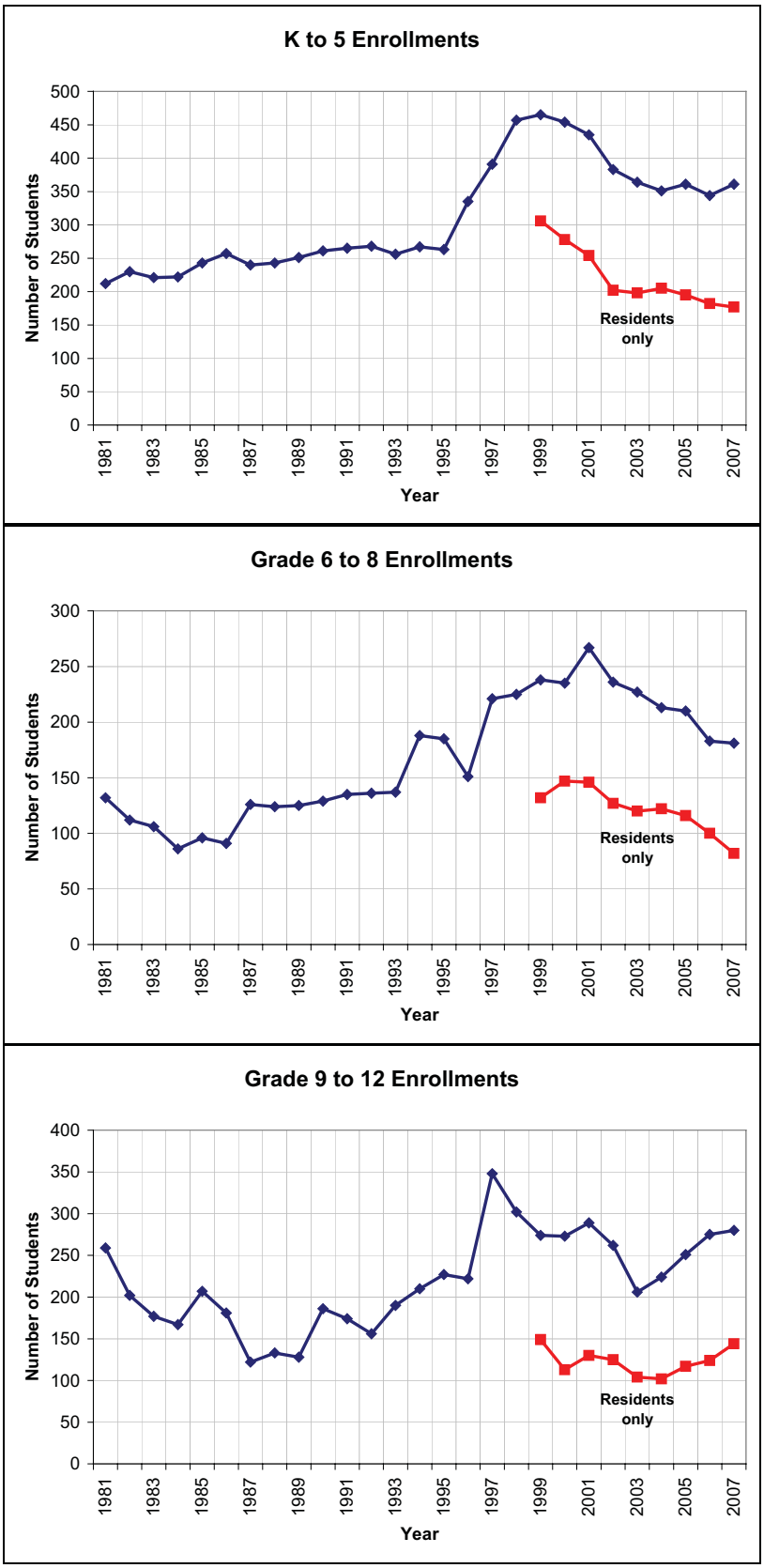
The number of students living in Emeryville declined substantially between 1999 and 2003. This decline corresponds to political and financial difficulties in the District, and may reflect a decision by parents to leave the District, or for families that were potential migrants not to move to Emeryville.

Since 2003, enrollments have been quite stable.

To get a better understanding of the enrollment trends, Chart 3 groups enrollments by combinations of grades: K to 5, 6 to 8, and 9 to 12, even though this is not the current school configuration.

- K to 5 enrollments replicate the trend found in the K-12 enrollments (Chart 2): enrollments rose between 1995 and 1998, and then began declining in 2001.
- Enrollments in grade 6 to 8 were more erratic, primarily because the numbers are so much smaller and subject to random variation. The figures for grade 6 to 8 "residents only" show a steady decline between 2001 and 2007.
- High school enrollments are also subject to random variation due to small numbers of students. In 1997, enrollments in grades 9 to 12 peaked, jumping from 222 in 1996 to 348 in 1997. It is really unfortunate that we do not have address data to tell us what amount of the increase resulted from admission of more out-of-district students.

Chart 3


K to 5 Enrollments
Number of Students
500
450
400
350
300
250
200
150
100
50
0
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Year
Residents only
Grade 6 to 8 Enrollments
Number of Students
300
250
200
150
100
50
0
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Year
Residents only
Grade 9 to 12 Enrollments
Number of Students
400
350
300
250
200
150
100
50
0
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Year
Residents only

Comparison with State and County Trends

Emery's past enrollment trends differ from those of the state and Alameda County. Unlike Emery, both the state and the county experienced overall enrollment increases during most of the 1980s and 1990s, though the increase was more pronounced at the state level (See Charts 4 and 5). And unlike Emery, state and county enrollments did not rise sharply in the late 1990s, and then subsequently decline. However, Emery is similar to the state and county in that its enrollments have been relatively stable during the last five years or so.

Chart 4

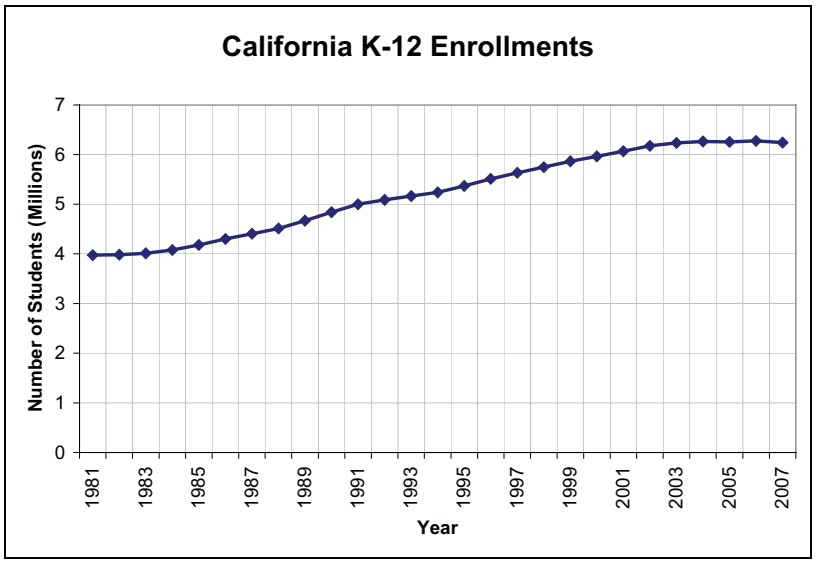
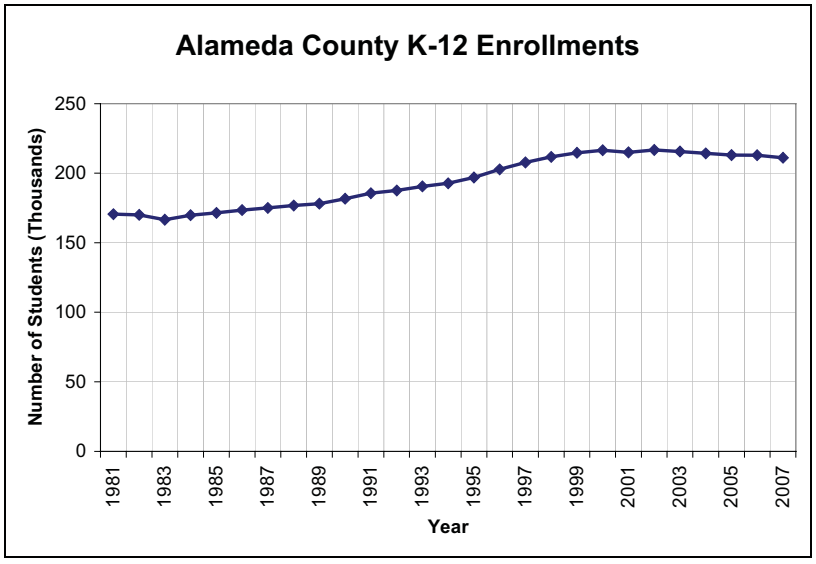


Chart 5



Interdistrict Transfer Students

As Chart 2 showed, about half of EUSD's students live outside the District. This has been the case since 1999 (and perhaps before, though we lack data to confirm this). In order to understand these patterns better, we grouped enrollments by combinations of grades: K to 5, 6 to 8, and 9 to 12, even though this is not the current school configuration. Chart 6 shows the number of students with out-of-district addresses in each of the three grade levels.

As mentioned above, we believe there was probably a huge increase in the number of out-of-district students in fall 1997, and these numbers probably remained high for several years.

Many districts use out-of-district students to optimize the use of teachers and classrooms. Since districts receive more funds when they have more students, it is usually financially beneficial to accept some out-of-district students to fill classrooms. This is also true for Emery, but there are other reasons it enrolls students who live outside Emeryville.

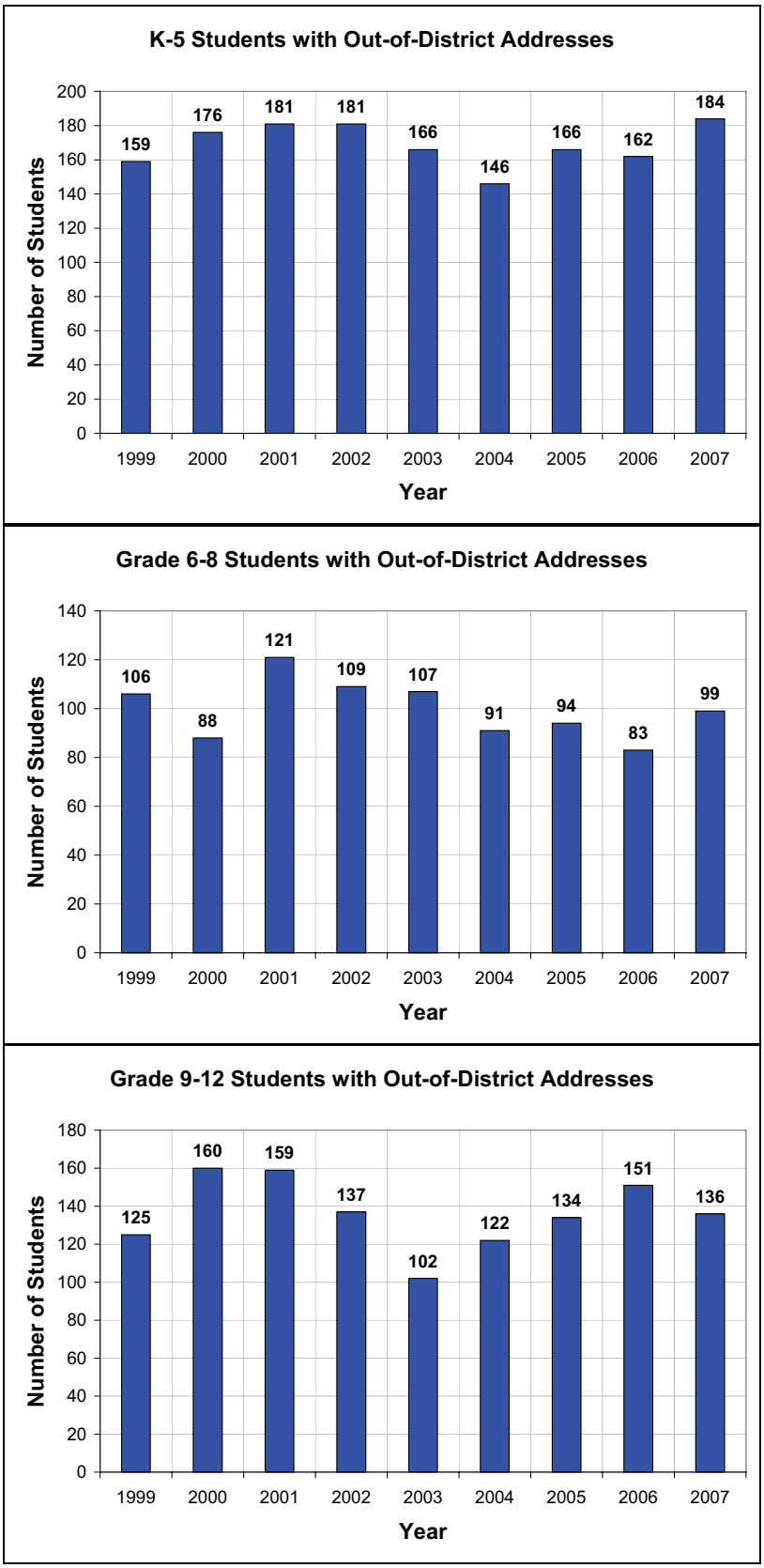
Former Residents

Emery's students are highly mobile. Many live in rental housing, and our study of enrollment patterns from 1999 through 2007 shows significant numbers moving into and out of the District. Sometimes students begin as Emeryville residents, leave the District for a few years and attend schools elsewhere, and then return to Emery as out-of-district students for a year or two before moving back into the District.

Our analysis shows that about 20 percent of out-of-district students started out as Emery students. In addition, another five percent started out as out-of-district students and subsequently moved into the District.

Because the school district is so small and has a strong sense of community, we imagine that District personnel almost always like to make room for out-of-district children who once were Emery students.

Chart 6


K-5 Students with Out-of-District Addresses
Number of Students
Year
159
176
181
181
166
146
166
162
184
Grade 6-8 Students with Out-of-District Addresses
Number of Students
Year
106
88
121
109
107
91
94
83
99
Grade 9-12 Students with Out-of-District Addresses
Number of Students
Year
125
160
159
137
102
122
134
151
136
1999
2000
2001
2002
2003
2004
2005
2006
2007

Allen Bill Students
As school administrators know, the California State Education Code allows parental employment in lieu of residency in a district of attendance ("Allen Bill Transfers"; CA State Education Code, Section 48204(b)). If space is available, Emery must accommodate K-8 children whose parents work in Emeryville and who wish to send their children to EUSD schools.[3] Note that the Allen Bill does not cover high school students.

In addition to the state requirement, EUSD administrators want to accommodate such students in the school because of the District's partnership with some of the large Emeryville employers. If a bond were passed, these large employers would pay much of the revenue. For these reasons, EUSD may want to plan to have enough space in the schools to accommodate children of people working in Emeryville.

District staff members have kept statistics on the number of out-of-district students admitted for childcare or employment reasons. Currently, 79 students, or 41 percent of out-of-district K-5 students, result from childcare (20 percent) or employment (21 percent). Of 6th-8th grade students, 12 students, representing 23 percent of all out-of-district students, were admitted for either childcare or employment reasons.

Residents of ZIP Code 94608
A final consideration regarding out-of-district students is that many of them are in ZIP Code 94608, the code that covers Emeryville, as well as some area beyond the city limits. Some Emeryville residents consider residents of these areas to be part of the "Emeryville community" even though they are officially outside the city (and school district) boundary. About 55 percent of out-of-district students live in this ZIP Code.

Ethnicity

Chart 7 and Table 1 show the ethnic distribution of all EUSD students (in-district and out-of-district students combined) since 1993. African Americans outnumber members of all the other ethnic groups. Currently, African Americans are 61 percent of the student body, but comprised as much as 74 percent during the late 1990s. During the last few years, a growing number of students are identified as "multiple race" or "other," making it more difficult to compare ethnic trends over time.

Note that almost all the enrollment increase between fall 1996 and fall 1997 was of African American students.

---

[3] "The Allen Bill established a parent's right to apply to register their children in a district where either parent's job is located. However, your child isn't guaranteed enrollment in the district where you work. Transfers under the Allen Bill are always on a space-available basis, and districts have the right to determine whether or not to accept them. Districts that do accept Allen Bill transfers can limit the number of incoming students as well as establish certain criteria according to types of requests." (http://www.greatschools.net/cgi-bin/showarticle/239). To read the relevant section of the CA Education Code, see: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=48001-49000&file=48200-48208).

Chart 8 shows each ethnic group on a separate graph, so that the trend line is discernible (however, note the change in scale on the left axis for each graph). Hispanic enrollments have increased, White enrollments have declined, and Asian enrollments show no discernible trend.

Chart 7

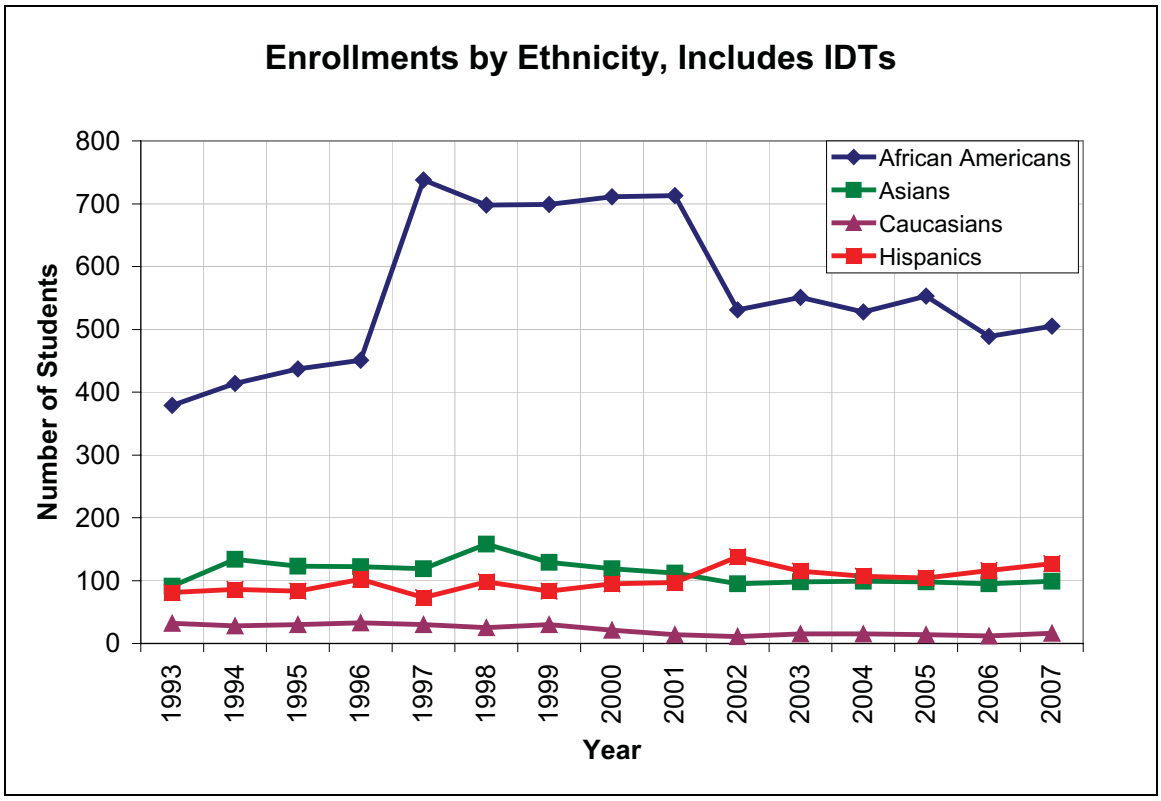
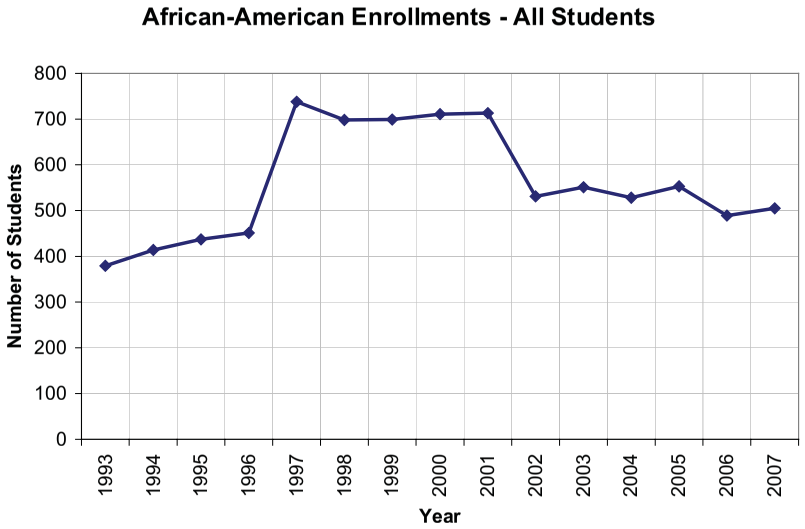


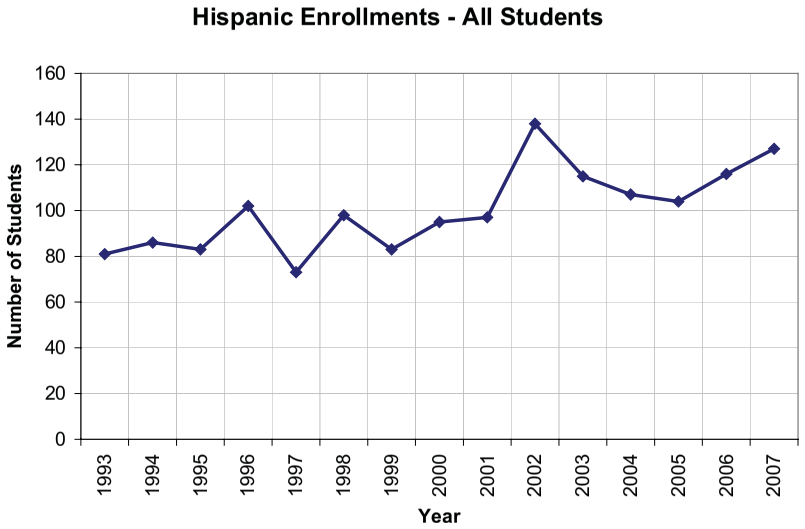
Table 1

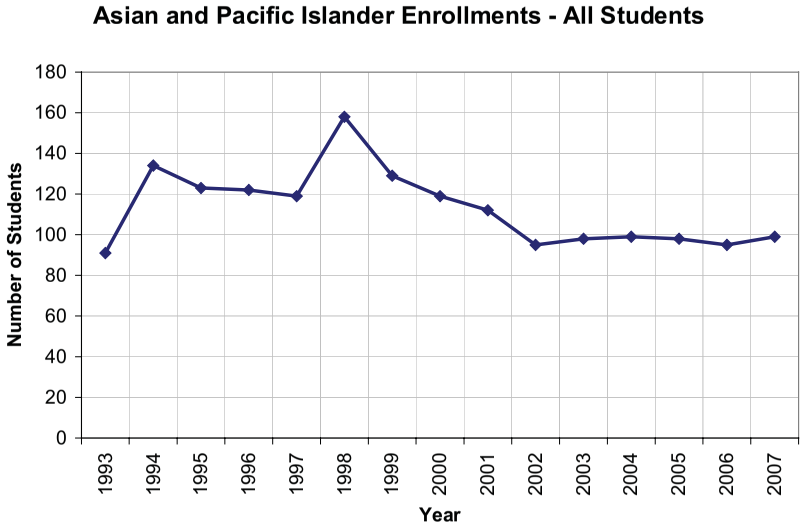
Ethnicity of Emery Unified Students (Includes both In-District and Out-of-District Students)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
African American	379	414	437	451	738	698	699	711	713	531	551	528	553	489	505
API/F	91	134	123	122	119	158	129	119	112	95	98	99	98	95	99
Caucasian	32	28	30	33	30	25	30	21	14	11	15	15	14	12	16
Hispanic	81	86	83	102	73	98	83	95	97	138	115	107	104	116	127
Native American	0	3	2	0	0	3	6	8	10	4	0	0	1	1	1
Other	0	0	0	0	0	2	30	8	45	102	18	39	52	89	74
Total	583	665	675	708	960	984	977	962	991	881	797	788	822	802	822
							SHARES								
African American	65%	62%	65%	64%	77%	71%	72%	74%	72%	60%	69%	67%	67%	61%	61%
API/F	16%	20%	18%	17%	12%	16%	13%	12%	11%	11%	12%	13%	12%	12%	12%
Caucasian	5%	4%	4%	5%	3%	3%	3%	2%	1%	1%	2%	2%	2%	1%	2%
Hispanic	14%	13%	12%	14%	8%	10%	8%	10%	10%	16%	14%	14%	13%	14%	15%
Native American	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	3%	1%	5%	12%	2%	5%	6%	11%	9%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Chart 8


African-American Enrollments - All Students
Number of Students
800
700
600
500
400
300
200
100
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year


Hispanic Enrollments - All Students
Number of Students
160
140
120
100
80
60
40
20
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year


Asian and Pacific Islander Enrollments - All Students
Number of Students
180
160
140
120
100
80
60
40
20
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

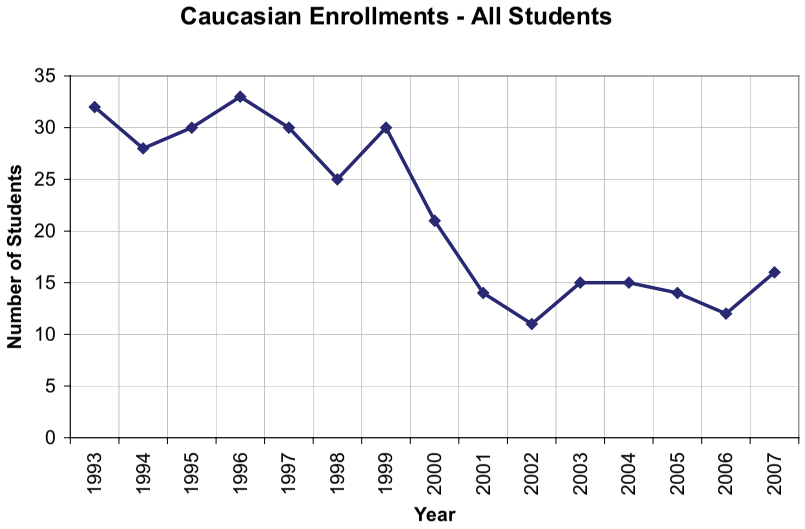

Caucasian Enrollments - All Students
Number of Students
35
30
25
20
15
10
5
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

Table 2 shows the ethnicity of EUSD *residents*, as contrasted with the charts that use CBEDS data and combine residents and out-of-district students. These data are from the student address database, which has somewhat different categories from those used in the CBEDS reports. African Americans make up between 50 and 60 percent of the resident student body. Hispanic students are the next most numerous group, comprising about 19 percent of the resident student population. Asian Indians comprise about seven percent of the student body, as do Other Asians. Whites comprise only two to three percent of the student population. In 2007, no ethnicity was reported for 10 percent of the students.

These data indicate that the out-of-district students are less likely to be Hispanic and Asian, and more likely to be African American, than the resident population.

The number of Asian students has remained fairly constant. This is somewhat surprising because birth data that we will discuss below suggest that Emeryville's Asian population has been increasing.

Table 2

Ethnicity of Residents

	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007
African-American	241	249	258	200	187
Asian Indian	20	33	30	25	27
Chinese		1	2	2	1
Filipino	4	6	4	7	10
Hispanic	76	66	68	75	73
Japanese			1		
Korean			2	3	
Native	1	1	1	1	1
Other Asian	48	30	27	28	25
Other Pacific Islander			1	1	1
Vietnamese		1	4	6	4
White	10	10	10	12	12
Decline to State	20	24	24	33	36
Total	420	421	432	393	377
African-American	57%	59%	60%	51%	50%
Asian Indian	5%	8%	7%	6%	7%
Chinese	0%	0%	0%	1%	0%
Fiilipino	1%	1%	1%	2%	3%
Hispanic	18%	16%	16%	19%	19%
Japanese	0%	0%	0%	0%	0%
Korean	0%	0%	0%	1%	0%
Native	0%	0%	0%	0%	0%
Other Asian	11%	7%	6%	7%	7%
Other Pacific Islander	0%	0%	0%	0%	0%
Vietnamese	0%	0%	1%	2%	1%
White	2%	2%	2%	3%	3%
Decline to State	5%	6%	6%	8%	10%
Total	100%	100%	100%	100%	100%

Student Yields

This section reports on "student yields" in EUSD. A student yield, also called a student generation factor, student generation rate, or student housing unit multiplier, is the average number of students living in each housing unit. Analysts compute a yield by dividing the number of children or students living in an area by the number of housing units there. A yield of .50 would indicate that for every 100 housing units, there are 50 children or students in residence there (however uniformly or irregularly the 50 might be distributed among the units).

Measuring student yields in Emery is useful for two reasons:

1. We learn how many students per unit to expect from any specific future housing project; and
2. For the Alternative Forecast, we compare Emery's student yields to yields in other school districts, which suggests how enrollments might change if Emery's test scores and other community characteristics begin to resemble those of other districts.

In order to understand Emery's demographics, we have measured student yields in different types of housing. As one might expect, yields vary tremendously. Condominiums contain far fewer students per housing unit than houses or duplexes. Housing that low-income households can afford contains many more students per housing unit than market rate units.

In our experience, yields can vary markedly between school districts. During the early to mid-2000s, we believe that the publicizing of test scores on the Internet exacerbated differences in yields across school districts. High test scores have acted as a magnet for families with children. On the other hand low scores have deterred parents from enrolling their children in the public schools. We have measured changes in the yields in other districts that we believe were at least partly driven by the publicizing of test scores.

We also have noticed that student yields vary within districts that have a diverse socioeconomic mix. Districts like Berkeley, San Leandro, and Oakland Unified have wealthy households (mostly in the hill areas) as well as middle-income and low-income households. In such districts, we often see low student yields and high private school rates in the high-income housing areas. This is in contrast to Piedmont Unified, which also has wealthy households, but in which private school rates are low and yields high. Piedmont has high test scores and is relatively income-homogenous.

Emeryville's Housing Inventory

The first step in measuring student yields is to understand Emeryville's housing stock. The California Department of Finance (DOF) reported 5,998 housing units in Emeryville as of January 2008. These units are of all types, and we need more detail when measuring student yields.

We obtained Alameda County Assessor's Office data on each parcel in Emeryville.[4] We supplemented this database with information from city planners, and did "windshield surveys" of some areas about which we had questions. These sources included information for 5,628 units in 12 different housing categories (Table 3). This represents 95 percent of the housing reported by the Department of Finance.

Table 3

Our Housing Database, Using County Assessors Data and Other Sources

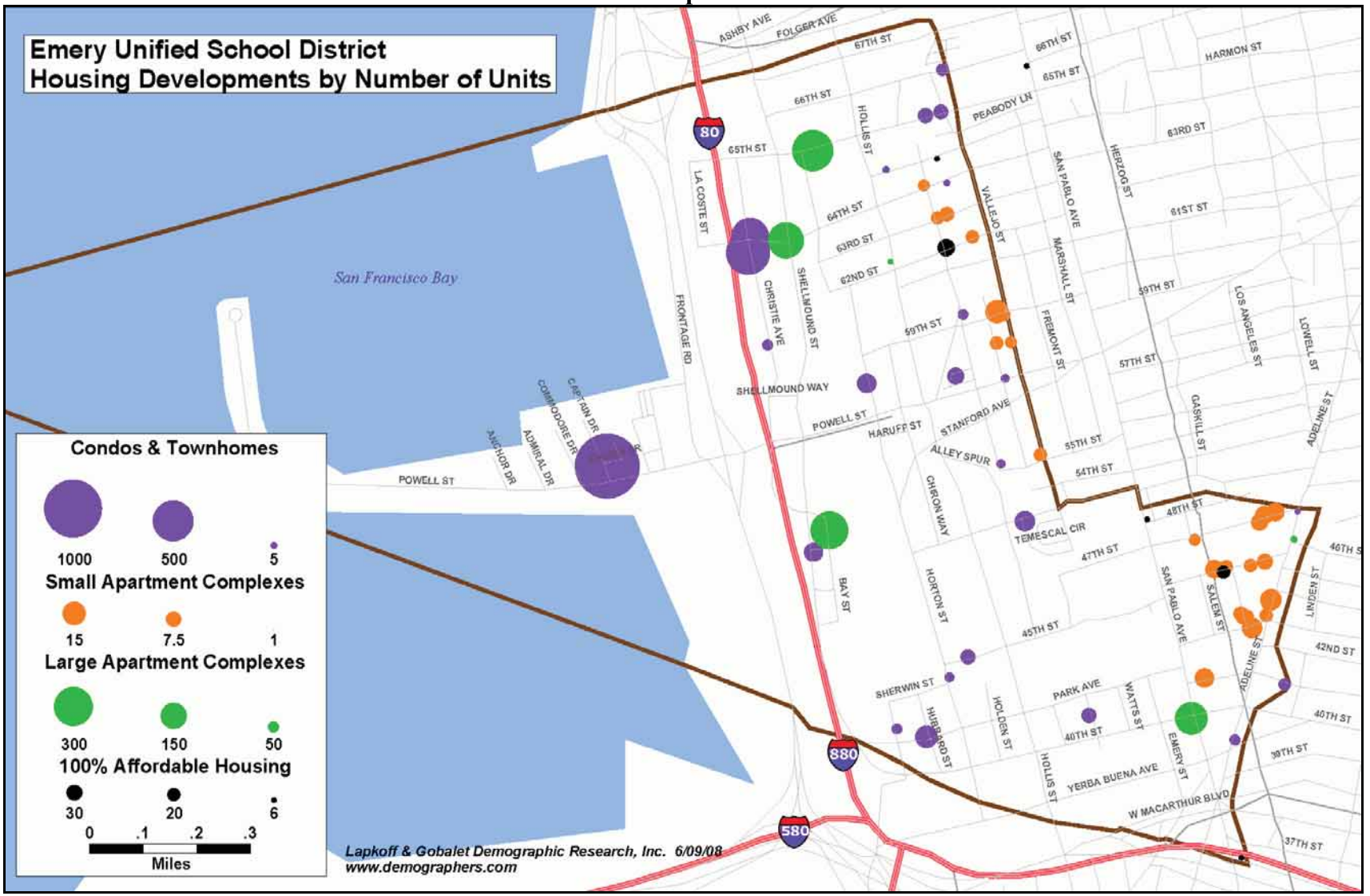
	Number	Percent
Condominiums	2,717	48%
Condominiums/Townhouse style	269	5%
Condominiums/Loft style	351	6%
Units in Large Apt Complexes	1,095	19%
Units in Small Apt Complexes	304	5%
Single Family Units (Houses)	197	4%
Duplexes	142	3%
Triplexes	99	2%
Fourplexes	132	2%
Low quality Housing (Includes SFUs, duplexes, etc)	130	2%
Units that are 100% Affordable	75	1%
Senior Housing	117	2%
Total	5,628	100%

Maps 1 and 2 show where the housing is located in Emeryville, by unit type. The large condominium and apartment complexes are concentrated in the western part of the District, while the single-family units, duplexes, triplexes, fourplexes, and small apartment complexes are located in the eastern areas.

Additional maps are provided in Appendix B, which shows SFUs, duplexes, triplexes, fourplexes, and poor (low quality) residential units, each on a separate map.

[4] The data were purchased from a private company, CD-Data, but the data originate from the County Assessor's Office.

Map 1


Emery Unified School District
Housing Developments by Number of Units
Condos & Townhomes
1000
500
5
Small Apartment Complexes
15
7.5
1
Large Apartment Complexes
300
150
50
100% Affordable Housing
30
20
6
0 .1 .2 .3
Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/09/08
www.demographers.com
San Francisco Bay
ASHBY AVE
FOLGER AVE
67TH ST
66TH ST
65TH ST
PEABODY LN
HARMON ST
63RD ST
61ST ST
59TH ST
57TH ST
55TH ST
54TH ST
48TH ST
47TH ST
45TH ST
42ND ST
40TH ST
39TH ST
37TH ST
64TH ST
63RD ST
62ND ST
HOLLIS ST
LA COSTE ST
CHRISTIE AVE
SHELLMOUND ST
SHELLMOUND WAY
FRONTAGE RD
VALLEJO ST
SAN PABLO AVE
MARSHALL ST
FREMONT ST
HERZOG ST
LOS ANGELES ST
LOWELL ST
GASKILL ST
ADELINE ST
POWELL ST
HARUFF ST
STANFORD AVE
ALLEY SPUR
CHERON WAY
TEMESCAL CIR
BAY ST
HORTON ST
SHERWIN ST
HUBBARD ST
HOLDEN ST
PARK AVE
WATTS ST
EMERY ST
YERBA BUENA AVE
W MACARTHUR BLVD
SALEM ST
LINDEN ST
ANCHOR DR
ADMIRAL DR
COMMODORE DR
CAPTAIN DR
80
880
580

Map 2


Emery Unified School District
SFU and 2-4 Unit Housing Developments
San Francisco Bay
Emery Dist boundary
Fourplexes
Triplexes
Duplexes
SFUs
Poor Residential
0 .1 .2 .3
Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/09/08
www.demographers.com
80
880
580
POWELL ST
SHELLMOUND WAY
STANFORD AVE
TEMESCAL CIR
PARK AVE
YERBA BUENA AVE
APGAR ST
W MACARTHUR BLVD
SAN PABLO AVE
ALCATRAZ AVE
PEABODY LN
OCEAN AVE
VALLEJO ST
SHELLMOUND ST
CHRISTIE AVE
FRONTAGE RD
LA COSTE ST
HOLLIS ST
HORTON ST
BAY ST
BEACH ST
HOLDEN ST
HALLECK ST
SHERWIN ST
EMERY ST
WATTS ST
HARLAN ST
HAVEN ST
ADELINE ST
LINDEN ST
ESSEX ST
SALEM ST
GASKILL ST
LOWELL ST
AILEEN ST
MARSHALL ST
FREMONT ST
BEAUDRY ST
ALLEY SPUR
PELADEAU ST
DOYLE ST
LOOP 22
HERZOG ST
SAN PABLO AVE
CAPTAIN DR
COMMODORE DR
ADMIRAL DR
ANCHOR DR
65TH ST
64TH ST
63RD ST
62ND ST
61ST ST
60TH ST
59TH ST
57TH ST
56TH ST
55TH ST
54TH ST
53RD ST
47TH ST
46TH ST
45TH ST
42ND ST
41ST ST
40TH ST
39TH ST
37TH ST

Student Yields in Emeryville's Housing

To calculate student yields, we used addresses supplied by the District for students attending EUSD between 1999 and 2007. Map 3 shows where students lived in fall 2007: they were concentrated in the eastern part of the District, especially the area east of San Pablo Avenue. Many students live outside the District, but close to Emeryville.

We matched these students to the housing database, in which, where possible, we noted the development's name, or "yield study area." This permitted us to identify enrollments in all of Emeryville's larger housing developments and in many of the smaller ones. Table 4 shows enrollments from 1999 through 2007 in each housing development that we could identify. The table classifies developments by type of unit. The right-most column shows the average number of students per unit over the 1999-2007 period.

Note that children living in Emeryville but attending private schools, charter schools, or a different public school district, are not included in our data, since the District does not have addresses (and other information) about these students.

Several important observations are:

1. Except for Emery Bay Village, condominium units have very, very few students. Many condominiums contained no students at all over the period studied.
2. Housing that is affordable to Very Low or Low Income households has the highest yields.
3. Single-family housing, duplexes, triplexes, and fourplexes have yields that are similar to what we have measured in other districts.
4. During the 1999 to 2007 period, enrollments declined substantially in houses, small apartment complexes and housing that is 100 percent affordable.
5. Large apartment complexes do not yield many students, except those with units affordable to Very Low and Low income households.
6. Yields in small apartment complexes are similar to and perhaps a bit higher than, yields that we have measured in other school districts.

Map 3

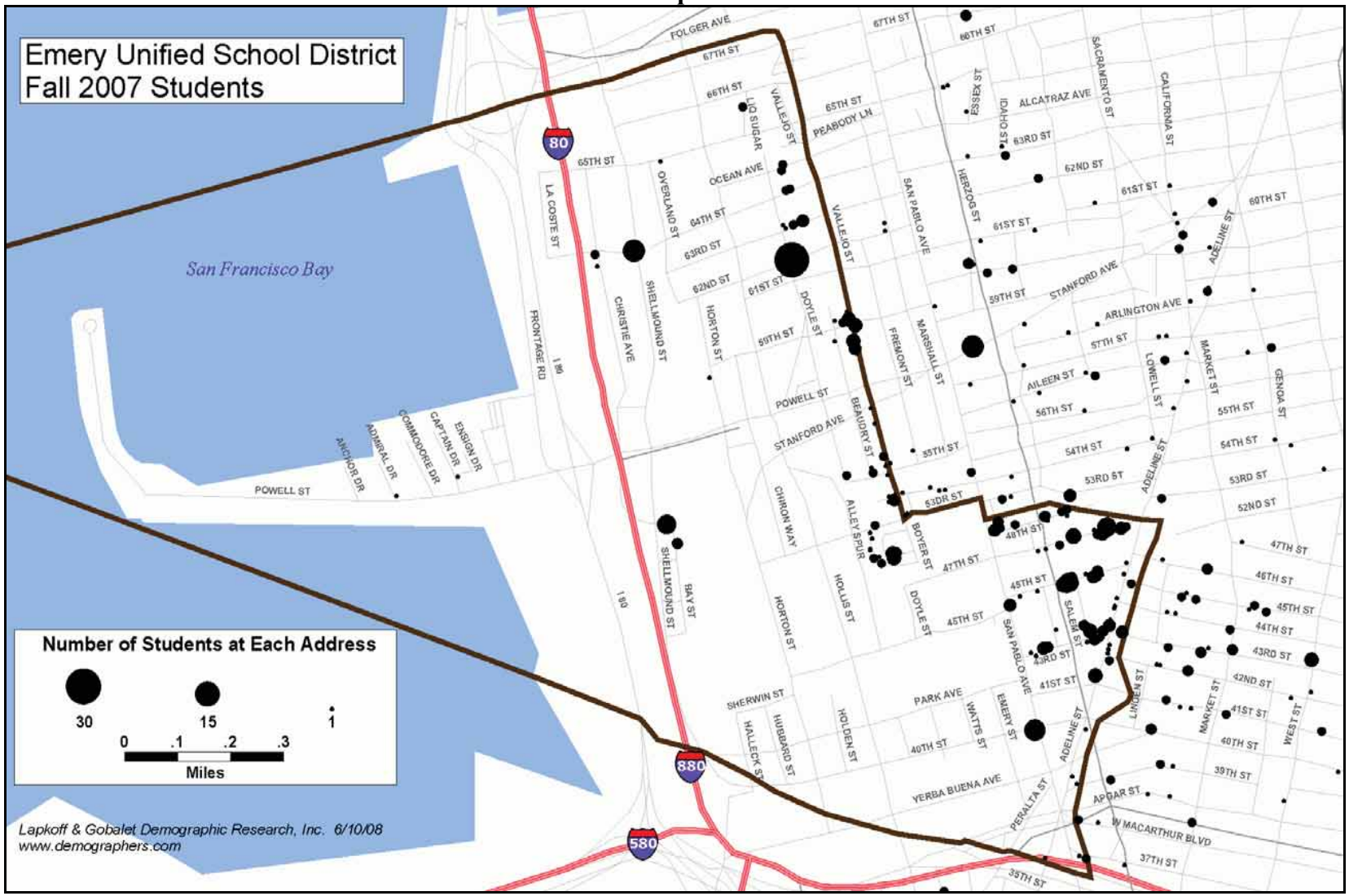

Emery Unified School District
Fall 2007 Students
San Francisco Bay
Number of Students at Each Address
30
15
1
0 .1 .2 .3
Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/10/08
www.demographers.com
80
880
580
FOLGER AVE
67TH ST
66TH ST
65TH ST
64TH ST
63RD ST
62ND ST
61ST ST
60TH ST
59TH ST
57TH ST
56TH ST
55TH ST
54TH ST
53RD ST
52ND ST
48TH ST
47TH ST
46TH ST
45TH ST
44TH ST
43RD ST
42ND ST
41ST ST
40TH ST
39TH ST
37TH ST
35TH ST
OCEAN AVE
PEABODY LN
ALCATRAZ AVE
STANFORD AVE
ARLINGTON AVE
AILEEN ST
POWELL ST
SHERWIN ST
PARK AVE
YERBA BUENA AVE
APGAR ST
W MACARTHUR BLVD
LA COSTE ST
FRONTAGE RD
CHRISTIE AVE
SHELLMOUND ST
OVERLAND ST
HORTON ST
DOYLE ST
VALLEJO ST
LO SUGAR
SAN PABLO AVE
HERZOG ST
FREMONT ST
MARSHALL ST
BEAUDRY ST
CHIRON WAY
ALLEY SPUR
BOYER ST
HOLLIS ST
HOLDEN ST
HALLECK ST
HUBBARD ST
WATTS ST
EMERY ST
SALEM ST
PERALTA ST
ADELINE ST
LINDEN ST
MARKET ST
WEST ST
GENOA ST
LOWELL ST
CALIFORNIA ST
SACRAMENTO ST
IDAHO ST
PASSEK ST
ANCHOR DR
ADMIRAL DR
COMMODORE DR
CAPTAIN DR
ENSIGN DR
BAY ST

Table 4

Emeryville's Housing

Name	# All Units	# of Moderate Affordable units	# Low Affordable units	# Very low Affordable Units	# Market Rate Units	Year Built	Number of Students									Avg Yield
							1999	2000	2001	2002	2003	2004	2005	2006	2007	
Condominium/Townhouses																
Elevation 22	71	7	7	0	57	2004						0	0	0	0	0.00
Emery Bay Village	112	0	0	0	112	1979	13	11	11	15	12	10	16	18	22	0.13
City Limits	31	5	4	0	22	2005							0	0	0	0.00
Liquid Sugar	55	6	5	0	44	2003					0	0	0	0	2	0.01
Subtotal	269	18	16	0	235		13	11	11	15	12	10	16	18	24	0.07
Condominium/Lofts																
Besler Building Lofts	52	0	0	0	52	1986	0	0	0	0	0	0	0	0	0	0.00
Emeryville Warehouse Lofts	141	24	2	0	115	1999	0	0	0	0	0	0	0	0	0	0.00
Green City Lofts	31	3	3	0	25	2006								0	0	0.00
Horton Street Lofts	15	7	0	0	8	1993	0	0	0	0	0	0	0	0	0	0.00
Key Route Lofts	22	0	0	0	22	2006								0	0	0.00
Ocean Avenue Lofts	6	2	0	0	4	1997	0	0	0	0	0	0	0	0	0	0.00
Oliver Lofts	50	5	5	0	40	2002					1	1	1	0	0	0.01
Powell Street Lofts	10	5	0	0	5	1994	0	0	0	0	0	0	0	0	0	0.00
Temescal Lofts	4	2	0	0	2	1995	0	0	0	0	0	0	0	0	0	0.00
Subtotal	331	48	10	0	273		0	0	0	0	1	1	1	0	0	0.00
Condominiums																
Andante Condominiums (phases 1&2)	125	10	15	0	100	2004						0	1	6	4	0.02
Artist Co-op (condo-like)	53	6	4	29	14	1986	0	0	0	0	0	0	0	0	0	0.00
Bay Street One Condos	95	0	0	0	95	2006								0	0	0.00
Blue Star Corner	20	0	0	0	20	2007									0	0.00
Bridgewater Condos (Conversion)	424	0	0	0	424	1988	5	7	3	2	4	1	8	3	0	0.01
Co-Housing (condo-like)	12	0	0	0	12	1991	0	0	0	0	1	1	1	2	2	0.06
Pacific Park Plaza	582	0	0	0	582	1981	1	1	0	0	0	0	4	2	1	0.00
Terraces at Emery Station	101	11	9	0	81	2002					1		1	1	1	0.01
Watergate Condos	1247	0	0	0	1247	1971	0	2	1	1	0	2	4	3	2	0.00
Other	53	0	0	0	53		8	6	5	6	5	7	1	1	1	0.08
Subtotal	2712	27	28	29	2628		14	16	9	9	11	11	20	18	11	n.a.

Emeryville's Housing																		
							Number of Students											
Name	# All Units	# of Moderate Affordable units	# Low Affordable units	# Very low Affordable Units	# Market Rate Units	Year Built	1999	2000	2001	2002	2003	2004	2005	2006	2007		Avg Yield	
Small Apartment Complexes																		
1016 47TH ST	10				10	1963	5	3	6	0	1	1	0	0	0		0.18	
1024 47TH ST	10				10	1965	5	4	7	10	13	15	17	11	9		1.01	
1029 47TH ST	9				9	1959	14	12	8	5	5	4	5	3	5		0.75	
1031 45TH ST	6				6	1916	1	0	0	0	1	1	1	1	1		0.11	
1032 47TH ST	6				6	1909	0	0	0	0	0	0	0	0	0		0.00	
1034 47TH ST	14				14	1918	1	2	2	1	1	1	1	4	1		0.11	
1039 45TH ST	8				8	1923	1	0	0	0	0	0	0	0	0		0.01	
1049 43RD ST	12				12	1908	10	15	16	13	9	12	13	7	5		0.93	
1049 45TH ST	6				6	1930	3	3	4	5	6	8	6	6	7		0.89	
1054 45TH ST	6				6	1910	1	0	0	2	2	0	1	1	0		0.13	
1058 45TH ST	6				6	1958	0	0	1	2	2	0	2	0	1		0.15	
1068 45TH ST	10				10	1935	2	3	2	1	0	0	0	0	0		0.09	
1071 47TH ST	6				6	1910	0	0	0	1	0	0	0	0	1		0.04	
1077 47TH ST	5				5	1927	6	5	6	6	4	4	1	1	1		0.76	
1086 41ST ST	11				11	1913	1	0	0	0	0	0	0	0	0		0.01	
1260 59TH ST	15				15	1961	5	8	9	3	3	1	6	5	3		0.32	
1262 62ND ST	6				6	1967	2	2	0	0	0	0	0	0	0		0.07	
1266 62ND ST	6				6	1964	3	4	6	7	2	2	0	0	0		0.44	
1274 63RD ST	7				7	1965	2	1	0	0	0	0	0	0	2		0.08	
1298 63RD ST	6				6	1954	4	4	0	0	0	0	0	0	0		0.15	
3617 SAN PABLO AVE	1				1	1926	0	0	0	0	0	0	0	0	0		0.00	
4015 ADELINE ST	6				6	1906	0	0	0	0	0	0	0	0	0		0.00	
4305 ADELINE ST	6				6	1929	0	1	1	0	0	0	2	3	3		0.19	
4322 SALEM ST	5				5	1935	2	3	0	0	1	1	1	2	1		0.24	
4326 ESSEX ST	7				7	1916	0	0	1	1	1	2	2	1	1		0.14	
4327 ESSEX ST	5				5	1900	1	0	1	0	0	0	0	0	0		0.04	
4343 ESSEX ST	7				7	1964	10	5	3	3	4	2	2	4	3		0.57	
4359 ADELINE ST	10				10	1938	2	3	6	8	6	2	2	2	0		0.34	
4369 ADELINE ST	13				13	1927	0	0	0	0	0	0	0	0	0		0.00	
5505 VALLEJO ST	6				6	1939	1	0	2	1	1	0	0	1	1		0.13	
5517 VALLEJO ST	6				6	1920	0	1	3	0	0	0	0	0	2		0.11	
5851 VALLEJO ST	5				5	1965	2	1	1	0	0	0	0	1	1		0.13	
5860 BEAUDRY ST	6				6	1943	0	2	4	4	4	1	1	1	0		0.31	
5899 VALLEJO ST	5				5	1922	0	0	0	0	0	0	0	0	0		0.00	
5941 VALLEJO ST	5				5	1937	0	0	0	0	1	0	0	0	0		0.02	
Bakery Lofts	41	8	0	0	33	2002	0	0	0	0	0	0	0	0	0		0.00	
Doyle Dollar Lofts	20	0	0	0	20	2000		0	0	0	0	0	0	0	0		0.00	
Ocean and Doyle THs	5	0	0	0	5	1989											0.00	
Subtotal	324	8	0	0	316		84	82	89	73	67	57	63	54	48		0.21	

Emeryville's Housing																		
							Number of Students											
Name	# All Units	# of Moderate Affordable units	# Low Affordable units	# Very low Affordable Units	# Market Rate Units	Year Built	1999	2000	2001	2002	2003	2004	2005	2006	2007		Avg Yield	
Larger Apartment Complexes																		
Bridgecourt Apts	220	0	64	24	132	1997	34	33	32	42	32	34	42	34	32		0.16	
Archstone Apts	260	0	0	52	208	1993	26	23	27	29	24	33	16	13	12		0.09	
Metropolitan at Bay Street Apts	284	0	0	57	227	2005								5	12		0.03	
Courtyards Apts at 65th	331	62	0	1	268	2004							1	2	1		0.00	
Subtotal	1095	62	64	134	835		60	56	59	71	56	67	59	54	57		0.05	
Partially Rented Apts																		
Avenue 64	224	15	8	0	201	2007									2			
Developments that are 100% Affordable																		
Triangle Court	20	0	11	9	0	1994	26	26	23	19	20	19	23	23	21		1.11	
Ocean Avenue Ct (1265 & 1269)	6	0	0	6	0	n.a.	11	10	11	6	3	3	2	0	1		0.87	
Emery Glen (6200 Doyle)	36	0	0	36	0	1983	44	37	28	23	26	35	31	28	29		0.87	
Gateway Commons	6	5	1	0	0	2000	0	0	0	0	0	1	2	5	5		0.31	
Bay Bridge Apts	6	0	0	6	0	1998	0	0	0	0	0	0	1	1	0		0.04	
1258 & 1268 64TH ST	5	2	3	0	0	1998	0	0	0	0	0	0	0	0	0		0.00	
Artisan Walk						2006												
Subtotal	79	7	15	57			81	73	62	48	49	58	59	57	56		0.76	
Senior Housing																		
Emery Villa	50	0	50	0	0	1993	4	6	8	1	1	0	0	0	1		0.05	
Avalon Sr Apts	67	0	66	0	1	2000			0	1	1	0	0	0	0		0.00	
Subtotal	117						4	6	8	2	2	0	0	0	1		0.02	
Houses																		
Single Family Units	197						137	140	134	99	100	94	85	77	72		0.53	
Duplexes	142						28	27	33	29	39	33	22	29	26		0.21	
Triplexes	99						27	30	27	24	14	18	21	19	14		0.22	
Fourplexes	132						43	44	34	26	38	32	33	32	31		0.26	
Low quality housing	130						31	33	36	28	21	29	39	23	25		0.23	
Subtotal	700						266	274	264	206	212	206	200	180	168		0.31	

Emeryville's Housing																	
							Number of Students										
Name	# All Units	# of Moderate Affordable units	# Low Affordable units	# Very low Affordable Units	# Market Rate Units	Year Built	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg Yield	
Miscellaneous																	
Exempt Public Agencies							2	0	1	1	2	1	1	0	0		
Mixed Use							7	7	4	2	1	3	6	8	8		
non-residential							9	12	12	5	3	4	6	4	2		
unidentified							2	2	1	0	0	0	0	0	0		
Subtotal							20	21	18	8	6	8	13	12	10	13	
Total Residents							542	539	520	432	416	418	431	393	377	452	
Out-of-District							390	424	461	427	375	359	394	396	419		
No address data							6	9	10	4	2	4	1	1	1		
Inconsistency with CBEDS (# of address records different from CBEDS)							39	-10	0	18	4	7	-4	12	25		
Grand Total							938	972	991	863	793	781	826	790	797		

Table 5 summarizes the student yields by category of housing.[5]

Table 5

Average Student Yield 1999-2007 in Emery Unified

	Market Rate	Affordable to Moderate Income Households	Affordable to Low or Very Low Income Households
Market Rate Units			
Condominiums/THs	0.07	0.00	0.13
Condominiums/Lofts	0.00	0.00	0.00
Condominiums	0.007	0.10	0.20
Units in Small Apt Complexes	0.23	0.00*	no units
Units in Large Apt Complexes	0.01	0.03*	0.25
Developments that are 100% Affordable	no units	0.31*	0.87
Single Family Units (Houses)	0.53	no units	no units
Duplexes	0.21	no units	no units
Triplexes	0.22	no units	no units
Fourplexes	0.26	no units	no units
Low quality Housing	0.23	no units	no units
Senior Housing	0.02	no units	no units

* small sample size

Student Yields in Other Districts

We have conducted demographic studies for other Bay Area school districts, and we present yield information here for comparison purposes; we also present it to suggest what EUSD yields could be if test scores and other community characteristics were to change.

We measured student yields in the Albany Unified School District when we worked there in 2001. Albany is considered a very desirable school district, with high test scores and a diverse population. Albany includes University Village, which houses U.C. Berkeley graduate student families. In addition, Albany has a family-friendly atmosphere due to its concentration of single-family units, its Solano Avenue shopping district, and neighborhood parks.

Albany contains three large condominium complexes that are visible from Interstate 80. All three are on Pierce Street (535, 545, and 555 Pierce). Table 6 shows the student yields in 2000 and 2001, as well as some characteristics of the condominiums. The average student yield of .20 for these units is much higher than the student yield we have measured in other condominium developments. Most students living in the condominiums had Asian surnames.

[5] The summary data in Table 5 does not bear an exact correspondence to the data in Table 4 because we had to make some assumptions and perform some calculations to arrive at summary data.

A typical condominium yield in other districts we have studied is between .05 and .10. Albany's yield of .20 is quite high. We believe the attractiveness of the Albany schools and community explain this yield.

Table 6

Albany's High Rise Condominiums

Name	Address	Yr. Built	# Units	Number of Students		Student Yield	
				2000	2001	2000	2001
Bayside Commons	535 Pierce Street	1988	235	41	52	0.17	0.22
Bridgewater	545 Pierce Street	1986	103	15	18	0.15	0.17
Gateview	555 Pierce Street	1977	466	93	90	0.20	0.19
All			804	149	160	0.19	0.20

We also measured yields in Albany's smaller apartment complexes (less than 50 units per complex). We found yields averaging .30, which is higher than those we have measured in other districts.

Emeryville has some large apartment complexes. Except for those with affordable housing, the large apartment developments had relatively low yields. Our experience with other districts suggests that apartment yields can vary tremendously: some have no students, while others can have yields as high as .50. The larger complexes tend to have lower yields, but that is not always the case.

To our knowledge, Albany does not contain any large apartment complexes. However, Alameda Unified has one large apartment complex that could be useful for comparison purposes: the newly renovated Summer House development. Its units are being marketed as luxury apartments. It has no affordable units. As of fall 2007, it was only partially completed. Of the units that were rented, the yield was .08. This yield is within the range we expected. Note that Emeryville's large apartment complexes have been averaging a yield of .05, including units that are affordable, compared to Alameda's .08 market rate yield.

We have measured yields for many school districts in the San Francisco Bay Area, including Hayward Unified, Oakland Unified, San Leandro Unified, Los Altos Elementary, and Palo Alto Unified. The results of these studies inform our discussion in the last section of this report of how Emery's yields could increase if test scores improved substantially.

Students from New Housing

More than 1,700 housing units have been built since 2000 in the City of Emeryville. Construction continues, but the pace of residential housing sales has slowed considerably and it is not clear if all projects that have been proposed, or even those that have been approved, will actually be built in the foreseeable future. Therefore, this section presents two housing forecasts: a "Full Housing Forecast" that includes all of the approved and proposed developments; and a "Conservative Housing Forecast" that assumes only a subset of projects will actually be built.

No matter which housing forecast is assumed, District decision makers need to know how many public school students are likely to live in this future housing. As we explain below, we expect relatively few students to live in the new units, regardless of which housing forecast is used. We expect most of the students in future housing to occupy units that are affordable to Very Low and Low Income households.

The forecasts below show 83 students living in future housing under the Full Housing Forecast and 38 students under the Conservative Housing Forecast. Since there is so little difference between the Full and Conservative Housing Forecasts, we assumed the Full Housing Forecast in the enrollment projections that are discussed later in this report.

Forecasting Students from Future Housing

We estimate students from future housing by multiplying the estimated number of future housing units by the student yield that is typical of those kinds of units.

Most future Emeryville housing developments will have affordable units. Virtually all of Emeryville is in a redevelopment area, with the requirement that 20 percent of the units be "affordable" to Very Low, Low, or Moderate Income households. Affordable units have much higher student yields than market rate units. In particular, the units that are affordable to Very Low and Low Income households have higher yields than those that can be afforded only by Moderate Income households. Therefore, it is important to take into account the number of housing units in each project that are affordable to families with different income levels.

Table 7 shows our forecast of students from new housing through 2014, assuming the Full Housing Forecast. A total of 2,378 units would be built, most by 2010, though some projects could be delayed if the housing market remains sluggish. Of the 2,378 units, 365 would be affordable, which includes 184 units affordable to Very Low or Low Income households, where we expect most students to live.

The shaded columns in the middle of Table 7 show the student yields that we assumed for the housing forecast. Most of the market rate units are expected to yield .007 students, or seven students for every 1,000 units. For most of the units, a yield of .30 is assumed for units affordable to Very Low Income households, a .20 yield is assumed for units

affordable to Low Income households, and a .10 yield is assumed for units affordable to Moderate Income households.

By 2013, only 83 additional EUSD students are expected to live in the large number of housing units assumed under the Full Housing Forecast. The 2,014 market rate units are expected to house only 15 students, because so few current students live in similar housing. (Remember that this forecast assumes that no dramatic changes occur in the attractiveness of Emeryville and its schools to families.)

Table 8 shows our forecast of students from new housing built through 2014, assuming the Conservative Housing Forecast. A total of 966 units would be built. Of these, 147 would be "affordable," including 54 that would be affordable to Very Low or Low Income households, where we expect most students to live. When we assumed the same student yields as under the Full Housing Forecast scenario, we expect 38 EUSD students to live in the new homes, primarily in the affordable units.

Table 7

Enrollment Forecast for Emeryville Under the "Conservative" Housing Forecast

Future Housing in Emeryville								Assumed Yield				Cumulative Students Expected from Housing Built in 2008 and Later						
Project Name	Projected Tenure	Total # Units	Very Low	Low	Moderate	Market	Expected Completion	Very Low	Low	Moderate	Market	2008	2009	2010	2011	2012	2013	2014
Doyle Street Condos	own	27	0	0	0	27	2007	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Vue46	own	47	0	3	6	38	2008	0.3	0.2	0.1	0.007	0	1	1	1	1	1	1
Adeline Place	own	36	0	0	13	23	2008	0.3	0.2	0.1	0.007	0	1	1	1	1	1	1
Beaudry St THs	own	4	0	0	0	4	2008	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Oak Walk Mixed Use	own	53	0	4	0	49	2009	0.3	0.2	0.1	0.007	0	0	1	1	1	1	1
Oak Walk House renovations	own	5	0	0	5	0	2009	0.3	0.2	0.1	0.007	0	0	1	1	1	1	1
39th/Adeline(Madison Park)	own	80	5	0	7	68	2009	0.3	0.2	0.1	0.007	0	0	3	3	3	3	3
Bakery Lofts IV	own	18	0	0	0	18	2009	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Ambassador Homes	own	55	0	0	11	44	2011	0.3	0.2	0.1	0.007	0	0	0	0	1	1	1
Marketplace Redevelopment	own	180	10	10	16	144	2012	0.3	0.2	0.1	0.007	0	0	0	0	0	8	8
Salem Manor	own	3	0	0	0	3	2010	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Vallejo Gardens	own	3	0	0	0	3	2010	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Glashaus THs and condos	own	145	5	6	18	116	2008	0.5	0.3	0.1	0.07	0	14	14	14	14	14	14
Subtotal		656	20	23	76	537												
Avenue 64	rent	224	0	8	15	201	2007	0.3	0.2	0.1	0.01	5	5	5	5	5	5	5
1077 41st 4plex relocation	rent	4	0	0	2	2	2009	0.3	0.2	0.1	0.01	0	0	0	0	0	0	0
1401 Park	rent	54	3	0	0	51	2007	0.3	0.2	0.1	0.01	1	1	1	1	1	1	1
Subtotal		282	3	8	17	254												
Age Song Assisted Living	rent	28	0	0	0	28	2009	0	0	0	0	0	0	0	0	0	0	0
Total		966	23	31	93	819						7	24	29	29	30	38	38

Table 8

Enrollment Forecast for Emeryville Under the "Conservative" Housing Forecast

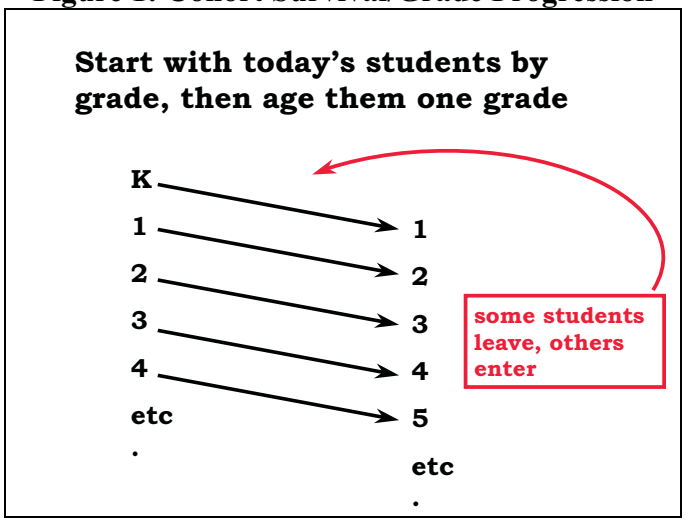
Future Housing in Emeryville								Assumed Yield				Cumulative Students Expected from Housing Built in 2008 and Later						
Project Name	Projected Tenure	Total # Units	Very Low	Low	Moderate	Market	Expected Completion	Very Low	Low	Moderate	Market	2008	2009	2010	2011	2012	2013	2014
Doyle Street Condos	own	27	0	0	0	27	2007	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Vue46	own	47	0	3	6	38	2008	0.3	0.2	0.1	0.007	0	1	1	1	1	1	1
Adeline Place	own	36	0	0	13	23	2008	0.3	0.2	0.1	0.007	0	1	1	1	1	1	1
Beaudry St THs	own	4	0	0	0	4	2008	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Oak Walk Mixed Use	own	53	0	4	0	49	2009	0.3	0.2	0.1	0.007	0	0	1	1	1	1	1
Oak Walk House renovations	own	5	0	0	5	0	2009	0.3	0.2	0.1	0.007	0	0	1	1	1	1	1
39th/Adeline(Madison Park)	own	80	5	0	7	68	2009	0.3	0.2	0.1	0.007	0	0	3	3	3	3	3
Bakery Lofts IV	own	18	0	0	0	18	2009	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Ambassador Homes	own	55	0	0	11	44	2011	0.3	0.2	0.1	0.007	0	0	0	0	1	1	1
Marketplace Redevelopment	own	180	10	10	16	144	2012	0.3	0.2	0.1	0.007	0	0	0	0	0	8	8
Salem Manor	own	3	0	0	0	3	2010	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Vallejo Gardens	own	3	0	0	0	3	2010	0.3	0.2	0.1	0.007	0	0	0	0	0	0	0
Glashaus THs and condos	own	145	5	6	18	116	2008	0.5	0.3	0.1	0.07	0	14	14	14	14	14	14
Subtotal		656	20	23	76	537												
Avenue 64	rent	224	0	8	15	201	2007	0.3	0.2	0.1	0.01	5	5	5	5	5	5	5
1077 41st 4plex relocation	rent	4	0	0	2	2	2009	0.3	0.2	0.1	0.01	0	0	0	0	0	0	0
1401 Park	rent	54	3	0	0	51	2007	0.3	0.2	0.1	0.01	1	1	1	1	1	1	1
Subtotal		282	3	8	17	254												
Age Song Assisted Living	rent	28	0	0	0	28	2009	0	0	0	0	0	0	0	0	0	0	0
Total		966	23	31	93	819						7	24	29	29	30	38	38

Grade Progressions

This section analyzes what demographers call "grade progressions" or, more technically, cohort survival rates and patterns. Grade progressions are an important input in a conventional enrollment forecast, and we study historical trends to guide what assumptions to use in the forecast model. Another reason to study grade progressions is to understand important demographic patterns within the District. Grade progressions often indicate migration trends, as well as retention rates, especially in the higher grades.

A "grade progression" is the change in the size of cohorts as they progress to the next grade. Figure 1 illustrates this process. One year's kindergarten class becomes the next year's first grade class, one year's first grade class becomes the next year's second grade class, and so on. However, as a cohort moves through the grades, its numbers can change. It is this change (indicated by the small box in Figure 1) that we call a grade progression.

Figure 1: Cohort Survival/Grade Progression



Most Recent Grade Progressions

Chart 9a shows EUSD's actual grade progressions between fall 2006 and fall 2007. The first bar on the chart represents the change between the number of fall 2006 kindergartners and the number of fall 2007 first graders (the K>1 progression); there was a net gain of two students. The second bar on the chart indicates that as the first graders from 2006 progressed to the second grade in fall 2007, there was a net loss of five students (the 1>2 progression).[6] Each bar on the chart presents the grade progression between each pair of grades.

[6] For enrollment forecasting purposes, it does not matter whether exactly the same students are present in consecutive years. Grade progressions are measures of *net* changes in cohorts. Theoretically, 100 percent of a cohort could move to the next grade, but they might not be the same students if the number of students who entered exactly replaced children who moved away.

Emery administrators have indicated that the high school grade progressions are affected by some students repeating grades, then sometimes "catching up." This is likely to explain the large numbers – both positive and negative – in the high school grade progressions. Students repeating ninth and tenth grades would increase the 8>9 and 9>10 grade progressions, while making the 10>11 and 11>12 progressions particularly negative.

Chart 9b shows grade progression *rates*. This shows the *percentage* change in the number of students as each cohort progressed to the next grade between fall 2006 and fall 2007. The first bar on the chart shows that the kindergarten class of fall 2006 increased by six percent when the students became first graders in fall 2007.

Chart 9a

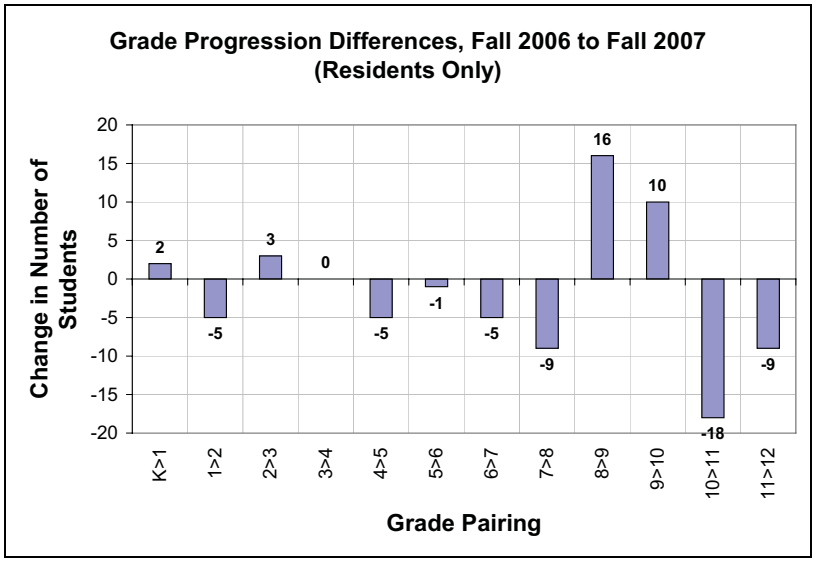
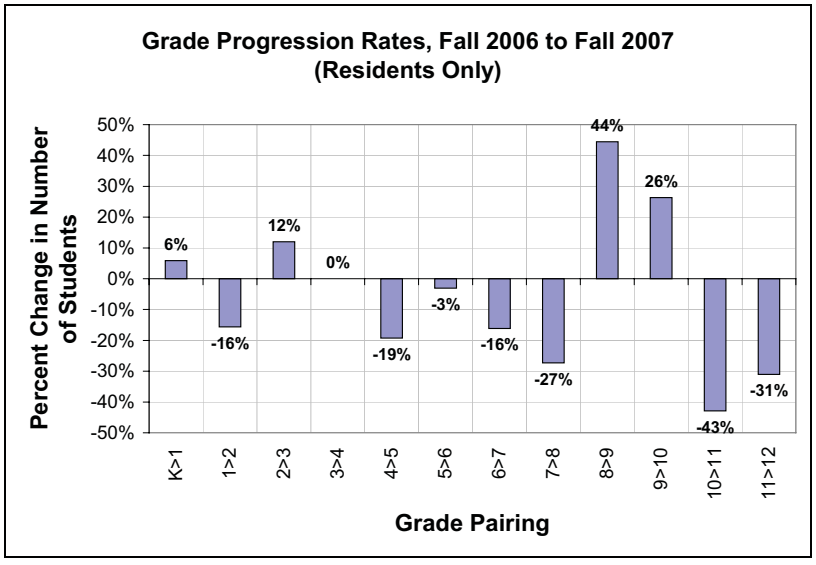


Chart 9b



Grade Progression Patterns Over Time

What are EUSD's typical grade progressions? How does the most recent set of progressions compare with that of each past year? In Appendix B we provide the historical annual grade progressions for each pair of years for which we have resident data. In addition to scrutinizing each set of charts, we have summarized each year's grade progressions by school level (K to 5, 6 to 8, 9 to 12) and compared the results across the years. We call these "aggregated grade progressions." [7] These measures are useful for comparing trends over time, giving a long-term perspective on this important assumption in the forecast model.

Chart 10 shows cohort size changes for elementary, middle, and high school resident students during each of the last seven pairs of years, covering all years for which we have student address data.

In the elementary grades, note the huge loss of students between fall 2001 and fall 2002. A net total of 46 fall 2001 students in kindergarten through fourth grades did not return the following year. Other than this pair of years, the elementary aggregate grade progressions have not fluctuated much. In most other years, the District loses a net of five to 20 students as the elementary students move to the next grade.

Middle school grade progressions have a different pattern. The fall 2001 to fall 2002 grade progression was not particularly low. The range of variation is between a net gain of 11 students and a net loss of 17 students. This is a large range given that middle school covers only three grades, and is about half the size of the combined elementary cohorts.

High school grade progressions show a distinct pattern different from those of the other two grade levels: grade progressions have become progressively less negative over time. The higher grade progressions could be a result of one or more of the following factors: lower dropout rates, more students taking five years to complete high school, more households moving into Emeryville with high school-aged children, and/or more students transferring from secondary charter (or private) schools into Emery's high school.

[7] To summarize elementary grade progressions, we compare the sum of kindergarten through fourth grade enrollments one year with the sum of first through fifth grade enrollments the following year. To summarize middle school grade progressions, we compare the sum of fifth through seventh grade enrollments one year with sixth through eighth grade enrollments the following year. To summarize high school grade progressions, we compare the sum of eighth through eleventh grade enrollments one year with ninth through twelfth grade enrollments the following year.

Chart 10: Grade Progressions for Residents Only

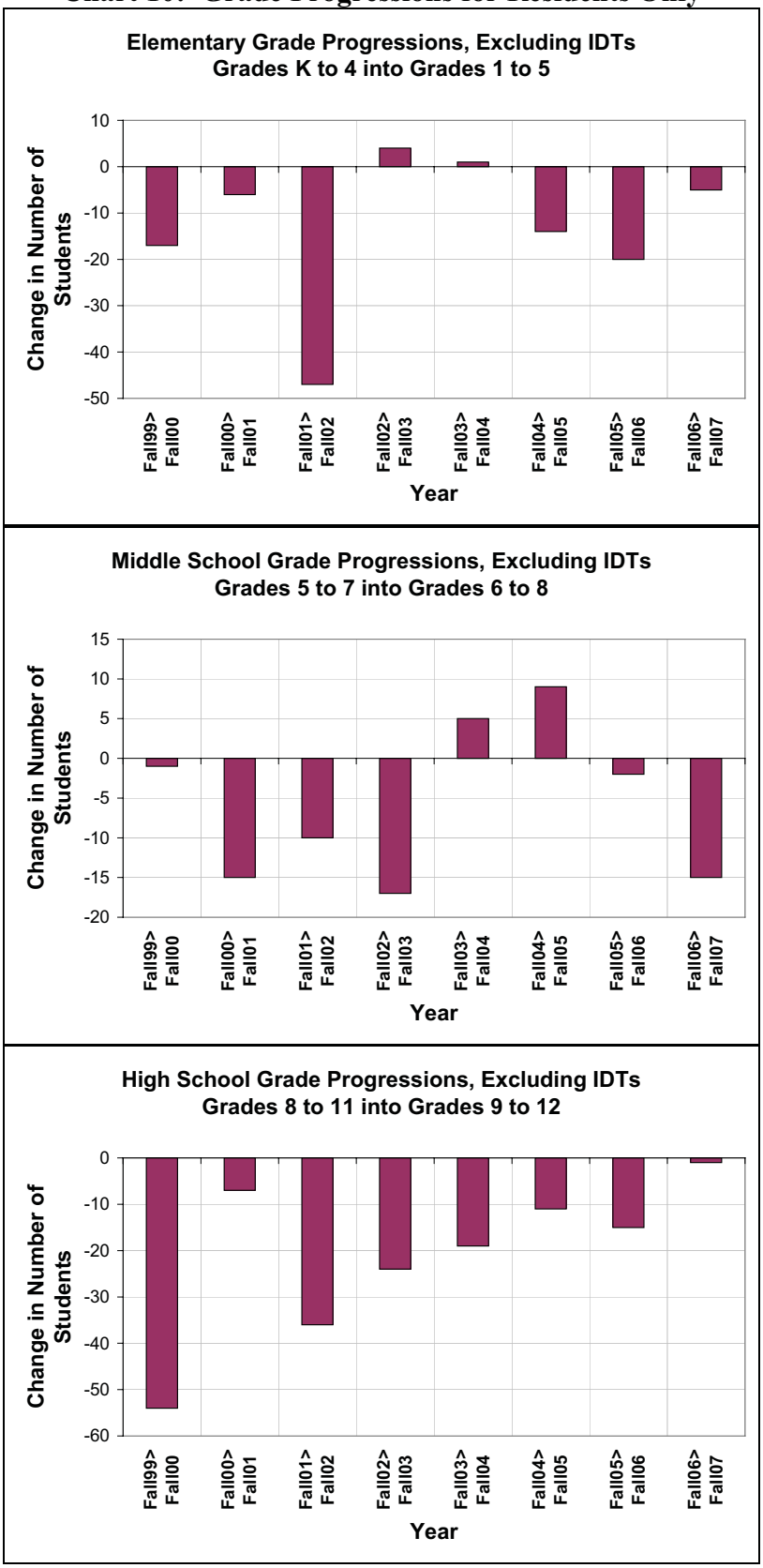


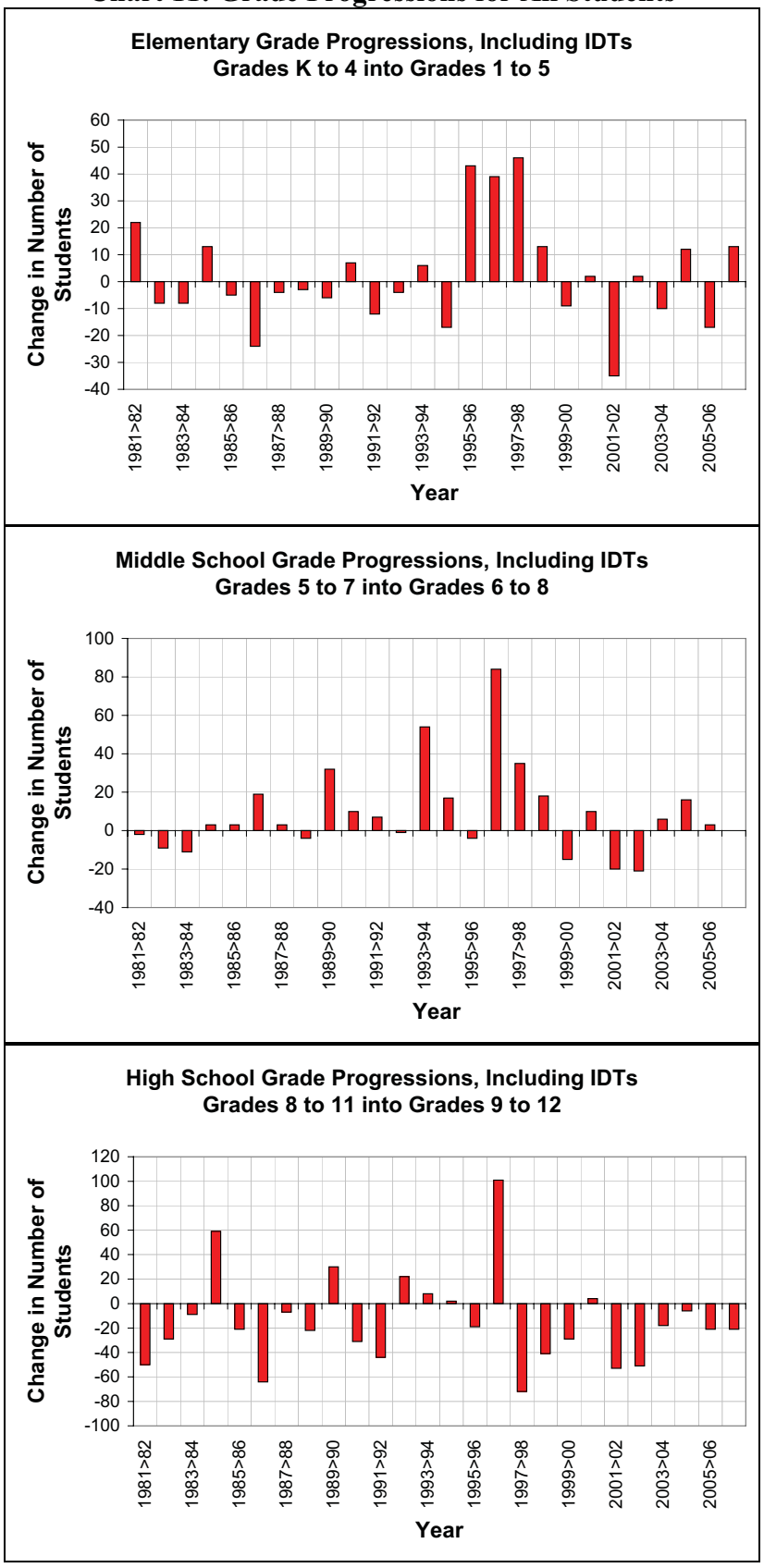
Chart 11 shows the aggregate grade progressions when the out-of-district students are included. These historical figures rely on CBEDS data, which we have from 1981 onward. Because the District has so many out of district students, it is difficult to draw meaning from the patterns. Changes in grade progressions could result from changes in the number of out-of-district students admitted, or they could result from changes in resident enrollments.

Whatever the cause, we see that elementary aggregate grade progressions were very high between 1995 and 1998, while middle and high school grade progressions were particularly high between fall 1996 and fall 1997.

Similar to the residents only graphs (Charts 10), the aggregate elementary grade progression was particularly low between fall 2001 and fall 2002.

Generally, middle school grade progressions are higher when the out-of-district students are included, probably because the District admits more out-of-district students at these levels. The reverse is true for the high school students: grade progressions are higher for residents than for residents and non-residents combined.

Chart 11: Grade Progressions for All Students



Following Cohorts Over Time

Another way to measure grade progressions is to follow a single cohort over time. Because we are interested in the demographic patterns within Emeryville, we track only District residents, and exclude students with out-of-district addresses. Chart 12a tracks the kindergarten class of 1999 as it progressed through the grades. The cohort started with 39 students, dipped to 29 students by the fourth grade, then rose again in the sixth grade. A large drop, to the lowest number over the nine years, was experienced between seventh and eighth grades. Note that because of the small sizes of resident cohorts, random variation can play a large role in the changing numbers of students.

Chart 12b starts with the fall 1999 resident fourth grade class and follows them through the twelfth grade in fall 2007. For this cohort there was also a substantial decline between seventh and eighth grades. Enrollments declined as students progressed through the high school grades.

Chart 12a

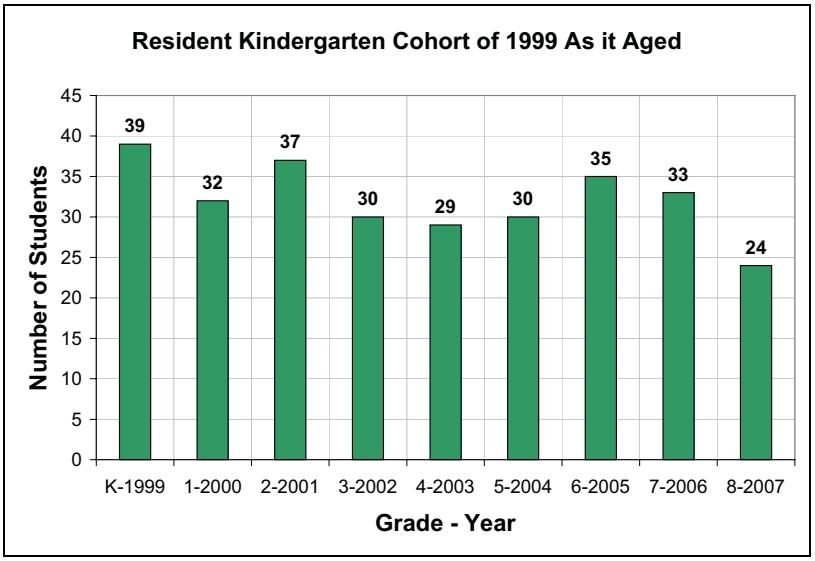
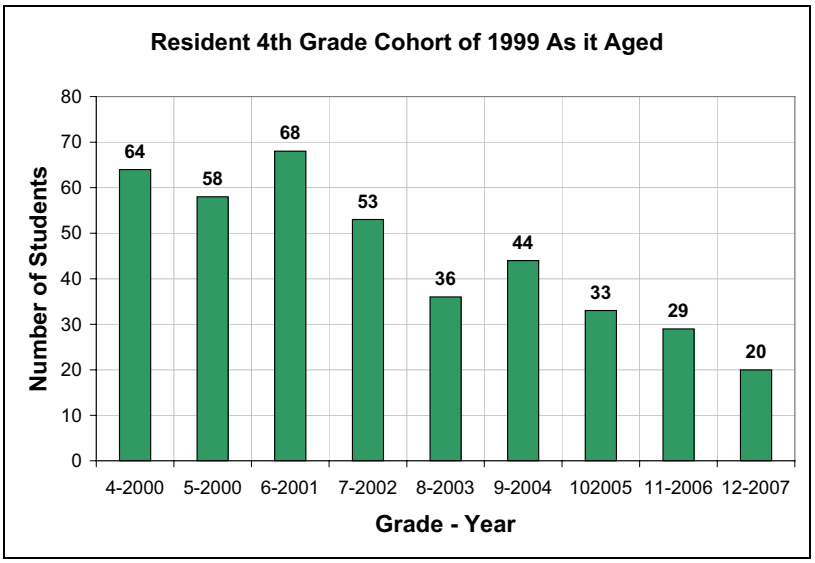


Chart 12b



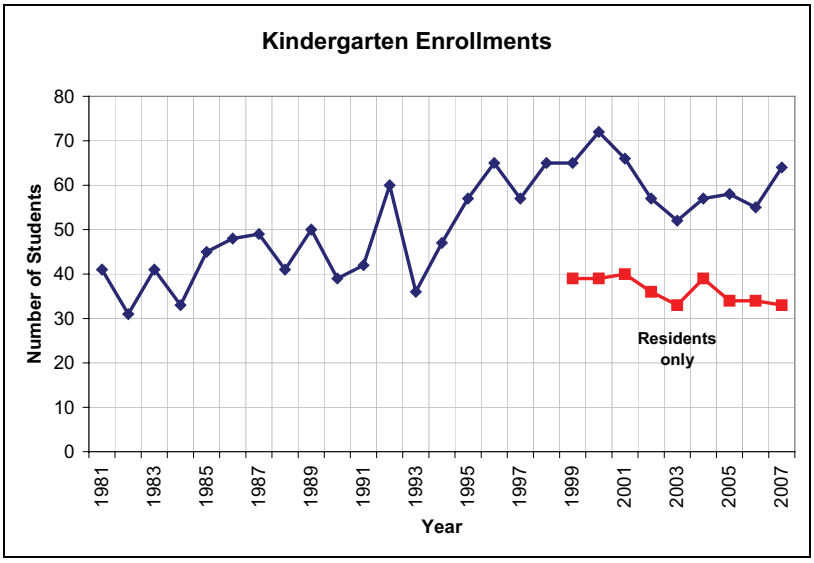
Kindergarten Enrollment

In this section, we discuss historical kindergarten patterns, birth patterns, the relationship between births and subsequent kindergarten enrollment (five years later), and forecasts of kindergarten enrollments using the conventional forecast model.

Historical Kindergarten Enrollments

EUSD kindergarten enrollments have varied a lot, partly because random variation can have a large effect on small numbers (see Chart 13). Also, EUSD may have admitted more out-of-district students in some years than others. Since 1999, resident kindergarten enrollments have been fairly stable: resident kindergarten enrollments ranged from a high of 42 students in 2001 to a low of 33 students in 2007.

Chart 13



Birth Trends

Chart 14 shows state, county, ZIP Code 94608, and City of Emeryville births. The state and county followed the same patterns between 1970 and 2006. The number of births increased substantially during the 1970s and 1980s, peaked in 1990, then declined until 1999. However, the decline was less marked in Alameda County than in the state, probably because of the county's housing growth during the decade. In both the state and county, the number of births has been relatively stable for the last 10 years.

Birth data are available for residents of ZIP Code 94608 for 1982 through 2006. The number of births was largest in the late 1980s and early 1990s. Between 1994 and 2002, the numbers were very stable, around 350. Between 2003 and 2005, the number of births dropped, but rose again to the prior 10-year average in 2006.

Finally, the last graph in Chart 14 shows the number of births to Emeryville residents. Birth numbers peaked in 1991 (similar to the state, county, and ZIP Code trends), and then declined. There is even more year-to-year variation (probably random) in the city figures than for the ZIP Code, no doubt because the city's population is smaller than the ZIP Code's. Note that the most recent year (2006) shows a jump in the number of births: from 83 in 2005 to 103 in 2006.

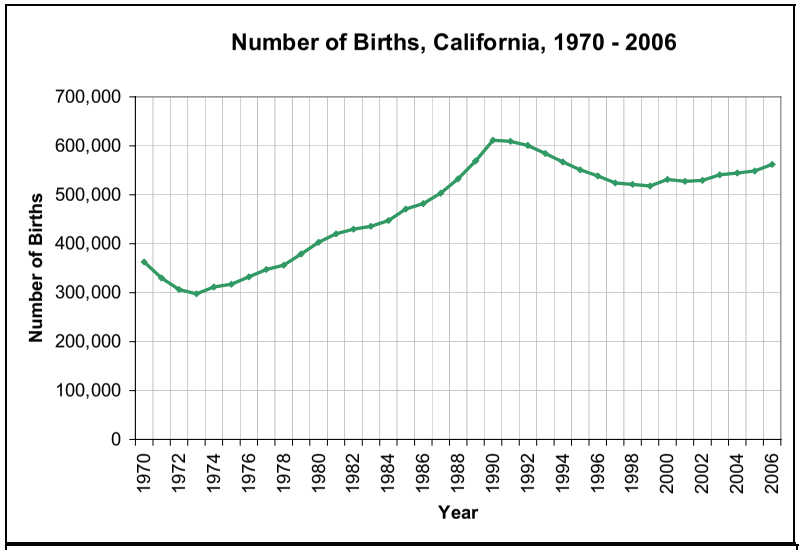
Additional information about trends in births to Emeryville residents is given in Chart 15, which details births by ethnicity.[8] We see that the 2006 increase was primarily a result of an increase in White births. Since about 1996, Asians have consistently had more births than any other ethnic group, which probably means that more Asians are migrating to Emeryville. This signals a probable shift in the community's ethnic mix.

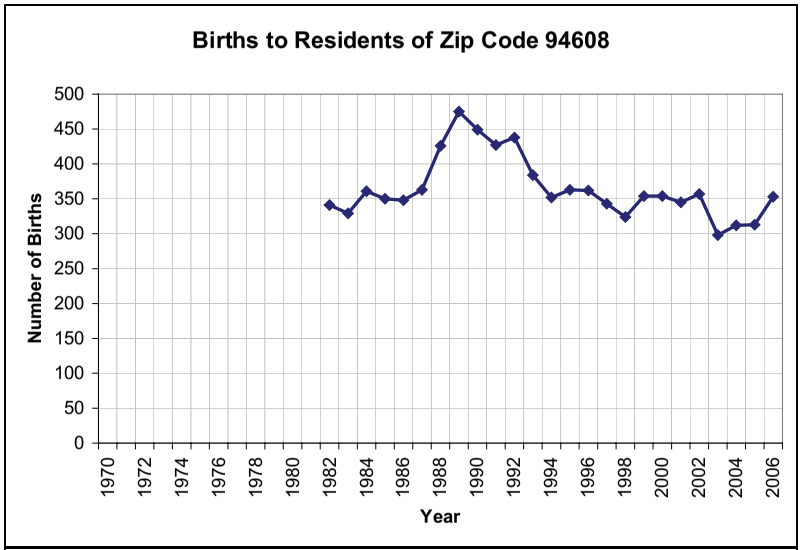
Other trends from the birth charts by ethnicity are:

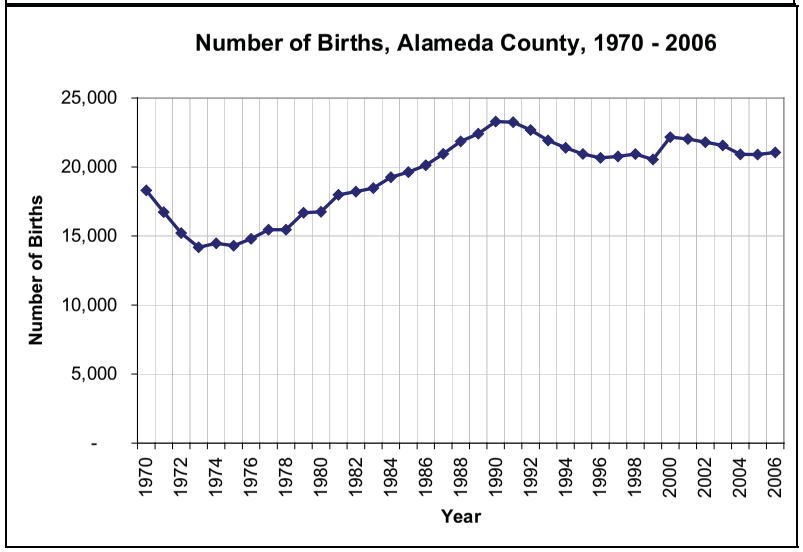
- The number of African American births has declined in recent years, probably as a result of African Americans leaving the area;
- The number of Hispanic births remains low;
- The number of Asian births has increased substantially over time;
- The number of White births has been erratic but with some underlying stability level, except for the jump in the most recent year.

[8] The ethnic categories in these charts reflects the mother's ethnicity, since this is how births are reported.

Chart 14


Number of Births, California, 1970 - 2006
Number of Births
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006
Year


Births to Residents of Zip Code 94608
Number of Births
500
450
400
350
300
250
200
150
100
50
0
1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006
Year


Number of Births, Alameda County, 1970 - 2006
Number of Births
25,000
20,000
15,000
10,000
5,000
-
1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006
Year

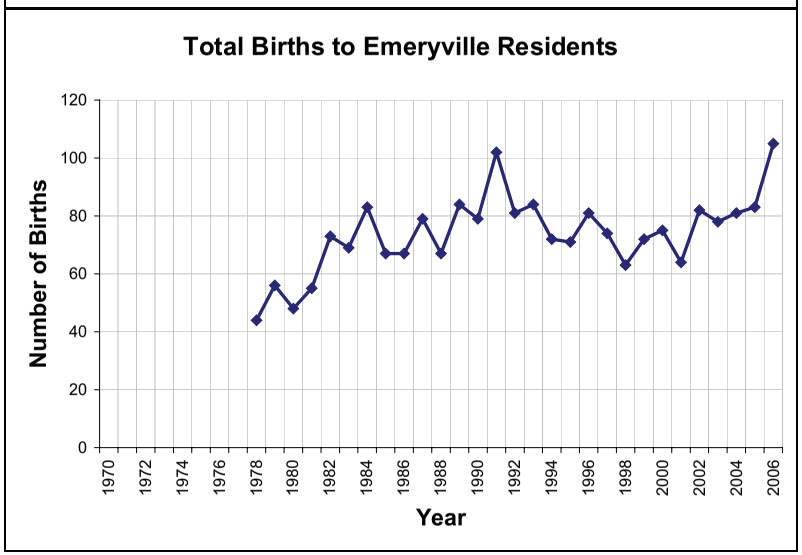
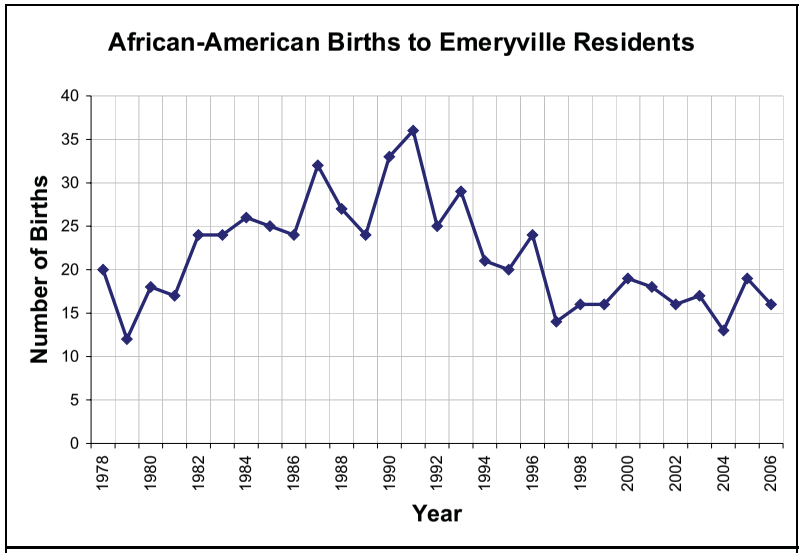
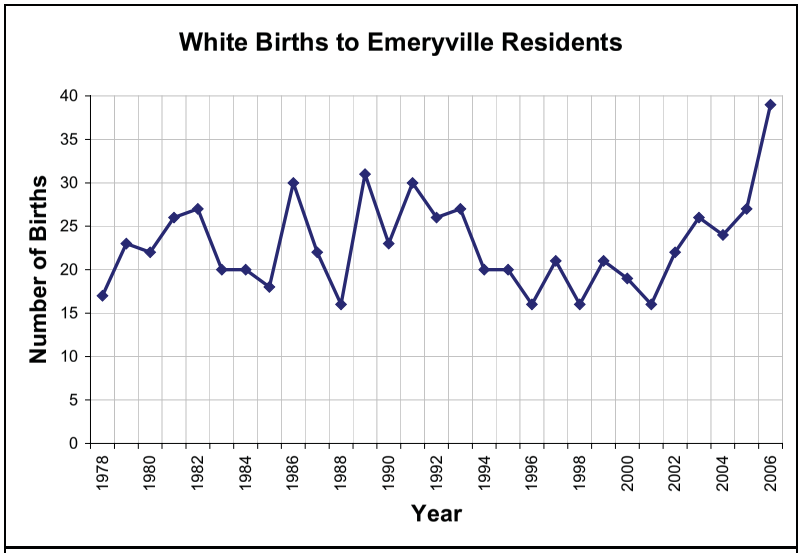
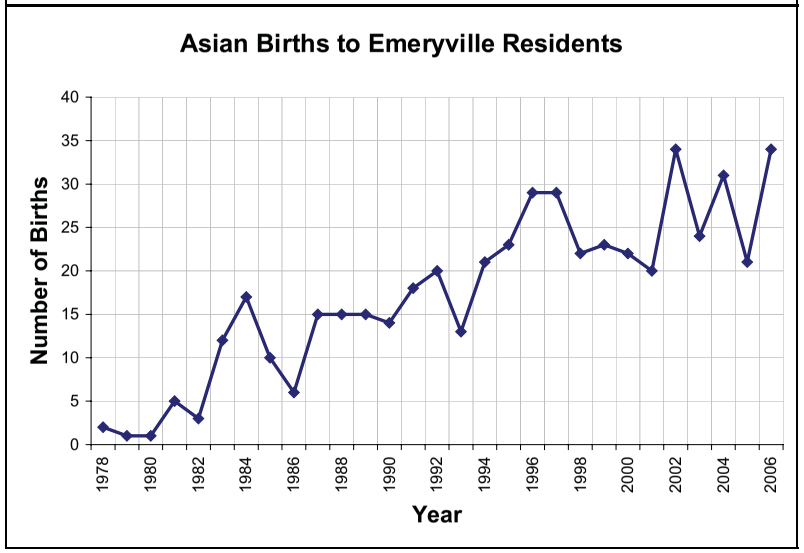
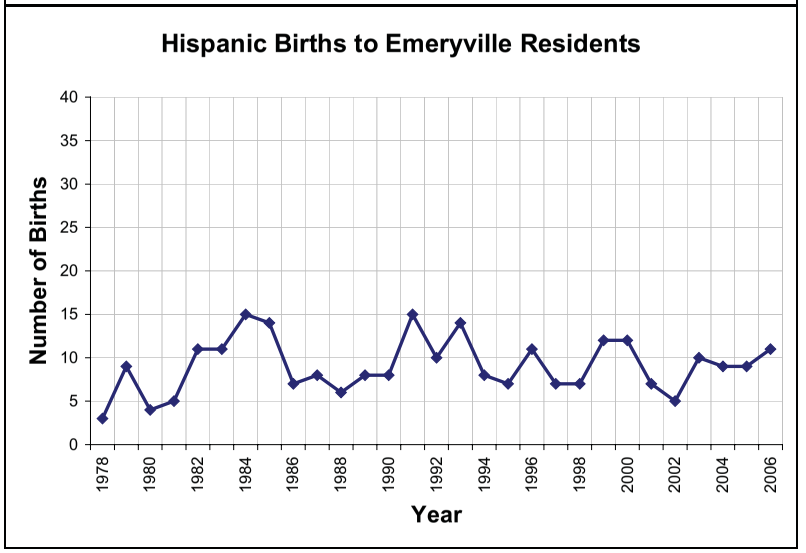

Total Births to Emeryville Residents
Number of Births
120
100
80
60
40
20
0
1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006
Year

Chart 15


African-American Births to Emeryville Residents
Number of Births
Year


White Births to Emeryville Residents
Number of Births
Year


Asian Births to Emeryville Residents
Number of Births
Year


Hispanic Births to Emeryville Residents
Number of Births
Year

Comparison of Kindergarten Enrollments with Births Five Years Earlier

It is useful to compare kindergarten enrollments with the number of births five years earlier for two reasons. First, it can help us forecast kindergarten enrollment for the next four years. Second, it indicates the migration pattern of parents with young children.

Chart 16 compares the number of births (the bars) with kindergarten enrollments five years later (the red line). Far more children are born to Emeryville residents than enroll in its public schools five years later.

Chart 16

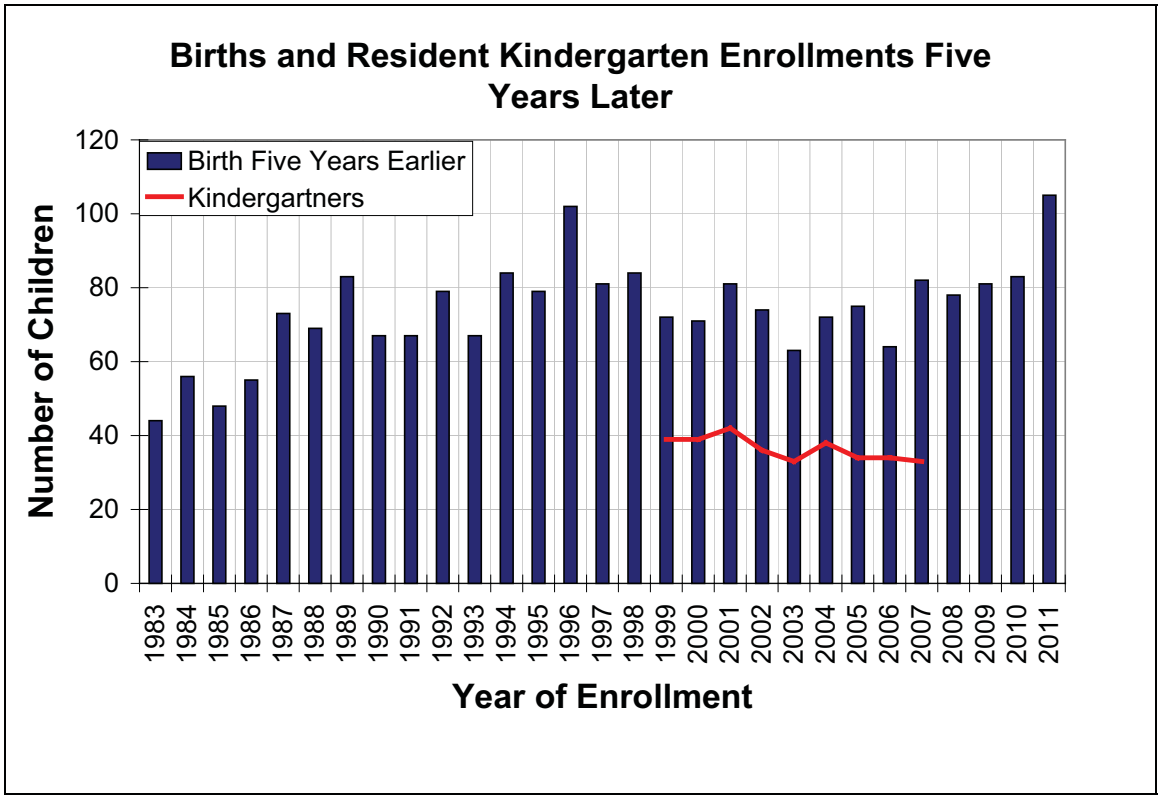
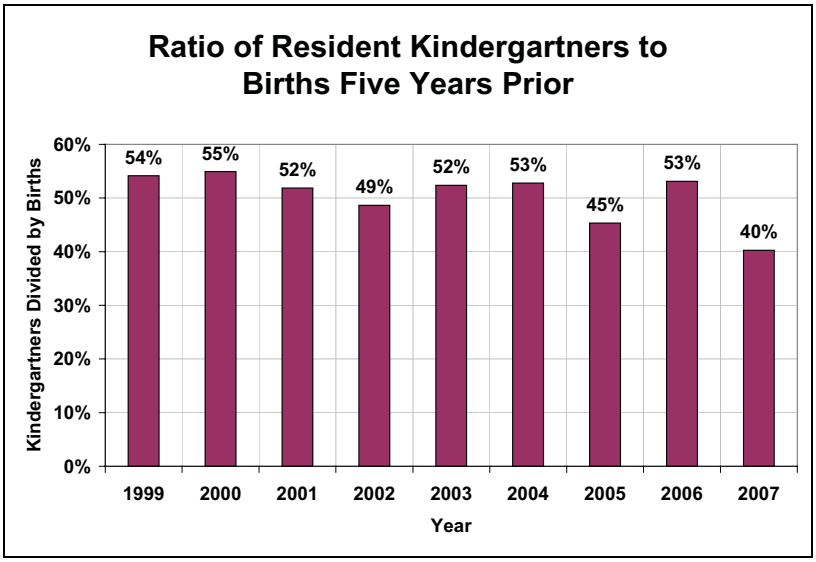


Chart 17 shows the *ratio* of the number of kindergartners to the number of births five years earlier. This kindergarten-to-birth ratio (about 50 percent) is the lowest ratio we have measured in our work for various California school districts. Because U.S. Census data indicate that relatively few Emeryville children attend private schools, the very low kindergarten-to-birth ratio strongly suggests that many families with children born in Emeryville move out of the city before kindergarten.

The conventional way to forecast kindergarten enrollment is to multiply the number of births five years earlier by the typical kindergarten-to-birth ratio. However, Emeryville's 50 percent kindergarten-to-birth ratio indicates that there is a great deal of mobility (families moving out of the city) of families with preschool-aged children. The big

difference between birth and enrollment numbers suggests to us that basing kindergarten forecasts on birth data could be highly unreliable and imprecise. Another factor that causes Emery's kindergarten forecasts to be unreliable is that Emery's resident kindergarten enrollment is very small (about 40 students), which means that random variation can create a lot of uncertainty when forecasting any particular year's enrollments.

Chart 17



The large number of births to Emeryville residents in 2006 would suggest, all else equal, that kindergarten enrollments in 2011 will be high. However, the data on births by ethnicity show that many of the additional births were to White mothers. The past ethnic mix of Emery kindergarten classes suggests that few of these White children will enroll in EUSD schools: for example, in 2007, there were only two White kindergarten students. Therefore, the 2006 birth increase may not result in a large 2011 kindergarten class.

When we take the ethnic mix of the District's students into account, we believe that it is more appropriate to focus on African American and Hispanic births when forecasting kindergarten enrollments. The numbers of births to African American and Hispanic mothers have been relatively stable during the last five years, and we anticipate relatively stable kindergarten enrollments, except for the (small) increases from new housing construction.

The Conventional Enrollment Forecast

The standard method to forecast student enrollments[9] starts with the number of students currently enrolled in District schools, by grade.[10] Student cohorts are advanced to the next grade for each forecast year. This year's first graders become next year's second graders, and the following year's third graders, and so on. However, as a cohort moves through the grades, its numbers can change. When forecasting, it is very important to account for students entering and leaving the District, by grade. We look at the historical patterns of cohort change (grade progressions) to guide the forecast assumptions.

In addition, kindergarten enrollments must be estimated and then incorporated into the model. To forecast kindergarten enrollment, we use non-White births five years earlier, plus the historical relationship between kindergarten enrollment and non-White births five years earlier.[11]

The process described above provides a forecast of residents of existing housing. The final two steps are (1) to add students from future housing and (2) add out-of-district students.

We prepared a variety of scenarios, each based on different assumptions regarding grade progressions and kindergarten-to-birth ratios. We prepared eight alternative forecasts or scenarios, each using a different historical year's patterns for its assumptions. For example, one forecast is based on the assumption that the 2000>01 grade progressions and fall 2001 kindergarten-to-birth ratio will exist through the forecast period. Another uses the 2001>02 grade progressions and kindergarten-to-birth ratio, and so on, to the 2006>2007 experience. An eighth scenario, labeled the "Medium Forecast," uses the average grade progressions and the average kindergarten-to-birth ratio.

In all scenarios, the number of students from future housing is the same. We multiplied the number of housing units forecasted by city planners by a student yield based on the type and income requirements of the future housing. The District's existing student yields by type and income were used to guide the assumption about future yields.

Although elementary forecasts are provided through fall 2020, please note that elementary forecasts for 2011 and beyond are not based on birth data (used to forecast kindergarten enrollments), and become increasingly less reliable as the forecast horizon extends beyond 2011.[12] The middle school forecasts have the same problem starting in 2018. We have shaded these areas of the table to indicate greater uncertainty in the forecasts.

---

[9] The standard forecasting technique reported here is called the cohort survival method or cohort component method.

[10] For our forecast, we began with EUSD students enrolled on CBEDS date in October 2007.

[11] We exclude White births from our calculations because so few Whites enroll in Emery's kindergarten classes and because the White births have been erratic.

[12] The kindergarten forecast for 2012 and beyond is set equal to the 2011 level.

Table 9 shows grade detail for the Medium forecast, from 2008 through 2020. Chart 18 shows elementary, middle, and high school enrollments for all eight forecast scenarios, plus the Medium forecast. Table 10 provides the enrollment figures for the chart.

The Medium forecast shows a substantial increase in elementary enrollments. The projections show a nearly 80-student increase in elementary enrollments (from 177 students in fall 2007 to 255 students by 2016). Over half of the increase is students from new housing. However, as the forecast scenarios show, actual future enrollments could be different from the Medium forecast. By 2020, if we exclude the highest and lowest forecast scenario, the enrollments range from 207 to 319.

The Medium forecast shows a modest increase in middle school enrollments beginning in 2011. In fall 2007, there were 82 middle school residents; by 2019, resident enrollments peak at 111 students. By 2020, if we exclude the highest and lowest forecast scenario, the enrollments range from 82 to 153.

The Medium forecast shows a large decline in high school enrollments over the next few years, followed by a small increase. Enrollments drop from 144 students in fall 2007 to 91 students in fall 2011. By 2020, high school enrollments under the Medium forecast show 110 students. By 2020, if we exclude the highest and lowest forecast scenario, the enrollments range from 91 to 123.

Table 9

Medium Enrollment Forecast
Excludes Out-of-District Students

Year	2007 Actual	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
K	**33**	36	40	41	50	46	47	47	47	47	47	47	47	47
1	**36**	30	33	38	39	46	43	43	43	43	43	43	43	43
2	**27**	36	31	34	39	39	46	42	42	42	42	42	42	42
3	**28**	27	36	31	36	39	40	46	42	42	42	42	42	42
4	**32**	27	27	35	32	35	39	38	44	40	40	40	40	40
5	**21**	29	25	25	34	30	33	35	35	40	37	37	37	37
6	**32**	23	32	28	29	37	33	35	38	37	43	39	39	39
7	**26**	28	21	29	27	26	34	29	31	34	33	38	35	35
8	**24**	25	28	21	31	26	27	33	29	30	33	32	37	34
9	**52**	27	29	32	26	34	30	29	36	31	33	35	35	40
10	**48**	42	23	25	28	22	29	25	25	30	26	28	30	29
11	**24**	33	30	17	20	21	18	22	19	19	22	20	21	22
12	**20**	22	30	27	17	18	20	16	20	18	17	20	18	19
K-5	**177**	186	192	204	231	234	248	252	254	255	252	252	252	252
6-8	**82**	77	81	79	87	90	94	97	97	101	108	109	111	108
9-12	**144**	124	111	101	91	95	98	93	100	97	98	103	103	110
K-12	**403**	387	384	383	409	418	440	442	451	453	459	464	466	470

Table 10

Enrollment Forecast Scenarios, Excludes Out-of-District Students

K to 5 Enrollments

Basis for Forecast Scenario	2007 (actual)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1999>2000 Experience	**177**	187	195	209	238	241	258	263	264	265	262	262	262	262
2000>2001 Experience	**177**	192	195	202	233	235	248	251	252	254	251	251	251	251
2001>2002 Experience	**177**	159	149	146	162	163	172	174	174	175	173	173	173	173
2002>2003 Experience	**177**	204	233	261	295	292	312	320	322	324	319	319	319	319
2003>2004 Experience	**177**	203	221	247	292	305	328	334	335	338	333	333	333	333
2004>2005 Experience	**177**	178	175	178	197	194	205	208	209	210	207	207	207	207
2005>2006 Experience	**177**	177	179	187	210	215	228	231	232	233	231	231	231	231
2006>2007 Experience	**177**	181	186	195	215	216	223	228	229	230	227	227	227	227
"Medium" forecast	**177**	186	192	204	231	234	248	252	254	255	252	252	252	252

6 to 8 Enrollments

Basis for Forecast Scenario	2007 (actual)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1999>2000 Experience	**82**	81	84	74	83	83	88	93	92	98	105	106	108	105
2000>2001 Experience	**82**	68	75	81	83	89	92	96	97	98	106	106	107	104
2001>2002 Experience	**82**	77	73	66	67	59	53	49	47	48	51	51	52	51
2002>2003 Experience	**82**	71	74	75	89	121	134	140	138	144	155	156	157	153
2003>2004 Experience	**82**	84	94	89	101	105	117	138	147	158	170	171	176	170
2004>2005 Experience	**82**	88	102	105	114	112	111	108	101	102	109	110	112	109
2005>2006 Experience	**82**	79	84	79	85	79	80	80	81	85	91	92	93	90
2006>2007 Experience	**82**	68	66	63	72	75	82	79	78	77	83	83	84	82
"Medium" forecast	**82**	77	81	79	87	90	94	97	97	101	108	109	111	108

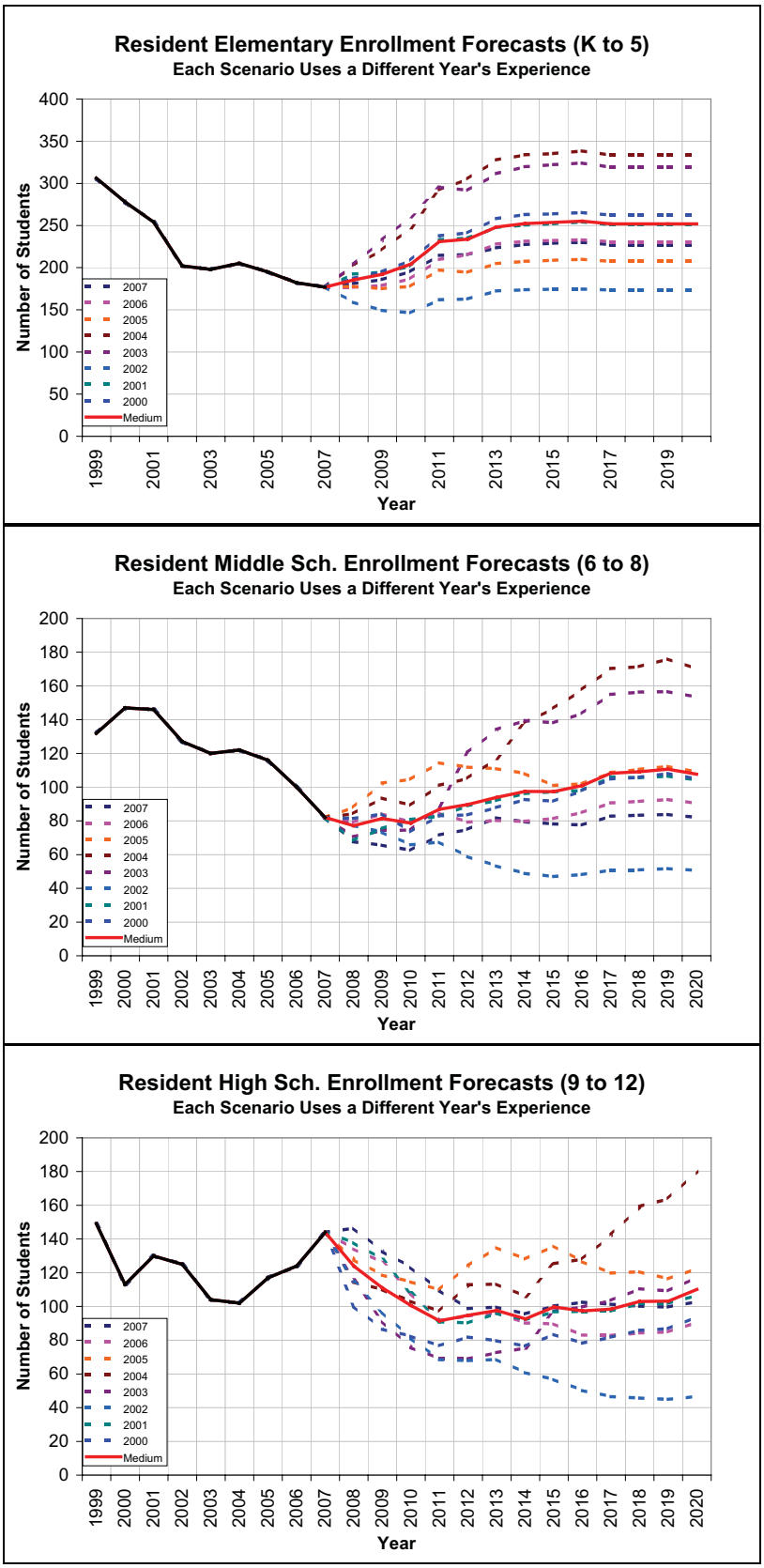
9 to 12 Enrollments

Basis for Forecast Scenario	2007 (actual)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1999>2000 Experience	**144**	100	87	82	77	82	80	77	83	78	82	86	87	94
2000>2001 Experience	**144**	138	128	108	91	90	96	92	97	97	97	102	102	107
2001>2002 Experience	**144**	115	97	81	68	68	68	61	57	50	47	46	45	47
2002>2003 Experience	**144**	116	91	76	69	69	73	75	97	100	104	111	109	117
2003>2004 Experience	**144**	115	110	103	97	113	113	106	125	128	142	159	164	180
2004>2005 Experience	**144**	128	119	115	110	124	135	128	136	127	120	121	116	123
2005>2006 Experience	**144**	134	126	108	92	94	96	90	90	83	83	84	85	91
2006>2007 Experience	**144**	146	133	123	110	99	100	96	100	103	101	100	100	103
"Medium" forecast	**144**	124	111	101	91	95	98	93	100	97	98	103	103	110

Total Enrollments

Basis for Forecast Scenario	2007 (actual)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1999>2000 Experience	**403**	369	366	365	397	407	426	432	439	442	449	454	457	461
2000>2001 Experience	**403**	399	398	390	407	414	436	439	446	450	454	458	459	462
2001>2002 Experience	**403**	351	319	293	298	289	294	283	278	273	271	270	270	271
2002>2003 Experience	**403**	390	398	411	453	481	518	535	558	568	578	586	585	590
2003>2004 Experience	**403**	402	424	440	490	523	558	578	607	624	646	664	673	684
2004>2005 Experience	**403**	393	396	397	421	430	451	444	446	438	436	439	436	439
2005>2006 Experience	**403**	390	389	374	386	389	404	401	403	401	404	407	408	412
2006>2007 Experience	**403**	395	384	381	396	389	405	403	408	410	411	411	411	412
"Medium" forecast	**403**	387	384	383	409	418	440	442	451	453	459	464	466	470

Chart 18


Resident Elementary Enrollment Forecasts (K to 5)
Each Scenario Uses a Different Year's Experience
Number of Students
Year
2007
2006
2005
2004
2003
2002
2001
2000
Medium
Resident Middle Sch. Enrollment Forecasts (6 to 8)
Each Scenario Uses a Different Year's Experience
Number of Students
Year
Resident High Sch. Enrollment Forecasts (9 to 12)
Each Scenario Uses a Different Year's Experience
Number of Students
Year

Including Some Out-of-district Students

The above forecasts excluded students who live outside the District. However, Emery enrolls many out-of-district students. In 2007, about half of student body lived outside the District (445 students). How many out-of-district students will the District enroll in future years?

In many districts, out-of-district students are admitted to balance classes. This has been true of EUSD, but there are at least two other considerations as well. The District has a substantial number of students who are covered under the Allen Bill: either they have daycare arrangements in Emeryville or their parents work in Emeryville. As a result of the partnership of the District with the city's large employers, the District might want to continue to allow students who are covered under the Allen Bill to attend its schools. Currently, District staff statistics show about 100 such students.

The second consideration is that about 20 percent of out-of-district students once lived in EUSD and began attending when they were residents. Significant numbers moved back into the district. Because Emeryville is so small, it is easy for a family to move a short distance and suddenly be located outside the District. Also, many of the households rent, and, on average, renters are more mobile than homeowners. District policymakers may want to allow enough capacity to allow residents who move outside the District to continue attending its schools. This is often the policy in other districts, but what makes Emery unique is the large number of students who fall into this category. These former residents currently number 100 students as well.

Combined, the former residents and Allen Bill students suggest that Emery will want to allow for an additional 200 spaces in their facilities for these students. If desired, Emery could admit more out-of-district students than these two groups. In particular, there are many out-of-district students living in the Emeryville ZIP code, which will probably continue to be attracted to Emery schools.

Alternative Enrollment Forecasts

We were asked to consider what would happen to Emery's enrollments if Emeryville became substantially more attractive to families with children. On the school district's part, this would mean a substantial increase in test scores, and perhaps other programs that, if publicized, would increase the school district's attractiveness. On the city's part, this might mean an increase in parks, programs for youth, and housing that is more attractive to families with children.

This section discusses the importance of test scores, the District's actual test scores, its appeal as a small district, and, finally, an indication or forecast of sorts of how enrollments could change if test scores improved dramatically.

Importance of Test Scores

Our experience (not rigorously investigated) indicates to us that standardized test scores influence public school enrollments. Since 2000, it has been easy for the public to obtain test scores of schools and school districts, and as a result, we believe that many parents consider these scores when deciding where to live and whether to send their children to public, private, or charter schools. We have compared grade progressions in the 1990s with more recent ones, and have found that since 2000 some districts with higher scores (such as Palo Alto Unified and Los Altos Elementary) have had increased numbers of families moving into the communities. In other instances, we have seen increased out-migration from districts with lower test scores (including Oakland Unified and Hayward Unified).

We investigated whether academic articles have been written about the correlation between test scores and enrollments. This is a new area of research, as test scores have only recently become widely available. We suspect more studies will be done in the future, but we did find three that speak to this relationship.

First, Justine Hastings and Jeffrey Weinstein documented from their research about school choice and academic achievement that "parents with high-scoring alternatives nearby were more likely to choose non-guaranteed schools with higher test scores." [13] By "non-guaranteed schools" the authors mean schools outside attendance areas in which students live. This study also points out the importance of parents receiving or having the necessary information to obtain test scores as a factor in determining where their children will attend school.

[13] Information, School Choice, and Academic Achievement: Evidence from Two Experiments, Justine S. Hastings and Jeffrey M. Weinstein, March 2008, http://aida.econ.yale.edu/~jh529/Hastings&Weinstein_InfoChoiceOutcomes.pdf

Second, Escondido High School in California exceeded its growth target as measured by the Academic Performance Index (API) for four straight years from 2000-2003. [14] The District believed that the rise in test scores was responsible for the rise in enrollments. The District needed to add five portables to the school's building inventory to accommodate additional students.

Third, Black River Public School, a small charter school in Holland, Michigan, claims it nearly doubled its enrollment from 1996 to 2002 with high test scores and innovative learning methods such as foreign language classes, art programs and Advanced Placement courses. [15] Although a charter school, this example indicates the relationship between a successful school (evident notably by test scores) and increased enrollments.

EUSD Test Scores

Table 11 shows API base test scores for each school district in Alameda County. The table is sorted by 2007 test score. In two of the past six years, EUSD had the lowest API base score in the county, and in the other four it was second lowest to Oakland Unified. Meanwhile, EUSD test scores increased substantially between 2003 and 2005.

[14] Escondido High School: California School exceeds growth target measured by API, May 15, 2005, http://www.euhsd.k12.ca.us/images/sarcs/ehs_sarc.pdf

[15] Charter School Boasts High Test Scores, Innovative Learning Methods, November 17, 2002, http://www.educationreport.org/pubs/mer/article.aspx?ID=4852

Table 11

Base API Test Scores

	2002	2003	2004	2005	2006	2007	Change: 2002 to 2007
Emery Unified	589	588	627	665	665	656	67
Oakland Unified	568	592	601	634	651	658	90
Hayward Unified	623	633	652	679	681	674	51
San Lorenzo Unified	652	669	661	674	694	700	48
San Leandro Unified	665	682	678	697	696	710	45
Newark Unified	700	708	710	716	727	739	39
Berkeley Unified	719	731	722	736	752	746	27
New Haven Unified	712	734	730	742	756	754	42
Livermore Valley Joint Unified	769	774	760	785	792	790	21
Alameda City Unified	733	755	758	784	807	805	72
Castro Valley Unified	796	811	809	810	826	830	34
Dublin Unified	781	802	804	816	827	833	52
Fremont Unified	797	817	817	833	839	836	39
Albany City Unified	845	862	854	858	862	860	15
Sunol Glen Unified	798	818	821	857	874	879	81
Pleasanton Unified	841	858	861	877	881	893	52
Piedmont City Unified	900	905	902	920	917	915	15

Emery's Small Size

The District's small size is probably quite appealing to many parents. Interviews with District staff members suggest that some families feel an attachment to the District that is evidenced by the fact that many former residents continue to enroll in its schools. Also, we found several students who were once enrolled in EUSD, left for a few years, then came back to The District, often as out-of-district students. When these families returned to the area, we assume that they wanted to make sure they enrolled in Emery. A sense of community is more easily fostered in small school districts than in large ones.

Research has confirmed that smaller districts and the schools within them are preferable to larger districts for a variety of reasons. In an extensive "Review of Research on School District Size," Sibyll Carnochan summarizes the findings in several studies that reach such conclusions as: "Where the size of the district, school or class is controllable, smaller seems to be better"; "Recent research indicates that small schools can be highly effective in providing quality education"; "recommended school sizes have been declining over time"; and "the smaller the district, the higher achievement when

[socioeconomic status] and per-student expenditures were taken into account."[16] In addition, several newspaper articles have reported that parental decisions hinged on the size of a district (or school), with small districts having a strong appeal.[17]

A small district means that teachers know many of the students and their families, not just those students that are currently in their classrooms. The faculty and administration's familiarity with individual students may make at-risk students less isolated and anonymous than similar students in a larger district. Teachers in smaller districts may have greater flexibility to design classes and curricula to meet the individual students' particular needs.

How and Why Emery's Enrollments Could Change if Test Scores Improved Dramatically and/or The City of Emeryville Became More Attractive to Families with Children

We believe there is a huge potential for increased enrollments if the District can boost its test scores substantially and/or the city becomes more family-friendly.

When families living in Oakland want to move to a better school district, they may choose Hayward, San Lorenzo, and San Leandro. If Emery's test scores were better than scores in those districts, families would be more likely to choose EUSD instead, particularly when they considered the District's small size.

Because there are so few resident students in Emeryville, even a small number of families moving into the area could have a proportionately large impact on enrollments. Currently, there are only about 400 resident students. Of the many Oakland families who may wish to move to a different school district, only a small fraction would need to choose Emery to have a large impact on District enrollments.

We wondered whether the housing mix in Emeryville made it so unattractive to families with children that even high test scores would not draw families to the District's schools. The city has a large number of condominiums and lofts that are not particularly appealing to large households. We agree with this sentiment for the most part, especially with respect to lofts. In most other districts, we have found low yields in condominiums (less than .10 students per unit). We believe the low yield is because families need substantial resources to purchase condos: families with the financial wherewithal to *buy* a condominium (but not a house) might well choose to *rent* a house instead.

We have found that as condominium developments age, units are increasingly likely to be rentals. When this happens, the possibility of more families living in the condominiums increase, for the developments are now like apartment complexes. Finally, as we

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[16] See Sibyll Carnochan, "Review of Research on School District Size," Winter 1997, part of *Policy Issues and Prospects: Regarding the Potential Breakup of the Los Angeles Unified School District.* http://www.gseis.ucla.edu/gseisdoc/study/biblio.html.

[17] See, for instance, http://www.districtadministration.com/newssummary.aspx?news=yes&postid=16803.

reported earlier, Albany Unified has student yields around .20 in the high-rise condominiums on Pierce Street. It is possible for such units to contain many students, but the draw to the district must be strong.

Currently, Emery's condominium student yields are *very* low, well below the .10 found in some districts. There are substantial numbers of condominiums, such as Watergate and Pacific Park Plaza, that are not lofts or loft-like, and these units could house students in the future.

The fact that student yields in EUSD's many condominiums are so low means that even a small increase in yields could result in many more students. If we included the future housing assumed under the Full Housing Forecast, Emeryville would soon contain over 4,000 non-loft condominium units. The current yield is about .01. If the student yield were to rise just a little bit, to .02 per unit, 40 additional student residents would result (4,000 multiplied by .01). If the yield were to rise to .10, 360 additional student residents would result (4,000 multiplied by .09).

Alternative Scenarios Under the Full Housing Forecast

Table 12 shows how enrollments would change if student yields increased under the Full Housing Forecast. Alternative 0 (meaning "no change in yields") shows enrollments based on the District's average student yield during the last nine years. Under this scenario, there are 530 resident students, compared to 470 students projected using the standard cohort method. The slightly higher forecast produced by the alternative method is a result of using average yields over the nine-year period, which are greater than current yields.[18]

Alternative 1 uses *slightly* higher student yields in condominiums and large apartments, but keeps all other yields the same as in Alternative 0. These alternative yields are what we would expect if Emery's test scores exceeded those in Oakland, Hayward, and San Leandro. Alternative 1 results in 843 resident enrollments.

Alternative 2 uses *substantially* higher student yields. These are like yields we have measured in very popular districts, such as Los Altos, Palo Alto, and Albany. These districts have very high test scores, particularly compared with those in neighboring districts. Perhaps the community also would need to be more family-friendly, with amenities for families such as parks, programs for families, and family shopping areas and neighborhoods. In Alternative 2, enrollments reach 1,441 students.

Alternative Scenario Under the Conservative Housing Forecast

Table 13 shows how enrollments would change if student yields increased under the Conservative Housing Forecast. Alternative 0 ("no change in yields") shows 504 students, 26 students less than under the Full Housing Forecast.

[18] Average yields produce somewhat higher enrollments than if we used current yields, since average yields are higher than current ones. Using current yields would mirror more closely the forecast under the cohort survival method, which starts with the current student counts.

The higher the student yields, the greater the impact on enrollments between the two different housing forecasts. Alternative 1, using slightly higher yields, shows enrollments of 748 students, 95 students less than under the Full Housing Forecast. Alternative 2, using substantially higher yields, shows enrollments of 1,232 students, 209 students less than under the Full Housing Forecast.

Effect on Out-of-district Students from Test Score Improvements

Currently, about 100 K-8 students attend Emery schools under the Allen Bill. Though we cannot provide a quantitative estimate, we know that if test scores substantially improved, it is very likely that more Emeryville workers would prefer to send their children to Emery schools, increasing the number of Allen Bill requests.

Table 12

Alternative Enrollment Forecasts, based on Higher Student Yields

Full Housing Forecast

	Emeryville's Housing			Alternative 0		Alternative 1		Alternative 2	
	Existing	Future	Total	Avg Yield 99-07	Enrollments	Higher Yields	Resulting Enrollments	Substantially Higher Yield	Resulting Enrollment
Market Rate Units									
Condominiums/THs	235	116	351	0.07	25	0.10	35	0.15	53
Condominiums/Lofts	293		293	0.00	0	0.00	0	0.00	0
Condominiums	2628	1455	4083	0.007	29	0.05	204	0.10	408
Units in Small Apt Buildings	296		296	0.23	68	0.23	68	0.30	89
Units in Large Apt Buildings	835	414	1249	0.01	12	0.05	62	0.20	250
Senior Housing	117		117	0.02	2	0.02	2	0.02	2
Single Family Units (Houses)	197		197	0.53	105	0.53	105	0.58	114
Duplexes	142		142	0.21	30	0.21	30	0.26	37
Triplexes	99		99	0.22	22	0.22	22	0.27	27
Fourplexes	132		132	0.26	35	0.26	35	0.31	41
Low quality Housing	130		130	0.23	29	0.23	29	0.28	36
Subtotal	5,104	1,985	7,089		356		592		1,057
Units Affordable to Moderate Income Households									
Housing that is 100% Affordable	5		5	0.31	2	0.31	2	1.00	5
Condominium/THs	18	18	36	0.10	4	0.10	4	0.20	7
Condominiums/Lofts	48		48	0.00	0	0.00	0	0.00	0
Condominiums	29	129	158	0.10	16	0.10	16	0.20	32
Units in Small Apt Buildings	8		8	0.23	2	0.23	2	0.35	3
Units in Large Apt Buildings	62	34	96	0.10	10	0.10	10	0.25	24
Subtotal	170	181	351		32		32		71
Units Affordable to Low or Very Low Income Households									
Housing that is 100% Affordable	70		70	0.87	61	0.87	61	1.00	70
Condominium/THs	16	11	27	0.13	4	0.13	4	0.25	7
Condominiums/Lofts	10		10	0.20	2	0.20	2	0.00	0
Condominiums	60	151	211	0.05	11	0.10	21	0.25	53
Units in Large Apt Buildings	198	22	220	0.25	55	0.35	77	0.35	77
Subtotal	354	184	538		132		208		304
Students not categorized					10		10		10
TOTAL	**5,628**	**2,350**	**7,978**		**530**		**843**		**1,441**

Table 13

Alternative Enrollment Forecasts, based on Higher Student Yields
Conservative Housing Forecast

	Emeryville's Housing			Alternative 0		Alternative 1		Alternative 2	
	Existing	Future	Total	Avg Yield 99-07	Enrollments	Higher Yields	Resulting Enrollments	Substantially Higher Yield	Resulting Enrollment
Market Rate Units									
Condominiums/THs	235	116	351	0.07	25	0.10	35	0.15	53
Condominiums/Lofts	293		293	0.00	0	0.00	0	0.00	0
Condominiums	2628	421	3049	0.007	21	0.05	152	0.10	305
Units in Small Apt Buildings	296		296	0.23	68	0.23	68	0.30	89
Units in Large Apt Buildings	835	254	1089	0.01	11	0.05	54	0.20	218
Senior Housing	117		117	0.02	2	0.02	2	0.02	2
Single Family Units (Houses)	197		197	0.53	105	0.53	105	0.58	114
Duplexes	142		142	0.21	30	0.21	30	0.26	37
Triplexes	99		99	0.22	22	0.22	22	0.27	27
Fourplexes	132		132	0.26	35	0.26	35	0.31	41
Low quality Housing	130		130	0.23	29	0.23	29	0.28	36
Subtotal	5,104	791	5,895		347		532		921
Units Affordable to Moderate Income Households									
Housing that is 100% Affordable	5		5	0.31	2	0.31	2	1.00	5
Condominium/THs	18	18	36	0.10	4	0.10	4	0.20	7
Condominiums/Lofts	48		48	0.00	0	0.00	0	0.00	0
Condominiums	29	62	91	0.10	9	0.10	9	0.20	18
Units in Small Apt Buildings	8		8	0.23	2	0.23	2	0.35	3
Units in Large Apt Buildings	62	17	79	0.10	8	0.1	8	0.25	20
Subtotal	170	97	267		24		24		53
Units Affordable to Low or Very Low Income Households									
Housing that is 100% Affordable	70		70	0.87	61	0.87	61	1.00	70
Condominium/THs	16	11	27	0.13	4	0.13	4	0.25	7
Condominiums/Lofts	10		10	0.20	2	0.20	2	0.00	0
Condominiums	60	28	88	0.05	4	0.10	9	0.25	22
Units in Large Apt Buildings	198	11	209	0.25	52	0.35	73	0.35	73
Subtotal	354	50	404		123		182		247
Students not categorized					10		10		10
TOTAL	**5,628**	**938**	**6,566**		**504**		**748**		**1,232**

Comparing the Conventional and Alternative Forecast Scenarios

Table 14 summarizes and compares the forecast scenarios under the conventional and alternative models, and using the Full or Conservative Housing Forecasts. Using the conventional forecast model, resident enrollments under the Medium forecast are 425 to 470, depending on the housing forecast. Alternative 0 is intended to mimic the conditions under the conventional forecast. Slightly higher enrollments arise under the alternative forecast because average conditions during the 1999-2007 period are used, rather than the current counts used in the conventional model.

Alternative 1 enrollments range from 748 to 843, depending on which housing forecast is used. We believe this scenario is likely if Emery's test scores were to exceed those in Oakland, Hayward, San Leandro, and San Lorenzo.

Alternative 2 enrollments range between 1,232 and 1.441, depending on which housing forecast is used. The yields used in this forecast suggest that Emery would need to become very attractive, similar to yields we have seen in very high-performing districts.

Table 14

Summary of Resident Enrollment Forecast Scenarios

Forecast Scenario	Assumptions about District's future reputation	Forecast Under Conservative Housing Forecast	Forecast under Full Housing Forecast
Conventional Forecast (Medium)	no change in District's reputation	425	470
Alternative 0	no change in District's reputation	504	530
Alternative 1	District's test scores exceed those of Oakland, Hayward, San Leandro	748	843
Alternative 2	District has test scores similar to high-performing districts.	1,232	1,441

As we noted earlier, resident enrollments in 1999 were nearly 600 students. As the District plans for new facilities, we recommend that the District plan to accommodate at least 600 students, since it has been demonstrated in the past that resident enrollments can reach this level.

For facilities purposes, whichever forecast is used, the District might want to add an additional 100 students for former residents and another 100 students (at least) to accommodate Allen Bill students.

Appendix A: Private School Enrollments

Each decennial U.S. Census through 2000 asked a sample of the population whether the children in the household attended public or private schools. These data show that Emeryville has had low rates of private school attendance. Table A-1 shows the private school rates in 1970, 1980, 1990 and 2000, and compares the rate to that in other Alameda County cities. (The table is sorted by private school rate in 2000.) In 1990 and 2000, Emeryville's K-12 private school enrollment rate dropped from nine to five percent. In 2000, Emeryville had the lowest private school rate of any city in the County.

Table A-1

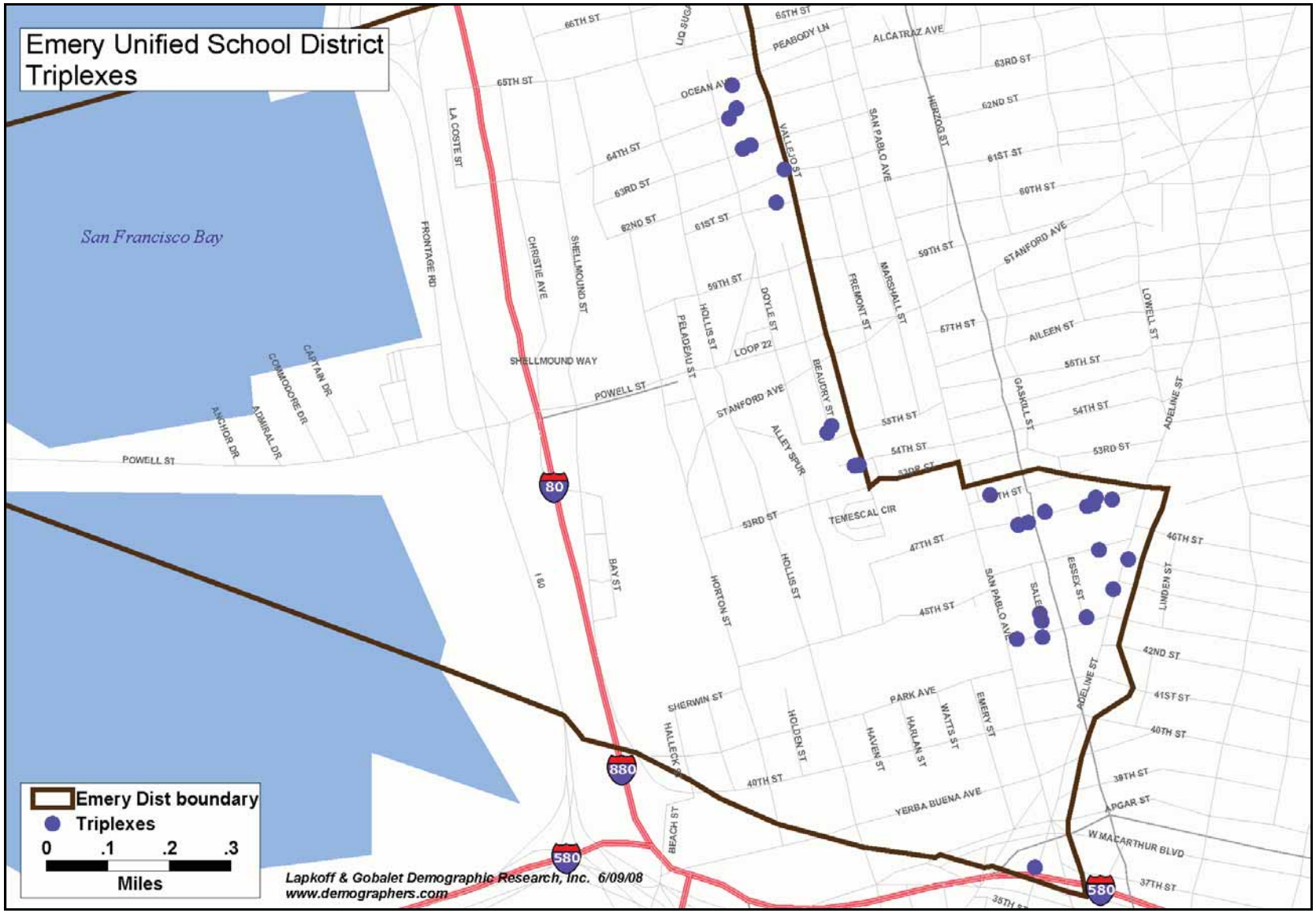
Percent of Enrollments Attending Private School

Cities in Alameda County	1970	1980	1990	2000	Change between 1990 and 2000
Emeryville	**2.5%**	**10.1%**	**9.0%**	**5.3%**	**-3.7%**
Pleasanton	n.a.	3.1%	4.3%	6.8%	2.5%
Livermore	3.2%	5.9%	7.8%	7.7%	-0.1%
Union City	n.a.	12.5%	7.4%	9.1%	1.7%
Dublin	n.a.	6.5%	10.9%	9.8%	-1.1%
Albany	n.a.	12.9%	7.2%	10.3%	3.1%
Hayward	6.0%	11.3%	9.1%	10.3%	1.2%
Newark	3.0%	9.3%	8.0%	10.4%	2.4%
Piedmont	n.a.	4.9%	9.0%	11.2%	2.2%
Castro Valley	7.7%	16.2%	12.4%	11.5%	-0.9%
Fremont	4.9%	9.6%	9.5%	12.8%	3.3%
Oakland	12.1%	14.4%	13.3%	13.6%	0.3%
San Leandro	10.6%	13.0%	11.5%	14.2%	2.7%
San Lorenzo	n.a.	14.3%	15.3%	14.5%	-0.8%
Alameda	10.6%	11.1%	12.4%	15.3%	2.9%
Berkeley	9.2%	18.5%	24.2%	24.7%	0.5%
Alameda County	8.3%	11.8%	10.8%	11.9%	1.1%

Sources: 1970, 1980, 1990 and 2000 U.S. Decennial Censuses

Appendix B: Additional Maps and Tables


Emery Unified School District
Duplexes
San Francisco Bay
Emery Dist boundary
Duplexes
0 .1 .2 .3
Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/09/08
www.demographers.com


Emery Unified School District
Triplexes
San Francisco Bay
Emery Dist boundary
Triplexes
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Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/09/08
www.demographers.com
80
880
580
POWELL ST
SHELLMOUND WAY
STANFORD AVE
TEMESCAL CIR
YERBA BUENA AVE
PARK AVE
SHERWIN ST
OCEAN AVE
PEABODY LN
ALCATRAZ AVE
FRONTAGE RD
LA COSTE ST
CHRISTIE AVE
SHELLMOUND ST
VALLEJO ST
SAN PABLO AVE
HERZOG ST
FREMONT ST
MARSHALL ST
BEAUDRY ST
ALLEY SPUR
PELADEAU ST
HOLLIS ST
DOYLE ST
LOOP 22
GASKILL ST
AILEEN ST
LOWELL ST
ADELINE ST
ESSEX ST
LINDEN ST
SALEM ST
HORTON ST
BAY ST
HOLDEN ST
HALLECK ST
BEACH ST
HAVEN ST
HARLAN ST
WATTS ST
EMERY ST
APGAR ST
W MACARTHUR BLVD
ANCHOR DR
ADMIRAL DR
COMMODORE DR
CAPTAIN DR
65TH ST
64TH ST
63RD ST
62ND ST
61ST ST
60TH ST
59TH ST
57TH ST
56TH ST
54TH ST
53RD ST
47TH ST
45TH ST
42ND ST
41ST ST
40TH ST
39TH ST
37TH ST


Emery Unified School District
Fourplexes
San Francisco Bay
Emery Dist boundary
Fourplexes
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Miles
Lapkoff & Gobalet Demographic Research, Inc. 6/09/08
www.demographers.com
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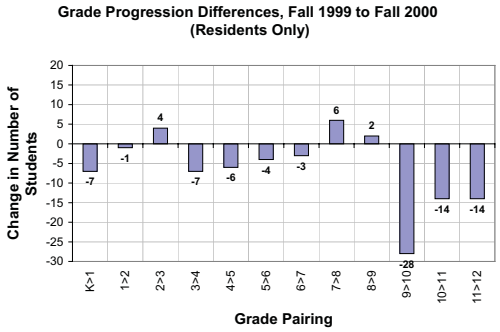
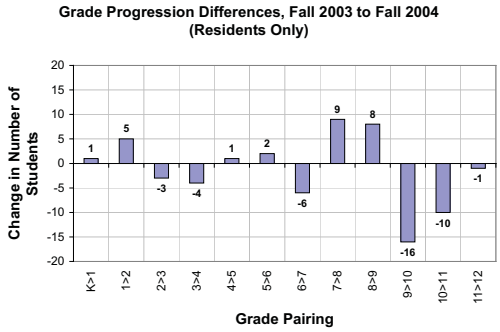
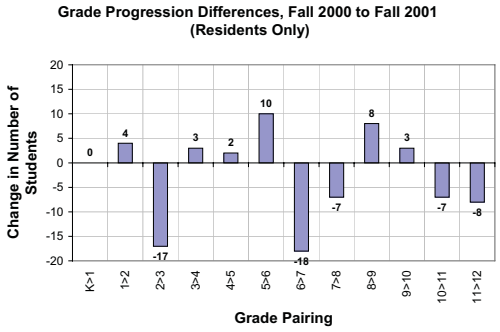
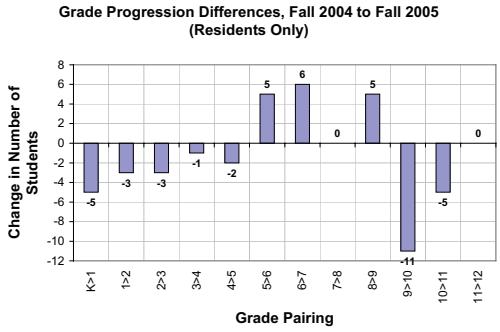
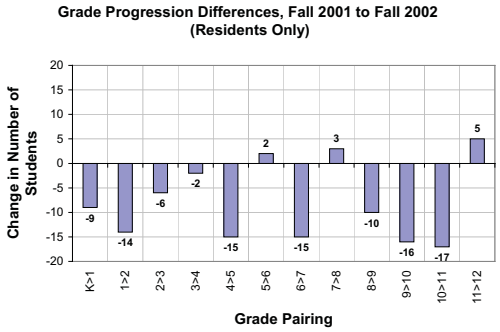
Historical Annual Grade Progressions of Resident Enrollments

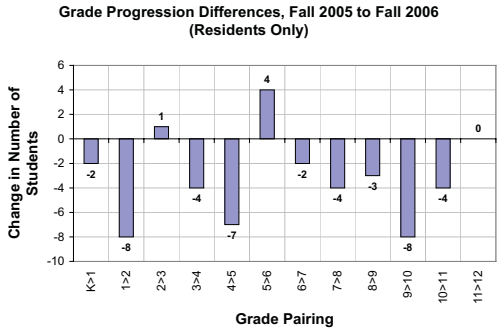


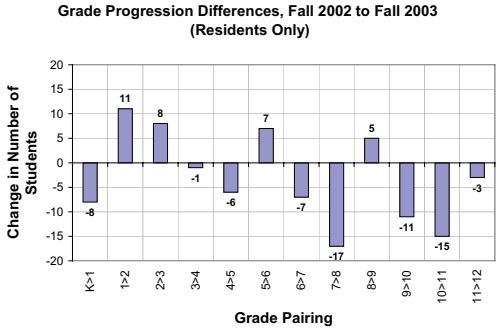


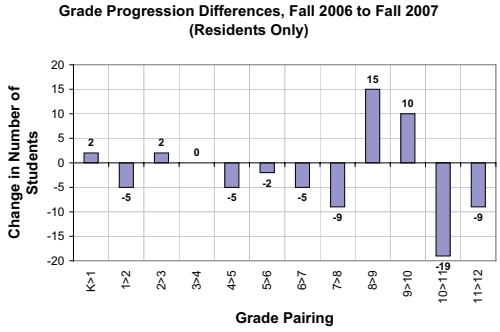












Historical Enrollments, Resident and Out-of-district Students

CBEDS Enrollments (District total)

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
K	**65**	**72**	**66**	**57**	**52**	**57**	**58**	**55**	**64**
1	**76**	**61**	**75**	**59**	**53**	**53**	**58**	**57**	**60**
2	**76**	**75**	**75**	**63**	**70**	**59**	**62**	**54**	**60**
3	**81**	**83**	**61**	**65**	**63**	**68**	**55**	**63**	**59**
4	**93**	**76**	**84**	**66**	**66**	**54**	**73**	**55**	**60**
5	**74**	**87**	**74**	**73**	**60**	**60**	**55**	**60**	**58**
6	**101**	**81**	**117**	**84**	**76**	**62**	**63**	**59**	**66**
7	**75**	**89**	**65**	**91**	**71**	**72**	**62**	**62**	**61**
8	**62**	**65**	**85**	**61**	**80**	**79**	**85**	**62**	**54**
9	**96**	**83**	**87**	**66**	**63**	**90**	**96**	**79**	**79**
10	**76**	**71**	**88**	**72**	**49**	**51**	**75**	**92**	**81**
11	**68**	**66**	**55**	**58**	**50**	**37**	**40**	**68**	**64**
12	**34**	**53**	**59**	**66**	**44**	**46**	**40**	**36**	**56**
K-5	**465**	**454**	**435**	**383**	**364**	**351**	**361**	**344**	**361**
6-8	**238**	**235**	**267**	**236**	**227**	**213**	**210**	**183**	**181**
9-12	**274**	**273**	**289**	**262**	**206**	**224**	**251**	**275**	**280**
K-12	**977**	**962**	**991**	**881**	**797**	**788**	**822**	**802**	**822**

Resident Enrollments

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
K	**39**	**39**	**40**	**36**	**33**	**39**	**34**	**34**	**33**
1	**58**	**32**	**39**	**31**	**28**	**34**	**33**	**32**	**36**
2	**49**	**57**	**37**	**25**	**42**	**33**	**31**	**25**	**27**
3	**46**	**53**	**41**	**30**	**33**	**40**	**30**	**32**	**28**
4	**64**	**39**	**56**	**39**	**29**	**29**	**40**	**26**	**32**
5	**50**	**58**	**41**	**41**	**33**	**30**	**27**	**33**	**21**
6	**60**	**46**	**68**	**43**	**48**	**35**	**35**	**31**	**32**
7	**38**	**57**	**28**	**53**	**36**	**42**	**40**	**33**	**26**
8	**34**	**44**	**50**	**31**	**36**	**45**	**41**	**36**	**24**
9	**58**	**36**	**50**	**40**	**36**	**44**	**50**	**38**	**52**
10	**41**	**30**	**38**	**35**	**29**	**20**	**33**	**42**	**48**
11	**34**	**27**	**23**	**22**	**20**	**19**	**15**	**29**	**24**
12	**16**	**20**	**19**	**28**	**19**	**19**	**19**	**15**	**20**
K-5	**306**	**278**	**254**	**202**	**198**	**205**	**195**	**182**	**177**
6-8	**132**	**147**	**146**	**127**	**120**	**122**	**116**	**100**	**82**
9-12	**149**	**113**	**130**	**125**	**104**	**102**	**117**	**124**	**144**
K-12	**587**	**538**	**530**	**454**	**422**	**429**	**428**	**406**	**403**

Out-of-District Students

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
K	**26**	**33**	**26**	**21**	**19**	**18**	**24**	**21**	**31**
1	**18**	**29**	**36**	**28**	**25**	**19**	**25**	**25**	**24**
2	**27**	**18**	**38**	**38**	**28**	**26**	**31**	**29**	**33**
3	**35**	**30**	**20**	**35**	**30**	**28**	**25**	**31**	**31**
4	**29**	**37**	**28**	**27**	**37**	**25**	**33**	**29**	**28**
5	**24**	**29**	**33**	**32**	**27**	**30**	**28**	**27**	**37**
6	**41**	**35**	**49**	**41**	**28**	**27**	**28**	**28**	**34**
7	**37**	**32**	**37**	**38**	**35**	**30**	**22**	**29**	**35**
8	**28**	**21**	**35**	**30**	**44**	**34**	**44**	**26**	**30**
9	**38**	**47**	**37**	**26**	**27**	**46**	**46**	**41**	**27**
10	**35**	**41**	**50**	**37**	**20**	**31**	**42**	**50**	**33**
11	**34**	**39**	**32**	**36**	**30**	**18**	**25**	**39**	**40**
12	**18**	**33**	**40**	**38**	**25**	**27**	**21**	**21**	**36**
K-5	**159**	**176**	**181**	**181**	**166**	**146**	**166**	**162**	**184**
6-8	**106**	**88**	**121**	**109**	**107**	**91**	**94**	**83**	**99**
9-12	**125**	**160**	**159**	**137**	**102**	**122**	**134**	**151**	**136**
K-12	**390**	**424**	**461**	**427**	**375**	**359**	**394**	**396**	**419**

9-4.204 Development Bonuses.

(a) **Procedure.** Bonus floor area ratio, height, and/or residential density, as specified in this Article, may be permitted upon the granting of a conditional use permit pursuant to Article 5 of Chapter 7 and the additional findings required by subsection (d) of this Section.

(1) In the RM Medium Density Residential zone public benefits are not required. The findings in subsection (d)(1) below must be made.

(2) In all other zones public benefits as specified in this Section must be provided sufficient to earn the number of points required for the bonus amount requested, pursuant to subsections (b) and (c) below.

(3) For bonus height over 100 feet, public benefits as specified in this Section must be provided sufficient to earn at least 100 points pursuant to subsection (c) below, and the additional findings in subsection (d)(3) below must be made.

To qualify for a bonus, a public benefit must be significant and clearly beyond what would otherwise be required for the project under applicable code provisions, conditions of approval, and/or environmental review mitigation measures. Development bonuses pursuant to this Section are in addition to any density bonuses for affordable housing pursuant to Article 4 of Chapter 5.

(b) **Determination of Bonuses.** Bonus floor area ratio, height, and/or residential density shall be calculated in accordance with the following procedures.

(1) Bonus Amount. Except for bonus height in the 100+ height district, the bonus amount is based on the number of points, up to a maximum of 100, attained through the provision of public benefits pursuant to subsection (c) of this Section. The bonus amount is calculated according to the following formula:

$$\frac{\text{Total Number of Points}}{100} \times \text{Bonus Increment} = \text{Bonus Amount}$$

Variables used in bonus amount calculation:

a. Total Number of Points. The sum of the points awarded for the provision of public benefits pursuant to subsection (c) of this Section, up to a maximum of 100.

b. Bonus Increment. The difference between the maximum bonus amount and the maximum base amount for FAR, height, and residential density as specified in Tables 9-4.201(a), 9-4.202(a), and 9-4.203(a), respectively.

(2) Maximum Allowable FAR, Height, and Residential Density. Except for bonus height in the 100+ height district, the maximum FAR, height, and residential density allowable is the sum of the base amount, as specified in Tables 9-4.201(a), 9-4.202(a), and 9-4.203(a), respectively, and the bonus amount calculated pursuant to subsection (b)(1) of this Section.

(3) Points Count Towards All Bonuses. The points awarded for the provision of public benefits pursuant to subsection (c) of this Section may be counted towards FAR, height, and residential density. It is not necessary to earn separate points for each of these bonuses.

(4) Height Over 100 Feet. To qualify for bonus height of any amount in the 100+ height district, public benefit worth at least 100 points must be provided pursuant to subsection (c) of this Section.

(5) Modifications.

a. Prior to Issuance of Building Permit. No public benefit for which a bonus has been granted may be eliminated or reduced in size without the approval of the Planning Commission or City Council, whichever approved the project. To grant such approval, the Commission or Council must find that there is a corresponding reduction in intensity, height, and/or density, a substitution of an equivalent public benefit, or a combination of the two.

b. Prior to Issuance of Certificate of Occupancy. Before a certificate of occupancy is issued for a project, the applicant shall certify to the Director that the bonus points upon which the project's floor area ratio, height, and/or residential density were based have, in fact, been achieved. If the number of bonus points achieved by the completed project is less than required, the applicant shall contribute 0.1% of construction valuation per point of shortfall to the Citywide Parks Fund. Such contribution shall be made before a certificate of occupancy is issued.

(6) Exceptional Circumstances. The above provisions notwithstanding, in exceptional circumstances the Planning Commission or City Council, as the case may be, may determine that one or more public benefits are sufficient to warrant the granting of all or part of the full bonus.

(c) **Public Benefits.** Public benefits, the maximum number of points that may be awarded for each, the calculation method, and other requirements are as shown in Table 9-4.204(c):

Table 9-4.204(c): Public Benefits and Bonus Points

Public Benefit	Maximum Points	Point Calculation	Requirements
(1) Public Open Space	50	15% of site area or 2,000 square feet, whichever is greater: 50 points	Must be in addition to what is required by Article 3 of this Chapter. Design must comply with applicable provisions of the Emeryville Design Guidelines and be approved as part of Design Review for the project. Open space must be accessible to the general public at all times. Provision must be made for ongoing operation and maintenance in perpetuity.
		10% of site area or 1,500 square feet, whichever is greater: 35 points	
		5% of site area or 1,000 square feet, whichever is greater: 20 points.	
		Contribution to Citywide Parks Fund: 10 points for every 1% of project construction valuation up to 50 points.	Contribution must be made prior to issuance of building permit.
(2) Sustainable Design[1]	35	LEED™ Platinum or equivalent: 35 points	Compliance of schematic design to be confirmed by Chief Building Official. LEED™ or equivalent third-party certification required prior to issuance of certificate of occupancy.
		LEED™ Gold or equivalent: 25 points	
		LEED™ Silver or equivalent: 10 points	
(3) Alternative Energy[1]	50	100% of energy load (zero net energy): 50 points	Percent of total building energy load measured as kilowatt per square foot provided by solar panels, wind turbines, or other renewable sources. No less than 50% of the bonusable energy must be produced on-site, and no more than 50% may be in the form of Renewable Energy Credits (RECs) in compliance with California state laws and procedures. Any such RECs must be available for the life of the project as evidenced by a long-term contract.
		50% of energy load: 35 points	
		30% of energy load: 20 points	
		15% of energy load: 10 points	
(4) Water Efficiency[1]	35	Graywater reuse system: 20 points	Reuse of domestic waste water from plumbing fixtures such as showers, dishwashers, and clothes washers, but not including toilets and garbage disposals, to be used for toilet flushing and irrigation. System must comply with the requirements of the Emeryville Plumbing Code in Chapter 3 of Title 8.

Public Benefit	Maximum Points	Point Calculation	Requirements
		Rainwater capture system: 15 points	System that captures and stores water from at least 75% of the project roof area for landscape irrigation and/or indoor water use. The storage system must be sized to hold all the water from a 1-inch rainfall event (equivalent to 0.62 gallons per square foot of roof area used for capture). System must comply with all applicable codes and regulations.
(5) Energy Efficiency[1]	35	20%: 35 points	Percent by which energy efficiency exceeds requirements of California Energy Code.
		10%: 15 points	
(6) Public Improvements	50	10 points for every 1% of project construction valuation up to 50 points	Does not include improvements along project frontage that are normally required. Examples include curb, gutter, and sidewalk; pedestrian and bicycle paths; sanitary and storm sewers; and street trees, beyond what would normally be required.
(7) Utility Undergrounding	50	Contribution to Citywide Underground Utility Fund: 10 points for every 1% of project construction valuation up to 50 points	Does not include utility undergrounding that is normally required.
(8) Transportation Demand Management (TDM)	35	General Requirement: All TDM measures except transit passes must be clearly indicated on project plans, must be installed prior to issuance of a certificate of occupancy, and must remain in place for the life of the project. Provision must be made for ongoing operation and maintenance in perpetuity.	
		Bicycle sharing program: 15 points	Participation in an existing bicycle sharing program or provision of bicycles on-site made available for free to project occupants. Bicycle "docks" must be shown on plans and bicycles must be provided prior to issuance of a certificate of occupancy.
		Bicycle Lockers: 10 points	Required long-term bicycle parking provided in secure lockers.
		Showers and clothes lockers: 10 points	Showers and clothes lockers provided on-site for nonresidential projects and available free of charge to project occupants.
		Electronic Transit Information Signs: 10 points	A sign or signs indicating real-time arrival estimates for the closest public transit lines.

Public Benefit	Maximum Points	Point Calculation	Requirements
		Automated Teller Machine (ATM): 5 points	On-site ATM must be available to project occupants and must accept deposits.
		Day Care Facilities: 20 points or Contribution to Emeryville Child Development Center: 10 points for every 1% of project construction valuation up to 20 points.	Child care facilities provided on-site, with or without charge, for use of project occupants, or a cash contribution to the Emeryville Child Development Center.
		Free Transit Passes: 35 points	Free AC Transit and/or BART passes, such as pre-paid Clipper cards or BART tickets, available to all project occupants for a minimum of 10 years. A legally binding agreement must be filed with the Director in a form approved by the Director and the City Attorney prior to issuance of a certificate of occupancy.
(9) Family Friendly Housing	50	2 points for each percentage of units that qualify as "family friendly".	"Family friendly" units must be a minimum of three bedrooms and must be provided with in-unit laundry hook-ups. 15 square feet of common open space for each unit must be provided, with amenities for children, teens, or seniors, in addition to the common open space required by Article 3 of this Chapter. Design must comply with provisions of the Emeryville Design Guidelines applicable to family friendly housing and be approved as part of Design Review for the project.
(10) Neighborhood Centers	35	35 points if project is located in the NR Neighborhood Retail Overlay Zone and meets requirements.	Along Transit Streets and Connector Streets, as indicated in the General Plan, at least 75% of the ground floor frontage must be devoted to space appropriate for, and actively marketed to, uses meeting the criteria of Section 9-3.404(a)(1). Such space must have a depth of at least 30 feet and a ceiling height of at least 12 feet. At least one space must be provided with a vent shaft adequate for a kitchen flue and space for an appropriately-sized grease interceptor, as determined by the Chief Building Official, to allow for a possible Restaurant use.

Public Benefit	Maximum Points	Point Calculation	Requirements
(11) Small Businesses	35	Contribution to Citywide Fund to Support Small Local-Serving Businesses: 10 points for every 1% of project construction valuation up to 35 points.	Contribution must be made prior to issuance of building permit.
(12) Public Art	20	Minimum of 10 points and maximum of 20 points, based on 10 points for every 1% of projection construction valuation (e.g. 10 points for 1.0% of valuation up to 20 points for 2.0% of valuation).	Must be in addition to what is required by Contribution for Art in Public Places Program at Article 4 of Chapter 2 of Title 3. (e.g. if this Program requires a contribution of 1.0% of valuation, 10 points would be earned for a contribution of 2.0% and 20 points would be earned for a contribution of 3.0%). Contribution may be in the form of acquisition and installation of publicly accessible art on the development site or an in-lieu contribution to the Emeryville Public Art Fund for acquisition and placement of public art throughout the City, or a combination of on-site art and an in-lieu payment. Compliance shall be pursuant to Section 3-2.406.
(13) Public Parking	35	Public parking in or within 500 feet of the NR Neighborhood Retail Overlay Zone: 1 point per parking space	Must be in addition to parking required by Article 4 of this Chapter. Spaces must be permanently reserved for public use and need not be located on the project site, but must be located on a single site. Parking must be covered or within a structure, not in an open surface parking lot. An agreement providing for the public use of the parking in perpetuity, executed by the parties involved, must be filed with the Director in a form approved by the Director and the City Attorney. The agreement shall be notarized and recorded in the office of the County Recorder. Parking spaces must be available for public use immediately upon issuance of the certificate of occupancy for the project.
(14) Bike Station	35	Public bicycle parking facility in or within 500 feet of the NR Neighborhood Retail Overlay Zone, the RR Regional Retail Overlay Zone, or the TH Transit Hub Overlay Zone: 1 point for every 3 bicycle parking spaces.	Must be in addition to bicycle parking required by Article 4 of this Chapter. Spaces must be permanently reserved for public use and need not be located on the project site, but must be located on a single site. Bike parking must be inside, secure, and available 24-hours. An agreement providing for the public use of the bike station in perpetuity

Public Benefit	Maximum Points	Point Calculation	Requirements
			executed by the parties involved, must be filed with the Director in a form approved by the Director and the City Attorney. The agreement shall be notarized and recorded in the office of the County Recorder. The bike station must be available for public use immediately upon issuance of the certificate of occupancy for the project. Provision must be made for ongoing operation and maintenance in perpetuity.
(15) Significant Structures	35	Project of high design quality that incorporates at least two facades of a Significant Structure: 15 points Adaptive reuse of an entire Significant Structure: 35 points	Article 12 of Chapter 5 addresses preservation and demolition of Significant Structures. Projects involving demolition of a Significant Structure (even if incorporating two or more facades of the Significant Building) require City Council approval, while projects not involving such demolition require Planning Commission approval.
(16) Electric Vehicle (EV) Charging Stations	35	10 points for each 1% of parking spaces that are EV charging stations.	Must comply with the requirements for EV Charging Stations at Section 9-4.406(l). Provision must be made for ongoing operation and maintenance in perpetuity.
(17) Mechanical Equipment Concealed in Penthouse[2] or Inside Building	20	Mechanical equipment concealed in penthouse level on top of building or within building: 20 points	Penthouse level must be integrated into the overall architectural design of the building and must completely conceal and baffle noise from all mechanical equipment. Penthouse must be completely roofed except for cooling towers and any other equipment that cannot properly function if roofed, must be set back from roof edges, may cover no more than 50% of roof area, and may not exceed 25 feet in height. Mechanical equipment within building must be completely concealed from public view and noise must be baffled.
(18) Universal Design	50	2 points for each percentage of residential units that incorporate Universal Design features.	To qualify, residential units must have all of the following features, in addition to any accessibility features required by the building code. Kitchen: • Clear floor space: 60” circle. • Space for a side-by-side

Public Benefit	Maximum Points	Point Calculation	Requirements
			refrigerator/freezer or refrigerator/freezer with frozen food storage in the bottom. • Appliances and cooktop must have front- or side- mounted controls and be approachable by people using wheelchairs or scooters. • Repositionable countertops to 28" height. Bathroom: • Clear floor space: 60" circle. • Reinforcement provided for grab bars beside toilets. • Toilet centered in a minimum 36-inch wide space, 18 inches from the sidewall Miscellaneous: • A minimum of one accessible parking space. • Space for laundry equipment with accessible front loading and front mounted controls located on an accessible route. • All closet rods adjustable to 48 inches above the floor.
(19) Flexible Public Benefit	N/A	The Planning Commission or City Council, as the case may be, shall determine the number of points to grant for the proposed public benefit.	Currently undefined public benefit proposed by the applicant that is significant and substantially beyond normal requirements.

Notes: 1. Public benefits (2), (3), (4), and (5) are overlapping. Points may not be awarded more than once for what is essentially the same public benefit in more than one category, and a total of no more than 35 points may be awarded in these four categories combined.

2. Penthouse is not included in building height.

(d) **Findings.** To grant a conditional use permit for bonus floor area ratio, height, or residential density, as prescribed in this Article, the following findings must be made in addition to the findings required by Article 5 of Chapter 7:

(1) In the RM Medium Density Residential zone:

a. That the proposed project is compatible with the surrounding neighborhood with regard to building scale, form, and materials, and street orientation.

b. That the proposed project has been designed to minimize the appearance from the street of driveways, parking spaces, maneuvering aisles, and garage doors as much as possible given the size and shape of the lot, and that at least 70% of the street frontage is devoted to active non-parking related uses, except that a driveway of up to ten feet in width shall be allowed.

(2) In all other zones:

a. That the proposed project will provide public benefits sufficient to earn the number of points required for the bonus amount requested, pursuant to subsections (b) and (c) of this Section.

(3) Bonus height over 100 feet:

a. That the proposed project will provide public benefits sufficient to earn at least 100 points pursuant to subsection (c) of this Section.

b. That the proposed project will minimize impacts on public views, wind, and shadows at the street level.

c. That the proposed project will be separated by an adequate distance from any other building with a height greater than 100 feet as specified in Section 9-4.202(f).