Demographic Study
for
Mountain View Whisman School District

May 29, 2013
Craig Goldman, Superintendent

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Glossary of Terms

Attendance Areas
An attendance area is defined by a physical boundary which is specific to an elementary or middle school. Students with a physical address which is located within that boundary are residents of that "attendance area".

Board of Trustees (BOT)
The BOT is the governing board of the Mountain View Whisman School District.

California Basic Educational Data System (CBEDS)
An annual data collection administered in October to collect information on student and staff demographics.

California Department of Education (CDE)
The California Department of Education is a regulatory agency whose Facilities Division is responsible for reviewing and approval of educational specifications as they relate to Districts' master plans for school sites, approval of new school sites, approval of additions to current schools, and approval of plans and specifications for modernization and construction of K-12 public and charter schools throughout the State.

California Department of Finance (DOF)
The Department of Finance is a state cabinet level agency within the government of California. The Department of Finance is responsible for preparing, explaining, and administering the state's annual financial plan. The DOF's other duties include analyzing the budgets of proposed laws, create and monitor current and future economic forecasts of the state, estimate population demographics and enrollment projections, and maintain the state's accounting and financial reporting system.

California Department of Public Health (CDPH)
California birth, death, fetal death, still birth, marriage and divorce records are maintained by the CDPH, Office of Vital Records.

Class Size Reduction (CSR)
Class Size Reduction is a program implemented throughout the State of California and funded, in part, by the CDE in order to reduce class sizes in grades K-3 to a teacher ratio of 20 students to 1 teacher (20:1).

Cohort
A cohort is a group of subjects who have a shared experience during a particular time span (in this case, students). Cohorts may be tracked over a period of time. For example, a cohort begins when a group of kindergarteners enroll in grade K and move forward each year through the grade levels.

Division of the State Architect (DSA)
The Division of the State Architect's (DSA) primary role in State government is to ensure that California's K-12 schools and community colleges are seismically safe and accessible to all. It fulfills this role by reviewing construction project plans for structural safety, fire and life safety, and accessibility (that is, access by disabled persons). In this role, DSA works closely with school districts and designers. In a typical year, DSA reviews about 4,000 project plans. In addition, DSA provides oversight of construction and testing labs.

Environmental Systems Research Institute (ESRI)
ESRI is a software development and services company providing Geographic Information System (GIS) software and geodatabase management applications.

General Obligation Bond
A General Obligation Bond is a common type of municipal bond in the United States that is secured by a local government's pledge to use tax revenues to repay bond debt.

Geocoding
Geocoding is the process of finding associated geographic coordinates from other geographic data, such as street addresses, or zip codes. With geographic coordinates the features can be mapped and entered into Geographic Information Systems.

Geographic Information System (GIS)
A geographic information system is any system that integrates, stores, edits, analyzes, shares, and displays geographic information. GIS is the merging of cartography, statistical analysis, and database technology.

Intra-district Transfers
Students who have a physical address in one elementary attendance area of the MVWSD but attend school in a different elementary school attendance area are considered "intra-district transfers".

Inter-district Transfers
Inter-district transfers are students who have a physical address in another school district boundary but are attending a school within the MVWSD.

Local Agency Formation Commission (LAFCO)
LAFCO is responsible for reviewing and approving proposed jurisdictional boundary changes, including annexations and detachments of territory to and/or from cities and special districts, incorporations of new cities, formations of new special districts, and consolidations, mergers, and dissolutions of existing districts. In addition, LAFCO must review and approve contractual service agreements, determine spheres of influence for each city and district, and may initiate proposals involving district consolidation, dissolution, establishment of subsidiary districts, mergers, and reorganizations (combinations of these jurisdictional changes).

Office of Public School Construction (OPSC)
The Office of Public School Construction, as staff to the State Allocation Board (SAB), implements and administers the School Facility Program and other programs of the SAB. The OPSC is also charged with the responsibility of verifying that all applicant school districts meet specific criteria based on the type of funding which is being requested. The OPSC also prepares recommendations for the SAB's review and approval.
It is also incumbent on the OPSC staff to prepare regulations, policies and procedures which carry out the mandates of the SAB, and to work with school districts to assist them throughout the application process. The OPSC is responsible for ensuring that funds are disbursed properly and in accordance with the decisions made by the SAB.
The OPSC prepares agendas for the SAB meetings. These agendas keep the Board Members, school districts, staff and other interested parties apprised of all actions taken by the SAB. The agenda serves as the underlying source document used by the State Controller's Office for the appropriate release of funds. The agenda further provides a "historical record" of all SAB decisions, and is used by school districts, facilities planners, architects, consultants and others wishing to track the progress of specific projects and/or availability of funds.

Sphere of Influence (SOI)
In California "sphere of influence" has a legal meaning as a plan for the probable physical boundaries and service area of a local agency. Spheres of influence at California local agencies are regulated by Local Agency Formation Commissions (LAFCO, see above for definition). Each county in California has a LAFCO.

State Allocation Board (SAB)
The State Allocation Board (SAB) is responsible for determining the allocation of state resources (proceeds from General Obligation Bond Issues and other designated State funds) used for the new construction and modernization of local public school facilities. The SAB is also charged with the responsibility for the administration of the School Facility Program, the State Relocatable Classroom Program, and the Deferred Maintenance Program. The SAB is the policy level body for the programs administered by the Office of Public School Construction.
The SAB meets monthly to apportion funds to the school districts, act on appeals, and adopt policies and regulations as they pertain to the programs administered by the SAB.

Transiency
The stability at which students enter and exit the district.

PROLOGUE

The 2012-13 Demographic Study for the Mountain View Whisman School District (MVWSD) provides a historical perspective on the MVWSD, including historical demographic information on the communities served by the district as well as an analysis of current and projected student residents.

Student enrollment is projected to grow through the 2022-23 year as a direct result of the recent increase in kindergarten class size. Kindergarten class size increased from 529 in 2005 to 683 in 2012 and is projected to continue to increase due to the emergence of the transitional kindergarten program and new residential development. These larger class sizes will have a significant positive impact on future elementary and middle school student resident enrollments as they move through the grade levels.

This data will require constant review as new enrollment information becomes available in the coming months and years; the District must be diligent in monitoring this data to assure the provision of adequate facilities through the projection period.

SECTION A: EXECUTIVE SUMMARY

The purpose of the 2012-2013 Demographic Study is to provide detailed updated demographic information about the Mountain View Whisman School District's community, and the effects of those demographics on the Mountain View Whisman School District's student resident enrollment and the impact on long range planning for facilities in order to assure that appropriate and equitable facilities are provided for the students of the District. It is imperative that the District remain proactive in planning as the construction and modernization of school facilities cannot be accomplished in a short time period.

This study provides information based on 2012-13 District residents, City planning policies, residential development, and population and student demographics. As these factors change and timelines are adjusted, the Demographic Study will be revised to reflect the most current information.

Demographic Analysis

Student resident enrollment increased every year in MVWSD since 2005 as a direct result of the increase in kindergarten class size combined with the movement of families to the area in order to benefit from the high quality of education offered by the Mountain View Whisman School District. The student resident kindergarten class size increased from 529 in October 2005 to 683 in October 2012, while total student resident enrollment increased from 4,045 students in October 2005 to 4,908 students in October 2012 (an increase of 21.3%). However, the factors contributing to this rapid enrollment growth have shifted in recent years.

During the preparation of the 2012-13 Demographic Study, Schreder & Associates compiled Census 2010 general population data and projections in order to analyze community demographics. The general population within MVWSD is projected to continue to increase (+5%) by 2017. Analyses of population projections by age group demonstrate the Under 5 population and the relevant school age population (5-14) are expected to increase through 2017.

The median household income for households in the MVWSD boundary increased from $41,911 in 1990 to $80,675 in 2012. Median household income is projected to increase to $93,210 by 2017. Further analysis of households by income demonstrates that the MVWSD community is becoming increasingly affluent.

Housing prices in the first quarter of 2013 demonstrated an increase of 2.1% compared to the first quarter of 2012. The average price per residential square foot was $604, an increase of 21.5% compared to the same period last year. In addition, commercial office rents increased to $5.15 per square foot during the first quarter of 2013. The City of Mountain View overall assessed valuation grew by 6.6% between 2012-2013, matched only by Cupertino and Santa Clara.

Student Generation Factors and Land Use Planning/Residential Development

Accurate student generation factors are important in planning for future facilities. Schreder & Associates researched housing units constructed within the MVWSD over a five-year period, between 2008 and 2012. This database was sorted and then cross-referenced with the 2012-13 MVWSD student list in order to determine the number of students generated per housing unit by grade level and by year of construction. The student generation rates are as follows:

- Each new single-family detached unit will generate 0.190 K-8 students for the District.
- Each new single-family attached unit will generate 0.040 K-8 students for the District.
- Each new multi-family unit will generate 0.125 K-8 students for the District.
- Each new affordable unit will generate 0.768 K-8 students for the District.

New residential construction was analyzed in order to measure the potential impact to MVWSD enrollments through the projection period. The Planning Division reviews private and public development applications for conformance with City plans, ordinances and policies related to zoning, urban design, subdivision and CEQA. The review process includes review of preliminary plans, the consideration of public input at the Development Review Committee, Zoning Administrator, Environmental Planning Commission and the City Council.

The City of Mountain View provided information on currently approved residential projects and other projects which are either under construction or in the approval process. These projects were reviewed by planning area in order to determine the impact on the Mountain View Whisman School District. In order to factor in future students generated from current and planned residential development into the student resident projections, JSA mapped the projects and summarized them by planning area. All units under construction and approved have been included in the enrollment projections. The highest number of students will be generated from the significant number of new residential units in the Landels school boundary.

The District will need to continue to monitor projects under review and in plan check in order to recalculate projections and provide facilities in a timely manner.

Spatial Analysis

Schreder & Associates utilized a Geographic Information System (GIS) to map and analyze the Mountain View Whisman School District. Schreder & Associates mapped the 2005-06 through 2012-13 student information databases by a process called geocoding. The address of each individual MVWSD student was matched to the parcel in which they reside in the MVWSD GIS. Once the students were mapped, they were analyzed and displayed by grade level. These layers of information provide tools for analyzing student resident distribution, determining future student resident enrollments, changing school boundaries or moving programs.

- At the elementary school level, student resident totals range from 54 in Landels C to 488 in Huff B.
- At the middle school level, student resident totals range from 16 in Landels C to 167 in Theuerkauf A.

Currently, there are 98 inter-district students enrolled in MVWSD. There is a decreasing trend of such enrollments as space availability has decreased over the last several years.

Resident Projections

Schreder & Associates utilized the industry standard cohort "survival" methodology to prepare the multi-year resident projections for the Mountain View Whisman School District. The following projections are based upon ***residence*** of the students. The historical years of student data utilized differ from enrollments in that we use the location of where students reside, as opposed to enrollments by school. These projections are meant to assist the District in making decisions such as where future school facilities should be located, boundary changes, and school consolidation. Since students don't necessarily attend their school of residence, these projections should not be utilized for staffing and budgeting purposes.

Overall, TK-8th residents are projected to increase to 5,323 through 2022-23.

- TK-5th grade residents are projected to increase from 3,545 to 3,754.
- 6th-8th grade residents are projected to increase from 1,363 to 1,569.

Recommendations

The Mountain View Whisman School District has undertaken this Demographic Study study in order to assist in proactive planning for current and future facility needs for its student population.

The cost of new and modernized school facilities will prompt the District to pursue several funding strategies. These strategies include developer fees, General Obligation Bonds, Joint Use Projects, and the State School Building Program. The following steps are recommended for the Mountain View Whisman School District to meet its future facility needs:

- Review this study annually to determine if projected development and student resident enrollment trends are accurate. Should future trends deviate from those identified in the study, adjustments regarding future school facility needs and costs may be required.
- Continue to pursue State school funding for modernization and/or new construction.
- Explore Joint Use programs at the State School Facility Program as well as through State and Federal Programs.
- Continue to work with the towns served by the District and other agencies throughout the planning process to secure full school facility mitigation for the construction of schools and/or acquisition of land.

SECTION B: INTRODUCTION

The Mountain View Whisman School District is located in Santa Clara County and serves a large portion of the City of Mountain View in addition to Moffet Federal Airfield, an area owned and operated by the NASA Ames Research Center. The District serves grades K-8 and has a total enrollment of 5,006 students, and a total resident enrollment of 4,908 students. Resident enrollments are those students who live within the District boundary and attend a MVWSD school. Resident enrollments do not include inter-district transfer students from other school districts.

A District map is included in Figure 1. The Mountain View Whisman School District currently operates 7 elementary school sites and 2 middle school sites. The District also operates an independent study program. The District owns three additional properties; Slater Elementary, Cooper Elementary, and Whisman Elementary.

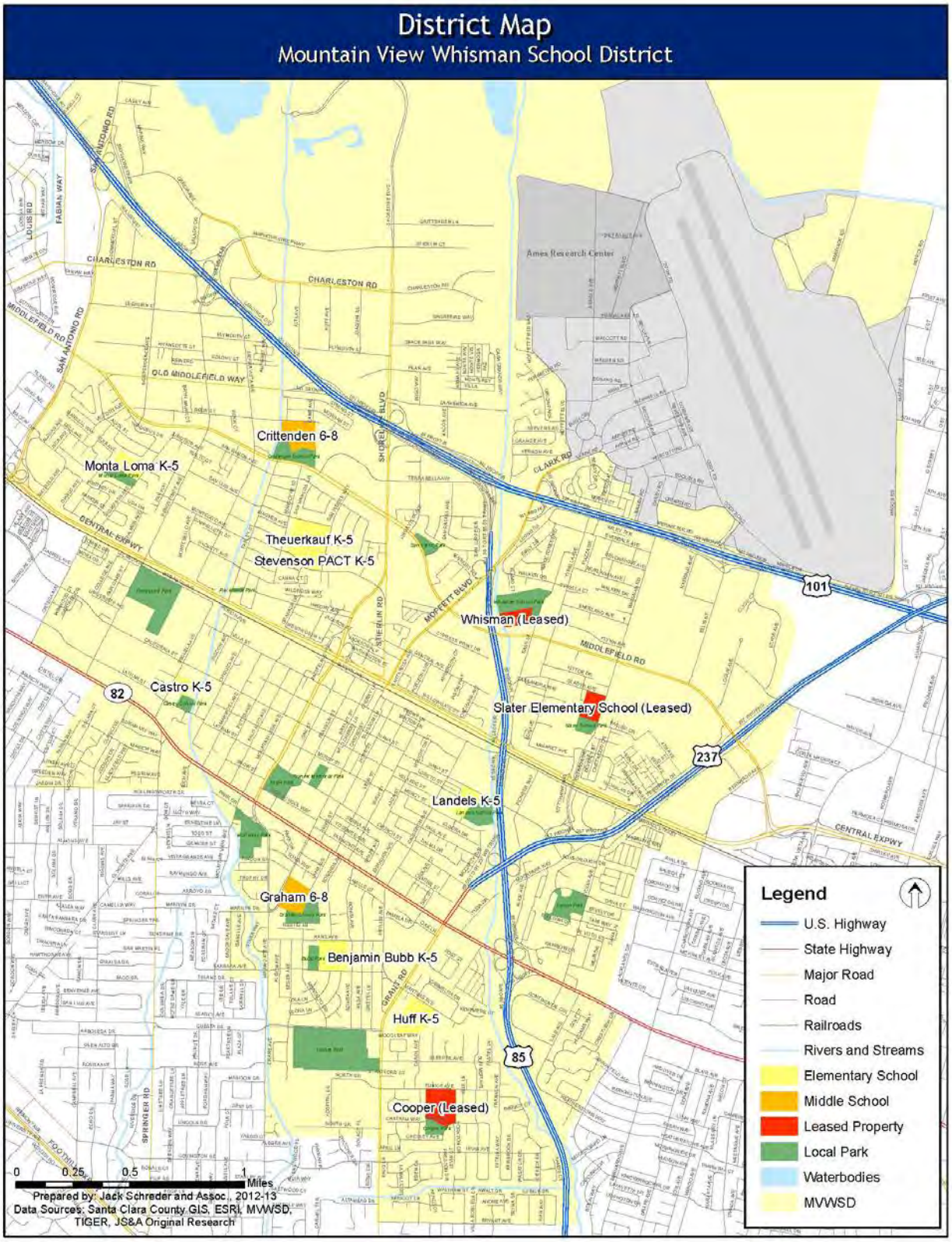
Table 1. School Sites and 2012-13 Enrollments

School	Grade Levels	2012-13 Student Resident Enrollment[1]
Benjamin Bubb Elementary	K-5	581
Mariano Castro Elementary	K-5	591
Frank L. Huff Elementary	K-5	568
Edith Landels Elementary	K-5	555
Monta Loma Elementary	K-5	505
Stevenson Elementary	K-5	293
Theuerkauf Elementary	K-5	446
Crittenden Middle	6-8	581
Graham Middle	6-8	779
Independent Study		9
Slater Elementary	Joint-Use with Google	0
Cooper Elementary	Leased: Primary Plus	0
Whisman Elementary	Leased: German Intl. School	0
Total Enrollment		**4,908**

Source: MVWSD Student List, 2012-13.

[1] Resident enrollments do not include inter-district transfer students from other districts.

Figure 1. Mountain View Whisman School District



Mountain View Whisman School District 2012-2022 Demographic Study

The Mountain View Whisman School District requested a Demographic Study in order to assure that the appropriate facilities are provided for current and future students of the district. The following variables were analyzed and conclusions regarding their impact to projected student residents are provided in this study:

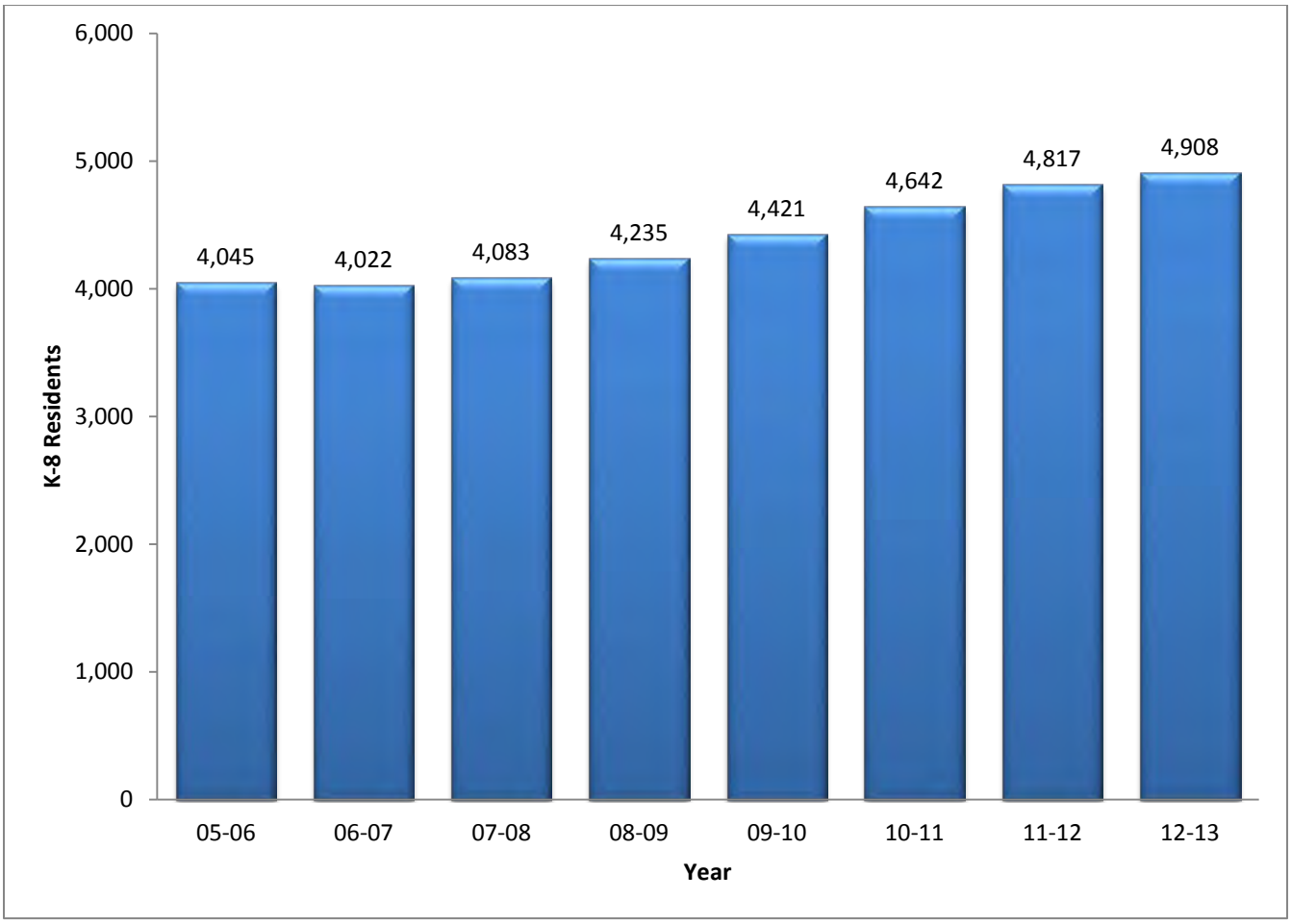
- A review of District/community demographics;
- A review of the various land use trends and policies governing residential development in the District;
- Measurements of Student Generation Factors;
- A spatial analysis of the 2012-13 student population;
- Resident projections based on standard cohort methodology and utilizing historical residents, District-specific birth data, and student migration to determine the level of student resident increases/decreases the District can expect;
- Recommendations.

SECTION C: DEMOGRAPHIC ANALYSIS

Resident Enrollment Trends[2]

The Mountain View Whisman School District's historical resident enrollment has risen from 4,045 students in October 2005 to 4,908 students in October 2012, representing an overall gain of 21.3% (Figure 2). A closer examination of historical resident enrollment by grade level demonstrates that resident enrollments at both K-5 and 6-8 grade levels increased each year since 2005 (Figure 3).

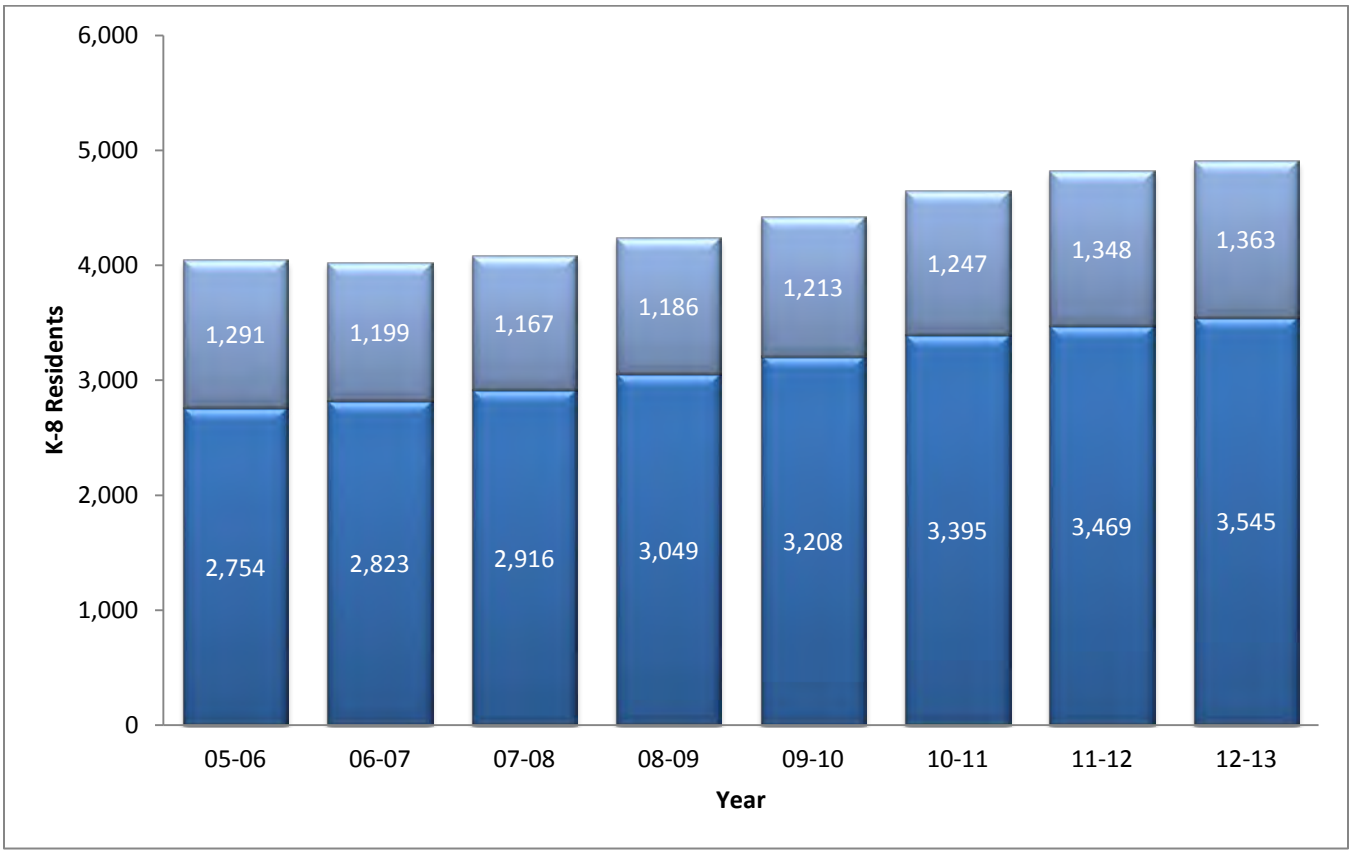
Figure 2. K-8 Historical Residents



Source: MVWSD Historical Student Data.

[2] Resident enrollments are MVWSD enrolled students living within the MVWSD boundary. Inter-district transfer students into MVWSD are not included in the analysis.

Figure 3. K-8 Historical Residents by Grade Level



Source: MVWSD Historical Student Data.

Since 2010, kindergarten resident enrollment significantly increased (Figure 4). Kindergarten resident enrollment has an impact on overall resident enrollments, as larger or smaller incoming kindergarten class sizes result in larger or smaller overall resident enrollments as these cohorts matriculate through the system.

In 2012-13 the District implemented transitional kindergarten, a program created by a new California law called the Kindergarten Readiness Act. The Kindergarten Readiness Act of 2010 is recent legislation that changes the kindergarten entry date from December 2 to September 1 so children begin kindergarten at age 5. The rollback will be implemented over a 3-year period, rolling back one month per year beginning in 2012-2013.

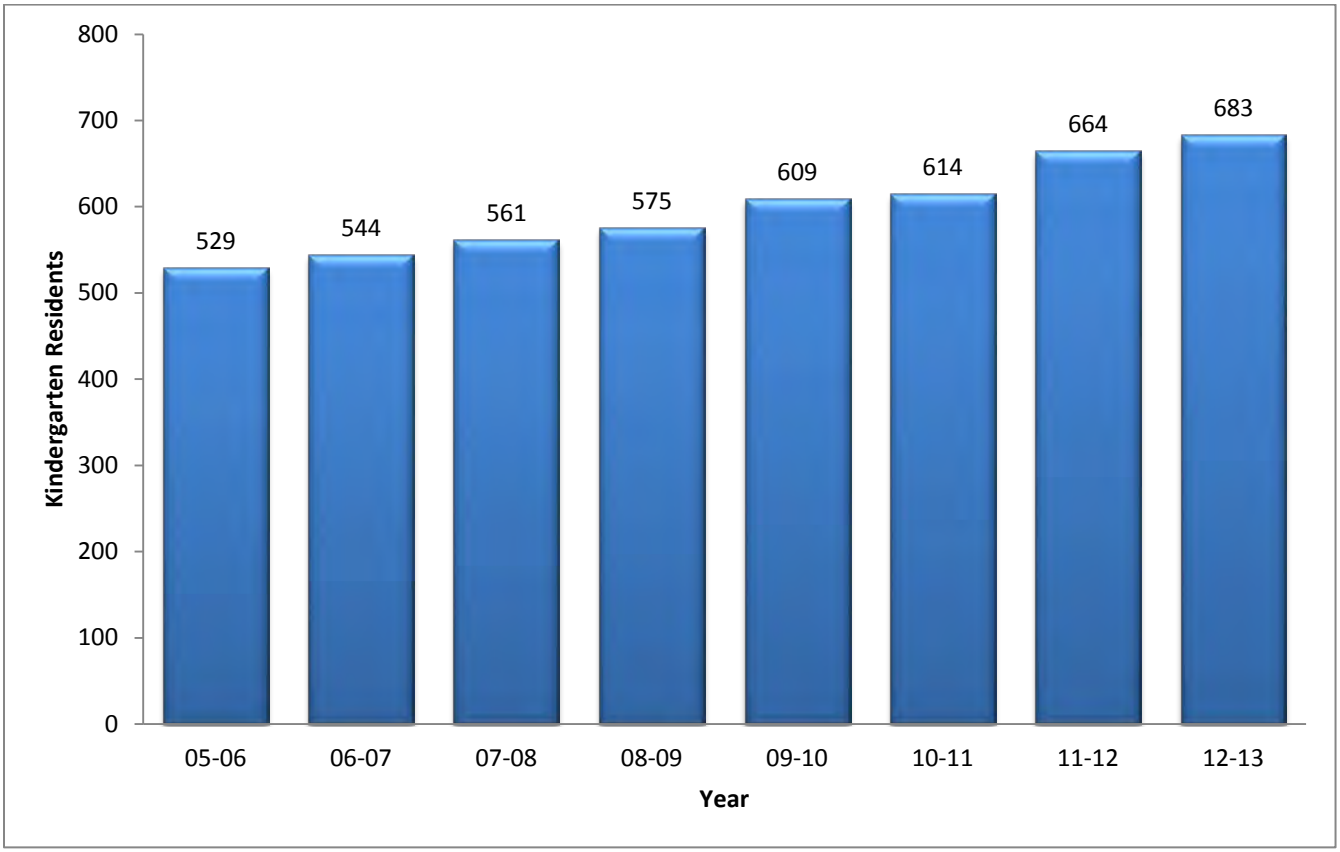
- 2012-13: Child must be 5 by November 1
- 2013-14: Child must be 5 by October 1
- 2014 -15: Child must be 5 by September 1

The Kindergarten Readiness Act of 2010 also creates a Transitional Kindergarten (TK) program for those students who miss the cutoff and who will be five years old between:

- November 1 - December 2 in 2012-13
- October 1 - December 2 in 2013-14
- September 1 - December 2 in 2014 -15

Resident enrollment in transitional kindergarten will likely be comprised of two groups of students; those who would have enrolled in kindergarten had the eligibility date not changed and those who would have waited to enroll in kindergarten until the following year.

Figure 4. Kindergarten Enrollment



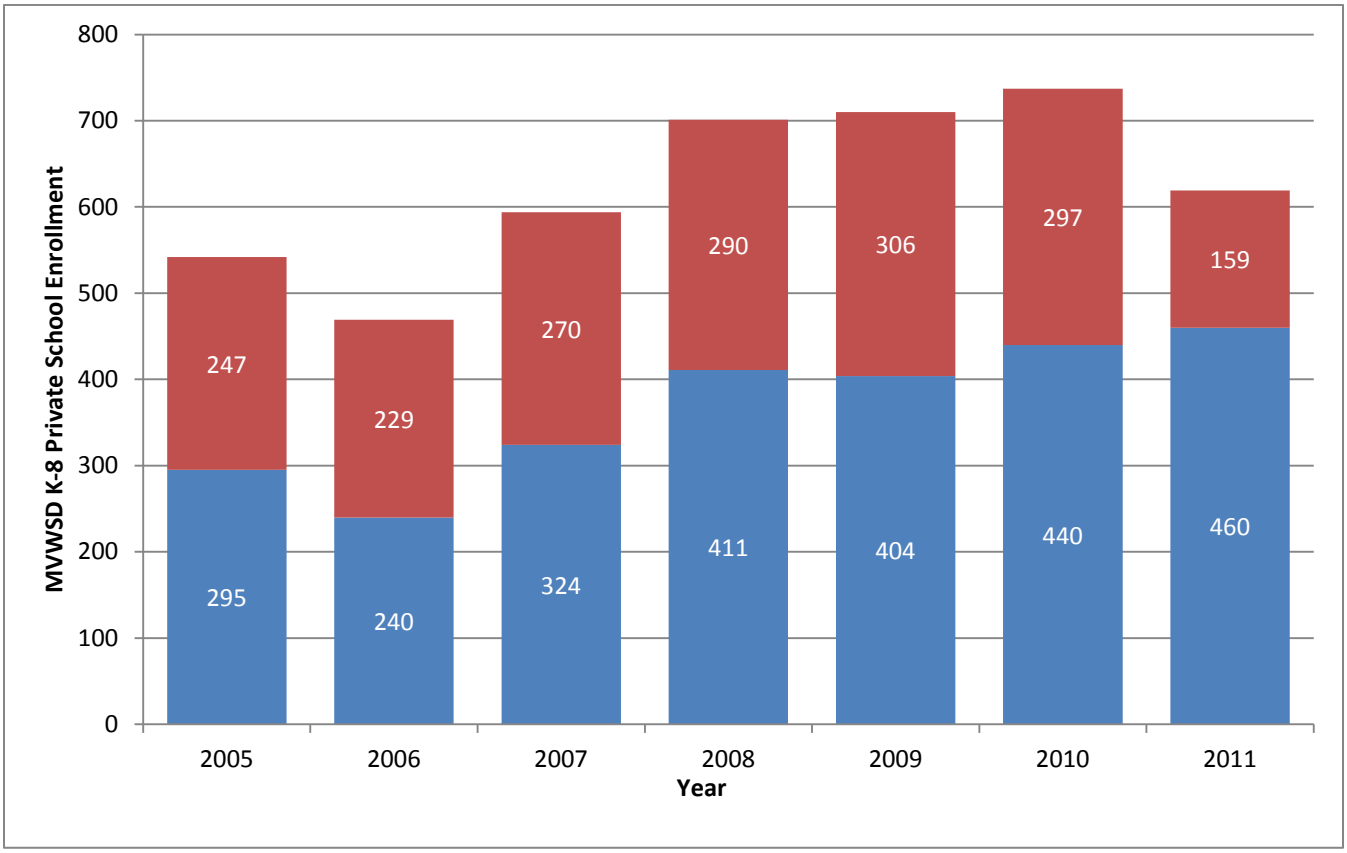
Source: MVWSD Historical Student Data.

Private School Trends

While public-to-private and private-to-public student transfer data is not readily available and therefore difficult to measure, it is possible to compare historical enrollments in order to determine if there is a significant correlation between public school enrollments as compared to private school enrollments. For example, if a school district is experiencing declining enrollments, and private schools within that District (or in adjacent districts) are experiencing enrollment increases, assumptions can be made regarding an increase in public-to-private school student transfers.

Private school enrollments for private schools located within the District were collected from the California Department of Education for years 2000-2011. Between 2005 and 2010 private school enrollments within MVWSD increased, from 542 students to 737 students, and then declined to 619 students in 2011 (Figure 5). The decline from 2010 to 2011 occurred as a result of the relocation of a private school serving grades 6-8 to Palo Alto. These data indicate a concurrent increase of private school enrollment and MVWSD public school enrollment.

Figure 5. Private School Enrollments for Private Schools Located within the MVWSD Boundary

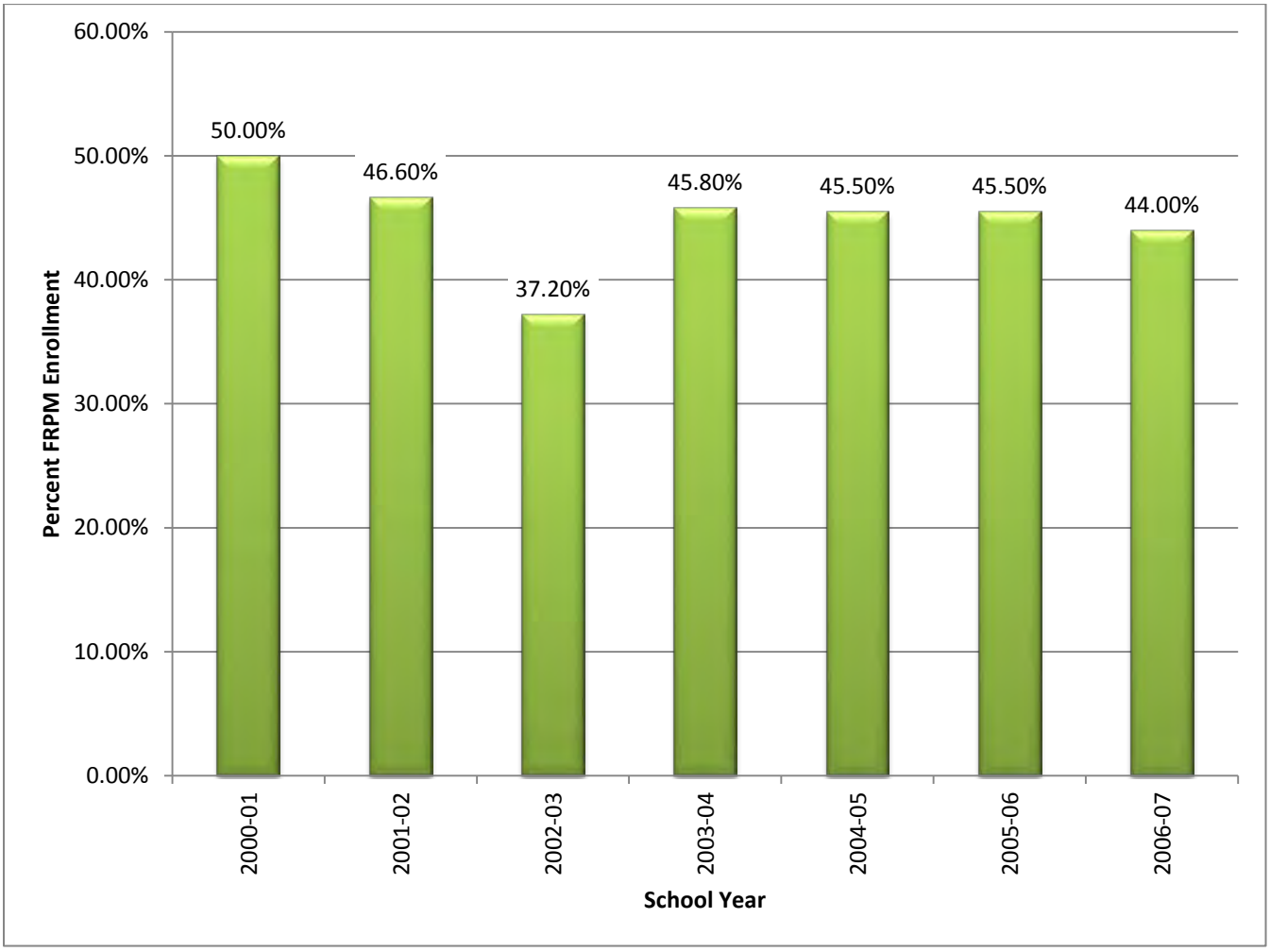


Source: California Department of Education, CBEDS.

Historical Enrollment by Socioeconomic Status

In order to analyze the District's socioeconomic profile, the consultant utilized participation in Free or Reduced Price Meals (FRPM) program as a socioeconomic indicator. Figure 6 demonstrates the percentage of students participating in the FRPM program from 2005-06 to 2011-12 (data is not yet available for 2012-13). Since 2005, participation in the FRPM program declined from 50% to 44%.

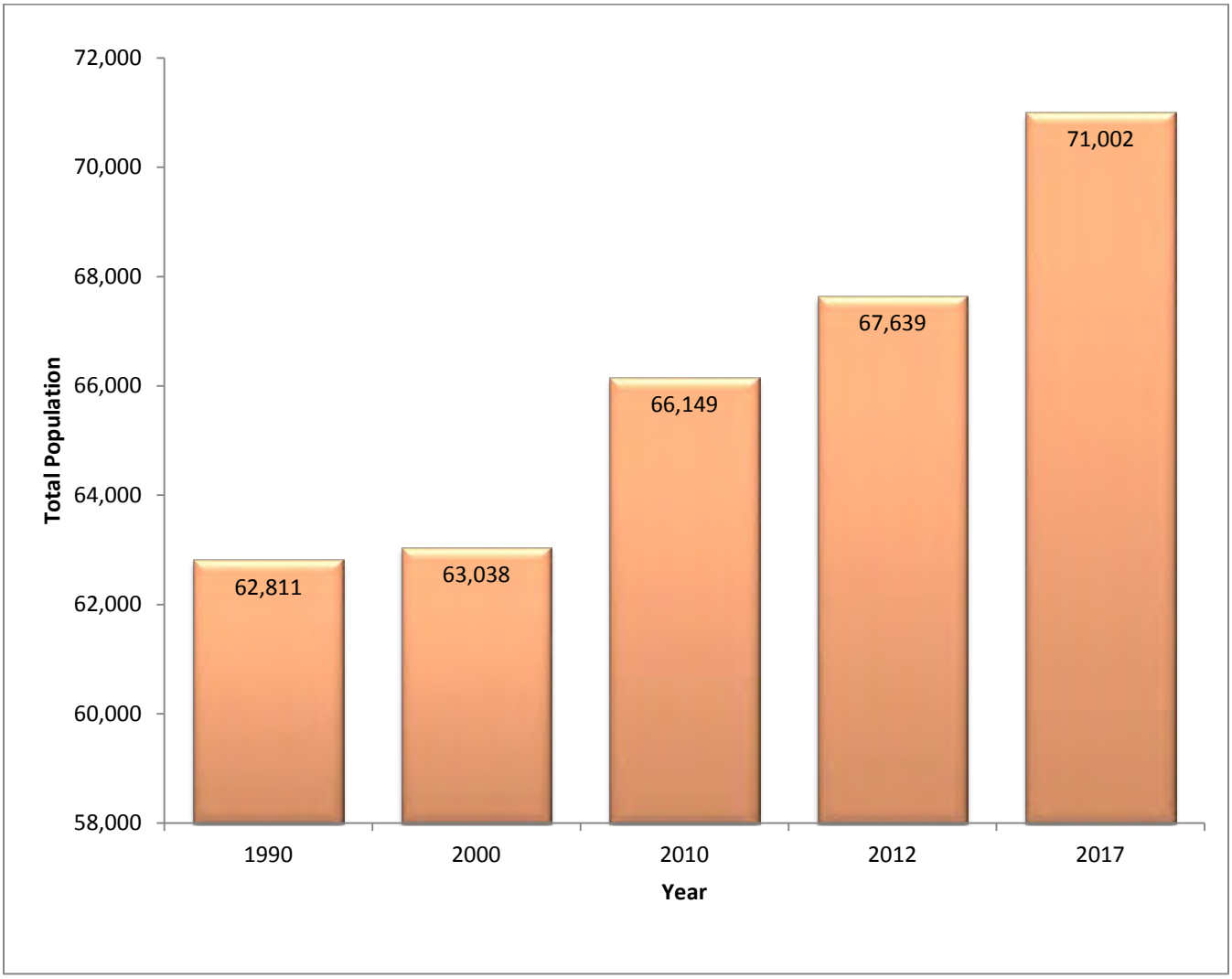
Figure 6. Percent of Students Participating in FRPM Program



MVWSD General Population Trends

The historical general population within the MVWSD boundary increased from 63,038 in 2000 to 66,149 in 2010 and again to 67,639 in 2012. The population is projected to increase another 5% by 2017 (Figure 7).

Figure 7. Historical and Projected General Population



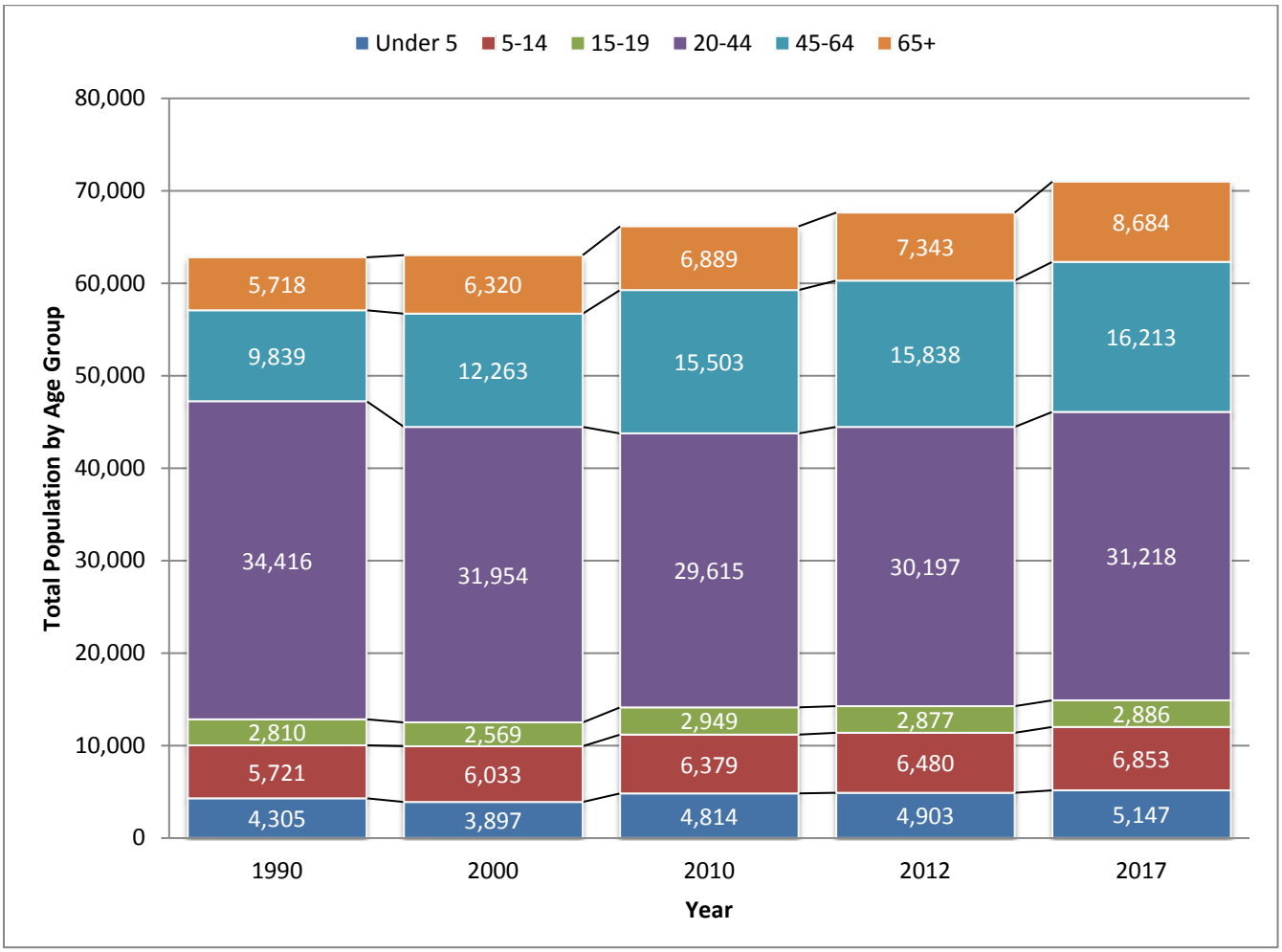
Source: ESRI Business Analyst Online, by Custom Region.

Population by Age

The age distribution of the population has significant effects on schools, social services, the available workforce, and the economy. An aging population normally requires fewer schools. A younger, rapidly growing population generally requires more schools. Figure 8 provides the historical and projected population by age grouping for the Mountain View Whisman School District. The population in this area has aged significantly since 1990 when the median age was 32.1 years. The median age increased from 34.3 years in 2000 to 35.6 years in 2012 and is projected to increase again slightly to 35.8 by 2017.

- The number of children Under 5 increased by 25.8% from 2000 to 2012 and is projected to increase 5% by 2017.
- The relevant school-aged population (5-14) increased by 7.4% from 2000 to 2012 and is projected to increase 5.8% by 2017.

Figure 8. Historical and Projected General Population by Age

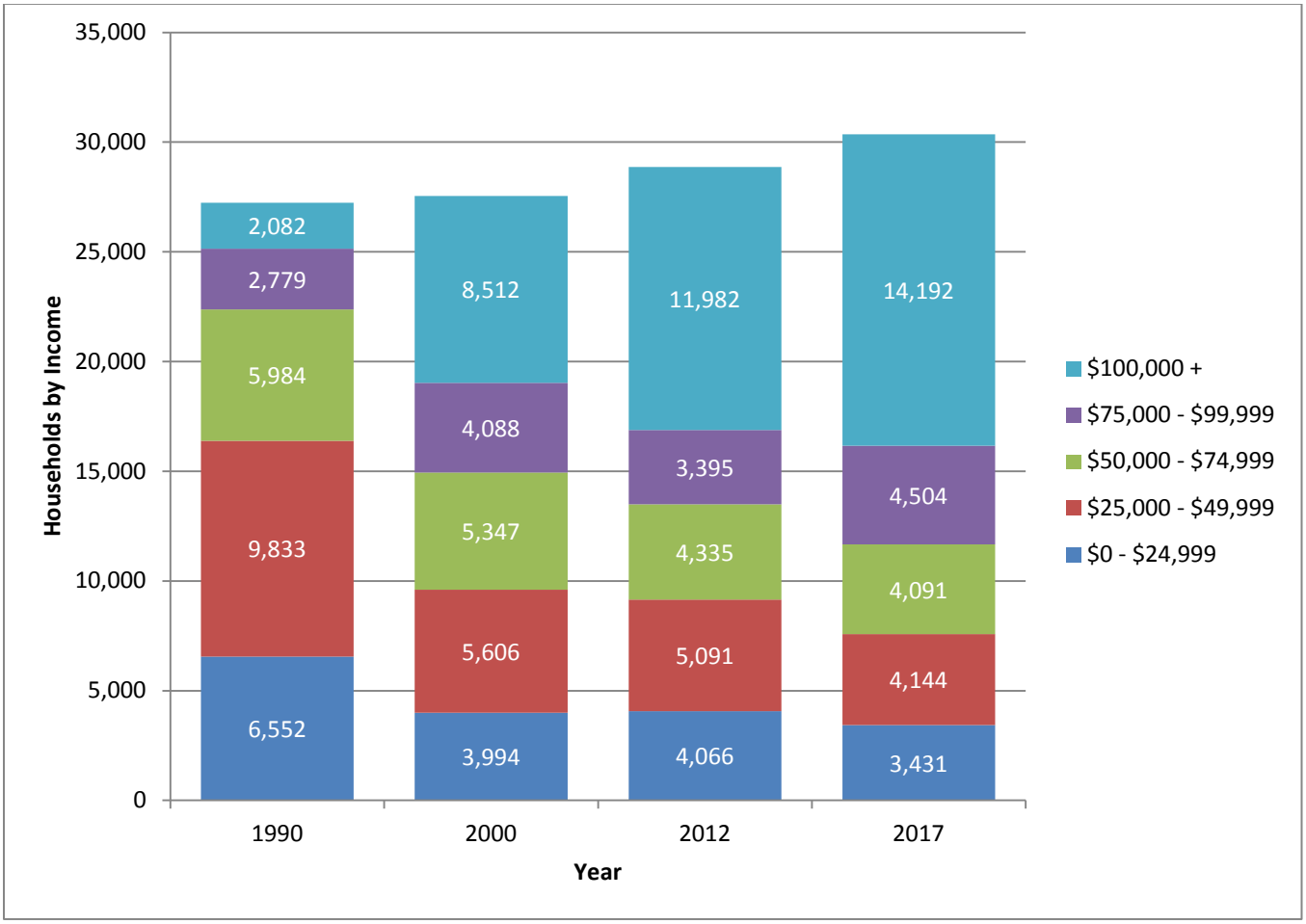


Source: ESRI Business Analyst Online, by Custom Region.

Population by Household Income

The median household income for households in the MVWSD boundary increased from $41,911 in 1990 to $80,675 in 2012. Median household income is projected to increase to $93,210 by 2017. Further analysis of households by income demonstrates that the MVWSD community is becoming increasingly affluent (Figure 9). Since 2000, all households with income less than $75,000 declined. At the same time, households with income greater than $100,000 increased by 40.7 percent. Households with income greater than $75,000 are projected to increase through 2017, while all households with income less than $75,000 are projected to decline.

Figure 9. Historical and Projected Households by Household Income

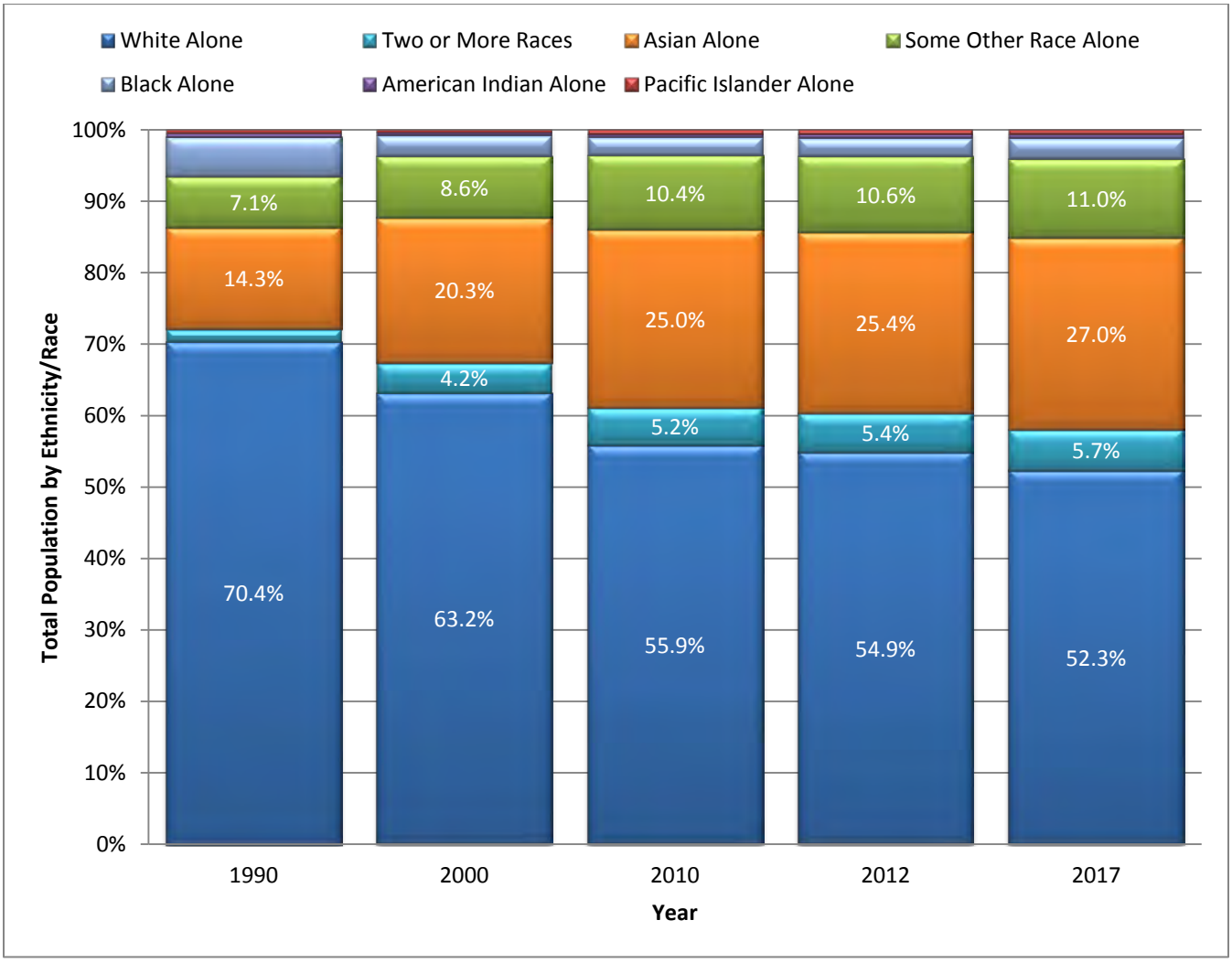


Source: ESRI Business Analyst Online, by Custom Region.

General Population by Ethnicity

The general population of MVWSD is becoming more diverse. In 1990, 70.4% of the general population was White and 16.3% of the general population was of Hispanic Origin. By 2017, it is projected that Whites will comprise 52.3% of the general population and 24.6% of the general population will be of Hispanic Origin (Figure 10). The proportion of all other races is increasing.

Figure 10. Historical and Projected General Population by Race/Ethnicity



Economic Analysis

Economic factors within Santa Clara County and, specifically Mountain View, have a direct impact on the communities served by the Mountain View-Whisman School District. A vibrant, growing economy will generate an increase in population, which, in turn, will increase the need for schools, services and other businesses (restaurants, retail stores, recreational facilities, etc.). The increase or

decline in the economy affects the population and, in turn, the number of students for the District to house. Enrollments tend to fall in worsening economic conditions and increase during stabilization or a period of economic growth.

Santa Clara County/Mountain View

In order to analyze the "health" of the economy, JSA reviewed documents available from the Santa Clara County Assessor's Office, various real estate databases, and other pertinent information regarding the current economy in Mountain View.

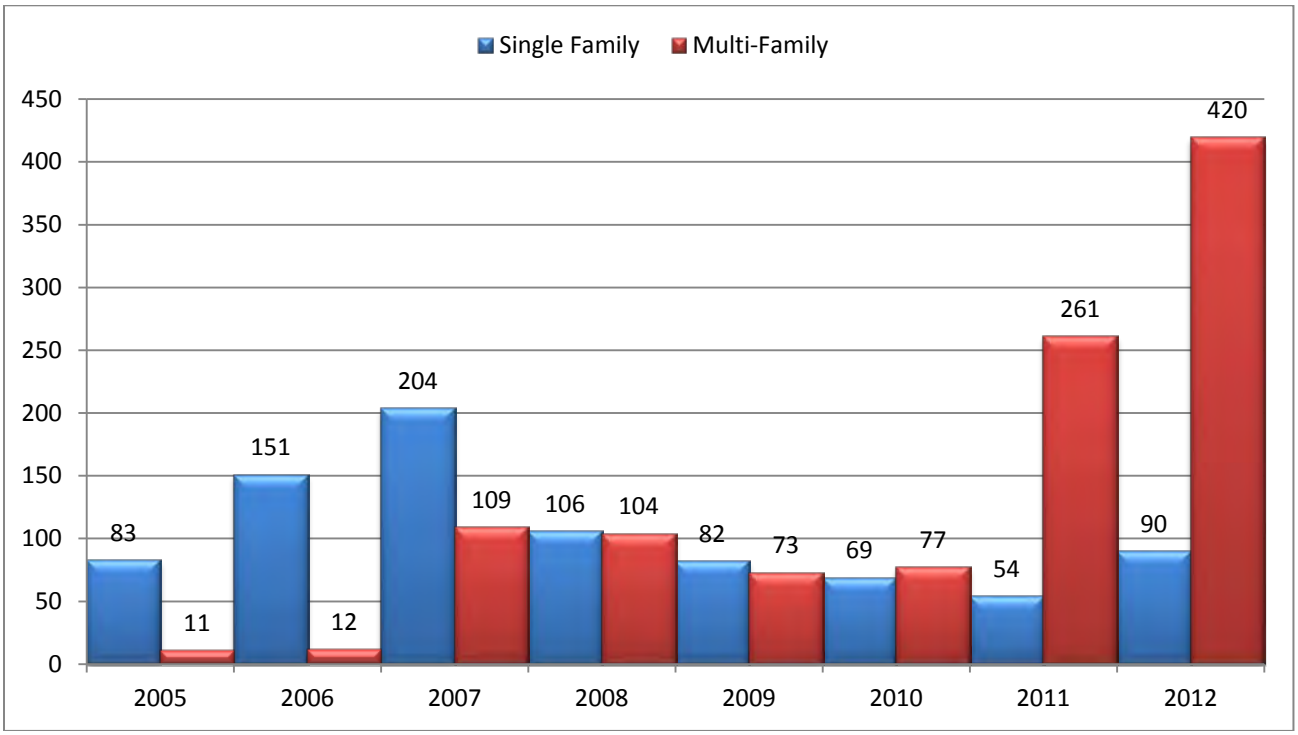
The Santa Clara County Assessor's Office is reporting the first year over year increase in assessed values since 2008. Much of this growth can be attributed to the strong recovery of the high technology market sector. This increase in property assessments reflects an encouraging trend and concrete evidence that the Silicon Valley economy is heading in a positive direction. Despite the overall improvement in the economy, there were major geographic variances. Cities including Mountain View, Cupertino, and Santa Clara experienced solid growth in excess of 6%. Other cities in the county, i.e. Gilroy and Morgan Hill were flat in terms of growth.

This increase in property values is also reflected in the increase in commercial real estate acquisition, construction, and leases in Mountain View. As the economy resurges, technology companies are purchasing, leasing, and/or expanding offices resulting in an increase in population, an increased need for housing, and increased retail services. Commercial office rents have increased from $2.68/foot per month (2009) to $5.15/ foot at the end of the first quarter of 2013. Located in the heart of Silicon Valley and served by the commuter rail, downtown Mountain View is also located within easy commuting distance to San Francisco, in addition to offering a wide range of local high density housing and other amenities.

Housing Prices/Sales

The median sales price for homes in Mountain View for the period February 13, 2013 to April 13, 2013 was $760,000. This represents a decline of 3.8%, or $30,000, compared to the prior quarter; however, it also represents an increase of 2.1% compared to the prior year. While sales prices have depreciated 1.3% over the last 5 years in Mountain View, the first quarter average price per square foot was $604, an increase of 21.5% compared to the same period last year. Building permit activity for multi-family projects has increased significantly in 2011 and again in 2012 (Figure 11).

Figure 11. Building Permit Activity



Due to the fluctuations within the economy following the economic downturn, the district should remain proactive in its analysis of these factors. The MVWSD should revisit this information on the economy and housing annually in order to effectively plan for the housing of future students. The students generated by housing type should also be reviewed as multi-family housing becomes more predominant within the District boundaries.

SECTION D: STUDENT GENERATION FACTORS

New residential development will have some impact on MVWSD future resident enrollments. New housing brings families with children to the District. In order to determine the impact, accurate student generation factors per unit of housing are necessary. The number of students generated by each new residential unit, including single-family, multi-family, and affordable housing units, assists the District in projecting future resident enrollments.

Student Generation: New Residential Construction

Accurate student generation factors are important in planning for future facilities. Schreder & Associates researched housing units constructed within the MVWSD over a five-year period, between 2008 and 2012. This database was sorted and then cross-referenced with the 2012-13 MVWSD student list in order to determine the number of students generated per housing unit by grade level and by year of construction.

Single-Family Detached Units

A total of 221 single-family detached units were constructed from 2008 to 2012. The student generation factors for newly constructed residential units are outlined in Table 2. Based on this analysis, a new home constructed in MVWSD will generate an average of 0.190 K-8 students. This district-wide K-8 student generation factor is significantly lower than the statewide average of 0.500.

Table 2. Student Generation Factors: Single-Family Detached Units

Housing Type	# of Units Constructed 2008-2012	Total Students	Student Generation Factor (K-8)	K-5	6-8
Single-Family Detached	221	42	0.190	0.140	0.050

Single-Family Attached Units

A total of 328 single-family attached units were constructed from 2008 to 2012. The student generation factors for newly constructed residential units are outlined in Table 3. Based on this analysis, a new single-family attached home constructed in MVWSD will generate an average of 0.040 K-8 students.

Table 3. Student Generation Factors: Single-Family Attached Units

Housing Type	# of Units Constructed 2008-2012	Total Students	Student Generation Factor (K-8)	K-5	6-8
Single-Family Attached	328	13	0.040	0.021	0.018

Multi-Family Housing Units

The MVWSD, by nature of its location, has numerous multi-family complexes located within its boundaries. Due to the economic downturn, many families are moving into multi-family units throughout California. Schreder & Associates prepared a student generation rate for market rate multi-family housing within the District.

Table 4. Student Generation Factors: Multi-Family Housing Units

Housing Type	# of Units Surveyed	Total Students	Student Generation Factor (K-8)	K-5	6-8
Multi-Family Apartments	996	125	0.125	0.091	0.034

Affordable Housing Units

The MVWSD also has numerous affordable housing complexes located within the District boundaries. Jack Schreder & Associates calculated the affordable housing student generation rates for this type of housing. Cities now require development projects to provide for some affordable housing within the development. Therefore, it is imperative the District remain aware of this generation factor.

Table 5. Student Generation Factors: Affordable Housing Units

Housing Type	# of Units Surveyed	Total Students	Student Generation Factor (K-8)	K-5	6-8
Affordable Housing	164	126	0.769	0.470	0.299

It is important to note that student generation factors have increased for all housing types since the previous Demographic Analysis was completed for the District in 2009-10.

SECTION E: LAND USE PLANNING/RESIDENTIAL DEVELOPMENT

The school district is inextricably linked to its community. The land use and planning policies of the various planning agencies affect where and how schools will be constructed as well as the fate of older schools within the District. In order to understand the connection between the schools in Mountain View Whisman School District and the areas they serve, an overview of policies and planning is included in this section of the study. By understanding the fabric of the communities, the policies and goals of the towns of the City of Mountain View and Santa Clara County, and the goals of the Mountain View Whisman School District, planning for the future will be made easier.

Mountain View Whisman School District serves the City of Mountain View and the surrounding unincorporated areas. The Santa Clara County Planning Department, and the City of Mountain View were contacted to provide information and documentation in regards to land use and planning, development and other pertinent information for the Mountain View Whisman School District. A brief summary of that information is provided in this section.

Santa Clara County

Santa Clara County, located at the southern end of the San Francisco Bay, is the sixth largest county in California. Originally rich with fertile agricultural land and a perfect climate for agriculture, orchards and vineyards once covered this valley. Gradually, ideas came to be the County's lifeblood, as aerospace and electronics manufacturing replaced orchards and packing plants. Universities and businesses grew and today the County is known as "Silicon Valley", the birthplace of the high technology revolution. The County is a major employment center for the region, providing more than a quarter of all jobs in the Bay Area. It has one of the highest median family incomes in the nation, and a wide diversity of cultures, backgrounds and talents.

The primary goal of the County Planning Department is to plan and regulate land use and development within the unincorporated portions of Santa Clara County.

Santa Clara County General Plan: 1995-2010

The plan includes three sections called elements: the Natural Systems Element, the Built Environment Element, and the Socio-Economic Element. The Countywide Plan incorporates sound environmental and planning principles that have guided Santa Clara County for over 30 years.

- The Natural Systems and Agriculture Element focuses on the protection and maintenance of natural resources, i.e. wetlands, riparian habitat, etc.
- The Built Environment Element focuses on guiding principles for the construction and design of housing, including energy and green building and transportation issues. As part of this element, the Community Development section includes policies about urban form[3] that are intended to shape development in the unincorporated county and provide guidance to the cities and town of Santa Clara. The County also coordinates its planning efforts with local agencies and jurisdictions. A Countywide Planning Agency was created in 1990 among all the cities and towns of the County. This agency reviews and comments on both the Countywide Plan and the plans of the cities and towns. In addition, the Redevelopment Agency provides financial, technical, and permit assistance to develop projects that revitalize physically and economically underutilized areas.
- The Socio-Economic Element focuses on business development (attracting new industries and businesses) health care, child care, community policing, civic participation, education and the arts, and physical fitness.

The General Plan outlines the policy that urban types and densities of development be located only within cities' urban service areas, in location suitable for such development. Outside cities' urban service areas, only non-urban uses and development densities are allowed, to preserve natural resources, rural character, and minimize population exposure to significant natural hazards, such as landslides, earthquake faults, and wildfire. The countywide growth management policies described herein have historically been referred to as the "joint urban development policies," held in common by

[3] Urban form refers to the physical layout and design of the city. Urban design takes into consideration density, street layout, transportation and employment areas and urban design issues. Growth management issues such as urban sprawl, growth patterns and phasing of developments influence urban form.

the cities, County, and County Local Agency Formation Commission (LAFCO) which controls city formation and expansion.

Based on the urban development policies, the Land Use Plan and policies further define allowable land uses and development potential for all unincorporated lands. Inside urban service areas, the policy of the County General Plan is to defer to the policies of the applicable city's land-use plan in defining (a) allowable uses and (b) densities of development. Outside urban service areas, all lands are assigned a land use designation, or classification. Principal designations for privately-owned lands are Hillside, Ranchlands, Agriculture, and Rural Residential. Typical densities of development range from 20 to 160 acres per parcel, depending on the designation, for lots created by subdivision. One primary dwelling is allowed per legal lot.4

Other Issues or "Elements"

In addition to the Land Use Plan element, six other major topics must be addressed by each city or county general plan: transportation, housing, resource conservation, open space, health and safety, and noise. All such "elements," as they are called in state law, have equal standing, and each address issues defined as important and pertinent to the local jurisdiction on the detailed subjects required to be contained in the General Plan.

Santa Clara County Housing Element Update: 2009-2014

The Santa Clara Planning Division has completed the process of updating the County's Housing Element. The Housing Element is a mandatory element of the General Plan that addresses the housing needs of unincorporated Santa Clara County. This element must be updated every five years as determined by the State Department of Housing and Community Development. The updated housing element assures that housing needs are addressed for all members of the community. The County's housing element was certified in November, 2010.

[4] *Santa Clara County Planning Department. General Plan*

Santa Clara Local Agency Formation Commission (LAFCO)

In 2000 the State of California adopted AB2838, a significant law which altered the guidelines for LAFCOs to establish Spheres Of Influence (SOI) in California. Sphere of Influence means a plan for the probable physical boundaries and service area of a local government agency. Establishing geographic areas around each city and special district to delineate where they may expand in the future is one of the primary activities of each LAFCO in the State. This law included uniform "analytical tools" for LAFCOs when evaluating potential SOIs, in addition to requiring the update of all SOIs by 2005.

When determining a sphere of influence, the Commission is required to consider and make written findings with respect to the following factors:

- The present and planned land uses in the area, including agricultural and open space lands.
- The present and probable need for public facilities and services in the area.
- The present capacity of public facilities and adequacy of public services which the agency provides or is authorized to provide.
- The existence of any social or economic communities of interest in the area if the commission determines they are relevant to the agency.

Spheres of influence act as a guide to LAFCO review of future boundary proposals. LAFCO is required to review adopted spheres of influence every five years. New legislation passed in 2001 requires LAFCO to perform service reviews prior to updating the spheres of influence. LAFCOs must review all of the agencies that provide each local service within a designated geographic area.

City of Mountain View

Mountain View is located at the southern end of the San Francisco Peninsula, where the Peninsula joins the Santa Clara Valley. This location is where the electronics industries that extend across Silicon Valley meet the financial and corporate headquarters offices concentrated on the Peninsula. Mountain View's focal-point location is emphasized by the way key roadways and rail transit line serving Santa Clara County join before continuing to San Francisco.

Mountain View's location makes it part of the Bay Area's economy, its housing and jobs market, the regional transportation system, and shared environmental concerns like air quality and water supply.[5]

General Plan Update: 2030

As part of the process to update the General Plan for the City of Mountain View, in March 2008 the City embarked on a city-wide process to actively engage the community and key stakeholders in helping to envision the city's future through the year 2030. Through an extensive outreach effort, residents were given the opportunity to share their ideas and opinions of the city's assets, challenges, values, and vision for the future. Two workshops were held with over 200 community members. From these workshops a Visioning Report was produced which is a synthesis and reflection of the community's input and feedback. This document served as a starting point for the City's General Plan Update.

The General Plan is the foundation for zoning regulations, subdivisions and public works plans. It also addresses other issues related to the City's physical environment, such as noise and safety. The City has identified planning areas and policy direction for each one; the Land Use section of the plan regulates the design, location of housing, industry, offices, retail and other land uses. Included within land use is also the designation which covers the types of uses, densities and intensities allowed in each part of the City. These land use regulations are important for MVWSD as they will determine what types of construction will occur in each area of the City. This development, residential and commercial, will affect the District's decisions regarding planning for schools and students.

City of Mountain View Zoning and Precise Plans

The City of Mountain View has adopted a zoning ordinance which consists of land use regulations based on the policies of the General Plan. The Zoning Ordinance recognizes the importance to the community of protecting land uses from other uses which are unrelated or incompatible and the

[5] *General Plan, City of Mountain View, 1992.*

importance to the public welfare of well-designed and properly integrated developments in all districts of the City.[6]

The City of Mountain View has adopted Precise Plans which are a tool for coordinating future public and private improvements on specific properties where special conditions of size, shape, land ownership or existing or desired development require particular attention. The City has 32 Precise Plan areas which assist the City in reviewing and approving development projects within those areas.

Residential Development

The Planning Division reviews private and public development applications for conformance with City plans, ordinances and policies related to zoning, urban design, subdivision and CEQA. The review process includes review of preliminary plans, the consideration of public input at the Development Review Committee, Zoning Administrator, Environmental Planning Commission and the City Council.

The City of Mountain View provided information on currently approved residential projects and other projects which are either under construction or in the approval process. These projects were reviewed by planning area in order to determine the impact on the Mountain View Whisman School District.

In order to factor in future students generated from current and planned residential development into the student resident projections provided in Section G, JSA mapped the projects and summarized them by planning area. Table 6 outlines the name and status of the project, the location, the type of and number of units.

Figure 12 provides the location of each development in the District.

Finally, Table 7 provides the projected number of students these units are projected to generate by planning area. All units under construction and approved have been included in the student resident projections. As Table 7 demonstrates, the highest number of students will be generated from the significant number of new residential units in the Landels school boundary.

The District will need to continue to monitor projects under review and in plan check in order to recalculate projections and provide facilities in a timely manner.

[6] City of Mountain View. *Article 1. Purpose of Zoning Ordinance.*

Table 6. City of Mountain View Residential Development Projects by Status

Location	SFD	MF	Rowhouses	AFF	Status	
1055 Boranda	4				U/C	
135 Franklin St.				51	U/C	
204-206 Ada	6				U/C	
209-405 Evelyn			65		U/C	
2545-2585 Middlefield			25		U/C	
3119 Grant Rd	53				U/C	
425 & 455 W. Evelyn		203			U/C	
505 E. Evelyn			151		U/C	
Total	***63***	***203***	***241***	***51***		
Location	**SFD**	**MF**	**Rowhouses**	**AFF**	**Status**	
111 Rengstorff		84			Approved	
365 Villa St.	12				Approved	
525-569 E. Evelyn			70		Approved	
Total	***12***	***84***	***70***	***0***		
Location	**SFD**	**MF**	**Rowhouses**	**AFF**	**Status**	
100 Moffett		191			Under Review	
111 & 121 Fairchild Dr.			18		Under Review	
137 Easy St.			21		Under Review	
1720 & 1760 El Camino Real W.		166			Under Review	
1951 Colony			28		Under Review	
1958 Rock St.			20		Under Review	
1991 Sun Mor	13				Awaiting Revisions	
325-339 Franklin			14		Awaiting Revisions	
W. end of Pacific Dr.	18				Awaiting Revisions	
115 Evandale			6		Scheduled	
1581-1585 El Camino Real W.				27	Scheduled	
865 & 881 El Camino Real E.		150			Scheduled	
135 Ada Ave.			59		Plan Check	
2060 Plymouth			14		Plan Check	
Total	***31***	***507***	***180***	***27***		
Grand Total	***106***	***794***	***491***	***78***		
Student Generation Rate	***.190***	***.125***	***.040***	***.768***		
Projected Students Generated	***20***	***99***	***20***	***60***		

Figure 12. Current and Planned Residential Development

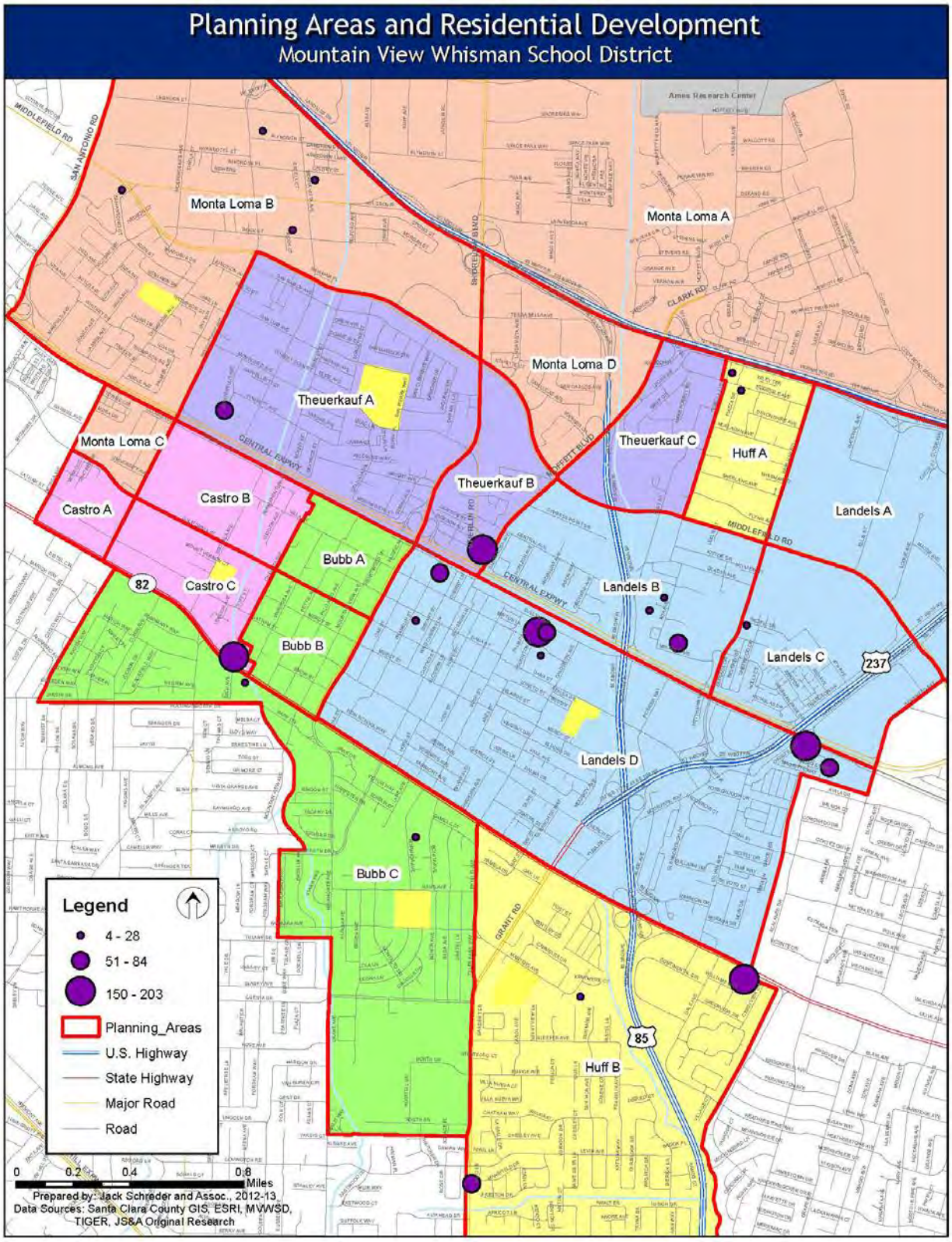


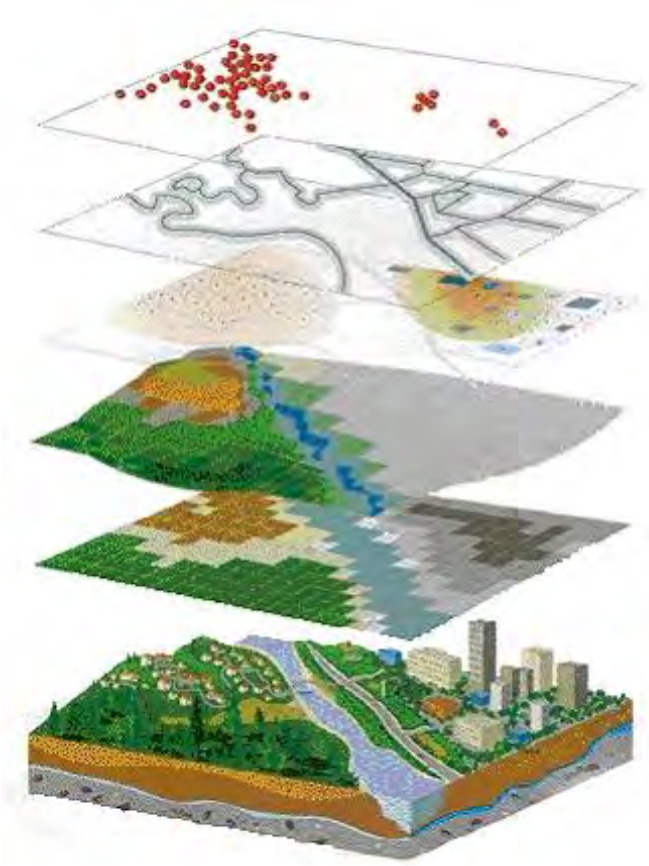
Table 7. Students Projected to be Generated from Development by Planning Area

Development Location	Housing Type				Total	Planning Area	Student Generation Rate		Projected Students Generated	
	SFD	MF	RH	Affordable			K-5	6-8	K-5	6-8
1581-1585 El Camino Real W.	-	-	-	27	27	Bubb C	0.470	0.299	12.7	8.1
1055 Boranda	4	-	-	-	4	Bubb C	0.140	0.050	0.6	0.2
Subtotal									*13.3*	*8.3*
1720 & 1760 El Camino Real W.	-	166	-	-	166	Castro C	0.091	0.034	15.1	5.6
Subtotal									*15.1*	*5.6*
115 Evandale	-	-	6	-	6	Huff A	0.021	0.018	0.1	0.1
111 & 121 Fairchild Dr.	-	-	18	-	18	Huff A	0.021	0.018	0.4	0.3
Subtotal									*0.5*	*0.4*
865 & 881 El Camino Real E.	-	150	-	-	150	Huff B	0.091	0.034	13.7	5.1
1991 Sun Mor	13	-	-	-	13	Huff B	0.140	0.050	1.8	0.7
3119 Grant Rd	53	-	-	-	53	Huff B	0.140	0.050	7.4	2.7
Subtotal									*22.9*	*8.4*
137 Easy St.	-	-	21	-	21	Landels B	0.021	0.018	0.4	0.4
135 Ada Ave.	-	-	59	-	59	Landels B	0.021	0.018	1.2	1.1
204-206 Ada	6	-	-	-	6	Landels B	0.140	0.050	0.8	0.3
Subtotal									*2.5*	*1.7*
W. end of Pacific Dr.	18	-	-	-	18	Landels C	0.140	0.050	2.5	0.9
Subtotal									*2.5*	*0.9*
135 Franklin St.	-	-	-	51	51	Landels D	0.470	0.299	24.0	15.2
325-339 Franklin	-	-	14	-	14	Landels D	0.021	0.018	0.3	0.3
209-405 Evelyn	-	-	65	-	65	Landels D	0.021	0.018	1.4	1.2
525-569 E. Evelyn	-	-	70	-	70	Landels D	0.021	0.018	1.5	1.3
505 E. Evelyn	-	-	151	-	151	Landels D	0.021	0.018	3.2	2.7
425 & 455 W. Evelyn	-	203	-	-	203	Landels D	0.091	0.034	18.5	6.9
365 Villa St.	12	-	-	-	12	Landels D	0.140	0.050	1.7	0.6
Subtotal									*50.4*	*28.2*
2060 Plymouth	-	-	14	-	14	Monta Loma B	0.021	0.018	0.3	0.3
1958 Rock St.	-	-	20	-	20	Monta Loma B	0.021	0.018	0.4	0.4
2545-2585 Middlefield	-	-	25	-	25	Monta Loma B	0.021	0.018	0.5	0.5
1951 Colony	-	-	28	-	28	Monta Loma B	0.021	0.018	0.6	0.5
Subtotal									*1.8*	*1.6*
111 Rengstorff	-	84	-	-	84	Theuerkauf A	0.091	0.034	7.6	2.9
Subtotal									*7.6*	*2.9*
100 Moffett	-	191	-	-	191	Theuerkauf B	0.091	0.034	17.4	6.5
Subtotal									*17.4*	*6.5*
GRAND TOTAL	**106**	**794**	**491**	**78**					**134.1**	**64.5**

SECTION F: SPATIAL ANALYSIS

Schreder & Associates utilized a Geographic Information System (GIS) to map and analyze the Mountain View Whisman School District. A GIS is a collection of computer hardware, software, and geographic data that allows us to capture, store, update, analyze and display all forms of geographic information. Unlike a one-dimensional paper map, a GIS is dynamic in that it links location to information in various layers in order to spatially analyze complex relationships. For example, within a GIS you can analyze where students live as opposed to where students attend school. Figure 13 provides a visualization of the layers developed for the MVWSD specific GIS.

Figure 13. MVWSD GIS Layers



- Students, Schools
- Attendance Areas
- Orthophotographs
- Parcels, Zoning
- Development
- District Boundary, Streets, Railways, Parks, Waterbodies

MVWSD Specific GIS Data

One of the most crucial pieces of GIS data that aids in the educational and facility planning process is District-specific GIS data. Facility planning is a multi-criteria process, which may result in a District making decisions regarding the consolidation of schools, renovation of existing schools, reconfiguration of current schools, and/or site location analysis and construction of new schools. Combining District-specific GIS data (students, attendance areas, land use data, etc.) with basemap data (roads, rivers, school sites, etc.) significantly enhances the decision making process.

In order to spatially analyze the District's student population, current school boundaries were subdivided into planning areas. Maps of the planning areas and current school boundaries are provided in Figures 14 and 15.

Figure 14. 2012-13 Planning Areas

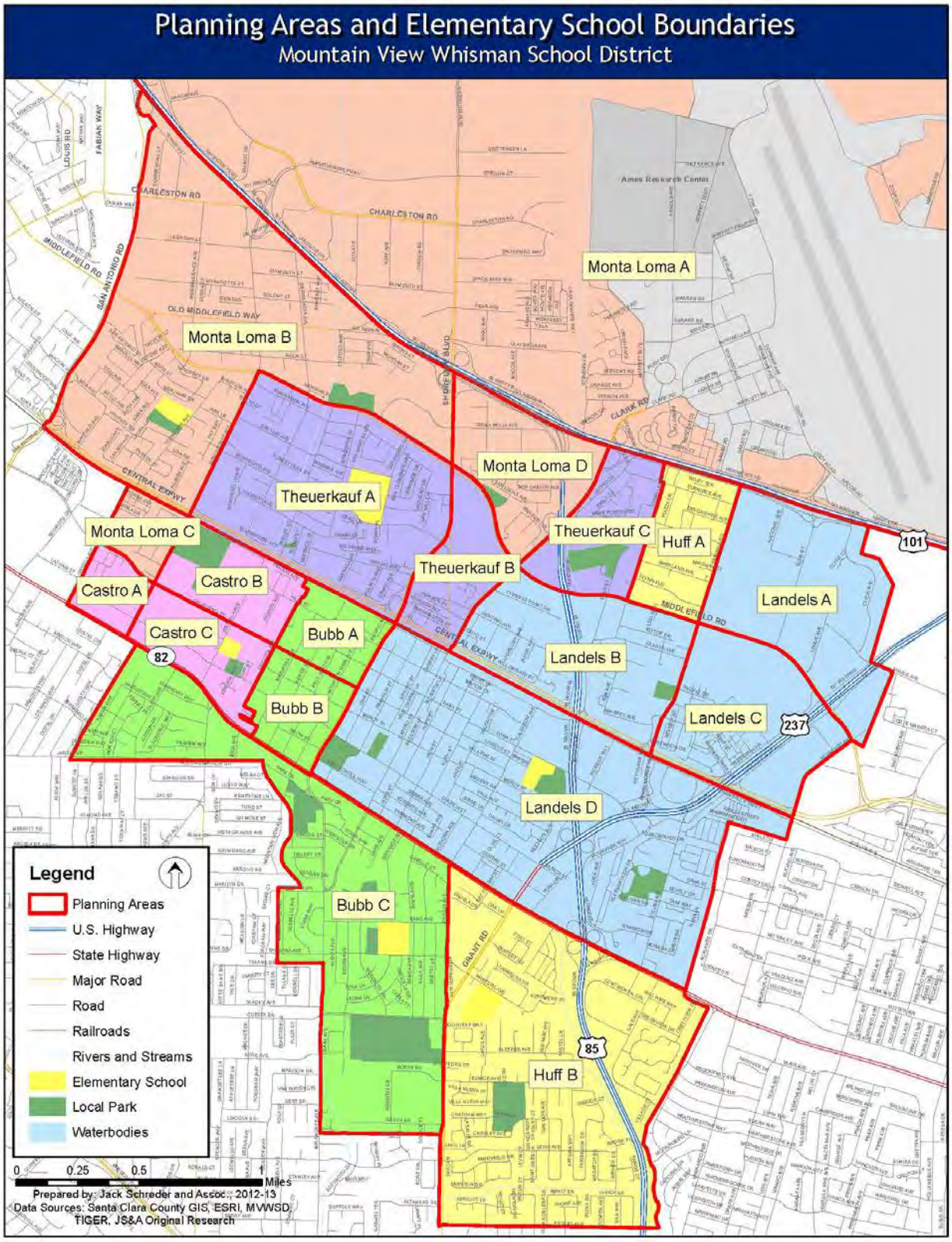
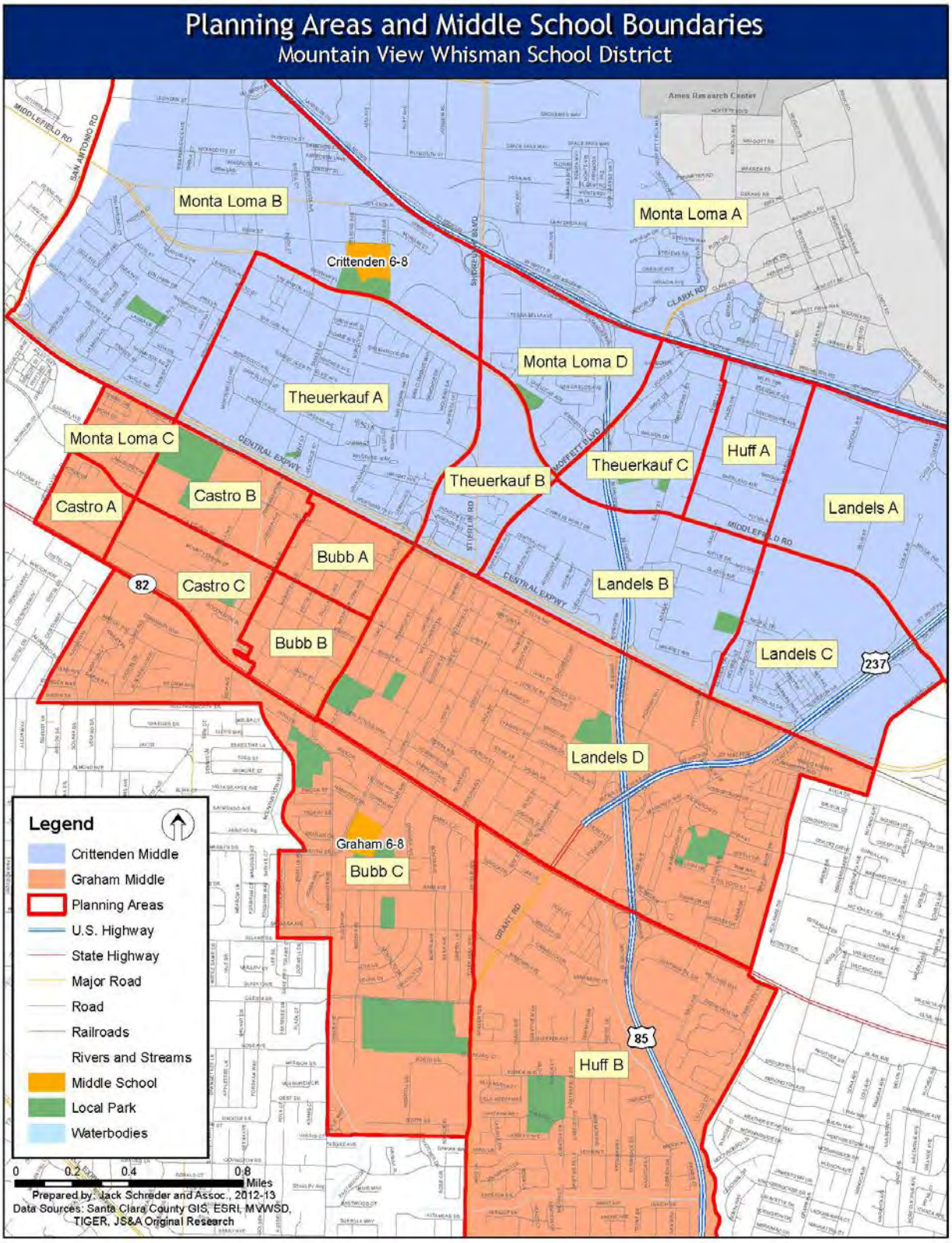


Figure 15. Planning Areas and Middle School Boundaries

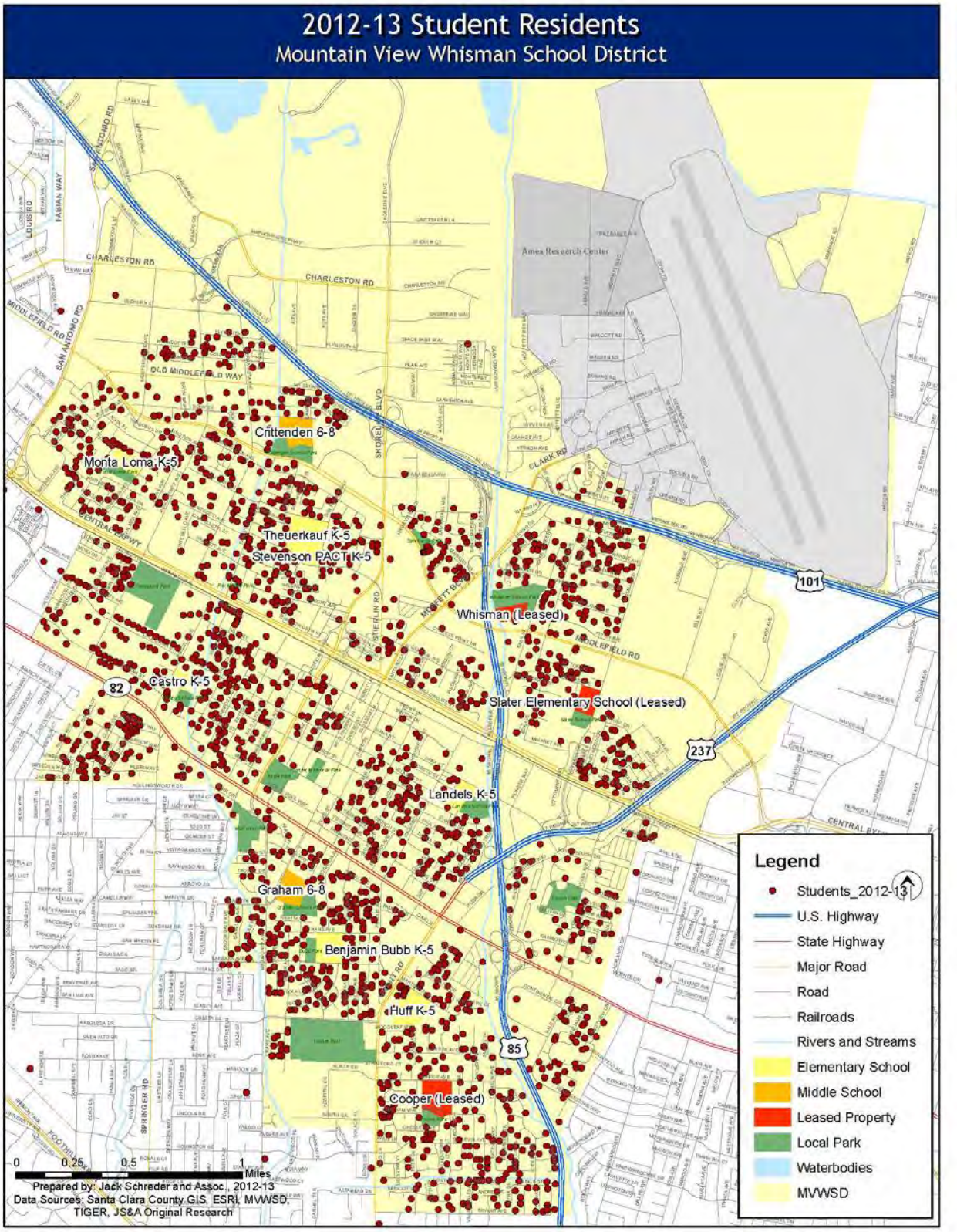


Mapping Student Data

Schreder & Associates mapped the 2005-06 through 2012-13 student information databases by a process called geocoding. The address of each individual MVWSD student was matched to the parcel in which they reside in the MVWSD GIS. Figure 16 demonstrates the 2012-13 students in the various areas of the District.

The student totals provided in this section were derived from the geocoded 2012-13 student list and therefore may not directly correspond to the 2012-13 MVWSD CalPADS enrollment totals.

Figure 16. 2012-13 Student Resident Distribution



Student Resident Totals

Once the 2012-13 students were mapped, they were analyzed and displayed by grade level and planning area (Figures 17 and 18). The numbers contained in each planning area on the following maps represent the number of students, by grade level, **residing** within that planning area in the 2012-13 school years. These numbers do not represent school enrollments. These layers of information provide tools for analyzing student resident distribution, determining future student residents, changing school boundaries or moving programs.

At the elementary school level, student resident totals range from 54 in Landels C to 488 in Huff B.

At the middle school level, student resident totals range from 16 in Landels C to 167 in Theuerkauf A.

Figure 17. 2012-13 K-5th Grade Student Resident Totals by Planning Area

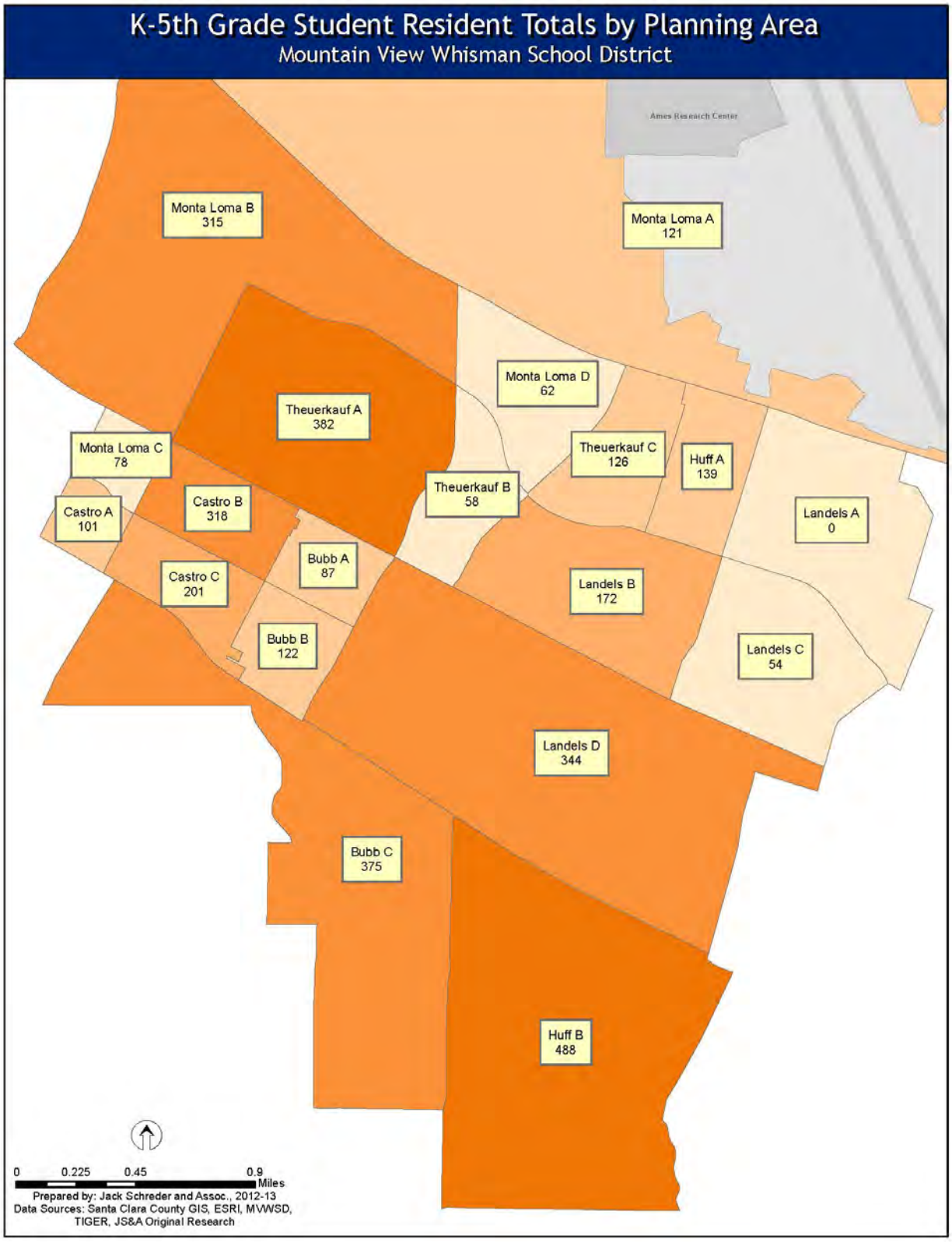
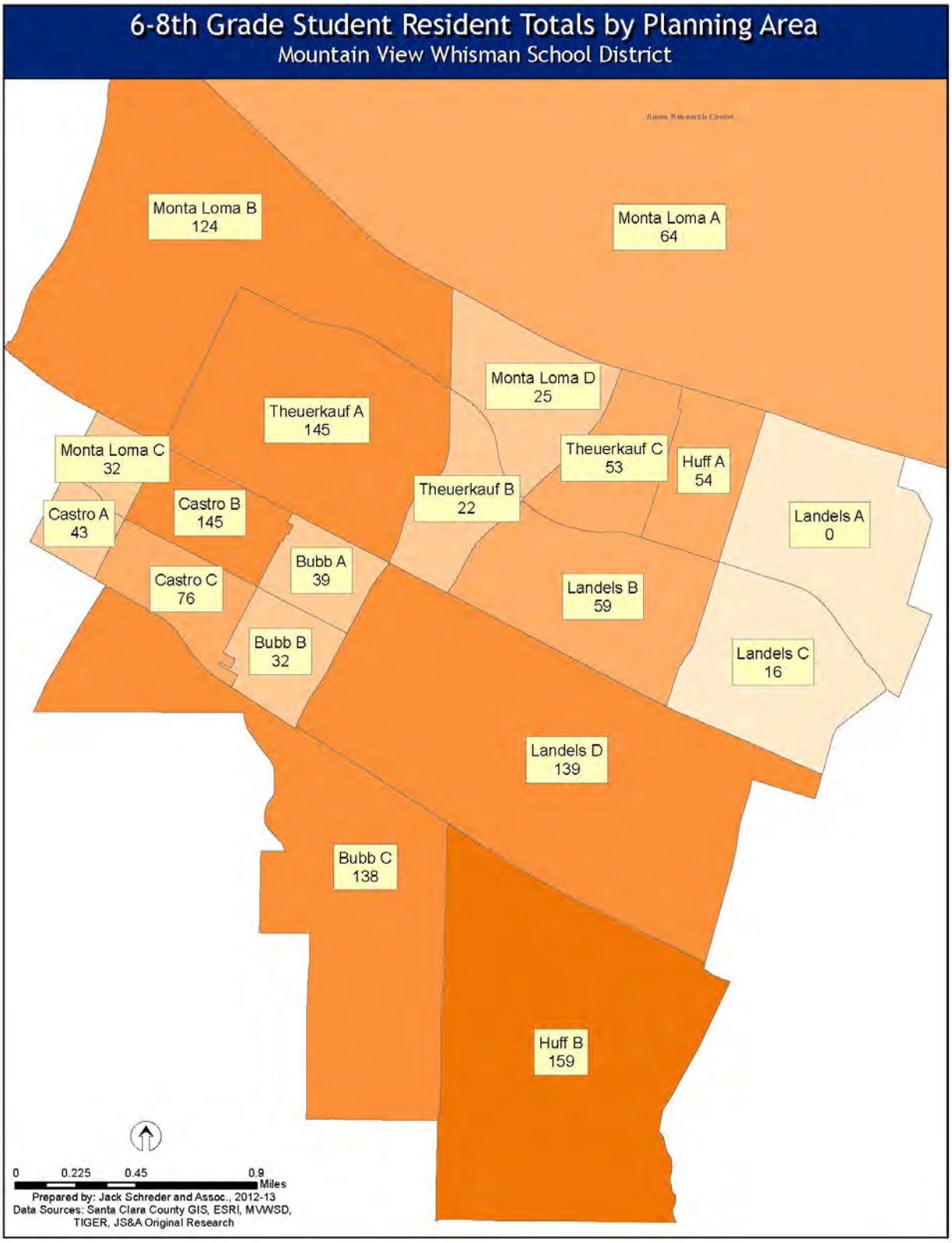


Figure 18. 2012-13 6th-8th Grade Student Resident Totals by Planning Area



Attendance Matrices

An important factor in analyzing the MVWSD student population is determining how well each school is serving its neighborhood population. Attendance Matrices have been included to provide a better understanding of where students reside versus where they attend school. The tables on the following page compare the 2012-13 MVWSD students by their planning area of residence versus their school of attendance[7].

This detailed analysis provides data on 2012-13 intra-district and inter-district students. Intra-district students are those students attending a school but not residing within their attendance area. Inter-district students are those students attending a school but not residing within the Mountain View Whisman School District boundary.

Tables 8 and 9 are meant to be read from top to bottom, then right to left.

For example, as Table 8 demonstrates, there are 21 K-5th grade students residing in the Bubb A planning area, but attending Castro Elementary School; alternatively, there are 3 K-5th grade students residing in the Castro A planning area, but attending Bubb Elementary School.

Similarly, as Table 9 demonstrates, there are 12 6-8th grade students residing in the Bubb A planning area but attending Crittenden Middle school; alternatively, there are 27 6-8th grade students residing in the Bubb A planning area but attending Graham Middle school.

[7] These student totals were derived from the geocoded 2012-13 student list and therefore may not match the 2012-13 enrollment totals.

Table 8. K-5th Grade Planning Area Attendance Matrix

School of Residence	Castro B	Castro C	Huff A	Huff B	Landels A	Landels B	Landels C	Landels D	Monta Loma A	
Castro B	48	**158**	9	25	43	11	24	-	**318**	
Castro C	32	**105**	9	24	12	6	13	-	**201**	
Huff A	10	12	**62**	19	7	8	20	1	**139**	
Huff B	27	16	**394**	28	3	12	8	-	**488**	
Landels A	-	-	-	**-**	-	-	-	-	**-**	
Landels B	5	5	11	**109**	3	26	13	-	**172**	
Landels C	3	3	6	**24**	2	16	-	-	**54**	
Landels D	12	53	12	**201**	7	56	2	1	**344**	
Monta Loma A	3	6	4	4	**79**	4	21	-	**121**	

Table 9. 6th-8th Grade Planning Area Attendance Matrix

Middle School Boundary	Castro B	Castro C	Huff B	Landels D	Monta Loma C	Crittenden Mi	Huff A	Landels A	Landels B	Landels C	Monta Loma A	
Castro B	39	24	9	13	8		**33**	-	**41**	**4**	**6**	
Castro C	**106**	**52**	**150**	**125**	**24**		21	-	18	12		
Huff B	-	-	-	1	-		-	-	-	-		
Landels D	-	-	-		-		-	-	-	-		
Monta Loma C	-	-	-				-	-	-	-		
Crittenden Mi												
Huff A	**145**	**76**	**159**	**139**	**32**		**54**	**-**	**59**	**16**	**6**	
Landels A												
Landels B												
Landels C												
Monta Loma A												

Inter-district Transfers

Inter-district transfers were analyzed for purposes of evaluating the impact to District enrollments and District facilities. As demonstrated in Table 10, inter-district transfer students represent 2% of the District's 2012-13 K-8th grade enrollments. Currently, there are 98 inter-district students enrolled in MVWSD. Table 10 indicates a decreasing trend of such enrollments as space availability has decreased over the last several years.

Table 10. 2012-13 Inter-district Transfer Students

Grade	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
K	34	48	42	17	31	8	5	4
1	18	34	56	28	23	27	7	4
2	27	17	37	47	42	18	25	6
3	19	23	29	34	41	34	12	17
4	27	17	41	19	33	38	28	10
5	37	26	29	28	25	23	37	22
6	17	20	23	14	20	15	10	13
7	22	17	33	14	22	18	12	9
8	24	15	27	18	24	19	17	13
K-5	*162*	*165*	*234*	*173*	*195*	*148*	*114*	*63*
6-8	*63*	*52*	*83*	*46*	*66*	*52*	*39*	*35*
Total	**225**	**217**	**317**	**219**	**261**	**200**	**153**	**98**

SECTION G: STUDENT RESIDENT PROJECTIONS

The following projections are based upon ***residence*** of the students. The historical years of student data utilized differ from enrollments in that we use the location of where students reside, as opposed to enrollments by school. These projections are meant to assist the District in making decisions such as where future school facilities should be located, boundary changes, and school consolidation. Since students don't necessarily attend their school of residence, these projections should not be utilized for staffing and budgeting purposes.

Schreder & Associates utilized the industry standard cohort "survival" methodology to prepare the multi-year resident projections for the Mountain View Whisman School District. While based on historical residents, Schreder & Associates adjusts the calculation for:

- Historical and Projected Birth Data (used to project future kindergarten students)
- Residential Development
- Student Migration Rates

Schreder & Associates geocoded eight years of student information databases to the District GIS in order to compile historical data by grade for those students residing within the MVWSD boundary and attending MVWSD schools from 2005-06 to 2012-13. Table 11 provides the data by planning area, by grade level.

Table 11. Historical Student Residents

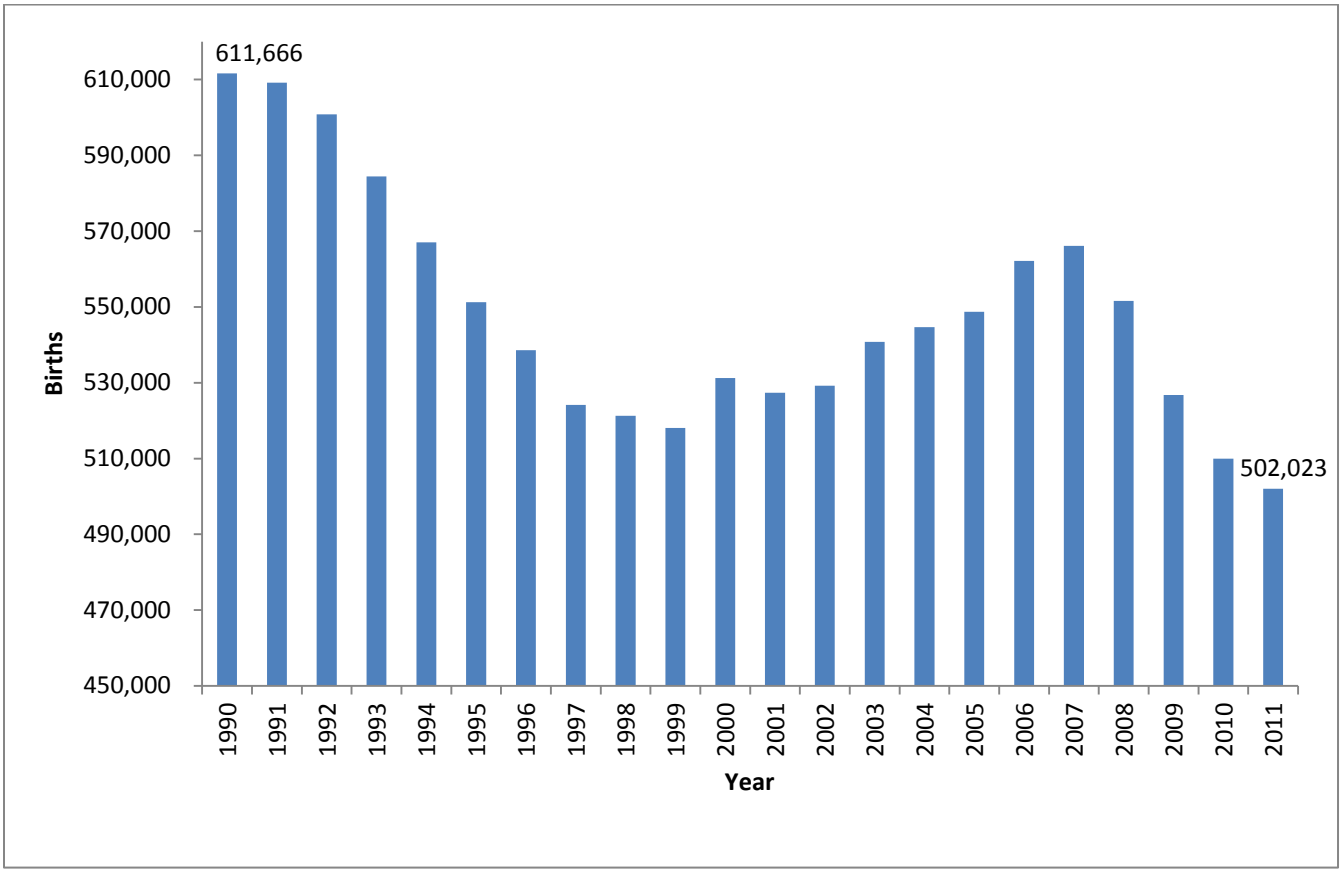
Planning Area: K-5 Student Residents	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13
Bubb A	66	70	87	78	72	81	76	87
Bubb B	57	63	63	71	85	100	116	122
Bubb C	259	245	270	320	330	349	359	375
Castro A	99	116	131	111	104	95	95	101
Castro B	254	264	281	276	320	352	348	318
Castro C	181	186	154	184	170	168	186	201
Huff A	166	158	127	119	124	123	133	139
Huff B	300	303	326	366	413	431	457	488
Landels A	0	0	0	0	0	0	0	0
Landels B	122	134	117	140	144	151	172	172
Landels C	43	52	56	47	41	47	54	54
Landels D	271	255	275	297	353	371	354	346
Monta Loma A	90	109	120	150	142	146	119	121
Monta Loma B	284	303	292	314	307	304	288	315
Monta Loma C	81	101	87	86	73	85	85	78
Monta Loma D	54	54	58	48	51	71	66	62
Theuerkauf A	320	304	338	318	332	363	400	382
Theuerkauf B	28	29	36	43	41	44	50	58
Theuerkauf C	79	77	98	81	106	114	111	126
K-5 Student Resident Totals	**2,754**	**2,823**	**2,916**	**3,049**	**3,208**	**3,395**	**3,469**	**3,545**
Planning Area: 6-8 Student Residents	**05-06**	**06-07**	**07-08**	**08-09**	**09-10**	**10-11**	**11-12**	**12-13**
Bubb A	35	23	27	27	26	30	38	39
Bubb B	27	23	23	23	31	23	27	32
Bubb C	108	95	101	96	120	122	140	138
Castro A	45	48	37	47	49	52	51	43
Castro B	116	88	95	109	102	109	115	145
Castro C	69	62	48	55	64	66	70	76
Huff A	77	84	66	57	40	39	47	54
Huff B	109	110	117	123	156	160	165	159
Landels A	0	0	0	0	0	0	0	0
Landels B	55	54	50	57	70	65	61	59
Landels C	11	10	16	18	18	17	21	16
Landels D	107	108	114	124	102	113	135	137
Monta Loma A	59	50	56	60	57	66	59	64
Monta Loma B	123	112	100	118	109	116	137	124
Monta Loma C	40	38	33	26	29	30	32	32
Monta Loma D	36	26	33	38	25	24	27	25
Theuerkauf A	187	198	185	156	152	149	143	145
Theuerkauf B	35	25	22	18	14	14	24	22
Theuerkauf C	52	45	44	34	49	52	56	53
6-8 Student Resident Totals	**1,291**	**1,199**	**1,167**	**1,186**	**1,213**	**1,247**	**1,348**	**1,363**

Historical and Projected Birth Data

Close tracking of local births is crucial for projecting future kindergarten students. Births are the single best predictor of the number of future kindergarten students to be housed by the District. Birth data is collected for the Mountain View Whisman School District by the California Department of Health Services using Zip Codes[8] and is used to project future kindergarten class sizes.

Since 2007, births in California have declined significantly. The decline in births in 2009 and 2010 were the second and third largest since 1990 (Figure 19). In 2010, the State realized fewer births than at any time since 1990. This is significant, and could mean declines in K-12 enrollments Statewide beginning in 2013.

Figure 19. California Births, 1990-2011



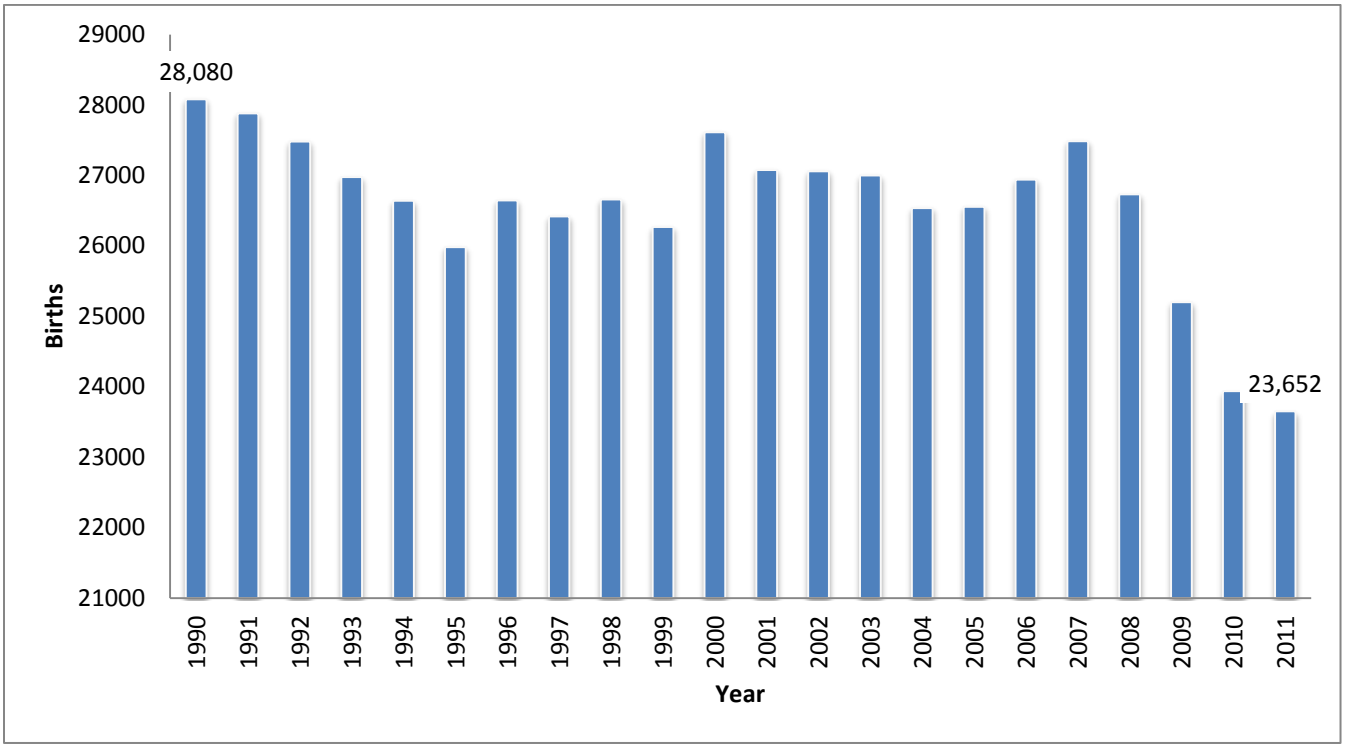
Source: California Department of Public Health

Similar to statewide trends, Santa Clara County experienced a steady increase in births until 1990, at which time births began to sharply and steadily decline. In 1995 this trend reversed, and births

[8] Schreder & Associates utilized Zip Codes 94035, 94040, 94041 and 94043.

began to rise once again, peaking at 27,612 in 2000. More recently, births in Santa Clara County have been declining. From 2007 to 2011, births declined significantly by 14% (Figure 20).

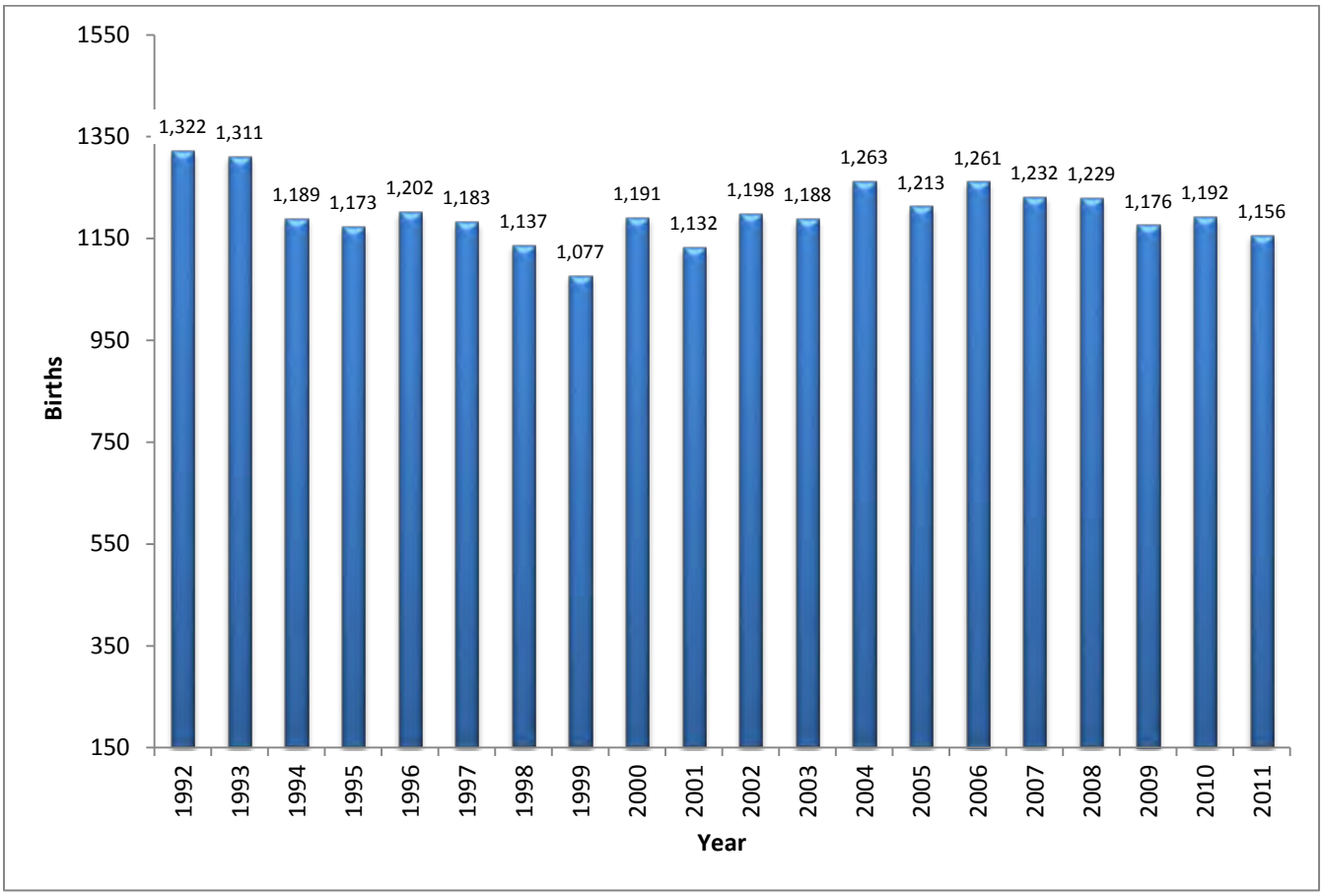
Figure 20. Santa Clara County Births, 1990-2011



Source: California Department of Public Health

The Mountain View Whisman School District has experienced similar fluctuations in births since 1989. Births peaked in 1992 at 1,322 and then declined sharply, dropping by 245 births in 1999. Births increased and remained fairly stable through 2006, but have declined in recent years. From 2006 to 2011, births in MVWSD declined by 8.3%. Figure 21 provides the total number of births between 1992 and 2011 in Mountain View Whisman School District.

Figure 21. Births in MVWSD



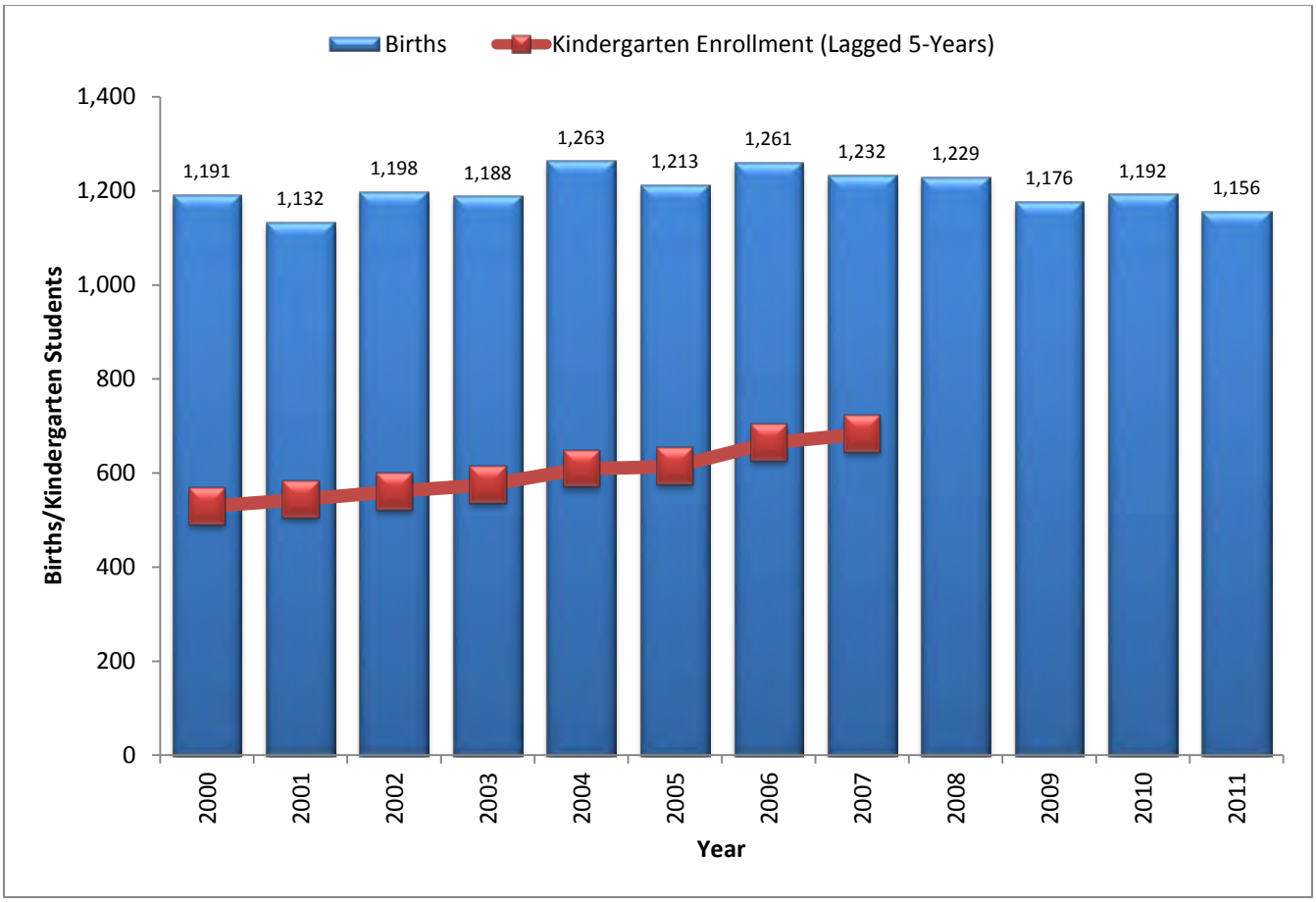
Source: California Department of Public Health

Kindergarten Resident to Birth Ratio

The number of children born to parents who live in MVWSD is correlated with the size of the kindergarten class five years later. Therefore, we use recent birth data as the most important factor when projecting future kindergarten students for MVWSD. Figure 22 demonstrates this relationship. It compares the actual births in MVWSD to the kindergarten residents 5 years later. For example, in 2007 there were 1,232 births in MVWSD. This birth year corresponds with the kindergarten residents of 683 five years later, in 2012.

Since 2005, the kindergarten resident to birth ratio has increased.

Figure 22. Births Compared to Kindergarten Resident Enrollment (Lagged 5 Years)



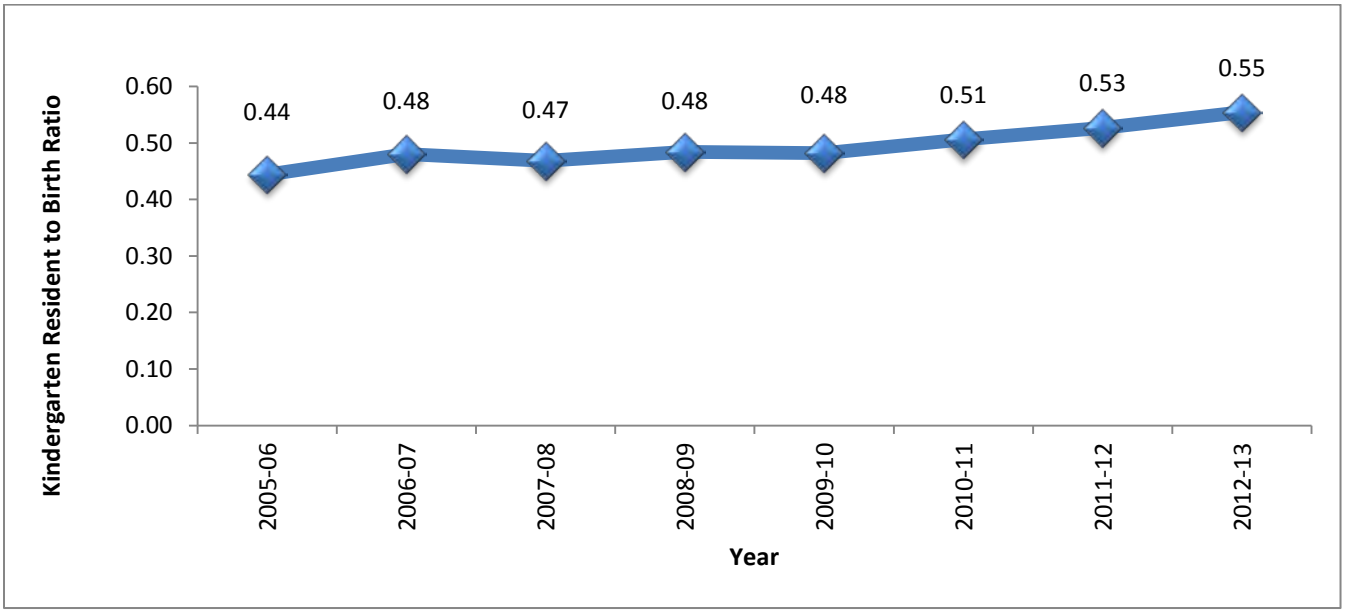
There is rarely a one-to-one correspondence between births and subsequent kindergarten residents. Table 12 and Figure 23 demonstrate the MVWSD kindergarten-birth ratio. It provides the percentage of births that result in kindergarten residents in the District five years later. It is a net rate, because children move both into and out of the District.

The ratio of MVWSD births to MVWSD kindergarten residents has increased every year since 2005. In 2012, the kindergarten to birth ratio was 0.55, meaning that for every 100 births in 2007, 55 kindergarten residents enrolled in MVWSD kindergarten classes five years later (in 2012).

Table 12. Kindergarten Resident to Birth Ratio Calculation

Birth Year	Live Births	Increase	Kindergarten Year	Kindergarten Resident Enrollment	Ratio of Live Births as Student Residents in Kindergarten
2000	1,191	114	2005-06	529	0.44
2001	1,132	-59	2006-07	544	0.48
2002	1,198	66	2007-08	561	0.47
2003	1,188	-10	2008-09	575	0.48
2004	1,263	75	2009-10	609	0.48
2005	1,213	-50	2010-11	614	0.51
2006	1,261	48	2011-12	664	0.53
2007	1,232	-29	2012-13	683	0.55
2008	1,229	-3			
2009	1,176	-53			
2010	1,192	16			
2011	1,156	-36			

Figure 23. Kindergarten Resident to Birth Ratio



The kindergarten to birth ratios are analyzed and statistical calculations are applied to estimate future kindergarten to birth ratios. Given the recent growth of in-migration to the District of families with children and the lag effect of this demographic factor (i.e. some families who have moved to the District likely came with very young children who have yet to enter school), combined with the transitional kindergarten program, we expect the ratio will continue to increase. Therefore, we have projected the kindergarten to birth ratio using a regression analysis. This analysis estimates the predicted growth of the kindergarten to birth ratio based on past values.

The projected kindergarten to birth ratios are multiplied by the number of births each year to project kindergarten resident enrollments. Currently, there is birth data available through 2011. In order to project kindergarten classes beyond 2016, county birth projections from the California Department of Finance (DOF) are utilized. Given the lack of adequate baseline trend data, we strongly recommend the District update their kindergarten to birth ratio annually as new data becomes available.

Student Migration Rates

The methods of projecting student residents in grades 1-8 involve the use of student migration rates. A migration rate is simply how a given cohort changes in size as they progress to the next grade level.

- Positive migration occurs when a District gains students from one grade into the next grade the following year. For example, consider a cohort of 100 1st grade students that becomes a cohort of 125 2nd grade students the following year. In this case, 25 new students enrolled in the District who were not enrolled the prior year[9].
    - Positive migration could be indicative of numerous influences, including the in-migration of families with children to the District, private to public school transfers, new residential construction, District policy changes, school closures in adjacent Districts, etc.
- Negative migration occurs when a District loses students from one grade into the next grade the following year. For example, consider a cohort of 100 1st grade students that becomes a cohort of 75 2nd grade students the following year. In this case, 25 new students who were present the prior year are not enrolled in the current year[10].
    - These losses could be indicative of numerous influences including the closure of schools, grade level reconfiguration, boundary changes, District policy changes toward interdistrict transfer students, losses to private schools or other Districts, out-migration of families due to economic decline, etc.

As an example, in 2011-12 the MVWSD student resident class of first graders was 602. A year later, this class became a second grade class of 582. Using this example, the rate of migration is calculated as follows:

(582-602)/602 = -3.32%

The -3.32% is a measure of the migration of students, i.e. the likelihood our first grade class will become larger or smaller as the class passes into the second grade the following year. **This migration is not a measurement of year by year change in student residents. It is possible to have negative**

[9] This is a net measurement.
[10] This is a net measurement.

migration, yet overall student resident gains, and vice versa, depending on the size of the exiting highest grade and the size of the incoming lowest grade class.

Table 13 provides an example of negative migration with positive student resident gains. The shaded boxes represent the same cohorts, as they migrated from one grade in 2011 into the next grade in 2012. For example, the kindergarten cohort of 400 in 2011 became a 1st grade class of 398 in 2012, representing negative migration of -2 students from one year to the next as the cohort progressed into the next grade. This example demonstrates how it is possible to have negative migration at every grade level, yet overall student resident gains (as the exiting 8th grade in 2011 was replaced with a kindergarten class of 400 in 2012). The addition of 160 students by way of the exiting 8th grade class (240) and incoming kindergarten class the following year (400) offset the negative migration (-45 students).

Table 13. Example of Negative Migration with Positive Enrollment Gains

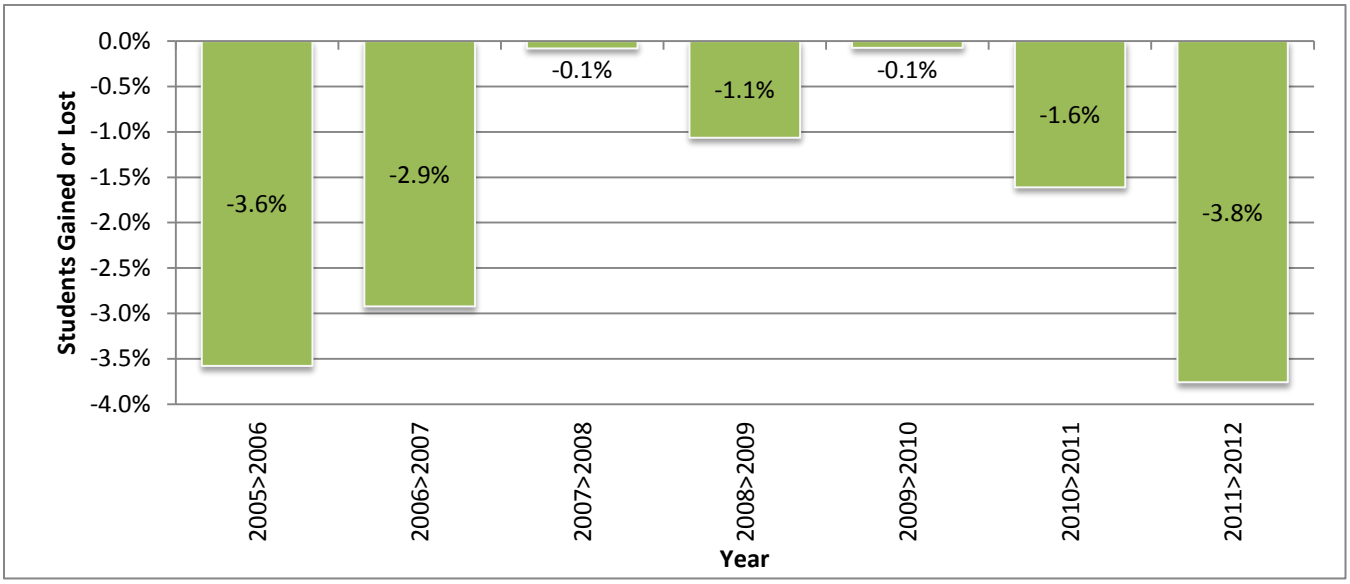
Grade	2011 Enrollment	Migration From 2011 > 2012	2012 Enrollment
K	400		400
1	380	-0.5%	398
2	360	-0.8%	377
3	340	-1.1%	356
4	320	-1.5%	335
5	300	-1.9%	314
6	280	-2.3%	293
7	260	-2.9%	272
8	240	-3.5%	251
Total K-8 Enrollment	**2,880**		**2,996**

Migration rates are calculated for all grade levels by year, analyzed and adjusted for anomalous years, weighed, and averaged in order to calculate future students at the 1-8 grade levels.

Student Resident Migration Rates

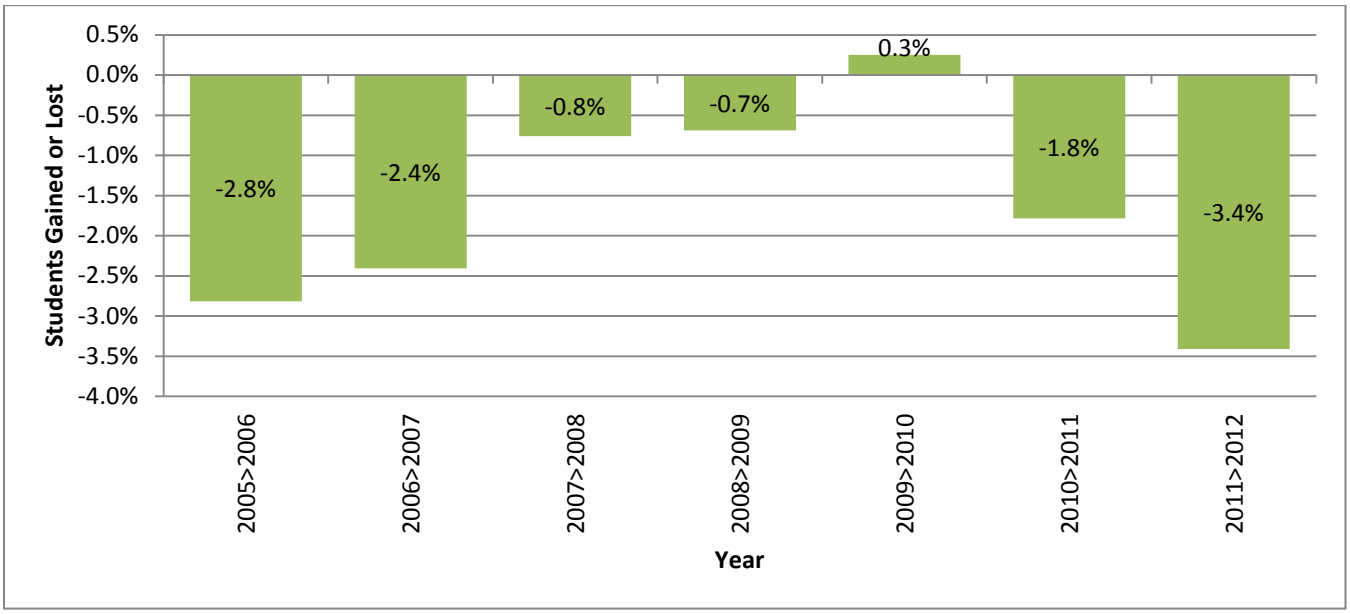
Overall, MVWSD experienced negative migration of student residents from 2005 to 2012 (Figure 24).

Figure 24. Student Resident Migration Grades K-7 > Grades 1-8



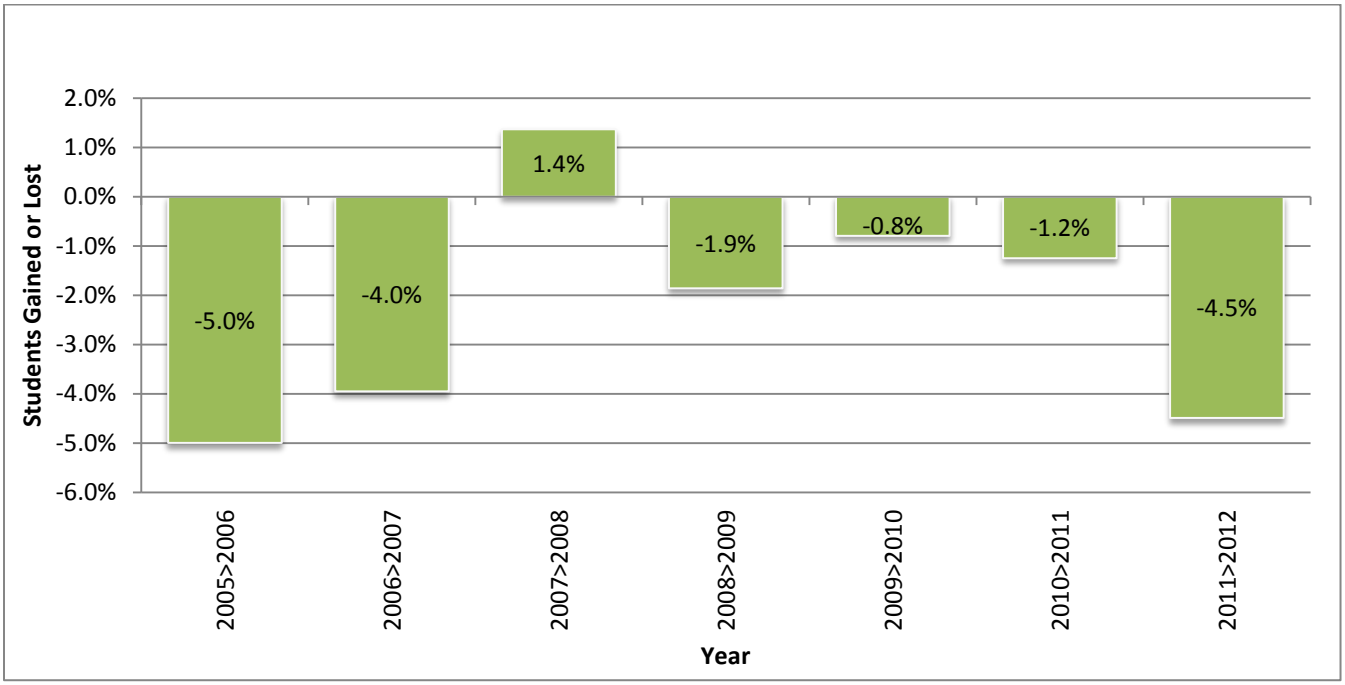
A closer examination of MVWSD student resident migration by grade level grouping provides additional insight. Overall, MVWSD has experienced negative student resident migration at the K-5th grade levels since 2005 (Figure 25). Typically, the District loses students at the elementary level from each year to the next.

Figure 25. Student Resident Migration Grades K-4 > Grades 1-5



Overall, MVWSD has experienced negative student resident migration at the 6-8th grade levels since 2005 (Figure 26). Typically, the District loses students at the middle level from each year to the next.

Figure 26. Migration Grades 5-7 > Grades 6-8



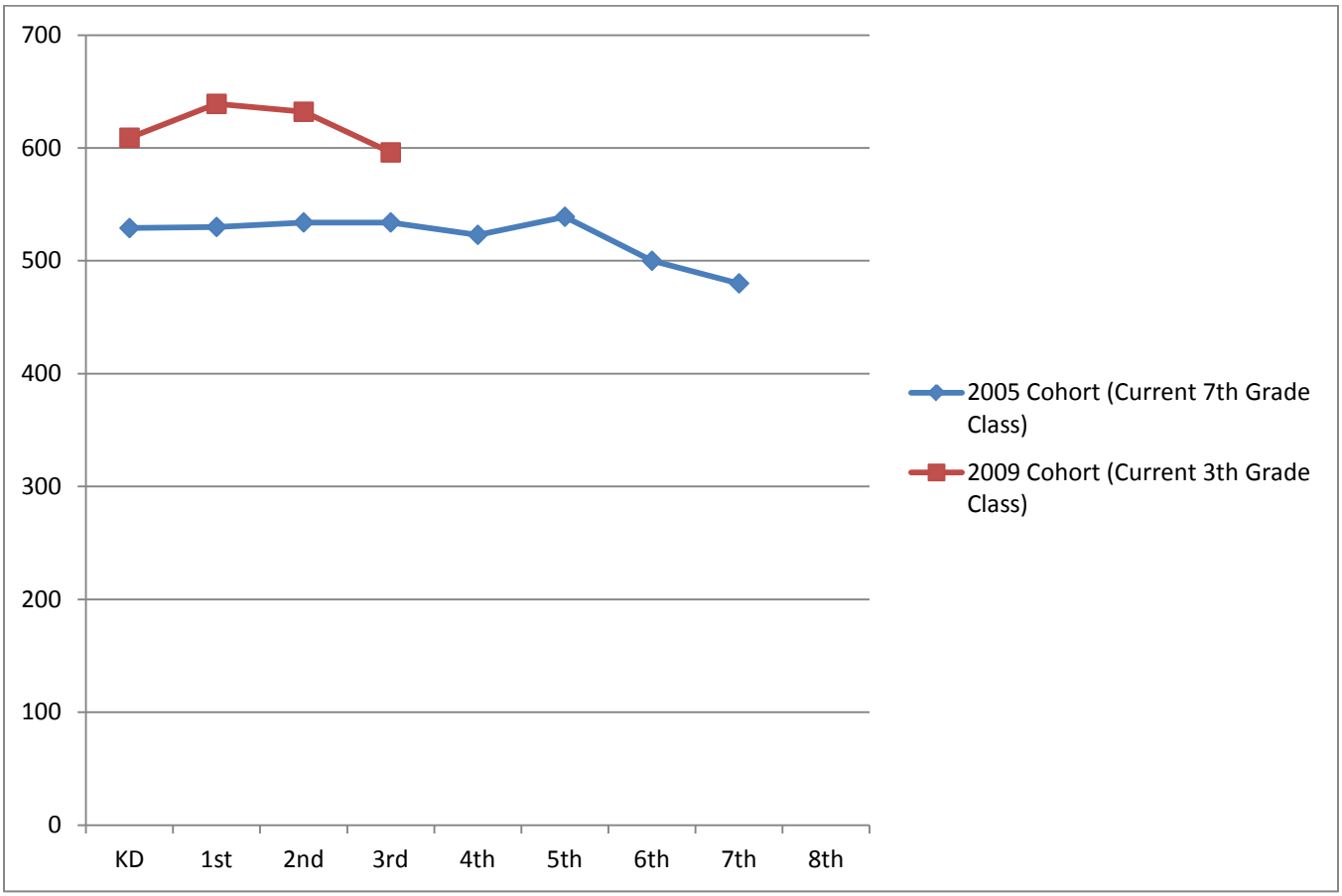
To minimize the effects of an exceptional year, student resident migration rates are calculated by averaging and weighting historical migration (Table 14).

Table 14. Migration by Grade

Year From > To	K>1	1>2	2>3	3>4	4>5	5>6	6>7	7>8
2005>2006	0.19%	-4.60%	-2.33%	-3.50%	-4.43%	-7.09%	-1.39%	-6.64%
2006>2007	-1.84%	0.75%	-2.29%	-5.19%	-4.08%	-6.34%	-4.47%	-1.18%
2007>2008	1.78%	-4.31%	0.00%	0.00%	-1.37%	-1.89%	1.30%	5.23%
2008>2009	1.74%	-4.73%	0.39%	-2.06%	1.88%	-5.79%	0.24%	0.26%
2009>2010	4.93%	-4.62%	-1.84%	-0.39%	3.06%	-4.61%	1.23%	1.20%
2010>2011	-1.95%	-1.10%	-0.90%	-4.12%	-0.98%	-7.24%	1.69%	3.64%
2011>2012	-2.56%	-3.32%	-5.70%	-3.44%	-1.76%	-9.49%	-4.00%	0.95%
Weighted Average	-1.11%	-2.80%	-3.45%	-3.16%	-0.70%	-7.92%	-1.23%	1.89%

As the table and figures demonstrate, MVWSD experienced negative migration in recent years, but is projected to increase in student resident enrollment. The smaller cohorts currently moving through the District's middle schools will be replaced with larger cohorts who have entered the District in recent years. As Figure 27 demonstrates, the cohort that began in 2005 as a kindergarten class of 529 students are currently the District's 7th grade class of 480 students. Alternatively, the cohort that began in 2009 as a kindergarten class of 609 students is currently the District's 3rd grade class 596 students. When smaller cohorts are replaced with cohorts large enough to offset negative migration, school districts experience enrollment growth.

Figure 27. Comparison of Cohorts



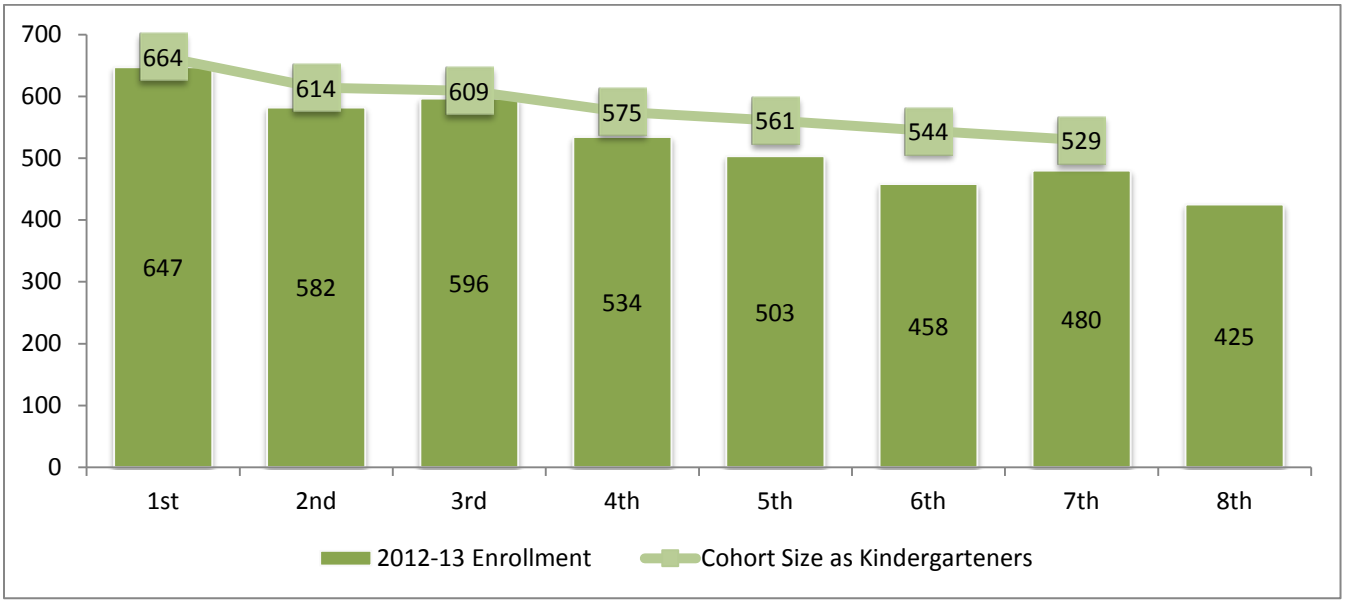
Student Resident Projections

The benefit of tracking district demographic trends is the ability to utilize the trend data to project future student residents. Predicting future residents is an important factor affecting many school processes: long-range planning, boundary realignments, predicting future building and capital needs. Schreder & Associates has utilized several tools to predict future student residents – cohort growth, birth rates, and residential construction patterns.

The cohort survival method is the standard demographic technique for projecting student residents. This method was utilized to project residents for MVWSD. Using this method, the current student body is advanced one grade for each year of the projection. For example, year 2008 first graders become year 2009 second graders, and the following year's third graders, and so on. As a cohort moves through the grades, its total population will, most likely, change.

In the Mountain View Whisman School District, cohort size decreases slightly as it progresses through the elementary grades, and then further in the middle grades. Figure 28 shows the 2012-13 K-8th grade student resident cohort sizes as compared to their cohort sizes when they began as kindergarteners. For example, MVWSD 2012-13 7th grade student resident cohort of 480 students began as a class of 529 kindergarteners in 2005. Likewise, the 2012-13 4th grade student resident cohort of 534 students began as a class of 575 kindergarteners in 2008.

Figure 28. Cohort Growth Since Kindergarten



We recommend the District continue to monitor all variables included in this analysis, and update the projections each Fall and Spring as new data becomes available.

The student resident projections through 2022-23 are provided in Tables 15-17. Based on the Most Likely projection, K-8th grade student residents are projected to increase to 5,323 by 2022-23.

Table 15. District-Wide "Low" Student Resident Projection

			School Year									
Grade	**Actual 12-13**		**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**
TK	32		100	125	150	150	150	150	150	150	150	150
K	651		610	606	638	647	613	623	637	647	648	644
1	647		648	609	606	629	639	605	615	628	638	640
2	582		631	637	600	588	611	620	586	596	610	620
3	596		561	616	622	576	564	587	597	563	573	586
4	534		583	550	606	604	557	546	568	578	544	554
5	503		536	587	555	602	600	554	542	565	574	540
6	458		468	500	551	511	558	555	509	497	520	530
7	480		460	468	500	543	504	550	548	502	490	513
8	425		498	476	485	509	552	512	559	556	510	498
Total TK-5	**3,545**		**3,668**	**3,730**	**3,778**	**3,796**	**3,734**	**3,684**	**3,694**	**3,726**	**3,737**	**3,734**
Total 6-8	**1,363**		**1,425**	**1,445**	**1,536**	**1,563**	**1,613**	**1,618**	**1,616**	**1,556**	**1,520**	**1,541**
Total	**4,908**		**5,093**	**5,174**	**5,314**	**5,359**	**5,347**	**5,302**	**5,310**	**5,282**	**5,257**	**5,275**

Table 16. District-Wide "Most Likely" Student Resident Projection

			School Year									
Grade	**Actual 12-13**		**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**
TK	32		100	125	150	150	150	150	150	150	150	150
K	651		610	606	638	647	613	623	637	647	648	644
1	647		651	612	603	630	640	605	615	629	639	641
2	582		637	644	599	586	613	623	589	598	612	622
3	596		568	625	627	578	565	592	601	567	577	591
4	534		587	560	613	610	561	547	575	584	550	560
5	503		539	593	561	609	607	557	544	571	581	547
6	458		473	508	557	521	569	566	517	504	531	540
7	480		461	475	505	550	514	562	560	510	497	524
8	425		498	478	487	513	558	522	570	567	518	505
Total TK-5	**3,545**		**3,692**	**3,765**	**3,791**	**3,810**	**3,748**	**3,698**	**3,710**	**3,747**	**3,758**	**3,754**
Total 6-8	**1,363**		**1,431**	**1,462**	**1,550**	**1,584**	**1,641**	**1,650**	**1,646**	**1,581**	**1,546**	**1,569**
Total	**4,908**		**5,123**	**5,227**	**5,340**	**5,394**	**5,388**	**5,348**	**5,357**	**5,328**	**5,303**	**5,323**

Table 17. District-Wide "High" Student Resident Projection

			School Year									
Grade	**Actual 12-13**		**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**
TK	32		100	125	150	150	150	150	150	150	150	150
K	651		610	606	638	647	613	623	637	647	648	644
1	647		655	614	599	631	640	606	616	630	640	641
2	582		643	651	599	584	616	625	591	601	615	625
3	596		574	635	632	580	565	596	606	572	582	595
4	534		592	570	620	617	564	549	581	591	556	566
5	503		542	600	567	616	614	561	546	578	587	553
6	458		477	516	563	530	580	577	525	510	542	551
7	480		463	482	510	557	524	574	571	519	504	535
8	425		498	480	489	517	564	531	581	578	526	511
Total TK-5	**3,545**		**3,716**	**3,801**	**3,804**	**3,825**	**3,761**	**3,711**	**3,727**	**3,768**	**3,778**	**3,775**
Total 6-8	**1,363**		**1,438**	**1,479**	**1,563**	**1,605**	**1,669**	**1,682**	**1,677**	**1,607**	**1,571**	**1,597**
Total	**4,908**		**5,154**	**5,280**	**5,367**	**5,430**	**5,430**	**5,393**	**5,404**	**5,374**	**5,349**	**5,372**

Student Resident Projections by Planning Area

Figure 29 provides a map of the planning areas that were utilized to capture historical student resident data and to project future student residents. Table 18 provides the resident projections by school.

Figure 29. 2012-13 Planning Areas

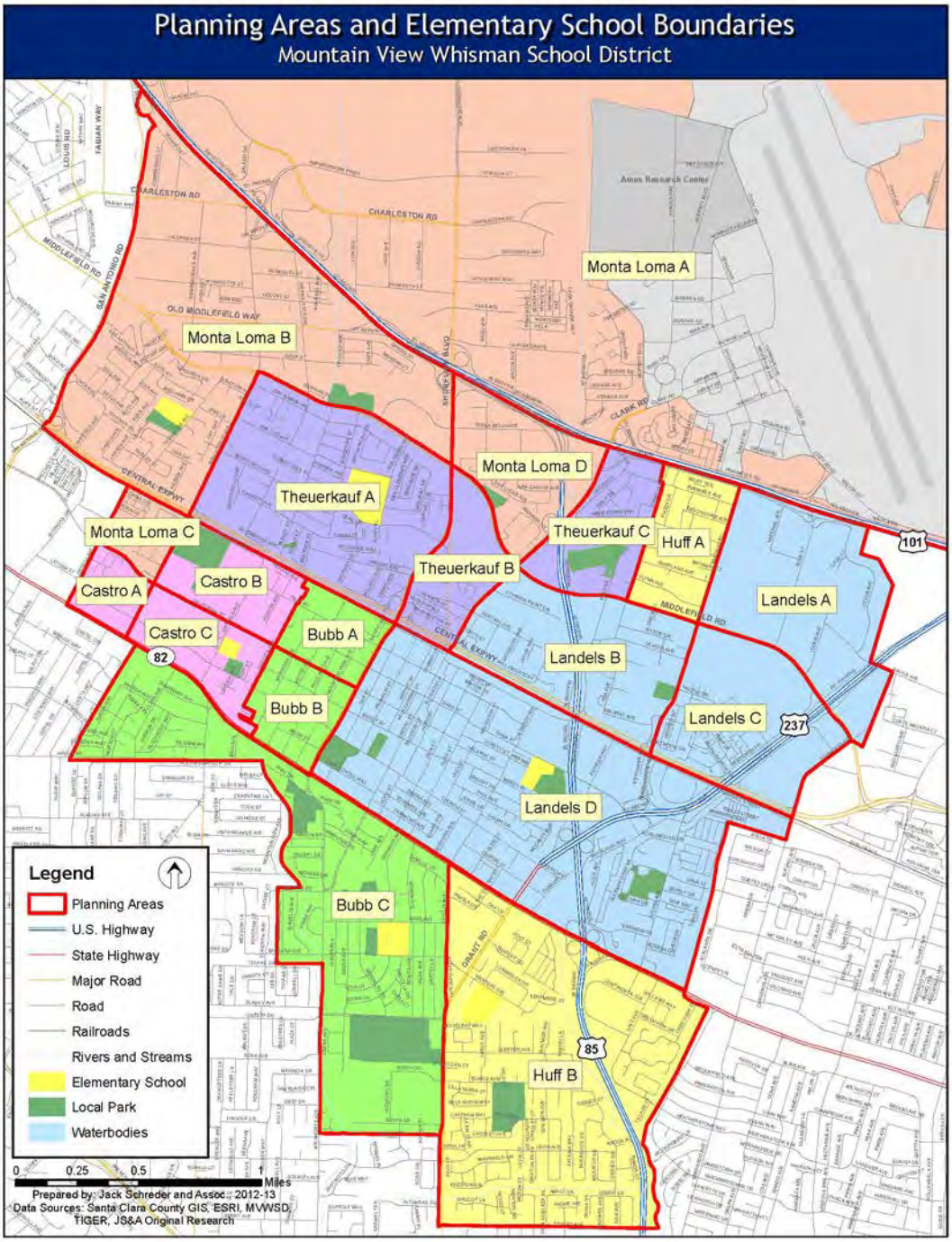


Table 18. Student Resident Projections by Planning Area

Planning Area: K-5 Projections	Actual 2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Bubb A	87	97	101	104	104	108
Bubb B	122	127	126	126	129	129
Bubb C	375	380	388	389	382	377
Castro A	101	102	102	106	109	109
Castro B	318	314	306	297	298	286
Castro C	201	218	225	246	239	234
Huff A	139	139	149	152	156	153
Huff B	488	507	513	530	541	519
Landels A	0	0	0	0	0	0
Landels B	172	184	194	200	201	200
Landels C	54	61	65	65	69	65
Landels D	346	367	370	341	330	314
Monta Loma A	121	124	122	128	128	129
Monta Loma B	315	326	339	337	342	347
Monta Loma C	78	74	77	72	71	70
Monta Loma D	62	66	58	58	57	58
Theuerkauf A	382	398	415	414	412	403
Theuerkauf B	58	68	66	65	72	70
Theuerkauf C	126	139	149	160	170	177
K-5 Student Resident Projection Totals	**3,545**	**3,692**	**3,765**	**3,791**	**3,810**	**3,748**
Planning Area: 6-8 Projections	**Actual 2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Bubb A	39	39	35	39	47	47
Bubb B	32	45	58	64	67	65
Bubb C	138	167	170	194	188	191
Castro A	43	42	41	40	37	37
Castro B	145	148	143	136	131	134
Castro C	76	72	79	83	103	106
Huff A	54	58	54	57	52	63
Huff B	159	169	196	221	221	234
Landels A	0	0	0	0	0	0
Landels B	59	63	63	63	72	81
Landels C	16	18	16	18	20	28
Landels D	137	149	166	179	180	172
Monta Loma A	64	56	46	34	35	32
Monta Loma B	124	130	109	127	126	131
Monta Loma C	32	36	32	36	31	35
Monta Loma D	25	20	27	27	31	22
Theuerkauf A	145	145	151	150	163	183
Theuerkauf B	22	27	29	38	36	34
Theuerkauf C	53	51	48	44	45	47
6-8 Student Resident Projection Totals	**1,363**	**1,431**	**1,462**	**1,550**	**1,584**	**1,641**
Total K-8 Student Resident Projection Totals	***4,908***	***5,123***	***5,227***	***5,340***	***5,394***	***5,388***

SECTION H: RECOMMENDATIONS

The Mountain View Whisman School District has undertaken this Demographic Study in order to assist in proactive planning for current and future facility needs for its student population.

The cost of new and modernized school facilities will prompt the District to pursue several funding strategies. These strategies include developer fees, General Obligation Bonds, Joint Use Projects, and the State School Building Program. The following steps are recommended for the Mountain View Whisman School District to meet its future facility needs:

- Review this study annually to determine if projected development and student resident enrollment trends are accurate. Should future trends deviate from those identified in the study, adjustments regarding future school facility needs and costs may be required.
- Continue to pursue State school funding for modernization and/or new construction.
- Explore Joint Use programs at the State School Facility Program as well as through State and Federal Programs.
- Continue to work with the towns served by the District and other agencies throughout the planning process to secure full school facility mitigation for the construction of schools and/or acquisition of land.

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