City of Mountain View 1992 General Plan

The Mountain View 1992 General Plan

City of Mountain View, California

A Comprehensive Revision of the 1982 Mountain View General Plan

Adopted October 29, 1992

Amended: _____

GENERAL PLAN TEXT AMENDMENTS

SINCE 1992

DATE	SUBJECT	RESOLUTION NO.
April 25, 1995	Child Care	15827
December 12, 1995	Residential Land Use Categories	15910
December 10, 2002	New Residential Neighborhoods Chapter	16766
March 24, 2009	Approving Amendment to the General Plan including a General Plan Land Use Map Amendment, to change five properties located at 100 Ferguson Drive, 364 Ferguson Drive, 420-430 Ferguson Drive, 438-454 Ferguson Drive and 500 Ferguson Drive from General Industrial to Medium-High Density Residential (26 to 35 dwelling units per acre) and a Text Amendment to the Medium-High Density Residential Land use Category	17393

CITY OF MOUNTAIN VIEW
RESOLUTION NO. 17393
SERIES 2009

A RESOLUTION APPROVING AN AMENDMENT TO THE GENERAL PLAN, INCLUDING A GENERAL PLAN LAND USE MAP AMENDMENT, TO CHANGE THE FIVE PROPERTIES LOCATED AT 100 FERGUSON DRIVE, 364 FERGUSON DRIVE, 420-430 FERGUSON DRIVE, 438-454 FERGUSON DRIVE AND 500 FERGUSON DRIVE FROM GENERAL INDUSTRIAL TO MEDIUM-HIGH DENSITY RESIDENTIAL (26 TO 35 DWELLING UNITS PER ACRE) AND A TEXT AMENDMENT TO THE MEDIUM-HIGH DENSITY RESIDENTIAL LAND USE CATEGORY

WHEREAS, on March 11, 2009, the Environmental Planning Commission held a duly noticed public hearing and thereafter forwarded its recommendations to the City Council that the General Plan Land Use Map be amended to change the area generally identified as 100 Ferguson Drive, 364 Ferguson Drive, 420-430 Ferguson Drive, 438-454 Ferguson Drive and 500 Ferguson Drive from General Industrial to Medium-High Density Residential (26 to 35 dwelling units per acre) and a text amendment to the Medium-High Density Residential land use category; and

WHEREAS, on March 24, 2009, having given notice as required by City Code Section A36.80.040, the City Council held a public hearing to consider adoption of said amendments to the General Plan; and

WHEREAS, the proposed amendment is internally consistent with the General Plan in that it places higher-density residential and mixed use near transit; increases recreational opportunities in the area with the provision of a public park; and promotes the opportunity to live and work in Mountain View. Consistent with the General Plan policies to encourage local businesses and promote a diversified economic base, the continued use, change in uses and building expansions allowed under Section 5.7 of the South Whisman Precise Plan for the existing commercial and industrial uses located at 364 Ferguson Drive and 438-454 Ferguson Drive shall be allowed under the Medium-High Density Residential (26 to 35 dwelling units per acre) General Plan Land Use Map designation of the Plan area; and

WHEREAS, the proposed amendment would not be detrimental to the public interest, health, safety, convenience or welfare of the City because it creates an opportunity to locate residential uses that are compatible with surrounding Whisman Station residential development; creates appropriate land use and height transitions from existing residential and industrial uses; creates a public street and circulation network within the development; and provides appropriate connections to the surrounding circulation network and creates buffers where necessary between adjacent industrial and residential uses; and

WHEREAS, the site is physically suitable for the requested/anticipated land use development(s) (including, but not limited to, access, provision of utilities, compatibility with adjoining land uses and absence of physical constraints) because the site has multiple points of vehicular access along Ferguson Drive which increases connectivity for autos, bikes and pedestrians with adjacent development by building a new public street network; places compatible residential land uses near the existing Whisman Station residential development; and creates buffers between industrial and residential uses; and

WHEREAS, the text revision to the Medium-High Density Residential land use category is appropriate because it clarifies the allowance of the commercial/industrial building expansion allowed under the Draft South Whisman Precise Plan; and

WHEREAS, the South Whisman Precise Plan Project Environmental Impact Report determined all of the environmental impacts associated with the General Plan amendments have been avoided or reduced to a less-than-significant level through the incorporation of mitigation measures into the project, with the exception of the significant unavoidable cumulative air quality and freeway traffic impacts for which a Statement of Overriding Consideration has been adopted;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View:

1. That Council hereby finds and determines that this General Plan amendment has been reviewed and approved by the City Council; and

2. That the General Plan Land Use Map is hereby amended to change that area generally identified as 100 Ferguson Drive, 364 Ferguson Drive, 420-430 Ferguson Drive, 438-454 Ferguson Drive and 500 Ferguson Drive from General Industrial to Medium-High Density Residential (26 to 35 dwelling units per acre), as shown on Exhibit A attached hereto, which shall be on file in the Office of the City Clerk; and

3. That the General Plan is hereby amended to revise the Medium-High Density Residential land use category as defined on Page 49 of the General Plan and as more particularly described below:

> "Medium-High Density Residential. This designation is intended for multiple-family housing that is consolidated to provide generous open space areas for common use. Apartments, condominiums and other similar types of uses are allowed in this category, as well as commercial and industrial uses as allowed under an applicable Precise Plan. The allowable density is 26 to 35 units per acre, and the resulting population is approximately 55 to 74 persons per acre."

TIME FOR JUDICIAL REVIEW

The time within which judicial review of this document must be sought is governed by California Code of Procedure Section 1094.6 as established by Resolution No. 13850 adopted by the City Council on August 9, 1983.

The foregoing Resolution was regularly introduced and adopted at a Special Meeting of the City Council of the City of Mountain View, duly held on the 24th day of March, 2009, by the following vote:

AYES:	Councilmembers Bryant, Inks, Kasperzak, Macias, Means, Siegel and Mayor Abe-Koga
NOES:	None
ABSENT:	None
NOT VOTING:	None

ATTEST:

ANGELITA M. SALVADOR
CITY CLERK

APPROVED:

MARGARET ABE-KOGA
MAYOR

I do hereby certify that the foregoing resolution was passed and adopted by the City Council of the City of Mountain View at a Special Meeting held on the 24th day of March, 2009, by the foregoing vote.

City Clerk
City of Mountain View

SW/8/RESO
818-03-24-09R-E-2^

CITY OF MOUNTAIN VIEW
RESOLUTION NO. 15827
SERIES 1995

A RESOLUTION APPROVING AN AMENDMENT TO THE GENERAL PLAN TEXT CONCERNING CHILD-CARE FACILITIES

WHEREAS, on December 7, 1994, the Environmental Planning Commission held a duly noticed public hearing and thereafter forwarded its recommendations to the City Council that the General Plan text be amended to include new policies and actions supporting child-care facilities in Mountain View; and

WHEREAS, on April 25, 1995, having given notice as required by City Code Section 36.45.2, the City Council held a public hearing to consider adoption of said amendment to the General Plan text; and

WHEREAS, child-care services are needed in Mountain View and the General Plan text amendments will help support and encourage child-care facilities; and

WHEREAS, as is more particularly described in the attached Negative Declaration, staff has determined that this project will not have a significant effect on the environment;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View:

1. Determination:

That the General Plan text is hereby amended as is more particularly described on Exhibit "A," attached hereto, which is incorporated by reference herein.

The foregoing Resolution was regularly introduced and adopted at an Adjourned Regular Meeting of the City Council of the City of Mountain View, duly held on the 25th day of April, 1995, by the following vote:

AYES:	Councilmembers Bonnell, Faravelli, Kleitman, Takahara, and Mayor Figueroa
NOES:	None
ABSENT:	Councilmember Freelen
NOT VOTING:	Councilmember Cochran

ATTEST:

KATHERINE B. KOLIOPOULOS
CITY CLERK

APPROVED:

PATRICIA FIGUEROA
MAYOR

I do hereby certify that the foregoing resolution was passed and adopted by the City Council of the City of Mountain View at an Adj. Reg. meeting held on the 25th day of April 1995 by the foregoing vote.

City Clerk
City of Mountain View

LL/RESO/860-1-19-95R

Exhibit "A"

General Plan Amendments Concerning Child Care Facilities

Section 1 The following actions are added under Policy 20 of the City of Mountain View General Plan to read as follows:

"**Action 20.d** Support measures to improve information between child care providers, neighbors, and parents seeking child-care services.

Action 20.e Coordinate educational programs and events that support child care providers, particularly family child care providers.

Action 20.f Streamline application procedures for child care centers and large family child care homes.

Action 20.g Reduce application fees for large family child care and child care centers."

Section 2 Policy 21.1 is added to the Mountain View General Plan to read as follows:

"**Policy 21.1** Encourage child care centers at schools, near major transportation routes, near transit hubs, and close to employment centers to reduce commute trips and improve air quality."

Section 3 The first sentence of the first paragraph under the "Child Care" section of the City of Mountain View General Plan (page 27) is amended to read as follows:

"Affordable and safe child care is a fundamental community need, essential for the healthy growth of children and a necessity for many families with employed parents."

CITY OF MOUNTAIN VIEW
RESOLUTION NO. 15910
SERIES 1995

A RESOLUTION APPROVING AN AMENDMENT
TO THE GENERAL PLAN RESIDENTIAL LAND USE CATEGORIES

WHEREAS, on July 5 and 19; August 2, 16 and 30; September 6 and 20; and October 3, 1995, the Environmental Planning Commission held duly noticed public hearings and thereafter forwarded its recommendations to the City Council that the General Plan text be amended to create a land use category called Medium Density Residential and to change the allowable densities and descriptions of the Medium-High Density Residential and the High Density Residential categories; and

WHEREAS, on October 31, November 28 and December 12, 1995, having given notice as required by City Code Section 36.45.2, the City Council held public hearings to consider adoption of said amendment to the General Plan text; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Mountain View:

1. Findings:

a. That the City Council of the City of Mountain View finds and determines that the proposed General Plan text amendments and the final Whisman Precise Plan Environmental Impact Report have been reviewed, and the final Environmental Impact Report is in accordance with State and City environmental impact guidelines and has been certified by the City Council. Mitigation measures set forth in the final Environmental Impact Report shall be enforced by the City of Mountain View.

b. The revision of the land use categories is appropriate because:

(1) The revisions divide two existing residential categories (Medium-High Density and High Density) into three categories (Medium Density, Medium-High Density and High Density) with each category covering a more narrow range of densities that more closely correlates with actual building types than was the case with two categories.

(2) The new Medium Density Residential category covers small-lot, single-family, townhouses, apartments and condominiums at 13 to 25 dwelling units per acre; the revised Medium-High Density Residential category covers only apartments and condominiums at 26 to 35 dwelling units per acre; and the High Density Residential covers apartments and condominiums close to transit, shopping and public facilities at an allowable density of 36 to 80 units per acre.

(3) When applied to specific sites, the designations will more clearly define which types of housing are appropriate.

2. Determination:

That the General Plan is hereby amended to revise the residential land use categories as defined on Page 48 of the General Plan and as more particularly described below:

(1) Definition of land uses and intensity.

Residential

Medium Density Residential. This designation is intended for small-lot, single-family, townhouses and multi-family housing that has open space areas for private and common use. The allowable density is 13 to 25 units per acre, and the resulting population is 27 to 53 persons per acre.

Medium-High Density Residential. This designation is intended for multiple-family housing that is consolidated to provide generous open space areas for common use. Apartments, condominiums and other similar types of uses are allowed in this category. The allowable density is 26 to 35 units per acre, and the resulting population is approximately 55 to 74 persons per acre.

High-Density Residential. This designation is intended for multiple-family housing that is close to transit, shopping and public facilities. Apartments, condominiums and similar types of residential uses are allowed in this category. The allowable density is 36 to 80 units per acre, and the resulting population is approximately 76 to 170 persons per acre.

The foregoing Resolution was regularly introduced and adopted at a Regular Meeting of the City Council of the City of Mountain View, duly held on the 12th day of December, 1995, by the following vote:

AYES: Councilmembers Bonnell, Cochran, Faravelli, Takahara, and Mayor Figueroa

NOES: Councilmember Kleitman

ABSENT: Councilmember Freelen

NOT VOTING: None

ATTEST:

KATHERINE B. KOLIOPOULOS
CITY CLERK

APPROVED:

PATRICIA FIGUEROA
MAYOR

I do hereby certify that the foregoing resolution was passed and adopted by the City Council of the City of Mountain View at a Regular meeting held on the 12th day of December 1995 by the foregoing vote.

City Clerk
City of Mountain View

LM/RESO
859-9-21-95R

City Council

James R. Cochran, Mayor
Dena K. Bonnell, Vice Mayor
Patricia Figueroa
Maryce Freelen
Robert Schatz
Norman Shaskey
Art Takahara

Environmental Planning Commission

Joseph Kleitman, Chair
Ralph Faravelli, Vice-Chair
Kent Lenhard
John Miller
Rhonda Scherber
Dan Schurz
Larry Wright

City Administration

Kevin Duggan, City Manager

General Plan Project Staff

Walter Cohen, Director of Planning and Community Development (1992)

Michael Percy, Principal Planner

Linda Lauzze, Senior Urban Planner

Lynnie Melena, Senior Urban Planner

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Introduction

Plan and Process

This is Mountain View's 1992 General Plan.

It builds on the efforts and visions of the past and states the aspirations for the future. Those efforts and visions have made Mountain View one of the most desirable mid-sized cities in the Bay Area. This General Plan, like those that came before it, identifies issues and trends that the community wishes to emphasize or change as Mountain View continues into the future.

The General Plan looks to the future, including projections for accommodating the growth of both housing and business, based on the most current available information. It is the City's framework for future decisions, especially for community development and preservation and environmental conservation until 2005. This framework is built on the Plan's Goals, Policies, and Actions, which provide a carefully balanced, internally consistent set of statements to guide the future policies of the community. Two basic premises of the General Plan are that growth can be directed to achieve beneficial ends, and the magnitude and location of growth is of direct concern to the residents, businesses, and taxpayers of the community.

The Plan document is a collective public memory about what the community is today and how the Plan's policies for the future were created.

The General Plan also entails a process, in both its development and its use over the next several years. It is expected to be changed as Mountain View continues to evolve. The Plan is general and flexible enough to allow for future change, but specific enough to inform residents and decision-makers of the City's policies on the future use of individual properties.

Most of the Actions in this General Plan continue programs that are already in effect, but new Actions are also proposed. Some of the new Actions will require a significant amount of public and private money to carry out. Cost was considered when this Plan's Actions were developed and should continue to be considered as decisions are made to put them into effect. Some Actions included here are investments that need to be made to increase the potential for future revenue. At the time this General Plan was prepared, the City, like many governmental agencies, expects a slower rate of growth in revenues and more restricted spending than during the 1980s. This emphasizes the importance of assisting the decision-makers as they set priorities among programs by giving them a firm decision-making foundation through a well-thought-out General Plan.

Mountain View in the Region

Mountain View is located at the southern end of the San Francisco Peninsula, where the Peninsula joins the Santa Clara Valley (Figure 1.) This key location is the place

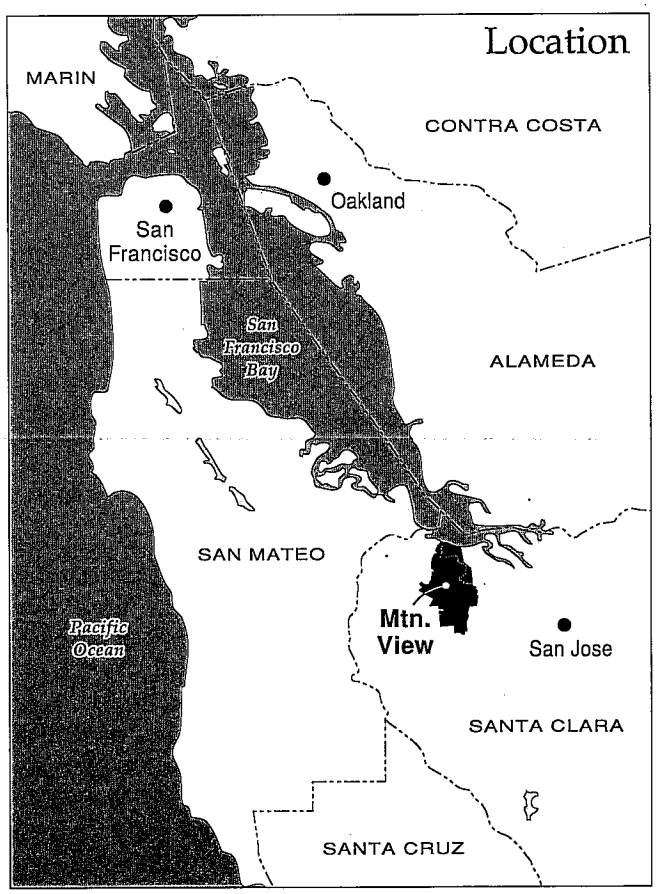


Figure 1. Mountain View's Regional Location.

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 lines 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. This regional context is important because Mountain View affects and is affected by what happens in neighboring cities and throughout the Bay Area. Mountain View's place in the region emphasizes the need to both enhance our identity as a separate place from our neighbors while participating in the continuing evolution of the region.

Major Themes

Three basic themes are woven throughout the 1992 General Plan:

- celebration of the community as it is now;
- diversity of opportunities, past and present; and
- the evolution of the community, building on accomplishments while consciously preparing for the future.

Celebration. The 1992 General Plan starts with the premise that Mountain View is a great place to be. Mountain View is a full-service city that offers choices of housing types, business opportunities, and employment. The city can accommodate people of many lifestyles, ages, and achievements. The development permitted by past General Plans has created a community that people and businesses are proud to call home. Pride of place is witnessed by the new City Hall and Center for the Performing Arts, the revitalized Downtown, the investment in Shoreline, the large amount of public participation in community activities and events, and in the broad-based effort by residents and businesses to bring Light Rail to Mountain View.

Diversity. Mountain View's diversity provides a richer environment for its residents than many other cities. It is possible for people to be born here, begin their own households, raise a family, and retire, all without having to separate themselves from the community. This same richness and strength of diversity is present in Mountain View's business and industry. Mountain View has one of the most active downtowns in the county, as well as being home to "mom and pop" neighborhood stores and major, regional retailers. Industries range from Fortune 500 corporations to one-person shops that may be the next generation of high-technology industry.

Evolution. A city evolves as some buildings are changed to different uses or are replaced by new structures better suited to the needs of the time. Conditions also evolve as Mountain View's relation to the region changes. The City is working with regional agencies such as the Association of Bay Area Governments to address regional concerns and develop solutions that respect Mountain View's character. This General Plan contains many Policies and Actions to maintain and enhance the present environment as well as to guide the city's future development and preservation. Inherent in evolution is that not everything is known; problems and opportunities will arise that are not envisioned by this General Plan. But the Plan is a foundation of thought and policy that will help Mountain View deal with these new issues.

Specific Visions

Within these three major themes, the 1992 General Plan establishes several specific visions for the future. These concepts weave their way throughout the General Plan, but each of the four main Chapters—Community Development, Circulation, Residential Neighborhoods, and Environmental Management—has a separate focus and most completely presents Goals, Policies, and Actions related to its own topic. A recap of these visions follows.

Community Development Chapter

- Mountain View is a "third-generation city." It has grown through the agricultural and build-out stages and is now entering the renewal and redevelopment phase of its history.
- The mix of land uses in the city is well balanced, with a full range of opportunities for its residents and businesses.
- New development is important to respond to changing needs of the community. New development must be carefully located to fit the rest of the community so that the benefits of new vitality do not come at the expense of existing quality.
- It is important to achieve and maintain good urban design as an important aspect of Mountain View's character. Urban design is concerned with the appearance and function of each of the parts of the city. It also concerns the overall visual character of the city and how Mountain View can retain its distinct identity as Bay Area cities grow physically together. It will become more important as time goes on and there are fewer new development opportunities and fewer new buildings to enhance or change the existing visual character.
- Mountain View is a key part of the San Francisco Bay Area. It is the fourth largest city in Santa Clara County

and is the meeting point of the San Francisco Peninsula and the Santa Clara Valley. Mountain View will be affected by regional decisions, so the City should participate in those decisions to shape them to fit Mountain View.

Circulation Chapter

- The roadway system of the city is essentially complete; no new roads are likely to be built. Future improvements will be limited to modest road widenings, intersection and interchange improvements, and completing unimproved edges of existing streets.
- Light Rail Transit will be extended to Mountain View about midway through the projected lifespan of this General Plan. It will make travel easier for people who live or work here and can open opportunities for growth while maintaining the community's character.
- Greater emphasis should be given to using the transportation system more efficiently, both through improving relationships between land uses and transportation and by focusing on alternatives to people driving alone, including people walking or biking instead of driving, especially during heavy traffic periods.

Residential Neighborhoods Chapter

- Mountain View's housing stock generally satisfies the housing needs of the community. Additional units, at all prices, are needed to meet the demand created by Mountain View's supply of jobs.
- Additional housing can be accommodated by developing land that is now zoned for housing but is vacant, and by limited redevelopment of lands now used for other purposes.
- Innovation will continue to be needed to provide housing for groups of people that need special help—the elderly, the handicapped, the homeless, and young families now priced out of the housing market. Mountain View will continue to do its fair share to address this regional problem.

Environmental Management Chapter

- Mountain View has a good record of environmental management, both in preserving and restoring natural areas in an urbanized area and in protecting the community from environmental hazards.
- Open space initiatives focus on linking parks and recreational facilities with urban trails along Stevens Creek and the Hetch Hetchy right of way.
- Regional efforts to address problems such as storage of hazardous materials, linkage between transportation and land use, and air and water quality control will continue to be important and will need Mountain View's involvement.
- Mountain View will continue its high-quality public safety programs to reduce the risk to people and property from fire, floods, crime, and other hazards.

The following sections explain in more detail what the General Plan is, how it is organized, and how it is used and modified to keep it an active vision of the community.

WHAT IS A GENERAL PLAN?

A general plan looks at the community and the region and at the issues and trends of today. It describes how the community wants to address those issues and trends now and in the future. The Plan includes the mandated elements of Government Code Section 65302 as they apply to the local conditions. (See table, page 9)

The Mountain View General Plan is a comprehensive, long-range, and internally consistent statement of Mountain View's development and preservation policies. The Plan is comprehensive; it addresses all geographic areas of the city and interrelationships of social, financial, environmental, and physical elements to produce one community. The Plan is long range; it looks 10, 15, and 20 years into the future, allowing Mountain View to focus on the big picture and the broad trends that shape it fundamentally. The Plan is internally consistent; each Goal, Policy, and Action is integrated with each other within the same topic and checked against the Goals, Policies, and Actions of other topics.

Mountain View has managed its part of the economic growth of the Bay Area by making choices about what and how to develop, rather than just reacting to circumstances. The General Plan is the primary tool for managing that growth. It represents an agreement among the residents of Mountain View on basic community values, ideals, and aspirations to govern a shared environment.

ORGANIZATION OF THE PLAN

The Mountain View General Plan is organized into four chapters covering all the elements required by State law. Each chapter consists of text, diagrams, and other illustrations. The text explains the issues and discusses them, then states Goals, Policies, and Actions. The seven mandated elements are land use, circulation, housing, open space, conservation, noise, and safety. The organization into four broad subject areas makes it easy to recognize the interrelationships among issues, and among the Actions needed to address the problems facing the City. The table at the end of this Introduction shows where each

State general plan requirement is located within these four chapters. In addition to mandated topics, Mountain View has selected five optional subjects. They are urban design, economics, hazardous materials, air quality, and congestion management.

Legal Requirements

State law requires cities to prepare general plans. The general plan derives its authority as the summit of land use regulations from the California Government Code. The City Council adopts the General Plan by ordinance as a legal document. Mountain View's General Plan is more than a document prepared to satisfy a law; it is the major tool the community uses to consider and shape its future. Regulations, such as zoning, that are not consistent with the Plan must be amended to ensure compatibility. That amendment process will occur over time, as expeditiously as possible given limited resources.

The General Plan is to be used as a whole. One section is not to be used at the expense of others, but all of them should be used together, with flexibility. Used in this way, the General Plan becomes a powerful tool for ensuring consistency of City actions, while remaining responsive to the changing needs of the times. When optional subjects are added to a general plan, they have the same status as a mandated element, and no single chapter or subject supersedes any other.

State law permits the City to plan for areas outside its immediate jurisdiction if those areas relate directly to the City's planning needs. The Mountain View General Plan includes all the land in its sphere of influence. The sphere of influence is all the land within the city now, plus land that may someday become part of Mountain View through annexation. It includes NASA/Ames Research Center, half of Moffett Field, and two small unincorporated areas—the Navy housing at Moffett Boulevard and Middlefield Road and an agricultural property at Grant Road and Levin Avenue. These sphere of influence boundaries contain the maximum possible land area of the city, with all boundaries established by agreements with adjacent cities.

Maps and Diagrams

The City's Land Use Map, which is attached separately at the back of this document, is an integral part of the General Plan. The map graphically expresses the Plan's development policies by showing the desired arrangement and location of land uses. The map is required to be consistent with the General Plan text under California Government Code Section 65302. To be useful to City officials, staff, and the public, the Land Use Map must allow anyone who uses the Plan to reach the same conclusion about the designated use of any property covered by the Plan.

Mountain View decided to prepare a site-specific Land Use Map. This map designates the type of land use permitted on each property covered by the Plan. The boundaries between land use districts clearly follow property lines or street lines. The Map and text together specify the number of people and dwelling units per net acre of land for each property planned for residences and the building intensity for all other proposed development. This building intensity is expressed in terms of a floor area ratio, which is the gross floor area permitted on a site divided by the total net land area of the lot. Other pertinent features of the Land Use Map include the location of existing and proposed parks, public schools, and other public services, such as fire stations.

General plans also must contain a circulation element. This element shows the location and extent of existing and proposed thoroughfares, transportation routes, terminals, and other local public utilities and facilities, and correlates them with the land use element. Maps are needed to show location. Mountain View's General Plan circulation maps show current and proposed arterials, collector streets, local streets or other roadways, as well as bikeways and rail lines. This roadway system has been tested against the planned level of development proposed in this Plan and has been found to be adequate. There is more discussion of the relationship between land use and circulation in the Circulation Chapter.

Together, the Land Use Map and circulation maps graphically show the managed growth of the city for the next 15 years. The General Plan contains other maps and diagrams that show various features of Mountain View and help illustrate the Policies and Actions of the General Plan.

Plan Content

The **Introduction** includes:

- summaries of the major themes of the entire Plan and of each chapter;
- brief explanations of the nature and purpose of general plans and the legal requirements for general plans in California;
- a description of the process used in preparing the Mountain View General Plan;
- information about maintaining the General Plan over time through administration and amendment; and
- a table (Figure 2) that shows where each of the State-mandated elements may be found in this Plan.

The **Community Development Chapter** contains:

- descriptions of the current and planned land uses in Mountain View, allowable development densities and intensities, and interrelationships among uses;
- discussion of urban design—the visual aspects of Mountain View's development;
- descriptions of Mountain View's relationship to the region;
- consideration of the links between land use and transportation; and
- an evaluation of the economics of land use, including the concept of guiding comprehensive change in special areas of the city while preserving and protecting the character of the city by retaining certain areas free of change.

The **Circulation Chapter** evaluates:

- the facilities and methods for transporting goods and services;
- the interrelationship of land use and transportation;
- Level of Service standards for roadways;
- ways of managing transportation demand;
- alternatives methods of transportation including rail, buses, bicycling, and walking;
- policies related to transportation and the environment;
- transportation of the mobility impaired; and
- transportation funding.

The **Residential Neighborhoods Chapter** contains:

- recognition that Mountain View is, in large part, the sum of its neighborhoods;
- a condensation of the State-mandated Housing Element adopted October 16, 1990;
- a discussion of the housing problems in the community, including the need for additional housing units, the high price of housing, the shortage of housing for special groups, and the need for housing those who have no homes;
- recognition that Mountain View residents are generally satisfied with their housing and neighborhoods;
- a discussion of how neighborhoods can be physically maintained and enhanced; and
- policies regarding how neighbors can group together to interact effectively, strengthen their own neighborhood identity, and deal with problems without outside intervention.

The **Environmental Management Chapter** contains four of the State-required elements; open space, conservation of resources, safety, and noise. This Chapter includes:

- a continued commitment to compatible blending of development with open spaces and recreational areas;
- a major new proposal for a system of urban trails;
- sections on cultural arts and conservation of historic areas, natural habitats, and open spaces;
- balancing development with water supply and quality;
- evaluation of air quality issues;
- policies for retaining historic and visual resources;
- programs for dealing with solid and hazardous waste;
- energy conservation policies;
- reinforcement of the importance of public safety, both ongoing and in response to disasters; and
- a discussion of programs to deal with noise.

Goals, Policies, and Actions

The heart of the General Plan is the set of integrated and internally consistent Goals, Policies, and Actions in each chapter. Goals are long range; they state finished conditions—the community's vision of what should be done and where. Policies and Actions are short to intermediate range. Policies state the City's clear commitment on how these Goals will be achieved. Actions carry out the Policies and are specific, such as defining land areas to be rezoned or bicycle lanes to be added. Together, Policies and Actions establish who will carry out the activities needed to meet the Goals as well as how and when the Goals will be met. Policies and Actions guide day-to-day decision-making so there is continuing progress toward the attainment of Goals. Some Policies and Actions may need to be re-examined and revised during the course of the Plan. While not changing the basic desirability of the Goals, Policies, and Actions in the long term, they will be carried out when suitable resources are available. The terms "Goals," "Policies," and "Actions" are defined below, in the numbering system and type-face used in the Plan.

GOAL **A** — **A general, overall, and ultimate purpose, aim, or end toward which the City will direct effort.**

Policy 1. **A specific statement of principle or of guiding actions. A general direction that the City elects to follow, in order to meet its Goals.**

Action 1.a An action, activity, or strategy carried out in response to adopted Policy to achieve a specific Goal.

In most cases, the General Plan text is arranged with explanations and information leading into the statements of Goals, Policies, and Actions. Some Policies and Actions require further explanation to make their intent clearer or to set down details to make sure that Actions are taken appropriately and in a timely manner. In such cases, explanatory language immediately follows the Policy or Action.

Technical Appendix

The Technical Appendix, a separate document, begins with a glossary. The glossary assists the reader in understanding planning terms, and helps avoid misinterpretations. The glossary will also be printed separately for easy reference. Terms critical to understanding the text are also defined in the body of the Plan.

The Technical Appendix also contains background material used in preparing the General Plan. Those who use the technical data in the General Plan text and in the Technical Appendix should keep in mind that projections are not inevitable outcomes. They are calculations of a future condition if the assumptions of today remain valid in the future. Changes in the trends or assumptions that led to the projections are one of the reasons why the General Plan should be reviewed annually and revised as needed. The Background Reports for the 1992 General Plan consist of:

Community Development Chapter

Report on Housing and Employment

Land Use Background Report

Economics and Land Use

Urban Design

Potential New Residential Areas

Circulation Chapter

Traffic, Roads, and Commuting Survey Results

Existing Conditions Report

Future Conditions Report (report on four land use and transportation traffic modeling scenarios)

Residential Neighborhoods Chapter

Housing Survey Results

1990 Housing Element

Negative Declaration of Environmental Impact

Environmental Management Chapter

Environmental Management Questionnaire Results

Open Space Background Report

Conservation of Resources Background Report

Noise Background Report

Safety Background Report

General Plan Environmental Impact Report (EIR)

The General Plan EIR is a particularly significant document. It is a complete assessment of the city's environmental conditions. The General Plan EIR is a program-level environmental assessment; that means that it examines the general nature of environmental impacts that could occur as the General Plan Goals, Policies, and Actions are put into effect. This program-level EIR helps determine the type and extent of the environmental concerns that will need to be examined in depth when the City is considering specific proposals.

Preparing one broad level of environmental review for the General Plan and then later preparing a more detailed and focused level of environmental study for specific projects or properties is called tiering. Subsequent tiers, or levels, of environmental analysis will refer to the discussion of environmental issues in the General Plan EIR to clarify which issues are significant for a particular area of the city or a particular type of use. The General Plan EIR tier also identifies those issues that may be significant and need to be studied in depth when more specific projects are being considered, allowing a more efficient study of the issues of greatest concern. As environmental assessments are done on specific projects, information will be added to the environmental record, updating and refining the City's environmental information base.

The Technical Appendix, while important to a thorough understanding of the General Plan process, is not adopted as Policy by the City, and it is not essential to the day-to-day use and implementation of the Plan. The EIR is certified by the City Council as an adequate assessment of environmental issues, but is not adopted as a policy document. For those reasons, the information is bound separately from the adopted Plan. Anyone wishing to review the Technical Appendix may do so at the Planning Department in City Hall or at the Mountain View Public Library.

THE GENERAL PLAN PROCESS

In 1988, the City decided to update its General Plan to give residents, public decision-makers, and private developers clearer and more effective policy guidance. The

four-year planning process to prepare the Plan began in November 1988, and ended when the new plan was adopted October 29, 1992. Highlights of that process include:

- Key community issues were identified at a public workshop attended by about 100 residents and business representatives.
- Detailed background reports were prepared on land use, environmental resources, and circulation, analyzing these issues and proposing possible solutions. The analysis of housing issues is incorporated in the adopted Housing Element, which serves as a background report for the Residential Neighborhoods Chapter.
- 60 public-comment meetings were held by the Environmental Planning Commission. Notices of the meetings for each chapter were placed in the news media, and letters were sent to individuals or groups that had expressed interest in that chapter or topic.
- Five public hearings were held by the Environmental Planning Commission and one hearing was held by the City Council certifying the General Plan Environmental Impact Report and adopting the General Plan.

The result of this effort is a new General Plan built upon the ideas of Mountain View's residents.

This is Mountain View's fifth General Plan since the city was incorporated in 1902. Here are the highlights of those General Plans.

1946 - The first General Plan focused on the shift from an agricultural community to a small town with housing, commerce, and industry. The city's size was about three-quarters of a square mile.

1958 - The second Plan dealt with the booming industrial growth of Mountain View and the Santa Clara Valley, and the accompanying growth in housing for the employees of Valley industries. The city covered about eleven-and-a-half square miles.

1968 - The third Plan envisioned substantial new residential development in the North Bayshore. Largely because of that development, Mountain View was projected to have around 120,000 people and a balance of housing and employment.

1982 - The fourth Plan discussed the future of Mountain View as a mature city, where all vacant land is developed. It also acknowledged local environmental issues and reduced the projections of future population to about 90,000. It accepted that housing and employment would not be balanced locally, but needed to be addressed regionally.

The 1982 General Plan focussed on how critically important the development of the last remaining vacant parcels would be in setting the tone for the future and for improving land use balances. Key areas for development discussed in the 1982 Plan included the North Bayshore, Downtown, and El Camino Real. The Plan noted that most of the future development would occur on infill sites, and that redevelopment and renewal would become increasingly important. Infill sites are vacant sites surrounded by development. That Plan also addressed completing or improving many portions of the City's infrastructure—the roads, the sewer and water system, parks, and public buildings.

The 1982 General Plan established what Mountain View should be as it matures: a full-service city with a strong historical heart, good balance among all land uses, and well-designed public services and facilities.

The list of accomplishments of the 1982 General Plan is long. The background reports for the 1992 General Plan list these successes in detail, and each chapter of this General Plan begins with a few examples of the accomplishments related to that chapter. It is important to acknowledge the achievements of the past. This General Plan, like all the others before it, builds on the General Plans and the community development that preceded it. Each new plan is part of the city's growth. They change to meet the needs and desires of the present as the city looks to the future. The 1992 General Plan emphasizes this evolutionary process, and acknowledges that the community will need to continue to change to remain a vital, attractive place for both residents and businesses.

ADMINISTERING THE GENERAL PLAN

State law defines how cities should maintain their Plan as a contemporary policy guide. The California Government Code requires each planning department to report annually to the City Council on "the status of the plan and progress in its implementation" (§65400 [b]). That report must include the City's progress in meeting its "fair share of its regional housing needs." The report must be sent to the City Council, and to the California Department of Housing and Community Development no later than 30 days after the report has gone to the City Council.

In addition, the City should comprehensively review the Plan every five years to determine whether it is still in step with community values and conditions. The Housing Element has a set schedule for review; Northern California cities will next update their Housing Elements for adoption by July 1995. It is intended that the General

Plan status be reviewed in the Fall of each year by the Environmental Planning Commission and by the City Council. General Plan amendments will be encouraged in conjunction with this review, although amendments may be accepted at other times of the year.

Amending the Plan. While the General Plan is intended to supply long-range and flexible policy direction, it also needs to give clear, specific information about the use of property, public improvements, transportation linkages, and the environment, now and in the future. This requires the General Plan to be fairly specific; for example, the Land Use Map clearly defines allowable land uses for each parcel of land in Mountain View. As needs in the community change, the General Plan will have to be amended to reflect current City policy direction accurately and to continue to provide clear information to land owners, users, and decision-makers.

California permits up to four General Plan amendments per mandatory element per year (Government Code §65358[b]). Most amendments propose a change in the land use designation of a particular property. However, amendments to any part of the text, Goals, Policies, or Actions to respond to changing needs or accomplishments are also appropriate.

Amendments to the General Plan may be initiated by the Environmental Planning Commission, City staff, City Council, or the general public. Detailed information on the procedure and timing for amendments is available from the Department of Planning and Community Development. All amendments require application to the City and public hearings by the Environmental Planning Commission and City Council. Environmental review in accordance with the provisions of the California Environmental Quality Act also will be required for every General Plan amendment.

Any decision on a General Plan amendment should be supported by findings of fact. These findings are the rationale for making a decision either to approve or deny a project. While specific findings may be applied on a project-by-project basis, at least the following standard findings should be made for each General Plan amendment:

1. The proposed amendment is in the public interest.
2. The proposed amendment is consistent and compatible with the rest of the General Plan.
3. The potential effects of the proposed amendment have been evaluated and have been determined not to be detrimental to the public health, safety, or welfare.
4. The proposed amendment has been processed in accordance with the applicable provisions of the California Government Code and the California Environmental Quality Act.

The 1992 Mountain View General Plan was recommended for approval by the Environmental Planning Commission on July 1, 1992, and was adopted by the City Council on October 29, 1992. The most current, official copy of the Land Use Map is on display at the Department of Planning and Community Development. A list of amendments and revised text reflecting those amendments and copies of the entire General Plan are available at the Planning Department and may also be reviewed at the Mountain View Library.

Mandated Elements	Pages
LAND USE ELEMENT	
Distribution of Housing, Business, and Industry	12–16, 84
Distribution of Agricultural Lands and Open Space	106–109, 123–125
Population Density and Building Intensity	48–50
Land Use Map	Pocket
Distribution of Recreation Facilities, Educational Facilities, and Public Buildings	24–28, 108–115
Flood Areas	130–132
Solid and Liquid Waste Facilities	120–122
Implementation	17–50
CIRCULATION ELEMENT	
Description of Existing System	58–76
Maps of Existing and Proposed Systems	59, 61, 65, 68, 71
Description of Proposed System	58–74
Utilities	112, 117–120, 127
Implementation	53–77, 117–119, 127
HOUSING ELEMENT—Condensed	
Potential Housing	36–38, 81–87
Map of Housing Sites	38
Governmental Constraints	97–99
Non-Governmental Constraints	99–100
Energy Conservation	100, 127
Quantified Objectives	81
Implementation	81–100
Public Participation	6–7
Progress on Housing Programs	79

Mandated Elements	Pages
CONSERVATION ELEMENT	
Forests, Rivers, and Wildlife	111–113, 116, 123–125
Water	117–120
Soils	122–123
Flood Control	130–132
Archaeological Resources	126–127
Air Quality	116
OPEN SPACE ELEMENT	
Description	106–109
Ground Water Recharge	118
Agricultural Lands	123
Scenic, Historic, and Cultural Values	21–25, 114–115, 126–127
Trails, Links, and Park and Recreation Access	111–113
Implementation	110–115, 125–126
SAFETY ELEMENT	
Seismic and Geologic Hazards	128–130
Slope Instability	Not Applicable
Flooding	130–132
Fire Hazards and Peak Water Supply	119, 133–134
Emergency Response and Evacuation	132–134
Hazardous Materials	134–135
NOISE ELEMENT	
Noise Sources	137–139
Extent of Noise Problems in Community	137–139
Noise Contours	139
Implementation	138–141

Figure 2. Relation of General Plan Chapters to State-Mandated Elements.

Community Development Chapter

Community Development Chapter

INTRODUCTION

Mountain View has a vitality that shows in its neighborhoods, businesses, and the quality of life of its people. It is a city with distinct districts, each with its own character. Mountain View is a community of strong contrasts: expansive natural wetlands by the Bay and the lively streetscape Downtown; traditional suburban neighborhoods, new apartments, and neighborhoods with a little of everything; buildings that are memories of the past, and buildings that are sleek visions of the future. This Chapter seeks to protect and enhance the best qualities of these districts and the quality of life in the community.

Mountain View is a complete and almost fully developed city. The community has maintained a small-town feel, with a pedestrian-oriented Downtown and quiet neighborhoods. There is also a cosmopolitan quality in the built environment and the varied origins of businesses and city residents.

Although largely built-out, the city is still evolving. Decisions the City makes today can dramatically change the way Mountain View looks, feels, and functions in the future. The Community Development Chapter of the General Plan exerts a strong influence on how the city will grow. The Land Use Map and the Goals, Policies, and Actions in this chapter will determine the location, intensity, and design of new development and will influence the quality of life and the economic health of the city.

The Community Development Chapter addresses three main issues: land use, community design, and economic well-being. It also ties together the other chapters of the General Plan. Many subjects reviewed here are discussed in greater detail in the Residential Neighborhoods, Circulation, and Environmental Management Chapters.

- **Land Use.** Land use policies and the Land Use Map affect every property in the city. They determine how people can develop their land, whether they can build a high-rise office building or a single-family house. They provide for the overall consistency and compatibility of land uses and orchestrate the quality of life in the city. Land use policies also affect the location and amount of traffic, impact adjoining cities, and have consequences for the entire region.

- **Community Design.** Community design is concerned with the location, building mass, design, and interrelationship of the different parts of the city, so that the physical environment is attractive and functional. Good design is good for everyone; it invigorates and uplifts people. While land use policies establish the balance of land uses in the city, community design policies are essential for bringing a human quality to the built environment.

- **Economic Well-being.** Good community design and effective land use policies depend on the economic health of the city and vice versa. Economics is now playing a more direct role in land use decisions because there is a better appreciation for ways the public and private sectors can work together.

Accomplishments

The 1982 General Plan emphasized Goals and Policies to refine land use patterns, increase the opportunities for building more housing, revitalize Downtown, upgrade public facilities, and improve community design. The community has succeeded in these Goals. Here are the major accomplishments listed under the related Goal or Policy from the 1982 General Plan, shown in italics.

Foster use of a range of densities for residential neighborhoods while protecting existing neighborhood character.

- The City adopted Design Guidelines for Townhouse Development and new design standards for single-family homes. It completed a Downtown Neighborhood Preservation and Improvement Plan.

- Mountain View enjoys the widest range of housing densities in Santa Clara County. Since 1982, the City has increased the potential housing supply by 5,683 units through Zoning Ordinance amendments, rezonings, and precise plans.

Continue and expand the Revitalization Program Downtown.

- The Downtown Precise Plan charted a new course for the revitalization of Downtown. Since adoption of the

Plan, more than $60 million in public improvements and $125 million in private improvements have been completed Downtown, resulting in a successful public and private partnership in revitalization. There is now ample parking Downtown, paid for by fees assessed on private development and by maintenance fees paid by property owners.

Foster improvement and limited addition to the Downtown civic center facilities as needed.

- The City built a dramatic new Civic Center, which includes City Hall, a Center for the Performing Arts, and outdoor public spaces. The Civic Center reemphasizes Downtown as the center of business, cultural, and social activities. Its architecture sets a standard of excellence for private development throughout Mountain View.

Protect and enhance the existing scale and architectural character of the community, particularly its residential neighborhoods, but allow and encourage changes that are a positive contribution to the urban design of the city.

- The City encourages high-quality development specially tailored to the neighborhood or district through precise plans, special zoning districts, and design review by the Site Plan and Architectural Review Committee and the Zoning Administrator.

- Along El Camino Real, the City installed attractive landscaping, lowered the allowable building height, and established the C3 zoning district, which requires upgrading of development over time.

Seek to establish and upgrade local commercial centers and enhance their relationships to surrounding neighborhoods.

- Many of the city's neighborhood shopping centers have been remodeled and upgraded, and substantial improvements have been made to other centers, from small strip commercial to the San Antonio regional shopping center.

Continue to ensure the high quality of new office and industrial site and building design and pursue upgrading of older developments.

- The North Bayshore industrial park is one of the premier office and research parks in Santa Clara County. Older industrial areas, such as The Fountains on East Middlefield Road, have been privately and successfully redeveloped.

BACKGROUND FOR PLANNING

Mountain View has a diverse population of residents and a large daytime working population. Almost all of Mountain View is fully developed and surrounded by other cities. Growth will occur by development of small parcels of vacant land and by redevelopment. As a result, most City services needed to accommodate future growth are already in place.

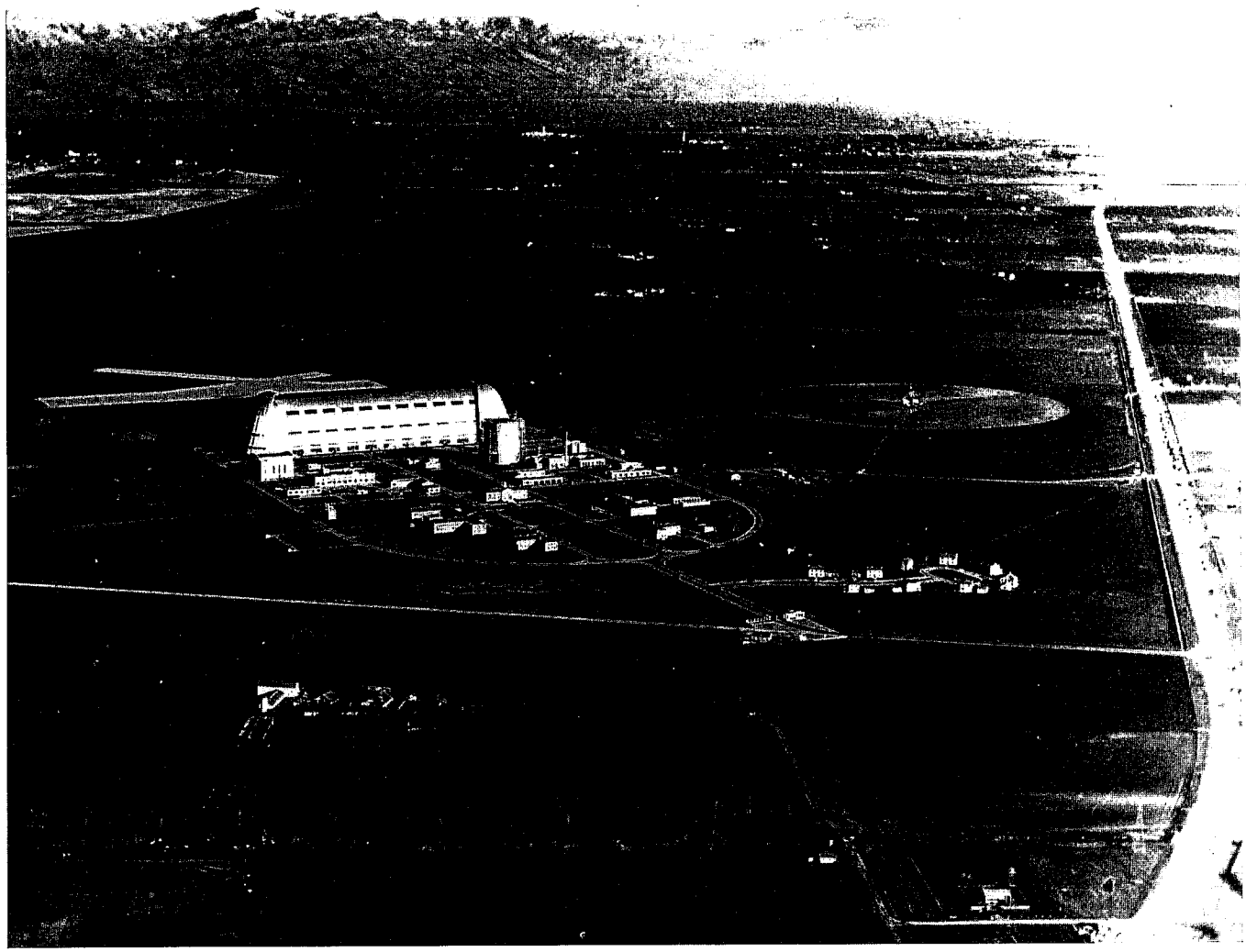
History of Development

Like other cities in Santa Clara Valley, Mountain View started as an agricultural community with a compact business and residential core surrounded by scattered farmhouses, fields, and orchards. The community's growing sense of identity led to incorporation in 1904.

The pace of development changed rapidly after 1950. The population grew from under 10,000 residents in 1950 to almost 50,000 in 1965—40,000 new residents in 15 years. This growth changed Mountain View from an agricultural community to a complete city with homes, commerce, and industry. People were drawn by the city's many attributes: the dry, mild Mediterranean climate; the views of the mountains; the beauty of San Francisco Bay; the proximity to San Francisco and the ocean; and the strong economy.

Housing was added to the original housing Downtown starting with small single-family tracts north of Central Expressway and continuing south of El Camino Real with newer and larger subdivisions. Many new apartments were built in the 1960s and 1970s around the center of the city and close to employment. Regional shopping centers, such as Mayfield Mall and San Antonio Center, opened on the city's west side, to provide goods and services to the growing population.

Mountain View has been an incubator for high-technology industries since the 1950s, anchored by Moffett Naval Air Station and the National Aeronautics and Space Administration (NASA). Early electronics pioneers met at Walker's Wagon Wheel on the corner of Whisman and Middlefield Roads. Many of the first electronics industries and integrated-chip manufacturers settled in the northeastern part of Mountain View near Moffett Field in the Ellis-Middlefield industrial area. Other industrial districts followed, including the newest industrial park north of Bayshore Freeway.



Moffett Field as it appeared in the early 1930s.

By the mid-1980s, the city had completed its post-World War II development. The pattern of development in Mountain View had been set: industrial districts in the north; older single-family houses, apartments, and a traditional downtown in the middle section; commercial development along El Camino Real and San Antonio Road; and large single-family neighborhoods and the El Camino Hospital complex south of El Camino Real.

The Residential and Working Populations

The way land is used—the type and amount of homes and businesses—affects the residential and working populations. Both populations have grown larger and changed in composition over the past 30 years because of land use decisions and changing socio-economic trends.

Mountain View Residents. Mountain View's population grew 15 percent from 1980 to 1990 and is expected to grow by 9 percent between 1990 and 2005. Since 1960, the population has also become more culturally diverse. Mountain View tends to have small households, which is why it can have one of the lowest median household incomes in the county but one of the highest median incomes per person. Household size has been decreasing in Mountain View, as in most cities in Santa Clara County. The Association of Bay Area Governments predicts that the city's average household size will be only 2.11 persons per household by 2005 compared to 2.14 in 1990.

Mountain View has the smallest median household size in Santa Clara County. The different types of households are shown in Figure 1. The high percentage of people

who live alone is at least partly explained by the large number of apartments. More than half of Mountain View's housing units, 53.4 percent, are in multiple-family buildings with five or more units. Renters occupy about 63 percent of the city's housing units, while owners live in 37 percent of the units.

Mountain View and Palo Alto are the two Santa Clara County cities with the lowest percentage of population under 18 years of age. The age of city residents also reflects the high number of smaller rental units.

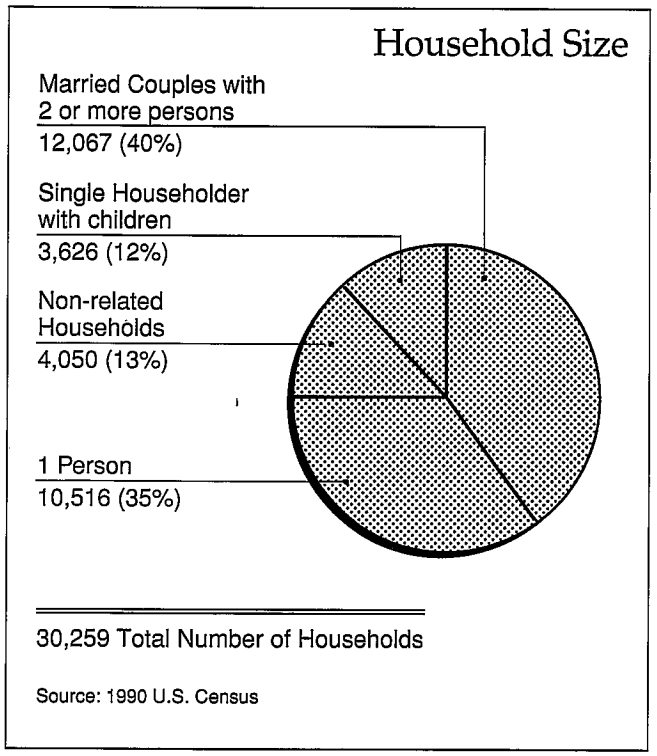


Figure 1. Household Size.

The Working Community. More people work in Mountain View than live here. In 1990, the city had a residential population of 67,460 and a daily work force of 68,040. The working population has a significant effect on the city, supporting local businesses and adding to Mountain View's social and cultural vitality.

The number of jobs in Mountain View is expected to increase significantly by 2005, but the proportion of workers employed in different occupations is expected to hold fairly steady. (See Figure 2.) Manufacturing is, and is projected to remain, the largest employment sector, while the service sector is expecting the most growth. Housing is often too expensive here for service-sector employees and other moderately paid workers, so it may be much harder to fill service jobs. Mountain View's large supply of affordable housing puts it in a better position than many cities to house a broad spectrum of workers. The Residential Neighborhoods Chapter lists Policies and Actions that are meant to ensure a continuing supply of adequate affordable housing.

The Mountain View Planning Area

Mountain View is small and compact. As of April 1990, there were 6,400 acres in the planning area, exclusive of streets and roads. The city covers about five-and-a-half miles from north to south from the edge of the Bay to the Los Altos city limits, and about three miles from the eastern to western city limits. Mountain View's sphere of influence boundary, which defines the ultimate limits of the city, extends another two miles north into the Bay. Part of the Bay is used for producing salt. Any further commercial use of the Bay has been discouraged. The city's sphere of influence also includes NASA/Ames and half of Moffett Naval Air Station.

Employment

	1980		1990		2005	
Employment Sector	**Jobs**	**Percent**	**Jobs**	**Percent**	**Jobs**	**Percent**
Agriculture	923	1.6	930	1.4	720	0.9
Mfg. and Wholesale	23,774	40.1	25,530	37.5	30,260	38.1
Retail	7,315	12.3	7,770	11.4	9,570	12.1
Services	11,455	19.3	14,770	21.7	17,370	21.9
Other	15,842	26.7	19,040	28.0	21,420	27.0
Total	**59,279**	100.0	**68,040**	100.0	**79,340**	100.0

Source: Association of Bay Area Governments, "Projections '90."

Figure 2. Employment by Sector, 1980–2005.

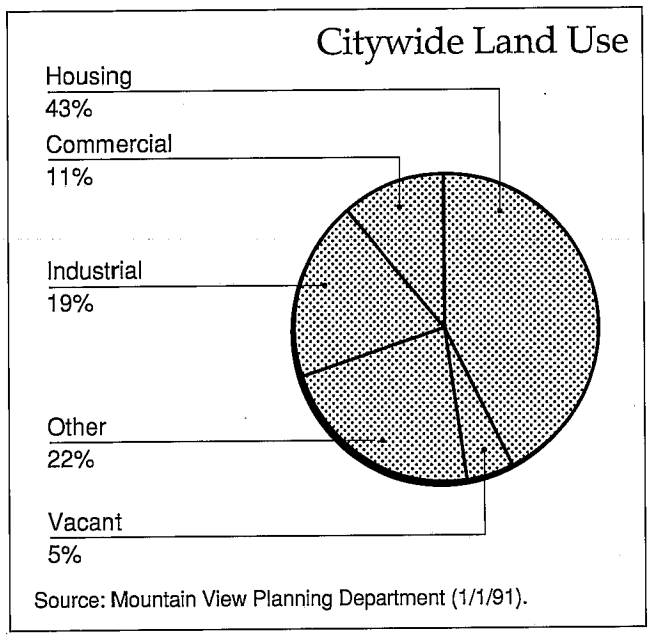


Figure 3. Citywide Land Use as Percent of Total.

Existing Development

	Units	Building Area (Sq. Ft.)
Single-family	10,810	
Multiple-family	20,931	
Total	**31,741**	
Commercial		9,075,730
Medical Office		968,800
Industrial/Office		16,581,395
Total		**26,565,924**

Source: Mountain View Planning Department (3/1/91).

Figure 4. Housing Units and Non-residential Floor Area.

Mountain View is almost fully built-out with little vacant land left. The percentage of land uses, not including roadways, is shown in Figure 3. As of 1991, about 2,781 acres of the city were used for housing, 717 acres were occupied by commercial uses and professional offices, 1,194 acres were in industrial use, 314 acres were vacant, and 1,394 acres were in other uses such as parks, schools, and agriculture.

Building area and residential units in Mountain View are shown in Figure 4. As of March 1991, there were 31,741 dwelling units and approximately 26.6 million square feet of commercial, industrial, and office buildings.

Unincorporated Areas. The Mountain View planning area includes all land within the incorporated city limits and the unincorporated properties within the City's sphere of influence. The sphere of influence boundary is defined by the Local Agency Formation Commission (LAFCo) and includes those areas that would be annexed into Mountain View if they were incorporated. There are only three unincorporated pockets in Mountain View: a portion of Moffett Field, the 17-acre Navy housing site at Middlefield Road and Moffett Boulevard, and the 15.6-acre agricultural property on Grant Road at Levin Avenue. Except for Moffett Field, these unincorporated properties will not significantly affect the balance of land use if they are developed or redeveloped. The salt ponds and Bay are also unincorporated areas within the sphere of influence. These areas are not open to development, as indicated by policies in the Environmental Management Chapter. The closure of the Naval Air Station at Moffett Field is discussed in the Community Facilities section later in this Chapter.

Development Potential

Ninety-five percent of the available land in Mountain View has been developed. As vacant land becomes scarcer, most new development will be second-generation projects—either expansions or redevelopment of buildings. This redevelopment and development on the remaining vacant parcels presents new opportunities for the community.

There is a total of 314 vacant acres in the city as shown on Figure 5. From 1985-1991, vacant land was developed at an average rate of 93 acres per year. This absorption rate has slowed in the past few years, but it is likely that all the remaining vacant land in Mountain View will be developed by 2005, including development of significant new open space resources.

Almost half of Mountain View's vacant land, 161 acres, is in the North Bayshore area, and much of this is owned by the City. Mountain View also owns 100 acres of open space land in addition to Shoreline at Mountain View. The City started to study the land-use potential for about 220 acres of city-owned vacant and open space land in 1989. Open space improvements and development of this City-owned property could benefit all of Mountain View and have a positive effect on the North Bayshore area. Other vacant parcels in Mountain View are smaller and scattered throughout the city. New construction on these parcels is likely to blend with the surrounding area, rather than create a significant change.

There are an additional 475 acres in Mountain View that have a high potential for redevelopment as shown in Fig-

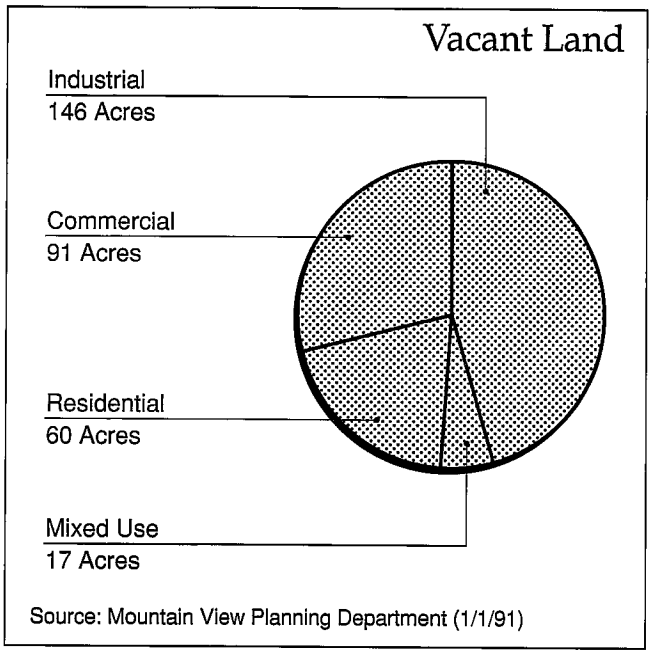


Figure 5. Vacant Land by Zoning.

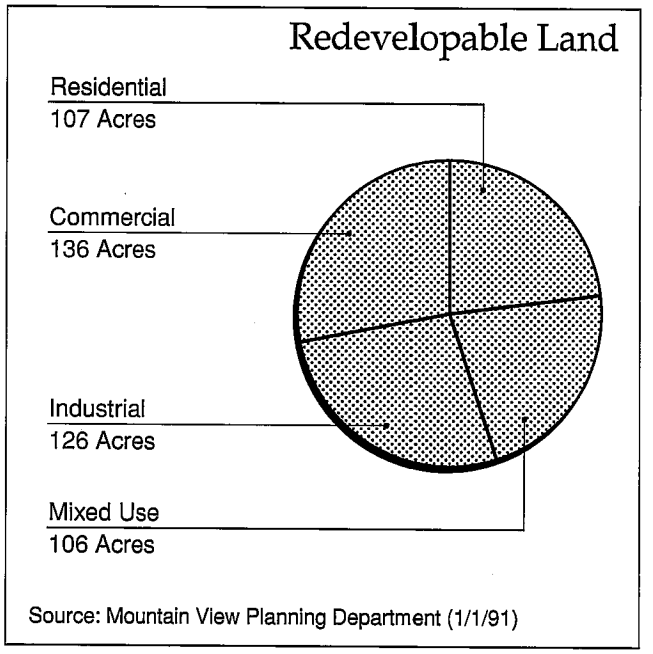


Figure 6. Redevelopable Land by Zoning.

ure 6. These parcels are either underutilized or have nonconforming uses. Redevelopable acreage is spread out evenly throughout the city and among the different types of land use.

Development of the city's vacant and redevelopable land under this General Plan would result in a maximum of 4,074 additional residential units and 6.5 million square feet of new building area. As discussed in the Residential Neighborhoods Chapter, the new residential units could house about 8,600 people. 5,900 of these new residents will work in or around Mountain View. The number of expected jobs from the added building area depends on the specific nature of the businesses and companies that occupy the space, but a rough number can be estimated. ABAG projects that 11,300 new jobs will be created in Mountain View between 1990 and 2005. (See Figure 2, page 14.) It bases this estimate on economic trends, not building square footage. This projection is within the range of the number of jobs that would occupy the expected maximum new building area.

Location of Future Development

City policies and regional, State, and federal regulations will be the main limitations on future development in Mountain View. The city's topography and natural hazards do not have much effect on development and land use. Flooding and earthquakes do constrain the construction and use of buildings somewhat, but they do not control Mountain View's overall development pattern, and neither does air traffic noise from Moffett Naval Air Station. The use, storage, and disposal of industrial hazardous materials is a new issue facing Mountain View. The City has adopted ordinances meant to ensure that toxic materials are safely stored and used, but may need to adopt other policies to manage the location of industries that use hazardous materials. The Environmental Management Chapter presents a more extensive discussion of hazardous materials, flooding, earthquakes, and noise.

GOAL **A** **Promote a pattern of land use that protects the community's health and safety.**

Minimizing Hazards. Flooding, earthquakes, and the effects of airports do not create any absolute restrictions on the location of land uses in Mountain View. However, these constraints do have an effect on how buildings are constructed and where different types of development should be located to reduce the risks to people and property.

The potential for flooding during the 100-year flood affects how buildings are constructed in some areas, but not their location. Buildings within the 100-year flood zones are required by the City's Drainage and Flood Control Ordinance to have special construction and habitable floors above flood levels. Building locations also are not limited by earthquake zones in Mountain View, as long as the buildings are constructed to City code and according to any required geotechnical reports. The northern part of Mountain View is most prone to flooding and seismic hazards. Sensitive land uses, such as residential,

should be carefully evaluated before they are built in this area. The flight paths of Moffett Naval Air Station affect only a very small triangle of Mountain View, near the intersection of Highway 101 and Route 237. In this triangle, commercial and industrial development is generally acceptable according to the Air Installation and Compatible Use Zone map, but housing is not.

Policy 1. **Ensure that new development is built and located to minimize the dangers of flooding, airfield effects, earthquake hazards, and hazardous materials.**

Action 1.a Review development applications for consistency with guidelines established in the Moffett Field Air Installation and Compatible Use Zone or other airfield safety guidelines.

There are more Policies and Actions on earthquakes and flooding in the Public Safety section of the Environmental Management Chapter.

Hazardous Materials. The use, storage, and disposal of hazardous materials is an increasing concern in Mountain View and throughout the state. The City's programs to manage hazardous material safely are discussed in the Safety Section of the Environmental Management Chapter.

Like most cities in California, Mountain View's zoning regulations do not require industries to be located differently depending on the type and amount of toxic materials they use. Industries that use toxic materials are located next to residential neighborhoods in Mountain View because a toxic materials user can locate anywhere within an industrial zoning district, even next to residential uses. Hazardous materials users in Mountain View are required to get a permit from the City's Fire Department and are inspected to ensure compliance with the Hazardous Materials Storage Ordinance. Even with the City's safe storage requirements, an accident on one of these sites could pose serious danger to surrounding residents.

It is possible to develop requirements for locating users of hazardous materials that will help reduce these risks, through zoning, use permits, or setback requirements. It is also possible to notify adjacent property owners when new hazardous materials permits are issued, so that homeowners are aware and businesses can prepare emergency plans in case of an accident.

Policy 2. **Minimize the risks from the use of hazardous materials.**

Action 2.a Establish standards and regulations for locating hazardous-materials users.

For example, Zoning Ordinance amendments or similar measures could regulate the location of toxic-materials users based on the type of materials used and the distance from sensitive receptors, such as houses and schools.

Action 2.b Assess the risk from hazardous materials when new residential development, schools, and other sensitive uses are considered near industrial areas.

Action 2.c Establish a system to notify adjoining property owners when new hazardous materials permits are issued.

THE LIVING ENVIRONMENT

Mountain View is a visually interesting and exciting city. Most of the physical environment is the result of conscious choices about what to build, plant, save, and create. Buildings and landscaping express the history, culture, and values of the community. Residents and businesses alike benefit from surroundings that are distinctive and appealing. In Mountain View, the built environment is set in a beautiful natural environment. Good design can help preserve and enhance the natural setting. Programs for historic preservation and public art are also an essential part of creating a rich and livable environment for the entire community.

The City's Identity

Mountain View's identity is how the community is viewed from the outside and how residents view the city they live in. The community has invested effort, time, and money to create a special environment. There are distinctive features that define Mountain View, such as the revitalized Downtown, the variety of residential neighborhoods, high-technology industrial parks, and high-quality architectural design. Each contributes to how people experience and remember the city. One of the challenges facing Mountain View is to continue the tradition of defining its identity.

The city can continue to build a strong, appealing image by enhancing the community's inherent physical qualities and values. An identity that comes from these inherent qualities affirms and reinvests in the city and its residents. It is possible to create a more memorable image by defining the entries to Mountain View, preserving city landmarks, and encouraging distinctive private development.

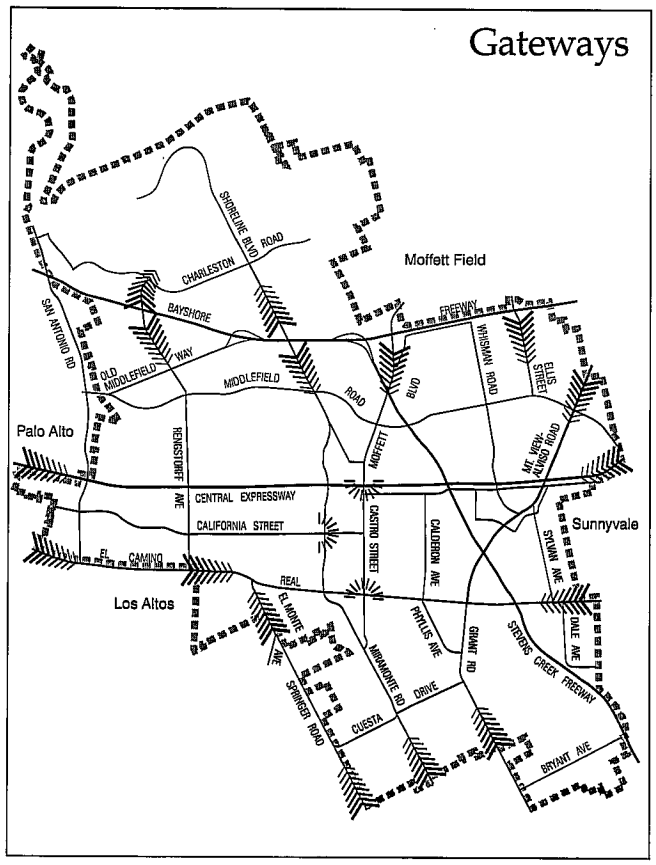


Figure 7. Gateways into Mountain View.

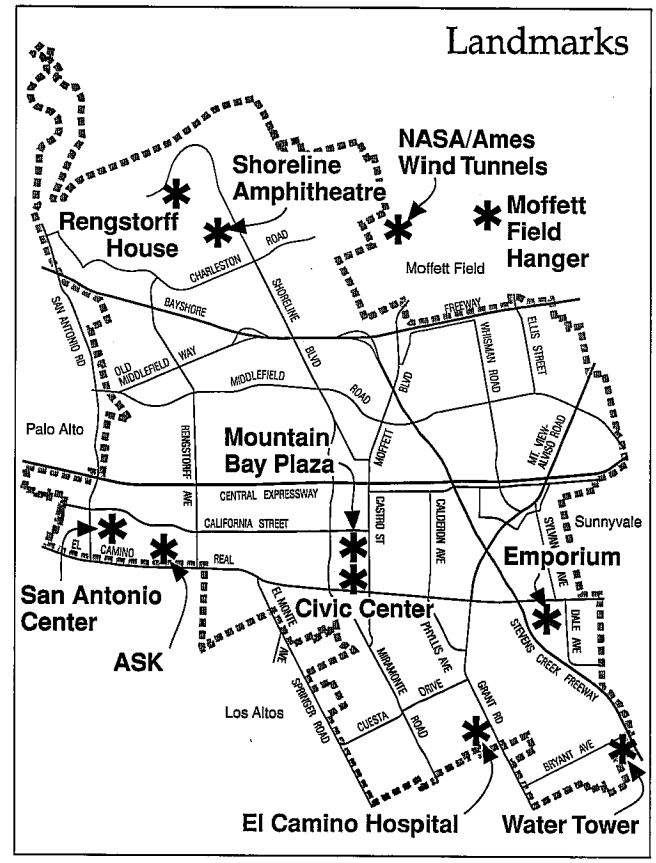


Figure 8. City Landmarks.

GOAL B

Preserve and strengthen Mountain View's identity.

Gateways. Gateways are the doorsteps of the community—they are the primary locations where people enter or leave the city. Visitors get their initial impression of Mountain View at gateways and leave these locations with a lasting image. There are gateways along the city boundary and gateways at rail stations. Entries to the city's special districts, such as Downtown and the North Bayshore industrial district, also are gateways.

Figure 7 shows the location of Mountain View's gateways. They should be made appealing and distinctive, so that the image of the city is a positive one. Uniform signs for the city's gateways would be one way to define the city's boundaries. Major gateways also can be identified through special architecture, landscaping, artwork, and plazas. Gateways into the city occur not just at a single point, but in sequences that extend down the street to create direction and anticipation. Each gateway will have a slightly different combination of features and should be part of a comprehensive gateway program for the entire city.

Policy 3. **Emphasize entries to the city and special districts with features that create an original and positive impression.**

Action 3.a Enhance city gateways through public and private improvements and appropriate Zoning Ordinance amendments.

Action 3.b Include a public participation process when developing a gateway program.

Action 3.c Develop a sign program and install City identification signs at specified gateways.

Action 3.d Include gateway improvements in precise plans, specific plans, or area plans for special districts. Revise plans that do not address entry design.

Landmarks. Some buildings in Mountain View have a distinctive identity and have become community landmarks. Landmarks are important because they create memorable images, help give the city its identity, and provide a sense of orientation that helps people find their way around the city. Visual landmarks are prominent because of their size, location, or architectural style. It is

Folks enjoy outdoor dining on Castro Street.

important to preserve the community's landmarks and control new development that could visually detract from their importance. It is also important to continue to add new landmarks by encouraging distinctive buildings in appropriate locations. Figure 8 shows the location of the major landmarks in Mountain View.

Policy 4. **Protect significant landmark buildings and features and encourage new ones.**

Action 4.a Pursue an appropriate landmark-quality project in the North Bayshore Study Area.

Action 4.b Encourage new landmark structures that enhance the character of the surrounding district or neighborhood.

Action 4.c Protect landmark structures through the development review process.

Private Development. Most of the city's physical environment is created by private development. The quality of private development has a pervasive influence on the identity of the city and the everyday lives of people who live and work here. Mountain View has design review programs to help ensure that private development is consistent with the community's values and compatible with surrounding properties. Since 1962, the City's Site Plan and Architectural Review Committee (SPARC) has reviewed and approved the design of new projects. This design review looks at the architectural merit of a project and its relationship to surrounding properties and districts. The SPAR Committee provides an opportunity for the City to work with developers to achieve high-quality design. The City also has adopted townhouse design guidelines and 33 precise plans, which have improved the overall look and function of the city.

Policy 5. **Encourage well-designed private development that is compatible with surrounding districts and neighborhoods.**

Action 5.a Retain the Site Plan and Architectural Review Committee.

Action 5.b Ensure quality development by using design guidelines, specific plans, and precise plans.

The City's Diversity

Mountain View's diversity is reflected in the rich cultural and lifestyle mix found in the city's districts and neighborhoods. Diversity can be encouraged through land use and design policies that amplify the character of Mountain View's residential, commercial, and industrial districts. Land use policies can promote compatibility within a neighborhood or district and prevent incompatible uses that erode their character. Design policies can be tailored to the special qualities of districts or neighborhoods and can avoid general design solutions that dilute these special characteristics.

GOAL **C** **Maintain and enhance the special diversity of the city's businesses and neighborhoods.**

Districts and Neighborhoods. Districts and neighborhoods are vital elements of how the city looks and functions. Districts are areas of the city that share a geographical area, an interdependency of uses, and a distinct character. They can have a mix of uses, such as a district with residential neighborhoods, a school, and neighborhood shopping center; or have a single use, such as some industrial districts. Neighborhoods are residential areas that are typically defined by wide roadways on the perimeter with protected local streets inside, similar types of housing, and often an elementary school within the neighborhood boundaries. Districts and neighborhoods have a personal scale that people can identify with. When these pieces of the city are rich and memorable, they enliven the city and make Mountain View a more enjoyable place to live and work.

The variety of the city's neighborhoods and districts is one of the features that makes Mountain View special. It gives the city a vitality and image that is distinct from other cities. Design standards can protect and improve the quality and vitality of the different parts of the community, particularly when there is an interest in the neighborhood or district in initiating those standards.

Policy 6. **Strengthen the identity and quality of the city's neighborhoods and districts.**

Action 6.a Prepare design guidelines, precise plans, or specific plans when initiated by neighborhood and district organizations, if possible.

Action 6.b Incorporate public input into any new design standards and regulations through surveys, neighborhood meetings, public hearings, and similar methods.

Action 6.c Educate the public and enforce regulations on zoning requirements for neighborhoods and districts.

Blending Uses. There are pockets of incompatible uses in some districts and neighborhoods. These incompatible uses are generally on properties that are zoned differently from the surrounding neighborhood or district, or are older uses that would not be permitted if they were new because the property has been rezoned, annexed, or otherwise changed. When a use does not conform to the current zoning, the Zoning Ordinance specifies a 40-year amortization period for the termination of that use, although other time periods can be required. Incompatible uses can disrupt the cohesiveness of districts and neighborhoods, be visually inharmonious, and create traffic problems and noise. The City should identify districts and neighborhoods that would benefit from rezoning and the amortization of incompatible uses. Some of these areas have been identified as potential housing sites and are discussed in the Residential Neighborhoods Chapter and the Housing and Jobs section of this chapter.

Policy 7. Encourage land uses that are compatible with the character of the surrounding district or neighborhood.

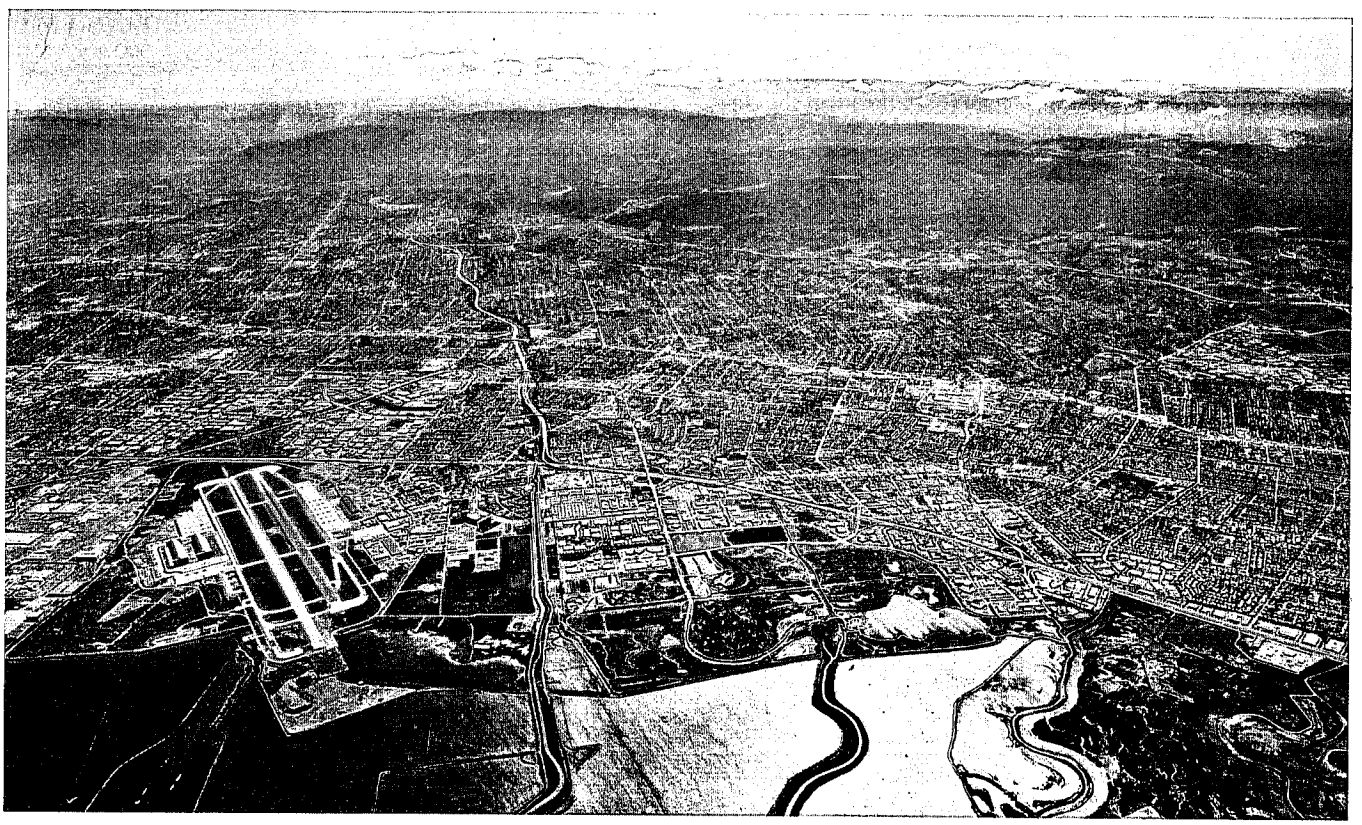
Action 7.a Consider rezoning pockets of incompatible land uses.

When pockets of incompatible uses are rezoned to be consistent with the surrounding area, the City's Zoning Ordinance would require termination of the use, usually through a 40-year amortization. New uses or development would then be compatible with the district or neighborhood.

Action 7.b Revise Zoning Ordinance regulations on the types of uses allowed in the city's districts and neighborhoods, where appropriate.

The Natural Environment

Mountain View is set in a beautiful natural environment. The Santa Cruz and Diablo Mountain Ranges, San Francisco Bay, and Stevens Creek provide invigorating natural spaces and scenic vistas for Mountain View residents. The sunny Mediterranean climate is also a great attribute of the area. Much of the city's character comes from these natural features.



Mountain View takes its name from the vista of the Santa Cruz Mountains to the south.

Land use and design policies can encourage development that unveils and accentuates the beauty of the natural environment by carefully distributing building intensity and land uses. Mountain View also can preserve the environment by encouraging project design that is responsive to natural features, such as trees or streams. Other issues concerning the city's natural environment are covered in the Open Space and Conservation of Resources sections of the Environmental Management Chapter.

GOAL D

Encourage development that preserves the beauty of the natural environment.

Preserving Natural Features. Shoreline at Mountain View is an example of successful land use policies that enhance the natural environment. The park has made San Francisco Bay more visible and has increased public access to it while preserving quiet wetland habitats. Shoreline is not only an important ecological preserve, it is an important community design element because it provides visual relief from the continuous development in the rest of the city. This contrast heightens the special character of both the natural and built environment. Shoreline also complements private development in the North Bayshore area and provides an outstanding setting for the Shoreline Amphitheater.

Increasing the access and visibility of Stevens Creek would similarly benefit the city and adjacent residential neighborhoods. The City's programs to improve physical access to natural features are covered in Policies and Actions in the Open Space section of the Environmental Management Chapter.

Policy 8. **Promote the visibility of and safe physical access to San Francisco Bay, the baylands, Stevens Creek, and other natural resources in the city.**

Action 8.a Orient new streets and development so that people can see and get to scenic features.

Policy 9. **Ensure compatible land uses next to the city's natural resources.**

Compatible land uses enhance the character of a place and do not overwhelm the natural environment.

Action 9.a Use the planning approval process to require mounds, landscaping, and other buffers in private development to protect natural resources from adjacent development.

Views. A view is the area that can be seen from a particular observation point. The very name of this city—Mountain View—shows how important views are to people who live here. The two most prominent visual resources are the Santa Cruz Mountains to the south and the Diablo Mountain Range and San Francisco Bay to the north. Other natural visual resources include Heritage Trees, Stevens Creek, and Permanente Creek south of El Camino Real. Visual resources that tie the city to its natural landscape can be emphasized and preserved through the design and placement of streets, buildings, and open spaces. By removing unnecessary obstructions and using discretionary approval of new buildings, the City can integrate views as an important element of Mountain View's character.

Policy 10. **Preserve scenic views of the natural landscape.**

Action 10.a Use the development review process to ensure that the design, location, and size of new projects, whenever possible, preserve significant views of the mountains, Bay, wetlands, streams, and other natural resources in the city.

Action 10.b Require developers to run utility lines underground.

Action 10.c Regulate the design and location of antenna towers.

Action 10.d Prevent advertising signs from facing freeways and Central Expressway.

Action 10.e Prohibit the construction of any new billboards or other off-site advertising signs.

Site Features. The location of new buildings, their height, and the design of outdoor spaces can either enhance the environment or detract from it. New buildings should be located on a site to preserve trees and other vegetation. Keeping mature trees helps blend new development with the surrounding area and protects an important resource. The City's Heritage Tree Ordinance protects trees that are 50 inches or more in circumference. Buildings and outdoor areas should be oriented to take advantage of Mountain View's sunny, benign climate.

Policy 11. **Encourage building and site design that is compatible with the natural environment and features of the site.**

Action 11.a Ensure that building and site design keep the destruction of mature trees and vegetation on the site to a minimum.

Action 11.b Require well-designed outdoor areas for eating, relaxing, or recreation for new projects, and if feasible, when buildings are remodeled or expanded.

Action 11.c Place buildings and outdoor areas so that they take advantage of solar opportunities and are shielded from wind, noise, and other adverse factors.

Action 11.d Ensure that common or public outdoor areas are designed to be next to adjoining natural features.

The Greening of the City

Landscaping brings nature into the built environment. It plays a crucial role in shaping how Mountain View looks and feels, creating cooling shade in the summer, bright colors, pleasant aromas, and softening the edges of the built environment. The city would be stark and uninviting without trees, shrubs, lawns, and flowers.

Landscaping is important in the public right of way as a method of defining the roadway and breaking up the expanse of asphalt. On private properties, planting accents architecture and binds together a neighborhood or district. The amount of landscaped open space has a major role in determining the character of a city. Requiring generous landscaping on public and private properties is one way to maintain and promote the city's traditional character. Encouraging drought-tolerant landscaping saves water and helps ensure that landscaping will survive and look good even during drought years. The City maintains a demonstration garden that illustrates the attractiveness and variety of drought-tolerant landscaping.

GOAL **E** **Use landscaping to maintain an open character and enhance the built environment.**

Roadway Landscaping. Street trees can unify and help identify districts and neighborhoods. Roadway landscaping is also important for the comfort of pedestrians. Street trees and parkway strips between the curb and sidewalk provide a buffer and a sense of protection from traffic. Monolithic sidewalks, right next to the curb, are easier to install and maintain, but they create a wider expanse of pavement and an uncomfortable environment for pedestrians. Parked cars often encroach on the sidewalk, reducing the space for pedestrians. Monolithic sidewalks are often used because they minimize the damage from tree roots to sidewalks and utilities. However, planted parkway strips have substantial benefits for pedestrians

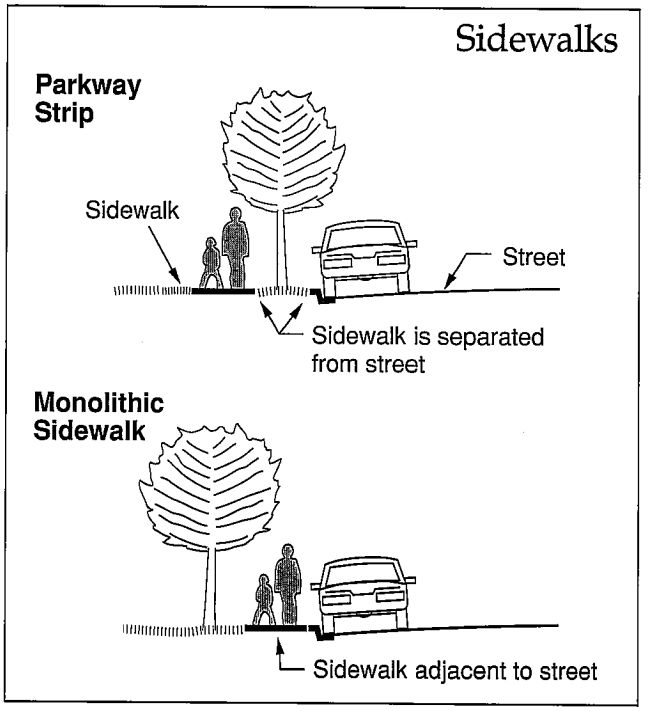


Figure 9. Parkway and Monolithic Sidewalks.

and the community and should be used whenever feasible. The City can investigate the use of root shields, deep root watering, or wider parkway strips to protect sidewalks and utilities. The Environmental Management Chapter contains more information on the City's street tree program in the Urban Reforestation section. The Circulation Chapter discusses the City's existing program for distinguishing residential arterials with special roadway landscaping.

Policy 12. Landscape public roadways to define the character of districts and neighborhoods.

Action 12.a Use similar types of trees or landscaping themes within districts or neighborhoods.

Action 12.b Investigate new tree varieties to find attractive and drought-tolerant trees for use on the city's roadways.

Action 12.c Continue to use landscaped medians to break up wide roadways and distinguish major thoroughfares and prominent streets.

Policy 13. Landscape public roadways to create a comfortable pedestrian environment.

Action 13.a Provide a landscaped strip for street trees between the curb and sidewalk on new roadways and use root shields or similar devices to prevent sidewalk and utility damage. (See Circulation Actions 28.a and 28.c, page 73.)

Private Landscaping. Landscaping on private property benefits the entire community. Because of the community benefit, the City maintains minimum landscaping requirements for development, except in single-family residential districts. The City also encourages water conservation by maintaining and distributing a list of drought tolerant plants to residents and developers. In Mountain View, where there is little natural open space left, landscaping on private property becomes a main source of pleasure and enjoyment of nature. Landscaping also can accentuate building architecture and the character of a street or neighborhood. Private landscaping on commercial and industrial properties should blend with the landscaping in the public roadway to create a unified streetscape and a stronger identity for the district.

Policy 14. Encourage abundant, attractive, and drought-tolerant landscaping on private property.

Action 14.a Maintain and periodically update minimum landscaping standards for private property.

This would not apply to single-family neighborhoods where there are no minimum landscape standards.

Action 14.b Require an interesting variety and adequate number of trees and shrubs for new projects in multiple-family, commercial, and industrial zones.

Action 14.c Ensure that private landscaping blends with public landscaping.

Action 14.d Ensure that private landscaping complements the architecture and site design when new projects go through development review.

Action 14.e Maintain a list of drought-tolerant plants for public distribution.

Action 14.f Consider adopting standards for drought-tolerant landscaping.

The Visual Arts

Art brings beauty and a human quality to the built environment. Artwork can express the social and cultural history of Mountain View and reflect the aspirations of the community. Artwork can give City buildings a stronger public identity. Public art can be whimsical or serious, abstract or figurative. Some public artwork also should be playful and meant for children to touch and climb. The private sector can be encouraged to include artwork with new buildings and expansions. Mountain View has promoted publicly visible art for private development through the architectural review process. This has resulted in attractive sculptures in front of many new buildings, particularly Downtown and in the North Bayshore area. Including art not only benefits everyone who passes by the building, it produces an elevated and creative work environment.

The Avatar sculpture in Eagle Park.

GOAL F

Encourage both public and private artwork that expresses the diversity and aspirations of the city.

Public Art Programs. Mountain View supports the visual arts through an annual Public Arts Capital Improvement Program, the Percent-for-Art-Program, and the Visual Arts Committee. The City budgets money every year for public art. In addition, the Percent-for-Art-Program calls for one percent of the expenditure for a new public building to be spent for public art on the site. In 1989, the City established the Visual Arts Committee. The Visual Arts Committee promotes public art and related programs that enliven the imagination of Mountain View residents and enrich the spirit of the city. Public art acquisitions in Mountain View go through extensive citi-

zen review and recommendations from the Visual Arts Committee before being presented to the City Council for a final decision.

Policy 15. **Support programs that bring the visual arts into the community.**

Action 15.a Retain the Percent-for-Art-Program and Public Arts Capital Improvement Program to acquire significant works of art for the public.

Action 15.b Maintain a Visual Arts Committee to guide the acquisition of public art and promote other visual arts programs.

Action 15.c Ensure the appropriate space and context for art in new public facilities through early design review by the Visual Arts Committee.

Action 15.d Update the Community Visual Arts Inventory annually.

Action 15.e Make the Visual Arts Inventory readily available to city residents.

Action 15.f Incorporate art into a broad range of public places to ensure access for the entire community.

Policy 16. **Provide public art that represents the diversity of the community and is meant for all age groups.**

Action 16.a Use measures such as surveys and displays to solicit opinions on public art acquisitions.

Preservation of Historic Resources

Mountain View is a modern suburban city, with most of its growth coming after 1950. However, in quiet residential neighborhoods and a few remaining fields and orchards, there is an older Mountain View. Scattered through the city are reminders of its past: the businesses and homes of the pioneers and farming families that built Mountain View. These older homes and commercial buildings are an important resource.

GOAL **G** **Protect Mountain View's historic buildings and districts and encourage their restoration.**

Historic Buildings in Mountain View. Historic buildings link the present with the past and are a visual record of Mountain View's history. They maintain a sense of stability and give the community character. Once a historic building is lost, it can never be replaced. Historic preservation ordinances and landmark programs can keep these buildings from being lost by encouraging voluntary preservation or by prohibiting demolitions. The City also can adopt special zoning and support local, State, and federal tax incentives to encourage the preservation of historic buildings in Mountain View.

The restored Rengstorff House at Shoreline.

Mountain View has residential, commercial, and industrial historic buildings. The City publication "Now and Then, Exploring Mountain View's Architectural Heritage," lists about 90 homes that are important reminders of the city's heritage. These homes include the historic Rengstorff House, which the City purchased, moved, and restored on its current site in Shoreline Park. Henry Rengstorff was a successful farmer and one of the early settlers of Mountain View. He bought 164 acres of farmland near San Francisco Bay in 1864, in what is now Shoreline at Mountain View. Here he operated Rengstorff Landing and built his home, one of the finest examples of Italianate architecture on the West Coast. Also listed in this publication is the city's original main street and Downtown commercial district on Castro Street.

Mountain View has a history as one of the birthplaces of high-technology industry. Places like Walker's Wagon Wheel were meeting places for early electronic engineers who ate, talked, traded ideas, and started many of the large electronic firms that created Silicon Valley. It is possible to capture and keep all of the city's history alive through preservation of the community's historic buildings.

Policy 17. **Support preservation of the city's historic buildings and structures.**

Action 17.a Make the publication "Now and Then, Exploring Mountain View's Architectural Heritage" readily available to the public.

Action 17.b Maintain and improve the City's inventory of historic local buildings, structures, and districts, including buildings or sites that commemorate the city's early high-technology industries.

Action 17.c Pursue ways to preserve the historic buildings and hangars at Moffett Field.

Action 17.d Commemorate historic buildings, or sites where these buildings once existed, with plaques, events, or similar measures.

Action 17.e Create a list of sources for public and private funding to preserve historic resources.

Action 17.f Encourage retention of historic buildings through the development review process.

Action 17.g Use the State Historic Building Code when reviewing building permit applications for historic buildings.

Action 17.h Consider forming a Heritage Preservation Board to identify and evaluate prehistoric and historic archaeological sites, landmark trees, and buildings, sites, or districts meeting local criteria for architectural preservation.

Action 17.i Continue to restore the Rengstorff House and improve public awareness of the history associated with its era.

Action 17.j Build a pier at Shoreline to represent Rengstorff Landing.

LAND USE IN MOUNTAIN VIEW

Mountain View has quiet residential neighborhoods, outstanding public facilities, a range of shopping opportunities, and an ideal location for industry. Each type of development is important for maintaining a vital and economically healthy community. The next sections of the Community Development Chapter discuss the city's different land uses and present action programs to retain and enhance the city's diversity. Residential uses are not covered in this Chapter. Neighborhoods are such an important part of Mountain View that they are covered in the Residential Neighborhoods Chapter, devoted exclusively to neighborhood and housing issues.

Public Places

Public places are essential for social cohesion in Mountain View. They foster a humane and caring community and promote pride and mutual respect. Children in Mountain View develop much of their sense of community and well-being from their schools, neighborhood parks, the Civic Center, and other public places. These do more than provide public services; they are symbols of Mountain View and a necessary part of the collective self-esteem of the community.

Mountain View's public places create a sense of mutual ownership and community. From 1980 to 1991 there was a significant change in the quality of Mountain View's public facilities. New buildings were built to replace old and outdated ones. These changes created a more visible civic presence in the community. About half the City's major public buildings have been rebuilt. Several of the City's other facilities may be remodeled or rebuilt by 2005.

GOAL **H**

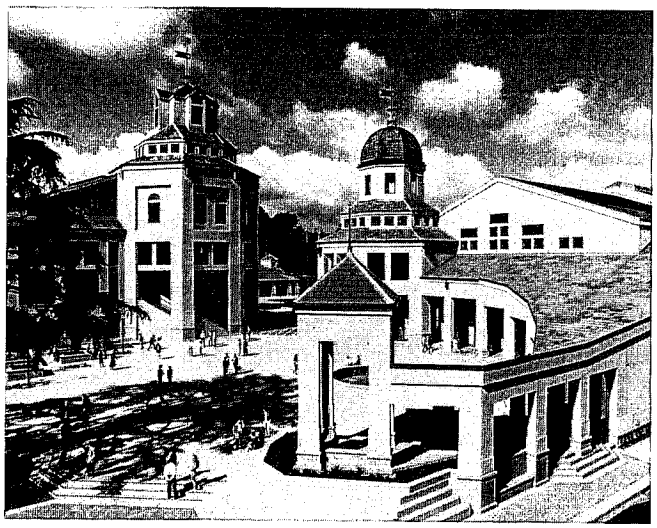
Provide Mountain View residents with high-quality public facilities and services.

City Facilities. Mountain View has four major civic buildings. They are the Police Services and Fire Administration building, the Library, the Center for the Performing Arts, and City Hall. In addition, the City owns and operates other recreational facilities, such as the Mountain View Sports Pavilion, the Senior Center, and 20 City parks. Parks and recreational facilities are discussed in the Open Space section of the Environmental Management Chapter. Some City facilities are not intended for public use, such as fire stations and the Municipal Operations Center. City facilities are designed to enrich and enhance surrounding neighborhoods and districts.

The Police Services and Fire Administration building was built in 1980 in Downtown Mountain View. Its central location is accessible to all city residents. The City plans to build a new fire station on Shoreline Boulevard to replace Fire Station No 1. Nearby residents participated in the design of the fire station; it will have some distinctive features, such as artwork and public open space.

The City's Municipal Operations Center (MOC) houses maintenance and operations staff and equipment for roadways, parks, water utilities, and other City services and facilities. The MOC building was 25 years old in 1991. As of 1991, a space study was underway to see whether the building needs to be remodeled or expanded.

The new Civic Center, which opened in 1991, is the most recent addition to the City's public buildings. The idea



Mountain View's new Civic Center.

for a new Civic Center was born when remodeling of the old City Hall uncovered major problems requiring extensive and expensive repairs. In 1985, the concept for a new City Hall and Center for the Performing Arts was approved by the City Council.

The Civic Center is a focus of cultural and social activity Downtown. It has become a place of enjoyment for the entire community. Beauty, grandeur, and whimsy combine in the architecture to create a distinctive and uplifting public place. The excellent design has set a standard of high quality for other development Downtown and throughout Mountain View.

The City is studying locations and the financial feasibility of building a new library, because service demands have outgrown the Library building on Franklin Street. Surveys of Mountain View residents show their support for a new library. The exact location will depend on design and financing options, but the library will be part of the Civic Center complex bounded by Castro, Church, Franklin, and Mercy Streets. Locating a new library with City Hall, the Center for the Performing Arts, and historic Pioneer Park exemplifies the central place of education within the city.

Policy 18. **Ensure that Mountain View's public facilities are easily accessible and provide friendly, efficient services to city residents.**

Action 18.a Continue to locate major public city facilities in a central location Downtown close to transit and adequate parking.

Action 18.b Conduct public surveys before building major new public facilities.

Action 18.c Build a new public library within the Civic Center complex or refurbish the current one.

Educational Facilities

Public schools play an important role in the community. Schools educate the city's children, offer open space and playing fields, and give a sense of identity to the city's neighborhoods. High-quality education produces future leaders and skilled workers and contributes to the city's cultural and social well-being. Many public schools also provide child care before and after school to satisfy the increasing need of working parents for child-care services.

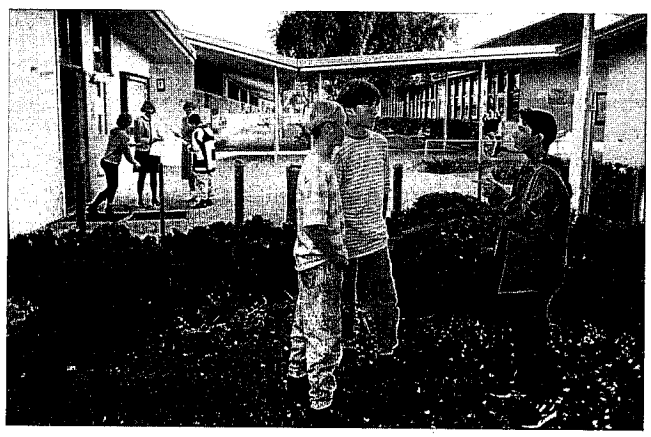
Public schools are operated by school districts, which are governmental agencies separate from the City. They have their own elected officials and source of financing. There has been a long tradition of support and cooperation between school districts and the community because public schools are so important to Mountain View. The City coordinates with schools districts on land use issues, cooperative financing of shared facilities, and joint activities, especially recreation programs. The City contributes to the development of playing fields and playgrounds at many schools and maintains seven parks next to schools. The Mountain View business community also supports public education through non-profit organizations and programs.

The General Plan Land Use Map shows the location of public schools in Mountain View. Most of the city's neighborhoods were laid out around public schools. Elementary schools were located within easy walking distance for children, and the neighborhood encircled the school. Declining enrollment and the resulting closure of schools can dramatically change the character of these neighborhoods.

GOAL I

Cooperate with the school districts to provide educational opportunities.

Public Schools. Mountain View has 12 schools and four school districts, including one high school district. De-



Graham is one of two middle schools in the city.

clining enrollments and tight budgets caused several schools to close in Mountain View in the 1980s. Mountain View encourages districts to reuse rather than sell the closed school sites. The City allows alternative uses of the school buildings and encourages retaining the open space for recreation.

Studies completed for the Mountain View and Whisman School Districts show that student enrollments will be increasing in the 1990s and then declining in some areas after 2000. Many schools will have to add more classrooms to accommodate the increase in students. Any additional housing generated by rezoning the 11 sites discussed in the Housing and Jobs section also will increase student enrollments. Future school closures are unlikely in the 15 years between 1990 and 2005, although the closure of the Moffett Naval Air Station and its eventual reuse may influence school enrollments and possible school closures.

Policy 19. Work with the school districts to retain public school sites in Mountain View.

Action 19.a Maintain zoning that supports the reuse of closed school sites for similar types of educational and quasi-public uses.

Action 19.b Cooperate with the school districts in providing information on demographic changes that may lead to school closures or the need for new schools.

Action 19.c Continue to find innovative ways for the City to use school facilities and grounds jointly with the school districts.

Cooperative programs make it less expensive for school districts and the City and bring City programs into the neighborhoods.

Child Care. Affordable and safe child care is a fundamental community need, essential for the healthy growth of children and a necessity for many families with two employed parents. The YMCA offers comprehensive child care services before and after school at every elementary school in the Mountain View School District and at two schools in the Whisman School District. The Mountain View Recreation Department operates some after-school programs for preschool through fifth grade. The City contributed Community Development Block Grant funds to establish a YMCA child care program at Castro School. Even with these programs, more than 100 children were on a waiting list for child care services in 1992. More child care could be provided if the City offers incentives for industry and business to set up on-site child care convenient for working parents.

Policy 20. Ensure that high-quality child care is available in Mountain View.

Action 20.a Continue to use Community Development Block Grant funds for establishing and expanding child care facilities.

Action 20.b Consider Zoning Ordinance amendments to require large, new, non-residential developments to provide day care facilities.

Large commercial and industrial developments are those that have 300 to 400 employees or more.

Action 20.c Support State and federal legislation that will provide funds for child care services.

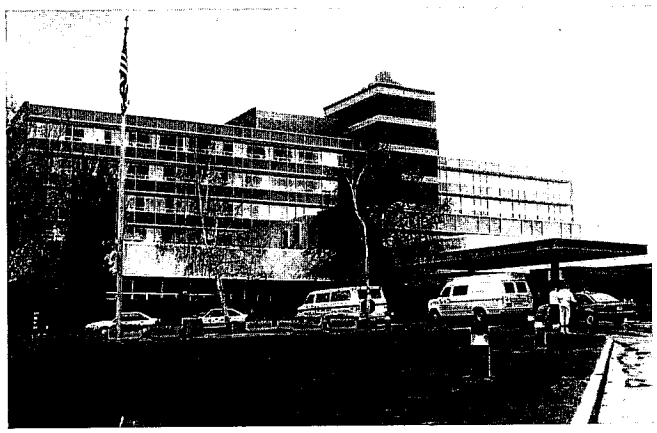
Policy 21. Encourage businesses and developers to provide and support child care services.

Action 21.a Consider establishing floor area ratio (FAR) bonuses for businesses that establish on-site child care facilities.

Action 21.b Exclude on-site child care facilities in industrial and commercial developments from FAR calculations.

Institutional Facilities

Moffett Naval Air Station, NASA/Ames Research Center, and El Camino Hospital are historic and essential parts of the city. They are well-known landmarks that are part of Mountain View's sense of identity. Moffett and NASA are the heart of a public-private complex that is important to Mountain View, Silicon Valley, the United States, and the international scientific community. The Moffett/NASA complex is a vital economic and sociological asset to the region. The medical services provided by El Camino Hospital are also vital for both Mountain View and the region.



El Camino Hospital serves the community.

GOAL **J**

Support retaining and protecting the City's major institutional facilities.

El Camino Hospital. El Camino Hospital provides important medical services. It is the only hospital located within a four-city area and serves many neighboring cities in addition to Mountain View. The hospital and surrounding professional offices are located in a predominantly single-family residential area next to Cuesta Park and the YMCA. The El Camino Medical Park Plan guides development in the hospital complex and helps insure that new buildings are compatible with adjoining residential neighborhoods.

Policy 22. Facilitate cooperation between El Camino Hospital and surrounding neighborhoods on development issues.

Action 22.a Update the El Camino Medical Park Plan with participation from surrounding neighborhoods.

Moffett Naval Air Station. In 1991, the federal government decided to close the Naval Air Station at Moffett Field after lengthy study by a national panel. The City has recommended that Moffett remain under federal control, with NASA/Ames as the new operator. Timing for the Navy phase-out was unknown as of early 1992; although 1997 is the target for phase-out completion. Moffett Field's physical assets include the historic dirigible hangars, various buildings, and housing both on-base and off-base. Moffett's runways and their flight support facilities serve federal activities as well as compatible private firms on federal contract. Moffett also represents a significant open space resource for Mountain View. Moffett has a number of toxic sites that the Navy plans to clean up over time.

It appears likely that most, if not all, of Moffett will remain in use by NASA and other federal agencies. It is imperative that any federal reuse of Moffett Field occur in the context of close liaison with the City of Mountain View to ensure continuing compatibility. If Moffett is eventually declared surplus to federal needs and comes under direct City jurisdiction, appropriate uses for Moffett Field will be decided through public discussion, studies, General Plan processes, and other types of community review.

Policy 23. Support NASA/Ames as the future federal operator of Moffett Field.

Action 23.a Ensure that the reuse of Moffett is compatible with City goals, policies, and concerns through coordinating with the new federal operator.

Action 23.b Monitor the Navy's short-term and long-term transition and clean-up of Moffett Field.

Action 23.c If Moffett Field is declared surplus, develop a specific plan for the property in cooperation with NASA/Ames and the City of Sunnyvale.

NASA/Ames Research Center. Mountain View's NASA/Ames Research Center is one of America's major intellectual and technological resources. It boasts a distinguished list of historic aerospace accomplishments and is destined to play a major scientific role in the twenty-first century. It is among the 10 largest employers in the Valley and a major economic force. NASA/Ames represents a unique educational resource. The importance of this facility deserves to be recognized through cooperative efforts and support from the City.

Policy 24. Reinforce NASA/Ames as an important institutional citizen of Mountain View.

Action 24.a Pursue a potential Air and Space Center as a cultural and educational resource and a public introduction to NASA.

Action 24.b Explore opportunities to reinforce NASA/Ames identification with Mountain View.

Action 24.c Pursue mutually beneficial efforts with NASA/Ames, such as facilitating Light Rail.

Action 24.d Pursue creation of a link between the North Bayshore area and the entrance to NASA/Ames.

Other Public and Quasi-public Facilities

Many public services are provided by federal, State, and County agencies at facilities such as the Post Office and Social Services Agency. There are also quasi-public uses, such as churches and non-commercial private schools. Federal, State, and County buildings and quasi-public buildings do not have a separate category on the Land Use Map, because they are spread throughout the city's residential, office, commercial, and industrial districts. The City lacks jurisdiction over other government facilities, but requires development review for most of the quasi-public uses.

The Business Community

The economic health of Mountain View depends on the success of its businesses, and businesses depend on a responsive community. City government and the people who live in Mountain View or own businesses here share a common goal in the city's continued economic pros-

perity. Mountain View's businesses range from family-owned stores to international corporations. General Plan Policies and Actions need to recognize all the city's businesses and meet their diverse needs. Definitions of the following land use categories and the allowable development intensity for commercial, office, and industrial uses are in the Land Use Map section at the end of this chapter.

Commercial Districts

Mountain View's commercial districts reflect the city's diversity, providing a variety of needed goods and services. These districts include local neighborhood shopping centers, service commercial districts, strip commercial districts, regional shopping centers, and the Downtown retail, entertainment, and office district. The locations of the city's commercial districts are not likely to change, although the type of businesses within them will continue to evolve as the city grows and market demands change. As shopping centers age, they will need to be remodeled if they are to keep pace with the competitive commercial market.

GOAL **K** **Maintain a variety of attractive and convenient commercial districts that provide needed goods, services, and entertainment.**

Neighborhood Commercial. Neighborhood shopping centers provide vital everyday goods and services and should be within easy walking or driving distance of neighborhood residents. Neighborhood shopping is generally well distributed throughout Mountain View. Most neighborhood shopping centers in Mountain View are integrated with the surrounding neighborhoods through thoughtful design that provides compatible architecture, landscaping, efficient parking and circulation, and adequate noise buffers.

Policy 25. **Ensure that neighborhood shopping centers are compatible with the surrounding neighborhood.**

Action 25.a Review the design and use of neighborhood centers.

Action 25.b Require upgrading of neighborhood centers with applications for discretionary permits.

Action 25.c Continue to carry out measures requiring the maintenance of neighborhood shopping centers.

General Commercial. There are three General Commercial areas in Mountain View. They are the Old Middlefield Road area, the Evelyn Avenue Area, and the Yuba Drive area defined by El Camino Real, Highway 85, and Route 237. Important service commercial businesses are located in these districts, including automobile and business equipment repair, carpentry shops, and professional photo labs, which generally do not fit easily into other commercial and industrial districts. General Commercial districts are distinct from adjoining neighborhoods and do not have a residential character. Development standards are minimal, so the districts have less landscaping and architectural refinement than other commercial and industrial districts. The City should review development standards and update zoning regulations for these districts.

Newly upgraded Blossom Valley Shopping Center.

Policy 26. **Maintain the General Commercial districts for heavy commercial services and uses.**

Action 26.a Determine whether there is a need to keep the current amount of service commercial uses before any change in General Commercial zoning and General Plan designations.

Policy 27 **Enhance the appearance of General Commercial districts.**

Action 27.a Update the General Commercial zoning district development standards.

Linear Commercial/Residential. The Linear Commercial/Residential district is intended for a broad range of commercial, office, and residential uses that serve both local residents and people from outside the city. This type of district is commonly called strip commercial development. El Camino Real, Moffett Boulevard, Fairchild Drive west of Whisman Road, and the west side of San Antonio Road are four areas designated Linear Commercial/Residential.

El Camino Real is a prominent, historic roadway that links Mountain View with other cities on the San Francisco

Peninsula. Many people from neighboring communities enter and leave Mountain View along El Camino Real. Because of its width and length, El Camino is also a road that provides opportunities for scenic vistas of the Santa Cruz and Diablo Mountain ranges. Most lots along El Camino are shallow and adjoin homes in the back. Development is limited by this shallow depth. Tall buildings and intense development would be inappropriate on these lots, because of their effect on adjoining homes. Large developments, such as some residential and mixed use projects, generally need to have at least two acres and a depth of 200 feet to accommodate the project adequately.

In 1982, the City began a program to install medians, add landscaping, and make other street improvements to upgrade the appearance of El Camino Real. The City can complete these improvements by developing plans that will coordinate land use, building height, development standards, floor area ratios, landscaping, and gateways. A detailed design and land use review would benefit El Camino Real and Moffett Boulevard. It would help give each district a distinct identity.

Policy 28. Maintain and enhance the city's Linear Commercial/Residential districts.

Action 28.a Develop strategies for El Camino Real and Moffett Boulevard commercial districts.

These strategies will address appropriate uses, street and landscaping design, gateway treatments, and building size, height, location, and design.

Regional Commercial. Regional shopping centers can be exciting concentrations of buildings and activity. Mountain View has three areas designated Regional Commercial: along San Antonio Road roughly between Central Expressway and El Camino Real, the Emporium site by Highway 85, and Grant Park Plaza on Grant Road, just south of El Camino Real.

Regional shopping centers are major revenue generators for cities, and competition is intense for a share of the regional market. The San Antonio Shopping Center is still busy; part has been remodeled and plans for a complete remodeling were approved in 1991. A proposed new CalTrain station and mixed-use commercial/residential development, located next to the Center, will contribute to its commercial vitality.

Grant Park Plaza on Grant Road is the city's other regional shopping center. This is a small regional center that would benefit if it were extended to El Camino. Extending the shopping center would create more space for new stores and would make the center more visible from El

San Antonio Shopping Center.

Camino Real. The City can encourage an expansion by extending the precise plan for Grant Park Plaza to El Camino and changing the General Plan designation on these properties to Regional Commercial.

Policy 29. Maintain attractive and exciting Regional Commercial districts that offer residents a broad selection of retail goods and create a strong retail base for the city.

Action 29.a Encourage remodeling of the city's older regional centers.

Action 29.b Ensure distinctive and enjoyable building and site design for regional shopping centers.

Action 29.c Encourage mixed-use projects with high-density residential uses near San Antonio Center so people can live close to shopping and transit.

Action 29.d Consider extending the Grant Road Precise Plan to El Camino Real between Grant Road and Bay Street and changing the General Plan designation on these properties to Regional Commercial.

Downtown Commercial. Downtown Mountain View is the heart of the city. Mountain View's Downtown district is centered on Castro Street between Central Expressway and El Camino Real. The Downtown Commercial designation covers the same area as the Downtown Precise Plan.

Adoption of the Downtown Precise Plan in 1988 laid the foundation for an influx of private and public investment Downtown. The revitalization of the historic Downtown has emphasized a traditional pedestrian scale while promoting a mix of uses and building styles that creates a vibrant and sophisticated environment. The City has installed special pavement, landscaping, medians, wide sidewalks, street furniture, and innovative flexible zones for parking or commercial activities. These improvements have resulted in a place that is visually exciting, comfortable for pedestrians, and personally engaging. Where once the Downtown commercial space vacancy rate was about 50 percent in the 1970s, Castro Street is now home to an international array of dining, bookstores, specialty retail, and coffee houses, as well as a grocery store, cleaners, and other business that serve people who live nearby. The combined result of this private and public investment is a Downtown that is the center for social, cultural, and business activities in Mountain View.

Policy 30. Promote Downtown as a daytime and nighttime center for social, entertainment, cultural, retail, and government activity in Mountain View.

Action 30.a Continue programs to promote social and cultural events Downtown.

Action 30.b Continue to provide benches, kiosks, telephones, and other street amenities that create a safe, pleasurable, and comfortable environment for pedestrians.

Action 30.c Maintain a design review program for development Downtown.

The City's design review program ensures high-quality, cohesive, and compatible design of buildings and site features Downtown.

Action 30.d Continue revitalization efforts on side streets within the Downtown Precise Plan area.

Action 30.e Encourage neighborhood businesses, such as cleaners and groceries, in the Downtown.

Residential development is important in maintaining the vitality of Downtown. Well-designed residential projects bring people Downtown day and night, creating continuous activity and a sense of community. Residential areas surrounding Downtown need to be protected from the traffic, noise, and overflow parking that can come from adjacent commercial uses. The City has adopted the Downtown Neighborhood Preservation and Improvement Plan, which establishes a traffic control strategy and programs for neighborhood improvements.

Policy 31. Protect the residential neighborhoods surrounding Downtown.

Action 31.a Prevent commercial encroachment, including the effects of traffic, into the neighborhoods.

Action 31.b Ensure compatible uses and building design along the boundaries of the residential and commercial districts.

Policy 32. Continue to provide adequate and attractive parking for Downtown businesses.

Action 32.a Maintain the Downtown Parking District.

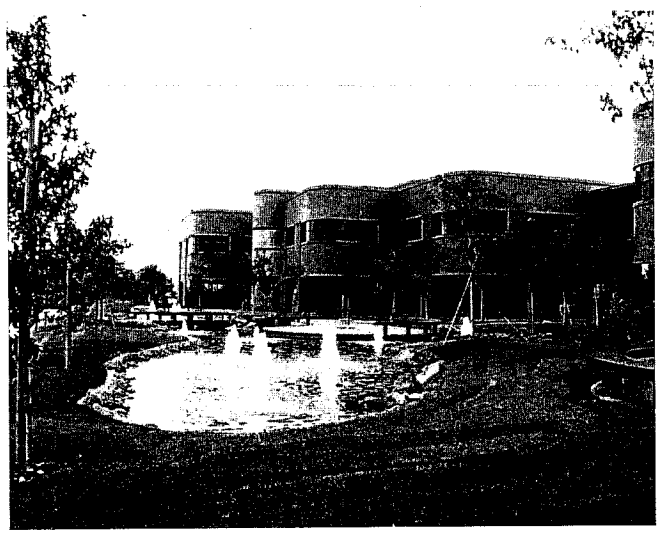
Action 32.b Require private development to provide parking consistent with zoning regulations or pay in-lieu fees.

Office Districts

Most offices blend into either industrial or commercial districts. Policies in other sections of this chapter help ensure that office development will be compatible with adjacent residential areas. The city's administrative and research and development offices are generally scattered through the industrial districts and are considered industrial uses. General and professional offices are located Downtown and along El Camino Real, mixed with other commercial uses. As a result, the General Plan designates most office buildings in Mountain View as commercial or industrial, rather than office. The office designation is used for a few small sites in the city.

Industrial Districts

The city's industrial districts vary in size, type of businesses, and appearance. Mountain View's industrial dis-



New research office buildings in the North Bayshore Area.

tricts are home to many sophisticated and successful high-technology corporations, as well as to warehousing and small peripheral and start-up industries. The city has been successful in attracting a strong and diversified industrial base. Mountain View may lose some of this diversity as inexpensive industrial space is redeveloped into modern research and development offices or new residential projects. Mountain View needs to continue to keep and attract a variety of businesses.

Industrial districts are not just places where people work; they are environments that people live in five days a week, eight hours a day. Like other districts, industrial districts need regulations that ensure compatible land uses through development and design standards. Many of today's Silicon Valley employees expect a modern work environment with many amenities. Businesses have to meet those expectations if they are to attract and keep employees. One of the ways the City is helping workers is by promoting a shuttle system that links employment centers, Downtown, other shopping and entertainment districts, and transit. Another way the City can help is by introducing some commercial services into industrial districts. The shuttle and other transportation programs are discussed in the Circulation Chapter.

The General Plan has two industrial designations: General Industrial and Industrial Park. Allowable uses and the development intensity for these designations are discussed in the Land Use Map section at the end of this chapter. The two industrial designations are meant to maintain and strengthen Mountain View's diverse industrial base.

GOAL L **Promote a variety of industrial districts that maintain a diversified economic base.**

General Industrial. The General Industrial designation covers many different industrial areas with both Limited Industrial (ML) and General Industrial (MM) zoning. General Industrial districts in Mountain View allow for a broad range of businesses. Some of the older industrial districts were the incubators for early high-technology industries. Older districts provide vital start-up space that is unavailable in the newer industrial parks. Some industrial areas adjoin residential neighborhoods and can have adverse effects on the adjoining homes. The City's Zoning Ordinance helps reduce these effects and minimize noise, traffic, odors, and safety problems for neighboring homes. This General Plan also has action programs for developing regulations about the location of hazardous materials next to residential neighborhoods.

Policy 33. Encourage work environments in industrial districts that meet the needs of the working population.

Action 33.a Amend industrial Zoning Ordinance standards to provide appropriate amenities for employees, such as outdoor eating areas and walkways.

Action 33.b Consider rezoning land or amending precise plans in industrial districts to bring commercial uses, such as restaurants and convenience shopping, closer to employment centers.

Policy 33, and Actions 33.a and 33.b apply to both the General Industrial and Industrial Park designations.

Policy 34. Ensure that General Industrial districts are compatible with adjoining residential neighborhoods.

Action 34.a Continue to review and revise the Zoning Ordinance to ensure that setback, design, use, and similar regulations reduce the negative effects of industrial uses on adjacent residents.

Action 34.b Require improvements, such as landscaping and equipment screening, on older industrial sites when businesses apply for changes or additions.

Action 34.c Rezone industrial areas that are not consistent with the new industrial General Plan map designations.

Policy 35. Maintain industrial space for small start-up and incubator industries.

Industrial Park. The Industrial Park designation is meant for newer industrial areas that have distinctive environments for high-technology industries. The North Bayshore area epitomizes the type of development intended by the Industrial Park designation. The large, well-designed buildings are surrounded by extensive landscaping, with amenities such as employee cafeterias and outdoor sculpture. This district is also appropriate for small commercial businesses, such as restaurants, and larger commercial support services, such as hotels. The Industrial Park designation is important for corporations that need a high-quality image. The attractive environment envisioned for Industrial Parks should help businesses maintain a competitive edge and attract and retain employees.

Mountain View owns a great deal of undeveloped land in the North Bayshore area. A land use study for City-owned property is expected to be completed in 1992. This plan will consider a variety of options for open space, a major hotel, space training center, commercial businesses, and corporate offices. More information and Policies on the North Bayshore area are presented in the Public Redevelopment section of this chapter.

Policy 36. Maintain a high quality of architectural and site design that creates an exceptional work environment in Industrial Park districts.

Action 36.a Review the Zoning Ordinance to ensure that development regulations are consistent with the intent to promote high-quality development in the Industrial Park districts.

THE ECONOMICS OF LAND USE

The issue of economics is especially critical in the 1990s because local and regional influences are changing and City revenues are growing more slowly. The City needs to understand the dynamics of economics and land use better if the public and private sectors are to work together more effectively. This understanding will help the City respond to changing market conditions and will be useful in guiding Mountain View's growth.

City Revenues

City revenues pay for the services provided to the community, such as police, fire, and library services. Since Proposition 13, Mountain View has become more dependent on sales tax revenues. The major components of Mountain View's budget revenues are shown in Figure 10. A city's sales taxes are influenced the most by the economy and decisions on development and growth.

GOAL M

Maintain strong and stable sources of City revenues while promoting an appropriate balance of land uses in the city.

Tax Revenues and Land Use. The current tax structure and declining municipal revenues encourage cities to make land use decisions based on the amount of tax revenues a project can generate. A reasonable consideration of the effects of land use decisions on revenue can help ensure an adequate budget for City services, but an overemphasis can distort the appropriate balance of land uses in the community. Basing land use decisions on revenues favors commercial and corporate office development over the construction of new housing. Housing typically generates less tax revenue and requires more City services. Too much emphasis on tax revenues also creates pressures for large, high-intensity projects that generate more revenues with less land.

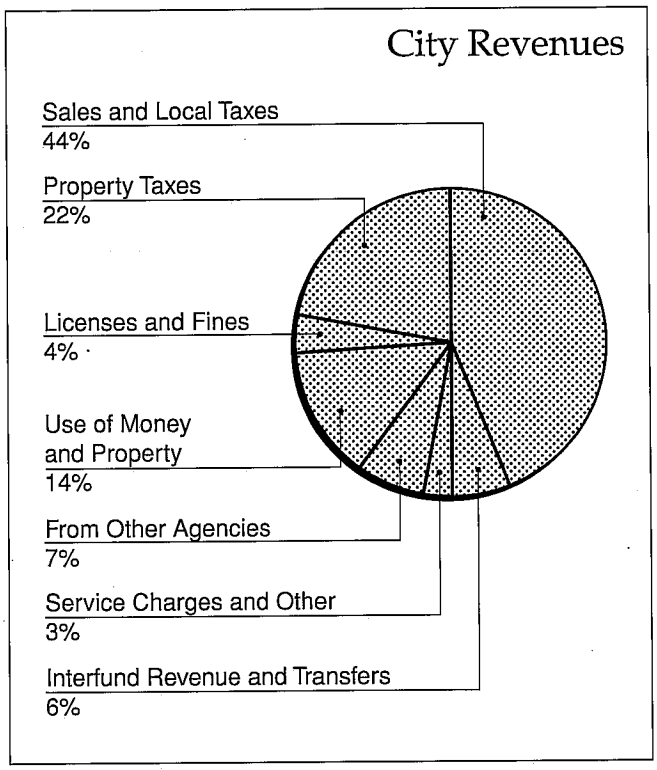


Figure 10. City Revenue Sources, Fiscal 1989–90.

Mountain View has pursued a balanced planning approach by providing varied and affordable housing while creating an attractive business climate. For example, the City rezoned older, less productive commercial and industrial areas for new housing, while preserving businesses and jobs through intensification in other areas, such as Downtown. The City weighs the intensity of development against concerns about traffic, design, compatibility, and regional effects.

Sales tax revenues are important to Mountain View's continued economic well-being. Sales taxes come from sources other than retail sales, particularly businesses such as hotels and corporate headquarters when they originate sales for a large volume of expensive goods, such as computers. As the pace of economic growth has slowed throughout the region, Mountain View has seen a decrease in both the number of sales tax generators and the amount of tax revenues they generate. Between 1980

and 1988, total sales tax revenues decreased, although property tax revenues increased, offsetting this decline. However, significant increases in property tax revenues are not expected to continue because of the limited land available for large new projects and a less rapid increase in regional land prices. As a result, Mountain View's revenues may decline in the future, unless aggressive programs are established to offset this decline.

Policy 37. **Encourage land uses that generate revenue to the City while maintaining a balance with other community needs, such as housing and open space.**

Action 37.a Develop strategies for revenue enhancement.

Action 37.b Attract a major hotel to Mountain View.

Policy 38. **Continue to provide high-quality City services to the community.**

Action 38.a Evaluate the fiscal effects of different land uses on City revenues and services.

Action 38.b Continue to put cost-saving measures into effect, while maintaining and improving the quality of City services.

Businesses. Mountain View's economic base is mature and diversifying. Mountain View traditionally was dominated by a single industry—first agriculture and then electronics. Now, in addition to electronics, there is a growing amount of medical diagnostic machinery manufacturing, work station computer manufacturing, pharmaceutical businesses, genetic engineering firms, and a variety of training and office support industries. Mountain View also has a strong commercial base Downtown and plans for expansion of regional shopping opportunities. This diversity will help Mountain View maintain economic equilibrium when there are downturns in different sectors of the economy. To protect this strong economic base, the City needs to anticipate economic trends and the needs of local businesses. The City also needs to promote opportunities for businesses to remain in Mountain View while they grow and to accommodate the shift from manufacturing operations to corporate offices.

Mountain View is a desirable place for businesses. Amenities in Mountain View, such as the recreational opportunities at Shoreline Park, the cultural events at the Amphitheater and Center for the Performing Arts, and the variety of restaurants Downtown are a benefit to businesses trying to attract employees. Attractive public improvements Downtown and along El Camino Real draw people to businesses in these areas. These types of amenities and the positive image of the city help create a successful business climate.

Maintaining a diversified economic base includes retaining businesses that meet the everyday shopping and service needs of Mountain View residents. Businesses such as car washes and small neighborhood grocery stores that serve local people, can be displaced by rising land costs. There may be times when the community wants to keep these uses through zoning or other types of regulations.

Policy 39. **Attract and retain a variety of businesses in the community.**

Action 39.a Work with the Mountain View business community to understand their economic needs.

Action 39.b Assess how the City's land use policies can accommodate economic growth.

Action 39.c Ensure that rezoning industrial and commercial areas or sites will not significantly hurt the city's economic base.

Action 39.d Develop a strategy to retain and attract businesses that meet the shopping and service needs of Mountain View residents.

Development Costs

The economics of private development significantly influence what is built or not built in Mountain View. General Plan land use categories can guide and encourage development, but if the economic incentive is not there, nothing will be built. City policies, procedures, and zoning requirements affect whether building a project is economically viable.

GOAL **N** **Encourage suitable development through effective regulation and efficient City approval procedures.**

Development Process. There are three basic parts of development costs: the land cost, construction costs, and administrative expenses. The City's zoning, building codes, public works requirements, and permit processing affect all three of these expenses. Land costs are influenced by the zoning of a property, as well as by the location and a variety of other factors. Construction expenses vary according to the type of building and quality of construction, and are also influenced by the City's building codes and public works requirements for right of way improvements. The cost of City licenses and permits affects administration expenses. The length of time it takes to process City permits also will affect administrative expenses, particularly construction financing costs.

Mountain View processes most building permits in three to nine weeks, among the quickest processing times in the county. The City can support development and business by continuing to streamline permit processing, building codes, and public works requirements, and by adopting ways to make zoning requirements more efficient.

Policy 40. Ensure that zoning, building regulations, and public works requirements are equitable and that City processes are efficient.

Action 40.a Review and revise zoning, public works, and building regulations routinely.

The City periodically makes Zoning Ordinance changes and adopts a new State Uniform Building Code every three years. A comprehensive revision of the Zoning Ordinance was underway in 1992.

Action 40.b Survey businesses, developers, homeowners, and others to determine where and how to improve development-related City services.

LIVING IN THE BAY AREA

There were 98 cities, nine counties, and six million people in the San Francisco Bay Area in 1990. The Bay Area exceeds many states and some countries in population and economic power. Mountain View shares in the prosperity and beauty of the Bay Area. It also shares the growth pressures and problems that have resulted from more and more people wanting to live in an area with job opportunities, cultural diversity, and a beautiful natural environment.

The Regional Setting

Mountain View is on the southern end of San Francisco Bay, where the San Francisco Peninsula and Santa Clara Valley meet. It is part of a continuous metropolitan area where each city joins the next and affects its neighbor. Mountain View is linked to the region by roadways and rails that carry the daily exchange of people and goods leaving and coming into the city. It is linked to other cities by shared environmental concerns for the Bay and the quality of the air basin. Like the rest of the Bay Area, Mountain View has become part of a larger economy. Mountain View is dependent on the overall economic and environmental health of the Bay Area for its own continued well-being.

GOAL O

Preserve and enhance the quality of life enjoyed by residents of the San Francisco Bay Area.

Regional Cooperation. Mountain View's land use decisions balance local concerns with a regional perspective. The City has a long history of cooperation in regional efforts, such as the Golden Triangle Task Force and Santa Clara County Congestion Management Agency. The Task Force focused on creating a better balance between jobs and housing through voluntary compliance with transportation and land use policies. Mountain View participated by increasing the potential housing supply and enacting a 0.35 maximum average floor area ratio (FAR) for industrial and office land uses. The City continues to look for sites for additional housing, as discussed in the "Housing and Jobs" section of this chapter. Mountain View also has participated actively in the Santa Clara County Congestion Management Agency. Detailed information on this and other City transportation programs is in the Circulation Chapter.

Cooperative regional efforts are important. The positive and negative effects of development on traffic, housing, and the environment may be felt in Mountain View even if the development occurs in other cities. Likewise, Mountain View's development decisions can affect other cities in the region. Voluntary cooperation between cities and counties in the Bay Area is vital to protecting the economic health of the region and improving the quality of life enjoyed by everyone.

Townhouses under construction.

Policy 41. **Support voluntary local government cooperation in making regionally responsible land use decisions.**

Action 41.a Consider the regional implications of land use decisions when reviewing new projects and zoning or General Plan changes.

Action 41.b Strive to make land use decisions that will be beneficial both regionally and locally.

Action 41.c Support voluntary regional cooperation as a preferred alternative to a new mandated regional government.

Housing and Jobs

Balancing housing opportunities with jobs is an important local as well as regional issue. The right balance of housing types and jobs can help reduce regional traffic congestion, improve air quality, stabilize housing prices, and secure an adequate labor supply for businesses. While Mountain View has a better balance of housing and jobs than some neighboring cities, there is less housing than is needed for the number of employees. A broad range of housing issues, including more on the jobs/housing balance, is discussed in the Residential Neighborhoods Chapter.

GOAL **P** **Promote the opportunity to both work and live in Mountain View.**

Managing the Jobs/Housing Balance. Mountain View, with other cities in Santa Clara County, has tried to realistically balance the supply of housing with employment in the city. The answer is not a simple one-to-one ratio of one house for each employee. The issue is more complex. A balance of jobs and housing is a goal, one that shifts with changing circumstances and one that may never be reached.

There are more people from other cities commuting to jobs in Mountain View than there are Mountain View residents commuting to jobs outside the city. This makes Mountain View a "net in-commute" city. Mountain View has more jobs than employed residents, like most cities in northern Santa Clara County. In 2005, there will be about 1.68 jobs for each employed resident, up from 1.53 in 1985. This does not consider the shift in housing and employment that would result if new housing is provided on the 11 potential housing sites. To bring jobs and housing into closer balance, either more housing must be built that people who work in Mountain View can afford, or job growth must be reduced, or both.

This need for additional housing has to be balanced with the community's desire to retain its quality of life and keep the suburban, small-town character of much of the city. On the residential side of the equation, it is important to preserve the city's single-family neighborhoods, while finding sites that are appropriate for additional housing.

On the other side of the jobs/housing equation, limiting job growth has to be weighed against the need for businesses to expand and the maintenance of the city's economic health. The City's zoning regulations and precise plans limit the allowable floor area of industrial and office buildings. Floor area restrictions are an attempt to manage traffic congestion by balancing new jobs with new and available housing in the community. Floor area ratios limit the flexibility to accommodate different types of businesses. These limits may not allow for corporate expansions or a full range of corporate and office employment in Mountain View. The City, therefore, will need to evaluate floor area restrictions periodically to minimize the negative effects on businesses. This General Plan stresses average floor area ratios for the city, creating the flexibility to increase floor area ratios in some areas, while reducing them in others.

Density transfers are one way the City can accommodate business expansion and still maintain the average floor area throughout Mountain View. The total number of jobs would remain the same but the employment density could vary from one area of the city to another. As of 1992, the City's Zoning Ordinance restricted floor area on a site-by-site basis. The ordinance would need to be amended to put a density transfer program into effect. The location for different employment densities should be tied to factors such as transit availability, the effect on adjoining neighborhoods, and the character of the district.

Policy 42. **Strive for a better balance of jobs and housing units in Mountain View.**

Action 42.a Maintain and periodically evaluate the effectiveness of floor area ratio limits to manage job growth.

Action 42.b Consider establishing procedures for density transfers of allowable floor area between sites and when industrial or office sites are redeveloped for residential use.

Potential Housing Sites. The Association of Bay Area Governments predicts that substantially more housing will be needed for the city's workforce by 2005. (See Figure 11.) To reduce this housing shortfall, the City has considered 18 sites for possible changes in the General Plan and zoning to promote more housing. (See Figure 6 on page 84.) A detailed discussion of these sites is presented

Housing and Jobs

	1990	2005 (without 9 sites)	2005 (with 9 sites)
Homes Needed	47,250	55,483	55,483
Homes Provided	31,487	34,238	39,325
Housing Shortfall	15,763	21,245	16,158

Source: ABAG, "Projections '90" and U.S. Census.

Note: "Homes needed" is based on the number of jobs divided by 1.44 workers/household in 1990 and 1.43 workers/household in 2005.

Figure 11. Housing and Jobs Balance.

in the "Potential New Residential Areas" background report. Of the 18 sites that are discussed in the Residential Neighborhoods Chapter, nine are still being considered as potential housing sites. These sites are shown on Figure 12.

If all nine sites were developed or redeveloped for housing, it would result in about 5,100 more dwelling units than under current zoning. The housing shortfall would remain about what it was in 1990 as shown in Figure 11. General Plan actions on the nine sites call for residential rezoning on three sites, Zoning Ordinance or precise plan changes for two sites, studying three sites for possible residential rezoning, and studying one site for a mix of possible uses.

Building housing on these sites not only improves the jobs/housing balance, it places more housing close to transit and shopping, eliminates some incompatible uses, and creates more logical boundaries for some of the city's neighborhoods. If industrial sites are redeveloped for housing, the City would have the option of transferring the development intensity from these sites and allowing a higher FAR in other industrial areas. This would help retain a healthy industrial base for the city, but would not be as effective in improving the jobs and housing imbalance.

Most of the four sites that require further study are industrial areas with many individually owned properties. More information is needed on the economic and environmental effects of a change from industrial to residential use and how this change would affect businesses. The largest of these sites, in the Whisman Road and Ellis Street area, is along the future Light Rail line. It would be studied for a range of possible uses that will revitalize the area and support Light Rail. Light Rail in this area will provide an excellent opportunity to create an innovative industrial, residential, and mixed-use district.

Policy 43. Investigate sites that have the potential to generate new housing, and amend the General Plan and zoning on these sites to residential use where appropriate.

Action 43.a Initiate rezoning to residential use on these sites:

Site 1 - Del Medio Court, known as the Sears warehouse site.

Site 3 - Showers Drive and California Street, known as the Old Mill site.

Site 7 - Evelyn Avenue and Villa Street.

Sites 3 and 7 were changed to residential use on the Land Use Map as part of this General Plan. Site 1 was already designated for residential use on the 1982 Land Use Map.

Action 43.b Study these sites for a possible General Plan change and rezoning to residential or mixed use:

Site 2 - Mayfield Avenue and Central Expressway.

Site 4 - Polaris and Gemini Avenues.

Site 6 - Evelyn Avenue and Moorpark Way.

Action 43.c Study Site 5, Fairchild Drive and Ellis Street, for a range of possible uses including mixed-use, housing, and industrial uses that will support Light Rail and revitalize the area.

Action 43.d Amend the Arterial Commercial (C3) zoning district to allow mixed-use housing projects as a principally permitted use on large lots (Site 9).

Action 43.e Promote the development of new housing Downtown (Site 8).

Land Use and Transportation

Land use decisions have a direct effect on traffic levels on the city's streets and intersections. Traffic congestion, with its bumper-to-bumper commutes, smog, noise, and delays, is the number one issue with residents of the Bay Area. Reducing congestion does not necessarily mean limiting growth if a better job can be done of matching the location and type of growth with improved transportation systems. Building more housing close to jobs is one example of ways to reduce commute trips and ease congestion. Promoting transit systems is another.

Most Mountain View residents want to retain the quality of life they now enjoy. The challenge is to manage

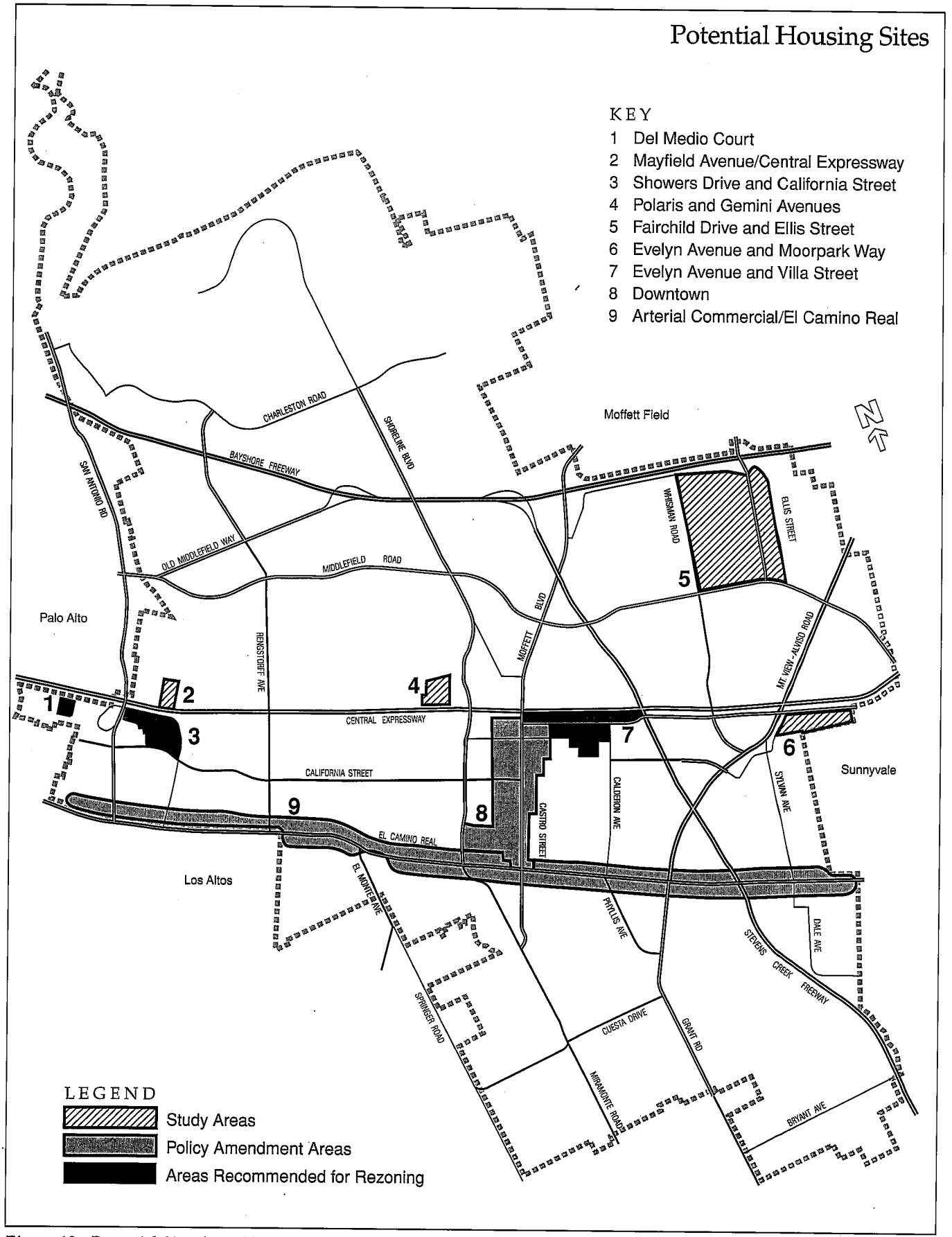


Figure 12. Potential Sites for Additional Housing.

land use and transportation so that they preserve the community's ideals of open space, safety, and convenience, while reducing the length and number of automobile trips. Sound land use planning, with the transportation programs and policies discussed in the Circulation Chapter, are an effective foundation for reducing congestion.

GOAL **Q** **Coordinate the location, intensity, and mix of land uses with transportation resources.**

Coordinating Land Use and Transportation. Mountain View has a low-density, suburban land use pattern that creates comfortable living and working spaces, but results in an environment that depends on automobiles. Much of the city is covered by roads and parking lots. Many people are now looking to alternative transportation, such as buses, Light Rail, bicycles, and walking to help ease traffic congestion. Improved transportation systems also reduce the number of cars on the road.

In 1991, the Santa Clara County Board of Supervisors and the Metropolitan Transportation Commission approved the extension of the Tasman Corridor Light Rail line into Downtown Mountain View. People who live and work in Mountain View put considerable effort into bringing Light Rail to the city. Light Rail is a special opportunity for the community. There is the potential to promote land uses along Light Rail lines that not only support Light Rail ridership, but add to the diversity and excitement of the city.

The City can promote alternative transportation by encouraging high-intensity development along transit lines and promoting a concentrated mix of uses that make it easy for people to walk from place to place. Consolidation of living, working, entertainment, and shopping in mixed-use projects or Downtown allows people to depend less on their cars. This type of development can be found on El Camino Real, where housing is combined with shopping, and Downtown, where higher-density housing, offices, and commercial businesses are close together. Mixed-use development is better for the environment, since fewer cars on the road mean less noise, cleaner air, and less fuel consumption.

Policy 44. Make land use decisions that support transportation alternatives to the automobile.

Action 44.a Encourage mixed-use projects and the city's highest-density residential projects along major transit lines and around stations.

Action 44.b Prepare land use plans for the Light Rail corridor that will complement and enhance Light Rail use.

Action 44.c Work with property owners to facilitate joint development and use of land at Light Rail stations.

Introducing a transit line into an area that has never had one influences land use in many ways. Taking the greatest possible advantage of opportunities to link land use and transit is the goal of planning near the Light Rail line. Each new station offers an excellent opportunity to combine public station facilities with private development.

OPPORTUNITY AND CHANGE

Mountain View is a many-faceted, constantly evolving community. It is changing because it is surrounded by change. Though the pace of regional growth has slowed, the Bay Area is still one of the most dynamic areas in the country. As long as people are drawn to the region by its climate, beauty, and cultural and intellectual environment, Mountain View will continue to experience the need to change. The question is not so much whether there will be change and growth, but how much, where, and in what form.

Public Redevelopment

Most of the city's future growth will come from private development on vacant land or private redevelopment of existing buildings, as discussed in the Development Potential section. However, public redevelopment also can have a significant effect on Mountain View. The success of the Downtown Revitalization District illustrates the benefits of public redevelopment for the community. The Downtown Revitalization District is the City's only redevelopment district. Redevelopment efforts Downtown have created a distinctive environment that is culturally and economically important to the community. There is a detailed discussion of Downtown in the Commercial Districts section of this chapter.

Shoreline Regional Park Community District, which covers much of the North Bayshore area, is a special-purpose district that functions like a redevelopment district. There is the potential for important new development on some vacant land in this district.

GOAL **R**

Focus public redevelopment efforts on important areas where revitalization will benefit the entire community.

North Bayshore. Shoreline Regional Park Community District is a special-purpose district and is usually called the "North Bayshore." It encompasses the recreation and entertainment facilities at Shoreline Park and the Amphitheater, a high-technology industrial park, and large tracts of vacant City-owned property. Before the City's redevelopment efforts, North Bayshore was an unattractive area of garbage dumps, marginal businesses, and scattered substandard housing. Now it is a regional attraction as well as a source of pride and enjoyment for Mountain View residents.

City-owned property in the center of the North Bayshore joins the various parts of the district and creates a link with the NASA/Ames research facility to the east. There is the potential in the North Bayshore for a true blending of industry, science, entertainment, outdoor areas, educational facilities, and nature preserves. The North Bayshore could be completely different from any other place in the South Bay, both in how it looks and in the activities there. This area also has the potential for landmark architecture and open space that will emphasize the image of the district and the city.

Policy 45. **Support the Shoreline Regional Park Community District as vital to the city for providing leisure and educational opportunities, locations for high-technology industries, and a distinctive image for Mountain View.**

Action 45.a Incorporate significant public outdoor areas on the City-owned properties.

Public outdoor areas in North Bayshore should maintain the open space characteristics of the district and provide transitions between Shoreline Park, industrial businesses, and NASA/Ames.

Action 45.b Ensure distinctive architecture and site design and, when possible, publicly visible art on properties in the North Bayshore through precise plans and development review.

Action 45.c Preserve the views of Vista Point and other natural landmarks in the North Bayshore area.

Policy 46. **Evaluate the potential for public redevelopment districts in other special areas of the city.**

Action 46.a Consider establishing a redevelopment district for the Evelyn Avenue Corridor study area.

Action 46.b Consider establishing redevelopment districts around rail stations.

Building Height

Mountain View has a generally low-profile character. Buildings are primarily one or two stories, surrounded by landscaping or parking. The predominant building form is low, horizontal, and dispersed. The scale of development does not overwhelm people. It results, however, in a sameness that can be too uniform and a development pattern that depends on the automobile. Given future needs, the City may see an increasing number of requests to construct buildings over three stories. However, there are only a few locations where a limited number of tall buildings should be permitted, if Mountain View is to retain its character.

Tall buildings are appropriate in some areas of Mountain View and not appropriate in others. They fit into areas that have a more urban appearance, such as Downtown and some portions of El Camino Real. These areas create some interesting diversity in the community. Not only are buildings taller in these locations, but there are more courtyards and plazas instead of landscaping, and there is a concentration of buildings and activities. Five buildings in Mountain View are over five stories. Generally, they are located Downtown and along El Camino Real on the eastern and western edges.

With good planning, tall and low buildings can comfortably coexist. Tall buildings can emphasize special districts, add contrast and excitement, and help orient people in the community by acting as landmarks. Tall buildings also make efficient use of the community's limited land. Mid-rise buildings have been carefully located in Mountain View to be compatible with surrounding land uses and to support transit and important districts, such as Downtown.

GOAL **S**

Maintain the predominant low building height in Mountain View, while allowing a limited number of well-designed tall buildings in selected areas of the city.

Locations for Tall Buildings. One of the key urban design issues for the City is to identify appropriate areas for more intense development and taller buildings. Tall buildings should have a meaningful design relationship

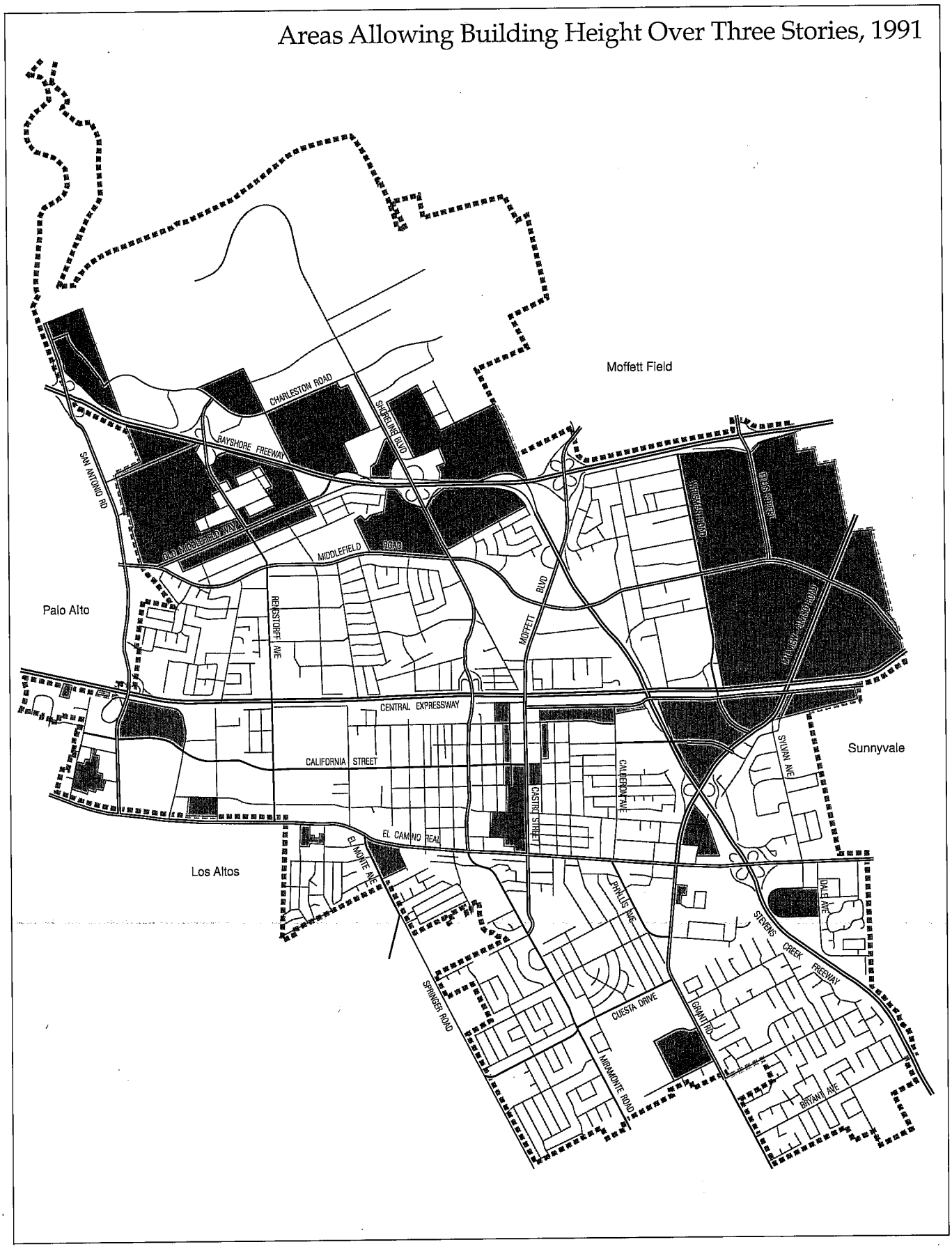


Figure 13. Areas Allowing Buildings Over Three Stories.

with the surrounding district and the rest of the community. Multiple-story structures can be used to emphasize the entrances to Mountain View, to increase the prominence of Downtown, to accentuate major shopping centers such as the San Antonio Center, to identify industrial parks such as the North Bayshore area, or to distinguish public facilities such as City Hall.

The height of a building is perceived in relation to its surroundings. The appropriate height for a building will depend on many factors, including compatibility with the district and city-wide urban design objectives. These same principles apply to the perceived mass or size of a building. For tall buildings to fit into a district or neighborhood, their size in relation to the lot and the area's open space quality must be similar to the size/lot/open space relationships of other properties in the district. To ensure compatible building size, the City maintains building coverage limits, setback requirements, floor area ratio limits, and architectural review for new development. However, some of the City's zoning districts place no restrictions on maximum building height. Figure 13 shows areas where buildings over three stories are allowed by 1991 zoning standards and precise plans.

The appropriate height and locations for tall buildings should be determined as part of a city-wide building height study and strategy. There are only a few areas in the city where multiple-story buildings are appropriate. There also may be areas of the city where allowable building height should be lowered. Tall buildings should be located in places that either have a concentration of multiple-story buildings, are special districts, are close to transit, or are located away from single-family neighborhoods.

Tall buildings demand attention. Their design is crucial because they are so visible. They can be seen from a long distance, particularly in a suburban environment. Because the effect of these buildings is substantial, they need more rigorous design review.

Policy 47. Maintain the predominantly suburban character of the city.

Action 47.a Prepare a city-wide building height study that specifies appropriate building heights in Mountain View.

The building height study should analyze existing and potential compatibility with surrounding properties and districts, closeness to transit, and effects on economics, community identity, and adjacent neighborhoods. The study would be carried out through Zoning Ordinance and precise plan amendments.

Policy 48. Ensure that tall buildings are especially well designed.

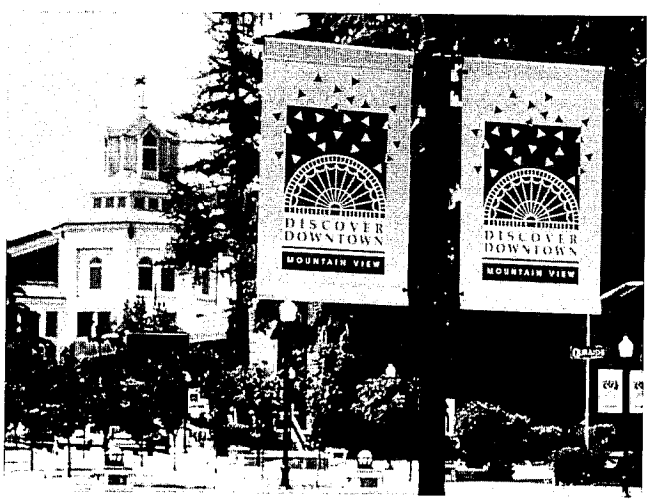
Action 48.a Require detailed design analysis of proposed buildings over three stories.

A detailed analysis would include scale models showing the relationship of the proposed building to the surrounding area, on-site demonstrations of the building height or computer simulations, and detailed height and shade studies.

Areas of Opportunity

Mountain View still has the potential for change, though the city is mostly developed. There are areas within the city that hold the key to the future, presenting opportunities for Mountain View to keep pace with major issues it faces in economic development, housing, and transportation. Most of these are transitional areas where there is some change in progress, and buildings are already being privately redeveloped or renovated. The City can encourage and guide private redevelopment so that it revitalizes the area and benefits the entire community.

Downtown Mountain View is an example of an area with great potential, where community efforts have made a difference. The community had a vision of what it wanted Downtown, and implemented this vision in the Downtown Precise Plan. This vision is becoming a reality through the public's investment in the distinctive new Civic Center and major streetscape improvements and private investment in businesses and buildings. These efforts have created a place the community can be proud of and enjoy. It is also a place where there are new housing opportunities and central access to bus and rail transportation. Downtown's success is a model for developing and carrying out plans for other special areas.



Downtown Mountain View displays a new spirit.

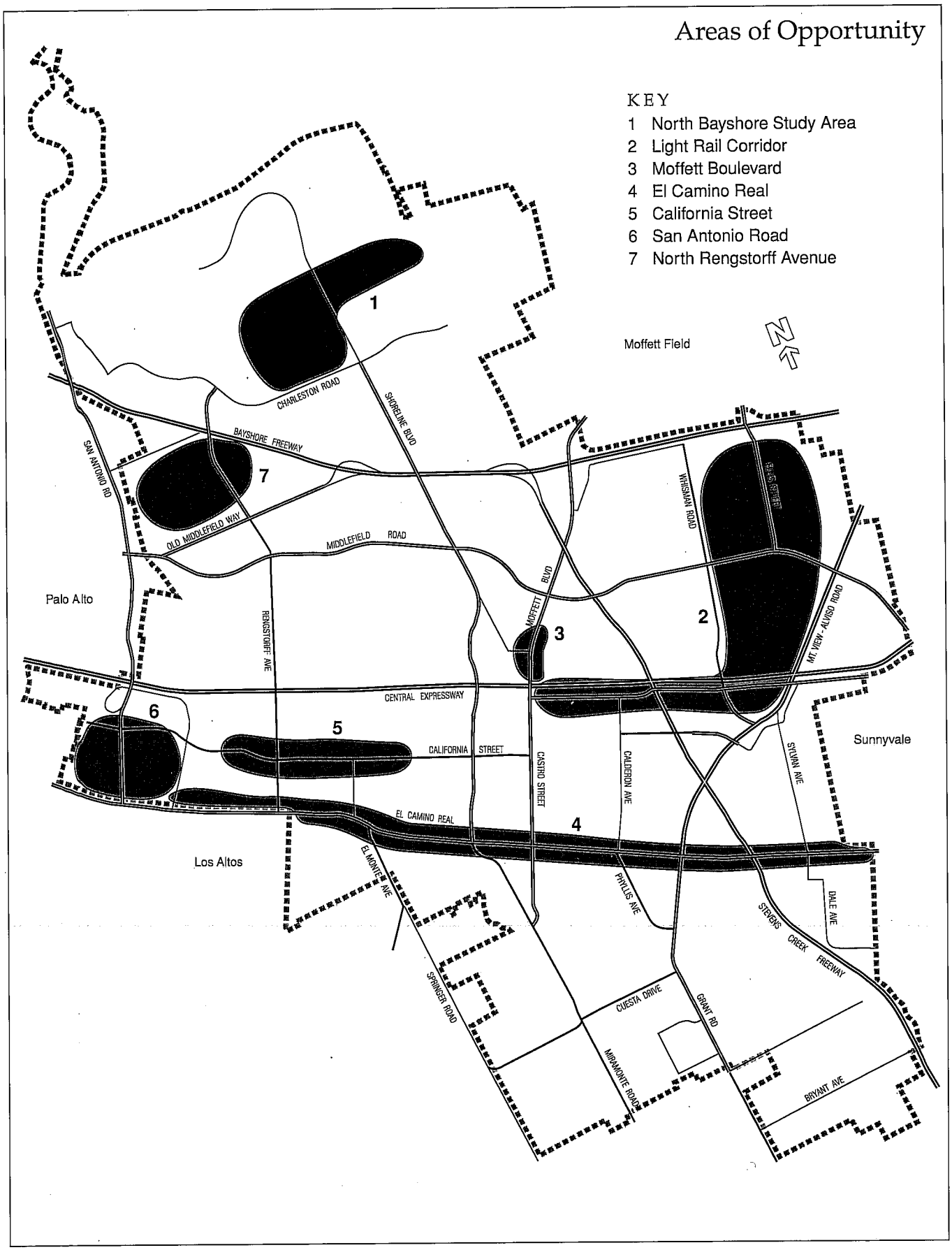


Figure 14. Areas of Opportunity.

GOAL T

Guide change in special opportunity areas to maintain the vitality of Mountain View.

Strategies for the Future. Most of Mountain View will remain the same during the 15-year life of this Plan. However, there are areas, like Downtown, where there is a high potential for change. Seven areas have been identified that are changing or have the potential to change significantly. They are the North Bayshore, the Light Rail Corridor, and the Moffett Boulevard, El Camino Real, California Street, San Antonio Road, and North Rengstorff Avenue areas.

The City can be better prepared for change by working with residents and business owners to develop strategies to anticipate and guide this change. Action plans for these areas can help the City meet key goals of the General Plan in providing adequate housing, improving traffic congestion, maintaining the city's economic vitality, and enriching the quality of life for those who live and work in Mountain View. Each of these areas has many of the following characteristics:

- The potential for change, either because the land is vacant or because the age and condition of the buildings encourage redevelopment.
- A location along transit lines or the future Light Rail line.
- A good location for new housing.
- A strategic location that will support Downtown, improve the appearance of the city, and promote a positive image of Mountain View.
- The potential to benefit the City's long-term economic health.

The seven areas of opportunity are discussed in the following profiles and shown in Figure 14. As of 1992, action plans were already underway in the North Bayshore and Evelyn Avenue Corridor areas, and development plans are in progress for improving the San Antonio Shopping Center. Other areas have been preliminarily studied, but need more in-depth analysis and comprehensive strategies to develop their full potential. All seven areas will need active cooperation between the public and private sectors to achieve the most effective and creative developments.

North Bayshore

- North Bayshore is home to Shoreline Amphitheater, Shoreline Recreational Area and Wildlife Refuge, leading high-technology corporations, and internationally known NASA/Ames Research Center.
- The North Bayshore Study Area is 220 acres of vacant, City-owned land strategically located in the middle of North Bayshore.

Opportunities. North Bayshore presents an opportunity for a blending of nature and science, and recreational and cultural activities, in a creative environment for technological and scientific achievement. Within this large area is the potential for more recreation space, new industries, business expansion, hotel and convention facilities, and an educational and cultural facility.

The Study Area is an unusual opportunity for development that can benefit the community and the entire North Bayshore. Development of the Study Area can link and enhance the different uses in the North Bayshore, respecting both the natural environment of the Bay and the high-technology complexes surrounding it. It can offer recreational and educational opportunities not available elsewhere and be economically beneficial to the city.

The City's land use concept for the Study Area is scheduled for completion in 1992, followed by adoption of a precise plan for the City-owned properties. Most of the area under study would be kept as open space or recreational areas, such as plazas, gardens, natural parkland, and other public places. Among the options being considered for development are a mixture of high-quality corporate offices, an educational or cultural facility, and supporting stores and restaurants. The Study Area would have distinctive buildings and a site design that links the rest of North Bayshore together and becomes a focus for the area.

North Bayshore will be an important area of growth and change. Additional Policies and Actions for North Bayshore are in the Businesses Community, Industrial Districts, and Public Redevelopment sections of this chapter, and the Open Space section of the Environmental Management Chapter.

Light Rail Corridor

- Light Rail in Mountain View is scheduled for completion in 1997. It will change the way people travel; it will change the way the city looks and functions.
- The Light Rail line will extend from Moffett Field, through the Middlefield industrial area, along Central Expressway, and into Downtown.

Opportunities. The Light Rail line provides an opportunity to improve the city's transportation alternatives dramatically and to encourage an infusion of energy and new development along the corridor. The Light Rail line will pass through four distinct areas of the city, each with a different character and potential. While each of these areas will require different strategies, the City needs to con-

Campaign to bring Light Rail to Mountain View.

duct a comprehensive review to be sure that the strategies will work together to maximize opportunities.

The first area is Moffett Field , where Light Rail could be a significant benefit as the Naval Air Station slowly changes to other uses.

The Middlefield Road industrial area is next and is the largest section. This area was once home to Silicon Valley's pioneer industries. Now, many buildings no longer meet the needs of modern businesses and there is a high potential for private redevelopment. General Plan background studies for this area have favored a concentration of corporate office, industrial, and multiple-family residential uses that would effectively use the resource and public investment in Light Rail. More compact development is particularly appropriate near the three Light Rail stations planned for this area.

The mid-section of the Light Rail corridor, along Central Expressway and Evelyn Avenue near Pioneer Way, is primarily an area of small industrial shops and general industry. This area will have a park-and-ride Light Rail station near Highway 85 that will improve access and transportation options. Light Rail may open many new possibilities for this area, including more auto-related service commercial uses or corporate offices with a high concentration of employment.

The last segment of the corridor encompasses Evelyn Avenue, the Evelyn Avenue Corridor Study Area, and a portion of Downtown. The City has approved a Phase I Concept Plan for the Evelyn Avenue Corridor Study area that calls for rezoning to promote more housing. This new housing will encourage and support Light Rail ridership. The Plan also envisions mixed residential and commercial development next to a new multi-modal transit station. The transit station would be the beginning of the Light Rail line, adding to Downtown's vitality and making it more important regionally.

The multi-modal transit station will be a transfer point for buses, Light Rail, and trains.

Moffett Boulevard Area

- Moffett Boulevard extends from Central Expressway to Middlefield Road and is a primary gateway to Downtown.
- It is a narrow commercial district with an identity separate from Downtown and an assortment of older buildings, small businesses, and service commercial uses.

Opportunities. The Moffett Boulevard Area offers an opportunity to create a focus for the surrounding residential neighborhoods and a more attractive entryway to Downtown. Most of the businesses were established before Downtown was revitalized and may no longer fit the image of an entrance to Downtown. The General Plan calls for developing strategies that would promote high-quality building design; a better meshing of the buildings, parking, and landscaping; and uses more compatible with the adjoining neighborhoods. The City has already changed the zoning and General Plan designation to encourage more retail stores.

New commercial development can enhance the area and Downtown if its scale is sympathetic to adjacent residential development and if it maintains a distinct identity for the Moffett Boulevard district. Public roadway improvements, such as landscaping, also are necessary to make this area more attractive and distinctive.

El Camino Real

- El Camino Real is the city's busy east-west axis and its historic link to other cities along the Bay.
- The commercial district on El Camino Real has a variety of businesses and buildings. They range from muffler shops to five-story offices and from older, nearly obsolete structures to new, high-quality buildings. There are several large vacant or underdeveloped sites.
- The City and property owners on El Camino Real have invested in significant landscaping and street improvements.

Opportunities. El Camino Real offers an opportunity to enhance the city's identity, promote new housing, and create distinctive entryways into the city and Downtown. El Camino is one of the city's more heavily-traveled roadways and more visible commercial districts. Many visitors get their only impression of Mountain View by driving along this street. The east and west ends of El Camino Real are prime locations for gateway improvements that clarify the city's boundaries and introduce people to the quality of the community. El Camino Real also presents an opportunity to add new housing close

to bus lines and commercial services. Housing that is clustered on part of El Camino can create an attractive area that has more landscaping, less pavement, and fewer cars. On a long street like El Camino Real, this would provide some visual relief from the monotony of strip commercial development.

The General Plan calls for developing strategies that would help El Camino Real reach its potential as an important living and shopping environment in Mountain View. These strategies would require a comprehensive review of the entire length of El Camino Real to coordinate the location for housing and other land uses, gateway and streetscape improvements, and any new building and site design standards. This review may suggest more specific actions for certain portions of El Camino Real.

California Street

- California Street is a major roadway surrounded by one of the city's earliest and largest multiple-family neighborhoods. California Street is centrally located and connects Downtown with the San Antonio Shopping Center.
- The California Street area was developed in the late 1950s with medium-density and high-density apartment buildings that are now generally old and outdated.

Opportunities. California Street offers an opportunity for the city to retain affordable housing while improving the living environment for many of the city's families. Most of the apartment buildings in this area do not meet today's design standards or provide adequate play areas for children. They were built inexpensively and need major renovation and improvements. Once this area was popular with single residents and young couples who would move on to ownership housing. Now many families live in this area and they stay longer, partly due to the high price of owning a home. California Street meets their needs for affordable housing.

The City can develop strategies with strong economic incentives to encourage building renovation, site improvements, and private redevelopment. These strategies must consider how to retain affordable housing while improving the living environment. New multiple-family development can benefit the area by creating a greater variety of densities and unit sizes, more play areas and landscaping, and better architectural design. California Street also needs public improvements to strengthen this area as a neighborhood and make it a more attractive part of Mountain View. This street can become one of the city's main residential boulevards with an appearance and character that recognize it as a distinct and important multiple-family neighborhood.

San Antonio Road

- The San Antonio Road commercial district stretches from El Camino Real to Central Expressway and includes a regional shopping center, individual businesses, and plans for a major high-density housing project.
- San Antonio Road is on the city's western edge, where Mountain View meets the neighboring cities of Palo Alto and Los Altos.
- The San Antonio Road area is an important transportation hub as a bus transfer center and site of a proposed new CalTrain station.

Opportunities. The San Antonio Road area can become a more vibrant commercial district, one that contributes to the city's image and economic well-being. This district offers an excellent opportunity for a concentration of regional commercial and high-density residential uses close to bus and rail transportation.

San Antonio Road is one of three important commercial districts in Mountain View. The others are Downtown and El Camino Real. The San Antonio Road district should have an identity that is clearly different from the strip commercial style on El Camino and the more intimate, pedestrian scale Downtown. The scale and style of development on San Antonio Road can be bigger and bolder because of the larger land area and the high-density housing around it.

Businesses along San Antonio Road serve a regional market and offer Mountain View residents retail goods unavailable in the city's other commercial districts. To draw shoppers, the district must be attractive and entertaining. A uniform and distinctive landscape theme on both public and private property along San Antonio Road would give the district a more attractive identity. Roadway medians and landscaping improvements are part of the City's Capital Improvement Program. Older commercial buildings need to be renovated to improve the district and attract patrons and new business tenants. Part of the San Antonio Shopping Center has already been remodeled.

Three major projects are planned that will have a significant effect on rejuvenating this area. The first is a new CalTrain station that will link the area to a regional transit network, improving the district's access and visibility. Second, the City also has approved a more extensive remodeling of the San Antonio Shopping Center that will update the Center's appearance and make it more competitive in the regional market. The third project is a major new housing development that has been approved on the Old Mill site next to the future CalTrain station. This concentration of commercial businesses, housing, and rail and bus transportation will create an exciting place to

shop and live, while making good use of efficient transit systems. The City should continue to support these projects while developing strategies to promote building and site improvements on other older building sites. Some sites may even be appropriate for additional housing.

North Rengstorff Avenue

- The North Rengstorff area, next to Highway 101, is an older industrial district with small manufacturing shops and start-up industries located in separate, small buildings.
- Single-family and multiple-family housing is scattered throughout the area. The irregular industrial zoning boundaries of the district do not adequately buffer and protect some adjoining neighborhoods.

Opportunities. North Rengstorff offers an opportunity to create more compatible boundaries between the city's industrial and residential uses, to support the city's vital start-up and small shop industrial space, and to guide probable private redevelopment of these older buildings. North Rengstorff provides inexpensive industrial space needed by incubator industries and the peripheral shops that supply larger manufacturers. It is also an important area for local-serving businesses, such as dog kennels.

Strategies for this area need to address how to better separate residential and industrial uses, so that neither intrudes upon the other. This may require rezoning some parts to clarify boundaries and create more cohesive districts.

North Rengstorff is another part of Mountain View that is ripe for private redevelopment because of the age and condition of the buildings. New development, such as warehouse retail or corporate headquarters, would improve the area's appearance and be economically beneficial to the City. Redevelopment also could displace much of the city's inexpensive industrial space. One of the key issues is how much redevelopment is appropriate and where. Strategies for this area should include programs for keeping start-up businesses in Mountain View as they grow.

Policy 49. Develop plans for areas of the city that are changing or have the potential to change significantly.

Action 49.a Continue to study and adopt plans for the North Bayshore Study Area and the Evelyn Avenue Corridor.

Action 49.b Adopt action plans for these special areas:

- Light Rail Corridor
- El Camino Real
- California Street
- San Antonio Road
- North Rengstorff Avenue

LAND USE MAP

The General Plan designates the general distribution and location of land to be used for housing, business, industry, open space, public facilities, and other categories of land uses. The General Plan also sets standards for population density and building intensity for each of the city's General Plan land use categories. The Land Use Map and the following definitions of the land use categories found on the Map designate the general distribution, location, and intensity of land use in Mountain View. Together, the Map and land use definitions carry out the City's goal to guide future development and growth in a way that promotes the health, safety, and welfare of the community.

Mountain View is almost fully developed, so the Land Use Map reflects the city's existing zoning and land uses. There are no major shifts in the land use pattern between earlier maps and the 1992 Land Use Map. However, the Land Use Map is a dynamic document that may change as General Plan Policies and Actions are carried out.

Land Use Changes

In general, the 1992 Land Use Map is not very different from the 1982 General Plan Land Use Map or from the pattern of land use. A fundamental change in the 1992 Land Use Map is that the boundaries of the different land use designations are site-specific. The 1982 Map was a "bubble map" that showed the predominant and broad land use for districts and neighborhoods, but did not show detailed land use designations for each property. The boundaries on the 1992 Land Use Map will conform more precisely to zoning district boundaries and precise plans.

The 1992 Land Use Map calls only for minor changes from the present distribution and intensity of land use in Mountain View. The reasons for these changes were discussed earlier in this chapter and the changes are summarized below.

- The 1992 General Plan will create more housing opportunities in Mountain View and achieve a better balance of jobs and housing. Land Use Map changes on two sites totaling 43 acres can result in an additional 1,020 housing units and a reduction of 880 jobs. These jobs can be shifted to other locations in the city. (In changes not shown on the Map, action programs call for rezoning one site from non-residential to residential use. This site already has a residential General Plan designation. Action programs also call for studying an additional four sites for potential housing.) The General Plan also calls for Zoning Ordinance amendments, precise plans changes, and other programs to promote housing more actively along El Camino Real

and Downtown. These changes are discussed in more detail in the Housing and Jobs section of this Chapter.

- Six mobile home parks zoned R-2M (Mobile Home Park District) now have a new Mobile Home Park General Plan category that designates them exclusively for mobile home park use. This change is discussed in the Residential Neighborhoods Chapter. The six mobile home parks previously had either a residential General Plan designation of low-density, at one to six units per acre, or medium-density, at six to 12 units per acre.

  The previous residential designation would have allowed redevelopment of the mobile home parks to other residential uses with only a zoning change. The new Mobile Home Park designation recognizes that these parks are important, long-term uses. Any redevelopment of a mobile home park will require a General Plan change that would be carefully weighed as to its effects on the supply and mix of housing in the city. The allowable density for the new Mobile Home Park designation is seven to 14 units per acre, which is consistent with the range of mobile home park densities in 1992. The new mobile home park designation, combined with the nine units per acre maximum in the mobile home park zone (R-2M), would not result in an increase in park densities.

- Some changes on the Land Use Map are the result of refinements—going from a bubble diagram to site-specific land use designations. These changes clarify the Map and do not result in any significant shift in land use distribution or intensity.

- Other changes in the 1992 General Plan, such as floor area ratios for non-residential uses and having two industrial land use designations instead of one, do not change the fundamental distribution and intensity of land uses. The General Plan floor area ratios for industrial and office use were already in place in the Zoning Ordinance and precise plans. Floor area ratios for commercial uses generally reflect development patterns and intensities allowed by the Zoning Ordinance and precise plans. The creation of two industrial designations is consistent with the two existing industrial zoning districts and existing precise plans and does not change the location or intensity of industrial uses in Mountain View. The refinement of the High Density Residential category into two new residential categories, Medium-high and High, also does not affect housing density, but simply provides more information on the Map.

Definition of Land Uses and Intensity

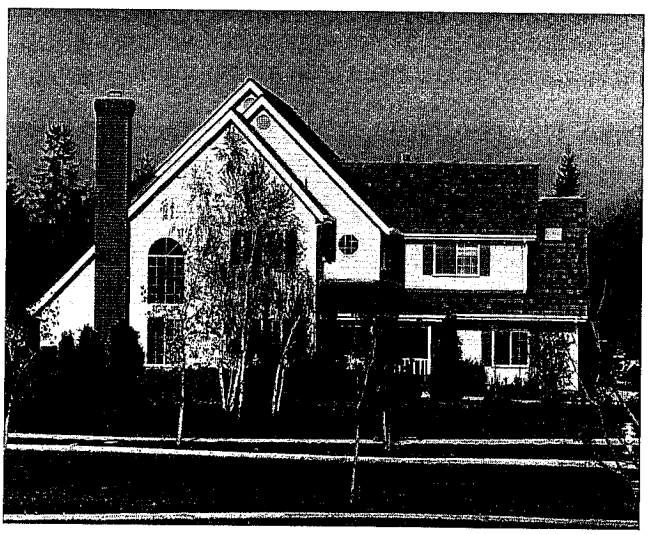
The following definitions, with the Land Use Map, define the type, location, and intensity of land uses in Mountain View. Residential uses are categorized by the range of dwelling units allowed per acre and the expected population per acre. The population estimate is a guide in planning for needed public services and facilities and is not meant to be an absolute limit on population. The dwelling units per acre for residential categories is the measurement of residential intensity. The intensity of non-residential land uses is defined by floor area ratios (FARs)—the total building area divided by the parcel area. Floor area ratios in the General Plan are not applied site-by-site, but are an average for all the properties within a land use designation on the Land Use Map. The FAR provides a measure of the allowable intensity of development for each type of land use.

Residential

Low Density Residential. This designation is intended for detached, single-family houses and similar uses compatible with a quiet, family living environment. The allowable density is one to six units per acre and the resulting population is approximately one to 13 persons per acre.

Mobile Home Park Residential. This designation is intended for mobile homes occupying a mobile home park with shared recreational and open space facilities. The allowable density is seven to 14 units per acre and the resulting population is approximately 15 to 30 persons per acre.

Medium-low Density Residential. This designation is intended for duplexes, townhouses, and other types of residential use that have open space characteristics similar to single-family neighborhoods. The allowable density is seven to 12 units per acre and the resulting population is approximately 15 to 26 persons per acre.



Single-family home in low density residential area.

Medium-high Density Residential. This designation is intended for multiple-family housing that is consolidated to provide generous open space areas for common use. Apartments, condominiums, and other similar types of uses are allowed in this category. The allowable density is 13 to 30 units per acre and the resulting population is approximately 27 to 64 persons per acre.

High Density Residential. This designation is intended for multiple-family housing that is close to transit, shopping, and public facilities. Apartments, condominiums, and similar types of residential uses are allowed in this category. The allowable density is 31 to 80 units per acre and the resulting population is approximately 66 to 170 persons per acre.

Public

City Facilities. This designation is intended for facilities owned and operated by the City of Mountain View, such as City Hall, the Senior Center, and fire stations. These facilities are shown by symbols on the Land Use Map. City facilities are allowed in any of the land use designations. In general, the FAR will range from 0.1 to 1.0.

Educational Facilities. This designation is intended for public schools and the reuse of those schools in a manner consistent with the character of the surrounding neighborhoods. Educational facilities are shown with symbols on the Land Use Map. They are allowed in the Neighborhood/Community Parks and Schools land use designation. In general, the average FAR is 0.25.

Institutional Facilities. This designation is intended for public and quasi-public uses that serve an important regional function and are vital to Mountain View. This designation covers El Camino Hospital and medical office complex, NASA/Ames, and Moffett Naval Air Station. The FARs generally range from 0.25 to 1.25.

Public and Quasi-public Facilities. This designation is intended for facilities owned by State, federal, or County governments and for uses that may be privately owned, but are non-profit and generally open to the public. The U.S. Post Office, churches, non-commercial private schools, and other similar types of uses are in this category. Public and Quasi-public Facilities are not shown on the Land Use Map and are allowed in all land use designations with zoning approvals. In general, the average FAR is 0.35.

Commercial/Office

Neighborhood Commercial. This designation provides convenience shopping for surrounding neighborhoods. Retail and service businesses, such as grocery stores, cleaners, restaurants, beauty salons, and similar types of uses are allowed in this category. The Neighborhood Commercial district is not intended for uses that attract traffic from outside the local area. The average FAR for this designation is 0.35.

General Commercial. This designation is intended for service industrial and commercial uses that serve local residents and businesses. Automotive repair, retail and wholesale businesses, carpentry shops, veterinary clinics, and similar types of uses are allowed in this category. The average FAR for this designation is 0.40.

Linear Commercial/Residential. This designation is intended for a broad range of commercial, office, and residential uses located along the city's major arterials. Businesses in this district serve the local population and provide services and goods to visitors from outside the city. Hotels, car sales, restaurants, offices, housing, and other similar types of uses are allowed in this category. The average FAR for this designation is 0.35 and the maximum residential density is 43 units per acre. Residential floor area is not included in the FAR.

Regional Commercial. This designation is intended for businesses supplying comparison goods and specialty items that need a broad customer base. Businesses in this district provide a wider range of merchandise than is available elsewhere in the city. Clothing stores, department stores, appliance stores, restaurants, offices, residential projects, and other types of similar uses are allowed in this category. The average FAR for this designation is 0.50.

Downtown Commercial. This designation is intended to accommodate a mix and concentration of commercial, office, government, cultural, and residential uses in the heart of the city. Theaters, restaurants, offices, specialty retail stores, government offices, housing, and other similar uses are allowed, along with groceries, drug stores, and cleaners catering to the local population. New projects should contribute to the vitality of district. The intensity of development and building height is determined by the Downtown Precise Plan, which allows a total of about 745 housing units and 2,200,000 sq. ft. of commercial and office space.

Office. This designation is intended for general business offices, medical, and professional offices. Real estate offices, financial offices, and other similar uses are also allowed in this category. The average FAR for this designation is 0.35.

Industrial

General Industrial. This designation is intended for the manufacturing, production, storage, or sale of consumer goods and services. General Industrial districts are meant for a variety of industrial enterprises that create a broad

industrial base. Research and development offices, start-up businesses, warehouses, manufacturing plants, supporting restaurants and retail stores, and other similar types of uses are allowed in this category. This designation is not meant for heavy industrial uses, such as the manufacturing of steel or explosives. The average FAR is 0.55 for personal storage facilities, 0.45 for warehouse, and 0.35 for all other industrial and office uses.

Industrial Park. This designation is intended to create a high-quality environment for major corporations, financial and administrative offices, high-technology industries, and other scientific facilities. Development in the Industrial Park district should promote scientific advancement and exemplify the best collaboration of human values and modern technology. Corporate headquarters, research and development offices, public facilities, supporting hotel and retail businesses, and similar uses are allowed in this category. For many properties within the Industrial Park designation, development intensity is determined by the precise plans. The average FAR is 0.40 for warehouse and 0.35 for all other industrial and office uses.

Open Space and Recreational

Neighborhood/Community Parks and Schools. This designation is intended for open space, leisure, recreational, and educational uses that serve surrounding neighborhoods and districts. City-owned parks and gardens, public schools, and similar uses are allowed in this category. Public schools are shown by a symbol on the Land Use Map. Except for educational facilities, the average FAR should not exceed 0.1.

Regional Park. This designation is intended for open space and recreational uses that draw visitors from a wide area and preserve regional natural resources and features. This category includes Shoreline at Mountain View regional park and Stevens Creek open space. The average FAR should not exceed 0.1.

Agriculture. This designation is intended for land that is used for the production of food and fiber. Growing crops and similar uses are allowed in this category. The average FAR should not exceed 0.1.

Circulation Chapter

INTRODUCTION

The Circulation Chapter is concerned with the movement of people and goods through and around the city. The focus is on the system of freeways, local roads, bus and rail transit, and bicycle and pedestrian routes to determine the most effective design possible while enhancing the community and protecting the environment.

State law recognizes that circulation and land use are closely related and requires that policies in the Circulation Chapter and the Community Development Chapter be tied together. The policies should demonstrate a balance between land uses and the transportation facilities that serve them. The circulation policies are also interwoven with economic, housing, open space, air quality, noise, and safety policies.

Three background reports were prepared for this Chapter. They describe the current transportation system, what has been accomplished since the 1982 General Plan, and future trends in transportation. The Environmental Planning Commission's discussion of these reports evolved into several major findings and underlying themes of the Circulation Chapter. They are:

- Traffic is a regional problem. It must be solved through the cooperative efforts of many agencies.
- Land use and transportation are irrevocably connected. They must be carefully balanced as the city and the region continue to evolve.
- Single-passenger autos have strained the regional transportation system to its limits. Much greater emphasis must be placed on alternatives—ridesharing, bus and rail transit, bicycling, and walking.
- The harm that auto use causes to air quality will be a major force behind transportation policies over the next 15 years.
- Rail transit, rather than road projects, should be the major transportation investment of the future.
- Excellent design, generous landscaping, sound walls, and other buffers can enhance transportation facilities and make them an asset to the community.
- Transportation facilities should be designed to serve all members of the community—children, seniors, the handicapped, and those who depend on bus and rail for mobility.

Accomplishments

Mountain View has made significant strides toward carrying out the policies of the 1982 General Plan, either through City actions or the actions of other agencies. Examples of these accomplishments include:

- Adoption of a model Transportation Demand Management (TDM) ordinance, which gives employers greater responsibility for helping their employees find commute alternatives;
- Addition of "commuter lanes" on U.S. 101 and State Route 85 to encourage higher average vehicle occupancy during commute periods;
- Reconstruction of Castro Street in the Downtown, creating an environment that encourages people to walk and take public transit rather than drive;
- Completion of most of the local street improvements listed in the 1982 Plan;
- Implementation of shuttle service between North Bayshore and Whisman industrial area employers and the CalTrain stations;
- Installation of extensive roadway landscaping on arterial streets and Central Expressway;
- Expansion of the bicycle system from 20 to 40 miles of lanes and routes as recommended by the Bicycle Advisory Committee in 1986;
- Construction of mixed-use and high-density developments that support transit.

The Transportation Environment in 1991

Transportation is now thought of as primarily a regional problem in the San Francisco Bay Area, a major change in perception since 1981.

The State of California and Santa Clara County have become more involved in transportation improvement projects. Voters have been more willing to approve additional taxes for transportation. Air-quality legislation has become a major force. There is a growing awareness of the significant effect of congestion upon the region's environmental, economic, and social well-being.

Traffic and congestion have been named as the Bay Area's most significant problem for eight years in a row, from 1983 to 1990, by respondents to an annual poll conducted by the Bay Area Council. More respondents list transportation first every year. Forty-six percent of Santa Clara County residents named traffic as the worst problem in the 1990 poll, compared to 38 percent of all Bay Area residents who listed traffic first.

There are reasons for the perception that traffic is a serious problem:

- People are driving more. Vehicle miles of travel, a standard measure of travel demand, and auto registrations have increased much faster than employment or the population.
- Land and housing prices in the region continued to climb. New housing is forced further into outlying areas and people must make longer commute trips.
- There are more employed people per household. Households earn more, own more cars, and make more commute trips. People now run errands, do their shopping, and transport their children at peak hours, rather than during the day.

Air Quality. Air pollution is another major regional issue that has been more firmly linked to transportation during the past decade. More than half of the air pollution in California is caused by cars. In the Bay Area, auto exhaust is responsible for 82 percent of carbon monoxide, 70 percent of visible particles, which are called particulates; 52 percent of nitrogen oxide, which causes "brown haze"; and 42 percent of hydrocarbons. Nitrogen oxide and hydrocarbons combine under sunlight to form ozone. Ozone near the ground is harmful to people, plants, and materials. Ozone in the stratosphere is needed to protect people from excessive ultraviolet radiation. The Environmental Management Chapter discusses air quality in more detail.

Strict emission-control standards have improved auto emissions since the 1960s, but air quality will be worse after 2000 because people are driving more. The California Clean Air Act was passed in 1988 to deal with this problem. It established strict new air quality standards and gave Regional Air Quality Districts new powers to achieve them. These powers include developing and carrying out Transportation Control Measures (TCMs). TCMs are aimed at curtailing the use of cars through employer-based trip reduction, land-use policies, and special fees tied to vehicle use.

Regional Transportation Issues

Mountain View recognizes that the growth in traffic is a regional problem closely tied to the pattern of land use that has evolved in the San Francisco Bay Area. Since 1970, job growth has been concentrated in Santa Clara County, particularly in northern Santa Clara County, while new housing for workers has been built in the South County, the East Bay, and more recently in San Joaquin and Merced Counties. By 2005, 18.3 percent of Santa Clara County's commuters will live outside the county, up from 13.6 percent in 1980, according to projections by the Santa Clara County Transportation Agency. At least 40 percent of people working in Mountain View will live outside the city in 2005, compared to 36 percent in 1990.

GOAL **A** **Help reduce regional traffic growth.**

Regional Transportation Groups

Regional planning is one way of dealing with the traffic congestion and air pollution that have resulted from long-distance commuting. Mountain View is working with many regional agencies. Some of the agencies are:

- *Santa Clara County Transportation Agency.* Prepares and carries out a comprehensive Countywide Transportation Plan, called T2010, and operates bus and Light Rail systems.
- *Congestion Management Agency.* Develops standards for traffic service level, coordinates local land-use planning, and establishes capital improvement programs under a State referendum approved in 1990. This agency replaced the Golden Triangle Task Force, a group of five cities, including Mountain View, and the County, which worked with the Santa Clara County Manufacturing Group between 1985 and 1990 to develop land use policies and employer-based programs to reduce traffic congestion.
- *Santa Clara County Traffic Authority.* Administers the "Measure A" half-cent sales tax for the construction of freeway improvements.
- *Metropolitan Transportation Commission.* Prepares and carries out a Regional Transportation Plan, establishes priorities for federal and State funding, and conducts studies of transportation corridors.

- *The Tasman Corridor Study Policy Board.* Analyzed alternatives for improving transit in the Tasman Corridor, located between Milpitas and the Mountain View/Sunnyvale area. The study led to the decision to extend Light Rail Transit to Mountain View.
- *Peninsula Corridor Joint Powers Board.* Owns and operates the Peninsula commuter train service (CalTrain).

Policy 1. **Participate actively in regional planning efforts and programs at the Bay Area, County, and subregional level.**

Action 1.a Continue to provide Council and staff representation on regional transportation planning groups.

Action 1.b Work with the Congestion Management Agency to carry out the Congestion Management Plan.

Policy 2. **Support regional transportation policies, programs, and projects that will limit growth of traffic on freeways, expressways, and local streets.**

Action 2.a Coordinate local transportation plans and improvements with those of regional agencies.

Action 2.b Commit staff resources to the review, analysis, and monitoring of regional transportation plans.

LAND USE AND TRANSPORTATION

Local land use planning is another method of managing regional traffic growth as well as local traffic problems. This General Plan includes land use policies aimed at giving more Mountain View workers the choice of living closer to their jobs. It also continues policies supporting mixed-use developments and higher-density development near rail stations. These policies can be found in the Community Development and Residential Neighborhoods Chapters. If other cities adopt similar policies, it may also be possible to improve the balance of jobs and housing, which will reduce the length and number of commute trips.

GOAL **B** **Coordinate transportation and land use planning.**

Ensuring Adequate Transportation

The traffic analysis in the "Future Conditions" background report for the Circulation Chapter shows that the roads in Mountain View can accommodate the amount of development projected for 2005. However, specific intersections within the city are at or near capacity. More and wider roads are expensive, hurt the environment, and can diminish positive elements of Mountain View's character. Alternatives to major road improvements are discussed throughout this Chapter. They include Transportation Demand Management, more efficient operation of existing roads, and improvements to the rail, bus, bicycle, and pedestrian circulation systems.

Policy 3. **Ensure that future development and the transportation system are in balance.**

Monitoring Land Use and Transportation. The location and intensity of development has an immediate effect on traffic levels in the surrounding area and on the city as a whole. Transportation engineers have developed several mathematical tools to monitor the relationship between land use and the transportation system. One tool is the traffic forecasting model. This model tries to forecast traffic volumes and simulate traffic conditions under future land use scenarios based on estimates of how much traffic will be generated by new development, what streets the traffic will use, and the amount of new traffic the street system can accommodate. The City used a traffic model to develop information for the "Future Conditions" background report.

The General Plan traffic model evaluated the capacity of the "links," that is, the roads, in the transportation system. However, these roads meet at intersections, which can become bottlenecks. Mountain View is instituting a city-wide traffic model that will evaluate the capacity of intersections to accommodate additional traffic. This evaluation can be added to the development review process to help determine types and intensities of land use and suitable mitigation measures.

Action 3.a Develop and maintain a city-wide traffic model as a tool to help evaluate the balance between development and transportation.

It will be important for the City to allocate resources to update the land use and transportation data in the traffic model continually if the model is to be useful.

Development Review. The California Environmental Quality Act (CEQA) requires cities to assess the environmental effects, including the traffic impacts, of new development. A traffic analysis is required if a project is

large or is expected to produce a lot of new traffic. The Congestion Management Program also requires a traffic analysis for projects over a certain size. When the traffic analysis shows that the development will cause an intersection to drop below desired Levels of Service, the City may require the new development to alleviate its share of the congestion. The costs of specific improvements or traffic reduction programs such as TDM would be shared over time by several developments, and, if appropriate, the City. The types of improvements and programs and the appropriate method of paying for those efforts could be established through area-wide studies, including the General Plan and zoning studies. The appropriate share of the costs for specific developments can be allocated through assessment districts, traffic impact fees, or developer agreements. An alternative to improvements and programs is to reduce the scale of development or phase it until improvements are made.

Action 3.b Require a traffic analysis for large new developments and those expected to worsen traffic conditions noticeably.

Action 3.c Require developers to lessen their share of the effects that their new developments have on transportation, as a condition of project approval.

Action 3.d Consider requiring measures such as street improvements, Transportation Demand Management programs, employer-financed shuttle buses, traffic impact fees, assessment district or other financial commitments, and reduced project size to reduce traffic impacts.

Level of Service. Level of Service (LOS) is a term used to describe traffic conditions. LOS can be described both in quantitative terms, for example, how many seconds a driver waits at an intersection, and in qualitative terms, for example, how a driver perceives the waiting experience.

New and upgraded intersections should be designed and built to ensure that they will function at least at a Level of Service D, "tolerable delay," during peak traffic periods. (See Figure 1.) Average waits would be 25-40 seconds, and drivers would begin to notice backups on more than one leg of the intersection.

Policy 4. Use peak-hour Level of Service D as the design standard for new or reconstructed streets, intersections, and traffic-control devices on arterials.

Standards for Special Areas. Maintaining a Level of Service D at existing intersections is not always appropriate or necessary. People may expect and tolerate varying levels of congestion depending on location and time of day. For example, in the Downtown and the San Antonio regional commercial area, people expect more traffic. It is perceived as part of the activity and vitality associated with higher densities and a mixture of uses, greater pedestrian activity, and heavier transit use. In these areas, "significant delays" (LOS E) may be acceptable. Allowing for heavy traffic in these few locations takes into con-

What Is "Level of Service"?

LOS describes driving conditions or how well traffic is moving. LOS can be expressed as a quantitative measure and as a qualitative experience. The quantitative description focuses on how long drivers may have to wait to get through an intersection or the speed at which they can travel on a street. The qualitative measure focuses on how drivers perceive their driving experience. (See Figure 1.)

Traffic engineers use quantitative measures of LOS to help them design or reconstruct a street or intersection. The engineers take into account the volume of traffic and where it is coming from, the size and design of the arterial or intersection, signal timing, distance between cars, how aggressively people drive, and other variables. Each LOS is assigned a letter, ranging from A, which is less than a five-second wait at intersections and no restrictions on speed along arterials, to F, delays of more than 60 seconds at intersections, and "stop and go" movement on arterials. LOS is normally used to describe peak-hour conditions, the morning or afternoon hour when traffic is heaviest.

The quantitative measure of LOS can be roughly equated with drivers' perception of driving conditions. Drivers may experience LOS A through LOS D as "free-flowing" to "easily understandable delay." Conditions of LOS E and F are usually less acceptable. Perception of traffic conditions is often influenced by expectations. People expect and accept occasionally heavy traffic, but not a continuous network of delays and not throughout the day. They also expect and tolerate more traffic delay in high-activity areas, such as a lively Downtown, than they will accept on neighborhood streets.

Quantitative measures of LOS are useful aids to understanding the community and helping identify potential problems with street design and impacts of land use. However, LOS ranges are theoretical. When used as a factor in determining land use capacity, they must be tempered by judgment and interpretation. Minor adjustments in signal timing, turning-lane provisions, points of access from adjoining property, and other modifications can improve the actual operation of the intersection. Given all the variables, intersections often work better than the LOS would predict. In such cases, more detailed evaluation of driving behavior and intersection design are needed.

sideration how people perceive congestion. While more traffic may be understandable, every effort should be made to encourage people to walk once they arrive.

Other areas where special Level of Service standards are appropriate are the freeways, expressways, and principal arterial streets included in the Congestion Management Agency (CMA) road system. Principal arterials in Mountain View are El Camino Real and San Antonio Road. Under CMA legislation approved in 1990, selected intersections along the principal arterials, freeways, and expressways must be monitored and improved if they drop below LOS E.

Residential neighborhoods are also special areas. However, neighborhood traffic problems usually mean excessive traffic, speeding, and accidents, rather than congestion as measured by LOS. These traffic problems and proposals to respond to them are addressed through the neighborhood traffic management policies discussed later in this Chapter.

Policy 5. **Establish goals for intersection Levels of Service that reflect the special circumstances of the surrounding area.**

Action 5.a Use Level of Service D, "acceptable delays," for most arterials and their intersections.

Action 5.b Use Level of Service E, "significant delays," for Downtown and San Antonio Center where vitality, activity, and transit use are primary goals.

Action 5.c Use Level of Service E, "significant delays," for roads in the Congestion Management Agency street network, in accord with Congestion Management Agency legislation.

TRANSPORTATION DEMAND MANAGEMENT

Seventy-six percent of Santa Clara County commuters drive to work alone, placing a very heavy commute burden on the county's road system. If this trend continues with no additional transit service and no increase in ridesharing, it will be impossible to build roads wide enough to handle all the cars. Air quality will worsen. Clearly, there has to be a change in the trend.

Transportation Demand Management is one answer to this problem. TDM attempts to reduce the number of people who drive alone during the commute period, and to increase the number of people who walk to work and who use carpools, vanpools, buses, trains, and bicycles. TDM works best during peak periods because many people are going to and coming from the same directions. This makes it easier to share rides and to supply enough riders to justify express and shuttle buses. The Golden Triangle Task Force concluded that employers can play a major role in carrying out TDM.

GOAL **C** **Increase the number of riders per vehicle during peak commute periods.**

TDM Ordinance

In 1990, Mountain View became the first city in Santa Clara County to adopt the Golden Triangle's model TDM ordinance. The ordinance's goal is to increase the average number of people per vehicle from 1.13 in 1990 to 1.33 in 1997. This looks like a minor increase, but it can reduce the number of cars on the road noticeably. The reduction may be enough to ease rush-hour traffic significantly if it is achieved county-wide. Under CMA legislation, all cities in the County must adopt TDM ordinances.

The TDM ordinance requires employers to designate commute coordinators and to file regular reports on progress toward the TDM goal. To achieve the goal, employers may use carpool and vanpool matching, preferential parking for ridesharing vehicles, subsidies or rewards for carpools and vanpools, transit ticket sales and subsidies, shuttles to transit lines, flexible work hours, telecommuting, subsidies or rewards for bicycling and walking, and site amenities that would encourage transit use, ridesharing, bicycling, and walking. The Commuter Network, which is funded by the City, gives technical support. The ordinance will eventually apply to all work sites with 100 or more employees and to the City as an employer.

Achieving the riders-per-vehicle goal of the 1990 TDM ordinance is voluntary. The Golden Triangle cities will evaluate the effectiveness of voluntary compliance by 1995. Cities can then decide whether to make it mandatory for employers to achieve the TDM goals.

Policy 6. **Promote Transportation Demand Management programs at work sites.**

Action 6.a Enforce the Transportation Demand Management ordinance.

Reporting is mandatory.

Action 6.b Help employers achieve Transportation Demand Management goals.

Level of Service Descriptions

Service Level Category	Descriptions of Traffic Conditions	
	Signalized Intersections (Average Length of Wait [1])	**Arterials** (Average Speed [2])
Free Flowing (LOS A)	Most vehicles do not have to stop. On the average, each driver waits less than 5 seconds to get through intersection.	Vehicles can maneuver completely unimpeded and without restrictions on speed caused by other cars and delays at intersections. *El Camino Real at 7 a.m. on a Sunday.*
Minimal Delays (LOS B)	Some vehicles have to stop, although waits are not bothersome. Average wait at intersections is 5 to 15 seconds.	Drivers feel somewhat restricted within traffic stream and slightly delayed at intersections. Average speed is about 70 percent of free flow. *El Camino Real at 10 a.m. on a weekday.*
Acceptable Delays (LOS C)	Significant number of vehicles have to stop because of steady, high traffic volume. Still, many pass through without stopping. On the average, vehicles have to wait 15 to 25 seconds to get through intersection. *Typical LOS at major intersections during mid-day.*	Traffic still stable, but drivers may feel restricted in their ability to change lanes. They begin to feel the tension of traffic. Delays at intersections contribute to lower average speeds—about 50 percent of free flow. *El Camino Real at noon most weekdays.*
Tolerable Delays (LOS D)	Many vehicles have to stop. Drivers are aware of heavier traffic. Cars may have to wait through more than one red light. Queues begin to form, often on more than one approach. On the average, vehicle wait is 25 to 40 seconds. *Common afternoon peak hour LOS at many intersections.*	High traffic volumes and delays at intersections reduce average travel speeds to 40 percent of free flow. Drivers aware of slower pace of traffic. *El Camino Real at 4 p.m. at most intersections.*
Significant Delays (LOS E)	Cars may have to wait through more than one red light. Long queues form, sometimes on several approaches. Average waits of 40 to 60 seconds. *Apparent at major arterial intersections at peak hour.*	High traffic volume and many signalized intersections with long queues reduce average travel speed to one-third of free flow. *El Camino Real at 5 p.m. near Grant Road.*
Excessive Delays (LOS F)	*Intersection is jammed.* Many cars have to wait through more than one red light, or more than 60 seconds. Traffic may back up into "up-stream" intersections. Generally caused by obstruction or irregular occurrence (*e.g.,* signal preemption for a train). This condition often viewed as "gridlock."	Travel is "stop and go"—one-third or one-fourth of free flow. Usually caused by a "down-stream" obstruction, such as lanes reduced from 4 to 3, or a stalled car, or signal preemption for a train. *At times, El Camino Real experiences LOS F where freeway Route 237 ends.*

[1] "Average wait" is a measure of traffic conditions at intersections. It is an estimate of the average delay for all vehicles entering the intersection in a defined period of time, for example, the evening peak hour. It is expressed as a range rather than a single value. Some drivers will actually wait more or less time than indicated by the range.

[2] "Average speed" is a measure of traffic conditions on arterials. "Average speed" is based on the total time it takes to travel a certain distance, including the time spent waiting at intersections. It is determined more by traffic volume and conditions at intersections, than by the legal speed limit.

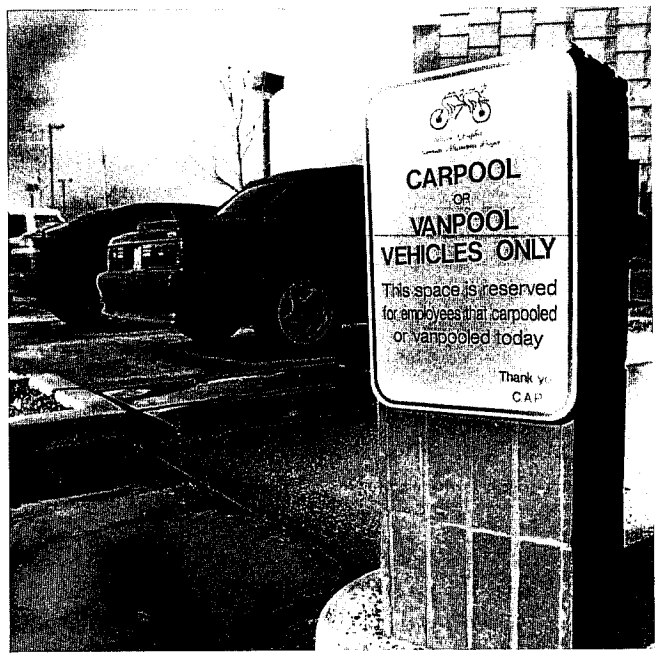
Figure 1. Traffic Levels of Service for Signalized Intersections and Arterials.

Action 6.c Collaborate with other cities to evaluate the effectiveness of voluntary compliance with the Transportation Demand Management ordinance and to determine whether to make compliance mandatory by 1995.

Action 6.d Work with employers to develop Transportation Management Associations where appropriate.

Several employers in a geographic area may join to form a Transportation Management Association (TMA) to run commute alternative programs more cost-effectively.

Action 6.e Hold special events and conduct promotions to encourage bicycling, transit, and other commute alternatives in cooperation with local employers, merchants, and other organizations.



Preferential parking for carpools and vanpools.

TDM with Other Land Uses

Large residential developments also have concentrations of people, some of whom can be expected to work in the same general locations. TDM programs could be set up in these developments as conditions of project approval. Developers could be required to supply funding for several years for service contracts with a nearby TMA. Or they could be required to incorporate TDM design features, such as bicycle and sidewalk connections, carpool waiting areas, and bus stops. There may also be opportunities for TDM programs at shopping centers, hospitals, schools, and other locations with large daily influxes of people.

Policy 7. Promote TDM programs in residential developments, retail centers, and other activity centers.

Action 7.a Consider requiring developers of large residential projects, retail centers, and other activity centers to prepare TDM plans, including mechanisms to ensure the TDM programs remain in effect after the project is complete.

TDM Site-design Features

Most non-residential developments built since 1960 have been oriented toward cars. Building entries face vast parking lots. Sidewalks are lacking or circuitous. There are no lunchrooms on the site or restaurants nearby. Some fairly simple changes in the design of new development and redevelopment could encourage people to carpool, ride the train or bus, bicycle, or walk to work. They include rideshare drop-off and waiting areas, bicycle parking, preferential parking for carpools and vanpools, direct access to bus stops, bus pull-outs and shelters, showers for bicyclists, and on-site services such as lunchrooms, automated teller machines, and postal services. Parking requirements could be reduced since fewer people would be driving their cars. This would be an incentive for developers to provide these amenities.

Policy 8. Require new development to incorporate design features that will strengthen TDM programs.

Action 8.a Use the design review process to require new buildings and major additions to incorporate design features that will encourage alternatives to driving alone.

Action 8.b Consider establishing incentives for new developments to provide showers, cafeterias and lunchrooms, and other on-site employee services that will encourage alternatives to driving alone.

The City could consider exempting these facilities from floor area ratio limits.

Action 8.c Consider reducing parking requirements for new development as an incentive for strong and effective TDM programs.

STREETS AND ROADS

The street network continues to be the basic element of the circulation system. Streets and highways are classified according to function, as shown below. Figure 2 shows Mountain View's primary street network.

The California State Department of Transportation, called Caltrans, controls the design, operation, and maintenance of freeways and highways, including traffic signals on state routes, for example, El Camino Real. Expressways are the responsibility of the County. Arterials, residential arterials, collectors, and local streets are under the jurisdiction of the City of Mountain View.

GOAL **D** **Improve the flow of traffic on freeways and expressways serving Mountain View.**

Highway and Expressway Congestion Relief

Freeway improvements costing $1 billion are expected to be built with the half-cent sales tax approved by County voters in 1984 as Measure A. The tax ends in 1994. State and federal funds will also be spent. All State highways in the County were to receive major improvements. By 1991, additional commuter lanes, reserved for carpools, vanpools, buses, and motorcycles, had been built on U.S. 101 and State Route 85 from Cupertino to the Route 237 interchange in Mountain View. A new interchange at Route 237 and Middlefield and Maude Roads was also to be built in 1993. Other projects, badly needed to relieve congestion, were delayed because of insufficient funds. The first two projects listed under Action 9.a are Measure A projects that will not be built until federal, State, and other revenue sources similar to Measure A are found.

Policy 9. **Support, where appropriate, improvements that will allow freeways and expressways to operate more efficiently.**

Action 9.a Pursue federal, State, and other non-City funding for completion of these freeway and interchange improvements.

- Improve the U.S. 101/State Route 85 interchange, including modifying the Shoreline Boulevard and Moffett Boulevard interchanges. This section of U.S. 101 is severely congested because the interchanges for Moffett Boulevard, State Route 85, and Shoreline Boulevard are so close together.

Street Classification System

Freeways. Drivers use freeways primarily for long-distance trips. Cars can enter a freeway only at an interchange; major streets cross only at underpasses or overpasses.

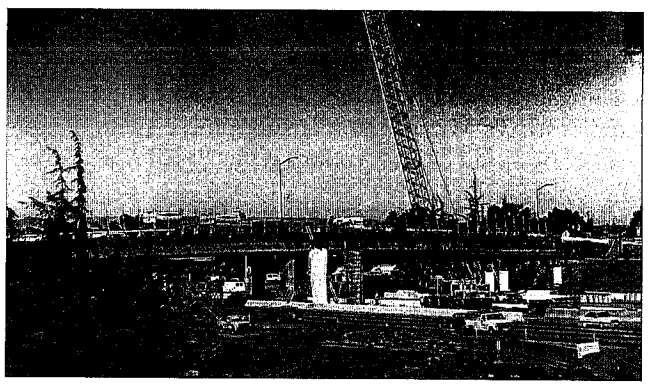
Expressways. Drivers also use expressways for regional trips. Other roads may cross expressways at intersections with traffic signals, or they may have underpasses or overpasses. It is usually not possible to enter an expressway from an adjacent parcel of land.

Arterial. Drivers use these streets to travel to activity centers, freeways, expressways, and other arterials. Driveways connect adjacent land uses directly; collector streets conduct traffic to the arterials.

Residential Arterials. Drivers reach adjacent residential areas on these streets, which pass through and immediately serve adjacent residential land uses. These roadways generally have more landscaping and less paving than non-residential arterials.

Collectors. Drivers use these streets to travel within and between neighborhoods and to get directly to adjacent land uses. These streets collect traffic from local streets and route it to arterials.

Local Streets. Drivers travel on these streets only to reach adjacent land uses. Local streets are designed to protect residents from through traffic.



Shoreline Boulevard/U.S. 101 overpass under construction.

- Widen State Route 85 to six lanes with commuter lanes between Route 237 and U.S. 101. State Route 85 was widened with commuter lanes from Cupertino to State Route 237 in Mountain View in the late 1980s. This project would complete the commuter lanes on State Route 85.
- Improve the State Routes 237/85 interchange. This project would improve freeway connections but could have adverse effects on the

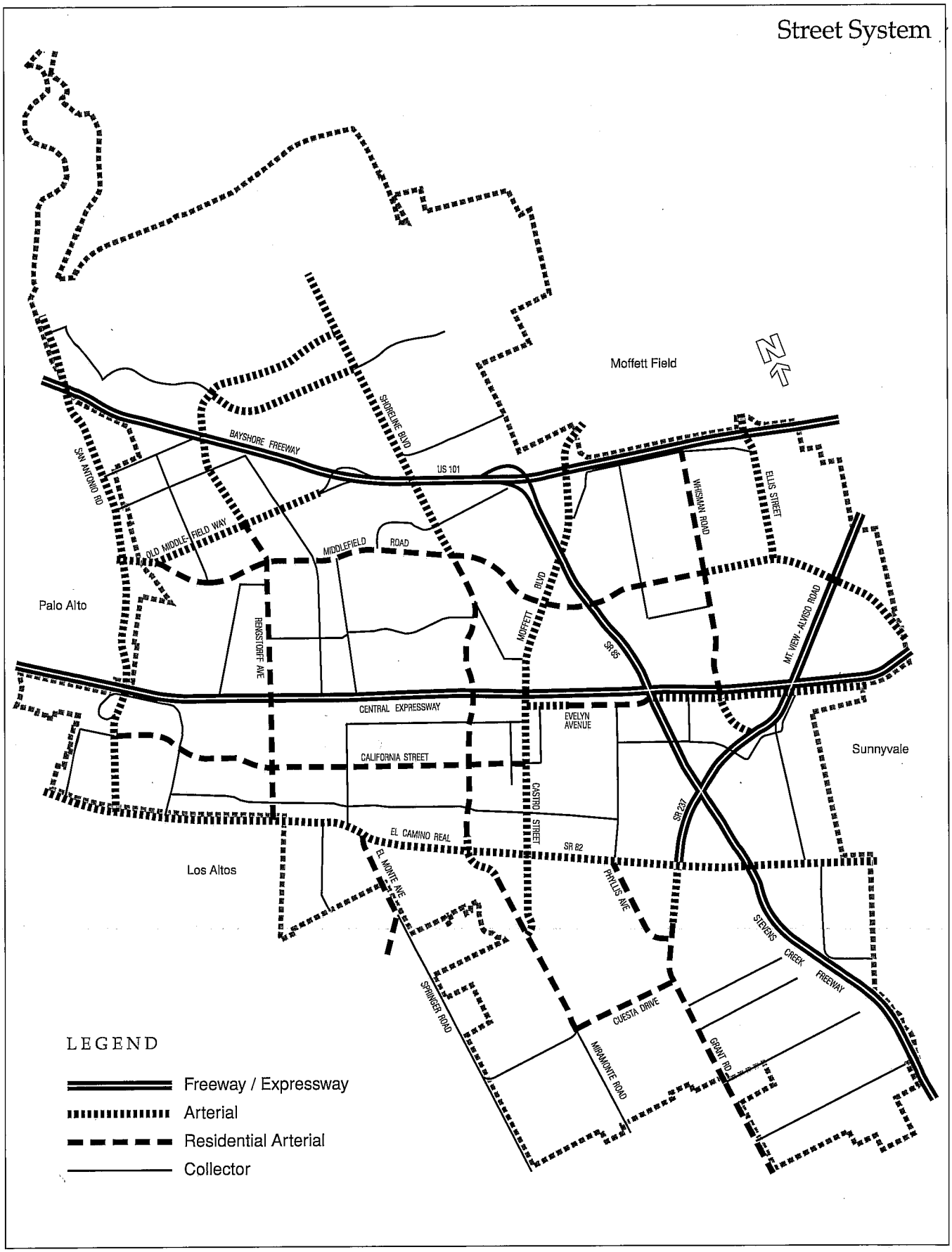


Figure 2. Local and Regional Roadway Network.

surrounding community and the planned Stevens Creek Trail. These effects must be carefully evaluated before proceeding.

- Construct direct ramp connections between Central Expressway and State Route 85. Southbound traffic must use local streets through the Downtown because there are no direct ramp connections.

More Efficient Road Systems

Even with these improvements, drivers will be delayed excessively during rush hours by 2005 on some freeways, including State Route 237 north of El Camino Real, State Route 85 south of El Camino Real, and U.S. 101 from San Antonio Road to State Route 85. However, the highway system will have reached the limit of what can be built within available rights of way and at reasonable cost. Expanding the highway system hurts the environment because it increases noise, worsens air quality, and wastes energy. In the future, highway improvements must focus on improving the operation of the existing system. Commuter lanes are a prime example of this.

Commuter lanes can save time for people using them, increase the capacity of an overburdened system, and reduce air pollution and energy use with much of the flexibility that makes cars the preferred mode of travel. Commuter lanes can also help express buses compete with single-occupant cars for quick travel. Better connections are needed at freeway interchanges and at freeway access points to complete the commuter-lane network. Freeway ramp bypass lanes would allow high-occupancy vehicles to enter commuter lanes directly by bypassing ramp metering lights and other traffic.

Action 9.b Seek to have State and County agencies provide commuter lanes, ramp metering, signal coordination, and incident warning systems on freeways and expressways.

Signal coordination improves the flow of traffic on expressways and arterials where there are many traffic signals. Freeway incident warning systems use video cameras or electronic detectors to monitor the flow of freeway traffic. Traffic condition information is flashed on changeable message signs so drivers can decide whether to endure the delay, take another route, or make the trip later.

Local Roads System

Mountain View had the foresight to construct a good system of cross-town arterials. The roads allow traffic to flow smoothly on most streets, even in commute periods. Traffic moves much better on Mountain View streets than on the regional road system, according to traffic studies conducted for this General Plan. Figure 3 shows Levels of Service projected for major roads in 1990 and 2005. Only Grant Road is expected to decline to LOS F. (It should be noted that the traffic model used for the General Plan is more accurate for freeways and expressways and less accurate for local roads.)

GOAL **E** **Build and maintain a safe and efficient local street system with the aim of meeting LOS goals.**

Local Road Improvements. Although traffic flows well along arterials, some intersections are congested, with "significant delay" or "excessive delay." These are often the intersections of major arterials or expressways where many vehicles are turning right or left.

Policy 10. **Improve safety and traffic flow on streets and at congested intersections, where feasible.**

Action 10.a Consider whether improvements can be made in the existing right of way before widening or otherwise expanding streets and intersections.

Action 10.b Decide if there are cost-effective improvements such as new traffic signals, improved signal timing, signal coordination, pavement markings, turn lanes, island modifications, realignment, improved sight distances, or construction of urban interchanges that can be made at the following intersections:

- El Camino Real with Grant Road/Route 237, with Clark Avenue, and with San Antonio Road.
- Shoreline Boulevard with Pear Avenue/theater driveway, with L'Avenida, with Middlefield Road, and with Montecito Avenue.
- Grant Road and Levin Avenue/Covington Road.
- Ellis Street and U.S. 101 on-ramps.

Action 10.c Improve Evelyn Avenue between Castro Street and Bernardo Avenue.

Evelyn Avenue is a major entry to Downtown Mountain View. The Evelyn Avenue Corridor Study recommended that it be wid-

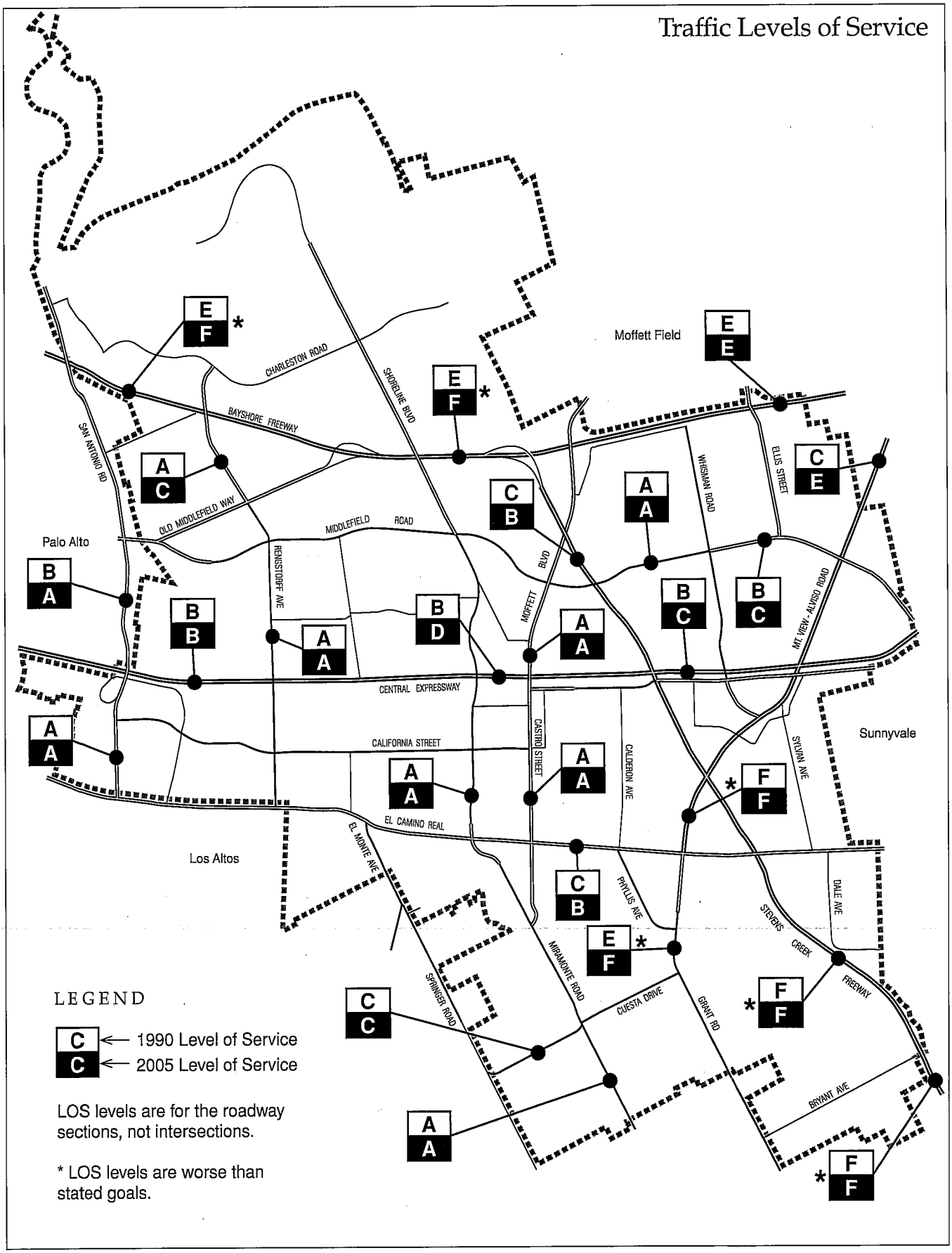


Figure 3. 1990 and 2005 Levels of Service, AM Peak Hour.

ened to four lanes from the Sunnyvale boundary to Downtown and be connected to Villa Street. This would provide a through route to Downtown and re-route traffic from neighborhood streets.

Action 10.d Widen Grant Road to three lanes, two of these to be southbound, and install curbs, gutters, and sidewalks between Waverly Place and Levin Avenue.

Action 10.e Install curbs, gutters, and sidewalks on the east side of Springer Road between the south City boundary and approximately Pilgrim Avenue.

The appearance and function of Grant Road and Springer Road (Action 10.d and Action 10.e) change as each passes through Mountain View and Los Altos because each City has its own standards for street improvement. Adding another lane and installing curbs, gutters, and sidewalks on the Mountain View side between Waverly and Levin would make Grant Road look better, make traffic flow more smoothly, and make pedestrians safer. Springer Road does not need widening, but would be safer for pedestrians if curbs, gutters, and sidewalks were installed on the Mountain View side from Sladky Avenue to approximately Pilgrim Avenue.

Action 10.f Study the feasibility of completing the interchange at Shoreline Boulevard and the south side of Central Expressway.

Construction of on-ramps and off-ramps from Central Expressway to South Shoreline Boulevard would improve traffic flow.

Action 10.g Consider prohibiting left turns during peak periods, closing medians, consolidating driveways, and making other modifications where needed to ease traffic congestion.

Mountain View can readily make the changes that involve public streets, after public review, but changes on private property (for example, private driveways) can only be made through City review of private projects.

Action 10.h Synchronize traffic signals on Shoreline Boulevard and Rengstorff Avenue.

Signal coordination makes traffic flow better on major arterials. It also makes drivers trying to cross the arterials wait longer.

Railroad Crossings. Some of Mountain View's more congested intersections are at railroad crossings. Opportunities for improvements range from overpasses and underpasses to better signals.

Policy 11. Ensure smooth flow of vehicles, bicycles, and pedestrians at rail crossings.

Action 11.a Consider an overpass or underpass to cross the railroad tracks at Rengstorff Avenue.

The improved crossing would relieve traffic congestion when a train passes through, but the overpass or underpass may be costly, take up land, and be less attractive than an intersection.

Action 11.b Work with appropriate agencies to improve the traffic signal preemption system at CalTrain crossings to eliminate unnecessary delay to auto traffic.

Each time a train crosses Rengstorff Avenue or Castro Street, through traffic on Central Expressway gets the green light. This causes unnecessary delays for some traffic movements. When new technology is available, the system should be modified.

Neighborhoods Traffic Management

Even though Mountain View has a good system of cross-town arterials, drivers may be prompted by heavy traffic on some through streets to take short-cuts through residential neighborhoods. Excessive traffic and speeding cars can destroy the feeling and cohesiveness of neighborhoods. This can eventually discourage residents from spending time and effort to keep up their properties, and the neighborhood begins to deteriorate. The Old Mountain View Neighborhood has been threatened by through traffic, primarily because there are no good arterials for traffic traveling to and from Downtown. Other potential problem locations are the area between Grant and Springer Roads, and the area between Central Expressway and El Camino Real.

GOAL **F** **Protect residential neighborhoods from excessive through traffic, where feasible.**

Deterrents to Local Traffic. The City should use a range of physical and program options to divert traffic or slow it down. The City should verify the size and kind of prob-

lem with a special traffic study before it carries out any of the options. Often, simple visual cues, instituted as part of an overall neighborhood design plan, will solve the problems. Visual cues do not appear to be traffic controls at all. Landscaping and other improvements tell drivers that they are entering a quiet residential place, where they should drive more slowly, be more aware of conditions along the edge of the street, and respect local pedestrian and bicycle traffic. Recognizable neighborhood entries are visual cues. Entries can be marked by short center medians or corner curb bow-outs with landscaping and signs. Short medians or tree planting pockets that extend into the parking lane narrow the perceived width of the street and can control speed. (See Figure 4.)

Where visual cues do not work, the City may consider installing speed undulations or closing the street partially or completely. Speed undulations are raised pavement, similar to speed bumps, but much wider. Physical deterrents may cause longer response time for emergency vehicles, reduce access, increase noise, and cause and increase maintenance costs, so it's important to be careful about installing them.

Policy 12. Work to actively discourage through traffic from using neighborhood collectors and local streets.

Action 12.a Develop neighborhood protection plans when traffic studies confirm that there is excessive traffic volume, speeding, or accidents.

Action 12.b Emphasize visual deterrents to through traffic; install physical obstacles only as a last resort.

Action 12.c Maintain the existing City standards for narrower widths on new or reconstructed residential streets.

The City's standard width for public residential streets is 32 to 36 feet between the curbs. Private streets, which are often allowed in townhouse developments, may be as narrow as 20 feet. The width and design of private streets are determined through site review.

Arterials on the Perimeters of Neighborhoods. Most neighborhoods built in Mountain View after World War II are not threatened by through traffic. Drivers find that nearby arterials are faster and more direct than the circuitous internal road systems of modern subdivisions. Through traffic is more of a problem in older neighborhoods where streets were laid out in a grid and the distinction between arterials and local streets is not clear. The

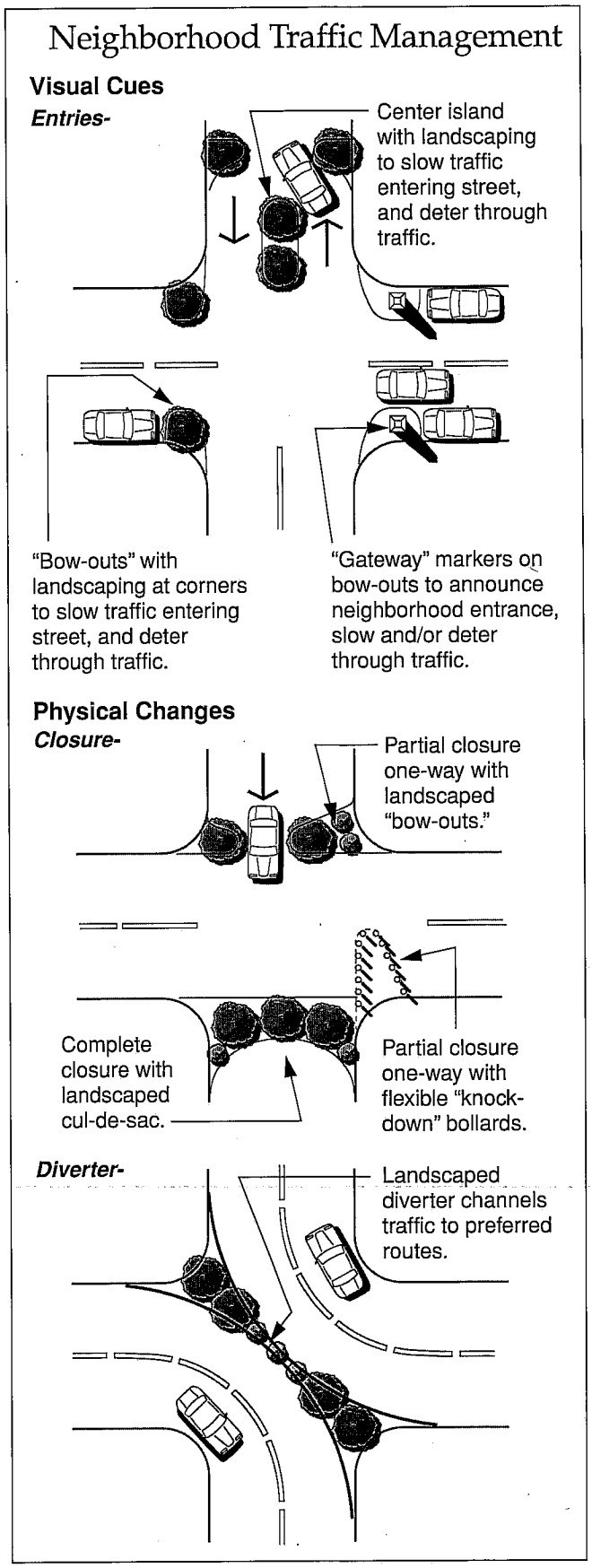


Figure 4. Traffic Control Methods in Residential Neighborhoods.

planned improvements to Evelyn Avenue will clarify its role as the preferred route for through traffic east of Downtown.

Policy 13. Route through traffic around the perimeters of neighborhoods where possible.

Action 13.a Identify arterials clearly by using design, signs, and other markers.

An example is the sign on Shoreline Boulevard directing traffic to Castro Street by way of California Street.

RAIL TRANSIT

The Southern Pacific Railroad has served Mountain View with its San Francisco Peninsula passenger line since 1864. That service is entering a period of significant change under new public ownership. An even more dramatic improvement in rail service is planned for Mountain View with the planned extension of the County's Light Rail Transit service to Downtown.

GOAL **G** **Improve rail transit serving Mountain View.**

Peninsula Commute Service

The Southern Pacific Railroad historically has stopped in Mountain View at the Mountain View Station near Castro Street and the Castro Station near Rengstorff Avenue. Caltrans took over passenger operations in 1980. A Joint Powers Board, with representatives from Santa Clara, San Mateo, and San Francisco Counties, was formed to plan for the long-term preservation and enhancement of commuter service. The service was re-named CalTrain. Caltrans purchased new rail cars, bought and rehabilitated stations, and began upgrading track. Caltrans and the three Counties subsidize passenger fares. Ridership has shown a steady annual increase since 1986. In 1990, there were 52 trains each weekday, and almost 7 million passengers annually. Two more trains were added in 1991.

In 1991, the Joint Powers Board purchased the right of way from the Southern Pacific Railroad, with a major part of the funding supplied under the 1990 Clean Air and Transportation Improvement Act. Caltrans transferred management of CalTrain to the Joint Powers Board in 1992. The number of daily trains was increased to 60, and service was extended to Gilroy. Up to 90 trains will be needed if rail service is also extended to Downtown San Francisco because many more people will choose to

CalTrain stopping at Downtown Mountain View train station.

take the train. The service now ends in San Francisco at the 4th and Townsend station, several long blocks south of the city's main business area. The San Francisco extension will be very expensive, and funding sources have not been fully identified.

Policy 14. Give strong support to plans to increase CalTrain service frequency and hours of service.

Action 14.a. Give active support to plans to increase the number of Peninsula commuter trains.

Action 14.b Work with appropriate agencies to improve train service in off-peak periods, and on weekends and holidays.

Action 14.c Give active support to plans to extend CalTrain service into south Santa Clara County.

Action 14.d Participate in evaluating the costs and benefits of extending CalTrain into downtown San Francisco.

Stations. As of 1992, the Downtown Station on Evelyn Avenue just east of Castro Street is an unattractive concrete block shelter and a barren parking lot. The General Plan proposes to replace this with a modern transportation center which this major entry to Downtown Mountain View deserves. The station would be a transfer point for CalTrain, Light Rail Transit, and bus passengers. Opportunities to incorporate offices, retail, and other uses into the station redevelopment plan should be explored.

Mountain View's other station, the Castro Station near Rengstorff Avenue, is to be moved to San Antonio Road where it will serve a larger population and where parking will be available.

Policy 15. Improve the design and function of Mountain View's CalTrain stations.

Action 15.a Work with appropriate agencies, and possibly a private developer, to replace the Mountain View station with a modern, attractive transportation center which could also include retail, office, or other uses.

This station design should be compatible with the Downtown street improvements, the Evelyn Avenue Corridor Plan, and the Downtown Precise Plan.

Action 15.b Work with appropriate agencies to relocate the Castro Station to San Antonio Road.

Action 15.c Evaluate the feasibility of retaining the Castro name for either the train station at Castro Street or the new San Antonio stop, when the present Castro Station is closed.

The Castro Station was named for the Castro family, which gave Southern Pacific Railroad the right to cross family lands more than 130 years ago through what would become Mountain View. The name, Castro Station, is an important part of Mountain View's heritage.

Light Rail Transit

The County Transit District began running Light Rail Transit (LRT) along the Guadalupe Corridor as the first leg of a planned larger system in 1987. There are now 21 miles of track extending from northern Santa Clara to southern San Jose. In 1991, the County decided to build an LRT extension into Downtown Mountain View. It is called the Tasman LRT because part of its alignment outside Mountain View would follow a street by that name. It would carry up to 30,000 passengers daily between residential areas in Milpitas and eastern San Jose and employment centers in Santa Clara, Sunnyvale, and Mountain View.

Five stations will be located in or near Mountain View, serving Moffett Field, the Ellis/Middlefield industrial area, and Downtown. (See Figure 5.) The General Plan

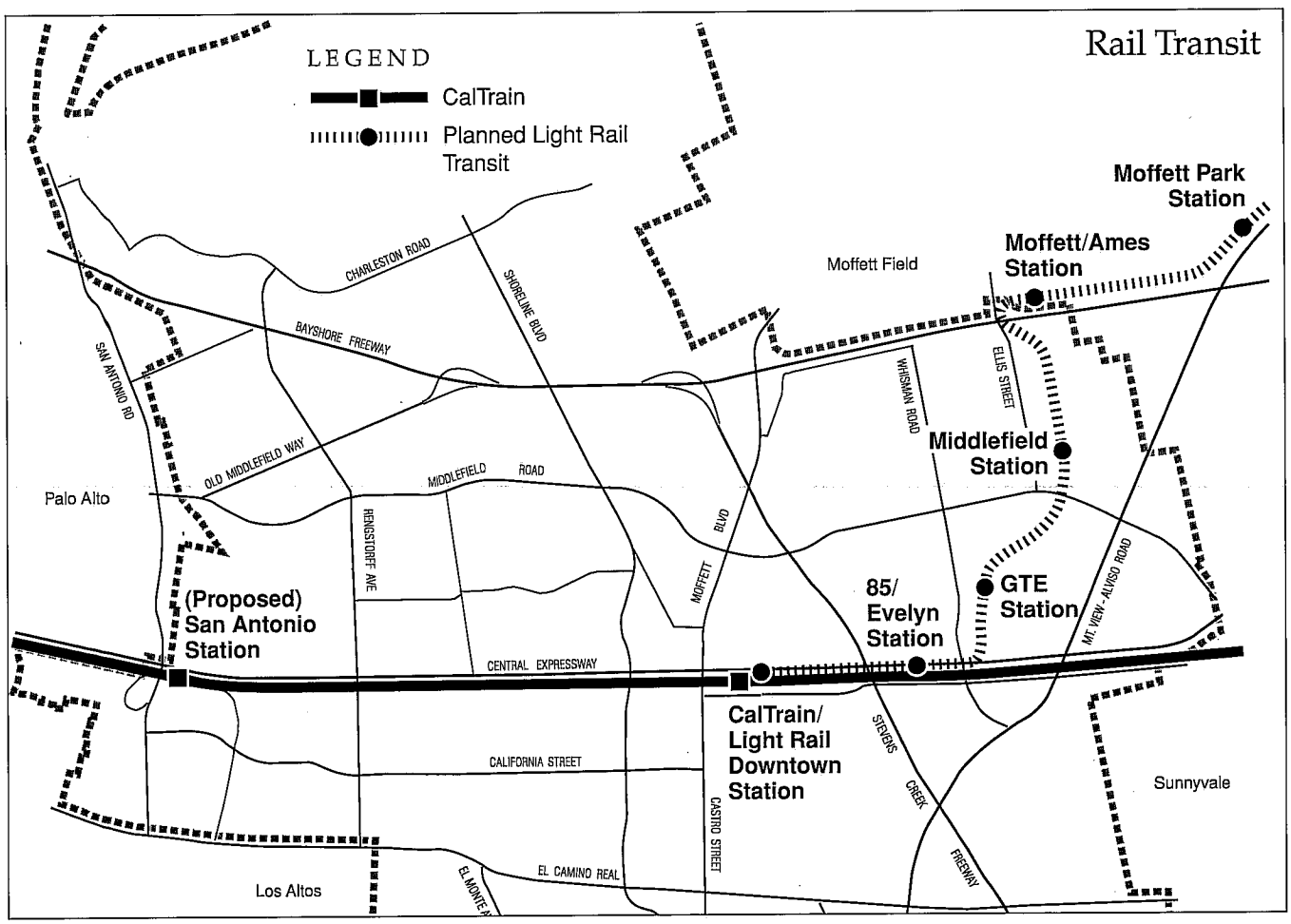


Figure 5. Rail Transit in Mountain View.

Coming to Mountain View in the 1990s—Light Rail Transit.

proposes high density residential and mixed-use development around several of the proposed stations. There is more information on land use and station development in the Community Development Chapter.

Policy 16. **Participate actively with the County Transportation Agency in planning and carrying out the Light Rail Transit extension into Downtown Mountain View.**

Action 16.a Work with the County Transit District to acquire the right of way and to plan, design, and construct the Light Rail Transit extension.

Much of the proposed alignment within Mountain View uses existing railroad right of way. The remaining right of way is privately owned.

Action 16.b Support plans to extend Light Rail Transit service throughout the county.

Santa Clara County has developed a long-range Rail Master Plan, which calls for an extensive county-wide LRT system.

Access to Rail

If travelers are going to choose CalTrain or Light Rail Transit over their own cars, they must know that they can get to rail stations easily and travel to their destination with little waiting. New rail stations will attract additional traffic, so consideration must be given to how the traffic can be directed around nearby residential areas, such as the Old Mountain View Neighborhood. Parking must be readily available for cars and bicycles, and County transit bus schedules should be carefully coordinated with train arrival and departure times. Some bus routes may need to be changed to improve access to rail stations.

Shuttle buses often connect train stations and work places most directly. Several private companies already run their own shuttles for their employees. Cooperative shuttles, subsidized by CalTrain, the City, and employers serve the North Bayshore area and the Whisman industrial area. Shuttle buses should also be available for LRT passengers.

Policy 17. **Seek to improve access to rail transit in Mountain View.**

Action 17.a Continue to work with employers on planning and running shuttle service between train stations and major employment centers.

Action 17.b Work with the County Transit District to schedule convenient train and bus connections at new and existing stations.

Action 17.c Make sure there is adequate auto parking at rail stations.

Action 17.d Work with appropriate agencies to provide adequate bicycle and pedestrian facilities at train stations.

Safety

Improved rail service will greatly benefit Mountain View and the region. However, the City must be prepared for a greater potential for safety problems at railroad crossings, both on the CalTrain line and on the proposed LRT line.

Policy 18. **Ensure that new Light Rail Transit and expanded CalTrain service operate safely within Mountain View.**

Action 18.a Work with the County Transit District to incorporate safe rail crossings into the design of the proposed Light Rail Transit line, including the crossing at Ellis Avenue near the U.S. 101 interchange and the crossing of Central Expressway east of Castro Street.

Action 18.b Monitor safety conditions at rail crossings and train stations as the number of trains increases, and seek to develop proposals to have safety problems corrected promptly.

Action 18.c Provide adequate, safe waiting areas for bicyclists and pedestrians at railroad crossings.

BUS TRANSIT

Bus service is essential to the circulation system. It is indispensable for the elderly, school children, the disabled, and others who cannot drive or choose not to. It is also becoming an increasingly attractive alternative for those who want to avoid the cost, stress, and delays of driving and the nuisance of parking. Buses can use commuter lanes on freeways, making them faster than single-passenger cars.

GOAL **H** **Provide fast, convenient, comprehensive, and dependable bus service in Mountain View.**

Bus Service

The County Transit District provides bus service to Mountain View. In 1991, 17 of the District's 80 routes served the city (see Figure 6). The basic grid system uses major arterials such as El Camino Real and Middlefield Road. Feeder routes serve neighborhoods, shopping centers, hospitals, industrial and office areas, schools, train stations, and other activity centers. County Transit buses generally run every 10 to 30 minutes on weekdays and every 15 to 60 minutes in the evening and on weekends and holidays.

In addition to its basic service, the County Transit District operates express bus service during peak commute periods. The express routes connect residential areas with employment centers in corridors where there are enough riders to justify the added cost.

Bus ridership has climbed steadily since service began in 1973. In 1991, it reached 41.6 million passenger trips, six times as many as in 1973.

The Mountain View Transit Center, located on Showers Drive between El Camino Real and California Street, is a transfer point for 12 bus lines. The Downtown train station is a transfer point for nine bus routes.

Policy 19. **Seek to have the County Transit District provide bus service and bus stops wherever there is a demonstrated need in the city.**

Action 19.a Seek changes to bus routes and schedules when needed to serve riders better.

Much of the City's role in improving bus service is to serve as a liaison between residents who use the buses and the County Transit District.

Action 19.b Work with the County Transit District and potential riders to increase express bus service to major employment centers during commute hours.

Because of limited resources, the County's Commute Service Plan for 2000 provides for only one express bus route to Mountain View. This route would serve the Whisman industrial area. Strong Transportation Demand Management programs could result in enough riders to justify the need for express routes to other areas. For example, the North Bayshore area should be served.

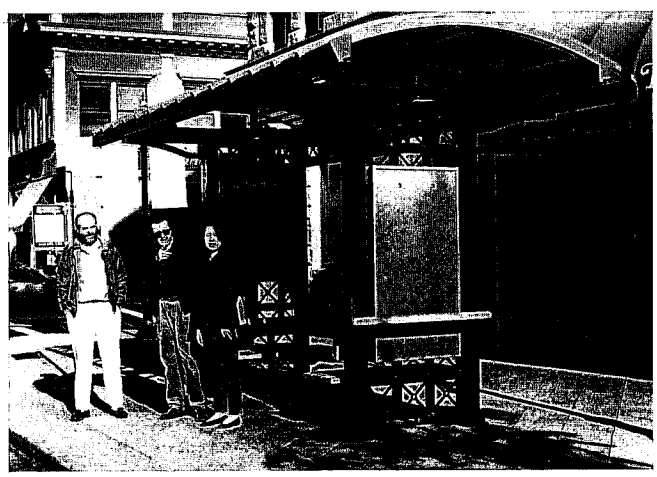
Bus Stops

Most bus stops in Mountain View have benches and are marked with signs. Bus stops that are heavily used may have shelters. Benches and shelters should be placed where they do not block pedestrian traffic and where they are not too close to traffic lanes.

The County Transit District has a standard design for its shelters. While the standard design is quite acceptable in most locations, special designs should be considered where they can help carry out the broader design theme of an area or a new development. The Castro Street bus shelters are a good example. The proposed new transportation center to replace the Mountain View train station is another. The County Transit District does not maintain shelters designed and installed by others.

Policy 20. **Ensure attractive, well-lighted, comfortable, and protected waiting areas for bus and train passengers.**

Action 20.a Review bus shelter designs and plans for installing shelters in specific locations.



Specially designed bus shelters on Castro Street.

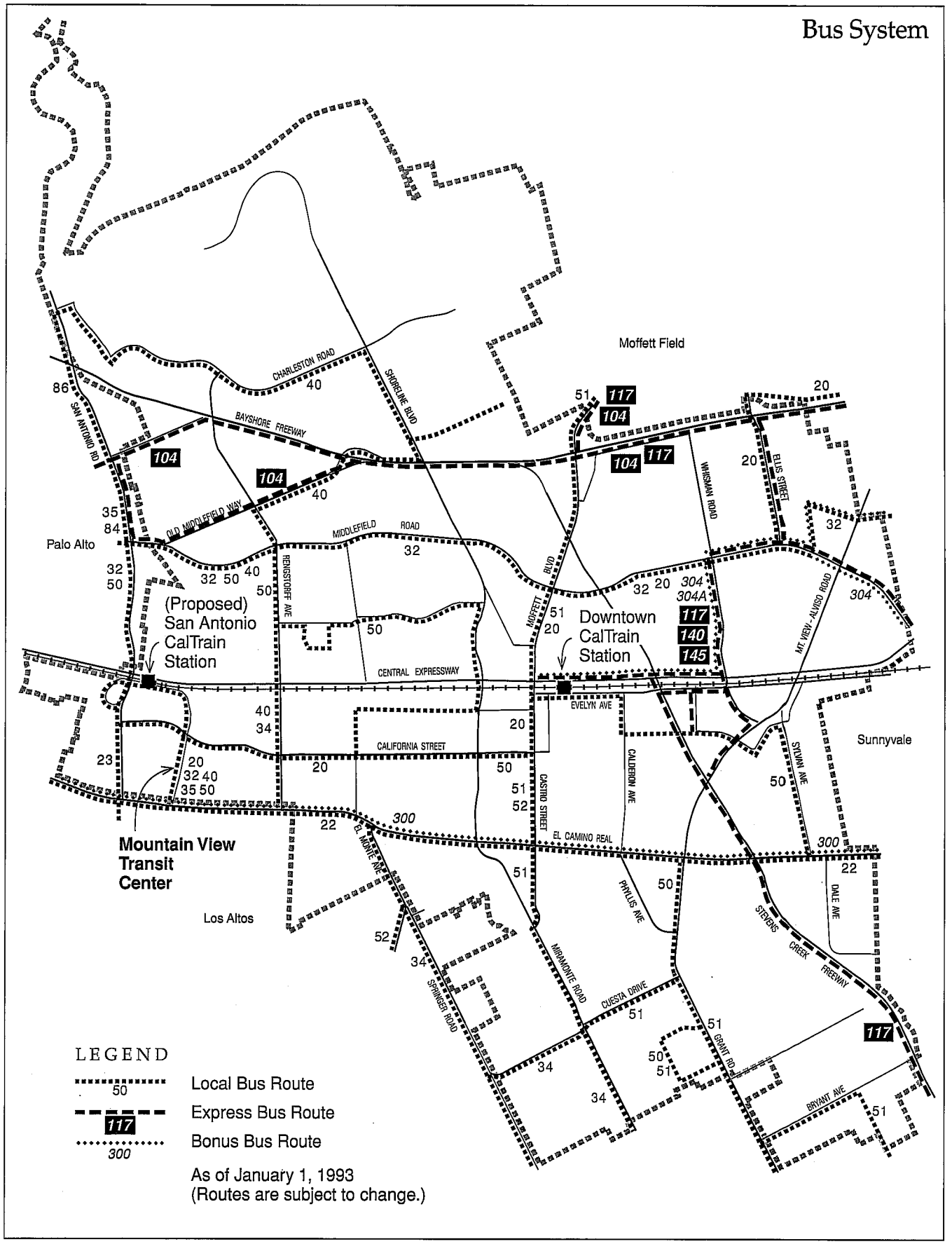


Figure 6. Local Bus Routes.

If the County changes its standard design, the City should participate in the review. The City should also review new bus stops to make sure they are compatible with adjacent uses, especially in residential areas.

Action 20.b Support special designs for bus shelters when they will help carry out a broader design plan in new public and private development.

Action 20.c Identify locations where bus shelters are needed based on use and available space, and request the County Transit District to install the shelters.

Busing for School Children

Although many children are within walking or bicycling distance of their neighborhood schools, others need to be driven because of distance or traffic hazards. In recent years, school busing has been reduced or eliminated because of lack of school funding. The result is more traffic during the morning commute, greater energy consumption, and increased air pollution. The County Transit District meets a small portion of the student transportation need with extra runs on some routes during the school year.

Policy 21. Encourage the elementary school districts to provide busing for their students.

Action 21.a Monitor elementary school district busing plans.

Action 21.b Communicate the City's policy (Policy 21) to the elementary school districts when decisions on busing are under consideration.

BICYCLE SYSTEM

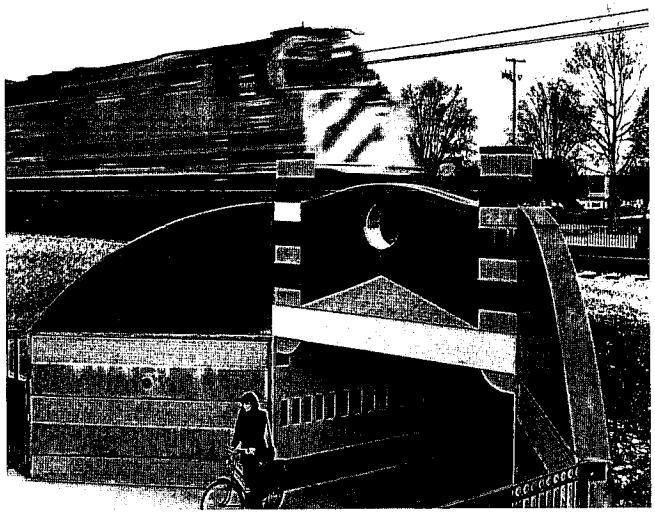
Until about 20 years ago, people rode bicycles mainly for recreation. Today, people are more concerned about physical fitness and the environment, so bicycling is a key element of the transportation system.

GOAL I

Make it easier and safer for people to travel by bicycle.

A Comprehensive System

Mountain View has an extensive system of bikeways, most of them on streets. The City expanded the system from 20 to 40 miles of roadways after it was evaluated by an Ad Hoc Bikeway Committee in 1986. The committee's recommendations will have been carried out fully once bike lanes are installed on remaining sections of Rengstorff Avenue and on Shoreline Boulevard. These lanes were delayed until freeway overpasses could be widened. More improvements are identified in this General Plan (see Figure 7).



Bicycle/pedestrian underpass near San Antonio Road.

Most bikeways in Mountain View are either bike lanes or bike routes, both of which are on the streets (see Figure 7). As of 1991, the only off-street bike paths are at Shoreline at Mountain View, the regional recreation and wildlife area; and along Stevens Creek in the North Bayshore area. The Environmental Management Chapter proposes that the City develop off-street bike paths in the Stevens Creek Corridor, on the Hetch Hetchy right of way, and on the abandoned Southern Pacific spur line in the Whisman industrial area. The spur line path could be developed in conjunction with the Tasman LRT. These paths will permit riders to enjoy safe, relaxing bicycling in an environment free from traffic, noise, and engine exhaust.

Mountain View is crossed by three freeways, an expressway, and a set of railroad tracks, all formidable physical barriers to bicyclists. Shopping centers and other large developments may also present obstacles. Bicycle bridges, underpasses, and designated routes through large developments offer alternatives to long detours. The bicycle/pedestrian underpass under the railroad tracks near San Antonio Road is a good example. Figure 7 shows several other locations where bridges or undercrossings should be considered.

Traffic signals that respond to bicyclists when they ride over detectors in the pavement and buttons that people can push to cross the street also help to make the bicycle system safe and convenient, as do well-maintained pavement and landscaping along bikeways.

Policy 22. **Provide and maintain a safe and comprehensive bicycle system that connects all parts of the city.**

Action 22.a Complete the bicycle system as shown on Figure 7.

Action 22.b Locate and design bikeways that are separate from streets wherever possible. Designate on-street bike lanes or routes where off-road bike paths are not possible.

Action 22.c Consider building bridges or undercrossings for bicyclists and pedestrians at locations shown on Figure 7.

Action 22.d Incorporate bicycle facilities into the design of interchanges, intersections, and other street improvement projects.

Street improvement projects should be viewed as an opportunity to enhance the bicycle system.

Action 22.e Develop bike paths in the Stevens Creek corridor and on the Hetch Hetchy right of way; develop bike paths in rail corridors if feasible.

The Urban Trails section of the Environmental Management Chapter discusses these plans.

Action 22.f Establish a bicycle advisory committee to review the bicycle system and advise staff and the City Council on needed improvements.

Bicyclists are the best source of information about where improvements to the bicycle system are needed. A bicycle advisory committee can recommend improvements and help develop proposals for State and federal funding of bicycle projects. The City gets State Transportation Development Act bicycle funds annually.

Action 22.g Make improvements to roads, signs, and traffic signals as needed to improve bicycle travel.

Action 22.h Keep bikeways free of overhanging shrubbery and other obstacles.

Action 22.i Regularly sweep bikeways to remove debris, which can damage tires.

Bicycle Parking. Easily accessible and well-designed bicycle parking can encourage people to ride their bicycles to work, shopping, school, and community facilities. Bicycle racks and lockers protect bicycles from theft and bad weather. They also clearly define where bicycles should be parked so they won't impede pedestrians or damage trees and other stationary objects put into service as bike racks. Established bicycle parking also reinforces the image that bicycles are a socially approved way to travel.

Bikeway Classification System

Bikeway is the general term for any marked bicycle facility. The Caltrans Highway Design Manual designates three types of bikeways. Each has standards for width, signs, and pavement marking.

Bike Path (Class I) Bicycles travel on a right of way completely separated from any street or highway. Example: Shoreline at Mountain View.

Bike Lane (Class II) Bicycles travel in a one-way striped lane on a street or expressway. Example: Shoreline Boulevard between El Camino Real and Central Expressway.

Bike Route (Class III) Bicycles share the road with pedestrians and motor vehicle traffic. Bike routes are marked only by signs. Example: Latham Street.

Policy 23. **Ensure that there is secure bicycle parking at centers of public and private activity.**

Action 23.a Require new development to provide secure bicycle parking.

The Zoning Ordinance requires new development, as a condition of approval, to provide bicycle parking equal to five percent of the total auto parking required. The ordinance also specifies which bike rack and locker designs are acceptable. Longer-term users, such as office workers, may prefer lockers because they provide both security and protection from the elements. Shorter-term users, such as shoppers, may prefer simply designed racks that are convenient to use. The ordinance should be revised to recognize the varying demands for bicycle parking.

Action 23.b Install bicycle parking in Downtown Mountain View and at city parks, civic buildings, and other community facilities.

Action 23.c Encourage shopping centers and businesses to install bike racks.

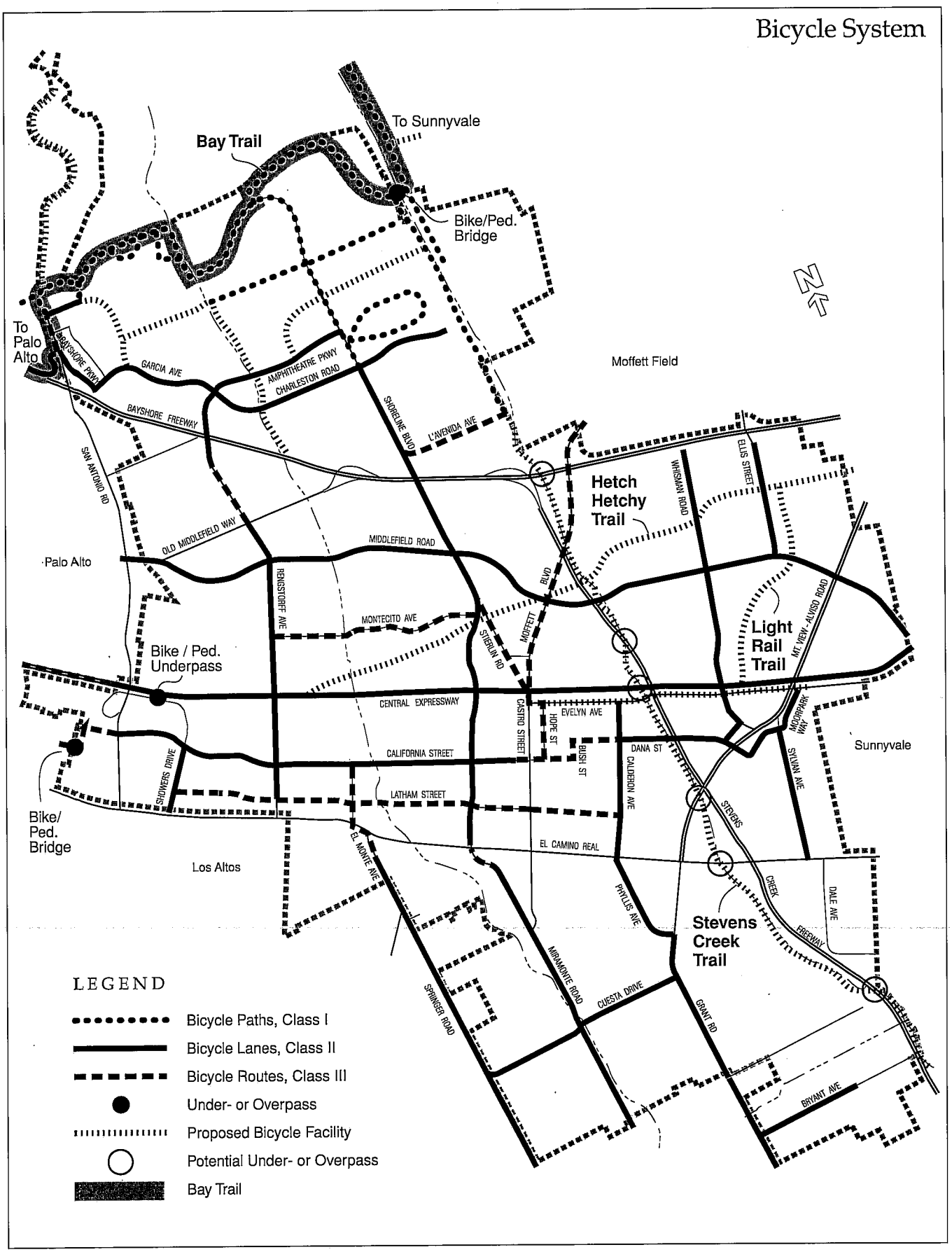


Figure 7. Existing and Proposed Bicycle Facilities.

Bicycles on Transit. Combining bicycles and transit enhances both modes of travel. Bicycles are a convenient and inexpensive way for people to get to transit stops. The County Transit District allows bicycles on buses when there is enough room. Similar arrangements are needed on trains.

Policy 24. Support arrangements for allowing bicycles on trains and buses.

Promoting Bicycling. Bicycling can become a part of almost everyone's life, either as a recreational pursuit reserved for weekends, or as a daily means of commuting to work.

Policy 25. Actively promote bicycling and bicycle safety.

Action 25.a Distribute maps of Mountain View's bicycle system and other information about bicycle safety through newspapers and other publications, at City buildings and schools, and at street fairs and special events.

Action 25.b Continue and expand the Police Department's bicycle education program.

School resource officers visit schools to teach children about bicycle safety. This educational program should be expanded to serve other groups.

WALKWAYS

Like bicycling, walking has become more popular as a form of recreation, exercise, and even commuting. Mountain View's climate is mild and its land is flat, so people find walking to be a pleasant experience when they have clearly defined walkways and feel safe using them. The City should encourage walking along streets, within private developments, and on the urban trails planned for the Stevens Creek, Hetch Hetchy, and railroad rights of way. Urban trails are discussed in the Environmental Management Chapter.

GOAL **J** **Make it easier, safer, and more enjoyable for people to move around the city on foot.**

Sidewalks

Most streets in Mountain View have sidewalks on both sides, consistent with long-standing City policy. Many of the streets that do not were built under County regulations before being annexed to Mountain View. There are also short, but critical, gaps in sidewalks. It is important to make sure sidewalks are continuous. The 1982 General Plan proposed to bring all streets up to current standards through City and property-owner financing on a fair-share basis. However, some neighborhoods have opposed forming assessment districts for this purpose. While the City should continue to try to complete its walkway system, it may be more productive to focus resources on arterial and collector streets where traffic is heavy and pedestrians are more vulnerable.

Policy 26. Provide a continuous system of sidewalks along streets.

Action 26.a Require sidewalks on both sides of public streets in all new developments.

Action 26.b Work with neighborhoods to decide where curbs, gutters, and sidewalks are needed on unimproved local streets and how to pay for the improvements.

Action 26.c Install and maintain temporary sidewalks or paths on at least one side of all unimproved arterial and collector streets.

Action 26.d Continue to replace sidewalks that have deteriorated.

The City makes temporary repairs to hazardous sidewalk surfaces as soon as problems are reported. The costs of permanent repairs may be the responsibility of the City or the property owner, depending on where the problem is and what caused it. A comprehensive sidewalk repair policy was being drafted in 1992.

Site Design

Carefully placed buildings and well-planned walkways can encourage people to walk within large developments. For example, clustering buildings around a core reduces the distances between buildings. People should not have to walk a long way from building entries to transit stops. They should not have to share walkways with bicyclists and cars. In some large developments, it is also important to build walkways through the site to connect public sidewalks. Landscaping, shade trees, benches, and lighting can make it more pleasant to walk.

Policy 27. Ensure that pedestrian paths are included within major new developments and public facilities.

Action 27.a Require new developments to build clearly

identified internal walkways that are distinct from roadways and that directly connect building entrances to public sidewalks and transit stops.

Encouraging Walking

Pedestrians, especially seniors and adults with small children, should feel safe and secure from traffic if walking is to be encouraged. Sidewalk widths, signal timing, intersection configuration, and proximity to heavy traffic all need to be considered. Vehicles will still need priority in some situations because of their sheer numbers and the need to reduce congestion. However, the City needs to make other accommodations where there is substantial pedestrian traffic it wants to encourage. For example, traffic signals can be adjusted to give pedestrians more time to cross the street than the minimum standard established by the State. Intersections can be designed with tight right turns to force traffic to slow down. There should be ramps at intersections for wheelchairs, baby carriages, and other non-motorized vehicles.

Policy 28. Provide for safe walkways and pedestrian crossings of arterial streets, railroad tracks, creeks, and other physical barriers.

Action 28.a Ensure that sidewalks are kept free of obstructions, such as signs and driveways, and that they are wide enough to accommodate pedestrians easily.

To provide a continuous level surface for pedestrians, the City requires new or reconstructed sidewalks to be separated from the curb.

Action 28.b Identify locations where there is substantial pedestrian traffic and improve traffic controls and lighting that benefit pedestrians.

Action 28.c Avoid placing travel lanes right next to sidewalks when considering plans to widen streets.

A landscaped strip provides the best protection for pedestrians (see Community Development Action 13.a, page 22), but even parked cars and bicycle lanes can serve as buffers.

Action 28.d Continue to work with the school districts to provide safe crossings for school children.

Castro Street. Creating an active and attractive environment for pedestrians was a major goal of the Downtown Precise Plan, adopted in 1988. That Plan presents the vision for Downtown as "a place to get out of the car, a place one will want instinctively to walk, rather than drive." Wide sidewalks, street furniture, generous landscaping, and fewer traffic lanes—all features that encourage people to walk—are included in Castro Street improvements. Precise Plan standards are also aimed at encouraging people to walk. The standards allow only stores and restaurants on ground floors. They require detailed and varied building facades, entries facing the street, and other design features for private development. Requirements and guidelines vary depending on Downtown location.

Policy 29. Maintain the pedestrian orientation of the Castro Street area.

Action 29.a Carry out the development standards and design guidelines in the Downtown Precise Plan.

How Do Pedestrian Signals Work?

Many intersections in Mountain View that have traffic signals also have pedestrian push buttons. Pressing the button triggers the "walk" signal. The signals are timed so that pedestrians who start walking at a reasonable speed as soon as the light changes have enough "green" time to cross all lanes of traffic. The duration of the "walk" signal is determined by the width of the street. Although the light begins flashing "don't walk" about the time the pedestrian is halfway across the street, it is safe to continue walking. It is not safe to begin crossing the street at that time. At many intersections on El Camino Real, signals are timed to remain in the "walk" phase for 10 seconds and in the "don't walk" phase for another 10 seconds, giving the pedestrian 20 seconds to cross the street safely.

TRANSPORTATION DESIGN AND THE ENVIRONMENT

Freeways, overpasses, train tracks, and bus shelters are integral parts of the urban landscape. Although they are highly visible, greater attention is often given to their function than to their appearance and environmental effects. Since 1982, Mountain View has tried to modify this emphasis. For example, many arterials and Central Expressway have been extensively landscaped. The Community Development Chapter lists actions to continue this effort. Other examples are the special bus shelters which have been built on Castro Street and the sound walls constructed along the residential sections of new freeway projects.

GOAL K

Support the development and maintenance of transportation facilities that are aesthetically pleasing and have minimal adverse environmental effects.

Residential Arterials

Creating "residential arterial" streets is one technique that Mountain View has used to improve the appearance of roads and integrate them better into the community. These are arterials that pass through residential neighborhoods. They carry traffic in the same way as other arterials, but the City emphasizes design elements that screen sidewalks and front yards from the sights and sounds of heavy traffic, slow the speed of vehicles, narrow the streets physically, and make them look narrower. These elements include:

- Reducing curb-to-curb pavement width.
- Retaining more narrow widths where safety allows.
- Designing streets so they have planter strips between street and sidewalk.
- Screening cars parked at the curb from residences.
- Planting larger trees closer together between curb and sidewalk.

Much of Middlefield and Grant Roads and sections of Shoreline Boulevard, Rengstorff Avenue, California Street, Phyllis Avenue, and Cuesta Drive have been upgraded to residential arterial standards, but other roads need attention.

Policy 30. Enhance the character of arterials in residential neighborhoods with landscaping and special design elements.

Action 30.a Prepare design plans for and improve the residential arterials that have not yet been upgraded:

- Whisman Road from Middlefield Road to U.S. 101.
- Miramonte Avenue.
- El Monte Avenue/Springer Road.
- Rengstorff Avenue from California Street to Middlefield Road.
- Cuesta Drive from Miramonte Avenue to Springer Road.
- Shoreline Boulevard from Central Expressway to U.S. 101.

Environmental Effects

Noise and air pollution caused by transportation are a regrettable part of city life. Generous landscaping, buffers, overpasses and underpasses, sound walls, and careful design can insulate the community from some of these effects. Methods of keeping visual unattractiveness, noise, traffic, and air pollution to a minimum should be included in planning for transportation. Noise reduction measures can also be incorporated into the design and construction of new buildings as described in the Noise section of the Environmental Management Chapter.

Policy 31. Reduce the negative effects caused by roadways and rail lines on visual quality, air quality, and noise.

Action 31.a Seek to have sound walls installed along sections of freeways and expressways that pass through residential areas when the roadways are widened or otherwise improved.

Action 31.b Assess the visual and noise effects of proposed underpasses, overpasses, and interchanges and soften their effects on residential neighborhoods.

Action 31.c Review environmental impact studies for proposed transportation projects to be sure that adequate measures are taken to make the impacts of their noise, traffic, and other effects less severe.

Even highly desirable transit facilities can affect the local environment. The City should evaluate all environmental impacts and identify appropriate measures to make them less severe.

Vehicle Design. Great progress has been made in making cars run cleaner and get better mileage, but people are driving more, so these gains are being eroded. It looks like the private automobile will continue to be Americans' favorite transportation method, so it is important to keep up the search for greater energy efficiency and cleaner emissions. Compressed natural gas, ethanol, and electricity are favored technologies. They need faster and safer refueling methods to help make them competitive. Vehicles powered by natural gas and electricity also need better battery and fuel storage so they can travel longer distances between refueling. Travel range is usually not a major concern for municipal vehicle fleets, so natural gas and electricity should be considered.

Policy 32. Support State and federal legislation that promotes vehicles that use less energy and have lower emissions of air pollution.

Action 32.a Investigate the feasibility of gradually changing the City's vehicle fleet to more fuel-efficient models, including models that use alternative fuels.

Action 32.b Encourage the County Transit District to convert to cleaner, quieter buses, using Mountain View routes to test prototypes.

The diesel-powered County Transit District buses produce offensive exhaust. The District is considering the use of alternative fuels to meet new State exhaust emission standards. Prototype buses that use alternative fuels could be tested in Mountain View.

ACCESS FOR THE MOBILITY-IMPAIRED

An estimated 3.5 percent of the population in Santa Clara County cannot use conventional public transportation because they have a physical or mental disability. Many are elderly; others use wheelchairs or have other mobility limitations.

GOAL L

Ensure that people who are mobility-impaired have access to transportation.

Access to Public Transit

Most County transit buses have wheelchair lifts as of 1991; all are to be wheelchair-accessible by 1993. Light Rail Transit is also wheelchair accessible, and the Joint Powers Board is studying methods of providing lifts on CalTrain cars. New rail stations are also required to be accessible. Existing stations must be made accessible within certain time frames under the federal Americans with Disabilities Act passed in 1990.

Policy 33. **Support improved access to public transportation by people with disabilities.**

Action 33.a Represent the needs of Mountain View residents to transit providers responsible for carrying out handicapped-access regulations.

Action 33.b Review the plans for new train stations and transfer centers and identify potential obstacles for people who are mobility-impaired.

Paratransit

People who cannot use conventional, fixed-route transit need specialized services, called "paratransit." The Community Services Agency provides a paratransit service, Vantrans, to residents of Mountain View, Los Altos, and Los Altos Hills. Seniors and disabled people of any age who have no other means of transportation may use the service for a small fee. Vantrans service operates on weekdays between 8:30 a.m. and 5 p.m. by reservation. It gave more than 13,000 subsidized rides in 1990, 85 percent of them to Mountain View residents. Most trips are for medical purposes, and most riders are elderly and longtime residents.

A major share of Vantrans' budget comes from the State sales tax, with the City of Mountain View contributing about 8 percent. The demand for paratransit services is expected to increase as the population ages. The Americans with Disabilities Act is also expected to change the character of paratransit because it requires transit districts to provide paratransit service comparable to regular service.

Policy 34 **Supplement the public transit system with paratransit services for the elderly and mobility-impaired where needed.**

Action 34.a Continue to contribute resources to Vantrans or similar paratransit service.

Handicapped Access Regulations

The State Health and Safety Code (Title 24) and the City's Zoning Ordinance establish requirements for access to and within buildings and other facilities.

Policy 35. **Ensure that people who are mobility-impaired can conveniently and safely move from parking lots to buildings and transportation boarding areas.**

Action 35.a Continue to carry out requirements for handicapped parking and building access in public and private developments.

PRIVATE TRANSPORTATION SERVICES

Although the public transit system in Santa Clara County is extensive, there are specialized transportation needs that can best be met by the private sector. These include shuttle buses serving limited routes during peak travel periods, and taxis.

CalTrain shuttle picking up employees in the Whisman industrial area.

GOAL **M** **Encourage private transportation services within Mountain View.**

Shuttle Services

Several large employers operate shuttle buses between Caltrans stations and their buildings, as discussed in Policy 17. At least one employer runs a shuttle bus to Downtown during the noon hour, benefiting both employees and Downtown businesses. Noon-hour shuttle buses also help TDM programs by giving employees opportunities to run errands during the work day even though they may not have access to their cars.

Policy 36. **Encourage innovative methods of running shuttle or jitney services as needed within Mountain View.**

Action 36.a Work with employers who want to provide shuttle service from industrial and office areas to Downtown Mountain View and other shopping and entertainment districts.

Action 36.b Identify other potential shuttle routes.

There may be other travel corridors, for example between high-density residential areas and rail stations or shopping centers, that would benefit from shuttle services. Opportunities to run shuttles on these routes should be pursued.

Taxicabs

Four taxi companies are licensed to serve Mountain View. Taxicabs are inspected annually and drivers must have City permits. The Police Department follows up on complaints about drivers and cars. Taxi fares are higher than other forms of transportation, although the service is personalized.

Policy 37. **Encourage private taxi service in Mountain View.**

Action 37.a Continue to monitor taxi service in Mountain View and require improvements as needed.

Action 37.b Evaluate the potential role of taxi companies in providing service to people who are mobility-impaired.

Some cities subsidize taxi companies for paratransit service.

PUBLIC INVOLVEMENT

The success of the transportation Policies and Actions proposed in this Chapter depends on public commitment. Giving residents ample opportunity to participate in developing and carrying out these Policies and Actions is the best way to get this commitment.

GOAL **N** **Seek public involvement in planning and carrying out transportation improvements.**

Review of Plans and Projects

The City can involve more people in transportation planning by notifying them when major issues are being considered by the City or transportation agencies. This can be done through newspaper and television advertising and by making copies of reports readily available.

Policy 38. **Encourage regular public comment and suggestions on regional and local transportation plans and projects.**

Action 38.a Continue to supply clear, readily available information and to hold public meetings on proposed transportation projects and plans.

Responsiveness to Problems

Almost everyone uses a part of the circulation system every day. Users are a prime source of information for the City and other public agencies on how the system is

functioning. Unfortunately, it is often difficult for the public to know where to report problems. Letters and phone calls to City offices and letters to *The View*, Mountain View's monthly newspaper, are good ways of communicating concerns.

Policy 39. **Help residents communicate their concerns and suggestions about transportation facilities to the appropriate people or agencies.**

Action 39.a Publicize the names of agencies and individuals responsible for responding to questions and concerns about traffic and transit problems.

The City Services Directory, periodically published in *The View*, is one source of information on who is responsible for specific transportation issues.

Action 39.b Notify the public when construction projects are about to begin on local streets, expressways, and freeways.

BALANCED TRANSPORTATION FUNDING

Historically, the road system has received a high proportion of the financial investment in transportation. If the goals, policies, and actions in the Circulation Chapter are to succeed in getting more people to use alternative modes of transportation, it is critical that funding priorities reflect a commitment away from roads. The County's new Transportation Plan, which incorporates the major highway and rail projects planned for Mountain View, reflects a decisive change in direction. If this plan is carried out as proposed, two-thirds of the County's transportation funds will be spent on transit between 1990 and 2010.

GOAL **O**

Ensure balanced funding for transportation systems.

Policy 40. **Shift a greater proportion of transportation funding toward improvements related to bus, rail, bicycle, pedestrian, and carpool transportation.**

Action 40.a Emphasize funding for alternatives to the single-passenger auto when appropriating money for transportation projects.

Residential Neighborhoods Chapter

Residential Neighborhoods Chapter

INTRODUCTION

Mountain View is its neighborhoods. The City's residential policies and programs are based on preserving and protecting those neighborhoods and finding ways to meet community and regional housing needs at the same time. The City recognizes that in order to achieve a specific goal, other goals may not be fully carried out. This is especially true with housing goals since there is little suitable land for housing and an enormous demand for it.

This chapter is divided into two parts. The first part is based on the State-required Housing Element and the second one deals with neighborhoods. The Housing Element section looks at the overall community need for quantity and variety of housing, at affordability of housing, at housing opportunity for groups with special needs, and at housing quality. The neighborhoods section deals with residential neighborhoods as a whole and the character and qualities that makes Mountain View a desirable place to live.

The Housing Element was adopted by the City Council on December 10, 2002. The California Department of Housing and Community Development informed the City on January 3,2003 that the element has been certified as being in compliance with State law. This chapter contains a condensation of that official Housing Element. Goals, Policies and Actions are the same in both documents. They have been renumbered in this chapter to follow the format of the rest of the Plan.

Housing affects every aspect of community life. It satisfies the need for basic shelter; it establishes the look and feel of neighborhoods; and it affects the composition of the population. The kind and amount of housing that is built has enormous influence over the quality of life, not only in Mountain View, but throughout the southern Bay Area. Without sufficient housing near jobs, streets and highways become overloaded. Workers have to commute long distances, taking away from the quality of home life and impacting the environment. In turn, the overall economy is hurt as employers find they must pay higher wages to attract a labor force that lives far away or that must pay more for nearby housing.

Accomplishments

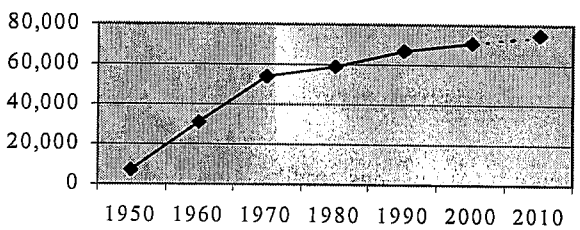
Mountain View has made significant strides in carrying out the policies of the 1990 Housing Element and 1992 General Plan. Among the accomplishments through 2000 are:

- Construction of almost 2,500 housing units since 1988. Of these, 305 were affordable to lower income households.
- Rezoning of six sites creating opportunities for 1,274 units that would otherwise not have been permitted. Of these, 987 had been built.
- Preservation of all but one at-risk housing project—a total of 509 units preserved.
- Adoption of a Below-Market-Rate program. Within three years, three units and $1.6 million in *in lieu* fees had been committed by developers.
- Adoption of a housing impact fee on new commercial and industrial development.
- Adoption of guidelines for development of single-family houses on small lots with about 560 houses built.
- Revision of the companion unit regulations increasing the potential number of units allowed by 75 percent.

COMMUITY PROFILE

A Gradually Changing Population

Mountain View's population grew from 67,460 in 1990 to 70,708 in 2000, an increase of 3,248, or 4.8 percent. After a post-war growth spurt between 1950 and 1970, population has increased more gradually. The City is projected to grow to 75,200 in 2010, which is a 6.3 percent increase.



Source: U.S. Census and "Projections 2002"

Figure 1: Population Change and Projections, 1950 – 2010

Age. The median age of Mountain View's population increased from 32.8 to 34.6 years between 1990 and 2000. While the percentage of young adults (20 to 35) shrank, those in older age groups grew and the percentage of children (0 to 19) remained about the same as in 1990. Seniors, those 65 and over, increased slightly from 9.8 to 10.6 percent of the population. Overall, the adult population is aging, but the percentage of children is stable. This suggests a continuing need for a variety of housing types.

Ethnicity. According to the 2000 Census, Mountain View's white population declined from 64.5 to 55.2 percent since 1990, while its Asian population increased from 13.7 to 20.7 percent. Hispanics comprise 18.3 percent (a small increase over 1990) and African Americans make up 2.4 percent (a decrease from 1990). American Indians, persons identifying themselves with two or more races, and other ethnic groups make up the remaining 3.4 percent.

Household Composition. About 40 percent of Mountain View households are two-parent families, 35.6 percent are single people, 13.5 percent are non-family households (unrelated individuals) and 11 percent are single-parent households. The average household size is 2.26 persons per household—less than the County average of 2.92 persons per household. This can be attributed to the high percentage of smaller, rental units in Mountain View.

New Types of Housing

Housing grew by 4 percent between 1990 and 2000, a slightly slower rate of growth than population. Housing growth is projected to continue to be slower than population growth, resulting in a very small increase in household size.

Housing Growth

Year	Occupied Dwelling Units	House-holds	10-Year Increase	
1960	10,297		-	-
1970	22,837		12,540	122%
1980	28,383		5,546	24%
1990	29,990		1,607	6%
2000	31,242		1,252	4%
2010		32,810	1,568	5%
2020		34,340	1,530	5%

Source: U.S. Census and ABAG "Projections 2002"

Figure 2: Housing Growth and Projections, 1960 – 2020

Although Mountain View's rate of growth has stabilized, different types of housing are now being built. Until the late 1970s, Mountain View was a city of single-family subdivisions and apartments. During the 1980s, developers were building condominiums in large numbers. By 1990, townhouses had become the dominant new unit type and by the end of the decade, single-family houses on small lots (3,000 to 4,000 square feet) had entered the field.

Small-lot single-family houses.

Owners live in 41 percent of the housing in Mountain View; renters live in the other 59 percent. The percentage of owners has increased since 1990 as more townhouses and small-lot single-family houses have been built. However, ownership is still considerably lower than the countywide average of 60 percent. In 2001, the State estimated that 56 percent of the housing units were multiple-family (apartments and condominiums), 28 percent were single-family houses, 12 percent were townhouses and 4 percent were mobile homes.

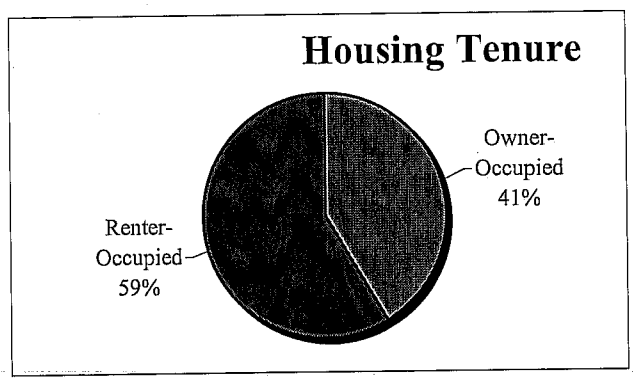


Figure 3: Renter/Owner as a Percent of Total

Projections

The Association of Bay Area Governments (ABAG) projects the regional growth in housing and jobs and assigns a portion of it to each city. ABAG takes into account both the regional economy and demographic trends. It also factors in local market demand, employment opportunities, commuting patterns and public facilities. Estimates of jobs and housing growth in each city are limited, or constrained, by the zoning and available land, in the earlier years of the projections. The estimates for Mountain View do not include new (2002) plans for housing at Moffett Federal Airfield and Ames Research Center.

Housing and Jobs

	1990	2000	Projected 2010
Housing Units	30,455	31,309	32,880
Employed Residents	44,054	47,556	50,500
Jobs	63,490	77,370	84,810
Jobs per Employed Resident	1.44	1.63	1.68

Source: ABAG "Projections 2002." Includes Moffett Field

Figure 4: Housing and Jobs, 1990 – 2010

Based on these constraints, ABAG estimates that Mountain View will grow at a rate of 157 housing units and 744 jobs per year between 2000 and 2010. These projections indicate that the current jobs-housing imbalance will worsen.

HOUSING QUANTITY AND VARIETY

Goal **A**

Provide policies that encourage a range of housing including single-family, townhouses, apartments, condominiums, mobile homes and other housing types.

The City is committed to maintaining a range of housing types that meet the housing needs of all Mountain View residents. The City also aims to increase the supply of housing to provide its fair share of the regional housing need as required by the State.

Share of Region's Housing Need

Unlike the estimates in ABAG's "Projections 2002," determination of the city's "fair share" is not constrained by current zoning and available land. For Mountain View, the "fair share" allocation is 3,423 units, or 489 units per year between January 1, 1999 and June 30, 2006, the term of the current Housing Element. This is much higher than "Projections 2002" and much higher than the 270 units per year built between 1996 and 2000 which was a period of dynamic economic growth.

To arrive at this number, the State first projected the state-wide housing need, and then allocates a portion to each region in California. In the Bay Area, ABAG assigned a share of this region's need to each city and county based on a formula that gives equal weight to projected housing and projected jobs. For cities like Mountain View, that have a jobs-housing imbalance, additional land must be zoned to residential to provide adequate sites to meet the housing need.

Fair Share by Income Category

The State also requires that there be a certain number of units in each income category as shown in Figure 5. In determining the income distribution of units, ABAG's formula aims to have each jurisdiction move closer to the regional average. Mountain View's percentages are already near the regional averages.

Fair Share Housing Need

Income Group	Seven-Year Projected Need	
Very Low Income (0 – 50%)	698	20%
Low Income (50 – 80%)	331	10%
Moderate Income (80 – 120%)	991	29%
Above Moderate (over 120%)	1,403	41%
Total	3,423	100%

Source: ABAG, "Regional Housing Needs Determination, 2001- 2006 Housing Element Cycle," June 2001, Table 12.

Figure 5: Housing Need, Jan. 1, 1999-June 30, 2006

Policy 1. **Ensure that adequate residential land is available to accommodate the new construction needed to meet ABAG's Fair Share Housing Needs.**

Action1.a. Encourage the construction and appropriate rehabilitation of an average of 489 units a year over the seven-year life of the Housing Element with an annual report to the Environmental Planning Commission on actual units built.

Adequate Sites

Mountain View has enough land zoned for housing to accommodate about 2,500 of its "fair share" units (including about 1240 units built or in the development pipeline in 1999 – 2001). In order to achieve the remaining 923 units (3,423 – 2,500 = 923) in the City's "fair share" allocation, land that is already developed in commercial, industrial or lower density residential use, must be rezoned and ordinances must be changed to encourage more housing. Potential housing sites are shown in Figure 6 and proposed ordinance changes are shown in Figure 8. Figure 7 shows both.

Action 1.b Before 2006, initiate General Plan changes and rezoning of the following sites to residential densities that will support housing affordable to a full range of incomes including households with less than median income.

Rezoning Sites

	Zoning	Units*	Target Date
Moorpark/Alice	R3-1.5	42	2002
Moffett/Middlefield (NW corner)	40/ac. (Precise Plan)	192	2003
Ada/Minaret	R3-1	152 (101)**	2004
Wyandotte/ Independence	R3-2	141	2005
Plymouth/Sierra Vista and Colony/Rengstorff	R3-2	258	2006
TOTAL		785 (734)**	

* Assumes development at 80% of maximum
** Net increase over current zoning.

Figure 6: Sites To Be Considered for Rezoning

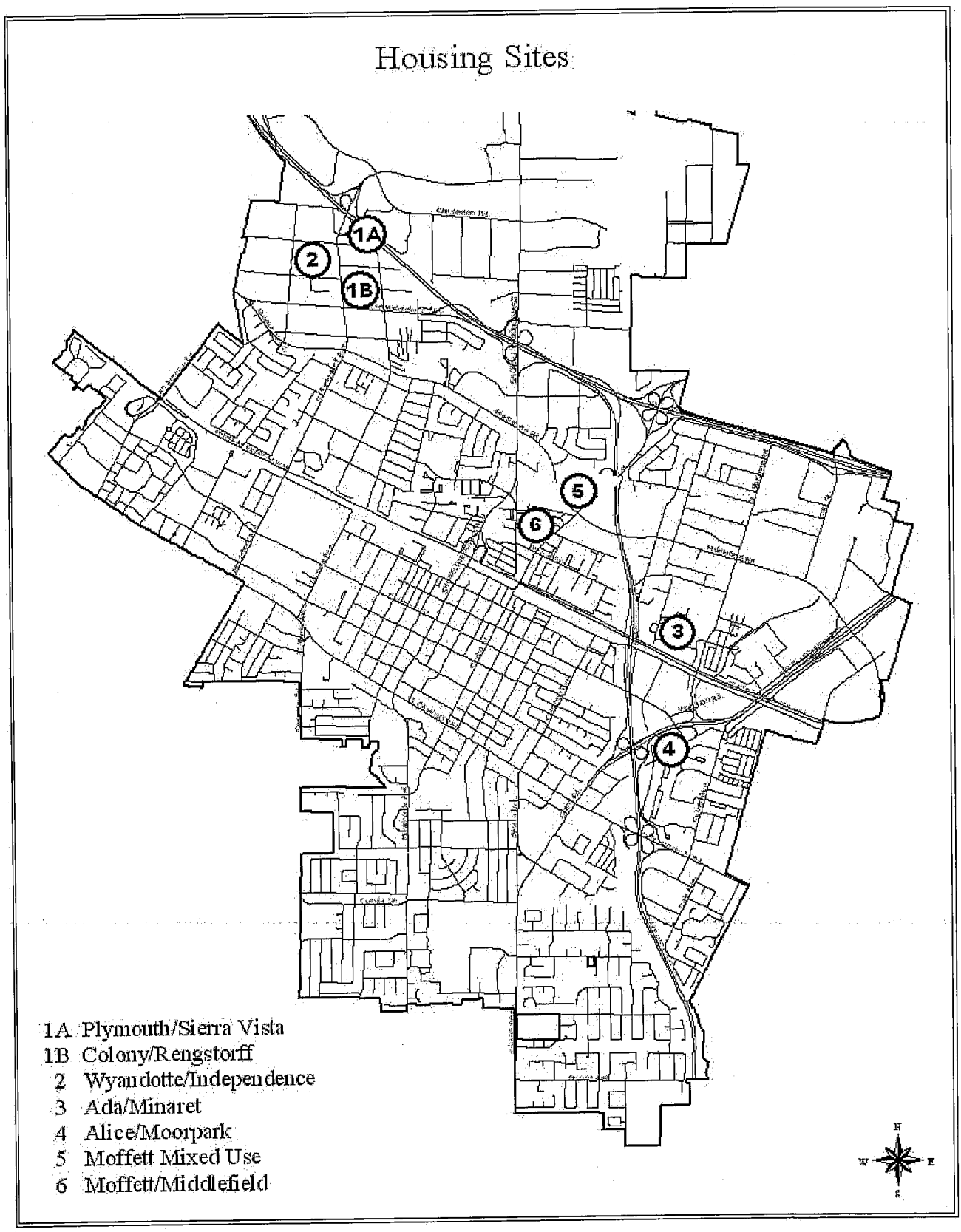


Figure 7: Sites To Be Considered for Rezoning or Ordinance Changes

Action 1.c. Before 2006, initiate amendments to the zoning ordinance and other regulations to increase potential additional housing units by:

— Allowing mixed use in the Neighborhood Commercial zone district on Moffett Boulevard and other areas.

— Allowing redevelopment at significantly higher than existing densities on already-developed multiple-family parcels in locations where the higher densities would be compatible with adjacent properties and including consideration of higher than 10 percent Below-Market-Rate units.

Ordinance Changes

Changes	Estimated Units	Target Date For Amendments
Moffett Mixed Use	31	2004
Multiple-Family	175	2006
TOTAL	206	

Figure 8: Ordinance Changes To Produce Additional Housing

All sites to be considered for rezoning, and ordinance changes, will undergo further environmental review and public hearings before final decisions are made.

The approximately 25-acre Mayfield Mall site may present another opportunity for some housing if the property owner, Hewlett-Packard, decides to sell it and the buyer wants to redevelop it.

Action 1.d. Revise the Mayfield Mall Precise Plan to allow for housing and other uses if redevelopment is initiated by the property owner.

A preliminary assessment has concluded that the listed sites are served with adequate infrastructure and do not have serious environmental constraints. However, if new extremely hazardous materials are allowed to move in nearby, this could be a deterrent to housing development.

Action 1.e. Initiate amendments to the zoning ordinance and other relevant City regulations to limit hazardous materials use within and near industrial areas proposed to be rezoned to housing under Action 1.b.

Housing projects are seldom built to the maximum density allowed by the zoning. The average is about 75 percent of maximum. Factors like neighborhood compatibility, lot configuration and the location of trees on the site influence the design and potential number of units. As the supply of land that can be developed declines, there may be a greater need to maximize the use of individual sites.

Action 1.f Require Zoning Administrator to review and take action on all applications proposing to develop property at less than the maximum density allowed by zoning. Factors the Zoning Administrator will take into account in making a decision include, but are not limited to, the following:

— The overall goal of increasing the proportion of sites developed at maximum density.

— The density of the surrounding neighborhood.

— Extenuating circumstances such as lot configuration and other factors that may allow for lower densities.

— Proximity to transit corridors and job centers.

Action 1.g Continue to provide appropriate incentives, including the more expeditious review process available to apartments and condominiums as compared to the PUD permit process required for townhouses and small-lot single-family projects, to encourage development at maximum densities. Update development application materials to highlight and promote the simpler review process for apartments and condominiums.

Besides ensuring an adequate number of new housing units, attention should also be focused on variety, compatibility and quality of housing A variety of housing will help meet the needs of Mountain View's diverse population.

Policy 2. **Encourage a mix of housing types, including higher-density and lower-density housing.**

Action 2.a Retain the following two sites for single-family residential development with retention of appropriate areas for open space.

— Greenhouse at Marilyn Avenue

— Southeast corner of Grant Road and Levin Avenue

Action 2.b Determine appropriate densities for privately initiated zone changes based on the need for housing, surrounding uses, available infrastructure and environmental constraints with the goal of increasing overall density of new residential construction.

Action 2.c Assure that all new housing is safe and attractive through appropriate design and zoning standards and application of the Uniform Building Code.

Innovative Housing

Some of the area's housing needs can be met with non-traditional dwelling types such as shared housing and companion units. These housing types not only provide alternative housing arrangements for Mountain View residents, they are also generally more affordable.

Action 2.d Continue to allow innovative housing programs such as co-housing and shared housing.

Companion units are usually small, making it more likely that their rents will be affordable. Mountain View made it easier to have a second unit on a single-family lot when it reduced the required minimum lot size in 2000. However, there have been few applications so far.

Innovative Housing Solutions

Co-housing developments have individual units with kitchens, combined with a common kitchen, meeting room and possibly other shared facilities.

Shared housing generally means an arrangement in which two or more unrelated people, each with private sleeping quarters, share a house or an apartment.

A companion unit, or second unit, is an additional self-contained living unit on the same lot as the primary residential unit. In Mountain View, they are allowed in the R1 zone on lots that are 35% larger than the minimum for the zone.

Action 2.e Disseminate information to home-owners about the City's current provisions for companion units in the R1 zone district.

Mixed Use And Transit Oriented Development

The Community Development Chapter has a policy which encourages Mountain View's highest density residential and mixed use development near transit. Implementation of this policy has won the city several major awards for transit-oriented development. Continuing this policy will help the city achieve its housing goals.

Policy 3. **Provide higher density housing near transit, near the Downtown and near other commercial areas.**

Action 3.a Continue to allow and encourage mixed-use development at higher densities in the Commercial Residential Arterial Zone District, in the Downtown Precise Plan and near transit.

Rental Housing

Mountain View has a high percentage of rental units—59 percent. They are an affordable form of housing for many lower income households. Rental housing also meets the needs of residents who wish to reduce the demands of property maintenance. It is important to maintain existing rental housing and allow new development.

Policy 4. Continue to provide rental housing.

Action 4.a Continue to regulate conversions of rental units to condominiums by ordinance.

Action 4.b Continue to include potential rental housing sites in the residential land inventory.

Action 4.c Encourage people to rent rooms in their homes.

Ownership Opportunities

Policy 5. Encourage the development of new ownership housing.

Compared to other Bay Area cities, Mountain View has a lower percentage of ownership housing—41 percent. There are only a few sites available for traditional single-family subdivisions. Thus, most new for-sale housing in the last 5 - 10 years has been single-family houses on small lots, townhouses and rowhouses. Guidelines have been developed for small-lot single family and townhouse projects. These guidelines set design standards that promote compatible development and a quality living environment. Rowhouses—which are a more urban form of townhouse with garages at the rear—are becoming more common and guidelines are also needed for them.

Action 5.a Encourage townhouses, rowhouses, and condominiums in multiple-family zones.

Action 5.b. Maintain and update as needed the Townhouse and Small-Lot Single-Family Guidelines.

Action 5.c Develop guidelines for row house development.

Condominiums are generally the lowest-priced form of ownership housing. However, there have been few built in the past 5 - 10 years. Developers shy away from them because of the prevalence of construction defect litigation targeting condominiums. Legislation is needed to provide greater protection to both developers and condominium buyers. This legislation could encourage developers to build more condominiums and thus create more affordable ownership housing in Mountain View.

Action 5.d Support construction defect legislation that will both protect homeowners from defects and encourage developers to build attached housing such as townhouses and condominiums.

Mobile Homes And Manufactured Housing

Mobile homes and manufactured housing units can fit either into a single-family neighborhood or into a mobile home park. When they are part of a single-family neighborhood, it is important to treat these units architecturally so that they blend in with the neighborhood. When they are part of a mobile home park, these units can create their own neighborhood style. The six major parks in Mountain View are active neighborhoods with their own strong sense of identity.

Policy 6. Preserve the six major mobile home parks as a vital part of housing opportunities in the community.

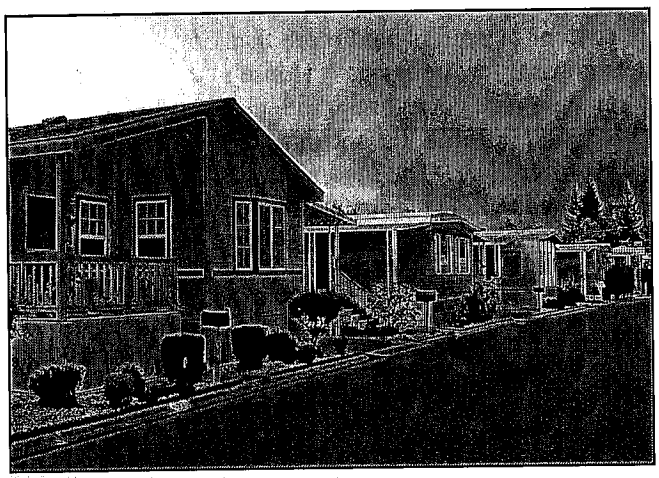
Action 6.a Retain "Mobile Home Park" as a separate residential land use category on the land use map of the General Plan.

Mobile home parks provide affordable housing in a safe and secure environment, with low yard and house maintenance. As a result, mobile home parks attract many retired residents. Mobile home owners enjoy the lifestyle and social benefits of living in a

close-knit neighborhood. The parks are also distinctive because the land and units are owned by different parties. Residents own their homes, but rent the land beneath them. Thus, their housing costs are subject to the same economic pressures that drive up apartment rents. Separate ownership also carries with it the risk of conversion of the land to another use and the loss of this special living arrangement. The State requires a conversion impact report with applications for park conversions. The report must include an assessment of the effects on residents who are displaced when the park is converted.

Action 6.b Require a conversion impact report before approving a mobile home park conversion.

Action 6.c. Require appropriate measures to lessen the adverse effects of mobile home park conversions on displaced mobile home residents.



One of Mountain View's six mobile home parks.

Action 6.d. Consider strategies for assisting low-income mobile home residents with obtaining replacement housing if a mobile home park owner seeks rezoning and other approvals to redevelop his property.

Action 6.e. Investigate strategies to protect the affordability of mobile homes in mobile home parks.

Action 6.e. Investigate strategies to protect the affordability of mobile homes in mobile home parks.

Manufactured Housing. Individual manufactured housing units, which are also called mobile homes, are allowed in any residential zone, subject to a Development Review Permit. The review is to make sure that the manufactured housing is compatible with the neighborhood in height, bulk and character. Manufactured housing that is mounted on a permanent foundation, and is architecturally compatible with the neighborhood is permitted in residentially zoned districts. The zoning ordinance should be revised to clarify that companion units can be manufactured homes.

Policy 7. **Allow mobile and manufactured housing in all residential zones and assure that it is safe and attractive.**

Action 7.a Encourage mobile and manufactured housing that is safe and attractive.

Action 7.b. Maintain Zoning Ordinance design requirements and criteria for manufactured housing and mobile homes.

Action 7 c. Clarify, in the zoning ordinance section on companion units, that manufactured homes may be used as companion units.

AFFORDABLE HOUSING

Goal **B** **Preserve and increase the supply of affordable housing with an emphasis on low-income and very low-income housing.**

Housing costs skyrocketed in the last half of the 1990s as the booming economy attracted thousands of new high tech workers to Silicon Valley. Between 1990 and 2000, 15,550 new jobs were created in the City's major industries while only 1,600 new housing units were built. In addition to the huge demand and limited supply, escalating land prices and high construction costs also contributed to the high cost of housing.

Late in 2000, the median price of a single-family home in Mountain View was about $650,000 and the median for a condominium or townhouse was about $375,000. Average rent for a two-bedroom apartment in a larger complex was $1,854 per month. Although these prices declined as the economy cooled in 2001, they are still not affordable to many households.

What Is "Affordable Housing"?

"Affordable housing" is housing that is priced so that renters or buyers do not have to pay more than 30 percent of their gross monthly income for rent or mortgage payments, taxes, insurance, and, in the case of renters, utilities. Typically, it is households in the lower income categories that have difficulty finding housing that does not consume more than 30 percent of their income. Therefore, the term "affordable housing" usually refers to housing that is priced to serve lower income households.

In 2001, only 15 percent of Santa Clara County households earning the median income ($87,000 for a four-person people) could afford to buy a single-family house, although more could afford condominiums and townhouses. Lower income households are even more vulnerable in periods of dramatic rent increases. People have a choice of commuting increasingly long distances from less expensive housing outside of the county, paying much more than 30 percent of their income for housing, or crowding into apartments and houses.

Policy 8. Provide a variety of affordable housing opportunities for lower and moderate-income households.

According to the 2000 Census, 19 percent of Mountain View's families had Very Low Incomes; 7.5 percent were in the Very Low- to Low-Income range; 19.4 percent were in the Low- to Median-Income range and 8.8 percent were in the Median- to Moderate-Income range. The remainder, 45.3 percent, had Above Moderate Incomes.

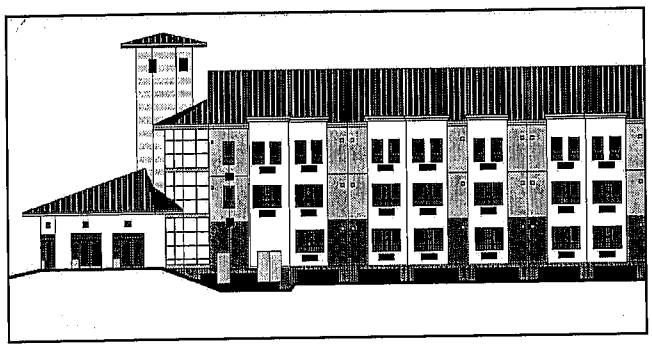
For Mountain View's non-family households (including single persons), 25.1 percent had Very Low Incomes; 9.1 percent were in the Very Low- to Low-Income range; 20.3 percent were in the Low- to Median range, and 9.6 percent were in the Median- to Moderate-Income range. The remainder, 35.9 percent had Above Moderate Incomes.

In 1999, 51 percent of mortgage holders and 46 percent of renters paid more than 25 percent of their incomes for housing. Households in the lower income categories may be eligible for federally-assisted affordable housing if they meet income qualifications. The income limits are established by the federal Department of Housing and Urban Development (HUD) and are updated annually.

HUD Income Limits, 2001 Four Person Household	
Extremely Low Income (30%)	$26,200
Very Low Income (50%)	$43,650
Low Income (80%)	$69,050
Median Income (100%)	$87,300
Moderate Income (120%)	$104,760

The two most common forms of federal assistance are subsidized housing projects and the Section 8 voucher program. In 2002, there were 855 subsidized housing units in Mountain View—596 for seniors and 259 for families. The supply will be increased by 14 percent (120 units) when a new efficiency studio project is completed as expected in

2004. The efficiency studio project is targeted to serve Very Low Income single renters, although some of the units will be large enough for two persons.



Plans for new efficiency studio development.

Action 8.a Work with a non-profit developer to finance and construct an efficiency studio development with 110 to 130 low-income units on the San Antonio Loop site.

Action 8.b Assure complete funding of the 110-130 unit efficiency studio project using Revitalization District funds, Below-Market-Rate *in-lieu* fees or other funding sources.

Mountain View has established a five-year "quantified objective" for the number of new and rehabilitated housing units it expects to be provided between 2001 and 2006. The number of lower income units is less than the City's need as prescribed under the "fair share" formula (Figure 5), but it is realistic given all available funding sources.

Action 8.c Encourage housing for low and very low income families and individuals throughout the City. Work toward the goal of 150 units of new housing for households with very low or low incomes (in addition to the 110-130 efficiency studio units already in process).

Action 8.d Continue to work with housing developers to help identify appropriate sites and to encourage the development of affordable housing and housing for the elderly both through new construction and the acquisition and rehabilitation of existing housing developments, including possible sites within the areas listed in Action 1.b.

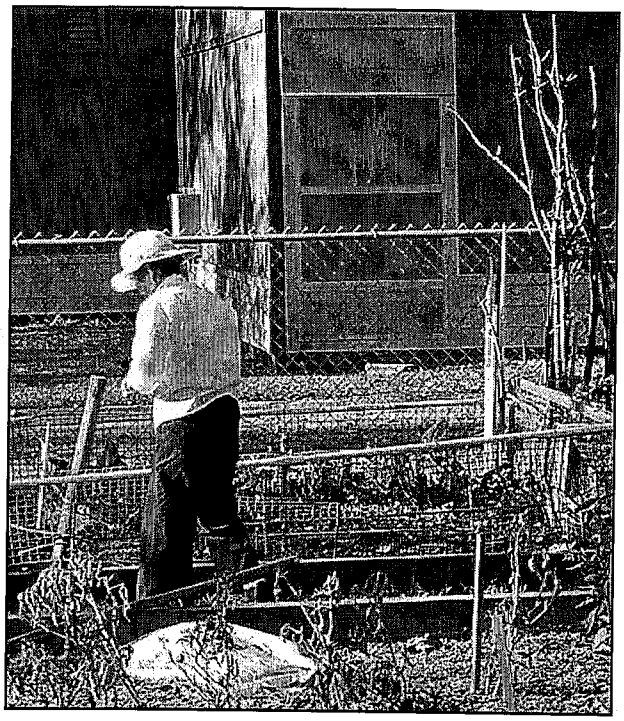
Housing for Seniors

Seniors, those who are 65 or over, comprised 10.5 percent of the population in 2000. Older renters have the highest incidence of paying more than 30 percent of their income for rent compared to all other age groups.

Housing for the elderly is typically one-bedroom and two-bedroom apartments designed for people 62 years of age and older. It can have higher densities than family housing, primarily because older people do not own as many cars and need less active open space. Housing for the elderly usually includes some units for the handicapped.

Closeness to services and relatively less expensive land are the City's two most important considerations when it evaluates sites for housing for the elderly. Services include shopping, public transportation, social services and health care. Projects should have between 50 and 100 units for efficient management, and should be built at densities of 20 to 50 units per acre. The City will also consider compatibility with the neighborhood, unit cost and community acceptance. Of secondary importance are closeness to recreation and churches and the absence of detrimental conditions such as traffic, noise and nearby industry.

Mountain View has four housing projects for the elderly and three others with some units for seniors, for a total of 596 subsidized senior housing units. The demand for senior housing units is very high. Those who apply to live in subsidized senior housing face waiting periods of two to four years.



Community garden at an affordable senior housing project.

Action 8.e Encourage senior housing including projects with centralized facilities or congregate care. Work toward the goal of 100 units of new senior housing.

Special Needs Housing

Some groups within the larger population have special housing needs not addressed by the conventional housing market. These include lower income persons with physical, mental or emotional disabilities, large families and households headed by single women with small children.

Based on extrapolations from countywide surveys and 2000 Census data, it is estimated that in Mountain View:

— About 400 – 450 people with mental illnesses need both housing and life skills training.

— About 75 persons with developmental disabilities need housing.

— About 6.8 percent of all households are living in overcrowded conditions.

— There are 2,270 female-headed households, of which 1,045 had children under the age of 18. Many are low income and need affordable and supportive housing.

— About 280 people in Northern Santa Clara County receive treatment for HIV and AIDS, and are unable to work and afford housing.

— About 9,530 residents over the age of five have disabilities. (The 1990 Census showed that about 3,735 households with disabled persons need modifications to make their homes more accessible.)

These people can be assisted with a combination of special programs and regional responses.

Action 8.f Continue to fund a program, such as Economic and Social Opportunities, Inc.'s Home Repair/Home Access Program, that assists handicapped low-income homeowners with minor renovations to their homes to make them accessible.

Action 8.g Work with non-profit agencies, other cities and the County, and developers on regional approaches to providing housing for persons with physical or mental disabilities, victims of domestic violence, and the homeless.

Action 8.h Continue to zone areas for single-family houses that are designed with enough bedrooms to accommodate larger families.

Homelessness

The homeless are people who lack a fixed, regular and adequate nighttime residence. Homeless people include those who are staying in temporary or emergency shelters or transitional housing or who are staying with friends or other people with the understanding that shelter is being provided as a last resort. They may live in hotels until their money runs out near the end of the month, then become homeless. There are also those without a shelter and in need of rehabilitative help, and the chronically

homeless—people looking for three meals and a bed, dependent on the "system."

It is not easy to get an accurate count of homeless people. However, a survey taken in Santa Clara County (including locations in Mountain View) in January 1999 found that:

- Over 40 percent surveyed reported being homeless for more than one year—about the same as in a 1995 survey.
- The number of children who are homeless comprised 31 percent of the total sample, an increase from 19 percent in 1995.
- Children in the 1999 survey were older than their counterparts in the 1995 survey. Sixty percent of the children in families were under the age of 12, compared to 74 percent in 1995.
- The number of working homeless has increased from 12 percent in 1989, to 24 percent in 1995, to 34 percent of the total homeless population in 1999.

Another indicator of homelessness is the number of Mountain View residents on the Santa Clara County Housing Authority's waiting list who identified themselves as homeless. There were 40 in 1999.

Mountain View's homeless assistance strategy consists of local and regional programs. Locally, the City tries to create affordable housing, such as the efficiency studio project, and to support programs, such as the Section 8 voucher program, to prevent persons from becoming homeless.

Action 8.i Continue to support programs that protect people from becoming homeless.

Mountain View also assists persons who are homeless by funding short-term shelter and emergency assistance programs. One of these programs is the Community Services Agency's motel voucher program that helps 20-30 families and individuals per year to obtain emergency housing. Another is the Alpha Omega Program which provides a rotating shelter and case management at area churches. The program serves 55 single adults each year (9 to 12 persons on any given night, although up to 29 are allowed).

There are two permanent homes in Mountain View for those in need of temporary housing. Homeless and runaway teens can live at Casa SAY, a single-family house in Mountain View with room for six teens, operated by Social Advocates for Youth. Single adults who successfully "graduate" from the Alpha Omega Program are eligible to move into a transitional home for six people in Mountain View.

Action 8.j Continue to fund or support efforts to provide short-term shelter and emergency assistance to persons who are homeless or at risk of homelessness, including homeless and runaway youth, with programs such as the Emergency Housing Consortium, the Community Services Agency's Emergency Assistance Program and Casa SAY.

Action 8.k Continue to provide funding for the operation of a local shelter, such as the Alpha Omega Rotating Homeless Shelter.

Action 8.l Continue to support Mountain View's six-bed transitional house for previously homeless persons.

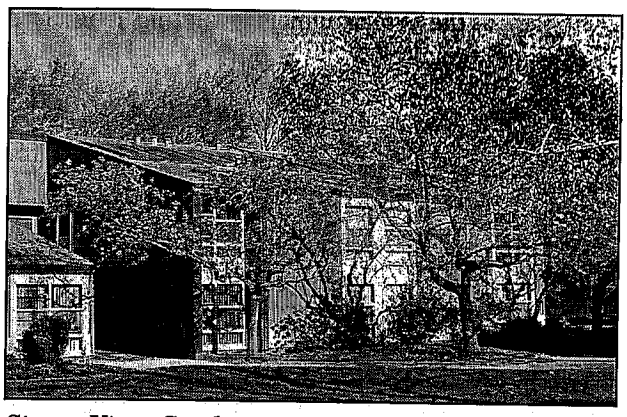
To address homelessness on a regional scale, the City participates in the Santa Clara County Collaborative on Housing and Homeless Issues and supports several regional shelters including the Clara-Mateo Alliance in Menlo Park and the Emergency Housing Consortium in San Jose. The Clara Mateo Alliance operates a shelter for homeless persons at the Menlo Park Veterans Center where 15 of the 480 total annual clients are Mountain View residents. It also operates a family shelter where about 12 of the 154 total annual clients are Mountain View residents. The Clara Mateo shelters are within four miles of Mountain View.

Action 8.m Continue to participate in regional homeless programs and to support short-term shelter and transitional housing programs, such as the Clara-Mateo homeless shelter.

At Risk Housing

Over the past 10 years, Mountain View has preserved affordable housing in five developments that were at risk of being converted to market-rate projects. These projects had been financed under special HUD assisted programs. These HUD programs required that rents be affordable, but property owners could pay off the mortgages and leave the programs after 20 years. In three cases, the City used its CDBG, HOME and local housing funds to assist non-profit organizations to purchase these properties. In the other two cases, the City assisted with refinancing efforts to lower property debt and in finding eligible non-profit agencies to purchase the properties.

The five developments that were preserved were Central Park, Monte Vista Terrace, Shorebreeze, Sierra Vista I and Tyrella Gardens, with a total of 509 units.



Sierra Vista Gardens preserved as affordable senior housing.

The Section 8 Program

The Section 8 program subsidizes rents for eligible tenants. The units may be in market-rate developments or in the federally-subsidized projects.

Owners and managers of market-rate projects often have little incentive to rent to Section 8 tenants if there are other potential renters who can pay high rents and move in immediately. Cooperation between landlords and housing support groups may help streamline the process of matching tenants who qualify for Section 8 vouchers with apartments.

Section 8 Program

The County Housing Authority operates the federal Section 8 program in Mountain view. Section 8 has two parts: certificates and vouchers.

Section 8 certificate holders rent from apartment developments that have Section 8 contracts with the Housing Authority. The certificate holders are not permitted to pay more than 30 percent of their incomes toward rent. The federal government, through the Housing Authority, pays the apartment owner the difference between what the tenant can pay and the fair market rent as determined by HUD.

Section 8 voucher holders may rent from any willing property owner. The property owner must agree to contract with the Housing Authority to receive the federal rent subsidy. Property owners may not charge more than the Fair Market Rent as determined by HUD. The Housing Authority pays a subsidy equal to the difference between the Fair Market Rent and 30 percent of the tenant's gross income.

Policy 9. Provide renters with stable rental opportunities.

Action 9.a Work with the Tri-County Apartment Association, the Mountain View Housing Council, landlords and affordable housing advocates to develop strategies to preserve rental housing, including increasing participation in the Section 8 program with a goal of 10 percent of all rental units in the City.

Action 9.b Participate in a regional program to increase Section 8 participation.

Action 9.c Identify resources such as a caseworker or ombudsman whose role is to encourage renter-owner cooperation in obtaining the goal of 10 percent participation citywide in the Section 8 program and additional outreach programs identified in this Housing Element.

Action 9.d Determine whether there are cost-effective alternatives for improving the Section 8 rental unit placement process, such as modest city funding

for a non-profit housing organization to help maintain client files and submit Section 8 paperwork.

Action 9.e Support other strategies and programs to supplement the Section 8 program such as programs to provide renters with deposits, emergency rental assistance and coaching on how to apply for a rental unit.

In the past, HUD's Fair Market Rents did not keep up with the rapidly changing rental market in Santa Clara County. Many vouchers holders could not find apartments with rents low enough to receive approval from the Housing Authority. Although HUD raised Fair Market Rents in 2001, it could become a problem again.

Action 9.f Actively lobby the Santa Clara County Housing Authority, Congressional officials and others for changes including making the Section 8 program better reflect "fair market rents" in the Mountain View area.

The number of households with housing problems far exceeds the supply of subsidized housing. Housing problems are defined as overcrowding, overpayment for housing, and substandard conditions. Renters are especially vulnerable in periods of dramatic rent increases.

Action 9.g Implement appropriate ordinances or programs with the goal of providing additional housing security for long-term renters:

— Explore Palo Alto's, as well as other cities', mandatory mediation programs.

— Expand outreach about tenant's rights and the City's mediation program through public and private agencies, and programs sponsored by the City.

The supply of lower rent housing in the private market is constantly changing. If the City could track changes in costs, rents and incomes annually, it could better understand the dynamics of the housing market. There may be ways to collect data on average cost of renting. For example, average rents for larger apartment developments is available. Rents in smaller complexes and in mobile home are very difficult to monitor.

Monitoring the Housing Supply

Policy 10. Monitor the supply and costs of existing rental, mobile home and ownership housing.

Action 10.a Use available statistical data to track the distribution of Mountain View's existing rental, mobile home, and ownership housing opportunities among the income categories Very Low, Low, Moderate and Above Moderate.

Action **10.b** Investigate ways of developing a comprehensive inventory of existing rental housing (including mobile homes) to track number of units and rents for units (and mobile home spaces) throughout the city.

Housing for Community Service Workers

In order to respond to the needs of residents, and also to address the jobs-housing imbalance, the City has tried to target its affordable housing to people who already live or work in Mountain View. Within federal guidelines, the City has adopted a policy that gives priority to persons who have lived in the City for at least six months or who have worked in the City for at least a year. These preferences apply to projects funded with federal grants such as CDBG.

It is especially important to have teachers and public safety officers living in the City. They are essential to the well-being and safety of the community, yet often cannot afford local housing. Therefore, the City has targeted these groups for housing projects and programs that are solely funded with locally-generated fees such as the Below-Market-Rate Program and Housing Impact Fee Program.

Policy 11. **Seek methods of ensuring that community service workers can continue to live in Mountain View.**

Action 11.a Give priority for subsidized affordable housing to persons who live or work in Mountain View whenever it is legally feasible.

Action 11.b Continue to give priority to City of Mountain View public safety workers, Mountain View public school teachers and persons who live or work in Mountain View (in that order) for housing units supplied under the City's Below-Market-Rate and Housing Impact Fee Programs.

Action 11.c Investigate giving priority to City of Mountain View public safety workers, Mountain View public school teachers and persons who live or work in Mountain View (in that order) for other City-assisted housing projects and programs in addition to those projects and programs noted under Actions 11.a and 11.b.

Besides establishing preferences, the City can make local residents and workers more aware of available subsidized housing through effective outreach programs.

Action 11.d Continue to conduct outreach efforts to identify and assist Mountain View residents and workers who may be eligible for subsidized housing projects and programs

Collaboration between the City and the school districts and with public employee organizations may produce a better understanding of what kinds of assistance employees need and want. It can also lead to a greater awareness of existing programs and to partnerships to create new housing programs.

Action 11.e Conduct ongoing interviews with representatives of City of Mountain View public safety workers, school teachers, and other priority community-service employees to determine their housing needs and housing programs that can serve them.

Action 11.f Create outreach partnerships with Mountain View school districts and organizations representing teachers, public safety and other relevant employees to increase awareness of affordable housing programs

Action 11.g Work with the Mountain View school districts and organizations representing teachers, public safety and other relevant employees to obtain financial support for affordable housing, including potential use of school district land.

Financing Affordable Housing

While land for housing is scarce, finding the money to build affordable housing is an even greater challenge. Creative use of federal, local and private funding and programs will help meet this challenge.

Policy 12. **Make efforts to stimulate private financing for affordable housing development.**

The Community Reinvestment Act (CRA) requires banks and other financial institutions to provide a certain amount of construction and permanent loan money at favorable terms to developers of low and moderate-income housing projects.

Action 12.a Continue to provide liaison between banks and affordable housing developers on the Community Reinvestment Program.

Action 12.b Encourage business owners to assist their employees with mortgages and rents.

Government Financing. The primary source of funding for lower income housing in Mountain View is the federal government. Each year, the City receives federal Community Development Block Grant and HOME funds. The amount in 2001-02 was $891,000 from CDBG and $477,000 from

HOME. There is a possibility the grants will be reduced in the future based on new data from the 2000 Census. The federal funds are allocated in accordance with a "Consolidated Plan," which brings needs and resources together in a coordinated housing and community development strategy. During the 1990s, a major part of these grants has been used to assist non-profit organizations with purchasing and rehabilitating "at risk" housing projects. For the past several years, the funds have been allocated to the efficiency studio project. Other smaller housing projects and programs have also been funded

Policy 13. Pursue County, State, federal and private government programs that provide financial assistance and incentives for lower-income and moderate-income households.

Action 13.a Apply annually for the City's maximum entitlements under the Community Development Block Grant and HOME programs.

Action 13.b Spend at least half of the City's CDBG and HOME grants to provide housing for lower income households, homeless people and other households with special needs consistent with the City's Consolidated Plan.

Several other federal and State programs are available to help finance affordable housing. One of the most important is the Low-Income Housing Tax Credit Program which enables non-profit developers to obtain financing through private investors. These tax credits provide a major portion of the financing and are crucial to affordable projects. However, only a limited amount of tax credits are issued each year and their allocation is highly competitive.

Action 13.c Monitor State housing financing programs and apply for funds from those programs suited to local projects.

Action 13.d Support legislation to continue, expand or develop financing programs such as the Low Income Housing Tax Credit Program and other tax incentives for creating affordable housing.

The Section 8 program described earlier is also a major source of federal funds.

Public /Private Partnerships. Two new sources of local funding were created in 2001. The Santa Clara County Housing Trust Fund is a public-private partnership that was established to provide funding for affordable housing. By the end of 2001, more than $20 million had been contributed by the County, cities and private corporations and individuals. The Trust Fund has targeted three programs for assistance: gap financing for affordable rental housing projects, a first-time home buyer program with low-interest down payments and closing cost loans, and homeless programs.

The Sobrato Family Affordable Housing Fund was endowed with $10 million by a local developer to support affordable housing projects in Silicon Valley. Interest-free loans are available for land acquisition and pre-development expenses for multiple-family rental projects and homeless and transitional housing.

Action 13.e Contribute a total of $500,000 to the Santa Clara County Housing Trust Fund with the agreement that these funds be spent on affordable housing projects or programs in Mountain View.

Limited funds and strong competition underscore the importance of City support and cooperation when non-profit developers apply for funding from these sources. The City can sometimes improve the chances that affordable housing projects will receive funding through active and strong support of the project.

Action 13.f Work with non-profit housing developers to optimize their eligibility for financing under various federal, State, County and private programs, such as CDBG, the Low Income Housing Tax Credit program, the Santa Clara County Housing Trust Fund, the Sobrato Family Trust and others.

Revitalization District. Under State law, at least 20 percent of all property tax increments in a redevelopment area must be "set aside" for low and moderate income housing. Mountain View's Downtown Revitalization District is projected to have $3.7 million in housing revenues between the fiscal years 1999-00 and 2005-06. Of that amount $809,000 has been committed to the efficiency studio project. The district's "Five-Year Implementation Plan" shows that the remainder could be used for preservation or development of low and very low income housing.

Policy 14. **Use locally generated housing funds to provide financial assistance to plan, build and preserve housing for lower-income and moderate-income households.**

Action 14.a Use the 20 percent set-aside for affordable housing through the Mountain View Revitalization Authority and the redevelopment plan to enable construction, preservation and improvement of affordable housing. Annually review the percentage set-aside for affordable housing to determine whether it should be increased.

Action 14.b Between 2000 and 2005, allocate $809,000 of set-aside funds to the construction of an efficiency studio project with 110-130 low-income units and allocate $2.8 million to the acquisition and conversion of market rate units to affordable units, or development of an affordable housing project.

The North Bayshore Community Fund is a special district that generates tax increments for public improvements in the area. This district is not subject to the "set-aside" requirements, but it may be feasible to funnel some of the tax increments into housing programs.

Action 14.c Evaluate setting aside a portion of the North Bayshore Community Fund for housing as one method of reaching numerical goals outlined in Actions implementing Policy 10 above.

Local Funding. In response to the increasing cost of housing and a federal funding stream that has remained basically flat, Mountain View has adopted two new programs to create local funding for affordable housing. The Below-Market Rate (BMR) ordinance, adopted in 1999, requires developers to set aside 10 percent of all new housing units for low and moderate-income households or pay an *in lieu* fee. BMR *in lieu* payments are deposited into a Housing Fund and can be leveraged with other funding sources to produce a substantially higher number of affordable housing units than would be built by a developer under the BMR program.

The Housing Impact Fee, adopted in January 2002, requires that new commercial and industrial developments pay a fee to mitigate the impacts of additional jobs on the housing supply. The initial basic fee was set at $6 per square foot for offices and similar uses and $2 per square foot for retail and commercial uses. Fees are halved for buildings under a certain threshold size. The fees are required to be adjusted annually in accord with changes in the Consumer Price Index.

Action 14.d Continue to implement the Below-Market-Rate program in which new housing developments over a certain size provide at least 10 percent of their units to low- and moderate-income households or pay fees in lieu of the housing units.

Action 14.e Evaluate the effectiveness of the Below-Market-Rate program in increasing the supply of affordable housing, implementing enhancements as appropriate.

Action 14.f Allocate Below-Market-Rate *in lieu* fees to housing projects for low and moderate income households, including ensuring completion of the 110-130 unit efficiency studios project.

Action 14.g Implement the Housing Impact Fee ordinance to facilitate collection of funds for affordable housing for low and moderate income households.

There may be other local funding sources that the City can explore.

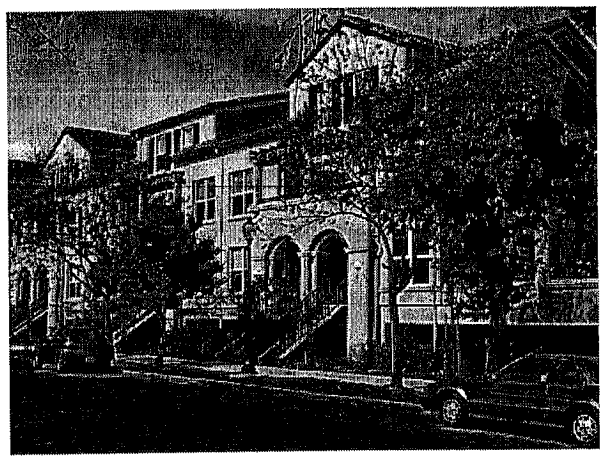
Action 14.h Investigate new ways to generate local funds for low and moderate-income housing from as many different sources as possible.

Home Ownership Opportunities. Owning a home is only a dream for many Mountain View residents. In 2001, only 15 percent of median income households could afford to buy a house in Santa Clara County. In Mountain View, a four-person household earning the median income could afford a house costing $297,000 while the median price of a single-family home was $650,000. Condominiums and townhouses were averaging $375,000.
To assist first-time homebuyers, the City participates in the Mortgage Credit Certificate Program (MCC). This program gives a tax credit of up to 15 percent on mortgage interest paid each year. The Santa Clara County Housing Trust Fund has also established an interest-free second mortgage program that can be used for down payments and other closing costs.

Policy 15. Assist moderate-income households in purchasing homes.

Action 15.a Cooperate with the Santa Clara County Housing Bond Coordinator for the issuance of Mortgage Revenue bonds for projects and for the issuance of Mortgage Credit Certificates for first time homebuyers.

Action 15.b Support the Santa Clara County Housing Trust Fund second mortgage program and other federal, State and local programs that enable moderate-income households to purchase homes.



New rowhouses in Downtown.

City Property. Occasionally, the City determines it no longer needs property it has acquired for another purpose. Some of these properties may be suitable—because of their size and location—for housing. For example, the City-owned property on the San Antonio Loop was made available for the efficiency studio project.

Policy 16. Evaluate surplus City properties to determine their suitability for affordable housing.

Action 16.a Specifically include consideration of affordable housing when reviewing City properties that are to be declared surplus.

Constraints On Housing

Several factors can constrain, or limit, housing construction. Governmental factors include land use controls, the review process, development standards, City codes and enforcement, permit fees, on-site and off-site improvements and park land dedication fees. These factors constrain housing only slightly in Mountain View. Non-governmental factors are the price of land, the cost of constructing housing and the availability of financing. These constrain housing greatly.

Policy 17. Remove unnecessary constraints to the development of affordable housing.

Government Constraints. Protecting the overall community health, welfare and safety remains the key focus of development regulations and review. The City continues to seek ways to improve its service by clearly and simply informing the public about development requirements, by making the review process as efficient as possible, and by evaluating whether regulation is the most effective way of dealing with a problem.

Land Use Controls. Mountain View's General Plan, Precise Plans and zoning classifications allow for a range of densities from about 4 to 100 units per acre. Higher densities are generally needed to produce housing affordable to lower income households. Most of the remaining land that can be developed for housing is zoned for densities of more than 20 units per acre.

Review Process. Mountain View has staff-level design review and the Zoning Administrator can approve many projects. The result is an expeditious review for many housing developments. The Development Review Committee has the authority to approve apartment projects in standard zone districts. The Zoning Administrator makes the final decision on residential care homes, as well as small (four or fewer) ownership projects. The City Council makes the final decision on Planned Unit Developments, larger ownership projects and most development in Precise Plans, based on the Zoning Administrator's recommendations. The approval process for companion units is being revised to comply with State legislation passed in 2002. The revision will further simplify the review process for these units.

Development Standards. Mountain View has standards for new development including density, open space, site coverage, setback and landscaping requirements. These standards are comparable to nearby cities. Mountain View also has a density bonus ordinance that allows a 25 percent density bonus for housing projects that provides 20 percent low-income, 10 percent very low-income, or 50 percent senior units. The ordinance also provides for additional incentives including a reduction in site development standards.

Action 17.a Use the density bonus provisions of the zoning ordinance to make adjustments to development standards that will facilitate the development of affordable housing. (Deleted language included in text above.)

City Codes and Enforcement. The City has adopted the 2000 Model Code (which includes the 1997 Uniform Building Code) and has no significant requirements above and beyond the Uniform Building Code.

Permit Fees. Major development fees include planning fees, building permit fees, off-site facility charges, subdivision fees and parkland dedication fees. A 1999 review of planning fees in nearby cities showed that Mountain View's were generally lower. The City has raised some of its fees since then to recover more costs, but they remain less than the average of the surveyed fees. In 1997, building permit fees were near the high end compared to other cities in the area. Mountain View's fees haven't been raised since then. Also the City does not have a surcharge for Title 24 energy compliance review or other special plan checks as some cities do.

Action 17.b Continue to improve the current simple and efficient level of planning and permit approval and building inspection service, while continuing to protect the public health and welfare.

The City Code allows planning fees for affordable efficiency studios to be waived or reduced. Consideration should be given to amending the City Code to allow for fee wavers or reductions for other affordable housing projects.

Action 17.c Initiate the process of further amending the City Code to allow waivers or reduced fees for planning approvals and building permits for affordable housing projects.

On-Site and Off-Site Improvements. Mountain View, like many cities in California, requires developers to provide on-site and off-site improvements to support the new development. Developer fees cover connections to sewers and water mains, storm drains and inspections. Costs vary greatly depending on whether the street is

improved or unimproved. On an unimproved street, costs range from about $17,700 for a multiple-family rental unit to $28,500 for a single-family house in a new subdivision—not including park dedication fees.

Park Dedication Fees. Mountain View has had a park land dedication ordinance since 1972 (revised 1997). The ordinance, like others in the State, requires a developer to dedicate land for parks or pay an *in lieu* fee. The *in lieu* fee is based on the number of housing units and the value of the land. Although Mountain View's fee is high compared to other nearby cities with lower land values (averaging more than $13,000 per unit in 2000-01), there is a logical nexus between the impact of new residents and the amount of the fee. The fees reflect what the City would have to pay if it had to buy park land or expand recreational facilities to serve new residents. An exception has been made for efficiency studio projects, which can be exempted from paying a fee.

Parking. Mountain View requires 2.3 spaces per unit for multiple-family housing. These requirements are normal for a mid-sized suburban city. The City has a lower parking requirement for some housing. For example, the standard for senior congregate care housing is 1.15 spaces per unit. Also, the parking requirement for efficiency studios can be lowered through a conditional use permit process. For the planned efficiency studio project, 0.6 space per unit was required. The use permit process may also be appropriate for reducing parking requirements for other affordable housing projects.

Action 17.d Initiate the process of further amending the zoning ordinance to allow reduced parking for senior and affordable housing projects on a project-by-project basis.

Mountain View has also allowed shared parking in mixed-use projects combining housing with stores, housing with offices and housing with a train station parking garage.

Action 17.e Encourage shared parking, on a project-by-project basis, in mixed-use developments that include residential units.

Non-Governmental Constraints. The major contributors to the ever-escalating cost of housing in Mountain View are extremely high land prices and construction costs and fluctuating interest rates. According to the Statewide Housing Plan, land costs in Santa Clara County were the highest in the State in 1997, averaging $40 per square foot. Residential land costs in Mountain View in 2001 were estimated to be $45 to $85 per square foot, with the wide range reflecting location and density. Construction costs in Santa Clara County were 21 percent higher than the national average and the second-highest in California.

Creditworthy buyers of residential property and buildings have always been able to get mortgage financing in Mountain View. A countywide fair housing report published in 2002 concluded that "redlining" (the practice of banks' not approving mortgages in areas perceived to be predominantly minority) is not occurring in the County, including Mountain View. The ability to accumulate enough funds for a down payment remains a significant obstacle to many potential homebuyers. The Santa Clara County Housing Trust Fund now has a program to assist moderate income buyers with their down payment.

Loss of Affordable Housing

Most new housing is built on sites that were previously developed. Redevelopment of residential sites often displaces older rental units that are more likely to be rented by low- and moderate-income households. Relocation can be a significant hardship to tenants who have to find affordable housing in a tight housing market.

Policy 18. **Review redevelopment proposals to determine whether they create a new demand for affordable housing or reduce the supply of affordable housing.**

Action 18.a If redevelopment results in the loss of affordable housing units, require developers to give tenants at least 90 days notice to vacate, professional assistance in locating new rental units, a full refund of tenants' security

deposit and information on affordable housing projects and assistance in Santa Clara County.

REHABILITATION AND PRESERVATION

Goal **C** **Improve the condition of housing in the City.**

Mountain View grew rapidly after World War II, so most of its housing was built in the 1950s or later and is relatively new. Only 9 percent was built before 1950.

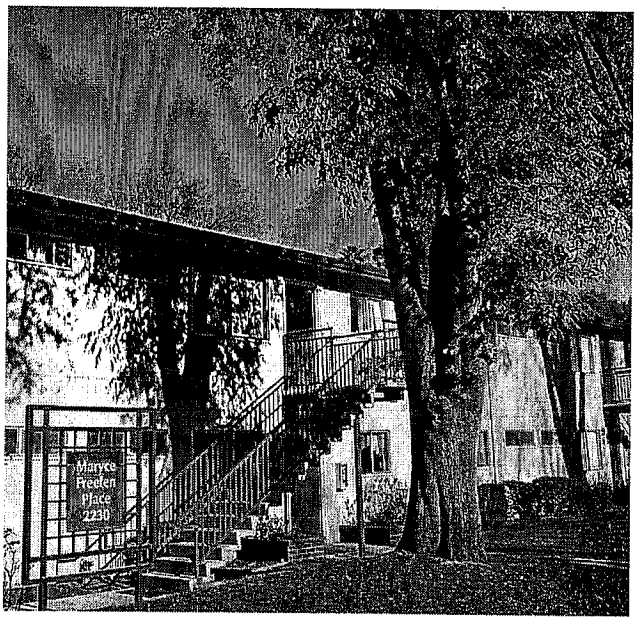
Since much of the City's housing stock is less than 50 years old, it is generally in good condition. Many homeowners are making improvements to their homes in response to the tight housing market and the tax advantages of staying in their own homes. For low-income homeowners who may not be able to afford repairs to their properties, the city operates a house repair program using its CDBG funds. About 20 owner-occupied units are repaired each year.

To ensure rental units are safe and sanitary, the City has had a multiple-family inspection program since the 1970s. Under this program, the City inspects 200 apartment complexes each year to assess whether they meet the basic health and safety standards set by the Uniform Housing Code. Deficiencies must be corrected. Each year, the City returns to re-inspect and sign off on about 265 of the deficient units. This helps keep the housing stock from deteriorating and improves living conditions.

Policy 19. **Maintain and improve the housing in the city to meet health, safety, fire and applicable development standards.**

Action 19.a Use the multiple-family rental housing inspection program to ensure compliance with the Uniform Housing Code's health and safety standards.

Inspections and enforcement often lead to general repairs and upgrades that help preserve the habitability of the City's housing stock. This process was accelerated in the late 1990s and early 2000s, when the high demand for rental housing resulted in a large surge in private rehabilitation and reinvestment in apartment buildings. For example, 900 units in five large complexes were rehabilitated. Privately-initiated upgrades have contributed significantly to improving the City's housing stock. However, they were also followed by large rent increases to enable property owners to recoup their investments.



Affordable family housing rehabilitated with City assistance.

The City cannot require apartment owners to keep units affordable after they are rehabilitated. However, the City can link up non-profit agencies with the owners of deteriorating buildings as was done with Maryce Freelen Place. This rundown apartment building on Latham Avenue was purchased and rehabilitated by Midpeninsula Housing Coalition with the support of City funding, and now provides affordable housing for 74 families. It also removed an eyesore and trouble spot from the neighborhood.

Action 19.b Continue to inspect at least 200 apartment complexes each year and require repairs to those units that are found to have code violations. Annually provide a list of apartment complexes, that continue show serious signs of deterioration, to non-profit affordable housing organizations that can contact these apartment owners about the potential sale of these properties.

The City can also encourage participation in the Section 8 program which is the only rent subsidy program available for existing, privately-owned buildings.

Action 19.c Promote and provide information on the Section 8 program to apartment building owners who are rehabilitating their buildings, and encourage participation in the program through Actions 5.a, 13.d and 13.e, with a goal of having at least 4 percent of the upgraded apartments remain affordable.

Action 19.d Work with property owners and/or non-profit developers to acquire, rehabilitate and preserve at least 50 units for affordable housing.

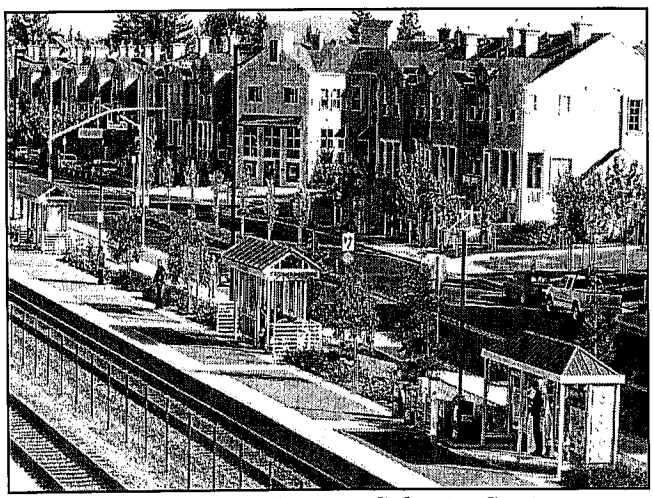
Energy Efficiency

Energy supply, use and conservation emerged as a major statewide issue in 2001. The way that new housing is designed and built can contribute much to efficient energy use.

Policy 20. Promote energy-efficient and environmentally sensitive residential development, remodeling and rehabilitation.

One way to reduce energy use is transit-oriented development. Concentrating housing near transit stations helps reduce auto trips and gasoline consumption. Mountain View is a leader in this field. Over 1,000 units have been built near three train stations since 1994.

Action 20.a Continue to implement design standards in new development that encourage alternatives to the auto. These include allowing private streets that are narrower than the City's public street standards in Planned Unit Developments, and requiring sidewalks and bicycle lanes, bus turnouts, and direct pedestrian connections to transit lines.



The Crossings at San Antonio Caltrain Station.

Another way to reduce localized heat build-up is with trees and generous landscaping.

Action 20.b To provide shade and reduce heat retention, continue to require street trees, trees in parking lots at a rate of one tree for every three parking spaces (plus additional landscaped islands and planter strips) and trees in the other required landscaped areas.

Every city is required to comply with Title 24, the portion of the Uniform Building Code that establishes specifications for insulation, glazing, heating and cooling systems and other elements of building construction that relate to energy use. Cities can make compliance easier by providing clear and understandable instructions, streamlining review and not charging special fees.

Action 20.c Maintain an effective and streamlined process to ensure compliance with Title 24 requirements in all new

construction, and implement future changes as quickly as possible after they are approved.

Improved energy conservation can be achieved through designs that take advantage of solar energy and natural ventilation.

Action 20.d Evaluate opportunities for passive solar heating and cooling in the design review process for new development and redevelopment.

Another element of building construction and remodeling where energy savings can be achieved is through recycling of demolition debris and unused materials. Rather than ending up in the landfill, these materials can often be recycled. The City can also investigate "green building" techniques, which are environmentally friendly.

Action 20.e Consider policies to encourage recycling as a part of all construction, reconstruction and remodeling projects.

Action 20.f Encourage "green" building techniques learned as best practices from other cities and organizations.

While solar panels (primarily for heating water) have been in use for about 30 years, new types of small-scale energy generating devices, such as photovoltaic cells, are entering the field. In order to clarify the approval process for these devices, the City's zoning ordinance should be revised to specifically indicate where and how they can be installed. The new standards should ensure that the home-based electrical systems are safe and do not create noise, glare, visual or other impacts on adjacent residences.

Action 20.g Expedite review and approval of alternative energy devices such as solar panels, photovoltaic cells and others.

Action 20.h Revise the zoning ordinance to specifically allow alternative energy generating devices such as wind generators and develop standards to accommodate their unique requirements while protecting neighbors from visual, noise and other forms of intrusion.

High utility bills are a concern for everyone, but they especially affect the affordability of housing for low-income residents. Several subsidy programs are available. Pacific Gas and Electric (PG&E) gives discounts on monthly energy bills for low-income households and non-profit group-living facilities. Another PG&E program provides one-time energy bill assistance when there is a sudden unexpected financial hardship. Federal funds to help low income households pay their utility bills (Low-Income Energy Assistance Program) are administered by the Economic and Social Opportunities, Inc. (ESO).

Both PG&E and ESO also have weatherization programs that help pay for the installation of weather stripping and insulation, and door and furnace repairs.

Action 20.g Provide support for energy conservation and assistance programs for low-income households including referral to available programs and advertisement of services.

FAIR HOUSING

Goal **D**

Ensure a choice of housing and locations to all regardless of race, sex, sexual orientation, national origin, age, marital status, familial status, ancestry, religion, color, source of income, or physical or mental handicaps.

Equal access to housing is a fundamental right. The high cost of housing and the tremendous demand relative to the available supply has tended to particularly affect lower income households, people of color, families with small children and disabled persons. With its high proportion of rental units, Mountain View makes special efforts to monitor

possible discriminatory practices and to work with rental property owners and managers.

To help eliminate discrimination in housing, the City has regularly allocated Community Development Block Grant funds to Mid-Peninsula Citizens for Fair Housing (MCFH). The City refers calls about discrimination to MCFH which follows up on complaints and tracks information regarding calls, cases and outcomes.

Policy 21. Prohibit discrimination in the sale, rental and development of housing.

Action 21.a Continue to refer housing discrimination complaints to a City-funded contractor for investigation and counseling.

The City disseminates information about fair housing laws to both renters and property owners. This includes publishing flyers in several languages, providing local, multi-lingual staff to assist the public, distributing housing information at neighborhood meetings sponsored by the City, advertising in newspapers and holding owner/manager training workshops. More than 1,000 fair housing brochures have been distributed to date.

Mountain View also publishes a "Housing Handbook" in English and Spanish that summarizes all of the housing assistance programs that are available in the community.

Action 21.b Continue to publicize the City-funded program for investigating housing discrimination complaints.

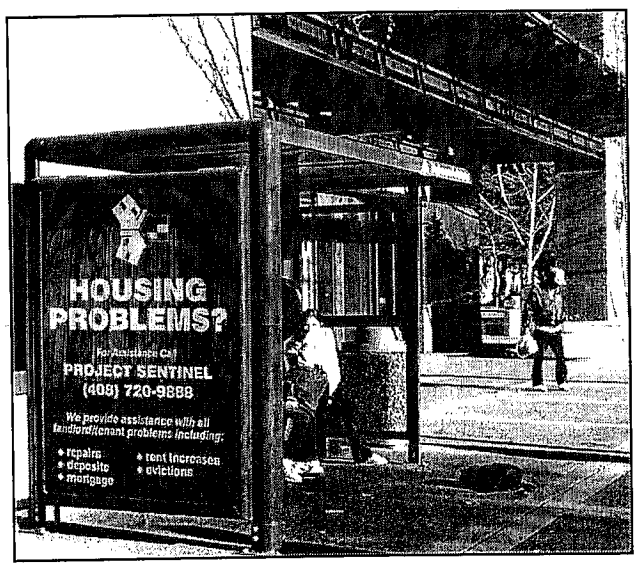
Mountain View periodically undertakes an "Analysis of Impediments to Fair Housing Choice" as required by HUD for receipt of federal block grant funds. The most recent analysis of fair housing issues consists of a special countywide study, "Fair Housing in Santa Clara County, An Assessment of Conditions and Programs, 2000-2002." Information from this study will be used to update the City's "Analysis of Impediments." The study found that fair housing conditions in the County are generally good and, in some cases, outstanding. However, the report did recommend establishing a fair housing collaborative and several improvements in fair housing services and structure.

Action 21.c Continue to prepare an Analysis of Impediments to Fair Housing Choice as required by HUD.

Action 21.d Participate in a countywide fair housing collaborative task force that will work toward improvement in fair housing services and structure.

Policy 22. Encourage good relations between housing providers and tenants.

Mountain View contracts with a non-profit agency to carry out its Tenant/Landlord Information and Mediation Service. The agency helps tenants and rental property owners (as well as neighbors and others who have disagreements) resolve their disputes. Mediation is fast, free and confidential. The mediators are Mountain View residents who volunteer their services and are trained by the agency. These volunteer mediators have also helped facilitate neighborhood workshops concerning the efficiency studio project and mobile home park issues.



Free mediation services advertised at bus stop.

Action 22.a Continue to refer rental property owner-tenant complaints to a City-funded contractor for mediation.

Despite publicity by the City of Mountain View, housing advocacy organizations and the Tri-County Apartment Association, the availability of mediation services is still not as widely known as it could be.

Action 22.b Identify and implement new outreach and promotion mechanisms to increase awareness among renters of the existing City-funded mediation program.

ANNUAL REVIEW

Goal **E** **Maintain an up-to-date Housing Element.**

The Housing Element is an invaluable planning tool, but it is only useful if it is consulted, monitored and, most importantly, implemented. An annual review is required by the State. To ensure that the review is meaningful, the Housing Element should be incorporated into the City Council's annual goal-setting process.

Policy 23. **Establish a Housing Element implementation plan with appropriate staffing and budget; review annually.**

Action 23.a Incorporate consideration of Housing Element implementation into the City Council's annual goal-setting process.

Action 23.b Prepare an annual report to the City Council which includes the results of Housing Element implementation for the past year.

NEIGHBORHOODS

Neighborhoods are the foundation of the city. Strong, healthy neighborhoods are vital to the overall well-being of the community. A neighborhood is a group of homes that share some common identity because of location, building style, density, or the people who live there. Two kinds of characteristics—psychological and physical—give meaning to the term "neighborhood."

Psychologically, neighborhoods give people a sense of belonging, of comfort, and of refuge. They allow people to connect with their neighbors informally, to meet others casually, to share interests, and to experience the diversity of cultures, ages, and ways of living that add to the richness of the community. Some neighborhoods are very well defined with formal boundaries and organized associations. Other neighborhoods have only a few of these characteristics, but are still recognizable as being different from surrounding residential areas.

Physically, neighborhoods include housing, streets and sidewalks, and, often, a focal point like a school, a park or a shopping center that gives identity to an area.

Mountain View recognizes the importance of creating and enhancing neighborhoods. Good neighborhoods allow people a widening circle of contacts, from individual to family, to neighborhood, to community. Neighborhoods help people take the important step from individual to city-wide involvement.

Goal **F** **Maintain and enhance the quality and character of Mountain View's neighborhoods.**

Neighborhood Associations

Neighborhood associations are voluntary affiliations of people with common interests based on where they live. Associations can be loosely organized groups that meet sporadically when an issue arises. Or they can be formally organized with boards of directors and bylaws.

Neighborhood associations provide a forum for communication with City Hall, hold social events, plan for local disaster preparedness, sponsor Neighborhood Watch and recycling programs, and promote other activities to preserve quality of life.

Most active associations hold public meetings, and some publish newsletters and host web sites.

Policy 24. Support neighborhood associations.

The City acknowledges and supports neighborhood associations in several ways. It publishes a Neighborhood Handbook which includes a step-by-step guide to forming neighborhood associations. The Handbook also describes City ordinances on noise, property maintenance, home occupations, animals, and other issues that affect neighborhoods. It also describes the many City programs that serve neighborhoods.

Action 24.a Assist neighborhood groups to form neighborhood associations.

Action 24.b Maintain an up-to-date Neighborhood Handbook and publicize its availability.

The City helps to encourage participation in neighborhood associations by providing them with small grants to host block parties, publish newsletters, develop web sites and other qualifying activities aimed at improving neighborhoods. Residents can also find a list of neighborhood associations and contact information on the City's web site.

Action 24.c Support the efforts of neighborhood associations to strengthen their organizations.

Action 24.d Maintain and publicize a list of neighborhood associations active in Mountain View.

Interaction with Neighborhoods

Policy 25. Promote active communication between the City and its neighborhoods.

One way that Mountain View ensures active communication is for the Council Neighborhoods Committee to hold special outreach meetings in neighborhoods. The Committee meets in each of six areas of the City every two years, usually at schools. These meetings bring Councilmembers and City staff together with residents to discuss how to improve their neighborhoods.

Action 25.a Continue to hold special outreach meetings of the Council Neighborhoods Committee in locations throughout the City.

Residents who live in mobile home parks or in apartment buildings may have shared interests that are not related to geographical neighborhood boundaries. These residents may also benefit from meetings where information can be exchanged with Councilmembers.

Action 25.b Explore the possibility of holding outreach meetings with special resident groups such as mobile home residents and renters.

Action 25.c Periodically review the meeting format and neighborhood areas for the outreach meetings of the Council Neighborhoods Committee to ensure the best possible neighborhood feedback.

Action 25.d Continue to disseminate information about City services and relevant phone numbers on the City's web site, in The View and in other printed handouts.

Investment in Neighborhoods

Mountain View's neighborhoods were built and improved incrementally over a 100-year history. Over time, the infrastructure (roads, sidewalks, parks) in the neighborhoods has aged and design standards have changed. Today, each neighborhood has different needs. In older neighborhoods, sidewalks may be deteriorating while street trees are mature. In another area, trees are needed, but sidewalks and streets are in good condition. In some neighborhoods, public parks are ample while in others, there are few.

Policy 26. **Develop and maintain projects and programs that respond to the individual needs of neighborhoods.**

Mountain View has developed several programs that evaluate the needs of individual neighborhoods and compare them to the needs of the City as a whole. The Parks and Open Space Plan is notable for assessing each neighborhood's park needs against city-wide standards. The City also has a sidewalk replacement program and a street tree planting plan that schedules improvements based on need. These programs establish priorities for funding land purchases and facility improvements out of the City's capital improvement budget.

Action 26.a Evaluate the needs of individual neighborhoods when expending limited City capital improvement funds.

Old Mountain View neighborhood celebrates the dedication of Mercy-Bush Park.

Mountain View also has a Neighborhood Traffic Management Program which is a standardized process for responding to concerns from residents about speeding and cut-through traffic. This program gives every neighborhood an equal opportunity to have its traffic problems reviewed. Residents on affected streets can vote on whether to install traffic management devices. In its first six years, 15 streets in Mountain View were studied and traffic management devices were installed on nine of them.

Action 26.b Apply the Neighborhood Traffic Management Program to concerns about speeding and cut-through traffic on neighborhood streets.

Preserving and Enhancing Neighborhoods

Mountain View has many different kinds of neighborhoods, some very uniform and others that have a variety of housing types. The City uses the zoning ordinance and the design review process to be sure that Mountain view's community character, housing quality and physical and visual environment are maintained and improved.

In 1991, and again in 2000, the City revised its residential development standards in response to concerns about over-sized houses and loss of privacy resulting from large remodeling projects and second-story additions. In 2000, the R1 (single-family) zone was amended to reduce the height limit, increase second-story setbacks, limit second-story decks and reduce the amount of floor area allowed under the exception process. The rules for accessory structures and companion units were also updated. These changes sought to balance the often competing objectives of preserving neighborhood character while providing flexibility for expansions and modernization.

Policy 27. Preserve **and enhance the character of Mountain View's neighborhoods.**

Design review is required for development in multiple-family zones, as well as for requests for variances and exceptions in the R1 zone. As a part of the 2000 zoning ordinance amendments, the criteria for development review permits were changed to specify that neighborhood compatibility is one of the standards for design approval.

Action 27.a Continue to use the design review process to ensure that new development is compatible with the existing neighborhood.

Homeowners are strongly encouraged to notify their neighbors about their remodeling plans, but not everyone does. A more formal process may be needed.

Action 27.b Consider options for a process for notifying neighbors when major additions or new construction are proposed for single-family houses.

The 2000 revisions also clarified the process whereby neighborhoods can apply for approval of single-story and neighborhood design overlay zones. Residents can petition the City to rezone their neighborhoods to establish special rules that ensure that new development is compatible with their existing home styles. Single-story overlay zones were applied in three neighborhoods between 2000 and 2002.

The revised residential development standards and review process are working well, but the City's design review process will be very important as more housing is built in already developed areas.

Code Enforcement

Most residents take pride in the appearance of their homes. They understand and respect the City's property development and maintenance standards. However, there are still instances of rundown property, unsightly or broken equipment stored in front yards, vehicles parked illegally in front and side yards and zoning violations in many areas of the City. To reduce this blight, Mountain View has an active code enforcement program that was consolidated in the City Attorney's office and expanded in 1999.

The code enforcement officers respond to violations in both residential and other areas of the City. Many property owners correct violations when notified., but some do not. In 2002, the City Council approved the use of administrative remedies to enhance the code enforcement program. Under the new rules, the City can issue civil citations, hold administrative hearings and levy fines, as an alternative to court proceedings.

Policy 28. Ensure compliance with zoning and property maintenance standards.

Action 28.a Maintain a strong code enforcement program that preserves the quality of residential neighborhood.

The City has other programs aimed at enhancing the visual character of neighborhoods and eliminating blight. One is the graffiti abatement program which requires property owners to remove graffiti within a set time period. Quick removal of graffiti discourages graffiti artists and impedes the efforts of rival gangs to "tag" their territory.

Another program targets abandoned shopping carts. Store owners must retrieve shopping carts which have been abandoned on public property within 72 hours of notification. After that time period, the City will remove them and store owners have to pay a fee to get them back.

Action 28.b Continue and periodically evaluate programs (such as graffiti control and shopping cart abatement) to reduce blight in public areas and neighborhoods.

Environmental Management Chapter

Environmental Management Chapter

INTRODUCTION

A city can determine its livability largely by the approach it takes in dealing with environmental problems caused by urbanization. These problems often arise from sources outside local control. Solutions require that local, regional, State, and federal governments work in coordination with residents and private industry. It is crucial to involve the public because government cannot, by itself, solve the problems that build up from the seemingly inconsequential actions of thousands of individuals.

Organization and Major Themes

This chapter defines the main method for putting the City's environmental policies into action. It contains four of the seven elements that California requires in general plans. These are Open Space, Conservation of Resources, Public Safety, and Noise.

The Open Space Element is composed of Goals, Policies, and Actions for acquiring, developing, using, and preserving open space over the long term. The main themes are using cost-effective ways of acquiring open space, developing a system of urban trails throughout Mountain View, and using the City's parks and other public spaces for activities that make people more aware of Mountain View's cultural richness.

The Conservation of Resources Element conveys City policy on air quality, water, solid waste, soil, wildlife and wildlife habitat, historic resources, and energy. It responds to the California environmental laws that have been passed since the 1970s, including the Clean Water Act, the Clean Air Act, the Integrated Solid Waste Management Act, and Title 24 of the State Building Code. The chapter identifies important natural resources in Mountain View, recognizes that they exist in limited quantities, and provides strategies for their preservation.

The Public Safety Element establishes Policies and Actions to protect Mountain View from hazards caused by earthquakes, floods, fires, toxic chemicals, and crime. It focuses on preventing hazardous circumstances from occurring and on adequate response to situations that do arise.

The Noise Element analyzes the current noise environment and presents Policies and Actions to control the source of noise, its path, and the way people receive it. The Element's goal is to protect people from noise intrusion. It includes a contour map identifying major noise sources and looks at stationary noise sources and the noise made by motor vehicles.

Accomplishments

Mountain View has succeeded in carrying out many of the environmental and safety Policies of the 1982 General Plan. Some of these accomplishments include:

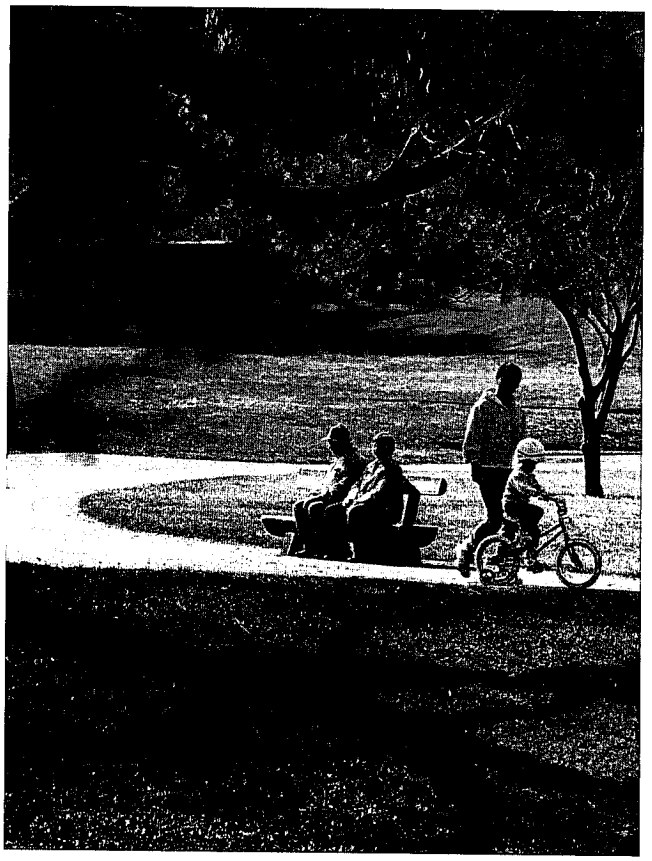
- Acquisition of 17.5 acres of new public open space for two new neighborhood parks and three mini-parks, one of which is not yet developed.
- Transformation of a 544-acre landfill site, closed in 1980, into Shoreline Regional Recreation and Wildlife Preserve. Shoreline has since grown to 662 acres. It offers activities including jogging, bicycling, wind surfing, small boat sailing, bird watching, kite flying, golf, and environmental education.
- Institution of a curbside recycling program in 1987. The program, originally available to roughly 16,000 households, was expanded in 1991 to include every residence in the city. In its first three years, the program collected more than 5,400 tons of recyclable materials which would otherwise have been deposited in a landfill.
- Mountain View was a founding member of the Golden Triangle Task Force, which sought to reduce air pollution by reducing the length and number of commute trips.
- Production of enough energy to satisfy the needs of more than 2,000 average homes from Mountain View's enhanced methane gas recovery system associated with the former landfill. This system improves air quality and develops an alternate energy source.
- Reduction in use of drinking water by 15 percent between 1985 and 1990 through Mountain View's comprehensive Water Conservation Program. This

reduction is particularly significant considering that the city added more than 2,000 new homes and more than 3,000,000 square feet of offices, stores, and industry during the same five years.

- Creation of an Office of Emergency Services by the Fire Department to oversee Mountain View's emergency preparedness planning and a Hazardous Materials Division to manage the use and storage of hazardous materials safely.

- Installation of a computer-aided dispatch system that improved Fire Department response times. The Department enhanced emergency medical care by adding automatic heart defibrillators to all emergency vehicles.

- Construction of a series of sound walls between freeways and Mountain View's residential neighborhoods by State and County agencies. These sound walls redirect traffic noise and reduce noise levels on adjoining properties by about 10 decibels.



Cuesta Park—one of two district parks.

OPEN SPACE

"The preservation of open space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of the land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation, and for use of natural resources."

California Government Code Section 65561(a).

Mountain View's parks and other open spaces are among its most visible and important public facilities. They provide recreation areas and spaces for people to relax and escape from urban pressures. As of 1990, the City had 768 acres of park land divided among one community garden, seven mini-parks, nine neighborhood parks, two district parks, and one regional park.

Parks and Open Space Facilities

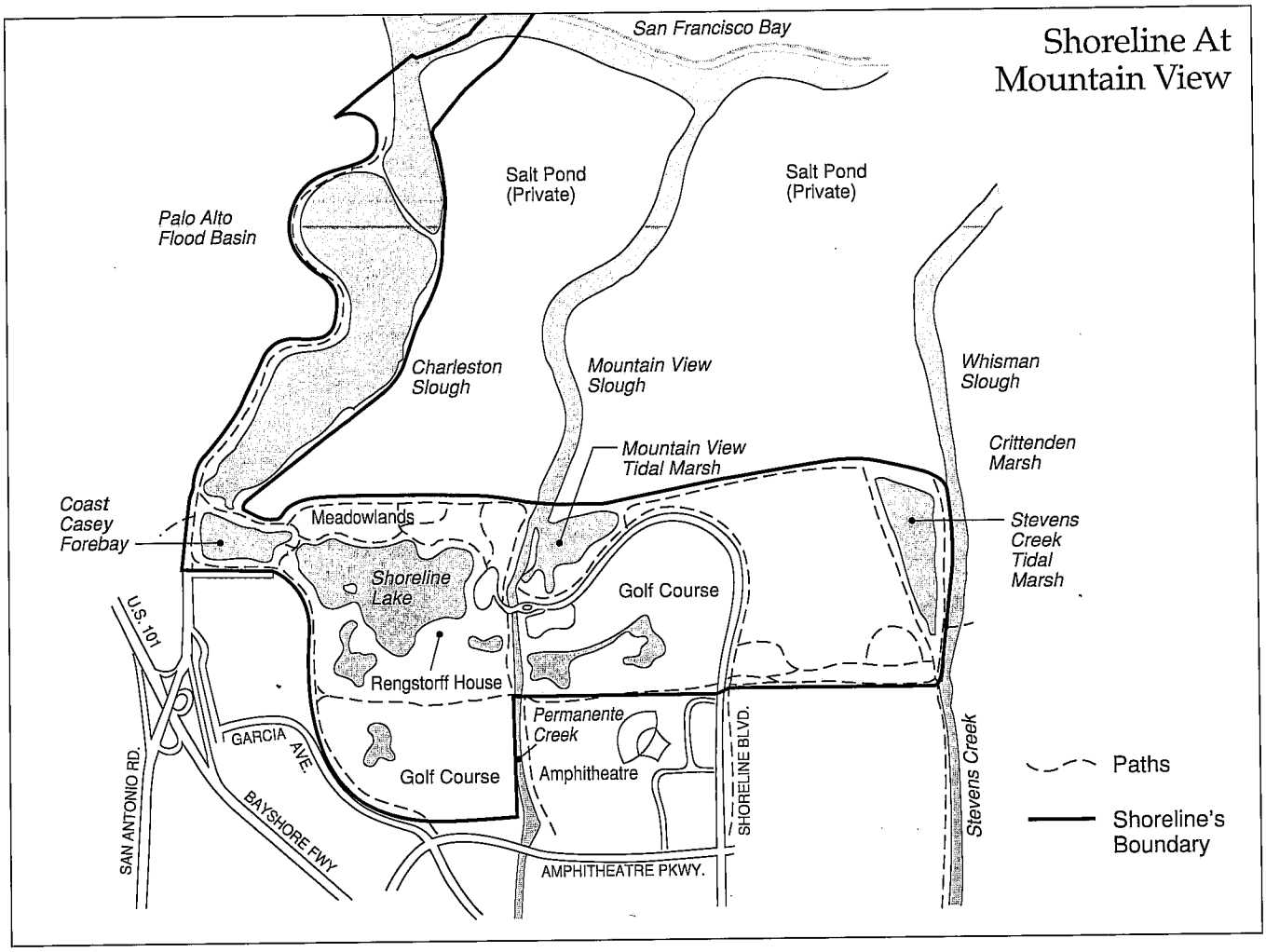
Type of Facility	Number	Total Acreage	Average Size
Community Garden	1	1.0 acres	1.0 acres
Mini-park	7	5.6 acres	0.8 acres
Neighborhood Park	9	40.2 acres	4.5 acres
District Park	2	59.0 acres	29.5 acres
Regional Park	1	662.2 acres	662.2 acres
Total	**21**	**768.0 acres**	

Figure 1. City-owned Parks and Open Space Facilities.

Mountain View's community garden sits on an acre of land in the Stierlin district. Its 36 garden plots are leased to Mountain View residents for one year at a time. The garden costs the City almost nothing in maintenance costs and is so popular that it has a waiting list.

The City's seven mini-parks are Fairmont, Jackson, Klein, San Veron, Thaddeus, Varsity, and Blackfield, which is not yet developed. These parks are usually an acre or less, and are intended to serve people within walking distance of the site. Mini-parks are generally designed for a specific population, such as senior citizens or children. They usually include ornamental landscaping, benches, and play equipment.

The City's nine neighborhood parks are Eagle, Pioneer, McKelvey, and Sylvan, which are independent of school sites; and Bubb, Cooper, Landels, Stevenson, and Whisman, which are next to school sites and benefit from sharing open space with the schools. Neighborhood parks range from two to eight acres, and serve people who live within half a mile. These parks create a focus of activity and help identify neighborhoods. They usually have open-grass fields for active recreation, play and



Shoreline at Mountain View Regional Recreation and Wildlife Area.

climbing equipment for younger children, and some type of sports facility such as swimming pools, tennis courts, or baseball fields.

Mountain View's two district parks, Rengstorff and Cuesta, are large parks designed to serve the whole city. Both have lighted tennis courts, play equipment, picnic tables, public rest rooms, and off-street parking. Rengstorff Park includes the Mountain View Community Center and Auditorium, the Senior Center, and a pool for swimming and diving. Rengstorff also has a great deal of open turf, whereas Cuesta Park has more plants and trees. Cuesta Park includes the Cuesta Tennis Center and 12 acres of orchard land, which were undeveloped as of 1992.

The largest open space resource in the city is its regional park, Shoreline at Mountain View. Shoreline is a 662-acre open space and wildlife preserve consisting of wetlands, marshes, upland habitats, a golf course, sailing lake, and the historic Rengstorff House. Shoreline is a regional attraction, drawing visitors from all over the South Bay. The park's hiking and biking trails are especially valuable to the thousands of people employed in the North Bayshore area, who use the park on their lunch hours and after work.

Another regional facility in Mountain View is the Stevens Creek Trail, begun in 1991. When it is completed, the trail will follow Stevens Creek through several cities, from Shoreline at Mountain View to the Stevens Creek Reservoir in the hills above Cupertino. Mountain View has already built a portion of the trail and has linked it with the Bay Trail, a hiking and biking trail being built around the shores of San Francisco Bay and San Pablo Bay.

Mountain View has also developed or contributed major funding to several open space resources owned by other agencies. These include Rex Manor mini-park built on the Hetch Hetchy right of way, four neighborhood parks—Castro, Monta Loma, Graham, and Crittenden—built on school district lands, and Deer Hollow Farm. Deer Hollow, located in the hills above Los Altos, is a 10-acre working farm serving as a nature preserve and environmental education center. These facilities, and those described above, are shown on Figure 2.

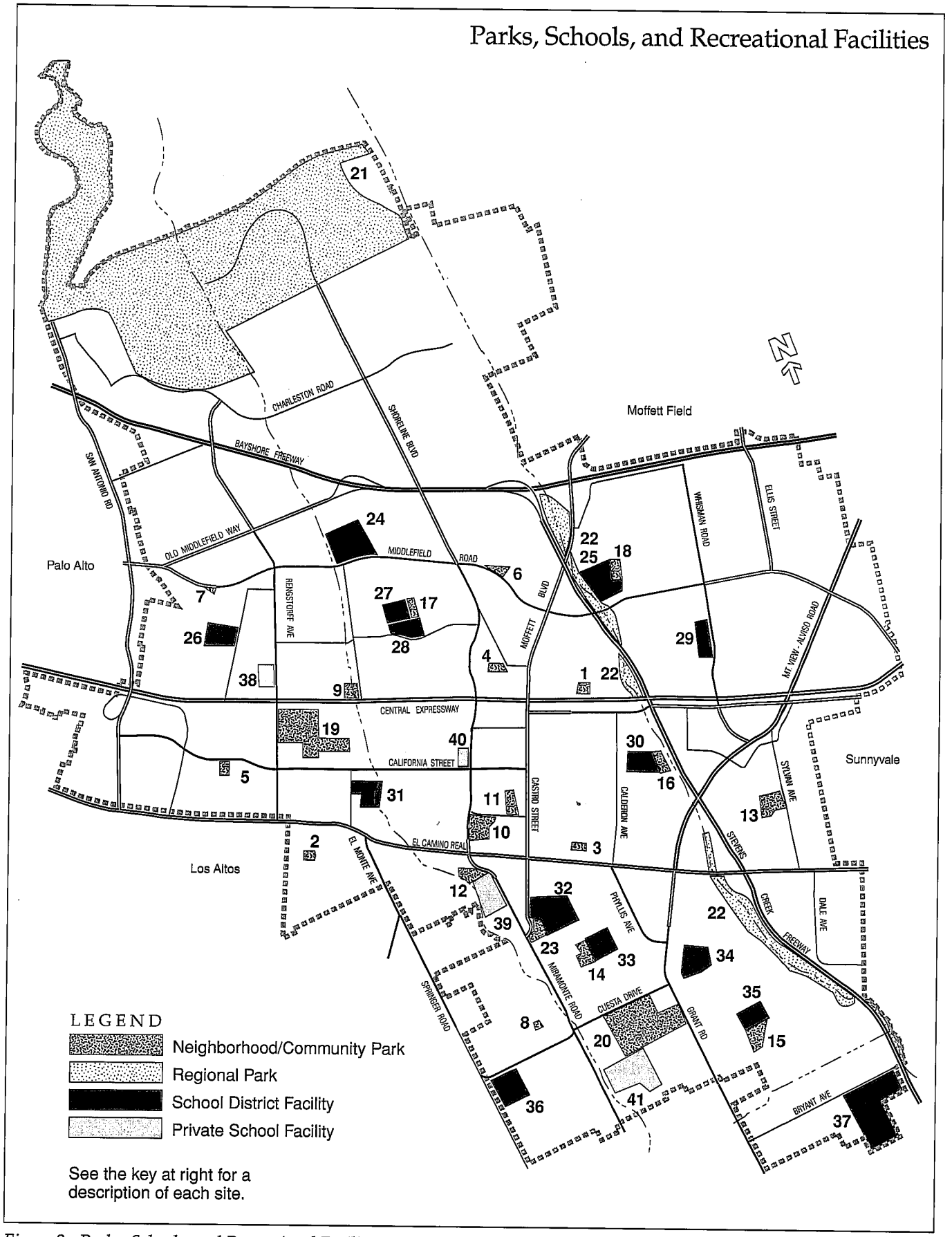


Figure 2. Parks, Schools, and Recreational Facilites.

KEY

Community Garden
1 Willowgate Garden

Mini-parks
2 Blackfield Park
3 Fairmont Park
4 Jackson Park
5 Klein Park
6 San Vernon Park
7 Thaddeus Park
8 Varsity Park
9 Rex Manor Park

Neighborhood Parks
10 Eagle Park
11 Pioneer Park
12 McKelvey Park
13 Sylvan Park
14 Bubb Park
15 Cooper Park
16 Landels Park
17 Stevenson Park
18 Whisman Park

District Parks
19 Rengstorff Park
20 Cuesta Park

Regional Parks
21 Shoreline at Mountain View
22 Stevens Creek Trail (proposed)

City-Owned Recreation Facilities
23 Mountain View Sports Center

Public School Facilities
24 Crittenden Junior High School
25 Whisman School
26 Monta Loma School
27 Theuerkauf School
28 Stevenson School
29 Slater School
30 Landels School
31 Castro School
32 Graham Junior High School
33 Bubb School
34 Huff School
35 Cooper School
36 Springer School
37 Mountain View High School

Private School Facilities
38 St. Athanasius School
39 St. Joseph School/South Bay Christian Center
40 Seventh Day Adventists School
41 St. Francis High School

Key to Figure 2. Parks, Schools, and Recreational Facilites.

Acquisition

Mountain View's parks and open space resources are described and quantified in the City's Open Space Vision Statement. That document contains recommendations for acquiring, developing, and preserving open space over the long term. It divides the city into 10 planning areas and assesses each area's need within a community-wide context. Specifically, the Vision Statement examines whether an existing resource is in jeopardy of being lost through sale, if the planning area is deficient in open space as compared to National Recreation and Parks Association standards, if the loss or addition of a park would have a significant effect on the City's overall park system, and if additional costs will be incurred if space is acquired.

The Vision Statement determined that Mountain View is exceptionally well served community-wide, but that some neighborhoods would benefit from improved access to open space. Overall, Mountain View's ratio of open space per person exceeds national guidelines. However, most of this open space is at Shoreline, in the North Bayshore District. The Vision Statement lists a series of future open space acquisitions and assigns priorities to them to improve the distribution and accessibility of open space throughout the city. It uses national standards to measure open space needs, but gives additional consideration to location, accessibility, and types of open space that are suitable for particular neighborhoods.

One way of acquiring property to meet the City's needs is to use California Government Code Section 66477, the Quimby Act. This law allows cities to require builders of residential subdivisions to dedicate land for parks and recreational areas, or pay an open space fee to the City. Mountain View requires developers to dedicate at least three acres of park land for each 1,000 persons who will live in a new housing project. This requirement is applied to housing that is owned or rented.

National Recreation and Parks Association Standards

Mini-park: A small facility serving a specific population such as children or senior citizens. It requires one-quarter to one-half acre per 1,000 people served. **Neighborhood Park:** A higher-intensity recreation area serving people within a half-mile. It requires one to two acres per 1,000 people served. **District Park:** A much larger recreational facility consisting of attractions that could include athletic fields, picnic areas, swimming pools, and tennis courts, among others. It requires five to eight acres per 1,000 people served.

Mountain View uses the Quimby Act to acquire and develop open space as new housing is built on vacant land and underused properties. According to the section on Vacant Sites and Potential Development in the Residential Neighborhoods Chapter, about 120 acres of vacant land were zoned for residential development in 1990. These properties could hold from 1,000 to 3,700 new housing units and accommodate 2,200 to 7,800 residents. Residential development of that scale would need between 20 and 60 acres of park land, based on the National Recreation and Park Association standards.

In addition to infill development on vacant sites, the Community Development Chapter lists seven sites where rezoning or policy changes would add 2,150 new units, accommodating 4,500 people. These residents would need between 30 and 40 acres of park land. The total need for more park land generated by the City's housing policies is between 50 and 100 acres. However, the park land dedication ordinance would only generate 35 to 50 acres. Therefore, it is important that the City set priorities for acquiring open space in neighborhoods with a critical need, that it look into other cost-effective methods of acquiring open space, and that it make existing parks more accessible to take better advantage of the community-wide supply of open space land.

GOAL A

Acquire enough open space to satisfy local needs.

Setting Priorities. Open space needs change when new park land is acquired or enhanced, when new residential developments are built, and when public opinion changes about recreation. It is necessary to look at open space needs every year because open space planning is a dynamic process affected by budgetary and other constraints. That is why Mountain View sets priorities for acquiring and developing open space in routine updates of the Parks and Open Space Plan.

The Parks and Open Space Plan seeks to involve as many people as possible in the decision-making process. The process uses neighborhood surveys, decision-making forums, and the involvement of competing interests. Strategies that come from this process can then be published in yearly updates of the plan, giving the community timely and accurate information on the City's open space planning policies.

Policy 1. **Establish a priority system for acquiring open space.**

Action 1.a Encourage comprehensive public participation in open space plans.

Action 1.b Monitor demographic trends and analyze their effect on open space needs.

Action 1.c Continue to use the National Recreation and Parks Association standards for evaluating open space demand at the neighborhood level.

Action 1.d Use the Parks and Open Space Plan to identify neighborhoods with open space needs.

Action 1.e Update the Parks and Open Space Plan every year to consider open space opportunities in new residential areas.

Action 1.f Maintain an inventory of vacant properties that could possibly be purchased and developed as public open space.

Cost Effectiveness. The park land dedication ordinance does not, by itself, provide enough open space for future use. Also, the amount of money available for buying open space has decreased due to reduced sales tax revenues and a slowdown in the development of large projects, which bring in new property taxes. As a result, the City is using more cost-effective ways to acquire public open space. One of these methods involves using the State's Education Code Section 39390, the Naylor Act, which allows cities to buy a portion of the open areas of surplus school district properties at 25 percent of market value. In the 1980s, Mountain View monitored school district properties and used the Naylor Act to purchase 5.5 acres of the old Mountain View High School and one acre of Klein School. Another strategy is to pursue agreements or "conservation easements" allowing public access to private properties for recreational purposes. Easements such as these can be used to make it easier to travel between existing open spaces, making it unnecessary to buy and develop more sites.

Policy 2. **Acquire property for the establishment of open space resources as opportunities arise and funding sources permit.**

Action 2.a Explore the use of open space easements, long-term leases, cooperative agreements, and other cost-effective means of acquiring open space.

Action 2.b Use precise plans and the design review process to require open space and recreational facilities in private developments.

Action 2.c Review surplus school sites for purchase as open space.

Action 2.d Use the park land dedication provisions of

the City's subdivision ordinance to require that developers dedicate land or pay open space fees to the City for park and recreational purposes.

Action 2.e Apply the Park Land Dedication or Fees Ordinance to all forms of residential development.

Improvements

After open space is purchased or leased, it is improved to create certain types of recreational opportunities. The improvements can be used to draw in specific groups such as families with small children, senior citizens, bicyclists, pedestrians, or youth sport leagues. Deciding which group to attract, and for what type of recreation, depends on several factors. These include the demographic makeup of the neighborhood, the type and availability of other open space in the vicinity, maintenance costs, and the desires of neighboring residents.

GOAL B **Improve open space areas to provide a diversity of recreational and leisure opportunities for the community.**

Urban Trails. Urban trails are continuous open space corridors. They offer scenic views, commute alternatives, and recreational opportunities; serve as migratory channels for wildlife; and connect neighborhoods and other parks and recreational facilities. Urban trails through Mountain View will include the Stevens Creek Trail, and could include future trails along the Hetch Hetchy right of way and the Tasman LRT line.

Future trail will parallel Stevens Creek.

The Stevens Creek Regional Trail is a proposed 10-mile trail system beginning in Shoreline at Mountain View and crossing through several cities to the Stevens Creek Reservoir. Mountain View has completed the northernmost section of the trail from Shoreline to L'Avenida and plans four additional segments. Each section is planned as a complete trail which would connect existing open spaces. Linking these sections connects neighborhoods and creates logical points to stop until the next section of the trail can be completed. The City plans to cut costs by using recreation easements wherever possible, rather than buying property, and relying on volunteers to help build and maintain parts of the trail.

The 80-foot-wide Hetch Hetchy right of way cuts across Mountain View from its northeastern border with Sunnyvale to its southwestern border with Los Altos. The City and County of San Francisco owns the right of way and uses it to transport water through two underground pipes from the Hetch Hetchy Reservoir to cities on the Peninsula. (See Figure 3, Transmission and Pipe Lines.) Development atop the right of way is limited to landscaping, paving, and some temporary structures. Other cities, such as Los Altos, have taken advantage of this development restriction to build urban trails.

A third trail could be built along the new Tasman LRT line, which runs in a north-south direction between U.S. 101 and Central Expressway. This trail would cross both the Stevens Creek and Hetch Hetchy trails, providing a needed link to the Whisman Industrial District. This trail also would improve access to public transportation.

Policy 3. **Develop a system of urban trails in Mountain View.**

Action 3.a Develop a trail along the banks of Stevens Creek.

Action 3.b Encourage Sunnyvale, Los Altos, and Cupertino to develop a regional trail along their banks of Stevens Creek.

Action 3.c Consider developing urban trails along the Hetch Hetchy right of way and the old Southern Pacific rail line.

Action 3.d Act as catalyst to encourage other South Bay jurisdictions to complete their sections of the Bay Trail.

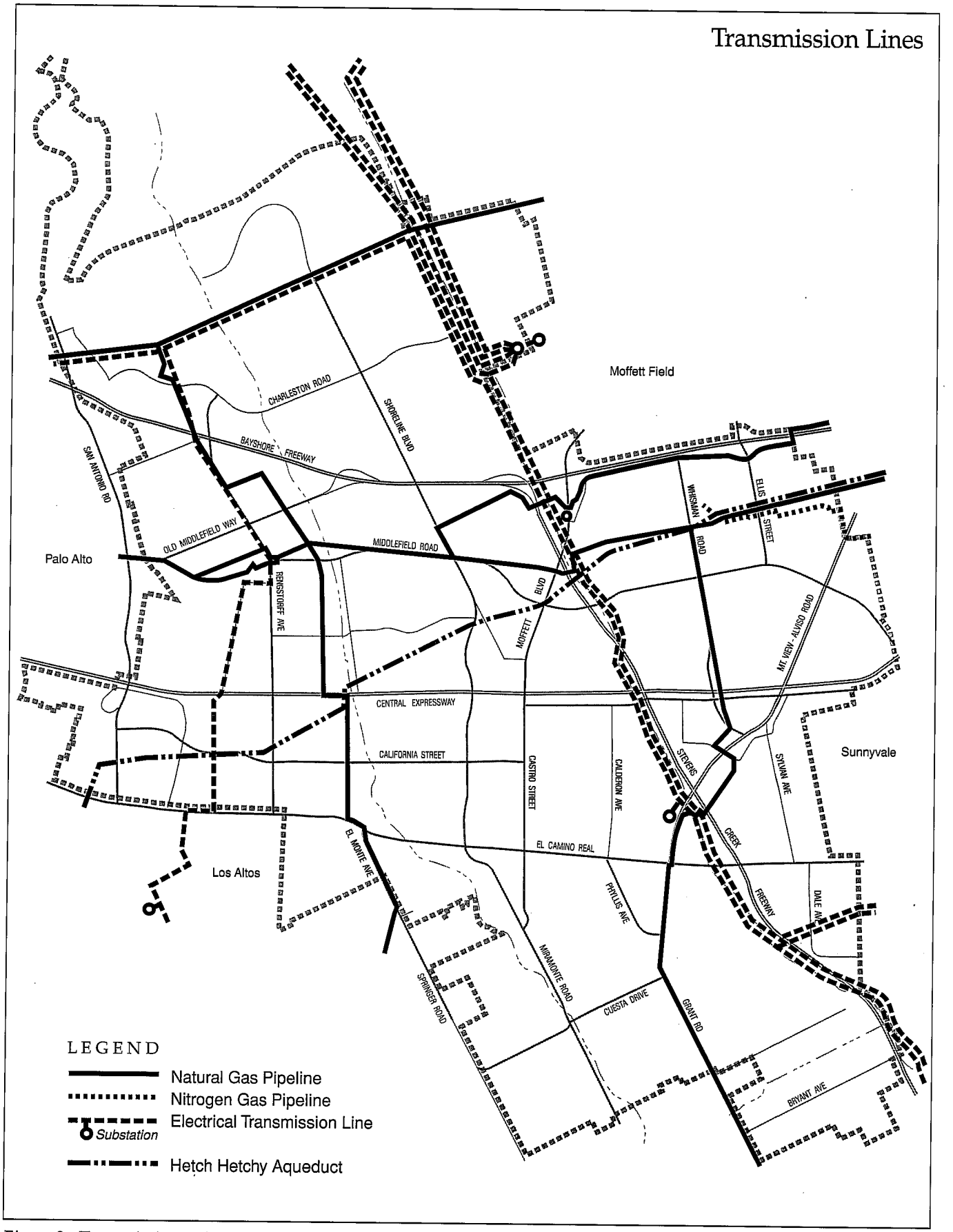


Figure 3. Transmission and Pipe Lines.

Action 3.e Build entry points, pathways, and bridges to link the urban trail system, and connect it with Shoreline at Mountain View.

Shoreline At Mountain View. Shoreline at Mountain View is a 662-acre regional recreation and wildlife preserve which forms the City's northern boundary. It has about 237 acres of wetland habitat, a 200-acre golf course, 195 acres of upland habitat, and 30 acres of utility and maintenance rights of way. Jogging, bicycling, wind surfing, small boat sailing, golf, and environmental education are among the activities available at Shoreline.

Before 1970, the land that now contains Shoreline consisted of a junkyard, hog farm, and a sanitary sewer treatment plant. Several plans for open space and recreational use of the area were developed; however, concerns about the environmental implications of these proposals resulted in the current plan, which focuses on wildlife preservation in a natural setting. After deciding on the development plan, the City found it needed money to buy land and prevent seasonal flooding. Both problems were solved when Mountain View allowed San Francisco to use portions of the site as a sanitary landfill. The garbage was distributed according to a careful plan and then capped with clean earth to provide good planting conditions and raise the elevation of the land to prevent flooding. Dumping has now ceased, and Shoreline's staff is restoring the land, placing major emphasis on reintroducing native plants and enhancing wildlife habitats.

Shoreline is bordered to the north by two privately owned salt evaporation ponds. Both salt ponds, a total of 850 acres, are listed as potential additions to the San Francisco Bay National Wildlife Refuge. The refuge was authorized by Congress in 1972 and has about 18,000 acres of land in Alameda, San Mateo, and Santa Clara Counties. Congress increased the acquisition authority of the refuge to 43,000 acres in 1988 and included most of the salt evaporation ponds. The salt ponds already provide valuable wildlife habitat, so acquiring them as a public wildlife refuge is a low priority. Mountain View favors the refuge eventually managing these ponds for wildlife.

Policy 4. Improve and expand wildlife habitats next to Shoreline.

Action 4.a Ensure that any use on the completed Vista Slope landfill site south of Shoreline provides unobstructed views of the Bay.

Action 4.b Support the U.S. Fish and Wildlife Service in expanding the San Francisco Bay Wildlife Refuge.

Action 4.c Restore most of the completed landfill areas in the North Bayshore for open space uses including upland habitat necessary to support adjacent salt marsh habitats.

Action 4.d Develop a circulation plan to improve pedestrian and bicycle access to Shoreline.

School Sites. School sites are a large part of local open space reserves because Mountain View has almost no remaining vacant land. This is why it is important that school sites are developed for a range of activities. Mountain View has 14 public school sites with about 150 acres of open space and an additional 20 acres of City-owned park land next to some of these schools. The City has helped pay for developing many school sites as neighborhood playgrounds, including baseball fields, tot lots, and tennis courts. The joint use of school sites as neighborhood parks is essential to meeting the open space demands of Mountain View's residents.

Policy 5. Develop cooperative arrangements with school districts to enhance property in and around local schools for use as neighborhood parks and playgrounds.

Action 5.a Plan and develop athletic facilities and playfields at Graham Middle School in cooperation with the Mountain View School District.

Action 5.b Develop park and playground amenities at Slater School, in cooperation with the Mountain View School District.

Action 5.c Pursue shared funding from the City of Los Altos and the Los Altos School District to upgrade the Springer School grounds to a neighborhood park.

Action 5.d Explore the joint use of St. Joseph School for public and private parking, playground, and athletic facilities.

Privacy. When the City plans to improve open space, it balances the rights of people living next to these areas with the needs of other residents to use and enjoy the open space. It's important that parks, schools, and trails are accessible and appropriately used, but it is imperative that the privacy and security of neighboring residents are not compromised. This is especially important when the public is allowed access to areas such as Stevens Creek, that have traditionally been off-limits.

Policy 6. Be sensitive to the need for privacy and security of neighboring residents when developing trails and other open spaces.

Action 6.a Notify all residents within 300 feet of any

proposed open space enhancement and involve them in the design and development of open space resources.

Action 6.b Place signs at open space areas to show hours of use.

Use

A City can emphasize and reinforce the recreational, social, and cultural values of its residents through the way it uses its parks and open space. Mountain View recognizes that it's important to reflect the desires of its residents by using its parks and recreational facilities efficiently and for a diversity of programs. The City ensures that parks are used appropriately and that they have compatible neighbors.

GOAL C

Make open spaces and recreation facilities available for different uses.

Recreation. Mountain View's park and recreation buildings meet a portion of the needs of residents for recreation and socialization. Activities and classes are conducted at Cuesta and Rengstorff parks, at Crittenden and McKelvey athletic fields, and at various other sites including Deer Hollow Farm, the Mountain View Sports Pavilion, the Senior Center, and the Mountain View Community Center. Typical activities include classes and sporting events for children and adults, seminars and special events for senior citizens, and environmental education for youths and their families.

Policy 7. **Continue to offer a range of recreation programs at the City's parks and recreation facilities.**

Action 7.a Conduct public opinion surveys to find the types of activities most residents prefer.

Action 7.b Hold public hearings to gauge the open space needs and desires of neighboring residents.

Action 7.c Draft a Recreation Element for the General Plan in coordination with the Parks and Recreation Commission.

Action 7.d Facilitate adult and youth sports leagues and programs.

Action 7.e Continue to conduct recreation and athletic programs tailored to the needs of specific user groups, such as aquatics, day camps, environmental education, and special-interest classes.

Cultural Awareness. The percentage of Asian-American, Latin-American, and African-American residents of Mountain View continued to increase during the 1980s, according to the 1990 Census. The City's parks, playgrounds, and schools can be used to reflect this diversity by improving awareness of the city's cultural makeup and by providing opportunities for people of different ethnic, social, and economic backgrounds to share a common experience. For example, when Mountain View's sister city, Iwata, Japan, presented a rock garden to the City, it was placed in a quiet section of Pioneer Park as a reminder of Mountain View's cultural ties to Japan. In the same way, open space can be used as staging grounds for special events such as the Heritage Faire or afternoon concerts.

Policy 8. **Use parks and recreation facilities to improve awareness and understanding of Mountain View's culture.**

Action 8.a Include cultural features such as Sister City gardens and historical markers in the design and development of City parks.

Action 8.b Recruit individuals from all backgrounds to serve on the City's boards and commissions.

Action 8.c Use the Performing Arts Center to present a diversity of cultural programs.

Cultural Arts. Cities can give their residents opportunities to pursue interests in music, literature, visual arts, and performing arts by building cultural arts facilities and by conducting cultural arts programs. Shoreline Amphitheater, the new Performing Arts Center, the Library, the community center, and local schools all offer these opportunities.

The largest cultural arts facility in Mountain View is the Shoreline Amphitheater. This concert arena is built on land owned by the City but leased to a private operator. It is a regional arena, attracting spectators from the entire Bay Area and drawing musical artists of international acclaim.

The Mountain View Center for Performing Arts was opened in 1991 as part of the City Hall complex. It is a state-of-the-art theater, containing the Main Stage, Second Stage, and Park Stage amphitheater. The Main Stage seats 625 in a standard theater setting. The Second Stage seats 80 to 228 depending on setup and houses performances such as cabaret, theater-in-the-round, and experimental works. The Park Stage amphitheater is used for casual lunchtime or evening performances and seats

around 300. About 350 performances each year are given by local community groups, professional companies from throughout the Bay Area, and touring artists and attractions from around the world.

Other important cultural arts programs in Mountain View include the Arts-in-Action and Music-in-Action programs, both of which are coordinated by the Community School of Music and Arts. CSMA is a private, nonprofit organization founded in 1968 to foster individual artistic abilities and promote awareness and appreciation of art in the community.

Policy 9. **Provide opportunities for residents to participate in cultural arts events and programs.**

Action 9.a Use local publications and other media to survey the community's interests in cultural arts.

Action 9.b Continue to organize junior theater productions.

Action 9.c Sponsor and organize concert series and other performance events as opportunities arise.

Action 9.d Use Arts-in-Action and Music-in-Action classes to offer art and music appreciation opportunities for youths.

Action 9.e Establish a corps of volunteers to serve as docents at various cultural arts programs and facilities.

Compatibility. A compatible use of an open space resource is one that does not conflict with the land's value as an open or natural area. Mountain View protects open space by restricting the activities conducted there. For example, creeksides and the shoreline are used for walking, bicycling, and environmental education. Urban parks such as Rengstorff and Cuesta are developed for intensive recreation and sports. In this way, the City offers a full set of recreational activities while protecting natural areas from disruption or intensive use.

Policy 10. **Encourage compatible uses in the city's open spaces.**

Action 10.a Develop natural areas, creeks, and Shoreline for low-intensity uses such as walking, jogging, and environmental education.

Action 10.b Direct group activities, sport facilities, and appropriate ornamental landscaping to the City's urban parks system.

The Community Development Chapter (Policy 7, page 20) discusses compatible uses on adjacent land.

Preservation

Open space is essentially a non-renewable resource. When properties such as school sites are redeveloped for non-recreational uses, their value as open space is lost. Vacant properties are increasingly scarce in Mountain View, and the few remaining sites are under development pressure. To limit development, the City has adopted four open space zoning districts and has established three open space designations in the General Plan.

GOAL **D** **Preserve open space for future generations.**

Zoning. Zoning and General Plan designations are among the most effective ways to preserve open space. California law requires cities to adopt an open space zoning ordinance to carry out general plan policies. Mountain View has adopted the Agricultural District to preserve land for agricultural use, the Open Space Commercial District and the Public Facilities District to encourage recreational and cultural uses and to preserve open space, and the Flood Plain District to protect people and property improvements from floods and other hazards.

Policy 11. **Protect designated public open spaces from redevelopment.**

Action 11.a Evaluate the potential of designating certain Shoreline Boulevard properties near Downtown for open space.

Action 11.b Use the Public Facilities zoning district to preserve school district playgrounds in open space and work with other jurisdictions to achieve this objective.

Action 11.c Use the Flood Plain district to preserve open space lands and to protect people and buildings from flood hazards.

CONSERVATION OF RESOURCES

The Conservation Section conveys local strategies for the preservation, development, and use of natural resources including air, water, solid waste, soil, wildlife and wildlife habitats, historic resources, and energy. The purpose of this section is to identify important natural resources within Mountain View, recognize that they exist in limited quantity, and manage them so that they are preserved.

Air Quality

Both the State of California and the federal Environmental Protection Agency have established Ambient Air Quality Standards for six air pollutants, those by which overall air quality is measured. These six are photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The San Francisco Bay Area Air Basin, of which Mountain View is part, has met each of the standards except ozone and carbon monoxide. Ozone forms when precursor pollutants, hydrocarbons and nitrogen oxides, react together in sunlight. Sources of ozone precursors include motor vehicles, petroleum and chemical industries, consumer products, and dry cleaning. Eighty to 90 percent of carbon monoxide emissions result when motor vehicles burn gasoline incompletely.

Ozone and carbon monoxide poisoning can be extremely harmful. Ozone diminishes lung function and makes people more likely to get respiratory infections. Carbon monoxide replaces oxygen in red blood cells, reducing the amount of oxygen reaching the heart, brain, and other vital organs. Senior citizens, children, fetuses, and people with respiratory and cardiovascular diseases are especially sensitive to the ill effects of carbon monoxide and ozone.

GOAL **E** **Protect and improve air quality.**

Regional Planning. California first established its own air quality standards in 1977, making State standards stricter than federal standards. However, regional governments did not get the power to adopt and carry out plans to attain State standards until 1988, when the California Clean Air Act was passed.

The Clean Air Plan for the San Francisco Bay Area was developed by the Bay Area Air Quality Management District in cooperation with the Metropolitan Transportation Commission and the Association of Bay Area Governments. It includes additional controls on industry and introduces new transportation control measures (TCMs). TCMs attempt to reduce motor vehicle use through incentives to carpool, improved public transportation, parking management, and special motor vehicle fees. There is more information on this subject in the Circulation Chapter under Transportation Demand Management.

To help achieve the transportation part of the Clean Air Plan and to reduce traffic congestion, all urbanized counties in California are forming Congestion Management Agencies. These agencies are writing Congestion Management Plans designed to reduce traffic congestion by improving the coordination between land use and transportation planning. The plans also use growth-management techniques that include setting standards for the amount of traffic that can be accommodated at key roads and intersections, improving public transportation facilities and linking them together, and balancing the mix of jobs and housing.

Policy 12. Participate in regional planning efforts to improve air quality.

Action 12.a Continue to cooperate with the Bay Area Air Quality Management District in carrying out the regional Clean Air Plan.

Action 12.b Work with the Congestion Management Agency to carry out the Congestion Management Plan.

See Policy 1 and Action 1.b in the Circulation Chapter, page 53.

Local Strategies. The major efforts to reduce air pollution come from regional, State, and federal programs, but Mountain View can do much to reduce local emissions. For example, the City's Transportation Demand Management Ordinance aims at reducing the number of vehicles on the road by encouraging carpooling. Mountain View is building urban trails and bicycle paths to get people out of their cars entirely. Other strategies the City uses include zoning to place housing near jobs, preserving undeveloped land as open space, and monitoring local businesses to be sure they are complying strictly with air quality standards.

Policy 13. Promote local efforts to improve air quality.

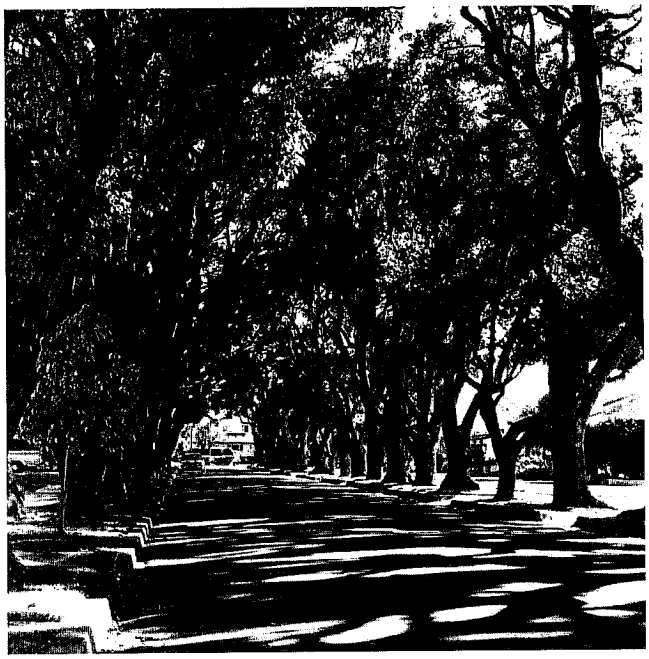
Action 13.a Use the development review process to evaluate the cumulative effects of new development on air quality and impose appropriate mitigation measures through the enforcement of CEQA.

Action 13.b Use the City's Transportation Demand Management Ordinance and similar transportation measures to encourage commute alternatives.

There is more information on this topic in the Transportation Demand Management section of the Circulation Chapter.

Action 13.c Improve awareness of the Bay Area Air Quality Management District's enforcement program to regulate specific businesses, especially those near residential neighborhoods.

The Urban Forest. Trees are particularly important in a mature city like Mountain View. Trees symbolize stabil-



Camphor trees line Velarde Street.

ity, increase property values, improve air quality, beautify neighborhoods, and reduce energy consumption. In Mountain View, Velarde Street is a perfect example of the way street trees can dominate the landscape and even become a neighborhood landmark. Trees cool and purify the air. Widespread tree planting in business districts can reduce temperatures up to 25 percent. Trees also filter the air by ingesting some polluting particles and gases during photosynthesis.

Urban reforestation in Mountain View involves planting new trees on public and private properties, pruning and watering trees in public spaces, preserving Heritage Trees, and removing dead or dying trees. The City assumes responsibility for about 500 new trees every year through the street tree planting program, public works projects, and private developments. To keep the trees healthy, the Parks Division has a program that includes fertilization, irrigation, and soil fracturing. Soil fracturing breaks up compacted soil and sends nutrients directly to the tree roots.

Mountain View's Heritage Tree Ordinance aims at preserving large trees and trees designated to be of special historic value. This ordinance requires a special permit to move or remove any tree defined as a Heritage Tree. The City's Arbor Day program gives away any of nine varieties of native trees to residents who request them. The 1991 program delivered 140 new trees to residents.

Policy 14. Improve and expand the city's urban forest.

Action 14.a Adopt a comprehensive program for inventorying, planting, and maintaining street trees, and trees in other public open spaces.

Action 14.b Work with local non-profit agencies to plant trees and shrubs in appropriate areas throughout the city.

Action 14.c Continue the annual Arbor Day Program of giving trees to residents who request them.

Action 14.d Prepare and distribute handouts to educate people on the value, planting, and care of trees, especially during periods of drought.

Action 14.e Expand the tree Fertilizing, Irrigation, and Soil Fracturing Program during periods of drought.

Action 14.f Publicize and enforce the Heritage Tree Ordinance.

Action 14.g Promote the use of native plants wherever possible.

Water

Mountain View owns and operates its own drinking water utility, delivering an average of 12 million gallons to more than 15,000 customers each day. The distribution system has about 160 miles of underground pipes and three storage reservoirs. The largest, Whisman Reservoir, has a capacity of six million gallons and is used to balance supply and demand during periods of high consumption. The Miramonte Reservoir has a capacity of one million gallons and is used for storage. It has a standpipe for the City's connection to the Hetch Hetchy system. The Bryant elevated tank has a storage capacity of 125,000 gallons and is used for fire protection in the southeastern part of the city.

Surface water in Mountain View includes the San Francisco Bay, Charleston Slough, two salt evaporation ponds, four new lakes in Shoreline, several creeks that run only part of the year, and a variety of smaller water retention basins and ditches. Bodies of surface water are an important natural resource because they are wildlife habitats, people use them for recreation, water reenters the aquifer there, and they are used for flood control and the production of commercial goods.

GOAL **F** **Manage the City's water resources to supply urban uses and protect the environment.**

Drinking Water Quality. Most of Mountain View's drinking water comes from the Grand Canyon of the

Tuolumne, a remote watershed in Yosemite National Park that feeds into the Hetch Hetchy Reservoir. This water is pure enough to be delivered unfiltered and is treated only with chlorine to prevent contamination and lime to prevent corrosion. However, a change in federal regulations requires that Hetch Hetchy water receive additional treatment, scheduled to begin in 1999.

Mountain View blends Hetch Hetchy water with ground water from five City wells. Well water is drawn from 500 to 800 feet below ground and is naturally filtered, requiring no treatment whatsoever. While there has been considerable public interest and concern about contamination of ground water in the San Francisco Bay Area, Mountain View's well water is tested regularly and continues to be better than the most stringent local, State, and federal water quality standards.

As of 1992, about 10 percent of the City's water supply came from the Santa Clara Valley Water District. This water is delivered by State and federal water projects to the District's Rinconada Water Treatment Plant in Los Gatos where it is purified. Treated water is then supplied to southeastern Mountain View through a pipeline completed in 1991. This water is not blended with Hetch Hetchy water to avoid possible taste and odor problems that could result from the different disinfection methods used.

Policy 15. **Encourage activities that maintain and improve drinking water quality.**

Action 15.a Continue to monitor drinking water quality and ensure that it meets or exceeds State and federal requirements.

Action 15.b Continue to enforce local, State, and federal codes to prevent contamination of ground water resources.

Action 15.c Provide technical assistance to State, regional, and federal agencies that oversee cleanup of groundwater contamination in Mountain View.

Action 15.d Assist the Santa Clara Valley Water District to locate abandoned wells and seal them to prevent the spread of contaminants to deeper-level aquifers which supply drinking water.

Storm Water Quality. Storm water is rain that does not seep into the ground but flows overland into storm drains and then into creeks and to San Francisco Bay. It may contain a variety of "non-point source" pollutants including heavy metals, oil, grease, household chemicals, pesticides, fertilizers, and eroded soil. These pollutants are washed from streets, construction sites, parking lots, and other exposed surfaces, unlike pollutants that come from "point sources" such as sewer pipes or industrial outflows. The federal Environmental Protection Agency has identified contaminants in storm water runoff as the leading cause of water pollution in the United States.

In Mountain View, storm water flows directly into Stevens Creek, Hale Creek, Permanente Creek, and Adobe Creek. From there, it enters the marsh lands at Shoreline and south San Francisco Bay. The City is dealing with the storm water pollution problem by enforcing restrictions on littering, increasing its storm drain cleaning and street sweeping programs, educating people about the proper disposal of household hazardous wastes, and increasing storm system inspections on commercial and industrial properties. In addition, the State has recently issued a National Pollutant Discharge Elimination System permit to all cities and agencies that drain water into south San Francisco Bay, requiring them to develop and carry out comprehensive storm water management programs.

Policy 16. **Establish pollution control measures that keep pollutants from entering Mountain View's storm drain system to protect the city's surface water resources.**

Action 16.a Carry out the Santa Clara Valley Non-Point Source Pollution Control Program.

The Santa Clara Valley Non-Point Source Pollution Control Program involves 13 cities in the Santa Clara Valley, the Santa Clara Valley Water District, and Santa Clara County that contribute runoff into south San Francisco Bay. The program's mission is to develop and administer a storm water management plan that controls water-borne pollutants at their source.

Action 16.b Use "best management practices" in new projects to prevent storm water from becoming contaminated.

Best Management Practices

"Best management practices" are actions taken to control the use of pollutants and prevent them from being discharged into the environment. Best management practices include engineered solutions, good housekeeping, and behavioral modification.

Action 16.c Look into technologies to separate and remove pollutants from the storm sewer system and use them if appropriate.

Future Water Requirements

Year	Population Served	Per Capita Demand (GPD)	Estimated Annual Demand (KCCF)
1990	63,900	195	6,100
1995	67,400	215	7,100
2000	69,900	215	7,300
2005	70,500	215	7,400
2010	72,300	215	7,600

GPD: Gallons per day (includes commercial and industrial users).
KCCF: Hundred thousand cubic feet.

Source: City of Mountain View, 1990 Urban Water Management Plan

Figure 4. Future Water Requirements.

Action 16.d Revise local ordinances and, if necessary, develop new ordinances to limit non-point source pollution.

Water Supply. In normal years, Mountain View gets about 74 percent of its water supply, a capacity of 12 million gallons a day, from the Hetch Hetchy reservoir. Another 1.2 million gallons a day is available from the Santa Clara Valley Water District. City wells can produce up to 2.5 million gallons from underground aquifers. The city also uses an average of half a million gallons a day of reclaimed water from the waste water treatment plant in Palo Alto. Unlike other sources, reclaimed water is not drinkable. It is used primarily for irrigation and construction. In total, the City's water customers can be supplied with roughly 16.2 million gallons a day, or 790,600,000 cubic feet per year.

Projections of future water demand have been calculated using population estimates supplied by the Association of Bay Area Governments and an estimated per-capita water demand rate based on historic trends.

Figure 5 shows that the estimated amount of water demand to 2010 is less than the total annual water system supply, but conditions governing the City's water purchases and the availability of well water could change. For example, the State Department of Water Resources was, as of 1992, reviewing the health of the San Francisco Bay-Delta ecosystem and could require that the San Francisco Water Department allow more water to flow down the Tuolumne River to the Sacramento Delta. This would reduce the water available to suburban customers like Mountain View.

Local water sources are also threatened by prolonged periods of drought. The City's wells become less productive during drought years because there is not enough rainfall to soak into the ground and replenish the amount that is withdrawn through wells. If too much water is withdrawn, the ground begins to sink. This sinking is called subsidence and is irreversible. Between 1940 and 1970, subsidence was fairly common throughout the Santa Clara Valley. It caused the ground level in Mountain View's North Bayshore District to drop about four feet. The Santa Clara Valley Water District began a comprehensive water-recharge program in 1971 that limits the amount of water that can be withdrawn to the amount that can be replenished.

To evaluate future water supply and demand requirements, Mountain View adopted an Urban Water Management Plan. The document, written in 1985 and updated in 1990, aims to reduce the city's water consumption, saving 14 billion gallons of water by 2010. It lists strategies to help Mountain View meet its future supply needs. These include a public information campaign, leak detection program, drought-tolerant landscape guidelines, use of reclaimed water, elementary school education on saving water, and water audit programs.

Policy 17. Maintain the City's ability to meet its water supply requirements.

Action 17.a Work with other local agencies and water wholesalers to develop new water sources and add to existing sources.

Action 17.b Continue to update and comply with provisions of the City's Urban Water Management Plan.

Water Conservation. Mountain View uses a variety of methods to keep the demand for water within supply limitations. It uses reclaimed water to irrigate City-owned landscaping and flush out sewers. It plants native species in City parks and uses water-saving appliances in its buildings. It prohibits residents from cleaning paved areas with water, watering their lawns between 9 a.m. and 3 p.m. during most of the year and until 6 p.m. during daylight saving time, washing their cars with a hose that does not have an automatic shutoff valve, and being served water in restaurants unless they request it. It calls for drought-resistant native plants accustomed to the city's microclimates in new and renovated private landscapes.

Use of drinking water went down about 15 percent between 1985 and 1990. Some of that came about because a major silicon chip manufacturer, which used a lot of fresh water, moved out of Mountain View, but the City's Water Conservation Program is responsible for just over half of the reduction. Mountain View expects this success to continue and increase, even during years when rainfall is plentiful.

Policy 18. Recognize that water is a limited resource and encourage water conservation measures where possible.

Action 18.a Use reclaimed water, efficient irrigation, and drought-tolerant landscaping on City lands, and encourage people to use them on private properties.

Action 18.b Prepare and distribute pamphlets and use local publications to educate people on water conservation techniques.

Action 18.c Adopt and carry out "best management practices," along with more than 100 cities in the state, for water conservation as outlined in the League of California Cities 1991 Memorandum of Understanding on urban water conservation in California.

Sanitary Sewer. Mountain View's sanitary sewer system processes about 7.2 million gallons of the 12 million gallons of water pumped into the city every day. The remaining 4.8 million gallons are returned to the environment as the water evaporates, runs off into the creeks and the Bay, or soaks into the ground. Waste water collected in the sewer system flows through a sewer main, generally located in the center of public streets, to one of three large-capacity collector pipes. These pipes meet at the Main Sewage Lift Station in the North Bayshore, where sewage is pumped to the Regional Water Quality Control Plant in Palo Alto. The plant receives waste water from Palo Alto, Mountain View, Los Altos, East Palo Alto, Stanford University, and Los Altos Hills.

The Regional Water Quality Control Plant has been expanded several times since it was built in 1934. If a treatment plant reaches 75 percent of total capacity, California law requires that a study must be undertaken to decide if the plant will be expanded, if additional capacity will be purchased from another plant, or if land use controls will be enacted to limit the production of additional sewage. The regional plant reached 77 percent of capacity in 1982, and a study found that it would be necessary to expand it. Its capacity rose from 30.6 million gallons a day to 38.0 million gallons a day when construction was completed in 1988. Capacity rights for each contributing agency are based on State population estimates. No increases are allowed for industrial and commercial output.

Mountain View's 1991 Sanitary Sewer Master Plan found that the total amount of waste water generated through 2010 will not exceed the City's flow entitlement at the treatment plant. Population and land use predictions suggest that Mountain View may one day generate up to 8.8 million gallons of waste water a day, well below its treatment entitlement capacity of 14.4 million gallons. However, the Master Plan did identify some streets where new lines are necessary because sewer flow exceeds pipe capacity. The quality of waste water discharged into Mountain View's sewer system is also of concern. The City's 1973 Industrial Waste Ordinance requires pre-treatment of industrial waste to comply with federal, State, and local standards. This ordinance protects public health, the City's sewer system, the Water Quality Control Plant, and the Bay.

Sewer Flow and Capacity

Contributing Agency	Capacity Rights (MGD)	Actual Flow (MGD)	Percent of Capacity	Unused Capacity (MGD)
Mountain View	14.4	7.2	0.50	7.2
Palo Alto	14.5	6.7	0.46	7.8
Los Altos	3.6	2.5	0.69	1.1
East Palo Alto	2.9	1.5	0.52	1.4
Stanford	2.0	1.2	0.60	0.8
Los Altos Hills	0.6	0.2	0.33	0.4
Total	**38.0**	**19.3**	**0.51**	**18.7**

MGD: Million Gallons per Day

Source: Palo Alto Regional Water Quality Control Plant

Figure 5. Sewer Capacity Rights and Average Flow.

Policy 19. **Provide adequate sewage treatment and capacity to serve the anticipated growth in Mountain View.**

Action 19.a Expand efforts to promote conservation of water and reduction of sewer outflow, especially among large industrial users.

Action 19.b Continue to require pre-treatment of industrial waste water.

Action 19.c Monitor the condition of sewer lines and continue to make improvements as necessary.

Solid Waste

Solid waste is any unwanted or discarded material that is not a liquid or a gas. Common solid wastes are paper products, metals, glass, plastics, cloth, food scraps, rock, soil, yard waste, and wood. In Mountain View, businesses generate 65 percent of the waste and households generate 35 percent. Much of this material is recyclable.

Since the early 1930s, Mountain View has disposed of its solid waste in three landfills north of U.S. 101, the Bayshore Freeway. The oldest and largest landfill, a 544-acre parcel, was closed in 1980 and has been redeveloped into the Shoreline Regional Recreation and Wildlife Preserve. The second-largest site is the 150-acre Vista Slope Landfill, west of Shoreline Boulevard. The site opened in 1980 and accepts privately hauled refuse. The smallest landfill is the 70-acre Crittenden Site, north of Crittenden Lane. It operated from 1968 to 1988 and was inactive but unclosed as of 1992. Eventually, the City would like to close all its landfills, and is exploring possible future uses for them through the North Bayshore Advisory Committee Study. These landfill sites will continue to be carefully monitored under regulations of the Integrated Solid Waste Management Board, the Regional Water Quality Control Board, and the Bay Area Air Quality Management District.

Mountain View contracts with the Foothill Disposal Company for refuse collection, disposal, and residential recycling. Through June 1993, this waste is deposited in the Newby Island Landfill in north San Jose. To meet landfill needs after mid-1993, Mountain View, Sunnyvale, and Palo Alto contracted jointly for 30 years of capacity at the Kirby Canyon Sanitary Landfill in south San Jose. A materials recovery facility and transfer station is planned in Sunnyvale to remove, process, and market recyclable materials. Recyclable materials include cardboard, metals, paper, tires, glass, wood, yard waste, plastic and large appliances. Non-recoverable solid waste will be compacted and transported to Kirby Canyon. Reducing the amount of landfill waste by recycling materials will allow the Kirby Canyon site to be used for the full 30 years.

GOAL **G** **Reduce the amount of solid waste generated in Mountain View.**

Waste Reduction. California has a growing waste-management problem. People in Mountain View throw away an average of 8.2 pounds of solid waste every day, more than the state-wide average of seven pounds, the New York average of five pounds, and the national average of 3.5 pounds. Mountain View has a larger commercial and industrial base than most cities, which pushes up its per-person figure on solid waste. It's no surprise that California's landfills are rapidly filling up and that it's difficult to build new ones near cities. In response, the State Legislature passed the California Integrated Solid Waste Management Act in 1989. The Act requires the waste disposed in landfills to be reduced by 25 percent by 1992 and by 50 percent by 2000. The law also requires cities to adopt Source Reduction and Recycling Plans that specify how they will achieve the waste reduction goals. Mountain View's Source Reduction Program, drafted in 1991, expects to achieve a 25 percent waste reduction by 1995 and a 50.1 percent reduction by 2000.

Policy 20. **Promote waste reduction methods throughout the city.**

Action 20.a Carry out the City's Source Reduction and Recycling Plan.

Action 20.b Prepare and distribute pamphlets that educate Mountain View residents about reducing household wastes.

Action 20.c Give preference for City purchases to buying products that minimize packaging and can be reused.

Action 20.d Assist local businesses in developing strategies to manufacture, package, and consume commercial products with less waste.

Recycling. Recycling is collecting waste material or used products, then making new products with them. The curbside recycling program began in 1987 with single-family houses, was extended to 2,000 small apartment and condominium complexes in 1989, and added all remaining households by 1991. Residents place recyclable materials into burlap bags which are picked up every other week. Materials collected include glass bottles and jars,

aluminum and tin cans, plastic soft drink bottles, newspapers, and used motor oil. The City's recycling program collected over 9,026 tons of recycable materials in its first four-and-a-half years.

Volunteer neighborhood Block Leaders are the key to Mountain View's recycling program. More than 350 people joined this program in its first two years. They encourage their neighbors to recycle and post signs in their yards reminding the neighborhood when to put out their bags of recyclables. The City also promotes the program with semi-annual newsletters, monthly notices and articles in The *View*, and informational door hangers that contain pickup schedules and recycling tips.

Policy 21. Promote recycling and resource conservation.

Action 21.a Provide convenient, accessible drop-off and redemption sites for recycling.

Action 21.b Institute a yard waste collection and composting program.

Action 21.c Give preference for City purchases to durable products that are recyclable or made from recycled material or both.

Action 21.d Provide local businesses with technical assistance, information on State tax credits, and other incentives to use recycled materials in their manufacturing processes.

Action 21.e Amend the Zoning Ordinance to require suitable space for separating, storing, and collecting recyclables in new or substantially remodeled commercial and multiple-family structures.

Action 21.f Consider charging a variable garbage rate based on the amount of garbage generated.

Action 21.g Develop a program to reward innovative recycling and resource-conservation ideas.

Recycling also saves energy because it takes less energy to remanufacture recycled material than to extract that material from crude oil, mineral ores, or other original sources.

Soil

Soil, a mixture of mineral and organic matter, is produced very slowly as native rock surfaces are eroded by wind, water, and gravity. Soil sustains plant life, is an important natural resource, and is a crucial part of the ecosystem. High-quality topsoil can easily be harmed by human activities and can lose its life-sustaining capabilities or be lost to erosion and sedimentation if it is not cared for properly.

Mountain View is generally underlain by soils of the Sunnyvale-Castro-Clear Lake association. This association has 40 percent Sunnyvale soils, 25 percent Castro soils, 20 percent Clear Lake soils, 10 percent Willow soils, and 5 percent Bayshore soils. These soils were deposited in different geological eras and contain different amounts of sand, gravel, clay, and organic matter. Such soils tend to exhibit a high shrink-swell behavior that, unless the structures are properly engineered, can cause cracks in the soil and damage to buildings, building foundations, roads, and other infrastructure. There are no significant mineral resources in Mountain View.

Mountain View is a densely populated city with very little farming and no mining. However, soil is still an important resource because it sustains landscaping, traps and absorbs water, and provides a foundation for buildings.

GOAL **H** **Protect and preserve soil as a natural resource.**

Soil Erosion. Soils are removed from their original location and transported by wind, water, and gravity during erosion. Soils settle and accumulate in a particular location during sedimentation. Erosion and sedimentation are natural processes that can speed up when grading and other construction work are done, especially when the work is done near creeks or during the rainy season. Erosion causes the loss of fertile top soil, carves deep ruts and gullies, and fills in creeks and marsh lands. Plants shield the soil and bind it together, helping to prevent erosion. Mountain View's gently sloping terrain and use of erosion-control measures in the creeks significantly reduce erosion problems, but the City still recognizes that it is important to use proper grading and construction techniques to prevent soil erosion.

Policy 22. Encourage soil stabilization measures that prevent soil erosion and sedimentation.

Action 22.a Protect and preserve existing plant communities next to creeks to help prevent erosion.

Action 22.b Amend the Weed Abatement Ordinance to maintain native plant communities on large tracts of vacant land.

Action 22.c Protect and preserve existing plant communities as appropriate to prevent loss of soil on construction sites.

Action 22.d Include collection and redistribution of top soil on construction sites as a soil conservation measure.

Soil Contamination. Soils are contaminated when chemicals or other pollutants are improperly released and the soil becomes toxic or harmful to plants, animals, and people. Chemical pesticides and herbicides used in agriculture and leaks from underground storage tanks into surrounding soils have contaminated soils in Mountain View. Contamination from storage tanks, which has been mostly limited to gas stations and industrial properties, is much less widespread than agricultural contamination. This is because agriculture was Mountain View's main industry before World War II and production relied heavily on chemicals such as DDT. As a result, Mountain View requires a soil analysis before it approves sensitive land uses such as housing or day care.

Policy 23. Ensure the proper use, storage, and disposal of toxic chemicals to prevent soil contamination.

Action 23.a Continue to enforce the City's Hazardous Materials Storage Ordinance.

Action 23.b Continue to enforce the City's Toxic Gas Ordinance.

There is a more detailed discussion on chemical management practices and more Actions in the Hazardous Materials Section of the Public Safety Element.

Action 23.c Reduce the use of herbicides and pesticides on City-owned properties to the extent possible.

Action 23.d Educate residents and businesses on ways to reduce the use of herbicides and pesticides on their property.

Prime Agricultural Lands. There are two properties in Mountain View's Sphere of Influence that are designated as "prime agricultural lands" by the U.S. Department of Agriculture's Soil Conservation Service. One is a 45-acre property between Charleston Road and Amphitheater Parkway and the other is a 135-acre property north of NASA/Ames. The larger property is owned by the federal government and is outside the City limits in an unincorporated area of the County. Both properties are farmed on short-term leases and do not contribute substantially to the regional economy. They are not viable long-term land uses; therefore, the City does not have policies for their preservation. However, there is a 35-acre property between these two sites that is under a permanent PG&E easement. This site is considered a viable long-term use and is designated for agricultural use on the General Plan Land Use Map. Additionally, there are six other sites in the city, totaling 20.1 acres, that are either designated or zoned for agricultural purposes.

Policy 24. Keep agricultural properties that have a viable long-term future.

Action 24.a Use the Agricultural land use designation and zoning district to provide for long-term agricultural land use.

Action 24.b Use the Williamson Act as an incentive to retain property for agricultural use.

Under the Williamson Act, the land is taxed on the basis of its agricultural use instead of its fair market value under a 10-year contract between the owner and the County.

Wildlife and Wildlife Habitats

An inventory of wildlife habitats in Mountain View was conducted in 1990. Habitats were classified under the California Wildlife Habitat Relationships System. That system groups habitats into four broad categories—Urban-developed Habitats, Tree-dominated Habitats, Herbaceous Habitats, and Aquatic Habitats.

Urban-developed Habitats account for more than 90 percent of the wildlife habitat in Mountain View. This category has four subgroups—Commercial, Industrial, Urban Residential, and Urban Park. These habitats have been affected, to one degree or another, by urban development. Generally, areas with relatively fewer buildings, less paved surface, and more landscaping provide the most valuable habitats. Birds that forage in these habitats include rock doves, house sparrows, starlings, scrub jays, and house finches. Animals include raccoons, squirrels, opossums, and gophers.

Tree-dominated Habitats in Mountain View are located near Stevens Creek and Permanente Creek. This category includes coastal oak woodlands, valley-foothill creeks, and eucalyptus groves. Common tree species include California sycamore, valley oak, and willow. Barn owls and red-tailed hawks are among the species in these habitats.

Herbaceous Habitats, which include grasslands and wetlands, are found in Mountain View in Shoreline and along parts of Stevens Creek. Common grassland plants are wild oat, ripgut brome, wild barley, and a variety of thistles. The plants give food and cover to alligator lizards, ground squirrels, gophers, harvest mice, and California voles. Grassland birds include turkey vultures, northern harriers, American kestrels, and burrowing owls.

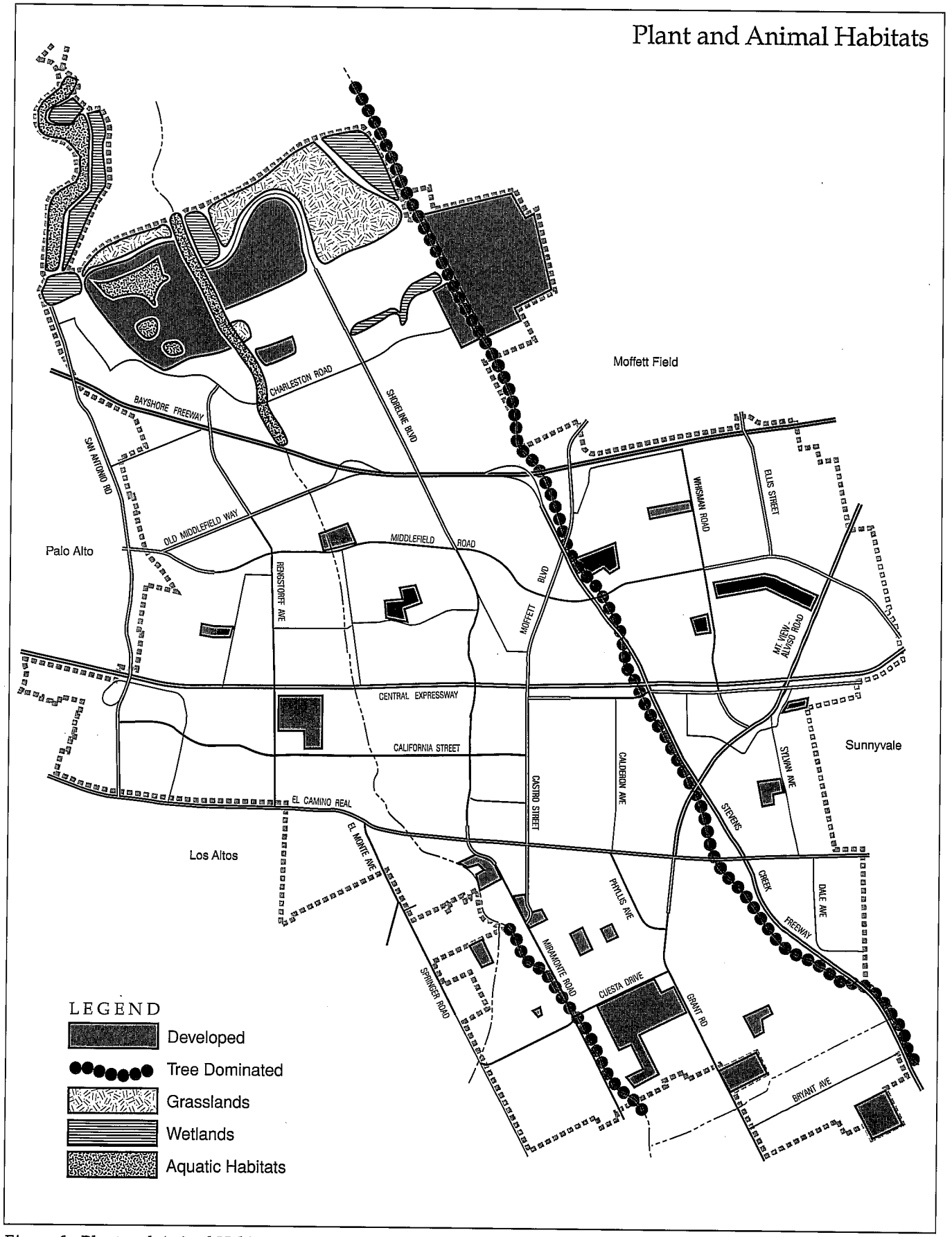


Figure 6. Plant and Animal Habitats.

Wetland habitats, including freshwater and saltwater marshes, are found only at Shoreline. Wetland birds include herons, egrets, ducks, hawks, and burrowing owls. Mammals include shrews, bats, mice, rabbits, raccoons, foxes, and harbor seals. Mountain View's Aquatic Habitats are divided into saltwater and freshwater. Saltwater marshes include the lower reaches of Adobe, Permanente, and Stevens Creeks; a 50-acre saltwater lake in Shoreline; Mountain View and Stevens Creek Tidal Marshes, and Charleston Slough. These areas contain a rich bottom-dwelling community of oysters, mussels, and clams, which are an important source of food for migrating birds. Herons, grebes, ducks, and pelicans fish in this saltwater. Characteristic mammals include jackrabbits, raccoons, ground squirrels, and harbor seals. Freshwater resources include Shoreline's Golf Course lakes, the upper reaches of Permanente and Stevens Creeks, and a variety of smaller retention basins and ditches. Birds include herons, bitterns, and kingfishers. Muskrats, raccoons, and opossums are frequent residents.

GOAL I

Preserve and enhance the diversity of biological resources in Mountain View.

Habitat Restoration. Shoreline at Mountain View is the largest wildlife area in the city. Since 1980, Shoreline's staff has been restoring this one-time landfill to its former capacity to support plant and animal life, placing major emphasis on reintroducing native plants. Shoreline's brand of multi-habitat preservation and restoration has been highly successful and could be applied to other areas in Mountain View. A city-wide habitat restoration program could involve restoring creeks, using native plants in private projects, changing weed control methods to reduce the use of chemical herbicides, eliminating the practice of plowing under meadowlands, and requiring wildlife surveys of vacant lands before the lands are developed.

Policy 25. Protect and restore plant and wildlife habitats.

Action 25.a Prepare and adopt a master plan that establishes appropriate land uses within Shoreline.

Action 25.b Use open space zoning districts and capital projects to preserve and enhance creekside habitats.

Action 25.c Use the City's Landscape Guidelines to require native plants in commercial, industrial, and multiple-family developments.

Action 25.d Prepare and adopt an ordinance limiting plowing under open fields as a way to control weeds and prevent fire.

Burrowing owls—a protected species.

Wildlife. The most interesting and successful wildlife management program in Mountain View is the burrowing owl habitat in Shoreline. Burrowing owls are small birds that live in abandoned ground squirrel burrows along levees and in the grasslands of Shoreline. The City has created several artificial burrows for these owls and enhanced their foraging habitat. Up to 30 burrowing owls live at Shoreline. As many as 65 owls live there in the summer, after the chicks are born. Burrowing owls are declining throughout the west and are a Species of Special Concern in California—a prelude to Endangered Species status. The federal Migratory Bird Treaty Act protects the birds and their nests, but their habitat is not protected. Mountain View is leading the way in preserving the burrowing owls not only by protecting owl habitat, but by creating it.

Mountain View also funds a private nonprofit wildlife rescue agency which collects injured animals, cares for them, and returns them to the wild. Most of these are injured or abandoned birds; but some are small mammals that have been poisoned by eating plants sprayed with chemical herbicides. Several property owners use herbicides to control weeds and prevent fires.

Mountain View has reduced the amount and toxicity of the chemical herbicides it uses on City properties in favor of other ways to control weeds and prevent fires. The City's strategies include allowing native vegetation to develop past the stage at which it is first prone to fire, clearing only the borders of wildlife areas where they touch homes and businesses, checking for wildlife before development, and mowing fields rather than plowing them under.

Policy 26. Protect wildlife from the hazards of urbanization.

Action 26.a Preserve Shoreline's burrowing owl habitat by passing an ordinance designating Shoreline as a burrowing owl preserve.

Action 26.b Require that public and private land owners mitigate for the destruction of habitat used by sensitive species.

Action 26.c Prepare and adopt an ordinance requiring wildlife surveys of open lands before they are developed, managed for fire prevention, or disturbed in any way.

Action 26.d Seek to fund organizations that rehabilitate injured animals and return them to the wild.

Action 26.e Avoid using balloons, especially Mylar balloons, at City-sponsored events because they are a safety hazard and pose a danger to wildlife.

Action 26.f Consult with the salt pond management and local duck hunting clubs to develop strategies that reduce the negative effects that duck hunting has on the public.

Archaeological Resources

The Ohlone tribe of Native Americans moved into the Bay Area around 500 A.D. and eventually occupied much of the central California coast as far east as the Diablo Range. Mountain View is in what were probably the Tamyen and Ramaytush sectors of the Ohlone territory. The Ohlone were a dispersed society of hunters and gatherers who divided themselves among politically autonomous groups, or tribelets, containing an average of 200 members. Spanish mission records and archaeologic data show that in 1770 as many as 1,200 Ohlones lived in what was to become the Mountain View area.

The Ohlone way of life flourished in California until the Spanish mission system arrived in the mid to late 1700s. This system forced a normally scattered population into a central location, where their labor could be exploited. By 1810, the Spanish had completely transformed the Ohlone people from hunters and gatherers to agricultural laborers and artisans. Replacement of the Ohlones' native religion, language, customs, and way of life with those of the Spanish led to a low birth rate, and many children died of European diseases for which they lacked immunity. When control of the missions passed to Mexican civil authorities in 1834, the few remaining Ohlone moved to ranchos and were absorbed into multi-ethnic communities. Today, only about 200 persons of Ohlone descent live in the Bay Area.

Land ownership patterns in California changed profoundly with the shift in control of the missions. The Mexican custom of individuals owning vast land grants replaced the Spanish system of founding presidios, missions, and towns with property held by the crown. One of these Mexican land grants, the 8,877-acre Rancho Pastoria de las Borregas, would become most of what is now Mountain View. The Rancho was granted to Francisco M. Estrada in 1842, and was transferred to his father-in-law Mariano de la Cruz Castro. Castro raised cattle for tallow and hides, the main business in the region.

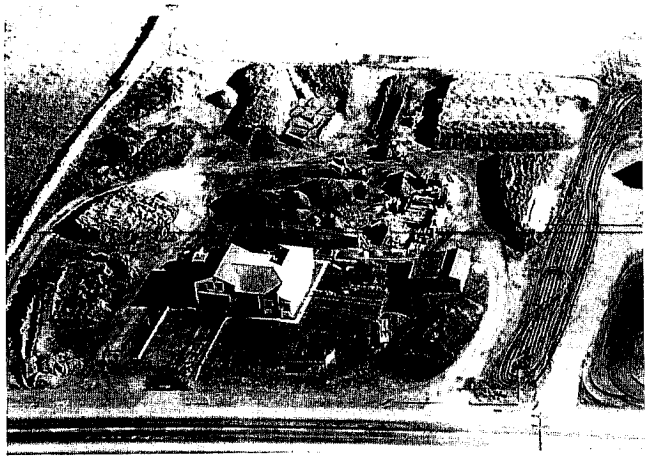
Northern California's population soared when the Gold Rush began in 1848 and the transcontinental railroad was completed in 1869. New agricultural towns grew quickly on the Peninsula and in the Santa Clara Valley to feed the burgeoning cities of San Francisco and Sacramento. After 1875, the success of fruit production and expansion of markets through the railroad transformed Mountain View's economic base from cattle raising to horticulture. Mountain View eventually became known for its production of olives, cherries, prunes, apricots, and chrysanthemums.

Until the 1950s, Mountain View was a small, compact settlement set in acres of orchards and greenhouses. Farming persisted until after World War II, when large numbers of people began moving to the suburbs in search of affordable houses. Since then, Mountain View's farms have been replaced by housing, commercial centers, and industrial campuses. The Santa Clara Valley, once known as the "Valley of Heart's Delight" for its fruit production, is now called "Silicon Valley" for its electronics industry.

GOAL **J** **Identify and preserve the city's archaeological resources.**

Archaeologic Sites. Six formally recorded sites and three unconfirmed shell mounds have been documented in Mountain View. The most important of the archaeological sites was located near what is now Central Expressway and San Antonio Road, and was known as the Mountain View Mound. The site was first excavated by Stanford archaeologists in 1893. The remains of more than 150 Native Americans were recovered from the mound. The mound was estimated to be 500 feet long, 300 feet wide, and 10 feet deep. Archaeologists found a circular house floor almost 20 feet in diameter, needles, barbed fish spears, arrowheads, pestles, pendants, and pipes, many of which dated from 1100 B.C. to 800 B.C. Most of the Mountain View Mound was carved up in the 1940s and marketed as "Indian Mound Top Soil." The commercial use of the mound for topsoil and fill destroyed its archaeological value and, more importantly, its spiritual value as a Native American burial ground.

Policy 27. Improve awareness of the city's archaeological resources.



The Mountain View Mound near San Antonio Road, circa 1940.

Action 27.a Maintain lists, descriptions, and photographic records of archaeological sites.

Action 27.b Develop standard practices or contingency plans for preserving archeological materials that are unearthed during construction.

Energy

Mountain View is in Pacific Gas and Electric's De Anza Division of the Mission Trails Region. PG&E's power comes from a variety of sources including the wind turbines along Altamont Pass, hydroelectric dams throughout the Sierra Nevada and in Oregon, and the Diablo Canyon Nuclear Power Plant in San Luis Obispo. Power is transmitted to Mountain View by high-voltage electric cables running parallel to Stevens Creek. Several large transformers at the Whisman and Mountain View substations then step the electricity down to 120 and 240 volts for local use.

PG&E also supplies the city with natural gas through an underground high-pressure pipe. (See Figure 3, Transmission and Pipe Lines). About 23 percent of the energy PG&E sells through the De Anza division is natural gas. The 1991 demand for natural gas in Mountain View was about 228,000 therms, the standard measurement for natural gas use. Almost 62 percent of this demand is from homes, 34 percent from commercial development, and 4 percent from industry. Mountain View contributes to PG&E's natural gas reserves by collecting methane gas from a closed landfill at Shoreline.

GOAL **K**

Encourage optimal use of available energy resources.

Energy Conservation. Californians have become more energy conscious since the energy crisis of the 1970s. The escalating cost of energy and the ever-decreasing availability of fuel sources have impelled government agencies to conserve energy and look for alternatives to the use of non-renewable resources. Strategies used by the State and local communities include improving the efficiency of transportation systems, replacing fixtures that use a lot of energy with newer and more efficient equipment, and promoting recycling. Many of these strategies are discussed in greater detail in the Circulation Chapter and in other sections of this Chapter.

Policy 28. Promote energy conservation.

Action 28.a Carry out actions in the Circulation Chapter aimed at reducing automobile use and improving the efficiency of the transportation network.

Action 28.b Continue to use Title 24 of the Uniform Building Code to require proper energy conservation for all approved projects.

Action 28.c Develop a plan to manage and conserve energy for all City structures.

Action 28.d Distribute PG&E literature on energy conservation.

Solar Access. Promoting the use of renewable energy sources, those that are not depleted when they are used, is part of Mountain View's overall energy policy. These sources include solar radiation, wind, tidal action, and terrestrial heat. Mountain View does not have access to strong wind and tidal currents, and it can't mine subsurface heat. However, the city's temperate climate does allow the use of solar energy.

Mountain View uses the Site Plan and Architectural Review process to encourage new building projects to consider solar exposure and take advantage of it. Maintaining solar access in new developments allows for the use of solar collectors, which generate energy for water or space heating. Planning for solar access involves the use of appropriate building types, heights and setbacks, land use, landscaping, site planning, and other design factors. For example, a house that uses glass walls to collect heat needs windows that face south for long-term exposure to sunlight.

Policy 29. Encourage active and passive solar energy design in building and site development.

Action 29.a Consider preparing and adopting a solar access ordinance.

Action 29.b Incorporate solar designs into new City facilities.

Action 29.c Use the development review process to inform developers of the advantage of planning for solar access.

Alternative Sources. Mountain View encourages the use and development of alternative energy sources, including cogeneration and landfill gas. Cogeneration creates electricity by harnessing heat energy that would normally be wasted. The waste heat from industrial processes runs a turbine that produces electricity. The electricity can be used on-site or sold to PG&E. Large institutions such as schools and hospitals typically use cogeneration to produce electricity and use the waste heat for space heating.

Landfill gas, mainly methane, is produced when waste decomposes in the City's landfills. Shoreline has more than 200 landfill gas extraction wells, connected by miles of pipeline atop specially designed landfill cells. The gas is processed at one of three energy recovery facilities, designed for maximum air quality protection. PG&E, under contract with the City, separates methane from the recovered landfill gas and sells it to its natural gas customers. The City contracts with another firm to burn landfill gas in two large reciprocating engines, which drive electrical generators and produce over 3,000 kilowatts of energy. In total, the landfill gas recovery system produces enough energy to satisfy all the electrical and natural gas needs of over 2,000 average homes.

Policy 30. Encourage the development and use of alternative energy sources.

Action 30.a Continue to extract methane gas from the sanitary landfill.

Action 30.b Promote energy cogeneration through an awareness program aimed at large companies and institutions.

PUBLIC SAFETY

The Safety Element establishes Policies and Actions to protect the community from risks associated with earthquakes, floods, fires, toxic waste, crime, and other hazards. This section is required to contain maps of known seismic and geological hazards, and emergency evacuation routes. This section is Mountain View's tool for identifying and mapping hazards, and is consulted before land use decisions are made.

Natural Disasters

Mountain View is close to several active earthquake faults. (See Figure 7, Earthquake Faults, and Figure 8, Earthquake Fault Zones.) An earthquake on any of these faults could result in severe ground shaking and seismic settling throughout the San Francisco Bay Area.

Because of Mountain View's location and its loosely compacted soils, ground shaking and seismic settlement are the most destructive earthquake activities in this area. The severity of ground shaking is determined by a quake's magnitude, epicenter, depth of focus, duration,

Earthquake Faults

Earthquake Fault	Distance from Mountain View	Maximum Ground Shaking Intensity
San Andreas	6 miles (west)	Strong to Very Strong
Hayward	10 miles (east)	Strong to Very Strong
Calaveras	15 miles (east)	Weak
Seal Cove-San Gregorio	19 miles (west)	Weak

Figure 7. Earthquake Faults Affecting Mountain View.

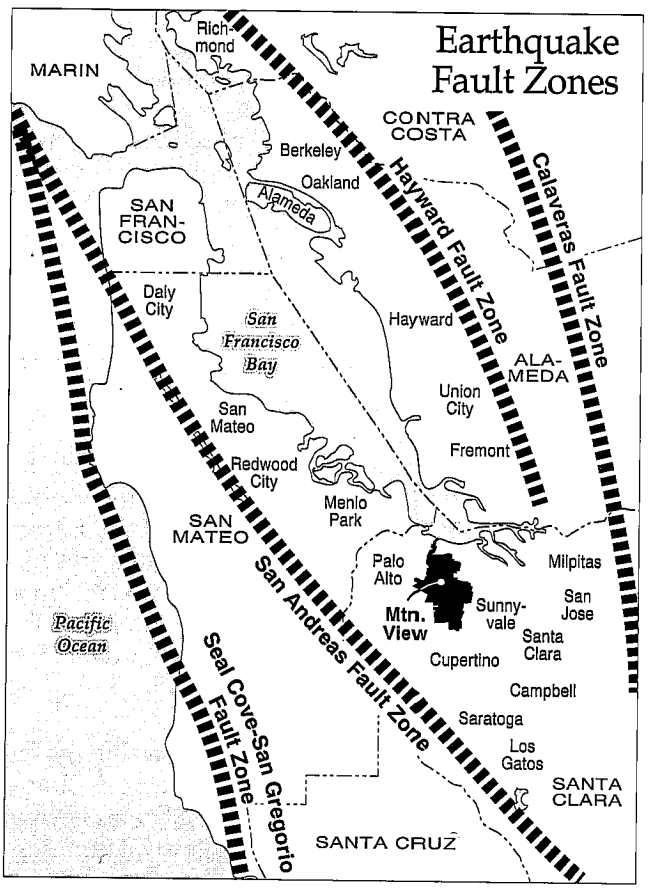


Figure 8. Earthquake Fault Zones.

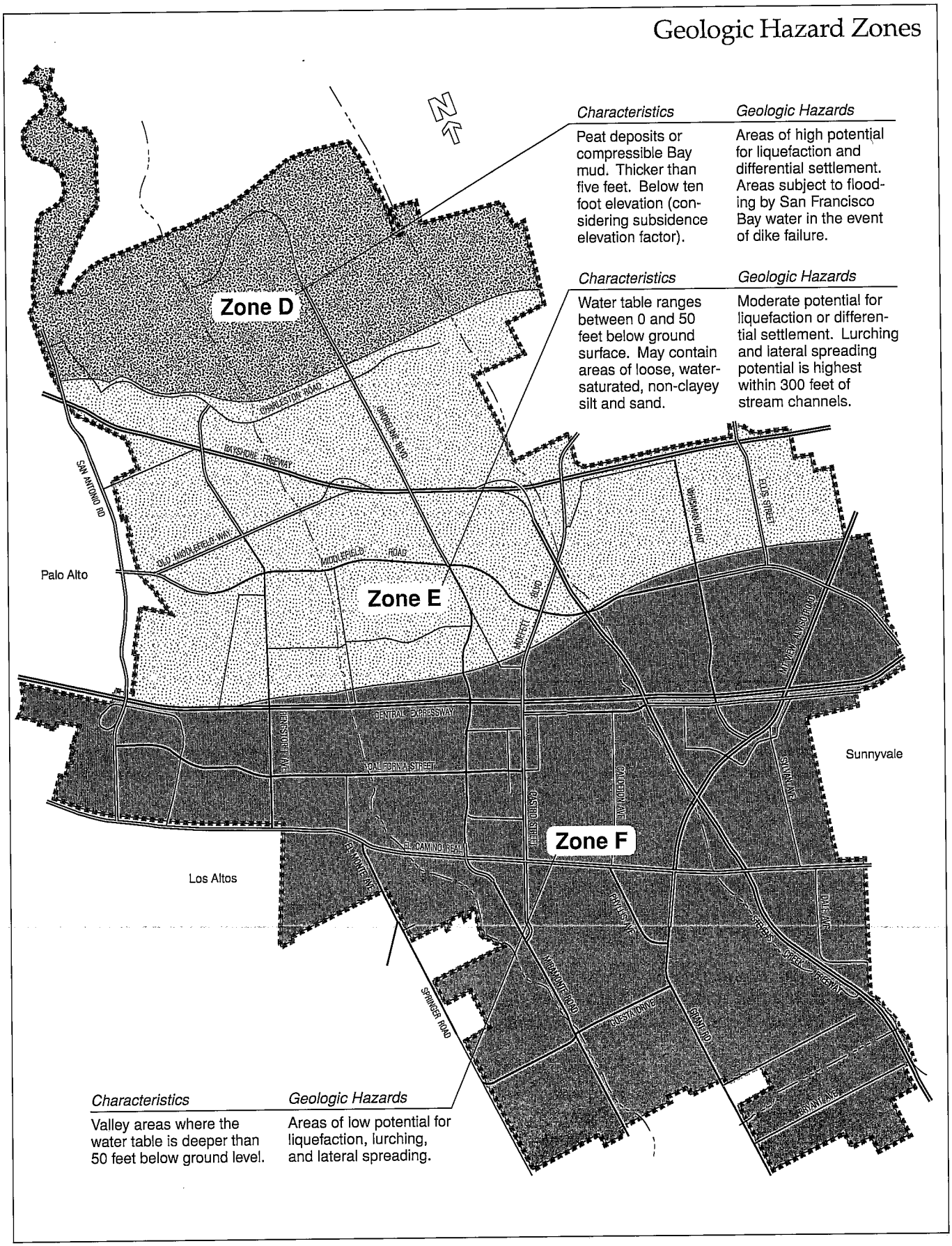


Figure 9. Geologic Hazard Zones.

and local ground water and soil conditions. Ground shaking in Mountain View would range from "strong" in the northern parts of the city to "very strong" in the North Bayshore area, according to a 1987 estimate by the Association of Bay Area Governments.

Seismic settlement is a drop in the ground's elevation when soils compact or liquefy during an earthquake. The California Department of Conservation, Division of Mines and Geology, prepared two planning scenarios that included Mountain View. The first was a scenario for a 7.5 magnitude earthquake on the Hayward Fault, and the second was a scenario for an 8.3 magnitude earthquake on the San Andreas Fault. Both scenarios showed that the potential for liquefaction and seismic settlement in Mountain View would be "moderate to high." (See Figure 9, Geologic Hazard Zones.)

Buildings that collapse during ground shaking cause the vast majority of injuries and deaths, so it is imperative that new buildings be designed to withstand a high level of shaking without collapsing.

Flooding is another natural disaster recognized as a hazard in Mountain View. The average annual rainfall is slightly less than 13 inches, but there have been more than 25 inches in some years. Ninety percent of this rain falls between November and April, sometimes spilling over creek banks and flooding surrounding land. Floods also could be caused by an earthquake strong enough to destroy Stevens Creek Dam and Shoreline's levees, or to create a huge sea wave, called a tsunami, within San Francisco Bay. A few properties in Mountain View could be flooded to a depth of one to three feet during the 100-year Flood, according to the 1988 Flood Insurance Rate Map. The 100-year Flood has a one percent chance of happening in any given year and is used as the standard design flood. Areas with the highest risk of flooding include much of the North Bayshore district, land along the banks of Permanente Creek, and in the northwestern corner of the city around Rengstorff Avenue and Old Middlefield Way. (See Figure 10, Flood Plains.)

Damage from earthquakes and floods can be devastating, but proper planning and preparation can reduce risks and lessen the harmful effects of natural disasters when they happen.

GOAL L

Protect the community from the harmful effects of natural disasters.

Earthquakes. Mountain View's Fire Department has created an Office of Emergency Services to prepare the City's Emergency Preparedness Plan and mobilize responses when disasters occur. The office presents earthquake preparedness information to local businesses, schools, City employees, and neighborhood organizations. It also manages a group of amateur radio operators who will go into action if telephone lines are shut down, and it participates in regional discussions with other cities and the Red Cross to share information and coordinate relief plans. In 1990, OES arranged an amendment to the Zoning Ordinance so that disaster storage containers could be located at large businesses, hospitals, and in schoolyards. This collaboration of public and private activities, drawing upon local and regional preparedness plans, is designed to anticipate problems and to lessen their effects.

Many of the Emergency Preparedness Plan's strategies are carried out in the development of new and remodeled buildings. The City's Building Department reviews development plans to be sure that they comply with the strictest earthquake standards in the latest Uniform Building Codes. These codes promote building safety while protecting historic structures and the housing supply. The Building Department has also identified 16 unreinforced masonry buildings that are of moderate to high risk of collapsing in an earthquake. As of 1992, strategies to require the upgrading of these buildings were being evaluated.

The City also promotes building safety by inspecting rental structures having three or more units for violations of the Housing Safety Codes. About 3,200 housing units are inspected and brought up to code each year. There is more discussion on this subject in the Neighborhood Design section of the Residential Neighborhoods Chapter.

Policy 31. Prepare for the destructive force of earthquakes and attempt to lessen their effects.

Action 31.a Continue programs to educate residents about seismic hazards and about what to do when earthquakes occur.

Action 31.b Develop an ordinance to upgrade unreinforced masonry buildings.

Action 31.c Adopt promptly, modify where necessary, and enforce the latest Uniform Building Code, Uniform Code for Building Conservation, and Historic Building Code.

Action 31.d Continue to update the City's Emergency Preparedness Plan.

Floods. In Mountain View's early years as an agricultural town, people often looked at flooding as an asset because the need for water to irrigate crops outweighed the damage caused by floodwaters. But, as development increased, people became more concerned about the property damage caused by floodwaters. Between 1950

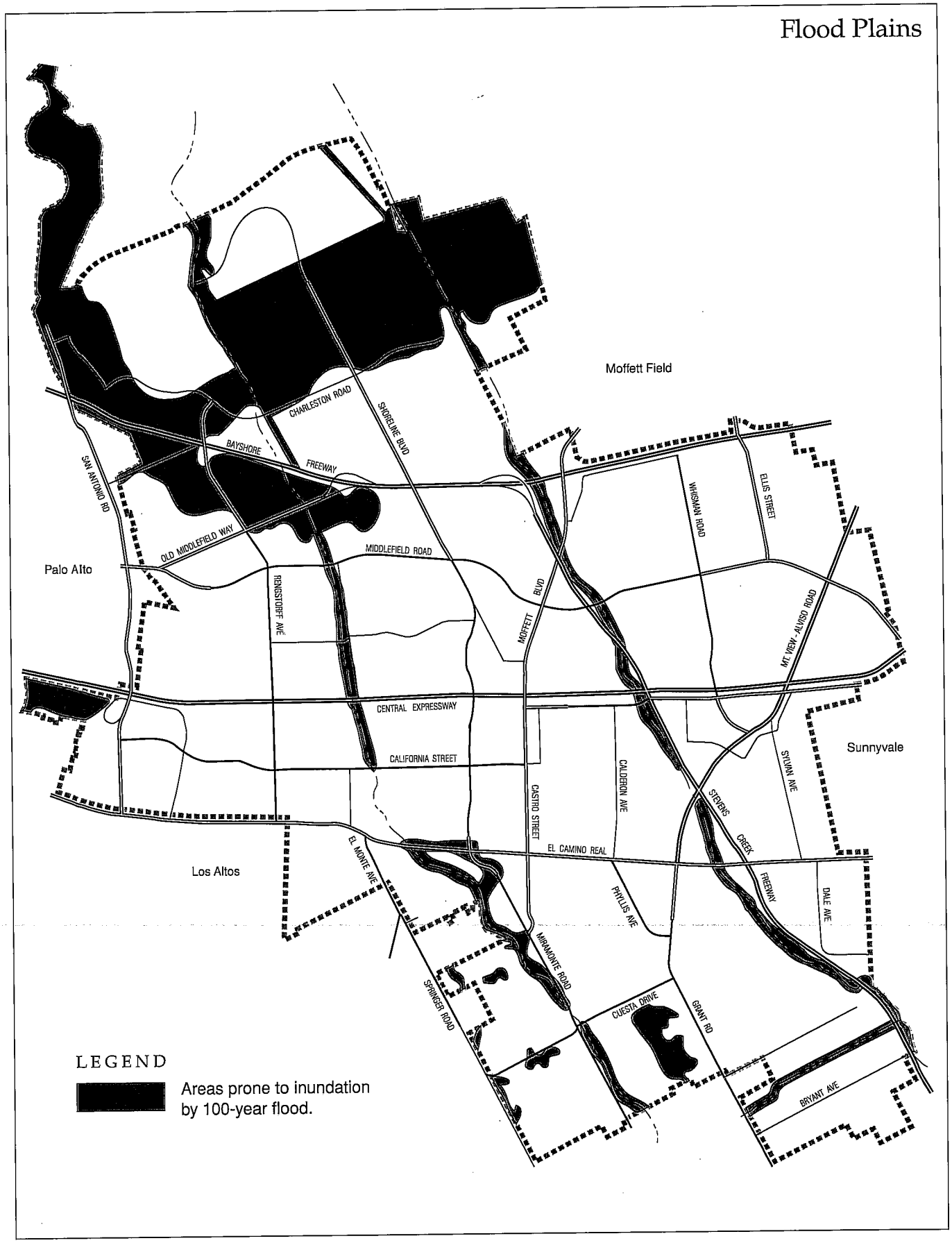


Figure 10. Flood Plains.

and 1970, water retention and diversion facilities were built, including the Stevens Creek Reservoir, the Stevens Creek-Permanente Cross Channel, Shoreline's levees, and much of the City's storm drainage system. These significantly reduced the amount of land threatened by floods.

Mountain View's 1979 Drainage and Flood Control Ordinance further reduces risks associated with floods. It requires that the lowest habitable floor is above flood elevation, that new construction is anchored so that it will not float, that building materials are resistant to flood damage, that utilities are designed to withstand floods, and that materials and equipment are properly stored. These standards apply to areas of special flood hazards designated by the Federal Insurance Administration and illustrated on the city's Flood Insurance Rate Map. The City imposes special conditions on appropriate projects to enforce the ordinance as part of the building development process.

Policy 32. Protect residents and their property from flood hazards.

Action 32.a Work with the Federal Emergency Management Agency and the Santa Clara Valley Water District to update the city's Flood Insurance Rate Maps.

Action 32.b Distribute flood maps to educate residents and developers about flood hazards in the community.

Action 32.c Enforce the City's Drainage and Flood Control Ordinance.

Action 32.d Coordinate with the Santa Clara Valley Water District to maintain and improve flood control programs and facilities.

Action 32.e Analyze the City's storm drain system for possible inadequacies and, if necessary, develop Capital Improvement Programs to improve the system.

Evacuation Routes. Evacuation routes can be airports, roadways, waterways, or trails that allow for the orderly removal of people and possessions from an endangered area. California law requires that each city discuss and map its emergency evacuation routes in the Safety Element of its general plan.

Moffett Naval Air Station was established in 1931 as a home port for the Navy's dirigible program, and is now the center of antisubmarine patrol in the Pacific Ocean. Moffett plays a key role in local disaster planning although there are no formal agreements between it and local or State emergency response agencies. Moffett provided an indispensable service after the magnitude 7.1 Loma Prieta Earthquake in October, 1989, when it coordinated airfield services for disaster relief materials. As of 1992, the federal government has decided to close the Naval Air Station at Moffett Field, but will continue to use the airfield for NASA and other federal agencies.

Roadways are the fastest way to move people from an endangered area. In Mountain View, El Camino Real and Central Expressway are the primary east-west evacuation corridors. These arterials are accessible to most of the city, especially to neighborhoods in central and southern Mountain View. El Camino is more structurally sound than Central Expressway because it has fewer overpasses. Primary north-south evacuation routes are Grant Road and State Route 237 on the eastern side of the city, Miramonte Avenue and Shoreline Boulevard in the central section, and San Antonio Road on the west. These are all surface streets with very few elevated sections or overpasses. The number of lanes and average widths of these roads and their evacuation routes are presented in Figure 11 below.

U.S. Highway 101, the Bayshore Freeway, runs through Mountain View from east to west but has many elevated sections and overpasses that could collapse in an earthquake. It is also subject to flooding in the 100-year Flood. State Route 85—the Stevens Creek Freeway—also runs north and south through Mountain View, but like the Bayshore Freeway, is at risk of flooding and of ground failure in an earthquake. For these reasons, U.S. 101 and State Route 85 are not part of Mountain View's evacuation route system. (See Figure 12, Evacuation Routes Map.)

Policy 33. Plan for the orderly evacuation of people and their possessions.

Action 33.a Involve Moffett Field in the City's emergency preparedness planning.

Action 33.b Train and equip emergency personnel in evacuation procedures.

Action 33.c Publicize the City's evacuation routes and other aspects of its Emergency Preparedness Plan.

Evacuation Routes

Roadway	Number of Lanes	Average Width
El Camino Real	6	100 ft.
Central Expressway	4	100 ft.
Grant Road	4	70 ft.
State Route 237	4	80 ft.
Miramonte Avenue	4	65 ft.
Shoreline Boulevard	4	80 ft.
San Antonio Road	6	100 ft.

Figure 11. Evacuation Routes List.

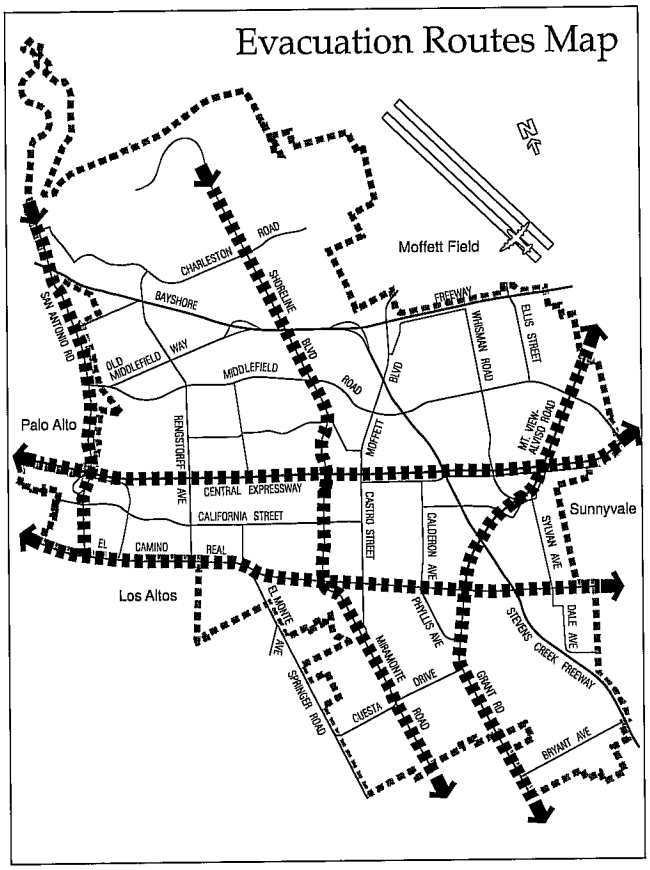


Figure 12. Evacuation Routes Map.

Fire

The mission of Mountain View's Fire Department is to prevent deaths, injuries, property losses, and environmental damages from fire, natural disasters, and uncontrolled release of toxic substances. The Fire Department responds to requests for fire protection services from four fire stations located throughout the city. These services commonly involve fire prevention, fire suppression, emergency medical care, and hazardous materials code enforcement and response.

Fire Department Service Calls

The Mountain View Fire Department responded to 4,198 service requests during the 1990-1991 fiscal year. These calls consisted of 12 chemical emergencies; 136 dangerous situations, such as downed power lines and gas leaks; 248 fires, 69 of which were residential; 369 non-emergency calls, such as trapped pets and domestic assistance; 379 false alarms, 674 good intent calls, in which someone reported what looked like an emergency but turned out to be a controlled situation; 2,377 rescue calls, and three calls for other services. About 57 percent of service requests were medical related.

Mountain View's 1969 Fire Protection Master Plan allocates these services cost-effectively. One of its underlying philosophies is that automatic fire protection along with fire prevention activities can achieve a higher level of fire safety while reducing the cost. Fire protection that only reacts to fires in buildings with minimal Building and Fire Code requirements produces excessive fire losses. Fire suppression services are increasingly expensive to provide. The Master Plan specifies a series of fire protection goals, objectives, and programs to guide code development and enforcement, and forms the basis for a management-by-results system.

GOAL **M**

Protect residents and the environment from fire and hazardous materials.

Fire Prevention. The Uniform Fire Code establishes maximum risk levels associated with fire hazards and identifies resources needed to deal with them. The Code emphasizes fire prevention, including the use of building materials that do not burn, automatic alarms and sprinkler systems, a thorough building inspection program, and evaluation of building plans as part of the Site Plan and Architectural Review process. Mountain View has added requirements for automatic sprinklers in new buildings of 5,000 square feet or larger. This balances the responsibility for fire protection between government and the property owner. The Department teaches a school safety program for students in kindergarten through the fifth grade, runs a juvenile fire-setters counseling program, gives seminars to private industry, and conducts general community outreach. The fire prevention program has become so successful that Mountain View has an insurance rating of "two" from the Insurance Service Organization of California. That scale runs from one to 10, with "one" the best.

Policy 34. Minimize property damage, injuries, and loss of life due to fire.

Firefighters practice their skills.

Action 34.a Maintain a continuing program of inspections and site plan review.

Action 34.b Improve the effectiveness of fire prevention programs through continued public education and code enforcement.

Action 34.c Use educational outreach programs to create a community consciousness of the need to improve fire safety.

Action 34.d Emphasize private responsibilities for fire prevention and protection in community awareness programs.

Action 34.e Adopt and enforce proactive fire and life-safety codes that require property owners to share in the responsibility for fire protection services.

Action 34.f Review development plans to be sure there is adequate access for emergency vehicles.

Action 34.g Develop weed abatement programs that reduce the risk of fire while maintaining habitat value for native plants and animals.

Fire Suppression. Levels of "acceptable risk" are defined in the Fire Protection Master Plan to help the Fire Department find the number of firefighters and the amount of equipment it needs to meet its fire safety responsibilities. An acceptable risk is a tolerable exposure to a hazard, given the cost of protective services. Different levels of acceptable risk may be assigned according to the potential danger and the importance of threatened areas. For example, the levels may range from "near zero" for schools and hospitals to "moderate" for open space and low-intensity warehouses. The City has located four fire stations so that firefighters can usually arrive at the scene of an emergency in less than four minutes. This average response time was improved in 1989 with the installation of a computer-aided dispatch system which constantly monitors the status and location of emergency personnel. In 1990, the City further enhanced its efficiency in responding to emergencies by replacing its entire fleet of fire trucks, adding a new ladder truck, and controlling signal lights at street intersections. For fires that exceed local capability, Mountain View is a member of the county-wide and State-wide mutual aid programs and automatically shares fire suppression responsibilities with the Palo Alto Fire Department.

Policy 35. Maintain personnel and equipment necessary to extinguish fires.

Action 35.a Continue to evaluate and update the Fire Protection Master plan. That plan establishes publicly defined acceptable risks.

Action 35.b Require that buildings in the city provide specialized fire protection systems that reduce the risk of fire to acceptable standards.

Action 35.c Maintain enough firefighters per shift to meet publicly accepted levels of risk and response expectations.

Action 35.d Continue to participate in county-wide and State-wide mutual aid and automatic aid programs with neighboring cities.

Action 35.e Continue to cooperate with neighboring cities to improve efficiency and cost savings in support services.

Action 35.f Maintain a water supply and water pressure than can meet potential firefighting demands.

Emergency Medical Care. The Emergency Communications Division of the Fire Department is responsible for answering all police, fire, and medical aid calls, including 911 telephone service for people with hearing and speech impairment. During fiscal year 1990-91, Communications dispatched 2,392 calls for emergency medical aid and rescue services. Firefighters are often the first to respond to medical emergencies involving heart attacks, falls, traffic accidents, diabetic and allergic reactions, drug overdoses, and many others. All firefighters are trained to the level of an Emergency Medical Technician I and can provide basic medical care to stabilize patients until paramedics arrive. In March 1990, firefighters began carrying automatic heart defibrillators which dramatically increase the survival rate for heart attack victims. All Mountain View firefighters are trained in emergency medical defibrillation.

Policy 36. Respond quickly and competently to rescue and medical emergencies.

Action 36.a Maintain certification of firefighters as Emergency Medical Technicians.

Action 36.b Provide emergency medical defibrillation for people suffering cardiac arrest.

Action 36.c Equip firefighters with state-of-the-art medical and rescue equipment as needed to meet demand for services.

Hazardous Materials. California's economic well-being and quality of life depend, in many ways, on the production and use of manufactured goods. However, manufacturing often requires large volumes of chemicals and generates hazardous waste. Hazardous waste ranges from familiar substances, such as solvents and waste oil,

to sophisticated compounds such as polychlorinated biphenyls and dioxins. More than 10 million tons of hazardous waste are generated in California each year.

Mountain View adopted a Hazardous Materials Storage Ordinance in 1983 to evaluate and manage local chemical and hazardous waste issues properly. The ordinance requires users of hazardous chemicals to get a permit from the City. To get this permit, users must show that their storage, handling, and use of hazardous materials is up to the City Code.

The California Legislature passed AB 2984 in 1986 to manage hazardous materials throughout the state. The law requires each county to develop a Hazardous Waste Management Plan for review and approval by the Department of Health Services. Another bill, SB 477, requires that within 180 days of the plan's approval, cities must either adopt the County plan by reference in their general plans, adopt the plan by local ordinance, or adopt their own plan. Since Mountain View has long recognized the need to establish proper chemical management procedures and has consistently endorsed the County's hazardous waste management efforts, the City is adopting the County Hazardous Waste Management Plan by reference.

Mountain View's Fire Department has created a Hazardous Materials Code Enforcement Division to help prevent the uncontrolled release of toxic substances into the environment, and a Hazardous Materials Response Team to contend with those that do occur. The Code Enforcement Division is responsible for enforcing the City's Hazardous Materials Storage Ordinance, processing hazardous materials use and storage permits, enforcing the Toxic Gas Ordinance, conducting inspections of high-hazard toxic materials facilities, and educating local businesses on proper storage and handling of hazardous materials. The Response Team responds to uncontrolled releases, identifies the category of chemicals involved, contains the spill if possible, oversees cleanup activities, and makes sure that the site is safe to be occupied again.

Policy 37. Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials.

Action 37.a Support Santa Clara County in carrying out and enforcing the Hazardous Waste Management Plan.

Action 37.b Revise the Zoning Ordinance as required to comply with the Hazardous Waste Management Plan.

Action 37.c Continue to update and enforce local ordinances regulating the permitted use and storage of hazardous gases, liquids, and solids.

Action 37.d Strengthen construction requirements where hazardous materials are stored or used.

Action 37.e Continue to make sure that underground storage tanks containing hazardous materials are properly installed, used, and removed.

Action 37.f Provide continuing training for hazardous materials enforcement and response personnel.

Action 37.g Conduct inspections of all industrial facilities using or storing hazardous materials.

Clean-up Sites. Mountain View has some large industrial sites and small properties that have been contaminated by toxic materials. The City's environmental assessment of new development requires soil samples if contamination is suspected. Contamination that exceeds State standards requires cleanup before development or reuse of the site. Cleanup is a long and complicated process monitored through the State Department of Health Services. On small residential infill sites, contamination often has been caused by the property owners' use of pesticides for small personal orchards or gardens. The City is working with the Department of Health Services to find simplified procedures for these smaller sites.

Policy 38. Ensure that hazardous materials are cleaned up before a property is developed or redeveloped.

Action 38.a Require an assessment of the past use of hazardous materials on proposed development sites.

Action 38.b Require that soils are analyzed for all new residential developments where there is a history of industry or agricultural land use.

Action 38.c Work with the State Department of Health Services to establish simplified procedures for small residential projects with limited contamination.

Police

Police officers are among the most visible representatives of City government and largely influence public attitude toward the quality of City services. They are responsible for maintaining the quality of life by protect-

ing people and property, promoting community order through crime prevention and educational programs, apprehending and prosecuting criminals, and regulating non-criminal activities.

GOAL N Reduce criminal activity and instill a feeling of safety and security in the community.

Community Services. Mountain View's neighborhoods, including its industrial and military areas, have their own subcultures, demographic characteristics, and individual identities. Their combined energies give character to the city, but they are not the only elements that do. A viable city is also marked by the interaction of residents, businesses, civic organizations, churches, schools, and government on issues that confront the entire community. The Police Department is an integral member of this partnership, and provides police services to each of these communities according to their particular needs.

Much of today's police work involves responding to various social problems including domestic disputes, alcoholism, and homelessness. In fact, 80 percent of police calls are requests for service, rather than responses to crime. Often these calls require police to help those who cannot care for themselves such as children, the elderly, and those with physical or mental handicaps. In these situations, police officers provide counseling and crisis intervention, and act as liaison to various social service agencies. When officers provide these community-oriented services, they clearly illustrate the support and service role of the Mountain View Police Department.

Policy 39. Provide superior community-oriented services.

Action 39.a Develop a customer orientation in providing services to the community.

Action 39.b Continue programs such as "Neighborhood Watch" and "Ride Along," which reflect community values, and increase residents' involvement in, and ownership of, police operations.

Action 39.c Direct services and outreach programs toward youths in the community.

Action 39.d Act as liaison to social service agencies that give support to physically or mentally disadvantaged persons.

Action 39.e Assist in preparing and carrying out Emergency Preparedness Plans.

Community Order. It is difficult to measure crime's effect on society, but clearly crime is a burden. Crime affects people in many different ways. People who fear crime cannot move around as freely. Crime victims suffer physically and emotionally and are less productive at work. Crime is extremely expensive, causing insurance cost to rise, making consumer goods more expensive, and making the public pay for maintaining public police departments and jails, hiring private security, and upholding the entire judicial system.

Police Service Calls

In 1990, the Police Department responded to approximately 42,750 incidents, wrote about 33,400 police reports, and handed out 21,200 traffic and parking citations. The Department investigated about 250 violent crimes and roughly 7,900 property crimes and made 4,670 arrests.

There are many different causes of crime, requiring many different approaches. Continuing crime prevention programs in Mountain View include Neighborhood Watch, educational outreach, juvenile counseling services, referral services, mediation for troubled youths, and data tracking. Use of new data systems help the Mountain View police identify crime areas, traffic problems, service requirements, and many other neighborhood characteristics. The Department assigns officers and provides services to maintain community order and public safety based on this information.

Policy 40. Provide services and personnel necessary to maintain community order and public safety.

Action 40.a Maintain a force sufficiently staffed and deployed to sustain a four-minute maximum emergency response 70 percent of the time.

Action 40.b Continue programs such as "Neighborhood Watch" and "Merchant Alert," which improve communication with neighborhood organizations and community merchants.

Action 40.c Identify changes to current laws and ordinances or create new ones to help carry out crime prevention strategies.

Action 40.d Review and modify proposed residential developments to create a sense of ownership and belonging among the residents.

Action 40.e Require approaches to crime prevention to be designed into new buildings.

NOISE

The Noise Element's Policies and Actions are aimed at controlling and diminishing environmental noise and at protecting residents from being exposed to too much noise. The State requires that the Noise Element must provide information on the noise environment, develop strategies for reducing excessive noise exposure, protect regions of the city that are not troubled by noise and uses that are "noise sensitive," and use the Ldn noise contours to comply with the State Noise Insulation Standards.

Sound is a pressure variation that a human ear can detect. Sound pressure can vary both in intensity, or loudness, and in the frequency of the pressure changes, or tone. Noise is unwanted sound, so the difference between sound and noise is frequently subjective. For instance, the sound of a P-3 Orion aircraft may be music to its Navy pilot, but noise to many people who live in its flight path.

Sound intensity is measured on a decibel scale. Sounds as faint as zero decibels are barely audible, and then only when there are no other louder sounds. Ordinary conversation is about 60 decibels. People who live in Mountain View are most often exposed to sounds ranging from 30 to 85 decibels. People can tolerate some noise, but brief exposure to intense sounds of 120 to 140 decibels can threaten physical or psychological well-being. (See Figure 13, Typical Noise Levels.)

The City has established noise guidelines for each of its land use categories and has assigned appropriate levels for indoor and outdoor activities. (See Figure 14, Noise Acceptability Guidelines). The guidelines are based on sound levels that do not interfere with people's activities or threaten their well-being. For example, noise levels measured outdoors at a public pool are normally acceptable up to 55 decibels; however, the pool's interior administrative offices should be quieter and not exceed 45 decibels. Noise levels higher than these standards may require methods of lessening the effect of the noise, such as perimeter sound walls or double-paned windows.

Mountain View's noise guidelines are expressed in terms of "dB(A)Ldn." This is a measurement of the intensity of sound (dB), weighted by frequency to correspond to the way humans perceive sound (A), and averaged over the period during which the measurement was taken; Ld means daytime measurements, and Ln means nighttime measurements. The dB(A)Ldn measurement assigns an automatic 10-decibel penalty to nighttime measurements, so there is no need to have separate standards for day and night. The dB(A)Ldn measurement is very similar to the community noise equivalent level (CNEL) measurement system used in some building code requirements. In both systems, the energy of sound is measured on a logarithmic scale, meaning that an increase of 10 decibels equals a doubling of noise levels.

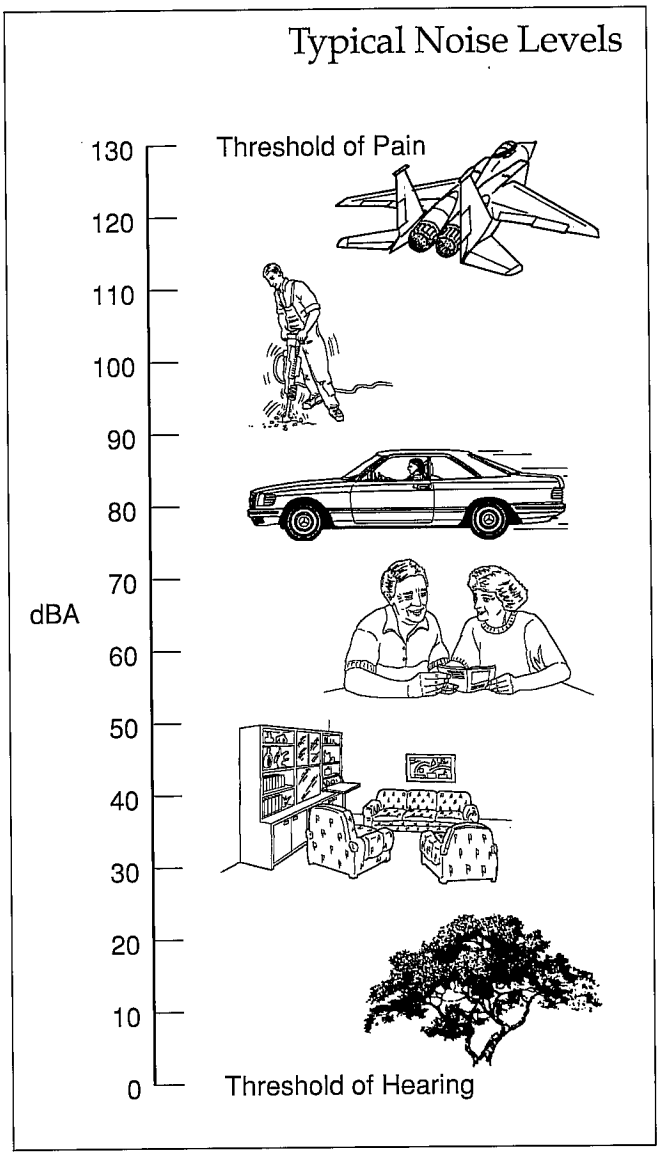


Figure 13. Typical Noise Levels.

Noise Source

Noise is often divided between stationary and motor vehicle sources. Both contribute to the city's noise levels, but in different ways. Stationary sources tend to be associated with fixed machinery in industrial districts but also include schools, athletic fields, day care centers, and music concerts. Motor vehicle noise is most often associated with rush-hour traffic, but also includes airplanes and freight trains. Mountain View differentiates between stationary and motor vehicle noise and has developed separate strategies to reduce their effects. A Noise Contour Map showing noise levels attributed to both of these sources is included as Figure 15, page 139.

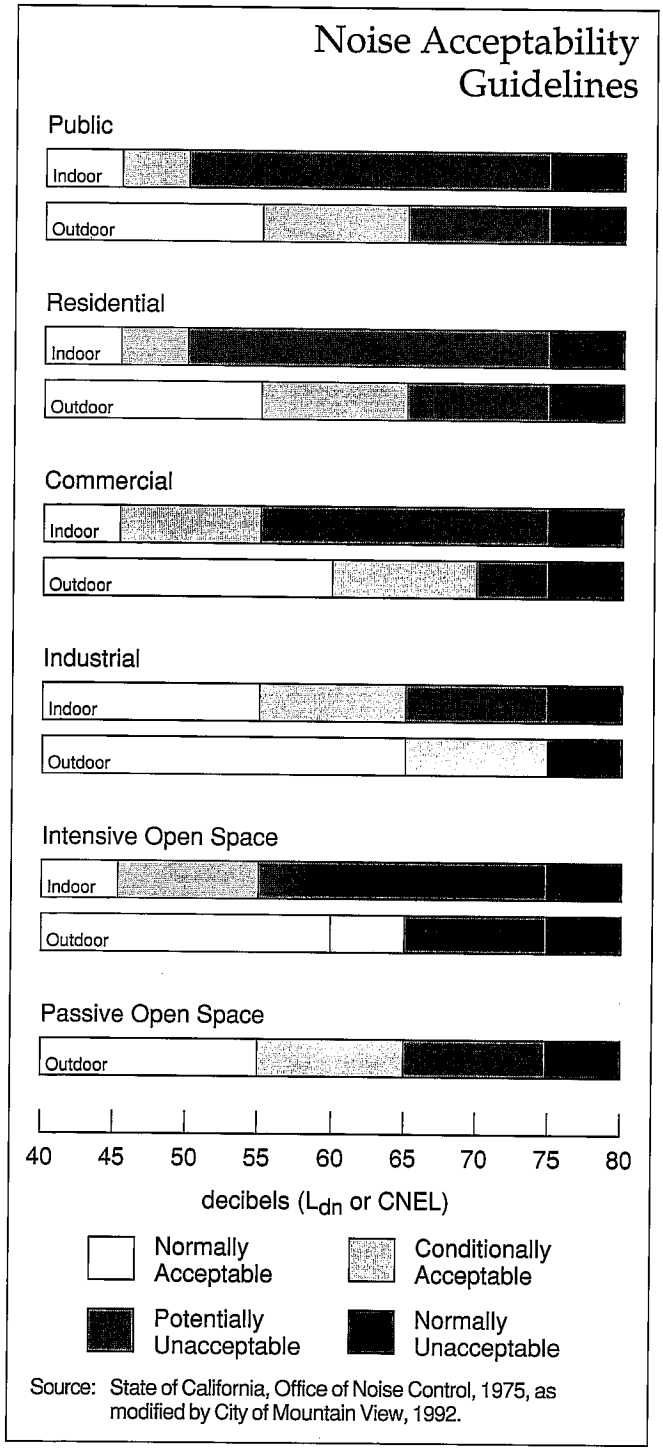


Figure 14. Noise Acceptability Guidelines.

GOAL

O **Reduce noise levels at the source.**

Stationary Noise Sources. Fixed equipment such as air conditioners, pool filters, compressors, and industrial machinery can become noisy distractions to people living near them. These noise sources tend to be intermittent, but can occur at all hours of the day and night. The City's noise thresholds are designed to prevent these situations by establishing measurable criteria for architects and builders that guide them in planning the site and choosing building materials. Enforcement of the thresholds is built into both the environmental review process, using the California Environmental Quality Act and the development review process. In both cases, City staff reviews development applications and requires proper site design and construction methods to keep exterior noise levels to a minimum and prevent the transmission of noise from outdoor sources to indoor receptors.

The City has also enacted a Stationary Equipment Noise Ordinance that restricts fixed equipment from exceeding 55 decibels when measured at any location on a neighboring residential property. Any plans submitted for a building permit must have documentation that proposed equipment meets this standard.

Policy 41. Restrict noise levels coming from stationary sources.

Action 41.a Maintain noise thresholds for each land use category.

Action 41.b Use CEQA and the development review processes to restrict new development from exceeding its noise threshold.

Action 41.c Enforce the City's Stationary Equipment Noise Ordinance.

Action 41.d Encourage NASA/Ames Research Center to reduce and control noise produced by its wind tunnels.

Motor Vehicle Noise. In 1990, noise levels throughout the city were calculated according to the Ldn noise measurement system. (See Figure 15, Noise Contour Map.) As in most cities, vehicles on freeways and expressways were found to be the primary noise sources in Mountain View. Noise levels of 72 to 76 decibels were measured on Highway 101, 69 to 74 decibels on Route 85, 65 to 74 decibels on Route 237, and 64 to 70 decibels on Central Expressway. High levels of noise on these freeways and expressways is generated by high levels of traffic. Some of the noise on Central Expressway is caused by the more than 50 commuter trains and freight trains that travel through Mountain View every day. There is more information on this topic in the Circulation Chapter.

State and federal legislation set individual vehicle noise standards. Cities can enforce these standards, but they cannot establish stricter standards. Cities can only prohibit engines without suitable mufflers and sound-am-

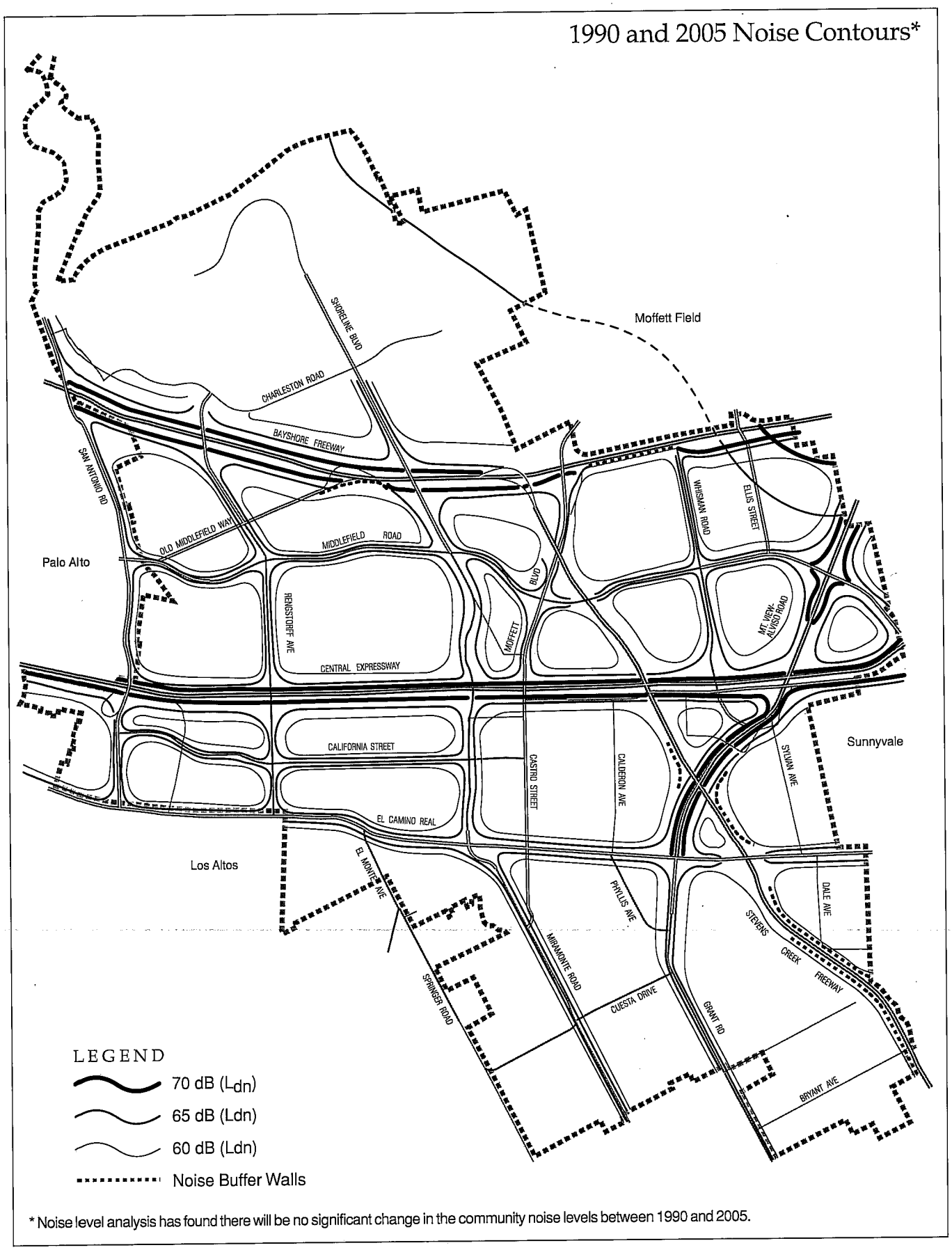
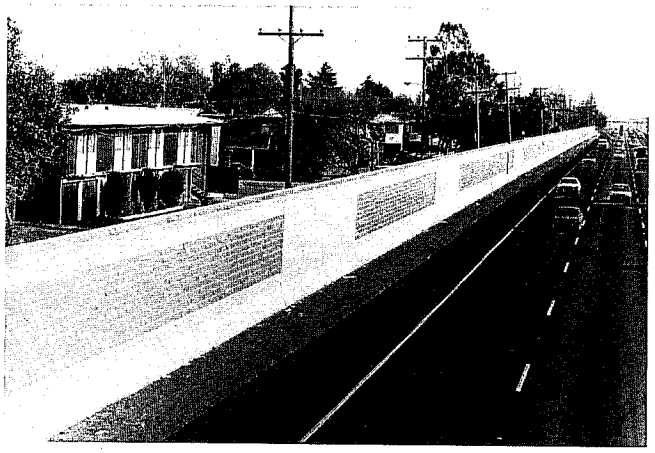


Figure 15. Noise Contours, 1990 and 2005.



Sound walls protect residential areas from noise.

plifying equipment such as speakers, horns, and sirens. Mountain View restricts vehicles equipped with sound amplifying equipment in the City Code and vehicles with illegal mufflers based on the State Vehicle Code. The City supports State and federal legislation to reduce motor vehicle noise.

Cities can also control motor vehicle noise indirectly by focusing on the path and receiver of noise. For example, the City plans to use traffic management techniques in the Old Mountain View neighborhood to redirect cars away from local streets to larger arterials. The City also worked with the State and the County Transit Authority to install sound walls between freeways and residential neighborhoods. The sound walls were funded by the "Measure A" half-cent sales tax initiative, approved by Santa Clara County voters in 1984. There is a complete description of sound walls, with Actions addressing their use, in the "Design and Environmental Effects of Transportation" section of the Circulation Chapter.

Policy 42. Reduce the effects of vehicular noise.

Action 42.a Identify roadways that contribute to high noise levels on neighboring properties and lessen these effects with land use plans and new developments.

Action 42.b Use traffic management techniques, such as rerouting traffic out of residential neighborhoods, lowering speed limits, and reducing the number of stopping points.

Action 42.c Support State and federal legislation regulating noise produced by motor vehicles.

Action 42.d Continue to enforce State muffler and exhaust laws.

Action 42.e Continue to work with Moffett Field and local airport officials to reduce aircraft noise further.

Action 42.f Seek to reduce the effects of the noise from commuter and freight trains that travel through Mountain View.

Transmission and Reception

There are three ways to regulate noise. The first reduces noise at the source. Noise reduction strategies, discussed earlier in the Plan, are generally the most effective for an entire community. The second obstructs the path of transmission of noise. The third insulates or moves the person who hears the noise. These last two methods can be very beneficial in limiting the area affected by unavoidable noise sources.

GOAL **P** **Protect people from the intrusion of noise.**

Noise Path. Cities can use sound barriers to control and interrupt the path of noise from source to receiver. A noise barrier can be any solid structure high and dense enough to reflect, rather than transmit, sound waves. Sound barriers often include masonry walls, earth berms, natural topographic features, and out-buildings such as garages and sheds. Combining one or more of these barriers with trees and other landscaping is probably the most effective type of sound barrier. Landscaping is a pleasing visual screen which softens the appearance of sound barriers and reduces the perception of noise by preventing people from seeing the source, but landscaping alone does not significantly reduce the amount of noise.

Noise levels also can be reduced through proper site planning and architectural design. For instance, residential buildings can be placed on the site so that a corner, rather than a flat wall, faces the noise source. This helps disperse sound waves and lessen their effect. Similarly, pools, play areas, parking lots, and other noise locations should not be enclosed by residential buildings, which trap the noise and amplify its effect.

Policy 43. Control the path of noise from source to receiver.

Action 43.a Use noise barriers such as sound walls, berms, and garages to interrupt the path of noise from roadways and other sources.

Action 43.b Use the development review process to place new buildings in a way that reduces noise levels.

Action 43.c Allow Planned Unit Developments where buildings are clustered and the resulting open space is used to distance residences from the noise source.

Action 43.d Continue to enforce Title 24 of the California Administrative Code noise insulation requirements for new or significantly remodeled structures.

Noise Receiver. Sound is what humans perceive it to be, no matter how sound levels are mechanically measured and weighted. Human psychology and a listener's experiences affect how people hear sound. People can get used to fairly loud sounds, especially if the sounds are regular and steady, but can be disturbed by an unusual sound, even a fairly quiet one, such as a car backfiring on the street. Perception of noise is also affected by how long a person listens to it. Schools, convalescent hospitals, and other land uses with fixed populations are often more sensitive to the noise environment and require special consideration. These projects are typically approved through the Conditional Use Permit process, which requires the developer to take special care in their design and construction.

Policy 44. Reduce the harmful effects of noise on people.

Action 44.a Identify sensitive noise receptors in the community.

Action 44.b Use zoning to separate noise-sensitive land uses from noise sources.

Action 44.c Respond to noise complaints by monitoring the source, suggesting noise mitigation measures, and using code enforcement options when necessary.

EPILOGUE

The 1992 General Plan is the result of a process designed to respond to the concerns and visions of the community. This process identified important community issues, analyzed current and future trends affecting these topics, and developed Goals, Policies, and Actions to guide future decisions. The community has been involved at every step of the process. Over 600 individuals from the community participated in community surveys, the issues workshop, informal public forums, and formal public hearings. Staff from every City department, particularly the Advance Planning staff, helped write the background reports and draft text of the General Plan. Their work was assisted by a team of consultants that provided technical analysis and advice throughout the process.

The Environmental Planning Commission spent three years developing the General Plan. It evaluated the 1982 Plan to find how it influenced today's Mountain View, and how that Plan needed to be changed to reflect current community ideals. The Planning Commission studied each technical background report and, beginning with staff's draft of the document, sculpted the text and each Goal, Policy, and Action in this 1992 General Plan.

The City Council reviewed and approved the progress on the General Plan at several stages of the process. The Council relied on the Planning Commission to conduct the detailed review of information and to develop the basic programs for dealing with the General Plan issues. The Council then reviewed the Commission draft document, modified it where appropriate, and adopted the General Plan as the official planning policy of the City.

The General Plan is not a static document. It is designed to be reviewed regularly to determine how it is being carried out and whether the Plan continues to reflect the community's consensus for the future. Changes will be made to the document to maintain its accuracy and usefulness as a policy guide. These changes will need to maintain the standards of comprehensiveness, consistency, and long-range vision of the current Plan. By regularly reviewing the Plan and by evaluating changes by the same standard of completeness as was used in creating this document, the General Plan will be a dynamic and reliable guide for Mountain View's future. The community at large will continue to be a vital part of this ongoing process of building on the past and aspiring to the future.

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Library

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Finance

Police

Utilities

Community Services