



## 1.0 INTRODUCTION

People and property in Redding are at risk from a variety of hazards which have the potential for causing wide spread loss of lives, and damages to property, the infrastructure, and the environment. Hazards are part of the world around us. Natural occurrences such as wildland fires, floods, winter storms, earthquakes are inevitable and are natural phenomena which we cannot control. The occurrence of a natural hazard can result in damages and hardships for an entire community for many years following the event.

Disasters result when the man-made environment, such as buildings, and infrastructure take place in areas subject to forces of nature. The frequency of disasters is rising at a substantial rate. This is not necessarily due to the frequency of natural hazards, but because more and more people have chosen to live and work in locations that put them at risk.

The purpose of hazard mitigation is to implement and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people and property. Mitigation actions are both short-term and long-term activities, which reduce the cause or occurrence of hazards; reduce exposure to hazards, or reduce effects of hazards through various means to include preparedness, response and recovery measures. Effective mitigation actions will also reduce the adverse impact and costs of future disasters.

The City of Redding Hazard Mitigation Plan includes resources and information to assist in planning for hazards. The plan provides a list of actions that may assist the City of Redding in reducing risk and preventing loss from future hazard events. The actions address hazard issues, as well as specific activities for Wildland Fire, Flood, Hazardous Materials, Winter Storm, Earthquake, Electrical/Extreme Heat, Aviation Disaster, Bio-Terrorism, Terrorism, Dam Overflow, Dam Failure, and Volcanos.



## 2.0 ACKNOWLEDGMENTS

### **Mayor and City Council**

John Mathena, Mayor  
Dick Dickerson  
Ken Murray  
Michael Pohlmeier  
Mary Stegall

### **Hazard Mitigation Project Team**

Bruce Becker, Deputy Fire Chief  
Lily Toy, Senior Planner  
Jim Coats, GIS Manager  
Ben Reed, Police Lieutenant  
John Duffy, County of Shasta Public Health  
Disaster Response Coordinator  
Ray Duryee, Public Works Manager  
Steve Hiner, Plan Check Engineer  
Ray Johnson, Battalion Fire Chief  
John Ostrowski, Police Sergeant

### **City of Redding Staff**

Mike Warren, City Manager

#### **Airports**

Rod Dinger, Airports Manager  
Barry Bratton, Assistant Airports Manager

#### **Development Services Department**

Jim Hamilton, Director  
Kevin Burke, GIS Analyst  
Terri Thesken, Senior Planner

#### **Municipal Utilities**

Steve Craig, W/W Utility Manager  
Mike Robertson, Water Utility Manager

#### **Redding Electric Utility**

Paul Cummings, Electric Program Supervisor  
Brian King, Electric Program Manager  
Steve Wood, System Analyst/Programmer

### **Other Contributors**

American Red Cross - Shasta Area Chapter



### **3.0 OFFICIAL RECORD OF ADOPTION**

This section provides a general and comprehensive view of the Disaster Mitigation Act of 2000. This includes a review of the federal requirements, City adoption and supporting documentation.

#### **3.1 Disaster Mitigation Act 2000 Requirements**

The Disaster Mitigation Act of 2000 (DMA 2000), commonly known as the 2000 Stafford Act amendments, was approved by Congress on October 10, 2000. On October 30, 2000, the President signed the bill into law, creating public Law 106-390. The DMA 2000 is the latest legislation to improve the hazard mitigation planning process. The new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. As such, this Act establishes a pre-disaster hazard mitigation program and new requirements for the nation post-disaster Hazard Mitigation Grant Program (HMGP).

The Act specifically addresses mitigation planning at the state and local levels. It identifies new requirements that allow HMGP funds to be used for planning activities, and increases the amount of HMGP funds available to states that have developed a comprehensive, enhanced mitigation plan prior to a disaster. States and communities must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. Local and tribal mitigation plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.

State governments have certain responsibilities for implementing the Act. DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. It encourages and rewards local and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network will better enable local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

To implement the DMA 2000 planning requirements, FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002 which establishes planning and funding criteria for states and local communities. Normally, FEMA publishes a proposed rule for public comment before publishing a final rule. This process can result in a lengthy comment and response period, during which the proposed rule is not legally effective or enforceable. Because certain types of Stafford Act assistance are conditioned on having an approved mitigation plan, FEMA wanted to publish an effective rule providing the DMA 2000 planning requirements in order to position State and local governments to receive these mitigation funds as soon as possible.



**TABLE 3-1  
DMA 2000 REQUIREMENTS - PREREQUISITES**

**Adoption by the Local Governing Body**

REQUIREMENT §201.6(C)(5)	The local hazard mitigation plan shall include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).
EXPLANATION	Adoption by the local governing body demonstrates the jurisdiction’s commitment to fulfilling the mitigation goals and objective outlined in the plan. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities. For final approval by FEMA, the Local hazard Mitigation Plan must include a copy of the local governing body’s resolution, adopting the plan.
ELEMENT	<p>A. Has the plan has been formally adopted by the local governing body?</p> <p>B. Is a copy of the signed plan adoption resolution included?</p>

**3.2 Adoption by the local governing body and supporting documentation**

The City of Redding Hazard Mitigation Plan meets the requirements of Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act) and Section 322 of the Disaster Mitigation Act of 2000 (DMA 2000). This includes complying with the requirement that the plan be adopted by the City of Redding City Council. The City of Redding Hazard Mitigation Plan has been prepared by the City of Redding Hazard Mitigation Project Team (HMPT) and adopted by the City of Redding City Council via resolution. A copy of the signed resolution is provided on the following page.



**RESOLUTION 2005-87**

**RESOLUTION ADOPTION OF  
LOCAL HAZARD MITIGATION PLAN**

**WHEREAS**, the City of Redding having developed a Local Hazard Mitigation Plan meeting the requirements of Section 409 of the Robert T. Stanford Disaster Relief and Emergency Assistance Act of 1988, and Section 322 of the Disaster Mitigation Act of 2000; and

**WHEREAS**, the City of Redding recognizes the consequences of disasters and the need to reduce impacts of natural and human caused hazards; and

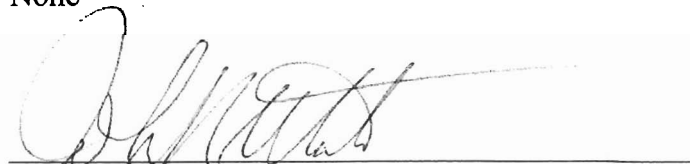
**WHEREAS**, the toll on families, individuals and businesses can be immense after a disaster, both emotionally and economically; and

**WHEREAS**, time, money and the emotional effort to respond and recover from these disasters diverting public resources and attention from other important programs and problems;

**NOW, THEREFORE, IT IS RESOLVED** the City of Redding does hereby adopt the Local Hazard Mitigation Plan.

**I HEREBY CERTIFY** that the foregoing resolution was introduced, read and adopted at a regular meeting of the City Council on the 19th day of July, 2005, by the following vote:

AYES:	COUNCIL MEMBERS:	Dickerson, Murray, Pohlmeier, Stegall, and Mathena
NOES:	COUNCIL MEMBERS:	None
ABSENT:	COUNCIL MEMBERS:	None
ABSTAIN:	COUNCIL MEMBERS:	None

  
 \_\_\_\_\_  
 JOHN R. MATHENA, Mayor

ATTEST:

APPROVED AS TO FORM:

  
 \_\_\_\_\_  
 CONNIE STROHMAYER, City Clerk

  
 \_\_\_\_\_  
 RICHARD A. DUVERNAY, City Attorney



## **4.0 BACKGROUND**

### **4.1 Introduction**

The Disaster Mitigation Act of 2000 (DMA), commonly known as the 2000 Stafford Act amendments, was approved by Congress on October 10, 2000. On October 30, 2000, the President signed the bill into law, creating Public Law 106-390, amended the Stafford Act with regards to hazard mitigation planning, primarily by moving from post-disaster mitigation to pre-disaster mitigation, planning and projects. The DMA 2000 emphasizes greater interaction between State and local hazard identification, mitigation planning and other mitigation activities. In addition, both the State and Federal Governments have a continuing interest in streamlining the mitigation planning, implementation and project funding process.

### **4.2 Purpose and Authority of Plan**

The City of Redding (City) Hazard Mitigation Plan 's purpose is to fulfill the federal DMA, which calls for all communities to prepare mitigation plans. The plan includes resources and information to assist City residents, public and private sector organizations, and others interested in participating in planning for hazards. The plan provides a list of mitigation activities that may assist the City in reducing risk and preventing loss from future hazard events.

Hazard mitigation is any action that reduces the effects of future disasters. It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster actually occurs. Hazard mitigation, along with preparedness, response, and recovery are the four phases of emergency management. Hazard mitigation is the only phase of emergency management specifically dedicated to breaking the cycle of damage, reconstruction, and repeated damage. The Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (a-d) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identify and prioritize mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. This mitigation plan serves to meet those requirements.

### **4.3 Plan Description**

The City of Redding Hazard Mitigation Plan consists of the following primary sections:

#### **Community Description**

This section provides details of our community to provide sufficient background for the hazard profiles and risk assessments that are presented in subsequent chapters. This description includes regional setting, history, government, and also includes information regarding the climate, population, demographics, and economy.

#### **Vulnerability Assessment**

Through this process the project team identified and gathered corresponding data on all potential hazards that present a danger to the City of Redding and the adjacent surrounding area. The information gathered includes historical data on natural hazard events that have occurred in and near the City and what impacts these events had on residents and their property.



## **Risk Assessment**

This section utilizes the information gathered through the vulnerability assessment process to determine what assets in the community will be affected by the hazard event. The inventory of assets include people, housing units, critical facilities, special facilities, infrastructure, hazardous materials facilities and commercial facilities. This data was compiled by assessing the potential impacts from each hazard using past events. The information in this section provides the City with information that outlines the full range of hazards the City may face and potential social impacts, damages and economic losses.

## **Mitigation Strategy**

This section identifies mitigation actions/measures and implementation strategies for the City. Additionally, this section provides a comprehensive strategy for addressing mitigation priorities. The mitigation measures include preventive actions, property protection techniques, structural projects, natural resource protection strategies, emergency services and public education and awareness activities.



**5.0 PLANNING PROCESS**

This section describes the process in which the plan was developed. This includes the federal requirement followed by the City’s actions applied to this process.

**5.1 DMA 2000 Requirements**

The table below summarizes the DMA 2000 requirements for documentation of the planning process.

**TABLE 5-1  
DMA 2000 REQUIREMENTS - PLANNING PROCESS AND DOCUMENTATION**

**Planning Process**

<p>REQUIREMENT §201.6(b) and §201.6(c)(1)</p>	<p>Requires that there be an open public involvement process in the formation of the plan. This includes opportunities for the public to comment on the plan at all stages of its formation, and the involvement of any neighboring communities, interested agencies, or private and non-profit organization. This should also include a review of any existing plans or studies and incorporation of these if appropriate. Documentation of the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved is essential.</p>
<p>EXPLANATION</p>	<p>A description of the planning process should include how the plan was prepared, who was involved in the planning process, and the timeframe for preparing the plan. The plan should document how the planning team was formed and the number and outcomes of the meetings the planning team held. Ideally, the local mitigation planning team is composed of local, State, and federal agency representatives, as well as community representatives, local business leaders, and educators. In addition to the core team preparing the plan, it is also important to indicate how the public (residents, businesses, and other interested parties) participated, including what means (e.g., WebPages, storefronts, toll free phone lines, etc) were made available to those who could not attend public forums to voice concerns or provide input during the planning process.</p>
<p>ELEMENT</p>	<p>A. Does the plan provide a description of how the plan was prepared?          B. Does the plan indicate how the planning team was formed (including who was involved)?          C. Does the plan indicate how the public was involved in the process?          D. Does the planning process describe what means were made available to those who could not attend public meetings to provide input?</p>



## 5.2 Plan Development

The initial phase of the planning process was to identify a team leader and to establish a project team comprising of City agencies. Bruce Becker, Deputy Fire Chief, and Lily Toy, Senior Planner, served as the project team leaders and as the primary contact persons for the City. The project team was formed as an advisory group and as a task group to develop the plan. Meeting dates were set on a bi-weekly basis. The project team invited interested parties such as the local American Red Cross, the County Public Health agency, Shasta County Office of Emergency Services and various City agencies not represented on the project team. The members of the Hazard Mitigation Project Team (HMPT) is listed in Table 5-2 below.

**TABLE 5-2  
HAZARD MITIGATION PROJECT TEAM**

<b>Project Team Leaders</b>	
Bruce Becker	Deputy Fire Chief
Lily Toy	Senior Planner
<b>Project Team Members</b>	
Jim Coats	GIS Manager
John Duffy	Disaster Response Coordinator, County of Shasta Public Health
Ray Duryee	Public Works Manager
Steve Hiner	Plan Check Engineer
Ray Johnson	Battalion Chief
John Ostrowski	Police Sergeant
Ben Reed	Police Lieutenant

The plan was developed primarily during the ten-month period from July 2004 through April 2005. The project team met bi-weekly from May 2004 through December 2004 and began to meet on a weekly basis in January 2005 until the draft plan was circulated for public review. The project team identified characteristics and potential consequences of natural and non-natural hazards affecting the City. With the understanding of the risks posed by the identified hazards, the team determined priorities and assessed various methods to avoid or minimize any undesired effects. As a result, mitigation strategy and goals were developed. The team then went on to develop an implementation and monitoring plan in which the plan will be implemented through various hazard mitigation projects, changes in day-to-day City operations, and through continued hazard mitigation development.



### **5.3 Community Participation**

Public input during the development of the mitigation plan assisted in shaping plan goals and mitigations. Meetings with the HMPT, two public workshops helped identify priorities in developing goals for reducing risk and preventing loss from natural and non-natural hazards in the City. Press releases were issued to invite the public to the public workshops. When the draft was completed, a 20-day public comment period was initiated. A public notice was placed in the local paper to invite the public to review and comment on the draft plan. Copies of the plan were made available at the local library and at City Hall. Furthermore, a draft of the plan was posted on the City's website. The plan was presented to the City Council on June 21, 2005, which was open to the public for further comment.

### **5.4 Local Hazard Mitigation Planning Benefits**

During the process of developing the plan benefits were realized. The following is a list of the benefits that were generated during the development of the plan.

1. Allowed for an in depth analysis of current Hazardous Materials Facilities in the City of Redding and the potential effects of a release of Hazardous Material.
2. Provided the City of Redding with a thumb print view of where those facilities are located and what chemical hazards they have on site.
3. Provided for the sharing of information and team building between city departments.
4. Gave the City of Redding a beginning point for discussions on transportation hazards and how to affectively deal with one should it occur. Plan for the worst, hope for the best.
5. Heightened our awareness level as to the nature of disasters in our community.
6. Provided an evaluation tool on our current resources and how to best utilize them in an emergency.
7. Allowed us to practice the plan for scenario responses and mitigation measures on some of the disasters.
8. Provided more up to date informational maps on specific hazards and facility locations.
9. Provided better methodology for quickly calculating property loss, number of affected structures and population.
10. Enhanced the City of Redding Emergency Preparedness Program.



## **6.0 COMMUNITY DESCRIPTION**

This section is to provide a glimpse into the community of Redding. This includes general information concerning regional setting, history, climate, government, population and economy.

### **6.1 Regional Setting**

The City of Redding is located in Shasta County in Northern California, nestled between the Cascades and Trinity Alps. It is approximately 100 miles south of the Oregon border and 160 miles north of Sacramento. Redding's population in 2004 was approximately 87,300, which makes Redding the largest City in Shasta County and the largest City in California north of Sacramento. Redding also serves as the county seat of Shasta County.

Redding is situated at the far north end of the Sacramento Valley at the point where the valley meets the foothills of the Cascade mountain range. Elevations range from 500 to 5,000 feet above mean sea level. The City's mean elevation is 557 feet above mean sea level. Redding is surrounded by mountains to the west, north, and east. The most distinctive geographical feature in the area is the Sacramento River, which meanders nine miles through the City in a general north-south direction. Several creeks also run through the City from the west and east. These creeks function as tributaries to the Sacramento River. Some have carved gullies and ravines with depths of up to 200 feet, mainly in the western part of the City. This stretch of river is one of the finest trout-fishing waters in the Western United States.

Redding is bisected by Interstate 5, a major north-south freeway that runs from Canada to Mexico. Interstate 5 connects Redding with major metropolitan areas such as Seattle, Portland, Sacramento, and Los Angeles. State Highways 299, 273, and 44 also pass through Redding, connecting the City with the Pacific Coast and Nevada. The main north-south line of the Union Pacific Railroad runs through the community as well. Redding's location also places it near many outdoor attractions and recreational areas such as Shasta Lake, Lassen Volcanic National Park, and the Shasta/Trinity/Whiskeytown National Recreation Area.

Redding was founded in 1872 and incorporated in 1887 at the northern terminus of the California and Oregon Railroad. The City's early growth was stimulated by the railroad and by the move of the county seat from Shasta in 1884. Mining played a major role in the economic life of Redding as the century progressed. In 1938, the beginning of construction of Shasta Dam provided another stimulus to growth in Redding. The construction boom after World War II boosted the lumber industry, which became the mainstay of Redding's economy. In more recent years, retail trade, construction, and tourism have become more significant activities as the lumber industry has declined. Redding has become a major regional center for shopping, health care, education, and government. As a result of this, the Redding area has become one of the faster-growing areas in California.



## 6.2 History

In 1843, Pierson B. Reading, one of the pioneers of the lumber industry in Shasta County, and his partner received a Spanish land grant for 26,000 acres near the Sacramento River. He built a home and settled in, also planting the state's first cotton and Northern California's first grapevines. By 1862, he had mapped out a town near the mouth of Clear Creek and the Sacramento River. Redding was founded in 1872, the year the "California and Oregon Railroad" reached the site of the City, which was to be its northern terminus for the next 12 years. The coming of the railroad saw the rise of Redding along with the decline of Shasta, "The Queen City" of Northern California and, in the 1870's, the largest settlement in that part of the state. Shasta did not have a railroad so business activity swung to Redding. With the railroad came a man named Benjamin Redding, who was a land agent for the Central Pacific railroad. With the development of the town, the legislature wanted to name the town Reading after its founder. The railroad was not happy with this choice and would not recognize the name. They wanted the town named after their agent, Redding. Finally in 1880, everyone gave in and the town was given the railroad's choice of names. At that time, there were 9,492 residents in Redding. By 1884, Redding had become the County seat of Shasta County. Redding was incorporated on October 4, 1887, the same year that the Southern Pacific Railroad came to Redding.

Since its incorporation in 1887, the area within the city limits of Redding has grown from 3.65 square miles to 60.03 square miles. The original city townsite as plated in 1872 established the town limits at North (now Eureka Way), South, East, and West Streets. Redding's early growth was spurred by copper and gold strikes during the late 1800s, which led to an initial boom period between 1890 and 1910. By 1890, Redding had grown to the Sacramento River on the north, Sequoia Street on the east, Grant Street on the south, and Almond Street on the west. In the 1940s, initial development north of the river and residential development moving toward the south occurred. In the 1950s, initial development of the area along North Market Street occurred. With the opening of the Interstate 5 Freeway, development spread to the north. Interstate 5 continued to spur development along the I-5 corridor during the 1970s.

In January 1, 1970, the City comprised of 15.2 square miles. Two significant annexations occurred in 1976 that dramatically altered the size and configuration of Redding. In June 1976, the Cascade Community Services District was annexed, adding 3,000 acres to the city south of town. Later, in December, the former Enterprise Public Utility District was annexed, adding another 3,200 acres east of town. These two annexations increased Redding's size by nearly 10 square miles. The largest annexation since 1976 was the Texas Springs/Oregon Gulch annexation which added 1,692 acres on the west side to the city. With a few smaller annexations and one de-annexation occurring since, the city now comprises of 60.03 square miles.



### **6.3 Government**

The City of Redding is a General-Law City, formed under State legislative statutes and governed by a body of laws in the State Constitution. The Redding City Council consists of five council members elected "at large" for staggered four-year terms. Council members must be residents of the City and registered voters both at the time nomination papers are taken out and assuming office.

Redding is one of the many California cities operating under the Council-Manager form of government. Under this system, the Council establishes the policies under which the City operates and appoints a trained and experienced City Manager to administer the affairs of the City. His responsibilities include hiring of City staff, preparation of the Annual Budget, administration and coordination of the City's operations, general supervision over all property under the control of the City, and enforcement of City ordinances and applicable State laws.

The City Manager appoints a staff to assist him in carrying out his duties. City departments include Administrative Services, City Attorney's office, City Clerk's office, City Treasurer's office, Community Services, Development Services, Electric, Fire, Human Resources, Municipal Services, Support Services, and Police.

Like the City Manager, the City Attorney is appointed by the City Council. Both the City Clerk and the City Treasurer are elected by the public.

Redding is a full-service City with approximately 1,000 full and part-time employees. The City's services include:

- Airport;
- Convention and Auditorium Facilities;
- General Administrative Services;
- Highways and Streets;
- Housing;
- Planning and Zoning;
- Public Safety (Police and Fire);
- Public Improvements;
- Recreation and Parks;
- Solid Waste Collection and Disposal;
- Tourist Bureau; and
- Utilities (Electric, Water, and Wastewater)

A list of the City's critical facilities is provided in Appendix 1 of this document.

### **6.4 Climate**

Climatologists describe the climate in the Redding area as Mediterranean, with hot, dry summers and cool, wet winters. In January, the average temperatures range from 36 degrees to 55 degrees. In April, the average daily high is 70 degrees with an average daily low of 46 degrees. During July, the temperatures range from 65 to 99 degrees, with some days exceeding 100. Annual rainfall averages 33 inches, most of which falls between November and March.



**6.5 Population/Demographics** (Source: U.S. 2000 Census and California Department of Finance)

Redding has sustained growth over the past decade and-a-half. The current population is approximately 88,459 (California Department of Finance, May 2005). Between 1990 and 2004, the City grew from 66,462 to 87,461, at an average annual rate of 2.3 percent. Since 2004, the City has grown at an average annual rate of 1.1 percent to approximately 88,459 in 2005. An exhibit geographically depicting the density of population within the City of Redding is attached (See Figure 2).

Category	
Population (2005 estimate: DOF):	88,459
Population (year 2000):	80,865
Estimated population in 2005:	88,459 (+9.4% change)
Males:	38,735 (47.9%)
Females:	42,130 (52.1%)
Median household income: (1999)	\$34,194
Median house value:	\$121,600
Housing units:	33,802
Homeownership rate:	56.7%
Households:	32,103
Persons per household	2.44

**Races in Redding**

American Indian and Alaska Native	2.2%
Asian	3.0%
Black or African American	1.1%
Hispanic or Latino	5.4%
Native Hawaiian and Other Pacific Islander	0.1%
White Non-Hispanic	88.7%
Other race	1.6%
Two or more races	3.3%



**Square Miles and Population**

Year	Acres	Square Miles	Population Estimate
1978	15778	28.3	40055
1990	33801.99	52.82	66462
1991	33801.99	52.82	69595
1992	37385.22	58.41	72777
1993	37672.02	58.86	75367
1994	38036.86	59.43	77014
1995	38036.86	59.43	78490
1996	38036.86	59.43	Not Available
1997	38036.86	59.43	Not Available
1998	38043.06	59.44	78518
1999	38044.06	59.44	78427
2000	38420.46	60.03	79593
Census 2000			80865

**6.6 Economy**

The outdoor lifestyle and air quality of the Redding area have attracted many highly skilled people from larger urban areas, creating a choice labor force. Both Money Magazine and Expansion Management Magazine have recognized the Shasta County metro area for its quality business environment.

Redding’s overall job growth in a five year period was more than double the national average (19.9 percent compared with 8.7 percent). The increase in the number of businesses in the city is almost triple the national average (38.8 percent compared with 13 percent) for the same period.

Redding also offers an extremely successful Down-Payment Assistance Program to aid first-time homebuyers. Affordable commercial and residential real estate, low-cost skilled labor and a low crime rate also contribute to Redding’s rapid growth.

One of the key components of the Shasta County’s business retention plan is to acknowledge and cater to small businesses, particularly those that help create a diverse economy with industrial linkages between local manufacturers. The Redding City Council has developed a number of local incentives for industrial development and businesses that create new jobs.

The Shasta Metro Enterprise Zone consists of 51 square miles of commercial and industrial sectors of the Cities of Redding, Anderson, and Shasta Lake as well as adjacent industrial areas of Shasta County. Special incentives offered by the Enterprise Zone include sales and tax credit, hiring assistance, business expense deduction, net operating loss carryover and net interest deductions for lenders.



### Occupation in Redding

Agriculture
Construction
Finance
Government
Manufacturing
Retail Trade
Services
Transportation, Commercial, Utilities
Wholesale Trade

### 6.7 Land Uses

Redding adopted its first General Plan in 1958. The Plan Area covered 9,366 acres, or 14.6 square miles, consisting of a land use diagram and a streets and highways plan and included five land use classifications: Single Family, High Density Residential/Professional, Retail Commercial, Planned Industrial, and Public. By contrast, the General Plan adopted in 1970 covered approximately 73 square miles. The current General Plan adopted in 2000 covers approximately 110 square miles and includes 23 land use designations. The residential land uses encompasses approximately 37,000 acres. The nonresidential land uses encompasses approximately 35,000 acres. The nonresidential land uses includes office, commercial, heavy commercial, industrial, public-facilities/institutional, airport service, greenway, park, and recreation.

### 6.8 Development Patterns

While in part the result of topography, flood-prone land, and physical barriers (such as the Sacramento River, Interstate 5, and the Union Pacific Railroad), the relatively low-density, discontinuous nature of Redding's development pattern does not come without its costs. These include increased costs of providing public services; loss of community identity, or "sense of place"; decreased air quality due to a near total reliance on the automobile; and a neglect of older, established residential neighborhoods and commercial areas in preference for development in new areas.

Few cities have the luxury of sole control over all land uses contained within them. Redding is no exception. Redding has grown geographically through the annexation of lands which were formerly outside its jurisdictional control. In fact, some of the larger annexations (e.g., Enterprise and Cascade areas) added not only significant territory to the City, but increased its population base and level of development as well. In part, this helps to explain why there seems to be no organizing principle underlying Redding's urban structure. It also serves to explain the lack of consistency in infrastructure improvements, landscape, and building design as well as lack of public-street access to individual properties found in various parts of the City.

Redding can be divided into five primary sectors, each of which is shaped by its unique characteristics, histories, and issues. These areas are (1) Central and West Redding, (2) East Redding (Enterprise), (3) Dana Drive and Northeast Redding, (4) North Redding, and (5) South Redding.



## **Central and West Redding**

Central Redding is the location of the City's original commercial and office core. Local government facilities and most of its older residential districts are also located here. Spreading outward from the original town site astride the railroad in a grid pattern typical of the time, Redding grew north and east to the edge of the bluff that borders the Sacramento River, south along the highway and railroad spine, and west into the hills and gullies. Extension of the early street pattern across the ravines created unusable lots and "paper" streets that remain undeveloped today.

Some of the City's most unique and historic residential areas are located west of Central Redding in the Magnolia neighborhood and its adjacent neighborhoods. Farther west, beyond Benton Airpark and the now closed Benton Sanitary Landfill, lies a large, residential district, consisting exclusively of single-family subdivisions. Development of some of these areas began in the early 1950s, and new developments continue to be constructed today.

West Redding is not only home to some of the City's more popular neighborhoods, but also home to Mercy Hospital and numerous doctors' office complexes and professional offices. Until such time as Downtown redevelopment occurs or additional multiple-family sites are identified, Central and West Redding will have a significant imbalance in available housing opportunities.

With the construction of Interstate 5, most new commercial investment was directed to locations other than Central Redding. The expansion of County government offices, Redding Medical Center, and Mercy Hospital also promoted office construction along Court, Oregon, and West Streets, displacing older residential uses.

Downtown Redding remains an important area, even though it was bypassed by the construction of Interstate 5, encouraging most new retail development to locate east of the river. All other major traffic arteries converge Downtown, which contributes to its viability. Recent efforts, including redevelopment projects to improve the appearance and pedestrian orientation of Downtown streets, demonstrate the community's commitment to maintaining and enhancing the unique character of the heart of the community. The development of the Turtle Bay Museums and Arboretum by the River and the new Civic Center will serve to emphasize the importance of the City's core area.

## **East Redding (Enterprise)**

Development in the Enterprise area occurred almost entirely in the postwar years. Early subdivisions were located along Old Highway 44 (now known as Cypress Avenue), Churn Creek Road, and Hartnell Avenue. Subsequent development has taken place both to the north up to the new State Highway 44 and to the south into the Churn Creek Bottom area. The street pattern in some older residential areas is poor, with long, dead-end streets and offset intersections. A lack of adequate subdivision regulations in the early days of development permitted the creation of large, deep lots surrounded by smaller lots and hundreds of landlocked parcels that can be reached only by private roads or by access drives across other properties. This lot pattern makes further development very inefficient and difficult and necessitates providing new, costly streets and infrastructure.

Like the residential areas, commercial development in the Enterprise area originally occurred in a haphazard manner along Old State Highway 44, Bechelli Lane, Hartnell Avenue, and at freeway interchanges. Access to many stores in these locations is poor, and the nature of this strip-type development—with each establishment having its own parking lot and driveway—precludes parking once and visiting several businesses. The



construction of Interstate 5 had a noticeable impact on commercial growth at the north end of this area along Hilltop Drive and other easily accessible locations. Service stations, motels, restaurants, and other uses that seek readily visible sites and easy freeway access can be found in this area. This area continues to develop with commercial uses, which can now be found along Churn Creek Road as well. Two overpasses across State Highway 44 connect this area to the newly expanding Dana Drive regional commercial hub and to an expanding residential area to the northeast.

### **Dana Drive and Northeast Redding**

Following the construction of Interstate 5, a noticeable pattern of commercial development, together with additional suburban residential growth, has occurred north of State Highway 44 along Dana Drive. Additional growth has also occurred along the northern extension of Churn Creek Road and eastward along Old Alturas Road. Commercial development largely commenced with the Mount Shasta Mall, which is located at the northeast corner of Hilltop Drive and Dana Drive. Subsequent regional commercial development has since spread eastward to Victor Avenue. In conjunction with commercial activities, residential development flourished to the north on Churn Creek Road and to the east on Old Alturas Road. The Dana Drive Benefit District and the Churn Creek Road Overcrossing Assessment District were formed in order to provide infrastructure for this newly established regional commercial hub.

All signs indicate that the available vacant commercial land in this area will be built out by the year 2005. Plans to expand the Mount Shasta Mall have been explored, and it is likely that these plans will commence before the year 2000. Large regional commercial store developers are still exploring options within the Dana Drive area. Multiple-family and single-family development continues to expand immediately north and east of the commercial development. Vehicle traffic in this area has increased significantly, which has necessitated the upgrade and improvement of the streets and intersections.

### **North Redding**

Like Enterprise, the North Redding area, extending from Keswick Dam to Shasta College, includes a scattering of residential and commercial development. Along North Market Street, formerly Highway 99, Redding's "Miracle Mile" is lined with a variety of motel, restaurant, retail, and auto sales establishments. Adjoining lowlands to the west have been developed with residential subdivisions and affordable housing units. Lake Redding-Caldwell Park extends along the north bank of the river on each side of the railroad trestle. This major recreation area has picnicking, playground, swimming, and other facilities.

Lake Boulevard is the main artery of the Buckeye area, a major portion of which was annexed to the City of Redding in 1969. Strip commercial development is strung along Lake Boulevard, and there is scattered residential development in the area. Landlocked parcels are common, with heavy dependence on private roads for access. Mobile homes are a major residential type here, both in mobile home parks and on individual lots. The pattern of small ownerships and prevalence of mobile homes in some areas may tend to discourage subdivision activity, particularly on the northern fringe of the Planning Area along Oasis Road.

### **South Redding**

Much of the development of South Redding came after World War II when subdivision activity expanded into the lower elevations and along the Anderson-Cottonwood Irrigation District Canal (ACID). Scattered developments also sprang up in the Live Oak-Bonnyview (Cascade) area to the south and along ridge tops in the southwestern part of the Planning Area. Also to the south, the old principal traffic artery—Old Highway 99



(now known as Highway 273)—became a commercial strip lined with an assortment of motels, truck stops, and service stations; industrial and distribution establishments; and local retail services. As a commercial gateway to the City, this area has largely become obsolete in design and function.

Several recent residential developments have occurred in the area, including the Country Heights Subdivision along the western ridges, as well as new developments in the Creekside, Hemlock, and East Bonnyview Road areas. The latter developments have led to a reduction in the pastoral setting that was recently prevalent in the area.