

From 1847 **Benicia General Plan**Into the 21st Century



Adopted: June 15, 1999

ACKNOWLEDGMENTS

Benicia City Council

Jerry Hayes, Mayor Steven Messina, Vice Mayor Carey Corbaley Stephen Gizzi Jan Cox-Golovich

Benicia Planning Commission

Joe Burek, Chair Gary Kalian, Vice Chair Tom Campbell Geoffrey Hannafin Gregg Renfrow Nancy Steele Kathy Turner

General Plan Oversight Committee

Elizabeth Patterson, Chair Joe Jacobson, Vice Chair **Ron Arrants** Ron Askham Marilyn Bardet Bob Berman Joe Burek Ron Glas Kitty Griffin Clint Holzwarth Gary Kalian Laksmi Lagares Annie Lloyd John Metzler Reg Page Lindy Purdy Mike Roetzer Gary Salvadori Bonnie Silveria **Bob Sotelo** Nancy Steele

Ed Swenson

Committee Liaison Members

City Council

Pepe Arteaga Carey Corbaley Jan Cox-Golovich John Silva

School Board

Diane Dooley Lisa Hirsh Sheli Ryan

City Manager

Otto Giuliani

Planning Staff

John Bunch,
Planning Director
Brenda Gillarde,
Principal Planner
Del Lacey,
Graphics Illustrator

Technical Advisory Committee

Mike Alvarez,
Parks and Community
Services Director
Rob Braulik,
Economic
Development Director
Ken Hanley,
Fire Chief
Heather McLaughlin,
City Attorney
Alan Nadritch,
Finance Director
Dan Schiada,
Assistant Director of
Public Works

Consultants

Naphtali Knox & Associates -Planning Manager Michael Fornalski - Report Format, Graphics, Maps Design, Community & Environment -**Environmental Impact** Report, Public Safety **Jovce Associates -**Geotechnical Environmental Collaborative -**Biological Resources** Clearwater Hydrology -Hydrology and Water Quality Orion Environmental Associates -**Hazardous Materials** Donald Ballanti - Air Quality Fehr & Peers Associates -Transportation Brown-Buntin Associates -Noise Mogavero Notestine Associates - Cultural Resources and Urban Design **Economic & Planning Systems** - Economic and Fiscal Community Design and Planning Services, UC Davis - Public Outreach Jeffery Baird - Work Program Daniel Iacofano -Meeting Facilitation Russ Clifton - Meeting Videos

Volunteers

Thanks to the many volunteers who supported the work of GPOC and the formation of the New General Plan.

CONTENTS

1. IN	NTRODUCTION	1
A.	. WHAT IS THE BENICIA GENERAL PLAN?	1
	1. Role of the General Plan	1
	2. Legal Requirements	
	3. The General Plan Process	2
	Public Outreach Program	2
	4. Organization of The Plan	6
	Goals, Policies, and Programs	6
	Four Chapters	6
	Maps and Diagrams	7
	Appendix	8
	Technical Appendix	8
	5. Implementing, Updating, and Amending the General Plan	10
	Administering the General Plan	10
	Annual Review by Planning Commission	11
	Amending the Plan	11
	6. Relation to Other Plans	12
B.	REGIONAL SETTING	13
	1. Location in the Region	13
	2. Physical Setting	14
	Gateways	16
C.	. THE PLANNING AREA	17
	1. Planning Area Boundary	17
	2. City Limits	
	3. Areas of Interest	19

2.	COMMUNITY DEVELOPMENTAND	
	SUSTAINABILITY	21
	What is Sustainable Development?	22
	A. LAND USE AND GROWTH MANAGEMENT	
	LAND USE	
	1. Residential Land	
	Low Density Residential	25
	Medium Density Residential	
	High Density Residential	
	2. Commercial Land	26
	Downtown Commercial	26
	General Commercial	27
	Community Commercial	27
	Business and Professional Offices	27
	Waterfront Commercial	27
	3. Mixed Use	27
	Downtown Mixed Use	27
	Lower Arsenal Mixed Use	28
	4. Industrial Land	28
	General Industrial	28
	Limited Industrial	28
	Water-related Industrial	
	5. Public and Quasi-public Land	
	6. Open Space	29
	Marsh	31
	General Open Space	31
	Parks	
	AIRPORT LAND USE COMPATIBILITY	
	GROWTH MANAGEMENT	33
	B. ECONOMIC DEVELOPMENT	37
	Economic Opportunities and Challenges	37
	Benicia's Competitive Strengths	38
	Benicia's Competitive Challenges	39
	Benicia's Fiscal Status	39
	2. Economic Development Goals, Policies, and Programs	41
	Citywide Egonomia Davelonment	11

	Industrial Development	43
	Port Development	45
	Historic Arsenal	46
	Downtown	4 7
	Other Commercial Development	50
C.	CIRCULATION	52
	1. County and Regional Transportation Framework	52
	Congestion Management Agency	52
	Metropolitan Transportation Commission	52
	2. The Movement of People	53
	Pedestrian and Bicycle Movement	53
	Public Transit	53
	Automobile Movement	55
	3. Circulation System	55
	Freeways	57
	Arterial Streets	57
	Collector Streets	58
	Local Streets	58
	4. Existing and Future Traffic Conditions	58
	Freeways	
	City Street Network	59
	5. Parking Conditions	
	6. Freight and Goods Movement	
	Truck Facilities	
	Freight Rail Facilities	66
	Port Facilities	66
	7. Circulation Goals, Policies, and Programs	66
D.	COMMUNITY SERVICES	77
	1. Public and Quasi-public	
	Public and Quasi-public Goals, Policies, and Programs	
	2. Parks and Recreation	
	Standards	
	Existing Parks	
	Future Park Development	
	Parks and Recreation Goals, Policies, and Programs	
	Panioia Stata Darke	07

Existing Facilities 88 Future Facilities 88 Schools Goals, Policies, and Programs 89 4. Water 90 Water Supply 90 Water Quality 90 Waste Water Treatment 91 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RE		3. Schools	88
Schools Goals, Policies, and Programs 89 4. Water 90 Water Supply 90 Water Quality 90 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Mareal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Existing Facilities	88
4. Water 90 Water Supply 90 Water Quality 90 Waste Water Treatment 91 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Future Facilities	88
Water Supply 90 Water Quality 90 Waste Water Treatment 91 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Schools Goals, Policies, and Programs	89
Water Quality 90 Waste Water Treatment 91 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		4. Water	90
Waste Water Treatment 91 Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Water Supply	90
Water Goals, Policies, and Programs 91 5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Water Quality	90
5. Recycling Goals, Policies, and Programs 94 6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Waste Water Treatment	91
6. Utilities 94 Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Water Goals, Policies, and Programs	91
Power and Energy Use 94 Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		5. Recycling Goals, Policies, and Programs	94
Telecommunications 94 Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		6. Utilities	94
Utilities Goals, Policies, and Programs 95 3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Power and Energy Use	94
3. COMMUNITY IDENTITY 97 A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Telecommunications	94
A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		Utilities Goals, Policies, and Programs	95
A. HISTORIC RESOURCES 97 1. Native American Period 98 2. Hispanic Period 98 3. American Period 98 4. Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107			
1. Native American Period.982. Hispanic Period.983. American Period.984. Archaeological Sites.1005. Historic Buildings, Sites, and Areas.100Waterfront.100Arsenal.101Downtown.1026. Historic Preservation.1027. Historic and Archaeological Resources Goals, Policies, and Programs.105B. CULTURAL RESOURCES.1061. Community Cultural Facilities and Activities.1062. Cultural Goals, Policies and Programs.107	3. CO	OMMUNITY IDENTITY	97
2. Hispanic Period	A.	HISTORIC RESOURCES	97
3. American Period		1. Native American Period	98
4 Archaeological Sites 100 5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		2. Hispanic Period	98
5. Historic Buildings, Sites, and Areas 100 Waterfront 100 Arsenal 101 Downtown 102 6. Historic Preservation 102 7. Historic and Archaeological Resources Goals, Policies, and Programs 105 B. CULTURAL RESOURCES 106 1. Community Cultural Facilities and Activities 106 2. Cultural Goals, Policies and Programs 107		3. American Period	98
Waterfront		4. Archaeological Sites	100
Arsenal		5. Historic Buildings, Sites, and Areas	100
Downtown		Waterfront1	100
6. Historic Preservation		Arsenal1	101
7. Historic and Archaeological Resources Goals, Policies, and Programs		Downtown	102
and Programs		6. Historic Preservation	102
B. CULTURAL RESOURCES		_	105
2. Cultural Goals, Policies and Programs	В.	C	
2. Cultural Goals, Policies and Programs		Community Cultural Facilities and Activities	106
		•	
- ,			
4. Art Goals, Policies, and Programs		•	
C. VISUAL CHARACTER	C		
1. What is Visual Character?	٥.		

	2. The Look and Feel of Benicia	110
	Natural Features	110
	The Human Landscape	110
	3. Scenic Views, Streets, and Gateways	111
	Scenic Views	111
	Waterfront	111
	Scenic Streets and Gateways	113
	Planning in Scenic Corridors	115
	4. Architectural and Landscape Features	115
	Southampton	115
	Industrial Areas	115
	Downtown	116
	Arsenal District	117
	Visual Character Goals, Policies, and Programs	117
	D. OPEN SPACE AND CONSERVATION OF RESOURCES	122
	1. Regional and Subregional Open Space and Trails	123
	Open Space	123
	Regional and Subregional Trails and Paths	124
	Regional and Subregional Open Space and Trails Goals, Policies, and Programs	125
	3. Biotic Resources	127
	Plant Life	127
	Wildlife	131
	Special Status Species and Sensitive Natural Communities	132
	4. Biotic Resources Goals, Policies, and Programs	133
	5. Water Resources	135
	6. Water Resources Goals, Policies, and Programs	136
	7. Mineral Resources	137
	Soils	137
	8. Mineral Resource Goals, Policies, and Programs	138
	9. Energy Conservation Goals, Policies, and Programs	138
4.	COMMUNITY HEALTH AND SAFETY	141
	A. HEALTHY COMMUNITY	141
	Dimensions of Optimal Health	
	Healthy Community Goals, Policies, and Programs	
	2. Heating Community Coals, Policies, and Programs	174

_		
В.	HAZARDS TO THE COMMUNITY	145
	1. Geologic	145
	Seismic Hazards	145
	Slope Stability Hazards	146
	2. Flood Hazards	148
	FEMA Flood Maps	148
	Stormwater Master Plan/Flood Control Improvements	148
	Sea Level Rise	151
	3. Fire Hazards	151
	4. Hazardous Materials and Waste	151
	Hazardous Sites	151
	Hazardous Material and Waste Handlers	153
	Toxic Air Contaminant Sources	153
	Hazardous Building Materials	153
	5. Utility Hazards	154
	Electric Power	154
	Natural Gas	154
	Water Supply	156
	Waste Water	156
	6. Air Quality/Contamination	156
C.	RESPONSES TO HAZARDS	158
	1. Community Right-to-know	158
	2. Emergency Response Plans and Procedures	158
	Emergency Operations Plan	158
	Evacuation Routes	159
	3. Public Safety Services	159
	Crime	159
	Police Services	159
	Fire Services	159
	4. Medical Services	160
	5. Community Hazards Goals, Policies, and Programs	160
D.	NOISE	170
	1. Human Reaction to Noise	170
	Communication Interference	
	Sleen Interference	171

Physiological responses	171
Annoyance	171
2 Noise in the Community	172
Existing Noise Levels	172
Projected Noise Levels	172
3. Performance Standards for Noise-Sensitive Uses	176
Transportation Noise Sources	176
Stationary Noise Sources	177
4. Community Noise Goals, Policies, and Programs	179
GLOSSARY	181
ABBREVIATIONS	181
GLOSSARV	192

LIST OF FIGURES

Figure 1-1.	Regional Setting	.4
Figure 1-2.	Generalized Topography	.5
Figure 1-3.	Gateways	.8
Figure 1-4.	Benicia Planning Area	20
Figure 2-1.	General Plan Land Use Catagories Within City Limits	23
Figure 2-2.	Industrial Properties to which Policy 2.3.1 (Master Plan) Applies 3	6
Figure 2-3.	City of Benicia General Fund Revenues	ίO
Figure 2-4.	Bicycle and Multi-Use Circulation Diagram5	54
Figure 2-5.	Circulation Diagram5	6
Figure 2-6.	Intersection Mitigations6	62
Figure 2-7.	Public/Quasi-public Facilities	78
Figure 2-8.	Parks and Open Space	30
Figure 3-1.	Historic Sites)9
Figure 3-2.	Vistas and Views	.2
Figure 3-3.	Biological Resources	28
Figure 3-4.	Hydrology and Mineral Resources	9
Figure 4-1.	Ground Shaking Amplification	í7
Figure 4-2.	Areas with Potential Landslide and Liquefaction Hazards	í9
Figure 4-3.	Flood Hazards	0
Figure 4-4.	Fire Hazards	52
Figure 4-5.	Transmission Lines and Critical Facilities	5
Figure 4-6.	Existing Noise Contours	' 3
Figure 4-7	Future Noise Contours 17	75

LIST OF TABLES

Table 1-1.	Background Reports in the Technical Appendix
Table 1-2.	Relation of General Plan Chapters to State-mandated Elements 9
Table 1-3.	List of Other Plans and Documents Examined
Table 2-1.	Zoning District Equivalents for General Plan Residential Land Use Categories
Table 2-2.	Residential Land Within City Limits in Gross Acres, as of 1995 25
Table 2-3.	Commercial Land (in gross acres) Within City Limits, as of 1995 26
Table 2-4.	Industrial Land (in acres) within City Limits, as of 1995
Table 2-5.	Existing Public and Quasi-public Facilities Within City Limits, 1995
Table 2-6.	Park Standards
Table 2-7.	Classification of Bicycle Facilities
Table 2-8.	Level of Service Criteria for Signalized Intersections
Table 2-9.	Level of Service Criteria for Stop-controlled Intersections
Table 2-10.	Existing (1995) and Future Intersection Levels of Service (LOS) 61
Table 2-11.	Intersection LOS: Future Conditions with and without Intersection Improvements
Table 2-12.	Streets That May Exceed Existing (1997) Capacity with Future Growth Under this General Plan
Table 2-13.	Existing and Future Parks and Recreation Facilities within City Limits, 1995
Table 2-14.	Amount of Park Land per Capita
Table 2-15.	School Enrollment and Capacity, 1997–1998
Table 2-16.	School Enrollment, 1997 and Projected
Table 4-1.	Decibel Levels of Common Noises
Table 4-2.	Summary of Measured Exterior Noise Levels and Estimated Day-Night Average Levels (L _{dn}) in Areas Containing Noise Sensitive Land Uses
Table 4-3.	Maximum Allowable Noise Exposure for New Noise-Sensitive Uses From Transportation Noise Sources
Table 4-4.	Noise Level Performance Standards for Noise-sensitive Land Uses which may be affected by Stationary Noise Sources 178

1. INTRODUCTION

Benicia has a long history of big ideas. Originally the city was to be a major port; then it was the state capital; later it was a transportation hub. An increase in population and jobs that started in the 1970s is expected to continue, though at a slower pace, through 2015. During this period of expansion, it is vital that Benicia's future be managed wisely to preserve and enhance its many attractive qualities.

This chapter details the planning, legal, and physical framework for the Benicia General Plan. Specifically it describes the role of the plan, its legal footing, its organization, Benicia's relationship to the region, and a description of the planning area.

A. WHAT IS THE BENICIA GENERAL PLAN?

1. ROLE OF THE GENERAL PLAN

The Benicia General Plan is the principal policy document for guiding future conservation and development in the city. It reflects the community's shared values and determination of what Benicia is and should continue to be—an uncommonly special place.

The Plan has a long-term horizon, addressing an approximately 15- to 20-year time frame. At the same time, it brings overall direction to the day-to-day decisions of the City Council, its commissions, and City staff.

The General Plan determines what kind of urban development should take place and where and when, and who in the City will be charged with getting it done. The Plan—

- Expresses the desires of Benicia residents in regard to the physical, social, economic, cultural, and environmental character of the city;
- Serves as a comprehensive guide for making decisions about land use, economic development, road improvements, and protecting natural resources and the public health and safety;
- Provides the legal foundation for all zoning, subdivision, and public facilities ordinances, decisions, and projects—all of which must be consistent with the General Plan.

The general plan is to be considered and used as a whole. One section is not to be stressed while ignoring others; rather all of the sections should be used together, with flexibility. Used in this way, the Plan will become a powerful tool for ensuring consistency of City actions, while remaining responsive to changing needs and times.

2. LEGAL REQUIREMENTS

The general plan is a State-mandated blueprint for physical development. The general plan derives its authority as the summit of land use regulations from the California Government Code. The City Council adopts the general plan by resolution as a legal document.

Seven general plan "elements" are required by law: Land Use, Circulation, Housing, Conservation, Open Space, Safety, and Noise. How these elements are incorporated into the organization of this General Plan is explained in Section 4, below, and in Table 1-2. When optional subjects are added to a general plan (for example, "economic development" and "health"), they have the same status as a mandated element. All general plan elements carry equal weight (Sierra Club v. Board of Supervisors [1981] 126 Cal. App. 3d 698). No single section, chapter, or subject supersedes any other.

3. THE GENERAL PLAN PROCESS

In late 1992, the Benicia City Council formed a citizens' task force to review the General Plan and report its findings. As a result, in late 1993, a General Plan Task Force Report was issued. The report stated that many of the policies and programs in the General Plan had not been revised since 1979, had already been implemented, or were no longer relevant to current or future conditions.

In June 1994, the City Council adopted a resolution directing that preparations begin for a comprehensive update of the General Plan. Accordingly, the Council formed a 17-member citizens' General Plan Oversight Committee (GPOC) to work with City staff to design the update process. GPOC was charged with facilitating public outreach, monitoring the update process to be sure it is on time and within budget, providing volunteer assistance, and assisting in community workshops and forums.

Consultants were engaged to develop a work program for a General Plan Update. The work program was presented to and accepted by the City Council in November 1994. The City Council adopted a budget for the work and directed staff and the GPOC to retain consultants to assist GPOC in undertaking the actual update.

PUBLIC OUTREACH PROGRAM

This General Plan is built on issues defined by the community—issues that focused on what should be preserved and what should change. Some of those

issues came from discussion by the General Plan Oversight Committee (GPOC) of a number of Background Reports produced by the City's consultants in late 1995 and early 1996. Many other issues, however, were identified during the course of two communitywide surveys and six public workshops in 1995 and 1996.

At the outset of the process to involve the public, GPOC mailed an open-response questionnaire to gauge, in a general way, public opinion concerning issues to be addressed in the General Plan update. In response to ideas generated through the questionnaire, the Community Design and Planning Services (CDPS) of the University of California (Davis) conducted a series of workshops in neighborhoods throughout the city. To involve the city's youth, CDPS oversaw workshops and discussion sessions in all Benicia schools. The issues brought out in the first questionnaire and the workshops were tested with a longer survey mailed to the entire community.

Survey 1

A two-page questionnaire mailed by the GPOC to Benicians in June 1995 was answered by nearly 500 people. The results pinpointed what people deeply care about in Benicia:

Benicia's small-town atmosphere

Economic health of First Street

Objectivity in business development



Workshops

In the summer of 1995, the General Plan Oversight Committee hosted six public workshops on the General Plan update. More than a hundred Benicians from all areas of town attended the workshops. Major concerns were:

- cultural resources
- · quality of life
- · small town character; and
- the waterfront.

Workshop participants generally supported:

- First Street and tourism;
- a diversified economy;
- · opportunities to live and work in town; and
- infill development, rather than expansion.

Youth Outreach

Students of all ages were involved in the process of identifying what is important to people living in Benicia. Different methods for garnering responses, ideas, and concerns were used for each age group.

Elementary school students were asked to draw pictures of the things they considered "important." The drawings centered on themes of environmental quality and recreational facilities. Middle school students were organized into small groups; each group was given a 24-exposure disposable camera to photograph representations of their ideas. The resulting collage of photos expressed concerns about pollution, increased housing construction, traffic congestion, parking, and historic preservation. They desired more green space and recreational facilities for their age group. High school students responded to a two-page survey; results of the survey yielded that almost half of the high school students would live in Benicia as an adult; 65 percent wanted to raise a family here; and 89 percent felt safe in the city.

Survey 2

A second survey was mailed to 11,000 households and businesses in Benicia in January 1996. Nearly 3,000 completed surveys were returned, which gave the survey results a high level of confidence. The following 10 issues received the highest level of support (69% or greater) as being important to the community:

- 1. Feeling safe in residential areas at night
- 2. Feeling safe Downtown at night
- 3. Good public schools
- 4. Balance growth to ensure maintaining Benicia's quality of life
- 5. Small town atmosphere
- 6. Growth should maintain small-town character
- 7. Citizens need a voice in growth decisions
- 8. Attract businesses that sustain environmental quality
- 9. Pedestrian-friendly streets in the Downtown and other commercial areas
- 10. Library facilities

A number of issues raised by the survey were opposed, although with the exception of Sky Valley (two-thirds of Benicians do not want residential development in Sky Valley) the levels of opposition were not as great (generally only 20 to 30 percent), in contrast to the very high levels of support (70 to 90 percent) for the 10 issues listed above. Refer to Appendix A for more detailed survey results.

The City's consultants and citizen groups prepared 11 background reports at the end of 1995. GPOC began in February 1996 to use that information, the results of a communitywide survey taken in January 1996, and a series of community workshops held during the summer to identify the issues to be faced in updating the Benicia General Plan. An Issues, Goals, and Policies (IGPs) report was prepared January 21, 1997 and reviewed by the GPOC, Planning Commission, and City Council. These reviews ensured that the IGPs document contained goals and policies for what are the most significant issues for the community.

The City's consultants then prepared a Goals, Policies, and Programs report (June 6) and a Preferred Alternatives Report (June 30) which incorporated additions and changes made by the GPOC, the consultants, City staff, Planning Commission, and City Council since the IGPs report of January 21, 1997. The Preferred Alternatives Report was reviewed by the City Council on August 6, and with their comments in hand, the consultants began drafting the General Plan and an environmental impact report.

This Draft General Plan is the outcome of a process which began with the Task Force (1992-93) and the Work Program (1994). It is a process in which the General Plan Oversight Committee (GPOC) held more than one hundred meetings and, with public participation, identified the Goals, Policies, and Programs (GPPs) which are the heart of this General Plan.

4. ORGANIZATION OF THE PLAN

GOALS, POLICIES, AND PROGRAMS

"Goals" are "end-state"; they are the long-range answers to what the City wants to accomplish to resolve a particular issue. Policies are medium- or short-range statements that guide day-to-day decision-making so there is continuing progress toward the attainment of goals. Programs are the actions taken to implement a specific policy or group of policies. The hierarchy of *goal*, *policy*, and *program* is outlined below.



GOAL: A general, overall, and ultimate purpose, aim, or

end toward which the City will direct effort.

POLICY: A specific statement of principle which implies clear com-

mitment but is not mandatory. A general direction that the

City elects to follow, in order to meet its goals.

Program: An action, activity, or strategy carried out in response to

adopted policy or group of policies.

Explanatory text appears before and after some of the goals, policies, and programs but is not part of the goal, policy or program.

FOUR CHAPTERS

The Benicia General Plan is organized into four chapters, a glossary, an Appendix, and a Technical Appendix. The chapters are 1: Introduction; 2: Community Development and Sustainability; 3: Community Identity; and 4: Community Health and Safety.

Chapter 2 includes four sections:

- Land Use defines the ultimate building envelope" for the City, and establishes the overarching goals for the community's development. Land Use also defines the seventeen land use categories used in the General Plan and identifies those properties where changes occurred to the prior (1993) General Plan land uses.
- Economic Development addresses land development in all the business and commercial sectors of the City.
- Circulation looks at how freeways affect Benicia, in-town traffic, and mass transit.
- Community Services discusses public facilities and provision of public services.

Chapter 3 covers three topics:

- Historic and Cultural Resources addresses preservation of historic areas and building community spirit.
- Visual Character deals with maintaining Benicia's small town atmosphere, preserving scenic views, and enhancing the City's appearance.

Open Space and Conservation of Resources focuses on protection and enhancement of the natural environment including open space, water and air, and plants and animals.

Chapter 4 contains four sections:

- Healthy Communities promotes ways to live more healthfully.
- Hazards to the Community identifies dangers to the community per the Statemandated safety element.
- Responses to Hazards contains the community's emergency response plans and the safety goals, policies and programs.
- Noise focuses on the sources and effects of sounds in the community, per the State-mandated noise element.

The Benicia Housing Element (1993) is a stand-alone document, but is part of this General Plan and should be consulted accordingly. The Housing Element contains the City's goals, policies and programs related to the maintenance and development of housing in Benicia.

DIAGRAMS

The City's land use diagram, which is attached separately at the back of this document, is an integral part of the General Plan. The diagram graphically expresses the Plan's development policies by showing the desired arrangement and location of land uses. The diagram is required to be consistent with the General Plan text (and its goals, policies, and programs).

In keeping with past practice, the City of Benicia has again prepared a site-specific land use diagram to avoid confusion about designations for individual parcels. While the boundaries between land use districts usually follow property lines or streets, the land use diagram should not be used to calculate parcel acreages or lot size dimensions. The Assessors' Parcel Books can be used for that purpose.

The land use diagram and the general plan text together specify the "population density" (number of people and dwelling units per net acre) of residentially-designated land and the "building intensity" for all other designations. Building intensity is expressed in terms of floor area ratio (FAR), which is the ratio of gross floor area to the total site area. The land use diagram also shows the location of existing and proposed parks, public schools, and other municipal services.

The circulation diagram diagram shows current and proposed arterials, collectors, and local streets, as well as bikeways and rail lines. The roadway system has been tested against the planned level of development and has been found to be adequate. More discussion about the relationship between land use and circulation is found in Chapter 2C of this General Plan.

Together, the land use and circulation diagrams illustrate the managed growth of the City for the next 15 to 20 years. The General Plan also contains other diagrams to illustrate the policies and programs in the Plan.

APPENDIX

The Appendix contains information on Growth Management, Airport Land Use Compatibility and Hazardous Substances. While important to a thorough understanding of the General Plan, the Appendix is not adopted as policy by the City.

TECHNICAL APPENDIX

A separate document, the Technical Appendix, contains background material used in preparing the General Plan. This material provided an essential foundation for formulating issues, goals, policies, and programs. While important to a thorough understanding of the General Plan process, the Technical Appendix is not adopted as policy by the City. Anyone wishing to review the Technical Appendix may do so at the Planning Department in City Hall or at the public library. A list of the Background Reports contained in the Technical Appendix:

Table 1-1. Background Reports in the Technical Appendix

1.	Audit of 1993 General Plan	November 13,1995
2.	Community Survey Report	May 1996
3.	Cultural Resources	August 23,1996
4.	Economic and Fiscal	February 26, 1996
5.	Healthy Communities	February 26, 1996
6.	Historical and Archaeological	March 5, 1996
7.	Housing and Demographics	January 11,1996
8.	Land Use	April 1,1996
9.	Natural Resources	January 17, 1996
10.	Noise	February 14, 1996
11.	Public Safety	February 28, 1996
12.	Transportation	May 3, 1996
13.	Urban Design	April 4, 1996

Table 1-2. Relation of General Plan Chapters to State-mandated Elements

GE			ENERAL PLAN	
MANDATED ELEMENTS	Chapter* Pages			
LAND USE ELEMENT	Population Density & Building Intensity	2	23-31	
	Land Use Diagram	2	Rear Pocket	
	Distribution of Housing, Business, Industry, and Open Space	2	Rear Pocket	
	Distribution of Recreation Facilities, Educational Fac- ilities, and Public Buildings	2	Rear Pocket	
	Flood Areas	4	148-150	
	Mineral Resources	3	137-139	
	Implementation	2	32-35, 41-51, 67-77, 84-87 89-90, 92-95	
CIRCULATION ELEMENT	Description of Existing System	2	52-66	
	Diagram of Existing System	2	54, 56	
	Description of Proposed System	2	58-65	
	Diagram of Proposed System	. 2	54, 56	
	Utilities	2,4	90-91, 154-156	
	Implementation	2	67-76, 168	
CONSERVATION ELEMENT	Water, Rivers, Harbors	2,3	90, 122-124, 129	
	Forests	3	130	
	Soils	4	137, 145-148	
	Mineral Resources	3	137	
	Implementation	2,3	92-94, 133-134 136, 138	
OPEN SPACE ELEMENT	Description	3	122-125	
	Trails System	2,3	80, 124-125	
	Management of Resources	2,3	90-91, 135, 137	
	Areas for Outdoor Recreation	n 2,3	79-83	
	Preservation for Public	3	147, 149	
	Health, Safety		150, 152	
	Implementation	2,3	84-86, 125-127 133-134, 136	

Table 1-2. Relation of General Plan Chapters to State-mandated Elements (continued)

GENERAL I				
MANDATED ELEMENTS			er* Pages	
SAFETY ELEMENT	Seismic Risk	4	145-146	
	Slope Instability/Geologic Hazards	4	146-148	
	Flooding	4	148-151	
	Fire Hazard	4	151	
	Emergency Response/	4	158-159	
	Evacuation Routes			
	Hazardous Materials	4, G	151-153, G1-G18	
	Implementation	4	160-169	
NOISE ELEMENT	Noise Sources and Problems	4	170-172	
	Noise Contours	4	173, 175	
	Noise Attenuation	4	176, 178	
	Implementation	4	179-180	

^{*} Letters refer to the Appendices

5. IMPLEMENTING, UPDATING, AND AMENDING THE GENERAL PLAN

ADMINISTERING THE GENERAL PLAN

Once adopted, a general plan does not remain static. State law permits up to four general plan amendments per mandatory element per year (Government Code §65358[b]). Most amendments propose a change in the land use designation of a particular property which equates to a change to the land use element. As time passes, the City may decide that it also is necessary to revise portions of the text to reflect land use diagram changes or other changing circumstances or philosophy.

While some degree of flexibility is desirable in the planning process, basic to its very existence is that it possess some degree of stability. Without the expectation of stability, it cannot serve as a comprehensive and long-term guide to local development. Therefore, although the City may decide to amend this plan, the primary position of the City will be to implement it as adopted. This will honor both the principle of stability and the extraordinary degree of community participation that went into the formation of the plan.

Generally it is recommended that the City comprehensively review the Plan every five years to determine whether it is still in step with community values and conditions.

ANNUAL REVIEW BY PLANNING COMMISSION

State law provides direction on how cities can maintain the plan as a contemporary policy guide: Government Code §65400[b] requires each planning agency to report annually to the Office of Planning and Research and the California Department of Housing and Community Development (HCD) on "the status of the plan and progress in its implementation, including the progress in meeting its share of regional housing needs determined pursuant to Section 65584...". In addition, the planning agency is required annually to review the City's Capital Improvements Program for consistency with the General Plan (Government Code §65103[c]).

AMENDING THE PLAN

Anyone wishing to amend the General Plan would follow the procedure generally outlined below. (More detailed information on processing and timing is available from the Planning Department.)

- 1. Prior to filing an application, the prospective applicant should discuss the proposed amendment with City staff. This will clarify the process and identify any concerns the City may have about the proposed changes.
- 2. The next step in the process is to file an official application with the Planning Department and pay any necessary processing fees. An application must include a development plan of sufficient detail that potential environmental effects could be ascertained.
- 3. City staff reviews the application for completeness and then schedules it for a public hearing before the Planning Commission. A public notice is sent to all property owners within 300 feet of the subject property and a legal notice is also placed in the official newspaper.
- 4. The Planning Department staff will prepare a report for the Planning Commission which discusses the proposed amendment, any environmental effects that may result from the amendment, and any comments received from City departments or outside agencies. The report advises the Planning Commission whether it should recommend the amendment to the City Council for approval or denial.
- 5. The amendment is then set for public hearing before the City Council, accompanied by another staff report and the Planning Commission recommendation.

6. RELATION TO OTHER PLANS

As part of the General Plan update, a number of plans and studies were examined and reviewed. The General Plan Task Force Report (item 1), the two Conservation Plans (items 2 and 3), and the Economic Development Strategy (item 4) were among the more influential documents in setting the scope and tone of the general plan update process.

Table 1-3. List of Other Plans and Documents Examined

	Plan or Document	Date
1.	General Plan Task Force Report	December 1993
2.	Downtown Historic Conservation Plan	November 1990
3.	Arsenal Historic Conservation Plan	November 1993
4.	Economic Development Strategy, Benicia Economic Development Board	January 17, 1995
5.	Benicia Industrial Design Guidelines	March 10, 1989
6.	Preliminary Master Circulation Study	August 1990
7.	Citywide Traffic Improvement Funding Report (Omni Means)	January 1992
8.	Water System Master Plan	November 1990
9.	SkyValley Benicia Specific Plan	April 10, 1992
10.	Benicia Zoning Ordinance (as amended):	May 1994
11.	Benicia Subdivision Ordinance	November 1993
12.	Parks, Trails, and Open Space Master Plan	June 1994
13.	Benicia State Park Recreation Area	June 1991
14.	Benicia Capitol State Historic Park	June 1991
15.	Benicia/Solano County Economic/Community Profile	August 1995
16.	Tri-City and County Open Space Plan	March 1994
17.	Gateway to the Inland Coast: The Story of the Carquinez Strait	1996
18.	Carquinez Strait Resource Plan	September 1997
19.	Delta Estuary, California's Inland Coast	May 1991
20.	Solano County Land Use and Circulation Element	July 1994
21.	Solano Congestion Management Program	November 1993
22.	Bay Area Ridge Trail Plan	1992
23.	Bay Trail: Planning for a Recreational Ring Around San Francisco	1989
24.	Special Area Plan - Tri-City and County Regional Park and Open Space Preservation Plan	1994
25 .	Waterfront Plan	1975
26.	Special Area Plan for Waterfront Area	1977
27.	Urban Waterfront Restoration Plan	1980

B. REGIONAL SETTING

1. LOCATION IN THE REGION

Benicia is approximately 35 miles northeast of San Francisco and 57 miles southwest of Sacramento. It lies on the north shore of the Carquinez Strait, where the combined flow of the Sacramento and San Joaquin rivers have cut a deep gorge through the coast range. The Strait is a crucial link in Northern California's inland waterway, connecting San Pablo Bay and San Francisco Bay to the west with the Sacramento and San Joaquin river delta to the east. Through the Strait, ocean-going ships can reach the Port of Benicia, or can continue on to the Central Valley ports of Sacramento and Stockton.

The city is built on a peninsula of land that reaches south from the main body of Solano County and creates a prominent bend in the Carquinez Strait. From this peninsula, highway and railroad bridges span the Strait to connect Benicia with the Contra Costa County cities of Martinez and Concord. This is the one place where both trucks and railroad cars can cross the San Francisco Bay/Sacramento River waterway. The rail line and I-680 provide easy access to Benicia from the north and south; I-780 (which the city straddles) provides access from the west.

Although part of Solano County, Benicia is closely linked to Contra Costa County across the Strait. Views from Benicia encompass the Strait, the foothills of northern Contra Costa County, and Mt. Diablo in the distance. Many Benicia residents work and shop in Contra Costa County.



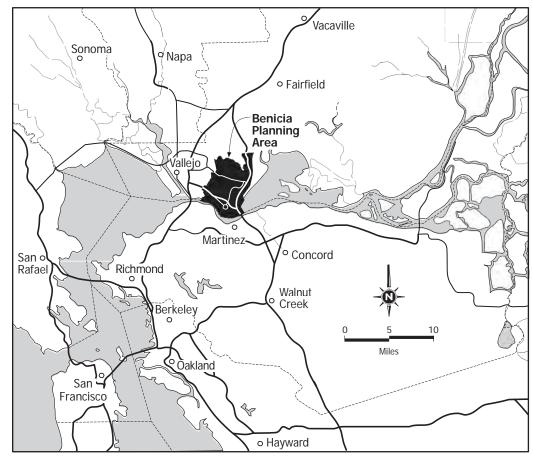


Figure 1-1. Regional Setting

Solano County lies within the Airport Influence Area for the *Travis Air Force Base* Land Use Compatibility Plan. Travis Air Force Base is located in Fairfield, approximately 15 miles from the Benicia city limits. Home to the largest air mobility organization in the Air Force, the 60th Air Mobility Wing, Travis AFB is the West Coast terminal for aircraft returning sick or injured patients from the Pacific region. Travis is the largest employer in Solano County: in 2013, the base employed over 13,000 military and civilian personnel and had an economic impact of \$1.6 billion.

2. PHYSICAL SETTING

The Planning Area is made up primarily of rolling hills, rising to an elevation of 1,160 feet. On the west boundary, Sulphur Springs Mountain reaches approximately 950 feet. Two major drainages—Sulphur Springs Creek in the west, and Paddy Creek in the east—run approximately north-south through the Planning Area. The flow from Sulphur Springs Creek is contained by Lake Herman before being joined by Paddy Creek and continuing into the Benicia Industrial Park.

The rolling hills reach almost to the shoreline; very little of Benicia is flat. (See Figure 1-2.) On the southern margins of the city, the land slopes gently down to the Carquinez Strait. Most of the older residential areas and the Downtown are here. The eastern city limits are bordered by the marshlands of Suisun Bay. Relatively flat areas adjacent to the marshes provide sites for industry. At the southwestern boundary of the Planning Area, another flat, marshy area has been preserved as the Benicia State Recreation Area.

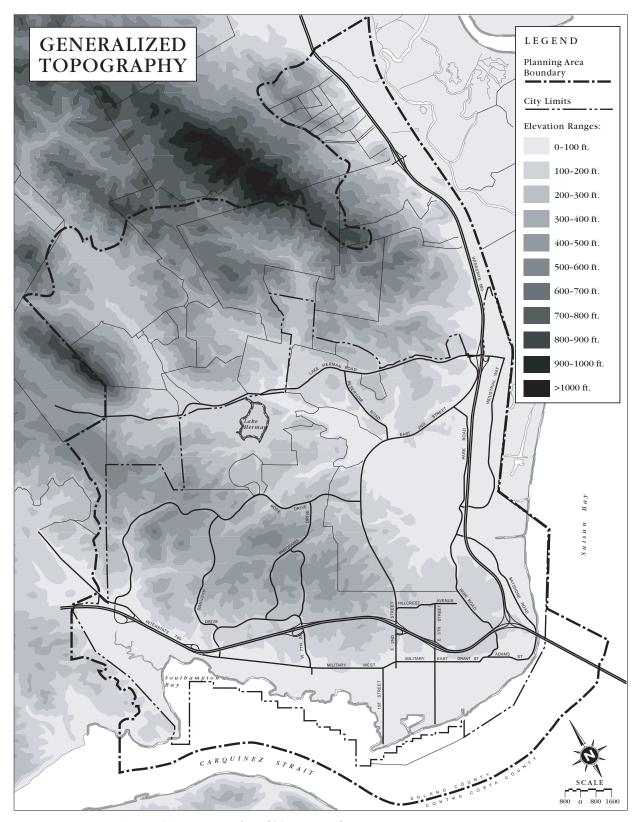


Figure 1-2. Generalized Topography

Several key natural features have influenced the pattern of existing development:

- The Carquinez Strait and Suisun Bay, which provide an extensive, accessible shoreline that is bracketed on both east and west by marsh preserves. The shoreline is divided between residential, recreational, and industrial uses.
- Low hills above the Downtown that interrupt lines of sight to the newer development in the hill areas north of I-780. This interruption creates separate "visual basins"—contributing to the small town feel and scale of Benicia. The topography frames a "water-oriented" area containing the Downtown, central Benicia, and portions of Southampton which lie below the main ridgeline.
- Steep hillsides, high promontories, and canyons north of the main ridgeline facing the Carquinez Strait that define three distinct areas: (1) an "upland" area directly behind the main ridgeline, which is largely developed; (2) the "lake" area where the hills slope inward towards Lake Herman; and (3) a "northern" area comprised of the watershed of Sulphur Springs Creek, which until the early 1990s was considered for residential development.
- A pronounced terrace, directly in line with the Benicia-Martinez Bridge, that separates the northbound and westbound freeways. This terrace defines two distinct industrial areas: community uses and import-export activities to the southwest, and major industrial uses to the northeast. The northeast industrial area is also contained by the hills below Lake Herman Road to the north, the slopes above East Second Street to the west, and Suisun Bay to the east.

GATEWAYS

Benicia's identity is strengthened by the experience of entering the city through distinct gateways: four by land and one by water. Each of these gateways provides a different view of the city:

Lake Herman Road: Provides the visitor with views of the lake and rolling

hills. Arriving from this direction the newcomer might

see Benicia as largely undeveloped.

Northern Gateway: On I-680 at Lake Herman Road. Presents Benicia as an

industrial city to visitors passing through the heart of the

industrial park.

Southern Gateway: Crossing the bridge from Martinez on I-680, shows

Benicia as a Bay Area crossroads, where major rail and highway crossings link the two shores of the Carquinez

Strait.

Western Gateway: On I-780, introduces the traveler to the green marsh-

lands in the Benicia State Recreation Area and water-

oriented housing.



Marina/Port Gateway: Welcomes those coming by small boat or by ship and provides a waterfront view of Benicia revealing its small town "human scale" and historic character.

The view from each of these gateways is influenced both by topography and land use. Whether Benicia is seen as a city of industry, open space, or residential neighborhoods can depend on the vantage point of the observer. Future development near each of these gateways will have important effects on the image of Benicia. (See Figure 1-3.)

C. THE PLANNING AREA

1. PLANNING AREA BOUNDARY

Benicia's Planning Area—established for this General Plan—covers an area of over 15,000 acres—about 24 square miles. (See Figure 1-4.) This Planning Area generally corresponds to Benicia's Sphere of Influence (soI), the area designated by the Solano County Local Agency Formation Commission (LAFCO) as the probable ultimate physical boundary and service area of the city. Along the northern border of the soI, however, the planning area extends only to the southern boundary of the Tri-City and County Open Space Area.

North of the city limits, the Planning Area encompasses 6,392 acres of generally undeveloped rolling hills. The Planning Area boundary deviates from the Sphere

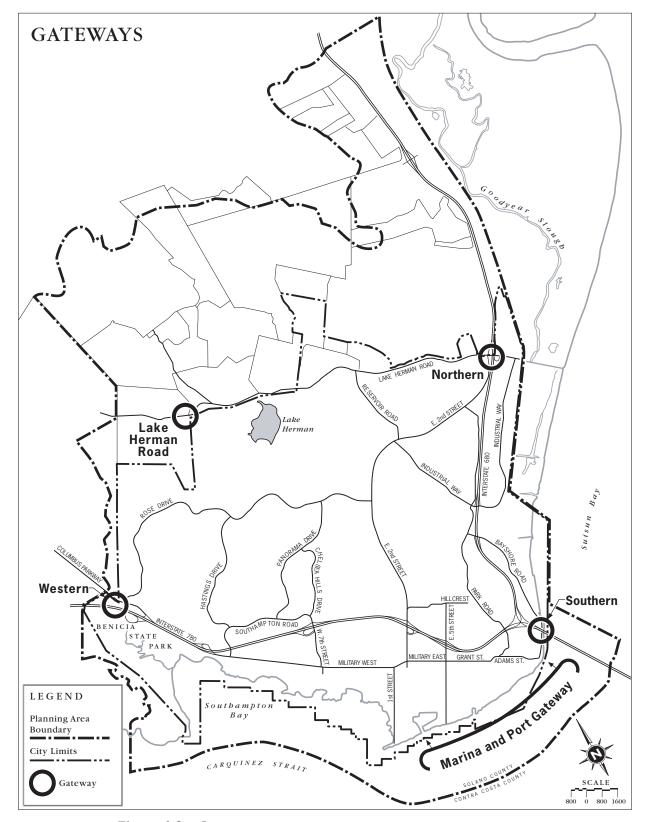


Figure 1-3. Gateways

of Influence boundary to include a small area east of I-680 and to follow the boundary of the Tri-City and County Open Space on the north, rather than the straight line drawn by LAFCO. Much of this land is used for cattle grazing or open space. The eastern portion of the Planning Area includes a 242-acre Class I hazardous waste disposal site which is being prepared for permanent closure.

The Planning Area also includes a portion of Sulphur Springs Mountain, which has been designated as a Mineral Resource Area. However, Syar Quarry is outside of the Benicia Sphere of Influence, and the Planning Area.

2. CITY LIMITS

Benicia's 1995 City limits covers a total of 14 square miles, including about 1.2 square miles of open water and 12.8 square miles of land. The land area also includes some areas of seasonal or permanent wetlands. Nearly all of the existing residential, commercial, and industrial development in the Planning Area is located within the City limits. Approximately 53 percent of the land within the City was developed as of 1995.

3. Areas of Interest

The City has identified several Areas of Interest outside the sot that have a direct physical and social influence on the City's planning but are not considered for annexation: (1) the Benicia-Vallejo buffer area adjoining Benicia's west City Limits, between I-780 and Lake Herman Road; (2) an area adjacent to and west of the Benicia State Recreation Area; (3) an area between the railroad line and I-680 and north of Lake Herman Road; and (4) the Carquinez-Strait region. The City has included these areas in its Planning Area and will request that it be notified of all planning decisions affecting these "Areas of Interest."

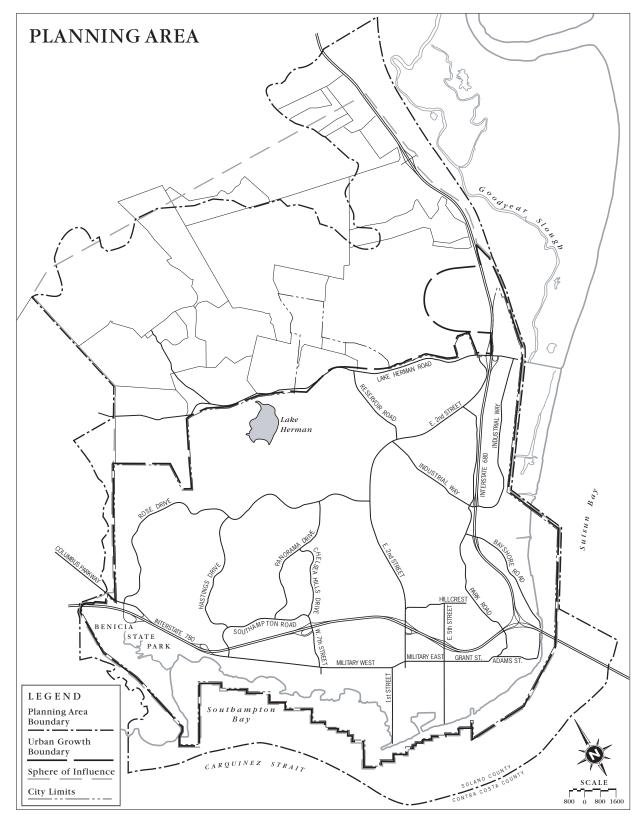


Figure 1-4. Benicia Planning Area

2. COMMUNITY DEVELOPMENT AND SUSTAINABILITY

Community development and sustainability are at the heart of the goals developed in this General Plan. *Community development* refers to all aspects of development including: (1) new residential and commercial development, such as new housing or an office building; (2) economic development such as jobs, income, fiscal health, and expansion and attraction of businesses; and (3) relationships between different areas of the city and how those areas serve the needs of the community. *Sustainable development* has become a popular planning expression used abundantly but often not understood. Sustainable development represents an approach to community development that Benicia residents and businesses want to achieve with this General Plan. A brief definition of sustainable development is provided below.





WHAT IS SUSTAINABLE DEVELOPMENT?1

One of the first governing bodies in the United States to develop a definition for sustainable development that fits the vision of this Plan was the Minnesota State legislature. They define sustainable development as that which "maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."

"Sustainability" in this General Plan conveys long-term interdependent economic and environmental goals that promote efficient land use. It is a way of thinking and acting responsibly with respect to environmental, social, and economic issues at everwidening levels of awareness or "integration." That is, what is done at the project or local level can affect all levels of the environment, including the local community, neighboring regions, the country, and the world.

Sustainable development implies urban areas that reflect a long-term economic horizon; result in efficient land use patterns that are not overly energy-intensive; have sufficient linkages to the local and regional economy to assure long-term job creation and economic vitality; support ecologically sensitive design features; and value the public realm.

The concept of creating a sustainable community in Benicia is a primary goal and objective of the General Plan. The concept affects all chapters of the Plan and all aspects of the community. While it is assumed that this Plan cannot radically change the nature of Benicia, the goal and intent is to create a more livable and sustainable community over time.

¹ This definition is taken in part from "Sustainable Development: Concept Definition, Urban Development Principles, and Stapleton Opportunities and Constraints" prepared for the Stapleton Redevelopment Foundation by Economic & Planning Systems, Inc. (January 1994).

A. LAND USE AND GROWTH MANAGEMENT

The primary function of this section is to designate land for specific types and amounts of development and to set the overall development framework for the City. Areas of the City are generally categorized according to their suitability for residential, commercial, industrial, or public/quasi-public use. In addition, the City has designated land for open space that should not be developed because of its importance for health, safety, agriculture, or recreation.

The land use section provides background information on the location and extent of existing land uses in Benicia, defines each land use category used in the plan, and describes the changes that this plan makes to the 1993 General Plan. A land use plan map covering the entire planning area is provided in the back pocket of this document and is adopted as City policy as part of this General Plan.

The Growth Management section establishes the overarching goals for development in Benicia. It defines and seeks to preserve those characteristics that make Benicia a truly unique and special place.

LAND USE

The pattern of general plan land uses is reflected in the pocket diagram at the back of the document. The largest category is industrial (31%), followed closely by parks/open space (25%) and residential (21%). Non-industrial/commercial uses represent a relatively small portion (3%). This pattern indicates the community's priorities in terms of types of land uses within the city limits. The new general plan slightly shifts the existing pattern of land use in the northern area toward

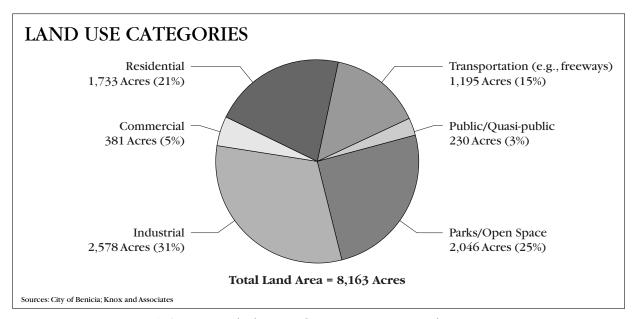


Figure 2-1. General Plan Land Use Catagories Within City Limits

more open space (refer to Appendix B - Land Use Changes). This reflects the community's desire to contain development and grow at a slower rate.

It is the intent of this General Plan that land be used efficiently to reduce traffic, preserve land at urban fringes, reduce infrastructure costs, and minimize the loss of farmland, wetlands, and open space. By doing these things, it is hoped that Benicia can avoid the costs of sprawl and erosion of the quality of life.

For each category of land, the General Plan must establish standards of population density and building intensity. For residential land, the Plan will stipulate densities in housing units per gross acre. Potential population density will be obtained by multiplying the number of units per acre by the number of persons per unit (three persons/unit for low density, two persons/unit for medium and high density. In the event of a discrepancy between residential units per acre and persons per acre, the unit density—and not the population density—will govern.)

For nonresidential uses, the Plan specifies a maximum Floor Area Ratio (FAR), calculated as the ratio of gross floor area to site area.

The specific uses mentioned in each definition of the land use categories are intended to be general and illustrative (as opposed to specific and all-inclusive).

1. RESIDENTIAL LAND

The General Plan has three residential land use categories. Each of the General Plan residential land use designations is intended to correspond to a specific zoning described in the Benicia Zoning Ordinance.

Table 2-1. Zoning District Equivalents for General Plan Residential Land Use Categories

GENERAL PLAN	ZONING DISTRICT	DENSITY RANGE (UNITS/ GROSS ACRE)	DENSITY RANGE (PERSONS/ GROSS ACRE)
CATEGORY			
Low Density	RS	0.1–7	0.3–21
Medium Density	RM	8–14	16–28
High Density	RH	15–21	30–42

Source: City of Benicia

The City may apply a lower density in certain cases (for example, if environmental constraints make it physically impossible to construct the minimum density in a given land use category). Densities higher than the upper limit can be achieved through the use of density bonuses for lower-income housing. This applies to any development with a residential component.



Table 2-2. Residential Land Within City Limits in Gross Acres, as of 1995

DENSITY	DEVELOPED LAND	VACANT LAND
Low Density	1,156	145
Medium Density	275	8
High Density	144	5
Residential Total	1,575	158

Source: City of Benicia; Knox & Associates



LOW DENSITY RESIDENTIAL

This category provides for single-family detached residences in residential neighborhoods. The density range permitted in the Low Density category is 0.1 to 7 units per gross acre.



MEDIUM DENSITY RESIDENTIAL

This category includes multifamily housing where lot coverage remains relatively low. It includes large older homes that have been converted to duplexes as well as new apartments, townhouses, condominiums, clustered housing developments, and mobile home parks. Compared to Low Density, the Medium Density land use category permits more people to be housed on a given land area and also provides more flexibility

in the location and arrangement of buildings than is possible in most single-family detached developments. The density range permitted in the Medium Density category is 8 to 14 units per gross acre.



HIGH DENSITY RESIDENTIAL

This category permits a density range of 15 to 21 units per acre. High Density Residential is intended to increase housing opportunities by permitting more housing to be built on a parcel(s).

2. COMMERCIAL LAND

The Benicia General Plan separates commercial land into five categories:

- (1) Community Commercial (previously called Neighborhood Commercial),
- (2) General Commercial, (3) Downtown Commercial, (4) Waterfront Commercial, and
- (5) Business and Professional Office. Each of these categories is intended to accommodate a particular scale and intensity of commercial use and corresponds to a particular zoning category. Each category has a permissible floor area ratio (FAR) and restrictions on uses. Table 2-3 shows the breakdown of commercial land into these five categories.

Table 2-3. Commercial Land (in gross acres) Within City Limits, as of 1995

CATEGORY	FAR	DEVELOPED LAND	VACANT LAND
Downtown	2.0-2.4	19	5
General	1.2	51	102
Community (formerly "Neighborhood")	1.2	6	0
Office	0.8-1.2	16	6
Waterfront	0.8-1.2	8	8
Commercial Total		101	280

Source: City of Benicia; Knox & Associates



DOWNTOWN COMMERCIAL

This category encourages a wide variety of retail businesses, restaurants, and lodging is encouraged. Offices and residences are encouraged above the first floor in order to establish a greater variety, intensity, and efficiency of use. A higher intensity of development Downtown is envisioned by permitting a maximum FAR of 2.4—higher than in the other commercial districts. The 2.4 FAR, however, is permitted only if housing is included; the maximum non-residential FAR is 2.0.

² Resolution No. 87-31, 2/17/87



GENERAL COMMERCIAL

This category is intended to provide shopping and services for the community as a whole and for visitors coming from the freeways. Solano Square, Southampton Center, and Parkway Plaza are designated General Commercial. A small commercial center at East Fifth Street and Military East is also designated General Commercial to provide for auto service and parts, retail sales, and similar uses. General Commercial is intended to allow a wide range of commercial development, with the intensity of development limited by a maximum FAR of 1.2.



COMMUNITY COMMERCIAL

This category (previously called Neighborhood Commercial) is intended to apply to convenience commercial centers which are limited in size. Uses include retail and quasi-public uses. Community Commercial is the most restrictive of the commercial categories and has a maximum FAR of 1.2.



BUSINESS AND PROFESSIONAL OFFICES

This designation is intended to allow small-scale offices to serve as a buffer between residential uses and more intensive commercial areas. Offices in this category typically generate lower traffic volumes than offices in other commercial or industrial districts. A maximum FAR of 0.8 is allowed (increased to 1.2 if housing is included).



WATERFRONT COMMERCIAL

This category is intended to accommodate development with both a water orientation and historic character to create a pedestrian-scale commercial and residential area. Multifamily residences and live/work spaces are permitted in Waterfront Commercial. The commercial component is restricted to retail shops and services that directly support marina and boating activities or restaurants overlooking the water. A maximum FAR of 1.2 is permitted for projects that include housing above the ground floor; otherwise the FAR is limited to 0.8.





DOWNTOWN MIXED USE

This category includes residential, retail, office, public and quasi-public uses. Its purpose is to encourage a mix of compatible uses adjacent to the Downtown, upgrading of existing buildings, preservation and adaptive reuse of historic buildings, and introduction of new, compatible mixed use buildings. "Mixed use" includes the mixing of permitted activities within the same building or within separate buildings on the same site or on contiguous sites. Design standards will be developed to ensure that mixed use development is compatible with and contributes to the character of the street, the Downtown, and adjoining neighborhoods. The Downtown Mixed Use category permits a maximum FAR of 2.0.



LOWER ARSENAL MIXED USE

This category includes residential, live/work, office, retail, public and quasi-public, and limited industrial uses. The purpose of this category is to continue to encourage a mix of compatible uses in areas of the Lower Arsenal; to promote the upgrading of existing buildings, and the preservation and adaptive reuse of historic buildings; and to allow new, compatible buildings to house mixed use. The Lower Arsenal Mixed Use category permits a maximum FAR of 2.0.

4. INDUSTRIAL LAND

Before 1987, industrial land was designated either Heavy Industrial or Light Industrial. Since 1987, Benicia's industrial land has been divided into three General Plan Land Use categories: (1) General Industrial; (2) Limited Industrial; and (3) Water-related Industrial. Table 2-4 shows how the industrial land is divided among these categories.

Table 2-4. Industrial Land (in acres) within City Limits, as of 1995

CATEGORY	FAR	DEVELOPED LAND	VACANT LAND
General Industrial	0.7	1,006	714
Limited Industrial	0.7	29	559
Water-related	0.7	178	92
INDUSTRIAL TOTAL		1,213	1,365

Source: City of Benicia; Knox & Associates



GENERAL INDUSTRIAL

The General Industrial land use category is the least restrictive of the three categories and is intended to allow a great deal of flexibility for industrial development. Over half of the Benicia Industrial Park is designated General Industrial. This includes nearly all of the Industrial Park north of I-780 and east of East Second Street. This category includes manufacturing, assembly, and packaging of goods and products from extracted, raw, and previously prepared materials and related industrial and commercial services. The maximum FAR permitted in this category is 0.7.



LIMITED INDUSTRIAL

This category includes manufacturing, assembly, and packaging of goods primarily from previously prepared (not raw) materials; wholesale, distribution, and storage facilities (including auto import, export, and storage); research and development facilities; and related industrial and commercial services. As it pertains to refining-related activities, this category also includes such uses as: fabrication areas, packaging

facilities (dry and liquid), quality control laboratories, and refining accessory uses such as maintenance shops, storage areas, shipping/distribution facilities and offices.

Several areas of the Benicia Industrial Park which border other types of land use are designated Limited Industrial to provide a buffer between the General Industrial areas and the rest of the City. Lower levels of traffic—particularly from heavy trucks—are expected in the Limited Industrial areas than in the General Industrial category. The Limited Industrial category permits a maximum FAR of 0.7.



WATER-RELATED INDUSTRIAL

This category includes port terminals and water-dependent, related industrial uses such as warehousing and storage; support transportation services; and ship maintenance and repair. The Water-related Industrial category is intended to protect the Port of Benicia from intrusion by non-water-dependent uses, to promote its long-term development, and to provide back-up land for port-related activities. The Water-related Industrial category permits a maximum FAR of 0.7.



5. PUBLIC AND QUASI-PUBLIC LAND

This category is intended to provide for a variety of uses serving the public including education, police, fire, water, and sewer. (Park and recreation facilities are included as a separate category under Open Space.) The Public/Quasi-public land use category allows facilities for City administration, safety, and health services; public and private schools; public utilities; and other public/quasi-public facilities. Facilities serving the public are scattered throughout the city. (Refer to Table 2-5 on the following page).

The maximum FAR for public/quasi-public facilities is established on a case-by-case basis through the use permit process of the Benicia Zoning Ordinance. If a use permit does not set a maximum FAR, then the maximum FAR of the abutting zoning district applies.

6. OPEN SPACE

State planning law requires cities to plan for "open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety." The General Plan Land Use Diagram (found in the back pocket of this Plan) recognizes three categories of open space to meet these requirements:

Table 2-5. Existing Public and Quasi-public Facilities Within City Limits, 1995

FACILITY	ACREAGE	
Administration		
City Hall	3.0	
Post Office	1.9	
School District Offices	6.0	
Cultural/Recreational Facilities		
Library	0.8	
Senior Center	0.3	
Girl Scout House	0.5	
Boy Scout House	0.5	
Swim Club (Private)	1.6	
Clocktower, Commandant's House	7.0	
B.D.E.S. Meeting Hall	0.5	
Public Access Trails	6.9	
Tennis Court	0.3	
Veteran's Hall	0.5	
Municipal Utilities		
Water Treatment Plant	30.0	
Sewage Treatment Plant	7.0	
Corporation Yard	7.0	
Building Maintenance Yard	0.2	
Public Safety		
Police Station (part of City Hall complex)		
Fire Station #1	0.5	
Fire Station #2	0.6	
Public Schools		
Elementary	44.4	
Benicia Middle School	18.7	
Benicia High School	35.0	
Private School	2.0	
Child Care Centers	2.4	
Churches	25.4	
Cemeteries	32.7	
Other Facilities	10.5	
Total Public/Quasi-Public	246.2	

Source: City of Benicia; Knox & Associates



MARSH

"Marsh" permits only educational and scientific research, low impact hiking, fishing, bird-watching, and similar activities offering public access to the shoreline.

GENERAL OPEN SPACE

General Open Space includes urban open space, such as publicly-owned open space, land dedicated for permanent open space in residential subdivisions, and open space for public health and safety, such as hillsides with slopes over 30 percent; and rural open space, such as open space for managed production of resources (such as mineral resources), and open space for conservation of natural resources (such as the Lake Herman watershed). Allowable open space uses include agriculture, horticulture, passive recreation, and mineral extraction in State-designated mineral resource areas only. General Open Space may lie inside or outside the Urban Growth Boundary.



PARKS

Parks provide land for the more intensive recreational uses. There are four park types in Benicia.

Regional Park: A Regional Park generally serves one or more communities and accommodates a variety of activities designed to enhance the use and experience of the natural environment. Uses may include trails, nature centers, picnic areas, and camping, if appropriate.

Community Park: A community park is designed to serve several neighborhoods. Community parks should accommodate a wide variety of activities and meet the needs of diverse users.

Neighborhood Park: A neighborhood park is designed to serve a residential population in close proximity to the park. Neighborhood parks should accommodate a variety of activities including playground activities, picnicking, and lawn games.³

Waterfront Park: A waterfront park serves the entire community and accommodates activities appropriate to the characteristics of the site such as low impact recreational activities, community events and festivals, and enjoyment of the surrounding natural environment. The waterfront park south of B Street may not include any permanent sports fields, courts, or equipment. Nor may it include any permanent buildings, except for a public restroom and similar amenties. Walkways, benches, drinking fountains, and trash receptacles are permitted. The waterfront park south of B Street will preserve the marshlands within its boundaries, thereby protecting the wildlife that rely on this ecologically sensitive habitat.

³ Parks, Trails, and Open Space Master Plan, pp. 3-1 through 3-3.

Table 2-6. Park Standards

PARKTYPE	ACRES/1,000 PEOPLE	SERVICE AREA	SIZE (ACRES)
Regional Park	10.0	One hour travel	250–1,000
Community Park	2.5	Within 3 miles of all residences	30–100
Neighborhood Park	3.5	Within 1/2 mile of all residences	2–15
Waterfront Park*	N/A	N/A	N/A

Source: Benicia General Plan, 1993; Parks, Trails and Open Space Master Plan, Revised 1994; 2004 Benicia Waterfront Park Initiative

AIRPORT LAND USE COMPATIBILITY

The Solano County Airport Land Use Commission adopted the updated *Travis Air Force Base Airport Land Use Compatibility Plan* (ALUCP) on October 8, 2015. The purpose of the plan is to ensure that future land uses in the area surrounding Travis Air Force Base (AFB) will remain compatible with the base. The plan establishes policies applicable to land use, including compatibility criteria and maps for the Airport Influence Area (AIA), which encompasses all of Solano County.

In accordance with Section 21670 et seq. of the California State Public Utilities Code, the Airport Land Use Commission (ALUC) is vested with the authority to implement the ALUCP. Benicia's General Plan and specific plans must conform to the ALUCP unless the City Council makes specific findings to overrule the ALUCP. Furthermore, amendments to the General Plan, Zoning Ordinance, and Building Code, as well as certain non-exempt development activity such as structures over 200 feet in height and commercial scale solar facilities, must be referred to the ALUC for a determination that the proposal is consistent with the ALUCP.



GOAL 2.0: Comply with the Travis Air Force Base Airport Land Use Compatibility Plan

POLICY 2.0.1: Review all proposed land uses for consistency with the

compatibility policies of the Travis Air Force Base Airport

Land Use Compatibility Plan (ALUCP).

Program 2.0.A: Refer land use development actions identified within the

ALUCP to the Solano County Airport Land Use

Commission

Refer to the Appendix for a synopsis of currently applicable policies of the Travis ALUCP.

^{*}Waterfront Park: A waterfront park is designed to incorporate the unique aspects of the specific location and provide a distinctive waterfront experience for all residents and visitors. Because each waterfront park will integrate the special features of the particular site, no uniform set of standards will be applied.

GROWTH MANAGEMENT

The preceding pages describing the different land use categories and changes set the stage for how Benicia is to develop over the next 15-20 years. The Growth Management section creates the connection between land uses and growth by establishing the overarching goals, policies and programs for development in Benicia.

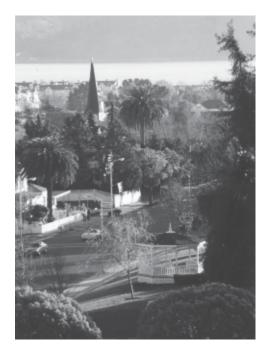
To reinforce these policy statements the plan defines an urban growth boundary (refer to Glossary).

Urban Growth Boundary (UGB) is coterminous with the city limit line around the property at the end of Bantry Way (Zocchi property) to Lake Herman Road; it follows Lake Herman Road east to the western side of the 20-acre property owned by Northgate Christian Fellowship, then turns northwest and traces that property's boundary back to Lake Herman Road, then follows Lake Herman Road east to Interstate 680. At Interstate 680, the boundary turns north along the freeway, then west around the area identified as Area 9 on the Land Use Changes diagram. It then continues north on Interstate 680, then turns east to the north end of the 1999 City Limit on Goodyear Road.

The Urban Growth Boundary is an officially adopted and mapped line that separates the City's urban area from its surrounding greenbelt of open lands. It is a growth management tool that seeks to contain, control, direct, or phase growth in order to promote more compact, contiguous urban development. No urban development is allowed beyond the UGB except for public parks and public or private recreation uses that do not require urban facilities or services as defined in Policy 2.1.5.

Benicia's UGB reflects the City's commitment to focus growth and prevent urban sprawl. It recognizes the City's limited ability to extend services (i.e., sewer, water, police, *etc.*) and its desire to protect agricultural and ecologically sensitive land.

In addition, the UGB will help preserve keyland forms which separate Benicia physically and visually from adjacent communities; protect and maintain the rural quality of Lake Herman Road and areas adjacent to it; concentrate future development in areaswhere services and infrastructure can be provided more cost effectively; strengthen First Street as the City's central commercial zone; guard against community health risksby avoiding encroachment into lands affected by the IT Panoche Hazardous Waste Disposal



Facility; and prevent encroachment into and avoid land use conflicts with areas designated as a mineral resource area of regional significance (Syar Quarry).



GOAL 2.1: Preserve Benicia as a small-sized city.

"Small-sized city" refers to Benicia's open and uncluttered space, safe neighborhoods and streets, pedestrian-friendly streets, the "Main Street" character of First Street, open vistas of hills and water, historic sites and buildings, strong sense of community and civic pride, good schools, well developed community facilities including parks and a library, low-crime, small town atmosphere, and numerous community-wide celebrations, cultural events, and family-oriented activities.

POLICY 2.1.1:

Ensure that new development is compatible with adjacent existing development and does not detract from Benicia's small town qualities and historic heritage, (and to the extent possible, contributes to the applicable quality of life factors noted above).

"Compatible" means "capable of existing together without detrimental effects." This policy applies broadly and citywide to residential and nonresidential uses. Its purpose is to ensure harmonious development in terms of intensity, and architectural character. It is not intended to restrict new buildings or additions to exact duplications of styles or heights; nor is it intended to limit new uses or densities to those found in adjacent existing development. This policy also is not intended to restrict the conversion of single-family dwellings to apartments if the parcel is zoned for multifamily use and if there are other multifamily uses nearby.

Program 2.1.A: Adopt development guidelines that retain the scale and charac-

ter of the city, preserve public view corridors, and reflect the subdivision and development patterns within existing neigh-

borhoods.

POLICY 2.1.2: Make efficient use of land in new development areas consistent

with the surrounding neighborhood.

POLICY 2.1.3: Maintain a visual and physical separation from the cities of

Fairfield and Vallejo.

POLICY 2.1.4: Strive to preserve significant areas of vegetation and open

space when approving development projects.

"Significant" can mean, for example, a single specimen tree, vegetation serving as habitat, or a grove of several native trees which enhance the canopy and scenic beauty of a neighborhood.

POLICY 2.1.5: An Urban Growth Boundary is established as shown on the

General Plan Land Use Diagram in order to separate the City's urban area from its surrounding greenbelt of open lands and to maintain lands near Lake Herman and north of Lake Herman Road in permanent agriculture/open space use. No urban development is allowed beyond the Urban Growth Boundary.

"Urban development" shall mean development requiring one or more basic municipal services including, but not limited to, water service, sewer, improved storm drainage facilities, fire hydrants and other physical public facilities and services.

POLICY 2.1.6: No urban development beyond the Urban Growth

Boundary shall be served by City water and/or sewer

services.

POLICY 2.1.7: The City shall promote compact urban development within

the UGB and shall encourage development of public, semipublic, active recreational, and all other uses deemed desirable

for the community inside the UGB.

Policy 2.1.8: Prior to December 31,2023, the Urban Growth Boundary

designated on the Land Use Diagram, this policy, Policies 2.1.5, 2.1.6, and 2.1.7 and the definition of Urban Growth Boundary in the Glossary, may be amended only by a vote of the people or pursuant to the procedures set forth below:

Exception I - Takings. the City Council may amend the Urban Growth Boundary if it finds, by at least a four-fifths vote and based on substantial evidence in the record, that:

- (1) The application of the Urban Growth Boundary policies would constitute an unconstitutional taking of a landowner's property, and
- (2) The amendment and associated land use designation will allow additional land uses only as necessary to avoid said unconstitutional taking of the landowner's property.
- Exception II Housing Supply. The City may grant an exception from the requirements of the Initiative where it determines that doing so is necessary to comply with State law governing the provision of housing. The City may do so only if it first makes each of the following findings based on substantial evidence in the record:
 - (1) A specific provision of State law requires the City to accommodate the proposed housing, and
 - (2) No feasible alternative exists that would allow for the required units to be built without siting some or all of them outside the Urban Growth Boundary.

Exception III - Reorganization. The General Plan may be reorganized, readopted in different text and/or format, and individual provisions may be renumbered or reordered, in the course of ongoing updates of the General Plan in accordance with the requirements of State law, but Land Use Element policies relating to the Urban Growth Boundary shall continue to be included in the General Plan until December 31,2023, unless earlier repealed or amended pursuant to the procedures set forth above or by the voters of the City.





GOAL 2.2: Maintain lands near Lake Herman and north of Lake Herman Road in permanent agriculture/ open space use.

POLICY 2.2.1: Protect and maintain agricultural and rural land uses, hillsides, two-lane curving roads, watershed, riparian corridors and upland grasslands.

POLICY 2.2.2: Avoid health risks associated with the inactive IT Panoche Hazardous Waste Facility and land use conflicts with the Syar Quarry.

Program 2.2.A: Initiate a variety of planning, regulatory, and financial measures to ensure permanent protection of agricultural and open space uses near Lake Herman and north of Lake Herman Road.

Program 2.2.B: Acquire property, development rights, or easements to preserve open space.

Program 2.2.C: Evaluate incorporating the Northern Area into the Tri-City and County Open Space Area.



GOAL 2.3: Ensure orderly and sensitive site planning and design for large undeveloped areas of the City,

consistent with the land use designations and other policies in this General Plan.

POLICY 2.3.1: Require a Master Plan for new industrial and business park developments on properties under common or single owner-

ship which aggregate to more than 40 acres.

Master plans will encourage the best and most effective use of the properties and will give the City an idea of how and when the various parcels or parts of parcels will be developed and when public facilities will be needed. The industrial properties to which this policy is most likely to apply are listed below and are shown on Figure 2-2. The five industrial properties as of 1995 are: The Seeno properties; the Exxon undeveloped area; Pine Lake north of I-780; the Port south of the bridge; and the Port north of the bridge.

The master plan requirement also applies to other large properties, which are not listed or mapped below but which may in the future be purchased or assembled for development or private redevelopment. Such master planning may be initiated by the Planning Commission, the City Council, or private property owners.

Program 2.3.A: Ensure adequate funding is available for the long-term mainte-

nance of undeveloped areas preserved when approving land

divisions.

POLICY 2.3.2: Support land divisions where existing buildings with historic

or architectural significance are retained and/or improved

rather than demolished.



GOAL 2.4: Ensure that development pays its own way.

State law allows cities to assess fees to ensure that development pays for itself; however the law also requires a nexus between fees imposed on developers and the public improvements funded by those fees.

POLICY 2.4.1: Ensure any new development to be fiscally and financially

sound and pay its own way with respect to City and School

District capital improvements.

The objective is that neither the City nor the School District will be expected or required to use general funds to provide capital improvements for private development unless a project produces substantial public benefits and amenities in which the City or School District may want to participate.

Program 2.4.A: Monitor development to ensure it does not overburden the

City's infrastructure.

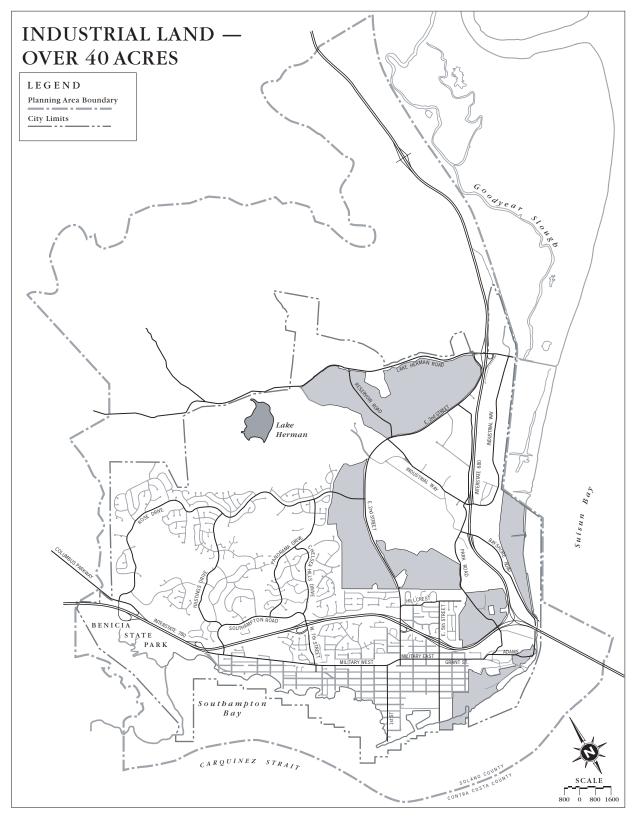


Figure 2-2. Industrial Properties to which Policy 2.3.1 (Master Plan) Applies, as of 1999



B. ECONOMIC DEVELOPMENT

This section of the plan contains five subsections that direct the more urban aspects of how the community should develop. Each subsection focuses on a particular type or area of economic development within the community: industrial development, port development, the Historic Arsenal area, the Downtown area, and other commercial development.

The Economic Development section begins with a discussion of the City's economic strengths and challenges, followed by goals, policies and programs for each of the five types or areas of economic development. Background information about each economic development area or type precedes the goals, policies and programs for that subsection.

1. ECONOMIC OPPORTUNITIES AND CHALLENGES

Benicia is a unique community that offers a "small town" residential and commercial environment in the foreground of a large industrial concentration. While Benicia is part of the Solano County market, its location along the Carquinez Strait, views of the water, and its active Port give the City more economic development opportunities than some of its landlocked competitors. The City also has a strong historic and cultural base, and the historic buildings in the Downtown and Arsenal area add to Benicia's charm and distinction.

The City of Benicia enjoys many economic advantages over similarly-sized cities in the greater Bay Area. It has a significant concentration of economic activity in the Port and the Benicia Industrial Park (BIP), which includes the Exxon Refinery. These are considered "heavy industrial" uses and provide a strong economic base for the City. In addition, businesses that support the refinery industry need to be located nearby, and many choose Benicia given its location and large concentration of like businesses.

The tax revenues that the BIP and other heavy industrial uses generate allow the City to provide a relatively high level of public services, including its own library system. As a result, the Economic Development Goals, Policies, and Programs emphasize the importance of protecting existing heavy industrial uses.

Many also believe, however, that Benicia can capitalize on its central location by diversifying its economy and attracting more high-technology firms and tourists. Although a radical shift in the types of businesses that locate in the city over the next 20 years is not expected, more non-industrial activities are desired in the future. Measures to increase the diversity of industries and land uses therefore can also be found in the Economic Development Goals, Policies, and Programs.

BENICIA'S COMPETITIVE STRENGTHS

From an economic standpoint, Benicia has many competitive strengths. The fact that the City's industrial vacancy rate is about 6 percent validates this position; other surrounding communities have industrial vacancies from 10 to 17 percent. The City has a well-developed industrial park (BIP), which is geographically compact and topographically separated from the rest of the City. The Port, leased, owned, and operated by Benicia Industries, is over 200 acres and complements many of the activities found in the BIP. The Exxon refinery has drawn over the years a series of support and related industries to the City which together represent an important agglomeration of economic activity. One advantage of the BIP's size and location is that businesses perceive that their industrial activities will be buffered from potential conflicts with other uses. Exxon owns about 400 acres of land west and south of their facility.

In summary, Benicia's assets that attract businesses include:

- Central location (i.e., highway accessibility to markets in the Bay Area, Sacramento, and Northern California).
- Presence of major manufacturing and refineries that attract similar types of businesses.
- · Historic buildings and places.
- · View of the water and hills.
- Some developable commercial vacant parcels (although high-priced).
- Private redevelopment potential and mixed use projects.
- Good transportation and access.

- Supportive local government/business climate.
- Municipal fiscal soundness.
- Highly skilled, reliable, dependable, and productive labor force.
- Quality of life (e.g., low crime, good public schools, warm climate, etc.)

BENICIA'S COMPETITIVE CHALLENGES

The City also faces a number of weaknesses in attracting businesses. These include the following, many of which are mentioned in the City's 1995 Economic Development Strategy (Resolution 95-10):

- No public transportation in the BIP industrial area.
- Limited vacant industrial and commercial sites.
- Limited very high and low income housing.
- High rent for Downtown real estate.
- Reliance on one type of industry for major business tax revenues.

Although development fees in Benicia may be higher than in other regions in California and nearby states, they are comparable to the average fees in Solano County and other competitive markets. Industrial and residential fees are only slightly higher than the average, and retail fees are slightly lower than the average.

While it is important to keep development costs low, it is equally important to provide adequate infrastructure and maintain it. A significant number of industrially-zoned parcels require investment in infrastructure in the next 20 years if these sites are to be competitive. This infrastructure could be provided by the City or by developers. Either way, Benicia will need to facilitate the creative financing mechanisms to provide infrastructure in a timely fashion. There is also a need to invest in existing infrastructure that cannot be funded through development impact fees or special assessments under existing law (Government Code §66000 et seq., popularly known as AB 1600). A funding program (e.g., for a landscape and lighting district) should be developed to ensure annual maintenance and replacement of infrastructure to keep the city's non-residential areas competitive.

Although the lack of higher value or executive housing may be a perceived weakness to some in the community, the lack of housing available to those who work in Benicia will have a much greater impact on economic development in the long run. The greater the amount of housing for workers in the BIP, the more competitive the City will be.

BENICIA'S FISCAL STATUS

All communities have their weaknesses and strengths. While Benicia has several perceived economic weaknesses, it also has many economic strengths. Overall, the City's economy, while focused on a few industries, is strong and competitive.

The City worked hard to reduce or hold constant expenditures over the five years 1990–1995 in order to respond to the loss of revenues from property tax diversions to the State and from a reduction in other revenues. Once the outstanding debt from the community park development is repaid and the General Plan update is complete, the Finance Department projects positive fiscal balances starting in 1997–98. Future increases in property taxes may be limited unless additional capacity for development is created. The City will need to work hard to retain existing businesses, to attract new sales-tax generating uses, and to continue its cost containment measures.

A review of per capita expenditures for cities of similar size shows that Benicia residents enjoy a high level of municipal services, which is a direct result of the amount of revenues generated by industry. To continue to enjoy these services, the City will need to protect and enhance business and economic activity in both the BIP and Port areas. It will also need to encourage economic expansion in the Downtown and Arsenal areas. Figure 2-3 shows the projected General Fund Revenues for 1999-2000.

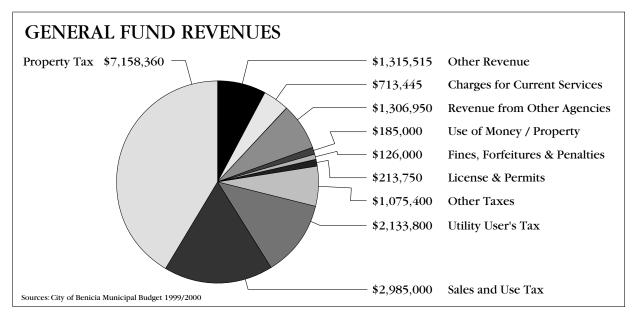


Figure 2-3. City of Benicia General Fund Revenues

2. ECONOMIC DEVELOPMENT GOALS, POLICIES, AND PROGRAMS

Benicia has an aggressive economic development program and has attracted several large companies to the Benicia Industrial Park (BIP) and elsewhere in the City. An Economic Development Strategy was adopted by the City in 1995. The Strategy focuses on (1) business retention and expansion, and (2) business attraction and incentives, and (3) outlines a set of policies and recommended actions. Studies have shown that businesses wishing to expand chose to stay in Benicia rather than move out of state. A Reviews of recent expansion or new leases within the BIP confirm that these economic development efforts are working.

The City's Economic Development Department also recently created an Industrial Development Authority to issue tax-exempt revenue bonds.⁵ Bonds have been issued to assist major employers and space users and keep them in the City.The City also created a local hiring service to help connect local business with local labor.

The goals, policies, and programs in this section address several points: They support continued internal growth and development of the industrial park and its port; they promote diversification of Benicia's economy; and they seek to expand appropriate commercial activity in the Arsenal and Downtown.

CITYWIDE ECONOMIC DEVELOPMENT



GOAL 2.5:

Facilitate and encourage new uses and development which provide substantial and sustainable fiscal and economic benefits to the City and the community while maintaining health, safety, and quality of life.

Sustainable development maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

This goal is the heart of the entire General Plan. It is a citywide expression of urban development policy. Nearly every policy and program in the General Plan, in some manner, serves to implement this goal.

^{4 &}quot;1st Quarter 1995 Industrial Market Overview, Greater East Bay Market," Grubb & Ellis Research Services Group (June 1995).

⁵ These are private activity bonds that are sold to fund a specific project that has a dedicated private revenue source with which to repay the bonds and interest. The interest on the bonds is not taxable, and thus encourages the private market to purchase public bond issues. This is a typical public funding mechanism.

Роцсу 2.5.1:	Diversify the mix of economic development programs in the city to include new programs that address Downtown revitalization, tourism, waterfront development, and clusters of related businesses.
Program 2.5.A:	Consider developing a labor force database as part of the Business Attraction, Expansion, and Retention Program which includes information on labor force costs by occupation and industry sector, turnover rates, productivity, reliability, and other factors. Maintain and update the database annually.
Program 2.5.B:	Target business attraction efforts toward firms that pay high wages and with jobs that relate to the skills and education levels of Benicia residents.
Program 2.5.C:	Evaluate future uses on a cost/revenue basis, taking into account economic diversity for the long term and environmental and community costs and benefits.
Program 2.5.D:	Continue to offer incentives for locating in Benicia to businesses that maximize jobs or long-term net revenues to the City of Benicia, or both.
Program 2.5.E.:	Develop business incentives that can be used to attract new businesses (e.g., fee deferral program, use of public financing when appropriate) and performance criteria to ensure that benefits are generated in line with incentives provided.
Program 2.5.F:	Continue to maintain and update an economic development strategy which focuses on both the acquisition of new businesses and retention of existing businesses.
Program 2.5.G:	Continue to implement the programs and actions proposed in the City's latest Economic Development Strategy.
Program 2.5.H:	Develop an "economic development web page" for Benicia with pertinent economic and demographic information, and profiles of key development sites and vacant buildings available for new businesses.
Program 2.5.I:	Conduct a bi-annual review of fee burdens for key land uses in Benicia and competing jurisdictions in the region to ensure that Benicia's fees are sufficient and competitive and do not create a deterrent to beneficial development.
Program 2.5.J:	Expand the City's economic development strategy to address the potential for eco-tourism (e.g., related to marshlands), recreation, artists, cultural, and historic elements. Conduct a study of the relative merits and strengths of each of these assets in Benicia.

INDUSTRIAL DEVELOPMENT

As of 1995 there were 1,213 developed acres of industrial land in the city, occupying 42 percent of all developed land. A large part of the existing industrial acreage is located within the Benicia Industrial Park and is categorized as General Industrial use. This is where the heavy industrial uses are located, as well as industrial uses that have a large space demand.

There are approximately 600 companies within the BIP, with combined employment in excess of 6,500 workers. The top 10 employers in the BIP provided a total of 2,250 jobs in 1997, or about 22 percent of the total estimated employment in Benicia. The largest employer in the Industrial Park, with 400 employees, is Exxon Company USA, a petroleum refinery. Other large employers include: Corey Delta Construction, Underground Construction, West Coast Beauty Supply, Alamillo Steel, Rockridge Technology, and the Coca-Cola Bottling Company.

The second largest category of existing industrial land is 270 acres zoned for water-related industrial use. This category applies to the Benicia Port area, most of which is owned by Benicia Industries.

The remaining existing industrial land (29 acres) is developed for Limited Industrial uses. These include industrial office centers and research and development ("R&D") facilities.



GOAL 2.6: Attract and retain a balance of different kinds of

industrial uses to Benicia.

Policy 2.6.1: Preserve industrial land for industrial purposes and certain

compatible "service commercial" and ancillary on-site retail uses.

"Compatible," as defined in the *California General Plan Glossary*, means "capable of existing together without conflict or detrimental effects." Compatibility will often be decided on a case-by-case basis by the Planning Commission and City Council.

"Service commercial" uses are those that accommodate citywide and regional services that usually are inappropriate in neighborhood or pedestrian-oriented shopping areas. Such services generally require automotive access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial vehicles.

POLICY 2.6.2: Other land uses should not adversely affect existing industrial

and commercial land uses.

Program 2.6.A: Where General Plan amendments propose to convert industrial

land to non-industrial or non-commercial uses, require the preparation of a fiscal and economic impact analysis to ensure that the conversion does not adversely affect the city's long-term economic development, or the economic vitality of

existing industrial/commercial uses.

Program 2.6.B: Develop criteria for evaluating whether a proposed non-

industrial/non-commercial use would impact the viability of existing industrial/commercial uses. Use the criteria to evaluate non-industrial and non-commercial projects proposed in the

Industrial Park.

POLICY 2.6.3: Facilitate continued development of the Industrial Park. Espe-

cially encourage general industrial uses to locate in the basin northeast of Downtown (around Industrial Way between East

Second and the freeway).

Program 2.6.C: For lands designated limited industrial, reduce the length of

time and number of steps required for development proposals to proceed, consistent with CEQA, community development policies and ordinances, and the design review process for

general industrial lands.

POLICY 2.6.4: Link any expansion of Industrial land use to the provision of

infrastructure and public services that are to be developed and

in place prior to the expansion.

Program 2.6.D: Continue to update the overall capital improvements program

and infrastructure financing plan for the Industrial Park and

other major industrial areas.

Program 2.6.E: Develop Industrial Park infrastructure and public services

standards, as approved by the City Council. (See also Program

2.28.A.)

POLICY 2.6.5: Establish and maintain a land buffer between industrial/

commercial uses and existing and future residential uses for

reasons of health, safety, and quality of life.

Program 2.6.F: Use topography, landscaping, and distance as a buffer between

Industrial Park uses and residential uses.

A buffer is "adequate" to the extent that it physically and psychologically separates uses or properties so as to shield, reduce, or block one set of properties from noise, light, or other nuisances generated on or by the other set of properties. Buffers will be determined on a case by case basis.



GOAL 2.7: Attract and retain industrial facilities that provide

fiscal and economic benefits to—and meet the

present and future needs of—Benicia.

POLICY 2.7.1: Attempt to attract high-wage and high-revenue producing

companies to Benicia.

This policy applies to emerging occupations such as secondary materials industry, wine industry, alternative transportation, environmental technology, fitness, and tourism. The intent of this policy is to encourage Benicia's participation in studies by the Solano Economic Development Corporation (SEDCORP) related to attracting high-tech jobs and marketing efforts targeted to Benicia.

Program 2.7.A:

Conduct a study of the City's competitiveness for high-wage businesses. Based on the results, determine which types of high-wage businesses could realistically be attracted to Benicia and develop an appropriate business attraction strategy.

PORT DEVELOPMENT

As discussed in this section the Port of Benicia has two aspects – the Port as a privately operated business and the Port as an important geographic locale in Benicia. The goals, policies, programs are intended to address both aspects of the port.

The Port of Benicia is partially owned by the City and partially owned by Benicia Industries, Inc., a private company. The City leases portions of the Port to Benicia Industries, who in turn leases facilities within the Port to industrial tenants on portions of the approximately 644 acres it controls in Benicia. In 1999, Benicia Industries specializes in the shipment of automobiles and petroleum products.



GOAL 2.8: Maintain the viability of the Port now and in the

future to benefit the City of Benicia.

POLICY 2.8.1: Avoid encroachment by future incompatible uses, and where

possible, reduce encroachment from existing incompatible

uses, in concert with Policy 2.11.1.

Program 2.8.A: Ensure that definitions of "water-related industrial" and "water-

front" land uses are consistent with "water dependent" uses as

defined in the Seaport Plan.

Refer to Appendix D for discussion of Seaport Plan and related tidelands issues.



GOAL 2.9: Ensure adequate land for port activity.

Program 2.9.A: Work with the Port to evaluate the future level of port activity

and need for land in order to sustain an economically viable

Port operation.

POLICY 2.9.1: Encourage and create opportunities and methods for coopera-

tive planning of the Port, Arsenal, and Pine Lake.

Rather than just reacting to specific development proposals, the planning should be "pro-active" and "master-planning" in nature. The primary criteria are that the process is conducted in public and that all stakeholders are represented. At a minimum,

"stakeholders" should include City officials, representatives of Benicia Industries, and the general public. Depending on the particular planning project, stakeholders might also include representatives of Caltrans, the Art Community, and the Chamber of Commerce.

"Master Planning" for these areas would evaluate, among other things, the historic preservation of buildings, public access, circulation, affordable housing, live-work space, infrastructure needs (train station, new bridge ramps and interchanges, and ferry service), potential for economic development and revenue enhancement for the City, reconsideration of uses in the lower Arsenal, restrictions on hazardous materials and waste, and improving the public process for project approval.



GOAL 2.10: Provide for caref

Provide for carefully-defined visual and physical public access where security and safety considerations permit.

This goal is not intended to conflict with other goals and policies encouraging port viability and industrial growth.

Program 2.10.A: Explore the feasibility of public access to and providing recre-

ation use in the Port in a manner which does not compromise the economic viability or safe operation of the Port.

For a discussion of public trust lands in relation to the Port, refer to Appendix E.

HISTORIC ARSENAL

The Arsenal area is characterized by older, historic buildings, and a multiplicity of uses and tenants, including studios, small professional offices, and small industrial activities, such as cabinet making. The Arsenal fronts on the Port of Benicia and is a distinct area within the Benicia Industrial Park.

Many buildings in the Arsenal area are not used—or are underutilized—and could be



converted to various uses. A number of the buildings, however, do not meet the current Uniform Building and Fire Codes and would be costly to convert or upgrade. The area also needs infrastructure improvements (including roads and signs) to create a distinct sense of place.

The artist community in the lower Arsenal is a small yet strong economic force in the City that should be supported and expanded while considering its context in, and the

operating needs of, the Port. This part of the City is a mixed-use area. The Arsenal adds character and diversity to the City and allows for alternative living and working arrangements quite different from those available in other parts of the community.



GOAL 2.11: Encourage the retention and continued evolution

of the lower Arsenal into a historic/cultural/ commercial/industrial center of mutually compat-

ible uses.

The "lower Arsenal" is south of I-780, between the freeway and the water-related industrial lands.

POLICY 2.11.1: Retain and expand the mix of compatible and balanced uses in

the lower Arsenal area.

POLICY 2.11.2: Continue to allow live/work uses in the lower Arsenal where it

can be demonstrated that adequate buffers exist, including noise buffers, and that the presence of residents would not significantly constrain industrial operations, including the flow

of goods and materials.

POLICY 2.11.3: Support the development of the Pine Lake area as an attractive,

aesthetic gateway with a water feature.

The Pine Lake area is located immediately north of I-780 and west of Park Road.

Program 2.11.A: Require protection of dramatic views of the strait and the

incorporation of a gateway/water feature into any development

plans for the Pine Lake area.

A Development Agreement has been adopted for the Pine Lake area. Refer to Appendix F.

DOWNTOWN

The major concentration of commercial uses in the City is located in the Downtown area which runs along the First Street Corridor and stretches to the waterfront park and includes the Depot site. This area is designated Downtown Commercial and is enhanced by the adjoining waterfront park. This designation was created specifically for the First Street Corridor area and is meant to emphasize the importance of First Street as the Downtown. The area has a mixture of office, retail, and residential development.

While the Downtown shares many of the problems faced by older downtowns throughout the country (*e.g.*, vacant lots, underutilized land, and competition from suburban shopping centers), its natural features and historical significance greatly increase its potential for economic development. Major points of interest include the third State Capital of California and sites adjacent to the Downtown including the western terminus of the Transcontinental Railroad and an accessible waterfront with



striking views of the Carquinez Strait and surrounding hills. The area is a community gathering place that attracts tourists and local residents to its historic sites, shops, restaurants, farmers' market, and special events. Adjoining the Downtown are a marina, a waterfront park, and several medium density condominium developments.

The General Plan encourages development of the Downtown in a manner that preserves its small-town characteristics. The Downtown provides a human scale and mix of building types; open, scenic vistas; a relaxed and pleasant "sidewalk" atmosphere; and minimum vehicular traffic. It offers social and recreational opportunities and points of interest to residents and visitors. The historic character of Downtown is enhanced by adjacent alleys, residential streets that lead to the waterfront, specialty and antique stores, a waterfront promenade, and a fishing pier at the end of First Street.

The intent of the following goals and policies is to allow a mix of uses in the Downtown, including residential;

provide easy circulation by transit and on foot; develop smooth, functional connections to other parts of the community; provide nighttime activities to create safer streets; make a commitment to public life Downtown by providing public gathering spaces; recognize the historical importance of the area; improve surrounding neighborhoods; cultivate a unique identity that will attract visitors; invest public funds in street improvements, housing, public transit, and cultural activities; actively recruit private investment and incentives to encourage development on First Street; and encourage cooperation in the management of the Downtown area.



GOAL 2.12:	Strengthen the Downtown as the City's central
	commercial zone.

POLICY 2.12.1: Emphasize retail sales and service businesses along First Street, preferring retail commercial on the street level and encouraging other commercial, office, and housing as important support-

ing uses on upper floors.

Program 2.12.A: Consider improvements to Solano Square to make it more

pedestrian friendly.

Program 2.12.B: Work to attract economically viable businesses that will create

night-life Downtown such as restaurants, cafes, movie theaters,

and other entertainment uses.

Program 2.12.C: Continue business recruitment and marketing efforts for

Downtown. Provide promotional information on Benicia's

economic and demographic profile, available sites and building space, a directory of support services, and an expedited approvals program.

Many of these programs are already carried out by the City based on the City's adopted Economic Development Strategy (Resolution 95-10). Also, the City funds Benicia's Main Street Program which provides some of the services listed above.

Program 2.12.D: Develop public/private partnerships to implement financing

mechanisms such as a Business Improvement District to fund

capital improvements and repairs to Downtown.

Program 2.12.E: Retain a permanent Main Street Program.

Program 2.12.F: Promote additional civic and compatible public and private

uses in the Civic Center area.

POLICY 2.12.2: Permit a mix of residential and commercial uses including

detached single-family homes and live/work quarters in the first row of blocks east and west of First Street. Allow small retail commercial businesses on parcels closest to First Street, and small, less intense uses (such as offices, personal services, and bed-and-breakfast establishments) anywhere within the block.

The intent of this policy is to encourage retention of the existing small-scale, fine-grain development based on historic lot sizes Downtown.

Program 2.12.G: Review and modify

the zoning ordinance, as needed, to accommodate a mix of uses in the blocks immediately east and west of

First Street.

POLICY 2.12.3: Seek to make

Downtown a thriving and vigorous community center offering a variety of activities and attractions for residents and

visitors.



Program 2.12.H:	Continue to promote special events in the Downtown such as a farmers' market, street fairs, art and music festivals. Encourage events that remain open in the early evening. (See policies in Noise section.)
Program 2.12.I:	Work with existing restaurants and cafes to provide sidewalk food service where the service will not impede pedestrian flow and where adequate sidewalk space exists.
Program 2.12.J:	Maintain public parks, streets, and sidewalks located Downtown in a clean and safe condition.
Program 2.12.K:	As the budget allows, provide amenities such as additional benches along First Street and in adjacent public areas; drinking fountains, public art, shade trees and arbors.
Роцсу 2.12.4:	Create a social, recreational, and economic anchor at the waterfront end of First Street by establishing a waterfront park which provides a site for community festivals, preserves open space, and allows commercial and civic uses at the Depot site.
Program 2.12.L:	Promote commercial and civic uses at the historic Railroad Depot, such as a restaurant or art gallery that would contribute to the revitalization of the downtown area and which would be compatible with the uses of the adjoining waterfront park.
Program 2.12.M:	Promote special events and festivals at the waterfront park.
Program 2.12.N:	By the end of the year 2000, decide on the feasibility of restoring three City-owned structures: —the former Southern Pacific Railway Depot and Jurgensen's Saloon, and the Von Pfister Adobe.
Program 2.12.0:	Establish a permanent public green on the waterfront as created by the 2004 Benicia Waterfront Park Initiative.
Program 2.12.P:	Investigate the possibility of developing a west side marina.
Program 2.12.Q:	Develop a "tourist-oriented web page" that includes photos and information about Benicia as a tourist destination, such as information on lodging, historic places, restaurants, artists galleries and studios, and recreational and natural resources.
Program 2.12.R:	Continue to support promotional maps for visitors that identify locations of restaurants, services, specialty retail, recreational, and other facilities that cater to visitors and tourists.

OTHER COMMERCIAL DEVELOPMENT

Within the City in 1995, about 86 acres were developed for commercial use. Over half of that acreage is designated for "general commercial"—a broad designation that

includes stores or services that are meant to serve the entire community plus the public traveling through the area. Areas designated for general commercial include a section in the lower Arsenal, an area around East Fifth Street and Military East, Solano Square, and Southampton Road. The other major commercially developed area is the 19 acre Downtown, which was discussed in the previous section.

Only three acres are developed for "neighborhood commercial" uses in the entire city. The remaining developed commercial acreage is used for office (nine acres) and waterfront commercial (four acres). In general, the city's existing commercial uses are limited in size, acreage, intensity, and sales volume.



GOAL 2.13: Support the economic viability of existing commercial centers.

POLICY 2.13.1: Direct new commercial ventures first, towards Downtown, and second, to other existing economic centers (instead of dispers-

ing resources to new areas).

Program 2.13.A: As part of the Business Attraction, Expansion, and Retention

Program, maintain an available commercial space and site database with information on size, lease rates, tenant improvements, etc., and make it readily available to prospective busi-

nesses.

POLICY 2.13.2: Preclude extension of the existing commercial development

east along Military East and south along East Fifth Street.

C. CIRCULATION

Government Code §65302(b) states that the general plan shall include a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan. The requirement for correlation is particularly important, since it recognizes the close connections between the different elements of the general plan.

The circulation element describes facilities for the movement of people and goods throughout the City. It includes a plan of the streets, highways, rail, and water transportation facilities designed to serve the community. It also discusses county and regional transportation planning programs and the future of transportation in Benicia. The last section presents the circulation goals, policies, and programs.

1. COUNTY AND REGIONAL TRANSPORTATION FRAMEWORK

The City's authority over the provision of transportation services in Benicia is determined by regulations at the local, State and federal level. The City's transportation decisions are coordinated on a countywide level through Solano County's Congestion Management Program (CMP) and the Solano Transportation Authority (STA). Regional transportation decisions for the nine county Bay Area are made by the Metropolitan Transportation Commission (MTC), which derives its powers from State and federal transportation funding programs.

CONGESTION MANAGEMENT AGENCY

The STA is the designated congestion management agency (CMA) for Solano County and the cities. State law requires the Authority to adopt and implement a *Congestion Management Program* (CMP), which contains the procedures for managing congestion created by growth and identifies all transportation projects proposed for State and federal funding, for seven-year planning periods.

METROPOLITAN TRANSPORTATION COMMISSION

MTC is the agency designated with the decision-making authority for the Bay Area for regional transportation issues. MTC prepares a Regional Transportation Plan which describes transportation investments in the Bay Area for the next 20 years. These transportation investments are directed at the "Metropolitan Transportation System" (MTS) which includes the regionally significant components of the Bay Area's transportation network. Components of the MTS located in Benicia include the freeways, East 2nd Street, Lake Herman Road, Military between I-780 and East 2nd St., the Port of Benicia, Benicia Transit Services, and the Union Pacific rail line. State and federal statutes require that MTC find a project or program consistent with the Regional Transportation Plan before allocating certain State funds and any federal funds for that project or program.

2. THE MOVEMENT OF PEOPLE

PEDESTRIAN AND BICYCLE MOVEMENT

Certain areas of Benicia are very walkable. The Downtown, lower Arsenal, and water-front areas provide closely spaced land uses and relatively flat topography, as well as a pleasant physical environment. The northern residential and industrial areas are less pedestrian-friendly, with hilly terrain and longer distances between uses.

Bikeways are classified based on the Caltrans classification system for off-road (Class I) and on-road (Class II) facilities, as described in Table 2-7.

Table 2-7. Classification of Bicycle Facilities

CLASS I	Bicycle Path	Paved path separated from automobile traffic by a curb and landscaped strip, or routed through an open space area. Motorized vehicles are prohibited; may be combined with pedestrian trail.
CLASS II	Bicycle Lane	Paved extension of a roadway designated exclusively for bicyclists.
CLASS III	Bicycle Route	Signed routes where bicycles share roadways with vehicular traffic; no separate right-of-way is provided for bicyclists.

Benicia's Bicycle and Multi-Use Trail System is shown in Figure 2-4. This system, which shows both existing and planned future facilities, was developed for the Benicia Parks, Trails and Open Space Master Plan in 1994. The City's existing bicycle facilities serve primarily the waterfront, western Downtown, and northern residential areas. Extensions and connections are planned along most of the arterial roadways and some collector streets, as well as off-road alignments, to provide a fully connected system.

PUBLIC TRANSIT

Three forms of public transit serve Benicia residents: buses, passenger rail and ferries. The following provides an overview of the services currently available in Benicia.

Bus Transit

Benicia Transit is an intercity fixed-route service which provides service to the ferry terminal, the Lemon/Curtola Park and Ride stop in Vallejo, and the Sun Valley Mall as well as the Pleasant Hill BART station in Contra Costa County.

In addition to its fixed-route transit services, Benicia funds a local Dial-a-Ride program open to the general public. The service is provided under contract with a transportation services company. Benicia also participates in the intercity "Run

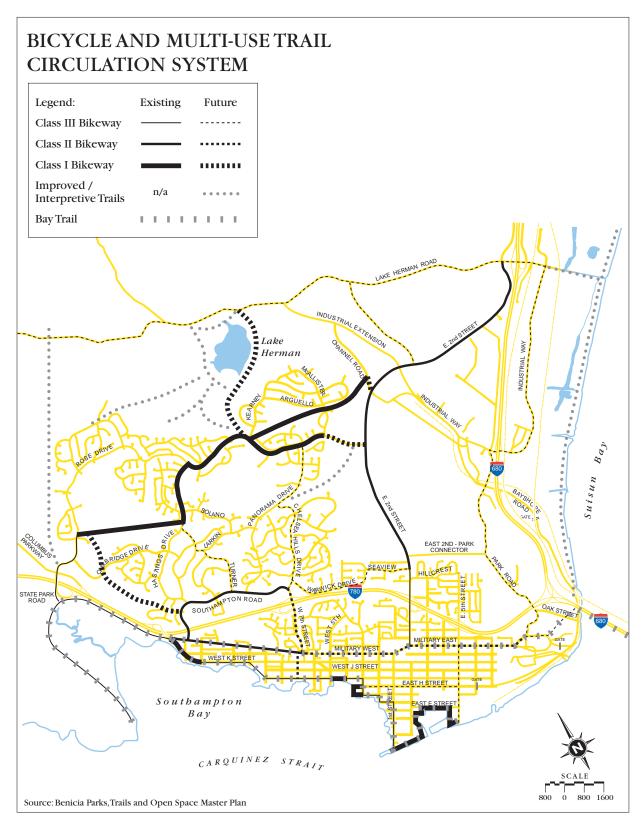


Figure 2-4. Bicycle and Multi-Use Circulation Diagram

About" paratransit service running primarily between Vallejo and Benicia. Since 1991, Caltrans has operated a daily Benicia-Martinez Bridge shuttle bus between the Park-and-Ride lot at the I-780/East 2nd St. interchange and the Martinez AMTRAK station. It is anticipated that this service will be discontinued on completion of the second bridge span.

Passenger Rail Service

There is commuter rail service operating through Solano County, and many Benicia residents commute to work via BART trains in Contra Costa County, using Benicia Transit to travel to the Pleasant Hill BART station.

Ferry Transit

Benicia commuters have access to ferry service via Benicia Transit to the Vallejo Ferry Terminal. The ferry operates between the ferry terminals in Vallejo and San Francisco.

AUTOMOBILE MOVEMENT

Street system

The original settlement of Benicia was surveyed by Jasper O'Farrell (who also laid out the street system in San Francisco). A five-mile stretch of shoreline was selected, and a grid system of streets was superimposed with little relation to topography. All north-south streets in the original settlement have 80-foot wide rights-of-way, while the east-west streets have alternating 60- and 80-foot-wide rights-of-way. North-south streets were extended beyond the shoreline and into the water. Street names are alphabetical in the east-west direction and numbered in the north-south direction.

In the mid-1960's, an east-west freeway (I-780) was constructed generally between "O" and "S" Streets. New development north of the freeway subsequently abandoned the grid system to minimize grading and street slope.

3. CIRCULATION SYSTEM

Figure 2-5 shows the existing and future circulation system for Benicia. It will serve existing traffic as well as new traffic from development allowed under this General Plan. The system includes five basic roadway types: Freeways, Major Arterials, Minor Arterials, Collectors and Local Streets. The system includes several roadway connections and extensions which do not exist as of 1997, including:

- 1. A second Benicia-Martinez Bridge Span (not shown on Figure 2-5);
- 2. Public road connections through the lower Arsenal and Port areas, to include Bayshore Road (minor arterial), Adams Street (major arterial), and Oak Street (minor arterial);
- 3. A Bayshore Road connection between Park Road and Industrial Way (minor arterial);
- 4. A new east-west connector roadway between East Second Street and Park Road (minor arterial); and

GENERAL PLAN CIRCULATION SYSTEM Legend: Freeway Future new/extended arterial alignments (illustrative only): Major Arterial 1. Second Benicia-Martinez Bridge span. Minor Arterial 2. Public Bayshore Road connection through port area. Collector 3. Bayshore Road connection between Park Road and Industrial Way Local Street 4. East-west connector roadway between East Second Street - Railroad and Park Road 5. Extension of Industrial Way north to Lake Herman Road. Lake Southampton BayCARQUINEZ STRAIT

Figure 2-5. Circulation Diagram

5. Extension of Industrial Way north to Lake Herman Road (minor arterial).

Following is a description of the different roadway types in the Circulation System.

FREEWAYS

Freeways are intended to serve regional and sub-regional travel. In Benicia, the location of freeways relative to the rest of the street network results in some (but not extensive) freeway use by residents or employees for intra-city travel.

Interstate Highways I-680 and I-780 serve north-south and east-west travel respectively, through and within Benicia. Each are four-lane facilities through Benicia. I-680 (six travel lanes) crosses the Benicia-Martinez bridge to the south. Caltrans plans to add a second bridge span which would result in five travel lanes in each direction (northbound and southbound).

ARTERIAL STREETS

Arterial streets link residential, commercial, and industrial districts with the highway system. They serve primarily through-travel as opposed to providing direct access to adjacent land uses. A Major Arterial is a roadway which connects freeways to minor arterials, other major arterials, and collector streets. A Minor Arterial is a roadway which connects major arterials to collectors and local streets. Arterials generally provide two to four travel lanes. Major and minor arterials in the General Plan Circulation System (see Figure 2-5) include:

Major Arterials

East Second Street

Rose Drive

Industrial Way Park Road (except major arterial section)

Lake Herman Road Oak Street

Military East - Military West Bayshore Road

Adams Street Hillcrest Ave., btwn E. 2nd and E. 5th Sts.

Southampton Road East Fifth Street

West Seventh Street New Park - East Second Connector Road Columbus Parkway First St. between Military and East "H" St.

State Park Road Cambridge Drive

Park Road between Industrial Way Panorama Drive from Southampton

and Bayshore Road Road to Rose Drive

Chelsea Hills Drive

Hastings Drive

West Seventh Street from West "K" Street

to Military West

COLLECTOR STREETS

Collector streets are generally two lanes wide and connect local streets to minor and major arterials. Collector streets generally do not form a continuous system; otherwise there would be a tendency to use them as arterials. The Benicia General Plan provides for collectors to serve the marina, various industrial areas, and most residential districts. The collectors in the General Plan Circulation System (see Figure 2-5) include:

Channel Road Larkin Drive between Turner and Panorama
Kearny Street West "K"/West J" Street (west of First Street)
McAllister Street West 5th St./Sherman Dr. (north of Military)

Arguello Street First Street South of East "H" Street

Solano Drive East "H" Street

(Hastings to Larkin)

Turner Drive East "D" Street between First Street and East Second

Warwick Drive East "E" Street between East 2nd and

East 5th Streets

Seaview Drive E. Second Street btwn East "H" and East "D" Streets

LOCAL STREETS

The function of local streets is to provide access directly to abutting property. Future local streets are not shown on the Circulation System map because they are typically laid out in accordance with City standards as part of the subdivision design process. They play an important secondary role as locations for utilities, easements, open space for light and air, and firebreaks between buildings. Local streets are not intended to carry through-traffic from one part of the community to another.

4. EXISTING AND FUTURE TRAFFIC CONDITIONS

FREEWAYS

The existing Level of Service (LOS) on freeways is monitored by the Solano Transportation Authority as part of their Congestion Management Program (CMP). LOS is expressed using a letter from A to F, with LOS A being best and LOS F being worst. (See Glossary for a more complete explanation of LOS). The 1995 CMP identifies LOS F conditions at the Benicia-Martinez Bridge toll plaza, LOS C/D conditions on I-680, and LOS C conditions on I-780.

The most recent study of future freeway traffic volumes is the I-680/I-80/I-780/Triangle Area Traffic Study Traffic Operations Report (1997). This report describes 1995 traffic volumes and projects future (2010) volumes for several scenarios which combine different sets of freeway improvements. The "No Build" scenario, which assumes the only improvement would be the scheduled Benicia - Martinez Bridge span which

represents the "worst case" for future conditions. For this case, the study indicates that peak hour freeway operations would be poor in the future (LOS D/E), although volumes would remain within the existing lane-capacity for all segments except I-780 between Southampton Road and Columbus Parkway in the AM peak hour.

Freeways serve both locally- and regionally-generated traffic and have a profound effect on communities. It is City policy to encourage Caltrans to maintain the current number of lanes on I-680 and I-780 through the city, except for spot widenings that may be necessary to smooth traffic at ramps. These policies are consistent with others in this General Plan which call for promoting alternative commute methods and a better jobs/housing balance to minimize freeway travel demand. The intent of the General Plan is not to create greater traffic congestion by rejecting all freeway widening, but to address the realities of growing travel demand through site-specific improvements, land use policies that minimize travel demand, and high occupancy vehicle (HOV) travel.

CITY STREET NETWORK

On the local, non-freeway road network in Benicia, traffic conditions are best represented by the operating level of intersections, because intersections are the primary source of delay and "bottlenecks." Traffic operations at intersections are described in terms of Level of Service (LOS). LOS D is generally accepted as the standard for intersection operation and has been adopted as the standard for Benicia. (See Policy 2.20.1.)

Tables 2-8 and 2-9 describe the different LOS designations A to F, for signalized and stop-controlled intersections.

There are 24 key intersections in Benicia. Table 2-10 shows existing and projected service levels. As of 1995, four intersections operated at LOS D, and another four operated at LOS E or EThe LOS E/F intersections are all located at I-780 ramps. The rest of the intersections operated at LOS C or better. Of the eight intersections operating at LOS D or worse, five are stop-controlled intersections. A check of the Caltrans signal warrant criterion for peak hour volumes at intersections shows that installation of a signal is warranted at two of these intersections: East Second Street/I-780 Westbound Ramps and East Fifth Street/I-780 Eastbound Ramps. Both of these intersections are scheduled to be signalized in the City's current Capital Improvement Program. Signalization would improve the existing LOS to C or better at these intersections.

Future traffic volumes at the study intersections were projected based on the land use changes in this General Plan. The traffic projection methodology is described in the General Plan DEIR Transportation chapter. Table 2-11 contains the future service levels which would result from these volumes, assuming no intersection improvements were made. While this General Plan involves a reduction in land use intensity in many areas relative to the previous general plan, the projected land uses at buildout would still cause unacceptable conditions (Los D or worse) at 14 of the 24 intersections. (An additional eight intersections are already at Los D or worse, as noted above).

Table 2-8. Level of Service Criteria for Signalized Intersections

LEVEL OF SERVICE (Los)	VOLUME-TO-CAPACITY RATIO
A	0.00 - 0.60
В	0.61 - 0.70
С	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	>1.00

Source: Transportation Research Board, Circular 212, Interim Materials on Highway Capacity

Table 2-9. Level of Service Criteria for Stop-controlled Intersections

LEVEL OF SERVICE (LOS)	AVERAGE STOPPED DELAY PER VEHICLE (IN SECONDS)
A	0 to 5.0 seconds
В	5.1 to 10.0 seconds
С	10.1 to 20.0 seconds
D	20.1 to 30.0 seconds
Е	30.1 to 45.0 seconds
F	more than 45 seconds

Source: Transportation Research Board, Highway Capacity Manual, 1994

The City's policy is to maintain intersection operation at LOS D or better, except where improvements would be infeasible or undesirable due to considerations of right-of-way, impacts of neighboring properties, aesthetics, or community character. Thus, the improvements included in this General Plan attempt to provide LOS D or better at the 24 intersections, wherever possible.

Figure 2-6 shows the intersection improvements which would be required to improve all intersections to at least LOS p. Table 2-11 shows the projected level of service at the study intersections with the improvements. Of the 22 intersections which require improvement, 14 would require the installation of a signal, and all 22 would require lane additions on some or all approaches. Some of the lane recommendations may not be feasible due to physical constraints; however, more detailed operational studies of these intersections can be performed as the need for the improvements draws near,

Table 2-10. Existing (1995) and Future Intersection Levels of Service (LOS)

		EXISTIN	G SERVICE	LEVEL	FUTURE SERVICE LEVEL		
INTERSECTION	CONTROL TYPE	V/C	DELAY (SEC.)	LOS	V/C	DELAY (SEC.)	LOS
1. Columbus Parkway/Rose Drive	Signal	0.82	(ozc.)	D	1.75	(SEC.)	F
2. Southampton/Hastings	One-way Stop		15/3	C/A		28/4	D/A
3. Southampton/Military West	Signal	0.46		А	0.58		А
4. Southampton/Chelsea Hills	Signal	0.74		С	1.09		F
5. West Seventh/I-780 WB On/Off	Signal	1.01		F	1.72		F
6. West Seventh/I-780 EB On/Off	Signal	0.60		А	1.07		F
7. First / Military	Signal	0.53		А	.76		С
8. East Second/I-780 WB On/Off	One-way Stop		81/22	F/D		*/*	F/F
9. East Second/I-780 EB On/Off	Signal	0.63		В	1.28		F
10. East Second/Military East	Signal	0.63		В	1.57		F
11. East Fifth/I-780 WB On/Off	One-way Stop		259/66	F/F		*/*	F/F
12. East Fifth/I-780 EB On/Off	One-way Stop		35/4	E/A		*/*	F/F
13. East Fifth/Military East	Signal	0.80		D	1.23		F
14. East Second/Rose Drive	Signal	0.58		А	1.91		F
15. East Second/Industrial	Two-way Stop		29/7	D/B		*/*	F/F
16. Bayshore/Park	Four-way Stop		28	D		*	F
17. Bayshore/I-680 SB On	WB Left Yield		5/1	A/A		*/*	F/F
18. Bayshore/I-680 NB Off	One-way Stop		6/3	B/A		*/*	F/F
19. Industrial/Park	Four-way Stop		14	С		*	F
20. Industrial/I-680 SB Off	One-way Stop		5/1	A/A		*/28	F/D
21. Industrial/I-680 NB On	One-way Stop		8/4	B/A		*/*	F/F
22. Lake Herman/East Second	Two-way Stop		9/4	B/A		*/*	F/F
23. Lake Herman/I-680 SB On/Off	One-way Stop		9/1	B/A		*/*	F/F
24. Lake Herman/I-680 NB On/Off	Two-way Stop		/2	A/A		*/*	F/F

For signalized intersections, the volume/capacity ratio is given. For side street stop-controlled intersections, two delays and service levels are given: the delay for the worst movement, and the average intersection delay. For four-way stops, the average intersection delay is given.

^{* =} very long delays (over two minutes)

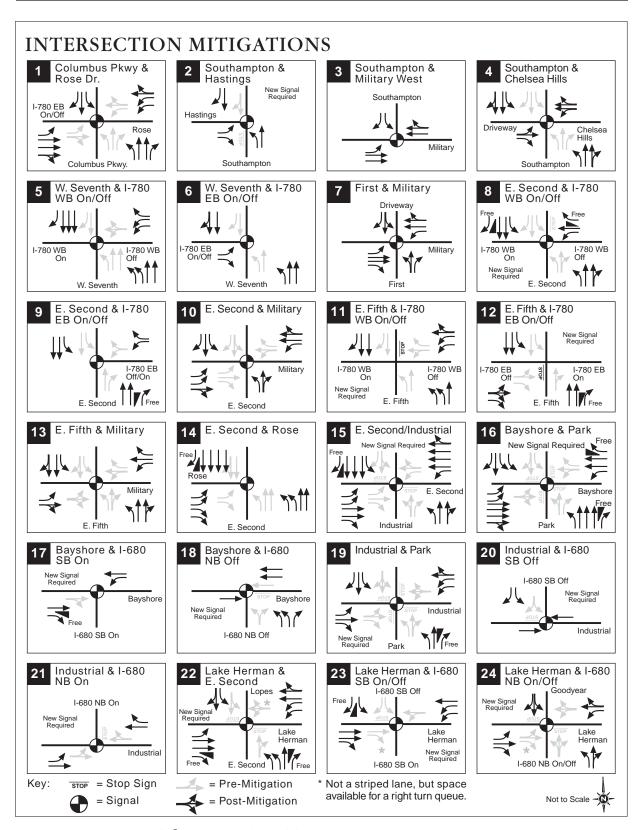


Figure 2-6. Intersection Mitigations

Table 2-11. Intersection LOS: Future Conditions with and without Intersection Improvements

	EXISTING	WITHOUT IMPROVEMENTS			WITH I	WITH IMPROVEMENTS	
INTERSECTION	CONTROL	V/C	DELAY	LOS	V/C	DELAY	LOS
	ТҮРЕ		(SEC.)			(SEC.)	
1. Columbus Parkway/Rose Drive	Signal	1.75		F	0.89		D
2. Southampton/Hastings	One-way Stop		23/4	D/A	0.71		С
3. Southampton/Military West	Signal	0.58		А	0.5 <u>9</u>		Α
4. Southampton/Chelsea Hills	Signal	1.09		F	0.82		D
5. West Seventh/I-780 WB On/Off	Signal	1.72		F	0.84		D
6. West Seventh/I-780 EB On/Off	Signal	1.07		F	0.76		D
7. First/Military	Signal	0.76		С	0.76		С
8. East Second/I-780 WB On/Off	One-way Stop		*/*	F/F			D
9. East Second/I-780 EB On/Off	Signal	1.28		F	0.87		D
10. East Second/Military East	Signal	1.57		F	0.83		D
11. East Fifth/I-780 WB On/Off	One-way Stop		*/*	F/F			D
12. East Fifth/I-780 EB On/Off	One-way Stop		*/*	E/F			D
13. East Fifth/Military East	Signal	1.23		F	0.88		D
14. East Second/Rose Drive	Signal	1.91		F	0.89		D
15. East Second/Industrial	Two-way Stop		*/*	F/F			D
16. Bayshore/Park	Four-way Stop		*	F			D
17. Bayshore/I-680 SB On ramp	WB Left Yield		*/*	F/F			С
18. Bayshore/I-680 NB Off ramp	One-way Stop		*/*	F/F			D
19. Industrial/Park	Four-way Stop		*	F			D
20. Industrial/I-680 SB Off ramp	One-way Stop		*/28	F/D			D
21. Industrial/I-680 NB On ramp	One-way Stop		*/*	F/F			В
22. Lake Herman/East Second	Two-way Stop		*/*	F/F			D
23. Lake Herman/I-680 SB On/Off	One-way Stop		*/*	F/F			С
24. Lake Herman/I-680 NB On/Off	Two-way Stop		*/*	F/F			В

For signalized intersections, the volume/capacity ratio is given. For side street stop-controlled intersections, two delays and service levels are given: the delay for the worst movement, and the average intersection delay. For four-way stops, the average intersection delay is given.

^{* =} very long delays (over two minutes)

and alternative solutions may be identified (*e.g.*, signal cycle length or phasing changes, adding capacity at a different intersection approach, coordinating timing at adjacent signals, *etc.*)

It should be emphasized that this improvement analysis is based on an estimate of conditions with reasonably foreseeable development allowed by this General Plan, to the year 2015—almost 20 years from now. As such, it constitutes long-range planning information, which will need to be supplemented by ongoing traffic counts and studies by the City to ensure that the appropriate improvements are developed and implemented when needed.

Future Arterial Widths

The definitions for arterials and collectors, noted earlier in this section, are summarized below:

- A major arterial is two to four lanes wide and connects freeways to minor arterials, other major arterials, and collectors.
- A minor arterial is two to four lanes wide and connects major arterials to collectors and local streets.
- A collector street is generally two lanes wide and connects local streets to minor and major arterials.

Projected future volumes on Benicia's arterials were analyzed to determine where widening or other changes may be needed. (The DEIR Transportation Chapter includes a table of arterial capacities which was used for this analysis). Table 2-12 shows the arterial segments which may exceed capacity with development allowed in this General Plan. As with the intersection improvements described above, this analysis provides long-range planning information, which will need to be supplemented by ongoing traffic counts and studies by the City.

Although the projected traffic volumes indicate the need for some roads to be widened, road widening may have deleterious effects, and alternatives should be studied before new widening projects are added to the City's Capital improvement Program.

Most of the improvements called for above would provide much greater capacity than needed. In most locations, only an additional 10 to 20 percent in traffic-carrying capacity is needed. A road widening from two to four lanes adds 100 percent capacity.

The City has recognized the need to provide smooth and reasonably convenient traffic flow, through General Plan policies such as maintaining LOS D where feasible. At the same time, the community is wary of the downside of over-sizing roads and intersections—a less pleasant environment for pedestrians and bicyclists, a tendency to draw new traffic to locations where excess capacity is provided, and a disincentive to use alternative travel modes such as carpooling and transit.

The General Plan promotes non-auto travel modes through policies and programs aimed at enhancing the pedestrian, bicycle, and transit experience. These policies

would be undermined if the road network offered excess capacity. As traffic congestion grows on city roads, the City will consider alternatives to widening, such as "spot widening" at congestion points, aggressive Travel Demand Management programs, rerouting traffic, prohibiting certain turning movements during peak hours, and coordinating traffic signals.

Table 2-12. Streets That May Exceed Existing (1997) Capacity with Future Growth Under this General Plan

ROADWAY	SEGMENT	IN CAPITAL IMPROVEMENT PROGRAM?
Lake Herman Road	East of the I-680 NB Ramps	No
East Second Street	Between Lake Herman Road and existing four-lane section	Yes (southeast half only)
East Second Street	Between I-780 WB Ramps and Military East	Yes
East Fifth Street	Between I-780 WB Ramps and Military East	Yes
Industrial Way	Between Lake Herman Road (along new extension) and the I-680 ramps	No
Bayshore Road	Between I-680 SB Ramp and Industrial Way ⁶	No
Military West	Between West Fifth and West Second	Yes
Military East	Between East Second and East Fifth	No
West Seventh	Between Chelsea Hills and Military West ⁷	Yes
Park Road	Between Industrial and Bayshore	Yes

5. Parking Conditions

Benicia generally has good parking conditions, with adequate on-street and off-street parking provided for local uses.

A future extension between Park Road and Industrial Way would extend through Exxon and would be difficult to build to four lanes. Also, any widening of the existing Sulphur Springs Creek two-lane bridge would be very costly. It is likely that a four-lane facility could extend only between the I-680 south-bound ramp and Park Road. The remaining portion would remain two lanes.

⁷ Any widening of West 7th at the I-780 interchange would require a new bridge, at significant cost.

6. Freight and Goods Movement

Three types of transportation facilities move freight and goods in Benicia. They are truck, rail, and port facilities.

TRUCK FACILITIES

Trucks are used for freight transport primarily in Benicia's industrial area along the northern I-680 corridor, and in the Port area adjacent to the Bridge. Freeway signs direct Benicia Industrial Park traffic to use I-680 exits.

As development allowed in the General Plan takes place, truck traffic will increase in the industrial and Port areas, and to a lesser extent in other growth areas.

FREIGHT RAIL FACILITIES

Freight rail facilities in Benicia center on the main Union Pacific Railroad line from Sacramento. This line once terminated at the foot of First Street, but now crosses the Carquinez Strait on a bridge paralleling the Benicia-Martinez Bridge to Martinez and the East Bay. Rail spur lines serve Benicia's industrial park area to the north and the Port area along the southern waterfront. Rail service along the waterfront terminates before reaching East 5th Street.

The spur line through the Benicia Industrial Park and the Arsenal area is used most frequently by auto carriers and by Exxon.

Caltrans and Union Pacific have negotiated an agreement for complete rebuilding of both tracks. The agreement will allow increased passenger rail service without interfering with freight trains.

PORT FACILITIES

Benicia has a natural deep water channel adjacent to the shore along the Carquinez Strait. This channel permits container ships, fuel tankers, and freighters with fairly deep draft (up to about 35 feet) to dock at Benicia's Port.

The Port of Benicia, which is leased and owned by Benicia Industries (a private company), has a 2,400-foot deep-water pier which provides berthing for three ships. This lease and the Bay Area Seaport Plan are discussed in Appendix D. There is also an existing petroleum service dock northeast of the Port of Benicia pier.

7. CIRCULATION GOALS, POLICIES, AND PROGRAMS

The goals, policies, and programs that follow deal comprehensively with the needs of and recommendations for pedestrian and bicycle circulation; transit, rail, and ferry service; reducing traffic congestion; parking; needs in special areas of the city (industrial park, Pine Lake, and Lower Arsenal); and proposals for freeway modifications.



GOAL 2.14: Enhance Benicia's

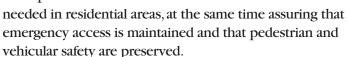
small-town atmosphere of pedestrian-friendly streets and neighborhoods.

POLICY 2.14.1: Give priority to pedes-

trian safety, access, and transit over automobile speed and volume.

Program 2.14.A: Reexamine City stan-

dards to allow the development of local streets with the minimum pavement width



Program 2.14.B: Consider physical and operational changes to reduce speeds

(e.g., narrow lane widths and signal timing), and increase traffic

speed enforcement.

Program 2.14.C: Consider residential streets with textured pavements and

parallel parking.

Program 2.14.D: Where feasible redesign corner radii to corners with tight radii

to slow vehicles and alert drivers to pedestrians in crosswalks.

Program 2.14.E: Consider reducing lane widths, as one method of both slowing

traffic and making room for parking, wider sidewalks, or bike

lanes.

Program 2.14.F: Where feasible, provide pedestrian sidewalks in all residential

areas along both sides of the street.

Some exceptions may be made where alternate paths exist, such as along alley streets, and where undesirable environmental impacts may result.

Program 2.14.G: Evaluate the feasibility of finishing sidewalks along streets

where they are currently lacking.

Program 2.14.H: Identify areas where sight distance for vehicle drivers and

pedestrian safety can be improved with signs, tree placement, landscaping, parking policy, building design, and streetscape. Prepare a program and schedule for implementing these

improvements.

Program 2.14.I: Identify areas where crosswalk safety can be improved through better lighting and striping, prohibiting right turns on red at specific intersections, installing pedestrian-activated push buttons for signals, installing a textured or raised paving material, and employing crossing guards for school children. Prepare a program and schedule for implementing these improvements. **POLICY 2.14.2:** Discourage street widenings and the removal of on-street parking to ease traffic flow. **GOAL 2.15:** Provide a comprehensive system of pedestrian and bicycle routes which link the various components of the community: employment centers, residential areas, commercial areas, schools, parks, and open space. **POLICY 2.15.1:** Make pedestrian and bicycle circulation, and safety improvements a high priority for transportation funding, utilizing locally generated revenues and State and federal grants. Program 2.15.A: Construct public improvements that accommodate and enhance pedestrian and bicycle access. Provide additional trails along the shoreline. Program 2.15.B: Provide proper signing for improved trails, fire break trails, and *Program 2.15.C:* interpretive trails. Program 2.15.D: Improve safety and pedestrian movement by building curb extensions that narrow the overall width required by pedestrians to cross the street at major pedestrian waiting areas at street intersections, sidewalks, and landscaped areas. Program 2.15.E: Identify areas where adequate lighting for pedestrians in urban areas is needed. Install additional lighting as appropriate. *Program 2.15.F:* Widen the Rose Drive/State Park Road at I-780 overpass to accommodate pedestrians and bicycle traffic. Create a protected landscaped sidewalk for West 7th Street Program 2.15.G: between I-780 and Military West. POLICY 2.15.2: Encourage the development of pedestrian paths in hill areas as a way to link neighborhoods to schools, parks, employment centers, and convenience commercial destinations. Program 2.15.H: Continue to implement the pedestrian pathway system in the City's Parks, Trails and Open Space Master Plan especially

linkages between the City's residential neighborhood and commercial districts. Program 2.15.I: Facilitate the connection of future Benicia-Martinez Bridge pedestrian/bike lanes to the city pedestrian/bike network. Connect paths from existing and proposed regional trail systems to the Boundary Hills and Benicia-Martinez Bridge. Program 2.15.J: Improve pedestrian and bike access between Downtown and Southampton. **GOAL 2.16:** Ensure access needs of individuals with disabilities. **POLICY 2.16.1:** Provide for adequate public access in all forms (walks, buildings, transportation) in conformance with the Americans for Disabilities Act (ADA). Program 2.16.A: In places that accommodate the public, remove barriers to access or provide alternative services when barriers cannot be removed. Program 2.16.B: Require that publicly sponsored programs, activities and transportation facilities are accessible to individuals with disabilities (including employees). **POLICY 2.16.2:** Encourage private entities to maintain places of business that are physically accessible to all. Program 2.16.C: Assess the cost and feasibility of Policy 2.16.2, including any changes in opportunities or costs for businesses to occupy historic structures. **GOAL 2.17:** Provide an efficient, reliable, and convenient transit system. POLICY 2.17.1: Continue to provide transit service to all—and subsidized paratransit service to all qualified—potential users, including youth, the elderly and the disabled, modifying routes and schedules as demand changes. Program 2.17.A: Preserve the personal service provided by Dial-a-Ride. Program 2.17.B: Subsidize transit at a level justified by a cost/benefit study. Program 2.17.C: Institute a continuing program to evaluate the transit system to ensure it meets the public's needs.

Allow preferential parking for public transit vehicles.

Program 2.17.D:

Program 2.17.E:	Set local priorities and needs for future service, taking into account funding uncertainties for Benicia's and other transit systems.
Program 2.17.F:	Improve inter-modal coordination of transit services.
Program 2.17.G:	Provide attractive and pedestrian-friendly transit stops and buses, including bike racks on buses.
Program 2.17.H:	Provide transit shelters with good visibility and benches, thus enhancing the pedestrian-transit interface.
Роцсу 2.17.2:	Consider nontraditional use of the existing transit system for tours, shuttles, and special events, (e.g., First Street shuttle, First Street to Community Park shuttle, First Street to Arsenal shuttle, State Park shuttle).
Program 2.17.I:	Optimize the use of existing transit equipment.
Program 2.17.J:	Consider a shuttle service between large commercial centers.
Роцсу 2.17.3:	Coordinate transit service and trip reduction efforts with other agencies.
Program 2.17.K:	Provide intercity bus service to Vallejo and Fairfield commensurate with available funding.
Program 2.17.L:	Coordinate school district/city bus schedules for optimum efficiency.
Program 2.17.M:	Coordinate transit planning with the Contra Costa Transportation Authority (CCTA) and Solano County, and coordinate future mass transit planning with all other regional efforts.
Program 2.17.N:	Participate in Major Investment Studies (MIS) to assure that transit alternatives are fully considered.
GOAL 2.18:	Encourage the provision of convenient rail service to Benicia with a station near the Benicia Bridge.
Роцсу 2.18.1:	Work with BART, Caltrans, BCDC, the Solano Transportation Authority, and MTC in planning a rail station near the Benicia-Martinez Bridge.
Program 2.18.A:	Consider mixed use, commercial and industrial uses that complement the train station.
Program 2.18.B:	Plan for convenient auto and transit access to and auto parking at the train station to encourage its use.



GOAL 2.19: Promote a regional (San Francisco, Oakland, Alameda) and local (Martinez, Port Costa, and

Crockett) ferry service.

When the waterfront park is established and the number of visitors to the foot of First Street increases, a weekend ferry service between Benicia and the historic town of Port Costa or Martinez along the northern shores of Contra Costa County may be feasible.

POLICY 2.19.1: Work with MTC to establish ferry service. Communicate

regularly with them regarding plans and funding for ferry

service.

Program 2.19.A: Identify ferry service market potential and terminal location

options.



GOAL 2.20: Provide a balanced street system to serve automo-

biles, pedestrians, bicycles, and transit, balancing vehicle-flow improvements with multi-modal

considerations.

POLICY 2.20.1: Maintain at least Level of Service D on all city roads, street

segments, and intersections.

Exceptions may be allowed where measures required to achieve LOS D are infeasible because of right-of-way needs, impact on neighboring properties, aesthetics, or community character.

Program 2.20.A: Identify areas where it would be beneficial to reduce and divert

through vehicular traffic from local residential streets. Implement appropriate neighborhood traffic control programs in

these areas.

Program 2.20.B: Locate new development where there is adequate existing or

planned future road and highway capacity and where local

residential streets will not be significantly impacted.

Program 2.20.C: Encourage use of alleys for commercial loading activities when

it will not block driveways or mid-block access to the street.

POLICY 2.20.2: Seek alternatives to road widenings

Program 2.20.D: Continue to identify and implement acceptable alternatives to

in-town roadway widening, extensions, and large intersections.

Program 2.20.E: Identify streets where traffic should be slowed.

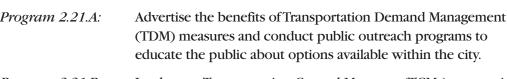
Program 2.20.F: Consider lane narrowing, driver education, traffic speed alert

trailers, and other traffic calming remedies.

Program 2.20.G: Advertise the use of transit, bicycling, and walking for commut-

ing, shopping, recreation, and school trips.

Program 2.20.H: Reserve right-of-way for new alternate transportation facilities that contribute to street and roadway congestion relief. Program 2.20.I: Coordinate traffic signal improvements and synchronization and continue to implement timing changes. Program 2.20.J: Develop adequate funding for keeping streets, alleys and sidewalks in good repair. Program 2.20.K: Identify and prioritize transportation facilities maintenance projects for roadways, sidewalks, and off-street trails and paths. Program 2.20.L: Identify areas of the city that are pedestrian-unfriendly and develop corrective plans. **POLICY 2.20.3:** Maintain Lake Herman Road as a rural, two-lane, curving scenic route. **GOAL 2.21:** Encourage Benicia residents and employees to use alternatives to the single-occupant automobile. POLICY 2.21.1: Provide and promote a range of travel alternatives to the use of the private automobile. "Design Strategies for Encouraging Alternatives to Auto Use Through Local Development Review," prepared by ABAG and BAAQMD, provides a number of site planning strategies for commercial and residential development that aim at reducing auto use by making pedestrian and bicycle travel more attractive. Program 2.21.A: Advertise the benefits of Transportation Demand Management (TDM) measures and conduct public outreach programs to



Implement Transportation Control Measures (TCMs) appropri-Program 2.21.B: ate to Benicia.

POLICY 2.21.2: Encourage new development patterns that facilitate bicycling, walking, and transit for commute, shopping, recreation, and school trips.

Consider denser, mixed-use developments, particularly in the Program 2.21.C: Downtown area.

Program 2.21.D: Consider the feasibility of extending East Second Street from East "L" Street to East "K" Street.



GOAL 2.22: Alleviate traffic congestion near school sites.

POLICY 2.22.1: Work closely with the School District in addressing traffic congestion near schools.

Develop a plan jointly with the School District for reducing Program 2.22.A: traffic congestion at and near school sites. Program 2.22.B: Encourage the School District to continue the comprehensive crossing guard program. Program 2.22.C: Adjust phasing/timing of signal lights on routes to schools, and consider providing increased crossing guards and/or police direction of traffic. Program 2.22.D: Encourage the School District to implement citywide busing and promote carpools for trips to school. Program 2.22.E: Promote School District provision of adequate off-street parking, drop-off and pickup facilities, and designated carpool parking at each school. Program 2.22.F: Study the need for and feasibility of a pedestrian bridge linking the middle school and high school. **GOAL 2.23:** Ensure adequate parking while maintaining aesthetic landscape features. **POLICY 2.23.1:** Provide adequate on-street and off-street parking. Program 2.23.A: Continue to allow on-street parking where needed for abutting uses (e.g., Military East). Program 2.23.B: Preserve and improve the East Second and "E" Street parking lot. Consider double-deck parking if need warrants. Program 2.23.C: Allow flexible parking requirements for uses smaller than 2,000 square feet. Program 2.23.D: Update parking requirements based on actual local parking generation studies wherever, appropriate, and consider parking proximity to transit corridors. **POLICY 2.23.2:** Reduce the visibility of parking lots. Allow future parking to be divided into smaller lots with Program 2.23.E: generous internal and perimeter landscaping. Recommend parking to be located behind or alongside (but Program 2.23.F: not in front of) buildings, where possible. **GOAL 2.24:** Continue to provide safe and direct access to the Industrial Park.



industrial and Port areas.

Program 2.24.A: Investigate establishment of Industrial Park bus service.

Program 2.24.B: Investigate alternate routes that would better accommodate

access from the freeway to the Port and Industrial Park.

Program 2.24.C: Identify solutions to circulation problems associated with truck

traffic by maintaining a database of truck-related citizen or business complaints in combination with truck counts and

accident data.



GOAL 2.25: Improve auto and non-auto access into the Old

Arsenal, without disrupting existing neighbor-

hood, historic, and environmental values.

POLICY 2.25.1: Consider alternative modes of transportation to the auto in

planning new access and in improving existing routes into the

Arsenal.

Program 2.25.A: Improve access into the Arsenal from I-680.

Program 2.25.B: Depending on City's determination of need and impacts,

decide whether to connect the Lower Arsenal with the Downtown, such as through East "H" Street, including bike, pedestrian,

and emergency access.

It is important to link the Lower Arsenal area with Downtown for economic development and maximum utilization of the waterfront, historic, and cultural assets. There are two alternatives: (1) open the gate and allow access over the hill to the Lower Arsenal; and (2) open the gate and allow access via Bayshore Road.

The City will investigate alternative alignments, mindful of "H" Street residents' concerns about through-traffic and Benicia Industries' concerns about Port security.



GOAL 2.26: Ensure that scenic and environmental amenities

of I-680 and I-780 are not compromised.

POLICY 2.26.1: Promote the

use of freeway rightof-way for alternative commute methods (e.g., car pool lanes, transit, and off-road bike paths).



POLICY 2.26.2:

Encourage the preservation of I-780 as four lanes, but support spot widenings at selected locations (e.g., the approach to the Benicia-Martinez Bridge on/off merge lanes) to address future capacity problems while still maintaining a four-lane mainline freeway.

POLICY 2.26.3:

Support Caltrans' Benicia–Martinez Bridge project, advocating the following: (1) continued toll collection in the northbound direction with the toll plaza located at the southern end of the bridge; (2) elimination of existing lane merge problems at the I-680/I-780 interchange; (3) retaining direct access to existing interchanges at East 2nd and East 5th Streets, (4) accommodating rail transit on the bridge in the future, and (5) only widen I-680 upon evaluation of alternatives.

POLICY 2.26.4:

Ensure that the Benicia-Martinez Bridge project adequately reflects the community's concerns.

Program 2.26.A:

Continue to monitor and comment on Caltrans planning activities and documentation as the bridge planning process continues.



GOAL 2.27:

Ensure an active community deliberation process in response to Caltrans proposals now and in the future.

POLICY 2.27.1:

Monitor Caltrans' planning process for I-680 and I-780 improvements and communicate the City's concerns and priorities to Caltrans.

POLICY 2.27.2:

Ensure the continuation of the following City policies in discussions with Caltrans about changes to I-680 and I-780:

- A) Preserve the Lake Herman interchange vista look-out and rest area.
- B) Relocate the Industrial interchange northbound off-ramp and southbound on-ramp from the south end of the Sulphur Creek overcrossing at Bayshore Road to the north end at Industrial Way.
- C) Use the existing toll building at the existing Benicia-Martinez Bridge for a passenger train station for the UP rail line. Provide adequate access to and automobile parking at the station. Provide for the station to accommodate a light rail passenger line on the new bridge.
- D) Preserve direct access to and from I-780 at East Second and East Fifth Streets.

- E) Preserve the existing westbound exit from I-780 at Columbus Parkway and ensure that existing commercial buildings are not removed.
- F) Keep I-780 four lanes. Support spot widenings at selected locations (e.g., the approach to the Benicia-Martinez Bridge on/off merge lanes) to address future capacity problems while still maintaining a four-lane mainline freeway.
- G) Only support the widening of I-680 to six lanes upon evaluation of alternatives.
- H) Do not permit sound walls or retaining walls along I-780. Permit sound walls and retaining walls that the community believes would provide benefits that outweigh drawbacks.
- POLICY 2.27.3: Ensure that the Benicia residential and business community is informed about Caltrans' project planning activities, and solicit public input on Caltrans projects.
- Program 2.27.A: Review existing plans and work with Caltrans to develop proposals that reflect the consensus.

D. COMMUNITY SERVICES

1. PUBLIC AND QUASI-PUBLIC

Public and quasi-public facilities uses provide a variety of services to the public including police, fire, water, sewer, and education. Local government entities (*e.g.*, the City of Benicia and the Benicia Unified School District) occupy a large portion of Public/Quasi-public lands. In keeping with the nature of these facilities in serving the public, they are distributed throughout the City. Figure 2-7 shows existing public and quasi-public facilities as of 1995.

PUBLIC AND QUASI-PUBLIC GOALS, POLICIES, AND PROGRAMS



GOAL 2.28: Improve and maintain public facilities and ser-

vices.

POLICY 2.28.1: Require that new development not reduce the levels of service

in existing neighborhoods below City standards.

Program 2.28.A: Establish standards for city services and facilities, as approved

by the City Council (see also Program 2.6.E).



GOAL 2.29: Provide for churches to locate where conflicts with adjacent land uses will be minimized.

POLICY 2.29.1: Inside the

Urban
Growth
Boundary,
allow
churches
outright in
community
commercial
zones and as
a conditional



use in other zones. Make every effort to provide land for needed religious assembly when planning large new projects in these zones.

POLICY 2.29.2: Encourage the location and design of church facilities to be

compatible with neighboring properties.

POLICY 2.29.3: In any future developments, consider earmarking land for quasi-

public uses.

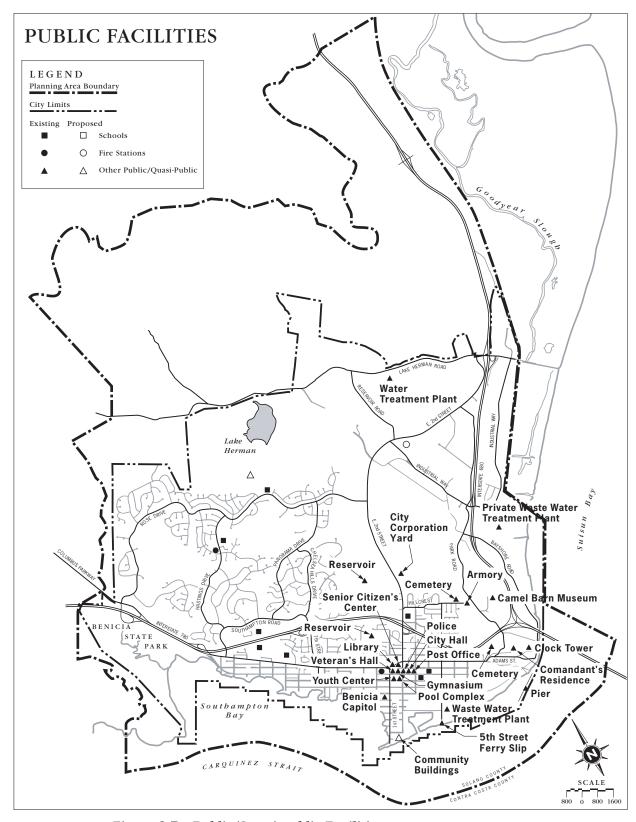


Figure 2-7. Public/Quasi-public Facilities

2. PARKS AND RECREATION

The City of Benicia has an extensive park, trail, and open space system, as well as a *Parks, Trails and Open Space Master Plan* (1997) that seeks to elaborate on the existing system by adding parks, bikeways and improved community trails.

STANDARDS

The General Plan provides standards for four categories of City Parks: Regional, Community, Neighborhood, and Waterfront. The categories are defined in Section A, Land Use of this chapter (Chapter 2).

EXISTING PARKS

Benicia has approximately 700 acres of existing parks; the largest part of this acreage is in the Lake Herman Regional Park (577 acres). Benicia also has several recreational centers: the Senior Center, City Gym, James Lemos Pool complex, and the Youth Activities Center. The City has a joint use agreement with the Benicia Unified School District that provides for the sharing of facilities. In



addition, the City has several parks/recreation facilities not categorized in the Parks, Trails, and Open Space Master Plan. These include one public launch ramp, two fishing piers, and small waterfront parks. Table 2-13 and Figure 2-8 list and locate the City's various parks and recreational facilities. The City's 1997 Parks Master Plan provides a full description of all parks within the City as of 1997.

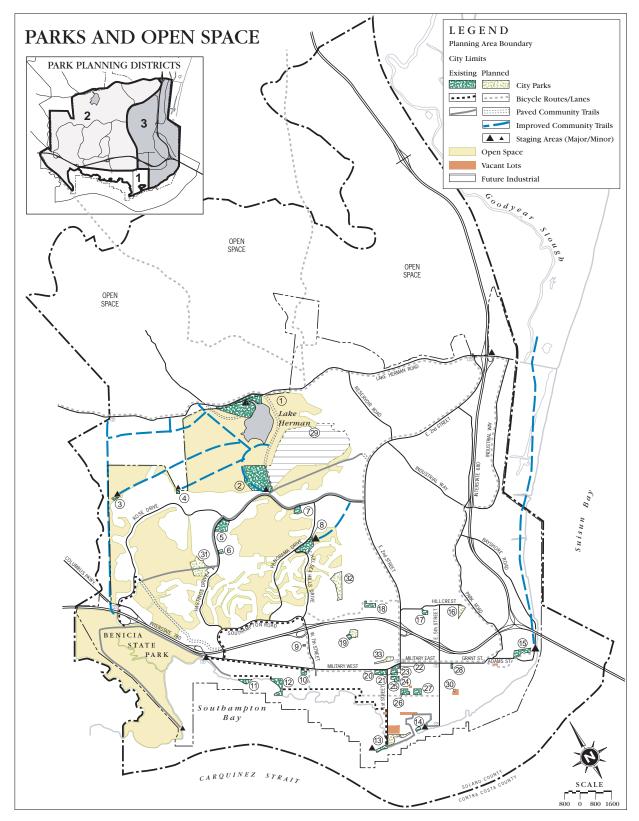


Figure 2-8. Parks and Open Space

Table 2-13. Existing and Future Parks and Recreation Facilities within City Limits, 1995

MAP NO.*	FACILITY NAME	ACRES
1.	Lake Herman Regional Park	577.0
2.	Benicia Community Park	50.0
3.	Channing Circle Park	2.5
4.	Gateway Park	0.5
5.	Jack London Park	7.7
6.	Park Solano	2.0
7.	Frank Skillman Park	3.0
8.	Southampton Park	6.0
9.	Benicia Views II	0.5
10.	Willow Glen Park	4.5
11.	Matthew Turner Park (West 12th Street)	2.5
12.	West 9th Street Park	6.0
13.	Point Benicia Spit	0.3
14.	Turnbull Park	0.3
15.	Clocktower	_
16.	Francesca Terrace	5.0
17.	Duncan Graham Park	2.0
18.	Overlook Park	3.5
19.	Bridgeview Park	4.5
20.	City Park	4.5
21.	Civic Center Park	3.5
22.	Benicia Senior Citizens' Center	_
23.	Benicia City Gymnasium	_
24.	James Lemos Pool Complex	_
25.	Youth Activity Center	_
26.	Fitzgerald Field	4.0
27.	Little League Field	4.0
28.	Ethelree Saraiva Park	0.5
29.	Park D-7 (future)	3.5
30.	Bottle Hill Park (future)	0.5
31.	Hastings Drive Neighborhood Park (future)	10.0
32.	Perth Way Neighborhood Park (future)	8.0
33.	St. Catherine's Wood Neighborhood Park (future)	0.5
34.	Waterfront Park	4.3
SUBTOTAL		721.1
	Benicia State Recreation Area	469.0
	Benicia State Capital Historic Park	1.5
· · · · · · · · · · · · · · · · · · ·		

Source: Parks, Trails, and Open Space Master Plan

^{*}These numbers refer to locations on Figure 2-8.

PARK AND RECREATION FACILITY NEEDS

The Parks, Trails and Open Space Master Plan evaluated the existing park and recreation system to determine future needs for Benicia. The analysis was conducted for the City as a whole, and for three districts divided along census tract boundaries (see inset in Figure 2-8):

- District 1 is the Downtown and Old Town area, bounded on the north by Military Street.
- District 2 is the Southampton subdivision. This district accounts for almost 70 percent of the City's population.
- District 3 is the eastern part of the City. It includes a few older residential areas on the east side of East Second Street, but most of it is developed for industrial uses.

Overall Population

The *Parks Master Plan* compared acreages of existing and planned park land in relation to both the existing and projected population of the City. Using the standard per acre shown in Table 2-14, the City has more than adequate regional parkland, but is deficient in community and neighborhood parks. *The Parks Master Plan* identified a shortfall of 35 acres of neighborhood park and 18 acres of community park in 2010.

Table 2-14. Amount of Existing Park Land per Capita

PARK TYPE	ACRES	ACRES/1,000 PEOPLE	STANDARD (ACRES/1,000 PEOPLE)
Regional Park	577	20	10
Community Park	50	2	2.5
Neighborhood Parks	59	2	3.5
Recreational Facilities	8	0.3	_
Totals	694	24.3	

District Population

Using the standards shown in Table 2-14 in the Land Use section, *the Parks Master Plan* found differing parkland needs by district. District 1 has an adequate park land through 2010. District 2 will be deficient by 33 acres of neighborhood park land in the year 2010. District 3 will be deficient by 5 acres of neighborhood park land in the year 2010. Thus most parkland deficiency is in District 2.

Distance

The *Parks Master Plan* used a half-mile mile radius standard to evaluate each neighborhood park. Using this standard, major service gaps were found in the western and southwestern portions of District 2, and the eastern tip of Downtown (District 1).

Facility Type and Description

The number of recreational facilities provided in the City and in each district was compared with the recreational facility standards to determine which areas were deficient in given facilities. The evaluation determined that there will be a citywide deficiency of six tennis courts by 2010 (four in District 2; two in District 3).

FUTURE PARK DEVELOPMENT

Several sites are shown on Table 2-13 as future parks. A brief description follows.

Park D-7. (Map No. 29). This 3.5-acre neighborhood park is planned for the northeastern portion of the Southampton development. Proposed uses range from a community center, public pool, and tennis courts, to volleyball courts, playgrounds, and croquet courts.

Bottle Hill Park. (Map No. 30). This 0.5-acre neighborhood park, in the southeastern portion of the Downtown area, will provide panoramic views of the Carquinez Strait, and sheltered areas for a tot lot, and picnic facilities.

Hastings Drive Neighborhood Park. (Map No. 31). This proposed 10-acre park is located in the Southampton open space in the central western portion of the Southampton development. The site contains a small drainage channel and is surrounded by existing homes. The topography in the area would necessitate terracing for facilities. The park will include a multi-purpose playing field, tennis court, basketball courts, playground, grass play area, picnic area, path, and benches.

Perth Way Neighborhood Park. (Map No. 32). Perth Way Neighborhood Park is a proposed 8-acre neighborhood park located in the open space in the eastern portion of the Southampton development. The site is relatively flat, but high in elevation, providing views toward Suisun Bay. Planned facilities include a multi-purpose playing field, tennis court, basketball court, playground, grass play area, picnic area, path, and benches.

St. Catherine's Wood Neighborhood Park. (Map No. 33). This 0.5-acre neighborhood park, located directly north of Solano Square at First Street, will include a playground, an entry plaza, and a seating area.

PARKS AND RECREATION GOALS, POLICIES, AND PROGRAMS

Goals, policies, and programs in this section call for adding parks and recreation facilities while maintaining and improving existing parks and recreation facilities.



GOAL 2.30: Maintain and improve existing parks and recre-

ation programs.

POLICY 2.30.1: Enhance existing city recreation facilities and programs.

Program 2.30.A: Develop programs that promote higher and better use of

Benicia's recreation facilities and programs.

Recreation facilities include parks and buildings.

Program 2.30.B: Conduct periodic surveys about ways to improve City recre-

ation facilities and programs.

Program 2.30.C: Direct the Parks, Recreation & Cemetery Commission to

annually audit and recommend additions to and updates of the

Parks Master Plan.

Program 2.30.D: Establish cooperative relationships with public agencies and

applicable public interest groups in developing plans for parks

and recreation programs.

Program 2.30.E: Distribute special park features (e.g., gazebos, bandstands,

fountains, sculpture, overlooks, etc.) at key locations in neighborhood and community parks to enhance neighborhood character, provide a focus for a park, or create a place for

viewing.

Program 2.30.F: Continue to share City park facilities with the School District

and consolidate park and school lands wherever feasible.

Program 2.30.G: Develop a process to evaluate existing facilities and determine

their utilization.

POLICY 2.30.2: Increase resident awareness of the available recreational

opportunities in the city.

Program 2.30.H: Develop public information materials (including a color map

and table of citywide recreation facilities), and a comprehensive

sign system about parks and recreational opportunities.

POLICY 2.30.3: Incorporate water conservation into park planning and design.

Program 2.30.I: Use primarily native plant species and other drought tolerant

plants in all parks and open space areas.



Program 2.30.J: Use drip irrigation and other water efficient irrigation methods

in all parks.

POLICY 2.30.4: Protect plant and animal life as part of any park improvement

project involving sensitive habitat areas of local or regional

significance.

POLICY 2.30.5: Design park improvements to facilitate accessibility and mainte-

nance.

Program 2.30.K: Regulate concessions stands in park and recreation areas

consistent with the Parks, Trails, and Open Space Master Plan.

POLICY 2.30.6: Continue to establish appropriate uses and programs for Lake

Herman Regional Park that (a) preserve and maintain its natural

condition and scenic value while providing for increased, passive, low impact recreational opportunities and (b) maintain and/or enhance Lake Herman's wetlands to attract a variety of

wildlife to the area; (c) preserve rock outcroppings and

creekside vegetation.



GOAL 2.31: Maintain safety at parks/open space.

POLICY 2.31.1: Improve and maintain safety in existing parks and design park

improvements to facilitate security and policing.

Program 2.31.A: Continue coordination with the City police department to

provide mobile patrol of parks and open space areas.

Continue coordination with the City fire department regarding *Program 2.31.B:* fire season warning and control, emergency vehicle access, support facilities, and response. Program 2.31.C: Continue to coordinate with neighborhood watch programs to provide added security at parks, along trails, and in the open space areas. Program 2.31.D: Coordinate with the Benicia Unified School District regarding safety concerns at joint use facilities. **GOAL 2.32:** Expand the City's park system to accommodate future community needs. **POLICY 2.32.1:** Establish new parks/recreation areas. Program 2.32.A: Ensure that lands dedicated for park land are of sufficient in size to accommodate the uses and facilities proposed, graded for those uses, and free of hazardous and toxic waste materials for each park site. Program 2.32.B: Regularly monitor County, State, and federal funding sources and apply for loans and grants to acquire, develop, and rehabilitate park land and facilities. Program 2.32.C: Identify and incorporate the needs of neighborhoods in developing new parks and facilities. **POLICY 2.32.2:** Continue to develop and enhance recreational benefits of the shoreline and seek public access along the waterfront. Program 2.32.D: Explore public access on private waterfront through collabora-

tive planning or a development review process.

BENICIA STATE PARKS

The State Department of Parks and Recreation maintains and operates two parks in Benicia: the State Capitol Historic Park and the Benicia State Recreation Area. The 1.5 acre State Capitol Historic Park is located on the corner of First and West G Streets. It includes the building used as California's State Capitol from 1853–1854, the Fischer-Hanlon House, associated historic structures and Victorian Garden. The 469-acre Benicia State Recreation Area is located in western Benicia along the Benicia-Vallejo border, southwest of I-780. This recreation area is predominantly marsh but also provides extensive hiking, jogging, and biking trails, a fishing area, and picnic areas. (See Chapter 3, Section D, for more information on trails in the Planning Area.)





GOAL 2.33: Assure long-term maintenance of the State Parks.

By itself, the City may not be able to assure maintenance of a State park. This implies working with the State to achieve the goal.

Program 2.33.A: Develop a Strategic Plan for addressing State park issues.

Program 2.33.B: Work with the State to maintain and improve both parks and

identify needed improvements.

For example, utility lines that cross the State Recreation Area should be re-routed.

Program 2.33.C: Work with the State to keep the State Recreation Area open to

the public for day use.

Program 2.33.D: Work with the State to assure that the Capital maintains maxi-

mum opening hours for public enjoyment and use.

3. SCHOOLS

EXISTING FACILITIES

Public and Private Schools

Benicia is served by the Benicia Unified School District (BUSD). Within the Benicia city limits are five public and one private elementary schools, one public and one private intermediate



school, one public high school, and one continuation high school. For the 1997-98 school year, fall district-wide enrollment was 5,381. Enrollment figures for each school facility are shown in Table 2-15.

Table 2-15. School Enrollment and Capacity, 1997–1998

SCHOOL	GRADE LEVEL	ENROLLMENT 1997-1998	CAPACITY 1997-1998
Public Schools		2777 2770	2,7,7 2,7,0
Semple Elementary	K-5	448	516
Mills Elementary	K-5	374	474
Mary Farmer Elementary	K-5	450	515
Henderson Elementary	K-5	657	671
Turner Elementary	K-5	478	518
Benicia Middle School	6-8	1,312	1,351
Benicia High School	9-12	1,586	2,089
Liberty High School	9-12	76	86
Private School			
St. Dominic's	K-8	346	346

FUTURE FACILITIES

The number of students expected in Benicia's schools, and the need for additional facilities is closely related to the amount of new housing. The District has some capacity to accommodate existing infill potential but can not accommodate significant new development.

The student generation rates used by the City and BUSD based on 1990-91 statistics assume 0.10 elementary school students for a multi-family housing unit and 0.30

⁸ Capacity can vary according to the distribution of portable classroom facilities among the various campuses. In addition, as new construction is completed, these figures must be revised.

elementary school students for a single family housing unit. For middle school, the rates are 0.045 for a multi-family unit and 0.14 for a single-family unit. For high school, the rates are 0.055 for a multi-family unit and 0.16 for a single-family unit.

Based on these generation rates the following table illustrates existing and projected enrollment to Year 2002.

Table 2-16. School Enrollment, 1997 and Projected

SCHOOL	ACTUAL 1997	ACTUAL 1998	PROJECTED 2000	PROJECTED 2002
Public Schools				
K-5	2,425	2,407	2,407	2,348
6–8	1,303	1,312	1,350	1,420
9–12	1,550	1,662	1,938	2,014
PUBLIC SCHOOL TOTAL	5,278	5,381	5,682	5,782
Private School	346	346	346	346

Source: Benicia Unified School District; St. Dominic's Priory School

Given limited residential buildout in the City, no new schools are anticipated. The high school is developing a progressive capacity master plan for the expansion of facilities to make room for new students on the existing 47-acre site. Increasingly, school districts rely on development permit fees to generate funds for new school facilities. Based on 1997 fee rates, the District calculates that about one-third of the cost of the new school facilities needed to serve new development generated by this Plan would be funded.

SCHOOLS GOALS, POLICIES, AND PROGRAMS

Goals in this section stress City/School District cooperation.

residential areas.



GOAL 2.34: Ensure adequate school facilities to serve all

POLICY 2.34.1: Approve new residential projects only if adequate school facilities are available or will be available when needed.

Program 2.34.A: Continue to work with the School District to identify appropri-

ate sites if needed for future expansion and new construction

of public schools.



GOAL 2.35: Cooperate with the School District to provide opportunities for citizen use of the schools.

POLICY 2.35.1: Continue to seek innovative ways for the City to use school

facilities and grounds jointly with the School District.

Program 2.35.A: Continue to maintain and implement the joint-use agreement

between the City and BUSD.

Program 2.35.B: Maintain zoning that, in the event any schools are closed or

relocated, will support the reuse of closed school sites for

public or quasi-public uses.

4. WATER

Sulphur Springs Creek Watershed and Lake Herman

Sulphur Springs Creek and its main tributary, Paddy Creek, form the largest watershed within the Planning Area. Of the approximately 18 square mile watershed area, the upper six square miles lies outside of the Planning Area in



the Vallejo Sphere Of Influence. Paddy Creek, which drains a three square mile watershed, joins the lower reach of Sulphur Springs Creek just below the Lake Herman outlet.

The Lake Herman reservoir on Sulphur Springs Creek stores watershed runoff along with excess water from the North Bay Aqueduct, a component of the State Water Project and the City's principal potable water supply. The reservoir is typically filled during the spring and drawn down during the summer and fall. Both the City and Exxon draw on the reservoir during periods of high demand.

WATER SUPPLY

Benicia has a long history of having a local shortage of fresh water. Benicia's potable water is currently supplied by the California State Water Project (SWP) through the North Bay Aqueduct (and the City of Vallejo in the event of a water shortage). The City's Water Treatment Plant is located on Lake Herman Road and was expanded in 1989.

WATER QUALITY

Water quality problems typical of commercial and residential land uses affect aquatic habitat and stormwater discharge throughout the urbanized portions of the Planning Area. Lake Herman, which is the City's back-up water supply, is considered a

eutrophic water body by the Regional Water Quality Control Board (RWQCB). Eutrophic waters are characterized by high nutrient loads, excessive algal and aquatic vascular plant growth, low water clarity, and reduced oxygen concentrations in bottom waters. However, the City also stores good quality North Bay Aqueduct water in Lake Herman, and the current mixture of water in the lake is deemed sufficient to meet water quality standards.

While no specific data are available on water quality for other surface waters in Benicia, it is reasonable that water quality in other minor creeks and drainages would be similar to that found in other urbanized portions of the Bay Area, since Benicia is subject to the same point and non-point sources as other jurisdictions.

Groundwater

The Public Safety Background Report lists a number of confirmed and potential groundwater contamination sites throughout the City. However, Benicia's reliance on imported swp water for its municipal water supply means that the groundwater quality problem sites have little significant impact on drinking water quality. Instead, they have the potential to affect water quality in local creeks and the receiving waters in the Carquinez Strait and Suisun Bay, since groundwater eventually flows to surface locations.

Groundwater contamination upstream from Lake Herman could reach the City's water supply. Two upstream contamination sites have been identified at Syar Quarry and the Hastings Mercury Mine. While these sites appear to be of relatively lower concern than downstream sites, they should be monitored.

WASTE WATER TREATMENT

Benicia's sewer system dates from the time when sanitary sewers and storm drains flowed together into the Carquinez Strait. Separation of sanitary from storm water flows was completed and interceptors were constructed to carry waste water to the Waste Water Treatment Plant (WWTP) at the lower end of East Fifth Street.

In June 1996, Benicia residents passed a bond measure to upgrade the City's wastewater treatment plant (wwtp). The upgrade will (a) increase the wwtp's firm capacity to sufficiently serve existing development and projected infill development within existing City Limits, (b) eliminate excessive noise, odors, and the use of gaseous chlorine from the Plant, (c) address problems with deteriorating equipment and facilities, and (d) create a flood wall along the southern and eastern borders of the Plant.

WATER GOALS, POLICIES, AND PROGRAMS

Goals, policies, and programs focus on meeting the needs of the existing and future development envisioned by this Plan with an adequate supply of high quality drinking water and sufficient wastewater treatment capacity.



GOAL 2.36:	Ensure an adequate water supply for current and future residents and businesses.
Роцсу 2.36.1:	Approve development plans only when a dependable and adequate water supply to serve the development is assured.
Роцсу 2.36.2:	Continue to pursue and secure adequate water sources of the highest quality available.
Program 2.36.A:	Pursue use of reclaimed wastewater—especially for major industrial users—where feasible.
Роцсу 2.36.3:	Implement measures to reduce water consumption.
Program 2.36.B:	Initiate water conservation programs and conduct drought contingency planning.
Program 2.36.C:	Continue to implement City-adopted water conservation Best Management Practices (BMP). (see Glossary)
Program 2.36.D:	Continue to require development to utilize adopted City standards for low-water-use landscaping.
Роцсу 2.36.4:	Encourage public and private uses to minimize water use and to recycle processed water whenever and wherever feasible.
Program 2.36.E:	Promote the retrofitting of public buildings with water conservation features.
Program 2.36.F:	Assist hospitality-related businesses to actively promote water conservation.
GOAL 2.37:	Identify and preserve groundwater resources.
POLICY 2.37.1:	Work with the RWQCB to protect groundwater quality.
Роцсу 2.37.2:	Ensure the cleanup of groundwater contamination resulting from the IT Panoche Hazardous Waste Facility.
GOAL 2.38:	Protect water quality.
Роцсу 2.38.1:	Continue to require the use of feasible and practical Best Management Practices (BMP) to protect receiving waters from adverse effects of construction and urban runoff.
Program 2.38.A:	Continue the Storm Water Pollution Prevention Program

Continue the Storm Water Pollution Prevention Program (SWPPP) and the Industrial Pretreatment Program, and continue to implement the Erosion Control Ordinance.

Such measures would include providing water conservation literature to visitors and tourists and installing a full range of water-conserving fixtures in hotels and restaurants.



GOAL 2.39: Provide safe drinking water and improve its taste and odor.

POLICY 2.39.1: Ensure that water quality goals are consistently met.

Program 2.39.A: Continue to cooperate in regional efforts by organizations such

as the CALFED Program to improve the quality of the City's

source water.

Program 2.39.B: Continue to optimize treatment operations in conjunction with

the implementation of the City's five- and 10-year Capital

Improvements Programs.

Program 2.39.C: Educate the public about City efforts to improve the taste and

odor of its drinking water.



GOAL 2.40: Ensure adequate wastewater treatment capacity to serve all development shown in the General Plan.

POLICY 2.40.1: Approve changes in land use designations for new develop-

ment only if adequate wastewater treatment capacity is as-

sured.

POLICY 2.40.2: Promote use of reclaimed wastewater where feasible.

Program 2.40.A: Prepare, adopt, and implement a sewer maintenance and

replacement program.

Program 2.40.B: Continue to implement the City's Wet Weather Management

Plan.

POLICY 2.40.3: Encourage developments with projected high strength dis-

charges to reduce pollutants directly to the City's wastewater

system.

Program 2.40.C: Educate developers about recycling and other technological

methods where feasible.

Program 2.40.D: Continue to pursue the City's Pollution Prevention Program for

all users of the City's wastewater system including commercial,

industrial, and residential.

Program 2.40.E: Continue to pursue the City's pretreatment program for

industrial dischargers.



GOAL 2.41: Minimize wwrp operational upsets, potential dis-

charge of inadequately treated wastewater, and

the emission of odor and noise.

POLICY 2.41.1: Continue efforts to replace the gaseous chlorine system with a

less hazardous chemical (such as a liquid chlorine system) that

will address the potential safety impacts to the neighborhood surrounding the WWTP.

POLICY 2.41.2: Continue to work with neighbors to implement programs that

minimize odor, noise, and potential safety impacts to the

neighborhood surrounding the WWTP.

5. RECYCLING GOALS, PROGRAMS, AND POLICIES



GOAL 2.42: Enhance the recycling of solid waste.

POLICY 2.42.1: Strive to accomplish the mandated objectives of the California

Integrated Waste Management Act.

Program 2.42.A: Adopt and implement a Source Reduction and Recycling Plan

(SRRP) and Hazardous Household Waste Plan (HHWP) which include components for waste characterization, source reduction, recycling, composting, special waste diversion, education, public information, disposal facility capacity, funding, and the safe use, disposal, and recycling of household hazardous materi-

als.

Program 2.42.B: Encourage local recycling facilities to be available to the public.

Program 2.42.C: Pursue establishment of curbside service that would pick up

and compost yard waste and make it available to City residents

for a reasonable cost.

6. UTILITIES

The City of Benicia owns and operates its own water and wastewater treatment plants. Additionally, the City owns a seven acre corporation yard, where maintenance equipment is stored and maintained.

POWER AND ENERGY USE

Benicia's principal sources of power come from natural gas and electricity supplied by the Pacific Gas and Electric Company. The regional supply system which feeds Benicia is a closed loop system; thus interruption of any single trunk line would not result in a complete blackout. No reliable estimate of future demand for power is possible due to variables of energy availability and the effects of the economy on new construction. No immediate limitations on supply capability are forecast.

TELECOMMUNICATIONS

Telephone communication is generally provided by Pacific Bell to Benicia. Century Cable provides television cable for subscribers in Benicia.

Growth and change in the telecommunications field has resulted in unprecedented demand for new commercial antenna and associated equipment. The antennas and associated structures can pose aesthetic problems because of their size, location, or number. The City controls antennas and similar structures through the use permit process.

UTILITIES GOALS, POLICIES, AND PROGRAMS



GOAL 2.43: Allow installation of telecommunications equip-

ment and distribution networks that maintain and protect health, safety, and quality of life and

avoid visual clutter.

POLICY 2.43.1: Minimize the visual impacts of siting exposed commercial

antenna structures in scenic corridors and residential and

historic districts.

Program 2.43.A: Establish design requirements for commercial antennas and

associated equipment and distribution networks.