



# Merced Vision 2015 General Plan

## Table of Contents

Table of Contents .....	i
List of Figures .....	ix
List of Tables .....	xv
List of Photographs .....	xix
<b>Executive Summary.....</b>	<b>I-0</b>
I. General Plan Summary.....	I-i
I.I Merced Vision 2015 General Plan .....	I-i
I.II What is the General Plan? .....	I-ii
I.III General Plan Diagrams .....	I-ii
I.IV Assumptions and Considerations .....	I-iii
I.V Goals, Policies, and Implementing Actions .....	I-iii
I.VI Major Goals.....	I-iv
I.VII Chapter by Chapter Summary.....	I-iv
II. Goals and Policies Summary .....	II-i
Urban Expansion.....	II-i
Land Use .....	II-i
Transportation & Circulation .....	II-ii
Public Services & Facilities .....	II-iii
Urban Design .....	II-v
Open Space, Conservation, and Recreation .....	II-v
Sustainable Development.....	II-vi
Housing .....	II-vii
Noise .....	II-viii
Safety .....	II-viii
<b>1.0 Introduction.....</b>	<b>1-0</b>
1.1 What Will Merced Be Like in the Year 2015?.....	1-1
1.2 What is a General Plan? .....	1-2
1.3 Legal Requirements.....	1-2
1.3.1 Maps and Diagrams .....	1-3
1.3.2 Goals, Policies and Actions.....	1-4
1.4 Organization of the Plan.....	1-5
1.4.1 Plan Contents .....	1-6

<b>1.0 Introduction (Continued)</b>	
1.5 Specific Goals and Visions .....	1-9
1.5.1 Urban Expansion.....	1-9
1.5.2 Land Use .....	1-9
1.5.3 Transportation and Circulation .....	1-9
1.5.4 Public Services and Facilities.....	1-9
1.5.5 Urban Design .....	1-9
1.5.6 Open Space, Conservation, and Recreation .....	1-10
1.5.7 Sustainable Development.....	1-10
1.5.8 Housing.....	1-10
1.5.9 Noise.....	1-10
1.5.10 Safety .....	1-10
1.6 The General Plan Process.....	1-10
1.7 Assumptions and Considerations.....	1-11
1.8 Planning Agencies.....	1-12
1.8.1 Planning Agency Organization.....	1-12
1.8.2 Regional Planning Organizations.....	1-12
1.9 Merced in the Region .....	1-14
1.9.1 The San Joaquin Valley & Merced County.....	1-14
1.9.2 General Physical Setting .....	1-14
1.9.3 Historic Setting .....	1-15
1.10 Administration of the General Plan.....	1-19
1.10.1 Amendments to the General Plan.....	1-20
1.10.2 Adoption of the General Plan.....	1-20
<b>2.0 Urban Expansion.....</b>	<b>2-0</b>
2.1 Background & Setting .....	2-1
2.2 Long Range Planning .....	2-2
2.2.1 Historic General Plans .....	2-2
2.2.2 Merced 2030 and the Village Concept.....	2-4
2.2.3 North Merced Conceptual Land Use Plan.....	2-5
2.2.4 Commercial and Industrial Land Study (1994-2010).....	2-7
2.2.5 General Plan 2015 Land Use Diagram and Growth Projections .....	2-7
2.3 Urban Expansion.....	2-8
2.3.1 Urban Expansion Constraints.....	2-8
2.3.2 Specific Urban Development Plan (SUDP) and Sphere of Influence (SOI) .....	2-9
2.3.3 Fringe Development.....	2-15
2.3.4 City/County Property Tax Sharing Agreement .....	2-18
2.4 Annexations.....	2-19
2.4.1 Unincorporated Islands .....	2-20
2.5 <i>Urban Expansion Goals, Policies, and Actions</i> .....	2-21
2.6 Regional Planning Issues.....	2-31
2.6.1 UC San Joaquin (Merced).....	2-31
2.6.2 Castle Re-Use Planning.....	2-31
2.6.3 Merced-Atwater Greenbelt.....	2-33
2.7 Issues for Future Study.....	2-35
2.7.1 Merced 2030 Expansion Area.....	2-35
2.7.2 Agricultural Land East of Lake Road.....	2-35
2.7.3 Joint Planning of Highway 59 Corridor .....	2-36

<b>3.0 Land Use .....</b>	<b>3-0</b>
3.1 Introduction and Authorization .....	3-1
3.2 Setting .....	3-3
3.3 Land Use Plan Implementation .....	3-4
3.3.1 The Land Use Diagram .....	3-4
3.3.2 Land Use Development Capacity .....	3-4
3.3.3 Summary of General Plan Land Use Designations .....	3-6
3.3.4 Development Review Process .....	3-10
3.4 Residential Neighborhoods .....	3-11
3.4.1 Background & Scope .....	3-11
3.4.2 Housing Element .....	3-11
3.4.3 Neighborhood Preservation.....	3-12
<b>3.4.4 Residential Neighborhood Goals, Policies, and Actions.....</b>	<b>3-14</b>
3.5 Economic Environment.....	3-21
3.5.1 Background & Scope .....	3-21
3.5.2 Issues Affecting Industrial Development .....	3-22
3.5.3 Issues Affecting Commercial Development .....	3-25
3.5.4 Economic Development .....	3-32
3.5.5 Commercial and Industrial Employment Corridors.....	3-34
<b>3.5.6 Commercial and Industrial Goals, Policies, and Actions.....</b>	<b>3-36</b>
3.6 Urban Growth and Design.....	3-47
3.6.1 Mixed Uses .....	3-47
3.6.2 Merced's Urban Villages .....	3-47
<b>3.6.3 Urban Growth and Design Goals, Policies, and Actions.....</b>	<b>3-50</b>
3.7 Specific Plans/Master Development Plans .....	3-54
3.7.1 Fahrens Park Specific Plan.....	3-54
3.7.2 Campus North Specific Plan .....	3-54
3.7.3 Northeast Yosemite Specific Plan.....	3-54
3.7.4 Bellevue Ranch Master Development Plan.....	3-59
3.7.5 Proposed Specific Plans .....	3-59
3.8 Issues for Future Study.....	3-62
3.8.1 Year 2015 to 2030 Expansion Area .....	3-62
3.8.2 U.C. San Joaquin (Merced) Joint Planning Area .....	3-63
3.8.3 Mission Avenue Corridor.....	3-63
3.9 General Plan Land Use Designations .....	3-63
3.10 Appendix.....	3-75
3.10.1 Residential Land Needs.....	3-75
3.10.2 Commercial and Industrial Land Needs .....	3-77
<b>4.0 Transportation and Circulation.....</b>	<b>4-0</b>
4.1 Introduction and Intent.....	4-1
4.1.1 Coordination of Land Use and Circulation .....	4-1
4.2 Circulation Planning.....	4-2
4.2.1 Merced's Historic Circulation Planning.....	4-2
4.2.2 Opportunities and Challenges .....	4-4
4.2.3 Coordination of Circulation System Planning.....	4-4
4.3 Elements of the Circulation System .....	4-6
4.3.1 Regional Circulation System.....	4-6
4.3.2 Functional Road Classifications and Design Standards .....	4-8
4.3.3 Streets and Highways .....	4-8
4.3.4 Public Transportation Services .....	4-13
4.3.5 Private Transportation.....	4-18
4.3.6 Social Service.....	4-18
<b>4.0 Transportation and Circulation (Continued)</b>	
4.3.7 Rail Service.....	4-18

4.3.8 Bicycle/Trail System.....	4-21
4.3.9 Pedestrian Circulation.....	4-23
4.3.10 Air Service.....	4-23
4.4 Circulation System Improvement Issues.....	4-24
4.4.1 Level of Service (LOS).....	4-24
4.4.2 Parsons Avenue.....	4-29
4.4.3 Collectors.....	4-31
4.4.4 Bear Creek Bridges.....	4-33
4.4.5 At-Grade Railroad Crossings.....	4-35
4.4.6 Intersections at Issue.....	4-35
4.4.7 Interchange Upgrades.....	4-37
4.4.8 Transitways.....	4-39
4.5 Transportation System Management (TSM).....	4-40
<b>4.6 Transportation and Circulation Goals, Policies, and Actions.....</b>	<b>4-41</b>
4.7 Issues Requiring Further Study.....	4-66
4.7.1 Access to the University of California (UC).....	4-66
4.7.2 Beltways.....	4-66
4.7.3 Highway 99 Merced-Atwater Corridor Major Investment Study.....	4-69
4.7.4 Willowbrook Area Circulation Plan.....	4-71
4.7.5 Expanded Off-Street Bicycle Plan.....	4-71
4.7.6 Financing Circulation Improvements.....	4-73
4.8 Appendix.....	4-74
4.8.1 Functional Road Classifications and Design Standards.....	4-74
4.8.2 Intersection Spacing and Design Standards.....	4-87
4.8.3 Needed Transportation Projects.....	4-91
4.8.4 Roadway Level of Service (LOS) Data.....	4-92
<b>5.0 Public Services and Facilities.....</b>	<b>5-0</b>
5.1 Introduction.....	5-1
5.2 Setting.....	5-2
5.2.1 Fire Protection.....	5-2
5.2.2 Police Protection.....	5-4
5.2.3 Water.....	5-6
5.2.4 Wastewater Collection & Disposal.....	5-7
5.2.5 Storm Water Drainage and Flood Control.....	5-8
5.2.6 Solid Waste.....	5-8
5.2.7 Schools.....	5-8
5.2.8 Library Services & Cultural Facilities.....	5-12
5.2.9 Other Public Services & Facilities.....	5-13
5.3 Issues and Intent.....	5-16
5.3.1 Fire Protection.....	5-16
5.3.2 Police Protection.....	5-16
5.3.3 Water.....	5-16
5.3.4 Wastewater Collection & Disposal.....	5-17
5.3.5 Storm Water Drainage and Flood Control.....	5-17
5.3.6 Solid Waste.....	5-17
5.3.7 Schools.....	5-17
5.3.8 Library Services & Cultural Facilities.....	5-17
5.3.9 Other Public Services & Facilities.....	5-17
<b>5.4 Public Services and Facilities Goals, Policies, and Actions.....</b>	<b>5-18</b>
5.5 Issues Requiring Further Study.....	5-38
5.5.1 Public Facilities Financing.....	5-38

<b>6.0 Urban Design .....</b>	<b>6-0</b>
6.1 Introduction.....	6-1
6.1.1 Background & Scope .....	6-1
6.1.2 Relationship to State Law .....	6-2
6.1.3 Relationship to Other General Plan Chapters.....	6-2
6.2 Guiding Principles.....	6-2
6.3 Urban Design Guidelines .....	6-4
6.4 Merced’s Urban Villages .....	6-5
6.4.1 Inner Villages.....	6-5
6.4.2 Core Commercial Areas .....	6-5
6.4.3 Village Core Residential Areas .....	6-5
6.4.4 Outer Village Areas .....	6-6
6.4.5 Open Space, Parks, & Plazas .....	6-6
<b>6.5 Urban Design Goals, Policies, and Actions.....</b>	<b>6-7</b>
<i>Merced Urban Design Guidelines--Street Design .....</i>	<i>6-14</i>
<i>Merced Urban Design Guidelines--Commercial Area Appearance .....</i>	<i>6-19</i>
<i>Merced Urban Design Guidelines--Residential Area Appearance.....</i>	<i>6-26</i>
<b>7.0 Open Space, Conservation, and Recreation.....</b>	<b>7-0</b>
7.1 Introduction and Authority.....	7-1
7.2 Setting .....	7-2
7.2.1 Agriculture .....	7-2
7.2.2 Recreation and Park Facilities.....	7-3
7.2.3 Biological Resources.....	7-7
7.2.4 Water Resources .....	7-10
7.2.5 Mineral Resources.....	7-11
7.2.6 Cultural Resources .....	7-11
7.3 Issues & Intent.....	7-12
7.4 Types of Open Space .....	7-13
7.4.1 Parks .....	7-13
7.4.2 Open Space .....	7-13
7.4.3 Agriculture .....	7-15
7.4.4 Schools & Parks.....	7-15
7.4.5 Other Open Space Features.....	7-15
<b>7.5 Open Space, Conservation, &amp; Recreation Goals, Policies, and Actions.....</b>	<b>7-16</b>
7.6 Issues for Future Study.....	7-34
7.6.1 Lake Yosemite Regional Park.....	7-34
7.6.2 Greenbelts & Urban Limit Lines.....	7-34
7.6.3 Future Park Sites .....	7-34
7.6.4 Park & Open Space Resources.....	7-35
7.6.5 Highway 59 Landfill Site .....	7-35
7.6.6 Ground Water Recharge.....	7-35
7.7 Implementation.....	7-36
7.8 Conclusion .....	7-36
<b>8.0 Sustainable Development.....</b>	<b>8-0</b>
8.1 Introduction and Intent.....	8-1
8.2 Setting .....	8-2
8.2.1 Soil Resources.....	8-2
8.2.2 Water Resources .....	8-3
8.2.3 Wildlife Resources.....	8-6
8.2.4 Air Resources.....	8-9
8.2.5 Energy Resources.....	8-11
8.2.6 Historic Resources .....	8-15

<b>8.0 Sustainable Development (Continued)</b>	
8.3 Issues & Intent.....	8-19
8.3.1 Soil Resources.....	8-19
8.3.2 Water Resources.....	8-19
8.3.3 Wildlife Resources.....	8-19
8.3.4 Air Resources.....	8-20
8.3.5 Energy Resources.....	8-20
8.3.6 Historic Resources.....	8-20
<b>8.4 Sustainable Development Goals, Policies, and Actions.....</b>	<b>8-21</b>
8.5 Technical Appendices.....	8-34
8.5.1 Merced Area Soil Resources.....	8-34
8.5.2 Merced Area Air Resources.....	8-43
<b>9.0 Housing (Adopted by the Merced City Council on December 15, 2003).....</b>	<b>9-0</b>
Executive Summary.....	ES-1
9.1 Introduction and Overview.....	9-1
9.1.1 Scope – Description of Geographic Area.....	9-1
9.1.2 History of Merced.....	9-6
9.1.3 Housing Element Intent.....	9-6
9.1.4 Current State Housing Element Law.....	9-7
9.1.5 State Required Local Program Strategy.....	9-9
9.1.6 Scope of Research and Analysis.....	9-9
9.1.7 Organization of the Housing Element.....	9-10
9.1.8 Relationship of the Housing Element to Other Plans.....	9-10
9.1.9 Application and Flexibility of the Document.....	9-12
9.1.10 Public Participation.....	9-12
9.1.11 Sources of Information.....	9-13
9.2 Evaluation of the 1992 Housing Element.....	9-14
9.2.1 Effectiveness of the Previous Housing Element.....	9-14
9.3 Population and Housing Data.....	9-33
9.3.1 Population Characteristics.....	9-33
9.3.2 Household Characteristics.....	9-37
9.3.3 Employment.....	9-42
9.3.4 Household Income Characteristics.....	9-43
9.3.5 Alternatives to Traditional Single-Family Housing.....	9-45
9.3.6 Existing Housing Conditions.....	9-47
9.3.7 Housing Costs.....	9-49
9.3.8 Financing Costs.....	9-64
9.3.9 Mortgage Lending Trends in California.....	9-64
9.3.10 Opportunities for Energy Conservation.....	9-66
9.4 Land for Housing.....	9-68
9.4.1 Land Availability.....	9-67
9.4.2 Utilities and Services.....	9-75
9.5 Constraints to Housing.....	9-78
9.5.1 Governmental Constraints.....	9-78
9.5.2 Non-Governmental Constraints.....	9-89
9.5.3 Special Constraints.....	9-91
<b>9.6 Goals, Policies and Objectives (2003).....</b>	<b>9-99</b>
9.7 Public Participation.....	9-119
9.7.1 Housing Element Task Force – 2003.....	9-119
9.7.2 Synopsis of Task Force Meetings.....	9-119
9.7.3 Environmental Review.....	9-120
9.7.4 Performance Evaluation.....	9-120
9.7.5 Provision For Update.....	9-120

<b>10.0 Noise</b> ( <i>Adopted by the Merced City Council on March 15, 1993</i> ) .....	<b>10-0</b>
10.1 Introduction .....	10-1
10.1.1 Scope of the Noise Element .....	10-1
10.1.2 Noise Sources & Noise Abatement Techniques .....	10-1
10.1.3 Definitions .....	10-2
<b>10.2 Noise Goals, Policies and Actions</b> .....	<b>10-8</b>
10.3 Major Sources of Noise in the City of Merced .....	10-11
10.3.1 Vehicular Noise .....	10-11
10.3.2 Rail Traffic Noise .....	10-11
10.3.3 Aircraft Noise .....	10-13
10.3.4 Other Sources of Noise .....	10-17
10.3.5 Noise Sensitive Land Uses .....	10-17
10.3.6 Issues for Future Study .....	10-19
10.4 Technical Data .....	10-22
10.4.1 Basic Characteristics of Noise .....	10-22
10.4.2 Psychological and Physiological Effects of Noise .....	10-26
10.4.3 Social and Economic Effects of Noise .....	10-27
10.4.4 Noise Pollution Standards .....	10-29
10.4.5 Noise Contour Line Computations .....	10-30
<b>11.0 Safety</b> ( <i>Adopted by the Merced City Council on January 3, 1995</i> ) .....	<b>11-0</b>
11.1 Introduction .....	11-1
11.1.1 Scope of the Safety Element .....	11-1
11.1.2 City of Merced Emergency Response/Disaster Plan General Overview .....	11-1
11.1.3 Definitions .....	11-2
<b>11.2 Safety Goals, Policies, and Actions</b> .....	<b>11-3</b>
11.3 Relevant Issues .....	11-11
11.3.1 Seismically Induced Ground Shaking .....	11-11
11.3.2 Ground Failure .....	11-14
11.3.3 Dam Failure/Seiche .....	11-17
11.3.4 Flooding .....	11-19
11.3.5 Urban Fires & Wildland Fires .....	11-25
11.3.6 Airport Safety Zones .....	11-32
11.3.7 Crime & Policing .....	11-34
11.3.8 Hazardous Materials & Waste .....	11-36
11.4 Technical Data .....	11-38
11.4.1 Seismic Safety .....	11-38
11.4.2 Dam Failure Characteristics .....	11-47
11.4.3 Discussion of Risk .....	11-47
11.4.4 Hazards Unknown in the Merced Planning Area .....	11-48
11.4.5 Pertinent California Code Sections .....	11-48
<b>12.0 Glossary of Terms</b> .....	<b>12-0</b>

<b>13.0 Bibliography .....</b>	<b>13-0</b>
13.1 Introduction .....	13-1
13.2 Urban Expansion .....	13-1
13.3 Land Use .....	13-1
13.4 Transportation and Circulation .....	13-2
13.5 Public Services and Facilities .....	13-2
13.6 Urban Design.....	13-3
13.7 Open Space, Conservation, and Recreation.....	13-3
13.8 Sustainable Development .....	13-3
13.9 Housing .....	13-4
13.10 Noise .....	13-4
13.11 Safety.....	13-5
<b>14.0 Subject and Policy Index .....</b>	<b>14-0</b>
14.1 Policy Index.....	14-1
14.2 Summary of Goals, Policies, and Implementing Actions .....	14-12
Chapter 2--Urban Expansion .....	14-12
Chapter 3--Land Use .....	14-15
Chapter 4--Transportation & Circulation .....	14-21
Chapter 5--Public Services & Facilities.....	14-27
Chapter 6--Urban Design.....	14-33
Chapter 7--Open Space, Conservation, and Recreation.....	14-36
Chapter 8--Sustainable Development .....	14-41
Chapter 9--Housing .....	14-44
Chapter 10--Noise .....	14-48
Chapter 11--Safety .....	14-50
<b>Appendix A--General Plan Amendments .....</b>	<b>A-1</b>