

CITY OF AUBURN GENERAL PLAN

Prepared By:

**City of Auburn General Plan Citizens Advisory Committee
Auburn Community Development Department
Harland Bartholomew and Associates
Brown-Buntin Associates
Resource Conservation District**

November 1993

CITY OF AUBURN

RESOLUTION

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Special thanks to the Auburn Park Conservancy
for their efforts on the trails plan, to the Main Street Program
and to Harry Aho for the photographs

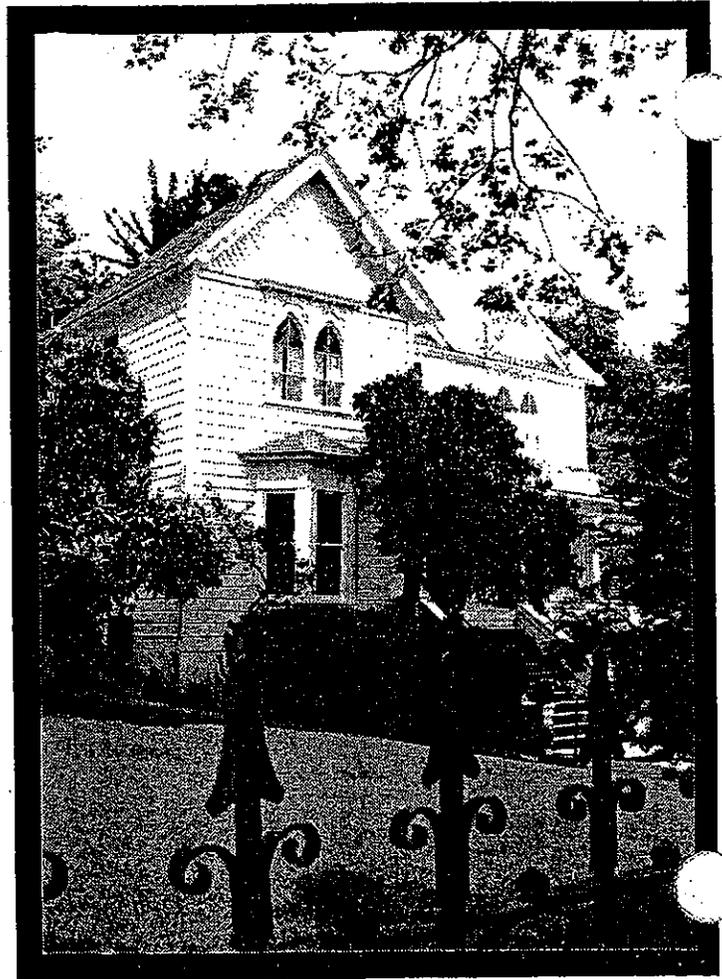
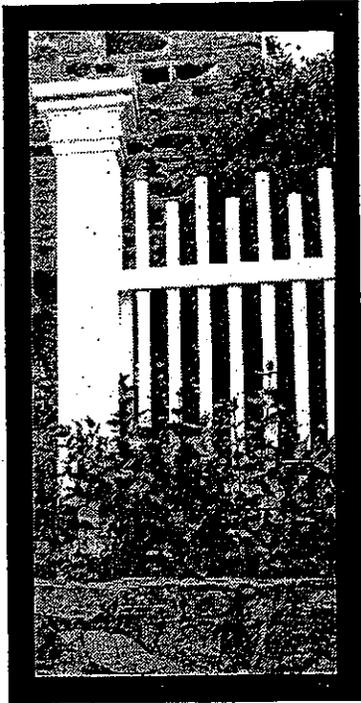
Auburn

The Setting

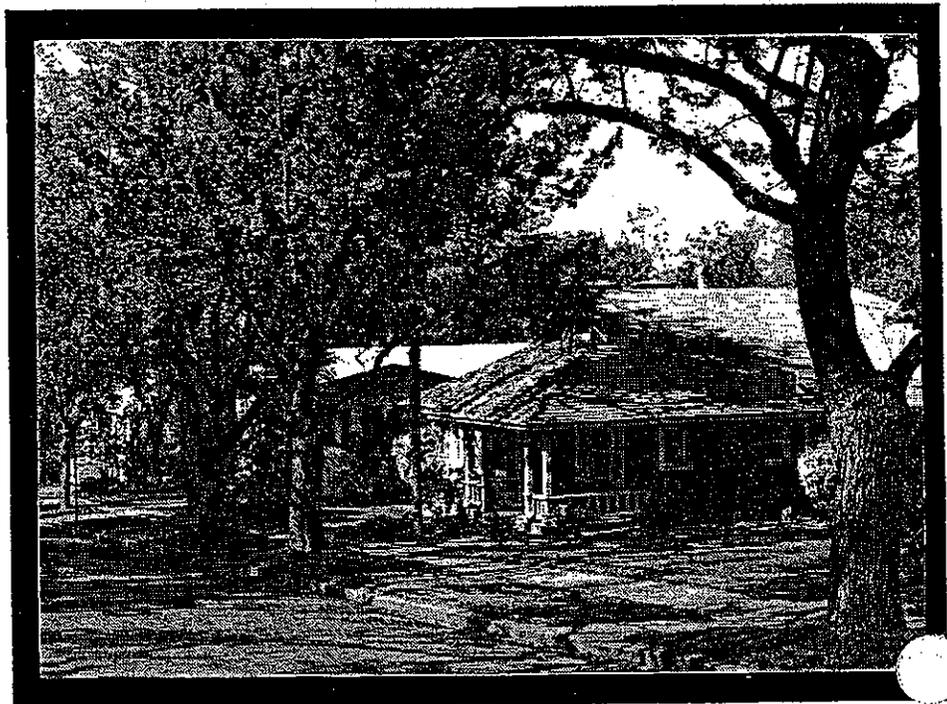


■ Police Station/Civic Center

Majestic views of the American River Canyon, vistas of the Sierra Nevada Mountains, wooded hills and ravines, and streams winding through small valleys characterize the site of the City of Auburn. From its origins in the 1850s, Auburn has emerged as a community of strong historic character, yet serves as a growing economic center.

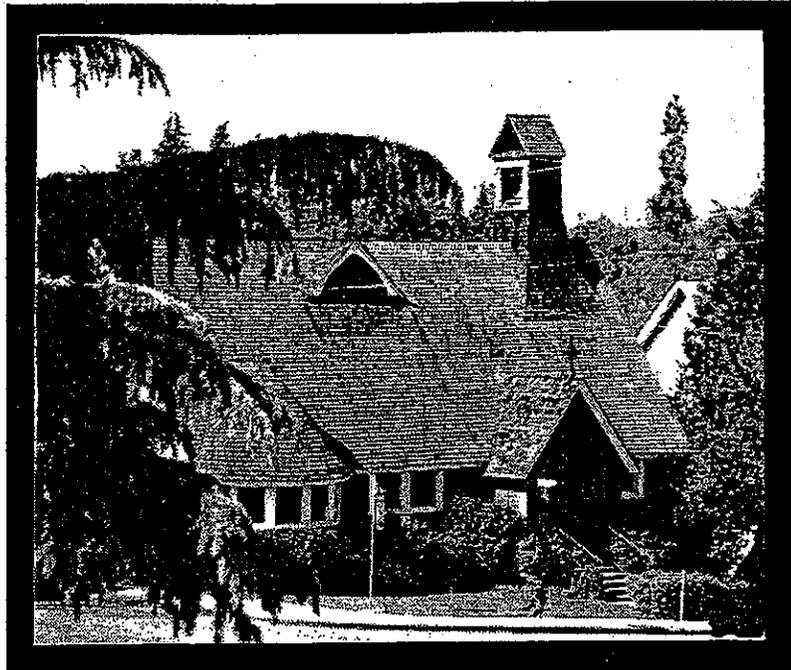


The older homes along tree-lined streets evoke memories of an earlier era. The styles of the late 1800s and early decades of the 1900s are represented. Modified Victorian, Eastlake, Queen Ann/Eastlake, Craftsman and California Bungalow architectural styles are found in the older areas of town.

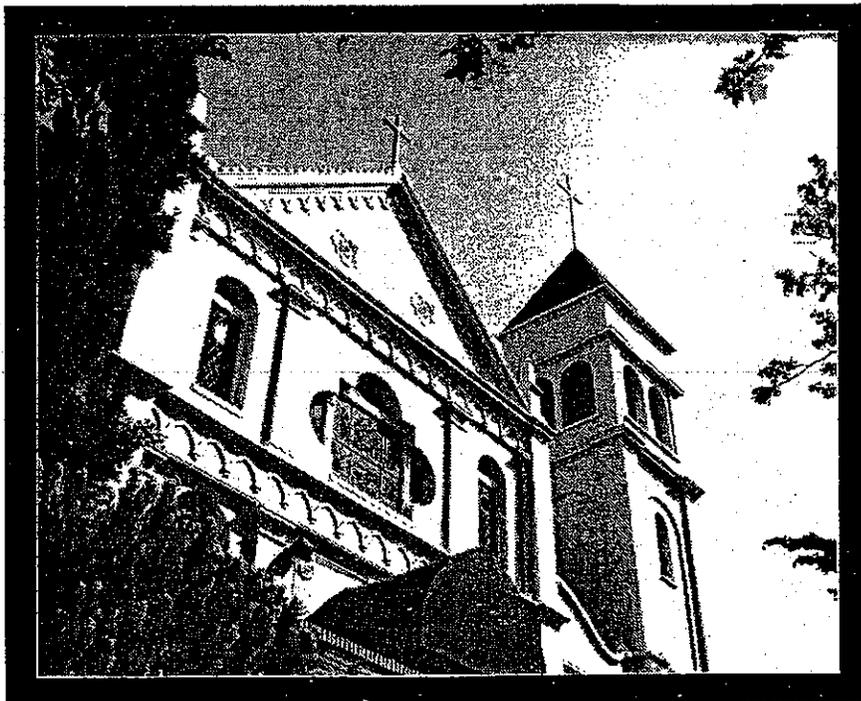


■ Auburn Neighborhoods

■ *Episcopal Church*

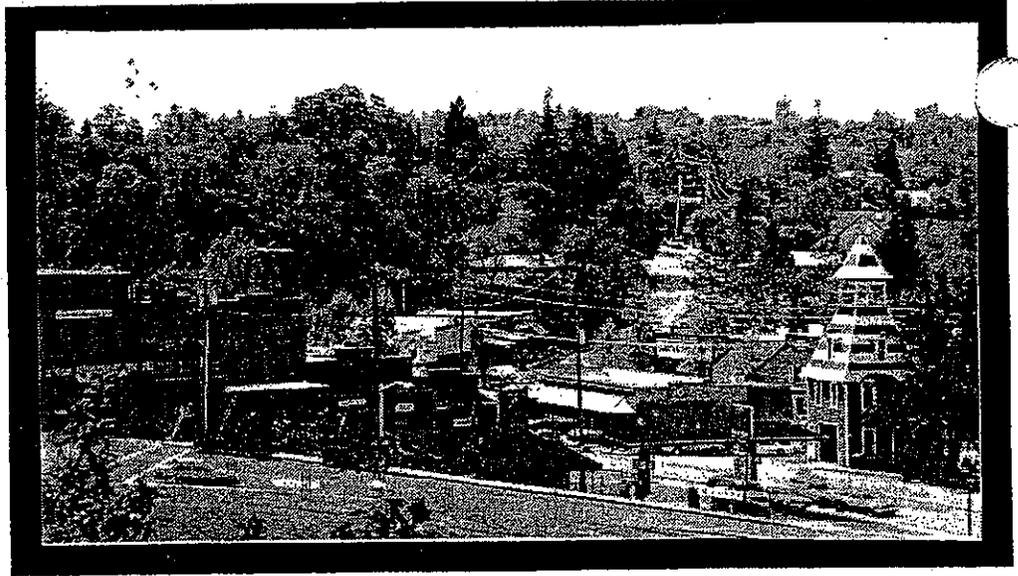


Landmark buildings from the past provide a sense of permanency—the County Courthouse rises over a part of the City as a sentinel of government and order. The old Episcopal Church on Orange Street, and the Catholic Church on Lincoln Way are reminders of more gentle times.

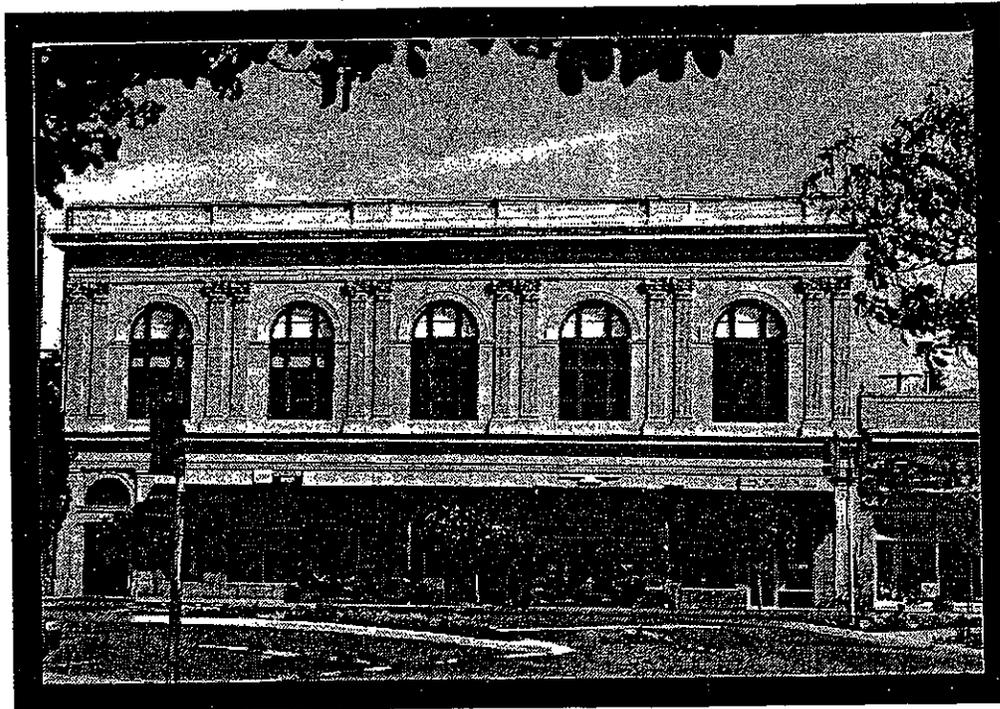


■ *Catholic Church*

■ Old Town



The Old Town shops and restaurants provide a focal point for Auburn's turn of the century character. Narrow sidewalks, old facades, the steep steps up to Lawyers Row, and the historic Courthouse, all provide a glimpse into the past.



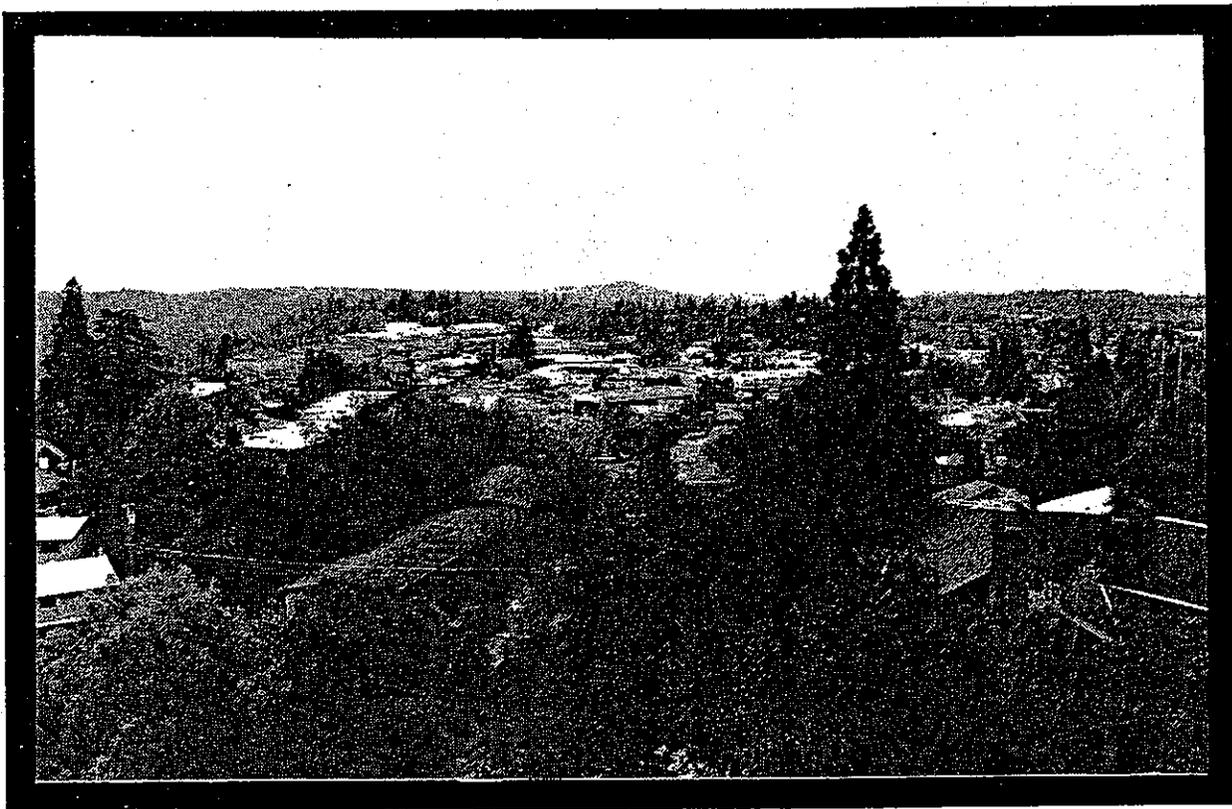
■ Masonic Hall

A visit to the center of downtown, at the intersection of Lincoln Way and High Street, is to experience a circa 1930 commercial place. The old Masonic Hall, mercantile buildings and small store fronts around this triangle intersection provide a backdrop of an earlier time.



■ Bernhard Museum

Images captured along Auburn-Folsom Road through the center of Auburn are those of trees, vistas and a winery. The Bernhard Home – now a museum – and its long white picket fence set the tone for this central area of Auburn. The tree-shaded areas of Recreation Park, the view to the north over the Auburn Ravine watershed, and houses on hills in the distance are all the essence of the area.



■ Auburn Ravine

The discovery of gold in 1848 in a ravine in the center of what is now Old Town led to the Anglo settlement in Auburn. The town gradually shifted from miners to lawyers, bankers and shopkeepers. Through the early decades of the 1900s, Auburn served as a place of growing commerce, a government seat, home of



■ Placer High School

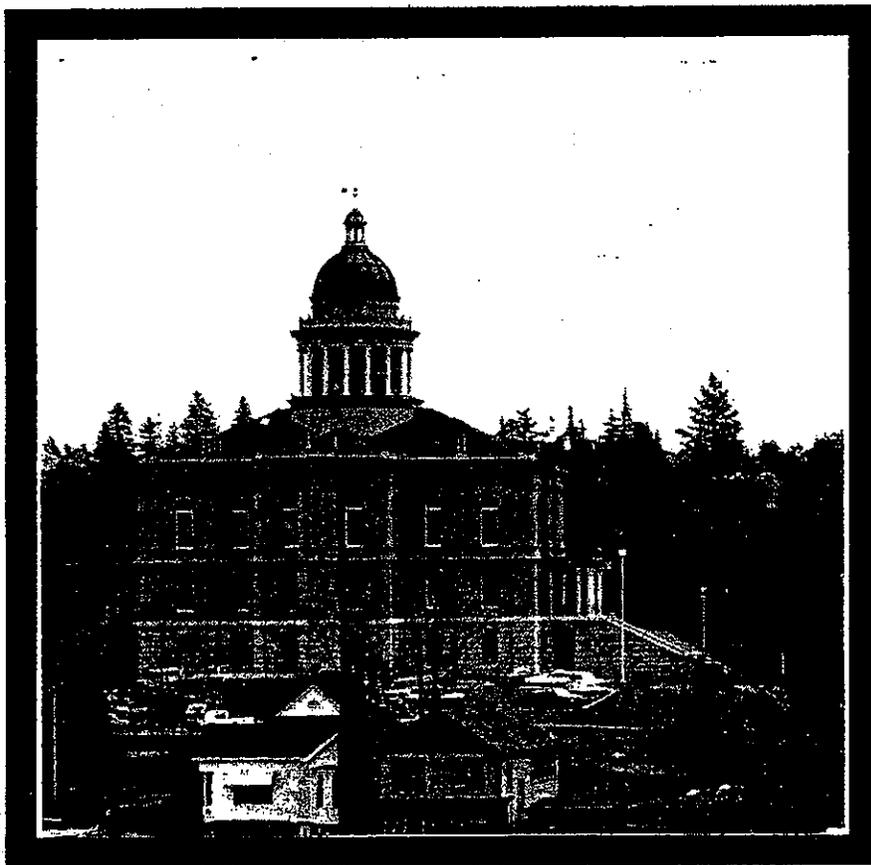
Placer High School and a service center for travelers. As the foothills began to be populated, services along the old Highway 40 (now Interstate 80) and Highway 49 expanded. The foothill environs of Auburn have grown steadily in the last few decades. Today, Auburn is the center of a large resident and commuter population.



■ Auburn Neighborhood

Highway 49, passing through the center of Auburn, is California's famous mother lode route. The Southern Pacific Railroad traverses the older area of Auburn from the northeast to southwest. Interstate 80 follows a generally similar route, replacing the old Lincoln Way. All three of these remain transcontinental routes.

Auburn offers its residents a quality environment above the fog with clean waters and wooded foothills. Occasional winter snowstorms provide a brief, but spectacular, panorama. One of California's most scenic rivers, the North Fork of the American River, spills out of the Sierra, passing along the edge of Auburn on its way to the Pacific.



■ County Courthouse

Auburn is not only an historic community – it is a unique town settled on rugged terrain. Auburn is indeed a sense of place as well as a fine town. The purpose of the General Plan presented in the following chapters is to lead this historic community into the twenty-first century, while preserving all of its graceful ambience, its unique character and its sense of history.

November 3, 1993

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The following documents are provided under separate cover and are available at the City of Auburn Community Development Department.

SUPPORTING DOCUMENTATION

1. Transportation Evaluation Criteria
2. Earthquake Intensity Description
3. Soil Types of the Auburn Area
4. Vegetative Habitats of the Auburn Area
5. Wildlife Habitats of the Auburn Area
6. Noise Analysis and Studies
7. City of Auburn Draft Noise Control Ordinance
8. General Plan Alternative Analysis Table
9. General Plan Compatible Zone Districts
10. Mineral Land Classification of the Auburn 15' Quadrangle, El Dorado and Placer Counties, California. 1984.
11. City of Auburn Historical Resources Inventory (CAHRI)
12. Dairy Road Drainage Study
13. Oldtown Drainage Study
14. Congestion Management Plan
15. Source Reduction and Recycling Element
16. Placer County Schools Present/Future Facility Needs
17. Auburn Bowman Rail Station Selection Study, October 1992
18. Resource Conservation District Constraints Maps
19. Auburn Fee Schedule
20. 169 Borland Avenue OSP

MASTER PLANS/SPECIFIC PLANS

Auburn Airport Master Plan
Auburn Airport Comprehensive Land Use Plan (CLUP)
Auburn Wastewater Treatment Plant Master Plan
Stormwater Management Manual
Auburn Recreation District Master Plan
Southwest Specific Plan
Auburn Transit Master Plan
Auburn Urban Development Authority Redevelopment Plan
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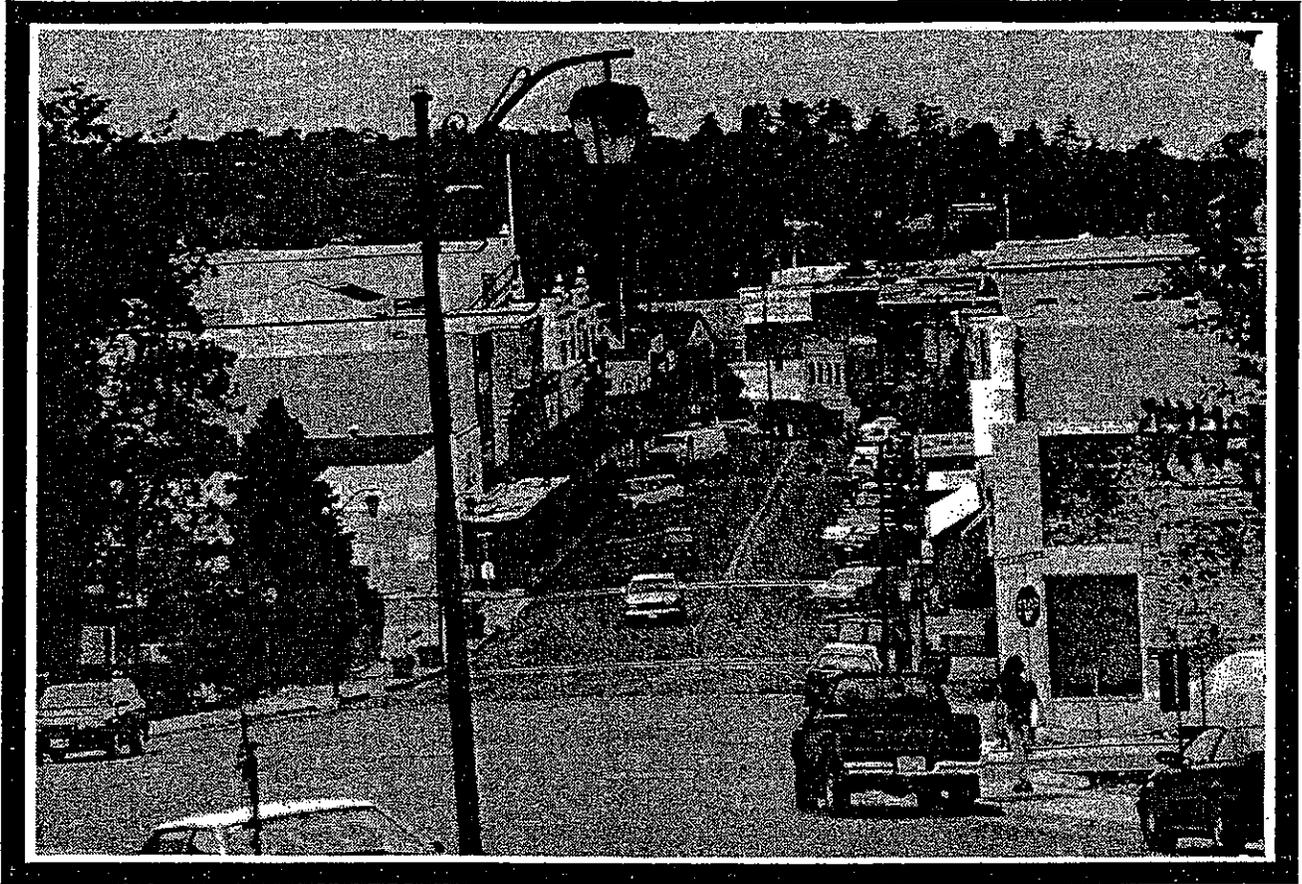
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I I N T R O D U C T I O N



Downtown Auburn

1. The General Plan

Beginning in 1971, changes in California legislation regarding the role and nature of a general plan have increased its importance significantly. Today a general plan is no longer a "wish list" or an ambiguous vision of the future physical development of a community. The general plan has evolved into a clear guide for rational decision making regarding a city's or county's long-term physical development.

The City of Auburn General Plan sets forth the goals and policies that will guide future growth in the Auburn area. The Plan will be used by City staff and City decision makers to review new development in order to ensure that future development will contribute to

retaining and improving the character of Auburn as a unique and readily identifiable foothill community.

The General Plan is a dynamic document because it is based on community values and an understanding of existing and projected conditions and needs, all of which continually change. Any adjustments to the General Plan require an amendment. Local governments may not amend any one of the mandatory elements of the General Plan more than four times in one calendar year (Government Code Section 65358(b). With all amendments, local governments must follow the procedures outlined in Government Code Sections 65350 et seq.

ORGANIZATION OF THE GENERAL PLAN

This Plan is organized into a combination of text, tables, and figures. The plan is presented in eight components referred to as Elements. Each Element is presented in a Chapter. The eight elements are:

- Land Use
- Circulation
- Housing
- Open Space/Conservation
- Noise
- Safety
- Economic
- Historic

The final chapter of the plan is the implementation program. A glossary is provided to assist the reader. A list of the resource documents and contacts is provided.

Under separate cover, but a part of the General Plan, are the supporting documents and the adopted Master Plans and Specific Plans.

Each element follows a similar format with goals and policies presented first, existing conditions presented next, and future needs or recommendations presented last. The goals and policies are listed first because they provide the vision of the community for which all future actions will be directed and against which all actions are judged. The goals and policies are presented by topic and sequential order, not by order of priority.

LAND USE/CIRCULATION DIAGRAM

Figure I-1 displays the City of Auburn Land Use Diagram. Figure I-2 displays the existing Street System Functional Classification. The roadway classifications that are shown on the diagram are those required to mitigate traffic impacts associated with buildout of the land use plan. Sphere of Influence Figure I-3 displays the existing and proposed sphere of influence for the City of Auburn. The new sphere of influence



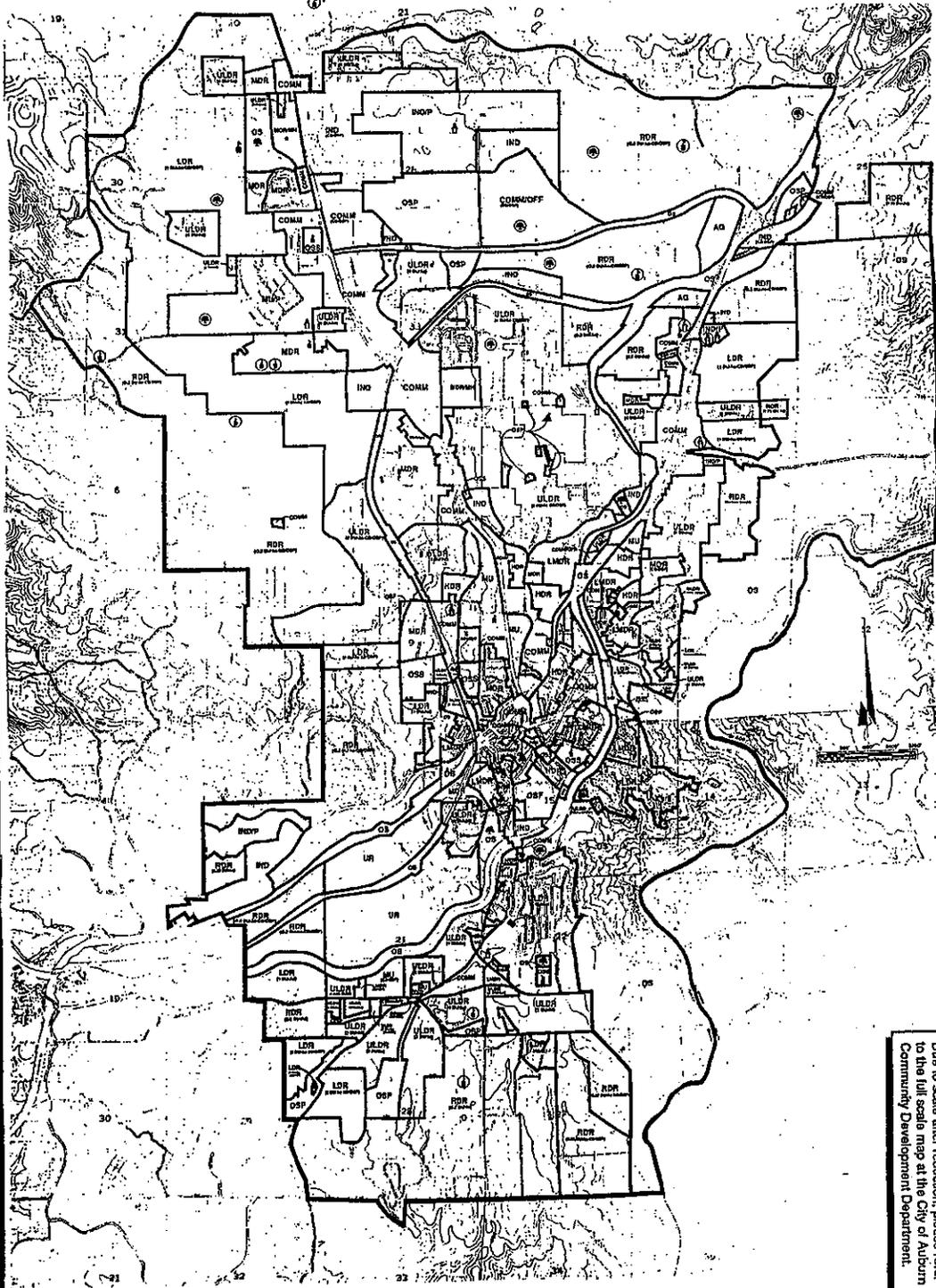
CITY OF AUBURN GENERAL PLAN

NOVEMBER 1993

LEGEND

<ul style="list-style-type: none"> <input type="checkbox"/> Agriculture (AG) <input type="checkbox"/> Urban Reserve (UR) <input type="checkbox"/> Rural Density Residential (RDR) <input type="checkbox"/> Low Density Residential (LDR) <input type="checkbox"/> Urban Low Density Residential (ULDR) <input type="checkbox"/> Low Medium Density Residential (LMDR) <input type="checkbox"/> Medium Density Residential (MDR) <input type="checkbox"/> Medium Density Residential (MOR/MDR) <input type="checkbox"/> High Density Residential (HDR) 	<ul style="list-style-type: none"> <input type="checkbox"/> Mixed Use (MU) <input type="checkbox"/> Commercial/Office (COM/COFF) <input type="checkbox"/> Commercial (COM) <input type="checkbox"/> Industrial (IND) <input type="checkbox"/> Open Space (OS) <input type="checkbox"/> Open Space Schools (OSS) <input type="checkbox"/> Open Space Private (OSP) <input type="checkbox"/> Open Space Parkgrounds (OSF) 	<p>OVERLAYS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Public (P) <input type="checkbox"/> Chartered Development/Open Space Private (CD/OSP) <input type="checkbox"/> Existing School Site <input type="checkbox"/> Proposed School Site <input type="checkbox"/> Existing Park Site <input type="checkbox"/> Proposed Park Site <input type="checkbox"/> Existing Fire Station <input type="checkbox"/> Proposed Fire Station <input type="checkbox"/> Proposed Rail Station <p><small>Land use designations reflect existing non-conforming densities with the Auburn General Community's Land Use Plan.</small></p>
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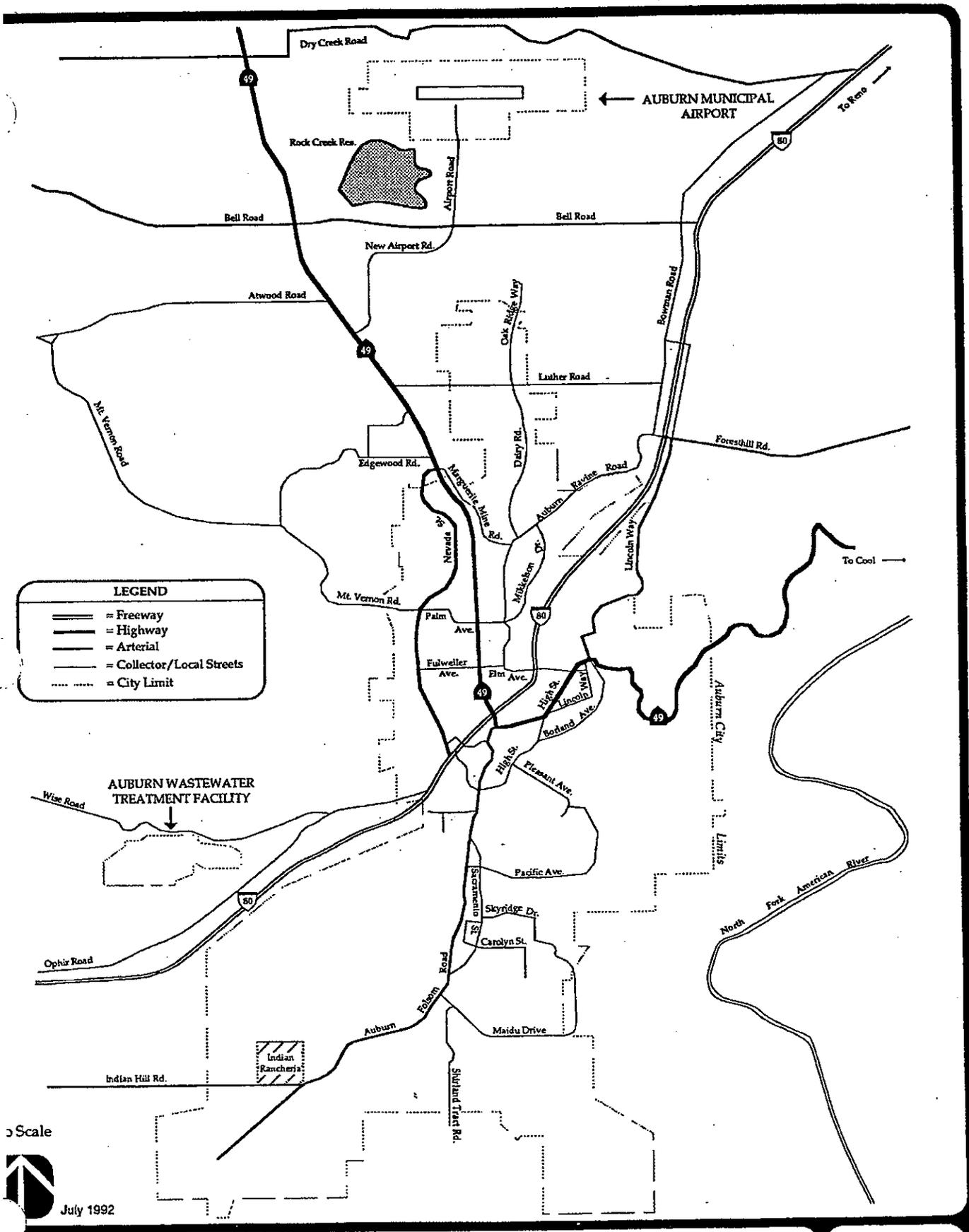
CITY OF AUBURN GENERAL PLAN
 City of Auburn Land Use Diagram




 No Scale

FIGURE
 I-1

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



**CITY OF AUBURN GENERAL PLAN
EXISTING STREET SYSTEM FUNCTIONAL CLASSIFICATION**

Harland Bartholomew & Associates, Inc.

**FIGURE
I-2
Page I-5**

incorporates approximately 4,830 additional acres. This line delineates the area the Advisory Committee considers to be Auburn.

LEGAL AUTHORIZATION FOR THE PLAN

This plan addresses the legal requirements under Government Code Section 65302 et. al. Table I-1 identifies the legal requirements and where they can be found in this document.

TABLE I-1 CITY OF AUBURN GENERAL PLAN SECTION*								
Legal Requirement	LU	CI	H	OC	N	S	E	HI
GOVERNMENT CODE SECTION								
65302(a) Land Use Element	X							
65302(b) Circulation Element		X						
65583 Housing Element			X					
65583(a) Housing Needs			X					
65583(b) Implementation Housing Development Goals Policies & Objectives			X					
65583(c) Public Participation			X					
65583(a)(4) and (5) Constraints			X					
65583(a)(7) Energy Conservation			X					
65584 New Construction Needs			X					
65588(a) and (b) HCD Guidelines			X					
65302(d) Conservation Element				X				
65302(e) Open Space Element				X				
65560(b) Local Open Space Plan				X				
65302(f) Noise Element					X			
65302(g) Safety Element						X		
65303 Elective Elements							X	X
<ul style="list-style-type: none"> • LU = Land Use Element • H = Housing Element • N = Noise Element • E = Economic Element • CI = Circulation Element • OC = Open Space/Conservation Element • S = Safety Element • HI = Historic Element 								



2. Regional Setting

PHYSICAL CHARACTERISTICS

The location of the City of Auburn is important in order to understand the relationship between growth and development in the foothill terrain and physical limitations. The City is located on the western slope of the Sierra Nevada Range at elevations between 1,000 and 1,400 feet. Within the city limits, the terrain is relatively gentle but the City is surrounded by several severe constraints to development. To the south, the American River Canyon provides a sharp boundary to urban growth and also an opportunity for regional open space. The Placer County line, a boundary with El Dorado County, is also located within the canyon. The canyon provides a natural boundary to city expansion along a north-south corridor.

Within the City limits and the sphere of influence, oak trees, riparian vegetation, wetlands, creeks, erosive soils, and sensitive wildlife habitats also constrain development. This physical setting is not conducive to many types of urban development. Therefore, the General Plan has developed land use designations with supporting policies to help protect sensitive or hazardous areas and allow for development where it is warranted.

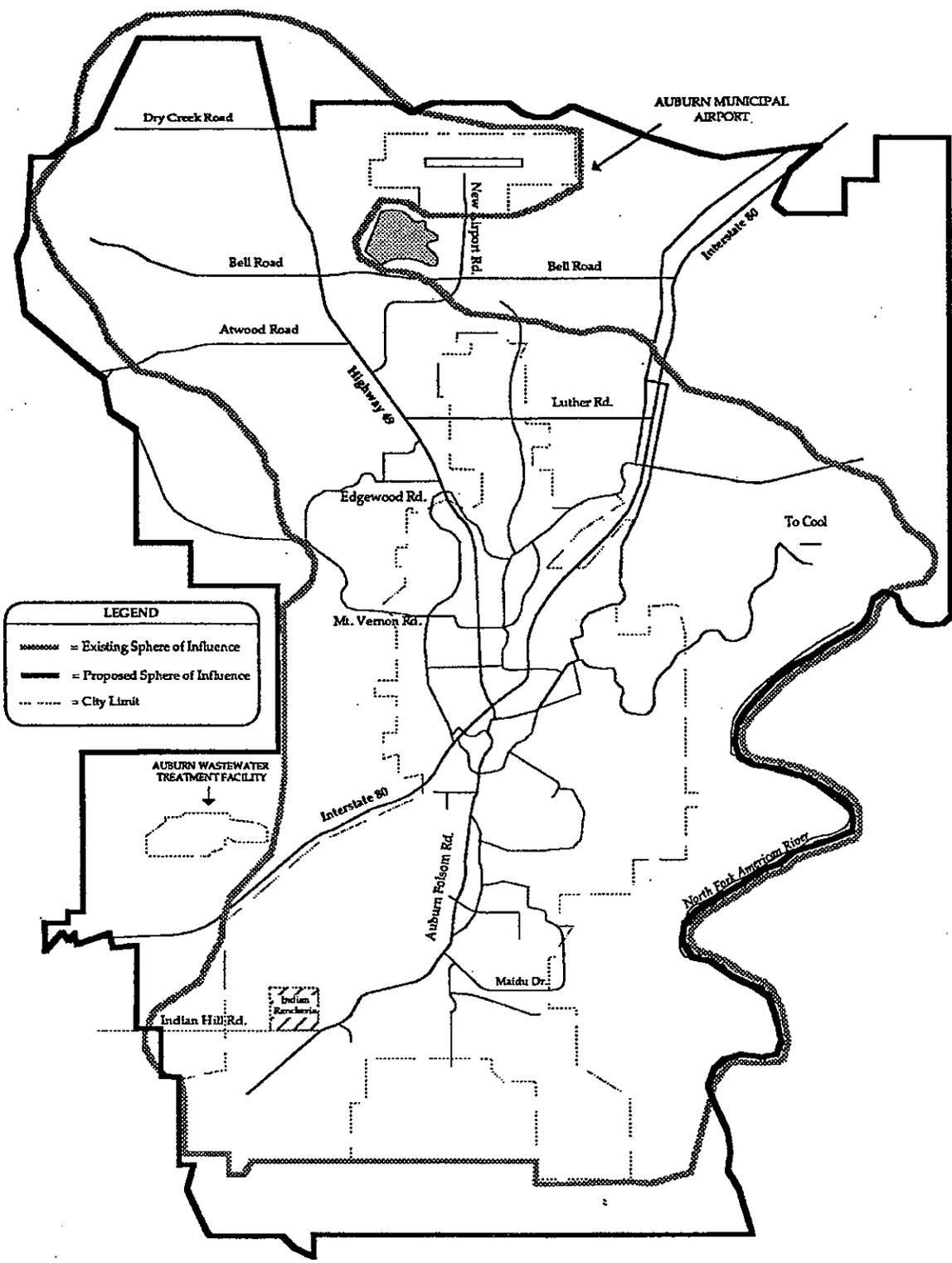
3. General Plan Background

This document supersedes the 1978 Auburn General Plan and the 1985 Auburn Housing Element. The plan covers the area within the city limits of Auburn and within a revised sphere of influence, which includes an approximate 4,830-acre increase over the 1978 sphere of influence. Lands within the sphere of influence have been given a land use designation in anticipation that annexation of these lands will occur within the 20-year life span of the plan. Limited land use information within the sphere resulted in single land use designations being applied to large areas. As these areas are annexed, the City will review development plans to provide more specific detail as to the land use designations.

ADMINISTRATION OF THE GENERAL PLAN

This General Plan includes implementation programs for each element. Under Government Code Section 65400(b) the City of Auburn Community Development Department is required to report annually to the City Council regarding the status of the General Plan. Therefore, the implementation program has been set up to provide a checklist of the implementation measures. This checklist includes the implementation measure, the responsible agency, and implementation timing. By using the checklist, the Community Development Department will be able to update the City Council on the implementation of the General Plan when requested.





LEGEND

- = Existing Sphere of Influence
- = Proposed Sphere of Influence
- - - - - = City Limit

No Scale



July 1992

CITY OF AUBURN GENERAL PLAN
CITY OF AUBURN EXISTING AND PROPOSED SPHERE OF INFLUENCE

Harland Bartholomew & Associates, Inc.

FIGURE
I-3
Page I-9

PUBLIC PARTICIPATION

The City recognizes the importance of public participation in formulating a general plan. State law specifies that "During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the city or county deems appropriate."

The Auburn General Plan update has utilized a process of community consensus building to create a future vision for the city. Techniques to gain public input have included public workshops, formulation of an advisory committee, newsletters and public hearings. The following text and chart summarizes the process.

Citizens Advisory Committee

A General Plan Citizens Advisory Committee was appointed by the City Council. The committee, composed of eight citizens, two council persons, two planning commissioners, and a representative of the Auburn Recreation District, met regularly to formulate the plan. This committee was responsible for developing the land use alternatives and eventually the draft preferred land use plan.

The committee meetings were open to the public allowing for public comment at the end of each meeting. The committee held 33 meetings, three of which were joint meetings held with the Placer County Auburn/ Bowman Community Plan Citizens Advisory Committee to receive their comments about land uses outside the current city limits. The committee held a public workshop to receive public input on the Historic Element. These meetings were productive and provided valuable information to the committee as they formulated the General Plan.

Workshops

The City has conducted public workshops, held joint meetings of the City Council/ Planning Commission, joint meetings with the City Council/Planning Commission/ Citizens Advisory Committee and joint meetings of the Placer County/Auburn Citizen Committees.

The public workshop held on August 29, 1990 with the City Council, Planning Commission, City staff and representatives of the consultant, Harland Bartholomew & Associates focused on the general planning process and goals for the city to be used as the focal point of the plan. Twenty-four goals were formulated as a result of this effort.



	Public Workshop	City Council/ Planning Commission	City Council/ Planning Commission/ Advisory Committee	City/County Advisory Committee	Planning Commission	City Council
February 8, 1990	X					
February 15, 1990	X ²					
February 21, 1990	X					
August 29, 1990		X				
December 6, 1990			X			
March 27, 1991	X ¹					
May 15, 1991				X		
July 24, 1991				X		
April 1, 1992				X		
November 17, 1992					X	
December 2, 1992					X	
December 8, 1992					X	
May 11, 1993					X ³	
May 12, 1993					X ³	
May 19, 1993					X ³	
May 25, 1993					X ³	
May 26, 1993					X ³	
June 1, 1993					X ³	
September 14, 1993						X ⁴
September 20, 1993						X ⁴
September 28, 1993						X ⁴
October 4, 1993						X ⁴
October 14, 1993						X ⁴
October 26, 1993						X ⁴
November 29, 1993						Adoption
¹ Historic Element Only ² Two workshops were held on this date ³ General Plan & DEIR ⁴ General Plan & FEIR						



Public Hearings

The Planning Commission held nine public hearings on the General Plan. The last six meetings were hearings on the General Plan and EIR. The Planning Commission, by Resolution, forwarded the General Plan, with recommended modifications, to the City Council on June 1, 1993.

The City Council held six public hearings on the General Plan and EIR. The EIR was certified and General Plan adopted on November 29, 1993 by the City Council. The hearings held on the General Plan are summarized on the previous page.

Newsletters

The City of Auburn in conjunction with Placer County prepared several newsletters to inform citizens of the General Plan progress. These newsletters contained schedules and articles on the preparation of the General Plan and informed readers of future important dates for meetings or public hearings.

4. Amendments to the General Plan

At least once every five years, each local planning agency should thoroughly review its entire general plan and revise the document as necessary. State law actually requires every city and county to evaluate its housing element as frequently as necessary and to revise the element, as appropriate, no less than every five years.

Local governments may not amend any one of the mandatory elements of the general plan more than four times in one calendar year (Government Code Section 65358(b)). However, this limitation does not apply to:

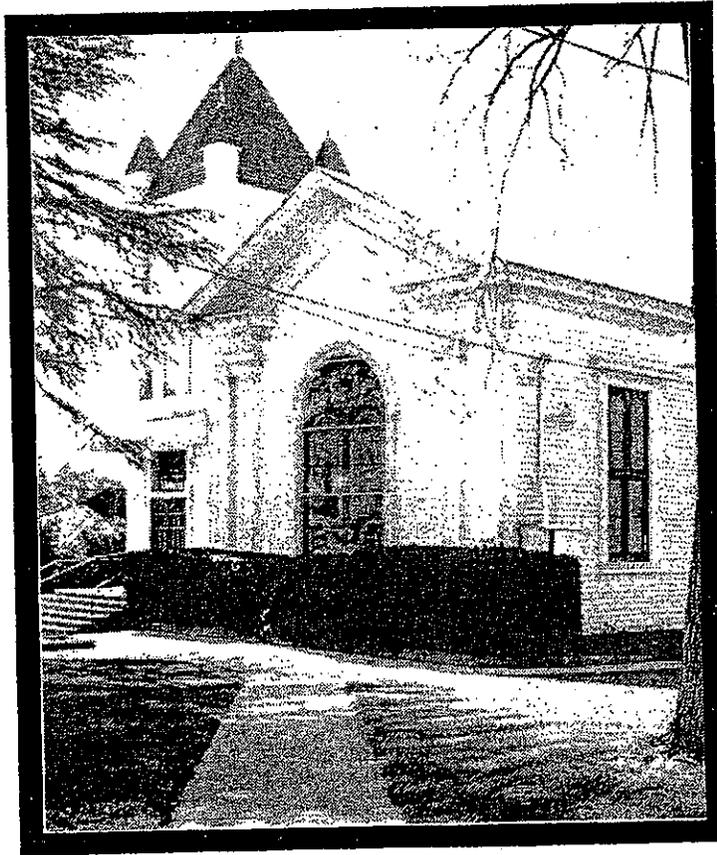
- (1) optional elements;
- (2) amendments requested and necessary for affordable housing (Government Code Section 65358(c));
- (3) any amendment necessary to comply with a court decision in a case involving the legal adequacy of the general Plan (Government Code Section 65358(d)(1));
- (4) amendments after January 1, 1984, to bring a general plan into compliance with an airport land use plan (Government Code Section 65302.3);
- (5) amendments needed in connection with adoption of a comprehensive development plan under the Urban Development Incentive Act (Health and Safety Code Section 56302(d)); or



Government Code Section 65358(b) provides that each amendment may include more than one change to the general plan. Earlier case law has established that each of the permitted amendments within a calendar year can encompass several different changes. (*Karlson v. City of Camarillo*(1980) 100 Cal.App.3d789. See also, 66 Ops.Cal.Atty.Gen. 258 (1983).



II GOALS



Methodist Church

The following goals provide guidelines for community growth and development. The goals were developed in conjunction with the Citizens Advisory Committee for the City of Auburn General Plan Update. These goals are presented by topic and sequentially, not by priority.

1. Goals

LAND USE ELEMENT

General

- Goal 1:** Guide development in a pattern that will minimize land use conflicts between adjacent land users.
- Goal 2:** Encourage maintaining the open rural character of the County areas beyond the City of Auburn Sphere of Influence so that Auburn is a distinct, readily identifiable foothill community. Encourage farmsteads, orchards, tree farms, grazing, and horse ranches.
- Goal 3:** Guide development so that it takes advantage of Auburn's unique character including, but not limited to, terrain and vegetation.
- Goal 4:** Enhance air quality.

Residential

- Goal 5:** Establish a variety of residential densities which will provide for different housing types and levels of cost.

Commercial

- Goal 6:** Discourage extension of strip commercial development and encourage future commercial infill development.
- Goal 7:** Provide a mix of commercial development to serve residents and visitors.

Industrial

- Goal 8:** Provide for the development of industrial areas where suitable land and services exist and with a minimum of land use conflicts.

Public

- Goal 9:** Develop a land use pattern which can be adequately served with community facilities (such as schools, libraries, and community recreation), urban services, and transportation facilities.
- Goal 10:** Establish a rate of development that allows public service providers to keep pace with growth.



- Goal 11:** Promote cultural activities and public art.
- Goal 12:** Provide for an adequate and safe educational environment.

CIRCULATION ELEMENT

- Goal 1:** Provide and maintain a comprehensive, safe, and efficient transportation system.
- Goal 2:** Create a continuous, interrelated street network that is user-friendly for both vehicular and pedestrian traffic including, but not limited to, avoiding walled projects, dead end streets, and barricades.
- Goal 3:** Encourage transportation alternatives to the single-occupant automobile.
- Goal 4:** Protect the public investment in the airport.
- Goal 5:** Provide a full range of adequate public services for all area residents and businesses.

HOUSING ELEMENT

- Goal 1:** Provide a range of housing choices that meet the needs of all Auburn residents in terms of type, density and cost.

OPEN SPACE/CONSERVATION

- Goal 1:** Preserve areas of natural vegetation, trees, topographic features, wildlife habitat, and riparian corridors.
- Goal 2:** Minimize adverse development impacts to the natural environment.
- Goal 3:** Identify, protect and enhance open areas and greenbelts throughout the planning area for the protection of wildlife and for use and enjoyment by residents and visitors.
- Goal 4:** Provide for the conservation, utilization, and development of mineral, geologic and soil resources in keeping with sound conservation and reclamation practices.
- Goal 5:** Create a pedestrian and trail network to provide access to developed areas as well as public access to open space and recreation resources consistent with the need to protect these resources.
- Goal 6:** Protect visual resources.
- Goal 7:** Conserve, protect and enhance water supplies and adequately plan for the development and protection of these resources and their related resources for future generations.

NOISE ELEMENT

- Goal 1:** Protect City residents from the harmful and annoying effects of excessive noise.
- Goal 2:** Protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise producing uses.

SAFETY ELEMENT

- Goal 1:** Protect the citizens and visitors of the Auburn area from loss of life while protecting property and watershed resources from unwanted fires through preplanning, education, fire defense improvements, and fire suppression.
- Goal 2:** Protect the lives and property of the citizens of the Auburn area from unacceptable risk resulting from flood hazards.
- Goal 3:** Minimize hazards to public health, safety, and welfare resulting from natural and man-made hazards.
- Goal 4:** Protect all residents from hazardous materials and the hazards associated with transport of such materials.
- Goal 5:** Maintain and enhance City emergency services.

ECONOMIC ELEMENT

- Goal 1:** Provide a land development pattern, planning process, and regulatory atmosphere conducive to maintaining and increasing employment opportunities for City residents and fostering new economic development.
- Goal 2:** Enhance the City's sales tax revenues by strengthening the City's retailing and tourism to serve the needs of local residents and encouraging shoppers from outside the community.
- Goal 3:** Maintain and expand existing businesses.
- Goal 4:** Encourage tourism, conventions and development of a conference center.

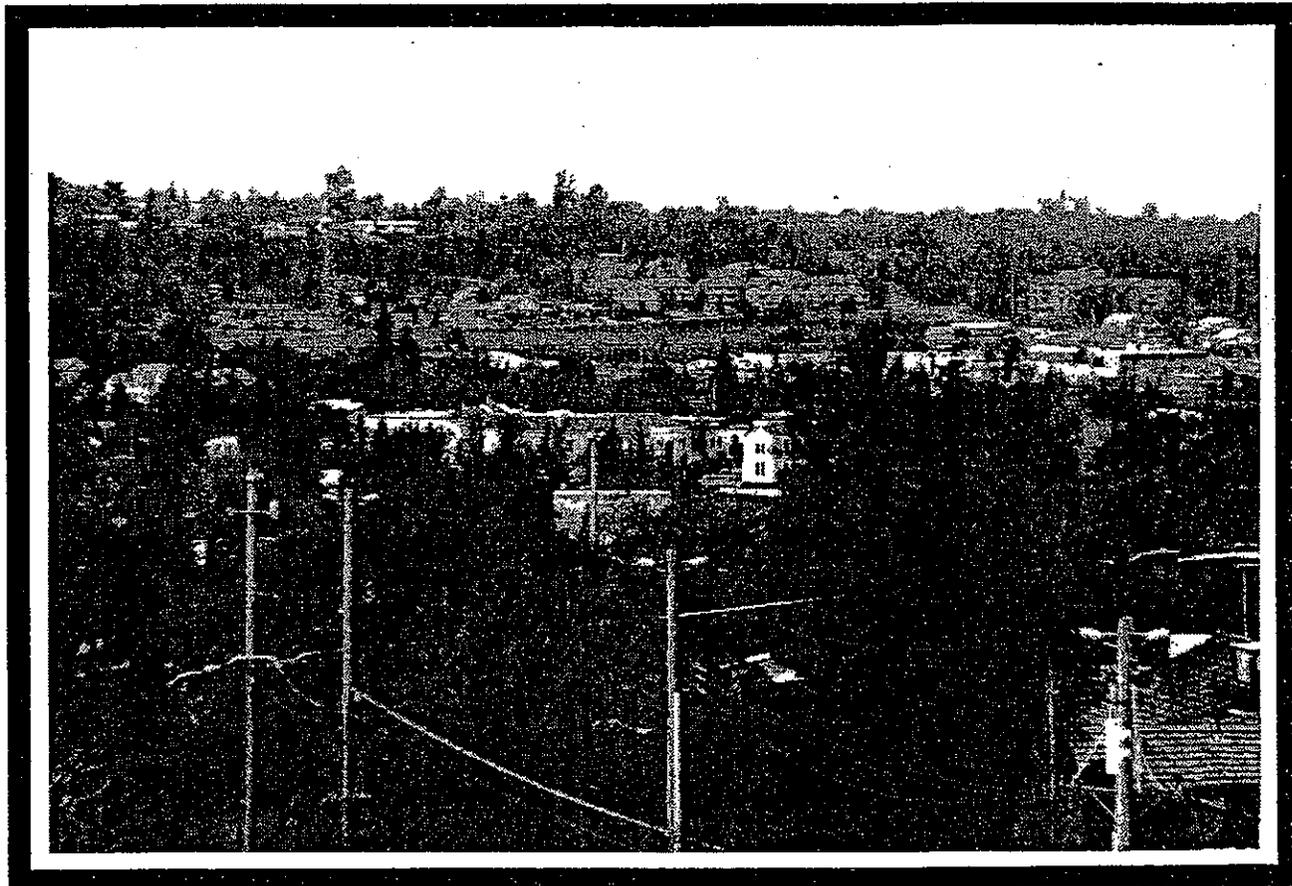
HISTORIC ELEMENT

- Goal 1:** Preserve all historical sites and enhance the character of the historic districts.



III

ASSUMPTIONS AND ISSUES



Downtown Auburn

1. Assumptions

The following assumptions were used by the consultant and the Citizens Advisory Committee during the development of the General Plan:

1. Residents often locate in Auburn because of its small-town atmosphere and rural environment.
2. Auburn will grow at a moderate rate.
3. Significant growth will occur outside of the current city limits.

4. Single-family residential development will continue to be dominant, with some increases in multi-family development.
5. Higher densities will locate where urban services are available.
6. Automobile transportation will be dominant.
7. The Highway 49 corridor, Downtown Auburn, Old Town Auburn, and the Interstate 80/Lincoln Way area will be the primary commercial centers of the City.
8. Some public service and facility improvements are needed for existing Auburn residents.
9. New growth will increase demands for public services and facilities.
10. Growth in the area will require the conversion/use of natural resources--land, water, and habitat.
11. There is insufficient information on the Auburn Dam and Route 102 for a determination to be made as to their affect on the General Plan.

2. Issues

The General Plan is intended to address the following issues:

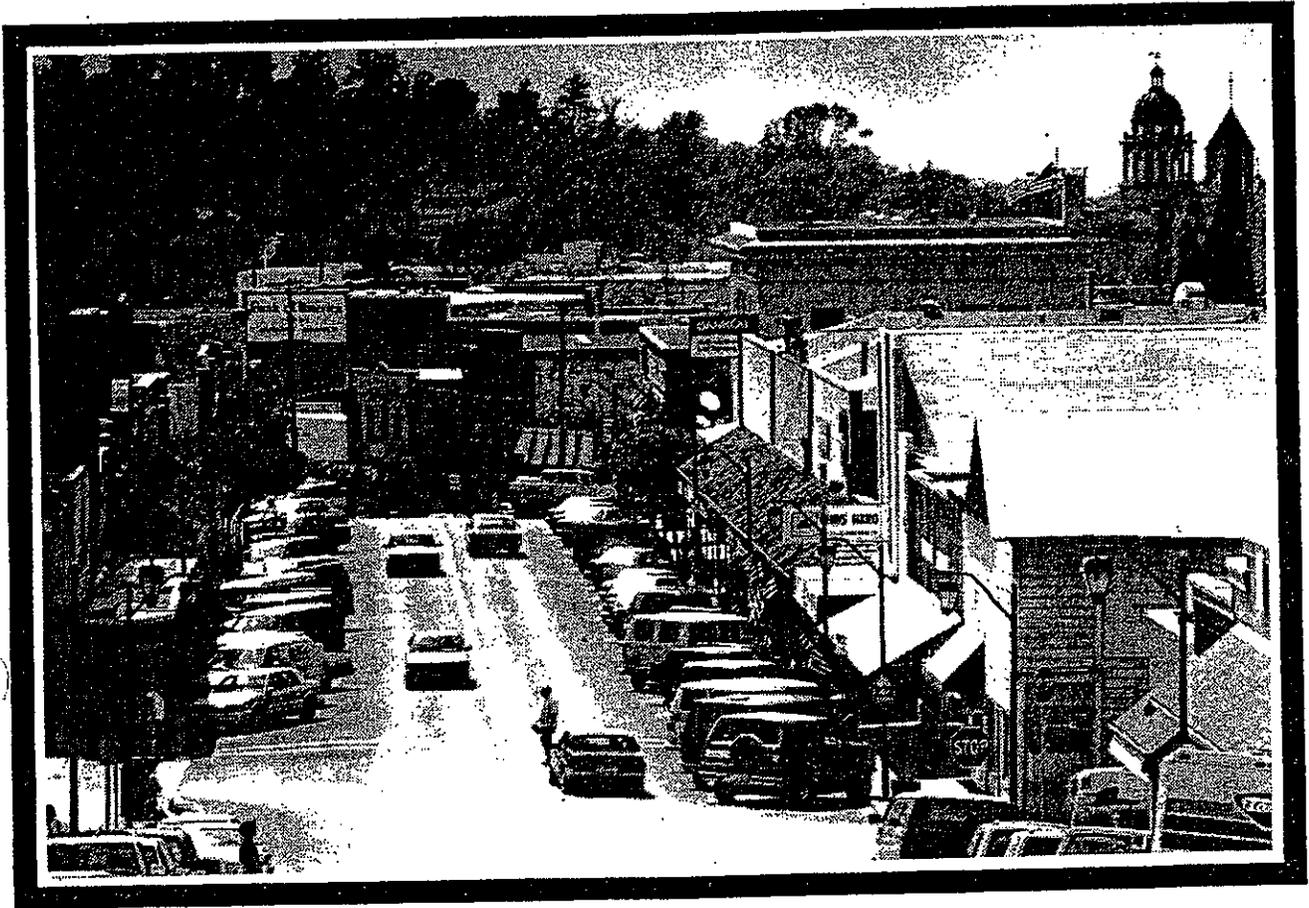
1. Highway 49 bypass location or route segments.
2. Annexation of areas to the north, east on Interstate 80, and to the south.
3. Residential density and zoning changes--transfer of density and multi-family tradeoffs.
4. Opposition to high-density housing.
5. Equity immigrants, those persons who sell their homes at a high price in one region and buy more house for less money in another region, impact affordable housing. (Opportunities for builders lie in upscale housing.)
6. Preservation and demolition of historic buildings and sites.
7. Need for major shopping facilities.
8. Industrial development.
9. The provision of sewer, water, police, fire, ambulance, educational, and recreational services to new residences.
10. The duplication of providers of water, sewer, police, and fire protection services.



11. Financing sources for new services and facilities.
12. Noise impacts from highway and airport sources.
13. Lack of suitable land for affordable housing.
14. Constraints to new school siting.



IV LAND USE ELEMENT



Downtown Auburn

1. Introduction

The planning process involves the making of decisions among alternate forms of development. This plan places specific land use designations on the land use diagram. However, the goals and policies listed below and the extent to which they are implemented will direct how Auburn develops in the future. The goals and policies listed below and in Section 2 have been developed based on the following:

1. Preservation of sensitive environmental areas.
2. Preservation and enhancement of Auburn's unique character and appearance.
3. Provision of land use opportunities that will support a jobs/housing balance.
4. Provision of public services efficiently.
5. Provision of a mix of land uses.

The Land Use Element is a mandatory element of the General Plan required by Government Code Section 65302(a).

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Citizens Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

GENERAL

Goal 1: Guide development in a pattern that will minimize land use conflicts between adjacent land users.

Policy 1.1 Design industrial/commercial business uses to be compatible with adjacent land uses, including, but not limited to, siting, height, orientation, materials, landscaping, circulation, grading, setbacks proportion, and architecture.

1.2 Design multi-family residential projects to minimize impacts on adjacent land uses.

Goal 2: Encourage maintaining the open rural character of the County areas beyond the City of Auburn Sphere of Influence so that Auburn is a distinct, readily identifiable foothill community. Encourage farmsteads, orchards, tree farms, grazing, and horse ranches.

Policy 2.1 Actively promote and preserve agricultural use on lands in the regional area.

Goal 3: Guide development so that it takes advantage of Auburn's unique character including, but not limited to, terrain and vegetation.

Policy 3.1 Minimize disturbance to terrain by limiting "pads" on steep slopes to reduce cut and fill.

3.2 Minimize disturbance to terrain by encouraging that roads follow the existing topography.

3.3 Utilize the policies in the Open Space and Conservation Element to create and maintain a visual variety.

3.4 Develop, adopt, and implement a hillside development ordinance.

Goal 4: Enhance air quality.

Policy 4.1 Review proposed development projects for their potential adverse impacts on air quality.



- 4.2 Continue to participate in regional solutions to air quality problems.

RESIDENTIAL

Goal 5: Establish a variety of residential densities which will provide for different housing types and levels of cost.

Policy 5.1 The City does not guarantee that any individual project will be able to achieve the maximum densities shown on the Land Use Map. (Recorded maximum densities reflect ideal conditions and are not guaranteed for all projects.)

5.2 The City shall calculate average residential densities as the number of dwelling units divided by the total area of the project, excluding any commercial, business and professional or industrial uses. Areas devoted to open space, public parks, roads, public schools and other miscellaneous land uses shall be included in the total area.

5.3 Promote use of Planned Unit Developments to provide for clustering and open space areas.

COMMERCIAL

Goal 6: Discourage extension of strip commercial development and encourage future commercial infill development.

Policy 6.1 Avoid linear commercial development designs.

6.2 Encourage commercial design that utilizes existing topography, minimizing cut and fill.

6.3 Promote aesthetics suitable to the foothill environment.

6.4 Develop landscape maintenance and lighting districts in commercial zones.

Goal 7: Provide a mix of commercial development to serve residents and visitors.

Policy 7.1 Neighborhood convenience commercial areas should be located so that residents may meet their daily needs for commercial goods and services.

7.2 Neighborhood centers should be designed to minimize impacts on adjacent uses through site design, access and parking, landscaping and lighting standards.

7.3 Preserve and enhance the tourist-oriented, historic commercial uses in the Downtown and Old Town Auburn areas.



INDUSTRIAL

Goal 8: Provide for the development of industrial areas where suitable land and services exist and with a minimum of land use conflicts.

- Policy 8.1 Designate lands for a variety of industrial land uses such as:
- a. Warehousing/storage facilities for supplies serving other businesses.
 - b. Industrial parks providing space for research and product development firms.
 - c. Other light industrial businesses.

PUBLIC

Goal 9: Develop a land use pattern which can be adequately served with community facilities (such as schools, libraries, and community recreation), urban services, and transportation facilities.

Policy 9.1 The City will continue to seek new and maintain existing sources of funding to develop, operate and maintain community facilities, urban services and transportation facilities. (C5.2)¹

9.2 Allow residential development only in those areas where adequate public facilities are available or will be provided with development.

Goal 10: Establish a rate of development that allows public service providers to keep pace with growth.

Policy 10.1 Utilize development standards and annexation to promote open space and to manage the rate, location, and type of growth.

10.2 Annex those lands which can be developed in accordance with the Auburn General Plan, are fiscally sound additions to the City, can be adequately served by municipal (or acceptable alternative) facilities and services, and are part of a planned, orderly annexation program.

10.3 Pre-zone all properties proposed for annexation in a manner consistent with the Auburn General Plan.

10.4 The Auburn General Plan and zoning designations for annexed land should consider the following criteria:

- a. The capacity of facilities and municipal services.

¹C5.2 indicates that Circulation Policy 5.2 is the same policy as Land Use Policy 9.1.

- b. The environmental effects that development on lands proposed for annexation may have on properties within the existing city limits.
- c. Existing land uses, if any, on and in the vicinity of the annexed land.
- d. The extent of any natural habitats and features of the landscape which should be preserved.
- e. The demonstrated need for additional housing, retail commercial uses, other commercial uses, and industrial uses.

Goal 11: Promote cultural activities and public art.

- Policy 11.1 Establish a financing mechanism to promote, support, and fund improvements for public art including, but not limited to, art forms such as music, theater, sculpture, and painting.

Goal 12: Provide for an adequate and safe educational environment.

- Policy 12.1 The City shall work closely with the school districts to ensure that school sites are dedicated or reserved for purchase by the districts.
- 12.2 The City shall work closely with the school districts to establish adequate funding sources for new school facilities.
- 12.3 The City shall allow development only if adequate school facilities exist or will be available in a timely manner.
- 12.4 The City shall forward all development projects to the school district and consider all responses as part of the development review process.
- 12.5 Development projects shall be designed so that children do not have to cross an uncontrolled intersection on an arterial road to reach a school.
- 12.6 The City, school districts, and the Auburn Recreation District shall work closely together so that joint park/school sites shall be developed wherever possible.
- 12.7 The City shall require bus turnouts and rider shelters for new residential projects where appropriate. (C1.9)
- 12.8 Where school sites are contiguous to playground apparatus and other recreational features/amenities, efforts shall be made to avoid duplication.
- 12.9 The City shall cooperate with the school districts in preparing joint-use agreements as needed.
- 12.10 The City shall work with the community college district as necessary to enhance educational opportunities for students.



12.11 It is the policy of the City that the individual school district's facilities master plans, financing plans, and other adopted facility guidelines are utilized as a guide to the City's school related policies and issues.

3. Existing Conditions

Auburn is located on terrain that places significant constraints on urban development. Development on the rolling Sierra Foothills requires considerable site preparation for most types of urban uses. Growth to the southeast is prevented by the American River Canyon. Rugged terrain limits growth to the south and west. Thus, the Auburn community has expanded to the north and northeast, taking advantage of access provided by Highway 49 and Interstate 80 (Figure IV-1). Table IV-1 summarizes the amount of land covered by this plan.

Planning Area	Acres	Square Miles
City limits	4,830	7.5
Sphere of Influence as of 7/92	12,870	20.1
Proposed Sphere of Influence	17,700	27.7

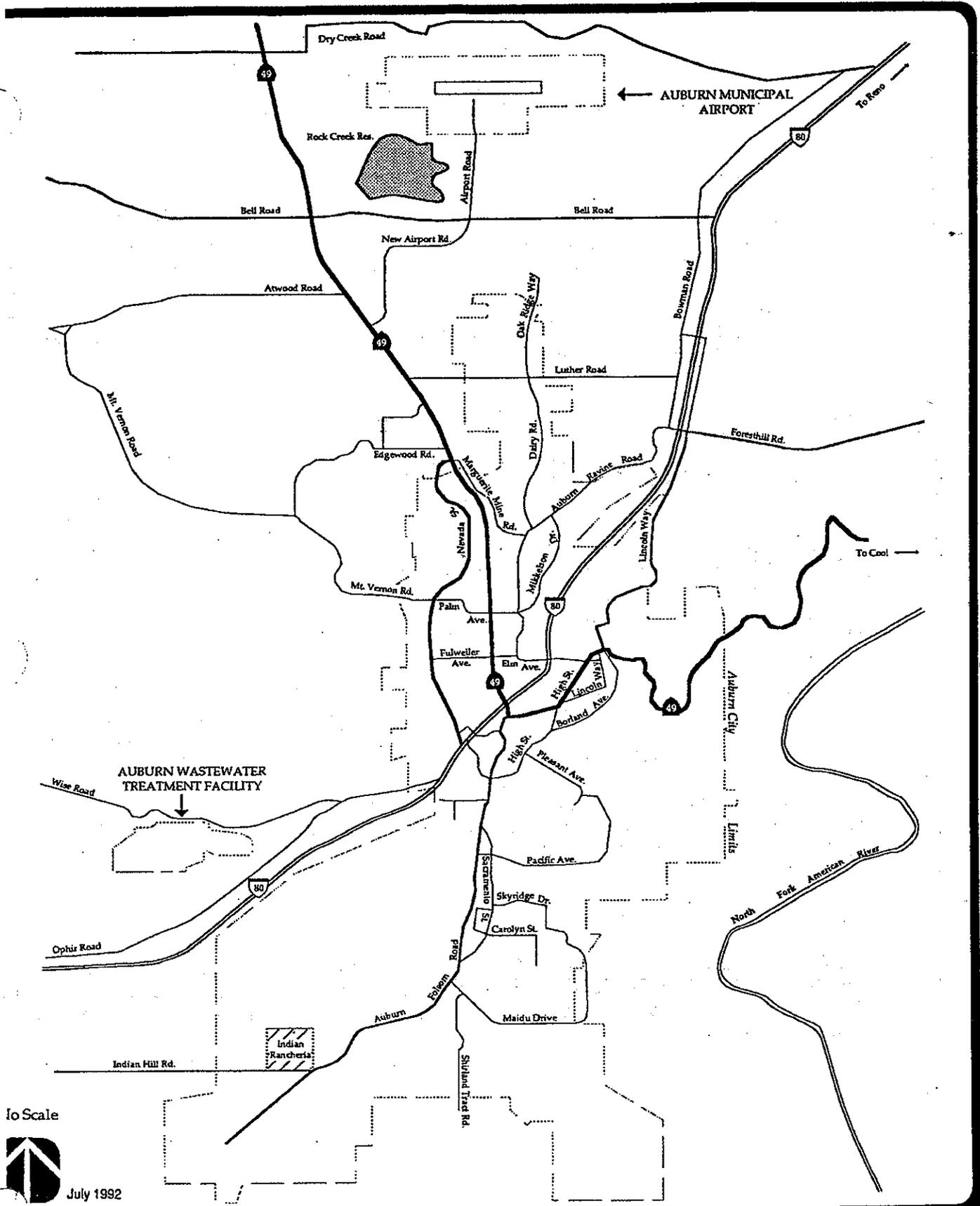
SOURCE: Harland Bartholomew & Associates, Inc.

There are major physical limitations on growth and development in the Auburn area. Man-made limitations such as Interstate 80 and the railroad tracks limit access or restrict urban uses. The Auburn Airport limits high-density residential, but has encouraged industrial development. The topography requires significant grading. There are additional environmental constraints such as wetlands, riparian habitat, erosive soils, and high fire hazards. These constraints affect the density and type of urban development that can occur. A detailed discussion of the constraints is contained in the Open Space and Conservation Element.

EXISTING LAND USE PATTERN

The City limits, in 1992, include 4,830 acres. Due to the City's terrain, over half of the area is vacant and undeveloped. A survey of existing land uses conducted as a part of the General Plan Update indicates that a total of 1,880 acres are used for urban uses as shown in Table IV-2.





10 Scale

 July 1992

CITY OF AUBURN GENERAL PLAN
STUDY AREA
 Harland Bartholomew & Associates, Inc.

FIGURE
IV-1
Page IV.7

**TABLE IV-2
1992 EXISTING LAND USE
CITY OF AUBURN**

<i>Land Use Type</i>	<i>Acres within City Limits</i>	<i>Percent</i>
<i>Single Family Residential</i>	961	19.9
<i>Multiple Family Residential</i>	103	2.1
<i>Commercial</i>	173	3.6
<i>Industrial</i>	66	1.4
<i>Public and Quasi-Public</i>	238	4.9
<i>Streets</i>	339	7.0
Total Developed	1,880	38.9
<i>Vacant Land (not all developable)</i>	2,950	61.1
TOTAL AREA	4,830	100.0

SOURCE: Harland Bartholomew & Associates, Inc.

Although 61 percent of land within the Auburn City limits is considered vacant, the developable land potential is relatively small due to development constraints such as topography and difficulty in access. It has been estimated that the buildout of remaining residential land in the city would result in the addition of approximately 13,000 people.

Residential uses are the predominant land uses in the City of Auburn, with the highest percentage being single family residential.

Commercial uses in Auburn are concentrated in several major areas including: Downtown Auburn, Old Town, the Highway 49 corridor, and the Auburn/Bowman area along Interstate 80. Auburn is atypical in that commercial is not scattered throughout the City as it is in many communities.

Auburn's industrial areas are also concentrated, with industrial uses occurring along Borland Avenue adjacent to the railroad tracks, at the Auburn Airport Industrial Park, along Nevada Street adjacent to the railroad tracks and along Sacramento Street adjacent to the railroad tracks.

Airport

The airport, which is an important transportation facility for the Auburn area, also provides for a large part of Auburn's industrial land. This land use should be maintained given the need for additional industrial development in Auburn. In order to protect the airport and the industrial land around it, the land use requirements of the airport's Comprehensive Land Use Plan (CLUP) should be followed.



Schools

The school districts serving the Auburn area maintain Facility Master Plans, financial plans, and guidelines. Please refer to the General Plan Supporting Documentation and Master Plans/Specific Plans.

The Auburn area has the following school districts:

- Auburn Union School District
- Placer Union High School District
- Ackerman Elementary School District

Table IV-3 displays each district's student enrollment and capacity.

School District	Student Enrollment	Student Capacity¹	Percent of Capacity
Auburn Union	2,854	1,841	155%
Placer Union High	4,208	3,205	131%
Ackerman Elementary	362	280 ²	129%

¹ Based on State classroom loading standards.
² Based on leach field/sewer system capacity.
SOURCE: Placer County Office of Education. October 15, 1993.

As Table IV-3 shows, Auburn area school districts are currently above their student capacities. Additional school facilities are required to meet the growing demand. According to the Placer County Office of Education the following school facilities will be needed over the next five to fifteen years:

- Auburn Union School District--Four school sites;
- Ackerman Elementary School District--One school site; and
- Placer Union High School District--Two school sites.

These additional school sites are required to meet growing demand. State law requires that new schools not be located within a two-mile radius of the airport. School sites are also constrained by railroads, natural gas lines, major power lines, topography, Highway 49 and Interstate 80. These constraints limit opportunities in the Auburn Area for schools. Future school sites will have to be located farther away from the developed areas of Auburn requiring longer bus and auto trips to transport students.



Parks

The City of Auburn contracts with the Auburn Recreation District for park and recreation services. The Auburn Recreation District also serves the area outside of the Auburn City limit including Christian Valley, Meadow Vista and Bowman.

Figure IV-2 displays the primary parks serving Auburn, which include the following:

1. Auburn Recreation Park
2. Regional Park (out of the City)
3. Ashford Park
4. Fair Park
5. Railhead Park (to be developed)
6. Skyridge Park

In addition to these parks, four schools have been developed with turf areas for recreational purposes. These schools include:

1. Alta Vista School
2. E.V. Cain School
3. Skyridge School
4. Placer High School

Additional small parks include the following:

1. Bicentennial
2. Chana
3. Herschel Young

And County parks in the Auburn Recreation District are:

1. Christian Valley Park
2. Meadow Vista Park
3. Placer Hills Park and Pool

In addition to the parks listed above, a number of trails, existing and proposed, meander throughout the area. A discussion is provided in the Open Space and Conservation Element of this plan and shown on the Auburn Park Conservancy Non-Auto Circulation Plan, Figure VII-9.

4. Land Use Plan

Figure IV-3 displays the land use plan for the City of Auburn (a full-size copy of this figure is available for public review or purchase at the City of Auburn Community Development Department). This figure depicts land uses within the proposed sphere of influence through the year 2012. The boundary lines between land use designations are

delineated as specifically as possible, generally following roads and parcel lines. Proposed school and park locations shown on the land use plan are conceptual, not parcel specific.

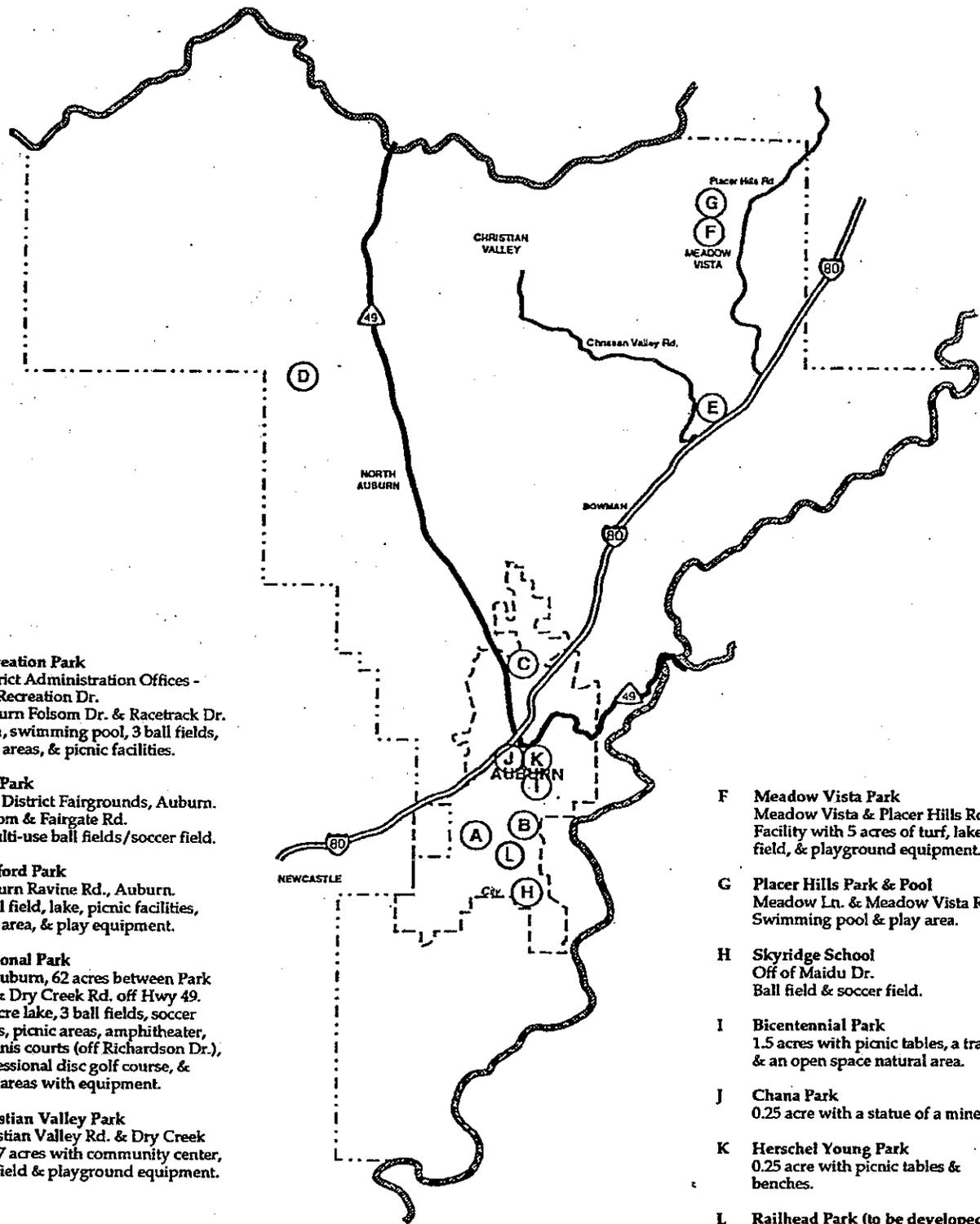
The following sections describe the land use designations contained in the land use plan and the standards of population density and building intensity for the various land use designations. Residential building densities are stated as the allowable range of dwelling units per gross acre. Dwelling units per acre are implemented by the Zoning Ordinance and are often indicated by ranges, i.e., Medium Density Residential--up to 10 units per acre. An adjustment to the allowable dwelling unit per acre can be achieved by several techniques allowable in the Zoning Ordinance.

1. *Planned Unit Development*--allows units to be clustered, tiered, or otherwise grouped as long as the maximum allowable units per total acres are not exceeded.
2. *Transfer of Development Rights*--allows a city (or other) to purchase development rights with an agreement that the property involved will remain in agriculture, open space, or other non-urban use. The purchasing entity may then transfer or sell those rights to a developer with a property which has a density designation but is located where a higher density is permissible.
3. *Density Bonus*--is allowed where a developer who agrees to provide some amenity to the city which would otherwise be difficult and/or costly for the city to develop.

Population density can be derived by multiplying the number of units by the average number of persons per dwelling unit. The assumed average number of 2.27 persons per dwelling unit for the Auburn area was obtained from the Sierra Planning Organization.

Non-residential building intensities are stated as maximum Floor Area Ratios (FARs). A FAR is equivalent to the gross building square footage permitted on a lot divided by the net square footage of the lot. Net acreage is the total acreage less any streets or buildings.





Recreation Park
 District Administration Offices -
 123 Recreation Dr.
 Auburn Folsom Dr. & Racetrack Dr.
 Gym, swimming pool, 3 ball fields,
 play areas, & picnic facilities.

B Fair Park
 20th District Fairgrounds, Auburn.
 Folsom & Fairgate Rd.
 2 multi-use ball fields/soccer field.

C Ashford Park
 Auburn Ravine Rd., Auburn.
 1 ball field, lake, picnic facilities,
 play area, & play equipment.

D Regional Park
 N. Auburn, 62 acres between Park
 Dr. & Dry Creek Rd. off Hwy 49.
 3.5 acre lake, 3 ball fields, soccer
 fields, picnic areas, amphitheater,
 4 tennis courts (off Richardson Dr.),
 professional disc golf course, &
 play areas with equipment.

E Christian Valley Park
 Christian Valley Rd. & Dry Creek
 Rd. 7 acres with community center,
 ball field & playground equipment.

F Meadow Vista Park
 Meadow Vista & Placer Hills Rd.
 Facility with 5 acres of turf, lake, ball
 field, & playground equipment.

G Placer Hills Park & Pool
 Meadow Ln. & Meadow Vista Rd.
 Swimming pool & play area.

H Skyridge School
 Off of Maidu Dr.
 Ball field & soccer field.

I Bicentennial Park
 1.5 acres with picnic tables, a trail,
 & an open space natural area.

J Chana Park
 0.25 acre with a statue of a miner.

K Herschel Young Park
 0.25 acre with picnic tables &
 benches.

L Railhead Park (to be developed)
 Sacramento St. & Pacific Ave.
 10 acres for soccer fields &
 potential staging area for the
 Auburn Dam.

No Scale



July 1992 Source: Draft Auburn Recreation District Master Plan, 1992.

AUBURN RECREATION DISTRICT MASTER PLAN

EXISTING PARKS

Harland Bartholomew & Associates, Inc.

FIGURE

IV-2

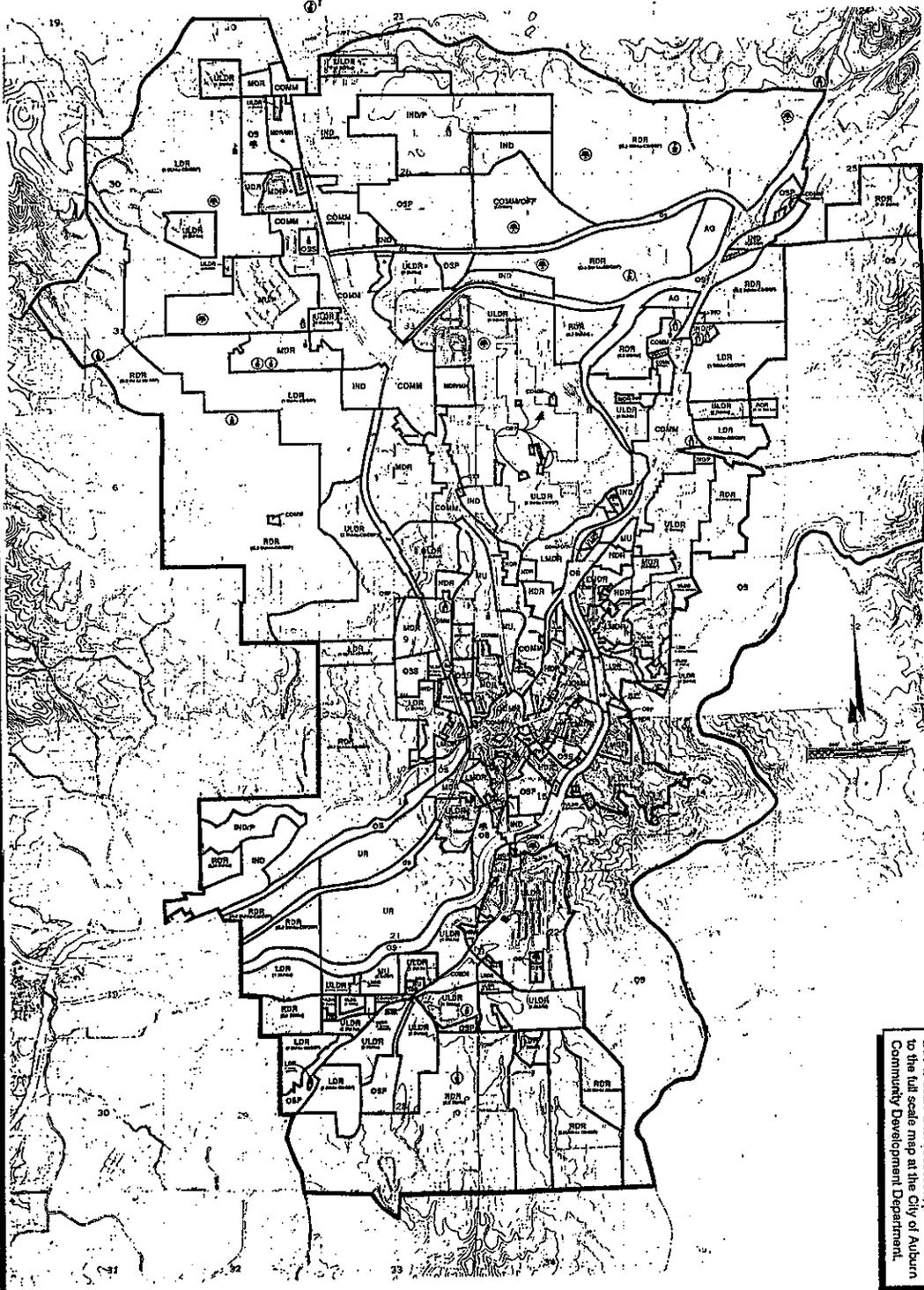
Page IV-13

CITY OF AUBURN GENERAL PLAN

NOVEMBER 1993

LEGEND

<ul style="list-style-type: none">  Agriculture (AG)  Urban Reserve (UR)  Rural Density Residential (RDR)  Low Density Residential (LDR)  Urban Low Density Residential (ULDR)  Low Medium Density Residential (LMDR)  Medium Density Residential (MDR)  Medium Density Residential (MDR/AD)  High Density Residential (HDR) 	<ul style="list-style-type: none">  Mixed Use (MU)  Commercial/Office (COMM/OFF)  Commercial (COMM)  Industrial (IND)  Open Space (OS)  Open Space Schools (OSS)  Open Space Private (OSP)  Open Space Fairgrounds (OSF) 	<p>OVERLAYS</p> <ul style="list-style-type: none">  Public (P)  Clustered Development/Open Space Private (CDOSP)  Existing School Site  Proposed School Site  Existing Park Site  Proposed Park Site  Existing Fire Station  Proposed Fire Station  Proposed Rail Station <p><small>Land use designations shown on this map are subject to change without notice. Refer to the Auburn General Plan for more information.</small></p>
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CITY OF AUBURN GENERAL PLAN
 City of Auburn Land Use Diagram


 No Scale

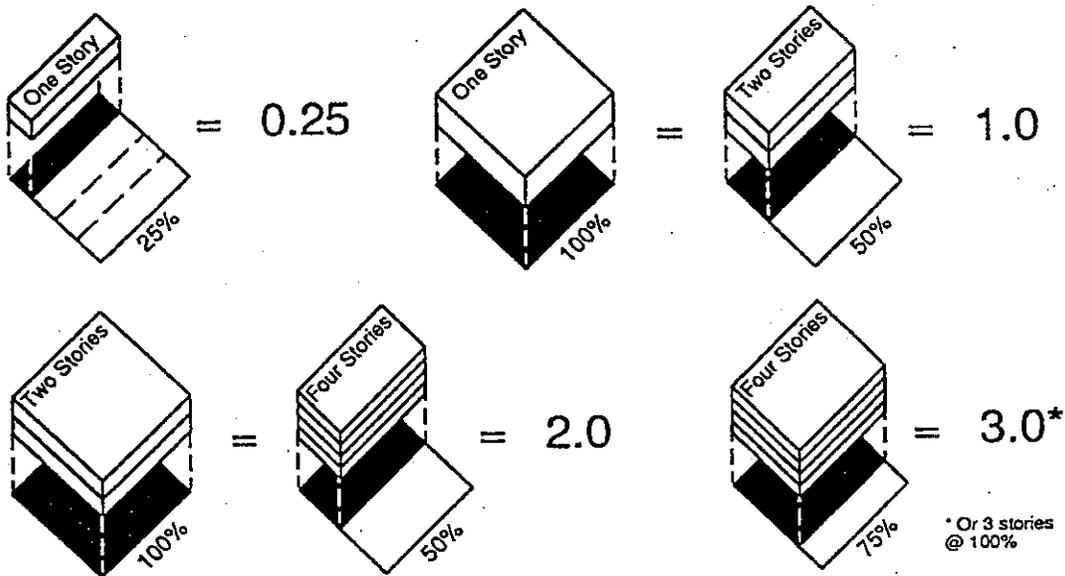
FIGURE
 IV-3
Page IV-3

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.

The table and graphic below provide an example of how FAR is calculated:

FLOOR AREA RATIO (FAR) EXAMPLE		
FAR	LOT (ONE ACRE) (SQUARE FEET)	BUILDING AREA (SQUARE FEET)
0.25	43,560	10,890
1.0	43,560	43,560
2.0	43,560	87,120
3.0	43,560	130,680

Examples of Floor Area Ratio



Note: Zoning height restrictions limit the height of structures.

LAND USE DESIGNATIONS

Table IV-4 below lists densities and intensities for various land use designations described in detail on the following pages.

**TABLE IV-4
DENSITIES AND INTENSITIES FOR LAND USE DESIGNATIONS⁽¹⁾**

DESIGNATION	DENSITY DU PER ACRE	INTENSITY (FAR)⁽²⁾
AG	Up to 1 du/5 acres	--
UR	By Specific Plan	--
RDR	Up to 0.05 du/acre, 0.25 du/acre, or 0.5 du/acre	--
LDR	Up to 1 du/acre	--
ULDR	Up to 2 du/acre, 3 du/acre, or 4 du/acre	--
LMDR	Up to 6 du/acre	--
MDR	Up to 10 du/acre	--
MDR-MH	Up to 10 du/acre	--
HDR	Up to 5-15 du/acre	--
MU (Residential)	Up to 5-15 du/acre	--
MU(Commercial)	--	3.0
COMM/OFF	--	3.0
COMM	--	3.0
IND	--	2.0
OS	--	0.25
OSS	--	0.25
OSP	--	0.25
OSF	--	0.25

- Notes: (1) All land uses will be guided by application of and reference to the constraints maps in the Open Space and Conservation Elements and Supporting Documentation.
 (2) Zoning height limits restrict the height of buildings



Agricultural (AG)

This designation provides for agricultural uses (including but not limited to orchards and horse ranches), single-family homes, and limited commercial and industrial uses as they relate to agriculture. Building densities may be up to one unit per five-acre parcel.

Urban Reserve (UR)

This designation provides a holding designation for single-family attached and detached homes, multi-family units, commercial uses, open space, parks, public and quasi-public uses, and similar and compatible uses until a specific plan is adopted for the area. All development under this designation shall be approved pursuant to an adopted master development plan (e.g., Specific Plan). As these master development plans are approved, the Urban Reserve designation shall be replaced with a residential, commercial, open space, or public/quasi-public designation as deemed appropriate based on the approved master development plan.

Building intensities and population densities included in this land use plan shall be used for development plans, specific plans, and further implementation of the General Plan. Adoption of a specific plan, considered an adjustment, would require an amendment to the General Plan.

Rural Density Residential (RDR)

This designation provides for single-family homes on larger parcels. Cluster type development is encouraged in many of the areas with this designation. Building intensities may be up to 0.05 or 0.5 units per acre.

Low Density Residential (LDR)

This designation allows for single-family homes. Cluster type development is encouraged in many of the areas with this designation. Building densities may be up to a maximum of one unit per acre.

Urban Low Density Residential (ULDR)

This designation allows for a combination of lower urban residential densities. Housing types under this density should be primarily single-family detached homes, patio homes, and zero lot-line homes. Building densities may be up to a maximum of two or four units per acre.



Low Medium Density Residential (LMDR)

This designation provides for increased densities of single-family homes on smaller lot, patio homes, and zero lot-line homes. Building densities may be up to a maximum of ten units per acre.

Medium Density Residential (MDR)

This designation provides for densities to accommodate multi-family residential uses, including small lot residential, duplexes, townhomes, and condominiums. Building densities may be up to a maximum of ten units per acre.

Medium Density Residential-Mobile Homes (MDR-MH)

This designation allows for mobile home parks or subdivisions. Building densities may be up to a maximum of ten units per acre.

High Density Residential (HDR)

This designation allows higher density residential development. Housing types under this density should be apartments, townhomes, and condominiums. These developments should be located close to major thoroughfares and located within easy walking distance to schools and shopping opportunities. Building densities may be five units up to a maximum of fifteen units per acre.

Mixed Use (MU)

This designation allows for a combination of higher density residential uses and commercial uses. This designation is to provide for flexibility as required to meet land use needs or to ensure compatibility for existing land users. Development under this designation should attempt to provide jobs and housing within the same project. Building densities may be five units up to a maximum of fifteen units per acre for residential uses and intensities up to a 3.0 FAR for commercial uses.

Commercial/Office (COMM/OFF)

This designation allows for commercial office uses. This designation is to provide for flexibility as required to meet land use needs or to ensure compatibility with existing surrounding land uses and topography. Building intensity may be up to 3.0 FAR.



Commercial (COMM)

This designation allows for a full range of commercial uses including neighborhood, community and regional. Neighborhood commercial uses are best located at intersections of major thoroughfares and collector streets. Ideally these smaller convenience centers should be restricted to a single corner. Community commercial uses are best located at the intersections of major thoroughfares. The centers may include all corners of the intersection. These centers should be contained to the general sphere of the intersection. Regional commercial uses should be located only where sufficient access can be provided by a major thoroughfare. Building intensity may be up to a 3.0 FAR.

Industrial (IND)

This designation allows for general industrial uses. Building intensity may be up to a 2.0 FAR.

Open Space (OS)

This designation provides for the preservation of land in its natural state and allows the development for trails, bike paths, and parks and includes all of the Auburn Recreation District facilities. Building intensity may be up to a 0.25 FAR.

Open Space Schools (OSS)

This designation allows for public uses such as schools and cemeteries. Building intensity may be up to a 0.25 FAR.

Open Space Private (OSP)

This designation provides for private open space that is dedicated as part of the tentative subdivision map process. The open space should be preserved in its natural state; however, this designation allows for recreational uses such as trails, bike paths, and other recreation facilities. Building intensity may be up to a 0.25 FAR.

Open Space Fairgrounds (OSF)

This designation allows for the wide variety of uses that do and could occur at the Gold Country Fairgrounds. It is the City's intent to support the public ownership and use under the Twentieth District Agricultural Association (Auburn District Fair Board).

The Gold Country Fairgrounds are designated as Mixed Use to reflect the wide variety of uses that do and could occur at this site. It is the City's intent to support the public ownership and use under the Twentieth District Agricultural Association (Auburn District Fair Board).



Overlays

There are two overlay designations which apply to this land use plan as described below.

1. *Clustered Development/Open Space Private (CD/OSP)*. This overlay designation requires that development be clustered in order to preserve open space, open space contiguous with adjacent open space, protect the natural environment, and provide urban services in an efficient manner. The number of units allowed under the land use designation, which this overlay is applied to, does not change. Therefore, the building intensity is calculated over an entire project area, not on a lot-by-lot basis.

The property having Assessor's Parcel Number 003-150-08, located at 169 Borland Avenue is designated Industrial with an Open Space Private (OSP) designation along the southeasterly boundary of the property per Exhibits A and B, Supporting Document 20. The intent of the OSP designation at this specific location is to provide a buffer between industrial and residential land use, for the currently existing residential portion of Assessor's Parcel Number 003-150-06, 173 Borland Avenue, which lies southeast of and adjacent to the subject site. In this case the OSP could be fenced and is not intended to provide for public use, recreational activities or preservation of a natural resource. Thus, with any change in land use designation on the southerly adjoining property, the appropriateness of retaining the OSP designation on the subject site should be reviewed, taking into consideration the original intent of the open space designation for the buffer on the subject site.

2. *Public (P)*. This overlay designation denotes public property within the study area. This is provided for informational purposes and does not affect other land use designations.

LAND USE ARRANGEMENT

The land use plan for the City presents a basic arrangement for the development of Auburn in future years, designating areas of use according to the foregoing land use categories. This arrangement takes into consideration the present land use pattern, the land use planning goals, identified constraints, circulation facilities and public services. Buildout scenarios (See Supporting Document, General Plan Alternative Analysis) were evaluated and the Land Use Plan in this document is a result of this process.

Residential

Residential infilling will take place typically at low and moderate densities. Vacant residential land is located south of Luther Road along Dairy Road in the northern part of the City; and along Auburn Folsom Road in the southern section of the City. Some higher density residential development will take place along Nevada Street north of Palm Avenue.



New residential growth will take place west of Highway 49, north of Luther Road, and south of Auburn Folsom Road. Each of these areas includes a variety of residential densities with commercial uses located nearby. The CD/OSP overlay designation has been added to many of these residential areas to allow developers to minimize environmental impacts by clustering housing and avoiding sensitive areas. Also, clustered housing is efficiently served by public facilities allowing for the consolidation and reduction of the service area.

Mixed Use

The mixed use designation is specifically applied to areas where flexibility is required to meet land use needs of an area or to ensure compatibility for existing land uses. Specific areas where this designation has been applied include the following:

1. Highway 49 between I-80 and Marguerite Mine Road (including the E.V. Cain site);
2. Dewitt Center; and
3. North Side, Indian Hill Road

At these sites, the mixed use designation will allow for a combination of high density residential development and commercial development of an office or retail nature. This designation provides the opportunity for affordable housing developments that can be located close to services. Mixed use developments should incorporate open space, pedestrian friendly circulation, and landscaping to buffer and integrate the uses. The final projects that are developed in these areas, however, will require specific project design review, coordination with the Community Development Department, and approval by the City.

The DeWitt Center is designated Mixed Use to reflect the existing conditions of multiple uses including County offices, health services (clinic), courts, jail, residential housing, juvenile group housing, public works maintenance and other private uses. It is the intent of the City of Auburn that the DeWitt Center does not provide retail commercial uses.

The intent of the Commercial/Public designation is to maintain the County's administrative functions at Fulweiler and Court facilities at the Lincoln Way Courthouse.

Commercial/Office

Select areas in Auburn are uniquely suited to office use because of topography and existing surrounding land use. Sites designated include: Old Town-220 Sacramento Street, Russell Road north of I-80 ("Hilltop"), Highway 49 east side between Bell Road and Dry Creek Road, and Northeast Corner of Bell Road and New Airport Road. The Northeast corner of Bell Road and New Airport Road has significant scenic qualities and is encouraged to include a golf course as part of the overall development plan for the site. On this property, development of a golf course which preserves significant portions of the existing vegetation and topography is considered open space.



Commercial/Industrial

The existing developed commercial and industrial areas within the City limits will change significantly during the planning period. New commercial developments are anticipated along Auburn Folsom Road and Highway 49, with gradual redevelopment in established commercial areas. Along Highway 49, policies have been developed to establish greater control over project design including landscaping along the corridor. Continued industrial development is anticipated at the Auburn Airport Industrial Park, along Borland Avenue and along Ophir Road in the portion of the sphere of influence. The Auburn Airport Industrial Park is the primary location for new industrial development in the region.

Auburn Airport

The Comprehensive Land Use Plan (CLUP) for the Auburn airport has very specific requirements for development within its approach, landing and takeoff zones. These restrictions control the density of development around the airport by setting standards for the number of people per acre that can be located within a certain distance of the different zones. Existing non-conforming uses are allowed to remain; however, no additions or expansions would be allowed. Further, the maximum building intensity allowed by some designations around the airport would exceed densities allowed by the CLUP. In these instances, the CLUP density shall be used as the maximum allowable building density. Golf course development is compatible with airport clear zones and is allowable in the CLUP. Bell Road from I-80 west to Highway 49 is recommended as a scenic route.

Schools

Proposed school locations are shown on the Land Use Diagram. These sites are conceptual and not site specific. The demand for additional school facilities is exceeding the ability to provide new school sites. Land use standards for potential school sites in Auburn are constrained by buffering and set back requirements. Few sites that meet all the criteria can be found within the General Plan Area. It may be necessary to modify these standards for buffer zones and minimum distance from industry, railroad, energy transmission lines, freeway or airport. Safety standards and noise impacts would have to be carefully evaluated. The school districts serving the Auburn area maintain Facility Master Plans, Financial Plans, and guidelines. Refer to the General Plan Supporting Documentation and Master Plans/Specific Plans.

Parks

Proposed park locations are shown on the Land Use Diagram. These sites are conceptual and not site specific. The Auburn Recreation District owns, operates and maintains the parks and recreation facilities in Auburn. The Open Space/Conservation Element discusses the parks, existing and planned. There is a shortage of parks within the City



and its sphere requiring additional parkland in the City and its sphere. There is an opportunity for additional parkland in the Baltimore Ravine Area which will be considered in the Southwest Specific Plan.

Agriculture, Mining and Timber Resources

Within the sphere of influence there are approximately 80 acres of land designated as agricultural. This agricultural land designation is limited to a small area of orchards located near Bell Road west of Interstate 80. Although there are known mineral resources, according to the State Department of Conservation, Division of Mines and Geology, City of Auburn Department of Public Works, Placer County Department of Public Works, and the Chevreux Concrete Company (pers. comm. on 7/23/92), there are no current surface mining operations within the sphere of influence. In view of the proposed urban uses, mining would be inappropriate. No such areas are designated in the Land Use Plan.

There are no timber resources in the planning area and no known hazardous waste sites. No areas of the plan are designated for these uses.

LAND USE AND TRANSPORTATION RELATIONSHIPS

The land uses, as set forth in the Land Use Plan, are properly served by the streets and highways as identified in the Circulation Element. The urban area is served on a regional basis by Highway 49 and Interstate 80.

The commercial areas are all located on the major streets or on Highway 49. The industrial areas at the airport have access by way of New Airport Road and Bell Road, which connects Highway 49 to Interstate 80.

The residential areas are all served with collector streets, although the topography in many areas requires reduced right-of-way to limit grading. The new residential areas to the west of Highway 49 in the Mt. Vernon Road area will require roadway improvements to handle additional traffic generated by growth in this area. New roads and roadway improvements are described in the Circulation Element.

There are no ports or marinas designated in the Land Use Element due to the City's location.

REDEVELOPMENT PLAN

The Redevelopment Plan, adopted by the Auburn Urban Development Authority in 1987, includes a number of development projects and public infrastructure improvements. The Plan provides a process which the agency can utilize in order to implement specific plans and projects which may be desirable to solve or alleviate concerns and problems of the community within the project area.



The primary goals of the Redevelopment Plan are essentially the goals of the General Plan applied to a specific area--the Redevelopment Plan area. (See Figure IV-4.) No land use or construction activity can be approved until it has been deemed to be in conform with this plan.

The City Manager's office and Community Development Department are assigned staff duties for the Auburn Urban Development Authority.

LAND USE PLAN SUMMARY

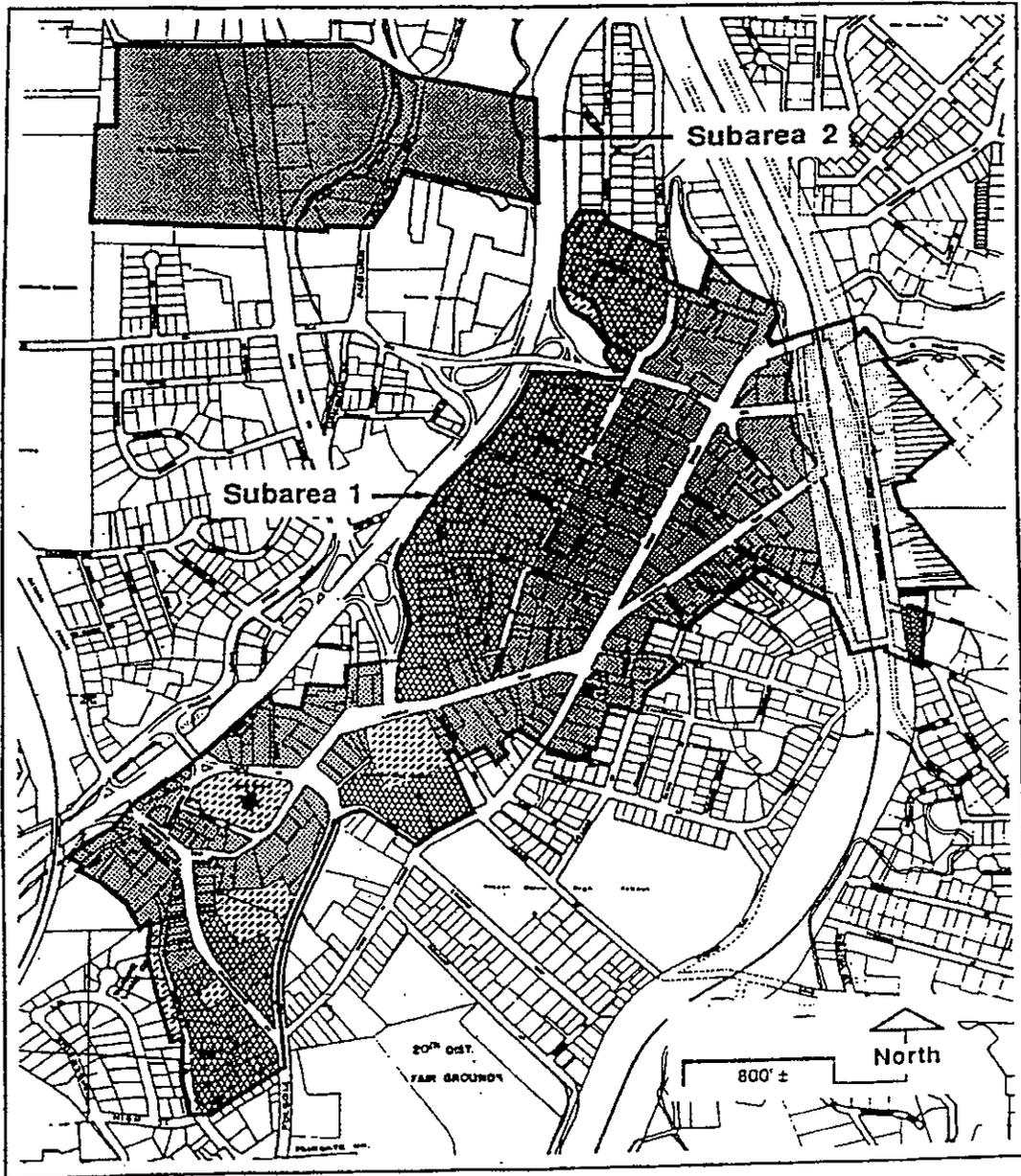
The Land Use Plan does not attempt to dictate the specific use of each parcel; rather, it designates a range of appropriate uses allowed within each category. Further, the policies developed for this plan and the level of their implementation will significantly affect land development in Auburn during the next two decades.

The land use plan is summarized by acreage in Table IV-5.

Land Use Designation	No. of Acres	No. of Acres	No. of Acres
	City Limits	Sphere of Influence	Total
Agriculture	0	80	80
Urban Reserve	410	0	410
Rural Density Residential	280	4490	4,770
Low Density Residential	540	1600	2,140
Urban Low Density Residential	1150	1320	2,470
Low Medium Density Residential	270	30	300
Medium Density Residential	80	520	600
High Density Residential	240	0	240
Mixed Use ¹	210	200	410
Commercial/Office	10	190	200
Commercial ¹	410	650	1060
Industrial ¹	430	500	930
Open Space ¹	550	2990	3,540
Open Space Schools ¹	60	60	120
Open Space Private	140	240	380
Open Space Fairgrounds	50	0	50
TOTAL	4,830	12,870	17,700

¹ These designations include publicly owned property.
SOURCE: Harland Bartholomew & Associates, Inc., 7/92





Land Use

- | | | | |
|---|------------------------------|---|------------|
|  | Low Density Residential |  | Commercial |
|  | Low Med. Density Residential |  | Industrial |
|  | High Density Residential |  | Public |

No Scale



Source: City of Auburn, 1992.

CITY OF AUBURN GENERAL PLAN
 AUBURN REDEVELOPMENT PLAN BOUNDARIES

Harland Bartholomew & Associates, Inc.

FIGURE
 IV-4

Page IV-27

Table IV-6 presents an analysis of various characteristics for the land use plan shown on Figure IV-1.

An additional population of approximately 13,000 people can be accommodated within the existing City limits (based upon 1990 household size estimates). The areas within the 1992 City limits, assuming 1990 household conditions and construction activity, would experience buildout within the next 20-30 years. Any change in building activity or household size, however, will significantly affect the buildout year estimate.

The land use plan developed for the City of Auburn attempts to provide land for growth and development yet preserve and protect the sensitive environmental areas of the City and its sphere of influence.

TABLE IV-6 LAND USE ANALYSIS CITY OF AUBURN GENERAL PLAN		
	Within City Limits	City Limits + Sphere
Population (2.3 persons/d.u.)	23,030	51,970
Students (18% of population)	4,145	9,355
School Classrooms	138	312
Labor Force (45% of population)	10,364	23,387
Parks (5 acres/1,000 population)	115	260
Residential Water Use at 150 gpcd	3.5 mgd	7.8 mgd
Residential Sewage at 120 gpcd	2.8 mgd	6.2 mgd
<p>Notes:</p> <p>1. Assumed size of school classrooms would be 30 students.</p> <p>2. gpcd = gallons per capita per day</p> <p>3. mgd = million gallons per day</p> <p>4. Estimates above do not include the urban reserve designation since land development under this designation can only occur after approval of a specific plan.</p> <p>SOURCE: Harland Bartholomew & Associates, 7/92</p>		

5. Implementation

These programs relate to the adopted goals and policies. The implementation and completion of the programs represent the means by which progress in carrying out the Goals and Policies will be measured.

- A. The City shall prepare design guidelines for commercial and industrial development proposals.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 1.1, 1.2, 7.1, 7.2, 8.1

- B. The City shall prepare and adopt a hillside development ordinance to address disturbance to the terrain including elements such as "pads" on steep slopes, roads to follow topography, and fencing on steep slopes.

Responsibility: Community Development, Public Works
Time Frame: 1994
Related Policy: 3.1, 3.2, 3.3, 3.4, 6.2

- C. The City shall update the Zoning Map to conform to the adopted General Plan.

Responsibility: Community Development
Time Frame: 1994 (as soon after adoption of General Plan as possible)
Related Policy: 5.1, 5.2, 5.3

- D. The City shall adopt Landscape and Lighting Districts in residential and commercial areas.

Responsibility: Community Development, Public Works, Finance
Time Frame: 1994
Related Policy: 6.4, 7.2

- E. The City shall update the phased Capital Improvement Program based upon the adopted General Plan.

Responsibility: City Manager, Community Development, Public Works
Time Frame: 1993 (as soon after adoption of General Plan as possible)
Related Policy: 9.1, 9.2, 10.1

- F. The City shall continue the Annexation Program based upon the adopted General Plan.

Responsibility: Community Development, City Manager
Time Frame: 1993-1997
Related Policy: 9.2, 10.1, 10.2, 10.3, 10.4

- G. The City shall pursue funding sources to support cultural activities and programs.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 11.1



- H. The City shall, in cooperation with the school districts, prepare a school facilities plan which addresses siting criteria, joint school/park sites, safety, access and funding.

Responsibility: Community Development, Auburn Recreation District, School Districts

Time Frame: 1994-1997

Related Policy: 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 12.10

- I. The City shall pursue the implementation of the Auburn Urban Development Authority Redevelopment Plan.

Responsibility: Auburn Urban Development Authority, Community Development, Public Works, City Manager

Time Frame: Ongoing

Related Policy: 1.1, 6.1, 6.2, 6.3, 6.4, 7.3, 8.1

- J. The City shall prepare a proposal for a new Sphere of Influence and submit to LAFCO for adoption.

Responsibility: Community Development, LAFCO

Time Frame: 1993

Related Policy: 2.1, 9.2, 10.1, 10.2, 10.3, 10.4

- K. Implementation measures for Goal 4, Air Quality Enhancement, are provided in a number of implementation measures in this General Plan including, but not limited to, the land use, circulation, and open space conservation elements.

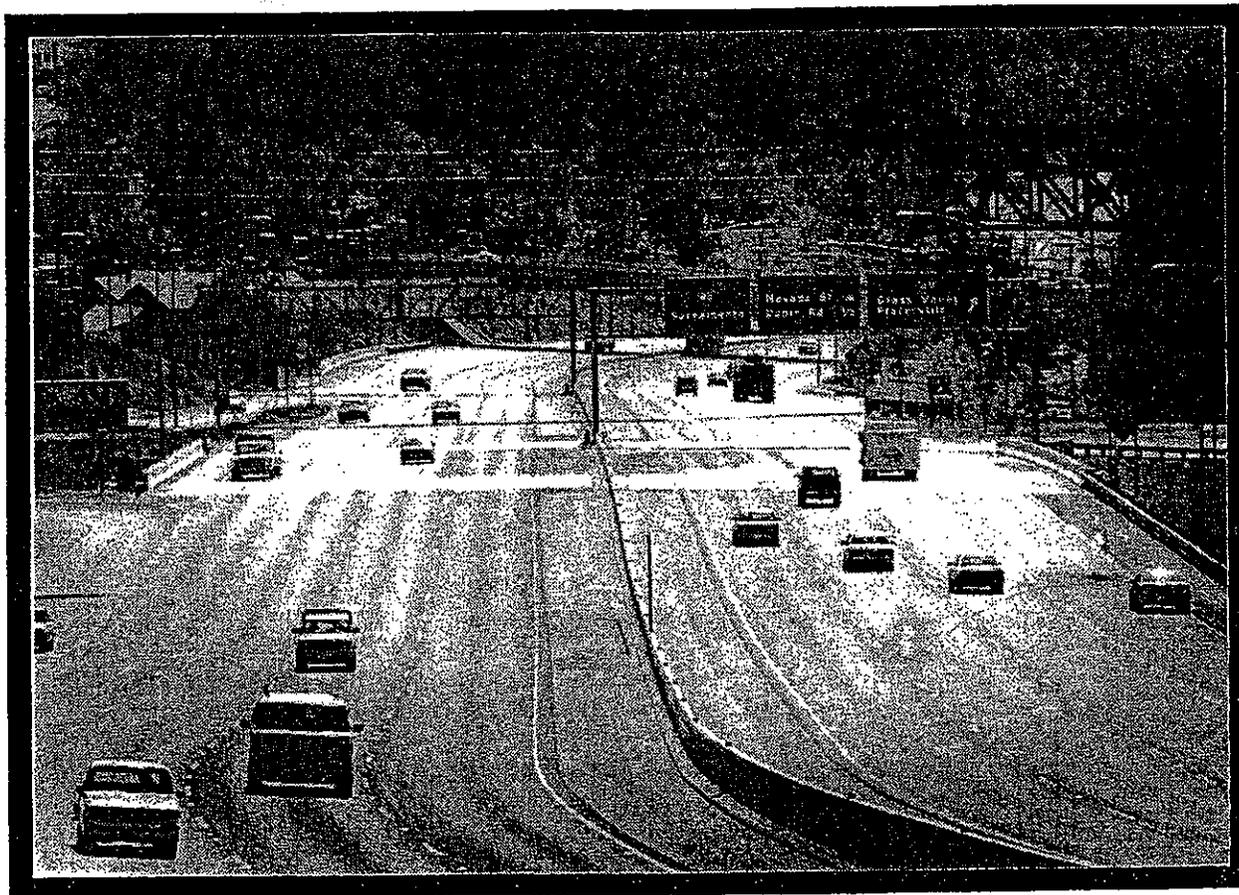
Responsibility: Community Development, Public Works

Time Frame: Varies

Related Policy: 4.1, 4.2, and related policies noted in other elements



C I R C U L A T I O N E L E M E N T

*Interstate 80 - Auburn*

1. Introduction

The Auburn Circulation Element is an infrastructure plan for existing and proposed facilities for the circulation of people and goods including sewer, water, and power. The Circulation Element is consistent with the Land Use Element and coordinated with the Regional Transportation Plan developed by the Placer County Transportation Commission (Congestion Management Agency), and any state transportation plans. Cooperation is necessary between all city, county, and state entities to develop a comprehensive circulation and transportation system. The Circulation Element is a mandatory element required by Government Code Section 65302(b).

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the City Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

Goal 1: Provide and maintain a comprehensive, safe, and efficient transportation system.

Policy 1.1 The City should maintain a peak hour level of service "D" at City-maintained intersections and a peak hour/daily level of service "D" on City-maintained roadways as measured by the most recent Highway Capacity Manual and adopted by the City Council.

(Note: One or both of the roadway level of service standards shall apply to roadways that are impacted by proposed development projects based on the level of impact associated with each project as determined by the City.)

1.2 Widen intersections and streets where additional capacity is required.

1.3 The City shall develop a Transportation System Management (TSM) program to assure efficient utilization of existing transportation facilities.

(Note: TSM is a local program, Congestion Management Program is regional.)

1.4 Update and use the traffic model developed for the General Plan to analyze impacts associated with future development.

1.5 Designate truck routes to avoid residential areas and low overcrossings.

1.6 Support improvements to Highway 49.

1.7 Support the construction of an improved connection between Highway 49 and Interstate 80.

1.8 Allow on-street parking only on residential collector streets, local streets and in the Old Town and Downtown business districts.

1.9 The City shall require bus turnouts and rider shelters for new residential projects where appropriate. (LU 12.7)

1.10 The City should require the upgrading and improvement of existing bus turnouts and rider shelters where appropriate.

1.11 Create a joint City/County Traffic Mitigation fee program with benefit areas targeting needed improvements.



Goal 2: Create a continuous, interrelated street network that is user-friendly for both vehicular and pedestrian traffic including, but not limited to, avoiding walled projects, dead end streets, and barricades.

- Policy 2.1 Post appropriate speed limits on streets within residential areas to minimize noise impacts and eliminate the need for the construction of sound walls.
- 2.2 Utilize, update, and implement the Auburn Park Conservancy Non-Auto Circulation Plan and the Auburn Ravine Trail Master Plan.
- 2.3 The City shall install crosswalks, pedestrian signals, and vehicular signals as warranted by standards adopted by the City Council.
- 2.4 The City shall construct pedestrian and emergency vehicle access where a logical connection can be made to existing streets, bikeways, future development or emergency access roads.
- 2.5 The City shall prohibit obstructions to through traffic by constructing barricades.
- 2.6 The City shall discourage obstructions to through traffic flow including speed bumps and mid-block stop signs.

Goal 3: Encourage transportation alternatives to the single-occupant automobile.

- Policy 3.1 Match land use density to transit service routes and roadway capacity.
- 3.2 Modify and update transit routes and schedules to reflect changes in service demand.
- 3.3 Encourage and support programs which will increase ridesharing.
- 3.4 Support the establishment of inter-city rail service and other modes of transportation connecting the Bay Area, Sacramento, Roseville, Auburn, Colfax, and surrounding cities.
- 3.5 The City shall develop and implement an ongoing Trip Reduction Implementation Program applicable to major development projects and employers.
- 3.6 The City shall prepare a transit master plan for the City transit system.
- 3.7 Continue participation with the Placer County Transportation Commission (Congestion Management Agency).
- 3.8 Construct bicycle lanes, where possible, on all major arterials.



Goal 4: Protect the public investment in the airport.

Policy 4.1 Minimize the impacts of future development on the Airport by abiding by the City adopted Airport Comprehensive Land Use Plan.

4.2 Continue participation with the Airport Land Use Commission.

4.3 Support the continuance of the Auburn Airport as an aviation transportation link.

4.4 The City shall prepare Airport Operation Standards that shall financially enhance the Airport.

Goal 5: Provide a full range of adequate public services for all area residents and businesses.

Policy 5.1 The City shall prepare and maintain a five-year capital improvement program for public facilities.

5.2. The City will continue to seek new and maintain existing sources of funding to develop, operate and maintain community facilities, urban services and transportation facilities. (LU 9.1)

3. Existing Conditions

This section provides an assessment of the adequacy of existing facilities. The discussion addresses the following transportation system components:

- Street System;
- Transit Service;
- Rail Transportation;
- Air Transportation;
- Pedestrian and Bicycle Transportation; and
- Public Facilities.

STREET SYSTEM

Roadways

Auburn's street system is predominately a two-lane road network reflecting the rural environment of this foothill community. Only Interstate 80, Highway 49, Elm Avenue and Auburn Folsom Road provide four or more travel lanes.

Figure V-1 shows the functional classification of the road network according to the following classifications:

- Freeways--Limited access highways.



- Highways--Limited access regional roadways.
- Arterials--Major streets providing through service to industrial and commercial areas and between cities.
- Collectors--Streets that collect traffic from local streets within residential areas.
- Locals--Streets whose primary purpose is to provide access to individual properties.

Interstate 80 and Highway 49 are the two main routes through the City. Interstate 80 bisects the City in a northeasterly--southwesterly direction while Highway 49 bisects the City in a northwesterly--southeasterly direction. Interstate 80 has six lanes to the east and west of Auburn and up to eight lanes through the City. Highway 49 is a two-lane highway through Auburn except for a four-lane section from Lincoln Way to Dry Creek Road in north Auburn. Auburn Folsom Road also functions as a thoroughfare for traffic in the southern portion of Auburn and varies from two to four lanes.

In order to analyze the existing conditions for the roadway system, procedures and methodologies from the *Highway Capacity Manual (HCM), Special Report 209*, Transportation Research Board, 1985, were used. HCM techniques generate daily roadway capacities adjusted to incorporate factors that influence theoretical roadway capacity. These capacities were then compared to 1990 roadway volumes to determine a level of service (LOS). Level of service describes traffic flow conditions and varies qualitatively from LOS A to LOS F as described below in Table V-1.

LOS	Description
A	<i>Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.</i>
B	<i>Stable flow, but the presence of other users in the traffic stream begins to be noticeable.</i>
C	<i>Stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.</i>
D	<i>Represents high density, but stable flow.</i>
E	<i>Represents operating conditions at or near the capacity level.</i>
F	<i>Represents forced or breakdown flow.</i>

SOURCE: Highway Capacity Manual, Special Report 209, Transportation Research Board. 1985.

Average daily traffic counts (ADTs) provided by the City of Auburn Public Works Department and Caltrans are shown on Figure V-2. These volumes were compared to the LOS criteria capacities to determine existing LOS. These capacities were generated using the Highway Capacity Manual techniques discussed above and are contained in the Supporting Documents, Transportation Evaluation Criteria (Table A-1). Figure V-3 shows the level of service results.



Intersections

In order to assess peak hour traffic operations, selected intersections were analyzed to determine peak evening hour LOS. Intersection analysis is important because it reveals peak hour operational problems that might not be evident in analyzing daily volumes.

Intersections were also analyzed using Highway Capacity Manual techniques and procedures. Tables A-2 and A-3 of the Transportation Evaluation Criteria in the Supporting Documentation define the analysis criteria for the intersections. Figure V-4 shows the peak hour LOS of each analysis intersection.

Truck Routes

Figure V-5 shows the truck routes through Auburn. These routes are designed to allow truck traffic to pass through the City with minimal impact on local vehicular and pedestrian traffic. Through truck traffic is also permitted on State Highway 49 through downtown Auburn.

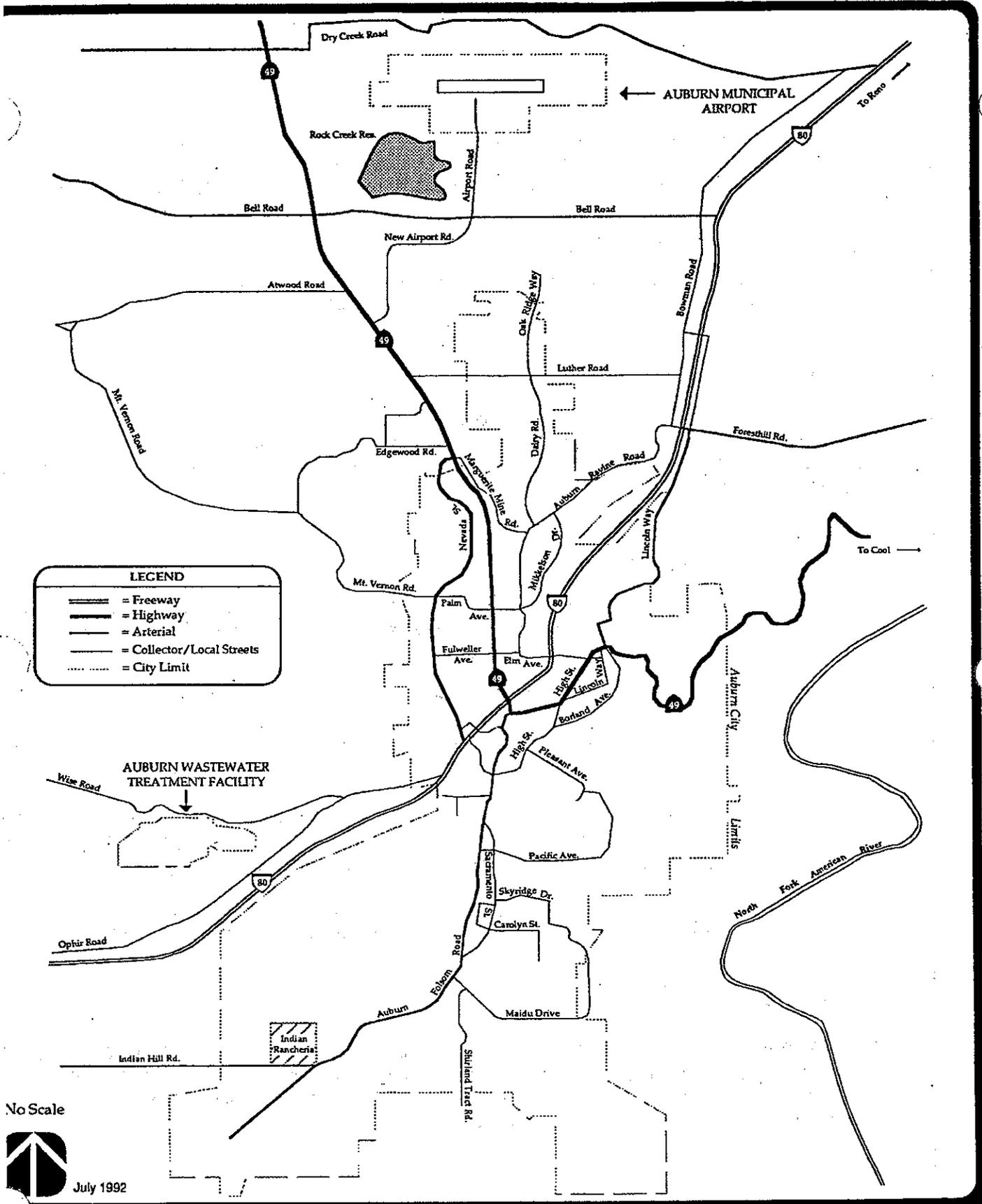
Roadway Design Standards

Currently, Auburn's Municipal Code contains roadway design standards. The standards provide a limited level of detail for the necessary features within the right-of-way. Revisions to these standards are necessary for the following reasons:

1. The application of the standards should be based on functional classification of the roadway, not the type of zoning proposed adjacent to the street. This ensures route continuity and provides safer operating conditions by minimizing the changes to driver expectation.
2. The current standards do not require bike lanes. Provision of bike lanes enhances recreational activities, enhances air quality and provides safer operating conditions for motorists and bicyclists.
3. The standards should detail all features including striped lane widths, on-street parking, bike lanes and pavement section requirements.

Parking Standards

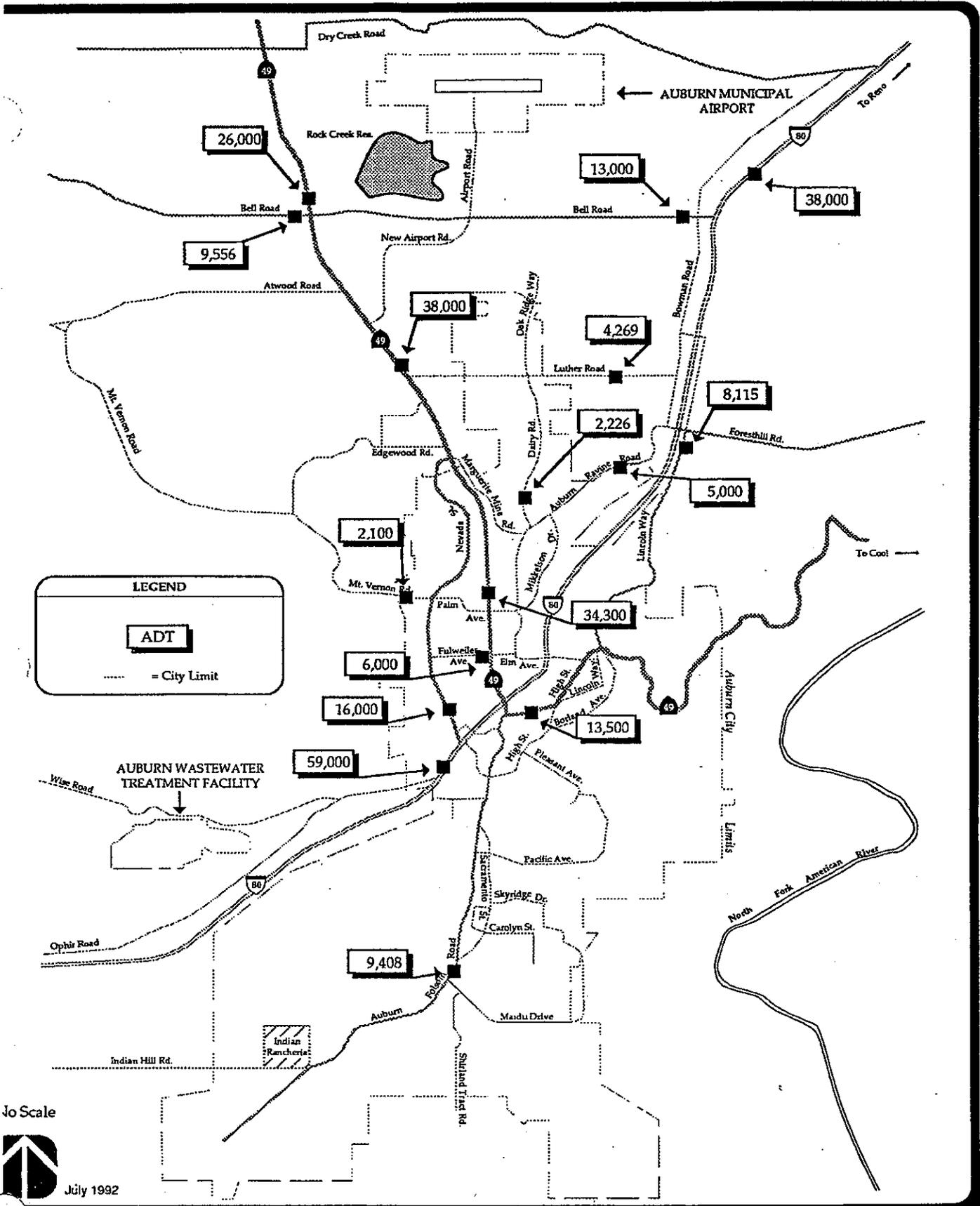
Article 9 of the Auburn Municipal Code defines the standards for off-street parking and loading. Items such as the number of required spaces, design standards and maintenance are well-defined in this article. There currently are no guidelines for the circumstances in which on-street parking is allowed or disallowed.



CITY OF AUBURN GENERAL PLAN
EXISTING STREET SYSTEM FUNCTIONAL CLASSIFICATION

Harland Bartholomew & Associates, Inc.

FIGURE
V-1
Page V-7



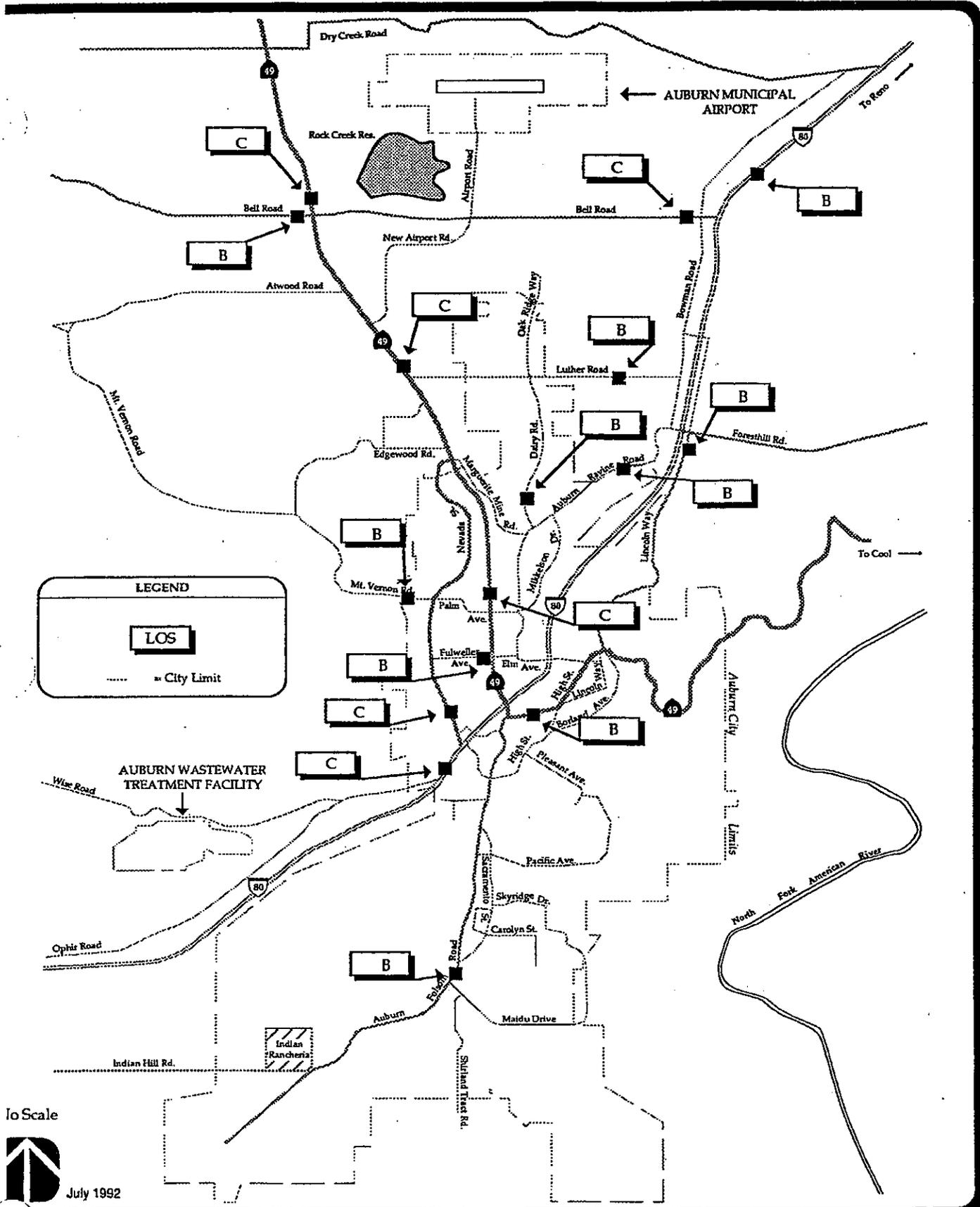
CITY OF AUBURN GENERAL PLAN
 1990 Average Daily Traffic Volumes

Harland Bartholomew & Associates, Inc.

FIGURE

V-2

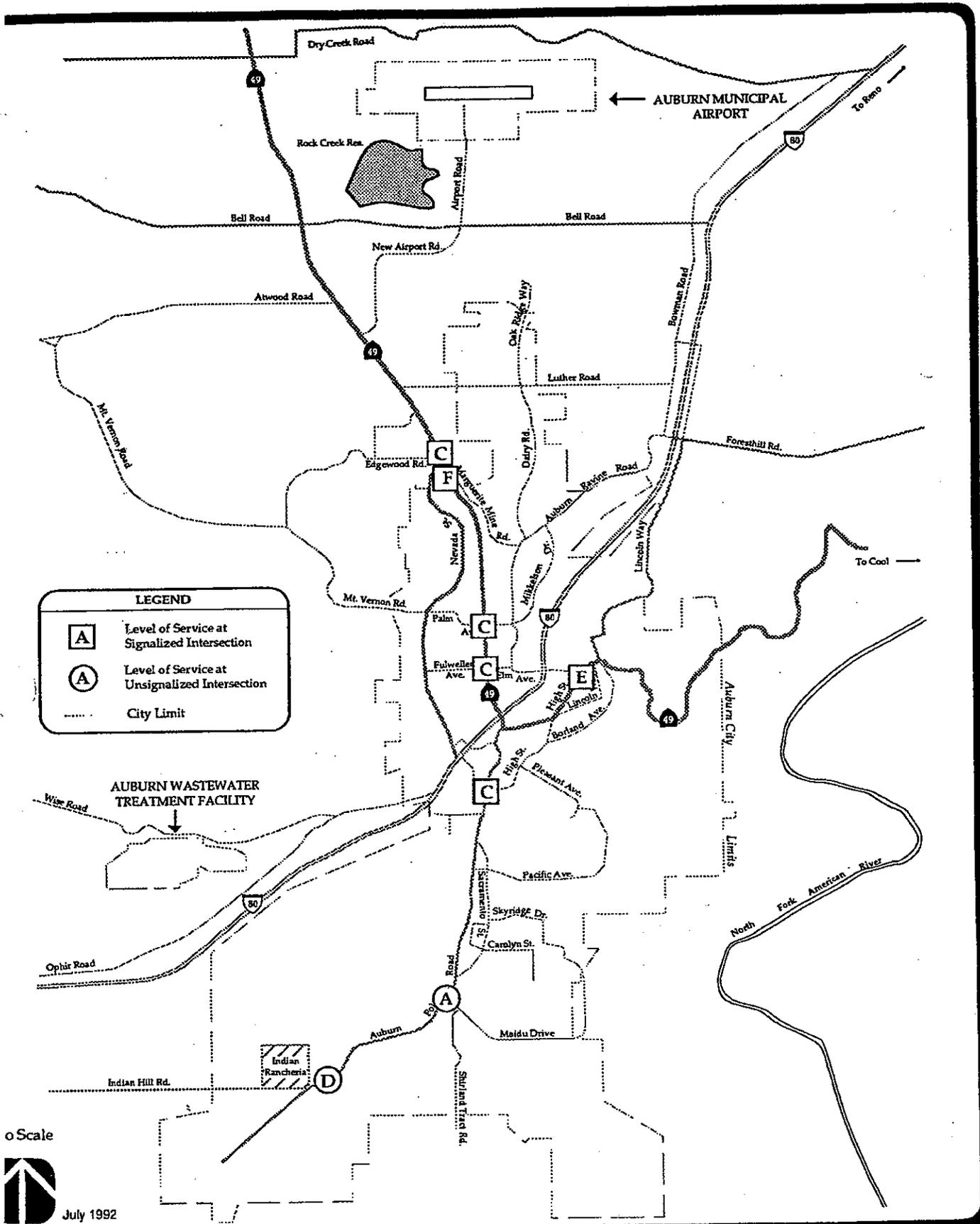
Page V-9



CITY OF AUBURN GENERAL PLAN
 1990 AVERAGE DAILY LEVEL OF SERVICE

Harland Bartholomew & Associates, Inc.

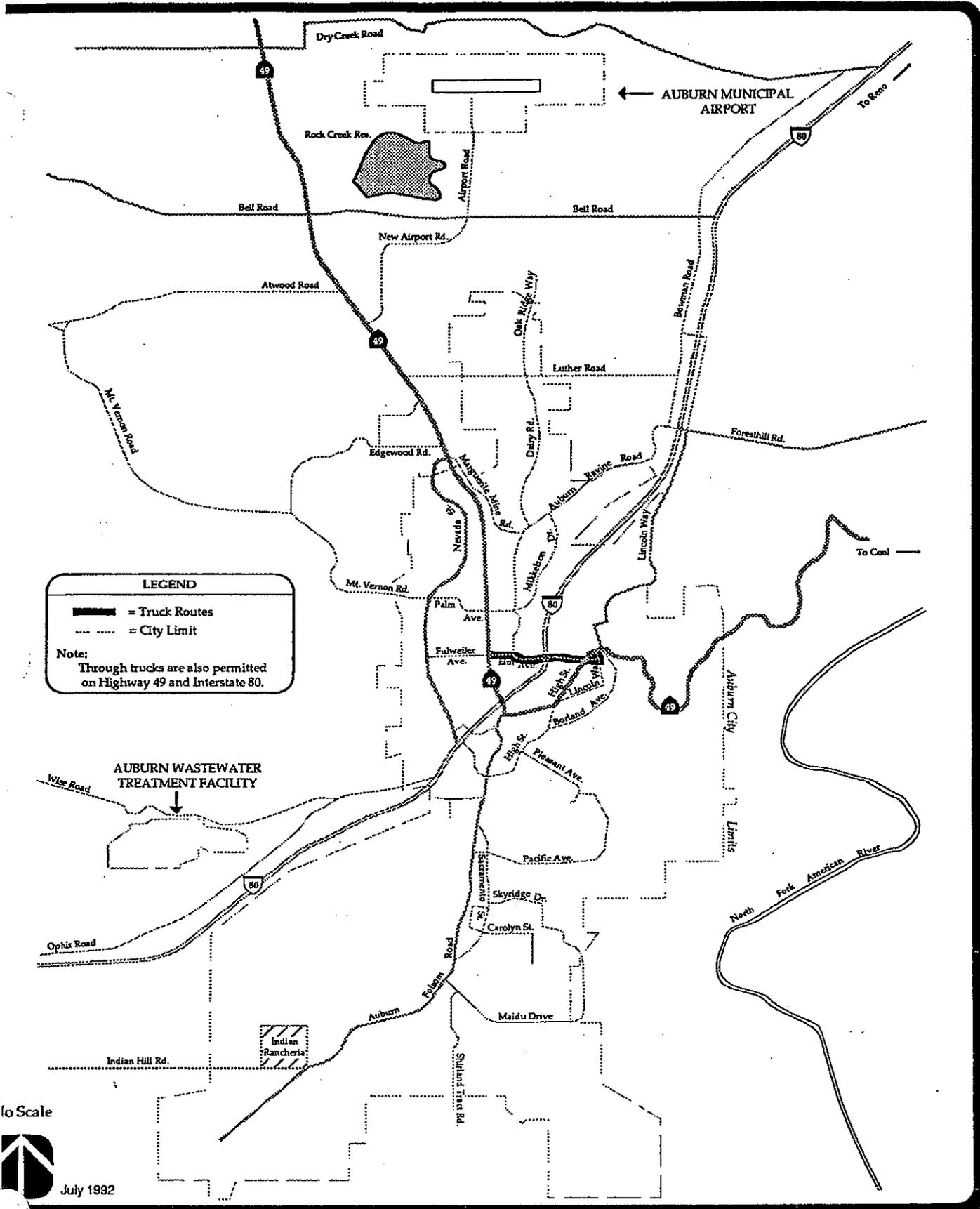
FIGURE
 V-3
 Page V-11



CITY OF AUBURN GENERAL PLAN
1990 PEAK HOUR LEVEL OF SERVICE FOR SELECTED INTERSECTIONS

FIGURE
V-4

Harland Bartholomew & Associates, Inc.



**CITY OF AUBURN GENERAL PLAN
TRUCK ROUTES**

Harland Bartholomew & Associates, Inc.

**FIGURE
V-5
Page V-15**

TRANSIT SERVICE

Public Facilities

Auburn Transit, Placer County Transit (PCT), and the Consolidated Transportation Services Agency (CTSA) combine to provide public transit service in the Auburn area. Auburn Transit, better known as the Auburn Mini-Bus, currently operates two passenger buses on a deviated route schedule. Service is provided six days a week and both buses are lift-equipped to serve elderly and handicapped patrons.

Placer County Transit operates a combination fixed route/route deviation bus service. The deviation service allows for a diversion of up to one mile from the fixed route to serve patrons who have requested the service at least 24 hours in advance. In the Auburn area, PCT service has eight buses available for service five days a week. The buses carry a maximum of 30 passengers with an average bus size of 18 to 19 passengers. Figure V-6 shows the PCT routes and the transit service area of the Auburn Mini-Bus.

The Consolidated Transportation Service Agency (CTSA) is an independent nonprofit organization that provides transportation services to over 300 individuals within Placer County who are disabled or seniors. As part of their service, CTSA also provides transportation services to the Association for Retarded Citizens within Placer County. Both CTSA and the Auburn Transit coordinate their activities on an ongoing basis by providing notice of new or expanded transportation services that may affect each operation and an opportunity to participate in planning for the provision of service.

Service quality of the Auburn Mini-Bus ranks well according to a June 1989 performance audit of the Auburn Mini-Bus. Audit authors made the conclusion that the service adequately met the transit needs of Auburn residents. Further, the combined efforts of the Auburn Mini-Bus, PCT, and CTSA have initiated a well-coordinated public transportation system which inherently meets the transportation needs of most Auburn area residents. Nevertheless, the Placer County Regional Transportation Plan recommends a comprehensive transit demand and needs analysis to be performed by the Placer County Transportation Commission that determines the overall demand for transit and paratransit services and that determines if all of the transit needs are being met within the region.

Caltrans offers a different type of transit service, that of ridesharing. Caltrans provides a commuter matching service and operates park-and-ride lots in the Auburn area (pers. comm. 9/21/92). The commuter matching service allows commuters to contact other commuters living in the same vicinity to arrange ride-sharing activities. In 1990, 259 commuters from the Auburn area requested matching information from the Caltrans Rideshare office. Caltrans officials estimate that about 25 percent of those expressing interest actually participate in ridesharing. Comparing this percentage with statistics regarding park-and-ride lot use in the Auburn area, this would seem to be a reasonable



estimate. Table V-2 contains ridesharing use statistics for three Auburn area park-and-ride lots.

TABLE V-2 PARK-AND-RIDE STATISTICS, 1990				
Location	Parking Spaces	Occupied Parking Spaces	Bicycle Lockers	Bicycle Lockers Occupied
Atwood Road	42	16	4	1
Bell Road	33	15	8	1
Lincoln Way	21	15	4	1
TOTAL	96	46	16	3
<i>SOURCE: Caltrans Rideshare Office, 1990</i>				

Private Facilities

Auburn's private transit facilities include two different types of services. One private company, Greyhound Lines, provides intrastate and interstate bus service. Other private companies provide charter bus service along the Interstate 80 corridor between Reno and San Francisco, with stops in Auburn.

Private van service to the airport and the Bay Area is available as is taxi and services.

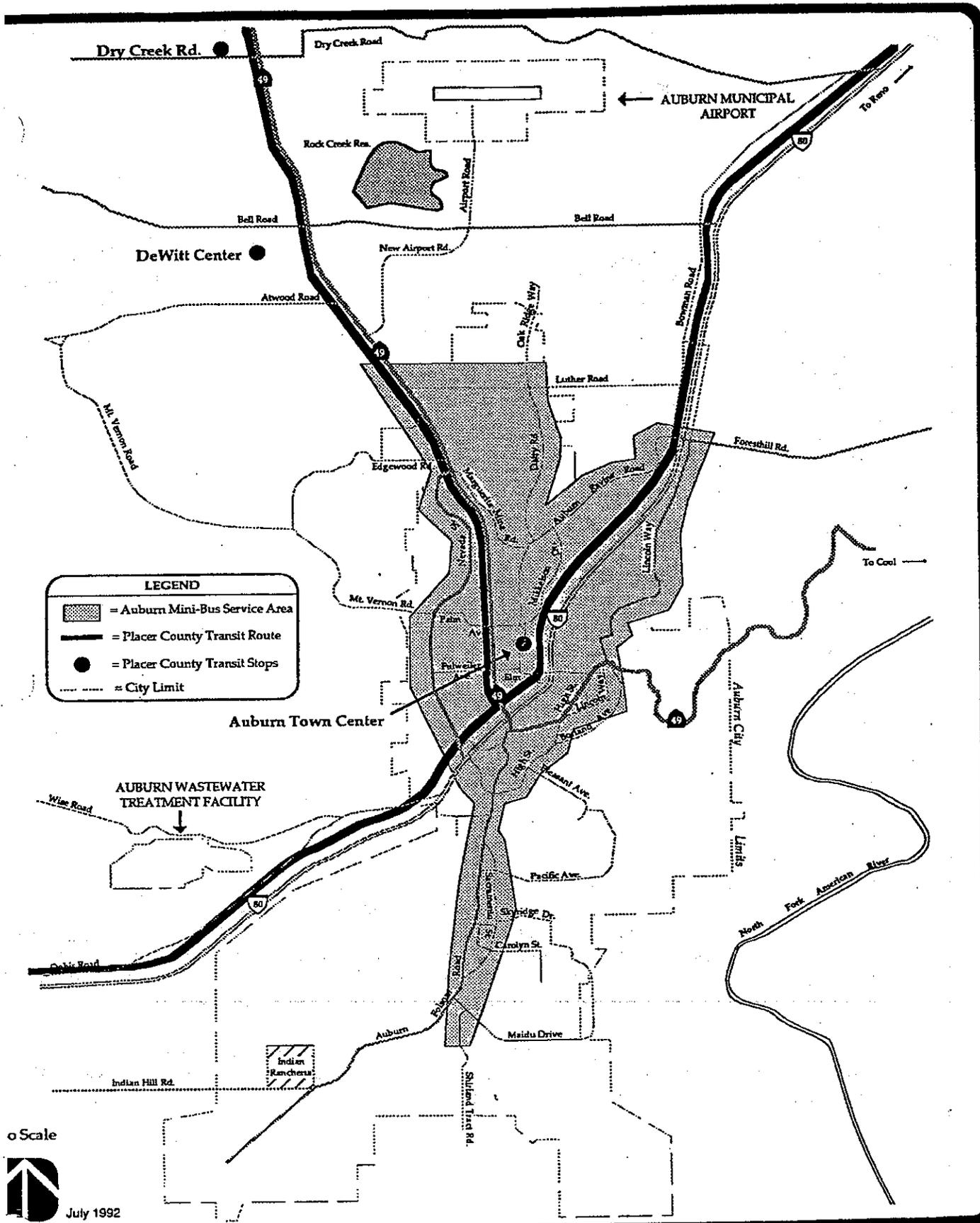
RAIL TRANSPORTATION

Facilities/Services

Rail facilities in Auburn include two sets of Southern Pacific tracks that run through Auburn. (See Figure V-7.) One set of tracks is used for eastbound trains and the other set of tracks serve westbound trains. Auburn is one of the last locations in the nation where separate parallel double sets of tracks exist to serve directional train traffic. Although the tracks exist, freight and passenger rail services are not currently available in Auburn due to the absence of a passenger and/or freight rail station.

In the recent Placer County Commuter Rail Feasibility Study, Auburn is listed as a potential station site. Initiation of a commuter rail route with an Auburn station could occur within the time frame of the Auburn General Plan.





CITY OF AUBURN GENERAL PLAN
 TRANSIT SERVICE IN THE AUBURN AREA

Harland Bartholomew & Associates, Inc.

AIR TRANSPORTATION

This section summarizes the existing conditions discussion prepared in the *Auburn Municipal Airport Master Plan, (AMAMP), 1989.*

Facilities

The City of Auburn Municipal Airport is the only public airport within the General Plan study area. The airport is currently zoned as an industrial-use design control district. Typical land uses associated with this zoning are aviation-related manufacturing, sales, and services along with general industrial and commercial land uses. The City owns and operates the airport, with the City Manager responsible for airport management.

The Auburn Municipal Airport is located approximately four miles north of Downtown Auburn and one-half mile east of Highway 49. Access to the airport is via Airport Road, a two-lane, north-south paved road between Bell Road and the airport. Bell Road is connects to both Highway 49 and Interstate 80. The airport covers 210 acres and has an airfield elevation of 1,523 feet above mean sea level. Figure V-8 shows the location of the airport.

Existing facilities at the airport include the following:

Airfield

- One paved runway, Runway 7-25, which is 3,100 feet long and 60 feet wide with an effective upward gradient of 1.7 percent to the east. Pavement type is asphalt and its gross weight strength is rated at 30,000 pounds for single-wheel landing gear aircraft. Pavement and runway markings, according to the master plan, are in fair condition. The runway also includes medium intensity runway and threshold lights.
- One 30-foot-wide parallel, asphalt taxiway located 150 feet (centerline-to-centerline) from the runway with one exit near mid-point, in addition to the connections at each end. The taxiway also has medium intensity edge lights.

Aircraft Parking and Hangars

- 187 open tiedowns, 40 port-a-port hangars, 14 T-hangars, 10 aircraft shelters, and seven other conventional hangars.

Other Facilities

- Two 8,000-gallon underground fuel tanks for storage to 80 octane and 100 octane aviation fuel.
- Miscellaneous industrial and commercial businesses including one restaurant within the City Limits.

Services

Air transportation services at the Auburn Municipal Airport are referred to as Fixed-Base Operators (FBOs). FBOs at the Auburn Airport provide flight instruction, charter service, pilot supplies, avionics sales and service, aircraft sales, rental salvage, fuel, and maintenance.

Use

As of August 1986, there were 195 single-engine and 11 twin-engine aircraft at the Auburn Airport for a total of 206 based aircraft. For 1990, airport officials estimate 210 based aircraft occupy aircraft parking facilities. In 1986, the 206 based aircraft were responsible for 35,000 "local" operations where the aircraft took off and landed at the Auburn Airport. An additional 33,000 "itinerant" operations were generated at Auburn by aircraft taking off at one airport and landing at another airport. The 1990 estimate for total operations was approximately 65,000, which represents little change from the 1986 total of 68,000 operations.

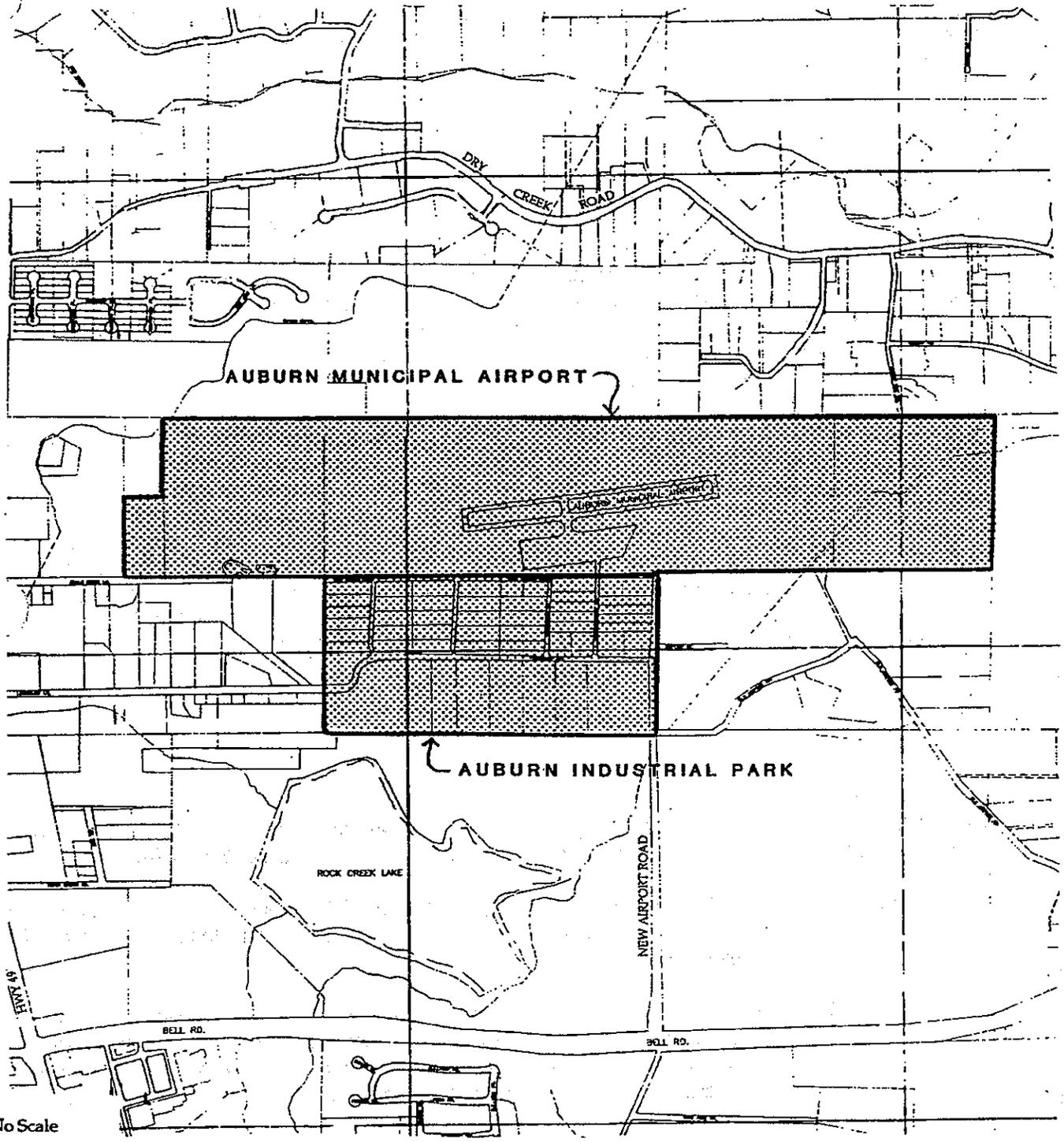
The decline in total operations seems to indicate a leveling off compared to increases in aviation activity at the Auburn Municipal Airport experienced from 1980 to 1986. During this six-year time period, based aircraft at Auburn increased from 105 to 206, a 96 percent increase. According to the AMAMP, based aircraft is expected to increase reaching 360 total based aircraft by 2007. Operations are also expected to increase, reaching 79,000 by 2007. Nevertheless, since 1986, Auburn's aviation growth has not materialized. Therefore, current aircraft parking and operations capacity is sufficient to meet current demand. If demand increases as predicted in the AMAMP, however, expansion or improvement of airport facilities may be required.

PEDESTRIAN AND BICYCLIST TRANSPORTATION

Facilities

Bike routes and pedestrian walkways are typical examples of pedestrian and bicycle transportation facilities. Bike routes are divided into three categories as follows:

- Class I** Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized.
- Class II** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.



No Scale



July 1992

**CITY OF AUBURN GENERAL PLAN
AUBURN AIRPORT / INDUSTRIAL PARK**

Harland Bartholomew & Associates, Inc.

**FIGURE
V-8**

Page V-25

Class III Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists.

SOURCE: Placer County Regional Transportation Plan, 1988.

In Auburn, plans and studies such as the Auburn Park Conservancy Non-Auto Circulation Plan and the Auburn Ravine Trail Master Plan have identified locations for bike routes and pedestrian walkways. Placer County has also designated bike routes and pedestrian walkways in and around Auburn through the Regional Transportation Plan and the Placer County Bikeways Master Plan.

Use

Although bicycle and pedestrian facilities are planned for in Auburn, existing bike routes are limited. As for pedestrian walkways, sidewalks and pedestrian crossings are provided throughout Auburn, but trails or paths separated from vehicular traffic are almost non-existent. Nevertheless, pedestrians and bicyclists can be found using Auburn's street system. The most apparent examples of pedestrian activity on the street system are near attractions such as parks and shopping centers. Examples include Ashford Park on Auburn Ravine Road, Recreation Park on Recreation Drive and Auburn Town Center on Elm Street. Therefore, the current facilities do not adequately meet the bicyclist and pedestrian needs.

PUBLIC FACILITIES

Water Service

Water service is provided to the City of Auburn by the Placer County Water Agency (PCWA). The agency serves 28,000 customers who utilize either well-water, treated water or both. PCWA purchases raw water from Pacific Gas and Electric (PG&E) that comes from the Yuba-Bear System. Under the current contract between PCWA and PG&E, a maximum annual amount of 100,000 acre-feet can be purchased by the Agency. Within the sphere of influence the Nevada Irrigation District (NID) also provides water service. NID serves approximately 1,800 customers in the area west of Highway 49.

PCWA provides water from the Bowman and Auburn Water Treatment plants. The combined production capacity of these two plants is 10 million gallons per day (MGD). Maximum demand in 1990 was 11.2 MGD. In order to alleviate existing capacity problems and to provide additional capacity, which will accommodate growth in the Auburn area, the PCWA has developed a *Master Plan*. This plan outlines four alternatives to effectively solve existing problems and to provide for future growth. Further, this plan will include water demand forecasts that are based upon the land use information contained in the City of Auburn General Plan and the Auburn/ Bowman Community Plan in order to provide accurate forecasts of demand.



NID operates one treatment plant at Locksley Lane, north of Auburn. The plant's current capacity is 3.0 MGD, but is to be expanded to a minimum capacity of 4.5 MGD. Expansion is expected during 1993. With the anticipated expansion, NID has indicated that it has more than sufficient water rights to provide for planned growth in its service area north of Auburn (*Auburn/Bowman Community Plan Public Services/Public Facilities Study, 1991*).

Sewer Service

The Auburn Wastewater Treatment Plant is located west of Auburn in the Ophir area. Existing and projected wastewater characteristics are shown in Table V-3.

TABLE V-3 EXISTING AND PROJECTED WASTEWATER CHARACTERISTICS CITY OF AUBURN WASTEWATER TREATMENT PLANT				
<i>Parameter</i>	<i>Existing</i>	<i>Stage 1 Expansion¹</i>	<i>Stage 2 Expansion²</i>	<i>Potential Expanded System</i>
<i>FLOW (MGD)</i>				
<i>Average Dry Weather Flow</i>	1.0	1.7	3.3	5.5
<i>Average Wet Weather Flow</i>	1.8	2.6	4.3	6.8
<i>Peak four-day</i>	4.5	6.0	8.6	12.3
<i>Peak hourly</i>	10.0	12.1	16.9	23.5
<i>LOADING (LBS-DAY)</i>				
<i>BOD₅³</i>	2,000	3,400	6,610	11,010
<i>Suspended Solids³</i>	2,000	3,400	6,610	11,010
¹ Stage I To accommodate the service area population expected by the end of 1999, not including any part of the Bowman area. Based on 7% annual population growth throughout the service area. ² Stage II To accommodate the service area population expected by the end of 2004, assuming the entire Bowman area is added to the system at the end of 1999. Based on 7% annual population growth throughout the service area. ³ BOD Based on 240 mg/l @ ADWF. Suspended Solids SOURCE: Dewante and Stowell Consulting Engineers				

The actual capacity for wet weather flows of the City's plant is 2.2 mgd. Accommodating current peak flows and future flows will require expansion of the existing plant.

Treatment plant expansion proposals may allow the annexation of 2,329 acres extending northeast along I-80 and east to the county line. The City has also tentatively scheduled a collector system master plan study for 1992. Additional expanded capacity is provided under the *Master Plan* to accommodate growth and annexations projected in the 1990-



2012 General Plan. This General Plan envisions about 4,500 acres of annexed land beyond that projected in the existing General Plan.

Auburn's current monthly rate for residential service is \$8.25. An increase in these rates is projected to finance plant expansion in order to supplement existing enterprise fund cash reserves. Development fees for wastewater facilities financing are currently \$1,400 per residential unit.

City officials are currently developing a master plan for the Auburn Wastewater Treatment Plant to meet projected growth. The adoption of the master plan and EIR will provide for a consolidation of wastewater treatment for the City's sphere of influence. This will provide a more efficient and economical operation to serve the Auburn area, which is currently served by both the County Sanitation Maintenance District (SMD) #1 and the City. The master plan will also provide a 5-year capital improvement program.

Drainage Facilities

The City of Auburn is served by two major drainage courses; Auburn Ravine and the American River. The drainage divide runs along East Lincoln Way and the SPRR tracks south to Maidu Drive then west along Indian Hill Road. All land to the east and south of the divide drains to the American River and the remainder drains to Auburn Ravine.

The City of Auburn has been subject to localized flooding in the Historic Old Town district and in the Auburn Ravine adjacent to Dairy Road in the north Auburn area. City officials have developed master plans to determine stormwater flow deficiencies and provide for capital improvements in these two areas. The objective of these master plans is to provide for 100-year flood protection to all structures including flood proofing, and to ensure that future development is responsible for mitigation of site-specific stormwater runoff to predevelopment flows. A Capital Improvement Program will be developed as part of the master plans.

Natural Gas Facilities and Electrical Transmission Facilities

Figure V-9 shows the major natural gas and electrical transmission facilities serving the City of Auburn. Some electric transmission facilities enter into substations and then feed into PG&E's electric distribution system and therefore appear to just end.

The 115kV electric line at Luther Road continues over the summit where a line feeds northwest across Bell Road to the Rock Creek Reservoir and then loops back to the main line. The Lincoln Way 60kV electric line ends at a substation in El Dorado County. The HP 6" gas line ends at Mt. Vernon Road and feeds into the distribution system of the City of Auburn. The 60kV electric lines, feeding from north and south, connect at the Placer substation southwest of Fulweiler Avenue. The 115kV electric line along Pacific Avenue ends in a PG&E substation.



According to PG&E officials, these facilities do not require upgrading or expansion to serve current development.

4. Needs Assessment and Recommended Improvements

EXISTING NEEDS AND RECOMMENDED IMPROVEMENTS

This section of the element identifies the deficiencies of the existing transportation system within the City limits and the improvements necessary to mitigate the deficiencies.

STREET SYSTEM

Roadways

Based on the results of the level of service analysis, all City maintained roadways analyzed currently operate at or better than LOS D. There are, however, other design problems which significantly affect the safety and capacity of a roadway. Improvements recommended on state highways will require coordination with Caltrans.

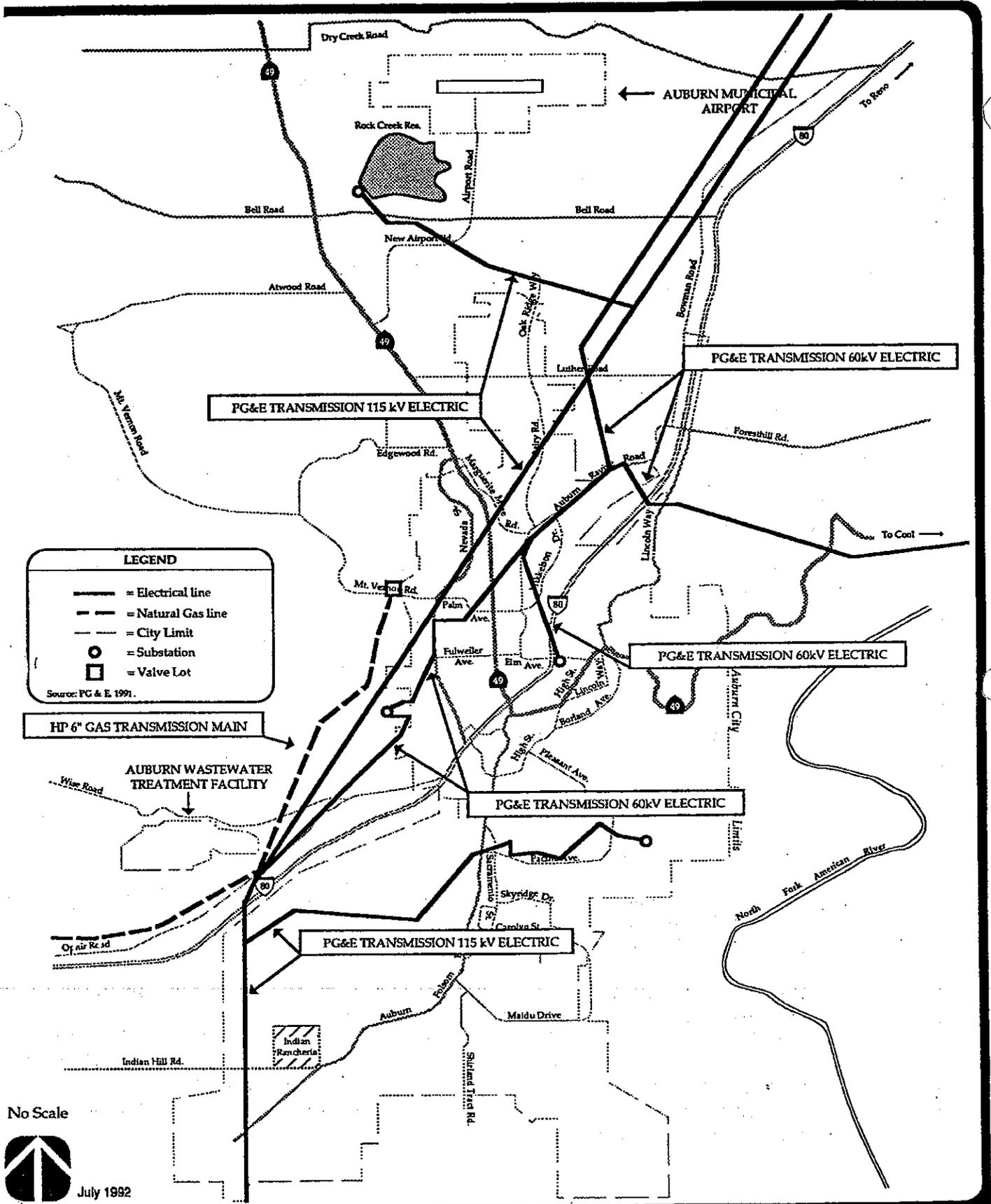
- Streets which do not meet the recommended design standards should be widened to accommodate safe and efficient travel.
- The on-street parking allowed on Nevada Street significantly reduces its capacity and level of service. On-street parking on this street should be eliminated.
- Although Highway 49 operates at LOS C over the course of the day, peak hour operations suffer significantly. Improvements such as signal system coordination and median-divided access control would substantially enhance peak hour operations.

Intersections

Of the intersections analyzed, the following operate at or exceed LOS D during the evening peak hour. Improvements recommended on state highways will require coordination with Caltrans.

- **Elm Street at High Street** operates at LOS E during the evening peak hour due to heavy eastbound and northbound left turning volumes. This intersection should be restriped to include a double left turn lane and a combination through/right lane for the northbound approach. The eastbound approach should also be restriped to include an exclusive left turn lane, a combination left/through lane and an exclusive right turn lane. This improvement, along with adjusted signal timings, will improve operations to LOS C.





CITY OF AUBURN GENERAL PLAN
 LOCATION OF MAJOR ELECTRICAL AND NATURAL GAS LINES

Harland Bartholomew & Associates, Inc.

FIGURE
 V-9

Existing, cont.

- **Marguerite Mine Road at Highway 49** operates at LOS F during the evening peak hour due to a heavy eastbound left turning movement and high through volumes on Highway 49. The City should restripe the eastbound approach to include an exclusive left turn lane and a combination left, through, and right lane. This improvement, along with adjusted signal timings, will improve the operation to LOS C.
- **Indian Hill Road at Auburn Folsom Road** operates at LOS D during the evening peak hour due to a heavy eastbound left turning movement. Operations would be improved with signalization, but signal warrants are not currently met. The City should continue to monitor the volumes at this intersection for future signalization based on the warrant criteria set forth in the Transportation Evaluation Criteria in the Supporting Documentation.

It should be noted that only a few major intersections were selected for General Plan analysis. Additional analysis should be performed for other intersections within the City to determine operating conditions and potential improvements. Under the Implementation Section of the Circulation Element Program (CMP), a program is outlined that would include annual analysis of major intersections and identification of improvements.

Truck Routes

Truck traffic passes through the city limits using I-80 or Highway 49. Elm Avenue and a portion of Lincoln Way have been designated truck routes to allow Highway 49 traffic to pass through the City without going through downtown. These are the only truck routes on city-maintained streets.

Roadway Design Standards

Current roadway design standards do not take into consideration the functional classification of the street. They also do not delineate the necessary features within the right-of-way. Figure V-10 shows the recommended roadway design standards for arterial and collector streets while the standards for local streets are shown on Figure V-11. These are provided as guidelines for development of specific standards for roadway designs.

Parking Standards

Current provisions for off-street parking are adequate to define parking design standards and maintenance. However, direction is necessary for the circumstances in which on-street parking is allowed or disallowed and the following guidelines are provided:

Existing, cont.

- On-street parking shall be prohibited on streets designated as arterials with the exception of the Old Town and Downtown business districts.
- On-street parking can be allowed on residential collectors and local streets under the provisions of the roadway design standards displayed on Figures V-10 and V-11.
- For the Local C and D roadway design standards displayed on Figure V-11, four off-street parking spaces per unit shall be provided because these street design standards do not provide on-street parking.

TRANSIT SERVICE

Since no current deficiencies were identified, no improvements are recommended.

RAIL TRANSPORTATION

A Rail Station is being considered by the Placer County Transportation Commission for the City of Auburn. This facility could increase local tourism activity because of easy pedestrian access to Old Town Auburn. The trip would be ideal for one-day or weekend visitors from the Bay area. This facility would also provide convenient access from the Auburn Central Business District to the Bay Area for business or pleasure. It is recommended that the City strongly promote efforts to secure a rail station for Auburn.

AIR TRANSPORTATION

Since no current deficiencies were identified, no improvements are recommended.

PEDESTRIAN AND BICYCLE TRANSPORTATION

According to the 1988 Placer County Regional Transportation Plan, bicycling and walking are increasing in popularity due to social, economic, and environmental factors. It is anticipated this trend will continue. However, Auburn has limited facilities for pedestrians and bicyclists. The Auburn Park Conservancy has updated the recommended trail system. The results of this work are incorporated into this element.

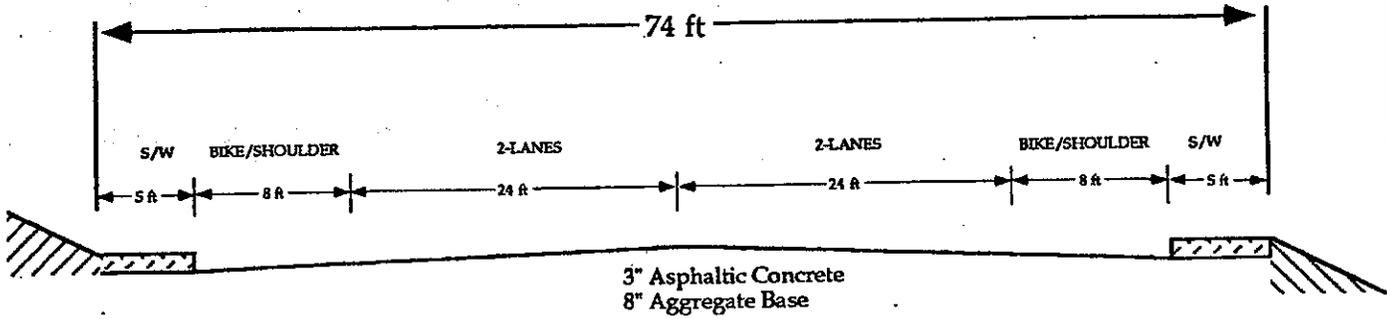
PUBLIC FACILITIES

Water Service

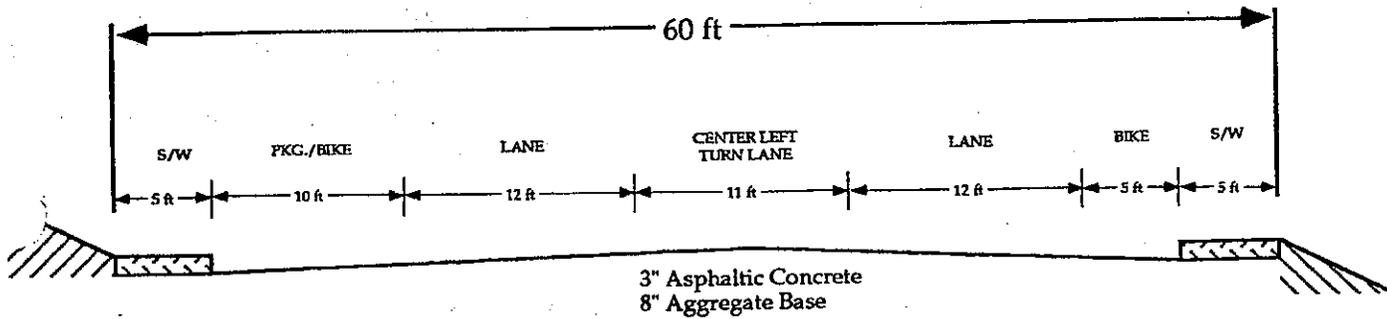
According to the PCWA, existing needs will be met through implementation of the PCWA's *Master Plan*. Therefore, no additional improvements are recommended.



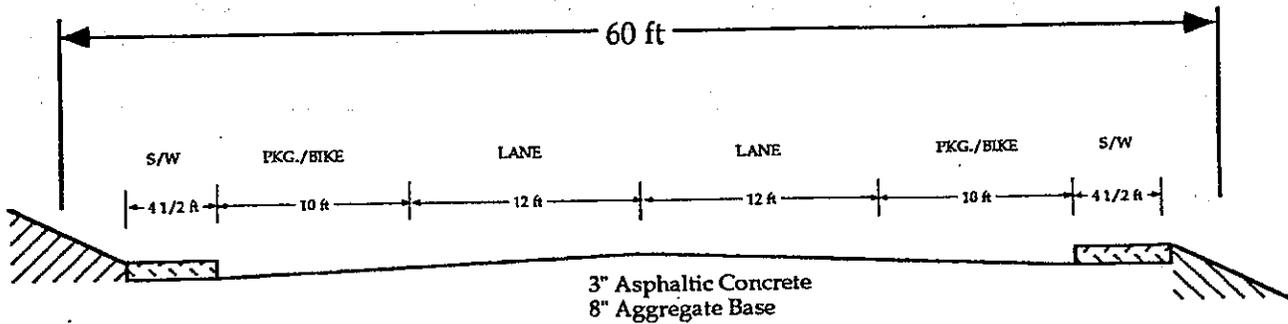
**Arterial A
(74' R.O.W. Minimum)**



**Arterial B
(60' R.O.W. Minimum)**



**Arterial C
(60' R.O.W. Minimum)**



Note: The City requires multipurpose easements of 12 1/2 feet wide on both sides of all roadways outside of the right-of-way.

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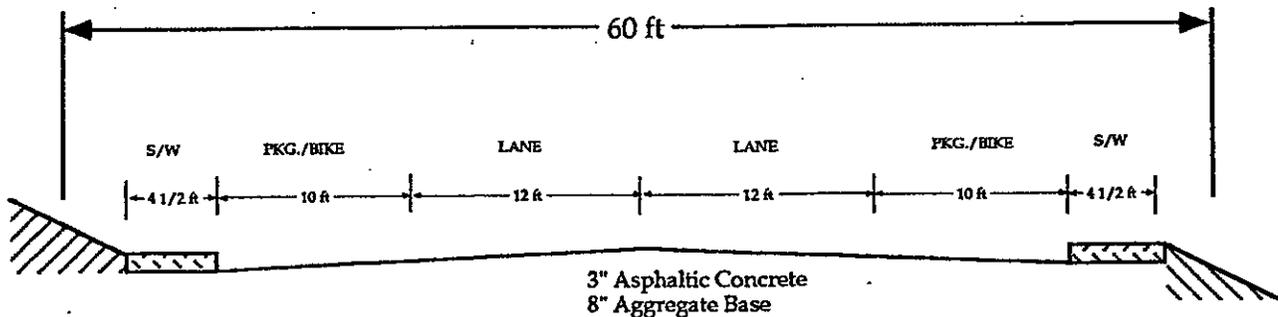
**CITY OF AUBURN GENERAL PLAN
TYPICAL ARTERIAL STREET STANDARDS**

Harland Bartholomew & Associates, Inc.

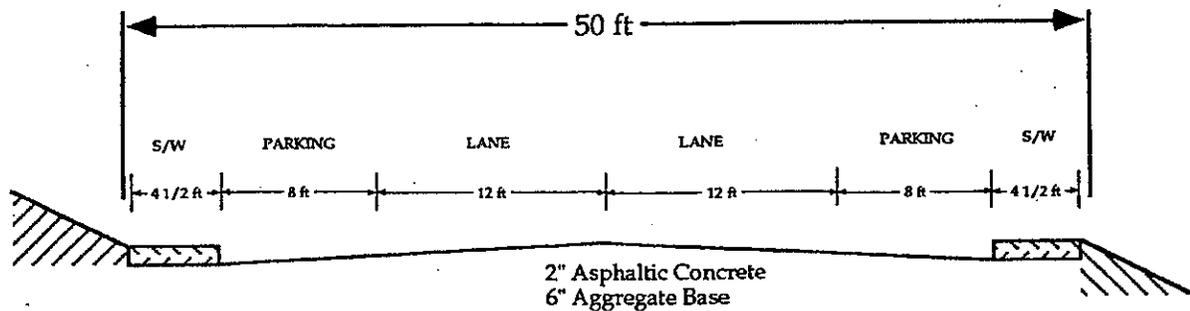
**FIGURE
V-10A**

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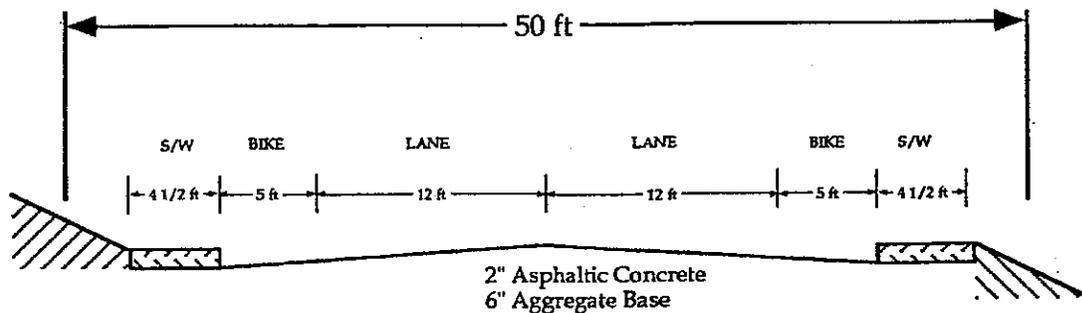
**Collector A
(60' R.O.W. Minimum)**



**Collector B
(50' R.O.W. Minimum)**



**Collector C
(50' R.O.W. Minimum)**



Note: The City requires multipurpose easements of 12 1/2 feet wide on both sides of all roadways outside of the right-of-way.

July 1992

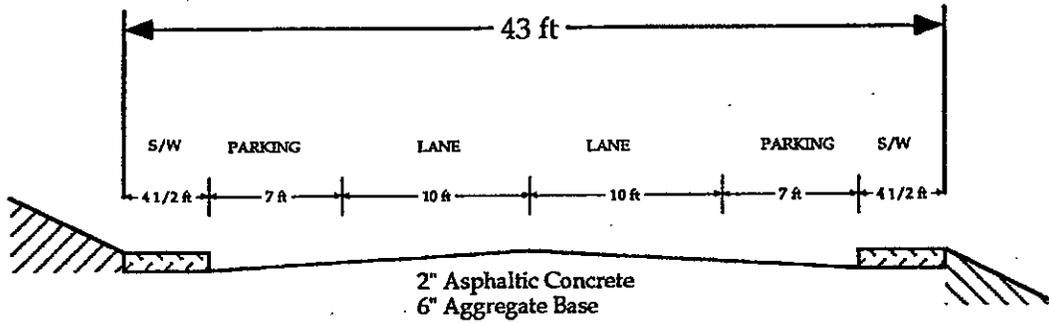
**CITY OF AUBURN GENERAL PLAN
TYPICAL COLLECTOR STREET STANDARDS**

Harland Bartholomew & Associates, Inc.

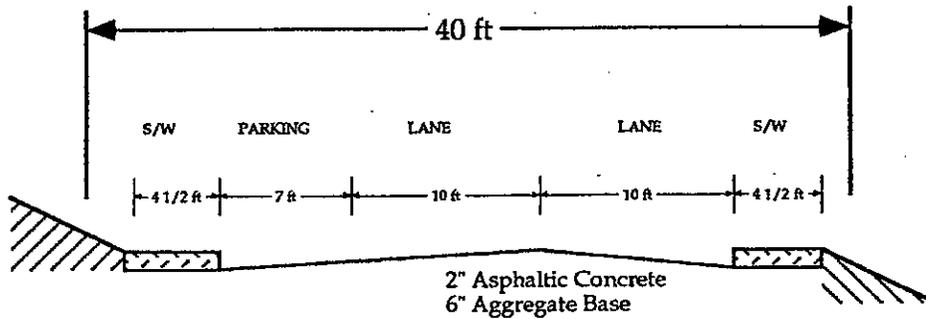
**FIGURE
V-10B**

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**Local Street A - with on-street parking
(43' R.O.W. Minimum)**

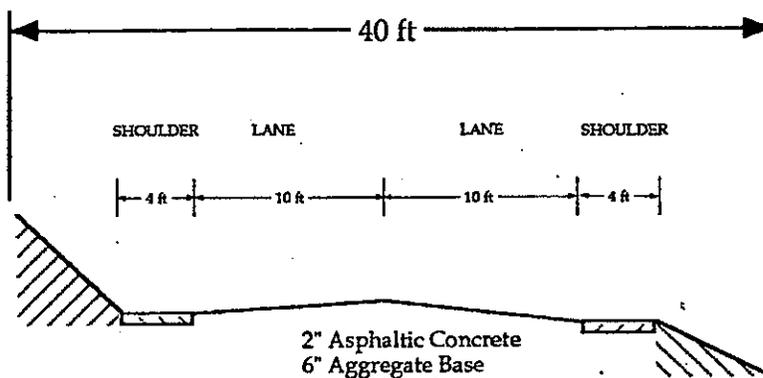


**Local Street B - parking one side
(40' R.O.W. Minimum)**



**Local C - two-way loop/no parking
(40' R.O.W. Minimum)**

Note: Simultaneous access for emergency vehicles and the evacuation of residents shall be provided. Roads serving more than four dwellings or commercial and industrial developments shall have a minimum unobstructed width of 26 feet. If Fire Department aerial apparatus is required, unobstructed width shall be 28 feet.

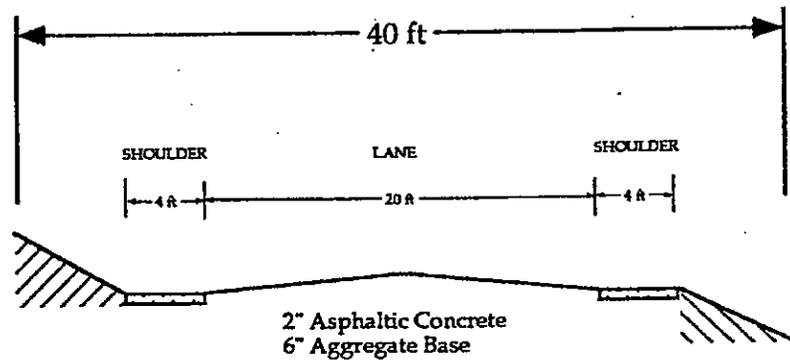


Note: The City requires multipurpose easements of 12 1/2 feet wide on both sides of all roadways outside of the right-of-way.

July 1992

**Local Street D - one-way loop/no parking
(40' R.O.W. Minimum)**

Note: Simultaneous access for emergency vehicles and the evacuation of residents shall be provided by a one-way loop travel way of not less than 20 feet with four foot shoulders on each side. Where hydrants are required, the travel way shall be 26 feet for a linear distance of 25 feet on both sides of hydrant with four foot shoulders on each side.



Note: The City requires multipurpose easements of 12¹/₂ feet wide on both sides of all roadways outside of the right-of-way.

July 1992

**CITY OF AUBURN GENERAL PLAN
TYPICAL LOCAL STREET STANDARDS**

Harland Bartholomew & Associates, Inc.

**FIGURE
V-11B**

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Existing, cont.

Sewer Service

Since City officials are currently preparing a master plan for improvement of the wastewater treatment plant, no additional improvements are recommended.

Drainage Facilities

City officials are conducting a study to determine the impact of development on the drainage system. Improvements will be recommended to address the problems which may be identified.

Natural Gas Facilities

Since no current deficiencies were identified, no improvements are recommended.

Electrical Transmission Facilities

Since no current deficiencies were identified, no improvements are recommended.

FUTURE NEEDS AND RECOMMENDED IMPROVEMENTS

Future circulation needs and improvements will be based on the impacts of the land use plan for the entire planning area. The land use plan was developed after reviewing circulation impacts associated with three land use alternatives. The Citizens Advisory Committee in conjunction with City planning staff reduced land use density throughout the planning area in order to improve future circulation operation conditions.

STREET SYSTEM

In order to identify the future needs of the street system, demand was forecast using the MINUTP travel demand model developed by Placer County for the Auburn/Bowman Community Plan. Figure V-12 shows the forecasts for the land use plan and the three land use alternatives (see Supporting Documentation, General Plan Alternative Analysis Table) used to develop the plan. These forecasts assume a buildout of each land use plan. Specific improvements for the land use plan are described below.



Future, cont.

Local Roadways

Figure V-13 shows the recommended street system improvements for the Auburn General Plan. The recommended street improvements are required for the street system to operate at or above the LOS D standard set in Policy 1.1 of the Circulation Element. The following summarizes improvements to local roadways.

1. **Auburn Folsom Road**--Improve to a four-lane arterial standard from Indian Hill Road to Maidu Drive.
2. **Indian Hill Road**--Improve to a four-lane arterial standard from Auburn Folsom Road to Interstate 80.
3. **Bell Road**--Improve to a four-lane arterial standard from Highway 49 to Interstate 80.
4. **Nevada Street**--Improve to a three-lane arterial standard from Highway 49 to Interstate 80.
5. **Mt. Vernon Road**--Improve to a two-lane arterial standard from Atwood Road to Nevada Street.
6. **Atwood**--Improve to a two-lane arterial standard from Mount Vernon Road to Highway 49.
7. **Richardson Drive**--Construct a two-lane arterial between Mount Vernon Road to Dry Creek Road.
8. **Edgewood Road**--Construct a two-lane arterial between Alta Mesa/El Oro Drive and Highway 49.
9. **High Street**--Construct a two-lane arterial between the east end of High Street and Auburn Ravine Road.
10. **Borland Avenue**--Construct a two-lane arterial between Lincoln Way and Pacific Avenue.
11. **East Frontage Road Highway 49**--Construct a two-lane arterial between Luther Road and Dry Creek Road.



ALT.	ADT	LOS
EX	26,000	C
CP	50,200	F
1	48,000	E
2	48,900	F
3	53,300	F
PP	55,700	F

ALT.	ADT	LOS
EX	38,000	C
CP	48,900	F
1	50,700	F
2	45,000	D
3	71,500	F
PP	72,400	F

ALT.	ADT	LOS
EX	13,000	C
CP	43,200	F
1	45,000	F
2	39,500	F
3	44,900	F
PP	35,100	F

ALT.	ADT	LOS
EX	2,100	B
CP	7,200	B
1	13,200	C
2	13,000	C
3	18,800	E
PP	18,700	D

ALT.	ADT	LOS
EX	4,269	B
CP	11,500	B
1	14,100	C
2	11,900	C
3	18,600	D
PP	15,000	C

LEGEND		
EX	=	1990 Counts
CP	=	Current Plan Buildout
PP	=	Preferred Plan Buildout
ADT	=	Average Daily Traffic
LOS	=	Level of Service
NA	=	Not Available

ALT.	ADT	LOS
EX	34,300	C
CP	44,900	D
1	47,300	E
2	43,100	D
3	64,500	F
PP	57,700	F

ALT.	ADT	LOS
EX	16,000	C
CP	13,000	C
1	17,700	C
2	16,100	C
3	17,700	C
PP	19,000	D

ALT.	ADT	LOS
EX	NA	NA
CP	11,000	B
1	15,600	C
2	18,100	C
3	21,900	E
PP	21,900	E

ALT.	ADT	LOS
EX	9,400	B
CP	33,100	C
1	29,700	C
2	28,600	C
3	39,900	D
PP	33,400	C

No Scale



July 1992

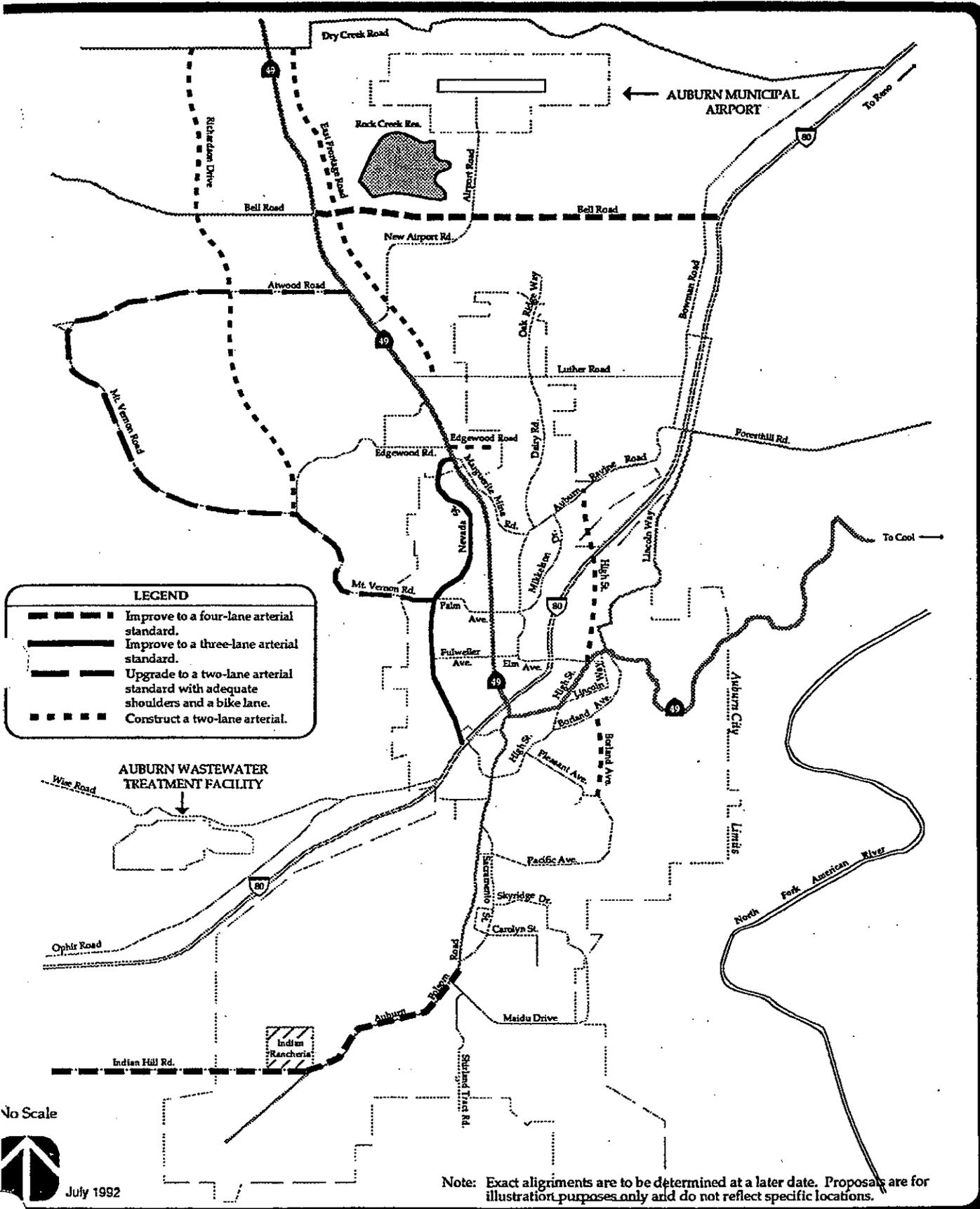
Note: Forecasts assume no improvements made to roadways.

CITY OF AUBURN GENERAL PLAN BUILDOUT TRAVEL DEMAND FORECASTS

Harland Bartholomew & Associates, Inc.

FIGURE
V-12

Page 7-45



**CITY OF AUBURN GENERAL PLAN
RECOMMENDED LOCAL STREET SYSTEM IMPROVEMENTS**

Harland Bartholomew & Associates, Inc.

**FIGURE
V-13**

Page V-47

State Highways

Two state routes, Highway 49 and Interstate 80, traverse the Auburn area. The State of California has jurisdiction over the operation and performance of these routes. However, land use decisions made by the City and County will affect the operation and performance of these routes.

Highway 49 and Interstate 80 through the Auburn area will carry a significant amount of regional and local traffic in the future. Given the existing laneage, operations on these routes at buildout of the General Plan (2012) are expected to reach LOS F.

Traffic generated from the implementation of the Auburn land use plan will contribute to the poor levels of service. This is especially true along the Highway 49 corridor where a significant amount of land is designated for commercial and mixed uses. Caltrans has begun preliminary planning work to expand Highway 49 through Auburn to six lanes.

This expansion will provide some relief for congested traffic conditions and it is expected that Highway 49 will operate above LOS D with six lanes from Luther Road south to Interstate 80. Highway 49 at six lanes from Luther Road north to Bell Road, however, will operate worse than LOS D.

The lower levels of service along Highway 49 between Luther Road and Bell Road is in part attributable to Placer County's proposed land uses for the Dewitt Center. This area is being planned by the County for a high density mixed-use development which is assumed to reduce reliance on the automobile. Due to a lack of data regarding trip reduction from such a development, the travel demand model forecasts for the Auburn General Plan assumed no trip reduction as a worst case scenario.

Recent legislation requires the development of congestion management plans for urban areas. These plans set level of service standards for major roadways within the urban area. According to preliminary information regarding the Placer County Congestion Management Plan (CMP), LOS F has tentatively been selected as the acceptable LOS for Highway 49. Therefore, widening Highway 49 to six lanes will more than adequately meet the LOS requirement set in the CMP.

Intersections

Increased traffic will affect intersection operations. Each intersection is unique and requires specific attention. Therefore, through the Transportation System Management (TSM) program required by Policy 1.3, annual traffic counts should be conducted at major intersections in Auburn in order to perform capacity calculations and to review intersection control warrants (criteria for both types of analysis are contained in the Supporting Documentation). The annual analysis of intersection operation and traffic projections will provide the detailed information needed to design improvements.



Future, cont.

Truck Routes

Truck routes should be designated to avoid low overcrossings and prevent through truck traffic on residential streets. Routes should be clearly signed and identified on local and regional maps. Based on the planned commercial and industrial locations located in the Land Use Diagram, additional truck routes should not be required.

Roadway Design Standards

The recommended roadway design standards shown in Figure V-10 and Figure V-11 should be implemented on all future roadway improvements. These standards were developed based on roadway functional classification and Auburn's topographical constraints.

Parking Standards

Future off-street parking requirements are addressed in the Auburn Municipal Code. On-street parking on many of Auburn's narrow streets impacts roadway capacity and therefore, where through traffic movement is desired on future roadways, on-street parking should be prohibited.

TRANSIT SERVICE

Public Facilities

The Auburn Mini-Bus operates efficiently when compared to other similar services. Therefore, no operating improvements are recommended. The transit service areas should be increased as urban development occurs in new areas. This extension of service should be addressed in the long range transit plan required by Policy 3.6 of the Circulation Element.

Private Facilities

Private transportation facilities in Auburn do not accommodate a large volume of Auburn's daily traffic. The Interstate 80 corridor bus routes from San Francisco to Reno, however, do provide an important regional transportation service. This service should be used to the fullest extent during winter and summer recreation periods to help alleviate traffic congestion on Interstate 80.



RAIL TRANSPORTATION

According to the *Placer County Commuter Rail Feasibility Study*, 1990, rail transportation from Auburn to Sacramento and San Francisco may become possible during the life of this General Plan. This study estimated the patronage for one-way trips between Auburn and Sacramento at 33,800 per year in 2012. Although this commuter rail line is not expected to accommodate a large percentage of the roadway demand, rail transportation in Auburn would provide a transportation mode that is not currently available. The addition of a new transportation mode could result in improved air quality and decreased dependence on the automobile, while also providing greater accessibility and mobility to citizens who do not own automobiles or who cannot operate an automobile.

AIR TRANSPORTATION

According to the Auburn Municipal Airport Master Plan, the potential exists for significant increases in operations and aircraft parking. Although these increases have not been evident over the past five years, the City of Auburn should be prepared to make the improvements identified in the Master Plan that will be required to accommodate additional aviation activity.

PEDESTRIAN AND BICYCLE TRANSPORTATION

Figure V-14 shows the trails identified by the Auburn Park Conservancy for the General Plan update (a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). This map and the Auburn Ravine Trail Master Plan, should be implemented in order to provide recreational and transportation opportunities for Auburn residents.

PUBLIC FACILITIES

Water Service

The Placer County Water Agency has prepared the PCWA Master Plan which outlines alternatives to effectively provide water service for future growth. The City of Auburn should work closely with PCWA to ensure service availability concurrently with new development.

Sewer Service

The City of Auburn is currently developing a Sewer Master Plan that addresses the future sewer needs of the City. This Master Plan has taken into consideration the land use plan developed for the General Plan in order to develop demand forecasts. The Sewer Master



Future, cont.

Plan project alternatives assumed an annual growth rate of 7% to accommodate potential worst-case scenario.

The majority of local growth was divided between the area along Auburn-Folsom Road in south Auburn and the area between Bell and Luther Roads north of the City. Plans are currently in progress to develop 267 acres in the Baltimore Ravine area east of the wastewater facility. Annexation of 2,329 acres extending northeast along Interstate Highway 80 (I-80) is currently under City consideration. All of these areas are, or are anticipated to be, serviced by the Auburn Wastewater Treatment Facility.

The treatment plant service area includes the entire incorporated City of Auburn and the portions of its proposed sphere of influence that can feasibly gravity-feed (flow without the significant assistance of pumping) to the existing treatment site. Once these portions of the sphere of influence are annexed, they are eligible to be serviced by the treatment facility. The remainder of the sphere of influence north of the City (Bell Road area), where gravity-feed is unfeasible, will be serviced by the Placer County wastewater treatment facilities located at Dewitt.

Stage 3 expansion capacity is based on an estimated maximum population of 55,000; this is a worst-case population estimate for the year 2012. Therefore, the City's future sewer demands should be met through implementation of the Sewer Master Plan.

Drainage Facilities

Auburn's drainage system is currently at capacity. Each new development that adds impervious surfaces has the potential to impact Auburn's drainage system. In the past, the City has required that projects retain storm drainage on-site. This method prevented any net increase in drainage flows to the different drainage basins. As the City grows and expands, additional facilities will be required to accommodate drainage flows. The City is currently studying the impacts of development on the drainage system and will make recommendations for alleviating drainage problems.

The Auburn Ravine drainage, which includes the Dairy Road, Lincoln Way, and Brewery Lane tributaries, has been studied to identify existing deficiencies and recommend improvements and mitigation measures for new development. The Old Town Drainage Study investigated the Lincoln Way and Brewery Lane tributaries and made recommendations for improvements to accommodate the 100 year flood. The Dairy Road Watershed Master Plan studied Auburn Ravine from Highway 49 upstream to Luther Road and made recommendations to mitigate impacts from new development.

The Old Town Drainage Study has recommended improvements to the existing drainage system to accommodate a 100 year flood. As an interim measure, all new development, which is tributary to the drainage system in Old Town, must provide mitigation measures which reduce post development runoff to predevelopment conditions.



CITY OF AUBURN GENERAL PLAN

Auburn Park Conservancy Non-Auto Circulation Plan



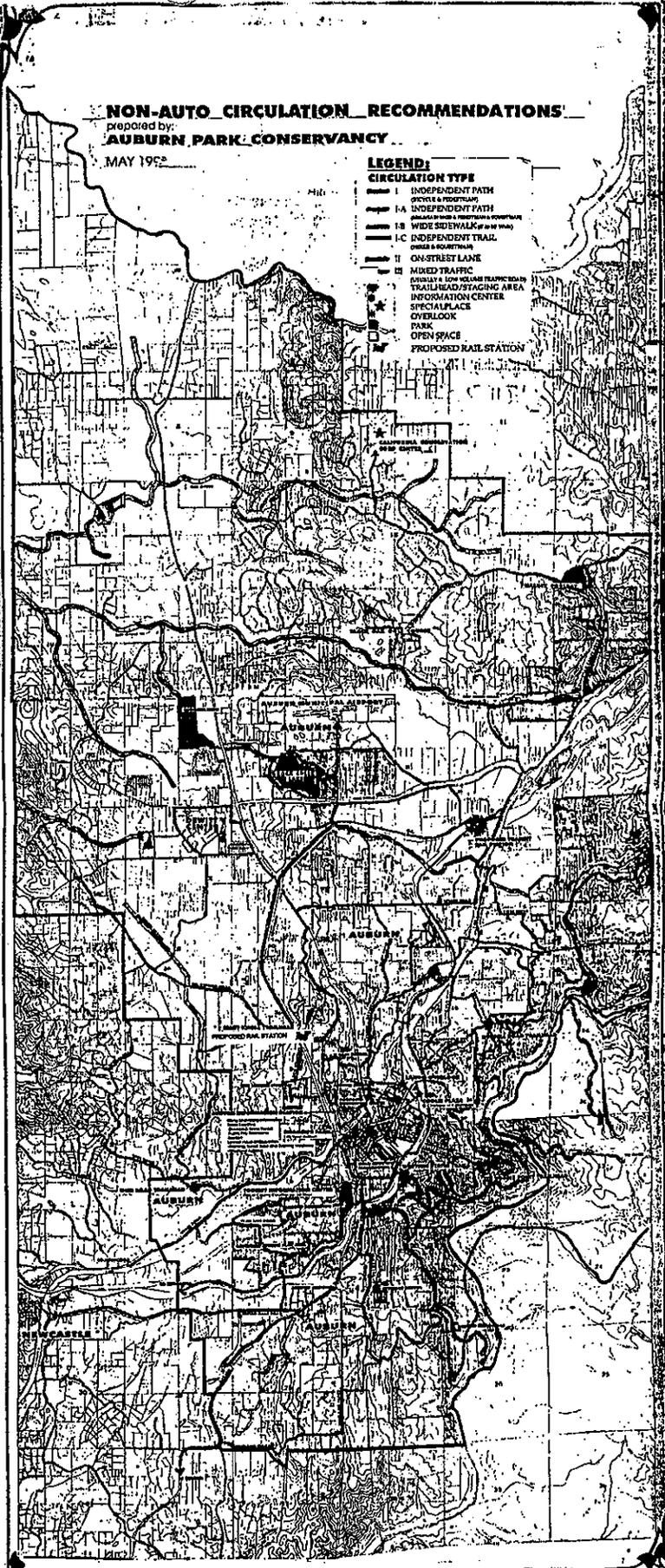
FIGURE

V-14

 5/9/14/53

LEGEND

 Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Future, cont.

The analysis conducted for the Dairy Road watershed concludes that the existing facilities are inadequate to accommodate the 100 year flood flow. However, improvements to eliminate flooding problems are prohibitively expensive. Therefore, the City should require detention basins which will mitigate impacts of new development.

The City of Auburn has adopted the Placer County Flood Control and Water conservation District's Stormwater Management Manual. The purpose of this manual is to provide consistent, specific guidance and requirements for stormwater management, including regulation of the development process, to achieve stormwater management objectives. The manual presents policy guidelines, and specific criteria for the development and management of natural resources, facilities and infrastructure for stormwater management.

Natural Gas Facilities

PG&E is planning to construct an additional transmission line to serve the Auburn area. The construction of this line will provide adequate supply for the foreseeable future according to PG&E officials. However, there is an economic feasibility issue regarding the cost of providing gas to all areas in the sphere of influence. In some areas, neither PG&E nor potential customers would be able to absorb the high cost of delivering gas. As the urban area of Auburn continues to develop, PG&E will provide natural gas when feasible.

Electrical Transmission Facilities

The substation facilities that serve the greater Auburn area are currently being upgraded to accommodate future growth projections. According to PG&E officials, electric demand in the Auburn area has increased at about 4.5 megawatts per year for the last few years. This trend is expected to continue for the next three to five years. PG&E officials anticipate no problems in meeting the projected needs of the community during this time. Electric supply levels are not an issue as PG&E's grid system is designed to provide adequate service. As development plans mature, PG&E will review its forecast of energy requirements needed to adequately provide reliable energy sources to the public.

5. Implementation

These programs relate to the adopted goals and policies. The implementation and completion of the programs represent the means by which progress in carrying out the Goals and Policies will be measured.

- A. The City shall develop a Transportation System Management (TSM) Program to address General Plan circulation policies.

Responsibility: Public Works, Community Development
Time Frame: Ongoing, updated annually
Related Policy: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 3.8

- B. The City shall develop a Trip Reduction Implementation Program.

Responsibility: Public Works
Time Frame: 1992-1997
Related Policy: 3.3, 3.5, 3.8

- C. The City shall prepare a Transit Master Plan.

Responsibility: Community Development, Public Works
Time Frame: 1994
Related Policy: 3.2, 3.4, 3.6, 3.8

- D. The City shall update the Comprehensive Land Use Plan for the Auburn Airport.

Responsibility: Community Development
Time Frame: 1993
Related Policy: 4.1, 4.2, 4.3, 4.4

- E. The City shall prepare a phased 5-year Capital Improvement Plan for street, transit and transportation improvements.

Responsibility: Public Works
Time Frame: Annually
Related Policy: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.8, 4.3, 5.1, 5.2

- F. The City should implement the Auburn Park Conservancy Non-Auto Circulation Plan and the Auburn Ravine Trail Master Plan.

Responsibility: Community Development, Public Works
Time Frame: Immediate and ongoing
Related Policy: 2.2, 3.8

- G. The City shall coordinate with Placer County on the Regional Transportation Plan and the Congestion Management Plan.

Responsibility: Public Works
Time Frame: Immediate and ongoing
Related Policy: 1.6, 1.7, 3.3, 3.4, 3.7, 3.8



H. The City should adopt the street standards contained in the General Plan (Figures V-10 and V-11).

Responsibility: Community Development, Public Works, Fire
Time Frame: 1994
Related Policy: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10

I. The City shall utilize Auburn Urban Development Agency powers and funding to contribute to the funding of circulation system improvements.

Responsibility: Auburn Urban Development Agency, Community Development, Public Works, City Manager
Time Frame: Ongoing
Related Policy: 1.3, 2.3, 2.4, 3.8, 5.1, 5.2

J. The City shall promote the establishment of a Rail Transit Station in Auburn.

Responsibility: Community Development, Public Works, Auburn Urban Development Agency
Time Frame: 1993-1995
Related Policy: 3.4, 3.6, 5.2

K. The City shall require the appropriate technical analysis of actions which affect the existing and future improvements of Highway 49 and Interstate 80.

Responsibility: Community Development, Public Works
Time Frame: Ongoing
Related Policy: 1.2, 1.4, 1.6, 1.7, 2.5, 3.1, 5.1

L. Create and implement a joint City/County Traffic Mitigation Fee Program.

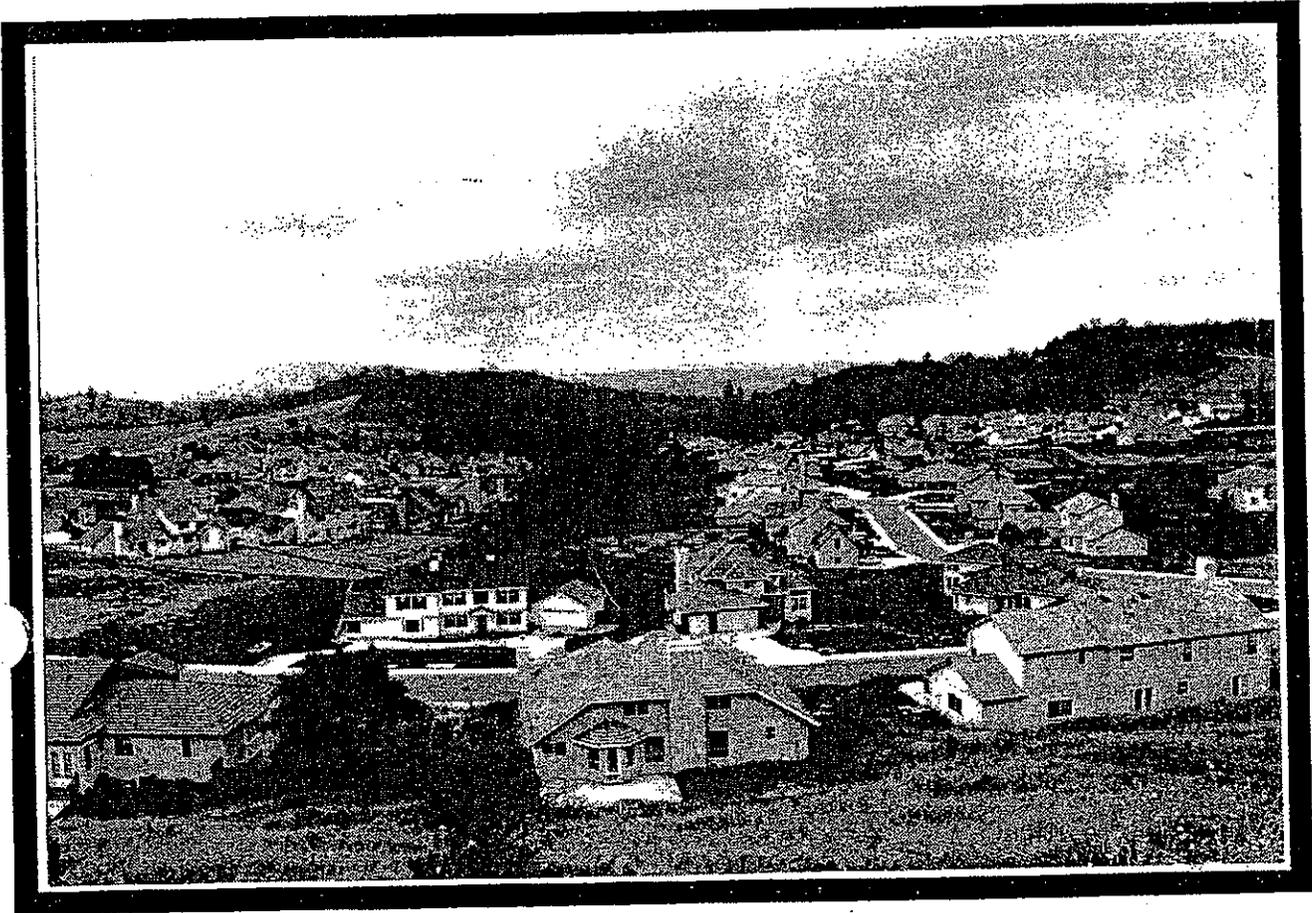
Responsibility: Community Development, Public Works
Time Frame: 1994
Related Policy: 1.11

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VI HOUSING ELEMENT



South Auburn Neighborhood

1. Introduction

This Housing Element of the General Plan represents the City of Auburn's efforts to address the State's housing requirements, plan for the residential development in Auburn and its surrounding planning area, and to meet the City's share of regional housing needs.

This Housing Element has been prepared in accordance with State Government Code Section 65583, which requires:

- an identification and analysis of existing and projected housing needs, including an inventory of constraints and resources;

- a statement of goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing; and
- a five-year housing program that the local government intends to undertake to implement the policies and achieve the goals and objectives.

The table below identifies the legal requirements of the general plan and where they can be found in this document.

**CITY OF AUBURN
GENERAL PLAN SECTION***

Legal Requirement	LU	CI	H	OC	N	S	E	HI
GOVERNMENT CODE SECTION								
65302(a) Land Use Element	X							
65302(b) Circulation Element		X						
65583 Housing Element			X					
65583(a) Housing Needs			X					
65583(b) Implementation Housing Development Goals, Policies, and Objectives			X					
65583(c) Public Participation			X					
65583(a)(4) and (5) Constraints			X					
65583(a)(7) Energy Conservation			X					
65584 New Construction Needs			X					
65588(a) and (b) HCD Guidelines			X					
65302(d) Conservation Element				X				
65302(e) Open Space Element				X				
65560(b) Local Open Space Plan				X				
65302(f) Noise Element					X			
65302(g) Safety Element						X		
65303 Elective Elements							X	X

* LU = Land Use Element CI = Circulation Element
 H = Housing Element OC = Open Space/Conservation Element
 N = Noise Element S = Safety Element
 E = Economic Element HI = Historic Element

The elements which are most closely related to the Housing Element are the Land Use and Circulation Elements. The Land Use Element designates land for residential development and sets forth permitted densities and intensity of development, while the Circulation Element establishes public service standards for new residential development.

The Land Use and Circulation Elements have been reviewed to ensure that the goals, policies, and objectives of those elements do not conflict with the goals, policies, and



objectives of this Housing Element. The goals, policies, and objectives of this general plan were drafted to provide consistency between the separate elements. For example, goal one of the Land Use Element expresses the objective to "guide development in a pattern that will minimize land use conflicts between adjacent land users." And goal five of the Circulation Element is to "provide a full range of adequate public services for all area residents and businesses."

DATA SOURCES

The principal source of information for this Housing Element was the 1990 Census of Population and Housing. Other sources of information included the California State Department of Finance, the California Association of Realtors, the Sierra Planning Organization, the Placer County Board of Realtors, the Placer County Department of Economic Development, Planning, and Building, the Auburn Community Development Department, and the Auburn Building Department.

CITIZEN PARTICIPATION

Recognizing the importance of public input for the General Plan, the City held four public workshops to formulate General Plan goals for each element. In addition, since there was not a formal organization representing housing issues in Auburn, the City used the General Plan Citizens Advisory Committee meetings as another means to receive public input. These meetings were open to the public and advertised as such by notices in the local newspapers, newsletters, and individual notices to citizens. The General Plan Citizens Advisory Committee was charged with reviewing and refining the goals, policies and programs for the Housing Element. Finally, public hearings were held before the Planning Commission and City Council to consider the draft General Plan and Environmental Impact Report (EIR).

Additional methods of public participation included the following: interviews held on the local radio station with both the Community Development Director and the Planning Commission Chair, an insert to *The Auburn Journal* providing a comprehensive summary of each element of the General Plan, and the donation of two copies of the General Plan to the public library for use by those individuals who do not wish to or cannot afford to purchase the document.

The City Community Development Director sits on the non-profit Placer County Housing Coalition and early on gave the Coalition a copy of the Housing Element, as well as keeping them informed at meetings (not only of the Element but also projects which provided housing for low and very low income persons), soliciting the Coalition's support. Members of the Coalition include Project Go, developers of low/very low and moderate income housing, Habitat for Humanity, Volunteers of America, churches, City and County staff and elected officials, interested citizens, and local realtors.

REVIEW OF PREVIOUS HOUSING ELEMENT



Auburn's current Housing Element was adopted in 1985. The housing programs in this element included: the establishment of a redevelopment agency and a countywide housing authority; the construction of new housing for renters through various State local programs; the annexation of unincorporated land; and the acquisition of Federal and State loans and grants for housing rehabilitation. The primary objective of the 1985 element was to establish a more realistic schedule and implementation for these programs. Essential to accomplishing this objective was the proposed formation of a redevelopment agency. In 1987, the City established the Auburn Urban Development Authority.

In addition to the formation of this agency, the 1985 Housing Element set forth that Placer County would be administering the Department of Housing and Urban Development's (HUD) Section 8 rental assistance program through its Community Services Department by January, 1986. Also, the 1985 element set forth that the City of Auburn would make its first application for a State Community Development Block Grant (CDBG) which would be used for housing rehabilitation.

From 1986 to 1990, the City of Auburn received 52 Section 8 certificates for rental assistance, annexed 841.4 acres, and formed the Auburn Urban Development Authority. Although the Auburn Urban Development Authority was established, it was relatively inactive during this period. The City did not receive CDBG funds, or any other federally-administered funds. According to City officials, the primary reason for the delay in program implementation is due to staff limitations and limited financial resources. The Community Development Department is responsible for staffing the Auburn Urban Development Authority. In 1986, the Community Development Department had two full-time persons. In 1990, the staff had increased to only three full-time persons. Although the City set up programs to address the housing needs of Auburn, the majority of programs were not fully implemented due to staff limitations, and a lack of funds. Despite these limitations, a number of high density housing projects were approved increasing the availability of more affordable housing units.

The programs in this Housing Element seek to further implement the housing goals from the 1985 Element. Specifically, the City will pursue a variety of programs involving both the public and private sector, and investigate currently available methods of attaining federal and state funding.

FINDINGS

In the course of preparing the Housing Element, the City of Auburn has made the following findings:

1. The City of Auburn met and exceeded its apportioned regional share of housing for the 1990 allocation period, which was a total 654 units.
2. Although the City is concerned about the provision of affordable housing, the total number of needed affordable units has not been constructed due to market factors beyond Auburn's control.



3. Auburn's topography limits the development of housing. The steep and rugged terrain characteristic of Auburn severely limits the densities and configuration of housing units on a site. In some circumstances, the topography prevents the development of any residential structures on a site.
4. Certain constraints may make it difficult for developers to provide a sufficient number of units affordable to all income levels. These constraints include:
 - land and development costs;
 - infrastructure costs; and
 - topography of the area.
5. The tourism industry has been a focal point for the City as a means to provide jobs for residents because topographic constraints have made it difficult for some large industrial and manufacturing industries to establish themselves in Auburn; the Auburn Airport Industrial Park is an exception. Industries that are tourist-related, such as retail, typically pay lower wages than manufacturing industries. For example, in Placer County, retail industries paid a yearly average wage of \$12,417 in 1990, while manufacturing industries paid a yearly average wage of \$27,925. Thus, due to the relatively low-wage jobs that are available in Auburn, it may be difficult for residents to both live and work in the City.
6. Auburn has a low vacancy rate (4.05 percent), compared to the County (17.69 percent). In addition, the City had a low persons per household (2.27) in 1990 relative to the County and the State as a whole (2.66 and 2.87, respectively). These figures indicate that Auburn is constructing homes, but the surplus may not be enough to offer both a reasonable choice of housing for Auburn residents, and competitive prices for housing.
7. Auburn will implement certain measures to preserve the existing stock of affordable housing, and to provide new affordable housing. These measures include:
 - funding assistance through the Auburn Urban Development Authority or a housing trust fund to rehabilitate homes; purchase infill lots to subordinate to small contracting firms who will sell to low income families on City approved list; and to purchase demolition property and process through the revolving housing trust fund.
 - annexations of unincorporated land; and
 - density bonuses to developers who reserve a percentage of a project's total units for affordable housing.

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the City Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

- Goal 1: Provide a range of housing choices that meet the needs of all Auburn residents in terms of type, density and cost.**
- Policy 1.1 The City shall maintain an adequate supply of land in appropriate land use designations and zoning categories to accommodate projected growth in number of households.
- Policy 1.2 The City shall revise the Housing Element as necessary to meet the changing needs of Auburn, but not more than every five years as required by State Law.
- Policy 1.3 The City shall identify areas where infrastructure is existing or proposed to support residential developments.
- Policy 1.4 The City should strive to meet Auburn's housing needs as identified in the Regional Housing Allocation Plan.
- Policy 1.5 The City shall locate higher density housing in those areas that are least environmentally sensitive and have infrastructure capabilities.
- Policy 1.6 The City shall encourage infill building and cluster housing in order to promote large open areas and ensure that public facilities and services are provided in a cost-effective manner.
- Policy 1.7 The City shall promote the development of energy and resource efficient housing types.
- Policy 1.8 The City shall promote the expeditious processing and approval of residential projects that meet General Plan policies and City regulatory requirements.
- Policy 1.9 The City shall encourage innovative and cost effective building technologies.
- Policy 1.10 The City shall continue to use state and federal funding assistance, to the extent that these subsidies exist and are appropriate to Auburn's needs, to develop affordable housing.
- Policy 1.11 The City shall encourage the development of second residential units in accordance with State law, while maintaining the single-family character of the neighborhood.
- Policy 1.12 The City shall encourage private reinvestment in older residential neighborhoods.



- Policy 1.13 The City shall encourage private rehabilitation of housing.
- Policy 1.14 The City shall pursue state and federal funding assistance to rehabilitate housing.
- Policy 1.15 The City shall support pre-existing nonconforming residential uses if the single reason that these uses are nonconforming is their density (number of units), when the continued existence of these units will not have a major impact on the neighborhood.
- Policy 1.16 The City shall maximize the visual quality of multi-family housing units.
- Policy 1.17 The City shall continue to actively participate in regional housing solutions.
- Policy 1.18 The City shall continue to pursue support from FLAG for a City proposed moderate income housing project on City owned land, participation in lending, financing a comprehensive housing survey, and participating in future grant matching, assistance, etc.

3. Existing Conditions

POPULATION CHARACTERISTICS

Population Growth

In 1970, Auburn's population was 6,570 persons. In 1980, Auburn's population was reported as 7,540 persons. According to 1990 census data, Auburn's population had reached 10,592 persons. This represents a 61.2 percent increase in population between 1970 and 1990. In comparison to the percent of population growth for the County (116.4 percent) and State (47.7 percent) for the same time period, Auburn has grown more rapidly than the State as a whole. Table VI-1 presents historic population trends for the City of Auburn.



**TABLE VI-1
POPULATION, 1970 TO 1990
CITY OF AUBURN**

Year	Population	Growth Rate
1970 (Census)	6,570	--
1975	6,725	0.47
1980 (Census)	7,540	2.31
1985	8,262	1.85
1986	8,175	(-1.05)
1987	8,575	4.84
1988	8,800	2.62
1989	9,375	6.53
1990 (Census)	10,592	12.98

SOURCE: California Department of Finance; Reports E-4A and E-5. U.S. Department of Commerce, Bureau of the Census.

Proximity to the Sacramento area has had an impact on Auburn's population growth. This is largely due to the housing boom that has occurred in Sacramento County in recent years, which has also increased the service and retail markets in the region. The Placer County cities which are located just outside of Sacramento County, such as Roseville, Rocklin, Lincoln and Loomis, have been recipients of accelerated population growth. While Auburn ranks fifth in percent population growth since 1985 (Table VI-2), it is located farther to the east, the growth rates of these other cities may be an indicator for Auburn's future growth trends.

Age Distribution

In 1990, the median age in Auburn was 38.7, higher than the County median age, which was 35.1. In addition, Auburn's dependent population in 1990, those individuals under 19 and over 65, was 44.0 percent. This figure is also higher than the County figure, which was 40.6 percent. Table VI-3 shows the age distribution for Auburn in 1990.

Recent school enrollments indicate an increase in families with school-aged children. According to the Auburn Union School District, the 1986-87 school enrollment for grades K through 8 was 2,114. For the school year 1990-91, enrollment was reported at 2,707; an increase of 28.05 percent since 1986-87. In addition, the school district is expecting the student population for grades K through 8th to reach 3,500 in five years.



TABLE VI-2
POPULATION GROWTH RATES, 1985 TO 1990
PLACER COUNTY AND SELECTED CITIES

City	Population		Annual Growth Rate
	1985	1990	
Rocklin	9,152	16,660	12.73
Roseville	27,998	40,981	7.92
Lincoln	5,053	6,555	5.34
Loomis	4,868	6,271	5.19
Auburn	8,262	9,812	3.50
Colfax	1,004	1,056	1.02
Placer County Total	135,340	168,038	4.42

SOURCE: California Department of Finance; Report E-5.

TABLE VI-3
AUBURN AGE DISTRIBUTION BY SEX, 1990

Age	Total	Males	Females
85+	317	81	236
80-84	326	109	217
75-79	421	167	254
70-74	506	231	275
65-69	569	218	351
60-64	518	237	281
55-59	435	200	235
50-54	469	213	256
45-49	615	303	312
40-44	886	439	447
35-39	929	440	489
30-34	808	388	420
25-29	716	358	358
20-24	560	281	279
15-19	584	280	304
10-14	611	285	326
5-9	632	311	321
0-4	690	342	348
Median Age, City of Auburn	38.7	37.2	40.1
Median Age, Placer County	35.1	34.5	35.7

SOURCE: U.S. Department of Commerce - Bureau of the Census, 1990.



Race and Ethnicity

According to 1990 census data, 96.4 percent of persons over the age of 18 were categorized as white; 1.4 percent were Asian/Pacific Islander (which includes Japanese and Chinese); 1.0 percent were American Indian, Eskimo, or Aleutian Islander; 0.5 percent were Black; and 0.7 percent were categorized as "Other". The 1990 Census identifies 348 persons, or 3.3 percent of the total population, as persons of Hispanic origin. (The 1990 Census places "persons of Hispanic origins" in all of the above categories).

Elderly

In 1990, 2,139 Auburn residents, or 20.2 percent of the total population, were 65 years of age or older as shown in Table VI-3. This percentage was much higher than for the County as a whole, where 11.9 percent of the total population were 65 years or older.

More than 23 percent of the female population in the City of Auburn is over 65 years of age, as compared to approximately 16.5 percent of the male population. There are nearly twice as many women than men over 65 years of age (1,333 females and 806 males). According to the 1990 census, there are 209 persons over 65 years of age who are living below the poverty level. These indicators support the development of affordable housing, one and two bedroom townhouses, and clustered development which provide a safe and accessible environment for senior citizens who are often victims of crime and have transportation constraints.

Handicapped

In 1980, 438 Auburn residents (9.7 percent) had a work disability. Auburn's percentage of residents in this group was similar to the County figure of 9.3 percent. Also, Auburn's percentage of residents who had a work disability and were also a part of the work force was similar to the County figure (36.5 percent and 37.4 percent, respectively). (As 1990 Final Census data becomes available, this section will be updated.)

Farmworkers

Since agriculture is not an industry in Auburn, the incidence of farmworkers does not present significant implications for housing. According to the State Employment Development Department, in 1992, 600 farmworkers were employed in Placer County. These numbers may decrease because farmland acreages are decreasing. The figures do not include farmworkers who were self-employed. The majority of farmlands are in south Placer County.

Homeless Persons

The transient nature of homeless individuals combined with the absence of this population from the census makes it difficult to determine the incidence of homelessness in Auburn. Nonetheless, there are services in Auburn and throughout Placer County that provide for homeless persons and persons in need of temporary shelter. The Placer Women's Center, located in Auburn, provides shelter up to 60 days for battered women



and children. The Center has approximately 23 beds. The Salvation Army, also located in Auburn, has no beds available and directs families, couples, and single individuals requiring shelter to the National Guard Armory in Roseville. Through the Federal Emergency Management Agency (FEMA), the Salvation Army does provide housing vouchers for local motels if funding is available.

It is estimated that in 1991 the National Guard Armory was averaging 80 people per night and very few families. Unfortunately, local officials who have used the armory as a winter shelter since 1986, recently learned that the facility will no longer be available after March 1993. In place of the National Guard Armory is the St. Vincent de Paule Society in Roseville.

The St. Vincente de Paule Society assists people from south Placer County needing temporary shelter. Through an Inter-Faith Shelter Co-op the society provides a Home-Start program by which they house nine families at a time in transitional status. They only house families, but will occasionally house a single man or woman if they are ill. The Home-Start program houses a family for six weeks while the organization looks for an apartment. Once the family is situated in a new home the organization follows-up with the family for more than a year assisting them with home management techniques. It is estimated that St. Vincent de Paule turns away approximately twice as many families as they take in (no approximate amount was available). St. Vincent will also occasionally voucher a family if there is funding.

The Placer County Community Services Department provides limited assistance through the Loan Assistance Revolving Program (LARP). Also, the Placer County Welfare Department provides assistance, to individuals who qualify, through the General Assistance Program, and to families who qualify, through the AFDC program.

The cities of Placer County and the County are in agreement that the homeless issue is a regional problem requiring a regional solution. It is recognized that it would be futile for each individual city with its limited resources to try and solve this county-wide problem. One regional solution discussed during a meeting of Placer County officials (December 1992) is to bus the homeless to regional shelters located at local Air Force bases slated for closure, such as the Mather and Beale facilities in Sacramento County. Mather Air Force Base is scheduled to close in 1993 and Sacramento County Supervisors have already identified it as a potential shelter for homeless families and individuals.

Auburn participates financially on an annual basis towards a countywide homeless program which specifically provides housing assistance and shelter. The City of Auburn's obligation to solving the homeless problem was solidified when an amendment to the 1991-1992 fiscal year budget was authorized and approved to finance a Regional Homeless Coordinator. In addition, a City Councilman currently sits on the Placer Homeless Shelter Committee, which is presently making tremendous efforts to locate and operate a homeless shelter. The Shelter Committee is made up of Council members from the various cities, churches, and business leaders.



HOUSEHOLD CHARACTERISTICS

Female Heads of Household

According to the 1990 Census, the City of Auburn has 410 family households headed by women (278 of which are households headed by women living with related children). This number (410) represents approximately 14.4 percent of the total family households in the City, compared to 16.7 percent for the State. Although the incidence of female heads of household is relatively low, this special group deserves consideration in the establishment of a comprehensive housing program. There are 62 family households consisting of women and their children which are below the poverty level. These households often find it difficult to find adequate housing since their limited income often constrains the ability to rent or own dwellings which are large enough to accommodate their children.

Large Family Households

The distribution of family households by size indicated that families in Auburn typically are smaller than those throughout California. For example, approximately 51 percent of all family households in Auburn consisted of only two persons, in contrast to about 37 percent state-wide. It is likely that many of the City's two-person family households consist of married couples who are retired, given that 20 percent of the City's population is over 65 years of age. Elderly householders, occupants 65 years of age and older, account for 34 percent of owner occupied housing units (843 persons) and 28 percent of renter occupied housing units (577 persons).

Few of the City's families consist of five or more persons. In 1990, families of this size accounted for only 9.1 percent of all families, while state-wide they made up 20.4 percent of family households. The average family size in Auburn (2.84 persons) was also lower than the average for California (3.32 persons). Large family householders account for 3.76 percent of owner occupied housing units (172 persons) and 2.03 percent of renter occupied housing units (93 persons).

Household Size

The average number of persons per household in Auburn has been both low and stable as recorded by the 1980 and 1990 Census. In 1980, the average stood at 2.24 persons per household; by 1990, the average had increased negligibly to 2.27 persons. In contrast, the average number of persons per household in California was significantly higher in 1980 (2.68 persons) and actually rose to 2.87 persons in 1990. This increase was most likely due to rapid growth in the number of Hispanic and Asian households state-wide. These ethnic groups, which comprise only a small portion of the City's population, tend to have larger households.



**TABLE VI-4
FAMILIES AND HOUSEHOLDS BY TYPE, 1990
CITY OF AUBURN**

Type	Number	Percent
Non-family household	310	7
Married couple, no child	1,388	30
Married couple, with child	927	20
Female household, with child	278	6
Male household, with child	82	2
Single person household	1,415	31
Other family household	178	4
TOTAL	4,578	100

SOURCE: U.S. Department of Commerce, Bureau of the Census, Summary Tape File 1A, 1990. (Preliminary 1990 Census data will be updated when available)

Overcrowding

The U.S. Bureau of Census gauges overcrowding by tabulating the number of housing units occupied by more than one person per room, excluding hallways, kitchens, bathrooms, and closets. Using this indicator, 2.49 percent of the City of Auburn's 4,578 occupied units were overcrowded in 1990. Overcrowding was more prevalent in the city's rental housing than in owner-occupied housing. Approximately 2.05 percent of renter-occupied units had more than one person per room. In comparison, .44 percent of owner-occupied units were overcrowded, about four times less than renter-occupied units.

Household Composition

In 1980, Auburn's households were comprised largely of married couples with no children (33 percent) and non-family households (39 percent). In 1990, there were more single person households (1,415) than either married couple, no children households (1,388) or married couple with children households (927). Table VI-4 shows Auburn's families and households by type in 1990.

Income

In 1990, the median income of Auburn households was \$32,708 (Table VI-5). The median family income in Auburn was \$42,660. There were 855 persons whose income was below the poverty level. The State Department of Housing and Community Development's, income eligibility limits as of April 1991, are shown on Table VI-6. In 1990, the median income of California households was \$35,798, while the median family income was \$40,559.



**TABLE VI-5
HOUSEHOLD AND FAMILY INCOME
CITY OF AUBURN**

Income	Households	Families
\$ 0 - 4,999	151	59
\$ 5,000 - 9,999	556	144
\$ 10,000 - 12,499	235	147
\$ 12,500 - 14,999	172	85
\$ 15,000 - 17,499	154	84
\$ 17,500 - 19,999	185	80
\$ 20,000 - 22,499	255	149
\$ 22,500 - 24,999	163	69
\$ 25,000 - 27,499	155	125
\$ 27,500 - 29,999	97	63
\$ 30,000 - 32,499	163	85
\$ 32,500 - 34,999	126	95
\$ 35,000 - 37,499	107	57
\$ 37,500 - 39,999	140	79
\$ 40,000 - 42,499	191	141
\$ 42,500 - 44,999	124	78
\$ 45,000 - 47,499	127	110
\$ 47,500 - 49,999	139	70
\$ 50,000 - 54,999	186	174
\$ 55,000 - 59,999	120	113
\$ 60,000 - 74,999	416	361
\$ 75,000 - 99,999	398	363
\$ 100,000 - 124,999	155	125
\$125,000 - 149,999	39	39
\$ 150,000 OR MORE	39	39
MEDIAN	\$32,708	\$42,660
MEAN	\$41,477	\$50,916

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990



**TABLE VI-6
INCOME ELIGIBILITY LIMITS
PLACER COUNTY***

STANDARD	Persons in Household							
	1	2	3	4	5	6	7	8
Lowest Targeted ¹	13,900	15,900	17,850	19,850	21,450	23,050	24,600	26,200
Targeted ²	22,250	25,400	28,600	31,750	34,300	36,850	39,400	41,900

* Placer County Median Income \$39,700
 * Auburn City Median Income \$42,660

¹ Very Low Income = Income not exceeding 50 percent of the median family income of the area.
² Other Low Income = Income between 50 and 80 percent of the median family income of the area.

SOURCE: California Department of Housing & Community Development, 1991.

HOUSING CHARACTERISTICS

Housing Stock

In 1990, single-family units comprised 65.3 percent of Auburn's housing stock while multiple-family units made up 33.9 percent. Mobile homes account for the remaining units. The proportion of single-family in Placer County (76.8 percent) was substantially higher than Auburn's. The County also has a larger percentage of mobile homes than the City; 5.8 percent versus 0.8, respectively.

In 1980, there were 3,506 total housing units, vacant and occupied, in Auburn. Based on 1990 census data, Auburn had 4,771² total housing units, an increase of 1,265 units within the ten-year period. The increase in housing stock resulted from both the City's annexation of existing development in formerly unincorporated areas and new construction. The majority of Auburn's residential growth over the last five years has occurred through the construction of single-family, detached homes. Between 1985 and January, 1990, 498 single-family homes were constructed. In comparison, between January 1, 1988, and January 1, 1991, Auburn annexed 113 existing housing units from unincorporated areas.

Housing Age and Condition

As depicted in Table VI-7, Auburn has a large supply of housing units which were built prior to 1940. According to the 1990 census, 651 structures, or 13.6 percent of the total

² This number is from the Final 1990 Census and consists of 2,482 owner occupied units, 2,096 renter occupied units, and 193 vacant units. Table VI-13 uses Preliminary Census data, since Final Census data was not available.



supply, were built in 1939 or earlier. In comparison, Placer County reported that 5,766 structures, or 7.5 percent of the total supply, were built in 1939 or earlier.

**TABLE VI-7
YEAR STRUCTURE BUILT
CITY OF AUBURN**

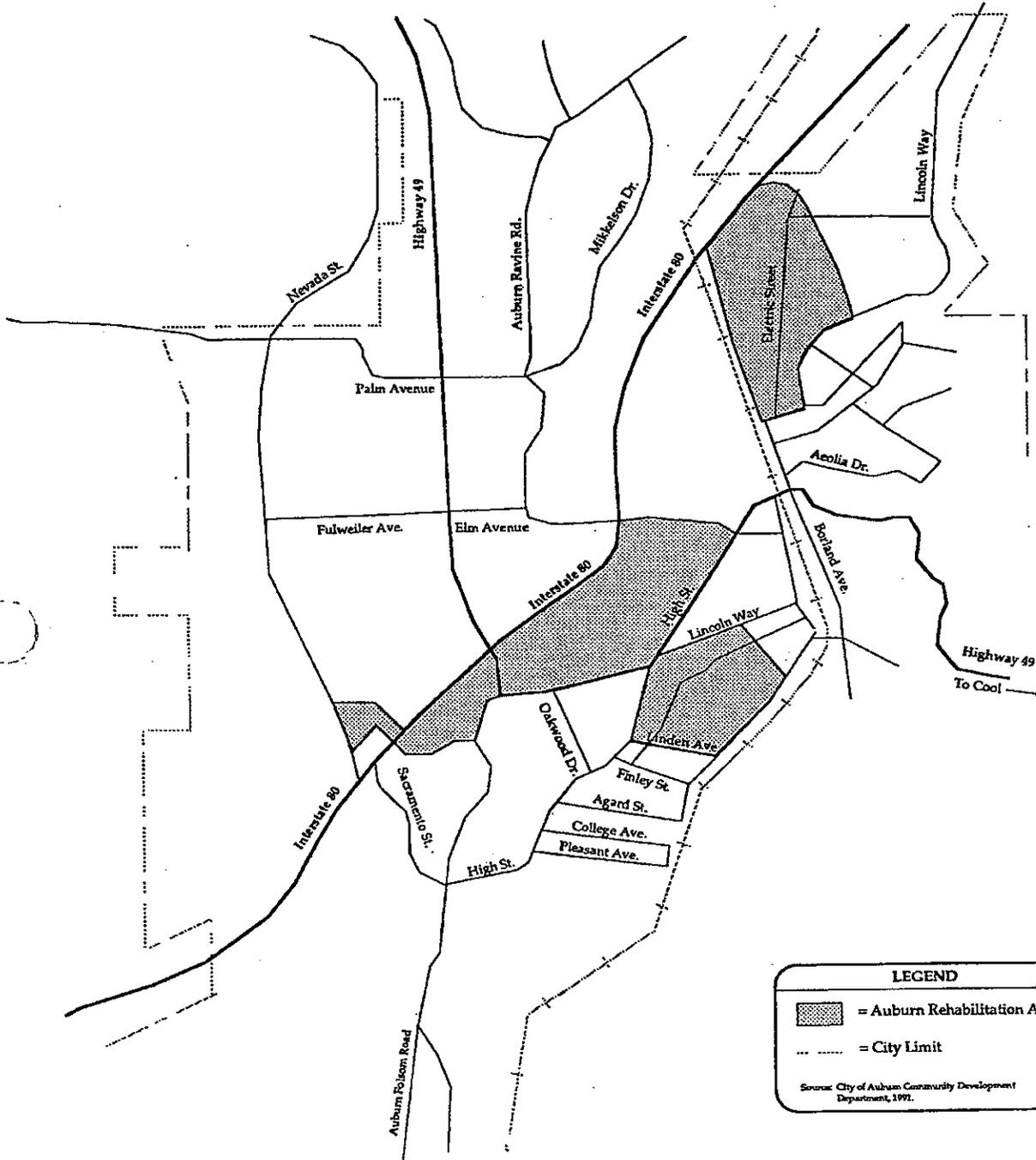
Year Built	Housing Units
1989 to March 1990	228
1985 to 1988	666
1980 to 1984	580
1970 to 1979	932
1960 to 1969	496
1950 to 1959	658
1940 to 1949	560
1939 or earlier	651
SOURCE: U.S. Department of Commerce, Bureau of the Census, 1990.	

Rehabilitation of the housing stock within the City is prevalent. For example, as Table VI-8 shows, 920 permits were issued to add to, alter, or repair a dwelling unit, while 77 permits were issued to demolish a dwelling unit between 1985 and 1990. Also, by adoption of this Housing Element, the City targets three areas for rehabilitation: (a) Old Town; (b) Downtown; and (c) areas adjacent to the railroad tracks near Electric Street. These areas are illustrated in Figure VI-1. Furthermore, the City has an adopted Redevelopment Plan, which proposes use of local monies to rehabilitate structures within its plan area. Figure VI-2 shows the boundaries for the Redevelopment Plan.

According to City Building Official, Wayne White, neither the City Municipal Code nor the other state codes he works with contain a definition for "rehabilitation" or "conservation." He stated that absent a definition he is required to use the latest dictionary. Use of this method has not posed a problem for the City. Rehabilitation is defined in the Auburn Main Street Architectural Design Guidelines as: "the act of repairing and fixing up an historic or existing building."

Rehabilitation for historic buildings has a particular definition: whereby the previously altered portions of a building, particularly the storefront elements, are largely removed and rebuilt to similar proportions, but not identical resemblance as the original to give the building a closer look to its original appearance.





Scale



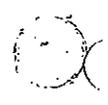
July 1992

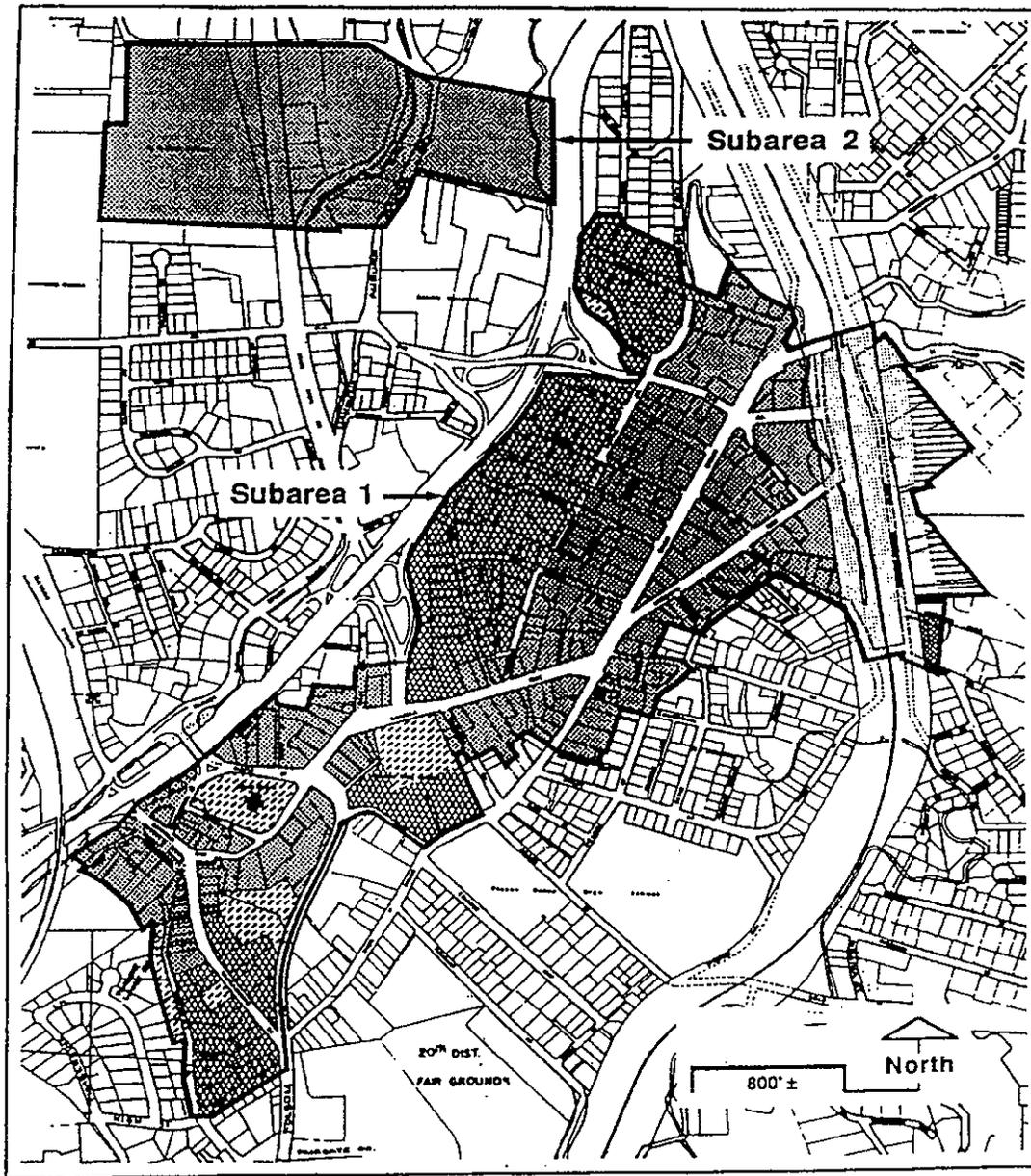
CITY OF AUBURN GENERAL PLAN
AUBURN TARGET AREAS FOR HOUSING REHABILITATION

Harland Bartholomew & Associates, Inc.

FIGURE
VI-1

Page VI-17





Land Use

- | | | | |
|---|------------------------------|---|------------|
|  | Low Density Residential |  | Commercial |
|  | Low Med. Density Residential |  | Industrial |
|  | High Density Residential |  | Public |

10 Scale



Source: City of Auburn, 1992.

CITY OF AUBURN GENERAL PLAN
 AUBURN REDEVELOPMENT PLAN BOUNDARIES

Harland Bartholomew & Associates, Inc.

FIGURE
 VI-2

Page VI-19

Rental Costs

According to the 1990 census, the median rent in Auburn was \$537 per month. This amount was slightly higher than the County median rent of \$496 per month. Rental costs for 1991 were estimated through a limited survey of property management companies and advertised rental housing units. The survey showed that rents in Auburn for apartments ranged from \$450 to \$750 per month, depending on the size of the unit and amenities. Rents for two and three bedroom houses ranged from \$625 to \$1,350 per month.

TABLE VI-8
PERMITS ISSUED FOR ALTERATION, ADDING TO, REPAIRING, OR
DEMOLISHING HOUSING STRUCTURES 1985 TO 1990
CITY OF AUBURN

	1985	1986	1987	1988	1989	1990	Total
Add to, alter, repair units	74	110	145	170	205	216	920
Demolition of units	15	31	9	8	8	6	77

SOURCE: City of Auburn Building Department, 1991.

Vacancy Rates

In 1985, the housing vacancy rate in Auburn was 8.12 percent. According to 1990 census data, the vacancy rate was 4.05 percent (since 1990 the Auburn Vacancy rate has increased). In comparison, the vacancy rate in Placer County was 17.69 percent in 1990, and the vacancy rate for the State as whole was 7.17 percent. Given these comparative figures, Placer County has a high vacancy rate, which may indicate a surplus of housing stock and thus, a reasonable choice in housing for residents. Conversely, Auburn has a low vacancy rate, which may indicate a lack of available housing stock and thus, less choice in housing for residents.

Housing Price

As Table VI-9 illustrates, the value of housing in the City of Auburn during 1990 was essentially the same as in Placer County, however, less than the State as a whole. Housing values in Auburn have come down from 1989 prices as a result of the real estate decline in California and in the Nation (Table VI-9).



**TABLE VI-9
MEDIAN HOUSING VALUES FOR SELECTED AREAS¹**

Area	1987	1988	1989	1990
Auburn	NA	NA	\$171,000	\$166,200
Placer County	119,600	137,600	157,000	169,000
California	141,540	160,100	201,028	195,500

¹ Amounts were estimated by homeowners and do not reflect actual median purchase prices shown in Table VI-15.

NA = information was not available.

SOURCES: Placer County Economic Development Department; Placer County Board of Realtors; California Association of Realtors; 1990 Census.

Housing Overpayment

One indicator of problems with housing affordability is the extent of overpaying - meaning that a household pays a higher percentage of its income for housing than will leave sufficient money available for the purchase of other essential goods and services. The term overpaying generally is used only to refer to lower income households which pay more than 30 percent of their gross incomes for housing costs (i.e., 30 percent is the percentage contained in federal guidelines defining affordable housing costs for lower income households).

Although this definition of overpaying is commonly used, higher-income households can, and frequently do, pay more than 30 percent of their income for housing. Since these households commonly can afford to pay a higher percentage, this situation has not been interpreted to constitute an overpayment problem. In California, the majority of households above the lower income level that pay more than 30 percent of income for housing are homeowners. While many of these homeowners may be paying more than they can afford for housing, it has not been determined whether this results from market constraints or consumer preference.

In 1990, 1,480 of the city's households paid more than 30 percent of their incomes housing. Of these, 420 (28.4 percent) were owners and 1,060 (71.6 percent) were renters. Of the total households paying more than 30 percent of income for housing, 1,096 were lower income households. These overpaying households comprised about 24 percent of all the households in Auburn in 1990. This percentage was very much in line with recent estimates of the percentage of overpaying households in California (i.e., 22 percent of all California households in 1989). While ideally all households would pay equally proportionate shares of their incomes for housing, this situation suggests that overpayment by the City's households may not be a significant problem when compared to the state-wide data.

Overpaying is primarily a problem for renter households. In 1990, about 42 percent of the county's renter households were lower income households with an overpaying problem. In contrast, only about nine percent of the owner households were overpaying and low income. The disparity in the percentages was also evident in the absolute



numbers of overpaying lower income owner and renter households; 184 compared to 912, respectively.

The pattern of overpaying by tenure in Auburn was similar to the pattern evident in California since 1970. In both 1970 and 1980, 37 percent of all renters were lower income households that overpaid. In 1980, only nine percent of the state's owner households were lower income with an overpaying problem.

Housing Construction Activity

In the period from 1985 to 1990, most of Auburn's new housing construction consisted of single-family units and the Auburn Building Department issued 814 permits for single-family dwelling units. Most of the single-family construction occurred in 1988 and 1989, with 205 building permits issued in both years.

For this same period, the Auburn Building Department issued 262 permits for multi-family units and 39 permits for multi-family buildings. A multi-family building may contain one or more units, and a multi-family unit is a single unit or a series of single units, such as a duplex.

Although the number of permits issued for multi-family construction are not as high as single-family permits, multi-family units accounted for 30 percent of total new housing units between 1985 and 1990. Table VI-10 shows building permits issued by type.

	1985	1986	1987	1988	1989	1990	Total
Single family	68	64	119	205	205	153	814
Multi-family* units	71	69	98	0	20	0	258
Multi-family* buildings	13	11	11	0	4	0	39

* Units consist of one unit zoned under high density (i.e., duplexes or triplexes). Buildings may contain one or more units (i.e., apartments)

SOURCE: City of Auburn Building Department, 1990

Energy Costs and Conservation

Plans for any new residential development in Auburn are reviewed for compliance with Title 24, State Building Energy Standards for Residential Development. Builders have the option of meeting Title 24 requirements through two different approaches, the performance and the prescriptive approaches.

The performance approach allows the builder to determine the mix of design and equipment technologies that will be used in meeting the specified energy budget. An



energy budget sets a limit to the amount a building may consume of British thermal units (Btu) per year per square foot of conditioned floor area. Thus, the builder must demonstrate, through the application of State approved calculation methods, that proposed building will consume no more energy than the energy budget allows.

The prescriptive approach does not require computerized calculations. This approach involves using one of five packages of energy-efficient measures that meet the energy budget.

Employment

Auburn's location at the intersection of Highway 49 and Interstate 80, has afforded the City with tourism as a longstanding local economic generator. Interstate 80 links San Francisco with Lake Tahoe and the East Coast. Subsequently, the tourism industry has continued to be a focal point for the City as a means to strengthen its tax base and to provide jobs for Auburn residents. For example, the establishment of the Main Street Program represented the City's efforts to preserve and revitalize Old Town and Downtown Auburn and strengthen existing trade and small businesses within the City limits.

Placer County's labor force trends were strong in 1988 and 1989, and are projected to remain relatively stable through the year 1992. Between 1988 and 1989, employment in Placer County rose by 2,900 jobs, from 72,700 to 75,600, and unemployment decreased by 300 people to 3,600. Subsequently, the County's unemployment rate decreased from a rate of 5.1 percent to 4.6 percent in 1989. In comparison, the State unemployment rate in 1989 was 5.1 percent. Table VI-11 depicts the County's jobs by industry.

Based on the County's economic growth and projected growth, and the population gains typically accompanying such growth, the State Economic Employment Department made the following predictions during the five-year period from 1987 to 1992:

- Placer County is expected to produce 9,800 new jobs;
- retail, trade, manufacturing, and the services industries are expected to produce more than two-thirds of these new jobs;
- construction and government are expected to account for the remaining increase of jobs; and
- transportation and public utilities are expected to experience very little growth.



**TABLE VI-11
EMPLOYMENT BY INDUSTRY, 1987 - 1992
PLACER COUNTY**

Industry	1987		1992		Change 1987-1992
	Number	Percent	1992	Percent	
Agriculture	600	1.2	600	1.0	0
Construction	4,300	8.5	5,700	9.4	1,400
Finance/Insurance/Real Estate	2,800	5.6	3,300	5.4	500
Government	9,200	18.3	10,100	16.7	900
Manufacturing	6,000	11.9	8,100	13.4	2,100
Mining	200	.4	200	.3	0
Retail Trade	11,900	23.6	14,800	24.5	2,900
Services	10,700	21.2	12,500	20.7	1,800
Transportation and Public Utilities	3,400	6.7	3,500	5.8	100
Wholesale Trade	1,200	2.4	1,400	2.3	200
TOTAL*	50,300	100	60,200	100	9,900

* Percentage may not add up to 100 percent due to rounding.
SOURCE: State Employment Development Department, 1992.

Table VI-12 shows the annual average wage by industrial sector. Based upon the projected 1992 employment composition, new employment will occur in relatively higher paying construction and manufacturing industries (36% of the total), as well as in lower paying industries such as retail trade and services (45% of the total). Placer County unemployment for February 1992, was 9.4%.

While Placer County's economic make-up is changing rapidly, with large manufacturing industries moving into the area, Auburn's topographic constraints provide few opportunities for the same type of industries to establish themselves. Thus, given that the City has constraints that may limit its ability to attract high-wage industries, the ability of individuals and families to both live and work in Auburn may be difficult.

Excluding the percent of population which is over 65 and under 19 (44 percent), there is potentially 56 percent of the population in the labor pool. An unemployment rate of 6.5 (in 1991 Placer County) indicates that possibly less than 400 Auburn residents are unemployed out of nearly 4,800 households. Placer County unemployment for February 1992 was 9.4 percent.

Jobs/Housing Balance

A balanced community is theoretically one in which access to employment and services is available to all community residents. The benefits from this jobs/housing balance would include:

- affordable housing for all income levels;
- reduction in commuter traffic;
- reduction in air pollution from mobile sources;
- decreased stress from commuting;



- Increased opportunities for walking, bicycling, and other recreational activities; and
- an overall sense of community.

**TABLE VI-12
ANNUAL AVERAGE WAGE BY INDUSTRIAL SECTOR
PLACER COUNTY**

Industry	Annual Average Wage
Agriculture, Forestry	\$11,683
Retail	\$12,417
Services	\$16,793
Mining	\$19,000
Finance, Real Estate	\$21,255
Government	\$21,312
Wholesale Trade	\$21,434
Construction	\$22,441
Manufacturing	\$27,925
Transportation, Utilities	\$34,323

SOURCE: Sierra Economic Development District, 1991

Jobs/housing balance is usually expressed as a ratio of jobs to housing units, i.e., 1:1 denoting one job for each housing unit. Because many families have two wage earners in recent years, a number of studies have indicated that a more appropriate jobs/housing ratio range would be a low of 1.23:1 to a high of 1.6:1 in the Auburn area. According to the Jobs/Housing Issue Paper prepared for the *Auburn/Bowman Community Plan* in 1991, the jobs/housing balance within the Community Plan area was 0.93:1, a considerably below the ideal for the area to support the resident work force.

The Auburn/Bowman area is housing rich and job poor as shown in Table VI-13. An analysis of the housing supply, which is in the higher income price levels, and the available jobs, which are primarily in retail/commercial services which are low paying, indicates a great disparity in match or balance. An analysis of types and amount of jobs within the plan area is provided in Table VI-14, while an analysis of housing units and estimated costs to rent and purchase is provided in Table VI-15.

With consideration to the area's job/housing ratio of 0.93:1, indicating that there are slightly less than one job for each household within the area, it is evident from a review of Tables VI-14 and VI-15 that at least two workers must reside in each housing unit, or that workers spend more than 30 percent of their wages on rent or mortgage payments, or that workers are living outside of the Auburn/Bowman area. Also evident from a review of the tables is that the average multi-family unit (2 bedroom/1 or 2 bath apartment) would not be within economic means of the average single-wage household in these categories. Only a small percentage of the available jobs within the institutional, industrial, and office categories can be assumed to provide jobholders with adequate earnings to afford the average single-family residential unit, even considering the dual-wage advantage of most of today's families.



RESIDENTIAL DEVELOPMENT PATTERNS

Existing Residential Development

The City of Auburn covers approximately seven and a half square miles. Only 39 percent, or 1,880 acres, of land within the City limits is developed. As shown in Table VI-16, existing residential land uses take up approximately 56 percent of the developed land within the city limits, but multi-family designated areas account for only five percent of the total residential. This most likely is a result of Auburn's steep slopes and rugged terrain, as well as market factors. Due to the topographic characteristics of Auburn, many new residential areas are zoned for single-family use, with parcel sizes between 10,000 and 15,000 square feet. In addition, there has been a high demand in Auburn for large, single-family lots. These two factors combined have created a favorable building climate for single-family units in Auburn.

TABLE VI-13
AUBURN/BOWMAN COMMUNITY PLAN EXISTING CONDITIONS¹

	City	Unincorporated	Total
Housing Units	4,784	7,527	12,311
Population	10,615	20,248	30,863
Employment	3,894	7,513	11,407
Jobs/Housing Ratio	0.81:1	1.00:1	0.93:1
Population/Housing Unit	2.22	2.69	2.51

SOURCES:
1990 Preliminary Census data; Final Census data was not available.
Number of jobs based on square footage of existing commercial and industrial development and an employee/floor area ratio provided by Stanford Ranch West Regional Housing and Employment Study (Coopers & Lybrand, 1990).

¹ Data per July 1992 draft of Auburn/Bowman Community Plan. May conflict with other data that has incorporated Final 1990 Census data.

TABLE VI-14
AUBURN/BOWMAN COMMUNITY PLAN AVAILABLE JOBS

	City	Unincorporated	Total	Average Annual Earnings
Retail/Commercial Service	2,033	2,049	4,082	\$14,605
Office	1,057	1,972	3,029	\$21,255
Industrial	63	632	695	\$24,680
Institutional, Government	741	2,860	3,601	\$21,312

SOURCES:
Number of jobs based on square footage of existing commercial and industrial development and an employee/floor area ratio provided by Stanford Ranch West Regional Housing and Employment Study (Coopers & Lybrand, 1990).
Average annual earnings--Sierra Economic Development District, 1990.



**TABLE VI-15
AUBURN/BOWMAN COMMUNITY PLAN
AVAILABLE HOUSING UNITS**

	Total No. of Units*	Median Monthly Rent (4/91)	Median** Purchase Price (4/91)	Average Annual Earnings to Rent	Average Annual Earnings to Own
SFR	9236	\$850	\$197,500	\$33,996	\$65,280
MFR	3002	\$540	\$61,200	\$21,600	\$20,936

NOTES: * Includes City of Auburn

** Amounts are from actual purchase prices and do not reflect median housing values shown in Table VI-9.

SFR--Single-family residential (3 bedroom/2 bath)

MFR--Multi-family residential (2 bedroom/1 or 2 bath)

SOURCES:

Number of units--Placer County Assessor's office records.

Median monthly rent--survey of local rental management companies and review of Auburn Journal classified advertisements.

Median purchase price--Placer County Board of Realtors.

Average annual earnings to rent and own--based on a 20 percent down payment and a debt to earning ratio of 30 percent.

**TABLE VI-16
EXISTING DEVELOPED LAND USES
CITY OF AUBURN**

	Acres	Percent
SF Residential	961	51.0
MF Residential	103	5.0
Commercial	173	9.0
Industrial	66	4.0
Public/Semi-public	238	13.0
Streets	339	18.0
Total Developed Land	1,880	100.0

SOURCE: Harland Bartholomew & Associates, Inc., 1991.



Potential for New Housing

The City of Auburn has approximately 2,950 acres of vacant land, not all of which is developable because of topographic, economic and access constraints. Given the topographic constraints in and around the city center, new housing construction has been focused in areas to the south and north. The majority of these new housing developments have consisted of single-family units. Based on the existing general plan designations, approximately 5,200 housing units could be constructed in the City limits, although considering the topographic features which limit the availability of buildable sites, the potential number may be significantly less. Further annexation of areas within the sphere of influence will increase the amount of developable land for residential use. It is the objective of the City to increase the amount of developable land within the sphere of influence for mixed residential uses (see Policies 1.1, 1.2, 1.4). High densities are allowed in Auburn commercial zoning districts; as a permitted use in the C2 and C3 districts and by use permit in C1, H-S, OB, and industrial districts.

Vacant land that permits residential development consists of more than 400 acres capable of supporting more than 2,500 additional dwelling units. Table A reflects the allowable range of development density in each General Plan designation that contains potential new development sites:

**TABLE A
RESIDENTIAL LAND SUPPLY AND RANGE OF POTENTIAL DWELLING UNITS**

Density Classification	Allowable Buildout Range (dwelling units/acre)	Vacant Land (acres)	Range of Potential Dwelling Units ¹
High Density Residential (HDR)	up to 5 to 15	26	130 to 390
Mixed Use (MU)	up to 5 to 15/3.0 FAR	48	240 to 720
Medium Density Residential (MDR)	up to 10	38	up to 380
Low Medium Density Residential (LMDR)	up to 6	12	up to 72
Urban Low Density Residential (ULDR)	up to 4	151	up to 604
	up to 3	14	up to 42
	up to 2	35	up to 70
Low Density Residential (LDR)	up to 1	125	up to 125
Rural Density Residential (RDR)	up to 0.05, 0.25, or 0.5	8	up to 4
TOTAL	n/a	457	up to 2,407

Notes: ¹Allowable buildout range times vacant land
Source: City of Auburn General Plan



To determine whether the city's supply of vacant, high density residential (HDR) land is adequate, it was compared to the construction goals established in the Regional Housing Needs Plan (RHNP) for the City of Auburn. The plan calls for the construction of 52 units needed to house the city's other low-income households by 1997 (no units for very low income households are expected to be provided). Table A indicates that 26 acres of vacant land designated HDR could provide up to 390 (16 percent) of the total additional units. If all of the 52 affordable units were constructed on the vacant land currently planned for high density residential development, there would still be a substantial amount of high density land left over. The available vacant land designated for high density development could accommodate seven times more units than is currently being required by the RHNP.

The City also has 48 acres of vacant land with a potential for mixed-use development. This designation allows for a combination of higher density residential uses and commercial uses. This designation is to provide for flexibility as required to meet land use needs or to ensure compatibility for existing land users. Development under this designation should attempt to provide jobs and housing within the same project. Building densities may be five units up to a maximum of fifteen units per acre for residential uses and intensities up to 3.0 FAR for commercial uses. There is more than an adequate amount of land within the residential land use designations identified in Table A to accommodate Auburn's total regional share need (see Table VI-21).

To determine whether designated density classifications accurately reflect development potential in Auburn, recently developed densities (defined as subdivisions recorded or construction projects recently occupied) were compared to the designated densities of project properties: see Table B.

Low density utilization (less than 90 percent) of some sites is largely due to topography. Other reasons result from the Department of Fish and Game and Army Corps of Engineers requirements for wetlands set aside, and preservation of oak woodlands.

Table B shows that projects are developed at the high range of permitted density resulting in units available to other low and moderate income households. The HUD 202 program has provided housing units which meet the needs of very low and other low income households.

The City has met the housing needs numbers and is targeting those groups whose housing needs are not met, the moderate and above-moderate households.

Affordable Housing Sites

Between the high land costs in Auburn and the topographic constraints on existing vacant land, the opportunities for any housing development for low income persons within the existing City limits are limited. Annexation of suitable properties presently outside of the City limits would be necessary to obtain a parcel larger than three acres.

**TABLE B
UTILIZATION OF DESIGNATED DENSITY BY
RECENTLY DEVELOPED PROJECTS 1992**

Single Family Subdivisions

Project	Number of Units	Developed Density (du/ac)	Designated Density (du/ac)	Density Utilization (%)	Building Valuation (\$)¹	Date Final Map Recorded
Meadowbrook	80	1	1	100	N/A ²	N/A ²
Southridge VI	48	3	4	75	N/A ²	N/A ²
Oakview Estates	37	3.3	4	83	150,000	8/28/90
Auburn Glen	20	3.3	4	83	125,000	1/9/91
Adriana Place	13	4	4	100	144,000	4/5/89
Heritage Grove	18	3	4	75	154,000	2/28/90
Brentwood Circle	13	4	4	100	144,000	7/1/88

Apartments

Project	Number of Units	Developed Density (du/ac)	Designated Density (du/ac)	Density Utilization (%)	Rents (\$/month)³	Date Planning Commission Approved
Court View Terrace	8	15	15	100	550-750	1/5/88
Birchwood	8	15	15	100	750	10/16/90
Hoffman	4	15	15	100	650	10/16/90
Auburn Pines	24	15	15	100	650	5/14/90
Volunteers of America	60	30	15	200	HUD 202 ⁴	4/6/93

1 Building valuation based on review of building permit records

2 N/A means that the final map has not been recorded

3 Rents are based on Community Development Department review as of June 10, 1993

4 The HUD 202 program rents vary on ability to pay, project is targeted to low and very low income senior citizens.

The City of Auburn is meeting their regional share of housing needs, and the City is committed to providing sites for affordable housing through several proposed programs including:

1. Inclusionary zoning--10 to 15 percent of any new residential development must be affordable and available to low income households.
2. Density bonus--25 percent bonus for developer who will provide:
 - a. Twenty percent of project for low income;
 - b. Ten percent of project for very-low income; or
 - c. Fifty percent of project for senior citizens.



3. Establishing a Housing Trust Fund which can purchase infill lots subordinate to small contractors who must sell to qualified low income households.

A Habitat for Humanity project is currently underway in the City of Auburn which shall increase the housing stock for low income families.

4. Housing Constraints

There are two types of constraints, governmental and nongovernmental, that affect the maintenance, improvement, or development of housing for all income levels.

Governmental constraints are typically land use controls such as building codes, site requirements, fees and other exactions required of local developers, and processing and permit procedures. Nongovernmental constraints are conditions resulting from interdependent, uncontrollable, natural and socioeconomic forces, such as the topography of land, the price of land, the availability of financing, and the cost of construction. These two categories are not mutually exclusive, however, as they each influence the other. For example, a large portion of development costs are used to ensure the health, safety and welfare of Auburn residents and to ensure environmental sensitivity by the developer. Thus, the extent of the development costs, or the governmental constraints, may depend on the nongovernmental constraints present on any given project.

GOVERNMENTAL CONSTRAINTS

Ordinances

State law requires municipalities to use zoning ordinances as a means to implement their General Plan policies and objectives. Although Auburn's zoning code permits a wide variety of residential densities and housing types, the current zoning map indicates a number of residential areas zoned R-1-10, which is a minimum of 10,000 square feet per lot. This most likely is a result of Auburn's steep topography, which limits the type and density of development.

The City of Auburn Zoning allows high density residential housing by right in the C-2 and C-3 Zones. The Zoning Ordinance allows, by permit, high density residential housing in the C-1, H-S, OB and Industrial Zones.

Planned Unit Developments

Planned unit developments (PUD) provide the City of Auburn with a procedure which can relate the type, design, and layout of residential development to the particular site and the particular demand for housing at the time of development in a manner consistent



with the preservation of the property values within established residential areas. The Clustered Development/Open Space Private overlay allows clustering to assure development on suitable sites and protect open space. While planned density does not change, actual lot sizes may vary when clustered. Recent projects which utilized the PUD provisions include the Auburn Glen project and Adriana Place project. Both projects, which are zoned for 10,000 sq. ft. minimum lots, resulted in lots in the range of 8,500 sq. ft. On the new General Plan map the clustered development/open space private designation identifies areas that allow planned unit development.

The following uses shall be permitted in planned unit developments:

- (a) Any use permitted in the basic district classification;
- (b) Two-family dwellings;
- (c) Single-family dwellings;
- (d) Multiple- (three (3) or more) family dwellings;
- (e) Recreation uses;
- (f) Buildings and uses accessory to the uses set forth in this section; and
- (g) Highway service, commercial, manufacturing, and airport. Standards for parking, open space, building coverage, and height per a use permit.

Each person proposing to construct a planned unit development shall first secure a use permit for such planned unit development. A developer can request a PUD or the staff of the Community Development Department can recommend a PUD.

Parking and Building Height

PUD standards for parking, open spaces, building coverage, and recreation areas shall be governed by the following chart:

STANDARDS FOR PARKING, OPEN SPACES, BUILDING COVERAGE, AND RECREATION AREAS*			
Land Use Intensity Expressed in Dwelling Units per Acre	Off-street Parking Ratio: Spaces per Dwelling Unit	Open Space Ratio: Minimum Percentage of Undisturbed or Replanted Land	Building Space Ratio: Maximum Coverage of Land by Buildings Expressed as a Percentage of the Site
3.0	2.00	70	16
4.0	2.00	65	18
5.0	2.00	60	20
6.0	2.00	55	22
7.0	2.00	50	24
8.0	2.00	45	26
9.0	2.00	40	28
10.0 and over	2.00	35	30

* These standards are used as a guide only and are not mandatory.
Source: Auburn Municipal Code (§§ 3.232 and 3.24, Ord. 558, as added by § 3, Ord. 591)



Although not specifically identified in Auburn's Municipal Code, covered parking is not required by the City of Auburn. As examples, none of the projects listed in Table B required covered parking. Some complexes chose to build covered parking areas, these structures were not required by the City. Also, the City staff has the flexibility to recommend and the Planning Commission/City Council have the authority to grant exceptions to the parking standards (i.e., reduction of spaces for senior housing). The Volunteers of America project listed in Table B is one example of reduced parking spaces for senior housing. The Planning Commission approved the project with a ratio of 1:1 uncovered parking spaces rather than the required 2:1 ratio (essentially a reduction of 50 percent).

For example, the City of Auburn has recently changed the Planned Unit Development standards in the Zoning Ordinance and deleted a plan line street (reduced street width standards for widening, reconstruction, sidewalk, shoulder, etc. significantly) to accommodate the Habitat for Humanity project. This procedure required public hearings before both the Planning Commission and City Council.

Previously, the ordinance stated the following: "The tract of land for a planned unit development shall comprise not less than one acre." At staff's recommendations, the Planning Commission and City Council changed the ordinance to read: "The tract of land for a planned unit development shall comprise not less than one acre; or the above noted size requirement may be reduced by the Planning Commission if the Commission finds that a hardship exists whereby there is insufficient acreage to meet the one acre minimum requirement and the site lends itself to the use of a planned unit development. Hardship may consist of topographic constraints, preservation of natural features, configuration of pre-existing housing parcels, the construction, or rehabilitation of existing housing for very low, low, or moderate income persons."

Building height measurement is very lenient. The Municipal Code basically defines "building height" as "the vertical distance from the level of the highest point of that portion of the building site covered by the building to the topmost point of the building."

Design Standards

There are design guidelines on all medium and high density housing and commercial and industrial buildings city-wide. There are no design guidelines on single family housing. The lot design and improvement standards for subdivisions shall conform generally to the requirements of the zoning provisions, the Standard Specifications, plans and details, and Article 16 of the Auburn Municipal Code. The Council shall have the authority to approve a subdivision with lot design and improvement standards at variance with the requirements referred to in this section when the facts and circumstances so warrant. By such approval the special design standards for such subdivisions shall prevail (§ 1, Ord. 770, eff. March 24, 1982).

In addition to the Auburn Municipal Code, design review standards for the City of Auburn are also outlined in the Auburn Main Street Architectural Design Guidelines, June 1988. These guidelines are intended to be an educational guide to compatible and



Image-enhancing building improvements in the Downtown and Old Town Design Review Districts of Auburn. Located within each of the two Design Review Districts is a designated historic district, the Downtown Historic District and the Old Town Historic District. While the two historic districts contain the most significant concentration of historic buildings, other historic and older buildings are located in the larger Design Review Districts which make it essential that these guidelines be administered beyond just the borders of the historic districts to assure continuity and compatibility throughout the larger areas. The City of Auburn encourages the use of these guidelines in the rest of the city, but their implementation is not required.

The Design Guidelines are applicable to building exteriors only. It should be remembered, however, that most every exterior change, modification and addition to an existing building of any type requires a building permit. It is important to remember that all signage changes and additions also require a city permit. Whenever a building or sign permit is required, the Auburn Main Street Architectural Design Guidelines shall be applicable in the aforementioned districts. The time necessary to obtain a design review approval for an average civic design is normally 2-3 months.

Because the Auburn Main Street Architectural Design Guidelines are only required for the areas identified above, they would have no impact on the City's ability to provide opportunities for low- and moderate-income housing. Because the City Council shall have the authority to approve a subdivision with lot design and improvement standards at variance with the requirements referred to in this section when the facts and circumstances so warrant, standards for subdivisions outlined in the Auburn Municipal Code would also have no impact on the City's ability to provide opportunities for low- and moderate-income housing. Recent examples where the City has facilitated projects through the design review process include all those listed in Table B, as well as the Habitat for Humanity project (Implementation Program J). The City's design review procedures have not hindered development of low and moderate-income units.

Permit Processing

In compliance with State and Federal requirements, the City of Auburn has developed review processes which evaluate projects for their impact on the environment and public services, and for design quality. Although there may be little argument as to the necessity of ensuring an environmental- and design-sensitive development, the extent of the review may pose a constraint for applicants. For the City of Auburn, the time required to complete evaluation and approval for use permits or civic design reviews is up to 90 days; however, projects are oftentimes processed within 30-45 days. Applications for subdivisions, zone changes, or General Plan amendments usually require anywhere from 90 to 180 days. When an environmental impact report is necessary, it could take up to 12 months for evaluation and approval.

Fees

Processing fees for building permits, schools/parks development review and infrastructure costs have affected the building climate in Placer County, including the

City of Auburn. These fees can add up to a substantial percentage of the cost of an affordable home.

The City of Auburn uses the Uniform Building Code (UBC) for all standards and has not adopted any additional standards. The City does use standards for snow load requirements as identified in the UBC.

Building permit fees are based upon the valuation of a new residence. The valuation of a home is figured by assigning a fixed amount to the square footage of a specified area (for example, the dwelling area, garage, or the deck/covered patio/carport). One percent of the total valuation of a home is the building permit fee. The following are various additional mitigation fees: sewer hook-up; sewer plant improvement; energy calc checking; facilities and equipment fee; and SMIP (seismic studies). School fees are another fixed amount that is calculated per square foot of dwelling space. Because building permit fees are dependent upon the square footage of a specified area, the fees may vary significantly for single-family as opposed to multi-family developments.

Planning, zoning, and environmental review fees and charges are subject to City Council discretion. Most are fixed amounts, but the Civic Design Review fees and the Conditional Use Permits are categorized according to the size of the building (i.e., fees are less for a development with less units or less square footage). Examples of fee sheets used by the Community Development and Building Departments of the City of Auburn are provided in the Supporting Documentation.

NONGOVERNMENTAL CONSTRAINTS

Environmental Constraints

Auburn's topography is the most prevalent constraint on housing. The steep and rugged terrain characteristic of Auburn severely limits the densities and configuration of units on a site. In some circumstances, the topography prevents the development of any residential structures on a site. The City is particularly sensitive to this situation and attempts, through its development review, to preserve the natural landscape of the area by limiting the amount, and degree of hillside development. The City encourages the use of PUDs allowing density transfers to more useable portions of a project site.

Access to Public Facilities and Services

Public facilities are a constraint to housing because all housing developments need adequate facilities to provide for water, waste disposal, electricity, natural gas, schools, parks, and fire and police protection.

The provision of roads, police and fire protection, and a sewer system are responsibilities of the City. Water services are provided by the Placer County Water District. Due to a limited tax base, the City relies upon developers to pay for the initial provision of public facilities and services for new housing developments. Since these costs are reflected in the overall price of a home, homebuyers are ultimately responsible for bearing the cost



of public utilities and services. It is the City's objective to ensure that public facilities are provided in a cost-effective manner.

In addition to supplying adequate infrastructure to Auburn residents, providing adequate school facilities for Auburn's increasing school-age population is a present challenge to City officials, and will continue to be a challenge given the projections of the student population. According to the Auburn Union School District, the 1986-87 school enrollment for grades K through 8 was 2,114. For the school year 1990-91, enrollment was reported at 2,707; an increase of 28.05 percent. The district has three elementary schools and one middle school to house students, and expects the school-age population to increase to 3,500 in five years. Several strategies are being pursued by the district to accommodate the growth, such as beginning year-round schooling, and purchasing and upgrading school facilities. The City worked very closely with the school district in forming a Mello-Roos district to generate revenue for new school facilities.

Market Forces

There are four main market forces that determine the cost of housing construction in Auburn. They are the cost of land, labor, construction materials, and financing.

Since the acquisition of land is the first step in the development of a home or apartments, land prices contribute significantly to the cost of new housing. Current residential land costs were estimated through a limited survey of real estate agencies. The survey showed that the cost of improved residential vacant lots in the City ranges from \$7.00 to \$11.00 per square foot, depending on the location. In areas north of the City, such as along New Airport Road and Oak Ridge Way, land costs are approximately \$8.00 per square foot. To the south of the City, for example, off of Auburn Folsom Road, land ranges from \$7.00 per square foot to \$11.00 per square foot. As an example, an R-1-10 zoned improved residential lot (10,000 sq. ft.), with the average land cost of \$9.00 per square foot, would cost approximately \$90,000. Thus, land costs in Auburn do contribute to the inability of Auburn residents to afford housing.

Since labor costs vary with the amount of amenities and the level of detail that go into any given housing project, it is difficult to assess how these costs contribute to the overall price of a home. According to the Placer County Contractors Association, however, there has been a high demand for custom-built homes in Auburn.

Costs for construction materials have increased rapidly. Current material costs were estimated through a limited survey of local contractors. The survey showed that material costs range from \$55 to \$100 per square foot, depending on the location of the project, and the cost of lumber, concrete, metals and other finished goods.

Financing costs for construction and mortgage loans are important in determining the availability and demand for new housing. Current financing rates were estimated through a limited survey of local banks. Financing rates for a 30-year fixed loan and a 30-year adjustable loan are presented in Table VI-17. Land cost presents significant constraints to the provision of affordable housing.



Overall, despite the governmental and nongovernmental constraints, the construction activity in Auburn has been strong over the last five years and, in light of approved and proposed housing projects, should remain strong. It is the City's objective to implement measures that alleviate some of these constraints in order to provide more affordable housing for Auburn residents.

Financing

Financing availability can be a constraint to housing development if an equal opportunity to obtain financing is not available throughout a geographic area. An equal opportunity to receive financing may not exist if lending institutions practice discrimination in lending based on a project's location. Geographic discrimination is typically referred to as *redlining*. Redlining has been shown to occur in lower income urbanized areas where property values are low due to the area's socioeconomic characteristics.

TABLE VI-17
TYPICAL INTEREST RATES FOR 30-YEAR LOANS*
AUBURN AREA

	Rate	Points
Fixed Loan	9.625 percent	2.00
Adjustable Loan**	7.375 percent	1.75

* Based on an average loan amount of \$191,250 from the surveyed banks.

** The stipulations for an adjustable loan varied among the surveyed banks.

SOURCE: Placer Savings and Loan, U.S. Bank of California, Wells Fargo Bank, May 1991.

To determine if redlining occurs in Auburn, information pertaining to the Community Reinvestment Act (CRA) was requested from local lending institutions.

Community Reinvestment Act Performance Evaluation reports prepared by the Federal Deposit Insurance Corporation (FDIC) were reviewed, providing specific information regarding the bank's lending practices. According to the FDIC, a review of various credit applications did not reveal any evidence of discriminatory practices or procedures.

5. Future Housing Needs

PRESERVATION OF ASSISTED HOUSING

Government Code Section 65583 requires that the housing element analyze and program efforts for preserving assisted housing developments that are at-risk of conversion to



market rate rents. Housing units are defined as "assisted" if the development or rehabilitation of those units was funded in whole or part through federal, state or local programs to provide affordable housing. Affected programs are listed below:

- A. Department of Housing and Urban Development programs:
 - 1. Section 8 Lower-Income Rental Assistance project-based programs:
 - a. New Construction
 - b. Substantial or Moderate Rehabilitation
 - c. Property Disposition
 - d. Loan Management Set-Aside
 - 2. Section 101 Rent Supplements;
 - 3. Section 213 Cooperative Housing Insurance;
 - 4. Section 221(d)(3) Below-Market-Interest-Rate Mortgage Insurance Program;
 - 5. Section 236 Interest Reduction Payment Program;
 - 6. Section 202 Direct Loans for Elderly or Handicapped; and
 - 7. Community Development Block Grant Program.
- B. Farmers Home Administration (FmHA) Section 515 Rural Rental Housing Loans;
- C. State and local multi-family revenue bond programs;
- D. Redevelopment Programs;
- E. Local in-lieu fee programs or inclusionary programs; and
- F. Development which obtained a density bonus and direct government assistance pursuant to Government Code Section 65916.

A housing development or unit becomes "at-risk of conversion" if the use restriction attached to the funding assistance is eligible for removal during the next ten years. This occurs for example when a property owner pays off a government subsidized loan. The purpose of the at-risk analysis is to identify actions (i.e., programs) the jurisdiction can take to preserve at-risk units, to adequately plan for preventing or minimizing tenant displacement and to preserve the local affordable housing stock. The following components are required as part of the at-risk analysis:

- 1. Inventory of units at-risk of losing use restrictions;
- 2. Cost analysis of preserving at-risk units versus replacing them;
- 3. Resources for preservation:
 - a. Nonprofit entities capable of acquiring and managing at-risk projects;
 - b. Potential preservation financing sources and estimates of available funds;



4. Quantified objectives (i.e., the number of at-risk projects and the units to be preserved); and
5. Programs (i.e., efforts to preserve units at-risk of losing use restrictions).

At-Risk Inventory

An initial review of at-risk units uncovered five projects in Auburn that are technically at-risk of conversion. These projects are listed in Table VI-18.

The FmHA projects were listed as technically at-risk since the 50-year loans that financed construction of each project are eligible for prepayment after 20 years. According to the California Department of Housing and Community Development (HCD), no FmHA loans in California have ever been converted as a result of prepayment. Because the Brookside projects are currently (as of December 1992) undergoing processing for additional incentives for continued ownership, further analysis of these projects is not required by law (Housing Element Analysis: Preservation of Assisted Units, 1991, page 15).

TABLE VI-18
INVENTORY OF AT-RISK HOUSING UNITS
CITY OF AUBURN

Project Name	Location	No. of Units	Funding Source	Loan Date/ Conversion Date ¹
Auburn Palms	701 Auburn Ravine Road	50	HUD 236 Loan	4-10-75/ 4-10-95
Auburn Gardens	385 Sacramento Street	48	HUD 236 Loan	8-28-72/ 8-28-92
Auburn Villa	628 Mikkelsen Drive	50	HUD 221 Loan/ Section 8	2-24-93
Ravine Terrace	750 Auburn Ravine Road	134	HUD 231 Loan/ Section 8	2-8-95
Brookside I & II	738 Mikkelsen Drive	48	FmHA ² Loan	Pre-1999/NA

NOTES: ¹ Earliest possible conversion date
² FmHA = Farmers Home Administration

SOURCE: State of California, Business, Transportation and Housing Agency, Department of Housing and Community Development, December 5, 1991.

The HUD 236 projects are technically at-risk since the 40-year loans that financed the projects are eligible for prepayment after 20 years. However, the HUD 236 projects are subject to the provisions of the federal Low-Income Housing Preservation and Resident Homeownership Act (LIHPRHA). The objective of LIHPRHA is extension of low-income use restrictions while offering owners alternative means of realizing a reasonable return on



their investment. These alternatives involve either continuing ownership with additional federal incentives, or selling the property with a first-right-of-refusal process for nonprofit and public entities.

Under LIHPRHA a prepayment option releasing use restrictions is available only if criteria essentially establishing no need for the low-income housing can be met ("no harm" application); or if the provisions for one of the above alternatives do not work out (e.g. federal incentives unavailable, lack of qualified buyers).

Of the two projects only the owner of the Auburn Gardens has filed a Notice of Intent (September 1992). Thus, the federal application process to either directly prepay, extend the use restrictions, or transfer the property has been initiated and the project is currently being appraised.

According to the U.S. Department of Housing and Urban Development, the prepayment option criteria is difficult to meet given the government incentives for continuation and the number of nonprofit or public entities interested in purchasing affordable housing. Therefore, conversion of the HUD 236 projects was considered unlikely. Furthermore, HUD recognizes that due to the locale of Auburn Gardens and Auburn Palms, it is extremely unlikely that a "no harm" application would be approved. Therefore, it is highly unlikely that the two projects will at any time convert to market rate rents.

The HUD 221 and 231 loans are combined with Section 8 rental subsidies. The Auburn Villa project is financed by a 221 (d) (4) market-rate mortgage. This project is at-risk because of an eligible "opt-out" (decision to not renew Section 8 contract) date of February 1993, thereby releasing the use restrictions. The Ravine Terrace project is an HUD-assisted property with a Section 231 loan. It is not required to be included in the analysis by statute, but is in the inventory. Because this property is owned by a nonprofit, its Section 8 contract (due to reach an optional renewal date in 1995) is likely to be renewed since federal appropriations have been authorized for renewal during this period (Housing Element Analysis: Preservation of Assisted Units, 1991).

In order to determine the likelihood of an "opt-out" for Auburn Villa, the property manager for the project was contacted. According to the property manager, the project serves elderly tenants and there are no plans to discontinue providing affordable housing for seniors.

Cost Analysis

Although considered unlikely, the potential for conversion of the Auburn Palms, Auburn Gardens, and Auburn Villa projects does exist. Accordingly, a cost analysis that compares preservation costs against new construction costs is required by state law. Costs may be estimated on any order of magnitude that allows a comparison of costs to be made. For this study, two non-profit companies specializing in rehabilitation and construction of low-income housing were contacted to determine cost differences in affordable housing preservation and construction. A brief description of each company and their determination regarding cost differences is provided in Table VI-19.



Resources for Preservation

Preservation resources are categorized into nonprofit entities capable of acquiring managing at-risk projects and potential preservation financing sources (including estimates of available funds). Two nonprofit entities, Project Go, Inc, and the Rural California Housing Corporation, expressed their interest in acquiring at-risk projects in Auburn. Project Go, Inc., has 14 years of experience in low-income housing construction, rehabilitation and management. The Rural California Housing Corporation has 25 years of experience in the construction of affordable housing, as well as recent experience in the acquisition of assisted housing.

Preservation Financing Sources

State law requires that each housing element identify and consider all federal, state and local financing and subsidy programs that could be used to preserve assisted housing for use by low-income residents. This analysis should include an estimate of the amount of each type of funds which could be available to preserve assisted housing. The financing sources which must be considered include the following:

- Community Development Block Grant Funds (CDBG);
- Auburn Urban Development Authority tax increment funds, including, but not limited to, those from the Low and Moderate Income Housing Fund; and
- Administrative fees (i.e., reserves) of any housing authority operating within the community.

The State of California administers the federal Community Development Block Grant program for non-entitlement cities and counties throughout the state. Non-entitlement jurisdictions include those cities with populations of less than 50,000 and counties with populations less than 200,000 that do not automatically receive U.S. Department of Housing and Community Development Block Grant Funds. Auburn is one of the 180 small cities and counties in the state eligible to apply for these CDBG funds.

**TABLE VI-19
PRESERVATION AND NEW CONSTRUCTION COST COMPARISON**

Company	Contact	Cost Comparison Discussion
Project Go, Inc.	Lynda J. Timbers	Due to the high cost of planning, environmental analysis, and providing infrastructure, new construction is more expensive than the preservation of existing units.
Rural California Housing Corporation	Stanley Keasling	The Rural California Housing Corporation has not constructed any low-income housing projects that were lower in cost than preserving the same number of existing units.

SOURCE: Harland Bartholomew & Associates, Inc., 1992.



The City does not have any current CDBG funds that are allocated to housing programs. The Housing Element adopted in 1985, however, recommends acquiring CDBG funds. This money, if received, will be used to fund a variety of housing programs, including rehabilitation, land acquisition, handicapped access, and emergency home repair. If necessary, some of these funds could be used to preserve at-risk units.

The Auburn Urban Development Authority is required to allocate a minimum of 20% of all taxes collected by the agency to increase and improve low and moderate income housing. This source of financing can contribute important funding to the improvement of existing housing units within the AUDA plan area and also provide an increased number of new low and moderate income residential units.

A housing authority does not currently exist in Auburn. Yet, as of December 1992, the Placer County Board of Supervisors reached a decision to establish a public housing authority. "In addition to getting more federal rental assistance funds, a county public housing authority can also acquire land to build low-income housing developments, issue revenue bonds to finance the construction of multi-family housing, and offer construction loans to finance rental housing" (*The Auburn Journal*, vol. 121, no. 99).

REGIONAL HOUSING NEEDS PLAN

The Sierra Planning Organization (SPO) is the agency responsible for the preparation of a Regional Housing Needs Plan (RHNP), pursuant to state housing law. The plan identifies the existing and future housing needs of all the communities within a region and serves as a guide to create interdependent management plans for the areas in that region. The housing needs determined in the plan are considered by SPO to be minimums. As part of the housing element, a land use analysis must be performed demonstrating that a jurisdiction has land available to meet the housing needs established in the RHNP. SPO's jurisdiction covers a four-county area, including portions of Placer and El Dorado counties, Sierra and Nevada counties, and the cities of Nevada City, Grass Valley, Loyaltown, Placerville, Auburn, and Colfax.

Table VI-20 displays the estimated 1990 distribution of households in Auburn by income group.

As Table VI-20 indicates, the estimated household distribution is weighted towards the above moderate income group. Over the past few years, the housing market in Auburn has been influenced by custom home buyers moving from the San Francisco Bay area and southern California. However, the very low income group also makes up a large percentage of Auburn's households (28 percent).

According to the 1997 allocation of households from the RHNP displayed in Table VI-21, Auburn is not expected to provide any units for very low income households, but is expected to provide seven percent of the total housing units for other low income households. (The RHNP allocated 93 percent of very low income households to the unincorporated areas of Placer County.)



TABLE VI-20
HOUSEHOLD DISTRIBUTION BY INCOME GROUP
1990

City of Auburn	Income Group				Total
	Very Low ¹	Other Low ²	Moderate ³	Above Moderate ⁴	
Households	1,268	758	633	1,934	4,593
Percent of Total	28%	16%	14%	42%	100%

NOTES: ¹ Very Low Income = Income not exceeding 50 percent of the median family income of the area.
² Other Low Income = Income between 50 and 80 percent of the median family income of the area.
³ Moderate Income = Income between 80 and 120 percent of the median family income of the area.
⁴ Above Moderate Income = Income above 120 percent of the median family of the area.

SOURCE: *Regional Housing Allocation Plan for Sierra Planning Organization, April 1991, 1990 Final Census.*

Based on the final allocation of housing needs in the RHNP, the housing element's land use analysis must demonstrate that adequate land exists for the housing allocations within each income group. If the land is not available, the housing element must contain programs that can rectify land shortages. For example, the housing element could call for programs that would increase density in suitable areas or require annexation of additional land suitable for housing types associated with each income group.

TABLE VI-21
1997 HOUSING ALLOCATION

City of Auburn	Income Group				Total
	Very Low ¹	Other Low ²	Moderate ³	Above Moderate ⁴	
Households	0	52	128	596	776
Percent of Total	0%	7%	16%	77%	100%

NOTES: ¹ Very Low Income = Income not exceeding 50 percent of the median family income of the area.
² Other Low Income = Income between 50 and 80 percent of the median family income of the area.
³ Moderate Income = Income between 80 and 120 percent of the median family income of the area.
⁴ Above Moderate Income = Income above 120 percent of the median family of the area.

SOURCE: *Regional Housing Allocation Plan for Sierra Planning Organization, April 1991, based on 1980 Census and Department of Finance January 1990 "Population and Housing Estimates."*

Based on the distribution of the housing units in Table VI-21, quantified objectives for the City to meet were established for each affordability level. The objectives are listed in Table VI-22.

The number of units actually constructed, conserved, and rehabilitated will depend on the level of implementation for programs developed as part of the Housing Element and



private sector market forces. It is not anticipated that any buildings will be demolished during the planning period.

**TABLE VI-22
CITY OF AUBURN GENERAL PLAN
QUANTIFIED HOUSING OBJECTIVES**

Affordability Level	Number of Units			Time Period	
	New Construction	Conservation ¹	Rehabilitation ²	New Construction	Conservation/Rehabilitation
Very Low-Income	0	93	18	Annually	1990-1997
Other Low-Income	8	55	11	Annually	1990-1997
Moderate-Income	18	0	9	Annually	1990-1997
Above Moderate-Income	87	0	27	Annually	1990-1997
TOTAL	113	148	65		

NOTES:

¹ Number of units to be constructed is assumed to include the 77 units that have been demolished and need to be replaced.

² Number of conserved units based on number of at-risk low-income units.

³ Number of rehabilitated units was estimated by assuming 10 percent of the 651 homes built prior to 1940 were in need of rehabilitation. The 10 percent guideline is based on the personal experience of the Planning Director and building officials in Auburn.

SOURCE: Harland Bartholomew & Associates, Inc., June 1992.

6. Implementation

The following programs address the range of housing needs and represent a commitment by the City of Auburn to make a conscious effort to address those needs in a responsible manner. These programs reflect the City's experience from past efforts to implement the 1985 Housing Element.

- A. The City shall review the Housing Element annually to monitor the City's progress in implementing its housing programs. The results of the review will be presented to the City Council and Planning Commission.

Responsibility: Community Development.

Time Frame: First report will be provided in 1993; updates will be prepared every year thereafter

Related Policy: 1.2

- B. The City shall continue to pursue all available and appropriate state and federal funding sources to support the City's efforts to meet new construction, conservation and rehabilitation needs of low- and moderate-income households. A complete listing of these funding sources can be found in the *Directory of Housing Programs: Local, State, Federal* (Sacramento, California: State Department of Housing and Community Development, 1987), the *Loan and Grant Programs for the Division of Community Affairs* (Sacramento, California: State Department of



Housing and Community Development, 1991), and *Programs of HUD: 1989-1990* (Washington, D.C.: U.S. Department of Housing and Urban Development, 1989). The City is seeking funds through non-profits to match a planning technical assistance grant in order to conduct a detailed inventory of housing needing rehabilitation. Upon completion of the housing inventory the City will seek grant funds for rehabilitation of identified housing units.

Responsibility: Community Development, Auburn Urban Development Authority
Time Frame: Annually
Related Policy: 1.10, 1.14

- C. The City shall apply for technical assistance grants from the State Housing and Community Development Department to assist the City in pursuing all available and appropriate state and federal funding. A complete listing of these funding sources can be found in the *Directory of Housing Programs: Local, State, Federal* (Sacramento, California: State Department of Housing and Community Development, 1987), the *Loan and Grant Programs for the Division of Community Affairs* (Sacramento, California: State Department of Housing and Community Development, 1991), and *Programs of HUD: 1989-1990* (Washington, D.C.: U.S. Department of Housing and Urban Development, 1989). The City is seeking funds through non-profits to match a planning technical assistance grant in order to conduct a detailed inventory of housing needing rehabilitation. Upon completion of the housing inventory the City will seek grant funds for rehabilitation of identified housing units.

Responsibility: Community Development
Time Frame: Annually
Related Policy: 1.10, 1.14

- D. The City shall revise the Zoning Ordinance to provide for a density bonus of 25 percent for projects in all residential zoning districts if the project reserves at least: 20 percent of the units for lower-income households; or 10 percent of the units for very low-income households; or 50 percent of the units for senior citizens. The City shall establish guidelines for income eligibility for the "reserved" units and for maintaining the affordability of "reserved" units over time.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.1, 1.9, 1.14

- E. The City shall continue to annex an appropriate amount of vacant, unincorporated land to meet its housing goals and policies.

Responsibility: City Council, Planning Commission, Community Development
Time Frame: Ongoing
Related Policy: 1.1



- F. The City shall implement the provisions of the Zoning Ordinance which allow nonconforming residential uses, when they are only nonconforming because of density, to be reconstructed in residential areas subject to an approved Conditional Use Permit, when findings can be made that the use has not and will not be detrimental to the surrounding neighborhood.

Responsibility: City Council, Planning Commission, Community Development
Time Frame: Ongoing
Related Policy: 1.15

- G. The City shall review the establishment of a program requiring developers of residential developments of 5 or more units to either: (a) provide between 10 percent and 15 percent of their units at below-market-rents or prices; (b) contribute in-lieu fees; or (c) propose alternative measures so that the equivalent of 10 percent to 15 percent of their units will be available to and affordable by households of low and median income.

Responsibility: City Council, Planning Commission, Community Development
Time Frame: 1993-94
Related Policy: 1.4

- H. The City shall review the establishment of a Housing Trust Fund to provide programs to produce housing for very low-income households. The Trust fund could be funded through a variety of sources, including but not limited to: (a) a development fee per square footage on all new and substantially changed commercial structures; (b) City appropriations to the Trust Fund from the General Fund; (c) an annual employment tax on all existing employers, which will be subject to a referendum and voter approval; or (d) contributions from the Auburn Urban Development Authority.

Responsibility: City Council, Planning Commission, Community Development, Auburn Urban Development Authority
Time Frame: 1993-94
Funding Sources: To be determined
Related Policy: 1.4

- I. The City shall establish a formal Housing Finance Partnership with businesses, financial institutions, and housing advocacy groups, to fund and implement a program for construction or rehabilitation of the fair share of housing units per year for very low- and low-income households. The City is currently an active member of Fair Lenders Action Group (FLAG) providing meeting facilities and assisting with all efforts. This is a local group of bankers which have grouped to invest their Community Reinvestment Act (CRA) monies. The types of projects the City will pursue are support from FLAG for a City proposed moderate income housing project on City owned land, participation in lending, financing a comprehensive housing survey, and participating in future grant matching, assistance, etc.

Responsibility: The City, lending institutions, development community, community and housing interest groups
Time Frame: Immediate and ongoing
Related Policy: 1.4, 1.13

- J. The City shall use the Auburn Urban Development Authority Redevelopment Plan and the funds appropriated to the agency, in combination with other funding programs, to assist in the provision of housing, the maintenance of housing stock, and the improvement of infrastructure. Approximately \$40,000 of the Redevelopment Agency's estimated expenses for 1992-93 will go to housing related projects. This housing set aside money is for assistance with fees (school, water district hook-ups, etc.) and if there is any left over it will be used for improvements (drainage, road, etc.). Two projects are targeted for this money, one is a Habitat for Humanity housing proposal for four single family homes, and the other is an HUD funded project for 60 low-income senior units.

Responsibility: City Council, Planning Commission, Community Development, Auburn Urban Development Authority
Time Frame: Immediate and ongoing
Related Policy: 1.4, 1.6, 1.7, 1.8, 1.12, 1.14, 1.16

- K. The City shall revise the Zoning Ordinance to provide for a density bonus of 25 percent for all projects in single-family residential zone districts if a percentage of the homes within the project do not exceed a maximum gross area of 1,700 square feet excluding the garage. The City shall consider recent amendments to state density bonus law (Government Code Section 65913.4, 65915, and 65917) when drafting ordinances.

Responsibility: City Council, Planning Commission, Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.4, 1.7, 1.9

- L. The City shall revise the Zoning Ordinance to provide a density of 25% to developers of single-family detached housing projects of 10 or more units which provide a variety of housing structures within the project including but not limited to common lot line, duet units on corner lots, or other innovative concepts which comply with the General Plan. The City shall consider recent amendments to state density bonus law (Government Code Section 65913.4, 65915, and 65917) when drafting ordinances.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.4, 1.6, 1.7, 1.8, 1.9

- M. The City shall establish a review process for all residential projects to maximize the visual compatibility of residential developments with their surrounding neighborhoods. Standards developed as guidelines for the review process shall not be a barrier to affordable development.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.16

- N. The City shall enforce State energy conservation requirements such as Title 24 of the Building Energy Efficiency Standards for new residential projects, and shall encourage residential developers to employ additional energy conservation measures with respect to: (a) subdivision design; (b) siting of homes on the lot; (c) landscaping and, (d) solar access.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.7, 1.9

- O. The City shall work closely with the Sierra Planning Organization to review and update the existing Housing Needs Allocation Plan as appropriate.

Responsibility: Community Development
Time Frame: Immediate to 1994
Related Policy: 1.4

- P. The City shall review the establishment of an inclusionary zoning ordinance, which will increase housing choice by providing the opportunity to construct more diverse and economical housing to meet the needs of low- and moderate-income families. The ordinance should require a minimum percentage of housing for low- and moderate-income households in new housing developments and in conversions of apartments to condominiums.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 1.4, 1.9

- Q. The City shall revise the second unit ordinance in order to encourage the construction of "granny-flats". Revisions should include reducing the parking requirement from two spaces to one space, allowing detached units, and requiring the property owner to live in one or the other units but not requiring property owner occupancy of the main unit.

Responsibility: Community Development
Time Frame: Accomplished 1992
Related Policy: 1.11

- R. The City shall attempt to relieve some of the constraints imposed on low income housing productions on a case-by-case basis through the use of discretionary funds when available, i.e. redevelopment funds or CDBG funds.

Responsibility: Community Development
Time Frame: Ongoing

Related Policy: 1.8, 1.10

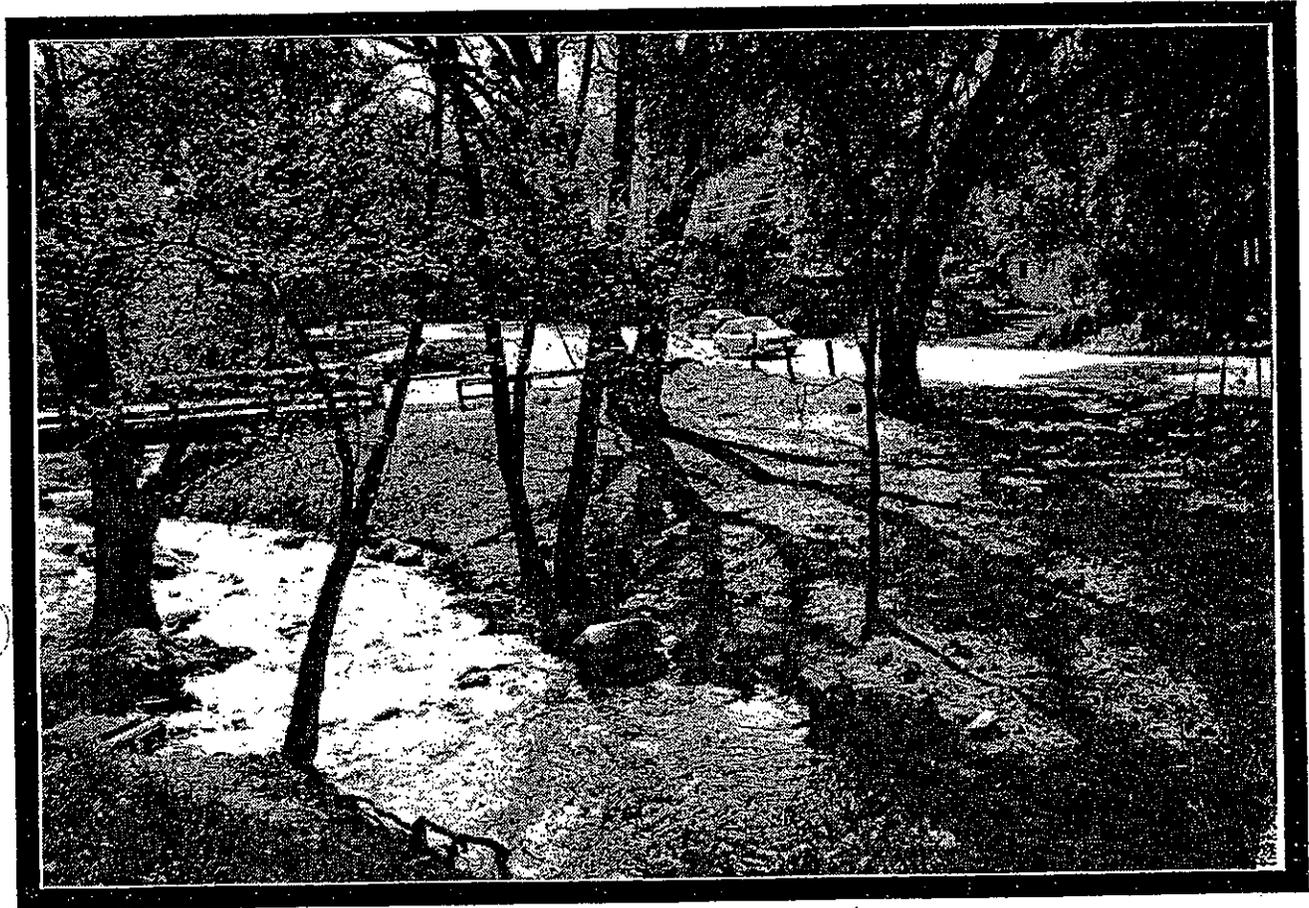
- S. In order to promote equal housing opportunities for all persons, the City provide some means for the resolution of housing complaints and fair housing issues by continuing to refer inquiring persons to the Placer County Community Services. The Fair Housing Plan implemented by the Community Services Department states that the County will cooperate with "all local, State and Federal agencies which seek to enforce fair housing and employment practices". Public awareness of equal housing opportunities will be generated by the posting of fliers advertising the program.

Responsibility: Community Development
Time Frame: Ongoing
Related Policy: 1.4

- T. The zoning ordinance will be modified to allow homeless shelters by conditional use permit in the open space and conservation zone, Central Business (C2) zone, and Regional Commercial (C3) zone.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 1.17

VII OPEN SPACE / CONSERVATION



Auburn Ravine

1. Introduction

The purpose of the City of Auburn's Conservation and Open Space Element is to develop policies and programs for the efficient management of natural resources and any areas of land which are essentially unimproved and devoted to open space. Although the conservation and natural resource elements can be prepared as separate documents, for this update of the City of Auburn General Plan they have been combined in a single element. Nevertheless, the legally required content of each element has been included in this document as required by Government Code Sections 65302(d) and 65302(e). This element was prepared by the Placer County Resource Conservation District in cooperation with the City of Auburn and Placer County.

REQUIRED CONTENT OF THE CONSERVATION AND OPEN SPACE ELEMENT

The content of a conservation element is set forth in California Code Section 65302. This statute requires that the element contain proposals for the conservation, development, and use of natural resources, including, "... water and its hydraulic force, forests, soils, rivers and other waters, fisheries, wildlife, minerals and other natural resources." Additionally, the law requires coordination with any countywide water agency and with all districts and city agencies which develop, serve, control or conserve water for any purpose within the area covered by the plan. The law lists several additional subjects which may be in the element, including:

- the reclamation of land and water;
- prevention and control of pollution of streams and other waters;
- regulation of the use of land in stream channels and other areas required for the accomplishment of the Conservation Plan;
- prevention, control and correction of soil erosion;
- protection of watersheds; and
- the location, quantity and quality of rock, sand and gravel resources.

The preparation of an open space element is also mandated by law (Government Code Section 65302(e)). The purpose of an open space element is to identify policies and proposals for any area of land or water which is essentially unimproved and devoted to an open space use. The law further defines open space land as any of the following:

- Open space for the preservation of natural resources, including areas required for the preservation of plant and animal life; areas required ecologic and other scientific study purposes; rivers, streams, lake shores, banks of rivers and streams, and watershed lands.
- Open space for outdoor recreation, including areas of outstanding scenic, historic and cultural value; areas suited for park and recreation purposes, including access to lake shores and rivers and streams; and areas which provide links between major recreation and open space areas, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- Open space for public health and safety, including areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, high fire risk areas, areas required for the protection of water quality, and areas required for the protection and enhancement of air quality.

ORGANIZATION OF THE ELEMENT

Following this introduction, the Conservation and Open Space Element has been organized into the following major sections: Section 2, Goals and Policies; Section 3, Existing Conditions; and Section 4, Implementation. Within each of these sections, the element separately discusses natural resources and open space.

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Citizen Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented sequentially by topic and not by priority.

Goal 1: Preserve areas of natural vegetation, trees, topographic features, wildlife habitat, and riparian corridors.

- Policy 1.1 Identify, protect and enhance natural, riparian wildlife habitat and vegetation areas and encourage preservation and maintenance of these areas in as natural a state as possible.
- 1.2 Adopt and implement a tree ordinance in order to focus attention on the importance of preserving existing native vegetation.
- 1.3 Conserve the quality of habitats which support fish and wildlife species so as to maintain populations at sustainable levels.
- 1.4 Protect, restore and enhance habitats for native animals and protect threatened and endangered species.
- 1.5 Carefully plan development in areas known to have particular value for wildlife and locate development so that wildlife habitat is maintained.
- 1.6 Encourage private landowners to adopt good wildlife habitat management practices.
- 1.7 As necessary, require field studies as part of project review. These studies shall document the possible occurrence of special status plant and wildlife species and provide a method for their protection, monitoring, replacement or for otherwise mitigating development near the sensitive habitats.
- 1.8 Encourage preservation and protection from urban encroachment the rural/agricultural areas in the Auburn community outside the Plan area.

- 1.9 Encourage the use of the California Wildlife Habitat Relationships (WHR) system as a guide for protecting, maintaining and enhancing vegetation.

Goal 2: Minimize adverse development impacts to the natural environment.

- Policy 2.1 Develop, adopt and implement a hillside development ordinance. (LU 3.4)
- 2.2 Continue to implement the grading ordinance of the City of Auburn to protect against sedimentation and soil erosion.
 - 2.3 The City shall use the natural resources/constraints maps, as amended, prepared by the Resource Conservation District for the General Plan Open Space/Conservation Element as part of the project review process, including identification/ verification of said constraints.
 - 2.4 Urbanization and development which requires typical City services (police, fire, water, sewer) shall be developed within the City limits.
 - 2.5 Encourage a program for the control of residual pesticides to prevent potential damage to birds, fish and other wildlife.
 - 2.6 Encourage development of all building sites and residences in a manner minimizing disturbance to natural terrain and vegetation and maximizing preservation of natural beauty and open space.

Goal 3: Identify, protect and enhance open areas and greenbelts throughout the planning area for the protection of wildlife and for use and enjoyment by residents and visitors.

- 3.1 Encourage both private and public ownership and maintenance of open space.
- 3.2 Provide for greenbelts or linear open spaces which shall be preserved to enhance developed areas as well as to maintain clear boundaries of the Auburn community.
- 3.3 Encourage planned unit developments as a means of preserving open space within and adjacent to residential developments.
- 3.4 The City shall require that all designated open space areas within a project be zoned for open space use in perpetuity.
- 3.5 The City, where possible, shall require open space areas to be linked together by providing additional open space areas or at a minimum provide connections using trails, banks of creeks, and rights-of-way.

- 3.6 The City shall continue to coordinate with the Auburn Recreation District the siting and improvement of park facilities and park/recreation/trail-oriented projects. Coordination shall also include but not be limited to land dedication for park/recreation purposes, payment of fees, construction of park/recreation facilities.

Goal 4: Provide for the conservation, utilization, and development of mineral, geologic and soil resources in keeping with sound conservation and reclamation practices.

Policy 4.1 The City should identify all economically valuable resources, including mineral deposits, soils conducive to agricultural uses, and those open space areas which add to the overall attractiveness of the region.

- 4.2 Consider the limitations of geological formations in the design and siting of buildings, roads, and utilities.

Goal 5: Create a pedestrian and trail network to provide access to developed areas as well as public access to open space and recreation resources consistent with the need to protect these resources.

Policy 5.1 Encourage recreation facilities and activities such as fishing, equestrian activities, trails, and parks.

- 5.2 Encourage uses such as trails, picnicking, observation points, and parks along major transportation routes, as appropriate.

5.3 Utilize the non-auto circulation map to develop a community trail system to:

- a. Provide safe, pleasant and convenient travel by foot, horse, or bicycle within the planning area;
- b. Provide recreational opportunities to residents of the General Plan area;
- c. Connect local trails to regional trail systems where appropriate;
- d. Link together school facilities, parks, community buildings and other community-oriented public services with residential developments where appropriate;
- e. Incorporate trails into public and utility corridors; and
- f. Implement the Auburn Ravine Trail Master Plan if feasible.

5.4 In making land use decisions, recognize the trail development and recreational potential of major open space features such as:

- a. The American River: Bikeways, hiking trails, equestrian trails, rest areas and picnicking accommodations should be provided within trail corridors, wherever feasible;

- b. **Terrain Changes:** Development along designated trails and pathway corridors should be controlled in order to provide sufficient right-of-way and to ensure that adjacent new development does not detract from the scenic and aesthetic qualities of the corridor;
- c. **Major Ridge Tops:** Ridge tops offer outstanding scenic value and have the potential to be linked to existing trails. Development should not detract from the overall viewshed quality of and from the ridge top.
- d. **Riparian Corridors:** The design, construction, and management of proposed trails and pathways within riparian corridors should be carefully executed in order to reduce environmental disturbance. Bridges and other public improvements should be designed to provide safe and secure routes for trails, including grade separations between roads and trails, when feasible.
- e. **Oak Woodlands:** Cooperative interagency planning of pathways, bikeways and equestrian trails should be promoted in "greenbelt" areas.

5.5 Residential developments adjacent to parks or open spaces shall be strongly encouraged to provide direct access to common open space contiguous to such areas.

5.6 When considering the location of new parks, the City in conjunction with the Auburn Recreation District shall select sites based on, but not limited to, maximum accessibility, topography and visibility.

Goal 6: Protect visual resources.

Policy 6.1 Enhance and protect scenic resources visible from scenic routes³ in the Auburn area.

6.2 Encourage anti-litter, beautification and cleanup programs along all routes¹.

6.3 Coordinate with Placer County and Caltrans the establishment of a beautification program for the Highway 49 corridor.

6.4 Maintain and promote heavily vegetated corridors along circulation routes. Roads and other public works projects shall incorporate beauty as well as utility, safety and economy.

6.5 Encourage and use existing City and County programs for protection and enhancement of scenic corridors, including, but not

³ Scenic routes are listed in Section 3, Existing Conditions, Open Space for Recreation of this Element.



limited to, design review, sign control, landscaping and mounding, undergrounding utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts.

- 6.6 The City shall require that all landscape plantings are to be maintained continually in a healthy and attractive condition.
- 6.7 The City shall require dedication of parkland and/or payment of fees in lieu of parkland, based on a standard of five acres per 1,000 residents.

Goal 7: Conserve, protect and enhance water supplies and adequately plan for the development and protection of these resources and their related resources for future generations.

- Policy 7.1 Protect water quality and watersheds by discouraging activities including, but not limited to, the use of hazardous materials around wetland and groundwater recharge areas.
- 7.2 Support regional, state and federal agencies in their efforts to exact high levels of water quality.
 - 7.3 Promote water conservation through development standards, building requirements, landscape design guidelines, and policies and programs.
 - 7.4 Adopt an ordinance to protect and enhance waterways, stream channels, and intermittent streams.
 - 7.5 Where feasible, keep waterways in their natural state.
 - 7.6 Encourage appropriate setbacks for building sites from natural waterways.

3. Existing Conditions

NATURAL RESOURCES

Soils

The rate and amount of soil formed are a function of the soil's parent material, climate, slope, biological activity, drainage and time. In combination, these components are the principle factors which determine a soil's unique characteristics.

Because soil types have different properties, they present a broad range of opportunities and limitations for future development. A particular soil's suitability for use will vary

depending upon its slope, depth, fertility, available water holding capacity, texture, erosion potential and other physical and chemical attributes.

The USDA Soil Conservation Service (SCS) has developed a soil classification system which assigns soils to one of eight capability classes. The highest quality soils (Classes I and II) are those which present few limitations when used for field crops, pose a low risk of damage and respond well to standard agricultural treatment. The soils that are best for agriculture are also best for urban uses because they offer few limitations for construction activities and provide the best medium for septic disposal systems.

There are few prime soils in the study area. The absence of Class I and II soils, however, is not considered a predetermination that agricultural uses are unimportant economically or less important than urban uses. Rather, the absence of these soils means that contention for "best use" is highly competitive and only generally determined by soil limitation.

Soil limitations (physical and chemical) are typically recognized as constraints to urban development and generally include the following considerations:

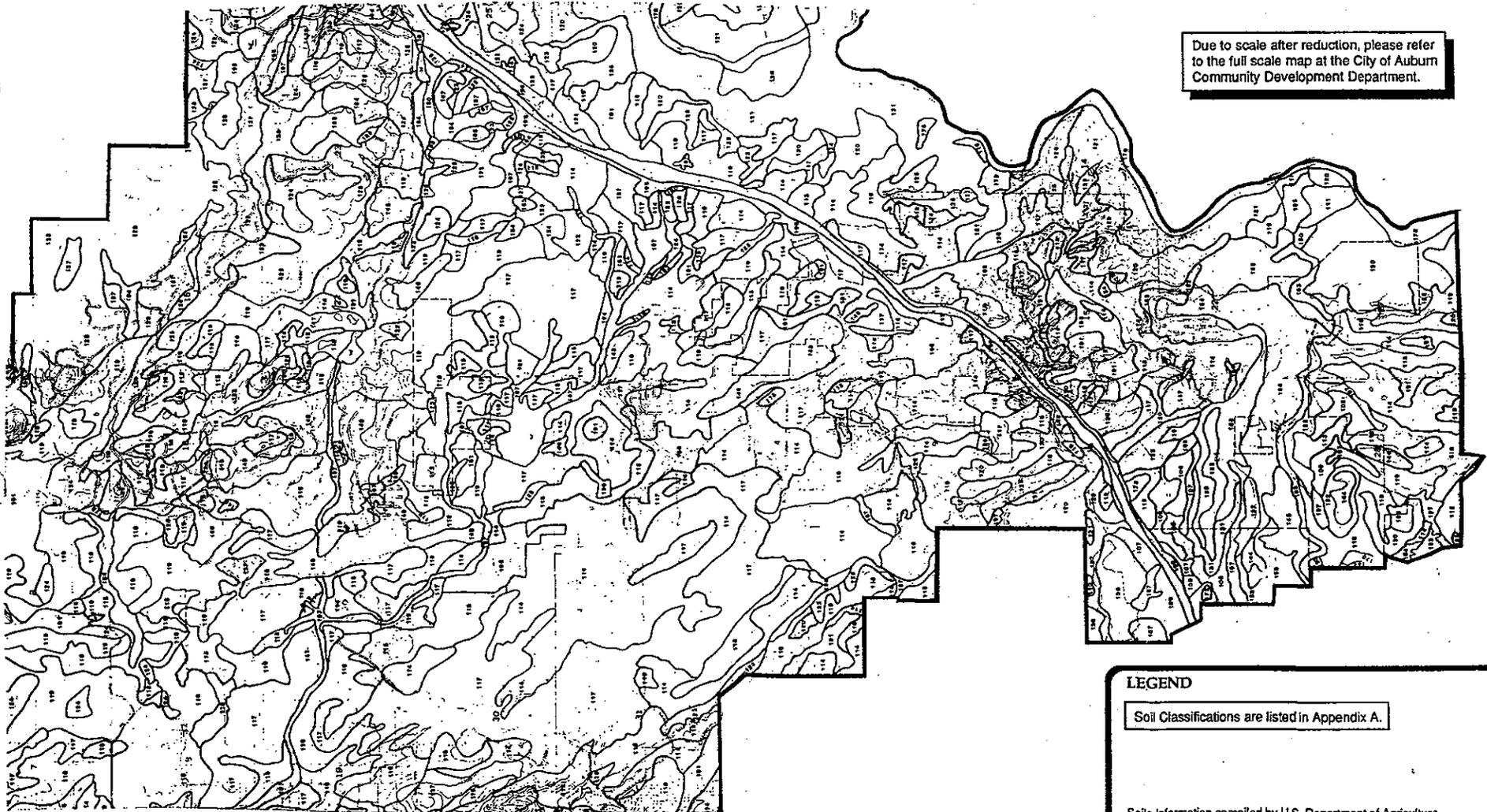
- Water features and relationships;
- Engineering properties;
- Sanitary waste absorption properties;
- Properties to support wildlife; and
- Properties to support woodland, rangeland, agriculture.

Information for each of these limitations is included in Placer County's Soil Survey and discussed in general terms by the Soil Conservation Service. For the Auburn General Plan update, the 52 individual soil types found in the planning area were summarized from the Soil Survey by the series within which each soil type occurs. (See Supporting Documentation.) The characteristics of each soil series were described along with selected constraints, including erosion hazard, water quality related to accelerated erosion, slope, vegetation loss, and agricultural resources. The soils map is included as Figure VII-1 (please note that a full-size copy of this figure is available for public review at the City of Auburn Community Development Department).

Erosion Hazard

Accelerated erosion is a problem in much of the study area. It is important to remember that erosion potential is always present and occurs when soils are disturbed and protective vegetative cover is removed. A number of complex factors are considered by the SCS when they assign erosion hazard ratings to predict how soils will erode in relation to specific kinds of land uses and treatment.

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Source: Placer County Resource Conservation District

LEGEND

Soil Classifications are listed in Appendix A.

Soils information compiled by U.S. Department of Agriculture, Soil Conservation Service and cooperating agencies.

LBA
Planning • Engineering • Landscape Architecture
Farland Bartholomew & Associates, Inc
Sacramento, California

CITY OF AUBURN GENERAL PLAN
Soils



1 : 38,400

FIGURE
VII-1

Table VII-1 lists each of the soils in the plan area by their propensity to erode. Figure VII-2, Erosion Hazards, shows that very high ratings have been given to those soils in the American River Basin (please note that a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). These particular soils are Auburn-Sobrante Rock outcrop complex and are within the administrative jurisdiction of the Bureau of Reclamation. Soils with high erosion potential within watersheds of Auburn Ravine and North Ravine are Auburn and Boomer Series and are generally in the western portion of these watersheds. The headwaters of the Dry Creek Basin contain Josephine and Mariposa, as well as Auburn and Boomer Series soils that have high erosion potential. An outcropping of Henneke Rock Outcrop complex occurs just north of the Auburn Airport within the basin.

TABLE VII-1 EROSION HAZARD BY SOIL TYPE	
Hazard	Soil Type
Slight	122, 192
Moderate	106, 112, 114, 115, 116*, 117, 124, 127, 144, 145, 152, 154, 158, 163*, 173, 188, 191, 197
High	107, 108, 109, 110, 111, 118, 119*, 123, 125, 128, 130, 131, 132, 148, 153, 160, 164, 165, 167, 179, 180, 183, 184, 185, 190, 194, 196
Very High	120, 121, 126, 178
* Indicates soils which fall into more than one hazard category due to slope variability.	
SOURCE: USDA Soils Conservation Service, Soil Survey of Placer County, California, Western Part, July 1980	

It is within hydraulic basins that overgrazing, road construction, shaping of building pads, grading for transportation systems, and construction for utilities are responsible for accelerating erosion. Accelerated erosion is of concern because movement of eroded soil will lead to destruction of wildlife habitat, change the capacity of streams to provide for proper flood control, carry pollutants to streams and rivers thereby reducing water quality, and reduce agricultural and timber production. Figure VII-6, shown later in the text, has been prepared to show major drainage basins and sub-basins. Those areas which have a predominance of high and moderate erosion hazard potential can be readily seen by comparing Figure VII-2 with Figure VII-6.

Slope

Figure VII-3 shows various slope categories in the planning area. Accelerated erosion occurred on all slopes and the rate of soil loss varies by percent of slope and soil type (please note that a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). The correlation between moderate and high erosion hazard potential and slopes of 15 to 30 percent and over 30 percent is evident. When combined, the effects of accelerated soil loss may rapidly change the ability of streams to maintain proper channel capacity for flood flows. Slopes over 30 percent can cause additional problems of stability, slumps and slides. Surfacing septic drainage has led to specific requirements for review of proposed rural subdivisions.

High erosion hazard with slopes over 30 percent leads to constraints for urban development which affect water quality, soil loss and leach field limitations.

AGRICULTURAL RESOURCES

The northwest and northeast portions of the planning area remain in grazing where large parcels still exist and rural residential encroachment is limited. Most grazing lands consist of Class IV and VI soils. Some properties are also subject to the Williamson Act. There are 18 Williamson Act contracts in the planning area constituting 1,323 acres. (See Figure VII-4.)

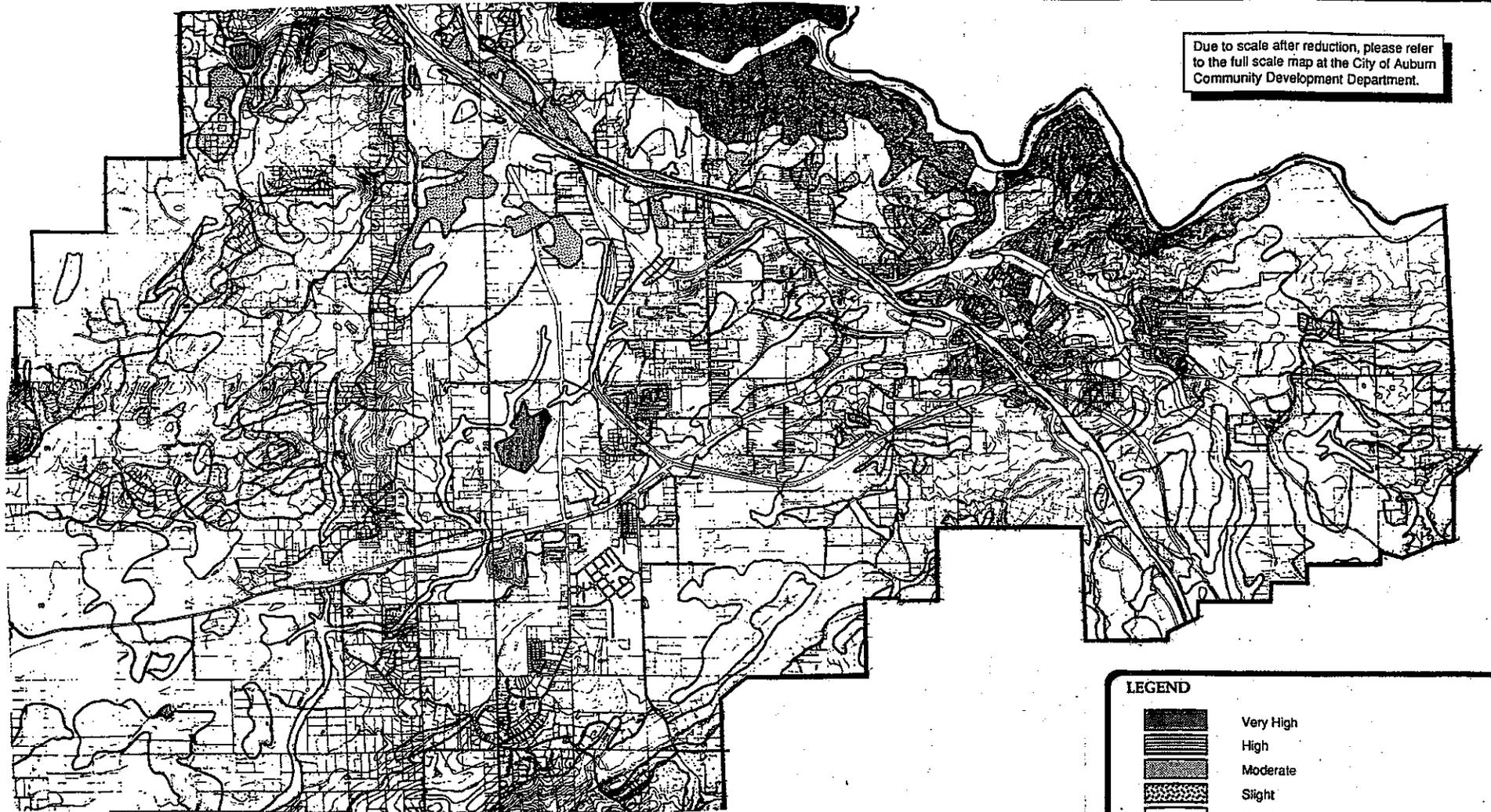
In addition, the planning area contains soils of statewide or local importance, and unique farmlands devoted to agricultural commodities such as oranges, apples, truck crops, pears, Christmas trees, or irrigated pasture.

Only about 40 acres in the planning area are classified as prime soils. This small area of Sierra sandy loam (Class I) is located north of Oak Road and has little significance in terms of agriculture potential. Table VII-2 lists prime and statewide important soils.

Importance	Soil Classification	Soil Description
Prime	183	Sierra sandy loam, 2 to 9 percent slopes
Statewide	106	Andregg Coarse sandy loam, 2 to 9 percent slopes
	107	Andregg Coarse sandy loam, 9 to 15 percent slopes
	109	Andregg Coarse sandy loam, rocky, 2 to 15 percent slopes
	158	Josephine loam, 9 to 15 percent slope
	191	Sobrante silt loam, 2 to 15 percent slope

SOURCE: U.S. Department of Agriculture, Soil Conservation Service

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Source: Placer County Resource Conservation District

LEGEND

	Very High
	High
	Moderate
	Slight
	Variable

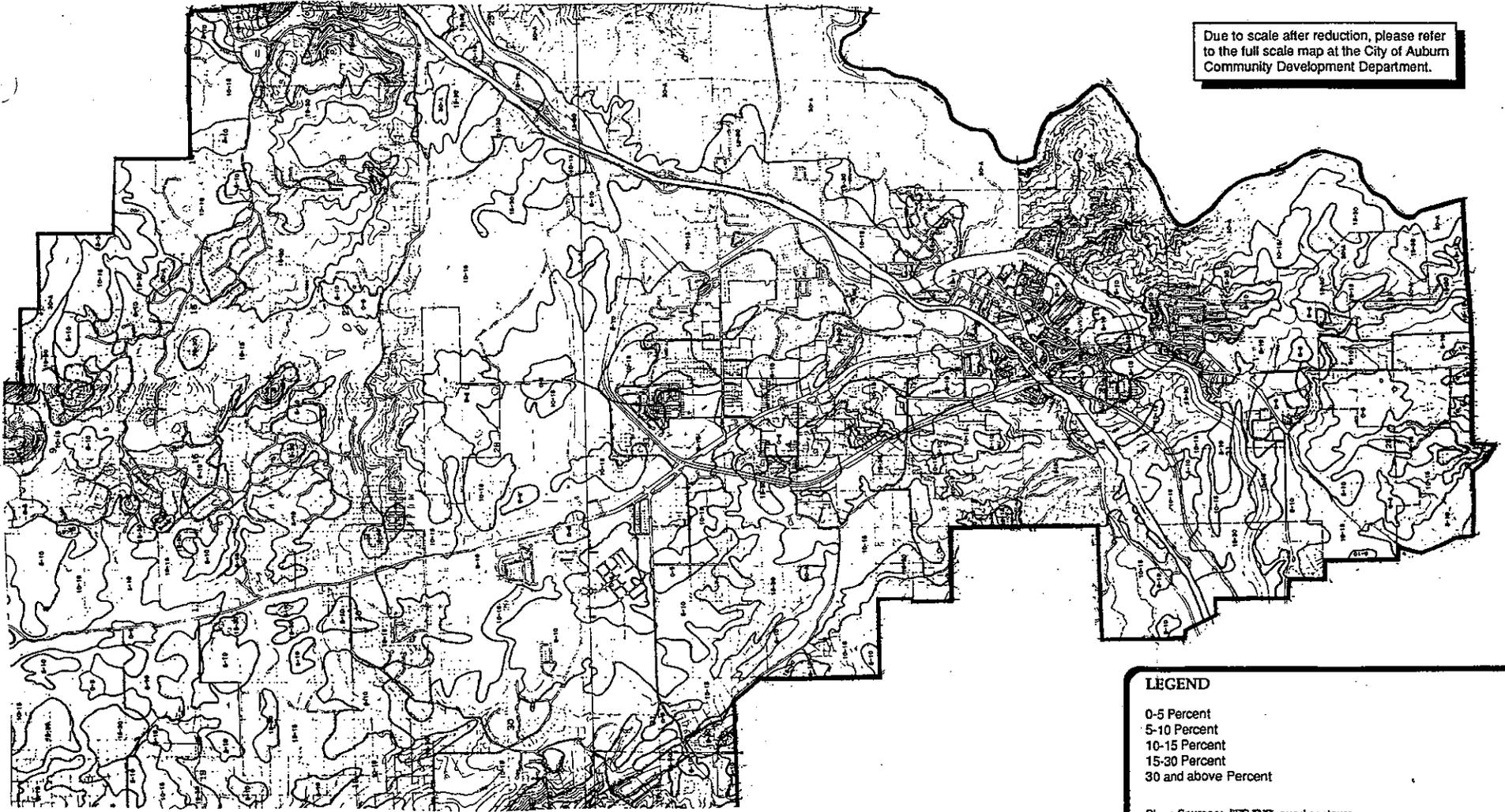
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CITY OF AUBURN GENERAL PLAN
Erosion Hazards


1 : 38,400

FIGURE
VII-2
Page VII-23

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Source: Placer County Resource Conservation District

LEGEND

- 0-5 Percent
- 5-10 Percent
- 10-15 Percent
- 15-30 Percent
- 30 and above Percent

Slope Sources: U.S.G.S. quad contours
(does not reflect developed area slopes)

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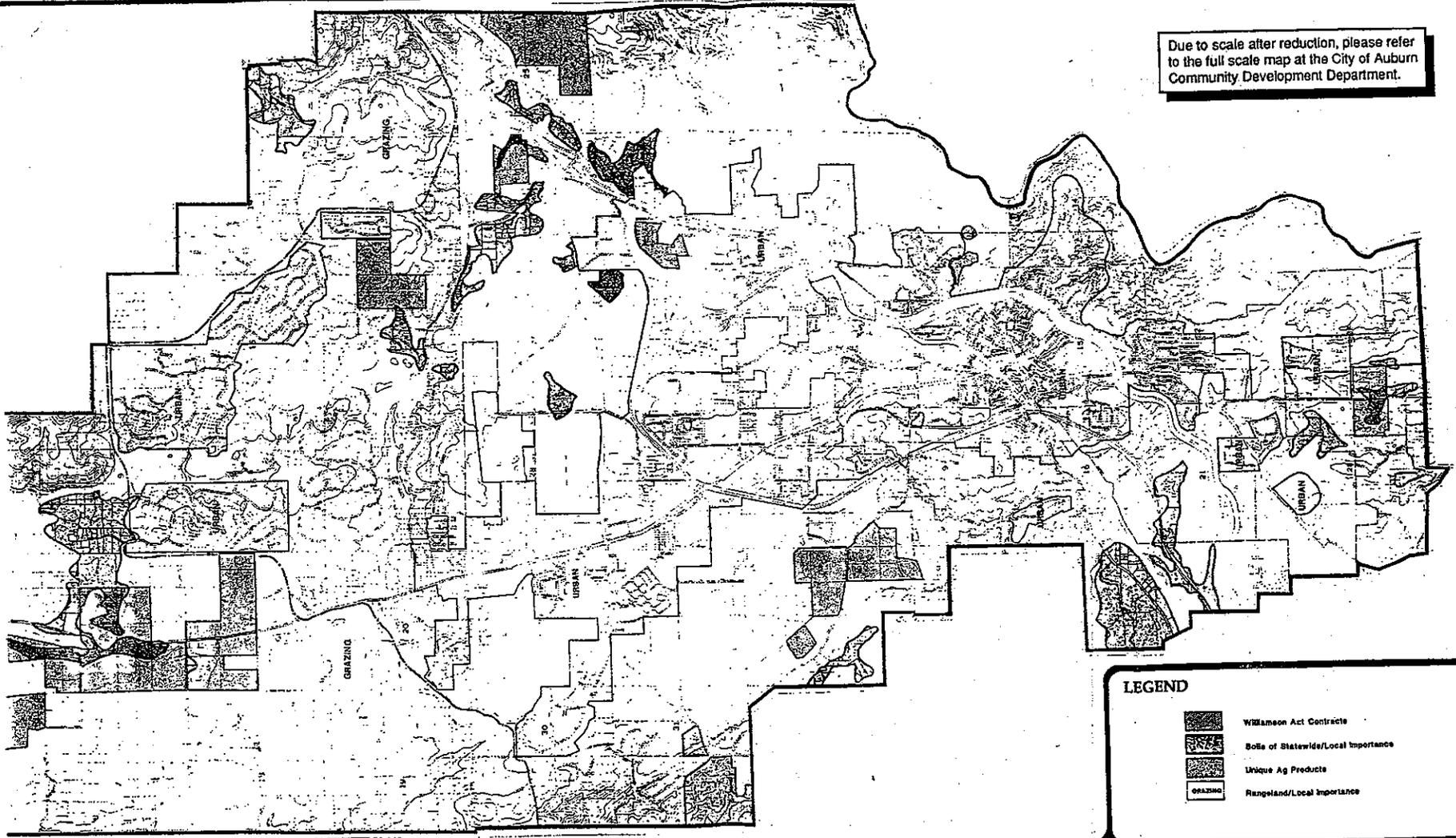
CITY OF AUBURN GENERAL PLAN

Slopes


1 : 38,400

FIGURE
VII-3
Page VII-15

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



LEGEND

-  Williamson Act Contracts
-  Soils of Statewide/Local Importance
-  Unique Ag Products
-  Rangeland/Local Importance



No Scale

Forestry

Forestry begins with an understanding of the soils on which trees grow. Some soils are very suitable for growing wood crops while others barely support tree cover. The probability of seedling survival, the danger of erosion, the resistance of trees to wind, and the problems of equipment use are some of the management items that can be inferred from soils information. These interpretations are expressed as ratings. They can be developed for each of these management considerations on a soil unit.

Simply expressed, productivity potential is the ability of a soil to produce a wood crop; in this case, the most suitable species for the Auburn area is Ponderosa pine (*Pinus Ponderosa*). The productivity of a particular soil is obtained by determining the site index (a numeric expression of the potential height of a tree at a given age, usually 100 years). The higher the site index the more productive the soil. It can also be interpreted in terms of board feet per acre, cords per acre, or cubic feet per acre.

A more generalized method of expressing productivity is the Site Classification System. It is widely used by the California Department of Forestry and the private forestry sector. Site Classes range from Class I (the most productive) to Class V (essentially, economically non-productive) and are determined from the site indices.

Soils in the planning area suitable for timber production include the Boomer, Mariposa, and Sites series. They are located in the north and eastern portions of the planning area. The principal timber species is Ponderosa pine, which is also the principle component of the montane hardwood-conifer vegetation community. From a timber productivity standpoint, these soils are Site Class III and IV. Some of these soils with north or eastern aspects may fall into Site Class II, but their acreage is limited.

As overall urban growth continues, these timber soils will continue to be very desirable areas for urbanization and rural living. Their value for aesthetics and open space far exceeds their timber production value.

GEOLOGY

As shown in Figure VII-5, the study area lies within the Mother Lode Belt of the Sierra Nevada foothills (a full-size copy of this figure is available for public review at the City of Auburn Community Development). The geologic structure consists mostly of metamorphic rock units that dip nearly vertical and trend 20 to 30 degrees west-of-north. The majority of the rock consists of hard metavolcanic flows, commonly called "greenstone", that contain numerous thin discontinuous bands of soft metavolcanic tuffs and soft-to-hard metasedimentary beds. The latter, which occur mostly in the vicinity of Auburn and Clipper Gap, consists of metasandstone, metashale, cherty limestone, and slate.

A highly irregular zone of serpentine extends from Auburn along Highway 49. The zone, which has an average width of one mile, consists of two to five bifurcating branches of hard serpentine that enclose irregular lens-shaped areas of metavolcanic flows and

metasedimentary beds. The serpentine appears to have been intruded parallel to the metamorphic structure along an ancient vertical fault zone.

Granitic rock units occur in the northeast and southwest corners of the planning area. Sugar Pine Mountain is an oval area composed of granodiorite. The granitic rock in the southwest consists of quartz diorite that is part of the large granitic mass that underlies Loomis Basin and extends north to Mount Pleasant.

Sedimentary rock units consist of the Mehrten Conglomerate, a channel gravel of an ancestral American River that has been cemented, weathered, and extensively eroded since it was uplifted to its present position. Only a few remnants of the river channel remain north of Auburn. The major deposit extends from Skyridge along Indian Ridge to Newcastle. Remnants occur as caprock, locally overlain by Mehrten Mudflow Breccia, on hills and ridges in and bordering the Loomis Basin.

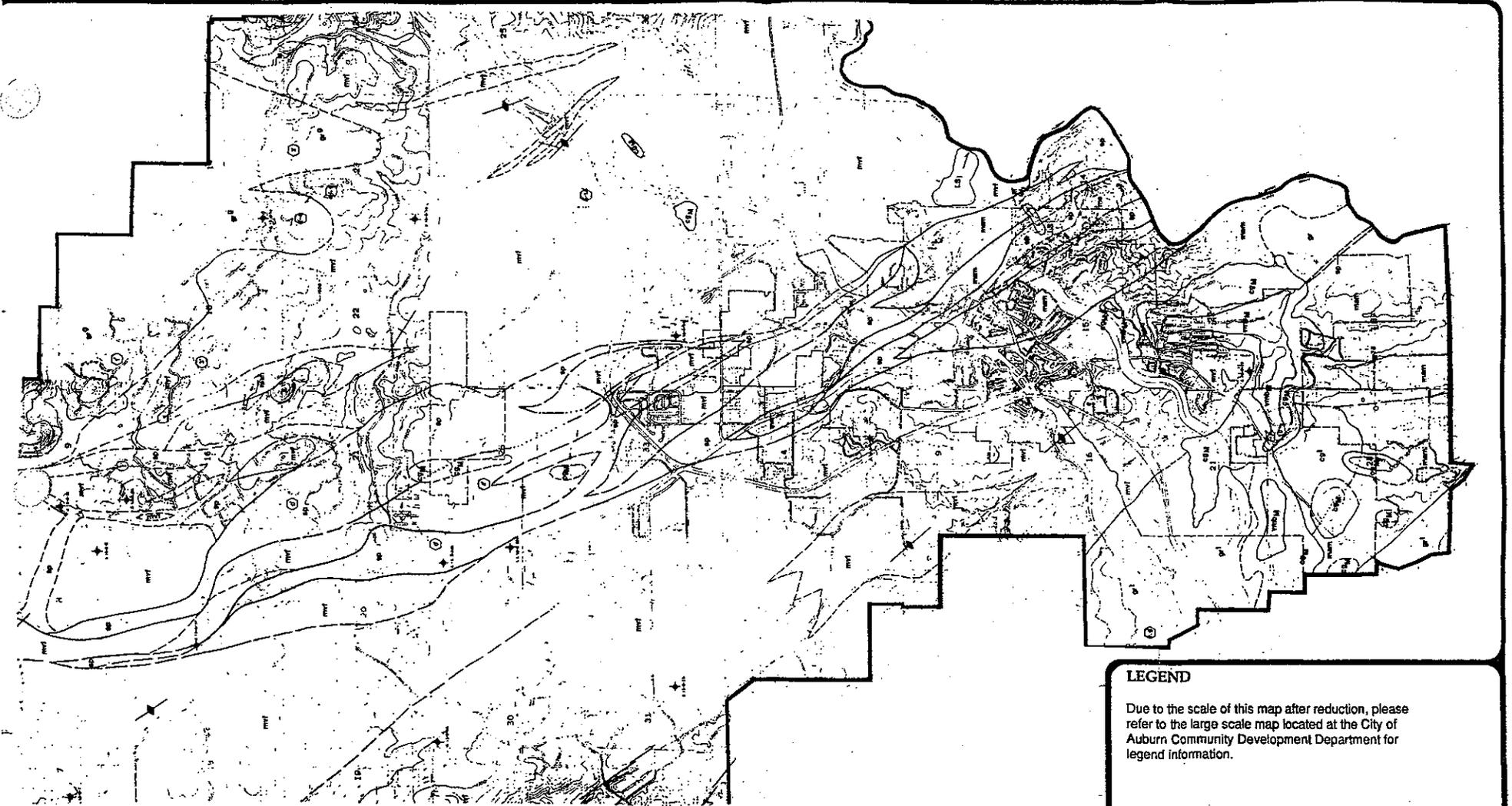
Surficial deposits consist of Stream Channel Deposits of gravel along Bear River and the North Fork of the American River; Terrace Deposits of sand and gravel that indicate former higher stands of streams that drain the area; and Landslide Deposits that mostly are inactive and occur along the steep canyon slopes of the American River.

The planning area is bordered on the north by the 200- to 400-foot deep canyon of the Bear River. Canyon slopes are steep in the vicinity of Sugar Pine Mountain and moderately steep near the Highway 49 bridge. The North Fork of the American River forms the southeastern border of the plan area. The canyon is entrenched 800 to 1,000 feet below the surrounding upland and canyon slopes are steep to very steep.

The metamorphic terrain between the two river canyons slopes gently southwest from a high elevation of 2,100 feet in the northeast to 1,100 feet in the southwest near Newcastle. Drainage is well integrated to a few major streams that flow generally westward across the metamorphic structure. Most of the former elongated northwest-southeast ridges have been dissected into isolated irregular hills, peaks and knobs. Bald Hill and Duncan Hill in the southwest and the irregular ridge south of Dry Creek are examples.

In general, the hills slope directly to an adjacent stream or drainage channel without any intervening floodplain. The streams are eroding bedrock in their downcutting stage; stream channel deposits of sand and gravel are therefore sparse and insufficient as a resource. Floodplains are very narrow, on the order of 8 to 20 feet, and generally well-marked. Terrace deposits of sand and gravel that mark an ancient higher stand of the stream are sparse and very narrow except in some locations where houses are constructed on them as along Millertown Road near a tributary to North Ravine; adjacent to Dry Creek for two miles downstream from Halsey Afterbay; and in a few areas along Orr Creek as it runs through Christian Valley.

For a more detailed discussion of soil characteristics in the Auburn area, see the Supporting Documentation.



Source: Placer County Resource Conservation District

LEGEND
 Due to the scale of this map after reduction, please refer to the large scale map located at the City of Auburn Community Development Department for legend information.

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CITY OF AUBURN GENERAL PLAN
Geology

1 : 38,400

FIGURE
VII-5
 Page VII-21

GEOLOGIC HAZARDS

Landslides

Geologic hazards within the planning area are presently limited to small slumps, block slides, and landslides within metamorphic rock; slumps, occasional block slides, and erosional gulying within weathered granitic rock; and slumps or small slides within the intensely fractured serpentine. The occurrence of these features will increase as land values increase and more and more building sites are excavated on natural hillsides. The deeper the excavations, the more the weaknesses of underlying rock masses are exposed for potential failure.

Active Faults and Earthquakes

The San Andreas Fault in San Francisco and the Hayward Fault in the east Bay area are 100 and 94 miles, respectively, from Auburn. Maximum credible earthquakes along these faults projected at magnitude 8.25 for the San Andreas and 7.5 for the Hayward, would produce barely perceptible shock and bedrock acceleration at Auburn (less than 0.05g). The closest identified "potentially active" faults (where movement has occurred within the past two million years), are the Bear Mountain Fault and the Melones Faults, which are situated approximately three to four miles westerly and easterly from Auburn. The closest identified "active fault" (where movement has occurred within the past 11,000 years) is the Cleveland Hills Fault, situated approximately 36 miles northwesterly of Auburn. Most recently, the Cleveland Hills fault was the source of the 1975 Oroville earthquake (Richter Magnitude: 5.7). Active faults located between 50 and 100 miles of the site include the Mohawk Valley Fault, the Stampede Valley Fault, and the Fort Sage Fault; all located northeast of Auburn. Given the relationship to these various active faults, there is a high potential that the area will be subject to at least moderate earthquake shaking one or more times over the next century.

HYDROLOGY

Ground Water

Rural residential uses in the northern and western portion of the planning area generally depend on groundwater for domestic needs. Ground water in sufficient quantities to supply domestic requirements occurs only along open fractures within metamorphic and granitic rock units. Terrace deposits are of insufficient occurrence to provide a significant ground water supply, although there may be a few water wells producing from these surficial deposits along Dry Creek.

The sedimentary rock unit is of insufficient extent to provide a ground water resource in this area. Permeability is very low because of high cementation of particles. The volcanic rock unit is impermeable and contains no ground water. Surface water does penetrate to the underlying conglomerate along open vertical joints that occur within this mudflow.

The predominant rock type in the planning areas is metamorphic. The depth at which ground water flows occur in metamorphic rock varies significantly. About 25 percent of domestic wells are completed at less than 90 feet and 75 percent at less than 160 feet. The fact that significant flows are reported for a few wells (less than 10 percent), at depths greater than 160 feet, indicates that there is reason for drilling deeper when the occurrence of additional water has been predicted and the need is sufficiently high. The average production figure reported is 14-15 gallons per minute (gpm).

There is also a significant amount of granitic rock in the plan area. The most common depth intervals at which ground water is encountered in the granitic rocks are 60 to 70 feet. The average production for granitic rock well within the planning area is 9 to 10 gpm.

In general, well water in the area is of moderate to high quality. The only problem areas encountered have been in serpentine rock where ground water can be salty and brackish. Competent assistance regarding well location and construction should be obtained by individuals planning to use wells as a domestic water source.

Surface Supplies

The Placer County Water Agency (PCWA) supplies surface water to the planning area for domestic purposes. Water is supplied to treatment plants at Bowman and Auburn. The PCWA staff has presented a report outlining the need for new treatment capacity to serve expected growth which includes alternatives for system expansion.

Water Quality

Surface water flows around and through the area from the Bear River on the north, American River on the south, Orr, Dry, and Rock Creek in the middle portion of the area and Auburn and North Ravine in the southern portion of the plan area. Surface water quality has decreased due to impacts from man's activities, which include increased sedimentation, improper use of herbicides, pesticides and fertilizers, as well as inadequate filtration of septic tank leach field systems.

Occurrence and quality of groundwater is greatly variable due to the complex geology in the plan area. There are no aquifers due to shallow soils and dense bedrock. Groundwater is found in surface fractures and cracks in the bedrock. Quality of groundwater varies with location and tends to be more mineralized when extracted from serpentine soils. An example of such mineralization can be found in the Green Valley area near Lone Star Road. Geology in the Auburn Valley Country Club area consists of "greenstone" and is generally known to contain low water yields.

The Placer County Environmental Health Department currently lacks a complete data base for identifying and monitoring yield and water quality problems. The County cannot identify major groundwater-bearing formations and has not established a classification system for determining safe water yield in geologic formations. The absence of a data

base prohibits analysis of quality using such indicators as nitrates, coliform, and mineral quality.

Flooding and Drainage

There are four major hydrologic units in the planning area: Auburn Ravine, Orr Creek, Dry Creek, and Rock Creek. These streams flow under roads and in proximity to numerous structures. Due to the interface of these streams with human improvements, drainage and flood control could become a major concern if the characteristics of these waterways were changed significantly. The watershed map is shown as Figure VII-6 (a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). Flooding that occurred during the 1986 storm event caused culverts and road crossings to wash out and affected structures close to all streams in the planning area. Well known examples of flooding that occurred include the KOA campground near Rock Creek and Old Town Auburn near Auburn Ravine.

Floodplains have not been adequately delineated since the February 1986 storm. Urban development could cause unknown effects on the ability of existing streams to contain future storm water flows. (See 1991 Hydrology and Drainage Study.) Policies relating to flooding are included in the Safety Element.

VEGETATION

Habitats

Vegetation in the planning area can be described in terms of vegetative habitats which share common characteristics. These vegetative habitats include valley-foothill riparian, annual grassland, pasture, orchard/vineyard, blue oak woodland, blue oak-Digger pine, montane hardwood, montane hardwood-conifer, mixed chaparral, urban and barren.

These vegetation types are described in the "Guide to the California Wildlife Habitat Relationship System" (WHR). Figure VII-7 shows the distribution of these vegetation types in the planning area (please note that a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). Included in the Supporting Documentation is a summary of each vegetative habitat.

FISH AND WILDLIFE

A diversity of animals, birds, fish, and reptiles, including numerous game species, are supported by the vegetation communities and numerous waterways located within the planning area. The major habitat areas are described in the Supporting Documentation.

Important Wildlife Species

According to the California Department of Fish and Game's Natural Diversity Data E there are no recorded threatened or endangered wildlife species in the planning area. There are, however, several sensitive status species which should be expected in the vegetation communities which are represented in the City of Auburn planning area. These species include the following: California red-legged frog, Foothill yellow-legged frog, Cooper's hawk, sharp-skinned hawk, golden eagle, bald eagle, northern harrier, black-shouldered kite, prairie falcon, long-eared owl, Pacific fisher, and valley elderberry longhorn beetle. There are also several other species inhabiting the planning area which are worthy of protective measures. These are:

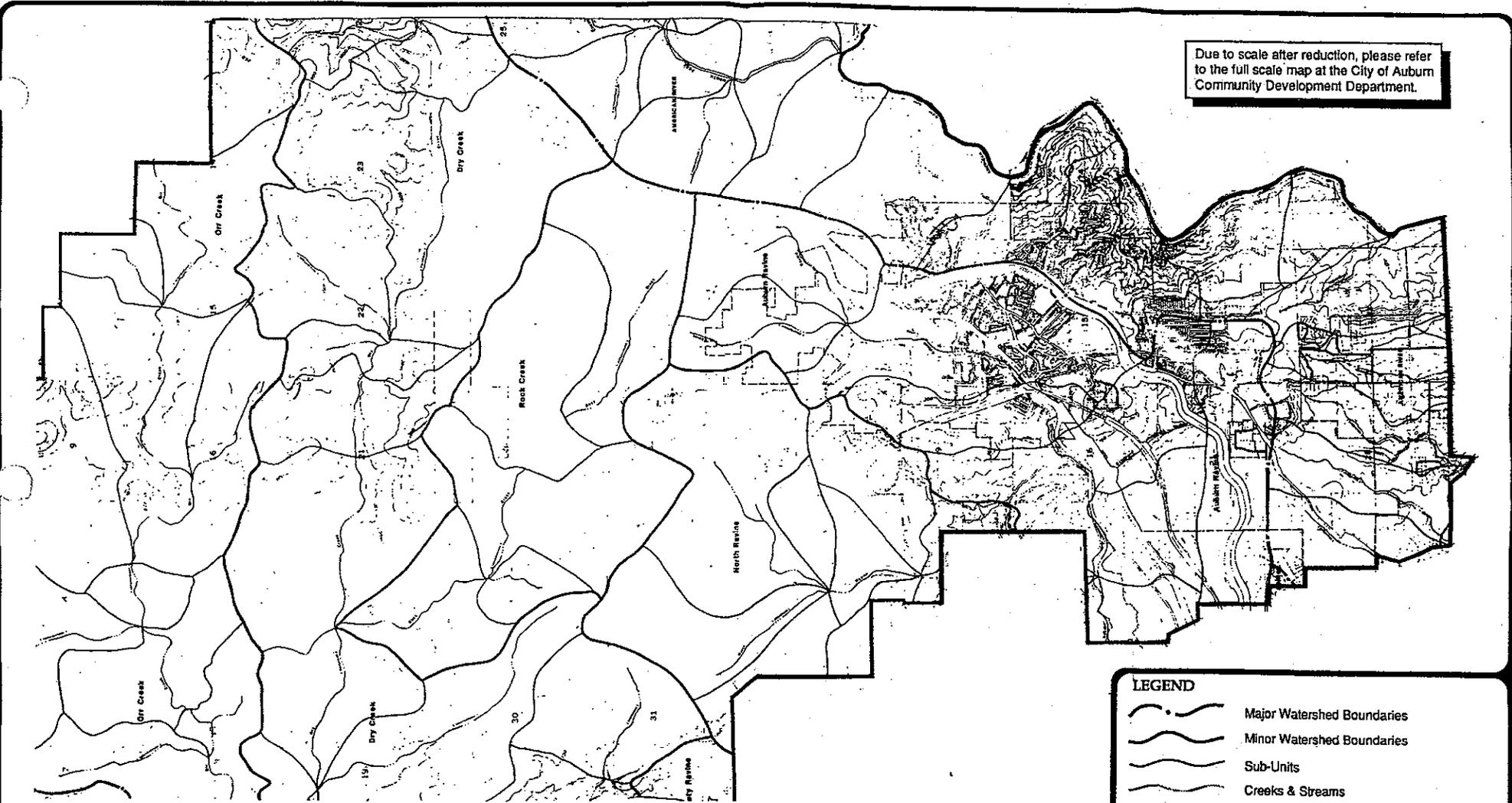
1. Deer--Deer within the planning area have been identified as non-migratory Columbian Black-Tailed Deer. These deer live in the same area year-round and do not have wintering and summering areas. Deer have been observed throughout the planning area and are numerous in some locations.
2. Wild Turkey--The Department of Fish and Game has introduced wild turkeys to Placer County because of the excellent habitat. The original introductions were made in the Coon Creek drainage near Garden Bar Road. This introduction was determined successful and a viable population has been established. The birds have spread along different water courses and continue to be observed in new areas. The primary habitat types which are suitable for turkeys include hardwoods (deciduous oaks, live oak, and madrone), and woodland-grass (hardwoods associated with herbaceous element).

Wild turkey sightings have been reported in the planning area and the area has a huntable population of turkeys although the exact number of birds is not known.

3. California Quail--California quail are common. Preferred habitat for these game birds is woodland-brush areas interspersed with grassy areas. Quail numbers vary from area to area depending upon the amount, quality, and distribution of food, water and cover. Excellent habitat occurs in the berry-covered areas.
4. Band-tailed Pigeon--Band-tailed Pigeons are very common. Flocks numbering in the hundreds have been observed during the fall at various locations. Many of these flocks have been in the process of feeding and resting during their migration to southern California and Mexico. Large flocks also spend the winter on ridges along the American and Bear River drainage channel and in Old Town Auburn.

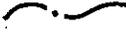
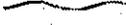
The presence of pine-oak woodlands and other mast producing trees determine the abundance of Band-tailed Pigeons. Nearby chaparral stands are also important as they provide seeds and berries.

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Source: Placer County Resource Conservation District

LEGEND

-  Major Watershed Boundaries
-  Minor Watershed Boundaries
-  Sub-Units
-  Creeks & Streams

Watershed Information compiled by Soil Conservation Service



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 Sacramento, California

CITY OF AUBURN GENERAL PLAN

Watersheds

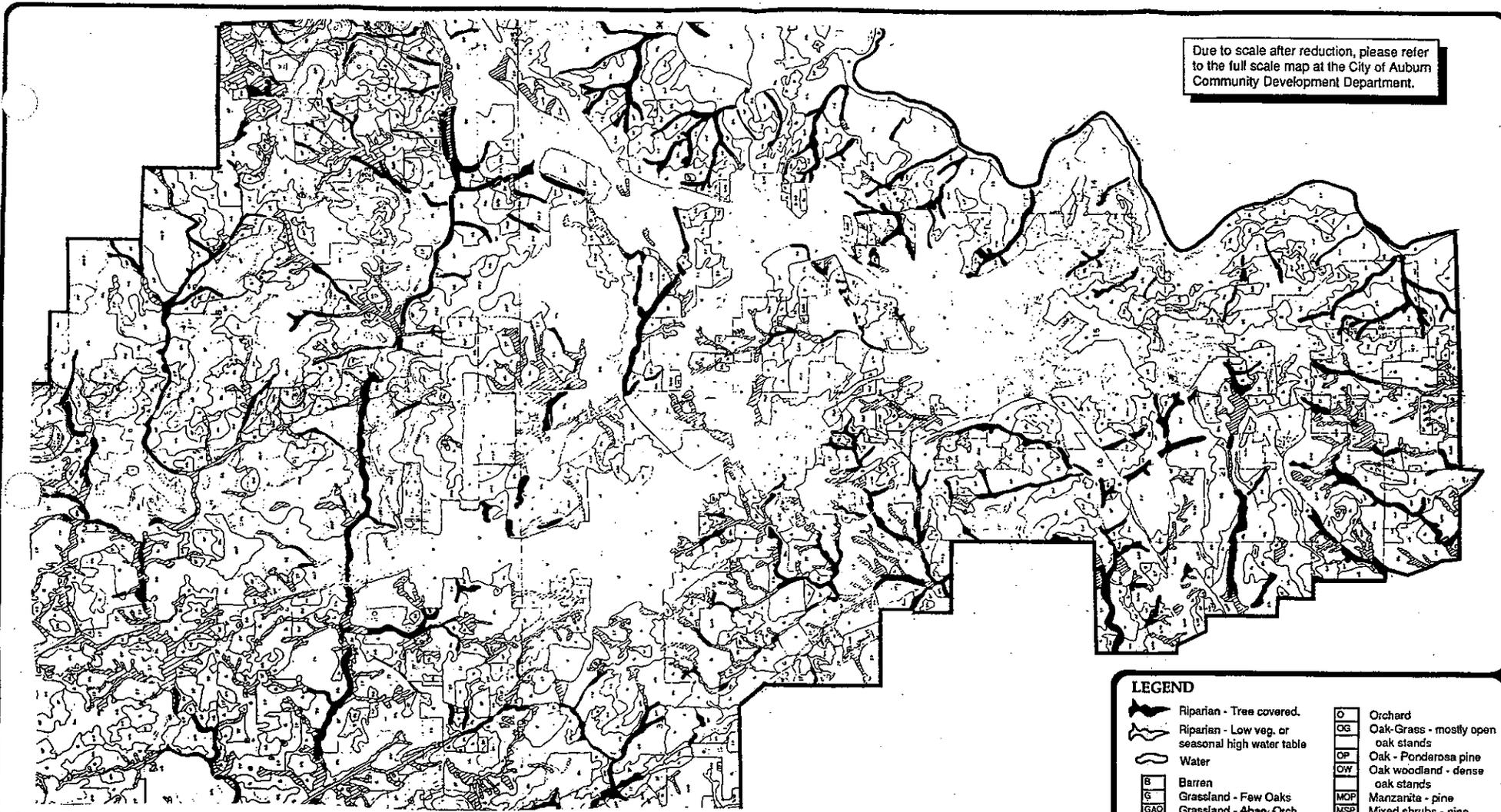


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FIGURE VII-6

Page VII-27

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



Source: Placer County Resource Conservation District

LEGEND			
	Riparian - Tree covered.		Orchard
	Riparian - Low veg. or seasonal high water table		Oak-Grass - mostly open oak stands
	Water		Oak - Ponderosa pine
	Barren		Oak woodland - dense oak stands
	Grassland - Few Oaks		Manzanita - pine
	Grassland - Aban. Orch.		Mixed shrubs - pine
	Irrig. Pasture		Urbanized

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CITY OF AUBURN GENERAL PLAN

Vegetation

1 : 38,400

FIGURE VII-7

Page VII-23

5. Mourning Dove--The Mourning Dove is a common upland game species. Numbers are generally high until cold weather occurs in the fall when most migrate south.

Doves live principally on weed seeds and grain that has fallen to the ground. These birds have proven over the years to be an adaptable species.

6. Raptors--The Golden Eagle and the Bald Eagle use both the American River and Bear River canyons for wintering areas, and nesting sites may exist in both drainages. There are many additional species identified in the habitat descriptions in the Supporting Documentation.

OPEN SPACE

Open space can serve a variety of purposes. It can be used as the focal point of a community in the form of local and regional parks or as a means of preserving significant features in the area. This plan recognizes that open space enhances a sense of well being, good health, and a balanced quality of life. In order to use open space in community design, it must first be recognized. Once recognized, it should be incorporated into programs for the preservation of natural resources, managed for the production of resources, used for outdoor recreation, and set aside, where appropriate, for public health and safety.

OPEN SPACE FOR THE PRESERVATION OF NATURAL RESOURCES

These areas should include lands for the preservation of plant and animal life including habitat for fish and wildlife species. Protective corridors are recommended along all major streams in the planning area as a means to eliminate the encroachment of development in these environmentally sensitive areas. These corridors will also help to preserve the water quality of these major waterways.

The majority of the oak woodlands are also proposed for protection for their historical, aesthetic and wildlife values.

OPEN SPACE FOR MANAGED RESOURCE PRODUCTION

Agricultural Land

Agricultural resources in the planning area are limited. Although foothill grasslands have long been used for cattle grazing, the value of land near Auburn for urban and rural residential uses makes grazing increasingly infeasible from an economic standpoint. The major area remaining for large scale grazing is in the northwest portion of the planning area where land remains in 20-acre or larger zoned parcels in recognition of existing land use and grazing potential.

On smaller rural home sites surrounding Auburn, the foothill grasslands provide a portion of the feed needed for cattle, horses and other animals kept on individual parcels. On most such rural home sites, the natural growth of grasses is not sufficient to provide animal feed and supplements such as hay and grain are required. There is a limited amount of irrigated pasture in the planning area.

There remain limited and isolated parcels in irrigated crop land, primarily in orchards, including oranges, apples, truckcrops, and pears. These orchards will likely be converted to urban or rural residential uses in the long term.

There are 18 Williamson Act contracts in the planning area constituting 1,323 acres. (See Figure VII-4.) All of the contracts are within the unincorporated area and are administered by Placer County. The Williamson Act allows a farmer or rancher to receive lower property tax assessments in exchange for keeping the land in exclusive agricultural use for a minimum 10-year period.

Mineral Resources

The California Division of Mines and Geology (CDMG) has classified lands in the Auburn area for their mineralized potential. Map and text information is in a document titled "Mineral Land Classification of the Auburn 15' Quadrangle, El Dorado and Placer Counties, California."

According to the CDMG study, the following major mineral resources can be found in the Auburn area: lode and placer gold, chromite, copper, asbestos, zinc, talc and limestone. Known deposits of each of these mineral resources are identified on the Mineral Classification Maps provided with the CDMG study.

In addition, the planning area contains surficial deposits of stream channel deposits of gravel along the Bear River and North Fork of the American River, terrace deposits of sand and gravel that indicate former higher stands of streams that drain the area, and landslide deposits which, for the most part are inactive and occur along the steep canyon slopes of the American River. In general, the hills in the plan area slope directly to an adjacent stream or drainage channel without any intervening floodplain. The streams are eroding bedrock in the downsettling stage; therefore, stream channel deposits of sand and gravel are sparse and insufficient for a resource.

OPEN SPACE FOR RECREATION

Scenic Routes

The Auburn area is blessed with a wide variety of landscapes and scenic resources which provide passive recreational opportunities for residents and visitors alike. Chief among these scenic resources are the views available from many roadways to surrounding open areas as well as to vistas of the foothills and mountains. Scenic routes should be protected from development which could destroy the scenic quality along the corridor.

Important viewsheds are shown on Figure VII-8 (please note that a full-size copy of this figure is available for public review at the City of Auburn Community Development Department). Scenic routes include:

- **Highway 49.** This route includes all of Highway 49 located in Placer County. The current alignment begins at the Placer/El Dorado County line at the American River and proceeds up the American River Canyon through the City of Auburn and north to the Placer/Nevada County line at the Bear River. This route is an important link in the "Golden Chain" which winds through the historic Mother Lode country and is included in the State Scenic Highway Master Plan. Within the planning area, Highway 49 is characterized by urban landscapes both in the city and county, and rural, native landscapes north of Joeger Road to the Nevada County line.
- **Interstate 80.** The portion of I-80 within the planning area begins just east of the Dry Creek Road interchange and continues through the City of Auburn to just east of Newcastle.
- **Bell Road.** Bell Road from I-80 west to Joeger Road is recommended as a scenic route. This is one of the more scenic routes in the planning area.
- **Auburn Ravine Road.** This route begins at Highway 49 near Elm Street and following Auburn Ravine Road to I-80. The riparian areas along the ravine are quite attractive and provide valuable habitat.
- **Foresthill Road.** Only a small portion of this route is within the planning area. It is included as a scenic route as it leads to some very scenic areas along the Foresthill Divide. It also includes the Foresthill Bridge across the American River which has overlook areas at both ends of the bridge providing views of the American River Canyon.
- **Indian Hill Road.** This route begins at its intersection with I-80 near Newcastle and extends easterly to Auburn Folsom Road. The scenic resources include foreground views of small ranches and background views of Folsom Lake and the Sacramento Valley.
- **Auburn Folsom Road.** Auburn Folsom Road starts within the City of Auburn and continues south into the Loomis Basin. The scenery includes rural pastoral scenes and a panoramic view of Folsom Lake at the northern end of the route.
- **Borland-Pacific Connector.** Borland Avenue proceeds south from Lincoln Way at Highway 49 and dead ends at Lubeck. The Borland connector is intended to proceed south from Lubeck and connect to Pacific Avenue. The total route then would be Borland Avenue from Highway 49 to Pacific Avenue and Pacific Avenue to Auburn Folsom Road. A part of this route passes the Auburn Dam Overlook.

- **Sacramento Street.** This route begins in "Old Town Auburn" at Lincoln Way and terminates at Auburn Folsom Road. This route is included because of the historic district.

Recreation Trails

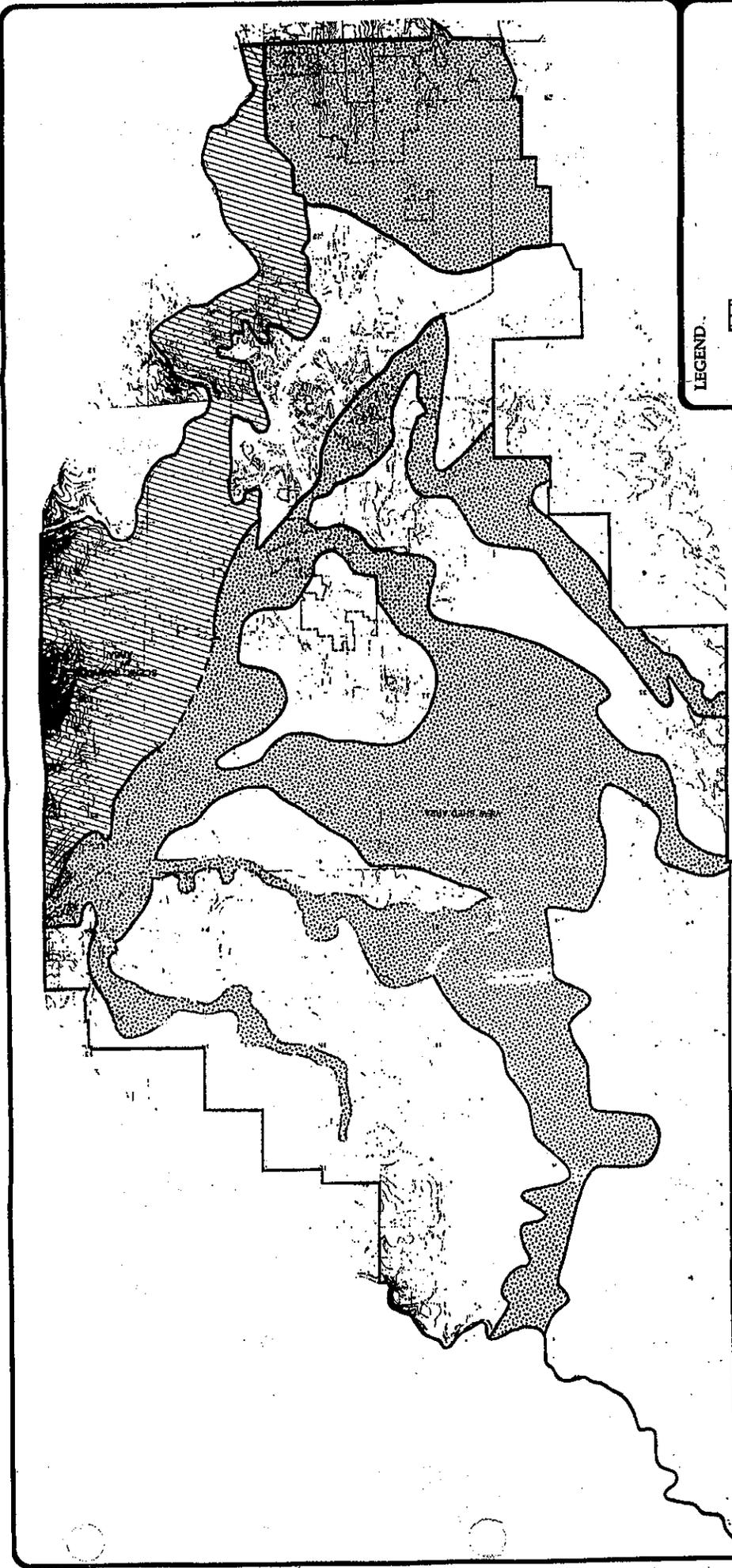
Also included in this open space category is an improved trail system which provides linkages to regional trails as well as to components of the urban bikeways plan in the City of Auburn. Figure VII-9 shows the existing and proposed trails system (please note that a full-size copy of this figure prepared by the Auburn Park Conservancy is available for public review at the City of Auburn Community Development Department).

Land ownership interests affecting the development of future trail corridors could consist of private property owners including but not limited to: the State of California, the County of Placer, the City of Auburn, Pacific Gas & Electric Company, the Placer County Water Agency, the Nevada Irrigation District, and the Southern Pacific Railroad. These identified land ownership interests would be affected when trail corridors are developed along stream corridors, public streets and highways, utility transmission easements, canal banks and rights-of-way, and railroad rights-of-way.

The feasibility of developing trail corridors within a reasonable time frame (five to ten years) will be contingent upon the cooperation between all parties having a fee or an easement interest. It will therefore be incumbent upon the City to carefully monitor proposals which may jeopardize the completion of future trail corridors.

The goal of achieving the optimum use of a trail is one which cannot be met unless considerations are made in trail design and construction standards which meet user needs. The identification of trail routes, support facilities and adequate access must also take into account user's needs, including those of the physically disabled (compliance with the Americans with Disabilities Act is necessary). Potential user needs are:

1. Pedestrian trails should address individual and family walkers, jogging loops, and long-distance runners. Throughout the state, hikers and joggers generally use equestrian or bicycle trails which can create conflicts. Pedestrian trails should include a physical separation from cyclists where possible and should have a natural surface.
2. Equestrians prefer scenic trails on a natural dirt surface with variations in terrain. These trails are usually six to eight feet in width and should be kept free from motor vehicles and bicycle traffic. Equestrians also require staging areas that include adequate access/parking for vehicles and trailers.
3. Non-mountain-bike cyclists require wide trails and a smooth surface to accommodate a number of users, wide ranges of speed and often long distances. An all-weather surface should be provided which can also accommodate the needs of disabled individuals.



LEGEND

-  Scenic Corridor Area
-  Viewshed Area

Source: Placer County Resource Conservation District



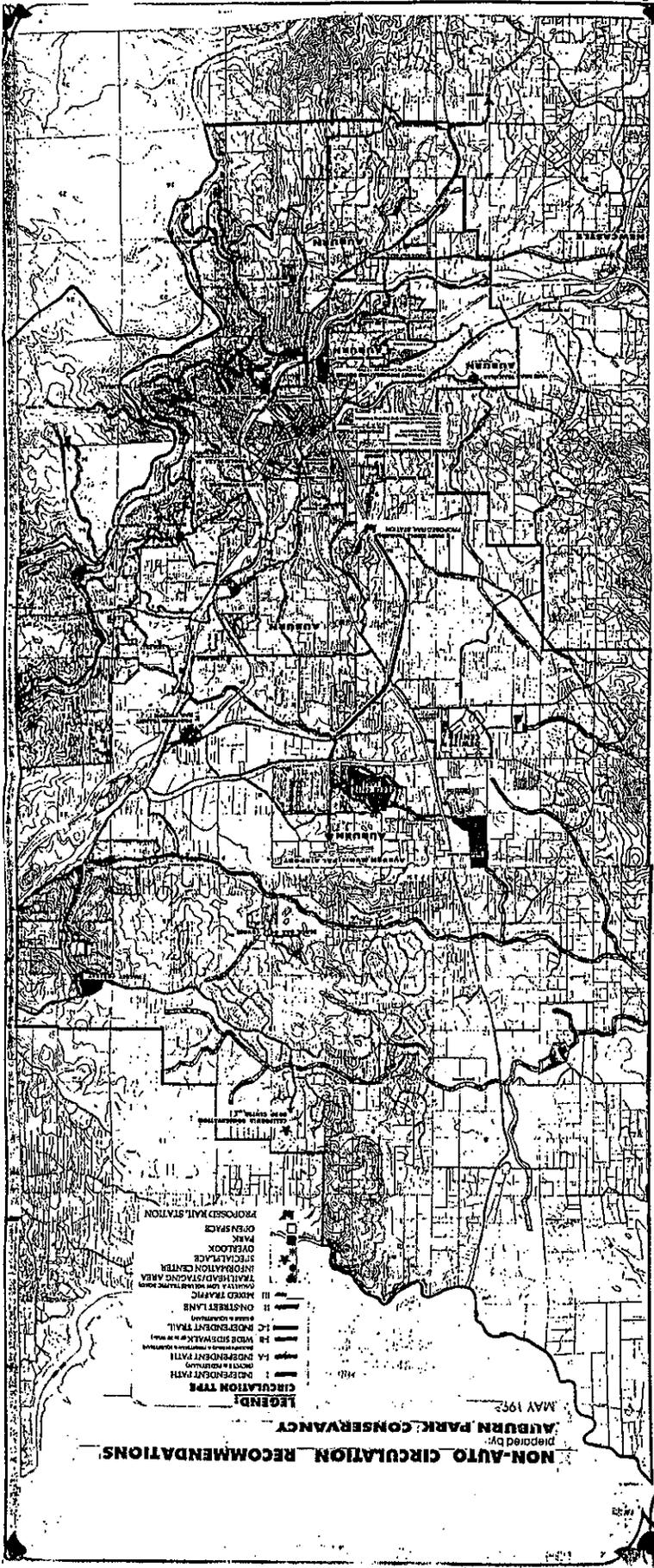
CITY OF AUBURN GENERAL PLAN
Viewsheds



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FIGURE VII-8

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LEGEND

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



No Scale

CITY OF AUBURN GENERAL PLAN
Auburn Park Conservancy Non-Auto Circulation Plan



FIGURE

VII-9

Page 97137

In the final planning stages for a trails system, the needs of all recreational users must be kept in mind when designating trail corridors.

Parks

The Auburn Recreation District (ARD) includes the City of Auburn and the communities of Christian Valley, Meadow Vista and Bowman. The District is generally bounded by the American River on the east and south, the Bear River on the north, and a staggered boundary line on the west which excludes the communities of Newcastle and Ophir. The District is a mixture of residential and rural areas.

Pursuant to the Quimby Act, the City of Auburn has adopted ordinances requiring the payment of park and recreation fees as a condition to the approval of any final subdivision or parcel map (Auburn Municipal Code 9-3.2301 et seq.). The City ordinance requirements have been in effect for over ten years and essentially mirror the requirements of the State Quimby Act (Government Code 66477).

The ARD relies upon park mitigation fees for 15 percent of their budget. An agreement with the City of Auburn (Resolution No. 90-169) directs a minimum of 50 percent of the city park mitigation fees for projects within the City limit. The Quimby Act specifically provides that "if park and recreational services and facilities are provided by a public agency other than a city or county, the amount and location of land to be dedicated or fees to be paid shall, ... be jointly determined by the City or County having jurisdiction and such public agency." Subdivision approval under the Quimby Act may be conditional upon providing park and recreation areas. This exaction must be based upon an assessment of needs contained in the General Plan and that the project is in accordance with definite principles and standards contained in the plan.

The City's policy for this General Plan is five acres of parkland for every 1,000 population. In 1988, the ARD provided only 3.2 acres of park facilities per 1,000 population district-wide, indicating a serious shortage of parkland based upon the adopted standards. The population has increased since 1988 and made the shortage of parks even more pronounced. Eight new park sites have been proposed in order to meet or exceed park standards.

The City requires dedication of natural habitat open space in addition to parklands when approving planned unit developments. This has resulted in substantial acreages being set aside for open space. In order to protect these areas from future development, the zoning is changed to "open space." This open space acreage has not been included in parkland calculations.

The City has in the past required linkages between the open space areas within and those outside the City boundaries. The City has also required construction of trails which provide access to open areas and adjacent subdivisions. These measures provide the City with passive recreational areas, protect natural habitat, and provide essential open space.

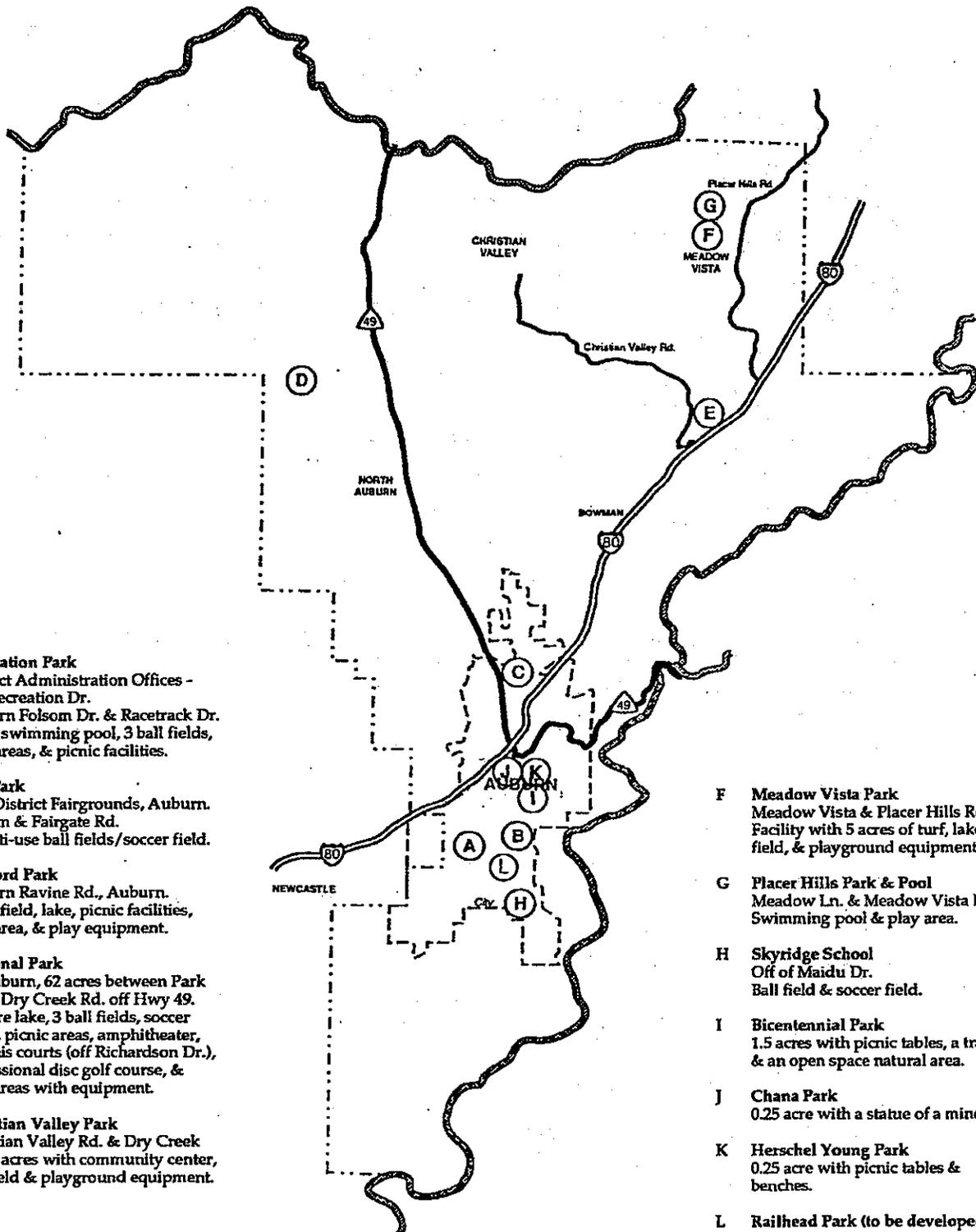
PARK AREAS AND POPULATION WITHIN AUBURN RECREATION DISTRICT

Existing Parks within ARD	Acreage	Population of ARD in 1990
Recreation Park	22	
Christian Valley Park	7	
Regional Park	62	
Placer Hills Park	2	
Fair Park	7	
Ashford Park	7	
Meadow Vista Park	22	
E. V. Cain School Park	1	
Skyridge School Park	5	
Bicentennial Park	1.5	
Chana Park	0.25	
Herschel Young Park	0.25	
TOTAL	137	38,425

Proposed Parks within ARD	Acreage	Projected Population of ARD, Year 2000
Railhead Park	10	
Lone Star Road Park	44	
Halsey Forbay Park	88	
Bell & Dry Creek Road Park	55	
Dry Creek Park	69	
Atwood Road Park	50	
Park Square Lane Park	11	
Bell & New Airport Road Park	30	
Bell Road Park	121	
TOTAL	478	49,103

The District owns and operates nine parks and recreation facilities within the Auburn General Plan study area. Figure VII-10 shows the location of the Auburn area parks. A brief description of these parks is provided in the following paragraphs:





Recreation Park
 District Administration Offices -
 123 Recreation Dr.
 Auburn Folsom Dr. & Racetrack Dr.
 Gym, swimming pool, 3 ball fields,
 play areas, & picnic facilities.

B Fair Park
 20th District Fairgrounds, Auburn.
 Folsom & Fairgate Rd.
 2 multi-use ball fields/soccer field.

C Ashford Park
 Auburn Ravine Rd., Auburn.
 1 ball field, lake, picnic facilities,
 play area, & play equipment.

D Regional Park
 N. Auburn, 62 acres between Park
 Dr. & Dry Creek Rd. off Hwy 49.
 3.5 acre lake, 3 ball fields, soccer
 fields, picnic areas, amphitheater,
 4 tennis courts (off Richardson Dr.),
 professional disc golf course, &
 play areas with equipment.

E Christian Valley Park
 Christian Valley Rd. & Dry Creek
 Rd. 7 acres with community center,
 ball field & playground equipment.

F Meadow Vista Park
 Meadow Vista & Placer Hills Rd.
 Facility with 5 acres of turf, lake, ball
 field, & playground equipment.

G Placer Hills Park & Pool
 Meadow Ln. & Meadow Vista Rd.
 Swimming pool & play area.

H Skyridge School
 Off of Maidu Dr.
 Ball field & soccer field.

I Bicentennial Park
 1.5 acres with picnic tables, a trail,
 & an open space natural area.

J Chana Park
 0.25 acre with a statue of a miner.

K Herschel Young Park
 0.25 acre with picnic tables &
 benches.

L Railhead Park (to be developed)
 Sacramento St. & Pacific Ave.
 10 acres for soccer fields &
 potential staging area for the
 Auburn Dam.

No Scale



July 1992 Source: Draft Auburn Recreation District Master Plan, 1992.

AUBURN RECREATION DISTRICT MASTER PLAN

EXISTING PARKS

Harland Bartholomew & Associates, Inc.

FIGURE

VII-10

Page VII-41

Within City Limits (1992)

- **Recreation Park**--Constructed in 1948, this 22-acre park is located at 123 Recreation Drive off of Auburn Folsom Road. The park includes three multi-use ball fields (two of which are lighted), picnic facilities, two playgrounds, meeting rooms, a youth wing, gymnasium, swimming pool, maintenance shops and administrative offices.
- **Ashford Park**--Located on Auburn Ravine Road, this 7-acre park was purchased by the District in 1975 and development was completed in 1982. The park includes picnic facilities, horseshoe pits, a multi-use ball field, an open play area, and a pond.
- **Fair Park**--This 7-acre park is located on Auburn Folsom Road and is leased by the District from the 20th District Agricultural Association. The park includes two multi-use ball fields, one of which is lighted.
- **Skyridge Park**--This 5-acre park is co-located with the Skyridge Elementary School on Poet Smith Drive and was developed in cooperation with the Auburn Union Elementary School District. The park's facilities include a soccer field. Future plans include basketball courts, tennis courts, and a mini park.
- **Railhead Park (to be developed)**--The ARD has leased, with a 30-day notice of cancellation, this 10-acre site from the Bureau of Land Management. The site, located at Sacramento Street and Pacific Avenue, is for soccer fields and is the potential staging area for the Auburn Dam.

Additional "small" parks are as follows (acreages are approximate only):

- **Bicentennial**--1 1/2-acres with picnic tables, a trail, and an open space natural area
- **Chana**--1/4 acre with a statue of a miner
- **Herschel Young**--1/4 acre with picnic tables and benches

Out of Existing City Limits (1992)

- **Regional Park**--This 62-acre park, the District's largest, is located at 3770 Richardson Road near Dry Creek Road and Highway 49 north. The park was acquired in 1964 and was developed over a number of years. The park's facilities include three lighted ball fields, one lighted soccer field, picnic facilities, a disc golf course, two playgrounds, a new gym (1991), offices, meeting rooms, fishing pond, tennis courts, and pedestrian paths.

The Auburn Recreation District has also worked with the Auburn Union School District to develop turf areas at Alta Vista School and E.V. Cain School.

OPEN SPACE FOR HEALTH AND SAFETY

Fire Hazard

In 1981, Senate Bill 78 required the California Department of Forestry to map the degree of fire hazard in California. The continuation of the drought conditions in El Dorado, Placer and Nevada Counties makes the area particularly susceptible to wild land fires from surrounding counties as well as from within Placer County. This hazard is based on the combination of highly flammable vegetation, steep terrain, extremely dry climate and the presence of structures.

The State Department of Forestry has identified potential sources of fuel in the planning area as grasslands, timber, woodland, and brush. These fuel types, combined with factors of humidity, precipitation and wind conditions, influence the behavior of wild land fires. These ratings generally describe a burning index which identifies the potential for the rate of fire spread and the spotting distance. Spotting distance is the distance a fire may jump or "spot" from the parent body. The Safety Element contains further discussion of fire hazards and identifies potential fire hazard areas.

Constraints

The natural and open space resources identified in this report present various levels of constraints to urban and rural development. The absence or reduced existence of natural features in many areas also presents the opportunity for development with the least potential for environmental impact. A composite map of constraints was prepared by the Placer County Resource Conservation District and is available for review at the City of Auburn Community Development Department. The constraints mapped and level of development restriction are as follows:

1. **High Erosion Hazard.** Areas of high erosion hazard are susceptible to accelerated erosion from subdivision roads, cuts and fills, driveways, foundations, utility lines, and sheet erosion from storm runoff. Development in high erosion hazard areas must minimize the amount of soil disturbance and vegetation removal. If development is allowed in high erosion hazards areas, careful consideration must be given to erosion control measures for compliance prior to the rainy season.
2. **Slopes of 15-30%.** On slopes of 15-30%, there is concern for soil slumping and slough due to over irrigation and resulting soil saturation. Other concerns include road construction, vegetation removal and wildland fire hazard. Development on slopes of 15-30% should be recommended only for large lot residential or higher density clustered development.
3. **Serpentine Formation.** Fractures within the Serpentine Formation allow water seeps which can lead to shrink-swell problems for building foundations. Poor permeability and low well water yields are also

characteristic of the Serpentine Formation. As a result, individual wells and septic systems should be discouraged.

4. **Williamson Act Lands.** Lands subject to a Williamson Act Contract present an absolute restriction to development for a minimum 10 year period. If notice of non-renewal is filed, urban development may be permitted according to adopted plans once the contract expires in 10 years.
5. **Foothill Valley Riparian Vegetation.** Several policies of the plan encourage setbacks to protect riparian vegetation areas as well as flood zones along stream and creeks in the planning area. While some development of riparian vegetation areas may be permitted, the "no net loss" philosophy would require replacement of the riparian vegetation in another location.

Some of the constraints, such as Williamson Act lands and riparian vegetation, imply that development is not appropriate and should be avoided in these areas. Other constraints would also limit development but could allow development after careful attention to site planning and mitigation monitoring.

Some other constraints are not shown on the map but would be considered in any development proposal. These include wetlands, which are closely correlated with riparian vegetation areas; fire hazard areas which are correlated with steep slopes; and hydric soils, which are not considered a development constraint in themselves, but which present the greatest opportunity for land banking for riparian and wetland vegetation.

The policies listed earlier and included in the implementation section have been carefully developed to promote the protection of sensitive environmental areas and to concentrate development where feasible.

4. Implementation

These programs relate to the adopted goals and policies. The implementation and completion of the programs represent the means by which progress in carrying out the Goals and Policies will be measured.

- A. The City shall prepare and adopt a Tree Ordinance.

Responsibility:	Community Development
Time Frame:	1993
Related Policy:	1.2



- B. The City shall prepare and adopt an Open Space Ordinance to zone open space use in perpetuity.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 5.4

- C. The City shall prepare and adopt a Stream, Canal and Waterway Protection Ordinance.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 7.4, 7.6

- D. The City shall prepare and adopt a Habitat Management Plan based upon the natural resources constraints maps of the General Plan. The Habitat Management Plan (HMP) is a program which provides protection to sensitive species and their habitat, while accommodating planned growth and land uses. The HMP therefore integrates biological, planning, and economic components into a single comprehensive framework that includes not only the plan, but an implementation program.

Responsibility: Community Development
Time Frame: 1995
Related Policy: 1.1, 1.3, 1.4, 1.5, 1.6, 1.9, 2.6, 5.4, 7.6

- E. The City shall continue to utilize the Quimby Act (Government Code Section 66400) to require the dedication of land and/or payment of fees for the creation of recreational facilities.

Responsibility: Community Development, Auburn Recreation District
Time Frame: Ongoing
Related Policy: 3.6, 5.1, 5.2, 5.3, 5.4, 5.6, 6.7

- F. The City shall maintain the Parks Standard of five acres of parkland minimum for every 1,000 population

Responsibility: Community Development, Auburn Recreation District
Time Frame: 1993-1997
Related Policy: 3.6, 6.7

- G. The City shall include measures to protect visual resources along scenic corridors in the update of the Zoning Ordinance.

Responsibility: Community Development
Time Frame: 1994
Related Policy: 5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 7.6



- H. The City shall provide for additional recreational opportunities in the Baltimore Ravine Area as part of the Southwest Specific Plan.

Responsibility: Community Development
Time Frame: 1993-1994
Related Policy: 3.6, 5.1, 5.2, 5.3, 5.4, 5.5, 6.7

- I. The City shall prepare a Household Hazardous Waste Ordinance. (See Safety Element Implementation Measure K).

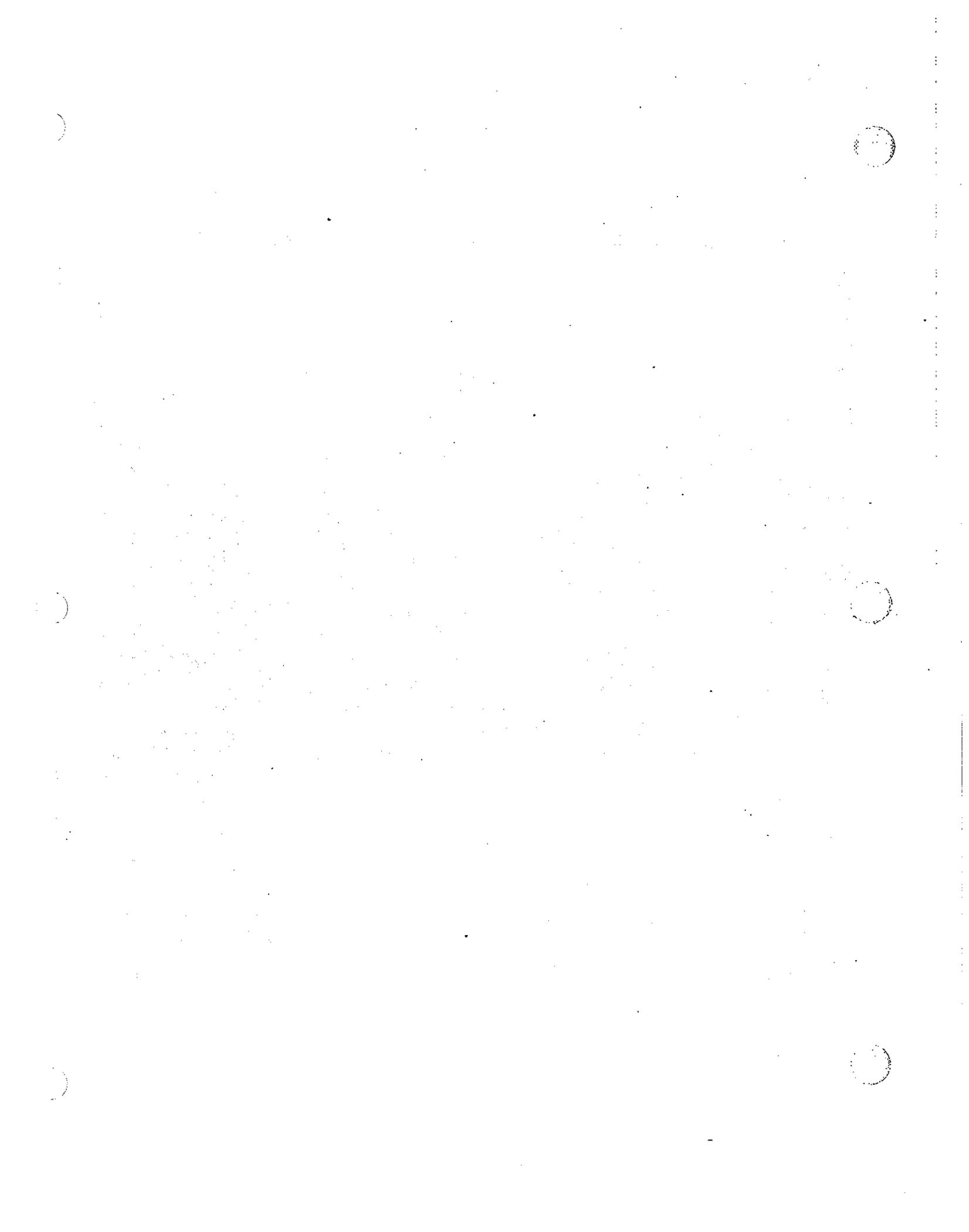
Responsibility: Public Works
Time Frame: 1993-1994
Related Policy: 2.5

- J. The City shall amend the Landscape Ordinance to establish a maintenance and enforcement program.

Responsibility: Community Development
Time Frame: 1993-1994
Related Policy: 6.6

- K. Implementation measures for Policy 7.3, Water Conservation, are included in the implementation of the Land Use Element.

Responsibility: Community Development, Public Works, Building
Time Frame: Ongoing
Related Policy: 7.3



VIII

NOISE ELEMENT



Depot, Auburn Chamber of Commerce

I. Introduction

The purpose of the Noise Element is to mitigate noise conflicts where they presently exist and to minimize future noise conflicts by the adoption of policies and implementation measures designed to achieve land use compatibility for proposed development.

The contents of the Noise Element and the methods used in its preparation have been determined by the requirements of Section 65302(f) of the California Government Code and by the "Guidelines for the Preparation and Content of Noise Elements of the General Plan (Reference 1)" adopted and published by the California Office of Noise Control (ONC) in 1976.

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Open Advisory Committee for the City of Auburn General Plan Update. These goals and policies are presented by topic and sequentially, not by priority.

Goal 1: Protect City residents from the harmful and annoying effects of exposure to excessive noise.

Policy 1.1 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table VIII-1 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. (Requirements for the content of an acoustical analysis are given by Table VIII-2.)

Policy 1.2 The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to the Land Use Compatibility Guidelines for Development.

Goal 2: Protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.

Policy 2.1 New development of noise-sensitive uses shall not be allowed where the noise level due to non-transportation noise sources will exceed the noise level standards of Table VIII-1, as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table VIII-1.

Policy 2.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table VIII-1 as measured immediately within the property line of lands designated for noise-sensitive uses. This policy does not apply to noise sources associated with agricultural operations on lands zoned for agricultural uses.

LAND USE COMPATIBILITY GUIDELINES FOR DEVELOPMENT

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L _{dn} OR CNEL, dB						INTERPRETATION
	55	60	65	70	75	80	
RESIDENTIAL, THEATERS, AUDITORIUMS, MUSIC HALLS, MEETING HALLS, CHURCHES	Acceptable	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	<p>ACCEPTABLE Specified land use is satisfactory. No noise mitigation measures are required.</p> <p>CONDITIONALLY ACCEPTABLE Use should be permitted only after careful study and inclusion of protective measures as needed to satisfy the policies of the Noise Element.</p> <p>UNACCEPTABLE Development is usually not feasible in accordance with the goals of the Noise Element.</p>
TRANSIENT LODGING - HOTELS, HOTELS	Acceptable	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	
SCHOOLS, LIBRARIES, MUSEUMS, HOSPITALS, NURSING HOMES	Acceptable	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	
PLAYGROUNDS, NEIGHBORHOOD PARKS	Acceptable	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	
OFFICE BUILDINGS, RETAIL COMMERCIAL	Acceptable	Acceptable	Acceptable	Acceptable	Conditionally Acceptable	Unacceptable	

**TABLE VIII-1
NOISE LEVEL PERFORMANCE STANDARDS
FOR NEW PROJECTS AFFECTED BY OR INCLUDING NON-TRANSPORTATION SOURCES**

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} , dB	55	45
Maximum level, dB	75	65

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight, including takeoffs and landings. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance.

**TABLE VIII-2
REQUIREMENTS FOR AN ACOUSTICAL ANALYSIS**

An acoustical analysis prepared pursuant to the Noise Element shall:

- A. Be the responsibility of the applicant.
- B. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- C. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- D. Estimate existing and projected (20 years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table VIII-1, and compare those levels to the adopted policies of the Noise Element. Noise prediction methodology must be consistent with the appendix to the Noise Element.
- E. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- F. Estimate noise exposure after the prescribed mitigation measures have been implemented.
- G. Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.



- Policy 2.3** New development of noise-sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table VIII-3, unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table VIII-3.
- Policy 2.4** Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table VIII-3 at outdoor activity areas or interior spaces of existing noise-sensitive land uses in either the incorporated or unincorporated areas.
- Policy 2.5** Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table VIII-3 or the performance standards of Table VIII-1, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

**TABLE VIII-3
MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCES**

Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	$L_{dn}/CNEL, dB$	$L_{dn}/CNEL, dB$	L_{eq}, dB^2
Residential	60 ³	45	--
Transient Lodging	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60 ³	--	40
Office Buildings, Retail Commercial	65	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dB $L_{dn}/CNEL$ or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB $L_{dn}/CNEL$ may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Policy 2.6 Where noise mitigation measures are required to achieve the standards of Tables VIII-1 and VIII-3, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a supplemental means of achieving the noise standards after all practical design-related noise mitigation measures have been integrated into the project.

3. Existing Conditions

The State Office of Planning and Research (OPR) Noise Element Guidelines require that major noise sources be identified and quantified by preparing generalized noise contours for current and projected conditions. Significant noise sources include traffic on major roadways and highways, railroad operations, airports and heliports, and representative industrial activities and fixed noise sources.

Noise modeling techniques, noise measurements and use of existing noise measurement data were used to develop generalized L_{dn} noise contours for the major roadways, railroads and fixed noise sources in the study area for existing conditions.

Noise modeling techniques use source-specific data including average levels of activity, hours of operation, seasonal fluctuations, and average levels of noise from source operations. Modeling methods have been developed for a number of environmental noise sources including roadways, railroad line operations, industrial plants and airports. Such methods produce reliable results as long as data inputs and assumptions are valid. The modeling methods used in this report closely follow recommendations made by the State Office of Noise Control, and were supplemented where appropriate by field-measured noise level data to account for local conditions. The noise exposure contours are based upon annual average conditions. Because local topography, vegetation or intervening structures may significantly affect noise exposure at a particular location, the noise contours should not be considered site-specific.

A community noise survey was conducted to describe existing noise levels in noise-sensitive areas within the Plan Area so that noise level performance standards could be developed to maintain an acceptable noise environment.

ROADWAYS

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to develop L_{dn} contours for all highways and major roadways in the Study Area. The FHWA Model is the analytical method presently favored for traffic noise prediction by most state and local agencies, including Caltrans. The current version of the model is based upon California noise emission factors (CALVENO) for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict

L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour day and to adjust the traffic volume input data to yield an equivalent hourly traffic volume.

BBA conducted short-term (15 minute) traffic noise measurements and concurrent traffic counts adjacent to the major roadways in the Plan Area. In addition, continuous (24-hour) noise measurements were conducted by BBA adjacent to I-80 and Highway 49. BBA also made use of available traffic noise level measurement data which was collected for various recent projects in the Plan Area. The noise measurements were made to evaluate the noise exposure due to traffic on all major roadways in the Plan Area. The locations of the traffic noise measurement sites are shown on Figure VIII-1.

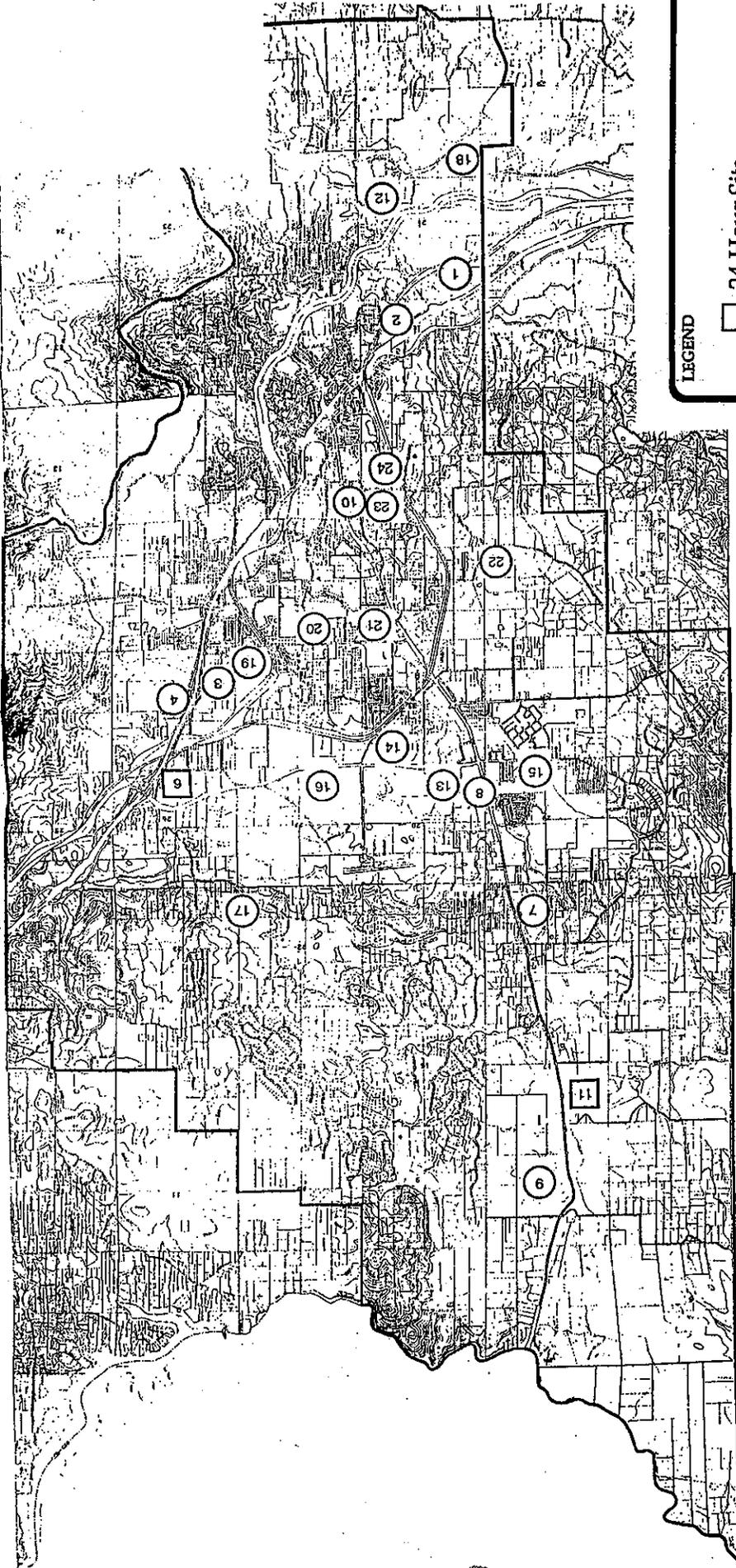
Instrumentation used for the traffic noise measurements included Bruel & Kjaer (B&K) Type 2218 and Larson Davis Laboratories (LDL) Model 700 and 800 precision integrating sound level meters which were calibrated in the field before measurements with matched acoustical calibrators to ensure measurement accuracy.

The purpose of the traffic noise level measurements was to determine the accuracy of the FHWA model in describing the existing noise environment within the Plan Area. Noise measurement results were compared to the FHWA model results by entering the observed traffic volumes, speed and distance as inputs to the FHWA model. The results of the traffic noise measurements are summarized in Table VIII-4.

The differences between measured and predicted noise levels were primarily due to the presence or lack of shielding of traffic noise by intervening topography. Topography in the Plan Area varies considerably, sometimes alternating from flat to hilly along relatively short roadway segments. Due to the size and topographic complexity of the Plan Area, it was not possible to evaluate the effects of topography on the propagation of traffic noise for every possible topographic configuration. Where it is necessary to generally evaluate the effects of topography on the propagation of traffic noise at a location not represented by the noise measurements in Table VIII-4, the following information may be useful.

Table VIII-4 shows that the FHWA Model generally overpredicted noise exposure at all of the measurement locations within the Plan Area, with the exception of locations which were basically at grade with the roadways being measured. This is consistent with BBA experience with the model, and is probably due mostly to the fact that the predicted levels do not account for excess ground attenuation, shielding, or atmospheric absorption over distance. The greatest amount of overprediction occurred in areas which were shielded from view of all or part of the roadway by intervening topography.

Traffic data representing annual average traffic volumes for existing conditions and the future Preferred Alternative scenarios were obtained from Placer County Department of Public Works and HBA. These data are summarized in the Supporting Documents. The future scenario is based on City of Auburn assumptions for future development. Day/night traffic distribution and truck mix were based upon Caltrans data and BBA file data. Using these data and the FHWA methodology, traffic noise levels as defined by L_{dn} were calculated for existing (1988) and future traffic volumes. Distances from the centerlines



LEGEND

- 24 Hour Site
- 15 Minute Site



No Scale

FIGURE
VIII-1

Page VIII-7

CITY OF AUBURN GENERAL PLAN

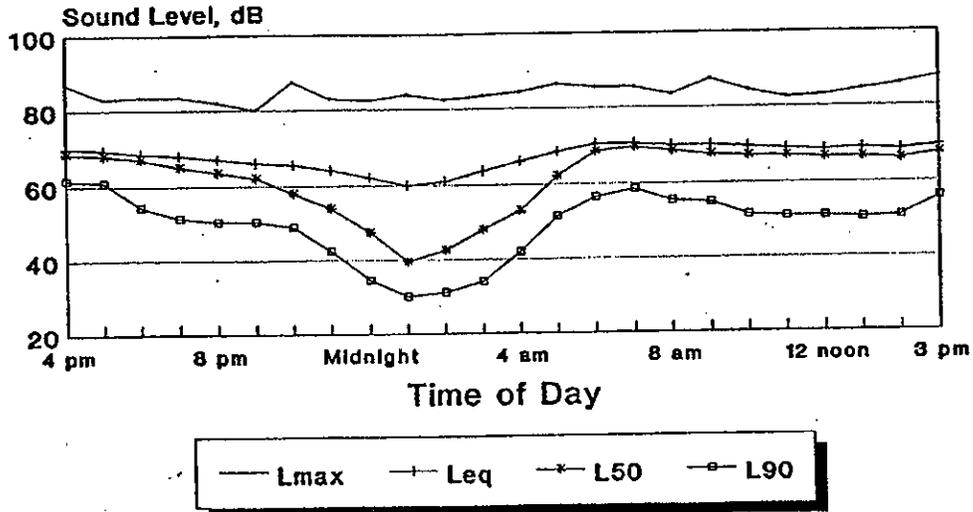
Traffic Noise Measurement Locations

Source: Brown-Buntin Associates, Inc.



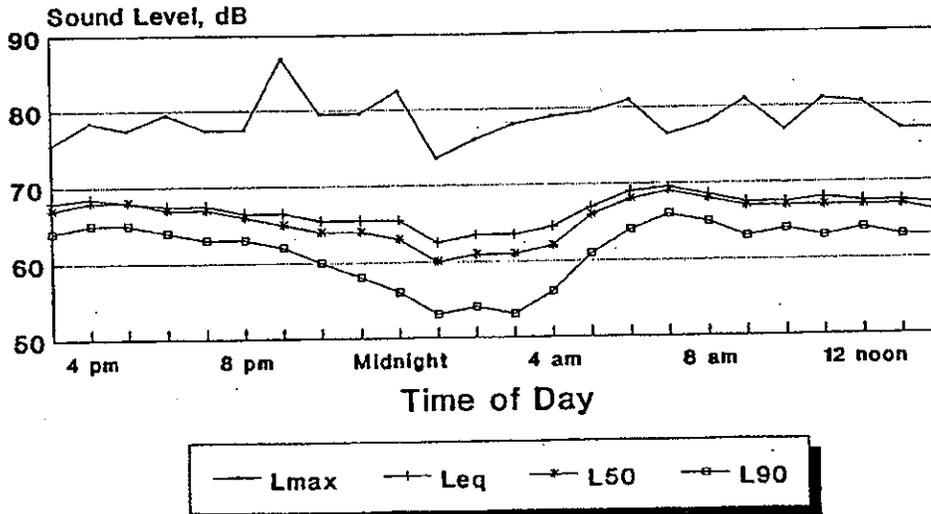
Planning • Engineering • Landscape Architecture
Harland Bartholomew & Associates, Inc.
 Sacramento, California

Measured Traffic Noise Levels Highway 49, South of Lone Star Road July 16-17, 1991



Microphone located approx. 75 feet from roadway centerline.

Measured Traffic Noise Levels Interstate 80 @ Old Airport Road July 16-17, 1991



Microphone located approx. 250 feet from roadway centerline.

1992
by: Brown-Burfin Associates, Inc.

CITY OF AUBURN GENERAL PLAN
Measured Traffic Noise Levels

Harland Bartholomew & Associates, Inc.

FIGURE
VIII-2
Page VIII-9

of selected roadways to the 60 dB L_{dn} contour are summarized in Table VIII-5 for existing and future conditions. The approximate 60 dB L_{dn} traffic noise contours for existing and future conditions are shown on Figures VIII-3 and VIII-4.

These calculations do not include consideration of shielding caused by local buildings or topographical features, so the distances reported in Table VIII-5 are worst-case estimates of noise exposure along roadways in the community.

TABLE VIII-4
COMPARISON OF FHWA MODEL TO MEASURED NOISE LEVELS
Auburn/Bowman Community Plan Area Roadways

Site	Roadway	Location	Dist. (Feet)	Measured L_{eq} dB	Modeled L_{eq} dB	Difference dB
1	Interstate 80	Indian Hill Road	150	69	70	1
2	"	High Street	300	62	64	2
3	"	Bowman Road	275	58	64	6
4	"	Mill Pond Road	200	65	67	2
5	"	Werner Road	100	72	74	2
6*	"	Old Airport	25	--	--	--
7	S.R. 49	Joeger - Dry Creek	200	57	61	4
8	"	Bell Road	75	66	68	2
9	"	Lone Star Road	700	47	54	7
10	"	Palm Avenue	75	62	69	7
11*	"	Lone Star Road	75	--	--	--
12	Auburn/Folsom Road	Rancheria Road	80	62	62	0
13	Bell Road	S.R. 49	75	64	67	3
14	Bell Road (cont)	New Airport Road	135	60	63	3
15	"	1st Street	50	63	63	0
16	"	East of New Airport	75	72	69	-3
17	Dry Creek Road	Valley Quail Road	60	57	59	2
18	Indian Hill Road	Auburn/Folsom Road	100	60	59	-1
19	Luther Road	Channel Hill Road	45	64	63	-1
20	"	Dairy Road	50	68	67	-1
21	"	East of S.R. 49	50	62	63	1
22	Mt. Vernon Road	Edgewood Road	60	53	55	2
23	Nevada Street	Palm Avenue	35	63	62	-1
24	Palm Avenue	Nevada Street	50	63	63	0

* - Continuous noise measurement site. See Figure VIII-2 for measurement data.



**TABLE VIII-5
DISTANCE (FEET) FROM CENTER OF ROADWAY
TO 60 dB L_{dn} CONTOURS**

Segment	Description	Distance to Contour, feet	
		1988*	Future Preferred Alternative
Interstate 80:			
1	Newcastle to S.R. 49	1532	2575
2	S.R. 49 to Eastern Plan Area Boundary	1204	2315
State Route 49:			
3	Lone Star to Dry Creek	397	596
4	Dry Creek to Bell	363	606
5	Bell to Cottage	417	584
6	Cottage to Atwood	484	591
7	Atwood to Luther	468	716
8	Luther to Palm	451	683
9	Palm to I-80	400	641
10	I-80 to Lincoln	199	477
11	Lincoln to Foresthill	118	194
Atwood Road:			
12	Bean to S.R. 49	98	185
Auburn/Folsom Road:			
13	South City Limits to Indian Hill	65	206
14	Indian Hill to Maidu	121	362
15	Maidu to Sacramento (south)	126	382
16	Sacramento (south) to Sacramento (north)	151	447
17	Sacramento (north) to Lincoln	181	360
Auburn Ravine Road:			
18	Palm to Interstate 80	83	179
Bell Road:			
19	Joeger to S.R. 49	141	243
20	S.R. 49 to New Airport	253	485
21	New Airport to Interstate 80	295	522
Bowman Road:			
22	Foresthill to Luther	156	157
Elm Street:			
23	S.R. 49 to Auburn Ravine	178	195

**TABLE VIII-5
DISTANCE (FEET) FROM CENTER OF ROADWAY
TO 60 dB L_{dn} CONTOURS**

Segment	Description	Distance to Contour, feet	
		1988*	Future Preferred Alternative
Foresthill Road:			
24	Interstate 80 to Eastern Plan Area Boundary	99	157
Fulweiler Road:			
25	Carson to S.R. 49	83	104
High Street:			
26	Elm to Lincoln	103	162
27	Lincoln to College	88	150
28	College to Auburn/Folsom	80	130
Lincoln Way:			
29	Bowman to Foresthill	192	206
30	Russell to El Dorado	136	274
31	El Dorado to High	75	262
32	High to East	91	117
33	East to Maple	113	222
Luther Road:			
34	S.R. 49 to Dairy	127	188
35	Dairy to Bowman	102	181
Maple Street:			
36	Lincoln to Interstate 80	95	174
Nevada Street:			
37	S.R. 49 to Mt. Vernon	70	102
38	Palm to Enterprise	90	162
39	Enterprise to Fulweiler	113	150
40	Fulweiler to Interstate 80	83	168
Quartz Drive:			
41	Galena to S.R. 49	69	102
Sacramento Street:			
42	Auburn Folsom to Auburn Folsom	67	156



TABLE VIII-5
DISTANCE (FEET) FROM CENTER OF ROADWAY
TO 60 dB L_{dn} CONTOURS

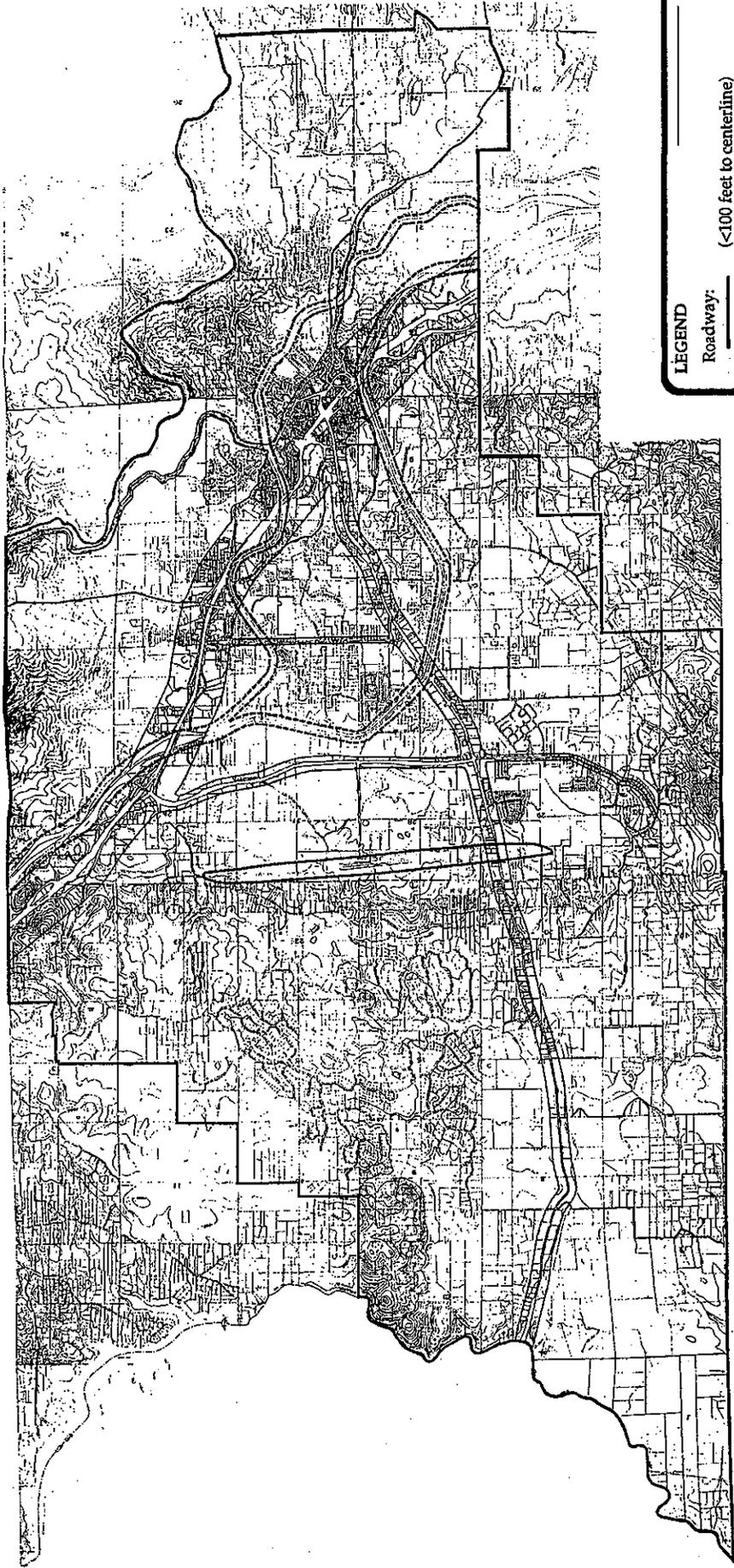
Segment	Description	Distance to Contour, feet	
		1988*	Future Preferred Alternative
Dry Creek Road:			
43	West of S.R. 49	62	124
44	East of S.R. 49	84	156
New Airport Road:			
45	North of Bell	37	109
Dairy Road:			
46	South of Luther	37	130
Mt. Vernon Road:			
47	West of Edgewood	28	150
48	Edgewood to Nevada	59	179
Maidu Drive:			
49	East of Auburn Folsom	59	94
Indian Hill Road:			
50	West of Auburn Folsom	85	162

* - 1988 counts are latest traffic data available.

Figure VIII-5, prepared using the FHWA Model, may be used to estimate the distance to the existing 60 dB L_{dn} contour for projected volumes of arterial traffic on the roadways not included in this analysis. For arterial traffic, the predicted distance to the 60 dB L_{dn} contour is determined by the Average Daily Traffic Volume (ADT) and the posted speed limit. L_{dn} contours derived from Figure VIII-5 are only indicators of potential noise conflicts, requiring more detailed analysis to determine traffic noise levels at any given location.

Table VIII-6 has been prepared to serve as a guide when applying the traffic noise exposure contour information presented in this section to areas with varying topography. The table is used by adding the correction factor to the noise level predicted at a given distance. It should be noted that the adjustment factors presented in Table VIII-6 are intended to provide conservative (worst-case) results, and that complex situations should be evaluated by an acoustical consultant where the potential for significant noise impact exists.





LEGEND

Roadway: (<100 feet to centerline)
 (≥100 feet to centerline)

Railroad:

Airport: (1986)

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



FIGURE VIII-3
Fig. VIII-3

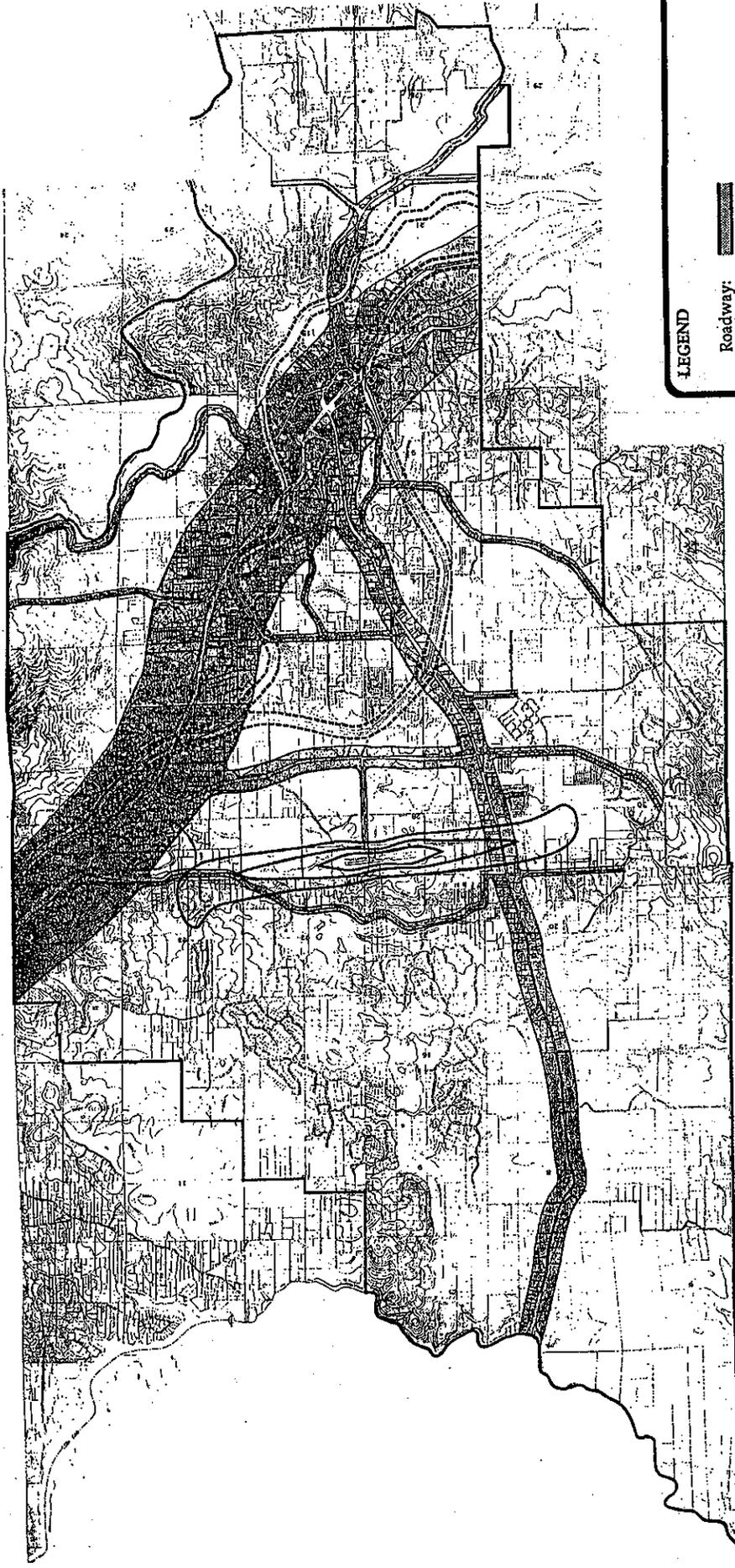
No Scale

CITY OF AUBURN GENERAL PLAN

Existing (1988) 60 dB L_{dn} Contours

Source: Brown-Buntin Associates, Inc.

Arland Bartholomew & Associates, Inc.
 Planning • Engineering • Landscape Architecture
 Sacramento, California



LEGEND

- Roadway: 
- Railroad: 
- Airport: 

Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.

Source: Brown-Burnin Associates, Inc.



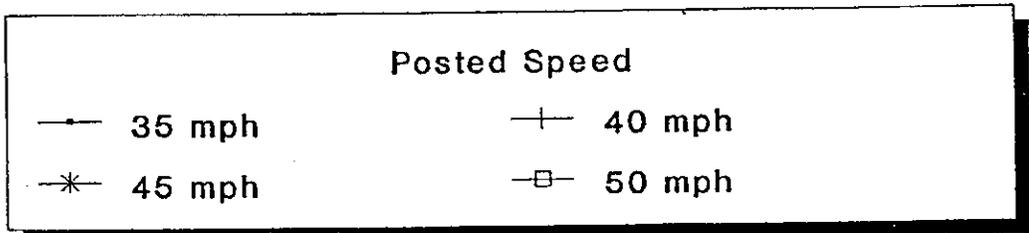
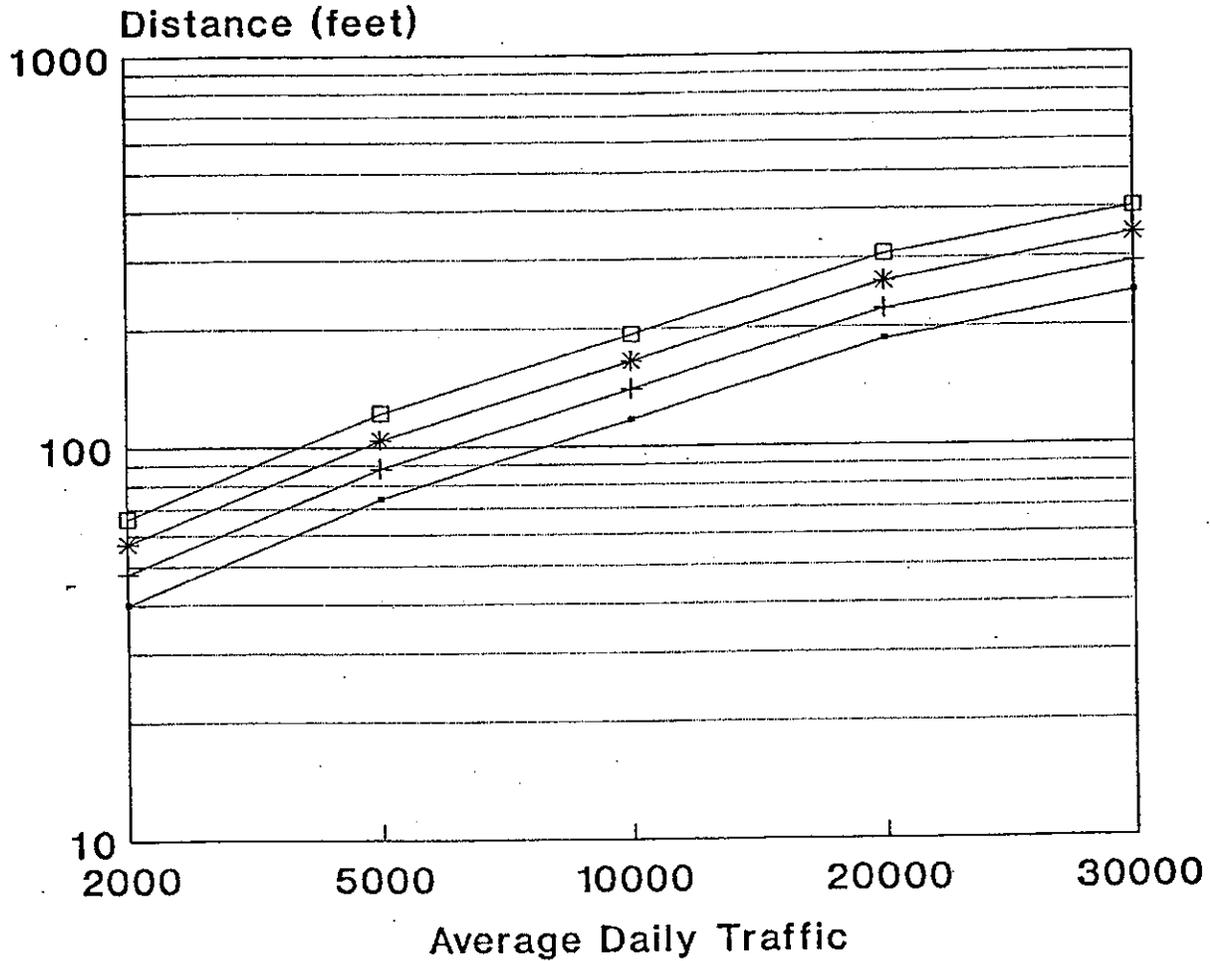
CITY OF AUBURN GENERAL PLAN

Future 60 dB L_{dn} Contours



No Scale

Distance to 60 dB Ldn Contour Arterial Traffic



FHWA RD-77-108

1992
©: Brown-Buntin Associates, Inc.

CITY OF AUBURN GENERAL PLAN
Distance to 60 dB Ldn Contour - Arterial Traffic

Harland Bartholomew & Associates, Inc.

FIGURE
VIII-5
Page VIII-19

**TABLE VIII-6
TRAFFIC NOISE ADJUSTMENTS FOR VARIOUS TOPOGRAPHIC CONDITIONS**

Topographic Situation	Distance from Center of Roadway (Feet)		
	<200	200 - 400	>400
Hillside overlooks roadway	-0-	+1 dB	+3 dB
Roadway Elevated (>15')	-5 dB	-2 dB	-0-
Roadway in cut/below embankment	-5 dB	-5 dB	-5 dB

RAILROADS

Railroad activity in the Plan Area includes freight and passenger activity on the eastbound and westbound Southern Pacific Transportation Company (SPTCo) trackage.

SPTCo officials from the Roseville Dispatcher's Office report that approximately 12 freight and 2 passenger train operations per day occur on SPTCo tracks in the study area. The freight trains are distributed equally on the eastbound and westbound tracks on a random basis throughout the day. Passenger train operations are scheduled to pass through the study area during daytime hours.

The new Capitol Corridor passenger rail service, operated by Amtrak, currently runs between San Jose, Oakland, and Sacramento. In the future, Capitol Corridor passenger service will likely be extended to Auburn. The number of daily Capitol Corridor trains which will likely extend to the Auburn area is not specifically known at this time, but will likely be a function of demand. The approved location for a passenger rail terminal is near the intersection of Nevada Street and Blocker Drive. There is insufficient data at this time to fully analyze the potential impacts of this expanded passenger service. However, because the noise emissions of freight train operations are substantially louder than passenger train operations, 5 additional passenger operations would be required to increase existing railroad noise levels by 1 dB.

Noise measurements were conducted by BBA at various locations within the Plan Area to determine the contribution of SPTCo railroad operations to the area noise environment. The monitoring locations are shown on Figure VIII-6. Instrumentation consisted of B&K and sound level meters. The systems were calibrated before use with B&K and LDL acoustical calibrators.

The purpose of the noise level measurements was to determine typical sound exposure levels (SEL), number of daily operations, and existing L_{dn} values for railroad line operations in the Plan Area, accounting for the effects of local topography, climate, train



speed and other factors which may affect noise generation. The results of the continuous railroad noise measurements are shown on Figure VIII-7.

To determine the distance to the 60 dB railroad L_{dn} contour, it was necessary to calculate the L_{dn} for typical freight and passenger train operations. This was done using the SEL data collected during the railroad noise measurements and the above-described number and distribution of daily freight and passenger train operations. The L_{dn} contribution may be calculated as follows:

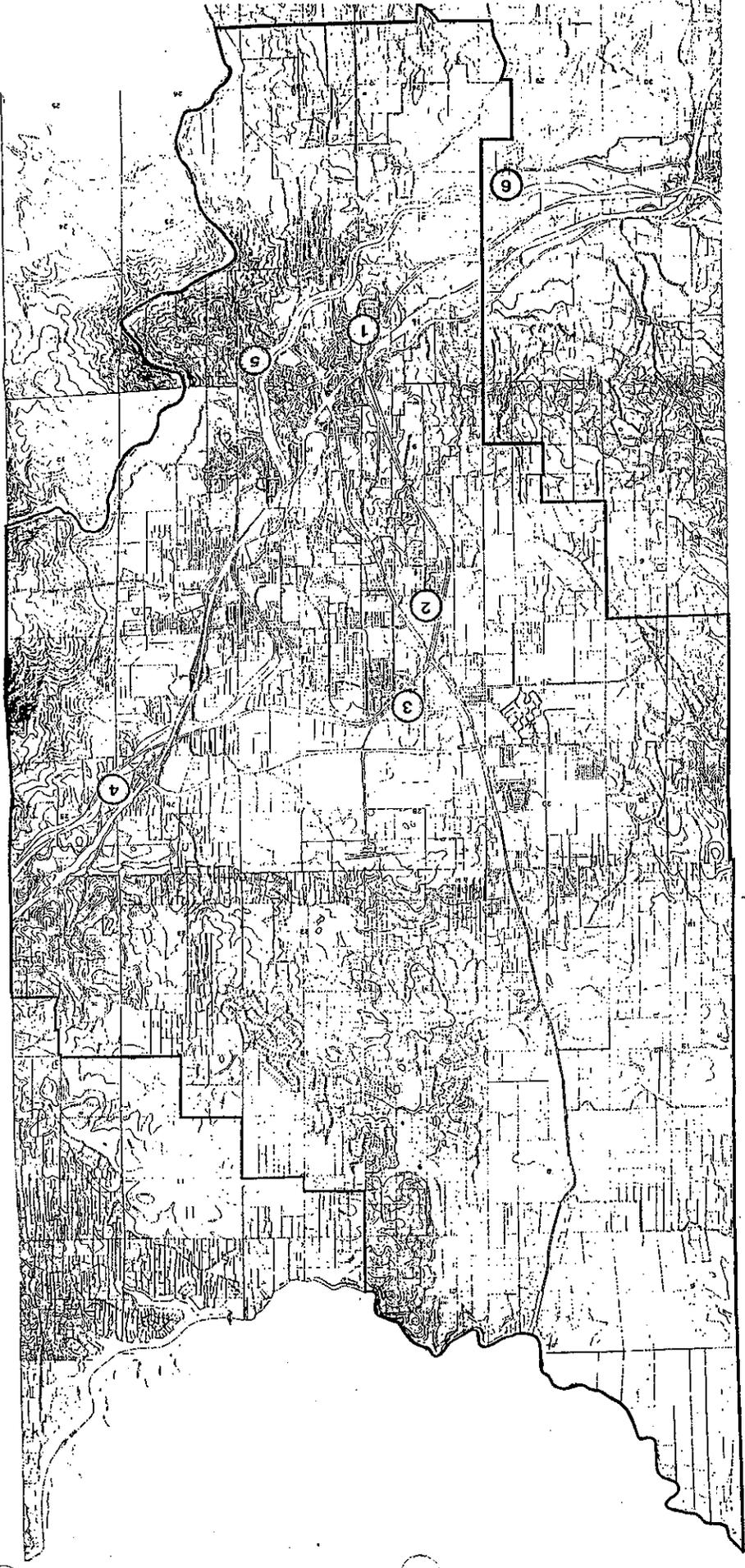
$$L_{dn} = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the mean SEL of the event, N_{eq} is the sum of the number of daytime events (7 a.m. to 10 p.m.) per day plus ten times the number of nighttime events (10 p.m. to 7 a.m.) per day, and 49.4 is ten times the logarithm of the number of seconds per day. The measured railroad noise levels and predicted L_{dn} values at the measurement sites are shown in Table VIII-7.

Site	Location	Measurement Date(s)	Train Direction	Apparent Number of Daily Trains	Average Sound Exposure Level (SEL) @ 100 ft	Measured L_{dn} 100 feet from tracks	Computed L_{dn} 100 feet from tracks
1	High Street	Sept. 26-27, 1989	Eastbound	6	101 dB	66 dB	66 dB
2	Lilac Lane	June 14-17, 1990	Eastbound	7	103 dB	68 dB	68 dB
3	New Airport Rd.	July 6-7, 1989	Eastbound	7	99 dB	65 dB	64 dB
4	Headquarter House	Aug. 8-9, 1991	Both	11	102 dB	70 dB	70 dB
5	Virginia Avenue	Aug. 1-4, 1991	Westbound	6	99 dB	64 dB	64 dB
6	Dillon Circle - Newcastle	Aug. 8-9, 1991	Westbound	7	91 dB	55 dB	56 dB

* - L_{dn} computation based on typical railroad distribution of 7 trains per day in each direction, randomly distributed.

At the measurement sites, locomotive and warning horn noise were the major contributors to railroad noise levels as defined by SEL. The SEL for freight train operations varied, depending on the train speed, track grade, and the amount of shielding provided by intervening topography.



Source: Brown-Buntin Associates, Inc.

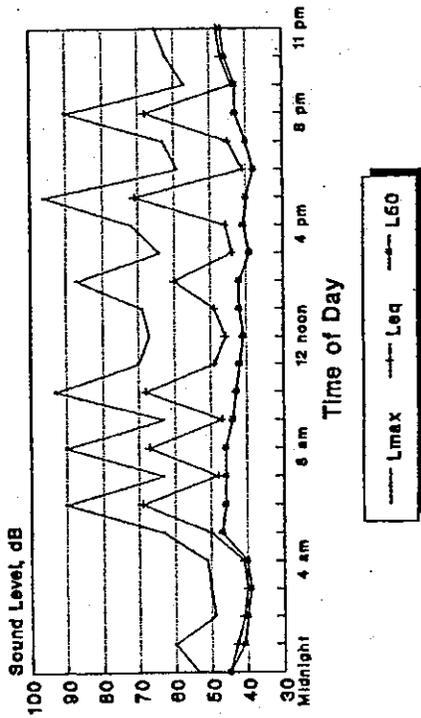


CITY OF AUBURN GENERAL PLAN

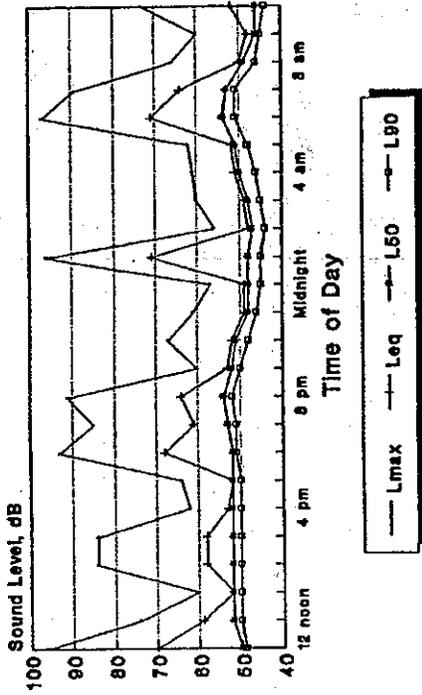
Railroad Noise Measurement Locations



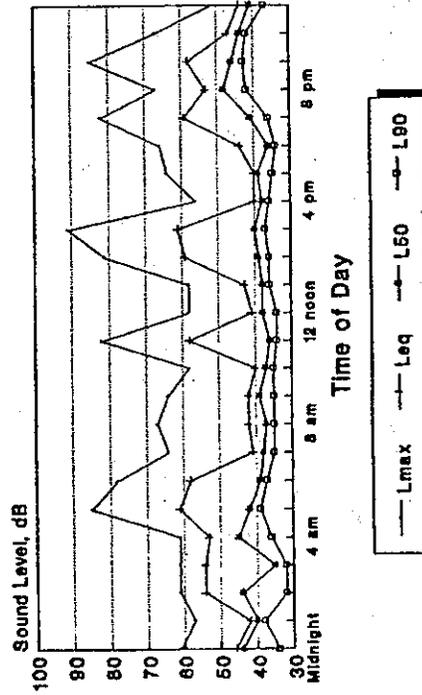
Measured Railroad/Ambient Noise Levels
Auburn/Bowman Plan Site 2 - Lilac Lane
June 16, 1991



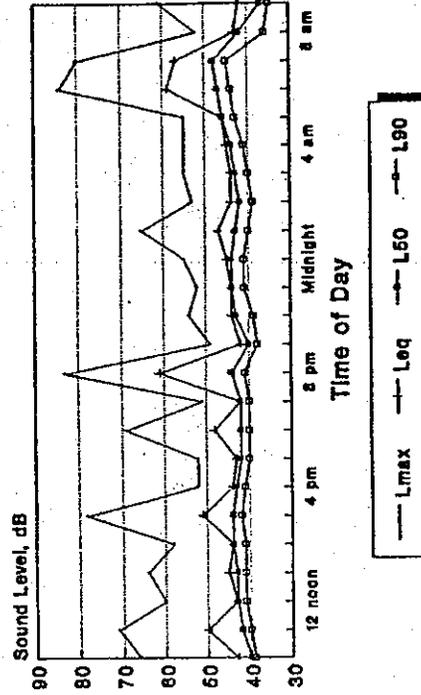
Measured Railroad/Ambient Noise Levels
Auburn/Bowman Plan Site 4 - Bell Road
August 8-9, 1991



Measured Railroad/Ambient Noise Levels
Auburn/Bowman Plan Site 5 - Virginia Ave
August 2, 1991



Measured Railroad/Ambient Noise Levels
Auburn/Bowman Plan Site 6 - Newcastle
August 8-9, 1991



July 1992
Source: Brown-Buntin Associates, Inc.

CITY OF AUBURN GENERAL PLAN
Measured Railroad/Ambient Noise Levels

Harland Bartholomew & Associates, Inc.

The railroad noise levels measured at site 6 were less than the levels measured at the other locations due to slow train speeds and topographic shielding. At site 2, the railroad tracks were elevated approximately 20 feet relative to the noise measurement site. The elevated tracks reduced the effects of ground absorption, and the measured noise levels were therefore higher than at the other railroad noise measurement sites.

Table VIII-8 may be used to estimate railroad noise levels at existing or proposed noise sensitive developments. The railroad noise contour information provided in Table VIII-8 is based on the railroad noise measurement results of Table VIII-7, and assumes that the tracks are approximately at grade with the development and that there is no shielding of railroad noise by intervening topography.

TABLE VIII-8
APPROXIMATE DISTANCE TO RAILROAD NOISE CONTOURS
AUBURN/BOWMAN COMMUNITY PLAN AREA

R/R Direction	L_{dn} , dE, 100 Feet From Tracks	Distance to 60 dB L_{dn} contour (feet)	Distance to 65 dB L_{dn} contour (feet)
Eastbound	66	250	120
Westbound	64	185	85
Both	69	400	185

The noise levels provided in Table VIII-8 should be increased by 3 dB where warning horns are used. The railroad noise exposure will differ from these values where the tracks are significantly elevated or shielded relative to the receiver location.

FIXED NOISE SOURCES

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by Federal and State employee health and safety regulations (OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses.

From a land use planning perspective, fixed-source noise control issues focus upon two goals: to prevent the introduction of new noise-producing uses in noise-sensitive areas, and to prevent encroachment of noise sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new



noise-sensitive uses in proximity to noise-producing facilities include mitigation measures to ensure compliance with noise performance standards.

The following descriptions of existing fixed noise sources in the Plan Area are intended to be representative of the relative noise impacts of such uses, and to identify specific noise sources which should be considered in the review of development proposals. These sources were identified through recommendations by City and County staff and by BBA observations.

**California Department of Forestry Helipad:
Contact: Steve Taylor**

The California Department of Forestry (CDF) operates a helipad near the intersection of Lincoln way and Rhodes Krueger Drive, northeast of the I-80/Bowman Road interchange. The CDF Helipad location is shown on Figure VIII-8. According to CDF staff, the helipad is used by the CDF, United States Drug Enforcement Agency (DEA), California Highway Patrol (CHP), UC Davis LifeFlight, Reno CareFlight and Stockton MediFlight.

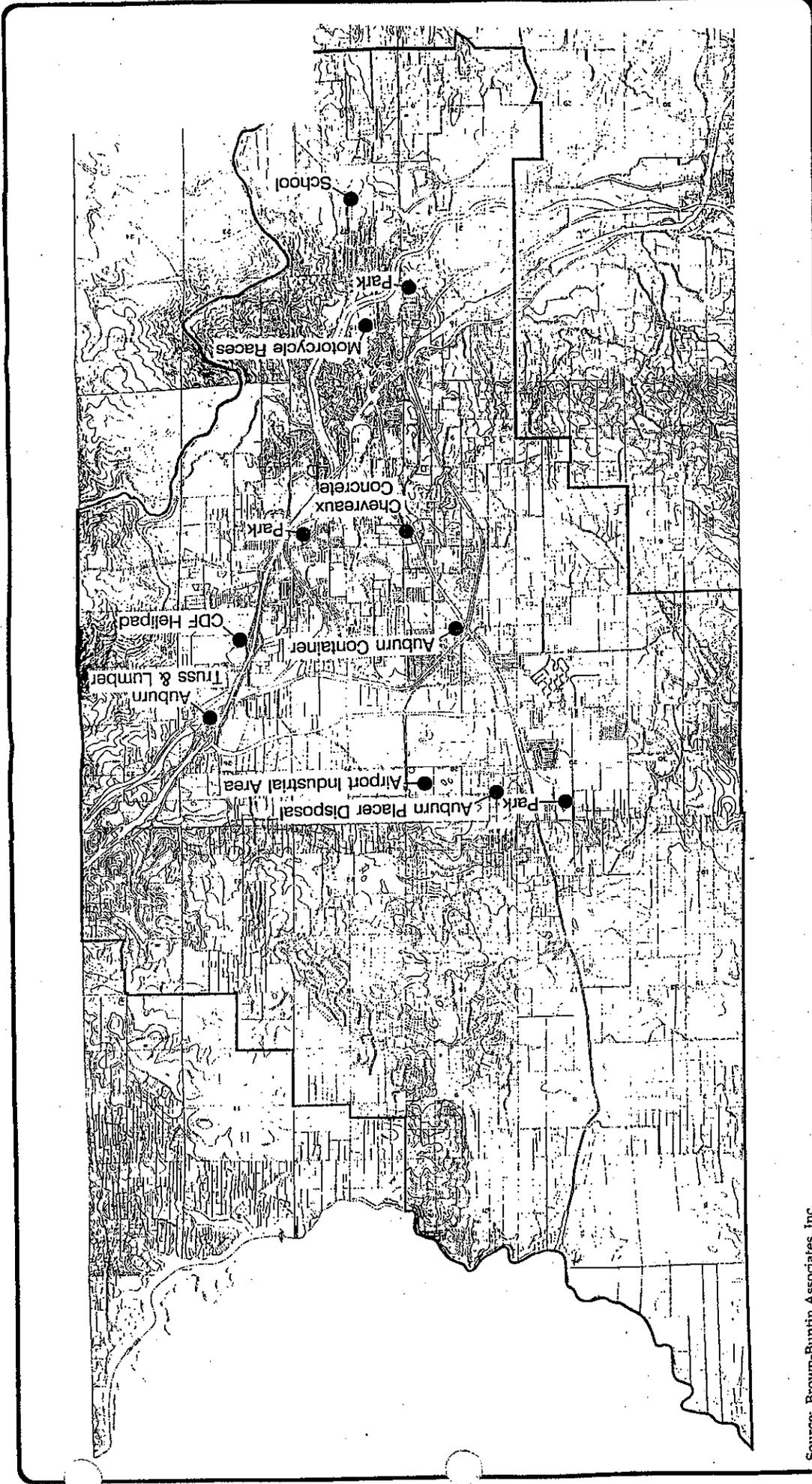
The CDF operates a Bell 204B helicopter, capable of carrying 9 passengers and equipment. CDF staff reported that the CDF operates a Bell 204B helicopter (Huey) at the helipad during the Summer months when there is a fire in the immediate vicinity of the CDF station. Because the CDF refuels the helicopter near the fire operations, the helicopter is seldom operated from the helipad. The majority of the fire-related operations occur at the fire site, where it is fueled and loaded with staff and equipment. CDF staff reported that the helicopter was used once a day at the helipad during the "49'er" fire of 1988.

CDF staff further reported that helicopters using the helipad typically approach and depart perpendicular to I-80, over the canyon area east of the helipad. However, pilots may deviate from that pattern in response to safety concerns.

The California Highway Patrol (CHP) operates a Bell 206 Jet Ranger in the Auburn area, and uses the helipad infrequently when necessary to provide medical support to accident victims or other governmental agencies. The Drug Enforcement Agency (DEA) stations a Hughes 500 helicopter at the helipad during the period of September through November. The DEA helicopter is reportedly used for aerial search and observation of marijuana growing areas. DEA operations are reported to be two arrivals and departures per day during those months.

For medical emergencies in the Auburn area, UCD LifeFlight and Reno CareFlight operate Alouette helicopters, and Stockton MediFlight operates an A-Star. These organizations typically use the CDF helipad only when it is not possible to land nearer to situations requiring aerial evacuation of persons in need of immediate and/or specialized medical attention.

Noise levels generated by the regular DEA helicopter operations at the CDF helipad were calculated using noise level data reported by the FAA for the Hughes 500 helicopter,



Source: Brown-Buntin Associates, Inc.



CITY OF AUBURN GENERAL PLAN
Fixed Noise Source Locations



No Scale

assuming 4 operations per day. An L_{dn} of 50 dB was computed at a distance of 1000 feet from the helipad directly under the flight path.

Auburn Truss & Lumber:
Contact: Wayne Larson

Auburn Truss & Lumber, located at 14002 Musso Road, manufactures trusses. Typical hours of operation are from 7 am - 3:30 pm, Monday through Friday. The facility reportedly does not operate on weekends, but may operate until 6 pm during periods of high demand. Noise producing equipment used at this facility includes forklifts, staple guns, air compressors, saws and a crane (boom truck). Heavy truck usage at the facility consists of 4 flatbed trucks per day and 1-2 heavy lumber trucks per week. BBA noise measurements conducted at the site indicated that saws generated 77 dB at a distance of 25 feet. There are currently no plans for future expansion of the facility.

Chevreaux Concrete:
Contact: Joe Chevreaux

The Chevreaux Concrete company is located east of the intersection of Marguerite Mine Road and State Route 49. Typical hours of operation are reportedly 6 am to 6 pm with occasional operations during early morning and evening hours as demand dictates. Noise is generated at this facility by the concrete batch plant and by front loaders and cement and gravel trucks. BBA conducted noise measurements at the plant on August 19, 1991 to quantify typical plant noise levels. An average noise level of 77 dB was measured at a distance of 75 feet from the concrete batch plant during normal operations. There does not appear to be any noise sensitive land use in the immediate plant vicinity. Plant noise is attenuated to the east by steep topography.

Public Address Systems/Drive up Window Speakers:
Source: Brown-Buntin Associates, Inc.

Public address systems and drive up window speakers are used extensively in the Auburn/Bowman Community Plan Area. The most prevalent usage of these systems is at car dealerships and fast food restaurants. Studies have shown that people are more highly annoyed by amplified speech or music than by continuous noise sources of similar intensity such as highway traffic. Noise generated by these systems depends primarily on the amplifier setting, and is therefore highly variable. BBA conducted noise measurements of the public address system at Goldrush Chevrolet and of the drive-up window speaker at Burger King to quantify typical noise emissions for these types of uses. BBA measured levels of 78 dB at 12 feet from the PA speaker, and 65 dB at a distance of 5 feet from the drive-up window speaker.

Airport Industrial Area:
Source: Brown-Buntin Associates

Uses identified in this area include Century Lighting, Coherent Industries, Doug Spense Construction, Pacific Bell, Mussetter Distributing Inc., RJT Construction, Auburn Foothill

Quality Door, Harris & Ruth Contractors, Nella Oil Company, the Skunk Works, advanced ceramics, and various aviation maintenance facilities. The most notable noise sources associated with these operations were operation and/or maintenance of mechanical and heavy commercial truck fleets. Although there does not appear to be any noise sensitive development in the immediate vicinity of the airport industrial area, the potential for noise generation in this area should not be overlooked if neighboring noise sensitive developments are considered.

**Auburn Container Company:
Contact: Arthur Moorehouse**

The Auburn Container company is located on the east side of State Route 49, between the Southern Pacific Railroad tracks and Luther Road. According to the plant manager, normal operating hours are from 7 am to 3:30 pm, Monday through Friday. The plant occasionally operates on Saturday from 7 am to 12 noon. Equipment used at the plant consists of resaws, cutoff saws, a rip saw, a molder, a cleat machine, cyclones, and a chipper. The cyclones are located about 30 feet above ground level at the plant building. The chipper is located at ground level near the east property line of the plant. The chipper normally operates the entire time the plant is in operation. In addition to the aforementioned noise sources, there are 5 diesel trucks per day entering and leaving the plant.

BBA noise measurements indicate that the exterior noise level due to the plant cyclones is approximately 69 dB at a distance of 100 feet. The 50 dB L_{eq} noise contour for the plant would be located approximately 850 feet from the plant.

**Community Plan Area Parks and Schools:
Source: Brown-Buntin Associates**

Parks are often considered noise sensitive uses due to the passive recreation which takes place there. However, such uses may also be significant noise producers during active recreation activities such as basketball and softball games. The amount of noise generated by such uses varies with age of participants, event size and location, as well as the hour during which the activity takes place. To some degree, the noise generated by such uses can be controlled by enforcing curfews, and by locating noise generating activities away from existing or proposed noise sensitive land uses.

Schools are similar to parks in that active recreation at outdoor playing fields of the schools could result in significant noise levels. School buses also add to the facility noise levels. Future land use planning should consider the potential for noise generation at the playing fields, and noise sensitive land uses should be discouraged adjacent to those areas.

Motorcycle Races - Auburn Fairgrounds

Contact: Hank Maul

Motorcycle races at the Auburn Fairgrounds occur on Friday nights from May to September. Approximately 24-30, 4-lap sprint races take place on a typical Friday evening during the race season, and all racing is completed by 11 pm. BBA conducted noise measurements of typical motorcycle races on September 13, 1991. The measurements were conducted at three locations in the vicinity of the racing. The first location was the southeast corner of the Fairgrounds at the access road. Average and maximum noise levels of 68.5 dB and 77 dB, respectively, were measured at that location. Site 2 was located 100 feet east of site 1. Average noise levels at that location ranged from 59 dB to 65 dB, and maximum noise levels ranged from 66 to 68 dB at site 2. Site 3 was located at Pleasant Avenue, at the residence nearest the riding arena. BBA measured average noise levels of 61 to 63 dB at that location, with maximum noise levels ranging from 66 to 68 dB during the races.

Auburn Placer Disposal

Contact: Eileen Dominguez

Auburn Placer Disposal is located on Shale Ridge Road, east of S.R. 49. The facility serves as a refuse disposal transfer station and recycling center. The facility is open to the public between 8 am and 5 pm, but garbage trucks start leaving the facility at 4 am. Approximately 40 heavy truck trips are generated by the facility daily. Noise is also generated by use of the compactor and maintenance operations at the facility. BBA conducted noise measurements at the facility on September 23, 1991 to document typical operating noise levels. An average noise level of 63 dB was measured at 100 feet from the opening of the transfer building. Noise generated by heavy truck passages was not included in the measurement sample.

AIRPORT NOISE

The Auburn Municipal Airport is situated on 210 acres in the northwest section of the City 1/2 mile east of Highway 49, one mile north of Bell Road. The Airport is a Basic Utility, Stage I category facility which can handle 75% of small general aviation aircraft (12,500 pounds gross weight maximum). The existing paved runway, Runway 7-25, is 3,100 feet long and 60 feet wide.

An Airport Master Plan and Environmental Impact Report are currently in progress for the Auburn Municipal Airport. The existing and worst-case future Airport noise contours which were prepared for these documents are reproduced in Figures VIII-9 and VIII-10, respectively. According to these contours the noise sensitive use most affected by airport operations is the Rock Creek Mobile Home Park, located west of Highway 49 between Bell and Dry Creek Roads. The contours indicate that the Mobile Home Park is currently exposed to aircraft noise levels between 60 and 65 dB CNEL.



BBA conducted continuous aircraft noise measurements at the Rock Creek M.H.P. from June 27-30, 1991 to gather single event noise level data and to compute the aircraft CNEL at that location. A Metrosonics dB-604 Environmental Noise Analyzer was used for the aircraft noise level measurements. The equipment was calibrated before use with a Bruel & Kjaer Type 4230 acoustical calibrator, and meets all pertinent specifications of the American National Standards Institute for Type I Sound level measurement systems.

In order for an aircraft to register as a single event, the noise level generated by the aircraft had to remain above 60 dB for a minimum of 10 seconds. These thresholds were set in order to filter out non-aircraft events such as passing cars. The results of the aircraft noise level measurements are shown in Table VIII-9, and are displayed graphically on Figure VIII-11.

TABLE VIII-9
AIRCRAFT NOISE MEASUREMENT RESULTS
ROCK CREEK M.H.P - JUNE 27-30, 1991

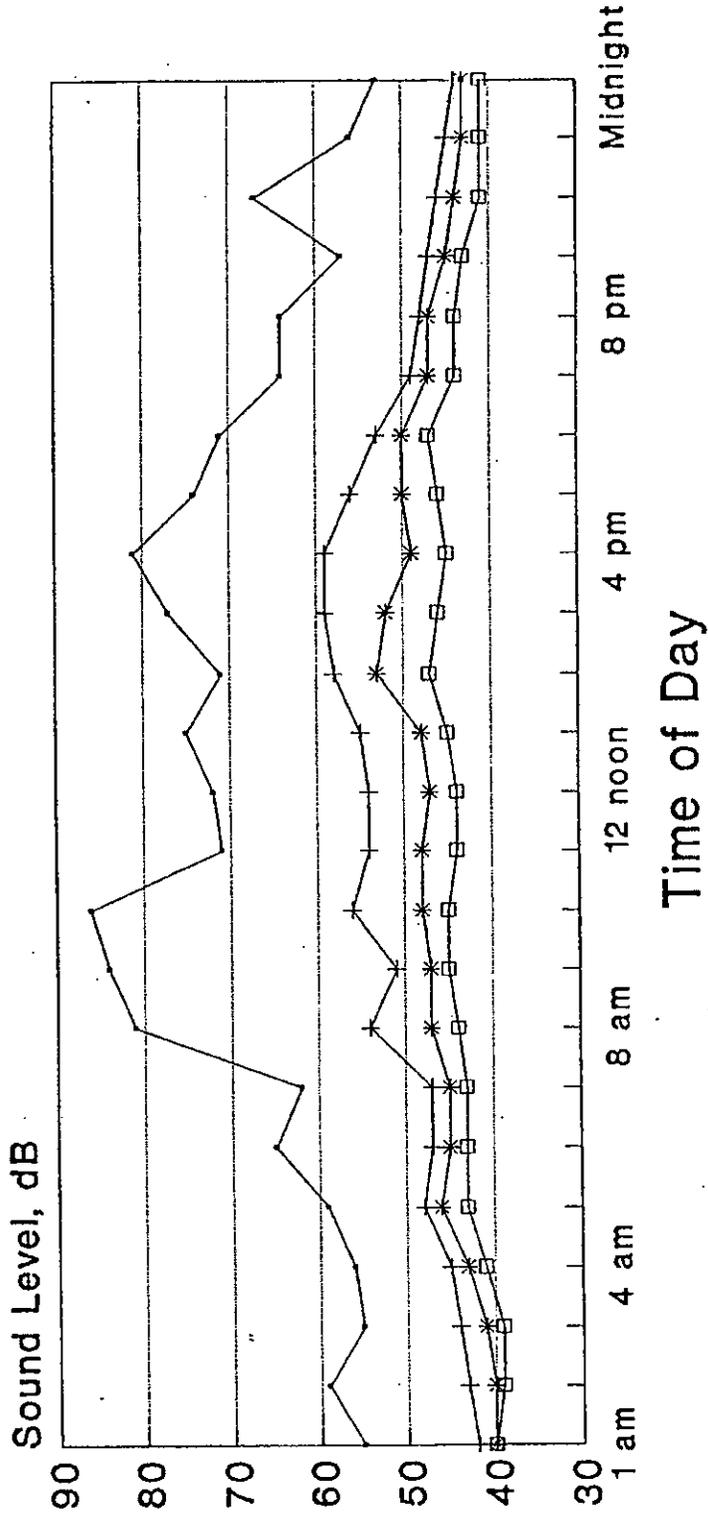
Date	Day of Week	Apparent # of Aircraft Departures	Range of Maximum Noise Levels, dB	Mean Sound Exposure Level, dB	Aircraft CNEL, dB
June 27	Thursday	98	61-81	79	50
June 28	Friday	8	61-77	80	40
June 29	Saturday	53	64-79	81	49
June 30	Sunday	83	62-81	81	53

The Table VIII-9 data indicate that the apparent number of daily operations on the 27th and 30th closely approximates the number of existing daily operations reported in the Airport EIR. The decrease in number of apparent operations on the 28th and 29th was probably caused by a shift in wind direction, resulting in departures to the east. Because the Rock Creek M.H.P. is located west of the airport, the eastern departures would probably not register as single events based on the aforementioned single event thresholds.

Although a considerable number of aircraft single events were logged on June 27th and 30th, the computed CNEL values for those days were 50 and 53 dB, respectively. The measured CNEL values on those days were approximately 10 lower than the values illustrated on the EIR noise contour maps.



Measured Ambient Noise Levels



July 1992
Source: Brown-Buntin Associates, Inc.

CITY OF AUBURN GENERAL PLAN
Measured Ambient Noise Levels - Rock Creek Mobile Home Park
Harland Bartholomew & Associates, Inc.

COMMUNITY NOISE SURVEY

A community noise survey was conducted to document noise exposure in areas of the community containing noise sensitive land uses. For that purpose, noise sensitive land uses in the Plan Area were considered to include residential areas, parks and schools. Noise monitoring sites were selected to be representative of typical noise sensitive locations within the Plan Area.

Short-term noise monitoring was conducted on July 17-18, 1991. Each site was monitored three different times during the day and night so that estimates of L_{dn} could be prepared. Two long-term noise monitoring sites were established in the Plan Area to record day-night statistical trends. The data collected included the L_{eq} and other statistical descriptors. Noise monitoring sites, measured noise levels and estimated L_{dn} values at each site are summarized in Table VIII-10. Monitoring sites are shown by Figure VIII-12.

Community noise monitoring systems were calibrated with acoustical calibrators in the field prior to use. The systems comply with all pertinent requirements of the American National Standards Institute for Type I sound level meters.

The community noise survey results indicate that typical noise levels in noise sensitive areas of the Plan Area are in the range of 43 dB to 58 dB L_{dn} . Traffic on local roadways, railroad and aircraft operations, and neighborhood activities are the controlling factors for background noise levels in the majority of the Plan Area. Noise from industrial uses was audible during the evening and nighttime hours at residential uses adjacent to some industrial areas. In general, the areas of the Plan Area which contain noise sensitive uses are relatively quiet.

The L_{90} values shown in Table VIII-10 represent background noise levels, where there are typically no identifiable local noise sources. The L_{50} values represent median noise levels. The L_{eq} values in Table VIII-10 represent the average noise energy during the sample periods, and show the effects of brief noisy periods. The L_{eq} values were the basis of the estimated L_{dn} values. L_{max} values show the maximum noise levels observed during the samples, and are typically due to passing cars or small aircraft overflights. The results of the continuous ambient noise measurements are shown on Figure VIII-13.

4. Noise Prediction Methodology

The following noise prediction methodologies are approved for use in acoustical analyses submitted to the City of Auburn. Other methodologies may be used if approved by the City Planning Department after review of supporting technical justification.

Traffic Noise:

1. The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) is the preferred traffic noise prediction methodology. The CALVENO standardized noise emission factors must be used (published in FHWA-CA-TL-84/13, "California Vehicle Noise Emission Levels"). Any form of the FHWA Model may be used, such as manual calculation and versions for programmable calculators and computers, including STAMINA.
2. Noise barrier insertion loss shall be calculated using the FHWA Model methodology. The effective center frequency of the noise sources shall be assumed to be 550 Hz. Source heights of 0, 2 and 8 feet above roadway centerline shall be assumed for autos, medium trucks and heavy trucks, respectively.
3. Noise sensitive receiver locations are assumed to be the back yards of single-family dwellings, and the patios and balconies of multi-family dwellings. The exterior receiver height shall be assumed to be 5 feet above back yard or patio elevation for ground-floor receivers, and 4 feet above balcony elevation for upper-floor receivers. The exterior ground-floor receiver shall be placed 10 feet from the building facade. The exterior upper-floor receiver shall be placed midway from the building facade to the edge of the balcony, and a correction factor of +2 dB shall be applied to account for reflections from the building facade.
4. For multi-family developments, common outdoor activity areas are also considered to be noise sensitive receiver locations. The assumed exterior receiver height is 5 feet above ground level, and the assumed receiver location is normally in center of the recreation area.
5. Traffic noise attenuation with distance for ground level receivers should be consistent with an acoustically "soft" site, at 4.5 dB attenuation per doubling of distance. Noise attenuation for receivers and building facades at upper floors, and for receivers overlooking the roadway, should be consistent with an acoustically "hard" site, at 3 dB attenuation per doubling of distance. These assumptions may be modified on the basis of on-site noise measurements at proposed receiver locations and elevations.
6. Noise measurements for traffic noise analyses should include at least one 15-minute sample of daytime traffic noise levels (including the L_{eq} value) under free-flowing traffic conditions, with a concurrent traffic count. Nighttime traffic noise levels may be estimated from 24-hour noise measurement data or published hourly traffic distribution data. For major arterials and highways, continuous hourly noise measurements over a 24-hour period are recommended to describe the effective day/night traffic distribution and to supplement the 15-minute sample(s). Noise measurement sites should be selected to represent proposed receiver locations and representative sound propagation conditions.

TABLE VIII-10
SUMMARY OF MEASURED NOISE LEVELS AND ESTIMATED
DAY-NIGHT AVERAGE LEVELS (L_{dn}) IN AREAS
CONTAINING NOISE SENSITIVE LAND USES

Site	Location	Date	Time	Sound Level, dB							Est. L _{dn}
				L ₉₅	L ₅₀	L ₁₀	L _{eq}	L _{max}			
1	Shirland Road 0.3 ml. east of Auburn Folsom Road	7-17-91	9:30	36	39	41	47.8	72	47		
		7-17-91	13:43	38	44	47	46.8	66			
		7-18-91	1:37	31	34	36	35.0	41			
2	Sky Ridge School	7-17-91	10:05	33	36	46	47.7	72	47		
		7-17-91	14:33	41	44	48	48.8	73			
		7-18-91	1:21	33	34	36	34.5	44			
3	Beggs Field/Auburn Recreation Park	7-17-91	10:44	48	52	61	59.8	78	55		
		7-17-91	15:03	40	45	50	48.8	63			
		7-18-91	1:10	33	35	38	35.5	41			
4	Paved Recreation Area near College Way and High Street	7-17-91	11:10	44	46	49	46.9	56	51		
		7-17-91	15:28	48	50	54	54.9	77			
		7-18-91	00:52	33	34	35	34.0	37			
5	Gold Street	7-17-91	11:40	32	35	53	55.6	75	51		
		7-17-91	15:56	33	39	42	43.9	69			
		7-18-91	1:03	34	35	38	36.5	50			
6	Ashford Park	7-17-91	12:15	45	47	51	49.9	69	58		
		7-17-91	17:35	50	52	56	53.0	66			
		7-18-91	00:42	47	50	55	52.0	64			
7	Kemper Road between Bean and Country Villa Roads	7-17-91	9:22	39	44	55	55.0	74	52		
		7-17-91	13:35	34	37	45	47.1	66			
		7-18-91	00:29	36	39	44	40.5	52			
8	Corner of Copper Penny and Rock View Court	7-17-91	10:00	33	40	50	48.2	66	50		
		7-17-91	14:05	38	42	50	52.5	73			
		7-18-91	00:20	34	37	40	37.0	42			



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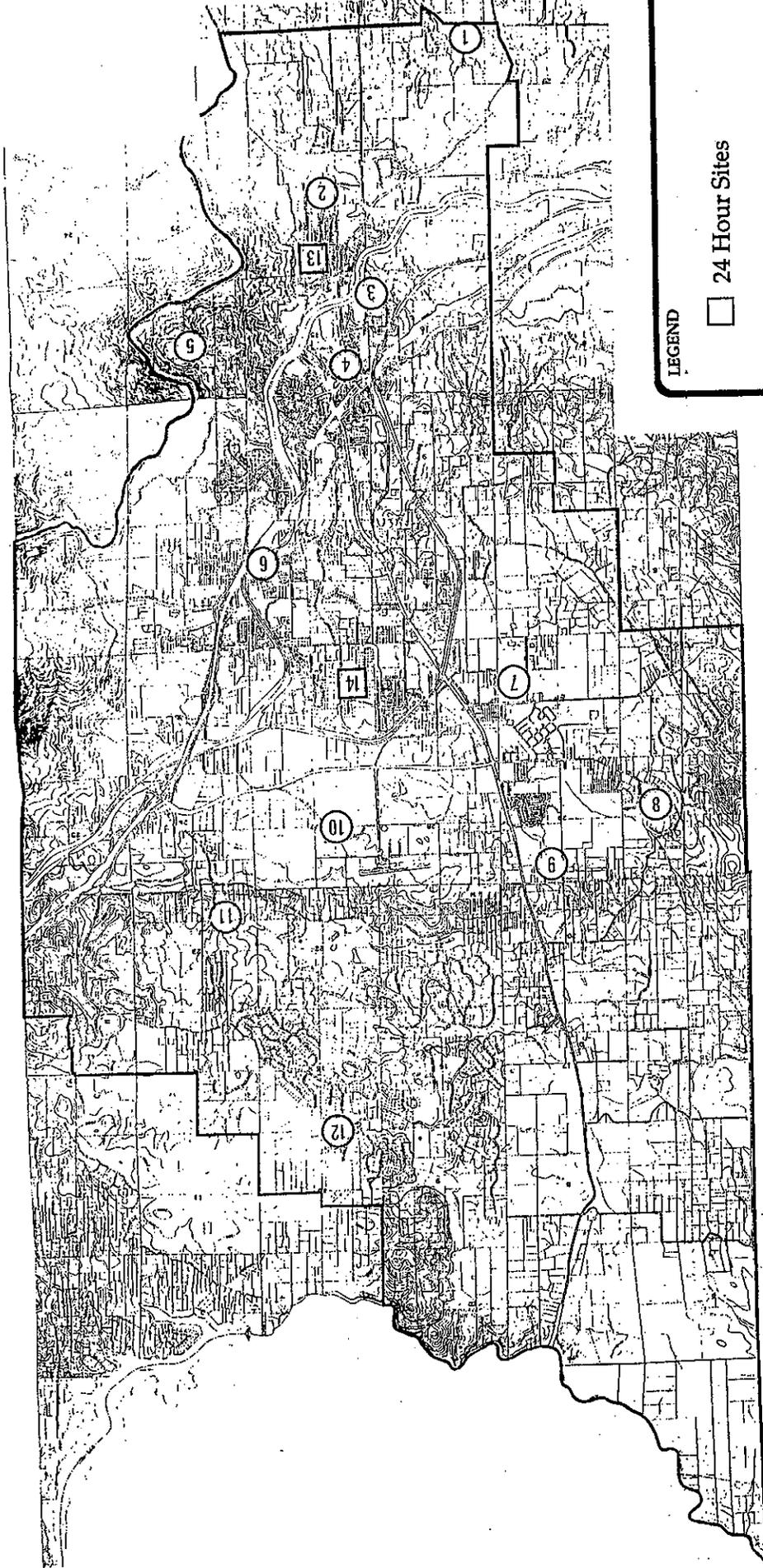
September 3, 1993

TABLE VIII-10
SUMMARY OF MEASURED NOISE LEVELS AND ESTIMATED
DAY-NIGHT AVERAGE LEVELS (L_{dn}) IN AREAS
CONTAINING NOISE SENSITIVE LAND USES

Site	Location	Date	Time	Sound Level, dB						Est. L _{dn}
				L ₉₀	L ₅₀	L ₁₀	L ₅	L _{max}		
9	Auburn District Regional Park	7-17-91	10:27	40	44	53	50.6	67	50	
		7-17-91	14:30	37	41	49	49.2	68		
		7-18-91	00:13	35	38	40	38.5	51		
10	Old Airport Road near Auburn Airport	7-17-91	10:57	40	44	51	51.7	68	52	
		7-17-91	15:00	42	44	51	48.8	65		
		7-17-91	23:58	40	41	43	43.5	56		
11	Squirrel Drive	7-17-91	11:27	44	48	54	51.5	66	49	
		7-17-91	15:30	36	42	49	45.4	60		
		7-17-91	23:47	36	37	39	37.5	49		
12	Ray Circle	7-17-91	12:03	29	33	39	36.2	48	43	
		7-17-91	16:00	32	34	44	46.2	63		
		7-17-91	23:00	28	30	32	32.1	38		
13	175 Smith Court	Continuous site - results are shown on Figure VIII-13						50		
14	1235 Oak Ridge Way	Continuous site - results are shown on Figure VIII-13						47		







LEGEND

□ 24 Hour Sites

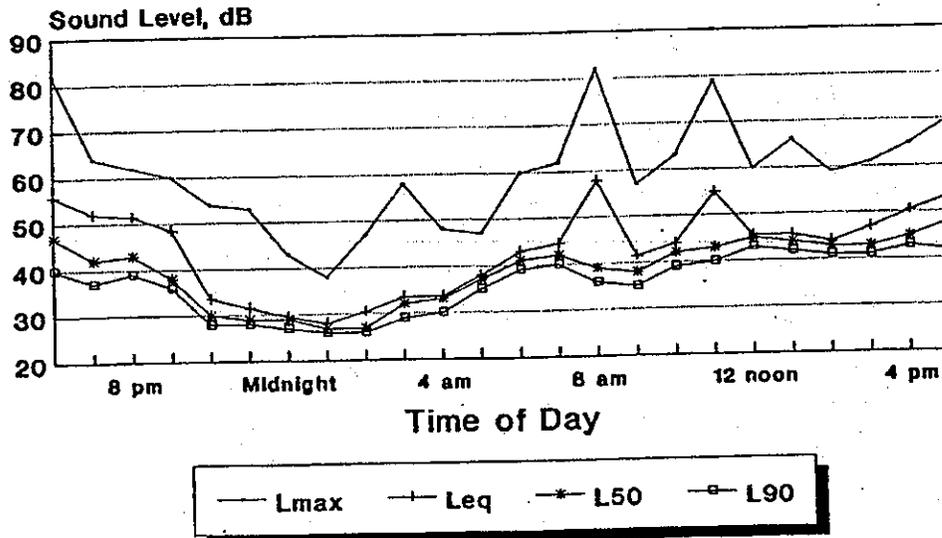
No Scale

CITY OF AUBURN GENERAL PLAN
 Community Noise Measurement Locations

Source: Brown-Buntin Associates, Inc.

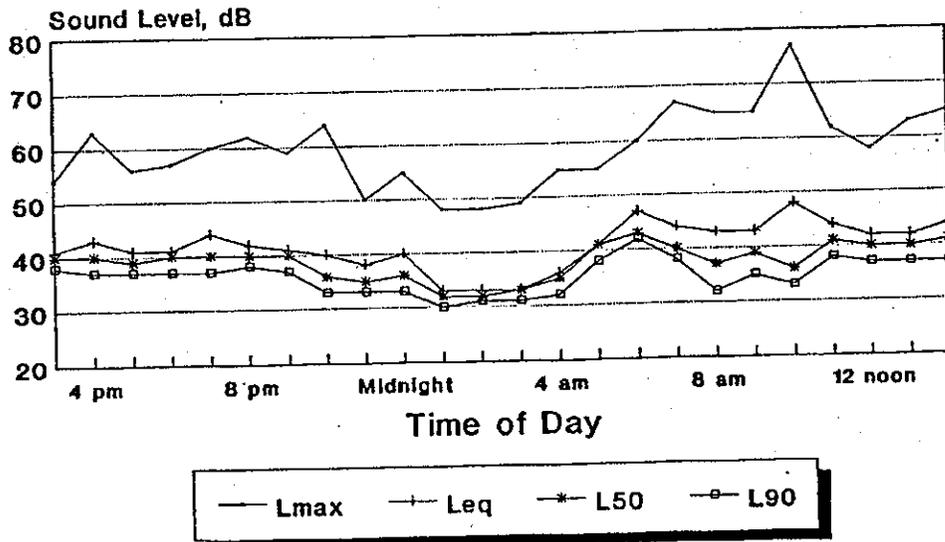
Planning • Engineering • Landscape Architecture
Harland Bartholomew & Associates, Inc.
 Sacramento, California

Measured Ambient Noise Levels Site 13: 175 Smith Court July 17-18, 1991



Ldn=50

Measured Ambient Noise Levels Site 14: 1235 Oak Ridge Road July 16-17, 1991



Ldn=47

Brown-Buntin Associates, Inc.

CITY OF AUBURN GENERAL PLAN

Measured Ambient Noise Levels

Harland Bartholomew & Associates, Inc.

FIGURE
VIII-13
Page VIII-49

7. Existing traffic volume, truck mix and day/night distribution should be obtained from the City of Auburn, Placer County Department of Public Works or Caltrans as appropriate. Projected future traffic volume may be obtained from those agencies or the project traffic consultant. Traffic speed shall be assumed to be the posted or projected design speed, unless shown otherwise by observation or noise measurements. Typical traffic data for the Community Plan area are shown by the FHWA Model input data listed in the Noise Element handbook.

Railroad Noise:

1. The preferred method of predicting railroad noise exposure is to calculate L_{dn} values at the proposed receiver locations based upon on-site single event and cumulative noise level measurements, assuming noise attenuation of 4.5 dB per doubling of distance for all receiver elevations. Alternative methods include the "Simplified Procedure for Developing Railroad Noise Exposure Contours," prepared by Jack W. Swing of the California Office of Noise Control, and the more detailed procedures prescribed in the Assessment of Noise Environments Around Railroad Operations, Wyle Research Report No. WCR 73-5. In the Community Plan area, variations in site topography, railroad grade and use of warning horns may require adjustments to the modeling assumptions. For this reason, on-site noise measurements and observations are preferred. The Noise Element handbook lists railroad noise measurement results in the Community Plan area.
2. Noise barrier insertion loss for railroad noise sources should be calculated using standard methods, such as those described by the FHWA Model or in Noise and Vibration Control, by Leo Beranek. Receiver locations for railroad noise exposures are the same as for traffic noise exposures. To account for differences in source heights and frequency content, it may be necessary to determine the relative contribution of different noise sources, such as wheel/rail interaction, locomotives or horns. For a generalized railroad noise source on smooth rails, the effective center frequency of the source may be assumed to be 1000 Hz with a source height of 10 feet above the rail bed. Other assumptions may be used as supported by published data or experimental results.
3. Day/night distribution of railroad freight operations may be assumed to be uniform over a 24-hour day, unless otherwise indicated by noise measurements or information from the railroad company. Passenger train operations should be distributed according to the published schedules. The numbers and distribution of freight operations may be obtained from the railroad company dispatcher. Refer to the Noise Element handbook for typical railroad operations in the Community Plan area.
4. Railroad noise measurements should include a representative number of single event noise levels from freight and passenger operations. Noise levels recorded over a 24-hour period are normally sufficient. The data collected should include the Sound Exposure Level (SEL) and maximum sound level (L_{max}) due to the



passage of the train, and a notation of whether a warning horn or whistle was used. The noise levels due to bells at rail crossings should also be described.

Aircraft Noise:

1. Noise produced by aircraft operations at an airport may be described by reference to published noise exposure contours for that airport. If the project site is within the 60 dB CNEL contour of an airport, predicted single event aircraft noise levels at the project site should be described. Predicted single event noise levels may be based upon noise measurements at the project site, or by using the FAA's Integrated Noise Model (INM). Aircraft noise levels should be expressed in terms of the Community Noise Equivalent Level (CNEL) and (where applicable) typical SEL and L_{max} values.
2. Noise produced by aircraft operations at other than an established airport should be described in terms of predicted Community Noise Equivalent Level (CNEL), SEL and L_{max} values. Predicted noise levels may be based upon noise measurements at the project site or other representative locations, or may be predicted using the FAA's Integrated Noise Model (INM). Helicopter noise level predictions may also be based upon the data reported in Helicopter Noise Exposure Curves for Use in Environmental Impact Assessment, FAA-EE-82-16.

Interior Noise Levels:

1. Interior noise levels should be calculated from the predicted exterior sound level and source spectrum at the affected building facades, and the sound transmission characteristics of the building facades. The calculation should account for the types and sizes of the building elements used in the facade, the amount of exposure of each facade to the noise source, and the cumulative noise exposure from each facade. If detailed building plans are not available, generalized building descriptions may be employed, subject to review when detailed plans are provided.
2. One-third octave or 1/1 octave band analysis is preferred, describing the source frequency content and facade transmission loss characteristics from 125 Hz to 4000 Hz. Corrections should also be made for absorption of sound by the receiving room. A safety factor of 3 dB is recommended to allow for potential degradation of acoustical performance from variables in construction and materials. Source spectra and transmission loss values should be obtained from published test results, if available.
3. If it is necessary to close windows and doors to achieve the required interior noise level standard, the analysis should indicate that adequate ventilation must be provided to meet the fresh air exchange requirements of the Uniform Building Code. Recommendations should also be made to ensure that the ventilation system does not compromise the acoustical integrity of the building facades, and that it does not create excessive interior noise levels due to its operation.



4. The report should cite the assumptions used for building elements and design features. Any building design features required to achieve the interior noise level standard should be clearly specified.

5. Description Of Noise

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers for many years have grappled with the problem of translating objective measurements of sound into directly correlatable measures of public reaction to noise. The descriptors of community noise in current use are the results of these efforts, and represent simplified, practical measurement tools to gauge community response. Before elaborating on these descriptors, it is useful to first discuss some fundamental concepts of sound.

Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, now called hertz (Hz) by international agreement.

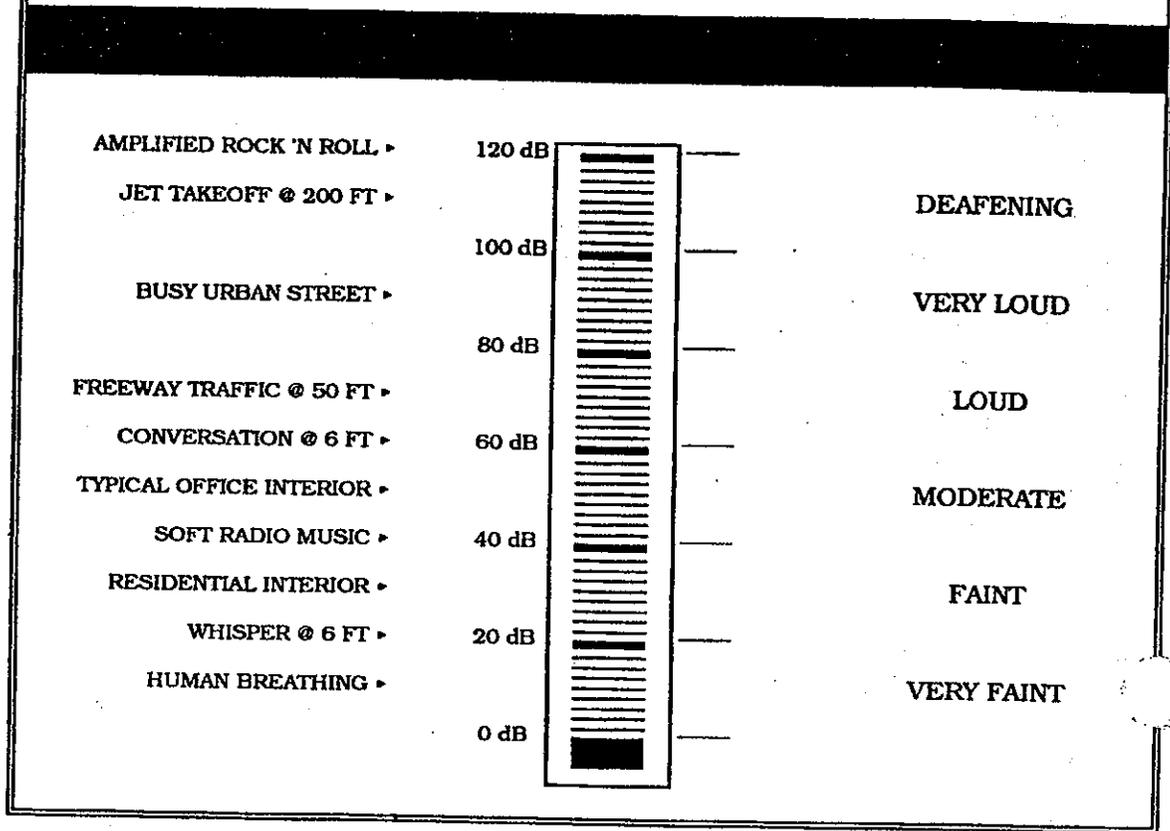
The speed of sound in air is approximately 770 miles per hour, or 1,130 feet/second. Knowing the speed and frequency of a sound, one may calculate its wavelength, the physical distance in air from one compression of the atmosphere to the next. An understanding of wavelength is useful in evaluating the effectiveness of physical noise control devices such as mufflers or barriers, which depend upon either absorbing or blocking sound waves to reduce sound levels.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold of 20 micropascals as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range.

The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level measurement device (called a sound level meter) by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as sound levels in dB) and community response to noise. For this reason, the A-weighted sound pressure level has

**FIGURE VIII-14
EXAMPLES OF SOUND LEVELS**



become the standard tool of environmental noise assessment. Figure VIII-14 illustrates typical sound levels and subjective reaction due to recognizable sources.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, and shows very good correlation with community response to noise.

Two composite noise descriptors are in common use today: L_{dn} (Day-night Average Level) and CNEL (Community Noise Equivalent Level). The L_{dn} is based upon the average hourly L_{eq} over a 24-hour day, with a +10 decibel weighting applied to nighttime (10:00 p.m. to 7:00 a.m.) L_{eq} values. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime



exposures. The CNEL, like L_{dn} , is based upon the weighted average hourly L_{eq} over a 24-hour day, except that an additional +4.77 decibel penalty is applied to evening (7:00 p.m. to 10:00 p.m.) hourly L_{eq} values. The CNEL was developed for the California Airport Noise Regulations, and is applied specifically to airport/aircraft noise assessment. The L_{dn} descriptor is a simplification of the CNEL concept, but the two will usually agree, for a given situation, within 1 dB. Like the L_{eq} , L_{dn} and CNEL are averages and tend to disguise short-term variations in the noise environment. Because they presume increased evening or nighttime sensitivity, they are best applied as criteria for land uses where nighttime noise exposures are critical to the acceptability of the noise environment, such as residential developments.

Noise in the community has often been cited as being a health problem, not in terms of actual physiological damage such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities such as sleep, speech, recreation, and tasks demanding concentration or coordination. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability of the environment for people decreases. This decrease in acceptability and the threat to public well-being are the bases for land use planning policies preventing exposure to excessive community noise levels.

To control noise from fixed sources which have developed from processes other than zoning or land use planning, many jurisdictions have adopted community noise control ordinances. Such ordinances are intended to abate noise nuisances and to control noise from existing sources. They may also be used as performance standards to judge the creation of a potential nuisance, or potential encroachment of sensitive uses upon noise-producing facilities. Community noise control ordinances are generally designed to resolve noise problems on a short-term basis (usually by means of hourly noise level criteria), rather than on the basis of 24-hour or annual cumulative noise exposures.

In addition to the sound level, other factors should be considered in establishing criteria for noise sensitive land uses. For example, sounds with noticeable tonal content such as whistles, horns, droning or high-pitched sounds may be more annoying than the A-weighted sound level alone suggests. Many noise standards apply a penalty, or correction, of 5 dB to such sounds. The effects of unusual tonal content are generally more of a concern at nighttime, when residents may notice the sound in contrast to low levels of background noise.

Because many rural residential areas experience very low noise levels, residents may express concern about the loss of "peace and quiet" due to the introduction of a sound which was not audible previously. In very quiet environments, the introduction of virtually any change in local activities will cause an increase in noise levels. A change in noise level and the loss of "peace and quiet" is the inevitable result of land use or activity changes in such areas. Audibility of a new noise source and/or increases in noise levels within recognized acceptable limits are not usually considered to be



significant noise impacts, but these concerns should be addressed and considered in the planning and environmental review processes.

6. Criteria for Acceptable Noise Exposures

The State Office of Planning and Research (OPR) Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The OPR guidelines contain a land use compatibility table which describes the compatibility of different land uses with a range of environmental noise levels in terms of L_{dn} or CNEL. A noise environment of 50 to 60 dB L_{dn} or CNEL is considered to be "normally acceptable" for residential uses according to those guidelines. The OPR recommendations also note that, under certain conditions, more restrictive standards than the maximum levels cited may be appropriate. As an example, the standards for quiet suburban and rural communities may be reduced by 5 to 10 dB to reflect lower existing outdoor noise levels.

The U.S. Environmental Protection Agency (EPA) also offers guidelines for community noise exposure in the publication "Information on the Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety". These guidelines consider occupational noise exposure as well as noise exposure in the home. The "Levels Document" recognizes an exterior noise level of 55 dB L_{dn} as a goal to protect the public from hearing loss, activity interference, sleep disturbance and annoyance. The EPA notes, however, that this level is not a regulatory goal, but is a level defined by a negotiated scientific consensus without concern for economic and technological feasibility or the needs and desires of any particular community. The EPA and other Federal agencies have adopted suggested land use compatibility guidelines which indicate that residential noise exposures of 55 to 65 dB L_{dn} are acceptable.

The U.S. Environmental Protection Agency has also prepared a Model Community Noise Control Ordinance, using L_{eq} as the means of defining allowable residential noise level limits. The EPA model contains no specific recommendations for local noise level standards, but reports a range of L_{eq} values as adopted by various local jurisdictions. The mean daytime residential noise standard reported by the EPA is 56.75 dB (L_{eq}); the mean nighttime residential noise standard is 51.76 dB (L_{eq}). This ordinance format has been applied by the City and County of San Diego.

7. Techniques for Noise Control

Any noise problem may be considered as being composed of three basic elements: the noise source, a transmission path, and a receiver. Local control of noise sources is practical only with respect to fixed sources (e.g., industrial facilities, outdoor activities, etc.), as control of vehicular sources is generally preempted by federal or state law. Control of fixed noise sources is usually best obtained by enforcement of a local noise

control ordinance. The emphasis of noise control in land use planning is therefore placed upon acoustical treatment of the transmission path and the receiving structures. The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. The problem should be defined in terms of appropriate criteria (L_{dn} , L_{eq} , or L_{max}), the location of the sensitive receiver (inside or outside), and when the problem occurs (daytime or nighttime). Noise control techniques should then be selected to provide an acceptable noise environment for the receiving property while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control techniques include the following:

a. Use of Setbacks

Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, storage yards, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally 4 to 6 dB per doubling of distance from the source.

b. Use of Barriers

Shielding by barriers can be obtained by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path length difference for a given increase in barrier height than does a location closer to either source or receiver.

For maximum effectiveness, barriers must be continuous and relatively airtight along their length and height. To ensure that sound transmission through the barrier is insignificant, barrier mass should be about 4 lbs./square foot, although a lesser mass may be acceptable if the barrier material provides sufficient transmission loss in the frequency range of concern. Satisfaction of the above criteria requires substantial and well-fitted barrier materials, placed to intercept line of sight to all significant noise sources. Earth, in the form of berms or the face of a depressed area, is also an effective barrier material.

Transparent noise barriers may be employed, and have the advantage of being aesthetically pleasing in some environments. Transparent barrier materials such as laminated glass and polycarbonate provide adequate transmission loss for most highway noise control applications. Transparent barrier materials may be flammable, and may



be easily abraded. Some materials may lose transparency upon extended exposure to sunlight. Maintaining aesthetic values requires that transparent barriers be washed on a regular basis. These properties of transparent barrier materials require that the feasibility of their use be considered on a case-by-case basis.

The attenuation provided by a barrier depends upon the frequency content of the source. Generally, higher frequencies are attenuated (reduced) more readily than lower frequencies. This results because a given barrier height is relatively large compared to the shorter wavelengths of high frequency sounds, while relatively small compared to the longer wavelengths of the low frequency sounds. The effective center frequency for traffic noise is usually considered to be 550 Hz. Railroad engines, cars and horns emit noise with differing frequency content, so the effectiveness of a barrier will vary for each of these sources. Frequency analyses are necessary to properly calculate barrier effectiveness for noise from sources other than highway traffic.

There are practical limits to the noise reduction provided by barriers. For highway traffic noise, a 5 to 10 dB noise reduction may often be reasonably attained. A 15 dB noise reduction is sometimes possible, but a 20 dB noise reduction is extremely difficult to achieve. Barriers usually are provided in the form of walls, berms, or berm/wall combinations. The use of an earth berm in lieu of a solid wall will provide up to 3 dB additional attenuation over that attained by a solid wall alone, due to the absorption provided by the earth. Berm/wall combinations offer slightly better acoustical performance than solid walls, and are often preferred for aesthetic reasons.

Another form of barrier is the use of a depressed noise source location, such as depressed loading areas in shopping centers or depressed roadways. The walls of the depression serve to break line-of-sight between the source and receiver, and will provide absorption if left in earth or vegetative cover.

c. Site Design

Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by reflections. The use of one building to shield another can significantly reduce overall project noise control costs, particularly if the shielding structure is insensitive to noise. As an example, carports or garages can be used to form or complement a barrier shielding adjacent dwellings or an outdoor activity area. Similarly, one residential unit can be placed to shield another so that noise reduction measures are needed for only the building closest to the noise source. Placement of outdoor activity areas within the shielded portion of a building complex, such as a central courtyard, can be an effective method of providing a quiet retreat in an otherwise noisy environment. Patios or balconies should be placed on the side of a building opposite the noise source, and "wing walls" can be added to buildings or patios to help shield sensitive uses.

Where project design does not allow using buildings or other land uses to shield sensitive uses, noise control costs can be reduced by orienting buildings with the narrow end facing the noise source, reducing the total area of the building requiring acoustical

treatment. Some examples of building orientation to reduce noise impacts are shown in Figure VIII-15.

Another option in site design is the placement of relatively insensitive land uses, such as commercial or storage areas, between the noise source and a more sensitive portion of the project. Examples include development of a commercial strip along a busy arterial to block noise affecting a residential area, or providing recreational vehicle storage or travel trailer parking along the noise-impacted edge of a mobile home park. If existing topography or development adjacent to the project site provides some shielding, as in the case of an existing berm, knoll or building, sensitive structures or activity areas may be placed behind those features to reduce noise control costs (see Figure VIII-16).

Site design should also guard against the creation of reflecting surfaces which may increase on-site noise levels. For example, two buildings placed at an angle facing a noise source may cause noise levels within that angle to increase by up to 3 dB. The open end of "U"-shaped buildings should point away from noise sources for the same reason. Landscaping walls or noise barriers located within a development may inadvertently reflect noise back to a noise-sensitive area unless carefully located. Avoidance of these problems while attaining an aesthetic site design requires close coordination between local agencies, the project engineer and architect, and the noise consultant.

Another important aspect of site design is avoiding the creation of noise problems at adjacent noise-sensitive properties. For example, air conditioning units should not be placed adjacent to living areas of adjoining residences unless adequate shielding is provided. Swimming pools and outdoor activity areas such as "tot lots" should be located away from adjoining residences, or should be adequately shielded.

d. Building Design

When structures have been located to provide maximum noise reduction by barriers or site design, noise reduction measures may still be required to achieve an acceptable interior noise environment. The cost of such measures may be reduced by placement of interior dwelling unit features. For example, bedrooms, living rooms, family rooms and other noise-sensitive portions of a dwelling can be located on the side of the unit farthest from the noise source, as shown by Figure VIII-17.

Bathrooms, closets, stairwells and food preparation areas are relatively insensitive to exterior noise sources, and can be placed on the noisy side of a unit. When such techniques are employed, noise reduction requirements for the building facade can be significantly reduced, although the architect must take care to isolate the noise impacted areas by the use of partitions or doors.

In some cases, external building facades can influence reflected noise levels affecting adjacent buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an "urban canyon" may be created.

Bell-shaped or irregular building facades and attention to the orientation of the building can reduce this effect.

e. Noise Reduction by Building Facades

When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades. Standard residential construction practices provide 12-15 dB noise reduction for building facades with open windows, and 20-25 dB noise reduction when windows are closed. Thus a 20 dB exterior-to-interior noise reduction can be obtained by the requirement that building facade include adequate ventilation systems, allowing windows on a noise-impacted facade to remain closed under any weather condition.

Where greater noise reduction is required, acoustical treatment of the building facade is necessary. Reduction of relative window area is the most effective control technique, followed by providing acoustical glazing (thicker glass or increased air space between panes) in low air infiltration rate frames, use of fixed (non-movable) acoustical glazing or the elimination of windows. Noise transmitted through walls can be reduced by increasing wall mass (using stucco or brick in lieu of wood siding), isolating wall members by the use of double- or staggered- stud walls, or mounting interior walls on resilient channels. Noise control for exterior doorways is provided by reducing door area, using solid-core doors, and by acoustically sealing door perimeters with suitable gaskets. Roof treatments may include the use of plywood sheathing under roofing materials.

Standard energy-conservation double-pane glazing with an 1/8" or 1/4" air-space is not considered acoustical glazing, as its sound transmission loss for some noise source is actually less than that of single-pane glazing.



FIGURE VIII-15

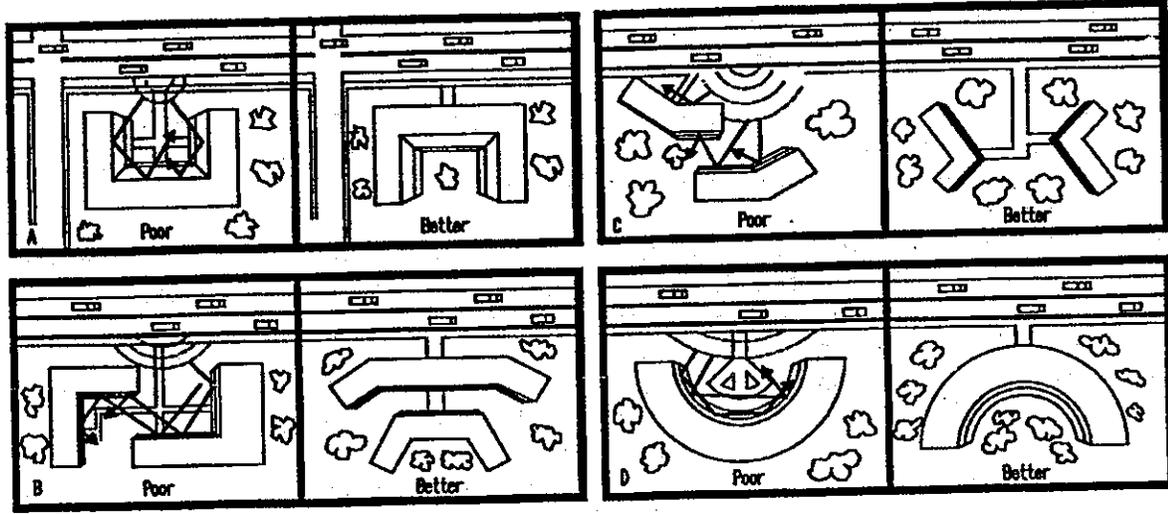
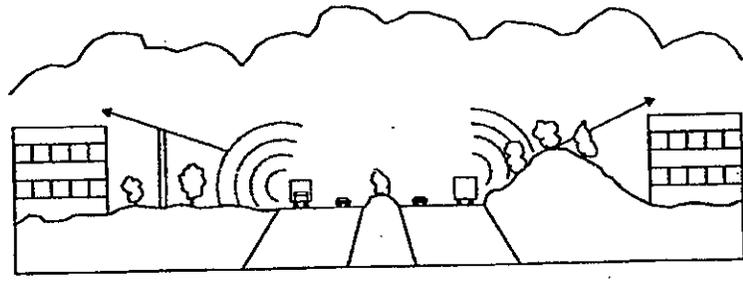


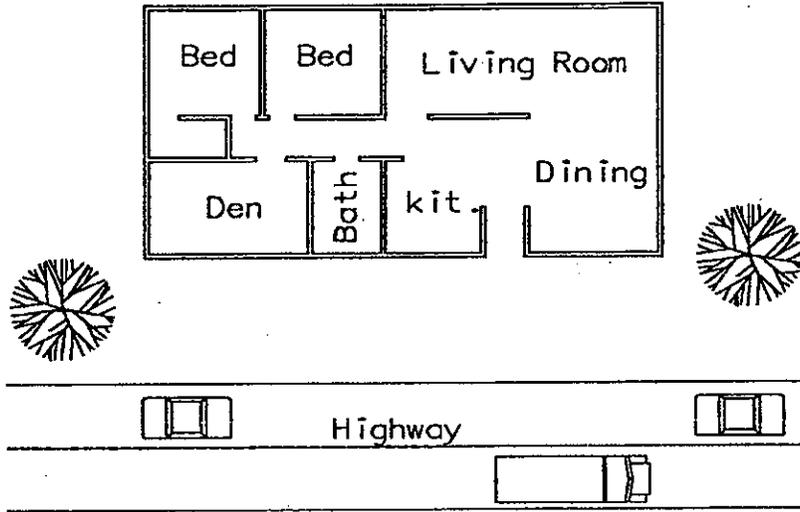
FIGURE VIII-16



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FIGURE VIII-17



Whichever noise control techniques are employed, it is essential that attention be given to installation of weatherstripping and caulking of joints. Openings for attic or subfloor ventilation may also require acoustical treatment; tight-fitting fireplace dampers and glass doors may be needed in aircraft noise-impacted areas.

Design of acoustical treatment for building facades should be based upon analysis of the level and frequency content of the noise source. The transmission loss of each building component should be defined, and the composite noise reduction for the complete facade calculated, accounting for absorption in the receiving room. A one-third octave band analysis is a definitive method of calculating the A-weighted noise reduction of a facade.

A common measure of transmission loss is the Sound Transmission Class (STC). STC ratings are not directly comparable to A-weighted noise reduction, and must be corrected for the spectral content of the noise source. Requirements for transmission loss analyses are outlined by Title 24 of the California Code of Regulations.

f. Use of Vegetation

Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 100 feet of dense foliage (so that no visual path extends through the foliage) is required to achieve a 5 dB attenuation of traffic noise. Thus the use of vegetation as a noise barrier should not be considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.

Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected. It should be noted, however, that trees planted on the top of a noise control berm can actually slightly degrade the acoustical performance of the barrier. This effect can occur when high frequency sounds are diffracted (bent) by foliage and directed downward over a barrier.

In summary, the effects of vegetation upon noise transmission are minor, and are primarily limited to increased absorption of high frequency sounds and to reducing adverse public reaction to the noise by providing aesthetic benefits.

g. Sound Absorbing Materials

Absorptive materials such as fiberglass, foam, cloth and acoustical tiles or panels are used to reduce reflections or reverberation in closed spaces. Their use in exterior environmental noise control may reduce reflections between parallel noise barriers or other reflective surfaces. Maintenance of absorptive materials used outdoors may be difficult, as most such materials are easily damaged by sunlight and moisture. Their application as an outdoor noise control tool is limited to special cases where the control of reflected noise is critical and where the material is sufficiently durable.

8. Implementation Measures

To provide a comprehensive approach to noise control which supports the goal and policies of the Noise Element, the City shall:

- A. Develop and utilize procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the project review and building permit processes.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

- B. Develop and utilize procedures to monitor compliance with the standards of the Noise Element after completion of projects where noise mitigation measures were required.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: 1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

- C. Enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC).

Responsibility: Community Development, Building
Time Frame: Immediate and ongoing
Related Policy: 1.2, 2.3, 2.4, 2.5, 2.6

- D. Actively enforce the California Vehicle Code sections relating to adequate vehicle mufflers and modified exhaust systems.

Responsibility: Community Development, Police
Time Frame: Immediate and ongoing
Related Policy: General Plan Guidelines

- E. Purchase only new equipment and vehicles which comply with noise level performance standards based upon the best available noise reduction technology.

Responsibility: Community Development, Police, Fire, City Manager, Public Works
Time Frame: Immediate and ongoing
Related Policy: General Plan Guidelines



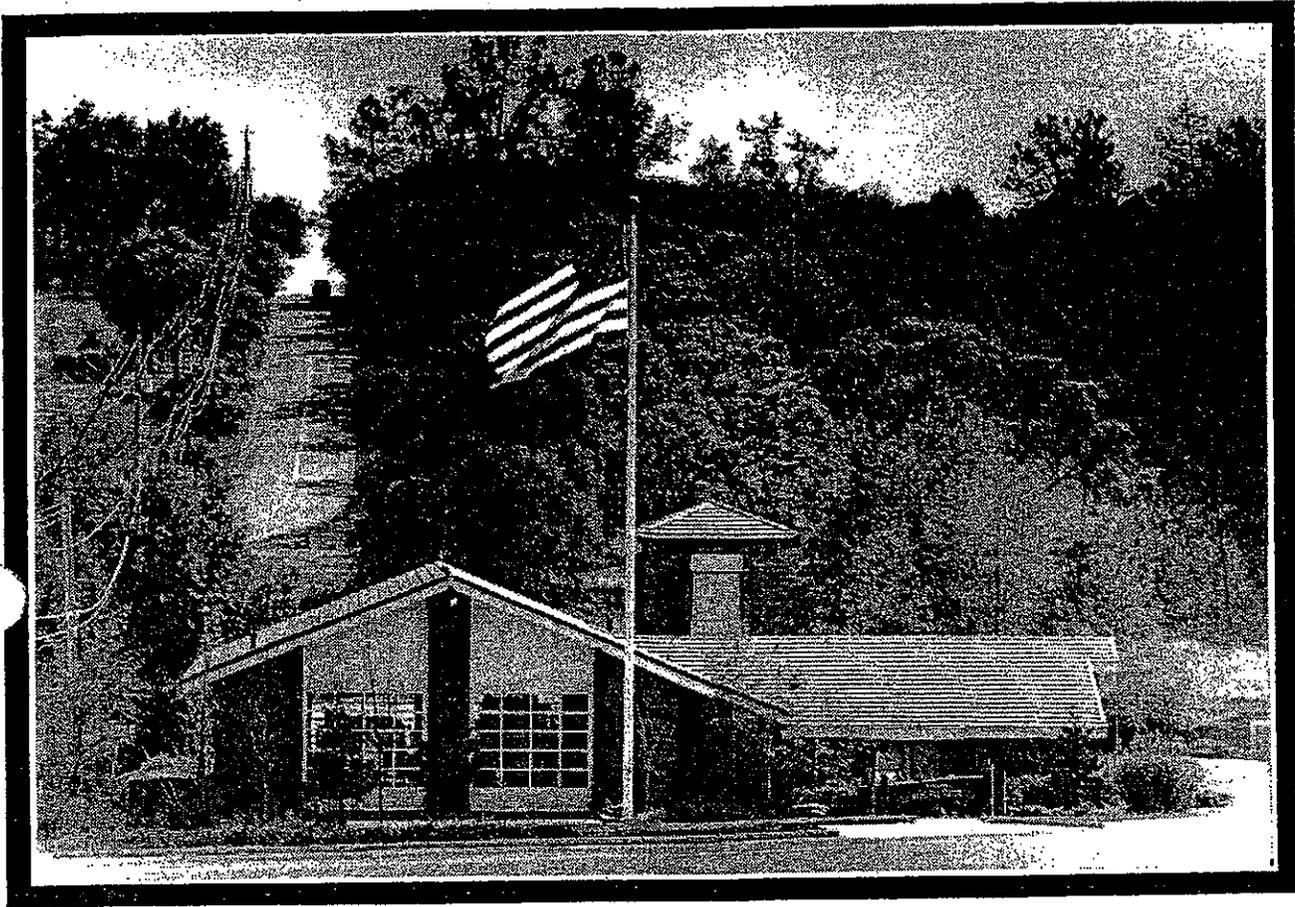
F. Periodically review and update the Noise Element to ensure that noise exposure information and specific policies are consistent with changing conditions within the community and with noise control regulations or policies enacted after the adoption of this Element.

Responsibility: Community Development
Time Frame: Immediate and ongoing
Related Policy: General Plan Guidelines



IX

SAFETY ELEMENT



Matdu Fire Station

1. Introduction

The Safety Element presents a plan for minimizing the hazards to public health and safety in the City of Auburn and its environs. It identifies natural and man-made hazards that affect existing and future development, and provides guidelines for protecting residents from injury and death. It describes present conditions, and sets policies and standards for improved public safety. It seeks to minimize physical harm, as well as economic and social disruptions. The goals and objectives of the Safety Element reflect Auburn's regard for the health and safety of its residents. The element

addresses issues which the community believes would require government intervention in order to effectively achieve public safety. The purposes and goals of the other elements are also related to the goals of the Safety Element. Together, they will serve as a guide for decision making by public and private investors and for the future expenditure of public funds.

Natural and man-made disasters result in losses of life and property, economic and social setbacks, and the destruction of the environment. Local governments are charged with the responsibility of protecting their residents from danger and harm. The Safety Element is intended to guide development by reducing the levels of risk posed by natural and man-made hazards within the city and its planning area.

Some degree of risk is inevitable since natural disasters cannot be predicted with certainty, and because the knowledge and technology to control man-made risks is constantly evolving. Since the total elimination of risk is not possible, public safety is relative to the degree of risk that people find tolerable. The value of life and property becomes a yardstick for tolerance and the need for governmental action.

Specifically, the Safety Element serves the following purposes:

1. As one of the state-mandated elements, it fulfills the requirements of the State Planning and Zoning Law and the regulations in Section 65302(g) of the Government Code of the State of California.
2. The identification, mapping, and appraisal of seismic hazards which would be of concern, including areas subject to liquefaction, groundshaking, surface rupture, or seismic sea waves [Section 65302(f)].
3. An appraisal of mudslides, landslides, and slope stability which might occur as a result of a seismic disturbance [Section 65302(i)].
4. The identification of the potential for fires and other natural and man-made disasters and measures designed to reduce the loss of life, injury, and damage to property [Section 65302(i)].

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Citizen Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

Goal 1: Protect the citizens and visitors of the Auburn area from loss of life while protecting property and watershed resources from unwanted fires through preplanning, education, fire defense improvements, and fire suppression.



- Policy 1.1** Encourage future development in areas of Auburn that have been identified as suitable for development and in those areas identified as having the least fire risk.
- 1.2 Insure that all proposed developments are reviewed for fire safety standards by local agencies responsible for fire protection, including providing adequate water supplies and ingress and egress.
- 1.3 Maintain strict enforcement of the Uniform Building Code and the Uniform Fire Code.
- 1.4 Encourage continued use of education programs in schools, service clubs, and industry by fire protection agencies to foster public awareness of local fire hazards.
- 1.5 Encourage and promote installation of smoke detectors in existing residences which were constructed prior to requirements for their installation.

Goal 2: Protect the lives and property of the citizens of the Auburn area from unacceptable risk resulting from flood hazards.

- Policy 2.1** Encourage future development in areas identified as having low risk of flooding.
- 2.2 Prohibit development within 100-year floodplain of all streams.
- 2.3 Continue to implement regulatory policies which minimize potential loss of property and threat to human life caused by flooding.

Goal 3: Minimize hazards to public health, safety, and welfare resulting from natural and man-made hazards.

- Policy 3.1** All development shall incorporate measures to reduce natural and man-made hazards.
- 3.2 Continue to encourage and support the enforcement of state and federal environmental and pollution control laws by assisting state and federal agencies in the control of hazardous wastes, landfills, air pollution, and other issues.
- 3.3 Participate in the development of any local or regional emergency response plans.
- 3.4 Ensure that public and private water distribution and supply facilities have adequate capacity to supply both daily and emergency fire-flow needs.
- 3.5 Ensure compatible development in both man-made and natural high-hazard areas (e.g., aircraft safety zones, active fault zones).



slide-prone hillsides) and prohibit development of critical facilities such as police, fire and health facilities in these areas.

- 3.6 Prior to approval of development in high hazard areas, require the design of mitigation measures to the satisfaction of the City Engineer, Community Development Department, and Police and Fire Departments.

Goal 4: Protect all residents from hazardous materials and the hazards associated with transport of such materials.

Policy 4.1 Continue to support and encourage state efforts to identify existing or previously existing hazardous waste generators or disposal sites and monitor disposal of all wastes and contamination of these sites.

4.2 Require all businesses located in the City of Auburn to maintain Fire Department permits and to file a list of the chemicals which they use with the Fire Department and City Engineer and to identify the areas where chemicals are used or stored so that, should an emergency arise, emergency personnel will be able to respond appropriately.

4.3 The City shall meet or exceed State requirements for the recycling of solid wastes to minimize the demand on landfill sites.

4.4 Cooperate with regional agencies to develop reduced-risk routing for hazardous waste along transportation corridors.

4.5 Promote efforts to reach zero hazardous waste generation within the City of Auburn.

Goal 5: Maintain and enhance City emergency services.

Policy 5.1 Ensure there is no reduction in effectiveness of emergency services as a result of growth or the implementation of the General Plan.

5.2 Support the continued active enforcement of building and fire codes.

5.3 Support the development and continued updating of public education programs on health and safety.

5.4 All new construction shall conform to the requirements for visible and clearly legible signs and street numbers to shorten the response time of emergency personnel.

5.5 Encourage the formation and continued education of neighborhood watch groups to assist the police in crime prevention and detection.

5.6 Encourage neighborhood surveillance.

5.7 Open space areas shall be accessible to emergency vehicles.



- 5.8 Encourage "fire drills" for neighborhood areas; particularly those in the extreme fire hazard areas (Figure IX-1).

3. Existing Conditions

This section of the Safety Element is concerned with natural and man-made hazards that affect the City of Auburn planning area and the impacts that they could have on life in the City. It focuses on fire hazards, seismic hazards, flood-related hazards, geologic hazards associated with the slope and soil stability failure, the risk of aircraft accidents at Auburn Municipal Airport, hazardous materials, and crime. Certain key issues were identified early in the planning process by city staff, residents, and members of the Auburn General Plan Citizens Advisory Committee. In addition, there are statewide and regional safety issues which affect the city.

This section documents existing conditions in the planning area and provides the background analysis that led to the goals and policies contained in the previous section.

Threats to public health and safety are posed by natural and man-made conditions. Natural hazards result from characteristics of the environment. They are difficult to control or eliminate and are best avoided in order to reduce their danger and potential for damage. Human action may magnify the potential impact of natural hazards, but the disaster is primarily dependent on environmental conditions, such as the presence of earthquake faults, floodplains, and steep slopes. Man-made hazards stem from human activity. They happen as a result of specific practices and actions of man which may create a potential for fire, aircraft accidents, hazardous materials contamination, and crime. To eliminate a man-made hazard, the complete suspension of particular activities is sometimes necessary. This is difficult when economic forces are at play or when the activity supports a host of other economic activities.

In the Auburn area, the major natural hazards are wildfire hazards, seismic activity, flood, and geologic conditions. Aside from these, urban fires, aircraft accidents, hazardous materials contamination, accidents on Interstate 80, Highway 49, and railroads, and crime hazards are present due to ongoing human activities.

FIRE HAZARDS

Wildfires occur on mountains, hillsides, and grasslands and they spread in relation to the area's vegetation, climate, and slope. In the planning area, native vegetation, such as chaparral, sage, and grassland provide the fuel that allows fire to spread easily across large tracts of land. These plant species are capable of regeneration after a fire, making periodic wildfires a natural part of the ecology of these areas. The climate of the Auburn region keeps the grass dry and readily combustible. Steep slopes bring grass and brush within reach of upward flames while impeding the access of fire-fighting equipment. Seasonal drought conditions exacerbate fire hazards.

Figure IX-1 shows the fire hazard ratings within the study area. Due to the rugged terrain, highly flammable timber and brush covered lands, and dry summers, most of the land is designated either extreme or high hazard. The fire season in the Auburn plan area typically occurs roughly from June to November. If rains are minimal, grass is dry as early as May and brush as early as July. From December to April, in the rainy season, wildfires rarely occur.

Wildfire may be started by a variety of things: carelessly used matches, cigarettes discarded in the brush, the lack of spark arresters in off-road vehicles, and target shooting ricochets. In turn, fire fighters are hampered by motorists who do not yield to fire vehicles or who do not know how to provide clear passage in emergencies, as well as the steep terrain in areas where wildfires typically occur.

Fire protection in the plan area is provided by the City of Auburn, the California Department of Forestry, and the Consolidated Fire District and Newcastle Fire Districts. The City of Auburn has an agreement with the Consolidated Fire District to provide services for both structural and wildland fires within its boundary. Structural and wildland fire protection outside the city limits are provided by the individual fire districts or by the California Department of Forestry.

The Auburn Fire Department has four stations currently in operation:

1. Martin Park Station
485 High Street and El Dorado
2. Gietzen Station
226 Sacramento Street
3. Maidu Station
901 Auburn Folsom Road and Maidu Drive
4. Airport/Industrial Station
New Airport Road and Earhart Avenue

The City is evaluating the addition of new fire stations; four sites under consideration are:

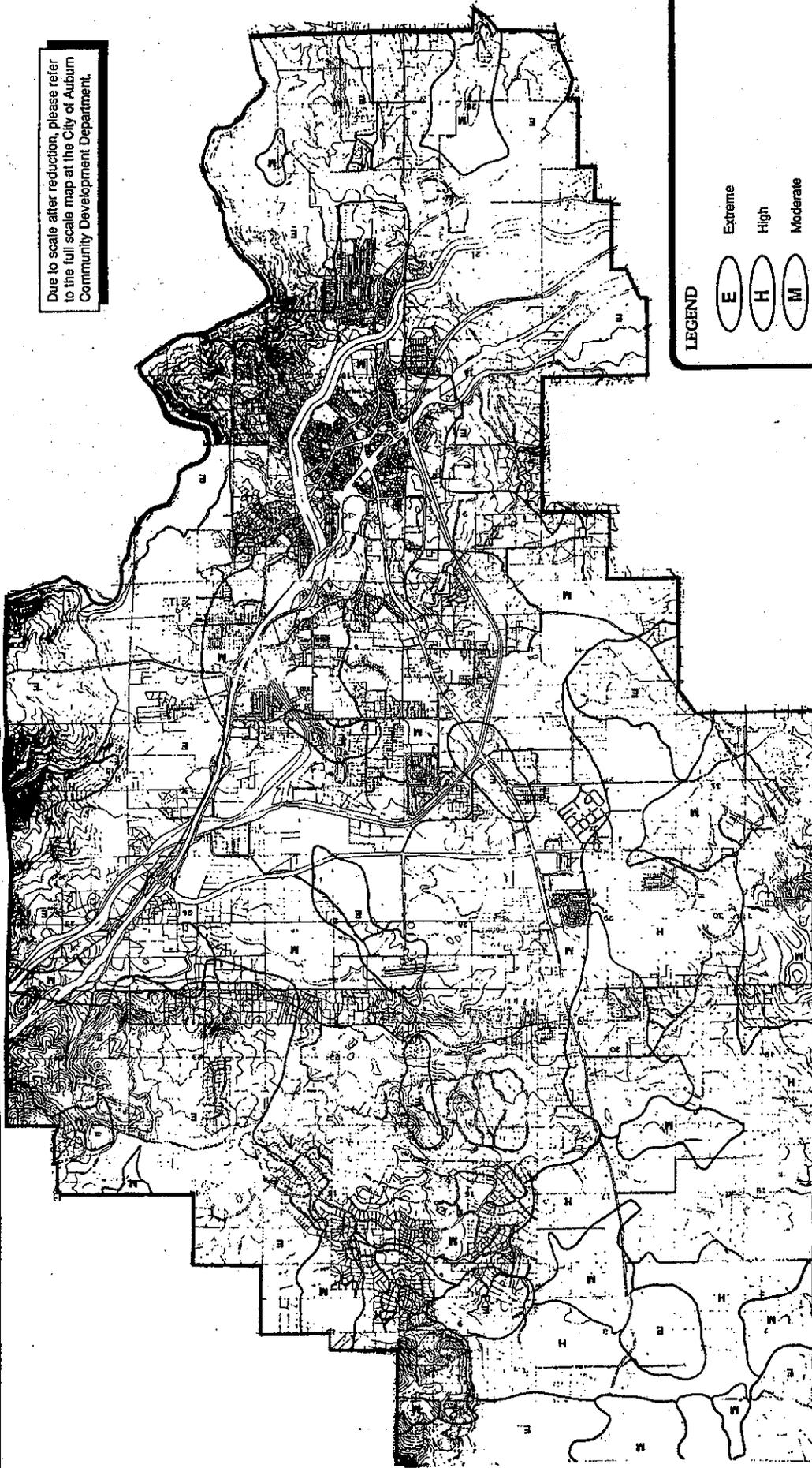
1. Palm Avenue/Nevada Street area
2. Bowman area near Foresthill Road and I-80
3. Bowman Road north of Luther on the west side of I-80
4. Department of Forestry Station

Urban Fires

Urban fires occur in built-up environments, destroying buildings and other man-made structures. These disasters are often due to faulty wiring or mechanical equipment, combustible construction materials, or the absence of fire alarms and sprinkler systems.



Due to scale after reduction, please refer to the full scale map at the City of Auburn Community Development Department.



LEGEND

-  Extreme
-  High
-  Moderate

Source: Placer County Resource Conservation District



Planning • Engineering • Landscape Architecture
Harland Bartholomew & Associates, Inc
Sacramento, California

CITY OF AUBURN GENERAL PLAN

Fire Hazard Rating



1 : 38,400

FIGURE IX-1
Page D-7

Human accidents with appliances and equipment, and the careless use of cigarettes and matches also cause urban fires. Older buildings are considered more likely to have fires since they often do not comply with present standards for fire safety construction. To minimize fire damage and loss, the fire department sets standards for building and construction. It requires the provision of adequate water supply for fire fighting, fire retardant construction, and minimum street widths, among other things. Fire prevention awareness programs and fire drills are conducted to train residents to respond quickly and correctly in order to reduce injury and losses during fires.

In the planning area, fires have been largely due to human accidents. Fire hazards are continuously present in the form of older buildings in the city center, although there are no pockets of high density development to compound the danger.

SEISMIC HAZARDS

A major earthquake is likely to occur in Northern California sometime during the next 30 years. Such an earthquake is expected to cause the loss of life, injury, and property damage at a scale unprecedented in this nation's history. While it is impossible to prevent an earthquake from occurring, research is continuing to develop ways of predicting earthquakes. Still, it will be many years before a program which accurately and reliably predicts earthquakes can be implemented.

Principal faults that could produce damaging earthquakes in the Auburn area are the San Andreas, Bear Mountain, Melones, Hayward and Cleveland Hills faults. The San Andreas Fault is the boundary where the North American plate and the Pacific plate meet. Pressure along this boundary causes earthquakes.

The San Andreas Fault in San Francisco and the Hayward Fault in the east bay area are 100 and 94 miles, respectively, from Auburn. Maximum credible earthquakes along these faults projected at magnitude 8.25 for the San Andreas and 7.5 for the Hayward, would produce barely perceptible shock and bedrock acceleration at Auburn (less than 0.05 g). The closest identified "potentially active" faults (where movement has occurred within the past two million years), are the Bear Mountain Fault and the Melones Faults, which are situated approximately three to four miles westerly and easterly from Auburn respectively. The closest identified "active" fault (where movement has occurred within the past 11,000 years), is the Cleveland Hills Fault, situated approximately 36 miles northwesterly of Auburn. Most recently, the Cleveland Hills fault was the source of the 1975 Oroville earthquake (Richter Magnitude: 5.7).

Active faults located between 50 and 100 miles from Auburn include the Mohawk Valley Fault, the Stampede Valley Fault, and the Fort Sage Fault; all located northeast of Auburn. Given the relationship to these various active faults, there is a high potential that the area will be subject to at least moderate earthquake shaking one or more times over the next century.



In general, the City of Auburn and the planning area are located in a seismically active region (Seismic Zone 3). The Uniform Building Code states that structures shall be designed to withstand seismic events as well as windstorm velocities. The dominant seismic feature affecting the city is the Cleveland Hills Fault which is 36 miles northwest of the planning area. This fault is considered one of the most active in the area in terms of destructive potential.

In addition, there are a number of fault traces that branch off from the primary fault. Movement on the San Andreas Fault may activate one or all of the subsidiary faults.

The amount of groundshaking at a site is expressed in terms of the acceleration of gravity. Ground acceleration is the rate of increase of speed of the ground, where each change in rate acts as a force on a structure. Thus, the greater the acceleration, the greater the force acting on a building site. Table IX-1 shows the historic activity of the San Andreas Fault, which includes richter scale measurement and modified Mercalli intensity scale (MMSI) measurement (see the Technical Appendices for a full description of the MMSI).

Placer County is traversed by a series of northwest-trending faults that are related to the Sierra Nevada uplift. Although seismic activity is a potential hazard, no active faults are known within Placer County (for details, refer to "Earthquake History of Placer County," Livingston, 1979, prepared for Placer County Planning Department).

Aside from groundshaking and ground surface rupture, earthquake hazards include the fissuring or cracking of bedrock, landslides, liquefaction, intense ground breakage, and ground settlement. Structures most likely to be affected are those that are old or on earthquake faults. Dams along earthquake faults may be subject to failure and cause flooding of the surrounding area. Critical damage may also occur to structures that provide emergency services (hospitals, fire stations, schools, emergency shelters). Roads and utility lines for water, gas, power, telephone, sewer, and storm drainage may be disjointed and services cut off. These structures require special attention in the public safety programs of the city.

In case of a major earthquake in the region, damage to the following structures could occur:

1. **Interstate Highway 80:** There are a number of overpasses on Interstate 80 that could possibly be threatened in the event of a severe earthquake, greater than those previously experienced. Under such a scenario the County would be virtually cut in half between the eastern and western portions. Similar conditions have resulted from past winter storms requiring limited emergency measures.
2. **Train Derailments:** Southern Pacific Railroad tracks run adjacent to Interstate 80. Passenger trains run between Sacramento and Reno through the I-80 Corridor. A derailment in the higher elevations would pose logistics problems involved in freeing passengers caught in snowsheds



**TABLE IX-1
SAN ANDREAS FAULT ACTIVITY**

Date	Magnitude	Maximum Intensity¹
1838	7.0	X - Comparable to 1906 earthquake
1857	7.9	IX+ - Buildings and large trees thrown down
1858	6.5	IX+ - Damage to building frames and foundations
1868	7.0	IX+ - Many buildings wrecked badly damaged. 30 killed.
1890	N/A	
1899	6.7	VIII - Brick buildings badly damaged. 6 killed.
1901	6.0+	
1906	8.3	XI - Great earthquake and fire. 700 killed. Greatest damage on poorly filled land 6.5 meter horizontal slip.
1916	6.0+	
1922	6.5	IX - Damage to masonry buildings and reservoir. Ground cracking.
1934	6.0	VIII - \$41 million damage. 120 killed.
1966	5.5	
1977	3.0	
1978	2.2	
1989 ²	7.1	VIII - Freeway and bridge collapse. 42 killed.

¹ Modified Mercalli Intensity Scale

² Subsidiary fault of the San Andreas Fault.

SOURCE: Department of Mines and Geology, Fault Map of California and Earthquake Hazards.

especially during winter months. A derailment resulting from an earthquake could also cause a hazardous materials release.

3. **Telephone Communications:** Telephone communications could be adversely affected due to overloading resulting from post-earthquake calls within the area and from outside, and many instruments could be off their hooks. The situation could be further complicated by physical damage to equipment due to ground shaking, loss of services due to loss of electrical power, and subsequent failure of some auxiliary power sources.



4. **Water Supplies:** The open canals operated by Placer County Water Agency could rupture during a large earthquake. It is anticipated that these canals, of which some are elevated and over 100 years old, would be susceptible to failure under sufficient stress that a large earthquake could produce.
5. **Natural Gas and Propane:** The City relies on natural gas for fuel, with some properties dependent on individual propane tanks. Earthquake damage could cause natural gas line breaks, disruption of service and damage to propane tanks by knocking them off their foundations, posing potential fire hazard.

Ground Motion

The technical analysis of earthquakes to be expected from faults affecting the study area has defined these events in terms of a magnitude and recurrence interval. The level of risk associated with each event is indicated by the recurrence interval in much the same manner as the risk from other natural hazards, such as flooding, is defined by a recurrence interval. For example, it is common practice to design flood-prevention projects to accommodate the flows from a 100-year storm. Where a higher level of protection is desired, the design levels are increased to accommodate the flows from storms occurring at 300- to 500-year intervals.

The choice of a particular earthquake, for which protection is to be provided, involves a determination of acceptable risk. In general, the risk of occurrence decreases as the magnitude of the potential earthquake increases. Since the cost of providing protection increases as the magnitude of the "design earthquake" is increased, there is a point at which the cost of providing protection becomes prohibitive. Design for the 100-year event should be considered minimum; where a high level of protection is desired, such as for hospitals, design levels should be increased to protect against earthquakes with longer recurrence intervals.

FLOOD HAZARDS

Historically, precipitation has been moderate to occasionally heavy, but snowfall is very light in the Auburn area. The drought situation which has extended over the past five years has resulted in a significant decrease from the mean precipitation figures of previous years. The average annual rainfall totals 35 inches, but there is considerable variability from year to year. In a ten-year period, on the average, the driest year has less than 24 inches of precipitation while the wettest will receive 48 inches. Winter is the rainy season with 89 percent of the annual total precipitation falling in the six months from November through April.

Although no major flooding is expected in the planning area, intermittent flooding and sheetwash occur along major drainage channels and adjoining areas on scattered sites. Areas with flood hazards are the natural drainage channels of the Auburn Ravine, Dutch



Ravine and Rock Creek and the tunnel section of the Auburn Ravine under Old Town. Flat plains and natural depressions are also subject to possible flooding (as was noticeable in the Mt. Vernon Road area during the 1986 floods).

Both earthquake faults and developments reduce the total ground absorption area. Earthquake faults include bedrock features that create barriers to subsurface percolation, thus increasing the velocity and erosive capacity of storm water runoff on hillsides. Development also creates impermeable surfaces (structures, pavement, streets). Storm runoff is augmented by water flows from development contributing to street flooding. Both earthquake faults and developments reduce the total ground absorption area. Moreover, developed areas generate irrigation water runoff from landscaping which may channel storm water and other runoff flows into nearby underdeveloped areas and street gutters.

GEOLOGIC HAZARDS

The area's geology determines its capacity for supporting man-made structures. In Auburn, consolidated rocks make up the mountains and rocky buttes while alluvial soils are found on stream beds and the valley floor. Beneath the alluvial soils are the same hard rocks as found in the mountain areas. Geologic hazards are present in the form of unstable soils and certain ground formations which render some areas unsuitable for intensive human activity.

The planning area has steep slopes on its eastern edges, with unstable slopes, and areas subject to erosion and landslides. Areas with slopes less than 15 percent are generally considered suitable for all types of development. Those with a 15 to 25 percent slope are typically required to use hillside construction techniques to achieve substantial foundation support and stable soil conditions. Areas with slopes greater than 25 percent are subject to instability and erosion and are generally not recommended for development. Increasing urbanization on the hillsides exposes the community to possible landslides and rockslides which may result in human injury and property damage. Extensive grading will be required to create a developable surface in these areas. However, grading is also a form of land disturbance which may provide future land failure.

Geologic hazards within the area of the Auburn General Plan are small slumps, block slides, and landslides within the metamorphic rock; and slumps, occasional block slides, and erosional gulying within the intensely fractured serpentine. The occurrence of these features will increase as land values increase and more and more building sites are excavated on natural hillsides. The deeper the excavations, the more the weaknesses of underlying rock masses are exposed for potential failure.

Lands around major fault zones are exposed to greater geologic hazards as a result of repeated fault movement. Earthquakes give rise to broken rocks, ground fracture, and clay gouge. Broken subsurface rocks may not be readily apparent but the ground would no longer have its cohesive and shear strength to carry building loads. Ground fracture



is characterized by surface cracks and dips which increase the potential for erosion and landslides. Clay gouge occurs as a result of uneven ground settlement. Clay is more fine-grained than other soils. Thus, repeated ground movement will cause settlement in areas with clayey soils than in other places.

A soil's potential to expand when wet, and shrink when dry, depends upon the type and amount of clay in the soil. Soil with certain types and a high amount of clay tend to swell or expand when water content is increased. They also shrink disproportionately when dry. Highly expansive soils can cause structural damage to foundations and roads. Lawn watering could concentrate subsurface water and subsequent soil expansion could cause land slippage. Soils with low shrink/swell potentials are suitable for building, with other factors considered. A high shrink/swell potential makes the site less suitable. Detailed investigations may be necessary for areas with moderate to high expansion potentials. Development on expansive soils requires special grading and construction techniques which increase development costs.

The propensity for soil erosion by wind or water runoff is dependent on soil type and its consolidation, vegetative cover, slope, and the runoff velocity. Erosive soils are often found in steep slopes where runoff velocity is also greatest and vegetative cover least. Eroded materials end up on the valley floor with coarse materials near the hillsides and finer ones in areas farther from the slopes.

Complete elimination of these geologic hazards is not possible due to the expense and the potential damage to the environment from massive alteration of the terrain. Danger can be avoided by prohibiting construction in areas with soil stability problems. It can also be reduced to some extent by grading and other engineering methods which remedy instability and provide a stable foundation for building construction. Differences in stability require specific engineering methods to offset the potential damage to the foundation and the reduced structural strength of buildings.

AIRCRAFT ACCIDENT POTENTIAL

The Draft Auburn Airport Master Plan reports that seventy-five percent of aircraft accidents have been reported to happen on or near airport runways. These accidents may cause injury, death, fire, explosion, damage to property, and special and nuclear cargo problems, straining hospital facilities, disrupting traffic and utilities, and causing crowd control problems.

The presence of the Auburn Municipal Airport in the planning area carries the probability of aircraft accidents in surrounding areas. The number of flights at the airport fluctuates with an average of 65,000 operations over the last two years. Although forty-six accidents have occurred at the airport since 1964, only three accidents have occurred since 1984.

The airport minimizes disaster potential by following strict safety precautions and by having its own emergency personnel for crash and rescue operations. Development



proposals around the airport are subject to review and approval by the FAA to ensure compatibility with the airport. High density developments around the runway approach zones are limited or prohibited by the adopted Comprehensive Land Use Plan (CLUP).

HAZARDOUS MATERIALS/WASTES

Trace metals and chemical compounds used in industry have caused toxic pollution of the environment and harmful effects on man. The concern for the production, storage, transport, and disposal of hazardous materials/wastes arises in the wake of widely publicized health and safety problems due to improper handling.

Interstate 80 and Highway 49 pass through Auburn. The bulk of truck carried hazardous materials that enter the County do so via I-80. The cargos consist of a wide range of hazardous substances. Although the road is well maintained and a controlled access roadway, there are some steep and sharp turns that severely tax the brakes and handling ability of semi-trailer trucks. A propane gas spill Interstate 80 through Auburn in 1988.

In addition to highway traffic, other hazardous materials are transported through Auburn on the Southern Pacific Railroad and a major pipeline which runs along Borland Avenue.

Historically, hazardous materials incidents in Auburn have been frequent but of a relatively minor nature compared to more urbanized and industrialized areas.

In accordance with Assembly Bill 2948 (Tanner 1986), the City and County are jointly preparing a Hazardous Waste Management Plan which will include:

- An analysis of the hazardous waste streams generated in the city.
- A description of existing hazardous waste facilities which treat, handle, recycle, and dispose of hazardous waste in the city.
- An analysis of the potential for reducing the volume of hazardous waste through recycling and source reduction.
- A consideration of the need for the management of small volumes of hazardous waste produced by businesses and households.
- A determination of the need for additional hazardous waste facilities to meet expected generation volumes.
- An identification of existing facilities that may be expanded or siting criteria to identify new hazardous waste facilities.
- A statement of goals, objectives and policies for siting of hazardous waste facilities and the general management of hazardous waste facilities and the general management of hazardous waste through the year 2000.
- A schedule which describes City actions necessary to implement the plan through the year 2000.

Assembly Bills 2185 and 2187 (Waters, 1985 and 1986) were intended to protect public health and safety, and the environment by establishing business and area plans relating



to the handling, and release or threatened release of hazardous materials/wastes. The area plan for Placer County has been developed and is implemented by the Placer County Division of Environmental Health. The area plan covers all of Placer County and includes an inventory of hazardous materials/wastes facilities in the County including Auburn, procedures for emergency notification response, pre-emergency planning measures, and public safety information. Facilities with more than a specified amount of hazardous materials/wastes on-site, must submit a business plan to the Placer County Division of Environmental Health. The information in the Placer County Area Plan is available for public review.

Assembly Bill 939 (Sher, 1989), the California Integrated Waste Management Act, was enacted to reduce the amount of solid waste that must be disposed of by transformation or "transportation" and land disposal. Each County, City or local governmental agency which provides solid waste handling services must "provide services that include, but are not limited to, source reduction, recycling, composting activities, and the collection, transfer, and disposal of solid waste within or without the territory subject to its solid waste handling jurisdiction." There are no hazardous waste landfills currently operated by the City of Auburn. The Auburn Placer disposal site, however, is a transfer station presently in use near the Auburn Airport.

Several State agencies monitor hazardous materials/waste facilities. Potential and known contamination sites are monitored and documented by the Department of Health Services (DHS) and the Regional Water Quality Control Board (RWQCB). A review of the leaking underground storage tank list produced by the RWQCB, and the Hazardous Waste and Substances Sites List produced by the Office of Planning and Research indicates no hazardous waste sites are located in Auburn.

If an imminent public health threat is posed by an outside factor, the city will support local regulating agencies in notifying the public.

The transport of hazardous materials/wastes and explosives through the planning area is regulated by the California Department of Transportation (DOT). Interstate 80 is open to vehicles carrying hazardous materials/wastes. City streets and unincorporated County areas are generally not designated as hazardous materials/wastes transportation routes, but a permit may be granted on a case-by-case basis. Transporters of hazardous wastes are required to be certified by the DOT and manifests are required to track the hazardous waste during transport. The danger of hazardous materials/wastes spills during transport does exist and will potentially increase as transportation of these materials increases on Interstate 80, Highway 49, and the railroad. The Placer County Office of Emergency Services (OES), Placer County Division of Environmental Health, the Auburn Police Department, and the Auburn Fire Department are responsible for hazardous materials accidents at all locations within the City.

Development of industrial land in the planning area could increase risks associated with hazardous materials/wastes use. Programs for proper storage, handling, and disposal need to be developed according to State, Federal, and local guidelines to reduce those risks. The City will support and assist in such programs.



CRIME

Crime and other acts of violence undermine the community's sense of security and threaten public safety. As Auburn develops, the increasing concentration of population will bring increasing criminal activities, although not necessarily increasing the crime rate (number of crimes per 1,000 population). While it is expected that individuals will take normal precautions to protect themselves from danger, the city provides additional protection from harm brought on by the malicious intent of others.

CONSTRAINTS

Constraints to public safety are a result of both natural events and the activities of man. Natural hazards are caused by excess rainfall, seismic activity, landslides or high winds. Man made hazards are the result of aircraft accident, crime, hazardous materials spills, and fires. The following are some of the factors which constrain protection of the public:

1. **Unpredictability.** Natural disasters are often unpredictable. In order to reduce the danger of disaster precautionary measures are required. Avoidance of flood-prone areas and flood control measures are necessary. Construction to earthquake standards has proven effective to reduce losses in seismic events. Emergency plans which include evacuation, medical aid, and temporary food and shelter are important.
2. **Existing Land Development.** Prior settlement patterns and very dense development often present difficult access problems for emergency vehicles. Undefined evacuation routes and lack of emergency communication lines are also problems for emergency service providers.
3. **Priorities.** Public safety may be described as the preservation of human life and the protection of property. These values underlie the concept of human settlement; however, the relative importance of saving lives or saving property is sometimes a subjective decision.
4. **Human Carelessness.** Carelessness often leads to accidents which can involve automobiles, airplanes, hazardous materials spills, urban fires and forest fires. Public education and safety rules and regulations are important to avoid careless attitudes and actions.
5. **Individual Precaution.** Citizens often are the cause of their own disasters through lack of available or at-hand precautions, i.e. not locking doors at night or when away, swimming alone, drinking and driving, or smoking in bed.
6. **Economics.** Economic considerations often play an important role in providing for public safety. Budget limitations force difficult decisions related to deciding which safety measures are more important or cost effective.



4. Implementation

These programs relate to the adopted goals and policies. The implementation completion of the programs represent the mean by which progress in carrying out Goals and Policies will be measured.

- A. The City shall review all new development for conformance to fire safety standards.

Responsibility: Community Development, Fire
Time Frame: Ongoing
Related Policy: 1.1, 1.2, 1.3

- B. The City should work with the Fire Department to prepare an educational brochure which fosters public awareness of local fire hazards and promotes use of smoke detectors.

Responsibility: Community Development, Fire
Time Frame: 1994
Related Policy: 1.4, 1.5

- C. The City shall identify high flood risk areas and update the zoning ordinance to prohibit development in flood prone areas.

Responsibility: Community Development, Public Works
Time Frame: 1994
Related Policy: 2.1, 2.2, 2.3

- D. The City should coordinate efforts with Placer County to keep current and periodically improve the Solid Waste and Hazardous Waste Management Plans.

Responsibility: Community Development, Public Works
Time Frame: Annually
Related Policy: 3.1, 4.1, 4.2, 4.3, 4.4

- E. The City shall review all new development proposals for conformance to standards for environmental protection, air pollution control, water quality, and hazardous waste disposal.

Responsibility: Community Development, Public Works, Fire, Police
Time Frame: Ongoing
Related Policy: 3.2, 3.3, 3.4, 3.5, 3.6

- F. The City shall periodically update the Emergency Services Plan.

Responsibility: City Manager, Police, Fire, Public Works
Time Frame: Ongoing
Related Policy: 5.1, 5.2, 5.3, 5.8



G. The City shall continue and expand Crime Prevention Programs.

Responsibility: Police
Time Frame: Ongoing
Related Policy: 5.5, 5.6

H. The City should include emergency access for development projects.

Responsibility: Community Development, Public Works, Building
Time Frame: Ongoing
Related Policy: 3.6, 5.1, 5.7

I. The City shall include legible sign and street number requirements in the development review process.

Responsibility: Community Development, Public Works, Building
Time Frame: Ongoing
Related Policy: 5.1, 5.2, 5.4

J. The City shall require all new buildings to be constructed to the Uniform Building Code Standards for protection from seismic events.

Responsibility: Community Development, Public Works, Building
Time Frame: 1993--ongoing
Related Policy: 3.1, 3.3, 3.4, 3.5, 5.2

K. The City shall prepare a Household Hazardous Waste Ordinance (see Open Space and Conservation Implementation Measure I).

Responsibility: Public Works
Time Frame: 1992-1993
Related Policy: 4.5



X

ECONOMIC ELEMENT



Previously Auburn Hotel - Auburn Promenade

1. Introduction

The economic growth rate of a city or area is controlled by numerous factors, many of which operate at both regional and national levels beyond the direct influence of local governments. However, the purpose of this Economic Element is to provide a framework for future economic development in Auburn, including the development of methods and strategies for creating new opportunities for future economic growth and development within the city. This Economic Element addresses Auburn's fiscal condition because the City's fiscal resources can be directly connected to its ability to provide amenities that attract economic development.

Economic growth and development are crucial to the City for three reasons:

1. Supply of jobs in the community.
2. Production of goods and services.
3. Maintenance of a tax base for the community that will ensure the financial stability of the city and provide financial resources for future municipal programs and projects.

To reach the goal of economic viability, the labor market must have a varied economy where new opportunities are constantly available, where upward mobility is possible and where entry-level positions already exist. An important factor in recruiting new business and industry is the matching of job skills of the local labor force with the needs of business and industry, in itself an ever changing arena. The Auburn Airport Industrial Park is an important location for industrial development in the Auburn Area, however, it is an island within the County. To achieve economic balance, the island needs to be eliminated, joining the airport with the remainder of the City through annexation.

This element is an optional or "elective" element of the Auburn General Plan. That is, although not one of the seven elements mandated by the state, the preparation of an Economic Element to the General Plan is authorized by Section 65303 of the California Government Code, which states: "The General Plan may include any other elements or address any other subjects, which in the judgement of the legislative body relate to the physical development of the County or City."

The inclusion of the Economic Element in the Auburn General Plan is an indication of the awareness of the City of the influence of economic factors on the development of a viable community, of adequate levels of community services, and the standard of living.

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Citizens Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

Goal 1: Provide a land development pattern, planning process, and regulatory atmosphere conducive to maintaining and increasing employment opportunities for City residents and fostering new economic development.

Policy 1.1 Focus on attracting clean, non-polluting industries.

1.2 Actively encourage new industries that will employ city residents.



- 1.3 Consider the adequacy of economic development efforts on an annual basis.
- 1.4 Attempt to increase the number of persons who both work and live in the city.
- 1.5 Develop industrial lands primarily for economic activities that contribute to local employment and income.
- 1.6 Support airport improvements.

Goal 2: Enhance the City's sales tax revenues by strengthening the City's retailing to serve the needs of local residents and encouraging shoppers from outside the community.

- Policy 2.1 Improve commercial areas by providing a variety of commercial needs for tourists and residents.
- 2.2 Improve economic development through promotion and by utilizing redevelopment funds.

Goal 3: Maintain and expand existing businesses.

- Policy 3.1 The Chamber of Commerce, Main Street, City, and Merchants Associations should all work together to promote the retention and expansion of existing businesses.
- Policy 3.2 The City will utilize and promote redevelopment to retain and expand existing businesses.

Goal 4: Encourage tourism, conventions and development of a conference center.

- Policy 4.1 Emphasize Auburn as a tourist stop.
- Policy 4.2 Strengthen and maintain tourism as a major industry in Auburn.
- Policy 4.3 The City of Auburn and Chamber of Commerce will promote the development and utilization of a conference center.



3. Existing Conditions

ECONOMIC PROFILE

Auburn's economic profile is characterized by government, service and retail, industrial and tourist related employment. Auburn is the county seat of Placer County with the County representing the largest employer in the Auburn area. Table X-1 summarizes the major employers in the Auburn area.

As Table X-1 indicates, most of the large employers in Auburn provide services to the local population. The lack of industrial sector jobs is due in part to two factors: (1) the close proximity of Auburn to Roseville and Sacramento where significant amounts of industrial sector jobs are located; and (2) development constraints such as topography and difficulty in access. Thus, Auburn operates as a bedroom community to the more developed areas in and around Sacramento.

According to the *Jobs/Housing Balance Issue Paper* prepared for the 1991 Auburn Bowman Community Plan Update, the Auburn area is job poor and housing rich. (Jobs/housing balance is typically expressed as a ratio of jobs to housing units; 1:1 denoting one job for each housing unit.) In the City limits of Auburn, the 1990 jobs/housing ratio was 0.81 to 1. This ratio was only somewhat higher in the unincorporated area around Auburn. In addition to the poor jobs/housing balance, further analysis in the study showed that the Auburn area lacks the important match between jobholder's housing needs at prices commensurate with their wages, and jobs to support the more expensive residences in the area.

The implications of the above information for this General Plan are important in the development of opportunities for economic development in Auburn. Opportunities which Auburn should consider include the following:

1. **Auburn has been recognized as a tourist stop.** This statement means that Auburn has been a destination for travelers and has significant attractions to warrant extended visits by tourists travelling through the area. To improve Auburn's attractiveness as a tourist spot, emphasis should be placed on lodging, food, entertainment, as well as its unique historical background. The City of Auburn imposes a Transient Occupancy Tax (TOT) that serves as a source of revenue. This tax currently stands at 8%, 2% of which is passed to the Chamber of Commerce and 6% of which remains with the City. The revenue accrued from TOT for fiscal year 1991-92 was approximately \$15,500.
2. **Auburn offers unique recreational opportunities.** These include, but are not limited to, fishing, gold panning, swimming, rafting, mountain biking, hiking, horseback riding, golfing, and picnicking.
3. **Auburn has the potential resources to provide adequate sites for small industrial employers.** Areas such as the Auburn Municipal Airport



**TABLE X-1
MAJOR EMPLOYERS IN THE AUBURN CITY AND SPHERE**

Employer	No. of Employees <small>(Full-time/Part-time)</small>	Type of Business
MANUFACTURING		
Coherent	400	Optic and laser systems
American Forest Products	110	Lumber
R & W Products	100	Industrial ceramics
Auburn Container	70	Box and crate manufacturing
Joe Chevreaux	50	Aggregates
Eric Larson Co.	50	Bottle water equipment
NON-MANUFACTURING		
Placer County	2,180	County governmental services
Auburn Faith Hospital	650	Medical services
Pacific Bell Telephone	310	Telephone services
Placer Union High School District	300	Education
Auburn Recreation District	250	Recreation/management
Pacific Gas & Electric	240	Gas and electric services
U.S. Bank	160	Savings and loan services
Auburn Union School District	152	Education
Auburn Journal	130	Local newspaper services
Raley's Stores	130	Food market
Lucky Stores	130	Food market
Bel Air Market	120	Food market
Placer County Water Agency	120	Water services
Lumberjack	100	Hardware store
Daughtery's Department Store	95	Department store
Albertson's Market	95	Food Market
U.S Post Office	90	Postal Services
California State Division of Forestry	80	Forest management
Placer Savings Bank	80	Banking services
City of Auburn	75	Local government services
SOURCE: Auburn Chamber of Commerce, 1990; Placer Union High School District, 1992; Auburn Union School District, 1992.		



Industrial Park and the industrially zoned areas along Nevada Street and Borland Avenue provide the opportunity for small scale industrial development to occur. Interstate 80 is directly accessible from all of the sites and public infrastructure such as water and sewer is currently in place.

4. **Auburn is in an ideal location to provide services to the growing population of the Sacramento area.** Possibilities include recreational services such as golf courses, hiking, biking and hotel services for tourists and conventions.

CITY OF AUBURN BUDGET

In order to understand how Auburn's fiscal resources are generated and utilized, the following analysis discussion of the City's 1988 to 1991 budgets have been included in the Economic Element. While commercial and industrial uses are taxed like residential uses, they usually do not create the same demand for public services. In effect, commercial and industrial uses help finance public services provided to Auburn's residential areas. A solid base is crucial to the City, for it is this base which generates funds which pay for many of the basic public services the City of Auburn must provide.

Revenue

In fiscal year 1990-91, the City of Auburn's estimated total general fund resources to \$4,511,726 (Final 1990-91 Operating Budget-City of Auburn). The sources of funding are described in Table X-2.

The total represents a seven percent increase from revenues during fiscal year 1989-90 (when revenues totaled \$4,203,672) and a 22 percent increase from revenues during fiscal year 1988-89 (when revenues totaled \$3,729,378). The most significant source of increase was revenue from service charges which rose by 67 percent. Other significant contributors to the increase were: a) revenues from "other agencies"; b) sale of documents, insurance refunds, etc., (a 46 percent increase); c) permits (a 38 percent increase); and d) property rentals (a 35 percent increase).

Expenditures

In fiscal year 1990-91, the City of Auburn's estimated expenditures totaled \$5,160,191. The expenditures, by department, were as follows:

- Police (24.37%),
- Non-departmental; insurance, contractual services, retirement, annexation costs, etc. (22.74%),
- Public services (18.92%),



TABLE X-2
1990-1991 CITY OF AUBURN GENERAL FUND SOURCES

Source	Amount	Percentage
Taxes	\$2,884,286	64
Service charges	\$426,807	9
From other agencies	\$382,197	8
Permits	\$255,302	6
Use of Money and Property	\$126,598	3
Licenses	\$122,734	3
Franchises	\$115,068	2
Fines and forfeitures	\$39,736	1
Other Revenues	\$158,998	4
TOTAL	\$4,511,726	100

SOURCE: City of Auburn, Final 1990-91 Operating Budget

- Administrative expenditures (8.02%),
- Community development (7.66%),
- Fire (6.02%),
- Building/buildings and grounds (5.19%),
- City Council and City Clerk (4.45%),
- Equipment and facilities plan (1.93%), and
- Civic Center maintenance and operations (.70%).

Expenditures increased \$1,430,726 since fiscal year 1988-89. The 38 percent increase maintained current service levels and provided for substantial funds for growth-related activities such as the general plan update and for the maintenance and operations of the Civic Center. The main factors involved in the increase were:

1. Insurance Increases;
2. Facilities and Equipment Plan;
3. Funding for a proposed police officer;
4. Additional funding for fuel and lubricants for the police department;
5. Civic Center maintenance and operations; and
6. General Plan Update.

Estimated revenues are expected to remain constant until the current (1992) economic climate improves. A decline in revenues occurred in 1992-93 due to the loss of Lumberjack, Safeway, and Alpine Market. Recent changes in state property tax allocations have also contributed to the decline in revenues. New sources of revenue along with the attraction of new revenue generating business are needed.

Although the City of Auburn is not facing a budget deficit, the future economic picture of the City is not clear. Currently 66 percent of the City's budget is spent on salaries with the remaining 34 percent available for materials, supplies, and capital. This is typical for most cities. Most of the 34 percent is allocated to materials and supplies. Therefore, significant public resources are not available for capital improvements for community services and amenities. In addition, the City has suffered the loss of three large commercial retailers, whose sales taxes are an important resource in the City's annual budget. Facing the situation described above, the City of Auburn may have to increase its dependence on private resources in the future to fund public services and amenities such as the construction and maintenance of roadways and parks. To provide for the City's needs, stable, long-term revenue generators need to be attracted and maintained.

4. Implementation

These programs relate to the adopted goals and policies. The implementation and completion of the programs represent the means by which progress in carrying out the Goals and Policies will be measured.

- A. The City should host an annual seminar with the Chamber of Commerce, Main Street, and the Merchants Associations to develop mutual strategies to attract industry, business, and tourism.

Responsibility: City Manager, Community Development
Time Frame: 1st annual 1994
Related Policy: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1

- B. The City will continue to identify areas suitable for redevelopment and coordinate planning and public works with redevelopment project proposals.

Responsibility: Community Development, Auburn Urban Development Authority, Public Works
Time Frame: Immediate and ongoing
Related Policy: 2.2, 3.2



- C. The City shall promote the establishment of a rail station to encourage the tourist industry and identify Auburn as a destination attraction.

Responsibility: Auburn Urban Development Authority, Community Development, Public Works

Time Frame: Immediate and ongoing

Related Policy: 4.1, 4.2, 4.3

- D. The City should, as feasible retain the services of an economic redevelopment specialist to assist with business retention/expansion and to attract new job generating uses.

Responsibility: Auburn Urban Development Authority, City Manager, Community Development

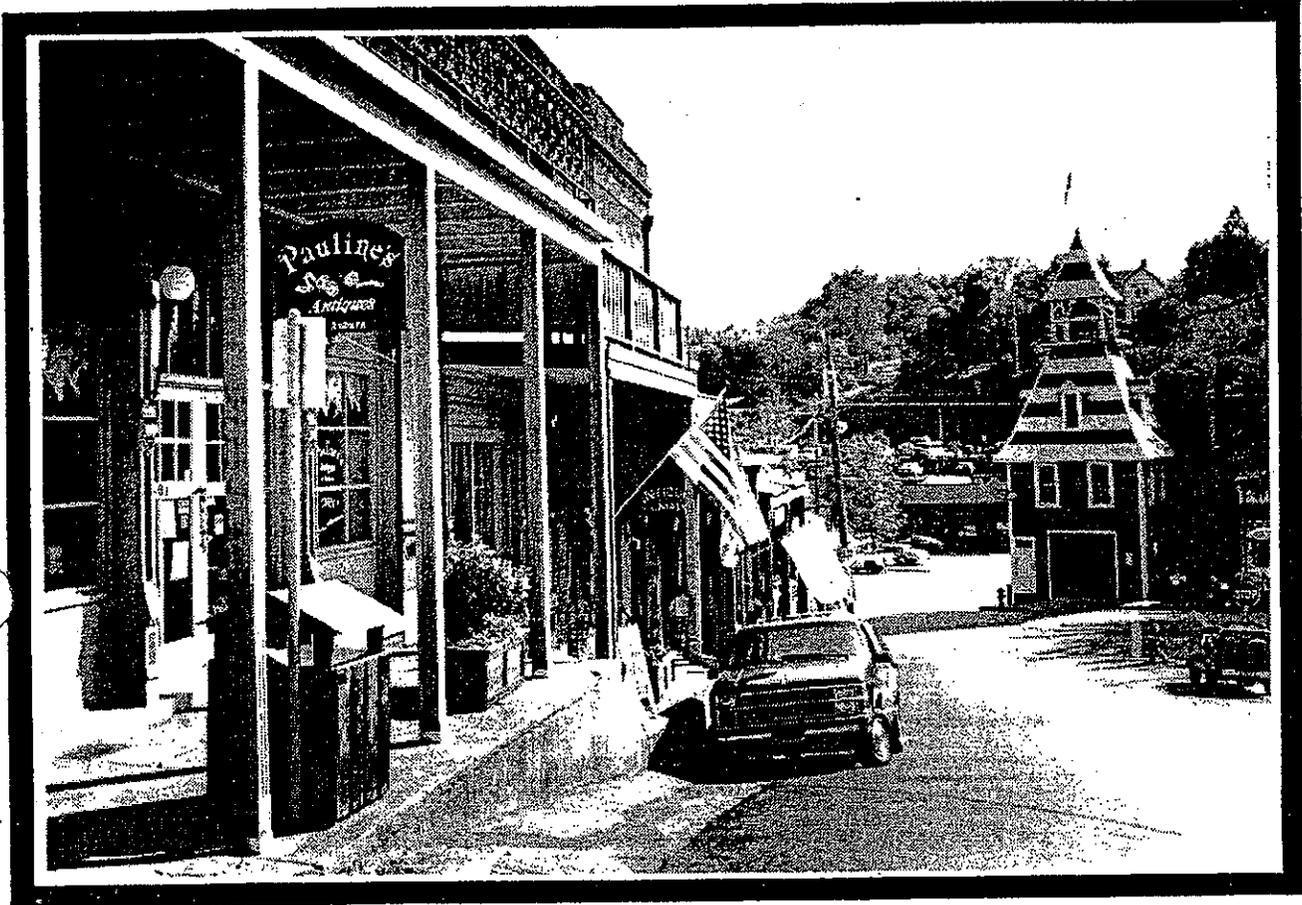
Time Frame: 1993

Related Policy: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 3.1, 3.2



XI

HISTORIC ELEMENT



Oldtown Auburn

1. Introduction

The purpose of the Historic Element is to identify the structures and areas of Auburn that should be preserved due to their historical, architectural, cultural, or archaeological significance and to present programs to effect preservation. The Historic Element is most closely related to the Land Use Element. Land uses within identified historic areas will be regulated by Historic Guidelines as well as zoning.

The Historic Element is an Optional Element of the General Plan (Government Code Section 65303). The following Goals and Policies are presented by topic and sequentially not by priority.

2. Goals and Policies

The goals and policies in this report were developed in conjunction with the Citizen Advisory Committee for the City of Auburn General Plan Update. These Goals and Policies are presented by topic and sequentially, not by priority.

Goal 1: Preserve all historical sites and enhance the character of the historic districts.

Policy 1.1 Implement the Historic Development Guidelines listed in the Historic Element.

Policy 1.2 Preserve existing Indian and Chinese cemeteries and other historic sites.

3. Existing Conditions

Auburn lies in the heart of territory formerly occupied by the Nisenan or Southern Maidu Indians. Their country encompassed the Bear, Yuba and American River basins. The Nisenan languages and dialects were related to those of the Northeastern or Mountain Maidu of the upper Feather River drainage system in much of what is now Placer County and the Konkow or Northwestern Maidu of the lower Feather River and Butte Creek basins in much of modern-day Butte County.

It has been noted that the economy of the Hill Nisenan was so diversified, the means of resource exploitation so effective, and the carrying capacity so relatively high, that Hill Nisenan territory was among the most densely populated in prehistoric California. Acorns, deer and fish were the primary staples of the Nisenan diet, and these were supplemented with a vast array of smaller game, nuts, seeds, roots, berries, herbs, fruits and fungi.

The discovery of gold in 1848 on a ravine in the center of what is now Old Town led to the first Anglo settlement in Auburn. By April of 1849 a mining camp was well established. It was initially called by several names--North Fork Dry Diggins, Rich Ravine, Wood's Dry Diggins--but by November of 1849 it became known as Auburn (Auburn Main Street Architectural Design Guidelines (AMSADG), 1989).

The Chinese came to the Auburn area with the advent of the railroads and the gold mining, as laborers, miners, cooks and merchants.



Although gold led to the beginning of Auburn, a secondary economy soon evolved around banking, lodging, and provisions as other areas of the Mother Lode opened up to gold mining. This resulted in the development of a variety of building types to house each of these activities. Old Town's population also began to change, reflecting Auburn's developing economy, from predominantly miners to a population that included lawyers, bankers, and shopkeepers (AMSADG, 1989).

Incorporation of Auburn as a city occurred in 1860; then it disincorporated in 1868 and reincorporated in 1888. In 1865, the transcontinental railroad from Sacramento arrived in Auburn with a profound effect. The railroad chose to bypass Old Town, establishing tracks and a station to the east, closer to what was to become the Downtown area of Auburn. With the development of Downtown, two historic areas evolved in Auburn, each with its own distinct character reflecting the time, people, and events that influenced development of the area.

Today Old Town functions as a specialty retail shopping area attracting both locals and tourists. Downtown plays a significant role as a major commercial area in Auburn and has a significant amount of 1920s-era buildings housing a wide variety of retail goods and services.

In addition to the above noted historic commercial areas, there are two historic residential neighborhoods, the Downtown Residential neighborhood and the Foresthill /Aeolia neighborhood which contain homes constructed between the mid-1800s and the early 1900s.

CURRENT PRESERVATION EFFORTS

Preservation efforts in Auburn have led to the development of two historic districts. The Old Town Historic District includes buildings constructed between 1850 and 1900. The Downtown Historic District includes buildings constructed between 1900 and 1940 with many 1920s-era structures dominating the area. Each historic district is surrounded by a larger design review district delineated to include many of the surrounding properties that give Auburn its historic character. Design guidelines and zoning regulations have been developed to control demolition, remodeling, and new construction within these design review districts. (Table XI-2) Each district prohibits the demolition of historic structures, requires that the remodeling of historic and non-historic structures to meet design guidelines, and requires that new construction meet design guidelines. However, the district regulations do not apply to residential structures and application of the guidelines are subject to approval or denial by the Old Town Historic Design Review Committee and the Planning Commission. For the Downtown Review District, the Downtown Design Review Committee makes recommendations with final action by the Planning Commission (these actions can be appealed to the City Council).

A significant number of historic sites are outside the existing Old Town and Downtown Design Review Districts. For instance, many historic residential sites can be found along the American River Canyon to the northeast of Old Town and Downtown Auburn. Exclusion of these historic sites from review districts or regulation could allow legal

removal or significant alteration to many of Auburn's significant historical structures. Enlarging the design review districts, however, will not adequately preserve historic residential structures because neither the design guidelines nor the zoning regulations apply to any building designed for or used exclusively for residential purposes.

The existing design guidelines and historic districts are documented in the *Auburn Main Street Architectural Design Guidelines (AMSADG)*, developed under the Auburn Main Street program to revitalize Old Town and Downtown Auburn. The omission of many historic sites from the Design Review Districts stems from the purpose of the Auburn Main Street program, which is to revitalize the two "Main" Streets to ensure that quality and compatible building improvements are made to further economic revitalization efforts. The emphasis of the Main Street program led to boundaries that omitted residential historic sites outside of the commercial areas of Old Town and Downtown Auburn.

To remedy this situation, the Historic Element is included as an optional element to the General Plan with the specific purpose of identifying historic sites in Auburn and developing regulations or guidelines to preserve historic residential, as well as commercial, sites and to ensure the compatibility of new construction in historic areas.

HISTORIC ELEMENT INVENTORY

Identification of Auburn's historic sites is presented in the *City of Auburn Historical Resources Inventory (CAHRI)*. The CAHRI was initiated after the loss of two historic buildings. This document is a supporting reference document. A supplemental survey was conducted by City and consultant staff for the specific purposes of identifying additional areas that should be considered for historic preservation. The CAHRI contains a complete listing of historic sites in Auburn based upon National Register status codes. The supplemental survey concentrated on historic structures that reflected local characteristics to supplement the use of national standards in the CAHRI. For the Historic Element, the CAHRI criteria were simplified as shown in Table XI-1 and then used with the supplemental survey to define additional historic areas that specifically reflect Auburn's past.

TABLE XI-1 HISTORIC SITE CODING CRITERIA	
National Register Status Code	Historic Element Code
1 = Individually listed on National Register	IS = Individually Significant
1D = Listed on the National Register as part of a district	IS = Individually Significant
3 = Appears eligible for individual listing in judgement of the person(s) completing or reviewing the inventory form	IS = Individually Significant
5 = Is individually listed or eligible for listing under a local preservation or landmark ordinance	C = Contributing Property*
3D = Appears eligible for listing only as a contributor	C = Contributing Property
5D = eligible for listing as contributor	C = Contributing Property
SOURCE: Harland Bartholomew & Associates, Inc., 1991	



The CAHRI and the supplemental survey, indicate that there are potentially about 400 historically significant properties within the city limits. As shown in Figure XI-1, these surveys suggest that an additional new historic area be identified to coincide with the 1948 Auburn City Limits. This is designated as Area III, the Historic Residential Area, in the following guidelines.

4. Historic Development Guidelines

Auburn contains two distinct historic commercial areas and a large historic residential area. Each area differs in respect to land use, time period, and historic styles. Therefore, each historic area will require different standards and guidelines for preservation.

- Area I:** The Old Town Historic Commercial area--circa 1850-1900.
- Area II:** The Downtown Historic Commercial area which displays 1900 to 1940 style buildings and contains a significant number of Twenties era buildings.
- Area III:** The Historic Residential Area--circa 1850-1940. The area within the 1948 Auburn City Limits.

The following Development Guidelines are intended for Areas I and II identified above. In these areas a public hearing is required for a demolition permit and extreme alteration. The Development Guidelines should be used in conjunction with the Auburn Main Street Architectural Design Guidelines (AMSADG). These development guidelines can be advisory or mandatory. It should be noted that all successful historic districts in the country have mandatory guidelines. To be mandatory, the City Council must adopt ordinances requiring that all existing, modified, and new structures comply with the development guidelines. If the Auburn Historic Area is to continue to compete with Old Sacramento, Nevada City, and other historic areas--the semblance of "older buildings" must be apparent.

In the guidelines, the term "shall" is mandatory and "should" is advisory. Authentic means that all building components are of the stated era and style. Compatible means a building has a combination of old and new components so that it appears to be compatible with the surrounding older buildings. Contemporary refers to any architectural style after 1940.

For Area III identified above, a public hearing is required for a demolition permit or extreme alteration. Implementation Measure E requires preparation of design guidelines for this area. This element does not include specific regulations for Area III.

AREA I--OLD TOWN HISTORIC COMMERCIAL AREA

This area contains a number of buildings which were constructed during the 1850-1900 period. The goal is to preserve this area in a pre-1900 style. Semi-modernization and infill with new pseudo western buildings would eliminate the potential for a historic



context. The following guidelines are intended to preserve the authenticity of this area. All building construction, renovations or additions, all signs and other structures are subject to the City's zoning, building, sign and other similar regulatory measures. Improvements within the Historic District (HD) currently require approval from the Old Town Historic Design Review Committee.

Exteriors

The exterior elements of a building include all walls, foundation, roof elements, doors, windows glazing, porch elements, eaves, chimneys, shutters and appurtenances.

- I.1 Demolition of existing historic buildings shall undergo a public hearing process.
- I.2 Remodel of an historic building shall be authentic and compatible with other historic buildings in the area (Circa 1850 to 1900).
- I.3 Non-historic buildings may remain.
- I.4 Remodel of existing non-historic buildings shall be compatible with the building itself and where possible should be compatible with the surrounding areas' historic buildings.
- I.5 All new construction shall be in 1850-1900 style.

Accessory Buildings

Garages, work sheds and other accessory uses should only be located in rear yards as required by the Zoning Ordinance.

Signage

All signs must be in accordance with the City of Auburn Sign Ordinance and Main Street Design Guidelines. All new signs should be compatible with the 1850-1900 building styles.

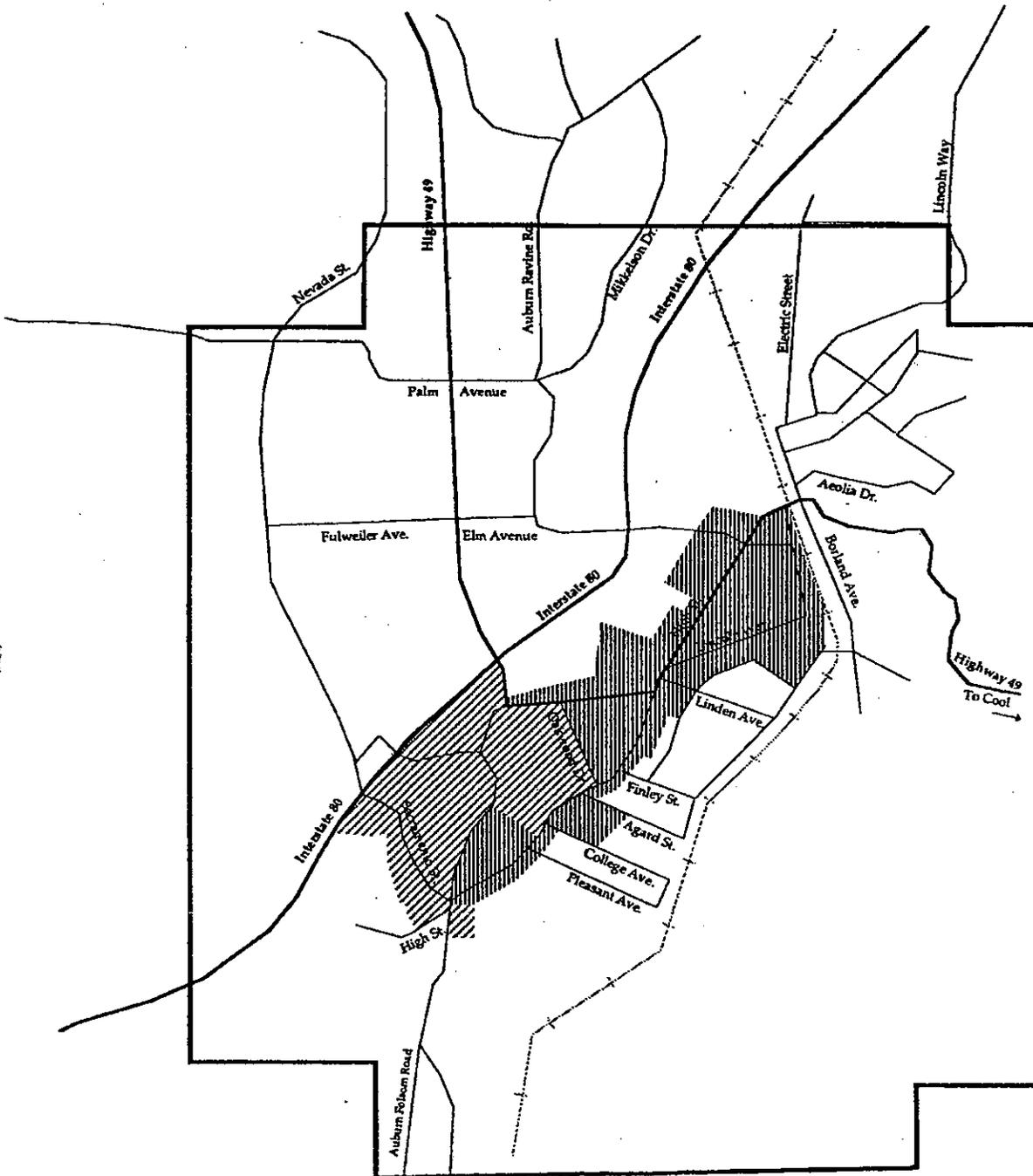
Street Appurtenances and Landscaping

Streets, walks, alleys and open spaces were sparse within business areas in the late 1800s. Boardwalks, dirt streets and a few trees were most common. A return to these types of improvements would not be practical for a rehabilitated Old Town Auburn area. Appropriate improvements, however, are discussed in the Main Street Design Guidelines and the Design Workplan.

Parking Facilities

Parking facilities should be consistent with Main Street Design Guidelines and Design Workplan.





No Scale



July 1992

LEGEND

- I Old Town Historic Commercial Area
- II Downtown Historic Commercial Area
- III Historic Residential Area (1948 City Limits)

**CITY OF AUBURN GENERAL PLAN
HISTORIC AREAS**

Harland Bartholomew & Associates, Inc.

**FIGURE
XI-1
Page XI-7**

AREA II--DOWNTOWN HISTORIC COMMERCIAL AREA

The Downtown Historic Commercial area is filled with 1920s-era buildings as well as many others which were constructed between the years of 1900 and 1940. The prescribed guidelines are intended to maintain this area in a pre-1940 style.

Exteriors

The exterior elements of a building includes all walls, foundation, roof elements, doors, windows, glazing, porch elements, eaves, chimneys, shutters and appurtenances.

- II.1 Demolition of existing historic buildings shall undergo a public hearing process.
- II.2 Remodel of an historic building shall be authentic and compatible with historic buildings in the area.
- II.3 Non-historic buildings may remain.
- II.4 Remodel of existing non-historic buildings shall be compatible with the area.
- II.5 All new construction shall be in pre-1940 style.

Accessory Buildings

Garages, work sheds and other accessory uses should only be located in rear yards as required by the Zoning Ordinance.

Signage

All signs must be compatible with the building styles and in accordance with the City of Auburn Sign Ordinance and the Main Street Design Guidelines. All new signs should be compatible with the building styles.

Street Appurtenances and Landscaping

Improvements should be based on the Main Street Design Guidelines and the Design Workplan.

Parking Facilities

Parking facilities should be consistent with Main Street Design Guidelines and Design Workplan.

AREA III--HISTORIC RESIDENTIAL AREA -- 1948 AUBURN CITY LIMITS

This area contains many houses which were constructed between the mid-1800s and early 1900s. In order to preserve historic residential structures and historic neighborhoods, demolition or extreme alteration of existing historic buildings and neighborhoods shall undergo a public hearing process.

5. Implementation

Table XI-2 summarizes the Auburn General Plan Historic Element development guidelines. These guidelines should be used in conjunction with the Auburn Main Street Architectural Design Guidelines and the Main Street Design Workplan to ensure historic preservation efforts are efficiently implemented.

These programs relate to the adopted goals and policies. The implementation and completion of the programs represent the means by which progress in carrying out the Goals and Policies will be measured.

- A. The City shall prepare and adopt Historic District designation for the Old Town and Downtown Areas.

Responsibility: Community Development
Time Frame: 1994-1998
Related Policy: 1.1

- B. The City should implement the Historic District Development Guidelines and continue implementation of the Auburn Main Street Architectural Design Guidelines.

Responsibility: Community Development
Time Frame: 1993-1995 and ongoing
Related Policy: 1.1

- C. The City shall continue to update the inventory of historic city sites.

Responsibility: Community Development
Time Frame: 1994-1996
Related Policy: 1.2

- D. The City shall prepare an historic site ordinance.

Responsibility: Community Development
Time Frame: 1994-1996
Related Policy: 1.2



E. The City shall prepare design guidelines for residential structures.

Responsibility: Community Development

Time Frame: 1994-1996

Related Policy: 1.2

F. Encourage the establishment and maintenance of a Auburn Historic Trust Fund to support the maintenance and enhancement of Auburn's Historic Structures and Historic neighborhoods.

Responsibility: Community Development

Time Frame: 1994-1996

Related Policy: 1.1 and 1.2



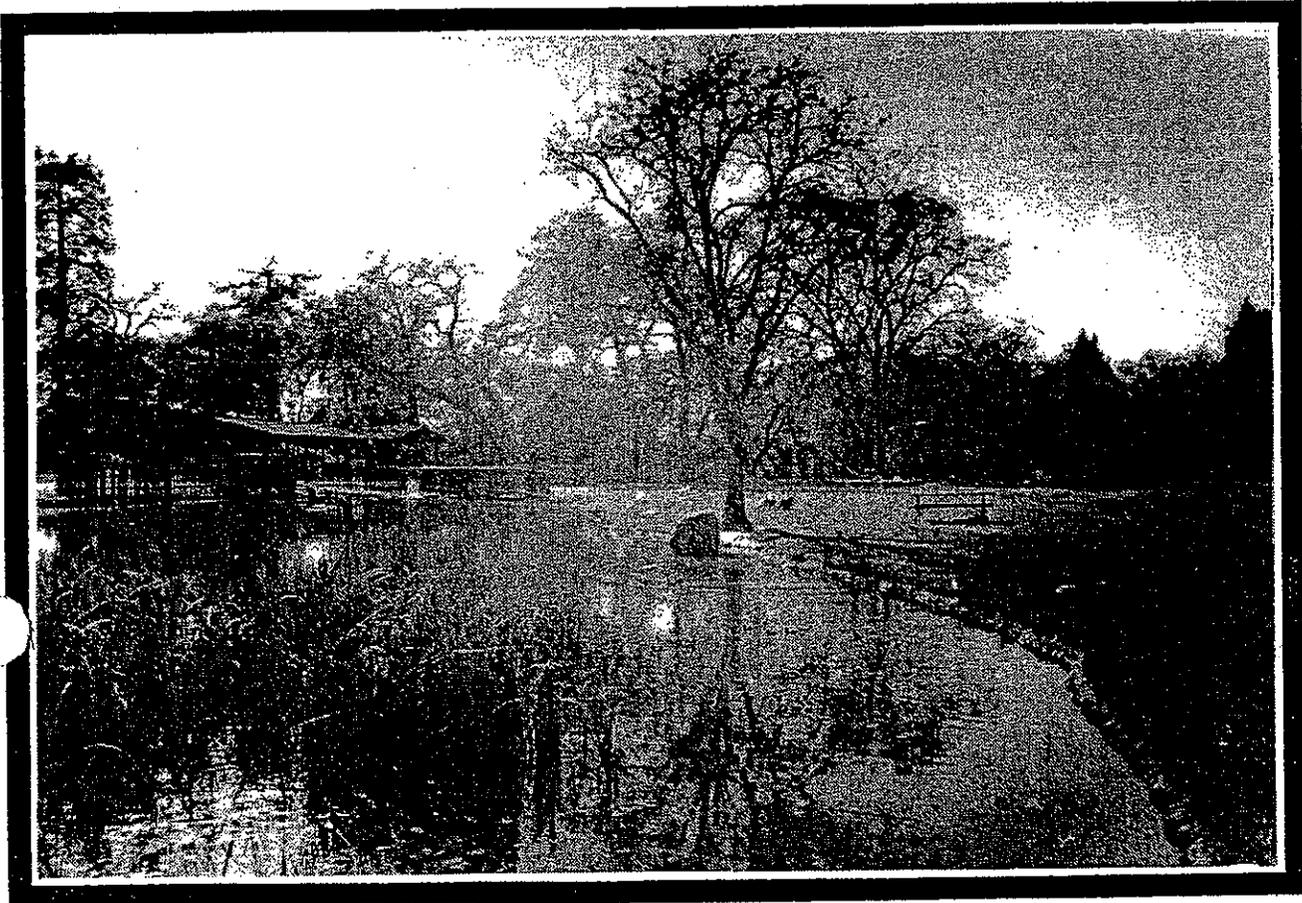
**TABLE XI-2
AUBURN GENERAL PLAN HISTORIC ELEMENT
DEVELOPMENT GUIDELINES**

2 Regulation/Standard	Area I Old Town	Area II Downtown	Area III Residential
1. Existing Historic Buildings			
1.1 Requires public hearing for demolition or extreme alteration.	Yes	Yes	Yes
1.2 Remodel			
Authentic	Yes	Yes	N/A
Compatible	Yes	Yes	N/A
Contemporary	No	No	N/A
2. Existing Non-Historic Buildings			
2.1 May Remain	Yes	Yes	N/A
2.2 Demolition Permitted	Yes	Yes	Yes
2.3 Remodel			
Authentic	No	No	N/A
Compatible	Yes	Yes	N/A
Contemporary	No	No	N/A
3. Construction of New Buildings			
Authentic	No	No	N/A
Compatible	Yes	Yes	N/A
Contemporary	No	No	N/A
4. Accessory Buildings			
Authentic	No	No	N/A
Compatible	Yes	Yes	N/A
Contemporary	No	No	N/A
SOURCE: Harland Bartholomew & Associates, Inc.			



XII

IMPLEMENTATION



Ashford Park

1. Implementation Summary

Table XII-1 summarizes the implementation measures by element. The table provides a checklist to track the implementation progress of each measure.

**TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997**

Work Task	Policies	Responsibility	Time Frame	Comments
LAND USE				
1. Prepare design guidelines for commercial/industrial development	1.1, 1.2, 7.1, 7.2, 8.1	CD	1993	
2. Prepare/adopt hillside development ordinance	3.1, 3.2, 3.3, 3.4, 6.2	CD, PW	1993	
3. Update Zoning Map	5.1, 5.2, 5.3	CD	1993	
4. Adopt Landscape/Lighting Districts in residential and commercial areas	6.4, 7.2	CD, PW, FI	1994	
5. Update the Capital Improvement Program	9.1, 9.2, 10.1	CM, CD, PW	1993	
6. Continue Annexation Program	9.2, 10.1, 10.2, 10.3, 10.4	CD, CM	1993-1997	
7. Pursue funding sources for cultural programs	11.1	CD	Immediate and ongoing	
8. Prepare School Facilities Plan	12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 12.10	CD, ARD, School Districts	1994-1997	
9. Pursue implementation of Auburn Urban Development Authority Redevelopment Plan	1.1, 6.1, 6.2, 6.3, 6.4, 7.3, 8.1	Auburn Urban Development Authority, CD, PW, CM	Ongoing	
10. Prepare proposal for new Sphere of Influence and submit to LAFCO	2.1, 9.2, 10.1, 10.2, 10.3, 10.4	CD, LAFCO	1993	
11. Implementation Measures for Goal 4, Air Quality Enhancement	4.1, 4.2, and related policies noted in other elements	CD, PW	Varies	
CIRCULATION				
1. Develop TSM Program	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 3.8	PW, CD	Ongoing/ Annual update	
Develop Trip Reduction Implementation Program	3.3, 3.5, 3.8	PW	1992-1997	

**TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997**

Work Task	Policies	Responsibility	Time Frame	Comments
3. Prepare Transit Master Plan	3.2, 3.4, 3.6, 3.8	CD, PW	1993	
4. Update CLUP	4.1, 4.2, 4.3, 4.4	CD	1993	
5. Prepare Capital Improvement Plan	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.8, 4.3, 5.1, 5.2	PW	Annually	
6. Implement the Auburn Park Conservancy Non-Auto Circulation Plan and the Auburn Ravine Trail Master Plan	2.2, 3.8	CD, PW	Immediate and ongoing	
7. Coordinate RTP and Congestion Management Plan with Placer County	1.6, 1.7, 3.3, 3.4, 3.7, 3.8	PW	Immediate and ongoing	
8. Adopt street standards in General Plan	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10	CD, PW, F	1994	
9. Use Auburn Urban Development Agency for circulation system improvements	1.3, 2.3, 2.4, 3.8, 5.1, 5.2	AUDA, CD, PW, CM	Ongoing	
10. Promote establishment of Rail Transit Station	3.4, 3.6, 5.2	CD, PW, AUDA	1992-1995	
11. Require the appropriate technical analysis for improvements of Highway 49 and I-80	1.2, 1.4, 1.6, 1.7, 2.5, 3.1, 5.1	CD, PW	Ongoing	
12. Create and implement a joint City/County TMF Program	1.11	CD, PW	1994	
HOUSING				
1. Review Housing Element annually, present results to CC and PC	1.2	CD	First report in 1993; updates every year thereafter	
2. Continue to pursue state and federal funding sources for low- and moderate-income households	1.10, 1.14	CD, AUDA	Annually	
3. Apply for grants from State Housing and Community Development Department	1.10, 1.14	CD	Annually	



TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997

Work Task	Policies	Responsibility	Time Frame	Comments
4. Revise Zoning Ordinance providing 25% density bonus for projects reserving units for low income households or senior citizens	1.1, 1.9, 1.14	CD	Immediate and ongoing	
5. Continue to annex an appropriate amount of vacant, unincorporated land	1.1	CC, PC, CD	Ongoing	
6. Implement provisions of Zoning Ordinance regarding nonconforming residential uses	1.15	CC, PC, CD	Ongoing	
7. Establish program for residential developments of 5 or more units to provide low income housing	1.4	CC, PC, CD	1993-1994	
8. Review establishment of a Housing Trust Fund	1.4	CC, PC, CD, AUDA	1993-1994	Funding sources to be determined
9. Establish formal Housing Finance Partnership	1.4, 1.13	The City, lending institutions, development community, community and housing interest groups	Immediate and ongoing	
10. Implement the Auburn Urban Development Authority Redevelopment Plan	1.4, 1.6, 1.7, 1.8, 1.12, 1.14, 1.16	CC, PC, CD, AUDA	Immediate and ongoing	
11. Revise Zoning Ordinance to provide for a density bonus of 25 percent for projects containing homes predominantly below 1700 sq. ft.	1.4, 1.7, 1.9	CC, PC, CD	Immediate and ongoing	
12. Revise Zoning Ordinance providing 25% density bonus for projects including zero lot line and duct structures	1.4, 1.6, 1.7, 1.8, 1.9	CD	Immediate and ongoing	
13. Establish review process for all residential projects to maximize visual compatibility	1.16	CD	Immediate and ongoing	
14. Enforce State energy conservation requirements	1.7, 1.9	CD	Immediate and ongoing	
15. Work with Sierra Planning Organization to review and update existing Housing Needs Allocation Plan	1.4	CD	Immediate to 1994	

**TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997**

Work Task	Policies	Responsibility	Time Frame	Comments
16. Review establishment of inclusionary zoning ordinance providing for more low income housing	1.4, 1.9	CD	1994	
17. Revise second unit ordinance to encourage construction of "granny-flats"	1.11	CD	1992	
18. Relieve some of the constraints imposed on low income housing productions	1.8, 1.10	CD	Ongoing	
19. Provide means for resolution of housing complaints and fair housing issues	1.4	CD	Ongoing	
20. Modify Zoning Ordinance to allow homeless shelters in open space and conservation, central business and regional commercial zone districts.	1.17	CD	1994	
OPEN SPACE				
1. Prepare/adopt Tree Ordinance	1.2	CD	1993	
2. Prepare/adopt Open Space Ordinance to zone open space use in perpetuity	3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 5.4	CD	1993	
3. Prepare/adopt Stream, Canal and Waterway Protection Ordinance	7.4, 7.6	CD	1993	
4. Prepare/adopt Habitat Management Plan	1.1, 1.3, 1.4, 1.5, 1.6, 1.9, 2.6, 5.4, 7.6	CD	1995	
5. Continue to utilize Quimby Act	3.6, 5.1, 5.2, 5.3, 5.4, 5.6, 6.7	CD, ARD	Ongoing	
6. Maintain Parks Standard of 5 acres/1,000 pop.	3.6, 6.7	CD, ARD	1992-1997	
7. Include measures to protect visual resources along scenic corridors in Zoning Ordinance	5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 7.6	CD	1993	
8. Provide for recreational opportunities in Baltimore Ravine through the Southwest Specific Plan	3.6, 5.1, 5.2, 5.3, 5.4, 5.5, 6.7	CD	1992-1993	
9. Prepare a Household Hazardous Waste Ordinance (see Safety Element Implementation Measure K)	2.5	PW	1992-1993	



**TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997**

Work Task	Policies	Responsibility	Time Frame	Comments
10. Amend the Landscape Ordinance to establish a maintenance and enforcement program	6.6	CD	1993-1994	
11. Implementation measures for Policy 7.3 are included in implementation of the Land Use Element	7.3	CD, PW, B	Ongoing	
NOISE				
1. Develop and utilize procedure to ensure noise mitigation measures are implemented	1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6	CD	Immediate and ongoing	
2. Develop and utilize procedures to monitor compliance with the standards of the Noise Element	1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6	CD	Immediate and ongoing	
3. Enforce the State Noise Insulation Standards and Chapter 35 of the Uniform Building Code (UBC)	1.2, 2.3, 2.4, 2.5, 2.6	CD, B	Immediate and ongoing	
4. Enforce California Vehicle Code sections relating to vehicle mufflers and exhaust systems	General Plan Guidelines	CD, P	Immediate and ongoing	
5. Purchase only new equipment and vehicles which comply with noise level performance standards	General Plan Guidelines	CD, P, F, PW, CM	Immediate and ongoing	
6. Periodically review and update the Noise Element to ensure consistent with changing conditions within the community	General Plan Guidelines	CD	Immediate and ongoing	
SAFETY				
1. Review new development for conformance to fire safety standards	1.1, 1.2, 1.3	CD, F	Ongoing	
2. Prepare educational brochure on fire hazard and prevention	1.4, 1.5	CD, F	1993	
3. Develop/adopt flood zone prohibition in Zoning Ordinance	2.1, 2.2, 2.3	CD, PW	1994	
4. Coordinate with Placer County regarding Solid Waste and Hazardous Management Plans	3.1, 4.1, 4.2, 4.3, 4.4	CD, PW	Annually	
5. Conform to CEQA review requirements	3.2, 3.3, 3.4, 3.5, 3.6	CD, PW, F, P	Ongoing	
Periodically update the Emergency Services Plan	5.1, 5.2, 5.3	P, F, PW, CM	Ongoing	

**TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997**

Work Task	Policies	Responsibility	Time Frame	Comments
7. Continue/expand Crime Prevention Programs	5.5, 5.6	P	Ongoing	
8. Include emergency access for development projects	3.6, 5.1, 5.7	CD, PW, B	Ongoing	
9. Include legible sign and street number requirements in the development review process	5.1, 5.2, 5.4	CD, PW, B	Ongoing	
10. Require new buildings comply with UBC Standards regarding seismic events	3.1, 3.3, 3.4, 3.5, 5.2	CD, PW, B	1992-ongoing	
11. Prepare a Household Hazardous Waste Ordinance	4.5	PW	1992-1993	
ECONOMIC				
1. Host annual seminar with Chamber of Commerce, Main Street, Merchants Association	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1	CM, CD	1st Annual 1994	
2. Identify areas suitable for redevelopment	2.2, 3.2	CD, PW, AUDA	Immediate and ongoing	
3. Promote establishment of rail station	4.1, 4.2, 4.3	CD, AUDA, PW	Immediate and ongoing	
4. Retain services of economic development specialist to assist with business retention/expansion	1.1, 1.2, 1.3, 1.4, 2.1; 2.2, 3.1, 3.2	AUDA, CM, CD	1993	
HISTORIC				
1. Prepare/adopt Historic District designation for Old Town and Downtown Areas.	1.1	CD	1994-1998	
2. Implement the Historic District Development Guidelines and continue implementation of the Auburn Main Street Design Guidelines	1.1	CD	1993-1995 and ongoing	
3. Continue to update the inventory of historic sites	1.2	CD	1994-1996	
4. Prepare an historic site ordinance	1.2	CD	1994-1996	
5. Prepare design guidelines for residential structures	1.2	CD	1994-1996	



TABLE XII-1
IMPLEMENTATION WORK PROGRAM
AUBURN GENERAL PLAN 1992-1997

Work Task	Policies	Responsibility	Time Frame	Comments
Community Development Department	F Fire Department	AUDA	Auburn Urban Development Authority	
Police Department	CM City Manager	ARD	Auburn Recreation District	
Public Works Department	CC City Council	B	Building Department	
Planning Commission	FI Finance Department	LAFCO	Local Agency Formation Commission	

LEGEND:

- CD
- P
- PW
- PC

2. Specific Plan Implementation

The urban reserve designation requires the preparation of a specific plan prior to the commencement of development. The criteria which shall apply to the preparation of a specific plan are outlined on the next page.

The following is taken from the *State of California General Plan Guidelines*, June 1987.

A specific plan is a tool for the "systematic implementation" of the general plan. It may be applied to all or a portion of the area covered by a general plan. Any interested party may request the adoption, amendment or repeal of a specific plan. While a plan may be prepared by either the public or private sectors, plan adoption, amendment and repeal are the responsibility of the local legislature. As a legislative act, however, a specific plan is subject to the referendum and initiative processes.

At a minimum, a specific plan must include a statement of its relationship to the general plan (Government Code Section 65451(b)) and a text and diagram(s) that specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, programs, public works projects and financing measures necessary to carry out the provisions of the preceding three paragraphs (Government Code Section 654451(a)).

These requirements are general and enable a local government to select from a wide range of land use criteria and implementation programs. Specific plans may also address any other subject which in the judgment of the planning agency is necessary or desirable for general plan implementation (Government Code Section 65452).

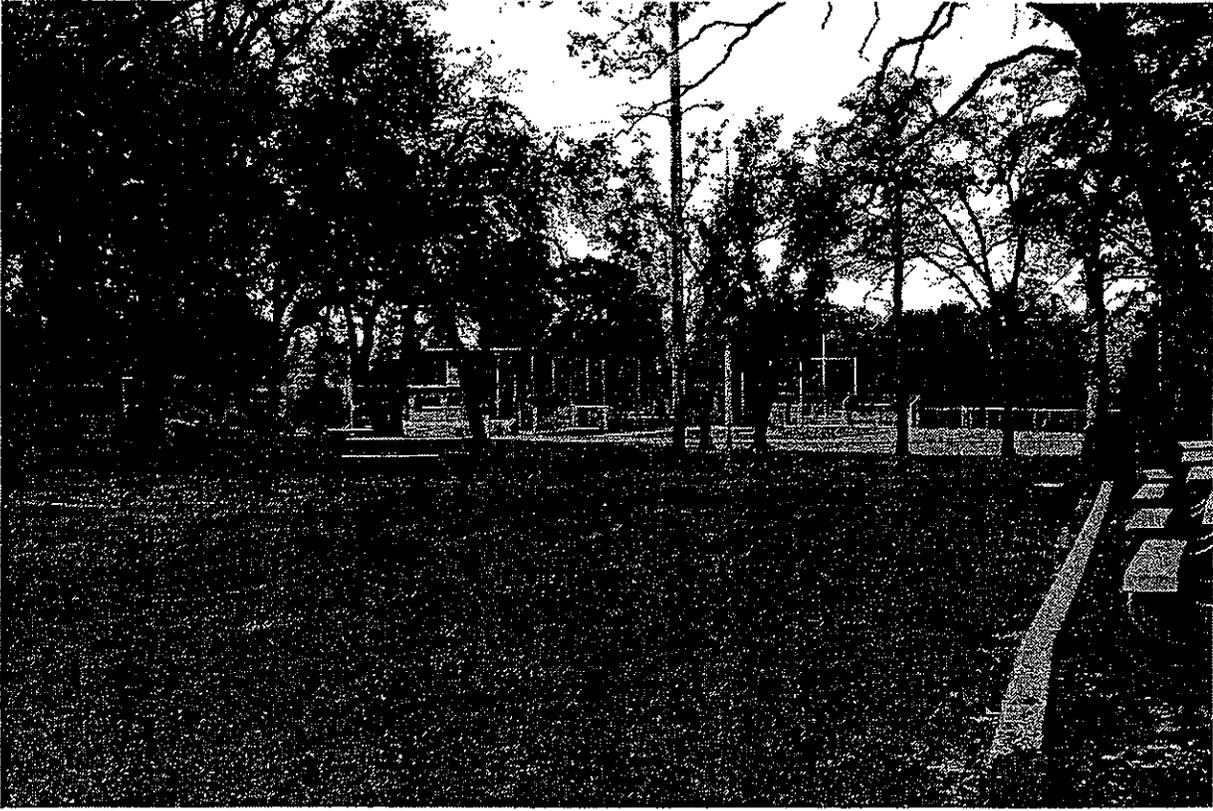
As allowed under Government Code Section 65452, the City of Auburn has developed the following additional specific plan requirements. This criteria was developed because of the unique environmental, circulation, and infrastructure impacts that will result due to development of the urban reserve area in southwest Auburn. These requirements are minimum standards, therefore, additional requirements may be required for the development of a specific plan.

1. Infrastructure elements shall evaluate storm drainage, water system, sewer system, and gas and electricity.

2. The circulation element shall evaluate access, streets, public transit and bikeways.
3. Environmental conditions analysis shall evaluate topography, geology/soils, b and wetlands, noise, historical and cultural resources, and public services and schools.
4. A land use concept shall be developed that includes the proposed land use pattern, the collector street system, the location and extent of public facilities, and the location and amenities of park and recreation facilities.
5. The specific plan shall also include an infrastructure master plan with cost estimates, urban design guidelines, and an implementation, phasing and financial plan.



SOURCES



Recreation Park

1. Bibliography

Auburn Area Chamber of Commerce, 1990. *Auburn Area Community Economic Profile.*

Auburn Area Recreation and Park District, 1989. *Auburn Area Recreation and Park District General Plan.*

Auburn/Bowman Community Plan. Public Education/Schools Component (James F. Bush, Director of Facility Planning, Placer County Office of Education)

Auburn/Bowman Community Plan. Public Facilities/Public Services Study (Quad 1991)

- Auburn/Bowman Community Plan. Recreation Element. (AARPD John Ramiriz) 1992.
Auburn Municipal Code. 1989.*
- Auburn Park Conservancy Non-Auto Circulation Recommendations Map, May 1991.*
- Auburn Urban Development Authority, 1986. Redevelopment Plan for the Auburn
Redevelopment Project.*
- California Department of Finance Demographic Research Unit, 1990. Placer County
Population and Housing Estimates January 1, 1985.*
- California Department of Finance Demographic Research Unit, 1986. Population
Projections for California Counties 1980-2020 with Age/Sex Detail to 2020 DOF
Baseline 86. December.*
- California Energy Commission, 1988. Building Energy Efficiency Standards. July.*
- Carl Elan and Associates, 1985. The Housing Element of the General Plan City of Auburn.
December 9.*
- Caltrans, 1990. Route Concept Report Route 49. August.*
- City of Auburn, 1989. 1989 - 1990 Budget.*
- City of Auburn, 1990. 1990 - 1991 Budget.*
- City of Auburn, 1985-1989. Building Activity Summary.*
- City of Auburn, Auburn Ravine Trail Master Plan.*
- City of Auburn, 1990. City of Auburn Building Department Procedure for Obtaining
Building Permits.*
- City of Auburn, 1990. Current City Project Activity List.*
- City of Auburn, 1986. Historic Resources Survey. November 1.*
- City of Auburn. Auburn Main Street Architectural Design Guidelines.*
- City of Auburn, 1990. Planning, Zoning, and Environmental Review Fees & Charges.
December 10.*
- City of Auburn, 1990. Zoning Map. April.*
- Department of Housing & Community Development. Draft Loan and Grant Programs for
the Division of Community Affairs.*



Employment Development Department, 1990. *California Labor Market Bulletin*. August.

Employment Development Department, 1990. *Annual Planning Information, Placer County*. June.

Housing Element of the General Plan, City of Auburn, 1985 (Carl Chan & Associates)

National Transportation Safety Board, 1991. *Brief of Aviation Accident, Auburn Municipal Airport*.

OMNI-MEANS, 1988. *Placer County Bikeways Master Plan*.

OMNI-MEANS, 1990. *Traffic Impact Analysis for Crystal Point*. July 26.

Placer County, 1978. *Auburn Area General Plan 1978-1979*. November 28.

Placer County, 1989. *Placer County Building Department Residential Fee Schedule*. March 1.

Placer County, 1990. *Placer County Planning Department Fee Schedule*. July.

Placer County, 1991. *Auburn/Bowman Community Plan Jobs/Housing Balance Issue Paper*.

Placer County Resource Conservation District, 1991. *Draft Auburn/Bowman Community Plan Conservation and Open Space Component of the Environmental Resources Management Elements*. February 28.

Planning Concepts, 1990. *Draft Nevada Street Rezoning Environmental Impact Report*. October.

Planning Concepts, 1990. *Nevada Street Rezoning Environmental Impact Report Appendix*. October.

QUAD, 1991. *Auburn/Bowman Community Plan Public Services/Public Facilities Study*. September.

Redevelopment Plan for the Auburn Redevelopment Project. (Auburn Urban Development Authority) 1986.

Regional Housing Allocation Plan for Sierra Planning Organization (Barbara Dollatz, 1991).

Sierra Economic Development District, 1986. *Statistical Abstract*. April.

Sierra Economic Development District, 1990. *Preliminary Census Data for SEDD Region*. September.

Sierra Planning Organization, 1991. *Regional Housing Allocation Plan*.

State of California Department of Finance, 1990. *Placer County K-12 Public Enrollment Grades K-8*. June 25.

TJKM, 1989. *Traffic Impact Study for the Commercial Center at Interstate 80 and State Route 49*. November 7.

Transportation Research Board, 1985. *Highway Capacity Manual, Special Report 209*.

U.S. Department of Commerce Bureau of the Census, 1990. *1990 Decennial Census Post Census Local Review Preliminary Housing Unit and Group Quarters Population Counts*. July 26.

U.S. Department of Commerce Bureau of the Census, 1991. *Boundary and Annexation Survey*. January 1.

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Thompson, Robert III

Council Members

Pisarek, Bud
Yue, Debbie

Planning Commissioners

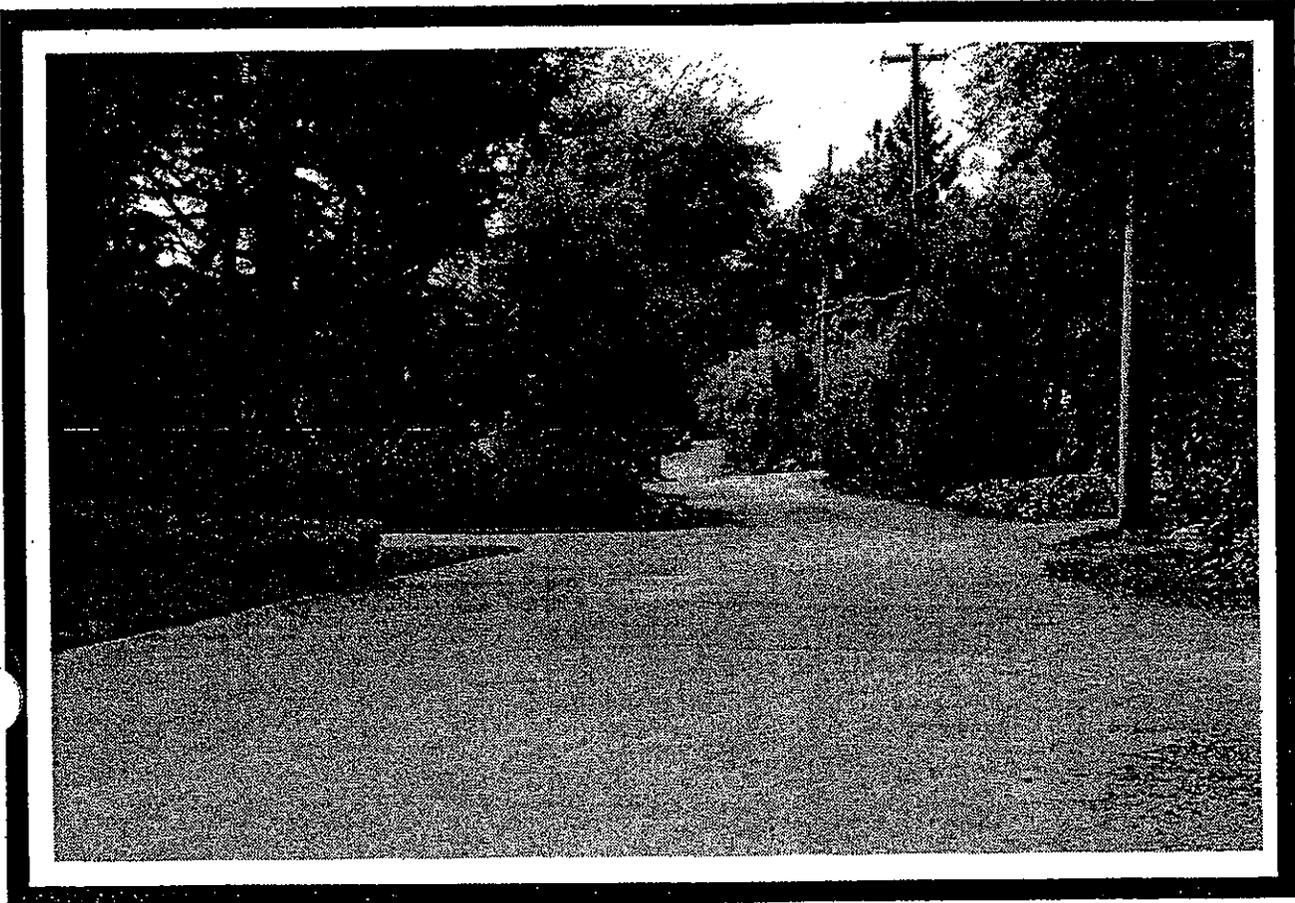
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GLOSSARY



Aeolia Drive

1. Abbreviations

ADT:	Average daily trips made by vehicles or persons in a 24-hour period
ALUC:	Airport Land Use Commission
BMR:	Below-market-rate dwelling unit
CBD:	Central Business District
CC&Rs:	Covenants, Conditions, and Restrictions
CDBG:	Community Development Block Grant
CEQA:	California Environmental Quality Act
CHFA:	California Housing Finance Agency
CIP:	Capital Improvements Program
CMP:	Congestion Management Plan
CNEL:	Community Noise Equivalent Level

COG:	Council of Governments
CRA:	Community Redevelopment Agency
EIR:	Environmental Impact Report (State)
EIS:	Environmental Impact Statement (Federal)
FAR:	Floor Area Ratio
FEMA:	Federal Emergency Management Agency
FHWA:	Federal Highway Administration
FmHA:	Farmers Home Administration
GMI:	Gross Monthly Income
HAP:	Housing Assistance Plan
HCD:	Housing and Community Development Department of the State of California
HOV:	High Occupancy Vehicle
HUD:	U.S. Dept. of Housing and Urban Development
JPA:	Joint Powers Authority
LAFCO:	Local Agency Formation Commission
LHA:	Local Housing Authority
LOS:	Level of Service
LRT:	Light-duty Rail Transit
NEPA:	National Environmental Policy Act
OPR:	Office of Planning and Research, State of California
PUD:	Planned Unit Development
SRO:	Single Room Occupancy
TDM:	Transportation Demand Management
TDR:	Transfer of Development Rights
TSM:	Transportation Systems Management
UBC:	Uniform Building Code
UHC:	Uniform Housing Code
UMTA:	Urban Mass Transportation Administration
VMT:	Vehicle Miles Travelled

2. Definitions

ACCEPTABLE RISK

A hazard which is deemed to be a tolerable exposure to danger given the expected benefits to be obtained. Different levels of acceptable risk may be assigned according to the potential danger and the criticalness of the threatened structure. The levels may range from "near zero" for nuclear plants and natural gas transmission lines to "moderate" for open space, ranches and low-intensity warehouse uses.

ACCESS/EGRESS

The ability to enter a site from a roadway and exit a site onto a roadway by motorized vehicle.



ACRES, GROSS

The entire acreage of a site. Most communities calculate gross acreage to the centerline of proposed bounding streets and to the edge of the right-of-way of existing or dedicated streets.

ACRES, NET

The portion of a site that can actually be built upon. The following generally are not included in the net acreage of a site: public or private road rights-of-way, public open space, and floodways.

AFFORDABILITY REQUIREMENTS

Provisions established by a public agency to require that a specific percentage of housing units in a project or development remain affordable to very low- and low-income households for a specified period.

AFFORDABLE HOUSING

Housing capable of being purchased or rented by a household with very low, low, or moderate income, based on a household's ability to make monthly payments necessary to obtain housing. Housing is considered affordable when a household pays less than 30 percent of its gross monthly income (GMI) for housing including utilities.

AGENCY

The governmental entity, department, office, or administrative unit responsible for carrying out regulations.

AGRICULTURAL PRESERVE

Land designated for agriculture or conservation. (See "Williamson Act.")

AGRICULTURE

Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

AGRICULTURE-RELATED BUSINESS

Feed mills, dairy supplies, poultry processing, creameries, auction yards, veterinarians and other businesses supporting local agriculture

AIRPORT-RELATED USE

A use which supports airport operations including, but not limited to, aircraft repair maintenance, flight instruction, and aircraft chartering.

ALLUVIAL

Soils deposited by stream action.

ALQUIST-PRIOLO ACT, SEISMIC HAZARD ZONE

A seismic hazard zone designated by the State of California within which specialized geologic investigations must be prepared prior to approval of certain new development.

AMBIENT

Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

AMBIENT NOISE LEVEL

The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

ANNEX

To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

APARTMENT

- (1) One or more rooms of a building used as a place to live, in a building containing at least one other unit used for the same purpose.
- (2) A separate suite, not owner occupied, which includes kitchen facilities and is designed for and rented as the home, residence, or sleeping place of one or more persons living as a single housekeeping unit.

APPROACH ZONE

The air space at each end of a landing strip that defines the glide path or approach path of an aircraft and which should be free from obstruction.

ARTICLE 34 REFERENDUM

Article 34 of the Constitution of the State of California requires passage of a referendum within a city or county for approval of the development or acquisition of a publicly-



financed housing project where more than 49 percent of the units are set aside for low-income households.

ASSISTED HOUSING

Generally multi-family rental housing, but sometimes single-family ownership units, whose construction, financing, sales prices, or rents have been subsidized by federal, state, or local housing programs including, but not limited to Federal Section 8 (new construction, substantial rehabilitation, and loan management set-asides), Federal Sections 213, 236, and 202, Federal Section 221(d)(3) (below-market interest rate program), Federal Section 101 (rent supplement assistance), CDBG, FmHA Section 515, multi-family mortgage revenue bond programs, local redevelopment and *in lieu* fee programs, and units developed pursuant to local inclusionary housing and density bonus programs. By January 1, 1992, all California Housing Elements are required to address the preservation or replacement of assisted housing that is eligible to change to market rate housing by 2002.

BELOW-MARKET-RATE (BMR) HOUSING UNIT

- (1) Any housing unit specifically priced to be sold or rented to low- or moderate-income households for an amount less than the fair-market value of the unit. Both the State of California and the U.S. Department of Housing and Urban Development set standards for determining which households qualify as "low income" or "moderate income."
- (2) The financing of housing at less than prevailing interest rates.

BIKEWAYS

A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

BUILDOUT; BUILD-OUT

Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations.

CALTRANS

California Department of Transportation.

CAPITAL IMPROVEMENTS PROGRAM (CIP)

A program, administered by a city or county government and reviewed by its planning commission, which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the general plan.

CIRCULATION ELEMENT

One of the seven State-mandated elements of a local general plan, it contains additional goals, policies and implementation programs for the planning and management of existing and proposed thoroughfares, transportation routes, and terminals, as well as local public utilities and facilities, all correlated with the land use element of the general plan.

CLUSTERED DEVELOPMENT

Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open space area.

COMMERCIAL

A land use classification which permits facilities for the buying and selling of commodities and services.

COMMERCIAL STRIP

Commercial development, usually one store deep, that fronts on a major street for a distance of one city block or more. Includes individual buildings on their own lots, with or without on-site parking, and small linear shopping centers with shallow on-site parking in front of the stores.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

A grant program administered by the U.S. Department of Housing and Urban Development (HUD) on a formula basis for entitlement communities, and by the State Department of Housing and Community Development (HCD) for non-entitled jurisdictions. This grant allots money to cities and counties for housing rehabilitation and community development, including public facilities and economic development.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

COMMUNITY REDEVELOPMENT AGENCY

A local agency created under California Redevelopment Law, or a local legislative body which has elected to exercise the powers granted to such an agency, for the purpose of planning, developing, re-planning, redesigning, clearing, reconstructing, and/or rehabilitating all or part of a specified area with residential, commercial, industrial, and/or public (including recreational) structures and facilities. The redevelopment agency's plans must be compatible with the respective agency's general plan.



COMPATIBLE

Capable of existing together without conflict or ill effects.

CONGESTION MANAGEMENT PLAN (CMP)

A mechanism employing growth management techniques, including traffic level of service requirements, development mitigation programs, transportation systems management, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development. Assembly Bill 1791, effective August 1, 1990, requires all cities, and counties that include urbanized areas, to adopt and annually update a Congestion Management Plan.

CONSERVE

To keep from losing or wasting.

DECIBEL, dB

A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

DEFENSIBLE SPACE

- (1) In fire-fighting and prevention, a 30-foot area of non-combustible surfaces separating urban and wildland areas.
- (2) In urban areas, open spaces, entry points, and pathways configured to provide maximum opportunities to rightful users and/or residents to defend themselves against intruders and criminal activity.

DENSITY, RESIDENTIAL

The number of permanent residential dwelling units per acre of land. Densities specified in the General Plan may be expressed in units per gross acre or per net developable acre.

DENSITY BONUS

The allocation of development rights that allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location. Under California law, a housing development that provides 20% of its units for lower income households, or 10% of its units for very low-income households, or 50% of its units for seniors, is entitled to a density bonus.

DUPLEX

A detached building under single ownership which is designed for occupancy a residence of two families living independently of each other.

DWELLING UNIT

A room or group of rooms (including sleeping, eating, cooking, and sanitation facilities, but not more than one kitchen), which constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

ELDERLY HOUSING

Typically one- and two-bedroom apartments or condominiums designed to meet the needs of persons 62 years of age and older or, if more than 150 units, persons 55 years of age and older, and restricted to occupancy by them.

EMERGENCY SHELTER

A facility which provides immediate and short-term housing and supplemental services for the homeless. Shelters come in many sizes, but an optimum size is considered to be 20 to 40 beds. Supplemental services may include food, counseling, and access to other social programs.

FAIR MARKET RENT

The rent, including utility allowances, determined by the United States Department of Housing and Urban Development for purposes of administering the Section 8 Existing Housing Program.

FAMILY

1. Two or more persons related by birth, marriage, or adoption [U.S. Bureau of the Census].
2. An individual or a group of persons living together who constitute a *bona fide* single-family housekeeping unit in a dwelling unit, not including a fraternity, sorority, club, or other group of persons occupying a hotel, lodging house or institution of any kind [California].

FARMERS HOME ADMINISTRATION (FMHA)

A federal agency providing loans and grants for improvement projects and low-income housing in rural areas.



FLOOR AREA RATIO (FAR)

The maximum gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net sq. ft. of land area, a Floor Area Ratio of 1.0 will allow 10,000 gross sq. ft. of building floor area to be built. On the same site, an FAR of 1.5 would allow 15,000 sq. ft. of floor area; an FAR of 2.0 would allow 20,000 sq. ft.; and an FAR of 0.5 would allow only 5,000 sq. ft. Also commonly used in zoning, FARs typically are applied on a parcel-by-parcel basis as opposed to an average FAR for an entire land use or zoning district.

GENERAL PLAN

A compendium of city or county policies regarding long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council or Board of Supervisors. In California, the General Plan has seven mandatory elements (Circulation, Conservation, Housing, Land Use, Noise, Open Space, Safety and Seismic Safety) and may include any number of optional elements (such as Air Quality, Economic Development, Hazardous Waste, and Parks and Recreation). The General Plan may also be called a "City Plan," "Comprehensive Plan," or "Master Plan."

GROUP QUARTERS

A residential living arrangement, other than the usual house, apartment, or mobile home, in which two or more unrelated persons share living quarters and cooking facilities. Institutional group quarters include nursing homes, orphanages, and prisons. Non-institutional group quarters include dormitories, shelters, and large boarding houses.

HABITAT

The physical location or type of environment in which an organism or biological population lives or occurs.

HANDICAPPED

A person determined to have a physical impairment or mental disorder expected to be of long or indefinite duration. Many such impairments or disorders are of such a nature that a person's ability to live independently can be improved by appropriate housing conditions.

HAZARDOUS MATERIAL

Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

HISTORIC; HISTORICAL

An historic building or site is one that is noteworthy for its significance in local, state, national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.

HOMELESS

Persons and families who lack a fixed, regular, and adequate nighttime residence. Includes those staying in temporary or emergency shelters or who are accommodated with friends or others with the understanding that shelter is being provided as a last resort. California Housing Element law, §65583(c)(1) requires all cities and counties to address the housing needs of the homeless.

HOUSEHOLD

All those persons related or unrelated who occupy a single housing unit.

HOUSEHOLDS, NUMBER OF

The count of all year-round housing units occupied by one or more persons.

The concept of *household* is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

HOUSING AND COMMUNITY DEVELOPMENT DEPARTMENT OF THE STATE OF CALIFORNIA (HCD)

The State agency that has principal responsibility for assessing, planning for, and assisting communities to meet the needs of low- and moderate-income households.

HOUSING ELEMENT

One of the seven State-mandated elements of a local general plan, it assesses the existing and projected housing needs of all economic segments of the community, identifies potential sites adequate to provide the amount and kind of housing needed, and contains adopted goals, policies, and implementation programs for the preservation, improvement, and development of housing. Under State law, Housing Elements must be updated every five years.

HOUSING AND URBAN DEVELOPMENT, U.S. DEPARTMENT OF (HUD)

A cabinet-level department of the federal government which administers housing and community development programs.



HOUSING UNIT

The place of permanent or customary abode of a person or family. A housing unit may be a single-family dwelling, a multi-family dwelling, a condominium, a modular home, a mobile home, a cooperative, or any other residential unit considered real property under State law. A housing unit has, at least, cooking facilities, a bathroom, and a place to sleep. It also is a dwelling that cannot be moved without substantial damage or unreasonable cost.

INDUSTRIAL

The manufacture, production, and processing of consumer goods. Industrial is often divided into "heavy industrial" uses, such as construction yards, quarrying, and factories; and "light industrial" uses, such as research and development and less intensive warehousing and manufacturing.

INFRASTRUCTURE

The basic components of a city, such as streets, sewers, drainage, sidewalks, curbs and gutters, street lights and water systems.

ISSUES

Important unsettled community matters or problems that are identified in a community's general plan and dealt with by the plan's goals, objectives, policies, plan proposals, and implementation programs.

JOBS/HOUSING BALANCE; JOBS/HOUSING RATIO

The availability of affordable housing for employees. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

L_{DN}

Day-Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}

Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. *L_{eq}* is typically computed over 1, 8 and 24-hour sample periods.

NOTE: CNEL and L_{dn} represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{MAX}

The maximum sound level recorded during a noise event.

L_n

The sound level exceeded "n" percent of the time during a sample interval L_{10} equals the level exceeded 10 percent of the time (L_{90} , L_{50} , etc.)

LAND USE

The occupation or utilization of land or water area for any human activity or any purpose defined in the General Plan.

LAND USE CLASSIFICATION

A system for classifying and designating the appropriate use of properties.

LAND USE ELEMENT

A required element of the General Plan that uses text and maps to designate the future use or reuse of land within a given jurisdiction's planning area. The land use element serves as a guide to the structuring of zoning and subdivision controls, urban renewal and capital improvements programs, and to official decisions regarding the distribution and intensity of development and the location of public facilities and open space.

LOCAL AGENCY FORMATION COMMISSION (LAFCO)

A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. The LAFCO members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCOs include two representatives of special districts.

LOW-INCOME HOUSEHOLD

A household with an annual income usually no greater than 80 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program.



MANDATORY ELEMENT

A component of the General Plan mandated by State law, California State law requires that a General Plan include elements dealing with seven subjects--circulation, conservation, housing, land use, noise, open space, and safety--and specifies to various degrees the information to be incorporated in each element.

MERCALLI INTENSITY SCALE

A subjective measure of the observed effects (human reactions, structural damage, geologic effects) of an earthquake. Expressed in Roman numerals from I to XII.

MIXED-USE

Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

MOBILE HOME

A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit and which (1) has a minimum of 400 square feet of living space; (2) has a minimum width in excess of 102 inches; (3) is connected to all available permanent utilities; and (4) is tied down (a) to a permanent foundation on a lot either owned or leased by the homeowner or (b) is set on piers, with wheels removed and skirted, in a mobile home park.

MODERATE-INCOME HOUSEHOLD

A household with an annual income between the lower income eligibility limits and 120 percent of the area median family income adjusted by household size, usually as established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program.

MULTIPLE FAMILY BUILDING

A detached building designed and used exclusively as a dwelling by three or more families occupying separate suites.

NATIONAL REGISTER OF HISTORIC PLACES

The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

NEIGHBORHOOD

An area of homes and sometimes local businesses which are within a defined boundary usually having distinguishing characteristics.

NOISE ELEMENT

One of the seven State-mandated elements of a local general plan, it assesses noise levels of highways and freeways, local arterials, railroads, airports, local industrial plants, and other ground stationary sources, and adopts goals, policies, and implementation programs to reduce the community's exposure to noise.

NOISE EXPOSURE CONTOURS

Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and L_{dn} contours are frequently utilized to describe community exposure to noise.

NON-CONFORMING USE

A use which was valid when brought into existence, but by subsequent regulation becomes no longer conforming. "Non-conforming use" is a generic term and includes (1) non-conforming structures (by virtue of size, type of construction, location on land, or proximity to other structures), (2) non-conforming use of a conforming building, (3) non-conforming use of a non-conforming building, and (4) non-conforming use of land. Thus, any use lawfully existing on any piece of property that is inconsistent with a new or amended General Plan, and that in turn is a violation of a zoning ordinance amended subsequently adopted in conformance with the General Plan, will be a non-conforming use. Typically, non-conforming uses are permitted to continue for a designated period of time, subject to certain restrictions.

NON-FAMILY HOUSEHOLD

A household with an individual or a group of persons living together who are unrelated and do not constitute a *bona fide* single-family housekeeping unit in a dwelling unit.

OPEN SPACE ELEMENT

One of the seven State-mandated elements of a local general plan, it contains an inventory of privately and publicly owned open-space lands, and adopted goals, policies, and implementation programs for the preservation, protection, and management of open space lands.

OPEN SPACE LAND

Any parcel or area of land or water which is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.



ORDINANCE

A law or regulation set forth and adopted by a governmental authority, usually a city or county.

OVERLAY

A land use designation on the Land Use Map, or a zoning designation on a zoning map, which modifies the basic underlying designation in some specific manner.

PARKS

Open space lands whose primary purpose is recreation.

PEAK HOUR/PEAK PERIOD

For any given roadway, a daily period during which traffic volume is highest, usually occurring in the morning and evening commute periods. Where "F" Levels of Service are encountered, the "peak hour" may stretch into a "peak period" of several hours' duration.

PLANNED UNIT DEVELOPMENT (PUD)

A description of a proposed unified development, consisting at a minimum of a map and adopted ordinance setting forth the regulations governing, and the location and phasing of all proposed uses and improvements to be included in the development.

PLANNING AND RESEARCH, OFFICE OF (OPR)

A governmental division of the State of California which has among its responsibilities the preparation of a set of guidelines for use by local jurisdictions in drafting General Plans.

PLANNING AREA

The Planning Area is the land area addressed by the General Plan. For a city, the Planning Area boundary typically coincides with the Sphere of Influence and encompasses land both within the city limits and potentially annexable land.

PLANNING COMMISSION

A body, usually having five or seven members, created by a city or county in compliance with California law (§65100) which requires the assignment of the planning functions of the city or county to a planning department, planning commission, hearing officers, and/or the legislative body itself, as deemed appropriate by the legislative body.



POLICY

A specific statement of principle or of guiding actions which implies clear commitment but is not mandatory. A general direction that a governmental agency sets to follow, in order to meet its goals and objectives before undertaking an action program.

PRESERVE

To guard or protect.

PROGRAM

An action, activity, or strategy carried out in response to adopted policy to achieve a specific goal or objective. Policies and programs establish the "who," "how" and "when" for carrying out the "what" and "where" of goals and objectives.

PUBLIC AND QUASI-PUBLIC FACILITIES

Institutional, academic, governmental and community service uses, either publicly owned or operated by non-profit organizations.

REDEVELOP

To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

REGIONAL HOUSING NEEDS PLAN

A quantification by a COG or by HCD of existing and projected housing need, by household income group, for all localities within a region.

REHABILITATION

The repair, preservation, and/or improvement of substandard housing.

RESIDENTIAL

Land designated in the City's or County's General Plan and zoning ordinance for buildings consisting only of dwelling units. May be improved, vacant or unimproved.

RESIDENTIAL, MULTIPLE FAMILY

Usually three or more dwelling units on a single site, which may be in the same or separate buildings.



RESIDENTIAL, SINGLE-FAMILY

A single dwelling unit on a building site.

RICHTER SCALE

A measure of the size or energy release of an earthquake at its source. The scale is logarithmic; the wave amplitude of each number on the scale is 10 times greater than that of the previous whole number.

RIDESHARE

A travel mode other than driving alone, such as buses, rail transit, carpools, and vanpools.

RIPARIAN LANDS

Riparian lands are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

SAFETY ELEMENT

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the protection of the community from any unreasonable risks associated with seismic and geologic hazards, flooding, and wildland and urban fires. Many safety elements also incorporate a review of police needs, objectives, facilities, and services.

SANITARY LANDFILL

The controlled placement of refuse within a limited area, followed by compaction and covering with a suitable thickness of earth and other containment material.

SECOND UNIT

A self-contained living unit, either attached to or detached from, and in addition to, the primary residential unit on a single lot. Sometimes called "Granny Flat".

SECTION 8 RENTAL ASSISTANCE PROGRAM

A federal (HUD) rent-subsidy program that is one of the main sources of federal housing assistance for low-income households. The program operates by providing "housing assistance payments" to owners, developers, and public housing agencies to make up the difference between the "Fair Market Rent" of a unit (set by HUD) and the household's contribution toward the rent, which is calculated at 30 percent of the household's

adjusted gross monthly income (GMI). "Section 8" includes programs for new construction, existing housing, and substantial or moderate housing rehabilitation.

SEISMIC

Caused by or subject to earthquakes or earth vibrations.

SEL OR SENEL

Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure level for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SENIORS

Persons age 62 and older.

SHALL

That which is obligatory or necessary.

SHARED LIVING

The occupancy of a dwelling unit by persons of more than one family in order to share housing expenses and provide social contact, mutual support, and assistance. Shared living facilities serving six or fewer persons are permitted in all residential districts by §1566.3 of the California Health and Safety Code.

SHOULD

Signifies a directive to be honored, if at all possible.

SIGN

Any representation (written or pictorial) used to convey information, or to identify, announce, or otherwise direct attention to a business, profession, commodity, service, or entertainment, and placed on, suspended from, or in any way attached to, any structure, vehicle, or feature of the natural or manmade landscape.

SINGLE-FAMILY DWELLING, ATTACHED

A dwelling unit occupied or intended for occupancy by only one household that is structurally connected with at least one other such dwelling unit.



SINGLE-FAMILY DWELLING, DETACHED

A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

SINGLE ROOM OCCUPANCY (SRO)

A single room, typically 80-250 square feet, with a sink and closet, but which requires the occupant to share a communal bathroom, shower, and kitchen.

SLOPE

Land gradient described as the vertical rise divided by the horizontal run, and expressed in percent.

SOIL

The unconsolidated material on the immediate surface of the earth created by natural forces that serves as natural medium for growing land plants.

SOUND LEVEL

The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SPECIFIC PLAN

Under Article 8 of the Government Code (§65450 *et seq.*), a legal tool for detailed design and implementation of a defined portion of the area covered by a General Plan. A specific plan may include all detailed regulations, conditions, programs, and/or proposed legislation which may be necessary or convenient for the systematic implementation of any General Plan element(s).

SPHERE OF INFLUENCE

The probable ultimate physical boundaries and service area of a local agency (city or district) as determined by the Local Agency Formation Commission (LAFCo) of the County.

STANDARDS

- (1) A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. The State Government Code (§65302) requires that general plans spell out the objectives, principles, "standards," and proposals of the general plan.

Examples of standards might include the number of acres of park land per 1,000 population that the community will attempt to acquire and improve, or the "Level of Service" (LOS) that the plan hopes to attain.

- (2) Requirements in a zoning ordinance that govern building and development as distinguished from use restrictions—for example, site-design regulations such as lot area, height limit, frontage, landscaping, and floor area ratio.

STREET FURNITURE

Those features associated with a street that are intended to enhance that street's physical character and use by pedestrians, such as benches, trash receptacles, kiosks, lights, newspaper racks.

STRUCTURE

Anything constructed or erected which requires location on the ground (excluding swimming pools, fences, and walls used as fences).

SUBDIVISION

The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. "Subdivision" includes a condominium project as defined in Section 1350 of the California Civil Code.

SUBDIVISION MAP ACT

Division 2 (Sections 66410 *et seq*) of the California Government code, this act vests in local legislative bodies the regulation and control of the design and improvement of subdivisions, including the requirement for tentative and final maps.

SUBSIDIZE

To assist by payment of a sum of money or by the granting of terms or favors that reduce the need for monetary expenditures. Housing subsidies may take the forms of mortgage interest deductions or tax credits from federal and/or state income taxes, sale or lease at less than market value of land to be used for the construction of housing, payments to supplement a minimum affordable rent, and the like.

SUBSTANDARD HOUSING

Residential dwellings which, because of their physical condition, do not provide safe and sanitary housing.



TOPOGRAPHY

Configuration of a surface, including its relief and the position of natural and man-made features.

TOURISM

The business of providing services for persons traveling for pleasure, tourism contributes to the vitality of the community by providing revenue to local business. Tourism can be measured through changes in the transient occupancy tax, or restaurant sales.

TRAFFIC MODEL

A mathematical representation of traffic movement within an area or region based on observed relationships between the kind and intensity of development in specific areas. Many traffic models operate on the theory that trips are produced by persons living in residential areas and are attracted by various non-residential land uses.

TRANSIT

The conveyance of persons or goods from one place to another by means of a local, public transportation system.

TRANSIT, PUBLIC

A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called "Mass Transit."

TRANSITIONAL HOUSING

Shelter provided to the homeless for an extended period, often as long as 18 months, and generally integrated with other social services and counseling programs to assist in the transition to self-sufficiency through the acquisition of a stable income and permanent housing.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to reduce the number of persons who drive alone on the roadway during the commute period and to increase the number in carpools, vanpools, buses and trains, walking, and biking. TDM can be an element of TSM (see below).

TRANSPORTATION SYSTEMS MANAGEMENT (TSM)

A comprehensive strategy developed to address the problems caused by additional development, increasing trips, and a shortfall in transportation capacity. Transportation

Systems Management focuses on more efficiently utilizing existing highway and transit systems rather than expanding them. TSM measures are characterized by their low cost and quick implementation time frame, such as computerized traffic signals, median and freeway ramps, and one-way streets.

TRIP

A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one "production end," (or origin—often from home, but not always), and one "attraction end," (destination).

TRIP GENERATION

The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract household members for specific purposes.

TRUCK ROUTE

A path of circulation required for all vehicles exceeding set weight or axle limits, a truck route follows major arterials through commercial or industrial areas and avoids sensitive areas.

UNIFORM BUILDING CODE (UBC)

A national, standard building code which sets forth minimum standards for construction.

UNIFORM HOUSING CODE (UHC)

State housing regulations governing the condition of habitable structures with regard to health and safety standards, and which provide for the conservation and rehabilitation of housing in accordance with the Uniform Building Code (UBC).

URBAN OPEN SPACE

The absence of buildings or development, usually in well-defined volumes, within an urban environment.

URBAN SERVICES

Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire, schools, parks, and recreation) provided to an urbanized or urbanizing area.

VACANT

Lands or buildings which are not actively used for any purpose.

VEHICLE-MILES TRAVELLED (VMT)

A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

VERY LOW-INCOME HOUSEHOLD

A household with an annual income usually no greater than 50 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program.

VIEWSHED

The area within view from a defined observation point.

WATERCOURSE

Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

WATERSHED

The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse which drains into a lake, or reservoir.

WETLANDS

Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. Under a "unified" methodology now used by all federal agencies, wetlands are defined as "those areas meeting certain criteria for hydrology, vegetation, and soils."

WILDLIFE REFUGE

An area maintained in a natural state for the preservation of both animal and plant life.

WILLIAMSON ACT

Known formally as the *California Land Conservation Act of 1965*, it was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby



slowing its conversion to urban and suburban development. The program entails a ten-year contract between the City or County and an owner of land whereby the land is taxed on the basis of its agricultural use rather than its market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement.

ZONE, COMBINING

A special purpose zone which is superimposed over the regular zoning map. Combining zones are used for a variety of purposes, such as airport compatibility, floodplain or wetlands protection, historic designation, or special parking regulations. Also called "overlay zone."

ZONE, INTERIM

A zoning designation that temporarily reduces or freezes allowable development in an area until a permanent classification can be fixed; generally assigned during General Plan preparation to provide a basis for permanent zoning.

ZONE, TRAFFIC

In a mathematical traffic model the area to be studied is divided into zones, with each zone treated as producing and attracting trips. The production of trips by a zone is based on the number of trips to or from work or shopping, or other trips produced per dwelling unit.

ZONING

The division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the General Plan.

ZONING DISTRICT

A designated section of the city or county for which prescribed land use requirements and building and development standards are uniform.

ZONING, EXCLUSIONARY

Development regulations which result in the exclusion of low- and moderate-income and/or minority families from a community.

ZONING, INCENTIVE

The awarding of bonus credits to a development in the form of allowing more intensive use of land if public benefits—such as preservation of greater than the minimum

required open space, provision for low- and moderate-income housing, or plans for public plazas and courts at ground level—are included in a project.

ZONING, INCLUSIONARY

Regulations which increase housing choice by providing the opportunity to construct more diverse and economical housing to meet the needs of low- and moderate-income families. Often such regulations require a minimum percentage of housing for low- and moderate-income households in new housing developments and in conversions of apartments to condominiums.

ZONING MAP

Government Code §65851 permits a legislative body to divide a county, a city, or portions thereof, into zones of the number, shape, and area it deems best suited to carry out the purposes of the zoning ordinance. These zones are delineated on a map or maps, called the Zoning Map.