Facility Master Plan/ Demographic Analysis for Mountain View Whisman School District

August 9, 2009

Dr. Maurice Ghysels, Ed.D., Superintendent

Board of Trustees:
Philip D. Palmer, President
Edward Bailey, Vice President
Fiona Walter, Clerk
Stephen Olson, Member
Ellen Wheeler, Member

Prepared by:
Jack Schreder & Associates
2230 K Street
Sacramento, CA 95816
916-441-0986

EXECUTIVE SUMMARY

The purpose of the 2008-09 Facility Master Plan/Demographic Analysis is to provide detailed demographic information about the Mountain View community and the affects of those demographics on the Mountain View Whisman School District enrollments and impacts 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 current District enrollments, District facilities, District policies and City planning policies and information on development in addition to City and District demographics. As these factors change and timelines are adjusted, the Master Plan will be revised to reflect the most current information.

- The District's overall enrollment declined slightly from 2001 to 2006. Since that time, enrollments have increased by 3.7%, from 4,298 KD-8th grade students in 2006 to 4,460 KD-8th grade students in 2008. Enrollments by grade level indicate the largest increases since 2005 have occurred at the lower grade levels. In fact, KD-5th grade enrollments have increased by 266 students since 2005. A more definitive examination of enrollments by individual grade demonstrates rapid growth at the kindergarten level.

- Private school enrollments in MVWSD declined by 52.4% from 2000-2002. From 2002-2006 private school enrollments within MVWSD remained fairly

stable. Since 2006, KD-8th grade private school enrollments increased by 49.4% indicating that recent MVWSD enrollment increases have not been due to transfers from private to public schools.

- The population of Santa Clara County and MVWSD is projected to continue to increase through the projection period.

- The relevant school-aged population in MVWSD (5-14) has not fluctuated significantly since 2000 indicating that recent MVWSD enrollment increases cannot be directly attributed to an increase in the number of relevant school-aged children.

- The District is comprised predominantly of Hispanic students (41%). White students comprise the second largest ethnic group (33.3%). The District is not experiencing significant ethnic-based demographic shifts.

- The communities served by the Mountain View Whisman School District had minimal development of residential units from 2001-2008 with an overall increase of 796 units: 260 single-family detached units and 536 single-family attached units.

- New single-family detached units in the District will generate .159 KD-8th grade students per unit, and new single-family attached units will generate .030 KD-8th grade students per unit.

- New single-family detached home sales in the District will generate .181 KD-8th grade students per unit, and new single-family attached home sales will generate .036 KD-8th grade students per unit.

- All low income housing will generate .628 students per unit.

- The effects of residential development and land use planning decisions affect the Mountain View Whisman School District.

- The City of Mountain View has adopted strict policies and regulations for residential development. These policies include the development of 32 Precise Plan areas throughout the City in order to guide future development in those areas.

- No large parcels of land remain to be developed in the SOI for Mountain View Whisman School District. Development is occurring in various areas of the District.

- The City of Mountain View is in the process of updating its General Plan and has adopted a Visioning Process in order to involve the community in this process.

- The residential growth in Mountain View Whisman School District is expected to continue due to the proximity to the Bay area and the continued growth of the technology industry, creating jobs in this area which may result in population increases as people move into the area.

- The District is experiencing significant rates of open enrollment[1], from 34.1% at Bubb Elementary to 57.6% at Castro Elementary.

- The District is experiencing significant rates of out-migration[2], from 32% at Huff Elementary to 50.1% at Castro Elementary.

- Based on the Most Likely projection, KD-8th grade enrollments are projected to reach 5,195 by the 2018-19 school year.

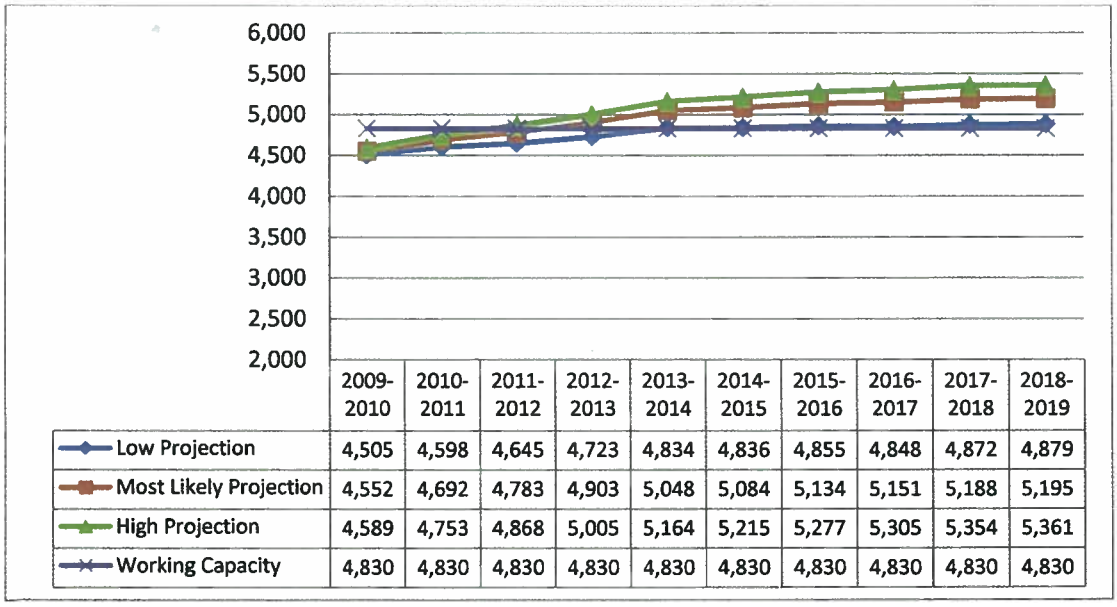
Grade	Actual 08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
K	576	599	637	612	636	622	631	626	620	613	606
1	602	575	599	637	611	636	621	630	625	619	612
2	560	587	560	583	621	596	620	606	615	610	604
3	571	553	580	553	576	614	589	613	599	608	603
4	443	560	542	569	542	565	603	578	602	588	597
5	466	426	543	525	552	525	549	587	561	586	571
6	433	429	389	506	488	515	488	512	550	524	549
7	404	427	423	384	501	483	509	483	506	544	519
8	405	395	418	414	374	491	473	500	473	497	535
Total KD-5	3,218	3,301	3,461	3,479	3,539	3,559	3,613	3,640	3,622	3,623	3,593
Total 6-8	1,242	1,251	1,231	1,304	1,363	1,489	1,471	1,494	1,529	1,565	1,602
Total	4,460	4,552	4,692	4,783	4,903	5,048	5,084	5,134	5,151	5,188	5,195

[1] Open enrollments are those students attending a school but not residing in its boundaries.
[2] Out-migration are those students leaving their resident school to attend another District school.

- The current District working facility capacity, based on State loading factors, is 3,341 students at the KD-5th grade level and 1,489 students at the 6th-8th grade level.

  - The District's 2008-09 KD-5th grade enrollments are 3,218 compared to a capacity of 3,341. There are no empty seats at the KD-5th grade levels.
  - The District's 2008-09 6th-8th grade enrollments are 1,242 compared to a capacity of 1,489. There are 247 seats available at the 6th-8th grade levels.

- Based on the Most Likely projection, the District will exceed working capacity by 2012-13 and remain over capacity through 2018-19.



	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Low Projection	4,505	4,598	4,645	4,723	4,834	4,836	4,855	4,848	4,872	4,879
Most Likely Projection	4,552	4,692	4,783	4,903	5,048	5,084	5,134	5,151	5,188	5,195
High Projection	4,589	4,753	4,868	5,005	5,164	5,215	5,277	5,305	5,354	5,361
Working Capacity	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830

- The District should consider options for remaining fiscally responsible to all of its students. These options may include consolidation of one or more sites during a time of declining enrollments; reconfiguration of grade levels in order to provide more options for parents and students; alternative utilization of sites; construction of new sites and removal of portable classrooms in order to alleviate overcrowding at existing sites.

- The cost of new and modernized school facilities will prompt the District to pursue several funding strategies. These strategies include developer fees, mitigation agreements, General Obligation Bonds, Joint Use Projects, and the State School Building Program.

- The Board of Education, based on the current analysis herein and other information provided by staff, is recommended to prioritize facility needs in order for the consultant to complete this document. Steps in this process include:
  1. Prioritize the list of current facility needs (modernization, expansion, additional ancillary facilities) at each site.
  2. Project future needs for facilities based on student growth and educational program needs.

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SECTION A: INTRODUCTION

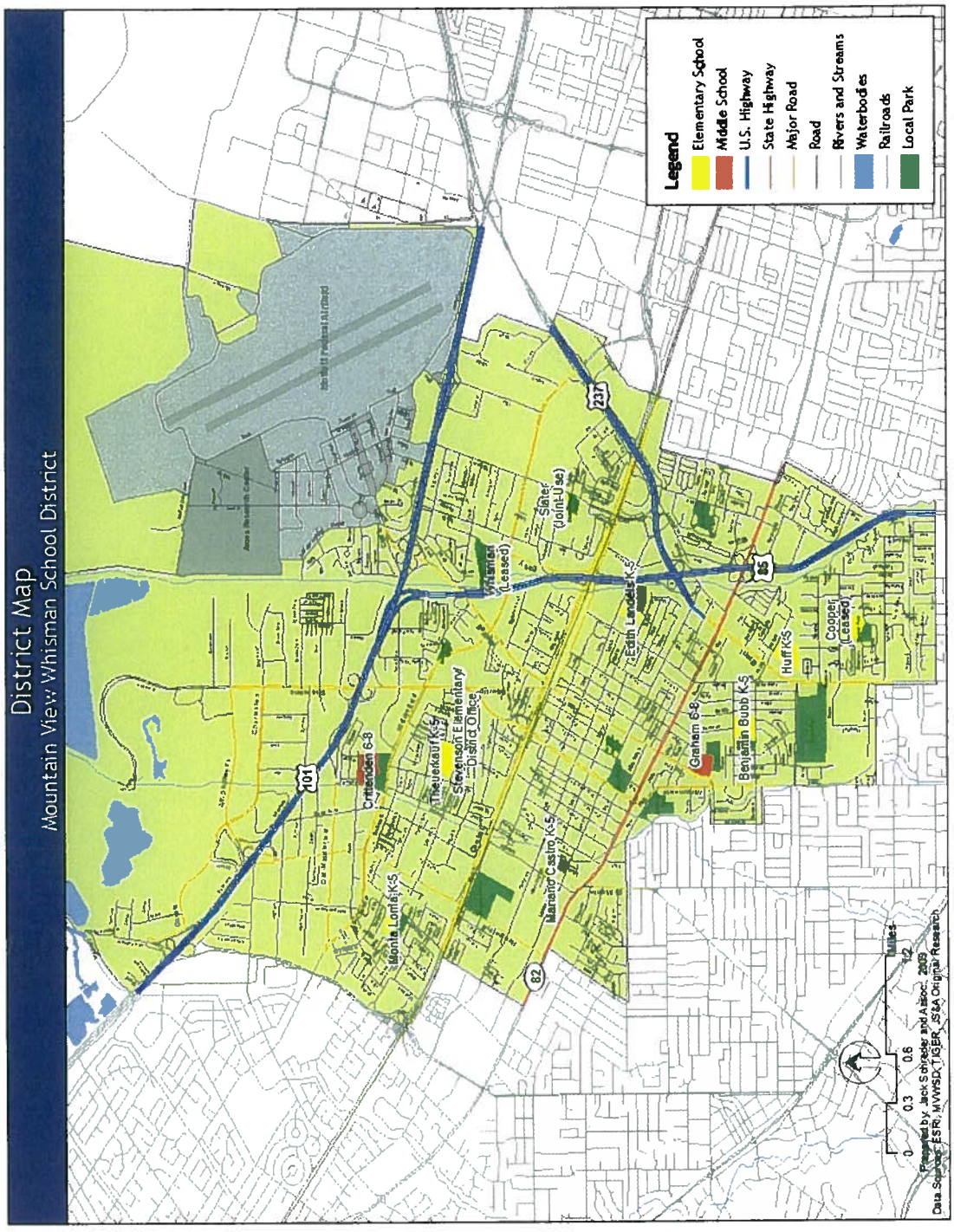
The Mountain View Whisman School District is located in Santa Clara County. The District serves a large portion of the City of Mountain View in addition to Moffett Federal Airfield, an area owned and operated by the NASA Ames Research Center. The Mountain View Whisman School District serves grades KD-8th grade and has a total enrollment of 4,460 students (October 2008, CBEDS). A District map is included in Figure A-1. The Mountain View Whisman School District currently operates 7 elementary school sites, 2 middle school site, and owns 3 additional properties:

Table A-1. School Sites and Current Enrollments

School	Grade Levels	08-09 Enrollment
Benjamin Bubb Elementary	KD-5	543
Mariano Castro Elementary	KD-5	692
Frank L. Huff Elementary	KD-5	501
Edith Landels Elementary	KD-5	516
Theuerakauf Elementary	KD-5	467
Monta Loma Elementary	KD-5	498
Stevenson Elementary (opening 2009-10)	KD-5	0
Crittenden Middle	6-8	581
Graham Middle	6-8	660
Slater Elementary	Joint-Use with Google	0
Cooper Elementary	Leased: Primary Plus	0
Whisman Elementary	Leased: German Intl. School	0

Source: California Department of Education, CBEDS.

Figure A-1. Mountain View Whisman School District



Mountain View Whisman School District 2008-2018 Demographic Analysis and Facility Master Plan

The Mountain View Whisman School District administrators requested a Demographic Analysis and Facility Master Plan in order to assure that the appropriate facilities are provided for current and future students of the district.

The following variables were analyzed and are provided in this study:

- A review of district/community demographics in order to identify potential age or ethnic-based demographic shifts;
- A review of the various land use trends and policies governing residential development in the District;
- Measurements of student generation rates;
- A spatial analysis of the current student population to determine where students live versus where students attend school;
- Enrollment projections based on standard cohort methodology and utilizing historical enrollments, District specific birth data, and student migration to determine the level of enrollment increases/decreases the District can expect;
- Resident projections based on standard cohort methodology and utilizing historical student residents (as opposed to student enrollments).
- A school facility analysis to provide current and projected enrollments as compared to current facility capacity;
- Recommended "Next Steps".

SECTION B: DEMOGRAPHICS

Enrollment Trends

Student enrollment in Mountain View Whisman School District declined slightly from 2001 to 2006 (see Figure B-1). Since that time the District's enrollment has increased 3.7%, from 4,298 KD-8th grade students in 2006 to 4,460 KD-8th grade students in 2008. Enrollments by grade level indicate the largest increases since 2005 have occurred at the lower grade levels (see Figure B-2). In fact, KD-5th grade enrollments have increased by 9% since 2005 (+266 students). A more definitive examination of enrollments by individual grade demonstrates rapid growth at the kindergarten level (see Figure B-3). Kindergarten class sizes have increased from 523 in 2004 to 603 in 2007[3]. This trend may be significant for future enrollments as larger incoming kindergarten class sizes can result in larger enrollments overall as these students matriculate through the system. The District will need to monitor these larger Kindergarten class sizes on an annual basis to determine if this trend remains steady.

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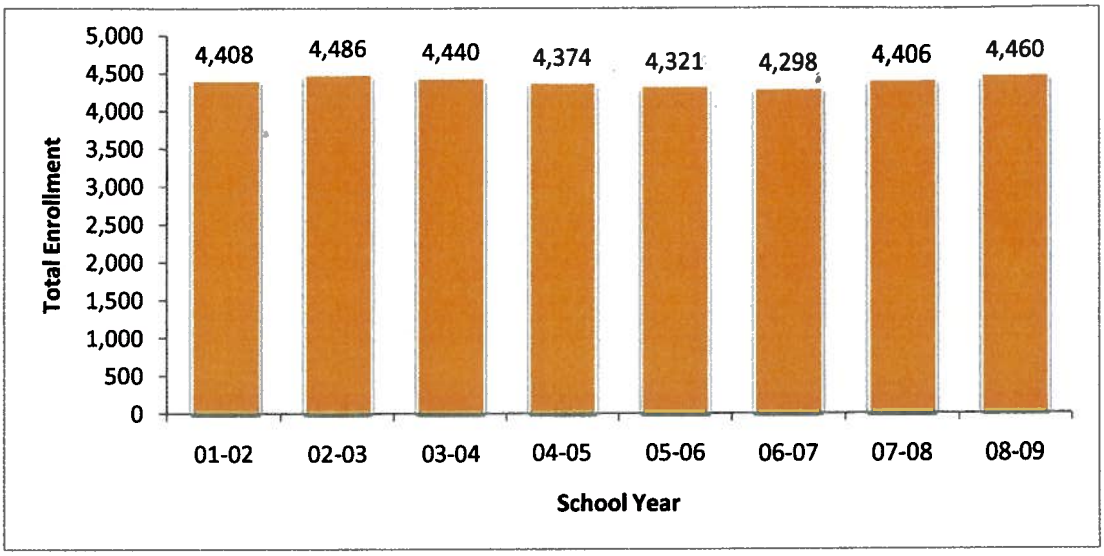
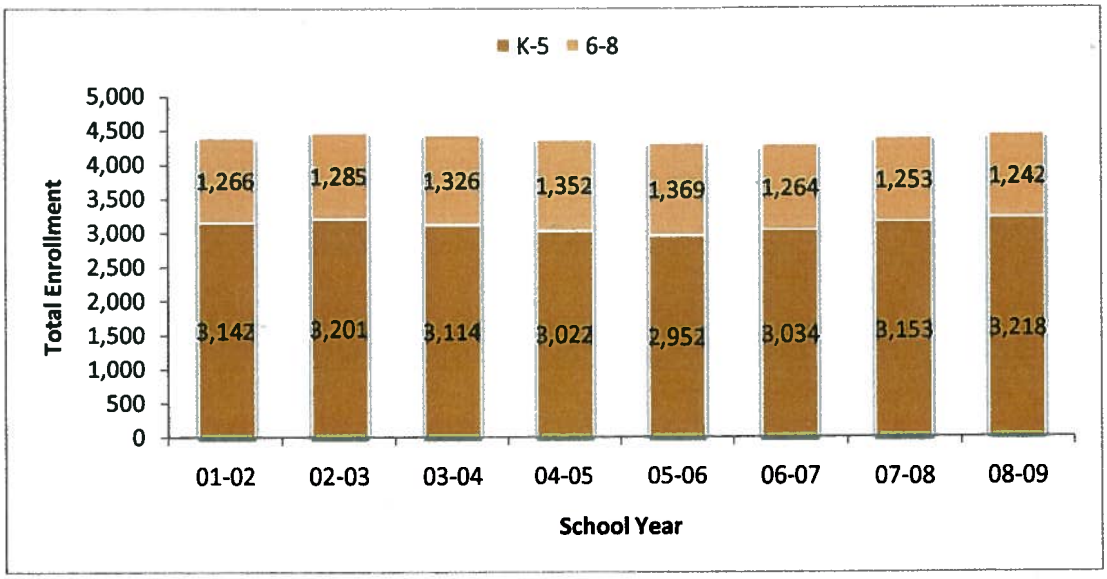
[3] Kindergarten decline from 2007 to 2008 is due to a change of interdistrict transfer policy.

Figure B-1. Historical Enrollments



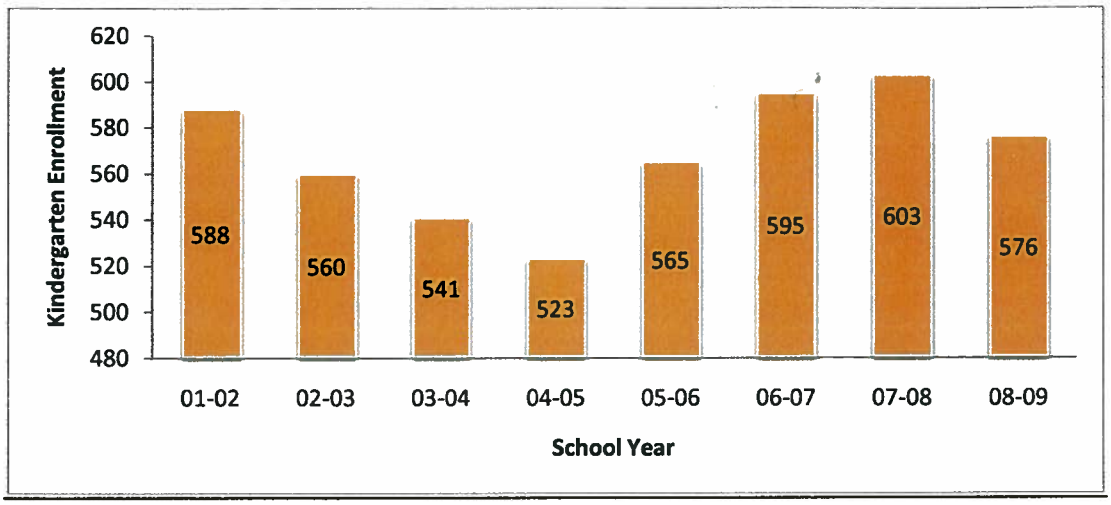
Source: CBEDS.

Figure B-2. Historical Enrollments by Grade Level



Source: CBEDS.

Figure B-3. Kindergarten Enrollment

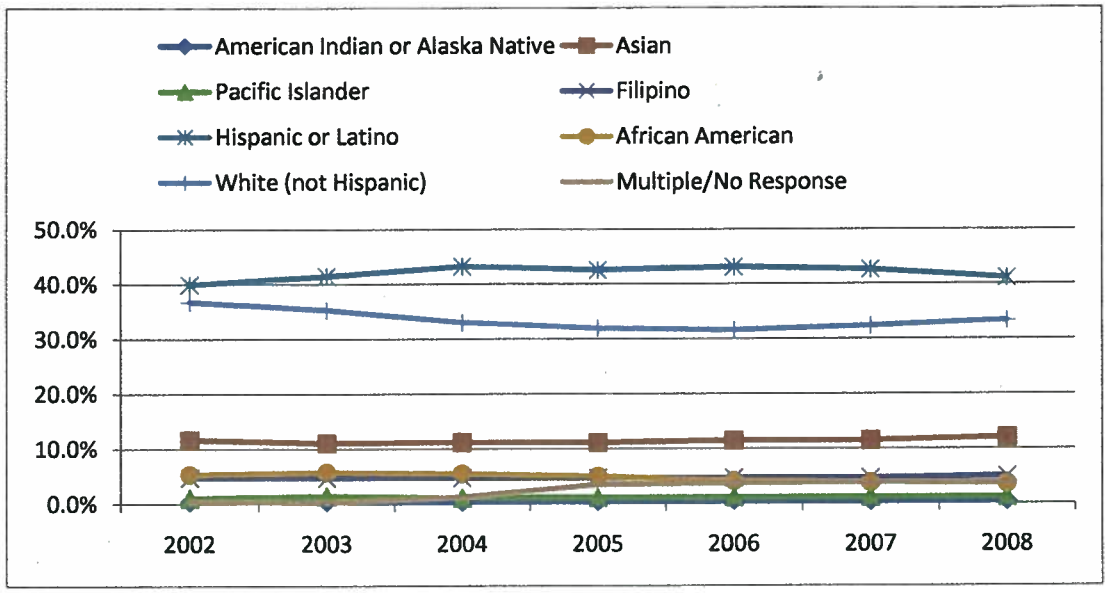


Source: CBEDS.

Ethnic Trends

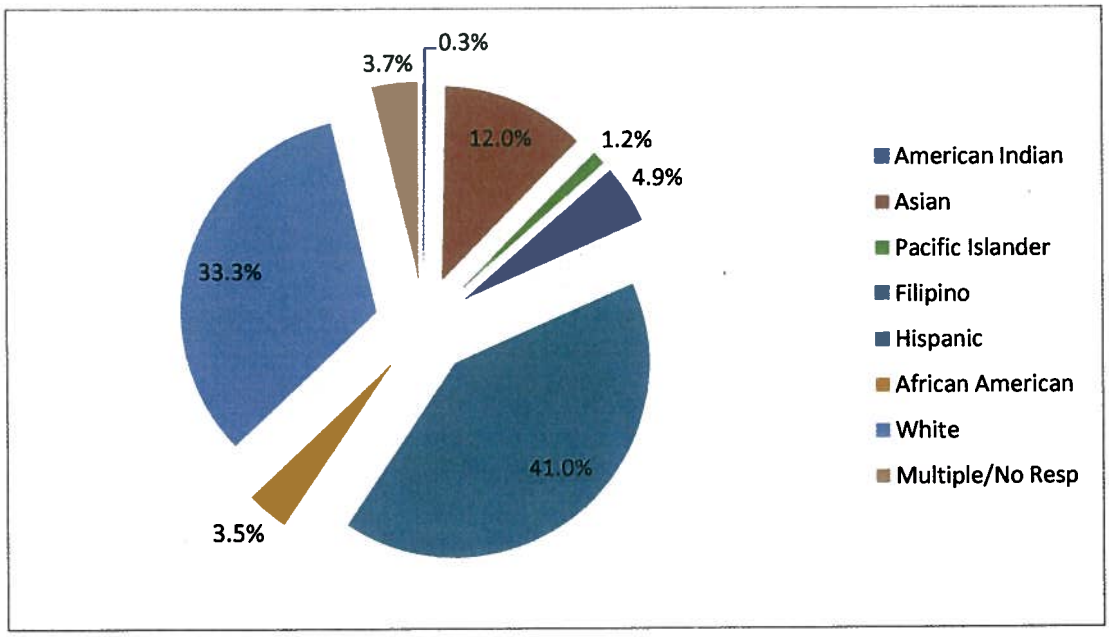
To further analyze the District's ethnic profile, the 2001-2008 California Basic Educational Data Survey (CBEDS) reports were used. Figure B-4 demonstrates the District is not experiencing any significant ethnic-based demographic shifts. Figure B-6 demonstrates the current KD-8th grade ethnic profile of the District, which is comprised predominantly of Hispanic students (41%). The second largest ethnic group is White students (33.3%).

Figure B-4. Historical Enrollment by Ethnicity



Source: CBEDS.

Figure B-5. 2008-09 Ethnic Profile

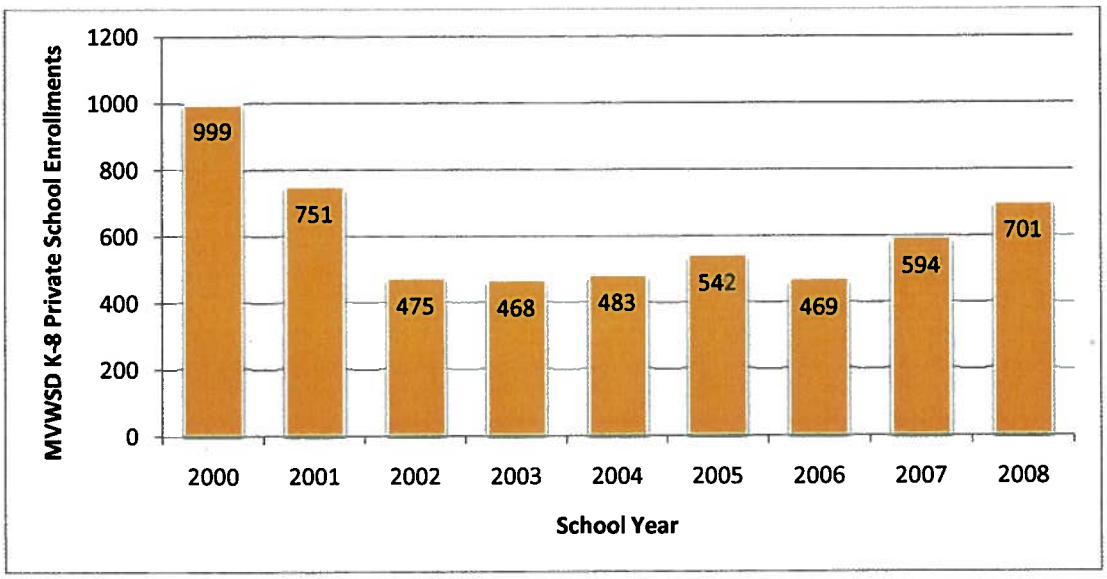


Source: CBEDS.

Private School Trends

MVWSD private school enrollments declined by 52.4% from 2000-2002. From 2002-2006 private school enrollments within MVWSD remained fairly stable. Since 2006, KD-8th grade private school enrollments increased from 469 to 701 (+49.4%), indicating that recent MVWSD enrollment increases have not been due to transfers from private to public schools.

Figure B-6. Private School Enrollments



Source: CBEDS.

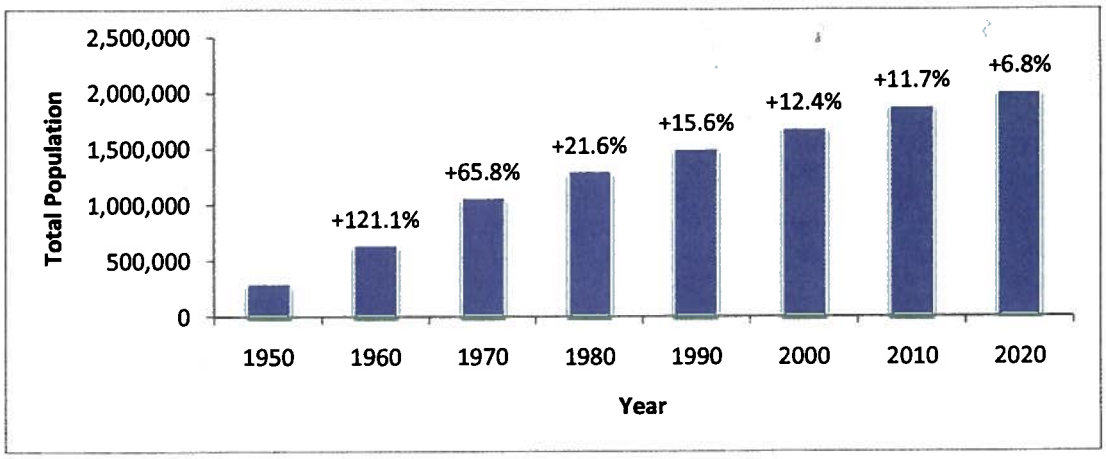
Santa Clara County Population Trends

The Mountain View Whisman School District serves a large portion of the City of Mountain View in addition to Moffett Federal Airfield, an area owned and operated by the NASA Ames Research Center.

Between 1980 and 1990, the County of Santa Clara grew by 202,506 people. This growth represents a 16% increase in population. Similarly, between 1990 and 2000, the County grew by an additional 185,008, which accounts for a 12% change in population. It is predicted that the County's population will continue to grow, however, at a slower rate. Moderate rates of growth in employment and housing development may account for this slow down in population growth. According to the Association of Bay Area Governments, by 2010, the County of Santa Clara's population is projected to increase by 197,115 people to 1,879,700. From 2010 to 2020, the County of Santa Clara's population is predicted to increase an additional 127,800 people to 2,007,500.

The desirability of the County in addition to its proximity to economically viable communities, have created a bedroom community of commuters. The historical population as well as the projected future population of the County is outlined in Figure B-7.

Figure B-7. Santa Clara County Historical and Projected Population Growth: 1950 -2020



Mountain View Whisman School District Population Trends

Population trends in MVWSD reflect countywide trends. Since 1990, MVWSD's population has increased by 1,796 people. Figure B-8 demonstrates MVWSD population growth and Figure B-9 provides the age group detail of the historical and projected growth. As you can see, the relevant school-aged population in MVWSD (5-14) has not fluctuated significantly since 2000 indicating that recent MVWSD enrollment increases cannot be directly attributed to an increase in the number of relevant school-aged children.

Figure B-8. MVWSD Historical and Projected Population Growth: 1990-2013

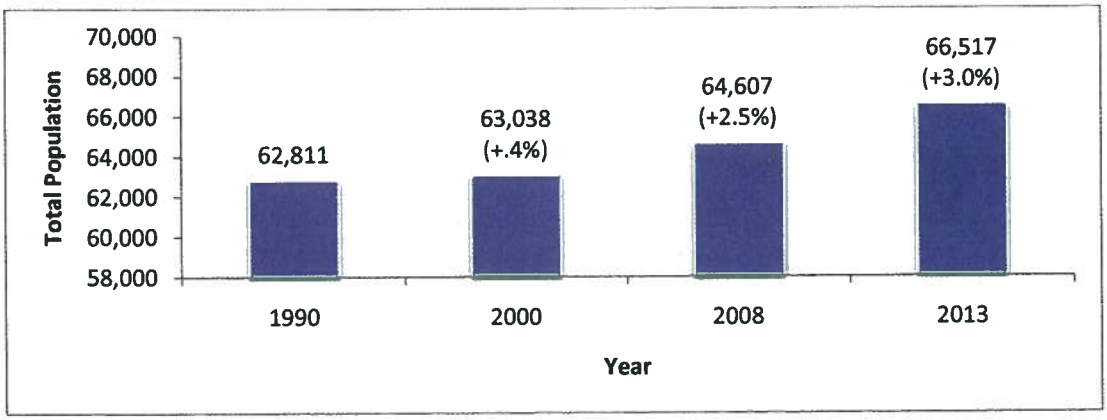
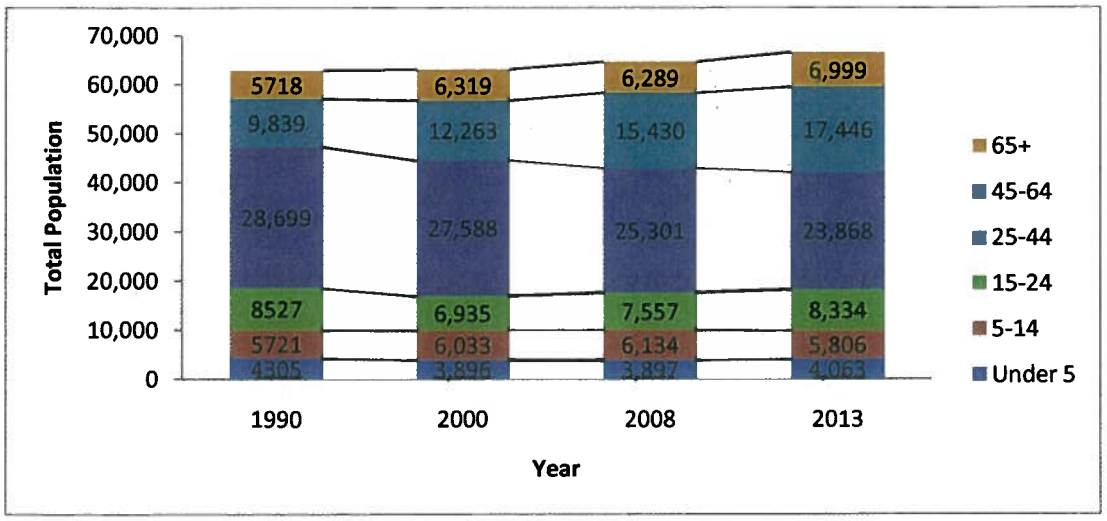


Figure B-9. Historical and Projected Population by Age Group



Historical Development and Student Generation Factors

New residential development will have an impact on MVWSD future enrollments. New housing brings families with children to the District. In order to determine the impact, accurate student generation factors 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 enrollments.

Student Generation: New Residential Construction

Accurate student generation factors are important in planning for future facilities. By determining the students generated from new residential units, the District can more accurately project future students. The consultant accessed a real estate database of all residential housing units constructed in MVWSD between January 2001 and January 2007. This database was sorted and then cross-referenced with the 2008-09 MVWSD student list in order to determine the number of students generated per housing unit (SGR) by grade level and by year

of construction. A total of 260 single-family detached units were constructed since 2001. A total of 16 single-family attached/multi-family units were constructed since 2001. The student generation rates for newly constructed residential units are outlined in Table B-1.

Table B-1. Student Generation Factors: New Residential Construction

Housing Type	Total Students	# of Units Constructed 2001-2007	Student Generation Rate (KD-8)	KD-5	6-8
Single-Family Detached	44	260	.159	.131	.028
Single Family Attached/Multi-Family	16	536	.030	.026	.004

Student Generation: Home Sales

MVWSD is considered built-out, i.e. there is minimal vacant land available for residential development. The majority of new residential construction is the result of either infill of vacant single parcel lots or the demolition and rebuilding of older buildings. For this reason, it was necessary to provide a housing turnover analysis. All neighborhoods have a "life cycle". As older homes inhabited by "empty nesters" sell (i.e. "turnover") to younger families they generate new students for MVWSD to house. Since 2001, 1,845 single-family detached homes have sold in the MVWSD and those homes have generated 334 new students for the District to house. Additionally, 788 single-family attached homes have sold in the MVWSD and those homes have generated 29 students for the District to house (Table B-2).

Table B-2. Student Generation Factors: Home Sales

Type of Housing	Total Students	# of Units Purchased	Student Generation Rate (KD-8)	KD-5	6-8
SFD	334	1,845	.181	.140	.041
SFA	29	788	.036	.030	.006

Student Generation: Low Income Housing

Affordable or "low income" housing traditionally generates more students than market rate housing. Because there are Low Income Housing units planned for development in MVWSD, the consultant analyzed units to provide a student generation rate specific to those types of units. A total of 164 Low Income Housing units were surveyed which generated 103 students for the District to house.

Table B-3. Student Generation Factors: Low Income Housing

Type of Housing	Total Students	# of Units	Student Generation Rate (KD-8)	KD-5	6-8
Apartments	103	164	.628	.451	.177

SECTION C: LAND USE PLANNING/RESIDENTIAL DEVELOPMENT

School districts are inextricably linked to their community(s). 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 City of Mountain View 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 which was contacted to provide information and documents in regards to land use and planning, development and other pertinent information for the Mountain View Whisman School District. Mountain View is located within Santa Clara County who also provided general information on planning for this study.

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 o f cultures, backgrounds and talents.

Santa Clara County General Plan: 1995-2010

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 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 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.

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

In 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: Visioning Report

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 has been produced which is a synthesis and reflection of the community's input and feedback. This document serves as a starting point for the City's General Plan Update. Community workshops are ongoing to refine this vision.

Within the Visioning Report, participants analyzed assets, challenges and future trends, which will be further analyzed during the General Plan update process.

ASSETS

- The city's architecture and design represents the history and culture of the city and is valued by participants
- Downtown is vibrant and walkable and provides a strong sense of community.

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

- Mountain View's economy includes a variety of businesses, ranging from internationally recognized research and technology companies to small, locally-owned businesses.
- Mountain View's City government provides services for a variety of needs and interests, while maintaining strong civic values and duties. . . The City supports and encourages policies and programs that can strengthen educational opportunities within the community.
- Mountain View's community character is diverse, with strong neighborhoods which contribute to the city's small town feel, sense of safety, and people friendly atmosphere.
- Mountain View has diverse and ample park land, open space, natural resources, and other unique amenities that provide recreation opportunities and support a healthy community.
- Mountain View is located in the heart of Silicon Valley and is in close proximity to San Francisco Bay Area amenities.

CHALLENGES

- Downtown would benefit from having a diversity of businesses that contribute to the community's economic vibrancy.
- Improvement of air quality, expansion of recycling services, increasing use of alternative energy.
- Some public services require attention.
- Residents are concerned about the cost of housing across the City.
- Existing lower-income housing needs improved maintenance.
- Service workers and new professionals have difficulty finding housing they can afford.
- Jobs need to be more balanced in terms of opportunities.
- Some neighborhoods are in need of improvements.
- Improved transit and more pedestrian and bicycle friendly streets and facilities.

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 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 are shown on the Zoning Map (see below) in gray and designated with a P prefix.

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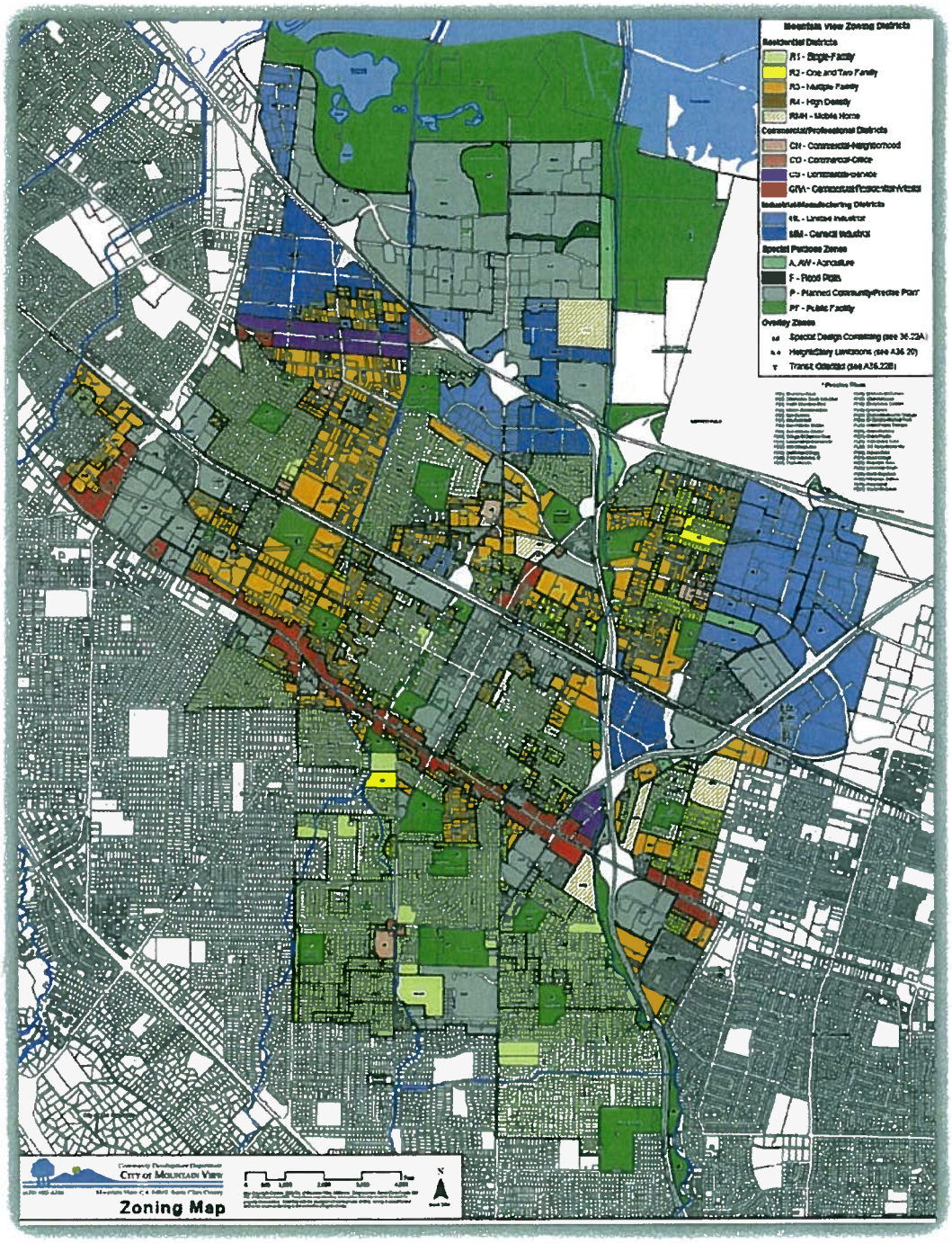
[6] City of Mountain View. *Article 1. Purpose of Zoning Ordinance.*

Figure C-1. City of Mountain View Zoning Map



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 in order to determine the impact on the Mountain View Whisman School District. Table C-1 outlines the name of the project, the location, the type of and number of units and the status of the project. The District will need to continue to monitor development in order to provide facilities in a timely manner.

Table C-1. Current and Planned Residential Development

Name	Address	SFD	MF	Rowhouse	Status	Elementary School	Middle School
Classic Communities	1136 Miramonte Ave	58			UC	Bubb South	Graham
Caruso	291 Evandale		144		Approved	Huff North	Crittenden
Summerhill Homes	3119 Grant	54			Under Review	Huff South	Graham
Castle Companies	125 W. Dana St.			39	UC	Landels East	Graham
Shea Homes	505 E. Evelyn			151	UC	Landels East	Graham
Pulte Homes	300 Ferguson			106	UC	Landels North	Crittenden
Downtown Family Rentals	Evelyn and Franklin		50*		Design Phase	Landels West	Graham
Regis Homes	1950 Colony St.			108	UC	Monta Loma	Crittenden
Rockwell Homes	2215 Rock St.			20	Approved	Monta Loma	Crittenden
Toll Brothers	100 Mayfield Ave	424			Approved	Monta Loma	Crittenden
Toll Brothers	100 Mayfield Ave			15	Approved	Monta Loma	Crittenden
Prometheus	111 N. Rengstorff			206	Plan Check	Theuerkauf West	Crittenden
Total		**536**	**194**	**645**			

*Low Income Units

Figure C-2 demonstrates the development on an attendance area map of the District. Table C-2 demonstrates the projected students generated by new residential units.

Figure C-2. Current and Planned Residential Development

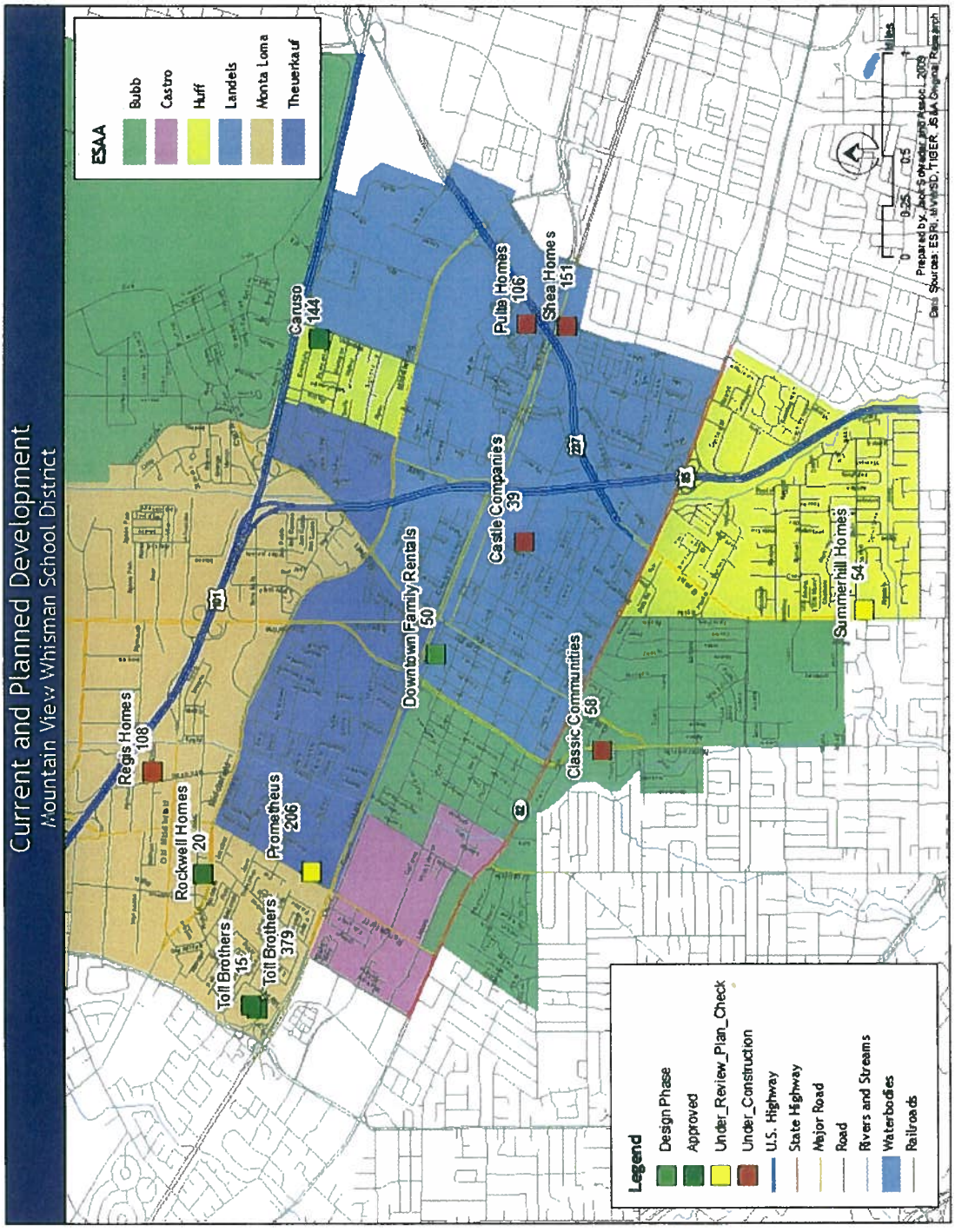


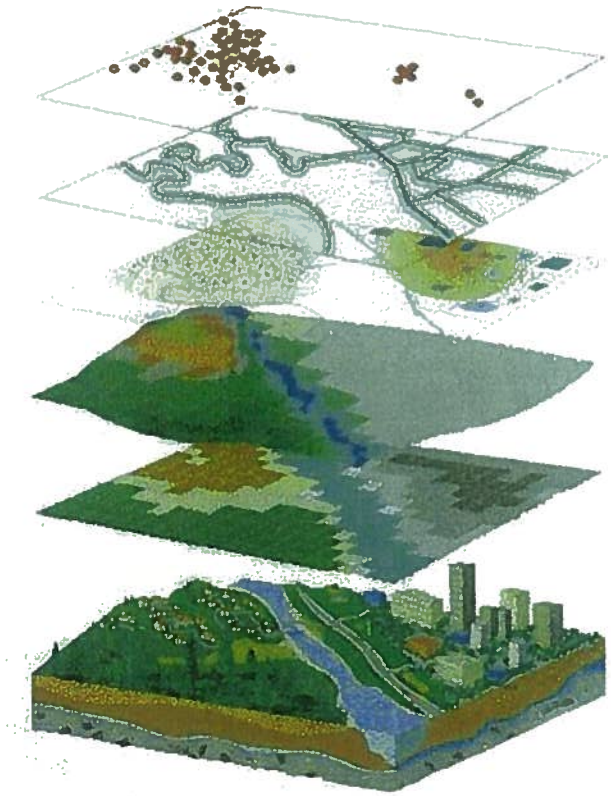
Table C-2. Projected Students Generated by New Residential Units

ESAA	UNITS	SFD	MF	Rowhouse	STUDENTS
Monta Loma	567	77		5	82
Huff South	54	10			10
Bubb South	58	10			10
Huff North	144		5		5
Landels East	190			7	7
Theuerkauf West	206			7	7
Landels North	106			4	4
Landels West	50		31		31

SECTION D: SPATIAL ANALYSIS

The consultant utilized a computer mapping software, 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 vs. where students attend school. Figure D-1 provides a visualization of the layers developed for the MVWSD specific GIS.

Figure D-1. 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 Facility Master Planning process is District specific GIS data. Facility Master 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. A map of the District along with attendance area maps are provided in Figures D-2 through D-4.

Figure D-2. Mountain View Whisman School District

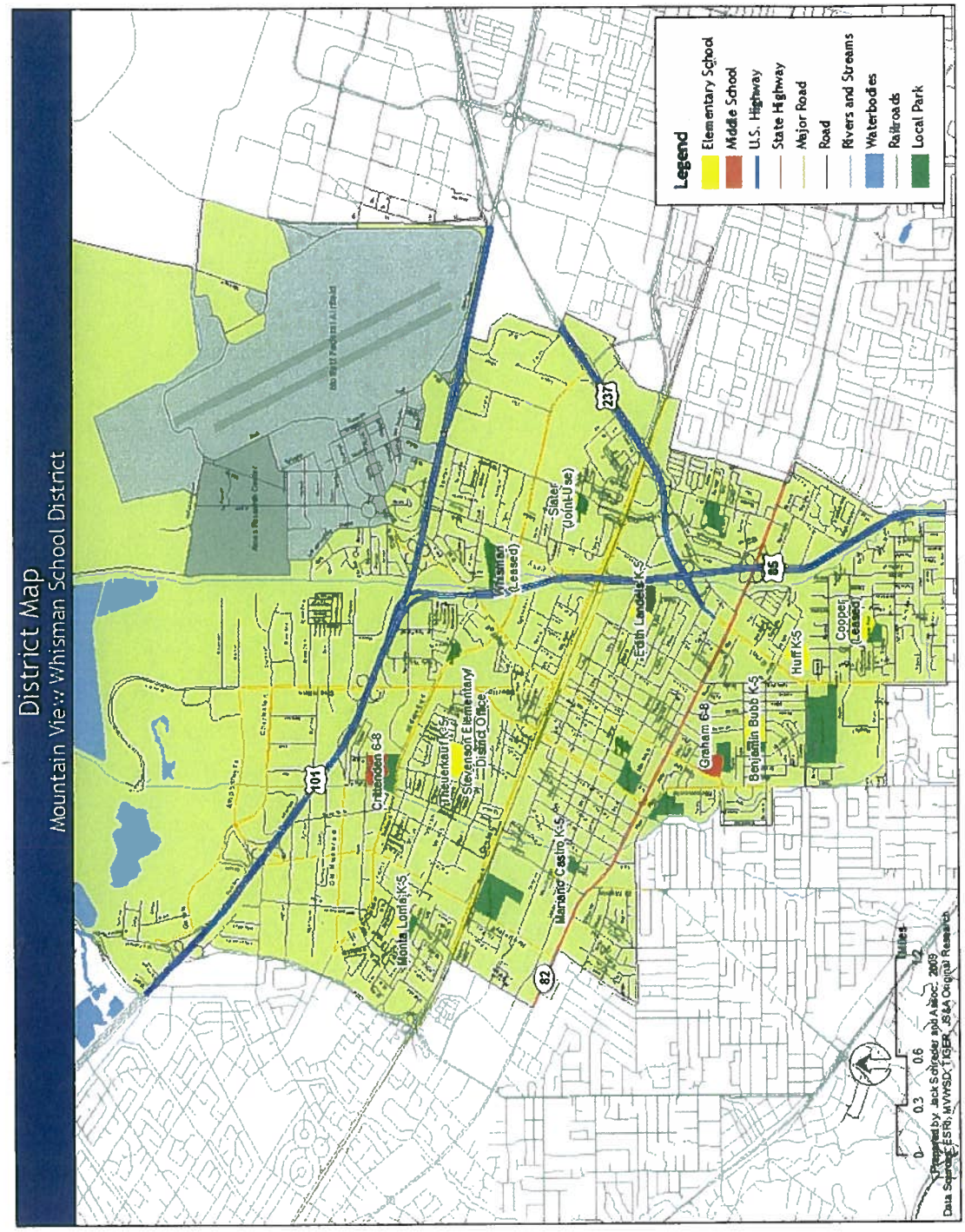


Figure D-3. Elementary Attendance Areas

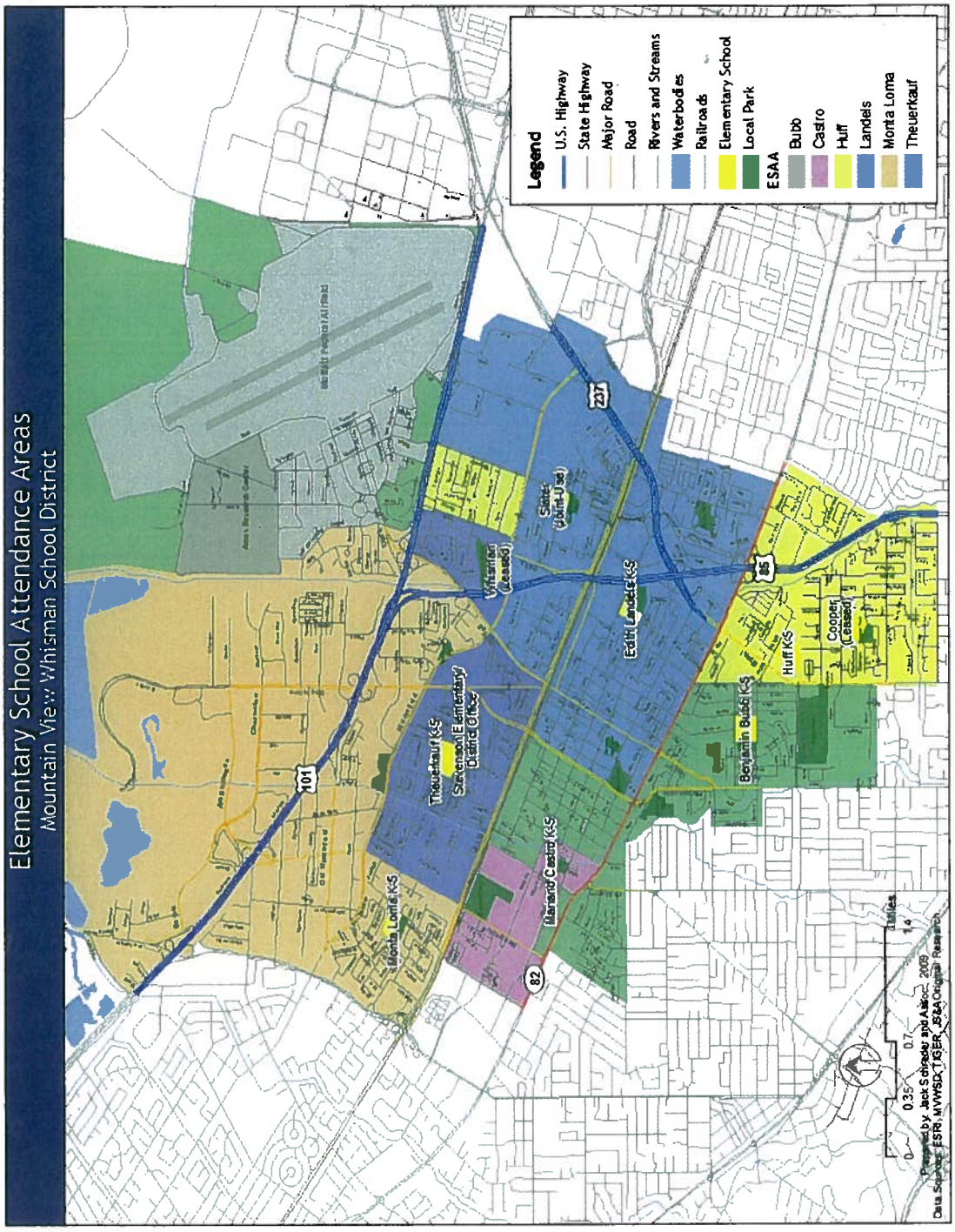
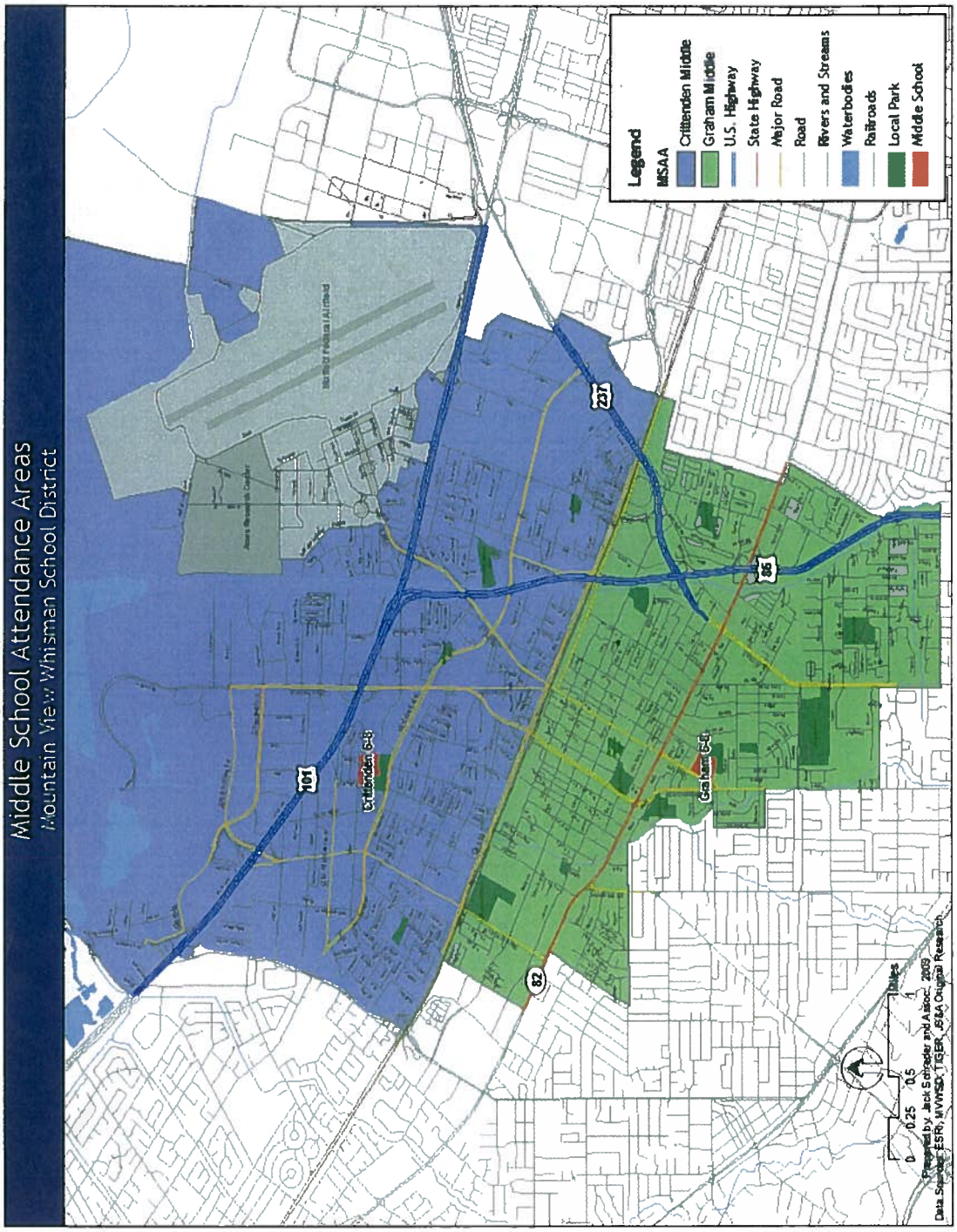


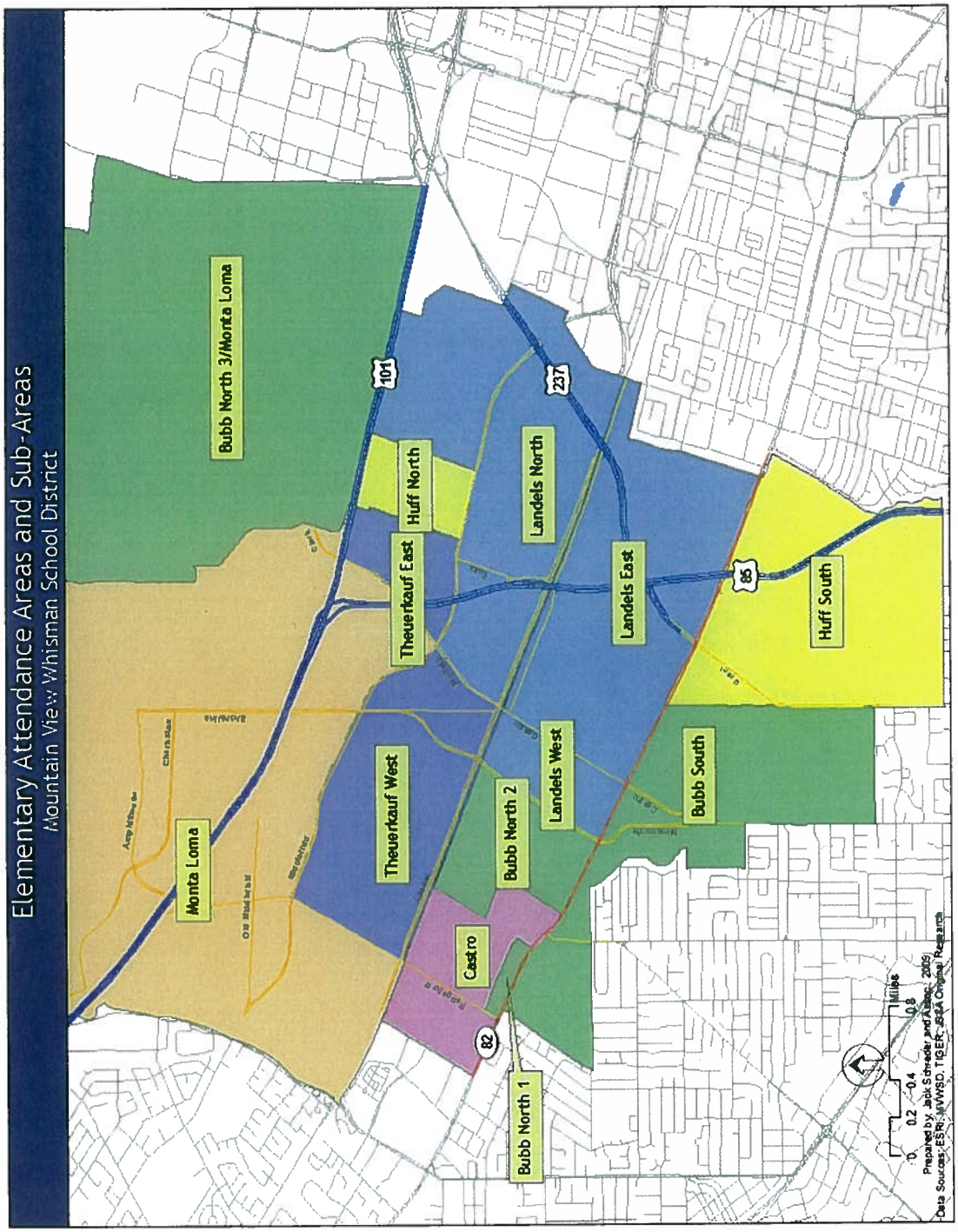
Figure D-4. Middle School Attendance Areas



Elementary Attendance Sub-Areas

The consultant analyzed the current elementary attendance areas as part of the initial analysis for the District. At the district's request, elementary attendance areas were separated into smaller geographical sub-areas as specified by the District. These smaller sub-areas will allow more analysis of student population to assist the District in decisions regarding use of schools and facilities. Figure D-5 shows the elementary attendance sub-areas utilized for the spatial analysis portion of the study.

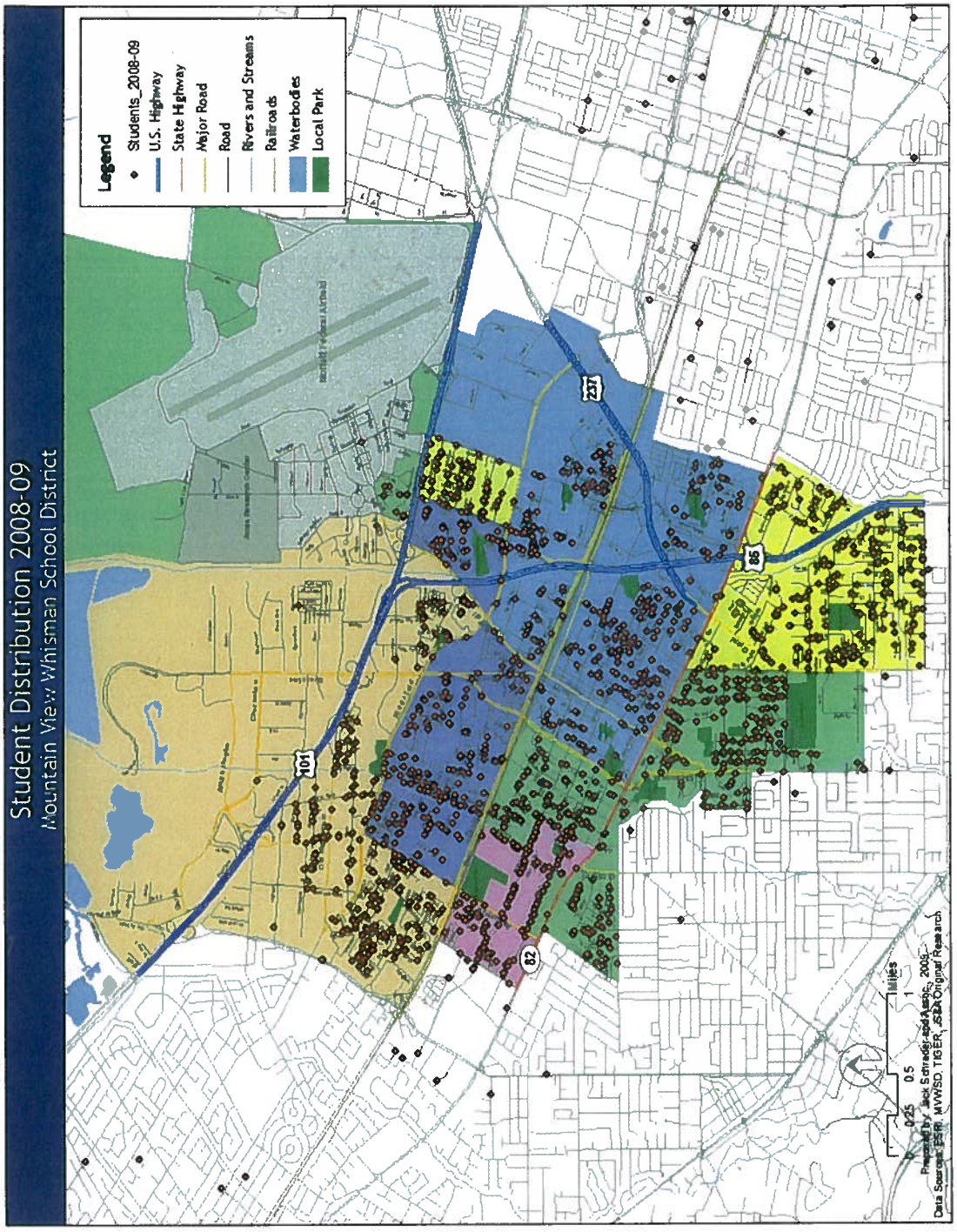
Figure D-5. Elementary Attendance Sub-Areas



Student Data

The consultant accurately mapped four years of student data by a process called geocoding. The address of each individual MVWSD student was matched in the MVWSD GIS. This resulted in a point on the map for each student (Figure D-6). This map demonstrates the density of students (or lack therof) in the various areas of the District.

Figure D-6. Student Resident Distribution



Student Densities

Once the students were mapped, they were analyzed and displayed by grade level (Figures D-7 through D-10). These layers of information provide tools for analyzing current enrollments, determining future enrollments, and promoting diversity Districtwide. The majority of MVWSD students (at all grade levels) reside in the Northwest and Southeast areas of the District.

Figure D-7. KD-8 Student Resident Counts

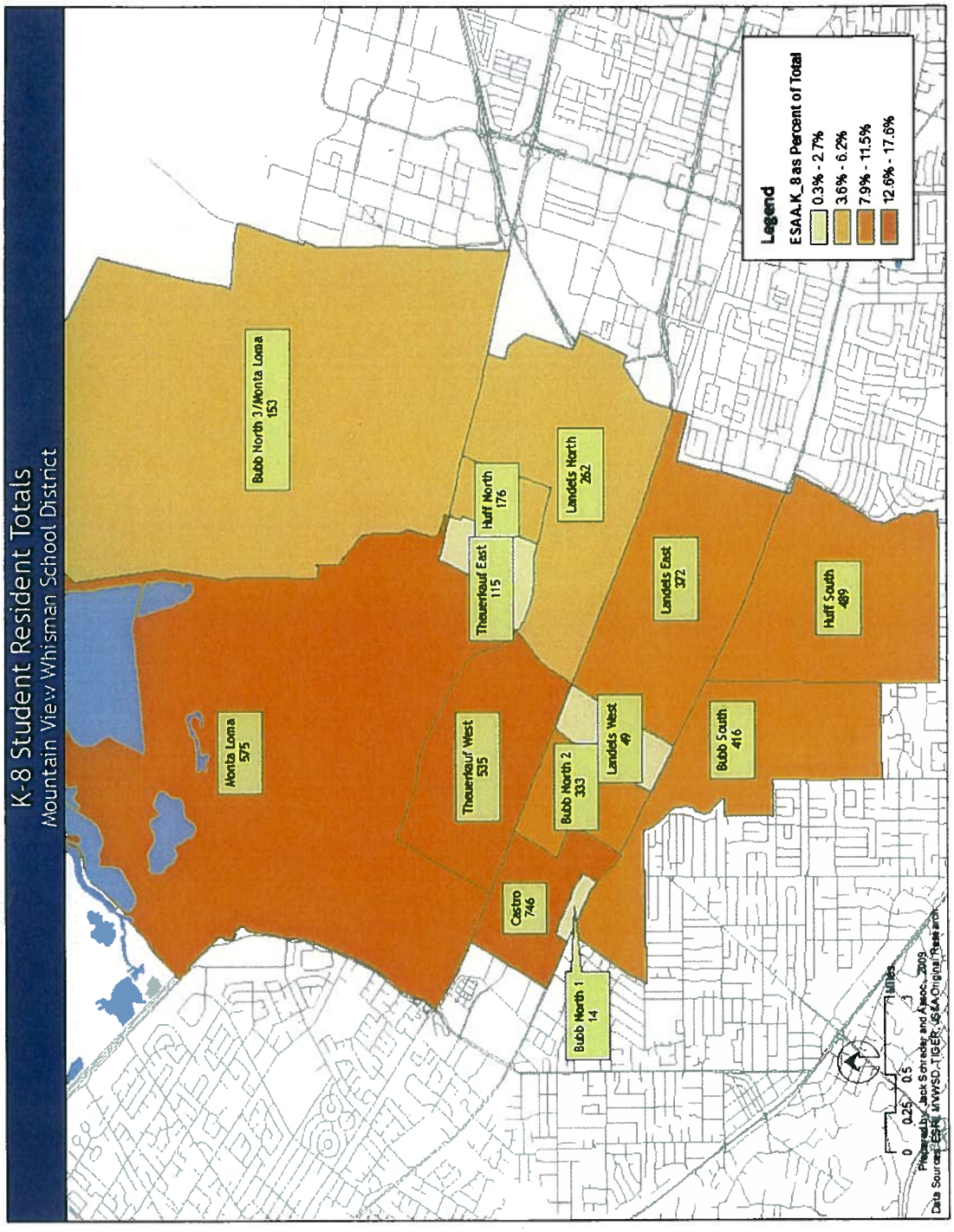


Figure D-8. KD-5 Student Resident Counts

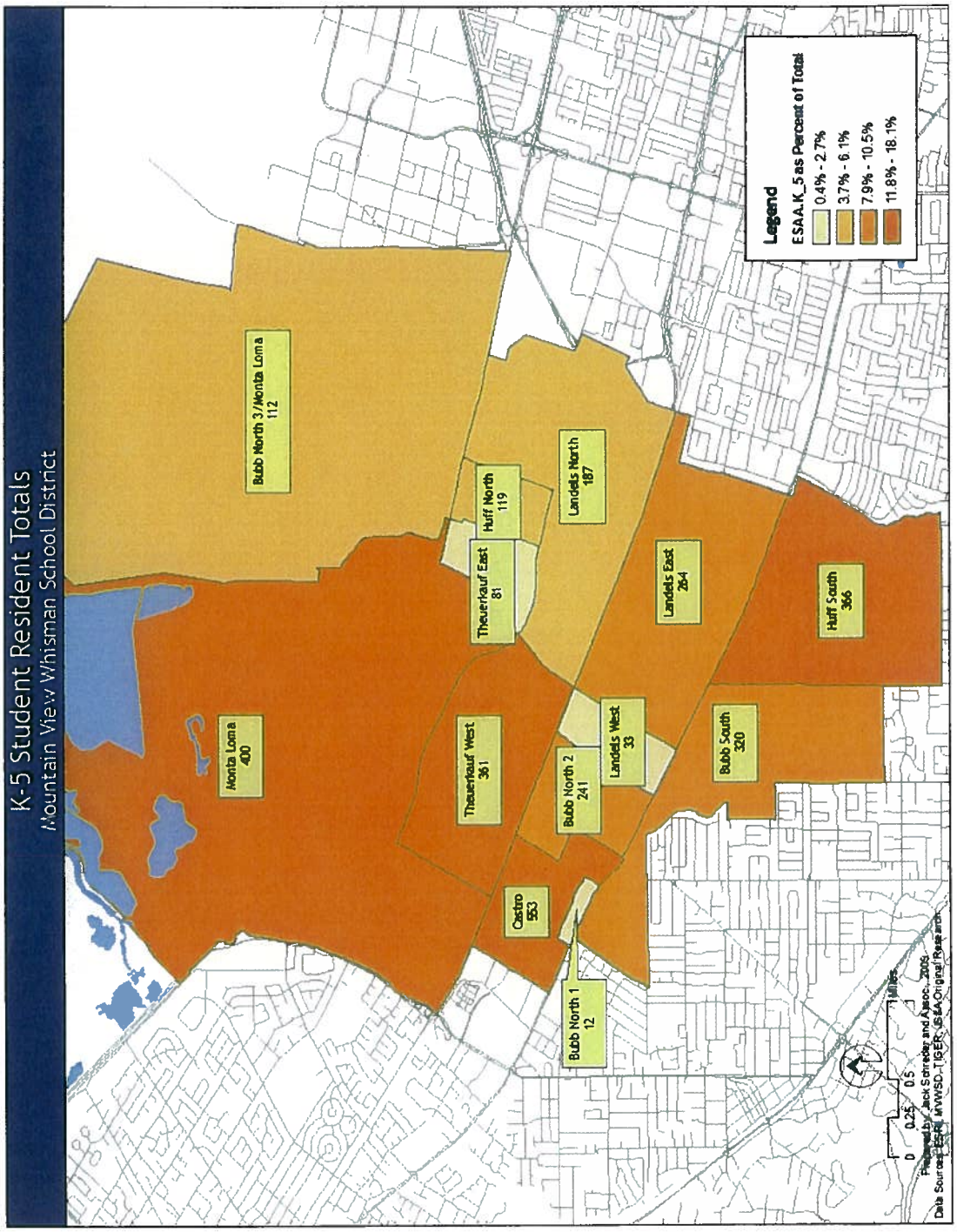


Figure D-9. 6-8 Student Resident Counts

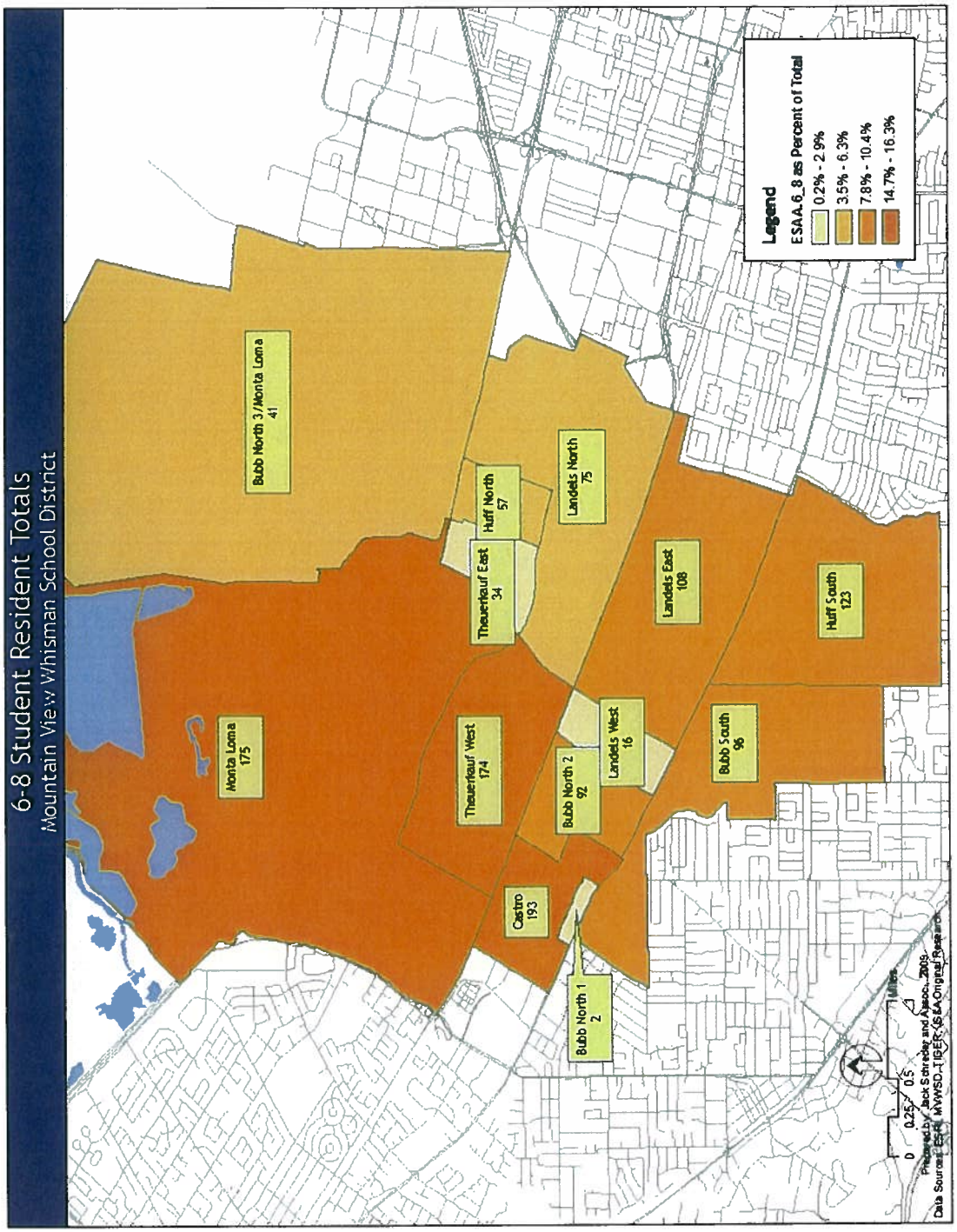
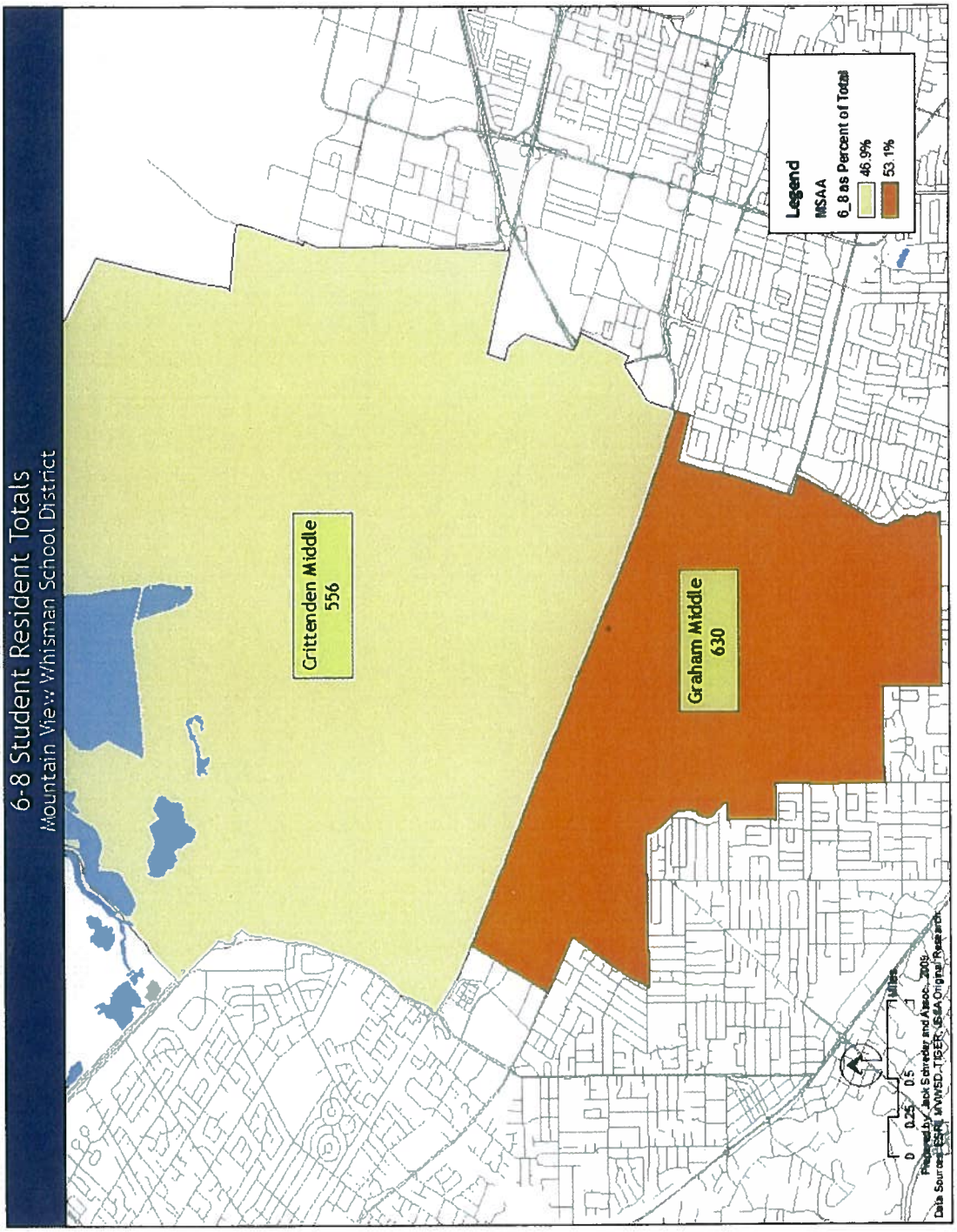


Figure D-10. 6-8 Student Resident Counts by MSAA



Attendance Matrices

Attendance Matrices have been included to provide a better understanding of where students reside versus where they attend school. An important factor in analyzing the MVWSD student population is determining how well each school is serving its neighborhood population. Therefore, these matrices were developed to demonstrate where students live versus where students attend school. Tables D-1 and D-2 compare the 2008-09 MVWSD students by their school of residence versus their school of attendance. The table should be read top to bottom, then right to left. For example, Table D-1 indicates that there are 69 elementary students residing in the Castro attendance area, but attending Bubb Elementary School; alternatively, there are 62 students residing in Bubb North 2 attendance sub-area, but attending Castro Elementary School.

This detailed analysis demonstrates the MVWSD is experiencing varying rates of open enrollment. Open enrollments are those students attending a school but not residing in its boundaries.

Table D-1 demonstrates the rates of open enrollment in the District; from 34.1% at Bubb Elementary to 57.6% at Castro Elementary (in other words, 57.6% of Castro's enrollment consists of students not residing in the Castro attendance area).

Likewise, the matrix also demonstrates the percentage of KD-5th grade students leaving their resident school to attend another District school. This is called "out-migration", and ranges from 32% at Huff Elementary School to 50.1% at Castro Elementary School.

Table D-1. Elementary School Transfer Matrix

School of Attendance		School of Residence															Total Attending
		Bubb North 1	Bubb North 2	Bubb North 3/Monta Loma	Bubb South	Castro	Huff North	Huff South	Landels East	Landels North	Landels West	Monta Loma	Theuerkauf East	Theuerkauf West	Other Districts		
	Bubb	6	69	39	247	69	6	22	17	21	3	15	8	24	2		548
	Castro	3	62	11	26	276	10	19	46	26	5	22	8	31	106		651
	Huff		10	5	21	33	34	296	20	29	2	19	11	18	2		500
	Landels		52	31	9	53	32	21	165	81	21	16	13	18	10		522
	Monta Loma	3	21	17	10	91	15	6	8	6		242	9	60	11		499
	Theuerkauf		25	9	7	31	22	2	8	22	2	83	32	210	20		473
	Independent Study		2							2		3			22		29
	Total Residing	**12**	**241**	**112**	**320**	**553**	**119**	**366**	**264**	**187**	**33**	**400**	**81**	**361**	**173**		**3222**
	Outflow to other AA	6	172	73	73	277	85	70	99	106	12	158	49	151			
	Inflow from other AA		185			269	168			245		246	211				
	Inflow from Other Districts		2			106	2			10		11	20				
	Total Geocoded Students Attending		548			651	500			522		499	473				
	Total Residents Attending		361			276	330			267		242	242				
	Total Non-Residents Attending		187			375	170			255		257	231				
	% Open Enrollment		**34.1%**			**57.6%**	**34.0%**			**48.9%**		**51.5%**	**48.8%**				
	% Residents Leaving AA		**47.3%**			**50.1%**	**32.0%**			**44.8%**		**39.5%**	**45.2%**				

The District operates two middle schools. Table D-2 demonstrates the rate of 6th-8th grade open enrollment. As indicated the rate of in and out-migration is very similar.

Table D-2. Middle and High School Transfer Matrix

		School of Residence			
		Crittenden	Graham	Other Districts	Total Attending
School of Attendance	Crittenden	**425**	110	20	**555**
	Graham	129	**517**	12	**658**
	Independent Study	2	**3**	14	**19**
	Total Residing	**556**	**630**	**46**	**1232**
	Outflow to other AA	129	110		
	Inflow from other AA	110	129		
	Inflow from Other Districts	20	12		
	Total Geocoded Students Attending	555	658		
	Total Residents Attending	425	517		
	Total Non-Residents Attending	130	141		
	% Open Enrollment	23.4%	21.4%		
	% Residents Leaving AA	23.2%	17.5%		

Inter-District Transfers

Inter-District transfers were also analyzed to determine the rate of enrollment from various districts and the student impact on the District facilities. As demonstrated in Table D-3, Inter-District transfer students represent 5.2% of the District's current KD-8th grade enrollments. Currently, there are 219 inter-district students enrolled in MVWSD.

Table D-3. Inter-District Transfers

City	Students
Atherton	1
Campbell	1
Cupertino	5
E. Palo Alto	2
Fremont	3
Hayward	1
Los Altos	6
Menlo Park	4
Milpitas	3
Mountain View	20
Newark	1
Palo Alto	11
Redwood City	10
San Carlos	5
San Jose	19
San Martin	1
San Mateo	3
Santa Clara	11
Saratoga	2
So. San Francisco	2
Sunnyvale	108
Total	**219**

SECTION E: ENROLLMENT PROJECTIONS

In order to continue to effectively plan for facilities, boundary changes or policy changes for student enrollments, school district administrators need a 10-Year enrollment projection. This projection is dual-purpose; 1) for 1-2 year short-term budgeting and staffing, and 2) for 7-10 year facility planning.

The consultant utilized the industry standard cohort "survival" methodology to prepare the 10-Year enrollment projection for the Mountain View Whisman School District. While based on historical enrollments the consultant adjusts the calculation for:

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

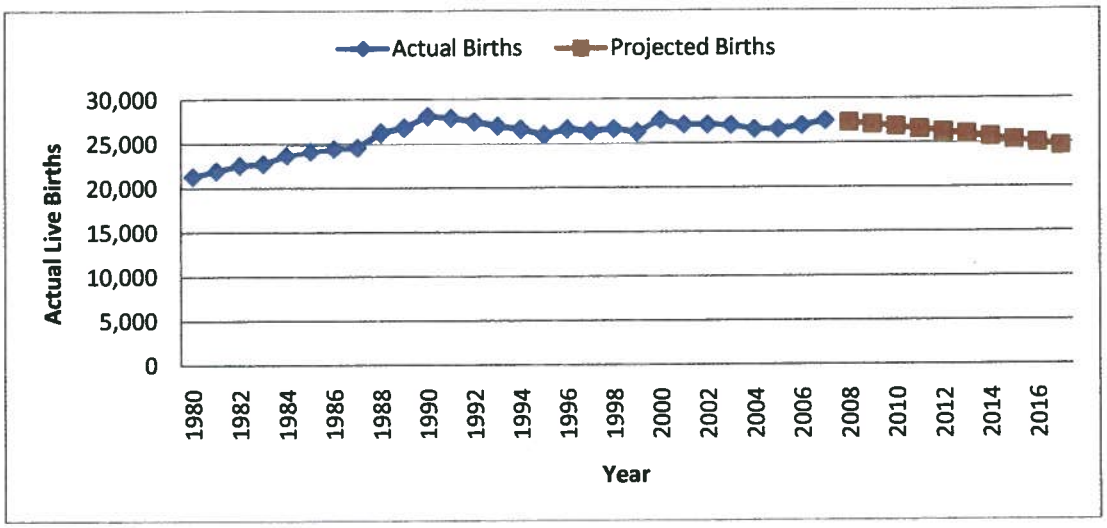
Historical and Projected Birth Data

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. Birthrate data is collected for Mountain View Whisman School District by the California Department of Health Services by Zip Code and is utilized in projecting future kindergarten class sizes.

Similar to statewide trends, Santa Clara County experienced a steady increase in births until 1990 at which time births began to decline. In 1996 this trend reversed, and births began to rise once again. Since 2000 births have

remained stable. According to the California Department of Finance, births in Santa Clara County are projected to decline through 2016 (Figure E-1).

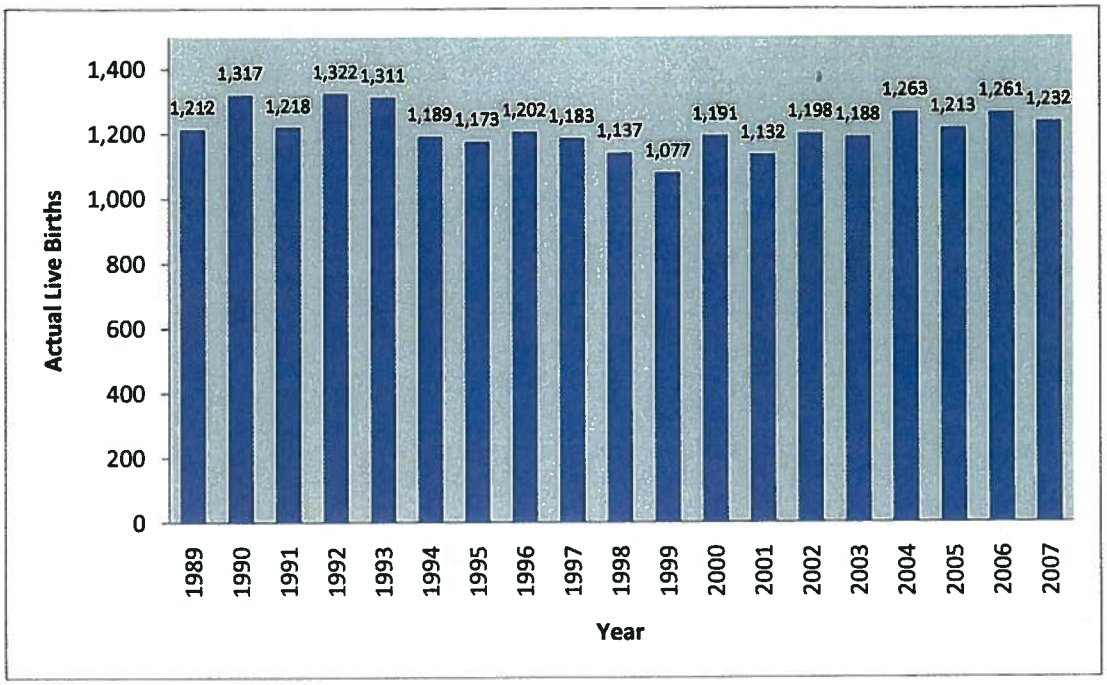
Figure E-1. Actual Live Births, Santa Clara County



Source: California Department of Public Health

The Mountain View Whisman School District experienced similar fluctuations in births since 1989. Births peaked in 1992 at 1,322 and then declined sharply, dropping by 245 births by 1999. Births have since risen, averaging 1,242 births a year since 2004. Figure E-2 demonstrates the total number of live births between 1989 and 2007 in the District.

Figure E-2. Actual Live Births, MVWSD



Source: California Department of Public Health

The number of children born to parents who live in MVWSD is highly correlated with the size of the Kindergarten class five years later. Therefore, we utilize recent birth data as the most important factor when projecting future kindergarten students for MVWSD to house. Figure E-3 demonstrates this relationship.

Figure E-3. Births Compared to Kindergarten Enrollments (Lagged 5 Years)

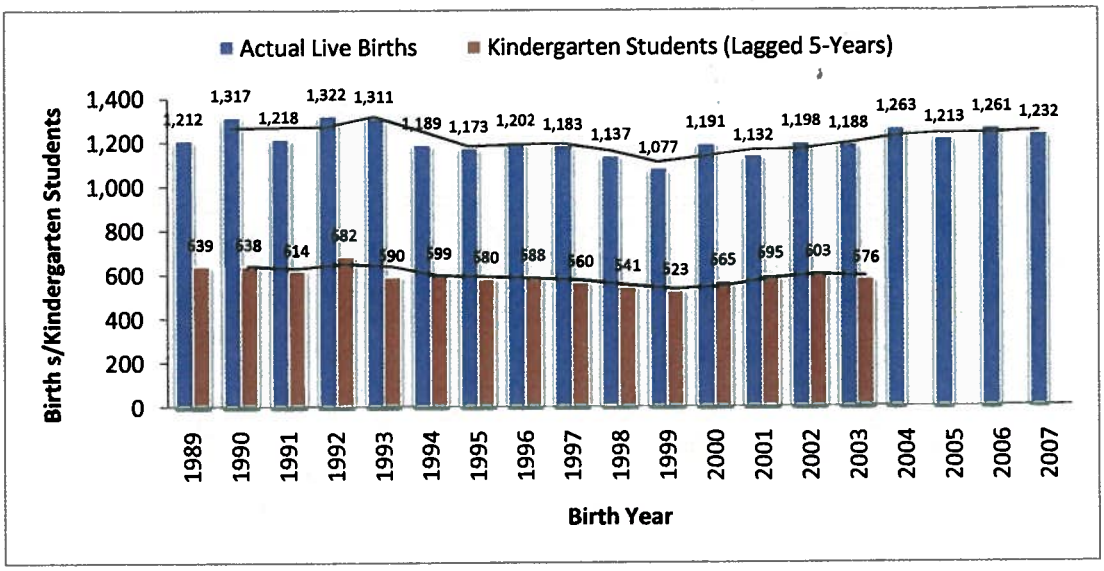
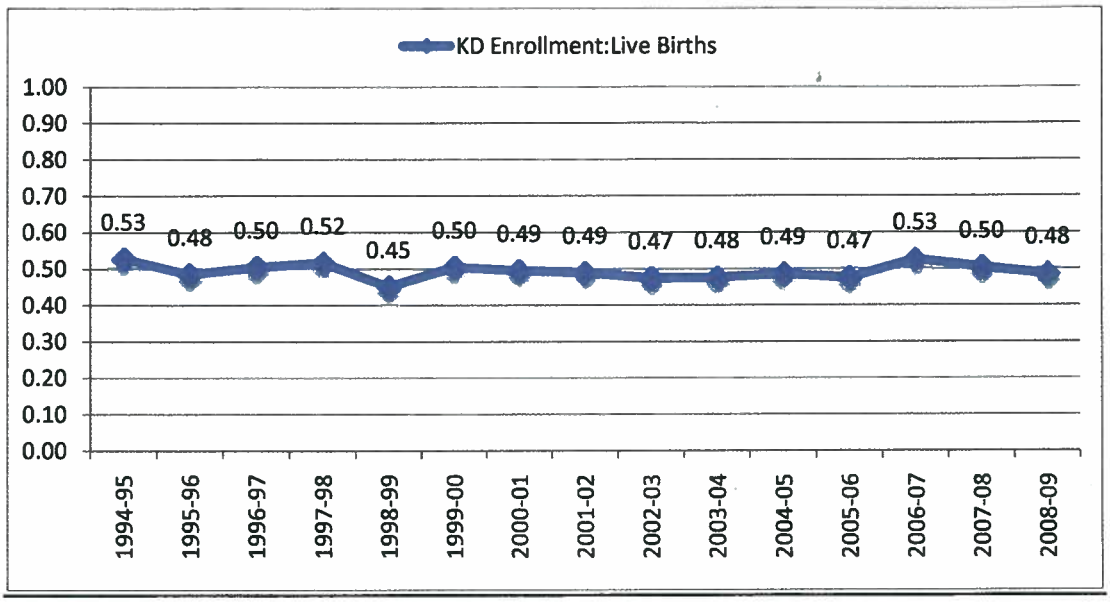


Table E-1 and Figure E-4 demonstrate the MVWSD kindergarten-birth ratio. The ratio of MVWSD births to kindergarten enrollments five years later has remained fairly stable over the years, ranging from .47 to .53. In 2006, the kindergarten to birth ratio was .53, meaning that for every 100 births in 2001, 53 children enrolled in MVWSD kindergarten classes five years later.

Table E-1. MVWSD Kindergarten Enrollment to Live Birth Ratio

Birth Year	Live Births	Increase	Kindergarten Year	Kindergarten Enrollment	Ratio of Live Births as Students in Kindergarten Enrollment
1989	1212		1994-95	639	0.53
1990	1317	8.7%	1995-96	638	0.48
1991	1218	-7.5%	1996-97	614	0.50
1992	1322	8.5%	1997-98	682	0.52
1993	1311	-0.8%	1998-99	590	0.45
1994	1189	-9.3%	1999-00	599	0.50
1995	1173	-1.3%	2000-01	580	0.49
1996	1202	2.5%	2001-02	588	0.49
1997	1183	-1.6%	2002-03	560	0.47
1998	1137	-3.9%	2003-04	541	0.48
1999	1077	-5.3%	2004-05	523	0.49
2000	1191	10.6%	2005-06	565	0.47
2001	1132	-5.0%	2006-07	595	0.53
2002	1198	5.8%	2007-08	603	0.50
2003	1188	-0.8%	2008-09	576	0.48
2004	1263	6.3%			
2005	1213	-4.0%			
2006	1261	4.0%			
2007	1232	-2.3%			

Figure E-4. MVWSD Kindergarten Enrollment to Live Birth Ratio



The kindergarten to birth ratios are weighed, averaged, and multiplied by the number of births each year to project kindergarten enrollments. Currently, there is birth data available through 2007. In order to project kindergarten classes beyond 2012, county birth projections from the California Department of Finance (DOF) are utilized.

Student Migration Rates

The methods of projecting student enrollment for future years involve the use of student migration rates. Student migration is a measure of the rate at which students grouped by grade level pass into the next grade level a year later. For example, in 2007-08 the Districts class of 2nd graders was 570. A year later, this class became a third grade class of 571. Using this example, the rate of migration is calculated in the following way:

(571-570)/570 = +.0017

The .0017 increase is a measure of the likelihood our second grade class will become larger or smaller as the class passes into the third grade the following year. To minimize the effects of an exceptional year, two, three, and five year migration rates are calculated by averaging and weighting historical migration rates (Tables E-2 and E-3).

Table E-2. Actual and Average Migration

	KD>1st	1st>2nd	2nd>3rd	3rd>4th	4th>5th	5th>6th	6th>7th	7th>8th	KD-4th>1st-5th	5th-7th>6th-8th
2001>2002	-73	-29	20	-23	15	25	2	7	**-90**	**34**
2002>2003	-14	-23	-18	-26	-11	-54	-3	-7	**-92**	**-64**
2003>2004	-20	-43	-6	-10	-27	-45	-10	-17	**-106**	**-72**
2004>2005	-41	-21	-21	-16	-39	-45	-12	-7	**-138**	**-64**
2005>2006	3	-17	-12	-12	-22	-50	-5	-38	**-60**	**-93**
2006>2007	-4	2	-10	-9	-15	-39	-7	1	**-36**	**-45**
2007>2008	-1	-31	1	-12	-13	-22	-5	9	**-56**	**-18**
Last 5	-13	-22	-10	-12	-23	-40	-8	-10	**-79**	**-58**
Last 3	-1	-15	-7	-11	-17	-37	-6	-9	**-51**	**-52**
Last 2	-3	-15	-5	-11	-14	-31	-6	5	**-46**	**-32**

Table E-3. Actual and Average Migration Rates

	KD>1st	1st>2nd	2nd>3rd	3rd>4th	4th>5th	5th>6th	6th>7th	7th>8th	KD-4th>1st-5th	5th-7th>6th-8th
2001>2002	-0.124	-0.053	0.038	-0.042	0.029	0.061	0.005	0.017	-0.153	0.082
2002>2003	-0.025	-0.045	-0.035	-0.047	-0.021	-0.101	-0.007	-0.017	-0.173	-0.124
2003>2004	-0.037	-0.079	-0.012	-0.020	-0.052	-0.088	-0.021	-0.039	-0.199	-0.148
2004>2005	-0.078	-0.040	-0.042	-0.033	-0.079	-0.091	-0.026	-0.015	-0.273	-0.131
2005>2006	0.005	-0.035	-0.024	-0.025	-0.047	-0.110	-0.011	-0.084	-0.126	-0.206
2006>2007	-0.007	0.004	-0.022	-0.018	-0.032	-0.087	-0.017	0.002	-0.075	-0.102
2007>2008	-0.002	-0.052	0.002	-0.026	-0.027	-0.048	-0.012	0.023	-0.106	-0.038
Last 5	-0.024	-0.041	-0.020	-0.025	-0.047	-0.085	-0.017	-0.023	-0.156	-0.125
Last 3	-0.001	-0.028	-0.015	-0.023	-0.035	-0.082	-0.014	-0.020	-0.102	-0.115
Last 2	-0.004	-0.024	-0.010	-0.022	-0.030	-0.068	-0.015	0.012	-0.090	-0.070

Since 2000, MVWSD has experienced negative migration, meaning fewer students return each year. We attribute this to several factors, including:

- Merge of Mountain View and Whisman School Districts.
- "Dot Com" Bubble Burst
- School Closure

As Figures E-5 through E-7 demonstrate, while negative migration remains, it is now beginning to stabilize, three years following the school closure. From 2001 to 2005 the District experienced a rise in negative migration. Since that time, negative migration has lessened, indicating a more stable population within the

District as more parents are choosing to keep their children enrolled in District schools. In Fall 2008, negative migration was down to 74 students.

Figure E-5. Migration Grades KD-7 > Grades 1-8, 2002-2008

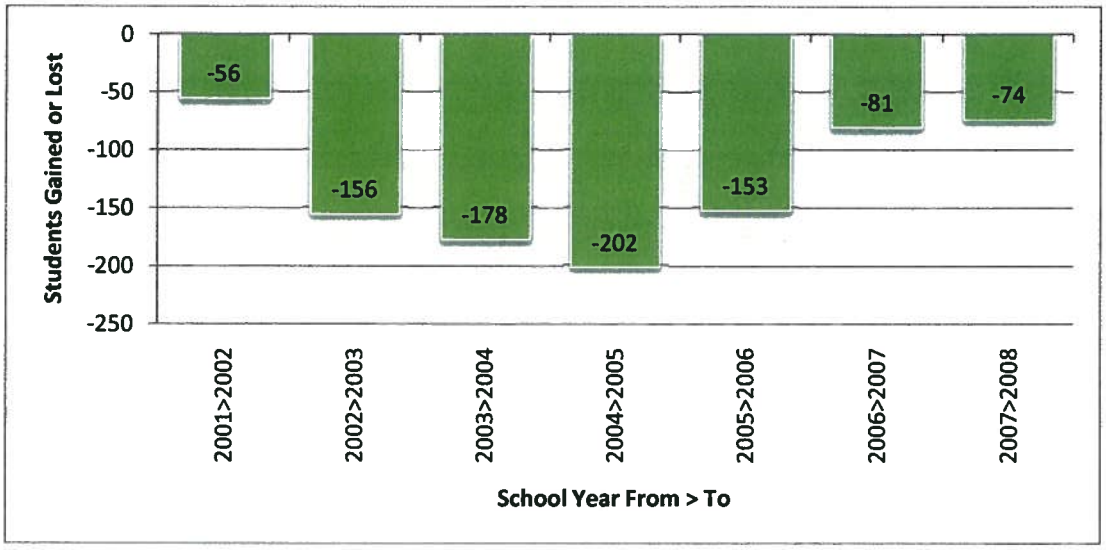


Figure E-6. Migration Grades KD-4 > Grades 1-5, 2002-2008

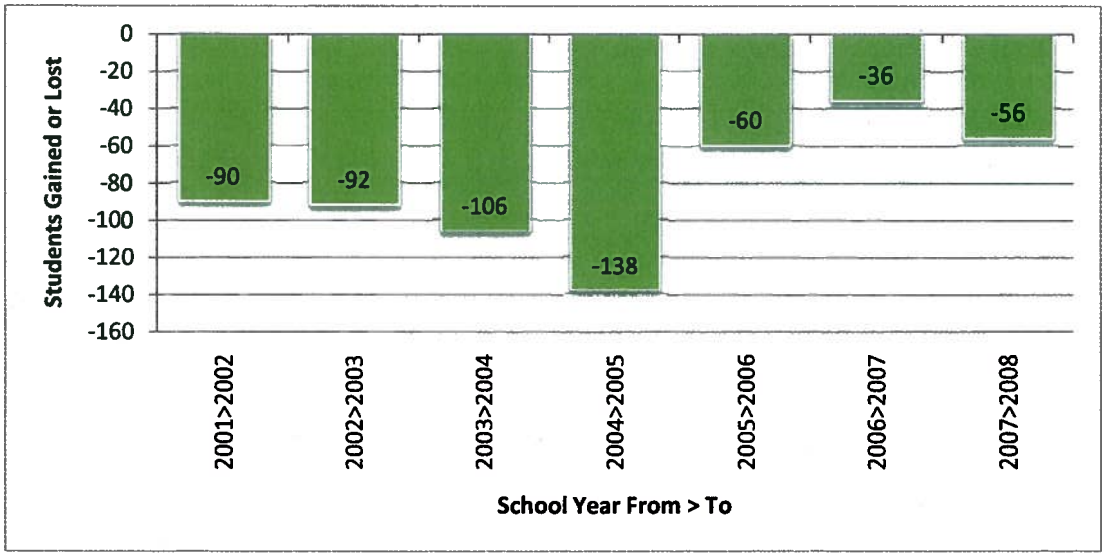
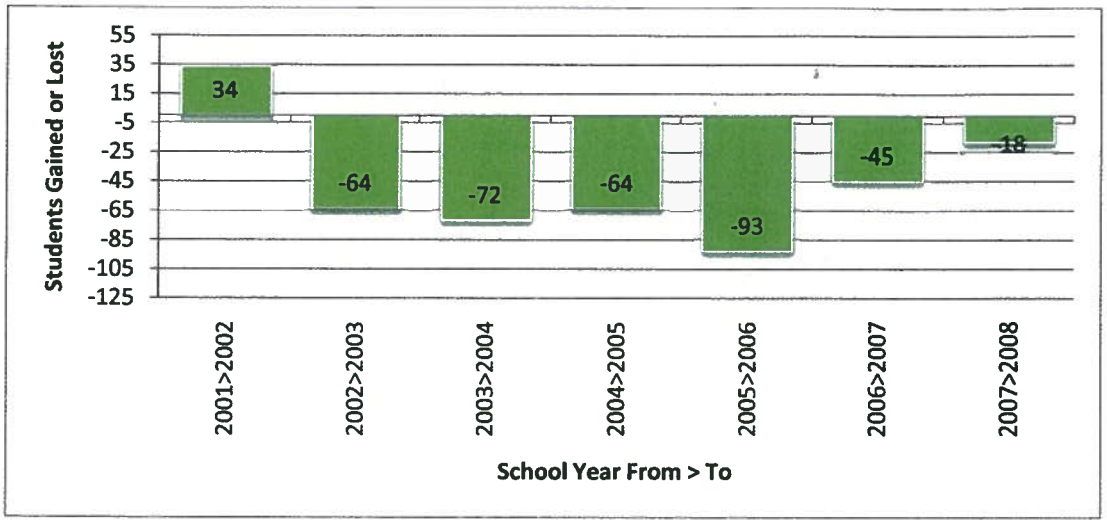


Figure E-7. Migration Grades 5-7 > Grades 6-8, 2002-2008



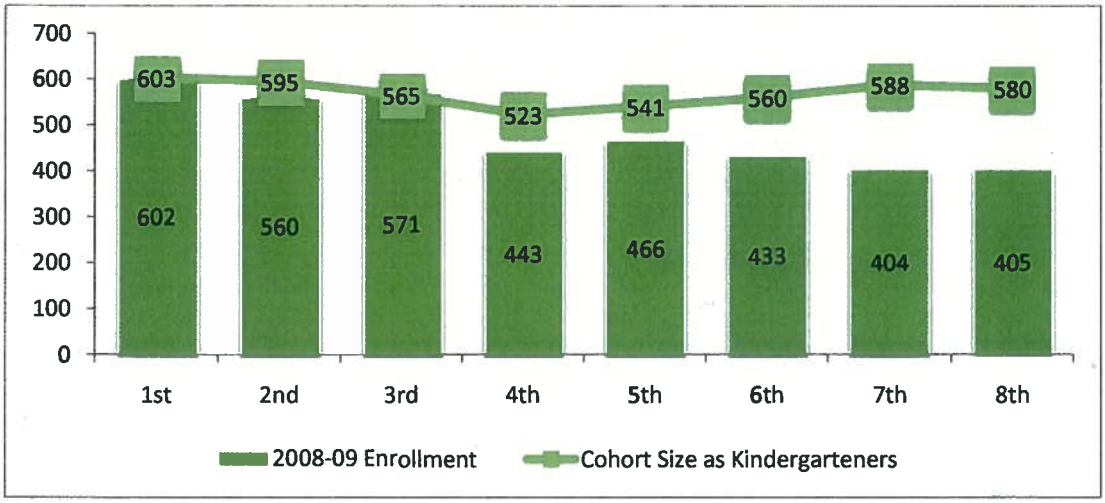
Enrollment Projection

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

The cohort survival method is the standard demographic technique for projecting enrollments. This method was utilized to project enrollments 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 Mountain View Whisman School District, cohort size decreases significantly as it progresses through the grades. Figure E-8 shows the 2000 kindergarten cohort as they moved through the grade levels. By Fall 2008, these students were the District's 8th grade class. The kindergarten class started with 602 students. However, in the 8th grade, this original class of 602 numbered 405 students.

Figure E-8. Cohort Growth Since Kindergarten



**For purposes of this comparison, Mountain View and Whisman Kindergarten classes were added together for the Fall 2000 school year.*

Three enrollment projections were prepared for MVWSD: "Low", "Most Likely", and "High". The Low enrollment projection was calculated by averaging and weighting five years of historical cohort survival rates. The Most Likely enrollment projection was calculated by averaging and weighting three years of historical cohort survival rates. The High enrollment projection was calculated by averaging and weighting two years of historical cohort survival rates.

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 enrollment projections through 2018-19 are provided in Tables E-4 through E-6. Based on the Most Likely projection, KD-8th grade enrollments are projected to reach 5,195 by the 2018-19 school year.

Table E-4. Low Enrollment Projection

Mountain View Whisman School District											
Low Enrollment Projection											
		School Year									
Grade	Actual 08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
KD	576	587	624	600	623	609	618	613	607	601	594
1	602	563	575	612	587	611	596	605	600	595	588
2	560	580	541	553	590	565	589	574	583	578	573
3	571	550	570	532	543	580	556	579	565	574	569
4	443	559	539	559	520	531	568	544	567	553	562
5	466	420	536	515	535	497	508	545	521	544	530
6	433	426	380	496	475	495	457	468	505	480	504
7	404	425	418	372	488	467	487	449	460	497	473
8	405	394	415	408	361	478	457	477	438	450	487
KD-5	3,218	3,260	3,386	3,370	3,399	3,393	3,435	3,461	3,444	3,445	3,416
6-8	1,242	1,245	1,212	1,275	1,325	1,440	1,401	1,394	1,404	1,427	1,463
Total	4,460	4,505	4,598	4,645	4,723	4,834	4,836	4,855	4,848	4,872	4,879

Table E-5. Most Likely Enrollment Projection

Mountain View Whisman School District											
Most Likely Enrollment Projection											
		School Year									
Grade	Actual 08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
KD	576	599	637	612	636	622	631	626	620	613	606
1	602	575	599	637	611	636	621	630	625	619	612
2	560	587	560	583	621	596	620	606	615	610	604
3	571	553	580	553	576	614	589	613	599	608	603
4	443	560	542	569	542	565	603	578	602	588	597
5	466	426	543	525	552	525	549	587	561	586	571
6	433	429	389	506	488	515	488	512	550	524	549
7	404	427	423	384	501	483	509	483	506	544	519
8	405	395	418	414	374	491	473	500	473	497	535
Total KD-5	3,218	3,301	3,461	3,479	3,539	3,559	3,613	3,640	3,622	3,623	3,593
Total 6-8	1,242	1,251	1,231	1,304	1,363	1,489	1,471	1,494	1,529	1,565	1,602
Total	4,460	4,552	4,692	4,783	4,903	5,048	5,084	5,134	5,151	5,188	5,195

Table E-6. High Enrollment Projection

Mountain View Whisman School District											
High Enrollment Projection											
		School Year									
Grade	Actual 08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
KD	576	612	650	624	649	634	644	638	632	625	619
1	602	574	609	648	622	647	632	641	636	630	623
2	560	588	559	595	633	607	632	617	627	621	615
3	571	556	583	555	590	629	603	628	613	622	617
4	443	561	545	573	544	580	618	592	617	602	612
5	466	429	547	531	559	530	566	604	578	603	588
6	433	436	399	516	501	528	500	535	574	548	573
7	404	427	430	393	510	495	522	494	529	568	542
8	405	409	432	435	398	515	500	527	499	534	573
Total KD-5	3,218	3,318	3,493	3,525	3,597	3,627	3,694	3,721	3,703	3,704	3,674
Total 6-8	1,242	1,272	1,260	1,343	1,408	1,538	1,521	1,556	1,601	1,650	1,687
Total	4,460	4,589	4,753	4,868	5,005	5,164	5,215	5,277	5,305	5,354	5,361

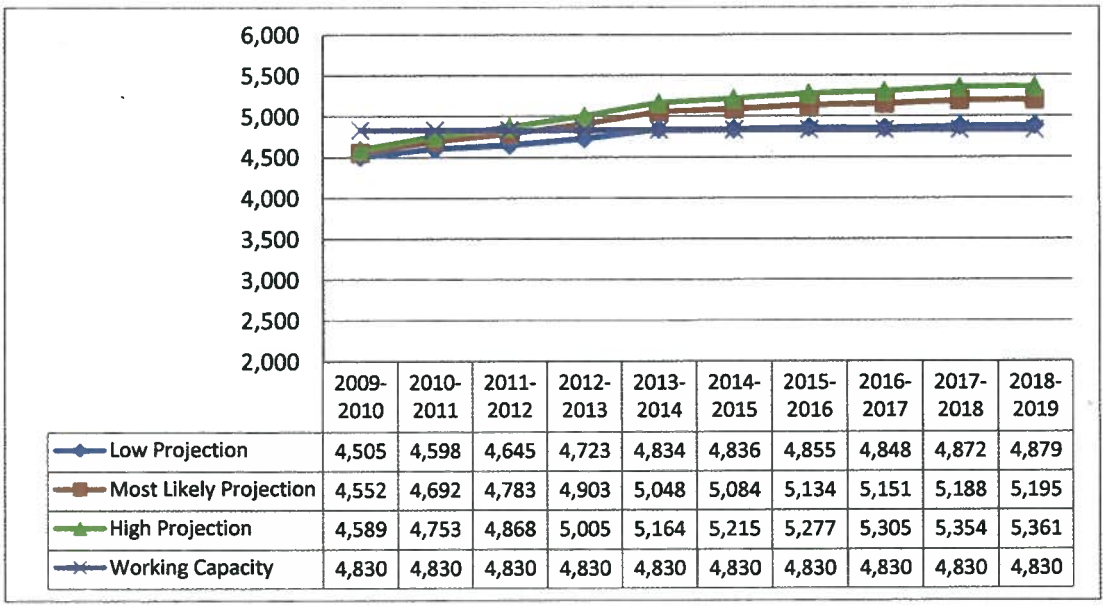
Table E-7. Comparison of Projections

	Elementary (KD-5)			*Middle (6-8)*			Grand Totals (KD-8)		
School Year	Low	Most Likely	High	Low	Most Likely	High	Low	Most Likely	High
2009-2010	3,260	3,301	3,318	1,245	1,251	1,272	4,505	4,552	4,589
2010-2011	3,386	3,461	3,493	1,212	1,231	1,260	4,598	4,692	4,753
2011-2012	3,370	3,479	3,525	1,275	1,304	1,343	4,645	4,783	4,868
2012-2013	3,399	3,539	3,597	1,325	1,363	1,408	4,723	4,903	5,005
2013-2014	3,393	3,559	3,627	1,440	1,489	1,538	4,834	5,048	5,164
2014-2015	3,435	3,613	3,694	1,401	1,471	1,521	4,836	5,084	5,215
2015-2016	3,461	3,640	3,721	1,394	1,494	1,556	4,855	5,134	5,277
2016-2017	3,444	3,622	3,703	1,404	1,529	1,601	4,848	5,151	5,305
2017-2018	3,445	3,623	3,704	1,427	1,565	1,650	4,872	5,188	5,354
2018-2019	3,416	3,593	3,674	1,463	1,602	1,687	4,879	5,195	5,361

Enrollment Projection Compared to Capacity

Figure E-9 provides a comparison of the 10-Year Most Likely enrollment projection to current facility capacity. Based on the projection, the District will reach capacity by 2012-13 and remain over capacity through the projection period.

Figure E-9. Enrollment Projection Compared to Facility Capacity



	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Low Projection	4,505	4,598	4,645	4,723	4,834	4,836	4,855	4,848	4,872	4,879
Most Likely Projection	4,552	4,692	4,783	4,903	5,048	5,084	5,134	5,151	5,188	5,195
High Projection	4,589	4,753	4,868	5,005	5,164	5,215	5,277	5,305	5,354	5,361
Working Capacity	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830	4,830

SECTION F: RESIDENT PROJECTIONS

The following projections are based upon residence of the students and are by geographic sub-attendance areas provided by the District. The methodology is similar to that utilized in the preparation of the enrollment projections; however the historical years of student data utilized differ in that we use the location of where students reside, as opposed to CBEDS enrollments by school. These projections are meant to alert the District as to where future school facilities should potentially be located. Since students don't always attend their school of residence, and especially given the high levels of open enrollment in MVWSD, these projections should be considered as a guideline and are not meant to be utilized for short-term budgeting or staffing purposes.

Figure F-1 provides a map of the geographic areas that were utilized to capture historic resident data and to project future student residents. Table F-1 provides the resident projections by school.

The projections were grouped by those areas increasing, stable, or declining in student residents through the projection period (Figures F-2 through F-5). Finally, a map was prepared to demonstrate the projected growth or decline of KD-8th grade student residents in a given attendance sub-area over the next five years (Figure F-6).

Figure F-1. Map of Sub-Attendance Areas

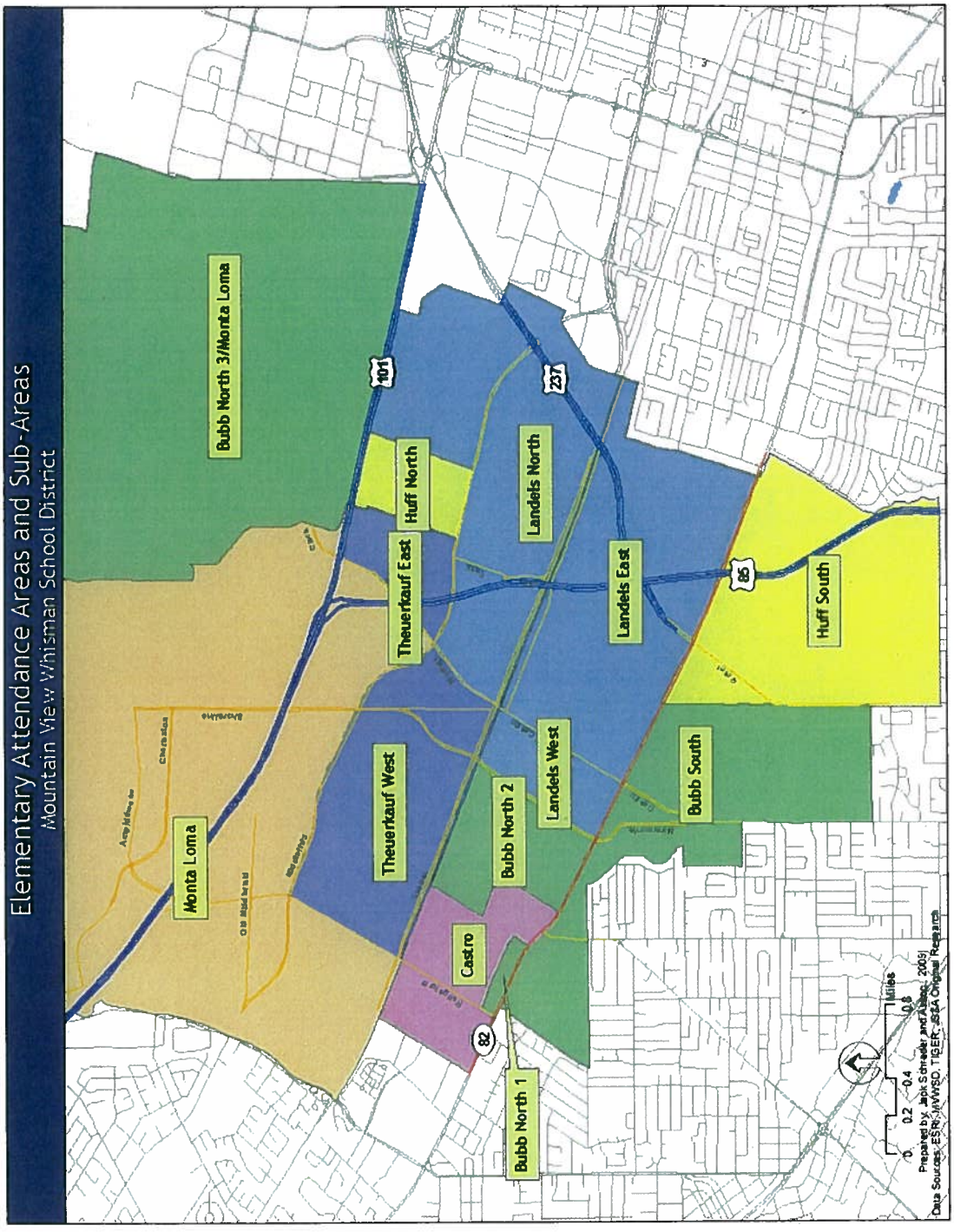


Table F-1. Resident Projections by School

	05-06	06-07	07-08	Actual 08-09		09-10	10-11	11-12	12-13	13-14
Bubb North 1	19	17	33	14		17	17	19	20	19
Bubb North 2	331	306	351	333		351	357	363	370	386
Bubb North 3/ Monta Loma	7	81	123	153		180	211	241	271	294
Bubb South	367	340	371	416		450	478	513	541	570
Castro	720	759	682	746		773	800	814	845	861
Huff North	243	242	188	176		146	128	116	102	92
Huff South	409	413	443	489		530	570	601	632	664
Landels East	329	323	342	372		384	408	421	443	463
Landels North	231	251	244	262		273	284	289	294	314
Landels West	49	40	47	49		43	45	42	43	39
Monta Loma	639	573	536	575		550	539	535	530	531
Theuerkauf East	131	122	142	115		116	117	115	111	108
Theuerkauf West	570	556	581	535		548	569	577	598	620
Total	**4,045**	**4,023**	**4,083**	**4,235**		**4,361**	**4,524**	**4,646**	**4,799**	**4,961**

Figure F-2. Increasing Residents

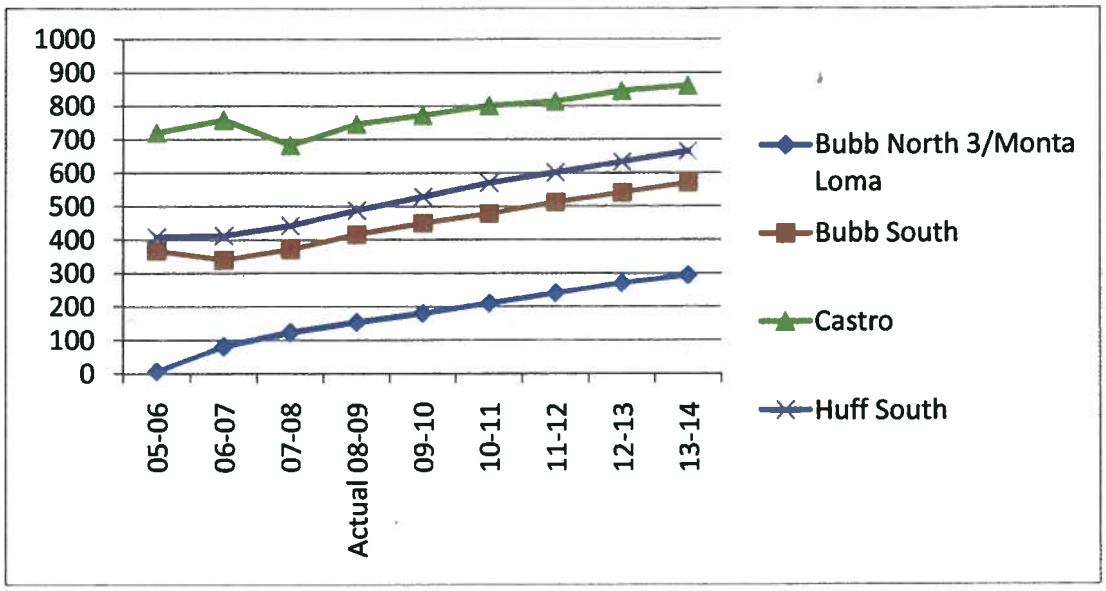


Figure F-3. Stable Residents

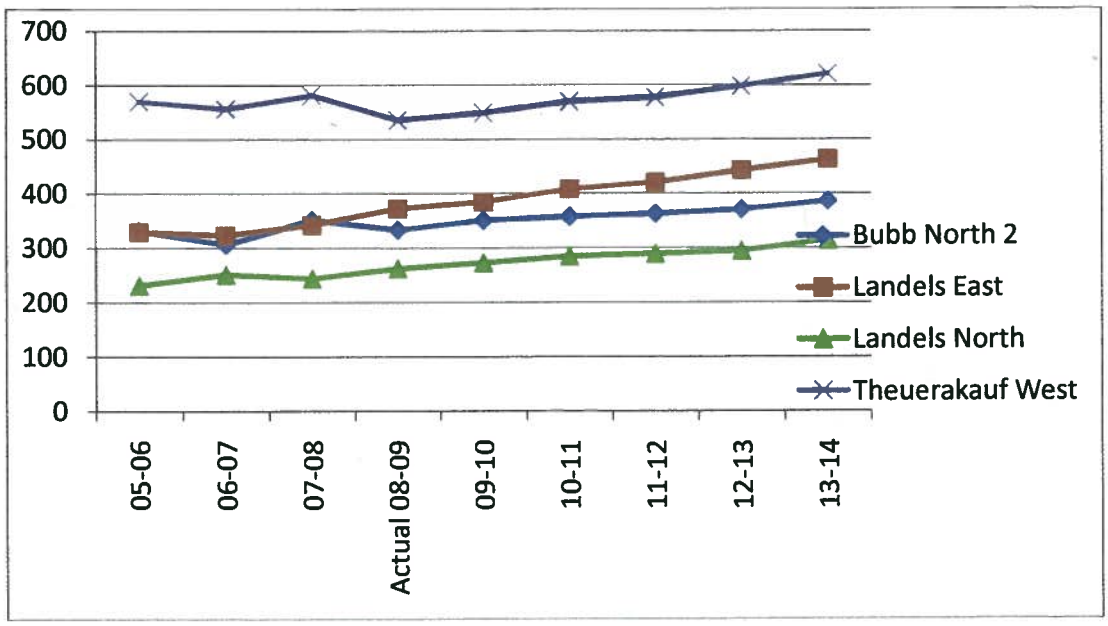


Figure F-4. Declining Residents

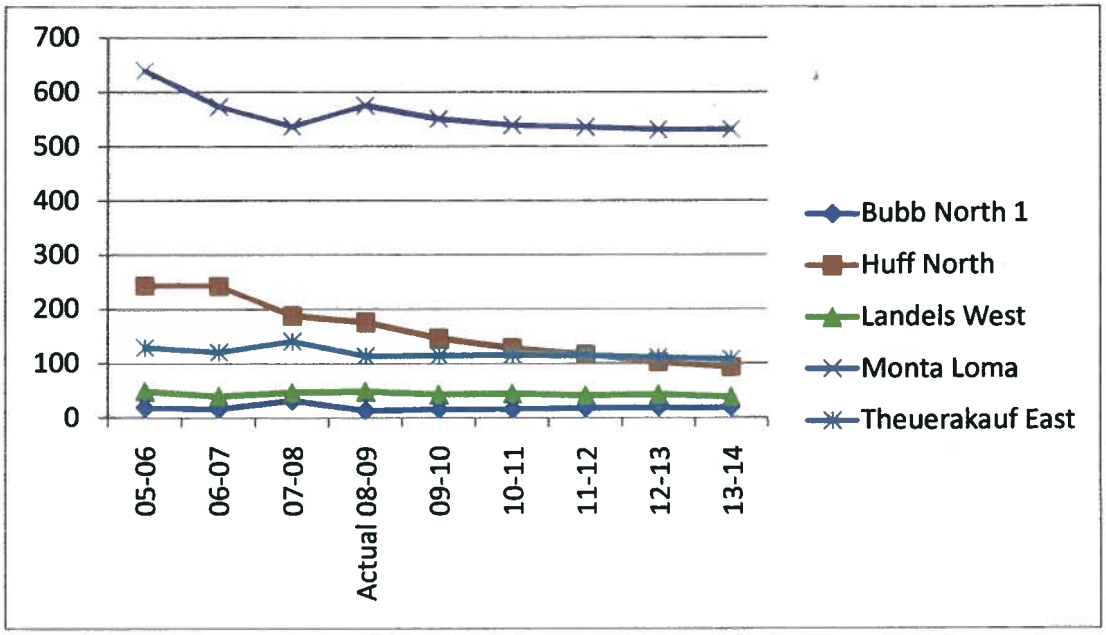
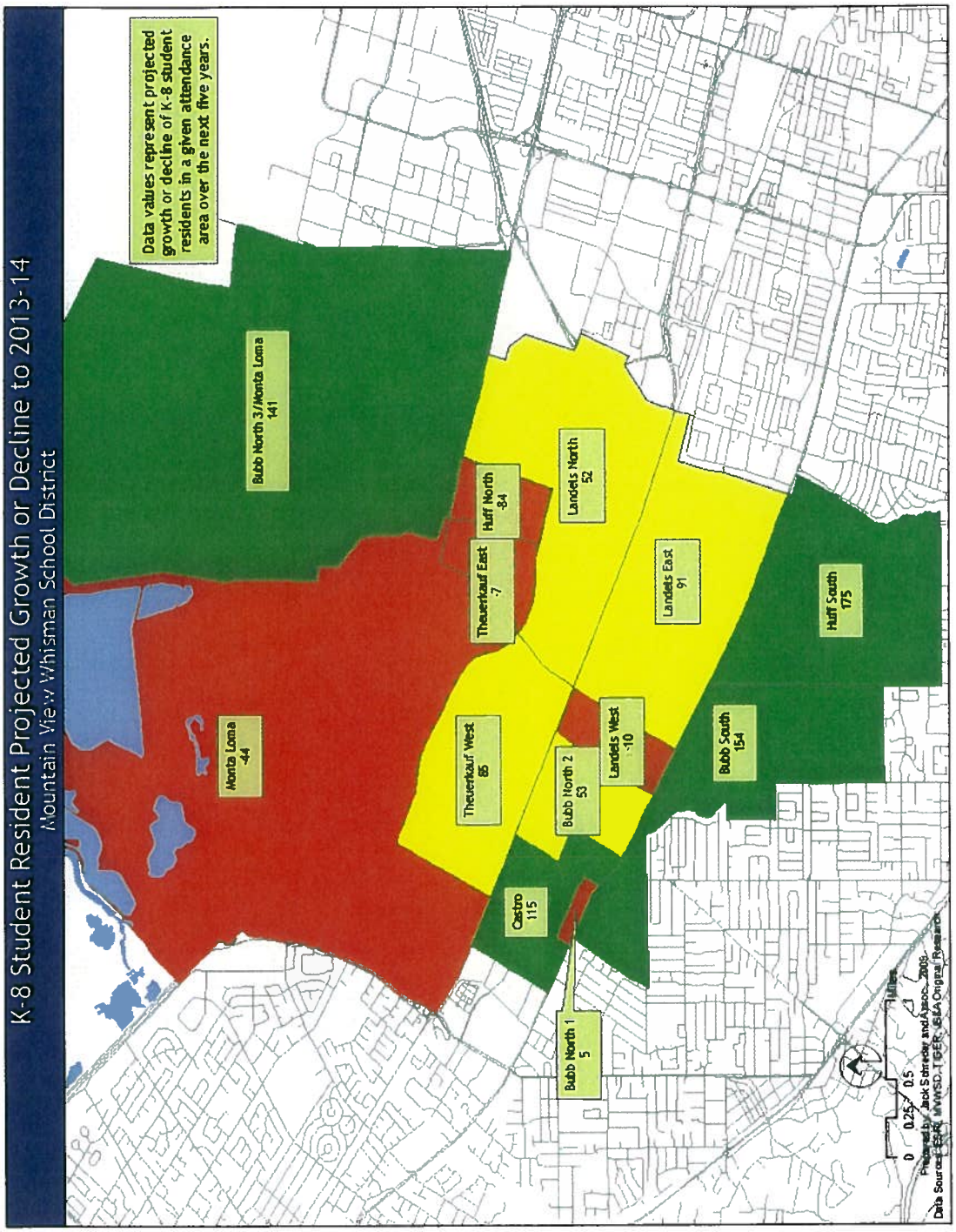


Figure F-5. Student Residents, Projected Growth or Decline to 2013-14



SECTION G: SCHOOL FACILITY ANALYSIS

In order to determine the future facility needs of Mountain View Whisman School District it is necessary to identify the ability of the District's existing facilities to adequately serve current enrollments. This section of the Facilities Study will identify the adequacy of the Mountain View Whisman School District's existing facilities. Table G-1 provides the age of the District's schools and the grade levels served.

Table G-1. School Site Information

School	Original Construction	Additions
Elementary Schools (KD-5)		
Bubb Elementary	1954	1965-1993
Castro Elementary	1948	1973-1994
Huff Elementary	1958	1959-1967
Landels Elementary	1959	1966-1996
Monta Loma Elementary	1950	1960-1998
Theuerkauf Elementary	1952	2008
Stevenson Elementary	1964	
Middle Schools (6-8)		
Crittenden Middle	1954	1968-1998
Graham Middle	1959	1962-1996
Other Sites Owned by District		
Slater Elementary	1952	1957-1993
Cooper Elementary	1963	
Whisman Elementary		

Source: Mountain View Whisman School District

Facility Capacity

To identify the ability of the Mountain View Whisman School District to house future enrollments, it is necessary to identify the student capacity of the District's facilities. Student capacities can be measured differently depending on which rooms are identified as classrooms and how many students are loaded into each classroom. These loading factors are described in Table G-2.

State Loading Factors (Capacity): The Office of Public School Construction (OPSC), which is the agency responsible for administering State school building programs, has determined class loading factors to be used in establishing eligibility for State school building funds and resources under Senate Bill 50 and the guidelines for the State School Facilities Program. These loading factors do not allow for Class Size Reduction or for special use rooms.

District Optimum Loading Factors: In order to provide an adequate educational environment for students, the following factors must be considered in order to attain the goal of optimum capacity for each site: Site size (acreage), portable classrooms, and appropriate classroom loading standards to accommodate students. Therefore, each site must be surveyed and assigned a capacity according to these factors. The loading factors in Table G-2 serve as a guideline for classrooms; however, each site varies due to the factors outlined previously in this paragraph.

Year-Round Loading Factors (four track): Multi-track year-round education (MTYRE) increases the capacity of a school by rotating on vacation one of four

student groups throughout the school year. A four-track program will effectively increase the capacity of a classroom by 18%. For purposes of this report, the year-round capacity is determined by increasing the capacity of a classroom by 18%. MVWSD may have a need for multi-track year round sessions as the district is currently over capacity.

Table G-2 provides a comparison of the loading factors based on District, State, and MTYRE standards.

Table G-2. Classroom Loading Factors

****Classroom Loading Factors**
For Standard Size Rooms (960 s.f.)

Grade Level	District (Contract)	State+
KD	20	25
1-3	20	25
4-5	25	25
6-8	27	27
KD-5 Resource Specialist	0	25
Special Education	12	25/27

****Capacity of classroom does not reflect actual class sizes.**
+The State does not recognize any reduction in capacity to accommodate Class Size Reduction.

Current Facility Inventory

In order to provide a capacity for each school site the consultant worked closely with District staff. These capacities are outlined in Table G-3 for each school and indicate a capacity range for all school sites, indicating an optimum capacity and a maximum capacity of all school sites.

Table G-3. School Site Capacities

School	Working Capacity	Maximum Capacity	2008-09 Enrollment	Enrollment +/- Working Capacity
Bubb Elementary	524	687	543	-19
Castro Elementary	662	867	692	-30
Huff Elementary	477	621	501	-24
Landels Elementary	497	648	516	-19
Monta Loma Elementary	484	630	498	-14
Theuerkauf Elementary	457	624	467	-10
Stevenson Elementary (2009-10)	240	309	0	0
Total KD-5 Capacity	***3,341***	***4,386***	***3,217***	***124***
Crittenden Middle	874	984	581	293
Graham Middle	615	702	660	-45
Total 6-8 Capacity	***1,489***	***1,686***	***1,241***	***248***
Total Capacity	**4,830**	**6,072**	**4,458**	**372**
Other Sites Owned by District				
Slater Elementary	ABA autism program/State preschool/Joint-Use Agreement with Google			
Cooper Elementary	Leased: Primary Plus Preschool			
Whisman Elementary	Leased: German International School of Silicon Valley			

Source: Mountain View Whisman School District

Facility Capacity Compared to Projected Enrollments

The enrollment projections identified in Table G-4 can be compared to the existing facility capacity to determine the adequacy of the District's schools to house future enrollments. Table G-4 compares the District's facility capacity based on optimal loading standards, coupled with Class Size Reduction loading factors, as compared to the projected enrollments.

Table G-4.Capacity Compared to Enrollment

Mountain View Whisman School District
Capacity Compared
to 2018-19 Projected Enrollments

Grade Level	Capacity	2018-19 Enrollment	Unhoused Students	Site Utilization
KD-5	3,341	3,593	252	107.5%
6-8	1,489	1,602	113	107.6%

Table G-4 shows the District will experience overcrowding by the 2018-19 school year at the elementary and middle school level.

School Sites

The size of a school's site has a direct impact on the educational effectiveness of the school. The site size must be adequate to provide sufficient area for physical education (playgrounds, athletic fields), buildings, and parking. A school site should also be large enough to handle additional classrooms should

enrollments increase. The State Department of Education provides school site size guidelines that are identified in the Department's *School Site Analysis and Development Handbook*. The handbook describes the amount of area required for classrooms, offices, athletic fields, etc. The site size utilization is important, as approval from the State Department of Education is required to exceed the site size guidelines at a particular site.

Table G-5. State Site Size Requirements

Grade Levels		Acreage
Elementary Sites (with CSR)	600 students	10.6 acres
Middle School (6-8, 7-8, 7-9)	Up to 900 students	20.9 acres
High School (10-12, 9-12)	Up to 1,800 students	44.5 acres

Source: Mountain View Whisman School District

Of the 4 elementary schools operated by the District, only Castro Elementary is undersized at 9.5 acres. The middle schools are adequate in size for a middle school population.

Table G-6 outlines the current enrollments at District sites, the useable acreage at those sites, and compares this acreage to the recommended acreage according to State guidelines to effectively accommodate the current enrollments.

Table G-6. Enrollments Compared to Usable and CDE Recommended Acreage

School	Acreage	CDE Recommended Acreage
Bubb Elementary	9.6	8.3
Castro Elementary	9.5	13.1
Huff Elementary	11	7.8
Landels Elementary	11.9	8.3
Monta Loma Elementary	10.08*	7.8
Theuerkauf Elementary	14.99*	7.8
Stevenson Elementary	4.86*	n/a
Crittenden Middle	11.42*	11.6
Graham Middle	22.06	12.9
Other Sites Owned by District		
Slater Elementary	9.3	
Cooper Elementary	9.5	
Whisman Elementary	5.8*	

**Acreages calculated from parcel layer in MVWSD GIS.*

Modular Classrooms

To accommodate enrollment increases due to residential growth, lack of financial resources, and the implementation of Class Size Reduction, the District has added portable classrooms on various sites. Portable classrooms provide a flexible and timely option to housing additional students. However, portable classrooms can over-burden existing ancillary facilities such as libraries, cafeterias, administrative space, playgrounds, and multi-purpose areas. When schools are constructed, the ancillary facilities are built to serve the original buildings and student population. These ancillary facilities become overburdened when portable classrooms are added to campuses without a corresponding expansion of these core ancillary facilities.

Significant encroachment upon school hardtop areas has resulted from the placement of portable classrooms to accommodate the District's historical enrollment growth as well as placement of Class Size Reduction portable classrooms. These classrooms have negatively impacted the educational environment in the Mountain View Whisman School District.

Portable classrooms are costly and ineffective when used as a permanent housing solution. While the initial cost to the District may be lower than constructing permanent classrooms, portable classrooms require more maintenance, and have a short life expectancy. Portables should be added only as an interim housing measure while the District constructs new schools or

implements other alternatives for housing students. Table G-7 shows the number of portable classrooms at each site[7].

Table G-7. Modular Classroom Summary

Mountain View Whisman School District	
KD-8 Modular Classroom Summary	
Elementary Schools	**Modular Classrooms**
Bubb	9
Castro	19
Huff	7
Theuerkauf	4
Landels	10
Middle Schools	
Graham Middle School	12

[7] Modular classroom counts do not include portable rooms being utilized for other purposes, i.e. Libraries, Restrooms, Offices, Storage, Bookrooms, etc.

SECTION H: FUTURE FACILITY FUNDING

The Mountain View Whisman School District has undertaken this demographic study in order to assist in proactive planning for future facility needs for its student population. The District may need to provide additional school facilities to adequately house its future enrollments.

The cost of new and modernized school facilities will prompt the District to pursue several funding strategies. These strategies include developer fees, mitigation agreements, 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:

- Conduct a General Obligation Bond Election in order to assist in financing new facilities within the District.

- Continue to pursue State school funding for modernization and/or new construction.

- Continue to update and apply for Deferred Maintenance Funding projects.

- Explore Joint Use programs at the State School Facility Program as well as through State and Federal Programs.

- Meet with potential developers and outline the need for mitigation due to the students generated for the District.

- Continue to work with the City of Mountain View and other agencies throughout the planning process to secure full school facility mitigation for the construction of schools and/or acquisition of land.

- Continue the community awareness program so that constituents are aware of the facilities needs in the District.

- Review this study annually to determine if projected development and 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.

SECTION I: RECOMMENDED NEXT STEPS

The Board of Education, based on the current analysis herein and other information provided by staff, is recommended to prioritize facility needs in order for the consultant to complete this document. Steps in this process include:

1. Prioritize the list of current facility needs (modernization, expansion, additional ancillary facilities) at each site.
2. Project future needs for facilities based on student growth and educational program needs.

SECTION J: SOURCES

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