

**BUREAU OF LAND MANAGEMENT  
SOCORRO FIELD OFFICE  
RESOURCE MANAGEMENT PLAN REVISION  
AND ENVIRONMENTAL IMPACT STATEMENT**

**BASELINE SOCIOECONOMIC CONDITIONS REPORT  
SOCORRO AND CATRON COUNTIES, NEW MEXICO**

*Prepared for:*

U.S. Department of the Interior  
Bureau of Land Management  
Socorro Field Office

*Prepared by:*

URS Corporation

**December 2003**

# TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION .....	1
1.1 BACKGROUND.....	1
1.2 STUDY CONTEXT .....	1
1.3 STUDY AREA .....	3
1.4 STUDY PURPOSE AND OBJECTIVES .....	4
1.5 GENERAL PLANNING ISSUES.....	6
2.0 REGIONAL SOCIOECONOMIC CONDITIONS .....	8
2.1 OVERVIEW .....	8
2.2 DEMOGRAPHICS.....	9
2.3 ECONOMIC ACTIVITY, EMPLOYMENT, AND EARNINGS .....	14
2.3.1 Socorro County .....	18
2.3.2 Catron County.....	20
2.3.3 Alamo Band of the Navajo Nation .....	22
2.4 AGRICULTURAL STATISTICS.....	22
2.4.1 Background.....	22
2.4.2 Number of Farms and Land in Farms .....	24
2.4.3 Types of Farms .....	24
2.4.4 Cash Receipts.....	26
2.4.5 Livestock on Farms .....	27
2.4.6 Field Crops .....	31
2.4.7 Annual Sales .....	32
2.4.8 Agricultural Sector Output .....	33
2.5 MINORITY AND LOW-INCOME POPULATIONS .....	35
2.5.1 Minority Populations .....	35
2.5.2 Low-Income Populations .....	35
2.6 HOUSING .....	36
2.7 PUBLIC FINANCE.....	37
2.7.1 Sources of Revenue .....	37
2.7.1.1 Gross Receipts Tax .....	38
2.7.1.2 Property Taxes .....	38
2.7.1.3 Payment in Lieu of Taxes .....	39
2.7.2 Expenditures .....	40
2.8 PUBLIC SERVICES .....	40
2.8.1 Education.....	40
2.8.2 Medical Services .....	43
2.8.3 Public Safety .....	44
2.8.3.1 Law Enforcement.....	44
2.8.3.2 Fire Protection.....	44
2.8.3.3 Search and Rescue .....	44
3.0 SOCIAL AND ECONOMIC CONDITIONS RELATED TO THE BLM'S DECISION AREA .....	45
3.1 INTRODUCTION.....	45
3.2 THE BLM SOCIAL SCIENCE GUIDANCE .....	46

3.2.1	The BLM Land Use Planning Handbook H-1601-1.....	46
3.2.2	BLM Instruction Memorandum No. 2002-167, Social and Economic Analysis for Land Use Planning .....	46
3.2.3	BLM Instruction Memorandum No. 2002-164, Guidance to Address Environmental Justice in Land Use Plans and Related National Environmental Policy Act Documents.....	47
3.3	SOCORRO FIELD OFFICE BUDGET.....	47
3.4	LIVESTOCK GRAZING ALLOTMENTS .....	48
3.5	MINERAL AND ENERGY RESOURCES .....	54
3.5.1	Leaseable Fluid Minerals .....	55
3.5.2	Leaseable Solid Minerals .....	56
3.5.3	Leaseable Geothermal, Solar, and Wind Energy .....	56
3.5.4	Locatable Minerals .....	56
3.5.5	Saleable Minerals and Materials .....	57
3.6	RIGHTS-OF-WAY, PERMITS, LEASES, AND EASEMENTS.....	57
3.6.1	Rights-of-Way.....	57
3.6.2	Permits, Leases, and Easements.....	58
3.7	RECREATIONAL RESOURCES .....	59
3.8	OTHER MANAGEMENT ACTIVITIES.....	62
3.8.1	Land Exchanges .....	62
3.8.2	Timber.....	62
3.8.3	Other .....	62
3.9	SOCIAL ATTITUDES AND VALUES.....	62
3.9.1	Issues Identified During Scoping for the RMPR/EIS .....	63
3.9.2	County Plans.....	64
3.9.3	Other Relevant Social Science Data for the Planning Area .....	64
3.9.3.1	Ancestry .....	65
3.9.3.2	Residence in 1995 .....	65
3.9.3.3	Travel Time to Work .....	65
4.0	REFERENCES .....	69
APPENDIX A	Sonoran Institute Economic Profile System Output for Socorro County	
APPENDIX B	Sonoran Institute Economic Profile System Output for Catron County	

## LIST OF TABLES

---

<u>Table No.</u>		<u>Page</u>
1	Selected Census 2000 Demographic Information .....	11
2	Historical and Projected Population Growth .....	13
3	Employment by Place of Work .....	15
4	Current Personal Income by Major Source and Earnings by Industry .....	16
5	General Employment and Income Characteristics .....	17
6	Number of Farms and Land in Farms.....	25
7	Types of Farms.....	26
8	Cash Receipts for Farm Commodities, 1997-2001 .....	28
9	Top Five Commodities by Value of Sales.....	29
10	Top Five Commodities by Livestock Inventory.....	29
11	Number of Cattle and Calves on Farms, 2000-2002 .....	30
12	Number of Cattle and Calves on Farms, 1975-2001 .....	31
13	Irrigated Crop Acreage, 2000 .....	32
14	Top Five Crop Commodities by Acreage.....	32
15	Farms by Value of Annual Sales.....	33
16	Agricultural Sector Output .....	34
17	Minority and Low-Income Populations.....	36
18	Housing Characteristics.....	37
19	Gross Receipts Tax Rates.....	38
20	Weighted Average Property Tax Rates by County, 2001 Tax Year.....	39
21	Aggregate and Median Real Estate Taxes, Census 2000 .....	39
22	PILT Payment and Entitlement Acreage.....	41
23	BLM Portion of PILT By Share of Entitlement Acreage, 2002 .....	42
24	Socorro County Budgeted Fund Expenditures, Fiscal Year 2001-2002 .....	42
25	Catron County Budgeted Funds .....	43
26	Socorro Field Office Budget by Subactivity and Major Category .....	49
27	Federal Grazing Fees per AUM .....	53
28	Active Use AUMs in BLM Allotments in the Decision Area, 1992-2002.....	54
29	Ancestry .....	66
30	Residence in 1995 .....	67
31	Travel Time to Work.....	68

## LIST OF MAPS

---

<u>Map No.</u>		<u>Page</u>
1	Socioeconomic Study Area .....	5
2	2000 Census Tracts .....	10

## LIST OF ACRONYMS

---

ACEC	Area of Critical Environmental Concern
AUM	Animal Unit Month
BEA	Bureau of Economic Analysis
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CO <sub>2</sub>	carbon dioxide
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
GRT	Gross Receipts Tax Receipts
IM	Instruction Memorandum
MSA	Management Situation Analysis
NASS	National Agriculture Statistics Service
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NMASS	New Mexico Agricultural Statistics Service
PILT	Payment in Lieu of Taxes
PRIA	Public Rangelands Improvement Act of 1978
RMP	Resource Management Plan
RMPR	Resource Management Plan Revision
SFO	Socorro Field Office
SIC	Standard Industry Classification
SRP	Salt River Project
TGA	Taylor Grazing Act
USC	United States Code
WSA	Wilderness Study Area

# 1.0 INTRODUCTION

---

## 1.1 BACKGROUND

The Bureau of Land Management (BLM) Socorro Field Office (SFO) is preparing a Resource Management Plan Revision (RMPR) and Environmental Impact Statement (EIS) to analyze and update the BLM's management of public land in Socorro and Catron Counties, New Mexico. The revision will update current management in response to new legislation, changing policies, and changing uses of public land and its resources that has occurred since the BLM SFO completed its 1989 Resource Management Plan (RMP). Since the Socorro RMP was implemented nearly 13 years ago, time and experience have demonstrated that many elements of the current Socorro RMP work well and it is the BLM's intent to carry these elements forward. However, the BLM has determined that some of the existing management decisions are not current with changing circumstances, demographics, resource conditions, and/or policies. Population growth in the region has increased recreational and other uses of public land, and land acquisitions and disposals have created new areas for the public while closing others. In addition, changing emphasis on fire management, noxious weeds, increasing urbanization and consequent urban-rural interface, potential development of new subdivisions, potential oil and gas and carbon dioxide (CO<sub>2</sub>) development, off-highway vehicle use, and other resource programs necessitate revision of the RMP.

SFO is responsible for managing approximately 1.5 million acres of Federal public lands and 2.2 million acres of Federal minerals in Socorro and Catron Counties. Total area of these two counties, including Federal, tribal, State, and private lands, comprises approximately 8,700,000 acres, or 13,600 square miles, which is equivalent to the states of Massachusetts, Connecticut, and Rhode Island combined. According to the year 2000 census, Socorro County has a population of 18,078 and Catron County has a population of 3,543. Both counties are economically disadvantaged, with 31.7 percent and 24.5 percent of their populations living below the poverty level, respectively.

## 1.2 STUDY CONTEXT

The BLM is responsible for management of public lands in accordance with the Federal Land Policy and Management Act (FLPMA) of 1976, which declares that "management [of public lands] be on the basis of multiple use and sustained yield unless otherwise specified by law" (43 United States Code [USC] 1701 [a][7]). FLPMA defines "multiple use" as "the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output" (43 USC 1702 103[c]). The term "sustained yield" is defined as "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use" (43 USC 1702 [h]).

The BLM is developing the RMPR to be consistent with current laws and regulations, and provide the public an opportunity to review the decision making process for resource management on public lands in the two counties. The EIS studies, to which this Baseline Socioeconomic Conditions Report is contributing, will identify the potential impacts that implementation of the RMPR could have on

the environment and work to identify appropriate measures to reduce or mitigate those impacts. The EIS will be prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality regulations implementing NEPA, FLPMA, and other relevant laws and regulations.

This Baseline Socioeconomic Conditions Report was prepared in support of the resource management planning process. This report by itself is not a NEPA or FLPMA document; however, information contained in this report will be incorporated into the RMPR/EIS. As such, this study serves as a companion technical document to the RMPR/EIS. The focus of this study is on the existing social and economic conditions that potentially may be affected by management actions considered in the RMPR, not on predicting potential environmental consequences of management decisions. Such evaluations will be included in the RMPR/EIS, wherein potential environmental consequences of a range of alternatives for management will be comparatively analyzed. The information contained herein is more detailed, but is comparative in context to the Management Situation Analysis (MSA), which includes a description of the current situation as it relates to natural resource management of public lands in Socorro and Catron Counties.

Concurrent with this effort, the Sonoran Institute has partnered with the BLM and prepared socioeconomic profiles for Socorro and Catron Counties that illustrate the long-term trends from 1970 to 2000 in population, employment, and personal income by industry, average earnings, business development, and retirement and other non-labor income. These reports (Socorro County provided in Appendix A and Catron County provided in Appendix B) were consolidated from primary government sources including the U.S. Census Bureau (e.g., decennial census), U.S. Department of Commerce (e.g., Bureau of Economic Analysis Regional Economic Information System), and U.S. Department of Labor (Bureau of Labor Statistics). This report is intended to complement and supplement these reports prepared by the Sonoran Institute. Duplication of material was avoided as practicable; however, some demographic information was compiled in tables and graphs to include both counties and provide comparison to statistics for New Mexico and the United States. As compared to the Sonoran Institute reports, the information in this report is focused more closely on those components of the economy that are related to management of public lands in Socorro and Catron Counties and with the information that will appear in the MSA and RMPR/EIS.

This report was prepared consistent with the BLM Manual 1601, *Land Use Planning*, its associated *Land Use Planning Handbook* (H-1601), including Appendix D, *Social Science Considerations in Land Use Planning Decisions*; BLM Instruction Memorandum No. 2002-167, *Social and Economic Analysis for Land Use Planning*; and the BLM Instruction Memorandum No. 2002-164, *Guidance to Address Environmental Justice in Land Use Plans and Related National Environmental Policy Act Documents*. As noted in Appendix D to H-1601 and Instruction Memorandum No. 2002-167, the “BLM is required to integrate social science and economic information in the preparation of informed, sustainable land use planning decisions.” Section 202 of the FLPMA requires the BLM to “...use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences...” in the development and revision of land use plans (43 USC 1712[c][2]). Section 102 of NEPA requires Federal agencies to “...utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking [sic] which may have an impact on man’s environment ”(42 USC 4332[2][A]). Federal agencies are also required to “identify and address ... disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States,” in accordance with Executive Order 12898 on Environmental Justice. These legal mandates require that social and economic information is considered in making informed, legal land use planning decisions.

### 1.3 STUDY AREA

For this Baseline Socioeconomic Conditions Report, the Study Area was defined as the potential area of influence of the Planning Area and Decision Area by the following geographic areas (Map 1):

- State of New Mexico
- Socorro and Catron Counties
- Municipalities: City of Socorro, Village of Magdalena, Village of Reserve
- Unincorporated Communities: Glenwood, Aragon, Quemado, Pie Town, Datil, Abeytas, La Joya, San Marcial, Carthage, Bernado, San Antonio, Bingham, Claunch
- American Indian Tribes: Alamo Band of the Navajo Indian Reservation

This region of influence is more extensive than the Planning Area to account for direct and indirect social and economic effects related to the activities under evaluation on public lands in Socorro and Catron Counties, including those related to environmental justice.

While the Planning Area encompasses the entirety of Socorro and Catron Counties regardless of jurisdiction or ownership, the Decision Area refers only to public land administered by the BLM and excludes private, State Trust, and other Federally administered land. The Decision Area for the majority of resources or resource uses refers to public land (i.e., land administered by BLM) in Socorro and Catron Counties. However, in addressing Federal minerals and the decision on whether to lease or not lease these minerals, BLM's Decision Area extends to split estate (areas where BLM administers Federal subsurface minerals, but the surface is owned by private or State entities).

The degree of linkage among the affected economies and social aspects of the communities and the land-management actions within the Decision Area also are important in defining the Study Area. The BLM management policy directly affects public lands within the Decision Area, which includes approximately 1.5 million acres of Federal public lands and 6.1 million acres of Federal minerals in Socorro and Catron Counties. These include the use of mineral, energy, recreational, and livestock grazing resources within the Decision Area. While the Decision Area shares the greatest direct social and economic linkages with the management plan and revisions thereto, surrounding lands and communities also are potentially affected. There also is linkage to Socorro, New Mexico associated with the fact that the BLM SFO, which is located in Socorro, is the principal employer of the BLM personnel responsible for management of public lands in the Decision Area.

## 1.4 STUDY PURPOSE AND OBJECTIVES

The purpose of this study is to provide a working document that details the current socioeconomic situation within the Planning Area. As previously stated, this study will support the RMPR/EIS and associated planning process and supplement/complement the Sonoran Institute reports (refer to Appendices A and B). Components of the social and economic environment evaluated in this study include populations, economies (including employment, earnings, and economic sectors), housing, public services, and social attitudes and values. This document is not a compilation of all available data, but rather, information appropriate and commensurate for the purposes of this report. The majority of the information was extracted and used from existing data on file at the BLM SFO or available from the U.S. Census Bureau, U.S. Commerce Department, and New Mexico Department of Agriculture. Other data were obtained to update and/or supplement these data (e.g., from County and local data sources).

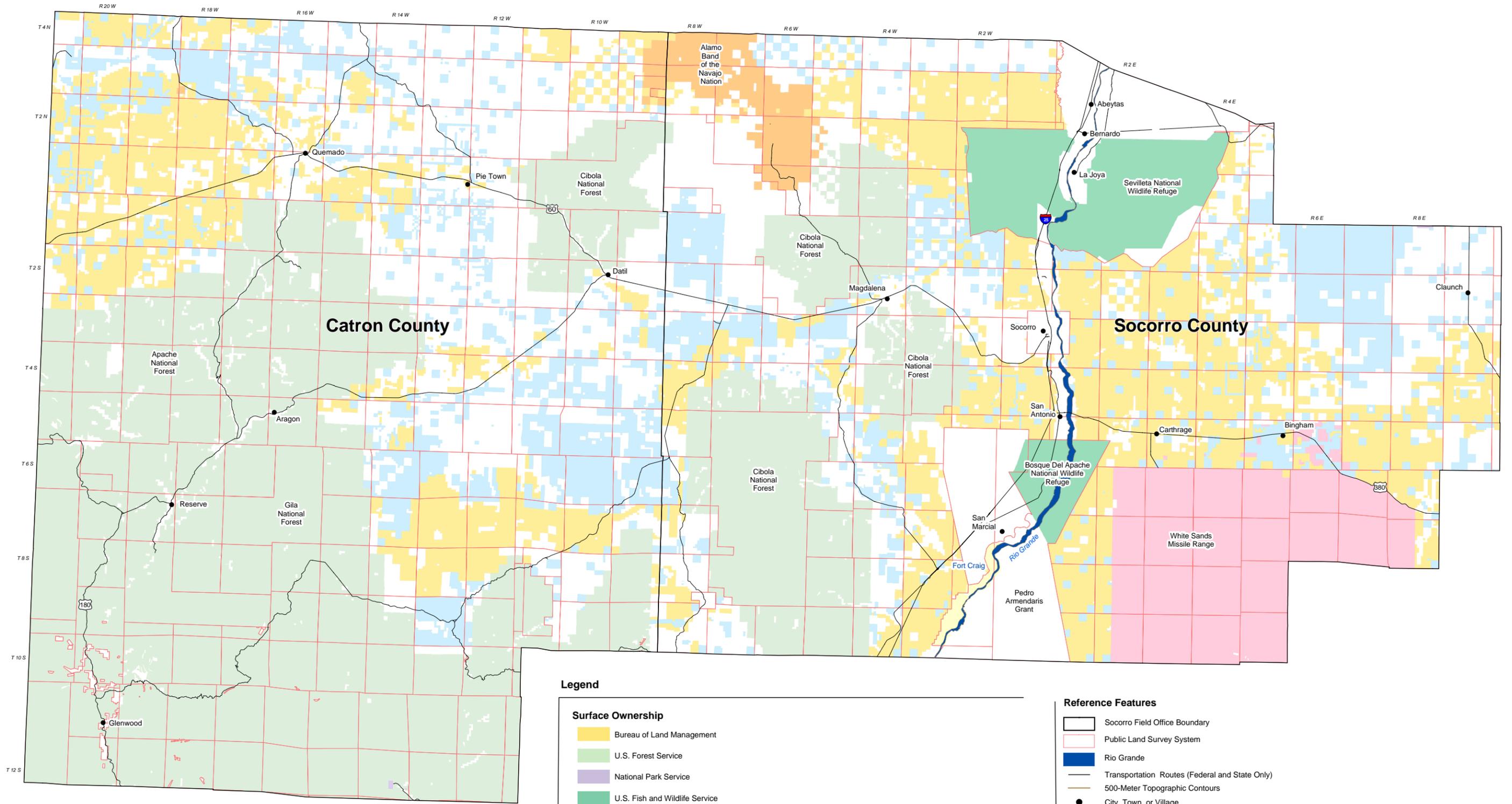
The key objectives in this study are to (1) describe regional socioeconomic conditions within the Study Area; (2) describe socioeconomic conditions related to the BLM Decision Area (i.e., public surface lands and mineral estate within Socorro and Catron Counties administered by the BLM); and (3) outline the existing management situation (i.e., regulatory considerations and current management in the BLM's Decision Area).

Objectives for defining the baseline regional socioeconomic conditions are to characterize the following:

- Background of social and economic development in the vicinity of the Planning Area and the relationship between use of the Planning Area and proximity to Albuquerque and Bernalillo County
- Demographics information including population, population growth, racial composition, income, and poverty
- Structures and trends of the economy including economic sectors, employment and unemployment, and earnings
- Distribution of minority and low-income populations in relation to the Planning Area and how it relates to Executive Order 12898 on Environmental Justice
- Current housing and housing trends including the increase in the numbers of subdivisions in previously sparsely inhabited areas
- Basic public infrastructure and services including education, health services, fire protection, and law enforcement

Objectives for outlining the baseline management situation within the BLM's Decision Area are as follows:

- Identify the current regulations and guidance that are relevant to socioeconomics and guide and influence BLM's current management direction on public land within the Planning Area (this section will serve as the Existing Management Situation section of the MSA and the basis for the Continuing Management Guidance and Actions section of the RMPR/EIS)

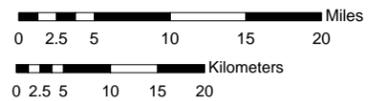


# Socioeconomic Study Area

## Socorro Field Office RMPR/EIS

September, 2003

Universal Transverse Mercator  
Zone 13, Units Meters  
GRS 1980 Spheroid  
NAD83 Datum



Location in New Mexico



### Legend

#### Surface Ownership

- Bureau of Land Management
- U.S. Forest Service
- National Park Service
- U.S. Fish and Wildlife Service
- Bureau of Reclamation
- Department of Defense
- Tribal Lands
- State Trust Lands
- Private

#### Reference Features

- Socorro Field Office Boundary
- Public Land Survey System
- Rio Grande
- Transportation Routes (Federal and State Only)
- 500-Meter Topographic Contours
- City, Town, or Village

Map Product is Considered Draft

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by BLM. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.



- Distinguish between laws and regulations and BLM guidance for planning and environmental resource management as they pertain to social and economic conditions
- Provide background of social and economic development in the vicinity of the Planning Area
- Provide breakdown of public attitudes and values with regard to key planning issues, as represented by scoping comments and other applicable documentation available to date
- Discuss social groups identified during scoping
- Discuss socioeconomics associated with ongoing and recent actions within the Decision Area including BLM SFO employment and operating budget, livestock grazing on BLM grazing allotments, fluid and solid minerals development potential, changes in land status/land tenure agreements (e.g., acquisitions, disposals), outdoor recreation, and resource management

## 1.5 GENERAL PLANNING ISSUES

Potential planning issues identified through the scoping process include the following:

- What areas will be open, closed, or designated as limited to motorized access?
- What are the desired levels of resource production or the conditions of those resources (e.g., mineral and energy resources, grazing resources)?
- What are the allowable levels of resource use?
- How can fire and fuels management, range management, wildlife habitat management, and other disciplines of multiple-use be best combined for improvements at the watershed level?
- How should off-highway vehicle use be managed?
- What are the effects of urban interface on public land resources and management practices?
- What types of constraints should be placed on resource uses?
- Do existing retention and disposal areas for land tenure adjustments reflect current knowledge of resource values?
- Should Special Management Areas and Areas of Critical Environmental Concern (ACECs) be added, dropped, or management plans revised?
- What resource and wilderness values are located on recently acquired public land, and what multiple use decisions are needed for effective management?
- How will fluid and solid minerals development be managed given changes since the 1989 RMP?

- How will development of the CO<sub>2</sub> resource affect other resources, in particular, Zuni Salt Lake?
- How can the public best benefit from the BLM's cultural and recreational initiatives (e.g., Ft. Craig, El Camino Real International Heritage Center)?
- How can the BLM and the public lands contribute to sustainable reduction of the extreme poverty levels of the two counties?
- Should additional lands with wilderness values be considered for Wilderness Study Area (WSA) designation?<sup>1</sup>

Not all of these planning issues are closely interconnected with social and economic factors, but nonetheless they serve as an overall framework for the RMPR/EIS process. A more specific analysis of issues-related socioeconomics, as identified through the scoping process.

---

<sup>1</sup> Subsequent to the scoping process for this RMPR/EIS, BLM's Washington, D.C., office issued Information Memorandum 2003/274 and 2003/275, which state that BLM will not designate new WSAs through the land use planning process.

## 2.0 REGIONAL SOCIOECONOMIC CONDITIONS

---

### 2.1 OVERVIEW

The Planning Area is located in a rural environment with small communities. The use of many of the Planning Area resources is driven by proximity to the Albuquerque region, the largest metropolitan area of the State. The Albuquerque Metropolitan Statistical Area, composed of Bernalillo, Sandoval, and Valencia Counties, constitutes almost 40 percent of the total population of New Mexico (U.S. Census Bureau 2001a). From 1990 to 2000, Bernalillo and Sandoval Counties grew at rates upwards of 40 percent, while Bernalillo County (Albuquerque's core) grew at a rate of 16 percent. Meanwhile, the population of Torrance County, located just northeast of Socorro County, increased by more than 64 percent, making it the fastest growing county in the State and a contender for future reclassification from a rural county to being counted as part of the Albuquerque Metropolitan Statistical Area (New Mexico Department of Labor 2001).

This trend is having an effect on the social and economic conditions within the Planning Area that is counter to the Statewide trend during this time period when rural areas of the State grew less rapidly than urban areas. From 1990 to 2000, Socorro and Catron Counties both grew more rapidly than the overall Statewide growth rate of 20 percent and the Bernalillo County growth rate of 16 percent. The growth in Catron County, 38 percent, is also notable due to the fact that the population of the County was declining during the 1980s. This growth in population has resulted in rapidly expanding urbanization, consequent urban-rural interface, and increasing demands on public lands within Socorro and Catron Counties for recreational and other resources. Nonetheless, the Planning Area today remains rural, particularly within Catron County, where all housing units are characterized as rural, but also in Socorro County, where 52 percent of households are characterized as rural (U.S. Census Bureau 2002a).

Based on geographic information system (GIS) analysis of land ownership digital mapping data, the combined land ownership in Socorro and Catron Counties is 58.1 percent Federal. In addition to public land in the Decision Area administered by the BLM, Federal land includes U.S. Forest Service-managed lands in the Gila, Apache, and Cibola National Forests; U.S. Fish and Wildlife Service-administered land in the Bosque del Apache and Sevilleta National Wildlife Refuges; and Department of Defense-administered White Sands Missile Range. Private land constitutes 28.5 percent and State Trust Land constitutes 12.0 percent of all land in these two counties combined. Other lesser categories of surface ownership exist.

Most data in this section are presented at the County level, which is appropriate for the purposes of this study. Community-level data are represented in census tract-level data, commensurate with the distribution of census tracts within the Counties. Beyond the community-level data, census tract/block group data provide the most refined geographic area data. Community-level demographic data typically are available only for incorporated communities. Within the Study Area these include the City of Socorro (Socorro County) and the Villages of Magdalena (Socorro County) and Reserve (Catron County).

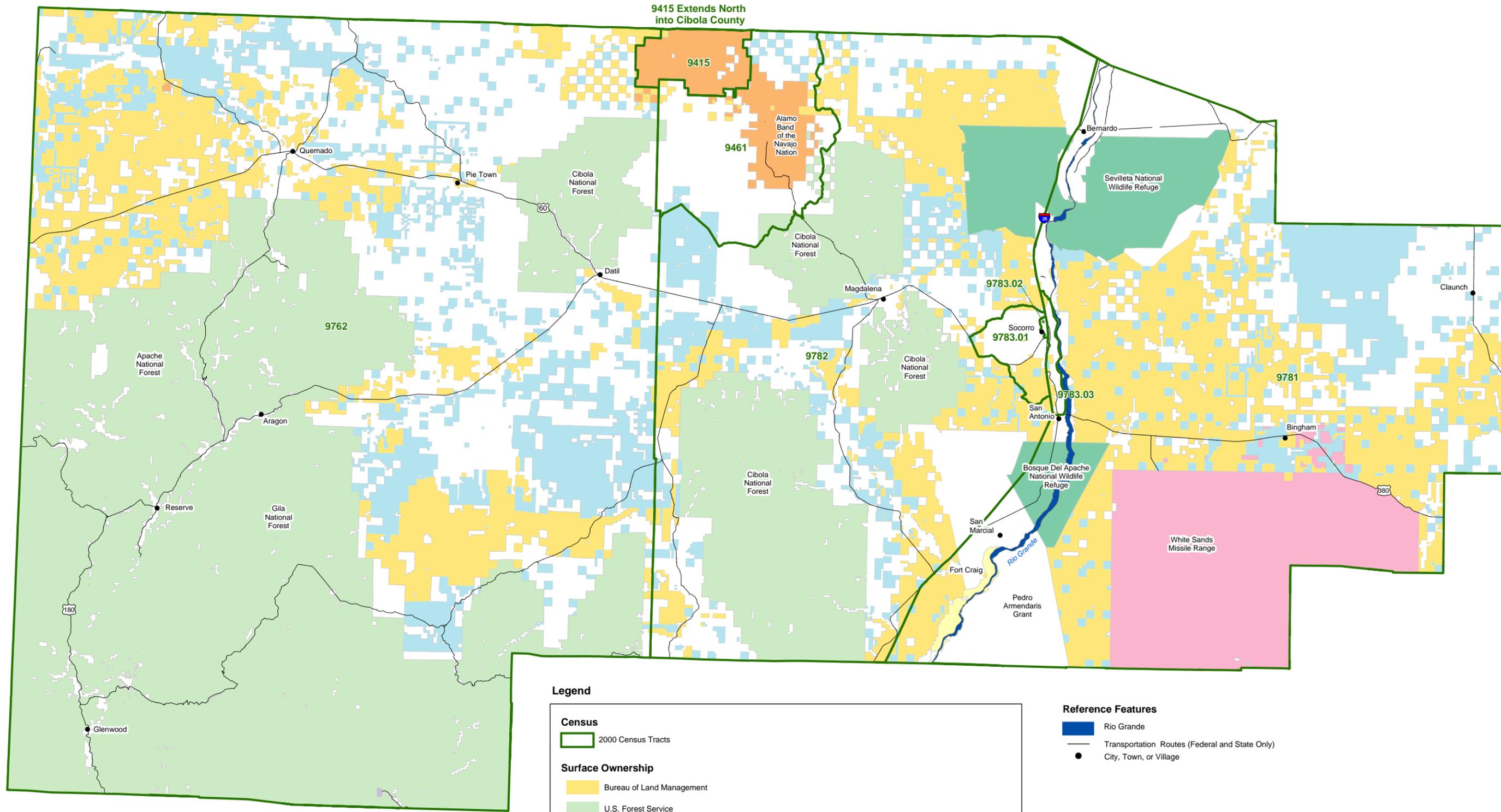
Census tracts are relatively permanent statistical subdivisions of a county and block groups are subdivisions of census tracts. Beyond the community-level data, census tract/block group data provide the most refined geographic area data. As shown on Map 2, there are eight census tracts within the Study Area. Census Tract 9415 is composed principally of Tribal lands within both Socorro and Catron Counties and extends well to the north of the Planning Area into Cibola County. All seven other census tracts are contained within Socorro and Catron Counties. Aside from the portion of Census Tract 9415 located in the northeastern corner of Catron County, this entire County falls within Census Tract 9762. In addition to the portion of Census Tract 9415 in Socorro County, there are three Census Tracts that have not been subdivided into block groups (Census Tracts 9461, 9781, and 7982) and Census Tract 9783 in the vicinity of the City of Socorro, which is divided into three block groups (9783, referred to hereafter as Census Tracts 9783.01, 9783.02, and 9783.03).

## **2.2 DEMOGRAPHICS**

Selected demographic data from the U.S. Census 2000, including total population, gender, age, and race and ethnicity, are presented in Table 1 for Socorro and Catron Counties. For comparison, statistics for New Mexico and the United States have been included in this table. These data are supplemented somewhat by the reports prepared by the Sonoran Institute including further data on age and gender from 1990 and 2000 census (Socorro County: Appendix A, page 3; Catron County: Appendix B, page 3) and population trend data from 1970 to 2000 (Socorro County: Appendix A, pages 1 and 4; Catron County, pages 1 and 4). Socorro County, at 18,078 residents, is almost five times more populous than Catron County, which has more than 3,543 residents. Together, the two Counties constitute 1.2 percent of the population of New Mexico. However, in terms of land area, the two Counties combined constitute 11.2 percent of the State of New Mexico. According to U.S. Census 2000, there are 0.5 persons per square mile within the 6,928-acre Catron County and 2.7 persons per square mile within the 6,646-acre Socorro County. This same statistic for the State of New Mexico is 15.0 persons per square mile, and there are 79.6 persons per square mile nationwide (U.S. Census Bureau 2002b).

Gender distribution in both Counties is similar, with slightly more males than females in each. Although there are slightly more females than males within the State of New Mexico and in the United States, in general all areas have a relatively equal gender distribution, roughly half male and half female.

The age distribution for persons between 20 to 64 years of age is generally similar in both Counties as well as the State and United States as a whole. However, while Socorro County's age distribution is similar to that of the State and nation, Catron County appears to have a larger proportion of persons over the age of 64 and a smaller proportion of persons younger than 20 years. The median age of persons in Catron County is 47.8 years, well over the median age of 34.5 in New Mexico and 35.3 in the United States. However, the median age of Socorro County residents is 32.4 years, more closely matching those of the State and nation.



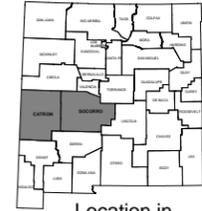
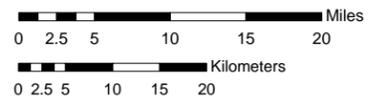
9415 Extends North into Cibola County

## 2000 Census Tracts in Socorro and Catron County

### Socorro Field Office RMPR/EIS

September 2003

Universal Transverse Mercator  
Zone 13, Units Meters  
GRS 1980 Spheroid  
NAD83 Datum



Location in New Mexico

#### Legend

##### Census

- 2000 Census Tracts

##### Surface Ownership

- Bureau of Land Management
- U.S. Forest Service
- National Park Service
- U.S. Fish and Wildlife Service
- Bureau of Reclamation
- Department of Defense
- Tribal Lands
- State Trust Lands
- Private

#### Reference Features

- Rio Grande
- Transportation Routes (Federal and State Only)
- City, Town, or Village

Source:  
Base Map Information: BLM, Socorro Field Office 2003  
Jurisdiction Information: BLM, Socorro Field Office 2003  
Census Tracts: US Census Bureau 2000

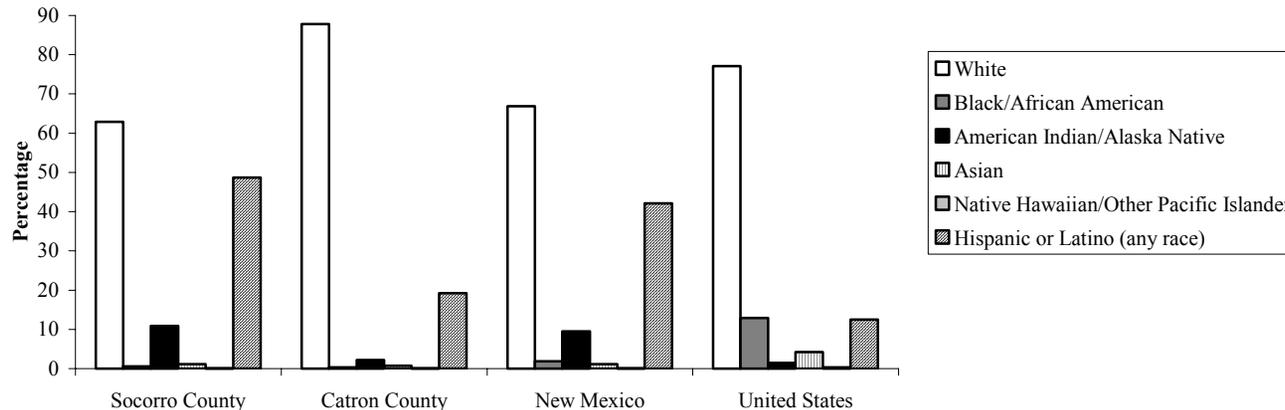
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by BLM. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.



**TABLE 1  
SELECTED CENSUS 2000 DEMOGRAPHIC INFORMATION**

	<b>Socorro County</b>		<b>Catron County</b>		<b>New Mexico</b>		<b>United States</b>	
<b>Total Population</b>	18,078		3,543		1,819,046		281,421,906	
<b>Persons per Square Mile</b>	2.7		0.5		15.0		79.6	
<b>Gender</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Male	9,184	50.8	1,812	51.1	894,317	49.2	138,053,563	49.1
Female	8,894	49.2	1,731	48.9	924,729	50.8	143,368,343	50.9
<b>Age</b>								
Under 20 Years	5,904	32.6	807	22.8	564,859	31.0	84,522,713	30.0
20 to 64 Years	10,207	56.5	2,069	58.4	1,041,962	57.3	161,907,440	57.6
Age 65 and Older	1,967	10.9	667	18.8	212,225	11.7	34,991,753	12.4
Median Age	32.4	N/A	47.8	N/A	34.6	N/A	35.3	N/A
<b>Race and Ethnicity</b>								
White	11,365	62.9	3,109	87.8	1,214,253	66.8	216,930,975	77.1
Black or African American	116	0.6	10	0.3	34,343	1.9	36,419,434	12.9
American Indian/Alaska Native	1,974	10.9	78	2.2	173,483	9.5	4,119,301	1.5
Asian	206	1.1	24	0.7	19,255	1.1	11,898,828	4.2
Native Hawaiian/ Other Pacific Islander	10	0.1	2	0.1	1,503	0.1	874,414	0.3
Hispanic or Latino (any Race)	8,810	48.7	679	19.2	765,386	42.1	35,305,818	12.5

**Graphical Representation of Race Distribution**



SOURCE: U.S. Census Bureau 2002b, 2002c.

Race distribution within the Counties differs dramatically, with a significantly higher percentage of Whites living in Catron County (87.8 percent) than the percentage of Whites living in Socorro County (62.9 percent). The percentage of Whites in Socorro County compares somewhat closely with that of the State of New Mexico (66.8 percent), but is much lower than the national percentage (77.1 percent). In contrast, Catron County has a significantly higher percentage of Whites than either New Mexico or the nation. Both counties have lower percentages of Black or African Americans than the State or nation (0.6 percent for Socorro County and 0.3 percent for Catron County and as opposed to 1.9 percent and 12.9 percent for the State and nation, respectively). At 2.2 percent, Catron County's American Indian/Alaska Native population compares closely to that of the nation (1.5 percent), but is far below that of the State of New Mexico (9.5 percent). In contrast, Socorro County's American Indian/Alaska Native population at 10.9 percent is more closely comparable to that of the State of New Mexico rather than that of the United States. The Asian populations of Socorro and Catron Counties at 0.7 and 1.1 percent, respectively, are comparable to that of New Mexico, which is also at 1.1 percent. However, these percentages are all lower than the national average of 4.2 percent. Finally, the Native Hawaiian and Other Pacific Islander populations of both Counties and the State of New Mexico are the same at 0.1 percent each, only slightly lower than the national average of 0.3 percent.

Hispanic or Latino origin statistics represent ethnicity (not race) and include all persons who identify themselves as of Hispanic or Latino origin or decent. Based on Office and Management Budget guidelines, there are five minimum categories for data on race and two categories for data on ethnicity: "Hispanic or Latino" and "Not Hispanic or Latino" (Office of Management and Budget 1997). People of Hispanic or Latino origin may be of any race. People of Hispanic or Latino origin, in particular, include those who indicate their origin as Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. For example, people who indicate that they are of Mexican origin may be either born in Mexico or of Mexican heritage. The U.S. Census Bureau uses the terms "Hispanic" and "Latino" interchangeably (U.S. Census Bureau 2001b). Catron County has a far lower population of persons of all races of Hispanic or Latino origin than that of New Mexico (19.2 percent compared to 42.1 percent), while Socorro County's percent of persons of all races of Hispanic or Latino origin is somewhat higher (48.7 percent). All of these percentages are significantly higher than that of the United States, at 12.5 percent.

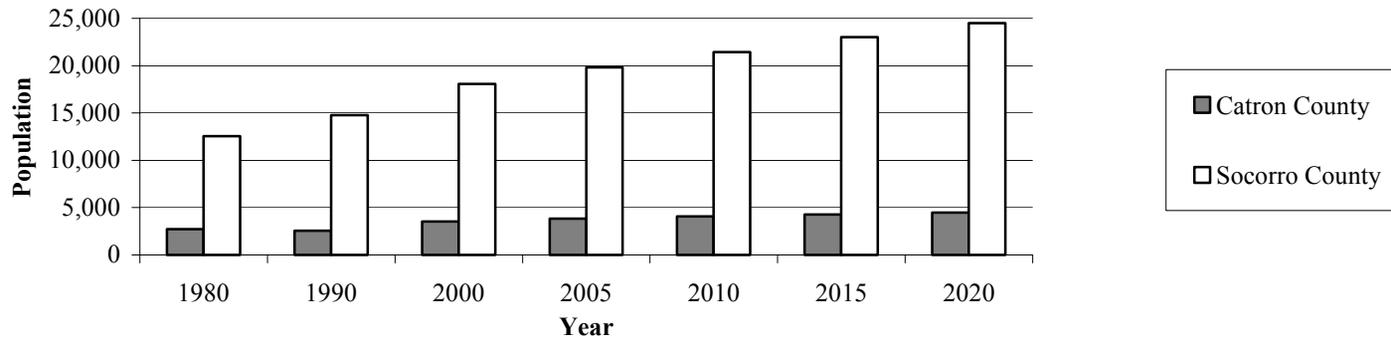
Populations in incorporated communities range from approximately 400 in the Village of Reserve to almost 8,900 residents in the City of Socorro. Population in most of the census tracts is fairly evenly distributed, ranging from approximately 1,500 residents to approximately 3,600 residents. With the exception of census tracts 9415 and 9461, the majority of the population is White (61.1 percent to 87.8 percent), with the next highest number of persons falling within the American Indian and Alaska Native category (1.3 percent to 6.4 percent). American Indian/Alaska Natives constitute 96.8 percent of the population within census tract 9415 and 94.8 percent of the population within census tract 9461.

Historical and projected population growth for 1980 to 2020 is presented in Table 2. The 1980, 1990, and 2000 data reflect actual data from the decennial census. The population projects are based on predicted growth rates. According to the data, Catron County experienced a population decrease of approximately 5.7 percent in the decade from 1980 to 1990, but increased by 38.2 percent over the next decade. Socorro County's population growth is charted at an increase of 17.2 percent from 1980 to 1990 and 22.4 percent from 1990 to 2000. Over the 20-year period, both Counties exceeded the population growth experienced within the State and nationally. Projected growth rates for Socorro County for the next two decades slightly exceed those of New Mexico, and are more than double national projected growth rates. Projected growth rates for Catron County are slightly less than the State, but greater than the nation.

**TABLE 2  
HISTORICAL AND PROJECTED POPULATION GROWTH**

Geographic Area	Historical Population Growth			Projected Population Growth				Rate of Change			
	1980	1990	2000	2005	2010	2015	2020	1980 to 1990	1990 to 2000	2000 to 2010	2010 to 2020
United States	226,542,199	248,718,291	281,421,906	287,716,000	299,862,000	312,268,000	324,927,000	9.8	13.1	6.6	8.4
New Mexico	1,303,302	1,515,069	1,819,046	1,970,982	2,112,957	2,251,249	2,382,999	16.2	20.1	16.2	12.8
Socorro County	12,566	14,764	18,078	19,802	21,421	23,000	24,493	17.5	22.4	18.5	14.3
Catron County	2,720	2,563	3,543	3,828	4,063	4,275	4,459	-5.7	38.2	14.7	9.7

**Graphical Representation – Counties**



SOURCE: Historical Population Growth: U.S. Census Bureau 1990a; 2001a

Population Projections: For the U.S.: U.S. Census Bureau 2000; For New Mexico: University of New Mexico Bureau of Business and Economic Research 2002.

## 2.3 ECONOMIC ACTIVITY, EMPLOYMENT, AND EARNINGS

The regional economies discussed here include the two Counties and the communities within the region of influence. Three tables have been included depicting statistics pertinent to these Counties. Table 3 presents employment by industry data, Table 4 presents the employment and earnings data, and Table 5 presents the income, unemployment, and poverty statistics. The source data for Tables 3 and 4 were the most current U.S. Bureau of Economic Analysis (BEA) data for these parameters (for the year 2001). These data on industry and place of work are based on the 2002 North American Industry Classification System (NAICS), which has replaced the U.S. Standard Industrial Classification (SIC), and includes 19 classifications for nonfarm private industries and three classifications for nonfarm government and government enterprises industries data. With the exception of unemployment data, the predominant source of data in Table 5 is Census 2000, which is based on 1999 income data. U.S. Department of Labor, Bureau of Labor Statistics unemployment data are presented for 1999, 2000, and 2001. These data generally show lower income rates, higher poverty rates, and higher unemployment rates for both Counties as compared to the State and nation.

In general, growth in the economies of Catron and Socorro Counties has been commensurate with population growth. As the combined population of the two Counties increased by 81 percent from 1970 to 2000, jobs in the two counties combined more than doubled from 4,220 in 1970 to 8,583 in 2000 (U.S. Department of Labor 2003). In 2001, nonfarm employment supported 92.2 percent of jobs in Socorro County and 81.6 percent of jobs in Catron County, while farm employment supported 18.4 percent of jobs in Catron County and 7.8 percent of jobs in Socorro County (much higher rates as compared to the State and nation). Nonfarm, private employment accounted for 59.3 percent of all jobs in Socorro County and 57.7 percent of all jobs in Catron County (both much lower rates than the State and the nation), while government and government enterprises provided 32.9 percent of all jobs in Socorro County and 24.0 percent of all jobs in Catron County (both higher than the State and the nation).

The U.S. BEA suppresses some employment and earnings data, either because to do so would disclose confidential information or the number of jobs in a particular sector was less than 10/earned less than \$50,000. For the 2001 data in Socorro and Catron Counties, data were suppressed for many of the nonfarm, private industry classifications. Together, data were suppressed for 29.1 percent of all nonfarm, private jobs and 27.7 percent of all nonfarm, private earnings in Socorro County and 45.3 percent of all nonfarm, private jobs and 23.2 percent of all nonfarm, private earnings for Catron County.

**TABLE 3  
CURRENT EMPLOYMENT BY PLACE OF WORK**

	United States		New Mexico		Socorro County		Catron County	
<b>Total Full-time and Part-time Employment<sup>a</sup></b>	167,535,600		989,989		7,394		1,457	
<b>By Type</b>	<b>No. of Jobs</b>	<b>% of Total</b>						
Wage and salary employment	139,165,000	83.1	802,681	81.1	5,728	77.5	710	48.7
Proprietors' employment	28,380,600	16.9	187,681	18.9	1,666	22.5	747	51.3
Farm proprietors' employment	2,205,000	1.3	14,785	1.5	409	5.5	216	14.8
Nonfarm proprietors' employment <sup>b</sup>	26,165,600	15.6	172,523	17.4	1,257	17.0	531	36.4
<b>By Industry</b>	<b>No. of Jobs</b>	<b>% of Total</b>						
Farm employment	3,075,000	1.8	21,444	2.2	574	7.8	268	18.4
Nonfarm employment	164,460,600	98.2	968,545	97.8	6,820	92.2	1,189	81.6
Private employment	141,296,600	84.3	763,793	77.2	4,386	59.3	840	57.7
Forestry, fishing, related activities, and other <sup>c</sup>	908,100	0.5	6,401	0.6	(D)	(D)	78	5.4
Mining	783,200	0.5	19,519	2.0	(D)	(D)	(L)	(L)
Utilities	626,400	0.4	4,371	0.4	(D)	(D)	(D)	(D)
Construction	9,841,800	5.9	64,945	6.6	299	4.0	(D)	(D)
Manufacturing	17,025,100	10.2	46,818	4.7	187	2.5	(D)	(D)
Wholesale trade	6,323,300	3.8	29,076	2.9	(D)	(D)	(L)	(L)
Retail trade	18,679,100	11.1	113,769	11.5	562	7.6	81	5.6
Transportation and warehousing	5,460,500	3.3	23,581	2.4	112	1.5	(D)	(D)
Information	4,065,700	2.4	19,764	2.0	54	0.7	17	1.2
Finance and insurance	8,143,200	4.9	33,762	3.4	174	2.4	17	1.2
Real estate and rental and leasing	5,602,200	3.3	32,001	3.2	144	1.9	(D)	(D)
Professional and technical services	10,525,100	6.3	60,463	6.1	552	7.5	(D)	(D)
Management of companies and enterprises	1,796,600	1.1	6,130	0.6	(D)	(D)	0	0.0
Administrative and waste services	9,827,500	5.9	54,730	5.5	(D)	(D)	(D)	(D)
Educational services	2,952,600	1.8	12,115	1.2	(D)	(D)	(D)	(D)
Health care and social assistance	15,520,600	9.3	88,493	8.9	(D)	(D)	(D)	(D)
Arts, entertainment, and recreation	3,290,500	2.0	20,218	2.0	(D)	(D)	(D)	(D)
Accommodation and food services	11,014,100	6.6	78,257	7.9	(D)	(D)	(D)	(D)
Other services, except public administration	8,911,000	5.3	49,380	5.0	318	4.3	108	7.4
Government and government enterprises	23,164,000	13.8	204,752	20.7	2,434	32.9	349	24.0
Federal, civilian	2,728,000	1.6	28,771	2.9	235	3.2	125	8.6
Military	2,097,000	1.3	17,070	1.7	58	0.8	11	0.8
State and local	18,339,000	10.9	158,911	16.1	2,141	29.0	213	14.6

SOURCE: U.S. Bureau of Economic Analysis 2003a.

NOTES: <sup>a</sup> Estimates of employment are based on 2002 NAICS.

<sup>b</sup> Excludes limited partners.

<sup>c</sup> "Other" consists of the number of jobs held by residents of the United States employed by international organizations and foreign embassies and consulates in the United States.

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

(L) Less than 10 jobs, but the estimates for this item are included in the totals.

**TABLE 4  
CURRENT PERSONAL INCOME BY MAJOR SOURCE AND EARNINGS<sup>a</sup> BY INDUSTRY (in thousands of dollars)**

	Socorro County		Catron County		New Mexico	
Personal income	292,450		48,744		42,260,462	
Nonfarm personal income	282,151		51,677		41,577,324	
Farm income <sup>b</sup>	10,299		-2,933		683,138	
<b>Earnings by Place of Work</b>	<b>Components of Earnings</b>					
Wage and salary disbursements	135,864		15,149		23,038,106	
Other labor income	22,382		3,742		3,184,999	
Proprietors' income <sup>c</sup>	18,914		(L)		3,181,650	
<b>Earnings by Place of Work</b>	<b>Earnings by Industry</b>					
Farm earnings	10,299	5.8%	-2,933	-15.5%	683,138	2.3%
Nonfarm earnings	166,861	94.2%	21,865	115.5%	28,721,617	97.7%
Private earnings	87,886	49.6%	9,330	49.3%	20,428,626	69.5%
Forestry, fishing, related activities, and other <sup>d</sup>	(D)	–	522	2.8%	83,266	0.3%
Mining	(D)	–	(L)	–	937,632	3.2%
Utilities	(D)	–	(D)	–	275,934	0.9%
Construction	5,992	3.4%	(D)	–	2,074,671	7.1%
Manufacturing	(D)	2.8%	(D)	–	1,860,749	6.3%
Wholesale trade	(D)	–	(L)	–	967,805	3.3%
Retail trade	8,370	4.7%	575	3.0%	2,260,252	7.7%
Transportation and warehousing	2,311	1.3%	(D)	–	805,700	2.7%
Information	990	0.6%	323	1.7%	830,686	2.8%
Finance and insurance	3,573	2.0%	69	0.4%	1,009,299	3.4%
Real estate and rental and leasing	482	0.3%	(D)	–	372,326	1.3%
Professional and technical services	18,205	10.3%	(D)	–	2,614,623	8.9%
Management of companies and enterprises	(D)	–	0	0.0%	271,331	0.9%
Administrative and waste services	(D)	–	(D)	–	1,172,737	4.0%
Educational services	(D)	–	(D)	–	226,812	0.8%
Healthcare and social assistance	(D)	–	(D)	–	2,509,671	8.5%
Arts, entertainment, and recreation	(D)	–	(D)	–	238,553	0.8%
Accommodation and food services	(D)	–	(D)	–	1,095,358	3.7%
Other services, except public administration	4,822	2.7%	1,043	5.5%	821,221	2.8%
Government and government enterprises	78,975	44.6%	12,535	66.2%	8,292,991	28.2%
Federal, civilian	13,680	7.7%	6,106	32.3%	1,935,163	6.6%
Military	849	0.5%	166	0.9%	724,870	2.5%
State and local	64,446	36.4%	6,263	33.1%	5,632,958	19.2%

SOURCE: U.S. Bureau of Economic Analysis 2003b.

NOTES: <sup>a</sup> The estimates of earnings for 2001 are based on the 2002 NAICS.

<sup>b</sup> Farm income consists of proprietors' income; the cash wages, pay-in-kind, and other labor income of hired farm workers; and the salaries of officers of corporate farms.

<sup>c</sup> Proprietors income includes the inventory valuation adjustment and capital consumption adjustment.

<sup>d</sup> "Other" consists of wage and salary disbursements to residents of the United States employed by international organizations and foreign embassies and consulates in the United States.

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

(L) Less than \$50,000, but the estimates for this item are included in the totals.

**TABLE 5  
GENERAL EMPLOYMENT AND INCOME CHARACTERISTICS**

	<b>Socorro County</b>	<b>Catron County</b>	<b>New Mexico</b>	<b>United States</b>
<b>Income</b>				
Per Capita Personal Income <sup>a</sup>	\$12,826	\$13,951	\$17,261	\$21,587
Median Household Income <sup>b</sup>	\$23,439	\$23,892	\$34,133	\$41,994
Number of Persons Below Poverty Level <sup>c</sup>	5,539	860	328,933	33,899,812
Poverty Rate – individuals	31.7%	24.5%	18.4%	12.4%
Children Below the Poverty Level (<18 years)	2,178	283	122,488	11,386,031
Percent Children Below the Poverty Level (<18 years)	43.6%	39.6%	24.6%	16.1%
<b>Unemployment (Civilian Labor Force)</b>				
Unemployment Rate (1999)	5.3%	9.8%	5.6%	4.2%
Unemployment Rate (2000)	5.4%	8.0%	4.9%	4.0%
Unemployment Rate (2001)	6.1%	6.8%	4.8%	4.8%
<b>Poverty</b>				
Number of Persons Below Poverty Level	5,539	860	328,933	33,899,812
Poverty Rate Among Individuals	31.7%	24.5%	18.4%	12.4%
Poverty Rate – families	24.1%	17.4%	14.5%	9.2%
Poverty Rate – families with related children under 18 years	35.3%	32.7%	20.8%	13.6%

SOURCES: U.S. Census Bureau 2002c; U.S. Department of Labor 2002a, 2002 b, and 2002c.

NOTES: <sup>a</sup> Personal income consists of all income that is received by individuals in a given year, originating from all sources. It is calculated as the sum of wage and salary disbursements, other labor income, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance. Per capita personal income represents the personal income of the residents of a particular area divided by the population of that area as of July 1 for the reference year (U.S. BEA 2002).

<sup>b</sup> Household income is the sum of money income received in the previous calendar year by all household members 15 years and older, including household members not related to the householder, people living alone, and others in nonfamily households. The median household income, therefore, is the amount that divides the income distribution into two equal groups, half having income above that amount and half having income below that amount (U.S. Census Bureau 2002e).

<sup>c</sup> The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. A summary of the 48 thresholds provides a general sense of the "poverty line" or "poverty level," but is not used to compute poverty data. The poverty thresholds do not vary geographically, but they are updated annually for inflation with the Consumer Price Index. Based on this information, the poverty level for a family of four in 1999 having two children under the age of 18 was \$16,895 (U.S. Census Bureau 2002f).

Although not included in Tables 3 and 4 (other than farm employment and earnings), the agricultural sector in Socorro and Catron Counties is an important sector of the economy. Similarly, the outdoor recreation data is not apparent in the U.S. BEA data. Thus, supplementary information about the agricultural and outdoor recreation economies in the study area is provided in Sections 2.4 and 3.7.

To place the data in Tables 3, 4, and 5 in context, a brief discussion of the economic activity as it relates to employment and earnings and long-term trends for each of the Counties and the Alamo Band of the Navajo Nation follows.

### **2.3.1 Socorro County**

At 6,646 square miles, Socorro County is the third largest county in the State (U.S. Census Bureau 2002b). Based on GIS analysis of land ownership data, more than 65 percent of the land within Socorro County is administered by the Federal government. The natural resources present on much of these lands offer opportunities that support the tourism and related services industries. Federal lands include almost 615,000 acres of national forest land (Cibola National Forest) and approximately 285,000 acres of National Wildlife Refuges (Sevilleta and Bosque Del Apache). The BLM lands constitute approximately 22 percent of the land in Socorro County and includes several special management areas (e.g., WSAs and ACECs). The White Sands Missile Range also is located in the southeast corner of Socorro County, occupying more than 430,000 acres of land owned and managed by the Federal government.

The City of Socorro is located near the geographic center of New Mexico, on the west bank of the Rio Grande. It is the home of the New Mexico Institute of Mining and Technology, a top-rated technical college that is the top employer in the area with an annual payroll of approximately \$25 million. The school, which opened as the New Mexico School of Mines in 1889, has an enrollment of approximately 1,500 students with plans to add an additional 300 during the next five years. Numerous high-tech facilities occupy the northern portion of White Sands Missile Range and the surrounding area. The “Very Large Array” National Radio Telescope site is located mostly on the private land in the Plains of San Agustin in the western portion of the County along U.S. Route 60, and is familiar from numerous science fiction movies, such as “2010” and “Contact” (Socorro Chamber of Commerce 2000).

The government and government enterprises constitutes the largest industry sector in the County. This sector employed 2,434 persons in 2001, representing almost one-third (32.9 percent) of the work force in Socorro County. This is far greater than the percentage of workers in this sector either in the State of New Mexico or nationally (20.8 and 13.8, respectively). Earnings in this sector totaled approximately \$79 million, by far the largest percentage of earnings in any of the sectors represented in Socorro County. Earnings in this sector at 44.6 percent represent a higher share than those experienced within the State as a whole (28.2 percent). Of this, a greater proportion of employment and earnings is in the State and local government and government enterprise industries (29 percent of employment and 36.4 percent of earnings) than in the Federal government and government enterprise industries (which are 3.2 percent of employment and 7. percent of earnings).

Only nine of the 19 NAICS categories for nonfarm, private employment and earnings were undisclosed in 2001. Data in the ten other industries was suppressed by the U.S. BEA, either because to do so would disclose confidential information or the number of jobs in a particular sector was less than 10/earned less than \$50,000. Together, the ten undisclosed industries represent 29.1 percent of employment and 27.4 percent of earnings in the County. Of those that are undisclosed, the health care and social assistance and accommodation and food services industries support a relatively large share of industry employment and earnings in the State and nation.

Of those nonfarm private industries in Socorro County where data are disclosed, the largest employer is the professional and technical services industry, employing 552 persons in 2001 (7.5 percent). This figure is slightly higher than employment in the professional and technical services industry Statewide and nationally where approximately 6 percent of the workers are employed. Traditionally, jobs in the services industry tend to pay less than those in the government and government enterprises sector; however, this type of service industry is higher paying than others (e.g., accommodation and food services). In Socorro County, approximately \$18.2 million, or 10.3 percent, of the overall earnings were realized in the professional and technical services industry in 2001. This is somewhat less than the percentage of earnings for this sector Statewide, at 8.9 percent. The third largest nonfarm private employment sector is the retail trade industry, with 562 persons employed (7.6 percent). Earnings for this sector were approximately \$8.4 million in 2001, or 4.7 percent, slightly lower than the Statewide average of 7.7 percent. Percentages of persons employed in the other disclosed nonfarm, private industries – construction; manufacturing; other services (except public administration), transportation and warehousing; finance and insurance, and real estate and rental and leasing – were all lower than the percentages in New Mexico or nationally. Earning percentages in these sectors also were lower than those experienced Statewide.

Farm employment provided 574 jobs in Socorro County in 2001. This percentage of farm employment at 7.8 percent is much higher than the State (2.2 percent) and nation (at 1.8 percent). As is typical of the farm sector, earnings (at \$10.3 million) are low in comparison to other private industries supporting a similar number of jobs (e.g., professional and technical services). The agricultural sector in Socorro County is the 10th highest against all other counties in the State, with cash receipts for all farm commodities (excluding livestock grazing) totaling \$52.8 million in 2001. Of this, \$40.5 million were cash receipts for livestock. Approximately 42,400 head of cattle were located on farms and ranches throughout Socorro County in 2001, with 18,000 being reported as beef cattle, 8,400 reported as milk cows, and 16,000 reported as cattle on feed. Approximately 1,400 sheep and lambs were reported in the Socorro County for that year. These sheep and lamb are located primarily on the Alamo Indian Reservation and are important both economically and culturally. There also is a large population of horses throughout the County (National Agriculture Statistics Service [NASS] 2002a, 2002b). It is estimated that 70 percent of land in Socorro County is, to some extent, used for livestock grazing (Socorro County 1998). Additional information about the agricultural sector is provided in Section 2.4.

Long-term trends in job and income growth and employment by industry in Socorro County from 1970 to 2000 are provided in the Sonoran Institute report for Socorro County (refer to Appendix A, pages 1 and 5-18). Among other things, these data show that government consistently has been the largest source of jobs and labor income in Socorro County and that the largest growth during this time frame has been in government jobs, primarily in State and local government. There also has been growth in nonlabor income (e.g., transfer payments related to retirement and dividends, interest, and rent). Farm employment and earnings have decreased from 13.3 percent of employment and 7.1 percent of income to 8.1 percent of employment and 4.6 percent of income. The relative 6.5 percent reduction in employment to 3.5 percent reduction suggests that farms have become more efficient during this time period.

Unemployment in Socorro County in 1999 was 5.3 percent, slightly lower than that of New Mexico as a whole at 5.6 percent, but higher than the 4.2 national rate (refer to Table 5). From 1988 to 2001, the annual average unemployment rate has fluctuated fairly consistently with the State and national rates, which typically have been lower than that of Socorro County. The highest unemployment rate during this time frame was near 10 percent in 1993 and the lowest was in 1999 (refer to Appendix A, page 21). Since 1999, the unemployment rate in Socorro County has risen slightly to approximately 6.1 percent in 2001, while New Mexico and the United States unemployment rates were both at

4.8 percent (U.S. Department of Labor 2003). The percentage of persons below the poverty level in Socorro County, at 31.7 percent, was greater than that of Catron County, and was significantly higher than either the State or nation as a whole. The figures are proportionately higher for children less than 18 years living below the poverty level (refer to Table 5).

The per capita income for persons in Socorro County at \$12,826 was slightly lower than the per capita income for Catron County and was significantly lower than the State and national averages. Specifically, the per capita income for Socorro County was only about two-thirds that of the State and one-half that of the United States. While the median family incomes between the Counties were similar, results shown against the State and national averages were comparable to the per capita incomes. As shown in Appendix A, page 12, the average earnings per job in Socorro County in real terms have fallen from \$23,962 in 1970 to \$23,542 in 2000.

The percentage of persons below the poverty level in Socorro County, 31.7 percent, was greater than that of Catron County, and was significantly higher than either the State or nation as a whole. The figures are proportionately higher for children less than 18 years living below the poverty level (refer to Table 5) (U.S. Census Bureau 2002c).

### **2.3.2 Catron County**

Although Catron County is the largest county in New Mexico in terms of area, it is one of the State's most sparsely populated. Based on GIS analysis, approximately 75 percent of the land within Catron County is owned by the Federal government. Federal land in the County includes forest land and land managed by the BLM. National forest land, constituting approximately 49 percent of the County's land area, includes the Cibola National Forest, Apache National Forest, and Gila National Forest. The BLM-administered public land constitutes approximately 13 percent of the land in the County (as compared to 22 percent in Socorro County) and includes four Special Management Areas and two ACECs. There also are approximately 13,000 acres of Tribal land, which is land held in trust by the Federal government, in the northeast portion of the County.

The Village of Reserve, located in the west-central portion of the County, is the County seat. Reserve was established as a result of the development of a string of villages along the San Francisco River by Mexican-Americans in the 1860s. Anglo settlers began arriving in the 1870s. Cattle grazing historically has been the predominant source of income to the County, but mining was a significant economic activity in the past (U.S. DOI, BLM 1989). The U.S. Forest Service historically has played a role in Catron County with the establishment of the national forests. As a result of the natural resources found in these and surrounding areas, numerous opportunities exist for sightseeing, camping, hiking, picnicking, hunting, and fishing, , attracting visitors to support the service and tourism industries.

Much of the County's economy has developed as a result of government agency administration, management, and use of the Federal land in the County. The long-term income growth or decline by major category is shown in Appendix B, page 1. Government and government enterprises constitute the largest economic sector in the County, employing 349 persons, or almost one-fourth of the work force in 2001. This percentage is greater than that experienced in either the State or nation in this sector, which were at 20.7 and 13.8, respectively in 2001 (refer to Table 3). In terms of earnings, the government and government enterprises sector contributed \$12.5 million, translating to 66.2 percent of all personal income in the County (refer to Table 4). Of this, the Federal, civilian and State and local government and government enterprise industries provided similar shares of earnings (32.3 percent federal, civilian and 33.1 percent State and local), but there were fewer federal civilian jobs than State and local jobs (213 versus 125).

As with Socorro County and to a greater extent, much of the data on nonfarm, private employment is undisclosed for Catron County. Of the 19 industries, data are available for six and data for the other 13 was suppressed by the U.S. BEA, either because to do so would disclose confidential information or the number of jobs in a particular sector was less than 10/earned less than \$50,000. Together, the 13 undisclosed industries represent 45.4 percent of jobs and 23.2 percent of earnings in the County. Of these, the health care and social assistance, accommodation and food services, professional and technical services, and construction industries support a relatively large share of industry employment and earnings in the State and nation.

Of those six nonfarm, private industries in Catron County where data are disclosed, the largest employer is the other services, except public administration sector at 7.4 percent of all jobs (108 employees), followed by the retail trade industry at 5.6 percent of all jobs in the County (81 employees). Because these jobs traditionally tend to pay less than the government and government services industry jobs, income generated from these sectors is proportionately less, yielding only 5.5 and 3.0 percent of personal income, respectively. Information on the mining; utilities; construction; manufacturing; wholesale trade; transportation and warehousing; real estate and rental and leasing; professional and technical services; administrative and waste services; educational services; health care and social assistance; arts, entertainment and recreation; and accommodation and food services was suppressed by the U.S. BEA.

Farm employment in Catron County provided 268 jobs (18.4 percent of all employment), which was greater than any other single 19 unsuppressed private employment or three government/government enterprises industry NAICS subcategories. Although farm industry earnings were reported as a loss of \$2.9 million in 2001, Catron County's economy is highly dependent on agrarian enterprise, specifically livestock production. In 2001, cash receipts for all farm commodities in Catron County (excluding livestock grazing) totaled \$10.4 million, ranking it number 31 against the 32 counties in the State. Crops produced county-wide include hay, alfalfa, sorghum, corn, wheat, peanuts, cotton, chile, and pecans. Cash receipts for livestock in Catron County accounted for \$9.9 million for 2001. An estimated 24,000 head of cattle and calves were on farms and ranches in Catron County in 2001, with 19,000 of them beef cows and 5,000 of them reported as cattle on feed. No milk cows were reported in Catron County, but there may be up to 200 head of milk cows unreported. That same year, only 100 head of sheep and lamb were reported in Catron County (NASS 2002a, 2002b). Additional analysis of the agricultural sector is provided in Section 2.4.

Long-term trends in job and income growth and employment by industry in Catron County from 1970 to 2000 are provided in the Sonoran Institute report for Catron County (refer to Appendix B, pages 1 and 5-18). Like Socorro County, BEA statistics show that government consistently has been one of the largest sources of jobs and labor income. However, farm employment, while not always reported, has exceeded that of government employment (when reported this does not include the undisclosed jobs in the agricultural services SIC). Farm employment and income decreased during this time frame, with employment dropping from 39.4 percent to 18.9 percent of all jobs and share of total income decreasing from 18.6 percent to -2.5 percent. There also has been a substantial decrease in manufacturing (including forest products) from 6.7 percent of all jobs and 7.8 percent of all income to 3.3 percent of all jobs and 1.0 percent of all income, a trend attributable to the closure of the Reserve timber mill in the late 1980s. The largest growth in income has been in non-labor income, mostly in dividends, interest, and rent and from age-related sources (retirement, disability, and Medicare).

The unemployment rate in Catron County in 1999 was 9.8 percent, about double that of the State and national averages (refer to Table 5). The unemployment rate in Catron County has been much greater at times, reaching highs near 15 percent in 1991 and 1996, but has been decreasing steadily from approximately 12 percent since 1998 (refer to Appendix B, page 21).

Both the average per capita annual income (\$13,951) and median household income (\$23,892) are significantly lower than the State and national averages (refer to Table 5). Average earnings per job, in real terms, have fallen from \$21,503 in 1970 to \$14,916 in 2000. In Catron County, there was a dramatic decrease in earnings in the early 1980s and another downturn in the mid 1990s. This pattern is slightly matched by Socorro County (although there was much less of an effect on annual average earnings in Socorro County in the early 1980s) and is not matched by the State, which has remained relatively even with a slight decrease; or the nation, which has experienced a moderate increase (refer to Appendix B, page 12).

The percent of persons living below the poverty level in Catron County in 1999 was 24.5, while the rate of families living in poverty was 17.4 percent. Children under 18 years living below the poverty level represent 39.6 of the population, and 32.7 percent of families with related children below the age of 18 live in poverty (refer to Table 5).

### **2.3.3 Alamo Band of the Navajo Nation**

The Alamo Navajo Reservation is geographically isolated from the Navajo Reservation, which is located 220 miles southeast of the Navajo Nation capital of Window Rock. This area also is the Alamo Chapter of the Navajo Nation, one of the 110 of these political entities or subdivisions of the Navajo Nation, which are similar to counties. Chapters elect leaders and delegates to the Tribal Council, which is located in Window Rock and retains much of the control over the Chapter level under the provisions of the Navajo government constitution. The socioeconomic conditions of the Alamo Navajo Reservation are a reflection of the isolation of this area, not just from the main reservation, but from other economic opportunities and communities as well. The total 2000 population of the Chapter was 2,072, of which 95.7 percent was American Indian/Alaska Native. In addition, 55.7 percent of individuals within the reservation are below the 1999 poverty level, with a median household income of \$19,306 and per capita income of \$6,528. The median age, at 24, is quite young in comparison to other areas in the United States. The average household size was more than four, whereas for the rest of New Mexico and the United States it was two to three (U.S. Census Bureau 2002d). Much of the area's economy is based on livestock-based agriculture along with the services industry. The Alamo Navajo School provides direct and indirect employment (Socorro County 1998).

## **2.4 AGRICULTURAL STATISTICS**

### **2.4.1 Background**

The statistics presented in Section 2.3 fail to represent the importance of the agricultural sector, particularly ranching, to the local economies of Socorro and Catron Counties. This is because farm and agricultural services data, particularly the agricultural services SIC and agriculture and forestry support activities NAICS (a subsector of the NAICS "forestry, fishing, related activities and other" category), are not reported in BEA data for most years (refer to Tables 3 and 4 and pages 6 and 9 in Appendices A and B). The new "forestry, fishing, related activities and other" NAICS sector comprises establishments primarily engaged in harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats. The sector distinguishes one basic activity: agricultural support. Agricultural support activities include establishments that perform one or more activities associated with farm operation, such as soil preparation, planting, harvesting, and management, on a contract or fee basis. Excluded from the sector are establishments primarily engaged in agricultural research and establishments primarily engaged in administering programs for regulating and conserving land, mineral, wildlife, and forest use. The sector includes the fishing, hunting, and trapping subsector (see Section 3.7 for more details). This NAICS sector also includes

jobs held by residents of the United States employed by international organizations and foreign embassies and consulates in the United States (U.S. BEA 2003c).

The rural communities in Socorro and Catron Counties have economies that are based largely on ranching, both historically and currently. Agriculture in Socorro and Catron Counties directly employs about 850 persons on more than 600 farms. In 2000, gross income from farms and ranches in Socorro County was nearly \$46 million, an increase from \$36 million in 1970; and \$19 million in Catron County, a decrease from \$27 million in 1970 (refer to Appendices A and B, page 17). This does not include additional income in agricultural services such as soil preparation and veterinary services. In addition, these farms are indirectly responsible for an undetermined number of jobs in the food processing industry, retail food establishments, and other food-related industries. In the West, the U.S. Department of Agriculture (2000) estimates that farming jobs account for only about 8 percent of all jobs in those activities that make up the system required to produce farm products and move them to products ready for consumers. The remainder of these jobs supported by the system are in wholesale and retail trade (32 percent), food service (28 percent), food processing (8 percent), other manufacturing (4 percent), textiles (3 percent), transportation (2 percent), and other (18 percent). Agriculture lends support to many local businesses including those associated with farm equipment, feed, and fertilizer. Tax revenues generated by agriculture include taxes for government transactions, direct government payments, property taxes, and motor vehicle registration and licensing fees. These support local government and schools and other government functions (New Mexico Agricultural Statistics Service [NMASS] 2001). As in other parts of the U.S., in the Study Area, the importance of agriculture to the economy is evident in the share of employment rather than the size of the economic impact and earnings (U.S. Department of Agriculture 2000). Whereas in 2001, farm employment accounted for 18.4 percent of all employment in Catron County, and 7.8 percent of all employment in Socorro County, farm employment accounted for 2.2 percent of the jobs in the State and 1.8 percent of the jobs in the nation (see Table 3). This section provides additional available data that better represent the impact of agricultural development, predominantly cattle production, in the subject Counties. Even with these data, the economic impact of agricultural development on Socorro and Catron Counties is not readily apparent. In order to fully assess the direct and indirect economic impact, some socioeconomic modeling would need to be performed, which was beyond the scope of this study.

The principal data sources for this section were NMASS and the Census of Agriculture. NMASS is one of the 45 State offices of the National Agriculture Statistics Service (NASS). Through a cooperative agreement with the New Mexico Department of Agriculture, NMASS is the official source for statistical information on New Mexico's agriculture industry, which is published nationally along with other states. The Census of Agriculture is the most comprehensive source of data portraying our nation's agriculture. It is the only source of uniform data on agricultural production and operator characteristics for each County, State, and the United States. Congress requires NASS to conduct the Census of Agriculture every five years. The 1997 Census of Agriculture is the most recent census available; the next Census of Agriculture will present 2002 data (NMASS 2002).

Long-term trend data for agriculture in terms of income, expenses, and net income from farming and ranching from 1970 to 2000 are provided in the Sonoran Institute reports (refer to Appendices A and B, pages 17 and 18). These data show that the gross income from farming and ranching has grown from \$36 million to \$45 million.

#### **2.4.2 Number of Farms and Land in Farms**

There is a high proportion of farms relative to populations in Socorro and Catron Counties than in New Mexico. As shown in Table 6, there are more farms in Socorro County than Catron County, which is notable given that the population of Socorro County is five times that of Catron County. While the number of farms in Socorro County and the State as a whole has remained fairly stable since 1987, the number of farms in Catron County has decreased (by 17 percent over the last 10 years). Based on 1997 Census of Agriculture data, the farms in Socorro and Catron Counties together constitute 4.4 percent of all farms in New Mexico, but they constitute 7.5 percent of all farm acreage in the State. The average size of farms in both Socorro and Catron Counties is substantially greater than the Statewide average, particularly within Catron County where the average acreage of farms was 2.5 times greater than that of the State in 1997. While the number of farms in Catron County has decreased during the last 10 years (by 17 percent, as noted previously), the average acreage of farms in this County has increased by 28 percent, mostly between 1992 and 1997.

#### **2.4.3 Types of Farms**

As shown in Table 7, most farms in Socorro and Catron Counties are individually or family owned. While Statewide and in Socorro County the number of individual and family farms have decreased only slightly in recent years, there has been a decrease of 12 percent in these types of farms in Catron County. There also is a notable percent increase in partnership or corporate farms in Catron County in comparison to Socorro County, where such farms dropped considerably, and the State, where the number of such farms decreased slightly.

**TABLE 6  
NUMBER OF FARMS AND LAND IN FARMS**

<b>Number of Farms</b>					
	<b>1987</b>	<b>1992</b>	<b>1997</b>	<b>Percent Change</b>	
				<b>1987 to 1992</b>	<b>1992 to 1997</b>
Socorro County	396	413	395	+4	-4
Catron County	260	236	217	-9	-8
New Mexico	14,247	14,275	14,094	0	-1

<b>Land in Farms (Acres)</b>					
	<b>1987</b>	<b>1992</b>	<b>1997</b>	<b>Percent Change</b>	
				<b>1987 to 1992</b>	<b>1992 to 1997</b>
Socorro County	1,964,748	1,868,074	1,650,979	-5	-12
Catron County	1,670,382	1,553,328	1,795,362	-7	+16
New Mexico	46,018,005	46,849,244	45,787,108	+2	-2

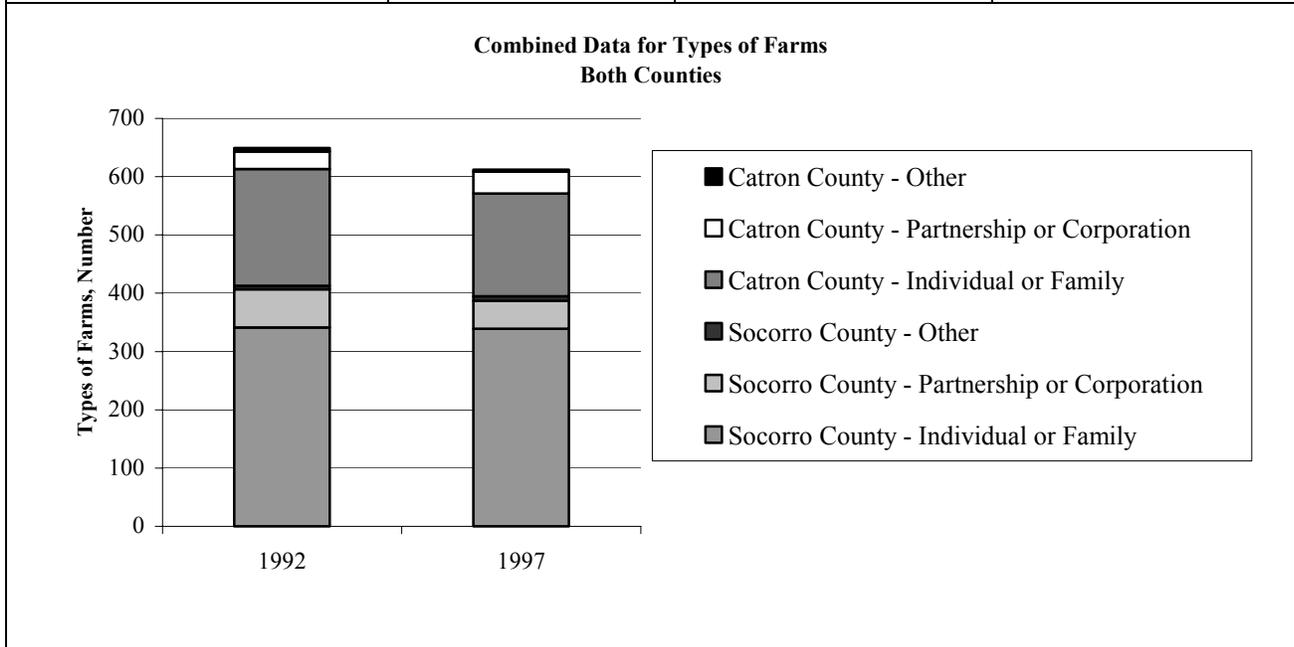
<b>Land in Farms, Average Size of Farm (Acres)</b>					
	<b>1987</b>	<b>1992</b>	<b>1997</b>	<b>Percent Change</b>	
				<b>1987 to 1992</b>	<b>1992 to 1997</b>
Socorro County	4,180	4,523	4,180	+8	-8
Catron County	6,425	6,582	8,274	+2	+26
New Mexico	3,230	3,281	3,249	+2	-1

SOURCE: New Mexico Agricultural Statistics Service 1997

**TABLE 7  
TYPES OF FARMS**

	<b>1992</b>	<b>1997</b>	<b>%Change</b>
<b>Socorro County</b>			
Individual or Family	341	339	-1
Partnership or Corporation	66	48	-27
Other	6	8	+33
<b>Catron County</b>			
Individual or Family	200	176	-12
Partnership or Corporation	38	30	+27
Other	6	3	-50
<b>New Mexico</b>			
Individual or Family	11,959	11,783	-1
Partnership or Corporation	2,070	2,006	-3
Other	250	305	+22



SOURCE: New Mexico Agricultural Statistics Service 1997.

#### **2.4.4 Cash Receipts**

As compiled by NMASS, cash receipts represent gross income from the sales of crops, livestock, and poultry during the calendar year. The value of home consumption of farm products, inter-farm sales of livestock, and crops fed on farms where grown are not included in cash receipts. Cash receipts from marketings of crops are the final product of several estimates, including acreage, yields, percentage of total production sold, average price, and changes in inventories. Marketings of livestock and poultry include an animal only once, usually at the time when the animal is sold for slaughter or at final disposition (NMASS 2001).

The cash receipts for all farm commodities for Socorro and Catron Counties in 2001 combined was \$58,637,000, not including livestock grazing (because NMASS compiles statistics based on the sale value of an animal only once, usually at the time when the animal is sold for slaughter or at final

disposition). As shown in Table 8, during the past five years there has been a general increase in cash receipts for farm commodities for Socorro County, but a decrease in cash receipts for farm commodities in Catron County. In comparison to the growth in sales of crop and livestock products in New Mexico, which reached a record of \$2.2 billion in 2001, Socorro County has increased almost 2.5 times the rate of the State, while Catron County declined by a margin of 65 percentage points behind that of the State. In 1997, Catron County was ranked twentieth of 33 counties in the State for the value of commodities sold, but that ranking dropped to thirty-first in the State in 2001. Socorro County was ranked fifteenth in 1997 and moved up to tenth in 2001. For both Counties, livestock represented a much greater proportion of cash receipts than crops. As shown in Table 9, according to the 1997 Census of Agriculture, the top commodity producer by value of sales in 1997 for Socorro County was dairy products, followed by cattle and calves, hay, silage, field seeds, and grass seeds. In Catron County, cattle and calves accounted for the vast majority of sales of agrarian commodities.

#### **2.4.5 Livestock on Farms**

An indication of the types of livestock on which the ranching is based is provided by the inventory of livestock on farms. While cattle and calves are the greatest commodity, other livestock includes horses and ponies, broilers, bees, sheep and lambs, and goats. Table 10 list the top five commodities for Socorro and Catron Counties per the 1997 Census of Agriculture.

Additional and more recent statistics on cattle and calves, shown in Table 11, indicate that there has been a slight decrease in cattle and calves on farms in both Socorro and Catron Counties since the 1997 Census of Agriculture. From 1997 to 2000, there was a decrease of approximately 3,500 cattle on farms in Socorro County and 3,600 cattle on farms in Catron County. This rate of decrease, 7.8 percent for Socorro County and 11.4 percent for Catron County, exceeds the Statewide rate of decrease of 2.3 percent during this time period (more than 36,000 cattle and calves). This trend continued, at a somewhat accelerated rate, from 2000 to 2002, during which there was a decrease of 10,000 cattle on farms in Socorro and Catron Counties, a 14.5 percent decrease as compared to a 0.4 percent decrease Statewide.

In 2002, all cattle and calves in Socorro and Catron Counties represented 1.4 percent and 2.3 percent of all cattle in the State, respectively (refer to Table 11). Most cattle and calves on farms in Socorro and Catron Counties are beef cows. Milk cows, which represent a relatively small percentage of the livestock inventory in Socorro and Catron Counties, are increasing in Socorro County and in the State as a whole (statistics are not available for Catron County because there are fewer than 200 head). In 2001, the prices of wholesale milk increased by 26.5 percent, making it New Mexico's number one cash commodity at \$814.6 million, and replacing cattle and calves in 2000 at \$807.1 million (NMASS 2001).

Sheep and lamb on farms in Socorro County increased to 1,500 in 2000 from 995 in 1997, but then decreased slightly to 1,400 sheep and lambs on farms in 2001 and 2002 (NMASS 2001).

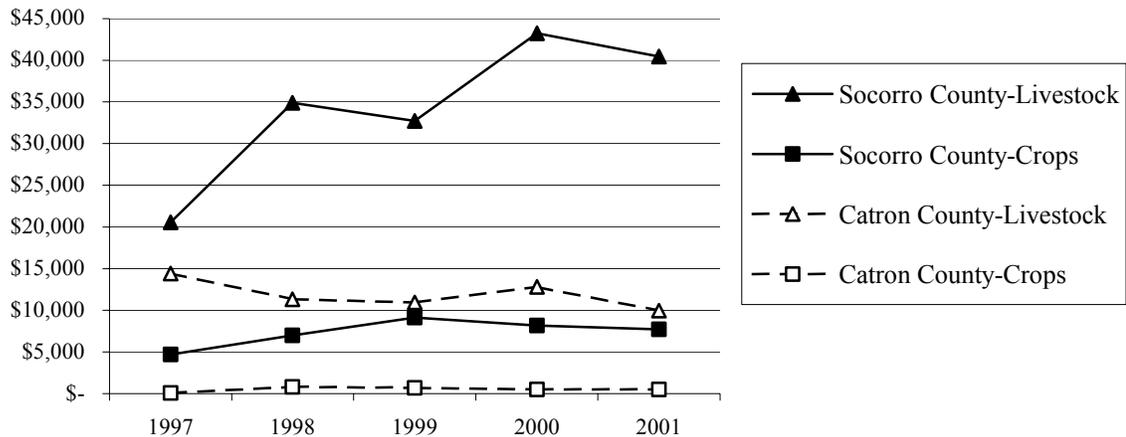
Long-range trend data from 1975 to 2001 on cattle and calves on farms, shown in Table 12, illustrate that there has been a decrease in both Counties, which is more pronounced in Catron County. Some of the discrepancy likely is related to the marked increase in milk cows on farms in Socorro County during recent years, which has not been reported in Catron County (although data for fewer than 200 head of milk cows are not necessarily reported).

**TABLE 8  
CASH RECEIPTS FOR FARM COMMODITIES  
1997 TO 2001  
(in thousands of dollars)**

	1997	1998	1999	2000	2001	Percent Change 1997 TO 2001
<b>All Farm Commodities</b>						
Socorro County	25,229	41,886	41,836	51,388	48,195	+91
Catron County	14,494	12,109	11,665	13,288	10,442	-28
New Mexico	1,617,708	2,215,122	2,003,288	2,113,502	2,215,122	+37
<b>All Livestock</b>						
Socorro County	20,543	34,911	32,714	43,228	40,480	+97
Catron County	14,419	11,327	10,961	12,806	9,937	-31
New Mexico	1,155,530	1,419,669	1,440,789	1,613,107	1,670,103	+45
<b>All Crops</b>						
Socorro County	4,686	6,976	9,122	8,160	7,715	+65
Catron County	75	782	704	482	505	+673
New Mexico	462,178	523,766	562,499	500,395	545,019	+18

**Graphical Representation**

**Agricultural Cash Receipts (in thousands of dollars)**



SOURCES: New Mexico Agricultural Statistics Service 1997, 2000, and 2001 (1997 data are from NMASS 1997, 1998 data are from NMASS 2000, and 1999 to 2001 data are from NMASS 2001).

NOTE: Does not include cash receipts for livestock grazing. Statistics are compiled based on the sale value of an animal only once, usually at the time when the animal is sold for slaughter or at final disposition.

**TABLE 9**  
**TOP FIVE COMMODITIES BY VALUE OF SALES (1997)**  
**(in thousands)**

Socorro County		Catron County	
1. Dairy products	\$11,845	1. Cattle and calves	\$14,336
2. Cattle and calves	\$8,187	2. Hay, silage, field seeds, grass seeds	\$65
3. Hay, silage, field seeds, grass seeds	\$3,492	3. Milk goats and goat's milk	(D)
4. Vegetables, sweet corn, and melons	\$917	4. Horses and ponies	(D)
5. Horses and ponies	\$232	5. Sheep, lambs, and wool	\$8

SOURCE: New Mexico Agricultural Statistics Service 1997.

NOTE: (D) Withheld to avoid disclosing data for individual farms.

**TABLE 10**  
**TOP FIVE COMMODITIES BY LIVESTOCK INVENTORY**

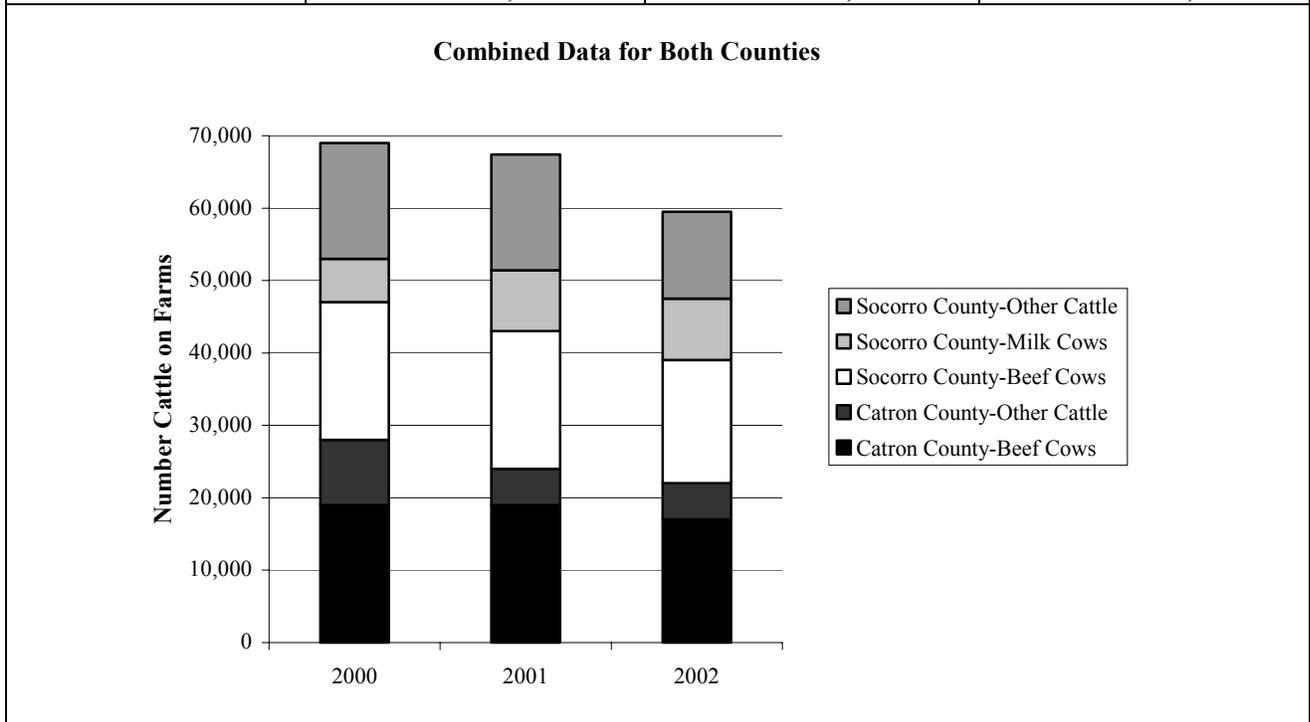
Socorro County		Catron County	
1. Cattle and calves	44,509	1. Cattle and calves	31,603
2. Broilers	(D)	2. Horses and ponies	713
3. Bee colonies	1,526	3. Sheep and lambs	131
4. Horses and ponies	1,301	4. Goats	88
5. Sheep and lambs	995	5. Broilers	(D)

SOURCE: New Mexico Agricultural Statistics Service 1997.

NOTE: (D) Withheld to avoid disclosing data for individual farms.

**TABLE 11  
NUMBER OF CATTLE AND CALVES ON FARMS<sup>a</sup>  
2000 TO 2002**

Type Of Cattle	Year		
	2000	2001	2002
<b>All Cattle</b>			
Socorro County	41,000	42,400	37,000
Catron County	28,000	24,000	22,000
New Mexico	1,640,000	1,580,000	1,580,000
<b>Beef Cows</b>			
Socorro County	19,000	18,000	16,500
Catron County	19,000	19,000	17,000
New Mexico	564,000	549,000	500,000
<b>Milk Cows<sup>b</sup></b>			
Socorro County	6,000	8,400	8,500
Catron County	–	–	–
New Mexico	236,000	261,000	290,000
<b>Other Cattle<sup>c</sup></b>			
Socorro County	16,000	16,000	12,000
Catron County	9,000	5,000	5,000
New Mexico	840,000	770,000	790,000



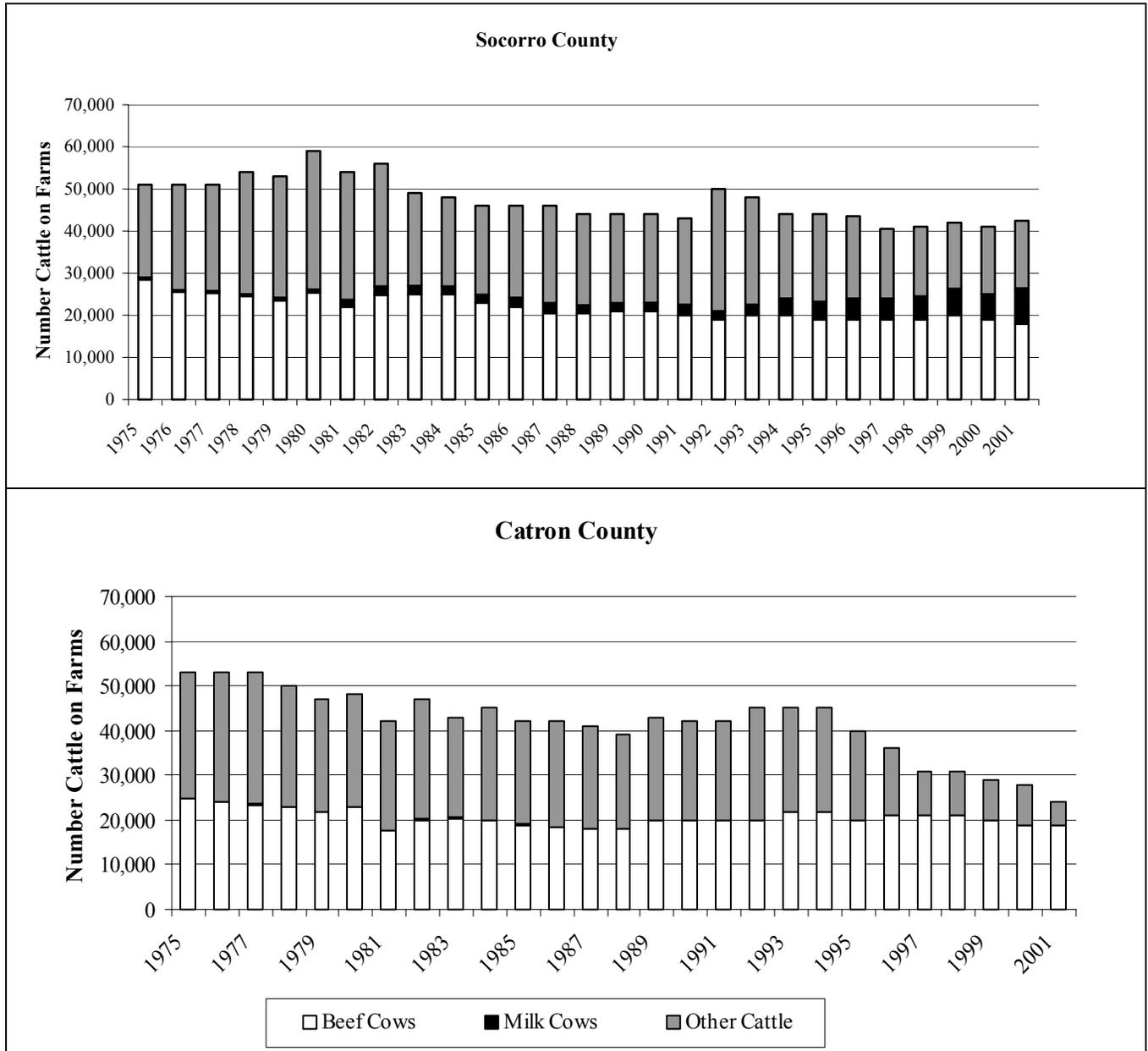
SOURCE: New Mexico Agricultural Statistics Service 2000 and 2001 (2000 data are from the 2000 report, 2001 and 2002 data are from the 2001 report.

NOTES: <sup>a</sup> As of January 1.

<sup>b</sup> Milk cow estimates are not made for counties with fewer than 200 head.

<sup>c</sup> Other cattle includes cattle on feed.

**TABLE 12  
NUMBER OF CATTLE AND CALVES ON FARMS  
1975 to 2001**



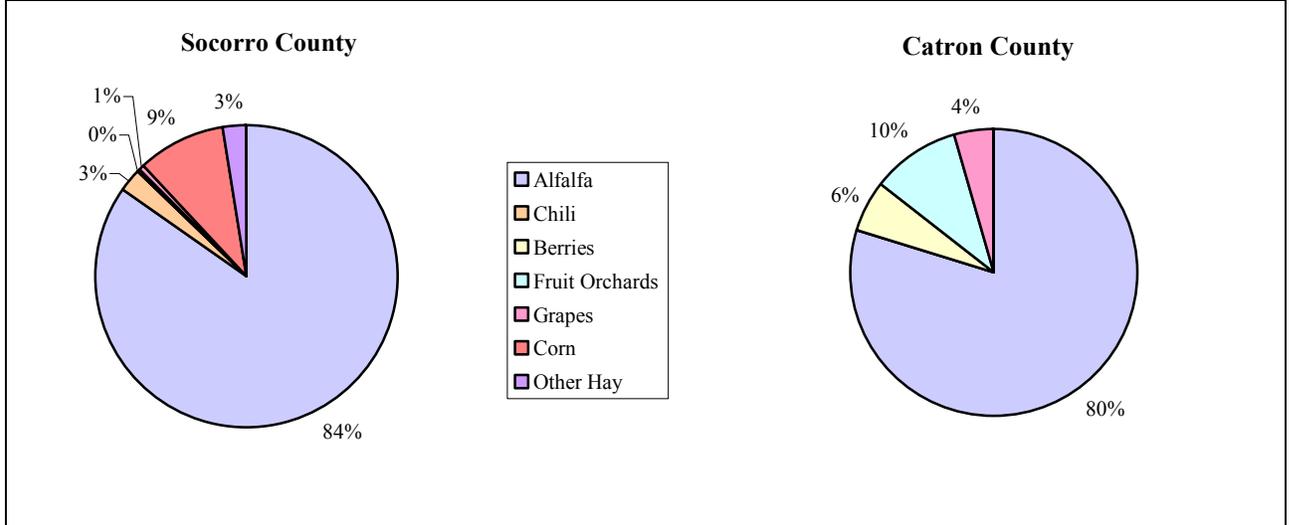
SOURCE: New Mexico Agricultural Statistics Service 2001.

**2.4.6 Field Crops**

As shown in Table 13, alfalfa represents a large percentage of the crops in both Counties. Corn represents the next greatest percentage of crop acreage in Socorro County, while fruit orchards are the second greatest crop acreage in Catron County. For the most part, these data are in line with the data from the 1997 Census of Agriculture, shown in Table 14, although land used for vegetables in Socorro County was the second greatest category in 1997, but is not represented in the 2000 statistics.

**TABLE 13  
IRRIGATED CROP ACREAGE, 2000**

	Total	Alfalfa	Chili	Berries	Fruit Orchards	Grapes	Corn	Other Hay
<b>Socorro County</b>	15,426	13,070	400	0	30	80	1,446	400
<b>Catron County</b>	157	126	0	9	16	7	0	0
<b>New Mexico</b>	483,318	235,459	18,802		3,844	1,155	134,161	12,445



SOURCE: New Mexico Agricultural Statistics Service 2001.

**TABLE 14  
TOP FIVE CROP COMMODITIES BY ACREAGE**

SOCORRO COUNTY		CATRON COUNTY	
1. Hay crops	9,539	1. Hay crops	798
2. Vegetables	356	2. Land in orchards	7
3. Corn for grain	351	3. All nursery	(D)
4. Corn for silage	287	4. Total berries	(D)
5. Sorghum for silage	(D)		

SOURCE: New Mexico Agricultural Statistics Service 1997.

NOTE: (D) Withheld to avoid disclosing data for individual farms.

### 2.4.7 Annual Sales

As shown in Table 15, a slight majority of farms in both Socorro and Catron Counties are farms with less than \$10,000 in annual sales. Given the decrease in total farms during the last 10 years in Catron County (refer to Table 6), there has been little statistical difference in the decrease of farms with less or more than \$10,000 in annual sales. A slight majority of farms in both Socorro and Catron Counties are farms with less than \$10,000 in annual sales (55 percent and 52 percent, respectively). In Socorro County, there has been a slight shift towards more farms in the less than \$10,000 annual sales category to farms in the \$10,000 or more in annual sales category, particularly from 1992 to 1997.

**TABLE 15  
FARMS BY VALUE OF ANNUAL SALES**

	1987	1992	1997	Percent Change	
				1987-1992	1992-1997
<b>Socorro County</b>					
Less than \$10,000	210	195	216	-7	+11
\$10,000 or More	186	218	179	+17	-18
<b>Catron County</b>					
Less than \$10,000	131	118	112	-10	-5
\$10,000 or More	129	118	105	-9	-11

**Socorro County - 1997**

**Catron County - 1997**

SOURCE: New Mexico Agricultural Statistics Service 2001.

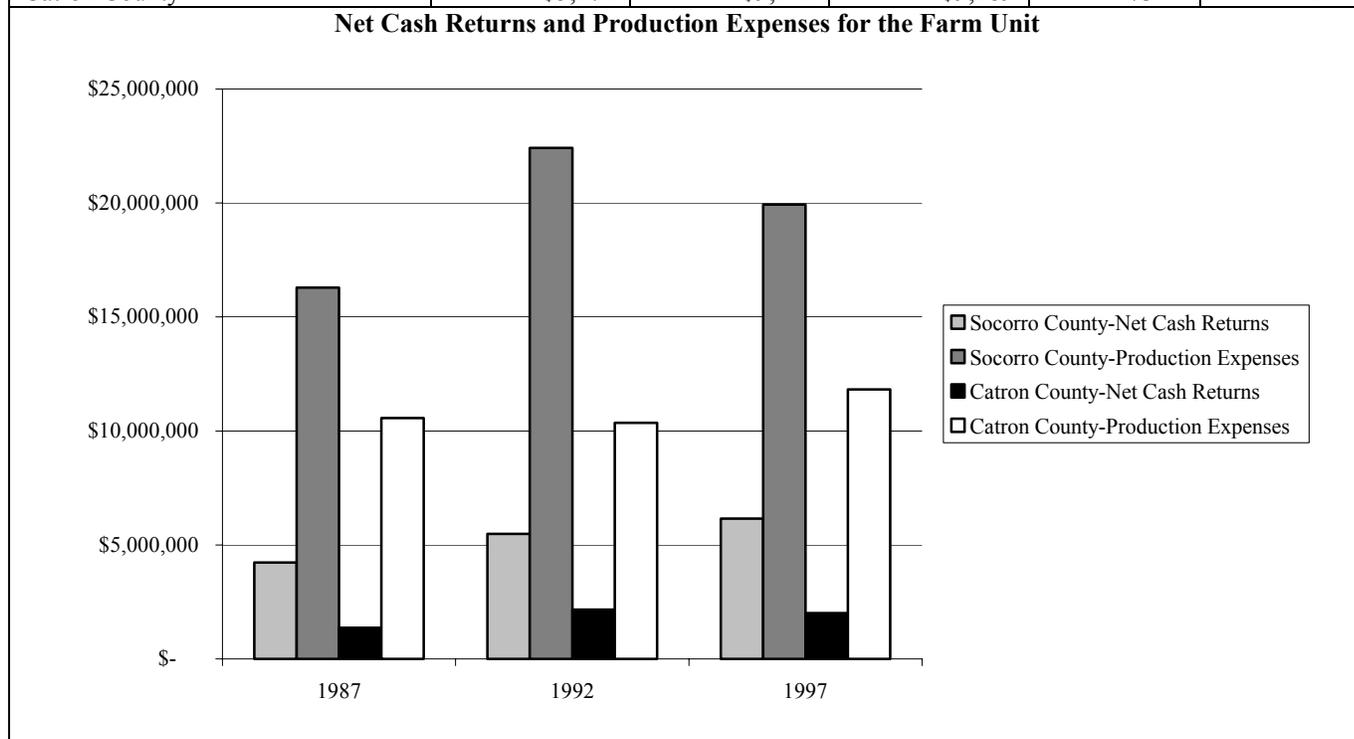
#### **2.4.8 Agricultural Sector Output**

Final agricultural sector output includes cash receipts as well as the value of home consumption, crop and livestock inventory adjustments, and other farm-related income. Net value added is the sector's contribution to the national economy and is the sum of the income earned by all factors of production, including direct government payments, minus all production expenses and capital consumption. Government payments to farmers are those payments made directly to farm producers in connection with farm programs. Examples of intermediate consumption outlays include purchase and repair of farm equipment and vehicles; purchases of fuel, seed, feed, and livestock; as well as utilities, marketing, transportation, and storage expenses. Net farm income is the operator's share of income from the agricultural sector's production activities, after deductions for wages paid to hired workers, rent received by nonoperator landlords, and real estate and non real estate interest (NMASS 2001).

As shown in Table 16, farmers and ranchers in Socorro County paid out \$19.9 million in 1997 to produce their crops and livestock. Production expenses include livestock purchases, feed purchases, pesticides, fuel and oil products, seed, fertilizer, and electricity. After deductions for production expenses, hired labor, and other economic factors, the total net cash return for the farm unit (i.e., the aggregate of all farms) in 1997 was \$6.1 million for Socorro County and \$2.0 million for Catron County. Generally, rises in production costs were commensurate with rises in net cash return. However, there were exceptions such as in Socorro County from 1992 to 1997 where production expenses decreased by 11 percent and net cash returns increased by 7 percent, and in Catron County from 1987 to 1992 when production expenses remained fairly steady, but net cash returns increased by 57 percent. The causes behind such fluctuations are complex and depend on a number of factors including weather conditions and prices received in sale of products.

**TABLE 16  
AGRICULTURAL SECTOR OUTPUT**

	1987	1992	1997	Percent Change	
				1987-1992	1992-1997
<b>Total Farm Production Expenses for the Farm Unit</b>					
Socorro County	\$16,288,000	\$22,424,000	\$19,928,000	38	-11
Catron County	\$10,572,000	\$10,362,000	\$11,823,000	-2	14
<b>Net Cash Return from Agricultural Sales for the Farm Unit</b>					
Socorro County	\$4,234,000	\$5,485,000	\$6,161,000	30	12
Catron County	\$1,371,000	\$2,158,000	\$2,016,000	57	-7
<b>Total Farm Production Expenses - Average Per Farm</b>					
Socorro County	\$41,131	\$54,427	\$50,578	32	-7
Catron County	\$40,661	\$43,906	\$54,485	8	24
<b>Net Cash Return from Agricultural Sales - Average Per Farm</b>					
Socorro County	\$10,692	\$13,314	\$15,637	25	17
Catron County	\$5,272	\$9,142	\$9,289	73	2



SOURCE: New Mexico Agricultural Statistics Service 1997.

Another formulated comparison of net income and long-term gross farm income and production expenses from 1970 to 2000 is provided in the Sonoran Institute reports (refer to Appendices A and B, page 18). These data show that the overall trend in realized net income in relation to production expenses is similar for Socorro and Catron Counties, with a noted peak in gross income in the late 1970s and early 1980s. Net farm income in Socorro County has fluctuated, but remained somewhat stable in the 1990s; by contrast, the net farm income in Catron County has been decreasing and remained negative since the mid-1990s. In Socorro County gross farm income minus production expenses equaled \$11.6 million in 2000, but in Catron County production expenses exceeded gross income by \$3.0 million.

## 2.5 MINORITY AND LOW-INCOME POPULATIONS

The identification of minority and low-income populations is relevant for this study because Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that Federal agencies make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations, low-income populations, and Native American Tribes. Environmental justice refers to the right to a safe and healthy ethnicity, and socioeconomic status. Environmental justice applies to all environmental resources. This information is to be regarded as baseline identification of those minority and/or low-income populations that could potentially be adversely affected by resources management decisions made by the BLM.

For purposes of this analysis, minority populations and low-income populations are defined as follows:

- Minority populations are persons of Hispanic or Latino origin of any race; Blacks; American Indian/Alaska Natives; and Asians or Pacific Islanders (without double-counting persons of Hispanic/Latino origin who also are contained in the latter groups).
- Low-income populations are persons living below the poverty level. The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. A summary of the 48 thresholds provides a general sense of the "poverty line" or "poverty level," but is not used to compute poverty data. Based on this, the poverty level for a family of four in 1999 having two children under the age of 18 was \$16,895 (U.S. Census Bureau 2002e).

### 2.5.1 Minority Populations

In 2000, Socorro and Catron Counties had a combined population of 21,621 persons. Of these, 7,154 (33 percent) were reported to be minority (non-White by race). This number is lower than that of the State overall, wherein 55.3 percent were reported in this category. Those of Hispanic or Latino ethnicity were most predominant, accounting for 9,450 persons of all ages or 43.7 percent of the population (of all races), and 4,951 persons of all ages (22.9 percent) when non-Whites of Hispanic or Latino origin are not included.

For this analysis, census tract areas are identified as containing disproportionately high percentages of minority populations if either of two criteria are met: (1) the percentage of persons in minority populations in the census tract exceeds the average for the comparison population (New Mexico), which is 55.3 percent; or (2) the minority population exceeds 50.0 percent, indicating that in that census tract, minorities constitute a majority of the persons who could be potentially affected by the project. As shown in Table 17, five of the six census tracts located in Socorro County meet these parameters. No census tracts in Catron County fall within these parameters.

### 2.5.2 Low-Income Populations

As previously shown in Table 5, the poverty rates for Socorro and Catron Counties are higher than those experienced Statewide. The poverty rate among individuals was used for the analysis of disproportionately high low-income populations. This measure of poverty in the comparison population, New Mexico, is 18.4 percent. This statistic was compared against the poverty rate among

individuals as reported in the nine census tracts in Table 17 including Census Tract 9415, although it is noted that this census tract extends into and is composed primarily of Cibola County population. The census tract that constitutes almost all of Catron County (9762) showed an average poverty rate of 24.4 percent, slightly lower than the Countywide rate of 24.5 percent. Poverty rates in Socorro County ranged from 22.7 percent to 70.1 percent, all higher than the 18.4 percent average for all of New Mexico. The census tract in Socorro County showing the highest poverty rate is located in the northwest portion of the State, and includes the Alamo Navajo Reservation (9461).

**TABLE 17  
MINORITY AND LOW INCOME POPULATIONS**

<b>New Mexico (Comparison Population)</b>	<b>Minority Population = 55.3%</b>		<b>Low-income Population = 18.4 %</b>			
<b>Census Tract</b>	<b>Total Minority<sup>a</sup></b>	<b>Minority Population</b>		<b>Poverty Rate<sup>b</sup></b>	<b>Low-income Population</b>	
		<b>&gt;50 %</b>	<b>&gt;55.3 %</b>		<b>Poverty Rate &gt;50 %</b>	<b>Poverty Rate &gt;18.4 %</b>
9461, Socorro County	99.4%	yes	yes	70.1	yes	yes
9781, Socorro County	57.4%	yes	yes	22.7	no	yes
9782, Socorro County	49.8%	no	no	24.7	no	yes
9783.01, Socorro County	60.0%	yes	yes	31.0	no	yes
9783.02, Socorro County	54.3%	yes	no	32.6	no	yes
9783.03, Socorro County	68.1%	yes	yes	29.0	no	yes
9762, Catron County	23.8%	no	no	24.4	no	yes
9415, Catron, Socorro, and Cibola Counties <sup>c</sup>	99.5%	yes	yes	29.8	no	yes

SOURCES: U.S. Census Bureau 2002c, 2002f, 2002g, and 2002h.

NOTES: <sup>a</sup> The total minority population includes individuals of Hispanic/Latino origin, but those that are also Black/African Americans, American Indian/Alaska Natives, Asians, and Native Hawaiian/Other Pacific Islanders are not included in the total in order to avoid double counting.

<sup>b</sup> Poverty rate among individuals, based on poverty status in 1999.

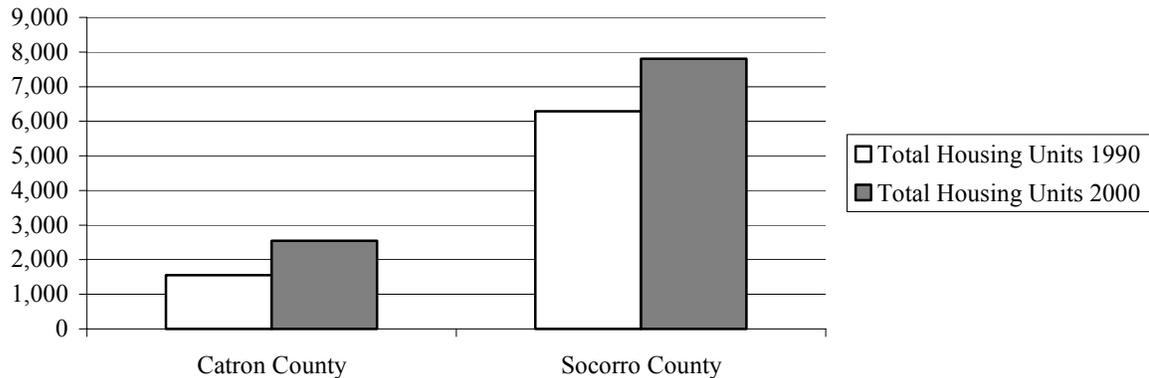
<sup>c</sup> The majority of the census tract is located north of Socorro and Catron Counties, in Cibola County; however, a small portion occurs in both Socorro and Catron Counties.

## 2.6 HOUSING

As shown in Table 18, both Socorro and Catron Counties have experienced an increase in housing units since 1990 in excess of the State and national averages. Catron County has experienced the fastest growth, with a 64.2 percent increase in housing units over the decade. Socorro County's increase in housing units from the 1990 to 2000 census (24.2 percent) is similar but slightly more than that of the State, and exceeds the average increase of the United States by more than 10 percent. Home ownership rates in Catron County exceed those of the State and nation, but Socorro County's home ownership rates are relatively similar. Renter-occupied housing units in both Counties, however, are far lower than either the State or national averages. Catron County has a notably high percentage of vacant housing units, which can be attributed to the comparatively high number of housing units that are for seasonal, recreational, or occasional use.

**TABLE 18  
HOUSING CHARACTERISTICS**

<b>Housing Characteristics</b>	<b>Catron County</b>	<b>Socorro County</b>	<b>New Mexico</b>	<b>United States</b>
Total Housing Units 1990	1,552	6,289	632,058	102,263,678
Total Housing Units 2000	2,548	7,808	780,579	115,904,641
Percent Change 1990 to 2000	64.2%	24.2%	23.5%	13.3%



	<b>Catron County</b>		<b>Socorro County</b>		<b>New Mexico</b>		<b>United States</b>	
	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>	<b>No.</b>	<b>Percent</b>
Occupied housing units	1,584	62.2	6,675	85.5	677,971	86.9	105,480,101	91.0
Owner-occupied housing units	1,276	80.6	4,746	71.1	474,445	70.0	69,815,753	66.2
Renter-occupied housing units	308	19.4	1,929	28.9	203,526	30.0	35,664,348	33.8
Vacant housing units	964	37.8	1,133	14.5	102,608	13.1	10,424,540	9.0
For seasonal, recreational, or occasional use	638	25.0	241	3.0	31,990	4.1	3,578,718	3.1
Homeowner vacancy rate	4.2%		2.5%		2.2%		1.7%	
Rental vacancy rate	5.2%		11.8%		11.6%		6.8%	
Average household size of owner-occupied units	2.21		2.72		2.72		2.69%	
Average household size of renter-occupied units	2.32		2.38		2.41		2.40%	

SOURCES: U.S. Census Bureau 1990b, 2002i.

## **2.7 PUBLIC FINANCE**

### **2.7.1 Sources of Revenue**

The principal sources of revenue for local governments include County-enacted taxes and fees including Gross Receipts Tax (GRT), State-shared taxes including property taxes, and Federally shared taxes including payment-in-lieu of taxes (PILT). There are various other sources of intergovernmental revenue available to the Counties from State and Federal grants and loans (New Mexico Association of Counties 2002).

### 2.7.1.1 Gross Receipts Tax

New Mexico’s GRT is similar to the sales taxes imposed in most other states. It is a general excise tax imposed on the value of the item, which is a good or service, and is levied against the receipts of the vendor; it is levied on sale or leasing of property and performance of service. This tax is imposed on persons engaged in business in New Mexico, but in almost every case the person engaged in business passes the tax to the consumer. A 5 percent gross receipts tax is State-imposed with a local limited add-on option available to all municipalities and counties. The tax rate applied to a transaction is determined by the location of the business where the transaction occurred. There are certain deductions and exemptions from the GRT (New Mexico Taxation and Revenue Department 2002a).

The total GRT, which varies throughout the State from 5.00 percent to 7.1875 percent, is paid to the State. The State retains its portion and distributes the Counties’ and municipalities’ portions to them. The Counties’ portion of GRT is determined by the county commissions, which can impose up to 1.9375 percent. Municipal councils determine the municipalities’ portion of GRT, which can be as high as 2.8125 percent. Changes may occur and go into effect in January and July of every year (New Mexico Taxation and Revenue Department 2002a).

GRT rates for Socorro and Catron Counties are listed in Table 19. Catron County only has a County GRT. In addition, Reserve has the following municipal local option taxes: municipal GRT, municipal infrastructure GRT, and municipal environmental tax. Socorro County local option taxes include County GRT, health (Medicaid), environmental, and fire protection tax. Municipal local option taxes in Magdalena are municipal GRT, environmental, plus the County GRT and health (Medicaid) taxes. Socorro has the same taxes as Magdalena, but also has a municipal infrastructure GRT. Socorro Industrial Park has no municipal taxes, but has the following County taxes: County GRT, health (Medicaid), environmental, and fire protection.

**TABLE 19  
GROSS RECEIPTS TAX RATES<sup>a</sup>**

<b>Geographic Area</b>	<b>City Imposed Rates</b>	<b>County Imposed Rates</b>	<b>Total Rates</b>
Socorro County (remainder)	–	0.5625%	5.5625%
Magdalena	1.3125%	0.1875%	6.0000%
Socorro	1.4375%	0.1875%	6.1250%
Socorro Industrial Park	–	0.5625%	5.5625%
Catron County (remainder)	–	0.1250%	5.1250%
Reserve	1.4375%	0.1250%	6.0625%

SOURCE: New Mexico Taxation and Revenue Department 2002b.

NOTE: <sup>a</sup> As of July 1, 2002.

### 2.7.1.2 Property Taxes

Property in New Mexico is assessed and taxed at the local level at 33.3 percent of market value. Non-residential property is valued at one-third of original cost less straight-line depreciation. Rates vary substantially and depend on property type and location. Each county typically contains several different rate jurisdictions and rate totals. Table 20 displays average rates, which are weighted in proportion to net taxable value in each jurisdiction. The rates are simply ratios of total obligations in each county to net taxable value in each county, with the result multiplied by 1,000 to convert to mills (dollars per \$1,000 net taxable value). In these terms, Socorro County Ranks second in the State and

Catron County ranks thirty-third in the State for both residential and nonresidential property taxes (New Mexico Taxation and Revenue Department 2002a, 2002c).

**TABLE 20**  
**WEIGHTED AVERAGE PROPERTY TAX RATES BY COUNTY, 2001 TAX YEAR**  
**(in Mills or dollars per \$1,000 Net Taxable Value)**

	<b>Nonresidential</b>	<b>Residential</b>	<b>Total</b>
Socorro County	33.086	33.565	33.326
Catron County	13.905	14.214	14.065
New Mexico	27.076	29.765	27.080

SOURCE: New Mexico Taxation and Revenue Department 2002c.

As shown in Table 21, the median aggregate real estate taxes per household are lower in both Counties than in New Mexico as a whole. On average, property taxes for households in Catron County are -\$200 (a negative number indicates that some Census survey respondents applied a credit), while for Socorro County this average, at \$419, is more closely aligned with New Mexico (\$699). Aggregate real estate taxes for Socorro and Catron Counties combined represent 0.5 percent of all real estate taxes in New Mexico.

**TABLE 21**  
**AGGREGATE AND MEDIAN REAL ESTATE TAXES**  
**CENSUS 2000**

	<b>Aggregate</b>	<b>Median</b>
Socorro County	\$1,261,400	\$417
Catron County	\$92,200	-\$200
New Mexico	\$279,417,200	\$699

SOURCES: U.S. Census Bureau 2002j and 2002k.

### 2.7.1.3 Payment in Lieu of Taxes

The Payment in Lieu of Taxes Act of 1976, as amended (31 USC 6901-6907) defines lands that are eligible for PILT including lands administered by the BLM and Federal lands in the National Forest System and National Park System. PILT payments are determined on a formula basis, with the number of Federal acres constituting the principal determining variable. The logic behind PILT is that Federal lands within county boundaries are not part of the county's tax base. Therefore, the County should be compensated for lost revenue opportunities. PILT payments are computed based on the number of acres of Federal entitlement land, as defined in 31 USC 6902, within each county. The number of qualified acres is multiplied by a dollar amount per acre set by law. Payments are subject to limitations based on population. Congress sets annual PILT program funding limitations that also may affect the amount of the payments under the program. The payments provide additional support to county governments that have certain Federal land within their boundaries. Examples of how PILT payments have been used include the improvement of local school, water, and road systems. Payment eligibility is reserved for local governments that provide services such as those related to public safety, environment, housing, social services, and transportation, and that contain nontaxable Federal

lands. PILT payments are made for tax-exempt Federal land administered by the BLM, National Park Service, U.S. Fish and Wildlife Service (all agencies of the Interior Department), U.S. Forest Service, and for Federal water projects and some military installations.

PILT payments are computed and disbursed by the BLM on or before September 30 of each year. Total PILT payments for Socorro and Catron Counties and New Mexico from 1999 to 2002 are shown in Table 22. PILT payments in Socorro and Catron Counties have been increasing steadily in proportion to the State, which increased at a rate of approximately 60 percent from 1999 to 2002. The entitlement acreage by agency is shown for Socorro and Catron Counties in Table 23. The BLM accounts for 58.3 percent of all entitlement acreage in Socorro County and 21.8 percent of all entitlement acreage in Catron County as compared to the 56.5 percent the BLM share Statewide. The Forest Service is a greater source of PILT payments in Catron County than the BLM. These entitlement acreages have varied slightly over recent years, but the relative share of agency PILT payments has remained fairly constant.

### **2.7.2 Expenditures**

Expenditures in Socorro County, as represented by fund expenditures during Fiscal Year 2001-2002, are shown in Table 24. During this time period, total annual expenditures totaled \$8,434,861 with the following major generalized expenditure categories: general government (35.3 percent), housing programs (16.4 percent), roads (13.9 percent), loan/bond payments (11.2 percent), and health and welfare (7.0) percent. The combined fund balance stood at \$1,995,393 at the end of the fiscal year, 23.6 percent of operating expenditures. The City of Socorro's operating budget is reported at \$12,460,751 (Socorro Chamber of Commerce 2000).

The operating budget for Catron County, based on balance of limited funds as of July 1, 2002 is provided in Table 25. The major generalized fund categories consist of the following: general government (35.0 percent), fire (24.8 percent), roads (15.5 percent), and emergency medical services (10.2 percent). The combined fund balance stood at \$1,995,393 at the end of the fiscal year, 23.6 percent of operating expenditures.

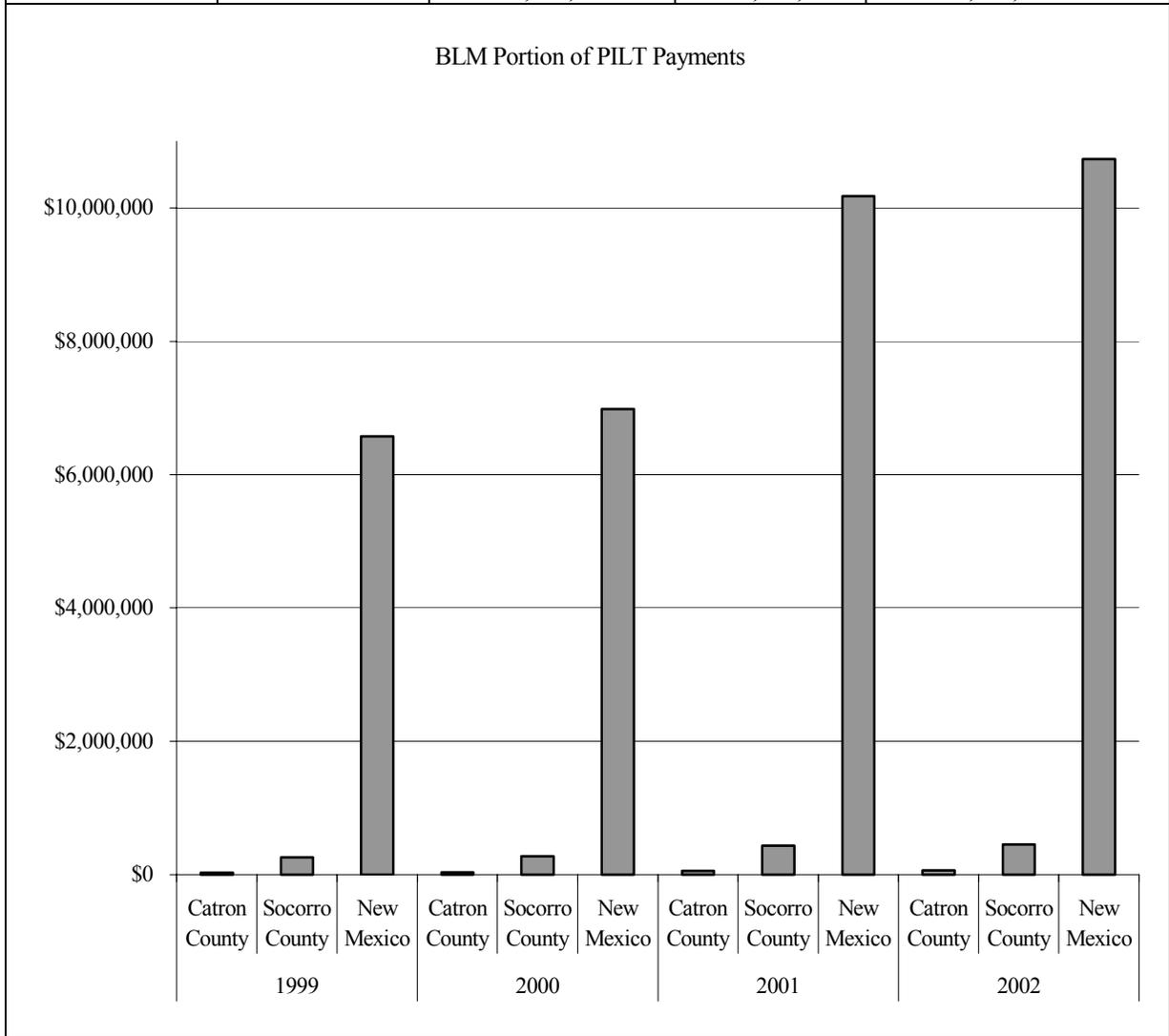
## **2.8 PUBLIC SERVICES**

### **2.8.1 Education**

The two public school districts in Socorro County are the Socorro Consolidated and Magdalena Municipal School Districts. The Bureau of Indian Affairs also operates the Alamo Navajo School, which serves Grades K to 12, with an estimated enrollment of approximately 325 students (Socorro County 1998). There are four elementary schools in the Socorro Consolidated School District school system (Parkview Elementary, Grades K to 3; Zimmerly Elementary, Grades 4 and 5; Cottonwood Valley Charter School, Grades K to 6; and San Antonio Elementary School, Grades K to 5); one middle school (Sarracino Middle School, Grades 6 to 8); and Socorro High School, Grades 9 to 12. Together, enrollment is approximately 2,000 students and there are 295 employees serving the direct and support needs of students and the schools (Socorro Consolidated Schools 2002). A total of 129 students in Socorro School District graduated from high school in the 2001-2002 school year (New Mexico Department of Education 2002a). Magdalena Municipal School Districts includes three schools: Magdalena Elementary (Grades K to 12), Magdalena Middle (Grades 6 to 8), and Magdalena High (Grades 9 to 12). Total 2001 to 2002 enrollment was 363 students and 28 graduated from high school in 2000-2001 (New Mexico Department of Education 2002a, 2002b, and 2002c).

**TABLE 22  
PILT PAYMENT AND ENTITLEMENT ACREAGE**

Year	Area	Payment	Total Acres	BLM Portion <sup>a</sup>
1999	Socorro County	\$444,997.00	1,600,797	\$259,529.81
	Catron County	\$139,439.00	2,749,820	\$30,369.37
	New Mexico	\$11,597,426.00	22,504,965	\$6,573,071.58
2000	Socorro County	\$472,450.00	1,600,785	\$275,539.39
	Catron County	\$149,812.00	2,749,802	\$32,627.81
	New Mexico	\$12,323,237.00	22,499,750	\$6,985,936.10
2001	Socorro County	\$748,662.00	1,600,785	\$436,630.06
	Catron County	\$267,638.00	2,749,802	\$58,289.33
	New Mexico	\$18,029,532.00	22,589,823	\$10,179,856.02
2002	Socorro County	\$781,870.00	1,600,779	\$455,996.20
	Catron County	\$280,882.00	2,749,802	\$61,173.76
	New Mexico	\$19,012,423.00	22,591,875	\$10,735,133.88



SOURCE: Bureau of Land Management 2002b.

NOTE: <sup>a</sup> BLM portion is based on entitlement acreage, refer to Table 24.

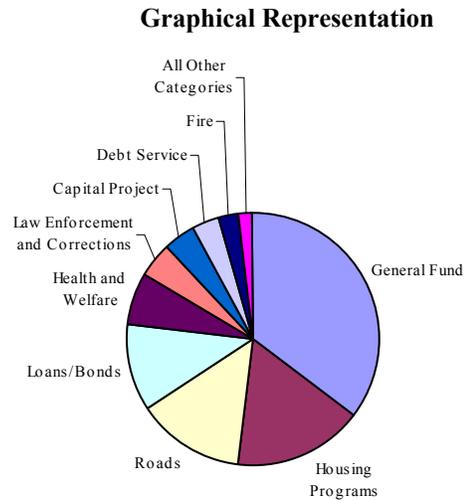
**TABLE 23**  
**BLM PORTION OF PILT BY SHARE OF ENTITLEMENT ACREAGE, 2002**

Area	BLM	Forest Service	Bureau of Reclamation	National Park Service	U.S. Fish and Wildlife Service	Total	BLM as percentage of Total
Socorro County	933,594	620,180	46,494	371	140	1,600,779	58.3%
Catron County	598,884	2,150,385	0	533	0	2,749,802	21.8%
New Mexico	12,756,228	9,170,172	252,178	376,490	15,767	22,591,875	56.5%

SOURCE: Bureau of Land Management 2002b.

**TABLE 24**  
**SOCORRO COUNTY BUDGETED FUND EXPENDITURES, FISCAL YEAR 2001 -2002**

Generalized Fund Categories	Expenditures	Percent of Total
General Fund	\$2,979,938	35.3
Housing Programs	\$1,382,636	16.4
Roads	\$1,172,414	13.9
Loans/Bonds	\$945,691	11.2
Health and Welfare	\$591,280	7.0
Law Enforcement and Corrections	\$380,231	4.5
Capital Project	\$339,557	4.0
Debt Service	\$279,981	3.3
Fire	\$225,775	2.7
Reevaluation Assessor	\$43,393	0.5
Emergency Medical Services	\$30,300	0.4
Farm and Range	\$24,500	0.3
Administrative Fees	\$23,270	0.3
Legislative Appropriations	\$15,895	0.2
Property Fund	\$15,000	0.2
Total Budgeted Fund Expenditures =	\$8,434,861	
Total Estimated End Fund Cash Balance =	\$1,891,506	



SOURCE: Socorro County Treasurer 2002.

**TABLE 25**  
**CATRON COUNTY BUDGETED FUNDS**  
**Balance as of July 1, 2002–Limited Funds**

Generalized Fund Categories	Fund Balance	Percent of Total	Graphical Representation
General Fund	\$593,084	35.0	
Fire	\$420,923	24.8	
Road	\$262,083	15.5	
Emergency Medical Services	\$173,636	10.2	
Law Enforcement and Corrections	\$72,654	4.3	
Recreation	\$56,439	3.3	
Landfill Fund	\$43,121	2.5	
Administrative Fees	\$39,749	2.3	
Farm and Range	\$32,905	1.9	
20 Communities	\$9,790	0.6	
Health and Welfare	\$8,245	0.5	
Legal Fund	\$2,273	0.1	
Airport	-\$3,611	-0.2	
Capital Project Fund	-\$16,284	-1.0	
Total Limited Budgeted Funds	\$1,695,014.85		
Total Other Funds <sup>1</sup>	\$30,579		

SOURCE: Catron County Treasurer’s Office 2002.

NOTES: <sup>1</sup> “Other funds” includes distribution to the State of New Mexico, school funds, and other trust account and revenues for further distribution.

The two school districts in Catron County are the Quemado Independent and Reserve Independent School Districts. The Quemado Independent School District includes Quemado Elementary and Datil Elementary (both Grades K to 5), with enrollment of 83 and 27 students, respectively, plus the Quemado High School and Junior High School, which also has 83 students (Sampson 2002). There were 17 graduates from Quemado High School in 2001 (New Mexico Department of Education 2002a). Reserve Independent Schools include Reserve Elementary and Glenwood Elementary, which are both K to 12, with enrollments of 81 and of 20, respectively. This District also includes Reserve High School, which includes Grades 7 to 12 and has an enrollment of 226, with 23 graduates in 2001 (Gutierrez 2002; New Mexico Department of Education 2002a).

New Mexico Tech is also located in Socorro. This State-supported, coeducational institute offers undergraduate and graduate degrees in science and engineering, and technically related fields. Fall 2002 enrollment was 1,724 students with 1,338 undergraduate students and 386 graduate students (New Mexico Tech 2002a).

### **2.8.2 Medical Services**

Within Socorro, medical services include Socorro General Hospital, Socorro Medical Associates Clinic, Bhasker Medical Clinic, and Socorro Good Samaritan Village nursing home. Socorro General Hospital currently operates a 38-bed acute care hospital that provides both inpatient and outpatient services, 24-hour emergency services, and home health. Socorro Medical Associates Clinic, located adjacent to the hospital, is a physician’s primary care practice facility staffed by medical staff that work at the hospital. Bhasker Medical Clinic provides outpatient services within Socorro (Socorro

County 1998). Socorro Good Samaritan Village is a nonprofit 62-bed skilled nursing home, licensed for both Medicare and Medicaid (Socorro County Chamber of Commerce 2002).

Licensed medical professionals by county of licensure for Socorro County are 11 medical doctors, 2 physicians' assistants, 82 nurses, 8 first responders, and 56 emergency medical technicians; for Catron County there are 3 medical doctors, 1 medical doctor resident, 1 physician's assistant, 17 nurses, 17 first responders, and 36 emergency medical technicians. Presbyterian Medical Services operates one health care clinic in Magdalena (Socorro County) and one health care clinic in Reserve (Catron County) (New Mexico Department of Health 2002).

Outpatient health care for the Alamo Chapter of the Navajo Nation is provided by the Alamo Chapter Clinic (Socorro County 1998). The clinic also supports behavioral health, community health representatives, diabetes, and dental programs (Apachito 2003).

### **2.8.3 Public Safety**

#### **2.8.3.1 Law Enforcement**

Catron County's Reserve Sheriff's Office in Reserve has approximately six officers and about six other personnel including jailers (Allred 2002). The Socorro County Sheriff's Department employs eight patrol officers. The County jail, located in the City of Socorro, employs six jailers. The City of Socorro, Village of Magdalena, Alamo Chapter of the Navajo Nation, and New Mexico Tech all have police departments (Socorro County 1998). Of these, the largest is the Socorro Police Department, which has 18 officers as well as supporting administrative staff (Juarez 2003). In addition, the New Mexico State Police District 11, the Socorro District (which encompasses Socorro, Sierra, and Catron Counties), has 26 officers (New Mexico State Police 2002; Trujillo 2002).

#### **2.8.3.2 Fire Protection**

In Socorro County, volunteer fire departments are located in five communities located in or along the Rio Grande Valley. Additionally, the City of Socorro and Village of Magdalena have fire departments (Socorro County 1998). Each community in Catron County has a volunteer fire department. The New Mexico Firefighters Training Academy is located in Socorro and provides training for 3,000 to 5,000 responders each year, mostly from State fire departments. The New Mexico State Fire Marshal's Office performs various functions including fire and life safety code enforcement, fire and arson investigation, training (met by the New Mexico Firefighters Training Academy), and distribution of the State Fire Fund (New Mexico State Fire Marshal's Office 2003). Wildland fire protection is a coordinated effort local, State, and Federal agencies in accordance with the National Fire Plan. Disaster preparedness is coordinated with various local, State, and Federal agencies.

#### **2.8.3.3 Search and Rescue**

Socorro Search and Rescue, a volunteer organization whose members consist primarily of New Mexico Tech students, provides primary Search and Rescue capabilities to Socorro and Catron Counties, as well as backup support for the entire State. The team maintains a cache of more specialized rescue and first aid equipment including mountain rescue hardware, stokes litters, first aid supplies, downed aircraft receivers, and additional radio equipment (New Mexico Tech 2002b).

## 3.0 SOCIAL AND ECONOMIC CONDITIONS RELATED TO THE BLM'S DECISION AREA

---

### 3.1 INTRODUCTION

While there are no 1989 RMP decisions that pertain directly to social and economic conditions, the BLM is required by statute and executive order to consider social science information when preparing a land use plan. As specified in H-1601-1, *Land Use Planning Handbook Appendix D, Social Science Considerations in Land Use Planning Decisions*, the BLM also is required to manage the public lands on the basis of multiple use and sustained yield and to meet the needs of present and future generations. These needs include environmental protection in relation to human occupancy and other uses that may conflict or create conflicting demands. The information contained in Section 2.0 of this report is intended to provide information on the social and economic climate of the Planning Area, particularly as it relates to resource issues being addressed in the planning effort. This type of information is important for understanding the social context within which land use decisions will be made and ascertaining how these decisions will affect communities and individuals in and near the Planning Area, as well as concerned groups and individuals at the regional and national level. Social science information and analysis may be useful at various stages throughout the planning process including scoping and issue identification; assessment of past, current, and future conditions; and identification of impacts and mitigation. The impact analysis will assess the social and economic consequences of implementing the various alternatives identified in the planning process (U.S. DOI, BLM 2000b).

The BLM management decisions, which direct the management of public land, have the potential to affect social and economic conditions of communities and individuals, negatively or positively, in the Planning Area. As specified in BLM Manual 1601, *Land Use Planning* (U.S. DOI, BLM 2000c), BLM's planning decisions are to be developed in concert with sustainable development concepts, which include a vision of economic prosperity, a healthy environment, and a just and equitable society. Implementation of this policy in the Planning Area is illustrated by the following examples:

- Grazing permits granted by the BLM allow operators to graze cattle, which yields revenue. Further, how the BLM manages rangeland (e.g., what is allowed versus constraints and restrictions) affects the benefits.
- Mineral leases granted by the BLM allow development of Federal mineral estate, which serves a need of the American public (in the case of energy minerals) and benefits the economy. However, management restrictions are placed on the operator (e.g., to protect sensitive environmental resources) that may affect the extent to which the operator can achieve its fiscal goals and the revenue, royalties, jobs, and other income produced.
- Special Recreation Use permits allow for commercial opportunities (e.g., outfitters, guides).

As indicated by the legal mandates of FLPMA, NEPA, and Executive Order 12898, social science information is required to make informed, legal land use planning decisions. Additional statutory requirements further define the planning environment and prescribe the extent of the BLM's authority and policies that define resource management planning and use. As the human population continues to increase and social values continue to evolve, resource conflicts are expected to increase. More importantly, the American public is increasingly aware of the importance of public land to its well

being and is demanding a larger voice in the resource management decision making process. Given these realities, the planning process can represent a constant balancing act between competing interests. The intent of this section is to understand this framework so that the BLM's RMPR planning process and decisions consider and provide social and economic benefit to the extent practicable and allowable to affected communities and individuals (U.S. DOI, BLM 2000b).

## **3.2 THE BLM SOCIAL SCIENCE GUIDANCE**

### **3.2.1 The BLM Land Use Planning Handbook H-1601-1**

The BLM Land Use Planning Handbook provides supplemental guidance to the BLM for implementing the BLM land use planning requirements established by Sections 201 and 202 of FLPMA. Land use plans ensure that public land is managed with the intent of Congress as stated in FLPMA (i.e., under the principles of multiple use and sustained yield). As required by FLPMA (43 USC 1701 [a] [10] and [12], in particular), public land must be managed in a manner that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values that, where appropriate, will preserve and protect certain public land in their national condition, provide food and habitat for fish and wildlife and domestic animals, and provide for outdoor recreation and human occupancy and use by encouraging collaboration and public participation throughout the planning process. In addition, public land must be managed in a manner that recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from public land. Land use plans are one of the primary mechanisms for guiding the BLM activities to achieve the mission and goals outlined in the BLM Strategic Plan.

Appendix D of the BLM Land Use Planning Handbook addresses social science considerations in land use planning decisions and provides guidance on integrating social science information into the planning process. As required by FLPMA, NEPA, and Executive Order 12898, social science information is required to make informed, legal land use planning decisions. Social science information in land use planning can include economic, political, and social structure of communities, regions, and the nation as a whole; social values, beliefs, and attitudes; how people interact with the landscape; and sense-of-place issues. The social sciences integrate a wide variety of disciplines, generally including economics, sociology, demography, anthropology, archaeology, political science, geography, history, and landscape architecture. The social sciences can help define the relationships between resource issues and social science questions, concepts, and values. Social science information included in any given analysis depends on the specific issues being addressed.

### **3.2.2 BLM Instruction Memorandum No. 2002-167, Social and Economic Analysis for Land Use Planning**

This Instruction Memorandum (IM) provides guidance on integrating social science and economic information into land use planning. It supplements the guidance in the BLM Land Use Planning Handbook (H-1601-1). The policy/action with regard to the development of RMPs and EISs is provided including the following:

- The scope and depth of social science and economic information should be scaled to the resource issues addressed in the planning effort and should provide decision makers with an analysis of the consequences of implementing the various alternatives identified in the planning process.

- Social and economic analysis should be incorporated into the planning issues, affected environment, management alternatives, and environmental consequences of the RMP/EIS. Methodology should be included in an appendix or other appropriate location.
- A variety of standardized analytical methods, tools, guidelines, and procedures can be applied to *economic* issues in land use plans. However, with *social* analysis, methods are less standardized than for other resources. Impact analysis for both social and economic analysis should follow a *peer-reviewed* methodology. With any methodology that is chosen, *social impacts must be presented by specific groups and or communities (or types of groups and communities) because social effects may vary by affected group.*
- Development of the social and economic analysis should take place as part of a larger collaborative dialogue between the BLM and public and should parallel processes used to incorporate consideration of other resource issues through scoping and public participation.

### **3.2.3 BLM Instruction Memorandum No. 2002-164, Guidance to Address Environmental Justice in Land Use Plans and Related National Environmental Policy Act Documents**

This IM provides additional information concerning the BLM's implementation of Executive Order 12898 and replaces an earlier IM providing policy and guidance for addressing environmental justice in land use planning. The policy/action set forth in this IM is as follows:

- The BLM will determine if its proposed actions will adversely and disproportionately impact minority populations, low-income communities, and Tribes and consider aggregate, cumulative, and synergistic effects, including actions taken by other parties.
- The BLM will promote and provide opportunities for full involvement of minority populations, low-income communities, and Tribes in the BLM decisions that affect their lives, livelihoods, and health.
- The BLM will incorporate environmental justice considerations into land use planning alternatives to adequately respond to environmental justice issues and problems facing minority populations, low-income communities, and Tribes living near public lands, working with, and/or using public land resources.
- Where disproportionately high adverse impacts are anticipated, the BLM will work with local community groups/associations, governments, and Tribal leaders to determine if land disposition and/or acquisition policies affect real estate values and real income of minority and low-income communities, and Tribes.

The BLM will continue to make environmental justice a mandatory critical element for consideration in all land use planning and NEPA documents.

### **3.3 SOCORRO FIELD OFFICE BUDGET**

Planning for resource management must include budgetary considerations. Changes in management planning could have various impacts on the budget, which will be analyzed in the environmental consequences analysis in the RMPR/EIS.

There currently are 35 full-time employees in the BLM SFO and there are six unfilled positions (Lane 2002). Table 26 shows the total detailed Fiscal Year 2002 budget for the BLM SFO by subactivity and major category (labor and operational) and summarizes this information in the following two ways: (1) total budget spent for each subactivity and (2) relative distribution of labor and operational expenses (major category). In these major subactivities, the total revenue/planned budget was \$3,135,200. Other activities falling into other funding categorizations are not included (e.g., wildfire preparedness and fuels management). In the Fiscal Year 2002 budget for SFO, there were \$9,689 reported in prior year adjustments, making the total available budget for these major subactivities \$3,144,889, of which \$3,015,207, or 96 percent, was spent during the fiscal year, leaving \$129,682. In total, expenditures in these subactivities were 51 percent labor and 49 percent operational, matching the percent in each major category allocated. The greatest expenditures were in the planning subactivity (\$592,646), which was an add-on rather than a regularly budgeted activity, while for some subactivities there were little or no expenditures that year (those without expenditures are not shown in Table 26).

Some components of the budget vary widely on an annual basis, while others such as administrative support and annual maintenance remain fairly consistent. For example, the planning budget was significantly higher in Fiscal Year 2002 than it was in prior years due to the funding of RMPR/EIS efforts (Lane 2002). Total expenditure for Fiscal Years 2000 to 2002 also are shown in the second graph in Table 26. During Fiscal Year 2000, labor was 60 percent of the budget and operations 40 percent of both the budgeted and spent funds for these subactivities. During Fiscal Year 2001, the planned allocation among subcategories was for labor to account for 67 percent and operations to account for 23 percent of the budget; actual expenditures closely matched these figures (68 percent operational and 22 percent labor) (BLM, Management Information System 2000, 2001, and 2002).

### **3.4 LIVESTOCK GRAZING ALLOTMENTS**

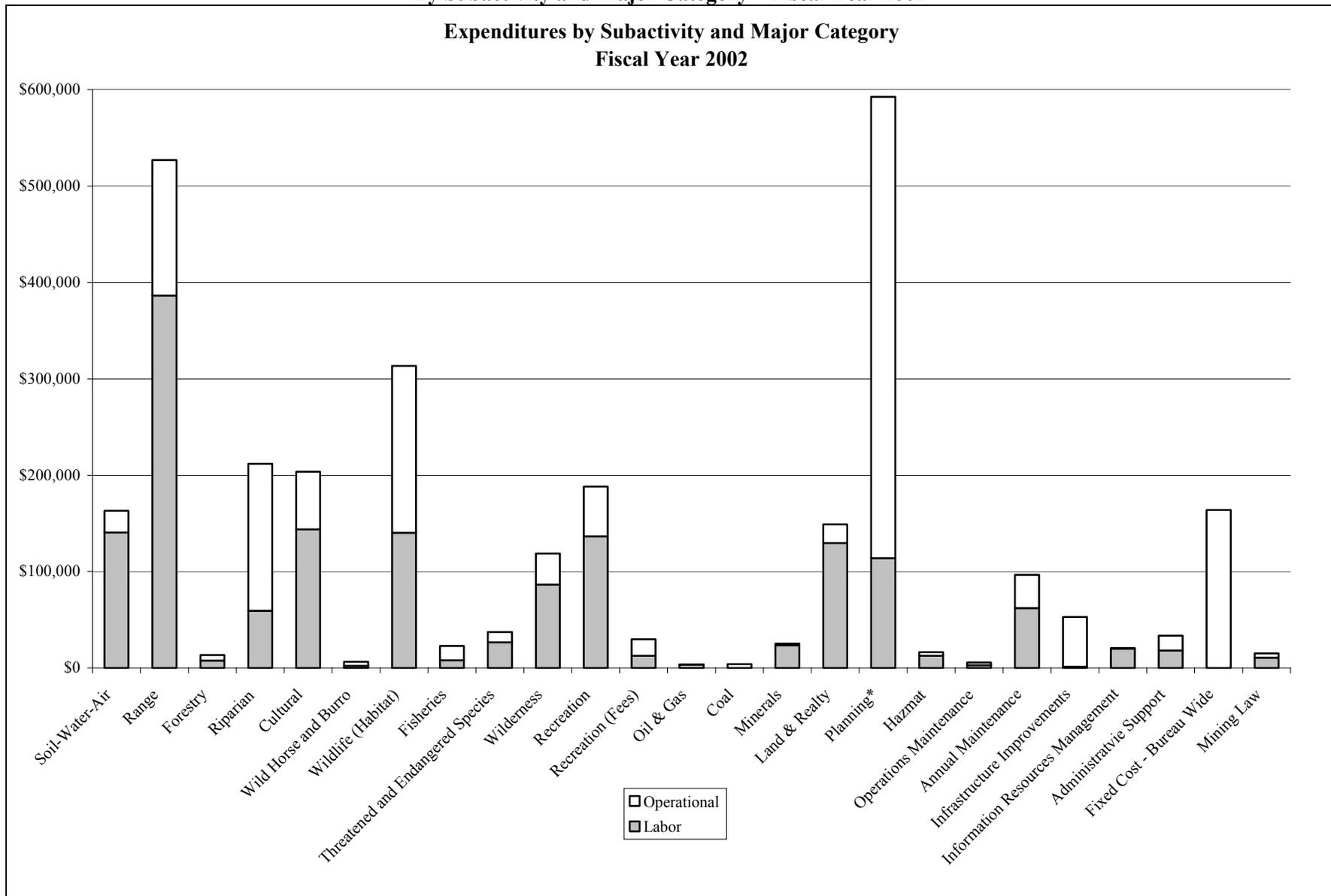
Livestock grazing is a widespread use of public, State, and private land throughout the region. The BLM administers livestock grazing on Federal land under the authority of Sections 3 and 15 of the Taylor Grazing Act (TGA) of 1934, as amended, (43 USC 315). TGA provides that the Secretary of the Interior is authorized to establish grazing districts from any part of the public domain of the United States (exclusive of Alaska) which, in his opinion, are chiefly valuable for grazing and raising forage crops, to regulate and administer grazing use of the public lands, and to improve the public rangelands. TGA was enacted to prevent overgrazing and soil deterioration and to provide for their orderly use, improvement and development; stabilize the livestock industry dependent upon the public grazing; and for other purposes. TGA states that the privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuances of a permit pursuant to the provisions of this Act shall not create right, title, interest, or estate in or to the lands.

Livestock grazing is authorized through grazing permits and leases, which typically are issued for a 10-year term. Livestock use on each allotment varies each year depending on current range conditions and livestock management needs. Livestock use can be measured by animal unit months (AUMs); that is, the amount of forage needed to sustain one animal unit (one cow and calf, one horse, or five sheep or goats) for one month. The types of livestock authorized to graze on the public lands include cattle, horses, bison, sheep, and goats.

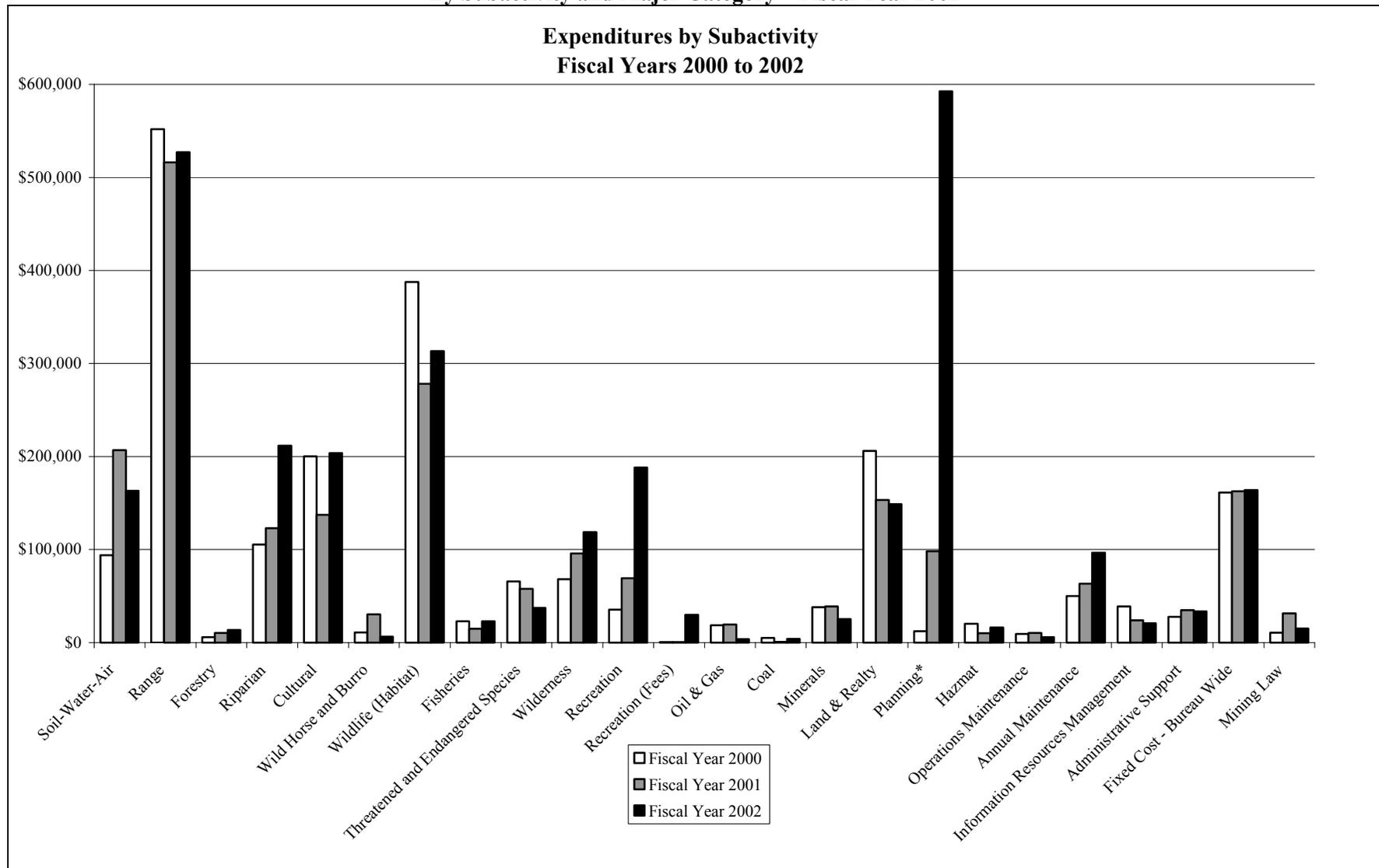
**TABLE 26**  
**SOCORRO FIELD OFFICE BUDGET**  
**By Subactivity and Major Category – Fiscal Year 2002**

<b>Subactivity Name</b>	<b>Revenue/ Planned Dollars</b>	<b>Prior Year Adjustments</b>	<b>Total Available</b>	<b>Spent</b>	<b>Balance</b>	<b>Percent Spent</b>
Soil-Water-Air	\$163,000	\$793	\$163,793	\$163,237	\$556	100
Range	\$527,500	\$977	\$528,477	\$527,060	\$1,418	100
Forestry	\$12,000	-\$139	\$11,861	\$13,445	-\$1,584	113
Riparian	\$209,100	\$2,716	\$211,816	\$211,747	\$69	100
Cultural	\$194,600	\$8,675	\$203,275	\$203,574	-\$299	100
Wild Horse and Burro	\$6,000	\$368	\$6,368	\$6,361	\$7	100
Wildlife (Habitat)	\$312,000	\$1,925	\$313,925	\$313,336	\$588	100
Fisheries	\$23,000	\$0	\$23,000	\$22,868	\$132	99
Threatened and Endangered Species	\$39,000	-\$1,214	\$37,786	\$37,291	\$496	99
Wilderness	\$118,000	\$349	\$118,349	\$118,783	-\$434	100
Recreation	\$190,000	-\$1,460	\$188,540	\$188,282	\$258	100
Recreation (Fees)	\$30,000	\$0	\$30,000	\$29,791	\$209	99
Oil and Gas	\$4,000	\$239	\$4,239	\$3,802	\$437	90
Coal	\$0	\$0	\$0	\$4,000	-\$4,000	
Minerals	\$23,500	\$355	\$23,855	\$25,237	-\$1,382	106
Land and Realty	\$151,500	-\$2,659	\$148,841	\$148,907	-\$67	100
Planning*	\$594,000	-\$944	\$593,056	\$592,646	\$410	100
Hazmat	\$17,000	\$0	\$17,000	\$16,316	\$684	96
Operations Maintenance	\$6,000	\$0	\$6,000	\$5,809	\$191	97
Annual Maintenance	\$97,000	-\$326	\$96,674	\$96,520	\$154	100
Infrastructure Improvements	\$183,000	\$0	\$183,000	\$52,960	\$130,040	29
Information Resources Management	\$21,000	\$3	\$21,003	\$20,723	\$280	99
Admin Support	\$35,000	-\$56	\$34,944	\$33,445	\$1,499	96
Fixed Cost - Bureau Wide	\$164,000	\$8	\$164,008	\$163,995	\$13	100
Mining Law	\$15,000	\$78	\$15,078	\$15,073	\$5	100
<b>Reporting Office Total</b>	<b>\$3,135,200</b>	<b>\$9,689</b>	<b>\$3,114,889</b>	<b>\$3,015,207</b>	<b>\$129,682</b>	<b>96</b>

**TABLE 26 (continued)**  
**SOCORRO FIELD OFFICE BUDGET**  
**By Subactivity and Major Category – Fiscal Year 2002**



**TABLE 26 (continued)**  
**SOCORRO FIELD OFFICE BUDGET**  
**By Subactivity and Major Category – Fiscal Year 2002**



SOURCES: Bureau of Land Management 2000, 2001, 2002.

\*NOTE: The planning subactivity was an add-on in 2002 rather than a regularly budgeted activity.

The grazing permit specifies all authorized use as specified by these terms:

- Active use: current authorized use; may constitute a portion or all of permitted use.
- Nonuse: when a portion of the permitted AUMs are applied for and approved, the remaining AUMs are placed in nonuse.
- Suspended use: held in suspense by BLM decision and cannot be activated by the permittee/lessee; often the result of BLM's monitoring program indicating that the grazing capacity of an allotment is not adequate to support full numbers; may not be removed until the conditions of the decision have been met.

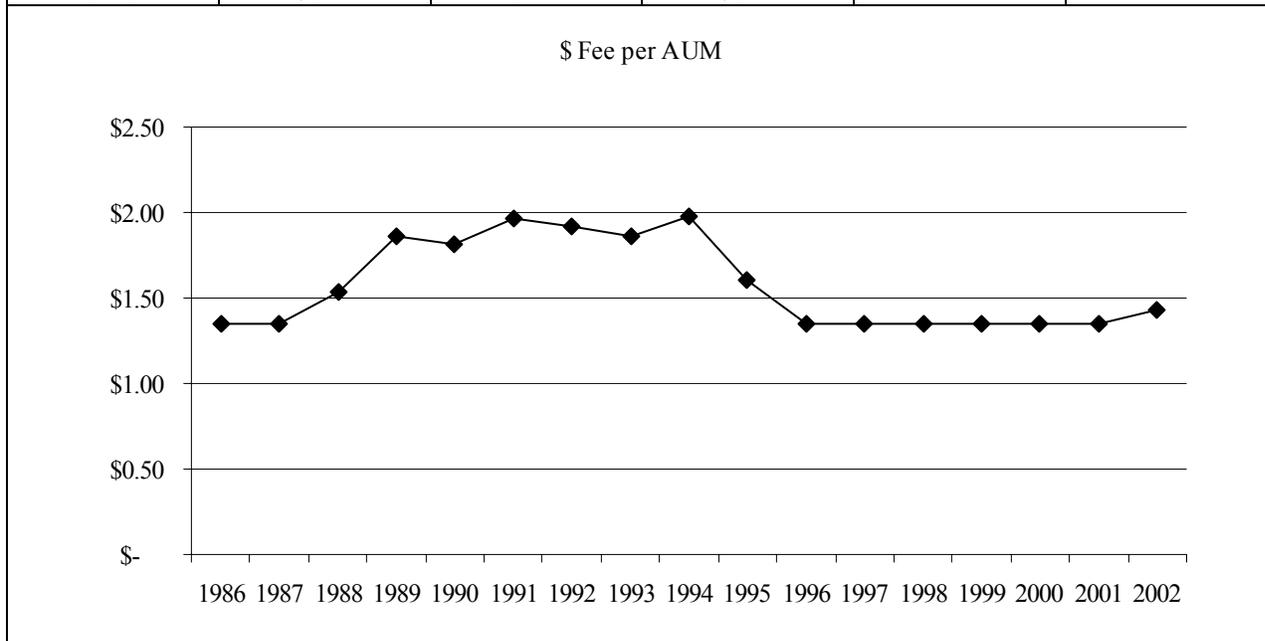
A permittee makes application to the BLM on a yearly basis for all or part of the permitted AUMs. For the active use, the permit/lease identifies the number and types of livestock and periods of use. In addition, the permittee/lessee is provided the opportunity to apply for a portion of the active use to be in nonuse. This may occur due to the permittee/lessee financial situation, drought, or animal husbandry practices. When the BLM approves the nonuse applied for by the livestock operator, the operator does not have to pay for the identified AUMs (Mendenhall 2003; Matthews 2003a; U.S. DOI, BLM 2000a).

The fee for grazing private livestock on the BLM grazing allotments in the Decision Area for the 2002 grazing year is \$1.43 per AUM. The formula used for calculating the fee was established by the Public Rangelands Improvement Act (PRIA) and continues under Executive Order 12548, Grazing Fees, issued in 1986. The \$1.43 per AUM grazing fee applies to lands in the West administered by the BLM and to national forests and national grasslands administered by the Forest Service. The annually adjusted grazing fee, effective March 1, 2002 through February 28, 2003, is computed by using a 1966 base value of \$1.23 per AUM for livestock grazing on public lands in western states. The figure is then adjusted according to three factors: current private grazing land lease rates, beef cattle prices, and the cost of livestock production. Based on the formula, the 2002 fee is an increase of 8 cents from the 2001 level (U.S. DOI, BLM 2000a). As shown in Table 27, the fee of \$1.35 per AUM had been unchanged since 1996, although it had been higher and fluctuated in earlier years, with a high of \$1.98 per AUM in 1994. The grazing fees charged for livestock grazing allotments on State Trust Lands are consistently higher than those charged for grazing on Federal rangelands. The New Mexico State fee is derived from a formula based on land carrying capacity and livestock market factors. Nonuse is allowed, but the same fee is paid based on carrying capacity. The fee is adjusted annually, but may not rise or fall by more than a third in any year (Cody and Baldwin 1996).

Based on the GIS database for the BLM grazing allotments in the Decision Area, there are 271 allotments ranging in size from 17 acres to 167,009 acres. There are approximately 260 authorized operators (Mendenhall 2002). Livestock grazing on 204 of these allotments is authorized by permits issued under Section 3 of TGA, and in the other 56 grazing allotments grazing is authorized by leases under Section 15 of TGA (U.S. DOI, BLM 2000a). The allotments vary in size and capacity and consist of intermingled private, State, and public lands. Some of the grazing allotments are overlapping. The majority of the operations are commercial cow/calf enterprises, using a variety of different breeds.

**TABLE 27  
FEDERAL GRAZING FEES PER AUM  
1986-2002**

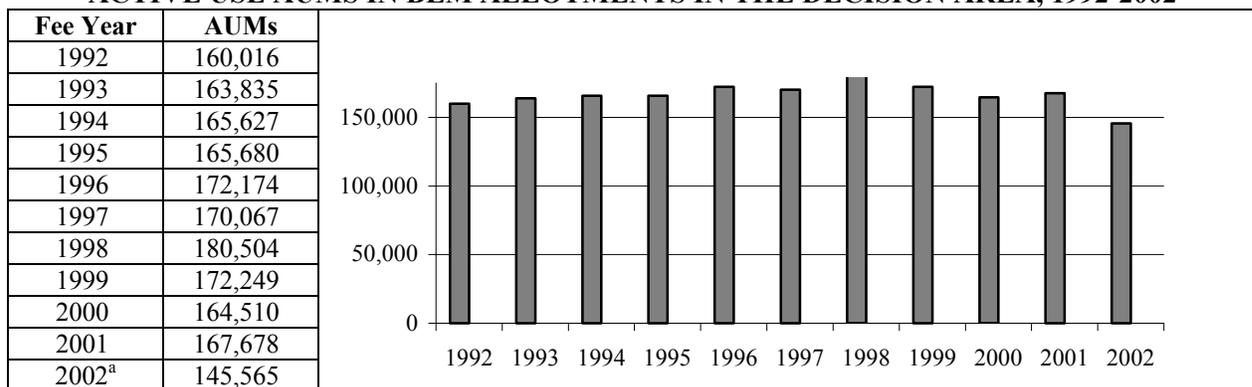
1986	\$1.35	1992	\$1.92	1998	\$1.35
1987	\$1.35	1993	\$1.86	1999	\$1.35
1988	\$1.54	1994	\$1.98	2000	\$1.35
1989	\$1.86	1995	\$1.61	2001	\$1.35
1990	\$1.81	1996	\$1.35	2002	\$1.43
1991	\$1.97	1997	\$1.35		



SOURCES: Bureau of Land Management 2002c; Cody 1996; Matthews 2002

The total grazing preference on the approximately 1.5 million acres of public land contained within 271 BLM grazing allotments within lands managed by the SFO is 238,472 Federal AUMs. The most recent BLM records (2001) show that there were 167,678 AUMs of active use or available for use and 70,994, or approximately 42 percent, were in nonuse. As stated previously, possible reasons for the nonuse can include finances of the permittee/lessee, drought, and animal husbandry practices (Mendenhall 2003). Table 28 shows the total active use AUMs on the 271 grazing allotments from 1992 to 2002 (with partial data for 2002). During this time period (excluding 2002 data), active use AUMs remained relatively constant with an average of 168,234 AUMs, a low of 160,016 in 1992, and a high of 180,504 in 1998.

**TABLE 28**  
**ACTIVE USE AUMS IN BLM ALLOTMENTS IN THE DECISION AREA, 1992-2002**



SOURCE: Mendenhall 2002.

NOTE: <sup>a</sup> 2002 data are not yet complete.

Although TGA states that livestock grazing on Federal lands is a privilege and not a right nor an interest in property, privately owned ranches with access to Federal forage often sell for a higher price than they would without access to Federal rangelands. The result is that the value of the grazing use is capitalized into the net worth of the ranch base property and is considered as an asset by the rancher. For decades, ranches have been purchased and loans have been made against them with the expectation that permits will be renewed and apparently that grazing fees would remain relatively stable. Whether or not the expectations are justified, many ranches have depended upon permit or lease renewals and made financial decisions as if they were a right (Cody and Baldwin 1998).

It is difficult to estimate fair market value of the grazing permits or leases within the BLM Decision Area. This is because public and private land lease rates are not directly comparable. Private range leases are generally competitive, with relatively greater accessibility, and prices set by supply and demand. In contrast, access to the BLM allotments is limited to those who own nearby property (known as base property) and can show a need for additional Federal land for livestock grazing. Also, private leased lands often provide water, fencing, and other amenities. The grazing authorization on BLM allotments allows the permittee to graze livestock, but the permittee is responsible for maintenance of range improvements on the allotment. Many boundary fences and water developments were constructed by allottees in the Planning Area during the 1950s and 1960s (Cody and Baldwin 1998; Matthews 2002, 2003a, and 2003b).

### 3.5 MINERAL AND ENERGY RESOURCES

There are numerous mining laws that promulgate the BLM's responsibility for leaseable, saleable, and locatable minerals. Leaseable minerals include fluid minerals such as oil, gas, CO<sub>2</sub>, helium, coal bed methane, and geothermal resources; solid minerals such as coal; and renewable energy sources such as wind and solar energy for which public land may be leased to construct collection facilities. Locatable minerals include metallic minerals such as gold, silver, tin, and uranium; and nonmetallic minerals such as gemstones, kaolin, and perlite. Saleable minerals include construction materials such as sand, gravel, limestone, cinders, and building stone (U.S. DOI, BLM 2003). The BLM is responsible for leasing fluid mineral resources on all Federally owned lands, including those lands managed by other Federal agencies and for maintaining viable national policies and processes for solid minerals resources under Federal jurisdiction. Further detail on the mining laws will be provided in the MSA.

Socioeconomic impacts discussed here include the economic contribution of mineral and energy resource development (including direct and indirect employment, expenditures, and royalties) and the social issues surrounding such development.

All oil and gas and coal lessees must pay rental and royalties on their leases. Leases are for 10 years and expire after the 10-year period unless production has been established. All leases must pay a \$75 filing fee. Rental fees are paid annually for as long as the lessee holds a lease. There are notable differences between oil and gas and coal leases. Royalties for productive oil and gas operations are set at 12.5 percent of proceeds of sale product are paid to the Federal government and processed through the BLM Minerals and Management Services. The Mineral Leasing Reform Act of 1988 prescribes that all oil and gas leases must be bid competitively. Leases are auctioned starting at \$2 per acre. Leases are granted to the highest bidder. When leases are bid at \$2 per acre or more, they are referred to as bonus bid. If no one bids on a competitive lease, then the leases are made available on a noncompetitive basis for a two-year period. With such leases, the rental fee for the first year's rental is set at \$1.50 per acre. Applicable regulations are codified at Title 43, CFR Part 3103. Coal leases differ depending on where the lease is located. The most common types of solid mineral leases, regional leases and leases by application, also are auctioned off to the highest bidder. Royalties for productive coal operations are based on the value and weight of the material sold. Applicable regulations are codified at 43 CFR 3400. With saleable minerals there are no royalties per se, but Federal payments are required based on the value of sales by cubic yard. For locatable minerals, no royalties are required in accordance with the Mining Law of 1872 (Stephens 2003).

Most of the information in this section pertains to mineral and energy resource potential in the Planning Area, but generally is reflective of the opportunities for development within the Decision Area.

### **3.5.1 Leaseable Fluid Minerals**

Geologic conditions are suitable for the potential occurrence of leaseable fluid minerals, which include energy minerals, oil and gas and nonenergy minerals, CO<sub>2</sub>, and helium. Although moderate oil and gas potential is mapped in some areas, there has not been economic production of the resources. In Socorro County, leasing for oil and gas exploration currently is active in eastern and northern Socorro County (U.S. DOI, BLM 2003a). There has been significant interest in leasing State Trust Land in northwestern Catron County where there is a high potential for occurrence of CO<sub>2</sub> and helium resources in the Zuni Basin. Ridgeway Arizona Oil Corporation (Ridgeway) has been investigating the development of this CO<sub>2</sub> field in western Catron County. Five wells have tested producible quantities of CO<sub>2</sub> and helium (U.S. DOI, BLM 2003a). Currently, a total of three wells are on line and one well is in production. Gathering pipelines feed the material to a processing plant, operated by Reliant Processing, where the food-grade CO<sub>2</sub> is being liquefied and trucked to food and beverage industries. There currently are three employees at Ridgeway and an additional three to four Reliant Processing employees at the plant. Ridgeway's long-term plans for development include the development and maintenance of approximately 200 wells, a network of access roads and gathering pipelines, and additional processing facilities. Additional wells would be drilled to maintain deliverability throughout the life of the project, which was expected to be approximately 40 years (Ridgeway 1998). An EIS was begun in 1998 for this larger scale development, but Ridgeway postponed development and the EIS and currently is working on securing contracts for the product (White 2003).

Exploration for oil and gas is a high-risk venture requiring large, up front capital expenditures. The level of risk is weighed against the current market value of oil and gas. The oil and gas potential within the Planning Area presents a high level of risk under current market conditions. If market demands for

oil and/or gas change substantially, more exploratory drilling activity could be expected in the Planning Area and Decision Area (U.S. DOI, BLM 2003a).

### **3.5.2 Leaseable Solid Minerals**

Solid leaseable mineral resources within the Planning Area that are attracting commercial interest at this time consist of coal resources in the Salt Lake and Datil Mountain coal fields. Recent mining and test burning have proven the potential for occurrences of leaseable solid energy coal minerals in the Salt Lake coal field in northwestern Catron County. Existing leaseholds by Salt River Project (SRP) on State and Federal land will probably become an active mine in 2005 (U.S. DOI, BLM 2003). The SRP Fence Lake Mining Plan, approved by Department of the Interior on May 31, 2002, is estimated to bring more than 200 new jobs to western New Mexico including jobs tied to the construction of the mine and the 43-mile railroad line that will transport the coal to SRP's Coronado Generating Station near St. Johns, Arizona. Of those 200 jobs that will be created by the Fence Lake Mine, between 75 and 150 will remain for the duration of mining operations. Another 100 to 160 jobs will be tied directly to the construction of the mine and the railroad. In addition, New Mexico will receive approximately \$60 million in taxes paid and another \$60 million to \$70 million in royalties from the new mine that will go directly to the New Mexico Education Trust Fund. The plan is to mine approximately 80 million tons of coal over the next 50 years at Fence Lake Mine, which covers 18,000 acres in a permit area that covers both Catron and Cibola Counties (SRP 2002). The New Mexico State mining permit has been issued; however, the Federal mining permit has not been issued, pending the outcome of legal appeals by the Zuni Pueblo. Economic development of the Datil Mountains coal field and in three small fields in east-central Socorro County should follow the increasing demand for coal to fuel power plants in the Southwest (U.S. DOI, BLM 2003a).

There is a steady market for coal resources in the southwestern United States because several power companies operate coal-fired power plants in areas of New Mexico and Arizona. The quality of coal in the Planning Area is suitable for use in power plants, as shown by the tests of coal from the Fence Lake Mine. Mining costs are an uncertain variable. The continuing demand for coal may stimulate more leasing activity in coal fields in the Planning Area and Decision Area.

### **3.5.3 Leaseable Geothermal, Solar, and Wind Energy**

Geothermal, solar, and wind energy resource potential exists throughout much of the Planning Area; however, little exploration has occurred or been proposed. With conditions for low-temperature geothermal energy favorable, exploration and development would be expected to focus on local heating needs. Commercial development may be limited by the expense of drilling and completing wells. The development of both solar and wind energy is viable within the Planning Area, but requires high initial capital expenditures for equipment and collection systems. However, research and development for more efficient solar and wind energy systems is ongoing. As more efficiencies are developed, and with possible government subsidies or tax breaks for clean energy resources, the incentive for using solar and wild energy should increase (U.S. DOI, BLM 2003a).

### **3.5.4 Locatable Minerals**

There is high potential for the occurrence of metallic and nonmetallic minerals in the Planning Area. Past mining for metallic minerals primarily has produced gold, silver, copper, lead, zinc, and uranium and for nonmetallic minerals included gemstones, kaolin, zeolites, and perlite. With the exception of perlite, the metallic and nonmetallic locatable mineral resources in the Planning Area are not being mined actively. Economic factors contributing to the lack of mining activity probably include one or more of the following: the value of the deposit, current market demand, and expenses for development

(U.S. DOI, BLM 2003a). Perlite is actively being mined immediately west of Socorro. This relatively small Socorro deposit (mined by Dicaperl) has approximately 37 employees (United Mine Workers Journal 2001).

### **3.5.5 Saleable Minerals and Materials**

A wide variety of salable minerals and materials are available in the Planning Area including sand and gravel, piedmont alluvium, colluvium, and eolian sand in some existing pits, quarries, and prospects. There currently is no leasing activity for aggregate pits in the Planning Area; however, any pit can be re-opened for construction or local repairs at any time. The demand for salable minerals and materials is a function of construction activity and, because of the transportation costs for hauling sand and gravel aggregate, depends on where the construction activity is occurring (U.S. DOI, BLM 2003a).

BLM's policy is to make these materials on public lands available to the public and local governmental agencies whenever possible and wherever environmentally acceptable. BLM issue permits to dispose of (sell) mineral materials to the public at fair market value. BLM issues free-use permits to states, counties, or other government entities for public projects and, in limited amounts, to non-profit groups. Materials obtained free of charge cannot be bartered or sold. BLM shares a portion of the revenues from the sale of mineral materials is shared with the state where the minerals are produced. Regulations which guide BLM's mineral materials program are found in 43 CFR 3600 (U.S. DOI, BLM 2003b). Information on use of salable minerals for a specific parcel of land where mineral resources are administered by the BLM is maintained at the Socorro Field Office.

## **3.6 RIGHTS-OF-WAY, PERMITS, LEASES, AND EASEMENTS**

### **3.6.1 Rights-of-Way**

Title V of the FLPMA addresses the granting, issuing, or renewal of rights-of-way over, upon, under, or through public lands. There are various types of rights-of-way currently in place and possible under current management policy for the Planning Area, which are currently managed through designated right-of-way exclusion and avoidance areas per the 1989 RMP. Direct economic impacts from the right-of-way applications vary by type, applicant, and purpose. Typically, when rights-of-way are for commercial purposes, the applicant is required to pay a nonrefundable processing fee (for granting the right-of-way) and rental/monitoring fees (for the use and overseeing the use of the right-of-way) to the BLM in accordance with 43 CFR 2808.1. The applicant for a right-of-way or temporary use permit shall reimburse the United States in advance for the costs incurred in processing the application, including the preparation of NEPA documentation. Exceptions are made for Federal agencies and State and local governments and when the application is for purposes benefiting the general public. This exception does not apply if the principal source of revenue results from charges being levied on customers for services similar to those rendered by a profit-making corporation or business. The exceptions set forth in the regulations also apply to cost share roads and reciprocal right-of-way agreements.

The conditions for which the BLM State Director, after consultation with an applicant or holder, can reduce or waive reimbursable costs (e.g., when payment of the fee would result in undue financial hardship) are set forth in 43 CFR 2808.5. The annual rent for holder of a right-of-way grant or temporary use permit is based on the fair market rental value. Similar to the application fees, no rent is collected where the holder is a government entity, except parties who are using the space for commercial purposes and municipal utilities and cooperatives whose principal source of revenue is customer charges. Other rental exemptions include right-of-ways that are issued pursuant to a statute that does not require a rental payment and also facilities constructed on a site or linear right-of-way

which are financed in whole or in part by the Rural Electrification Act of 1936, as amended, or are extensions of such an Rural Electrification Act financed facility. There also are conditions when the authorized officer may reduce or waive the rental payment, which are outlined in 43 CFR 2803.1-2(2) (Bell 2002).

Except for those linear right-of-way grants or temporary use permits that the BLM Director determines to require an individual appraisal, linear right-of-way grant or temporary use permit applicants are required to submit annual rental payments in accordance with a fee schedule established in 43 CFR 2803.1-2(c)(1)(i). The per-acre rental fee by zone value is specified for two categories: (1) oil and gas and other energy related pipelines, roads, ditches, and canals and (2) electric transmission lines, telephone electric distribution, non energy-related pipelines, and other linear rights-of way.

Major utility providers with corridors through the Planning Area include Navopache (transmission line), Tucson Electric Power (transmission line), Chevron (pipeline), Eastern New Mexico Telephone, and New Mexico Electric. These corridors generally run east-to-west through the Planning Area. There also are small, rural phone companies and pipelines, storage, and well sites for local water users associations. There are various Federal, State, and local transportation corridors, but relatively few major roads. There are also various communications towers that serve purposes ranging from entertainment to emergency services. Additional analysis of the rights-of-way in the Planning Area will be provided in the MSA.

These transportation/utility corridors provide infrastructure to support numerous economic and social activities. While the value of rights-of-way are of benefit to many (e.g., providing utilities and transportation infrastructure to support residential and commercial uses). The 1989 RMP designated right-of-way exclusion areas that are closed to all forms of new right-of-way development. In these areas, rights-of-way only may be granted when mandated by law. The current exclusion areas encompass 22,690 acres, or approximately 1.5 percent of all public land in the Planning Area (these numbers are from the 1991 Right-of-way Avoidance Plan and have not been confirmed/updated with current GIS information). The 1991 Socorro Resource Area Right-of-Way Avoidance Area Plan further defines the protocol for management of the avoidance areas, which include all Special Management Areas except San Pedro, Sawtooth, and Horse Mountain and portions of the Ladron and Tinajas Special Management Areas and Class II Visual Resource Management Areas (U.S. DOI, BLM 1991).

### **3.6.2 Permits, Leases, and Easements**

Proposals for non-Federal use of the public lands (for other than casual purposes) are outlined in 43 CFR 2090. Any use not specifically authorized under other laws or regulations and not specifically forbidden by law may be authorized under these regulations including residential, agricultural, industrial, and commercial uses and uses that cannot be authorized under Title V of the FLPMA (43 USC 1761 et seq.) or the Mineral Leasing Act. Land use authorizations are categorized as leases, permits, and easements. Leases are used to authorize uses of public lands involving substantial construction, development, or land improvement and the investment of large amounts of capital which are to be amortized over time. A lease conveys a possessory interest and is revocable only in accordance with its terms and the provisions of the regulations. Leases are issued for a term that is consistent with the time required to amortize the capital investment. Permits are used to authorize uses of public lands for not to exceed the years that involve either little or no land improvement, construction, or investment which can be amortized within the term of the permit. A permit conveys no possessory interest. The permit is renewable at the discretion of the authorized officer and may be revoked in accordance with its terms and the provisions the regulations. Easements may be used to

assure that uses of public lands are compatible with non-Federal uses occurring on adjacent or nearby land. The term of the easement is determined by the BLM State Director.

These regulations allow for the collection of rental fees as determined by the BLM State Director. The rent is to be based either upon the fair market value of the rights authorized in the land use authorization or as determined by competitive bidding. Rental fees for leases and easements may be adjusted every 5 years or earlier, to reflect current fair market value. A nonrefundable processing fee of \$25 may also be assessed, except that any permit whose total rental is less than \$250 is exempt. The conditions for the applicant to reimburse the United States for costs are similar to those described for rights-of-way.

The major types of these issues by the Socorro Field Office are grazing permits (addressed in Section 3.4) and Special Recreation Permits (discussed in Section 3.7). There are also a few other permits, leases, and easements issued by the Socorro Field Office, most of which are permits issued at an appraised value that does not allow for the collection of processing fees (Bell 2003).

### **3.7 RECREATIONAL RESOURCES**

The social and economic values of the recreational resources on the BLM lands in the Decision Area include hunting, camping, picnicking, backpacking, horseback riding, climbing, caving, hang gliding, motorcycling, four-wheel driving, nature observing, rockhounding, and photography. Economic activity associated with recreational use is difficult to quantify based on available data, but includes the purchases of services and sundries in nearby communities, fees paid for hunting and other recreational permits and the outfitter industry. The socioeconomics of such recreation uses are temporally related to season, hunting seasons (particularly big game), and timing of recreational events.

By some estimates, tourism is the largest employer and second largest industry in New Mexico, contributing more than \$4 billion in direct economic impact. Key reasons cited for tourism are outdoor recreation opportunities and open space, which are prevalent assets in the Planning Area. Among those participants that are 16 years old and older, fishing, hunting, and other wildlife-related recreation (i.e., wildlife watching) combined generated in excess of \$1 billion in New Mexico in 2001. Of that total, trip-related expenditures were \$302 million and equipment purchases totaled \$583 million. The remaining \$138 million was spent on licenses, contributions, land ownership and leasing, and other items and services. There were 884 thousand total participants in wildlife-associated recreation, with 379 thousand sportspersons and 671 thousand wildlife watchers (U.S. DOI and others 2001).

Nationwide, hunters spend an average of approximately \$1,896 per hunter on an annual basis including travel-related costs; equipment; hunting leases and land ownership; and licenses, fees, and permits. The economic impact of these expenditures, which represent 5.5 percent of the average wage earner's annual income, is estimated to triple as secondary economic impacts are realized. Statewide, an estimated 130,133 hunters participated in 1,667,054 hunter days in 2001. The related retail sales, at \$891 million, translated into more than \$342 million in economic impact; an estimated 4,057 jobs and \$82 million in salaries and wages; and about \$22 million generated in sales, motor fuel, and state and federal income taxes (International Association of Fish and Wildlife Agencies 2002). Although nonresidents hunters comprise 22 percent of all hunters in New Mexico, they account for more than 70 percent of hunting license sales income (New Mexico State University 2003).

The cost of hunting permits in the Planning Area varies from \$5 to \$3,064 based on a number of factors including whether the permit is an over-the-counter permit or a draw permit/license; whether the hunter is a resident or non-resident of New Mexico; whether the hunt is a standard hunt, quality

hunt, and or high-demand hunt; number of applicants; and fee reductions for handicapped, juniors, and seniors (New Mexico Game and Fish Department 2002). During Fiscal Year 2002, the BLM collected \$27,971 in recreation fees (BLM, Management Information System 2002).

According to the New Mexico Game and Fish outfitter's database, active New Mexico outfitters total 246. Of these, the registration address of 30, or 12.2 percent, was within the socioeconomic study area (New Mexico Game and Fish 2003). By strictly applying this percentage to the total estimated economic impact of outfitting and guiding per the New Mexico State University 2003 study, the corresponding annual economic impact of these outfitters within the study area is \$27.2 million.

A total of 53, or 21.5 percent, of those in the New Mexico Game and Fish database of outfitters and guides, have a registration address outside of New Mexico, mostly in Arizona, Colorado, and Texas, but some individuals addresses were as far as New York and Michigan. Outfitters with registration addresses in the study area account for 15.5 percent of all outfitters with registration addresses in New Mexico (New Mexico Game and Fish 2003).

The New Mexico BLM issues Special Recreation Use Permits for outfitting/guiding purposes for those who are not currently registered in the New Mexico Game and Fish outfitter and guide program (Sykes 2003). Thus, to some degree the prevalence of outfitters operating on the BLM lands can be determined through the issuance of special use permits. Typically, about 15 to 20 active Special Recreation Use Permits are issued per year in the SFO. The use is primarily for elk hunting, but also includes deer, antelope, and other hunts. On the low end of the range, some outfitters take as few as one to five hunters, while on the high end of the range some as many as 20 to 30 hunters. Some hunters use the BLM permit for one day while others as many as five days, depending on the hunt and a variety of factors. Total visitor use associated with outfitted hunters can vary from as few as about 300 to 400 days to as many as 1,500 to 2,000 days each year. Many outfitters receive about \$1,500 per hunter for low-end hunts and up to \$4,000 per hunter for high-end hunts. Assuming 15 Special Recreation Permits with 10 hunters, this translates to a low-end annual income of \$225,000 and a high-end annual income of \$600,000. Most of this use occurs in Catron County but some occurs within Socorro County (Carson 2003).

As compared with the data compiled by the U.S. BEA for 2001, this impact is underrepresented in the NAICS sector for "forestry, fishing, related activities, and other." As noted in Section 2.5, this sector includes a subsector for "fishing, hunting, and trapping." This subsector applies to those activities that involve the harvesting of fish and other wild animals from their natural habitats and are dependent upon a continued supply of the natural resource. In 2001, there was \$70,000 in reported earnings in this subsector in Catron County (0.4 percent of all earnings), while there was less than \$50,000 in reported earnings in this subsector in Socorro County (U.S. BEA 2003b). (Note: The "arts, entertainment, and recreation" NAICS sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons [e.g., performing arts, spectator sports, museums, historical sites, zoos, parks, gambling, etc.] and is, thus, not applicable to current activities in the Decision Area).

The New Mexico Council of Outfitters and Guides sanctioned a study, completed in February 2003, which evaluated the total economic impact of the outfitter industry to New Mexico (New Mexico State University 2003). The outfitter industry evaluated in the study is comprised of businesses that provide varying levels of service from just providing a camp to full accommodations (including cooked meals, guides, and care of the game after harvest). A majority of the customers for this industry are nonresidents of New Mexico, who are unfamiliar with the area and therefore willing to pay for the local expertise of the outfitter. The study notes that the economic contribution of outfitting and guiding, in rural communities, generating a source of income in areas impacted by curtailed logging

and mining activities and limitations on livestock grazing. The researcher estimates that, annually, New Mexico's big game and outfitting industry:

- generates \$127.7 million in direct economic impact
- provides 4,680 in direct full- and part-time jobs, with a total employment compensation of \$29.2 million
- generates indirect and secondary impacts to reach a total estimated economic impact of \$223 million, with total employment of 6,082 and \$54.6 million in employment compensation

There has been substantial increase in the outfitting industry since a similar study was conducted in 1989. In 13 years between 1989 and 2002, the number of outfitters has more than doubled, increasing from 80 to 260. Similarly, the demand for the service has increased from 6,204 clients to 20,540 clients (New Mexico State University 2003).

As the socioeconomic impact hunting and outfitter activities are more pronounced by hunting season, various annual events have economic impacts that can result in a short-term influx of expenditures in the area. This can sometimes dramatically influence businesses and some businesses may make certain business decisions (e.g., inventory, staffing, etc.) based on annual events, such as vendors of recreational supplies. Recreational events that draw users to the Socorro Decision Area are as follows (from Carson 2003):

- **Enchanted Sky Star Party:** With this annual event, approximately 200 or more people use BLM lands to view stars, eat dinner, and listen to presentations. Out-of-town participants visit to the area are estimated from one to four days.
- **Fat Tire Fiesta:** This annual weekend mountain bike event attracts 100 to 200 people for a ride that occurs in and around Socorro. Typical out-of-towners stay over at least one night and some extend their stays to two or more days.
- **Rock Hounding Days:** This event, which is promoted by the Socorro Chamber of Commerce, is usually a one-day event with an estimated 50 participants.
- **Fort Craig Re-enactment:** This is usually a weekend event that attracts more than 100 people who participate in living history re-enactments of civil war battles in Socorro and at BLM's Fort Craig. Out-of-town participants usually include an overnight.
- **Socorro Valley 100 Motorcycle Races:** These motorcycle races last two days and attract 100 to 200 participants. Out-of-town visitors stay at hotels in Socorro and in trailers and Recreational Vehicles.
- **Dog Trials:** About five times a year, dog trial events are held on BLM about 20 miles north of Socorro near Ladron Mountain. There are usually between 30 and 75 people who attend these trails, which last a weekend. Out-of-town visitors stay at hotels in Socorro and in trailers and Recreational Vehicles.
- **Model Rocket Launches:** Two groups, one from Socorro and one from Albuquerque use BLM lands east of Socorro about 15 to 20 times a year to launch model rockets. Generally, these are day use events, but occasionally people stay overnight in Socorro.

- **Festival of the Cranes:** While the Festival is primarily geared to birders and is hosted by the Bosque del Apache National Wildlife Refuge, BLM conducts a tour of the Quebrada Backcountry Byway to tourists that are in the area primarily due to the event, but are also interested in surrounding lands.

### 3.8 OTHER MANAGEMENT ACTIVITIES

#### 3.8.1 Land Exchanges

The 1992 completion of the Boyd Exchange resulted in the disposal of 15,000 acres of isolated the BLM tracts and the closure of 18 separate grazing case files. Most of the land disposed of were in small, isolated parcels. There were 18 different parties that were involved in the land exchange on a voluntary basis. These parties pooled their people and monetary resources to buy the Boyd Ranch property and then exchanged that land for the isolated parcels. Economically, this exchange was beneficial to the BLM because the disposal of these lands eliminated administrative costs associated with management responsibilities in these areas (e.g., grazing allotments, processing a right-of-way). This exchange also was advantageous for the ranch owners, which is why they volunteered to participate. Some ranchers were able to eliminate the BLM-administered lands from their ranch uses, thereby eliminating the BLM stipulations and requirements for livestock grazing (e.g., fees, rotations, etc.) (Hertz 2002).

The second land exchange, the New Mexico State Exchange finalized in 1997, encompassed a larger extent of land. Approximately 100,000 acres of land was exchanged with the State of New Mexico. Roughly 50,000 acres were transferred from the BLM to the State and vice versa. With ranching lands, effects to operators generally were related to individual attitudes of preference between State and the BLM grazing leases. The State permit fees are higher than the BLM fees, but the ranchers also have more control over State land than the BLM land since the BLM land is public and can be used for other purposes such as recreation. The exchange was based on “like-for-like” principles, meaning that trades were made for similar land (e.g., grazing land for grazing land). If there was any controversy with regard to the appraised values for specific lands, then these lands were not included in the exchange. Thus, there was little socioeconomic impact from this exchange (Hertz 2002).

#### 3.8.2 Timber

Timber resources within the Decision Area currently are managed to meet local public demand for fuel wood, fence posts, Christmas trees, and wildlings (naturally occurring timber species seedlings) (U.S. DOI, BLM 1989). Timber resources are not used in range improvement practices (e.g., fencing) as these are primarily constructed/financed by the permittee. There is slight economic and social value associated with such use among local users.

#### 3.8.3 Other

Other BLM management activities, such as wildfire suppression, hazardous materials, range management, and natural and cultural resource management also have some socioeconomic effect. This socioeconomic effect is primarily from the BLM’s direct labor and expenditures (refer to Table 26) and in the benefits of land management for affected publics.

### 3.9 SOCIAL ATTITUDES AND VALUES

Social attitudes and values include social and cultural elements such as community lifestyle, quality of life, well being, customs or traditions, community stability, and ability to adapt to change. These social

attitudes and values are often discussed in terms of specific groups or communities (or types of groups and communities) that may be affected by the revisions to the RMP. Social effects may vary by potentially affected groups. Such groups identified from scoping include environmental and wildlife interest groups and organizations, ranchers, recreational users, fluid and solid mineral interests, other resource management agencies, sociopolitical groups, and historical/cultural interest groups. While there was representation of nearly all groups at local level during the scoping process for the RMPR/EIS, there were some groups that also were more strongly represented at the State and national level, particularly the environmental and wildlife interest groups and organizations. Some initial indications of social attitudes and values and social groups that may be affected by the revisions to the RMP emerged through scoping. Some other readily available data, such as U.S. Census Bureau data on ancestry, travel to work, and residence in 1995, also provide insights into social dynamics within the Planning Area. However, the public involvement program for the RMPR/EIS will further the efforts to determine public attitudes and values relevant to the RMPR/EIS process. Additional information derived from this process will be included in the socioeconomic analysis in the RMPR/EIS.

### **3.9.1 Issues Identified During Scoping for the RMPR/EIS**

The prevalent social attitudes and values for the Planning Area, as expressed during the public scoping period for this RMPR/EIS, were varied. Four major categories of issues related to social and economic values were identified: (1) the potential for mineral and energy resource development; (2) participation by local business, counties, and individuals in the planning process and in management of public land; (3) recreation uses; and (4) resource management concerns.

With regard to fluid and solid mineral development, there was curiosity about the status of CO<sub>2</sub> and helium discoveries and foreseeable development of these resources in Socorro and Catron Counties. There was the suggestion that the BLM provide management direction for industry plans for development of CO<sub>2</sub> and helium resources. Other comments regarding these resources were related to the use of oil and gas and saleable mineral resources, asking the BLM to examine the possibility of increasing exploration and leasing for oil and gas in frontier areas and consider more activity for saleable minerals and the possibility of permitting these extractive sites. Support was received for the Fence Lake Mine as it will be beneficial for the local economy.

There was also interest expressed in participation by local business, the Counties, and individuals in the planning process and in management of public land. There were several comments that reflected concern for the local economy and how the BLM may be able to better benefit the local individuals and businesses by using local workforce or enhance small businesses in the area. Some specific concerns expressed regarded the difference in treatment between “affected parties” and “interested parties,” compliance with the Small Business Regulatory Enforcement Fairness Act of 1996, and environmental justice. A need for County involvement in economic development workshops was expressed.

With regard to recreation, concerns were expressed about the use of public land by outfitters and the over-harvesting of game populations. There was a general perception expressed that commercial hunting guides and commercial trappers have a disregard for public land as evidenced by refuse left behind, off-road travel, and over-harvesting of game populations.

Resource management concerns expressed included potential adverse effects of livestock grazing including adverse effects on vegetation, watersheds, and stream banks. Several commenters noted that restrictions should be placed on the amount of cattle allowed on public land and that monitoring efforts should be improved. One commenter suggested that livestock grazing should be used for vegetative management instead of using chemicals or fire for that purpose. Wildlife was discussed in terms of the

desire to maintain viable native populations and habitat (with emphasis on big game species, according to the commenter).

### **3.9.2 County Plans**

The 1998 Socorro County Comprehensive Plan included a survey effort that demonstrated a high satisfaction in quality of life equated with a rural lifestyle and strong ties to the County's landscape. With regard to change, there was an expectation for population growth Countywide, with a higher expectation for change in and along the Rio Grande in northern Socorro County. The expectation of change was accompanied by an expectation of change in lifestyle. There was a high level of agreement that more jobs were needed in the County, but disagreement with the notion that additional jobs were more important than preserving the lifestyle. The majority of respondents indicated agriculture was a desirable industry. There was preference for locally owned business and support for clean industry, but not big factories. Nationally advertised events were viewed as favorable and businesses that cater to other outdoor activities were viewed as being somewhat desirable. The respondents were evenly split on issues related to satisfaction with existing levels of local government response to their needs and mixed responses on zoning. Environmental issues of flooding, need to protect air and water resources, and support for protection of the bosques were a concern for most of the respondents.

The 1992 Catron County Comprehensive Land Plan included a customary land use survey. The conclusions warranted from the survey were that (1) traditional, agricultural employment continues to dominate the economy of Catron County, (2) customary land uses (including food/natural resource production and extraction uses and social and recreational uses) are clearly the prevailing current land use activities, and (3) a significant number of residents earn income from more than one source. The most prevalent actions identified as needed to protect the land and resources and improve the environment of the County were reduction of government interference, the expansion of local control, and the protection of local rights; community cooperation/involvement; improved range management; and improved timber management. The predominant issues and concerns regarding public and private lands were excessive government regulation, government management of land, threat of environmental extremism, excessive wilderness area/restrictions, protection of private property, livestock overgrazing, threat of a higher grazing fee, land abuse by hunter and fisherman, and others similar to the issues raised during the scoping process for the RMPR/EIS. Values of living in Catron County were most strongly tied to the preference for rural live, ties to place, favorable climate, pure air, landscape, scenery, natural environment, personal/family heritage, friendly/good neighbors, location of home and land, desirable employment, and good quality of life.

### **3.9.3 Other Relevant Social Science Data for the Planning Area**

Three sets of readily available social science data for the Planning Area are included because they may prove useful as the planning process progresses in providing further context of public attitudes and values relevant to the RMPR/EIS process. These include statistics regarding ancestry, residence in 1995, and travel time to work. Herein, these statistics are presented with little interpretation. The public involvement program will further the efforts to determine public attitudes and values relevant to the RMPR/EIS process.

### **3.9.3.1 Ancestry**

Table 29 shows the ancestry data for the Planning Area. Based on these data, there is a strong representation of individuals from English, German, and Irish heritage in Catron County. While there is a more diverse representation of ancestry in Socorro County, the same three ancestries are most prevalent. These data should be viewed in combination with the race and ethnicity data presented in Section 2.2 (which includes other heritages such as Mexican).

### **3.9.3.2 Residence in 1995**

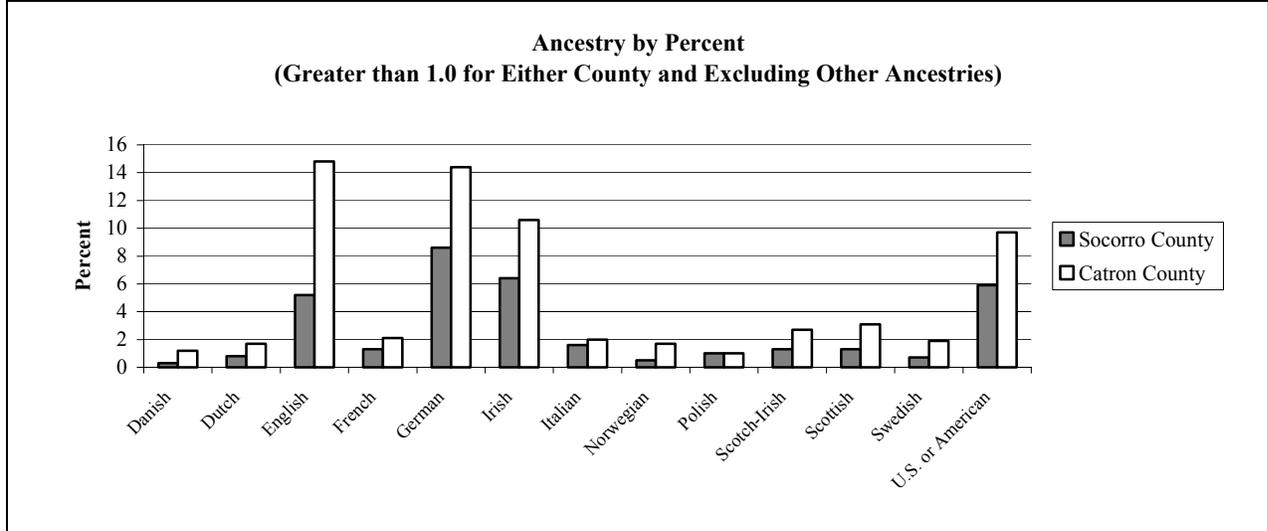
Generally, the longer people have lived in a community, the greater their connection to community and social groups as well as the land (Harp and others 2001). People's place-based values, while subjective and often shared interactions with the landscape emotionally or symbolically, is tied to their attachment to places and areas, which is customarily passed down through generations (Galliano and Loeffler 1999). As shown in Table 30, the majority of the population in the Planning Area have lived in the same houses since at least 1995 (58.5 percent in Socorro County and 57.7 percent in Catron County). Of those that were living in a different house in 1995, most people were living in a different county. Of those Socorro County residents that had moved since 1995, 54.1 percent were living in a different county, and of those, 56.3 percent were living in New Mexico. Of those that came from a different state to Socorro County, an equal percentage came from the south and west (39.9 percent). By comparison, a larger percentage of Catron County residents were living in a different county than Catron County (78.5 percent) and most were living in a state other than New Mexico. Of those that were living in a different state, 80.7 percent were western states.

### **3.9.3.3 Travel Time to Work**

Sociologists have found that when people work in the same community in which they live, there is a stronger community cohesion or a sense of belonging to a group with shared beliefs and common behavioral assumptions, and a feeling of recognition as members of that group (Harp and others 2001). As shown in Table 31, there is a similar pattern in that most of the residents of both Socorro and Catron Counties travel time to work is less than 20 minutes. Travel times to work are generally longer in Socorro County as compared to Catron County. Also, in Catron County more persons (14.4 percent) worked from home than in Socorro County (4.1 percent).

**TABLE 29  
ANCESTRY**

Ancestry	Socorro County		Catron County	
	Number	Percent	Number	Percent
Arab	46	0.3	3	0.1
Czech <sup>1</sup>	13	0.1	10	0.3
Danish	60	0.3	41	1.2
Dutch	153	0.8	59	1.7
English	945	5.2	524	14.8
French (except Basque) <sup>1</sup>	241	1.3	73	2.1
French Canadian <sup>1</sup>	39	0.2	15	0.4
German	1,562	8.6	510	14.4
Greek	10	0.1	5	0.1
Hungarian	19	0.1	8	0.2
Irish <sup>1</sup>	1,150	6.4	377	10.6
Italian	292	1.6	71	2.0
Lithuanian	-	-	2	0.1
Norwegian	98	0.5	60	1.7
Polish	187	1.0	34	1.0
Portuguese	20	0.1	5	0.1
Russian	61	0.3	3	0.1
Scotch-Irish	242	1.3	95	2.7
Scottish	233	1.3	10	3.1
Slovak	-	-	-	-
Subsaharan African	22	0.1	2	0.1
Swedish	119	0.7	67	1.9
Swiss	39	0.2	12	0.3
Ukrainian	10	0.1	7	0.2
United States or American	1,073	5.9	345	9.7
Welsh	70	0.4	33	0.9
West Indian (excluding Hispanic groups)	36	0.2	-	-
Other ancestries	10,598	58.6	1,062	30.0



SOURCE: U.S. Census Bureau 2002c.

Note: <sup>1</sup> The data represent a combination of two ancestries shown separately in the U.S. Census Bureau, Summary File 3. Czech includes Czechoslovakian. French includes Alsatian. French Canadian includes Acadian/Cajun. Irish includes Celtic.

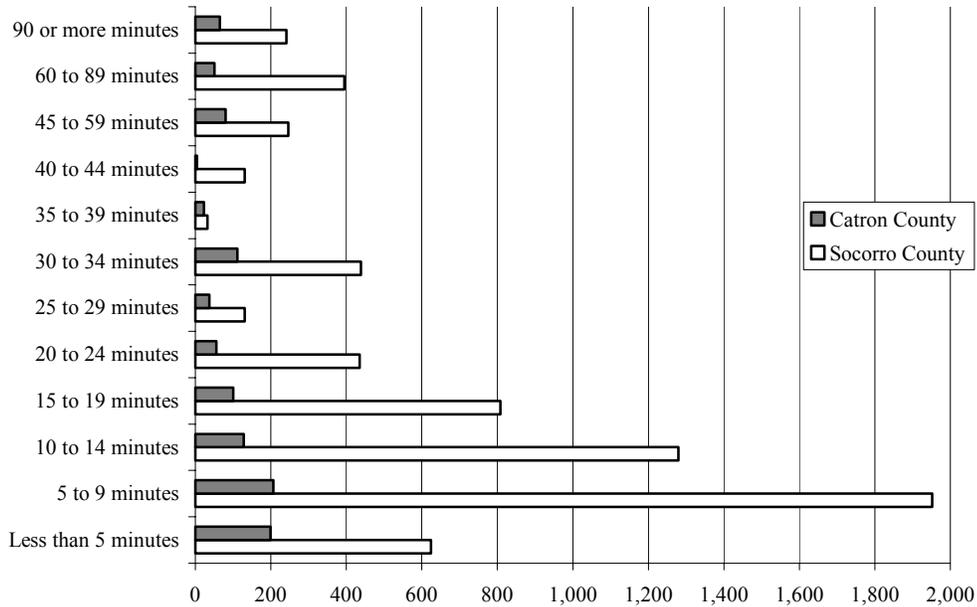
**TABLE 30  
RESIDENCE IN 1995**

	Socorro County		Catron County	
	Numbers	Relative Percentages	Numbers	Relative Percentages
Sample	16,854	100.0	3,394	100.0
Same house in 1995	9,863	58.5	1,960	57.7
Different house in 1995	6,991	41.5	1,434	42.3
In United States in 1995	6,684	95.6	1,430	99.7
Same county	3,068	45.9	307	21.5
Different county	3,616	54.1	1,123	78.5
Same state	2,034	56.3	344	30.6
Different state	1,582	43.8	779	69.4
Northeast	166	10.5	17	2.2
Midwest	153	9.7	48	6.2
South	632	39.9	85	10.9
West	631	39.9	629	80.7

SOURCE: U.S. Census Bureau, 2001.

**TABLE 31  
TRAVEL TIME TO WORK**

	Socorro County		Catron County	
	Number	Percent	Number	Percent
<b>Total:</b>	7,002	100.0	1,240	100.0
Did not work at home:	6,714	95.9	1,061	85.6
Less than 5 minutes	624	8.9	199	16.0
5 to 9 minutes	1,952	27.9	207	16.7
10 to 14 minutes	1,280	18.3	128	10.3
15 to 19 minutes	808	11.5	100	8.1
20 to 24 minutes	435	6.2	56	4.5
25 to 29 minutes	131	1.9	37	3.0
30 to 34 minutes	439	6.3	111	9.0
35 to 39 minutes	32	0.5	23	1.9
40 to 44 minutes	131	1.9	4	0.3
45 to 59 minutes	246	3.5	80	6.5
60 to 89 minutes	395	5.6	51	4.1
90 or more minutes	241	3.4	65	5.2
Worked at home	288	4.1	179	14.4



SOURCE: U.S. Census Bureau 2002m.

## 4.0 REFERENCES

---

- Allred, Denise. 2002. Record of Conversation between Denise Allred, Office Assistant Reserve Sheriff's Office and Carol Wirth, URS. December 6.
- Apachito, Miranda. 2003. Record of Conversation between Miranda Apachito, Alamo Navajo Medical Clinic and Carol Wirth, URS. October 1.
- Bell, Lois. Comments on the preliminary draft baseline socioeconomic conditions report.
- \_\_\_\_\_. 2002. Record of Conversation between Lois Bell, Realty Specialist, BLM Socorro Field Office and Carol Wirth, URS. December 4.
- Carson, Kevin. 2003. E-mail communication from Kevin Carson, Bureau of Land Management to Jen Wennerlund, URS. January 17.
- Catron County. 1992. Catron County Comprehensive Land Plan. Published by the National Federal Lands Conference. October.
- Catron County Treasurer's Office. 2002. Treasurer's Financial Report, Fiscal Year 2002-2003, Report Period Ending October 31, 2002.
- Cody, B. A. 1996. Congressional Research Service Report. Grazing Fees: An Overview. May 21, 1996. <http://www.ncseonline.org/NLE/CRSreports/Agriculture/ag-5.cfm>.
- Cody, P. and P. Baldwin. 1998. Congressional Research Service Report, IB 96006: Grazing Fees and Rangeland Management. December 4.
- \_\_\_\_\_. 1996. Congressional Research Service Report, 96 97 A. Survey of Grazing Programs in Western States. May 21. <http://www.ncseonline.org/NLE/CRSreports/Agriculture/ag-12.cfm?&CFID=2667993&CFTOKEN=70166011>
- Galliano, Steven J. and Gary M. Loeffler. 1999. Place Assessment: How People Define Ecosystems. United States Department of Agriculture Forest Service Pacific Northwest Research Station United States Department of the Interior Bureau of Land Management General Technical Report PNW-GTR-462. September.
- Gutierrez, Becky. 2002. Record of Conversation between Becky Gutierrez, Business Manager Reserve School District and Carol Wirth, URS. December 6.
- Harp, Aaron J., Neil R. Rimbey, and Tim D. Darden. 2001. Cohesion, Integration, and Attachment in Owyhee County Communities. Paper presented at the Annual Meeting of the Society for Rang Management, Kailua-Kona, Hawaii, February 17-23.
- Hertz, John. 2002. Record of Conversation between John Hertz, BLM Socorro Field Office and Carol Wirth, URS. November 27.
- Hess, Karl, Jr., and Jerry L. Holecheck. 1995 Beyond the Grazing Fee: An Agenda for Rangeland Reform. Cato Policy Analysis No. 234. July 13.

- Horne, Amy L. and Richard W. Haynes. 1999. Developing Measures of Socioeconomic Resiliency in the Interior Columbia Basin. Interior Columbia Basin Ecosystem Management Project: Scientific Assessment. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon, General Technical Report PNW-GRR-453. April
- International Association of Fish and Wildlife Agencies. 2002. The Economic Importance of Hunting.
- \_\_\_\_\_. 1997. The Economic Importance of Hunting.
- Juarez. 2003. Record of Conversation between Officer Juarez, Socorro Police Department and Carol Wirth, URS. October 1.
- Lane, Mark. 2002. Record of Conversation between Mark Lane, Socorro Field Office and Carol Wirth, URS. December 20.
- Matthews, Mark. 2003a. Comments on preliminary draft baseline socioeconomic conditions report.
- \_\_\_\_\_. 2003b. Telephone call from Danielle Stearns, URS Corporation, to MarkMatthews, BLM, Socorro Field Office. January 17.
- \_\_\_\_\_. 2002. Record of Conversation between Mark Matthews, BLM Socorro Field Office and Carol Wirth, URS. November 27.
- Mendenhall, Melanie. 2002. 10 Year AUM History BLM from SFO Grazing Authorization and Billing System files, 1992 to 2002. Provided by Melanie Mendenhall, Natural Resource Specialist BLM Socorro Field Office by e-mail on December 17.
- \_\_\_\_\_. 2003. Clarification on SFO AUMs. Provided by Melanie Mendenhall, Natural Resource Specialist BLM Socorro Field Office by e-mail on January 10.
- Morton. Pete, PhD. 2000. Wilderness: The Silent Engine of the West's Economy. The Wilderness Society. April 21.
- National Agriculture Statistics Service (NASS). 2002a. Census of Agriculture, National Agricultural Statistical Service. County Level Data for New Mexico. NASS Data Base. <http://www.nass.usda.gov>. Accessed December 5.
- \_\_\_\_\_. 2002b. Cooperative Extension Service State Major Program Plan 1999-2004, Catron and Socorro Counties. <http://www.nass.usda.gov>. Accessed December 5.
- New Mexico Agricultural Statistics Service (NMASS). 1997. Census of Agriculture. Sheets for New Mexico, Socorro County, and Catron County.
- \_\_\_\_\_. 2000. New Mexico Agricultural Statistics Report.
- New Mexico Agricultural Statistics Service. 2001. New Mexico Agricultural Statistics Report.
- \_\_\_\_\_. 2002. Frequently asked questions. [http://www.nass.usda.gov/census/census02/preliminary/census\\_faq.htm](http://www.nass.usda.gov/census/census02/preliminary/census_faq.htm).
- New Mexico Association of Counties. 2002. Principal Sources of Revenue.

- New Mexico Department of Education. 2002a. Data Collection Reporting Unit. High School Graduates, 2000-2001. Printed August 15.
- \_\_\_\_\_. 2002b. New Mexico Schools Locator. <http://sde.state.nm.us/districts/index.html>
- \_\_\_\_\_. 2002c. Data Collection Reporting Unit. Total School Enrollment by School District, 2001-2002.
- New Mexico Department of Health. 2002. Office of New Mexico Vital Records and Health Statistics, Public Health Division, New Mexico County Health Profiles for Socorro and Catron Counties.
- New Mexico Department of Labor. 2001. New Mexico Labor Market, Annual Social and Economic Indicators. June.
- New Mexico Economic Development Department. 2002. NM Factbook, New Mexico's Economy. <http://www.edd.state.nm.us>. Accessed December 5.
- New Mexico State Fire Marshal's Office. 2003. New Mexico Public Regulation Commission, State Fire Marshal's Office. "State Fire Marshal Information Article" <http://www.nmsffa.nm.org/> Accessed October 1.
- New Mexico Game and Fish Department. 2003. Active New Mexico Outfitters Database including Name, Organization Name, Address, Phone No "LCLED\_ACTIVE\_OUTFITTERS.rdf" May 8. Updated lists can be accessed at [www.gmfish.state.nm.us](http://www.gmfish.state.nm.us)
- \_\_\_\_\_. 2002. New Mexico Big Game and Furbearer Rules and Information. 2002-2003 License Year.
- New Mexico State Police. 2002. <http://www.nmsp.com/d11.htm>. Accessed December 9.
- New Mexico State University. 2003. New Mexico Council of Outfitters and Guides. Beyond Sport, An Analysis of the Economic Impact of the Professional Hunting Industry on New Mexico's Economy. Economic Development Specialist Range Improvement Task Force Cooperative Extension Service, Nick Ashcroft. February 28.
- New Mexico Taxation and Revenue Department. 2002a. Frequently Asked Questions. [http://www.state.nm.us/tax/trd\\_ques.htm](http://www.state.nm.us/tax/trd_ques.htm)
- \_\_\_\_\_. 2002b. Enactment Dates of Local Option Taxes – as of July 1, 2002. <http://www.state.nm.us/tax/pubs/TaxreseStat/July2002EnactmentDates.pdf>
- \_\_\_\_\_. 2002c. Weighted Average Property Tax Rates by County, 2001 Tax Year Expressed in Mills or dollar per \$1,000 Net Taxable Value <http://www.state.nm.us/tax/pubs/TaxreseStat/Averageratesbycounty.htm>
- New Mexico Tech. 2002a. Facts and Figures. <http://www.nmt.edu/mainpage/about/facts.html>
- \_\_\_\_\_. 2002b. Socorro Search and Rescue. <http://www.nmt.edu/~ssar/> Accessed December 13.
- Office of Management and Budget. 1997. Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Federal Data on Race and Ethnicity. October 30.

- Research & Polling, Inc. 2002. Coalition for New Mexico Wilderness Study. August.
- Ridgeway Arizona Oil Corporation. 1998. St. John's, Arizona CO<sub>2</sub>- Helium Project Environmental Impact Statement Bureau of Land Management Socorro Field Office. Scoping Notice. November. <http://www.ridgewaypetroleum.com/projects/stjohnsEIS.html>
- Salt River Project (SRP). 2002. Media Release: Fence Lake Mine Gets Green Light from DOI, Construction Phase to Start Soon Following Interior Department Approval. May 31.
- Sampson, Cheryl. 2002. Record of Conversation between Cheryl Sampson, Office Assistant, Quemado School District and Carol Wirth, URS. December 6.
- Scarnecchia, David L. 1985. The Animal-Unit and Animal-Unit Equivalent Concepts in Range Science. *Journal of Range Management* 38(4), July 1985.
- Socorro Chamber of Commerce. 2000. "Destination Socorro." Produced for the Socorro Chamber of Commerce by pen gwen productions.
- Socorro Consolidated Schools. 2002. <http://www.sdc.org/~ssco/>
- Socorro County. 1998. Socorro County Comprehensive Plan. July 14.
- Socorro County Chamber of Commerce. 2002. <http://www.socorro-nm.com/main/socorro.html>.
- Socorro County Treasurer. 2002. Local Government Division, Budget Recapitulation for Fiscal Year 2001-2002. Provided by fax by Gloria Appel, Socorro County Treasurers Office.
- Stephens, Gary. 2003. Record of Conversation between Gary Stephens, BLM New Mexico State Office and Carol Wirth, URS. February 6.
- Sykes, Dwayne. 2003. Memo addressed to those (New Mexico BLM personnel) responsible for the Special Recreation Use Permits for Outfitters and Guides. Dated 30 May.
- The Wilderness Society. 2002. The Economic Benefits of Wildlands in the Eastern Sierra Nevada Region of California. April.
- Torrell, L. Allen and Marc E. Kincaid. 1996. Public land policy and the market value of New Mexico Ranges, 1979-94. *Journal of Range Management*. Volume 49:270-276. May.
- Trujillo, Kim. 2002. Record of Conversation between Kim Trujillo, New Mexico State Police, District 11 and Carol Wirth, URS. December 13.
- United Mine Workers Journal. 2001. On the Grow. <http://www.umwa.org/journal/VOL112NO1/onthegrow.shtml>. Volume 112, No. 1. January-February.
- University of New Mexico Bureau of Business and Economic Research. 2002. New Mexico Population Projections by County 1990-2030. <http://www.unm.edu/~bber/demo/table1.htm>. Accessed November 15.

- U.S. Bureau of Economic Analysis (BEA). 2003a. Regional Economic Information System. CA25 - Total full-time and part-time employment by industry series for 2001 for the United States, New Mexico, Socorro County, and Catron County. From <http://www.bea.gov/bea/regional/reis/>. Released in May; Accessed September 22.
- \_\_\_\_\_. 2003b. Regional Economic Information System. CA05 Personal income by major source and earnings by industry in thousands of dollars. For 2001 for the United States, New Mexico, Socorro County, and Catron County . From <http://www.bea.gov/bea/regional/reis/>. Released in May; Accessed September 29.
- \_\_\_\_\_. 2003c. Regional Definitions. <http://www.bea.gov/bea/regional/definitions>. Accessed, September 22-October 1.
- \_\_\_\_\_. 2002. Personal income and per capita personal income: definitions. [http://www.fedstats.gov/qf/meta/long\\_58606.htm](http://www.fedstats.gov/qf/meta/long_58606.htm). Accessed November 22.
- U.S. Census Bureau. 1990a. 1990 Census of Population and Housing, Population and Housing Unit Counts, United States. Economics and Statistics Administration.
- \_\_\_\_\_. 1990b. Table H001. Housing Units. Catron County, Socorro County, and New Mexico. From <http://factfinder.census.gov>. Accessed November 26.
- \_\_\_\_\_. 2000. <http://www.census.gov/population/projections/nation/summary/np-t1.txt>. Annual Projections of the Total Resident Population as of July 1: Middle, Lowest, Highest, and Zero International Migration Series, 1999 to 2100. Internet Release Date: January 13, 2000; Revised Date: February 14, 2000.
- U.S. Census Bureau. 2001a. Profiles of General Demographic Characteristics. 2000 Census of Population and Housing. New Mexico. (DP-1 Tables for all of New Mexico, including counties, incorporated communities, metropolitan statistical areas, and Indian Reservations. Issued in May.
- \_\_\_\_\_. 2001b. The Hispanic Population, Census 2000 Brief. C2KBR/01-3. Issued May.
- \_\_\_\_\_. 2002a. P5. Urban and Rural - Universe: Total population. From Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data. From <http://factfinder.census.gov>. Accessed November 22.
- \_\_\_\_\_. 2002b. State and County Quick Facts. Last Revised September 24. <http://quickfacts.census.gov/qfd/states/35/35003.html> and <http://quickfacts.census.gov/qfd/states/35/35053.html>.
- \_\_\_\_\_. 2002c. Demographic Profile Tables from the 2000 Census DP-1 to DP-4 for Socorro County and Catron County, New Mexico, and the U.S. The DP-1 table is part of the Summary File 1 (SF 1) data set, and the other three tables are available as part of the Summary File 3 (SF 3) data set. From <http://www.census.gov/Press-Release/www/2002/demoprofiles.html>. New Mexico (including county data) Released May 24. U.S. Released June 4.
- \_\_\_\_\_. 2002d. Summary File 3 (SF 3) data sets available for Tribal Subdivision/Remainder for the Alamo Chapter; Navajo Nation Reservation and Off-Reservation Trust Land, AZ–NM–UT.

- From the American Factfinder. Matrices P3, P6, P8, P9, P12, P13, P17, P18, P19, P20, P23, P27, P28, P33, P56, P82, P87, P90, H1, H3, H4, H5, H11, and H12.
- \_\_\_\_\_. 2002e. Current Population Survey – Definitions and Explanations. <http://www.census.gov/population/www/cps/cpsdef.html>. Last Revised April 3; accessed November 22.
- \_\_\_\_\_. 2002f. Poverty 2000. Poverty Thresholds for 1999, by Size of Family and Number of Related Children Under 18 Years (Dollars). Created: September 20, 2000; last Revised August 22.
- U.S. Census Bureau. 2002g. Table P-7, Hispanic and Latino by Race. Universe: Total population. Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data. From <http://factfinder.census.gov> for selected census tracts. Accessed November 25.
- \_\_\_\_\_. 2002h. Table P-87, Poverty Status in 1999 by Age- Universe: Population for whom poverty status is determined. From <http://factfinder.census.gov> for selected census tracts. Accessed November 25.
- \_\_\_\_\_. 2002i. Table QT-H1. General Housing Characteristics: 2000, Catron County, Socorro County, New Mexico, and United States. From <http://factfinder.census.gov>. Accessed November 26.
- \_\_\_\_\_. 2002j. HCT21 Aggregate Real Estate Taxes. Specified owner-occupied housing units. Census 2000 Summary File 3 Sample Data. From <http://factfinder.census.gov>. Accessed November 26.
- \_\_\_\_\_. 2002k. HCT20 Median Real Estate Taxes. Specified owner-occupied housing units. Census 2000 Summary File 3 Sample Data From <http://factfinder.census.gov>. Accessed November 26.
- \_\_\_\_\_. 2002l. PCT21. Residence in 1995 for the Population 5 Years and Over – State, County, and Place Level (24) - Universe: Population 5 years and over. From <http://factfinder.census.gov>.
- \_\_\_\_\_. 2002m. P31. Travel Time to Work for Workers 16 Years and Over (15) - Universe: Workers 16 years and over. From <http://factfinder.census.gov>.
- U.S. Department of Agriculture, Economic Research Service. 2000. Rural Conditions and Trends – Rural Industry. Volume 10, Number 2. July.
- U.S. Department of Labor. 2002a. Bureau of Labor Statistics. Unemployment Rates by County, October 2001-September 2002 Averages. <http://data.bls.gov/lau/maps/twmcort.gif>. Accessed November 22.
- \_\_\_\_\_. 2002b. Bureau of Labor Statistics. Local Area Unemployment Statistics, New Mexico. From <http://data.bls.gov/servlet/> Accessed November 22.
- U.S. Department of Labor. 2002c. Bureau of Labor Statistics. Unemployment Rate – Civilian Labor Force, United States. <http://data.bls.gov/cgi-bin/surveymost>. Accessed November 25.
- \_\_\_\_\_. 2003. Bureau of Labor Statistics data for 1969 to 2001 as compiled by the BLM/Sonoran Institute Cooperative Economic Profile System (EPS). Last run January 3.

- U.S. Department of the Interior (DOI), Bureau of Land Management (BLM). 1989. Management Situation Analysis, Resource Area Profile and Existing Management Situation. January.
- \_\_\_\_\_. 1991. Socorro Resource Area Right of Way Avoidance Area Plan.
- \_\_\_\_\_. 2000a. New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management Proposed Statewide Resource Management Plan Amendment and Final Environmental Impact Statement.
- \_\_\_\_\_. 2000b. BLM Handbook. H-1601-1- Land Use Planning Handbook. Release 1-1667. November 11.
- \_\_\_\_\_. 2000c. BLM Manual 1601 – Land Use Planning. Release 1-1666. November 11.
- \_\_\_\_\_. 2002a. PILT Payments. <http://www.blm.gov/ess/pilt.htm>.
- \_\_\_\_\_. 2002b. PILT Payments, Summary by State and County for New Mexico for 1999 to 2002 and Entitlement Acreage by County and Agency for 1999 to 2002. From <http://www.blm.gov/pilt/search.html>. Accessed 23 December.
- \_\_\_\_\_. 2002c. News Release: 2002 Federal Grazing Fee Announced [http://www.blm.gov/nhp/news/releases/pages/2002/pr020214\\_grazing.htm](http://www.blm.gov/nhp/news/releases/pages/2002/pr020214_grazing.htm).
- \_\_\_\_\_. 2002d. BLM Instruction Memorandum No. 2002-167, *Social and Economic Analysis for Land Use Planning*.
- \_\_\_\_\_. 2002e. BLM Instruction Memorandum No. 2002-164, *Guidance to Address Environmental Justice in Land Use Plans and Related National Environmental Policy Act Documents*.
- U.S. Department of the Interior, Bureau of Land Management. 2003a. Preliminary Draft Energy and Mineral Resource Potential Report Catron and Socorro Counties, New Mexico. Prepared by URS Corporation. February.
- \_\_\_\_\_. 2003b. Solid Minerals, Mineral Materials. <http://www.blm.gov/nhp/300/wo320/minmat.htm>
- U.S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2001. *2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*.
- Van Tassell, Larry W., L Allen Torrell, Neil R. Rimbey, and E. Tom Bartlett. 1997. Comparison of forage value on private and public grazing leases. *Journal of Range Management*. 50 (3). May.
- BLM Management Information System. 2000. Department of Interior – Bureau of Land Management Reporting Office by Subactivity by Major Category for the Socorro Field Office. [www.mis.blm.gov](http://www.mis.blm.gov).
- \_\_\_\_\_. 2001. Department of Interior – Bureau of Land Management Reporting Office by Subactivity by Major Category for the Socorro Field Office. [www.mis.blm.gov](http://www.mis.blm.gov).
- \_\_\_\_\_. 2002. Department of Interior – Bureau of Land Management Reporting Office by Subactivity by Major Category for the Socorro Field Office. [www.mis.blm.gov](http://www.mis.blm.gov).

White, Tom. 2003. Record of Conversation between Tom White, Ridgeway Arizona Oil Corporation and Carol Wirth, URS. February 3.

Zogby International. 2003. Memo to Campaign for America's Wilderness Regarding Results from January Zogby America Polling on Wilderness Protection. January 23.

## **APPENDIX A**

### **SOCORRO COUNTY, NM ECONOMIC PROFILE SYSTEM**



# **Population, Employment, Earnings and Personal Income Trends**

Socorro County, NM



Sonoran Institute  
Northwest Office  
201 S. Wallace  
Bozeman, Montana 59715  
Tel (406) 587-7331  
Fax (406) 587-2027

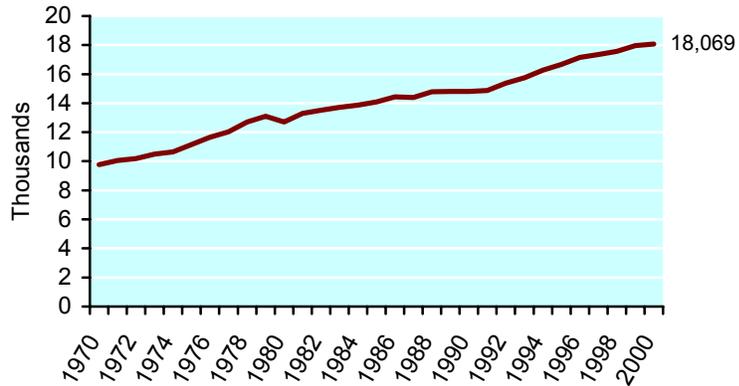
ray@sonoran.org  
ben@sonoran.org  
www.sonoran.org

December 29, 2003

<a href="#"><u>Summary Findings</u></a>	P-1
<a href="#"><u>Population Trends</u></a>	P-3
<a href="#"><u>Employment Trends</u></a>	P-5
<a href="#"><u>Personal Income</u></a>	P-9
<a href="#"><u>Trends in Earnings Per Job</u></a>	P-12
<a href="#"><u>Another Way to Look at Industry Groupings</u></a>	P-13
<a href="#"><u>Non-Labor Sources of Income</u></a>	P-15
<a href="#"><u>Agriculture</u></a>	P-17
<a href="#"><u>Commuting</u></a>	P-19
<a href="#"><u>Business Establishments by Size</u></a>	P-20
<a href="#"><u>Unemployment Trends</u></a>	P-21
<a href="#"><u>Data Sources</u></a>	P-22
<a href="#"><u>Methods</u></a>	P-23
<a href="#"><u>Glossary</u></a>	P-27

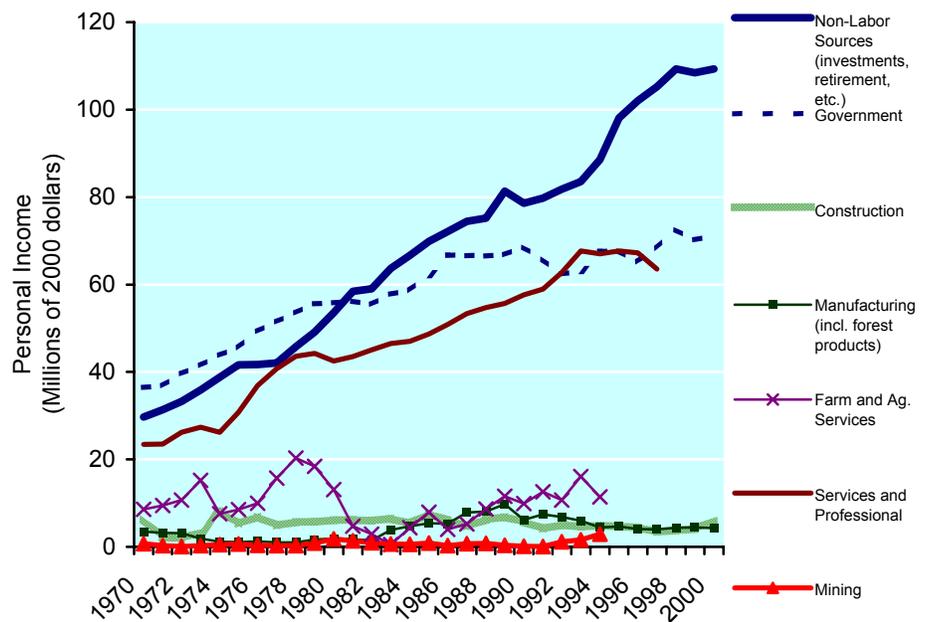
### Population

- From 1970 to 2000 Socorro County, NM grew by 8,294 people, a 85% increase in population.



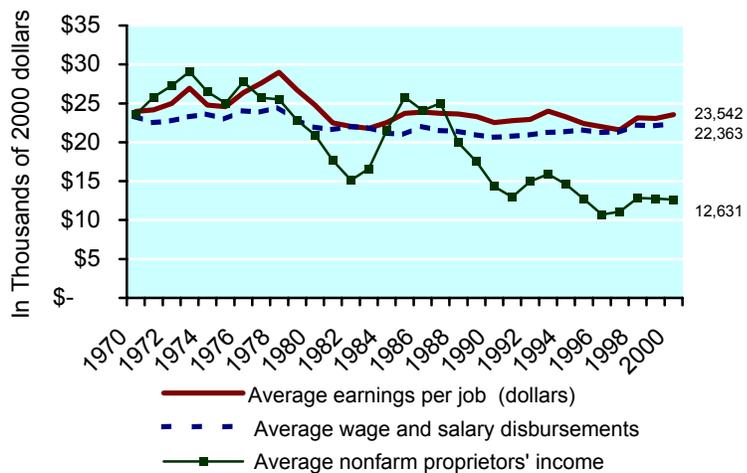
### Income Growth or Decline by Major Category

- #N/A
- #N/A



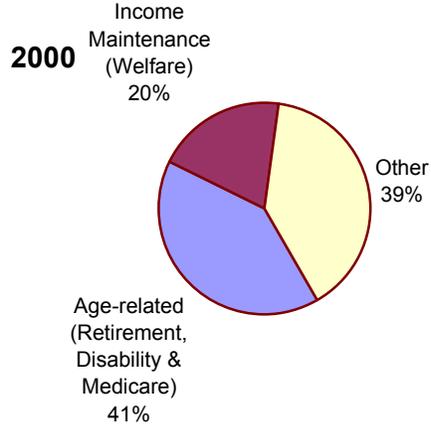
### Average Earnings

- Average earnings per job, in real terms, have not changed much since .



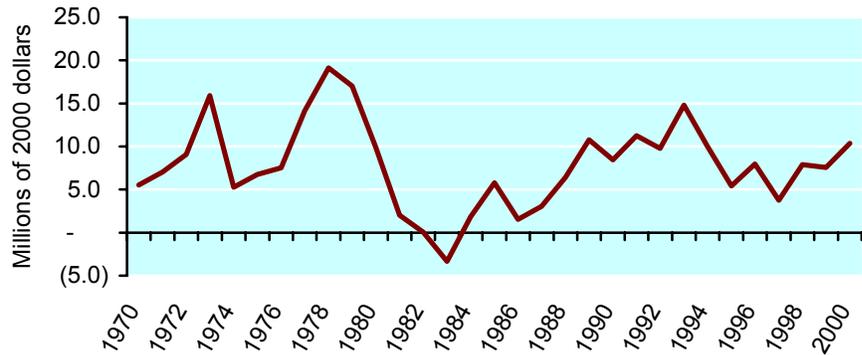
### Components of Transfer Payments

- In 2000, 40% of Transfer Payments were from age-related sources (retirement, disability, insurance payments, and Medicare). 20% was from welfare.



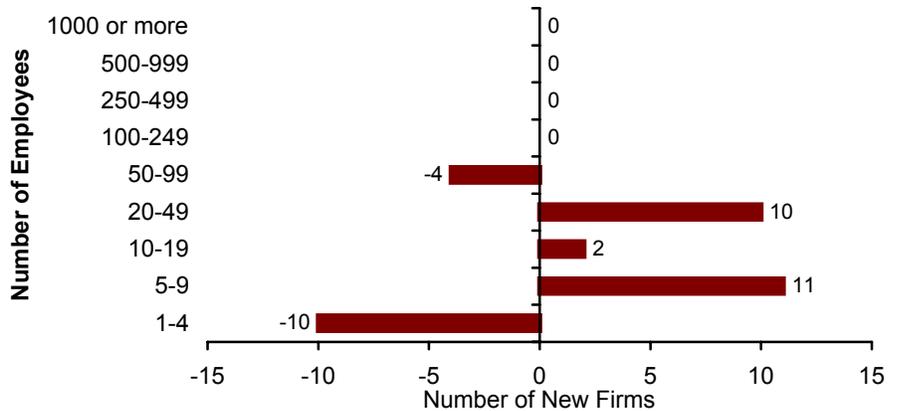
### Net Farm Income

- Net income from farming and ranching rose from \$6 million in 1970 to \$10 million in 2000.



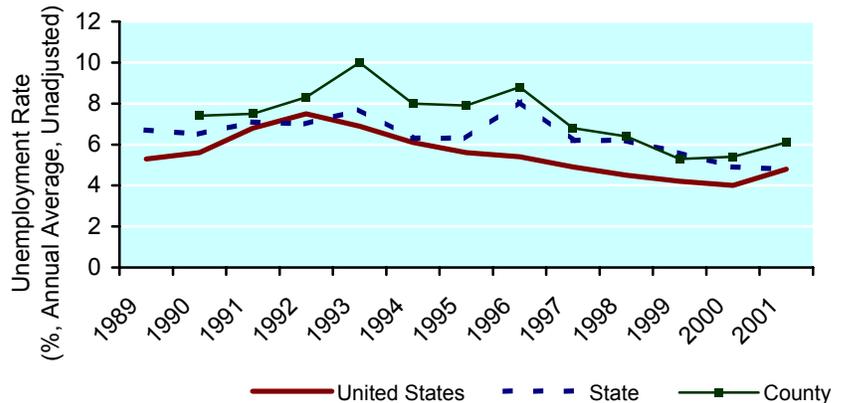
### New Firms by Employment Size 1990 to 2000

- From 1990 to 2000 the majority of new businesses established in Socorro County, NM were large, with 20 or more employees.



### Annual Average Unemployment Rate Comparing County to State

- In 2001, the unemployment rate in Socorro County, NM was 6.1%, compared to 4.8% for the state and 4.8% for the nation.



## Age Breakout in 2000

- The median age in Socorro County, NM is 32.4 years old, compared to 34.6 in the state and 35.3 in the nation.
- In 2000, the baby boom was aged 40 - 55.



## Trends

- Retirement age category has been stable.

## Population by Category, 1990 & 2000

	1990		2000		% Chg 1990 - 2000		% Chg per Year 1990 - 2000	
	Population	% of Total	Population	% of Total	% Chg	% Chg	% Chg	% Chg
<b>Population</b>	<b>14,764</b>		<b>18,078</b>		<b>22%</b>		<b>2.2%</b>	
<b>Male</b>	<b>7,493</b>	<b>51%</b>	<b>9,184</b>	<b>51%</b>	<b>23%</b>		<b>2.3%</b>	
<b>Female</b>	<b>7,271</b>	<b>49%</b>	<b>8,894</b>	<b>49%</b>	<b>22%</b>		<b>2.2%</b>	
<b>Under 20 years</b>	<b>5,057</b>	<b>34%</b>	<b>5,904</b>	<b>33%</b>	<b>17%</b>		<b>1.7%</b>	
<b>65 years and over</b>	<b>1,541</b>	<b>10%</b>	<b>1,967</b>	<b>11%</b>	<b>28%</b>		<b>2.8%</b>	
<b>Median Age</b>			<b>32.4</b>					

## Race Breakout

- Race is broken out two ways. The Hispanic breakout is separate because Hispanics can be of any race.

## Population by Race in 2000

	County	% of Total	State	% of Total
White	11,365	62.9%	1,214,253	66.8%
Black or African American	116	0.6%	34,343	1.9%
American Indian & Alaska Native	1,974	10.9%	173,483	9.5%
Asian	206	1.1%	19,255	1.1%
Native Hawaiian & Other Pacific Islander	10	0.1%	1,503	0.1%
Some other race	3,634	20.1%	309,882	17.0%
Two or more races	773	4.3%	66,327	3.6%
Hispanic or Latino (of any race)	8,810	48.7%	765,386	42.1%
Not Hispanic or Latino	9,268	51.3%	1,053,660	57.9%

## Household Type

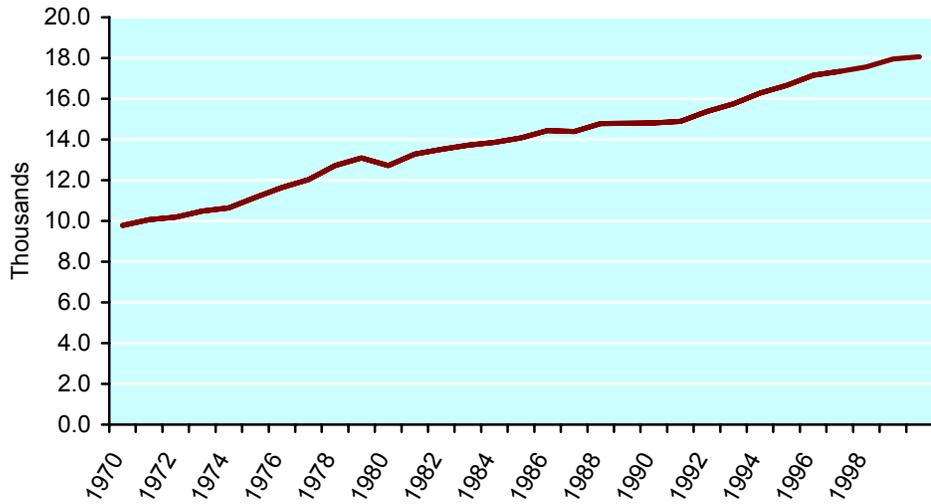
- Socorro County, NM has a higher owner occupancy rate than the state.

## Population by Household Type in 2000

	County	% of Total	State	% of Total
<b>Total Housing Units</b>	<b>7,808</b>		<b>780,579</b>	
Occupied Housing Units	6,675	85.5%	677,971	86.9%
Vacant Housing Units	1,133	14.5%	102,608	13.1%
For Seasonal, Recreational, or Occ. Use	241	3.1%	31,990	4.1%
<b>Homeowner Vacancy Rate (%)</b>	<b>2.5%</b>		<b>2.2%</b>	
<b>Rental Vacancy Rate (%)</b>	<b>11.8%</b>		<b>11.6%</b>	
<b>Housing Tenure</b>	<b>County</b>	<b>% of Occ.</b>	<b>State</b>	<b>% of Occ.</b>
Occupied Housing Units	6,675		677,971	
Owner-occupied Housing Units	4,746	71.1%	474,445	70.0%
Renter-occupied Housing Units	1,929	28.9%	203,526	30.0%
<b>Avg Household Size - Owner Occupied</b>	<b>2.7</b>		<b>2.7</b>	
<b>Avg Household Size - Renter Occupied</b>	<b>2.4</b>		<b>2.4</b>	

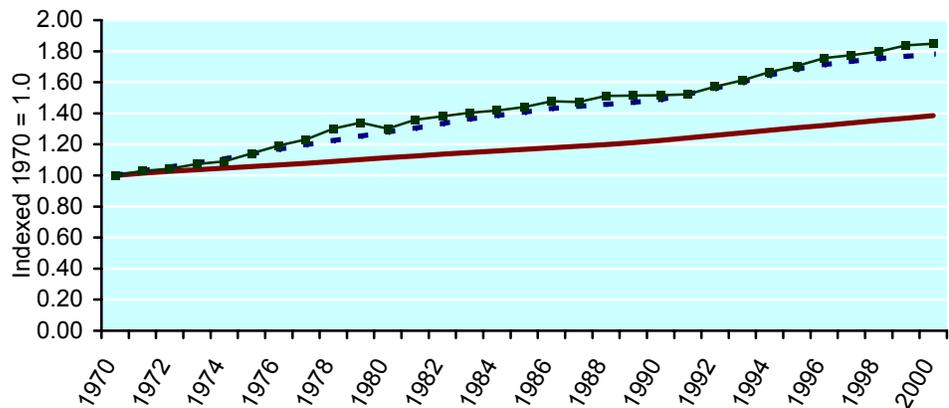
**Population**

- From 1970 to 2000 Socorro County, NM grew by 8,294 people, a 85% increase in population.



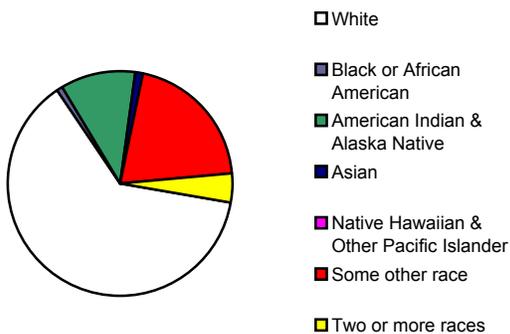
**Compared to State and the Nation**

- Since 1970, the population in Socorro County, NM has grown faster than the state and faster than the nation.

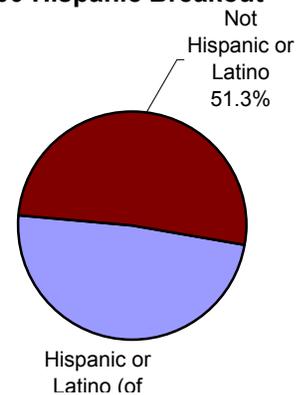


United States ■ New Mexico ■ Socorro County, NM

**2000 Race Breakout**



**2000 Hispanic Breakout**



### **Job Growth (See next page)**

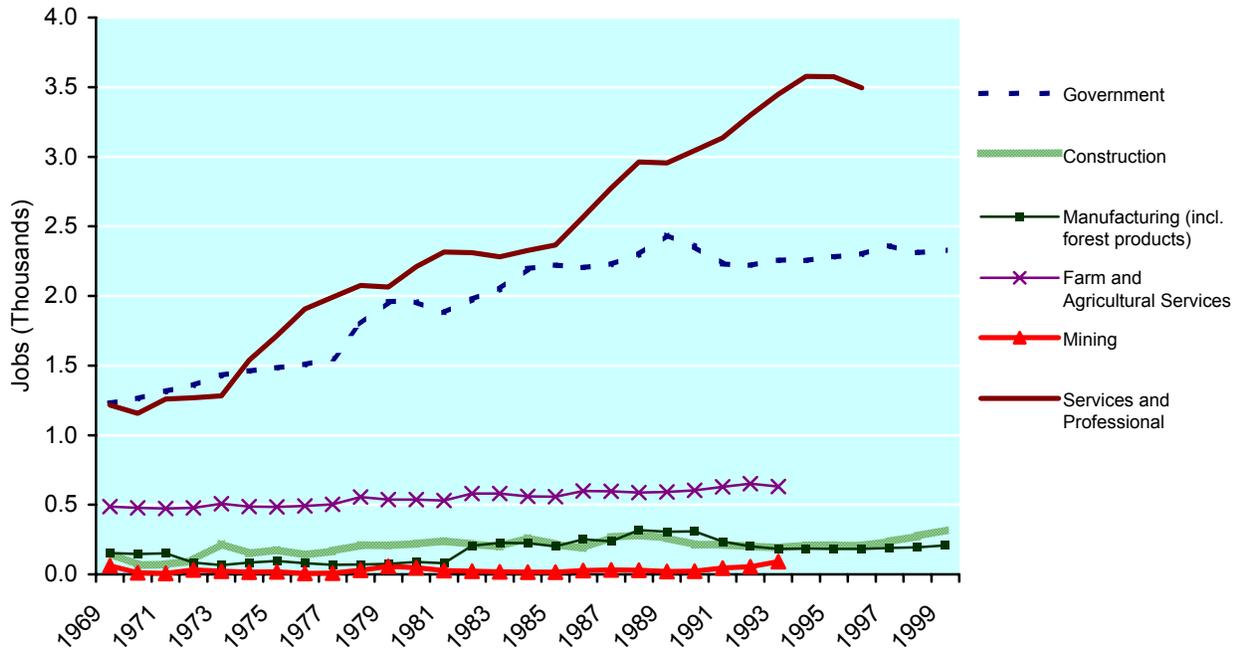
- From 1970 to 2000, 3,847 new jobs were created.
- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A

This graph has been hidden because the data contains data gaps.

### **Jobs 1970 & 2000**

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A

This graph has been hidden because the data contains data gaps.



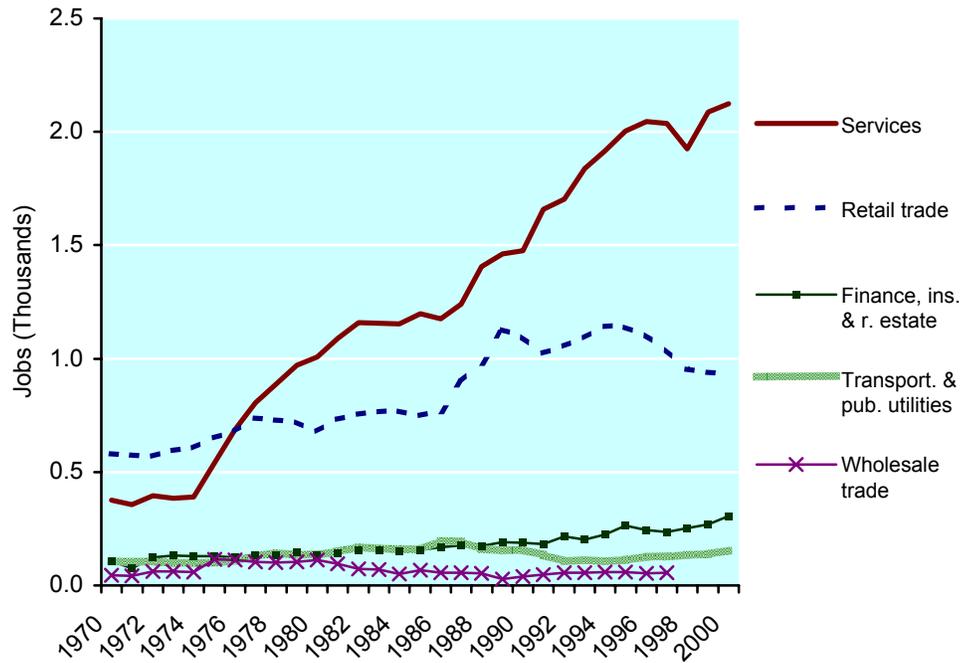
Employment by Industry Changes from 1970 to 2000						
	1970	% of Total	2000	% of Total	New Employment	% of New Employment
<b>Total Employment</b>	3,301		7,148		<b>3,847</b>	
<b>Wage and Salary Employment</b>	2,503	75.8%	5,531	77.4%	<b>3,028</b>	<b>78.7%</b>
<b>Proprietors' Employment</b>	798	24.2%	1,617	22.6%	<b>819</b>	<b>21.3%</b>
<b>Farm and Agricultural Services</b>	488	14.8%	#N/A	#N/A	<b>#N/A</b>	<b>#N/A</b>
<b>Farm</b>	438	13.3%	580	8.1%	<b>142</b>	<b>3.7%</b>
<b>Ag. Services</b>	50	1.5%	#N/A	#N/A	<b>#N/A</b>	<b>#N/A</b>
<b>Mining</b>	62	1.9%	#N/A	#N/A	<b>#N/A</b>	<b>#N/A</b>
<b>Manufacturing (incl. forest products)</b>	154	4.7%	207	2.9%	<b>53</b>	<b>1.4%</b>
<b>Services and Professional</b>	1,215	36.8%	#N/A	#N/A	<b>#N/A</b>	<b>#N/A</b>
<b>Transportation &amp; Public Utilities</b>	106	3.2%	154	2.2%	<b>48</b>	<b>1.2%</b>
<b>Wholesale Trade</b>	44	1.3%	#N/A	#N/A	<b>#N/A</b>	<b>#N/A</b>
<b>Retail Trade</b>	582	17.6%	934	13.1%	<b>352</b>	<b>9.1%</b>
<b>Finance, Insurance &amp; Real Estate</b>	106	3.2%	307	4.3%	<b>201</b>	<b>5.2%</b>
<b>Services (Health, Legal, Business, Others)</b>	377	11.4%	2,123	29.7%	<b>1,746</b>	<b>45.4%</b>
<b>Construction</b>	153	4.6%	318	4.4%	<b>165</b>	<b>4.3%</b>
<b>Government</b>	1,229	37.2%	2,328	32.6%	<b>1,099</b>	<b>28.6%</b>

**Agricultural Services** include soil preparation services, crop services, etc. It also includes forestry services, such as reforestation services, and fishing, hunting, and trapping. **Manufacturing** includes paper, lumber and wood products manufacturing.

## Services & Professional

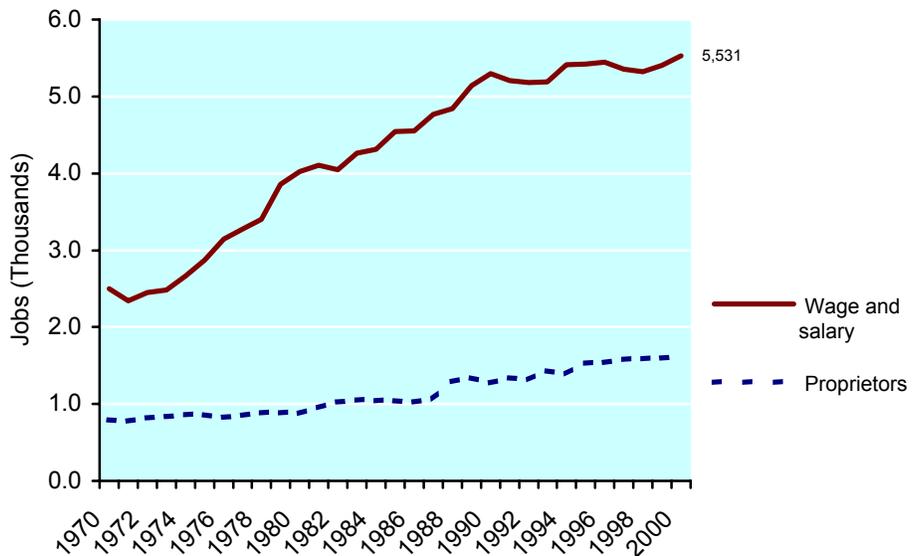
The fastest growing categories under Services and Professional are:

- Services (which includes health, business, legal, engineering and management services) represent 30% of total employment in 2000.
- Retail Trade accounts for 13% of total employment.



## Employees vs. Proprietors

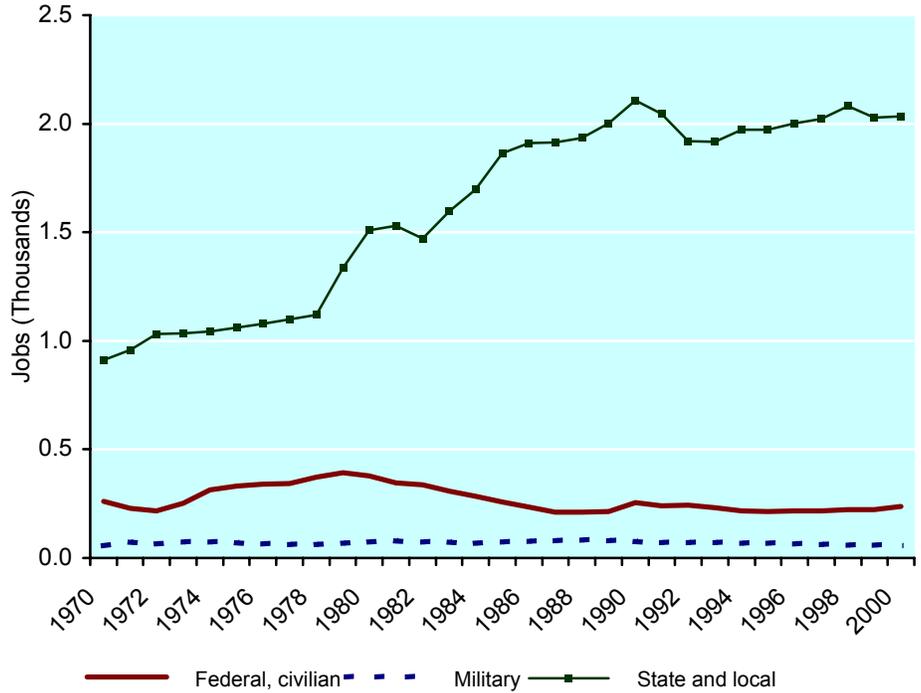
- From 1970 to 2000, the majority of job growth, 79% of new jobs, has been in wage and salary employment (people who work for someone else).
- Employment of proprietors contributed to 21% of new employment from 1970 to 2000. In 1970, proprietors represented 24% of total employment; by 2000, they represented 23%.



**Proprietors** include sole ownerships, partnerships, and tax-exempt cooperatives.  
**Wage and salary** employment refers to employees.

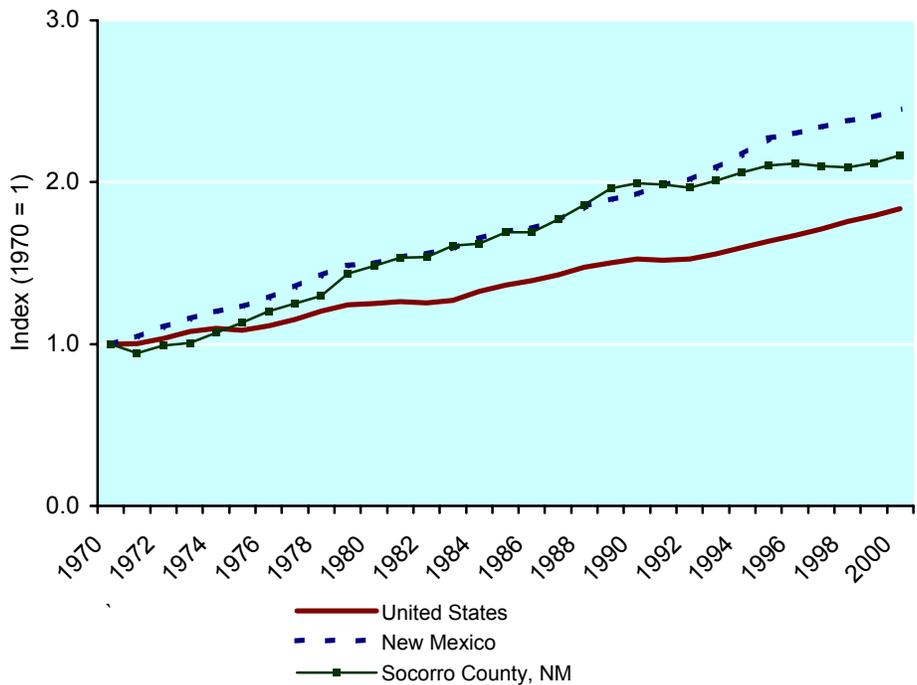
### Government Jobs

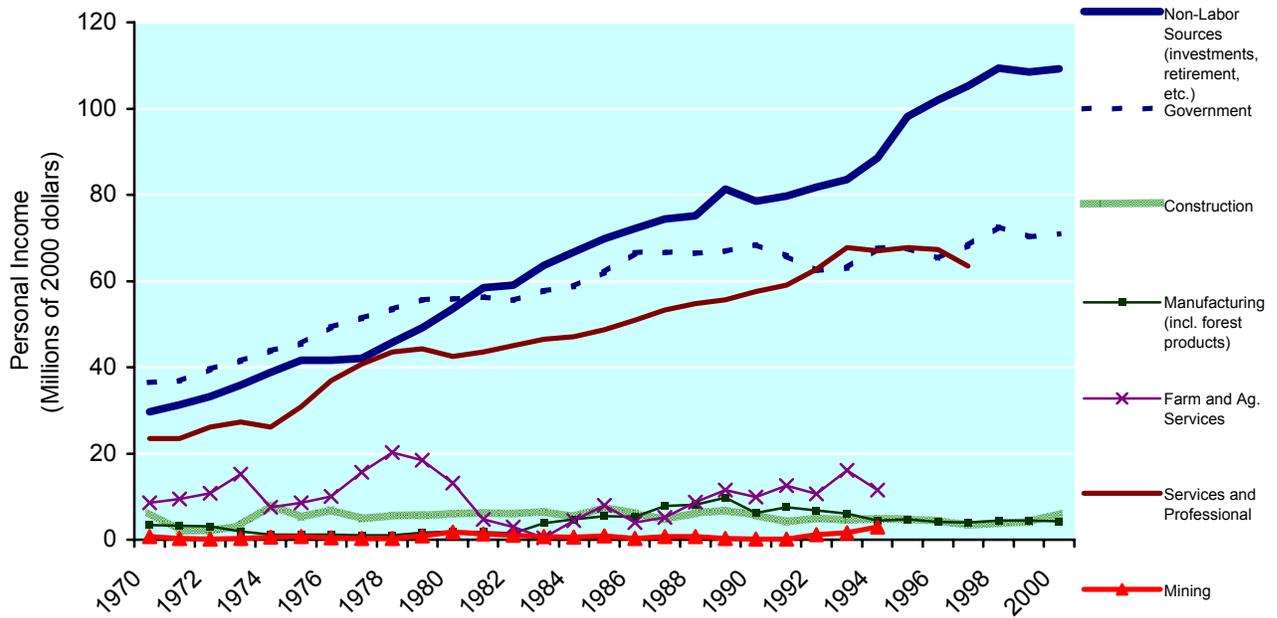
- The majority of the growth in government employment has been in state and local government.



### Job Growth Compared to the State and Nation

- Over the last 30 years job growth in Socorro County, NM has been slower than the state and faster than the nation..





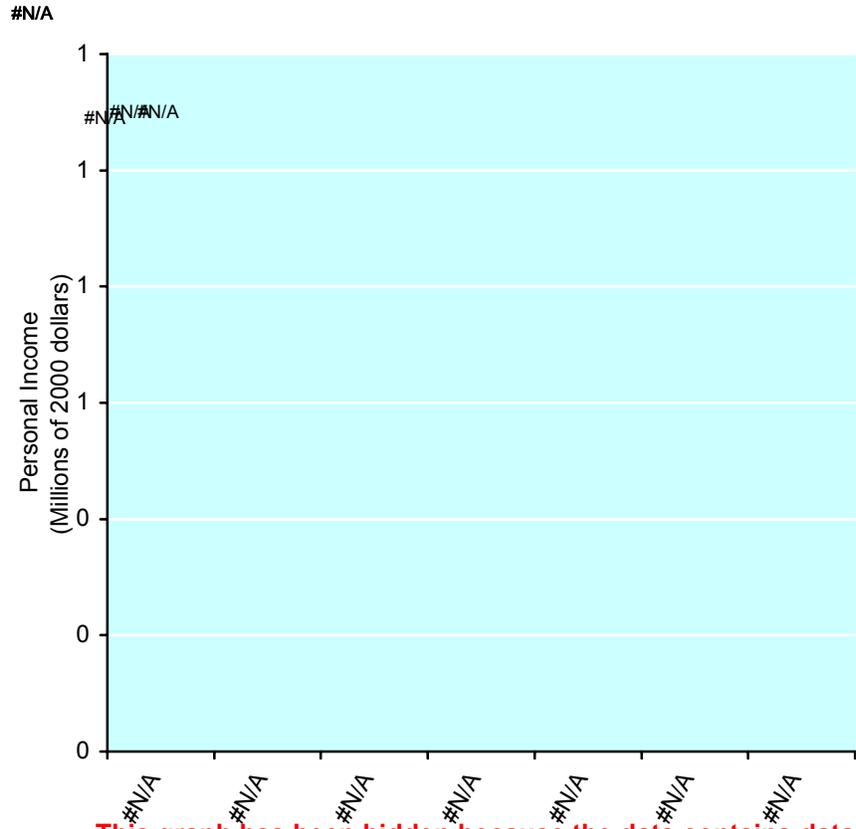
## New Income by Type

All figures in millions of 2000 dollars	1970	% of Total in 1970	2000	% of Total in 2000	New Income 1970 to 2000	% of New Income
<b>Total Personal Income*</b>	109		277		169	
<b>Farm and Agricultural Services</b>	9	7.9%	#N/A	#N/A	#N/A	#N/A
<b>Farm</b>	8	7.1%	13	4.6%	5	3%
<b>Ag. Services</b>	1	0.8%	#N/A	#N/A	#N/A	#N/A
<b>Mining</b>	1	0.7%	#N/A	#N/A	#N/A	#N/A
<b>Manufacturing (incl. forest products)</b>	3	3.2%	4	1.5%	1	0%
<b>Services and Professional</b>	23	21.6%	#N/A	#N/A	#N/A	#N/A
<b>Transportation &amp; Public Utilities</b>	5	4.3%	5	1.8%	0	0%
<b>Wholesale Trade</b>	1	0.6%	#N/A	#N/A	#N/A	#N/A
<b>Retail Trade</b>	10	9.0%	13	4.7%	3	2%
<b>Finance, Insurance &amp; Real Estate</b>	2	1.7%	4	1.6%	2	1%
<b>Services (Health, Legal, Business, Others)</b>	7	6.1%	48	17.4%	42	25%
<b>Construction</b>	6	5.9%	6	2.2%	0	NA
<b>Government</b>	36	33.5%	71	25.6%	35	21%
<b>Non-Labor Income</b>	30	27.3%	109	39.4%	80	47%
<b>Dividends, Interest &amp; Rent</b>	13	12.1%	45	16.1%	32	19%
<b>Transfer Payments</b>	16	15.2%	65	23.3%	48	28%

\*The sum of the above categories do not add to total due to adjustments made for place of residence and personal contributions for social insurance made by the U.S. Department of Commerce.

### Net Change by Major Category

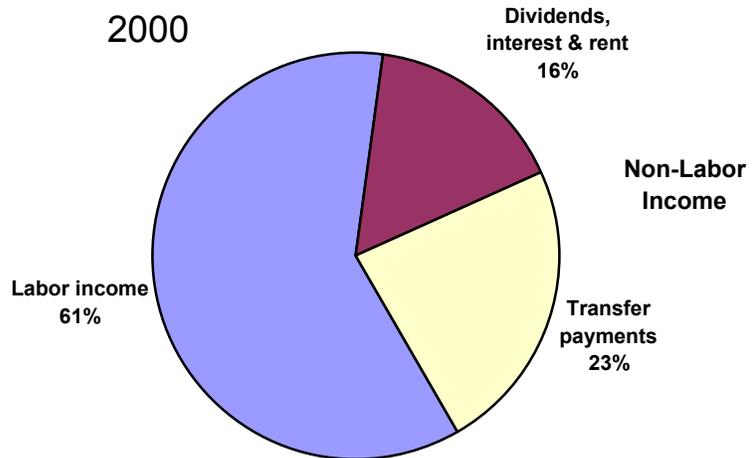
- From 1970 to 2000, Socorro County, NM added \$169 million in personal income, in real terms.
- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A



This graph has been hidden because the data contains data g:

### Income by Type 1970 & 2000

- In 1970, Non-Labor Income sources represented 27% of total personal income. By 2000, they comprised 39%.
- In 2000, Dividends, Interest and Rent represented 16% of total personal income. Transfer Payments comprised 23%.



**Non-Labor Income** includes Transfer Payments (primarily related to retirement) and Dividends, Interest and Rent (money earned from past investments).

Per Capita Income

Per Capita Income									
All income in millions of 2000 dollars (Except Per Capita)	1970		1980		1990		2000		% Change 90-00
	1970	% of Total	1980	% of Total	1990	% of Total	2000	% of Total	
Total Personal Income	109		171		224		277		24%
Non-Farm	101	93%	158	93%	215	96%	265	95%	23%
Farm	8	7%	13	7%	9	4%	13	5%	37%
Population (Thousands)	9.8		12.7		14.8		18.1		22%
Per Capita Income	11,118		13,423		15,125		15,352		1%

- Per capita income, in real terms, increased by 1% from 1990 to 2000.

Note: Population estimates from the Bureau of Economic Analysis vary slightly from those in the Census (Page P-3).

Sources of Labor Income

Sources of Labor Income									
All income in millions of 2000 dollars	1970		1980		1990		2000		% Change 90-00
	1970	% of Total	1980	% of Total	1990	% of Total	2000	% of Total	
Labor Sources									
Wage and Salary	58	54%	88	52%	109	49%	124	45%	13%
Other Labor Income	4	4%	12	7%	19	9%	20	7%	3%
Proprietor's	17	16%	21	12%	19	9%	25	9%	27%
Non-Labor Sources	30	27%	54	31%	79	35%	109	39%	39%
Dividends, Interest & Rent	13	12%	26	15%	39	17%	45	16%	14%
Transfer Payments	16	15%	27	16%	40	18%	65	23%	63%

Percentages do not add to 100 because of adjustments made by BEA, such as residence, social security, and others.

- In 2000, proprietor's income accounted for 9% of total personal income, compared to 9% in 1990. From 1990 to 2000, proprietor's income grew by 27%, in real terms. Wage and salary income during those years grew by 13%.

- From 1990 to 2000 Non-Labor income sources grew by 39%.

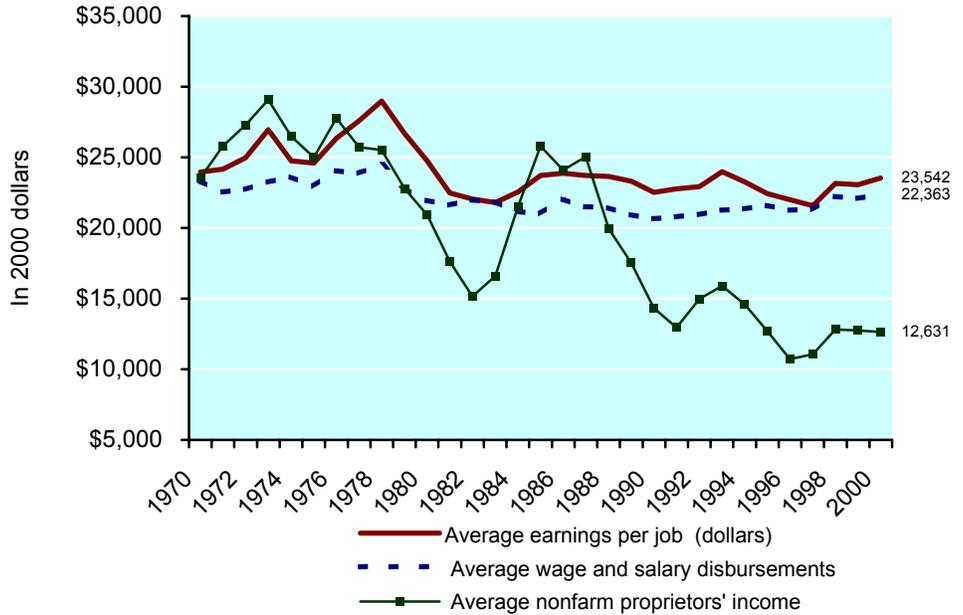
**Wage and salary** is monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401(K) plans.

**Other labor income** is payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees. The payments to private benefit plans account for more than 98 percent of other labor income.

**Proprietors** is income of sole proprietorships, partnerships and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

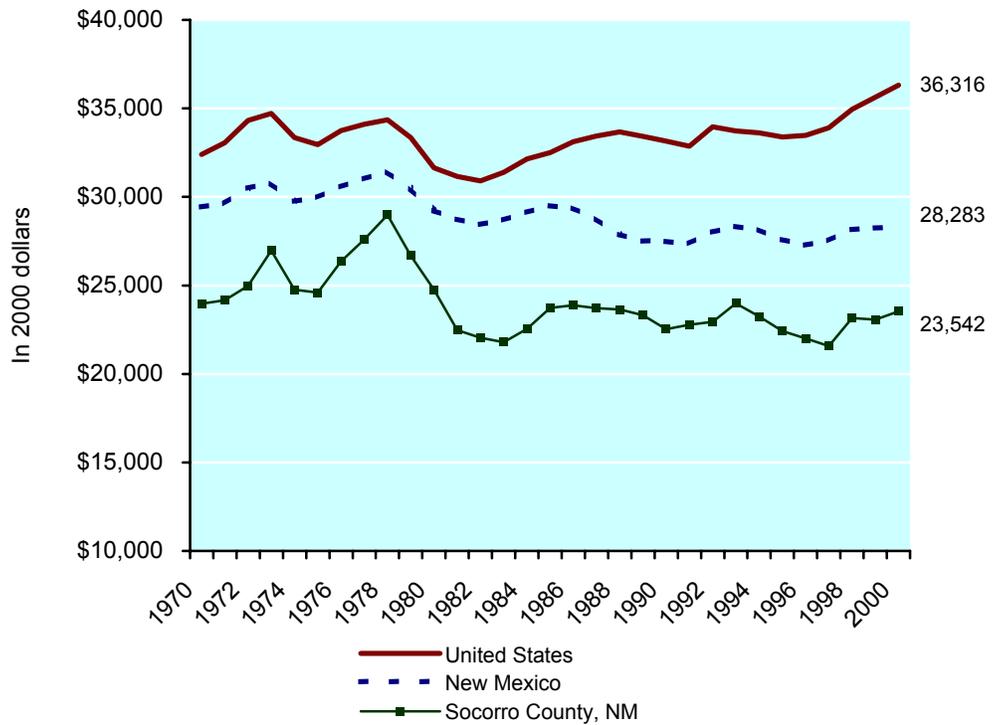
## Average Earnings Per Job

- Average earnings per job in Socorro County, NM, in real terms, have fallen from \$23,962 in 1970 to \$23,542 in 2000.



## Average Earnings Compared to State and Nation

- In 1999, Average earnings per job in Socorro County, NM are lower than the state and the nation.



Another way to look at industry trends is to group industries differently, as shown in the table. This grouping allows a more detailed review of "service" sectors, which can be broken down into categories such as producer, consumer, social, and government services. Consumer services are generally low-paying. They include jobs in amusement and recreation, hotel and lodging, repair shops, motion pictures, household and personal services.

Social services include education and health care. Government services include state and local government, military, as well as federal employees, and public lands agencies. Producer services are defined as those services that are part of goods production and they include some of the higher paying sectors, such as finance, insurance, real estate, legal and business services, membership organizations, and engineering and management services.

### Labor Income by Industry Grouping

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

This graph has been hidden because the data contains data gaps.

### Labor Income by Industry Grouping

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

This graph has been hidden because the data contains data gaps.

# Another Way to Look at Industry Groupings

## Personal Income Change by Category 1990 to 2000

The largest contributors to new personal income from 1990 to 2000 in real terms, were:

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

● #N/A

● #N/A

Personal Income					
All figures in thousands of 2000 dollars.	1990	2000	New Income	% Change	% of New Income
Total Personal Income	224,095	277,395	53,300	24%	
<b>LABOR INCOME</b>					
<b>Transformative</b>					
Agriculture	9,909	#N/A	#N/A		
Mining	146	#N/A	#N/A		
Construction	5,780	6,026	246		
Manufacturing	6,159	4,269	-1,890		
Total	21,995	#N/A	#N/A	#N/A	#N/A
<b>Distributive</b>					
Transportation & public utilities	5,001	5,037	36		
Wholesale Trade	883	#N/A	#N/A		
Total	5,884	#N/A	#N/A	#N/A	#N/A
<b>Retail Trade</b>					
	15,785	13,049	-2,736	-17%	NA
<b>Consumer Services</b>					
Hotels & Other Lodging	723	1,419	696		
Personal Services	800	#N/A	#N/A		
Household Services	406	466	60		
Repair Services	1,034	#N/A	#N/A		
Motion Pictures	#N/A	251	#N/A		
Amusements & Recreation	70	#N/A	#N/A		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Producer Services</b>					
Finance, Insurance & Real Estate	2,621	4,333	1,712		
Legal Services	870	961	91		
Business Services	1,708	2,226	518		
Engineering & Management Service	#N/A	15,365	#N/A		
Membership Organizations	1,047	#N/A	#N/A		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Social Services</b>					
Health Services	6,914	11,694	4,780		
Social Services	1,528	1,320	-208		
Educational Services	#N/A	#N/A	#N/A		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Government Services</b>					
Federal, Civilian	13,420	10,730	-2,690		
Military	929	794	-135		
State and Local	54,194	59,521	5,327		
Total	68,543	71,045	2,502	4%	5%

Note: The sum of the above categories does not add to total because non-labor income is not included. See page P-9 for non-labor income data.

The term "Non-Labor Income" is also referred by some economists as "Non-Earnings Income". It consists of Dividends, Interest and Rent (collectively often referred to as money earned from investments) and Transfer Payments (payments from governments to individuals, age-related, including Medicare, disability insurance payments, and retirements).

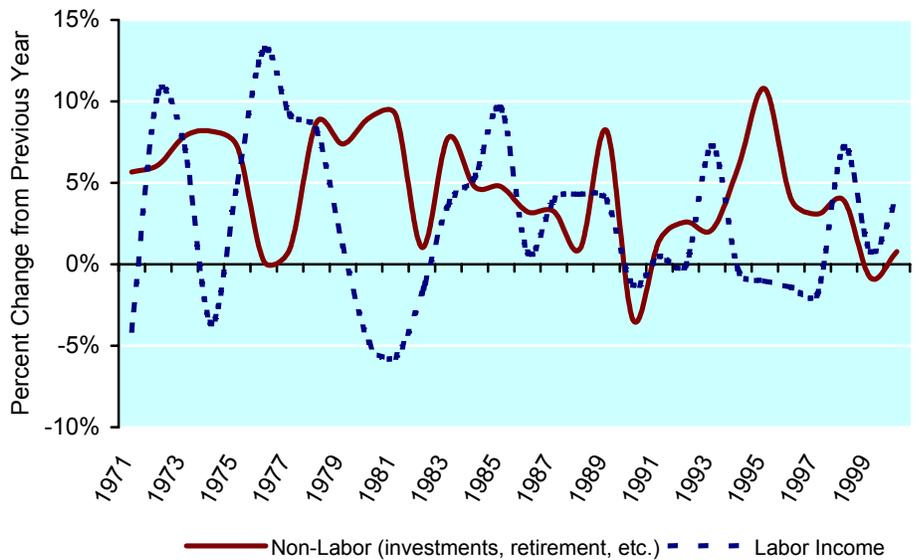
(See methods section for definitions and further explanations.)

## Components of Transfer Payments

All figures in millions of 2000 dollars	% of Total TP		% of Total TP		% of Total TP		New Payments 1970 to 2000	% of New Payments
	1970	1980	1980	2000	2000			
<b>Total transfer payments</b>	16.5	27.2		64.5			<b>48.1</b>	
<b>Government payments to individuals</b>	15.3	93%	25.3	93%	61.1	95%	<b>45.8</b>	<b>95%</b>
Retirement & disab. insurance benefit payments	5.7	34%	9.7	36%	19.0	29%	<b>13.3</b>	<b>28%</b>
Medical payments	1.85	11%	4.62	17%	22.77	35%	<b>20.9</b>	<b>44%</b>
Income maintenance benefit payments ("welfare")	4.1	25%	6.2	23%	13.0	20%	<b>8.8</b>	<b>18%</b>
Unemployment insurance benefit payments	0.9	5%	0.6	2%	0.6	1%	<b>(0.3)</b>	<b>NA</b>
Veterans benefit payments	2.7	16%	3.4	12%	2.7	4%	<b>(0.0)</b>	<b>NA</b>
Federal educ. & trng. asst. pay. (excl. vets)	0.1	0.7%	0.8	2.9%	1.8	2.8%	<b>1.7</b>	<b>4%</b>
Other payments to individuals	-	0.0%	0.1	0.2%	1.2	1.9%	<b>1.2</b>	<b>3%</b>
<b>Payments to nonprofit institutions</b>	0.7	4%	1.1	4%	2.1	3%	<b>1.4</b>	<b>3%</b>
<b>Business payments to individuals</b>	0.4	3%	0.8	3%	1.3	2%	<b>0.9</b>	<b>2%</b>

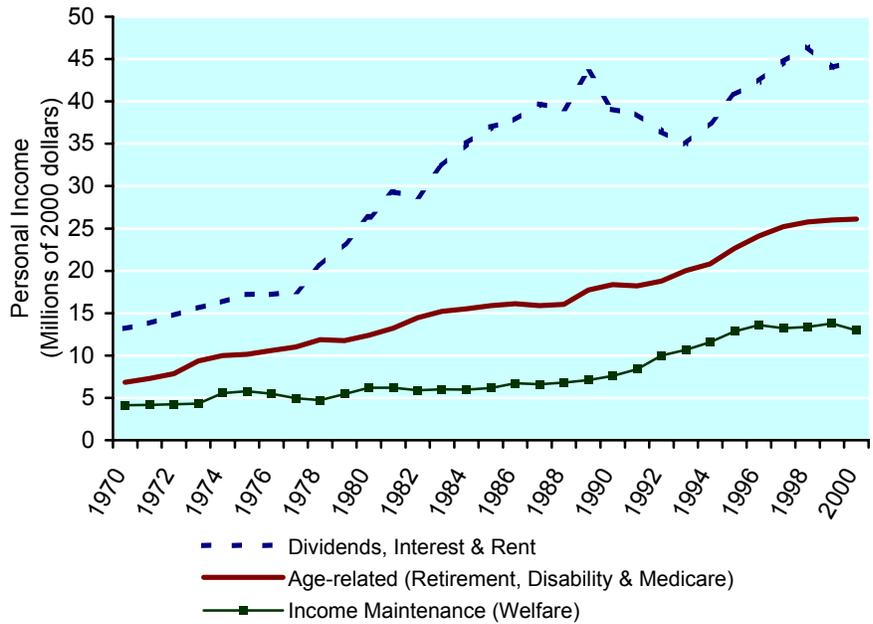
## Labor vs. Non-Labor Income Stability

- Over the last 30 years Non-Labor Income sources have had a stabilizing effect relative to the frequent fluctuations of Labor Income sources in most areas.



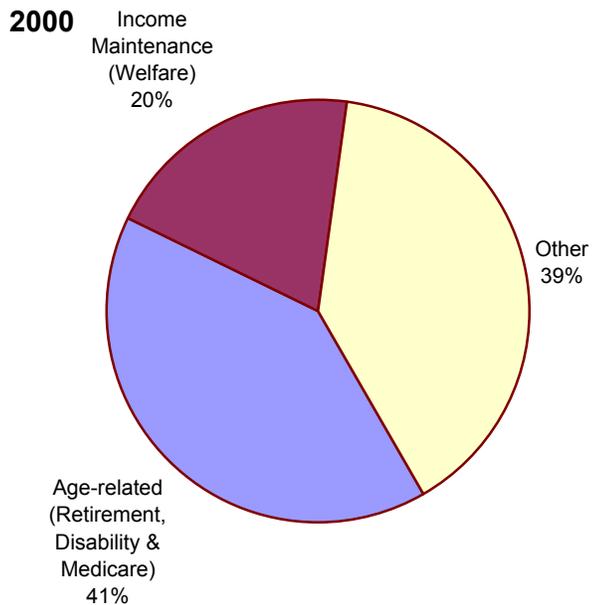
## Trends in Non-Labor Income by Type

- The largest components of Non-Labor Income are from Dividends, Interest & Rent (i.e. money earned from past investments).
- In 2000 welfare represented 20 percent of transfer payments, and 5.1 percent of total personal income. This is down from 1980 and down from 1970.



## Components of Transfer Payments

- In 2000, 40% of Transfer Payments were from age-related sources (retirement, disability, insurance payments, and Medicare) while 20% was from welfare.



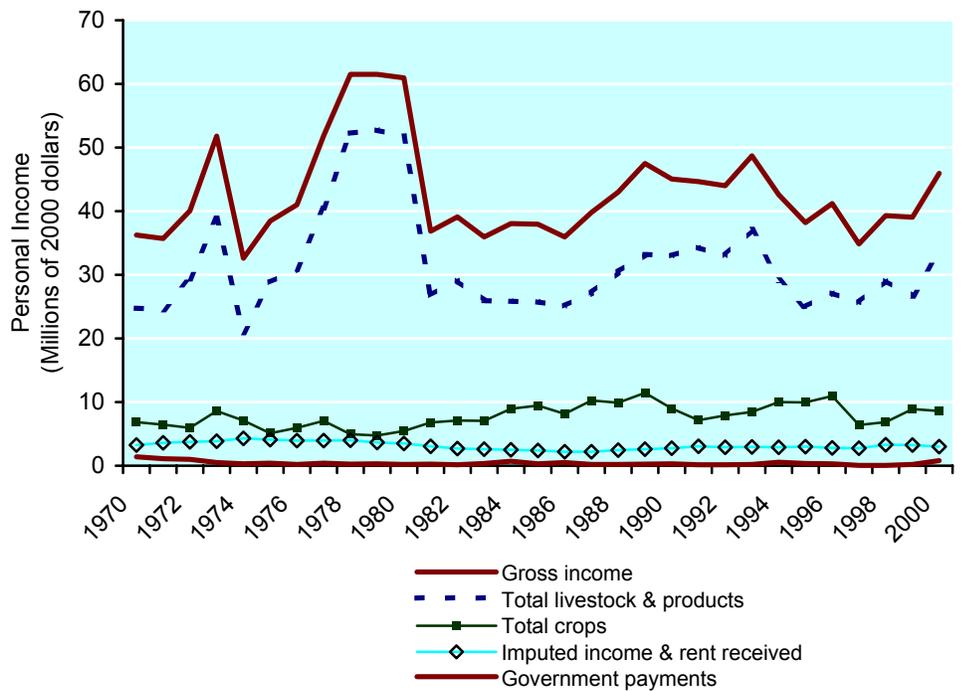
### Gross Income, Expenses, and Net Income from Farming and Ranching

All figures in thousands of 2000 dollars	% of Gross Income		% of Gross Income		2000	% of Gross Income
	1970	1985	1985	2000		
<b>Gross Income (Cash + Other)</b>	36,255	37,943		45,938		
<b>Cash Receipts from Marketings</b>	31,617	35,223	87%	42,154	92%	
<b>Livestock &amp; Products</b>	24,747	25,753	68%	33,538	73%	
<b>Crops</b>	6,870	9,469	19%	8,616	19%	
<b>Other Income</b>	4,638	2,721	13%	3,784	8%	
<b>Government Payments</b>	1,407	312	4%	803	2%	
<b>Imputed Rent &amp; Rent Received</b>	3,231	2,409	9%	2,981	6%	
<b>Production Expenses</b>	27,889	35,152		34,319		
<b>Realized Net Income (Income - Expenses)</b>	8,366	2,791		11,619		
<b>Value of Inventory Change</b>	(2,854)	3,010	-8%	(1,258)	-3%	
<b>Total Net Income (Inc. corporate farms)</b>	5,512	5,801		10,361		

### Farm Income by Category

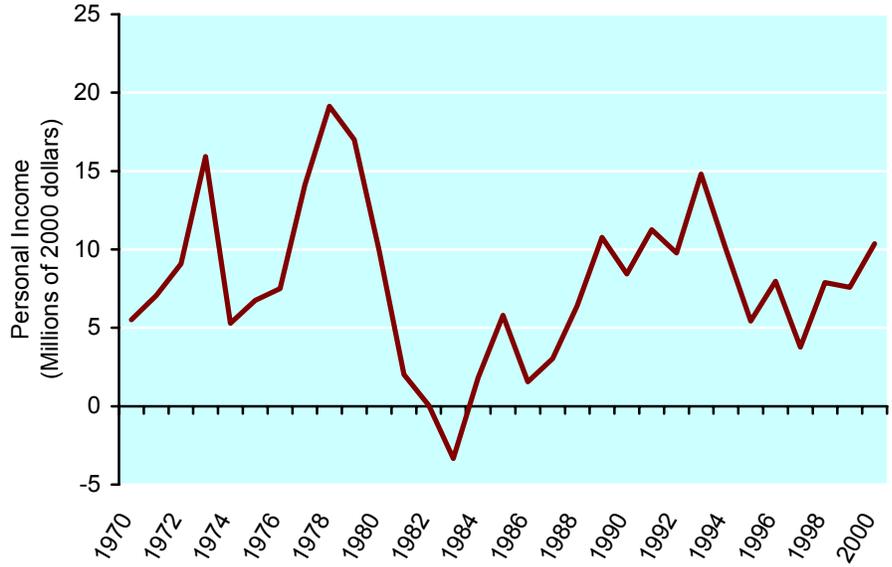
(Includes Ranching)

- In 1970, 68% of gross farm income was from livestock, while 19% was from crops. By 2000, 73% percent of gross income was from livestock, and 19% percent from crops.
- Income from government payments has dropped from 4% of gross in 1970 to 2% in 2000.



### Net Farm Income

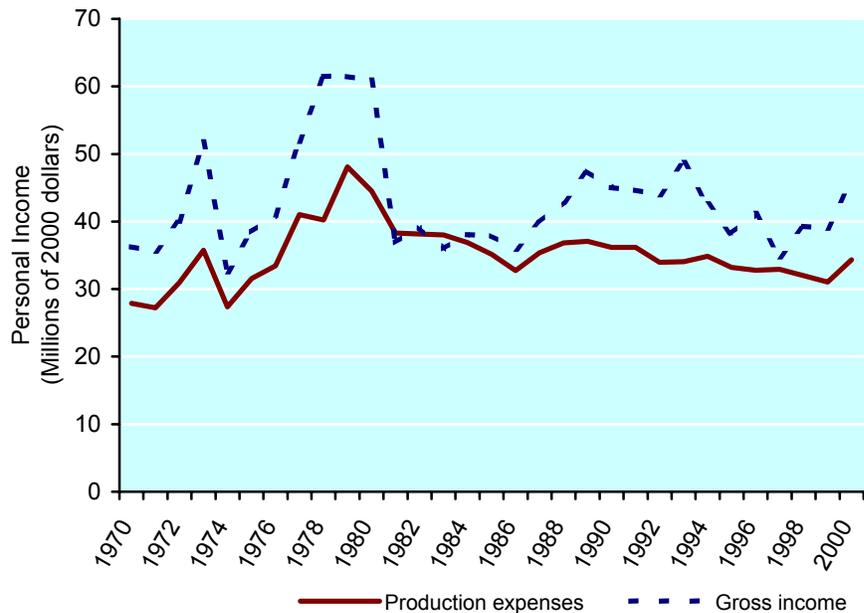
- Total net income from farming and ranching in Socorro County, NM, in real terms, rose from \$5.5 million in 1970 to \$5.8 million in 1985, and then rose to \$10.4 million in 2000.



Net farm income can be counted as positive by the Department of Commerce, even with slim margins, because the value of inventories may rise.

### Gross Income vs. Production Expenses

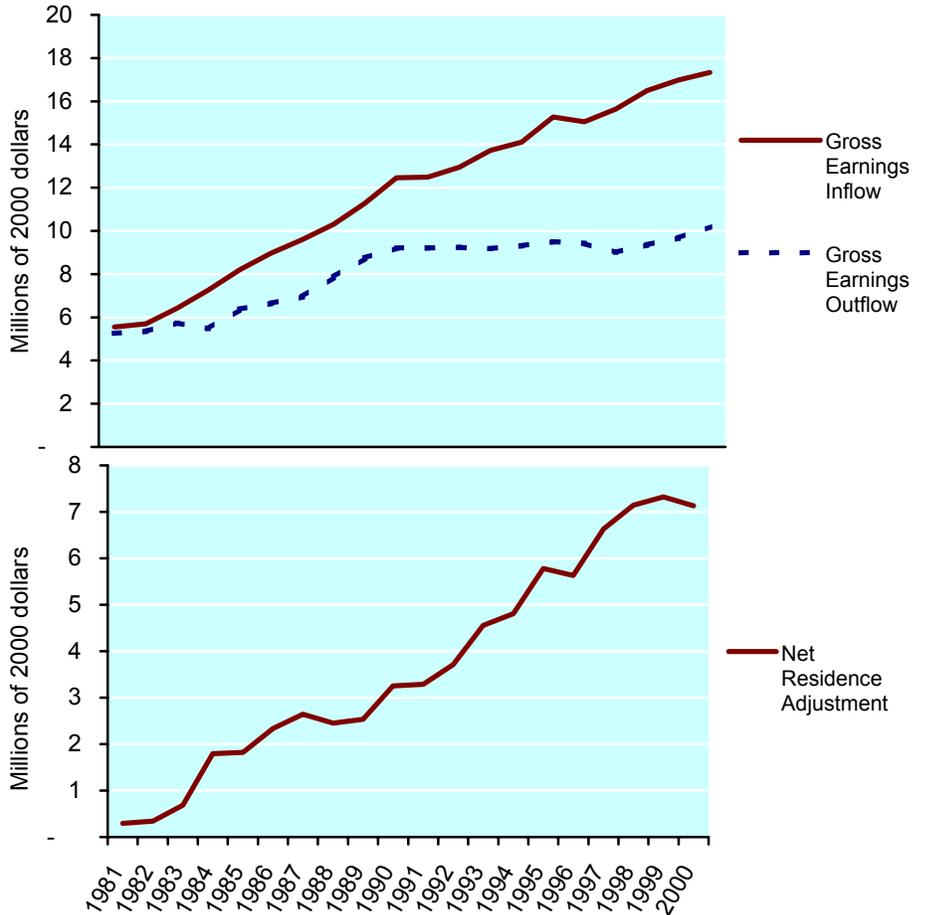
- In 1970 Gross Farm Income exceeded Production Expenses by \$8 million.
- By 2000 Gross Farm Income minus Production Expenses (realized net income) equaled \$11.6 million.



The Bureau of Economic Analysis (BEA) reports personal income in terms of location of residence. BEA calculates how much money is earned in the county by people living outside the county (Total Gross Earnings Outflow) and it calculates how much money is brought into the county by residents who work outside of the county (Total Gross Earnings Inflow). Subtracting one from the other gives the Net Residence Adjustment. The Inflow and Outflow Trends indicate whether the county is closely tied to others in terms of commuting.

### Inflow & Outflows

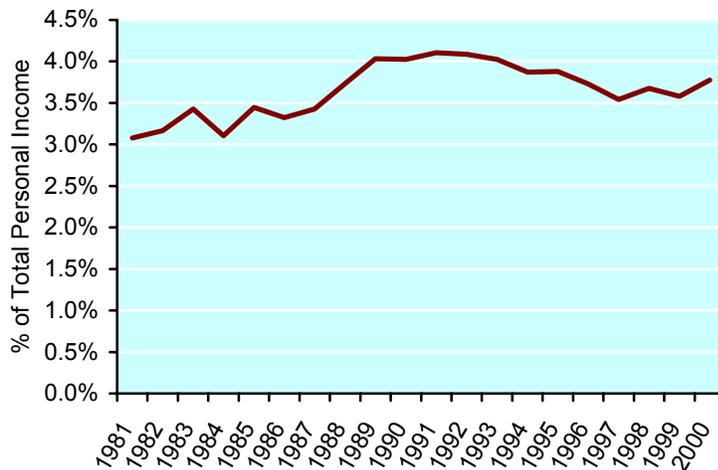
- Inflow outpaces Outflow. (See definitions above.)



- A positive Net Residential Adjustment indicates out-commuting for work to adjacent counties.

### Outflows as a Percent of Total Personal Income

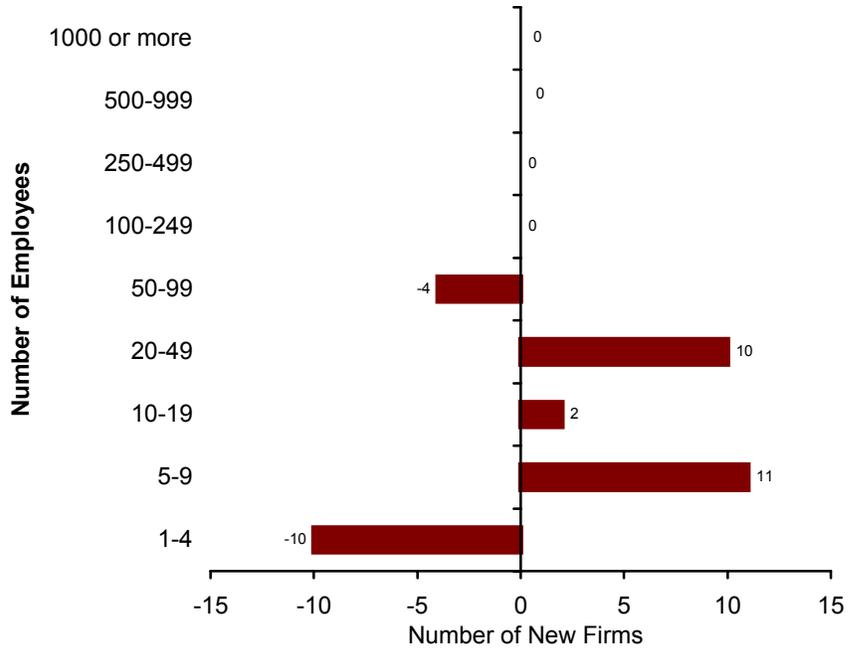
- In 2000, outflow represented 3.8% of total personal income in Socorro County, NM roughly unchanged from the 1980's



In its annual report *County Business Patterns*, the Bureau of the Census lists employment by the size and type of employer. These statistics are useful to help determine what size of business, large or small, are adding most of the new jobs.

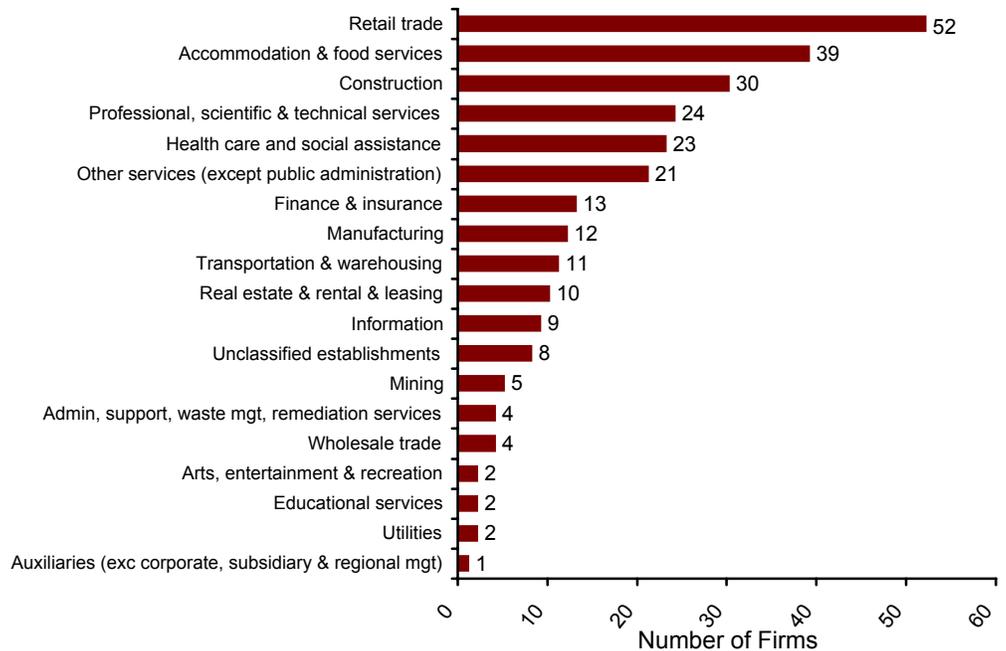
### New Firms by Employment Size 1990 to 2000

- The majority of new businesses established in Socorro County, NM from 1990 to 2000 have been large, with 20 or more employees.
- The largest growth has been in firms of 5-9 employees, with 11 new businesses.



### Number of Firms by Major Category in 2000

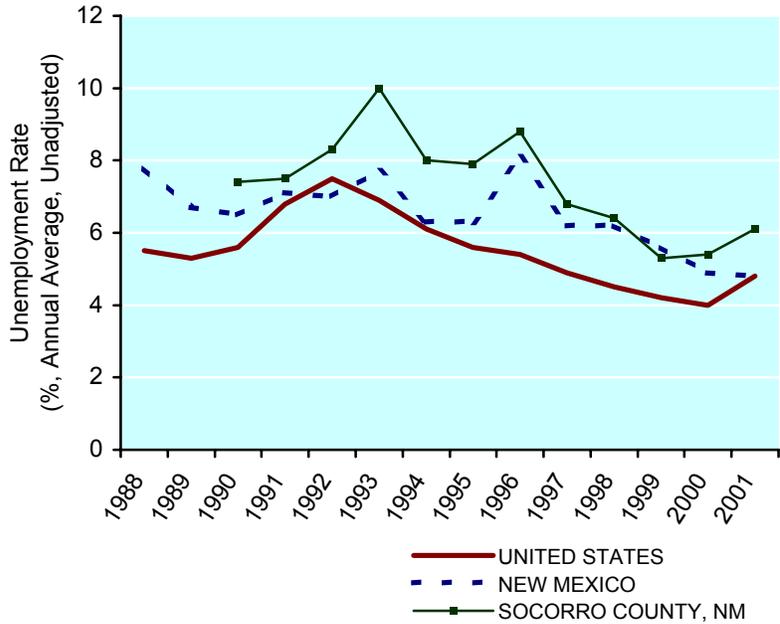
- The majority of firms are in Retail trade (52 firms) followed by Accommodation & food services (39 firms), and Construction (30 firms).



**Note:** Data for this page was obtained from *County Business Patterns* (CBP), which counts only wage and salary employment. Therefore the self-employed ("proprietors" in previous sections of this profile) are not counted, and therefore total employment is underestimated. Also, data on this page was reported by CBP using the NAICS system. Previous pages used data from REIS, which uses the SIC system. See Methods Section for a discussion on the transition from SIC to NAICS.

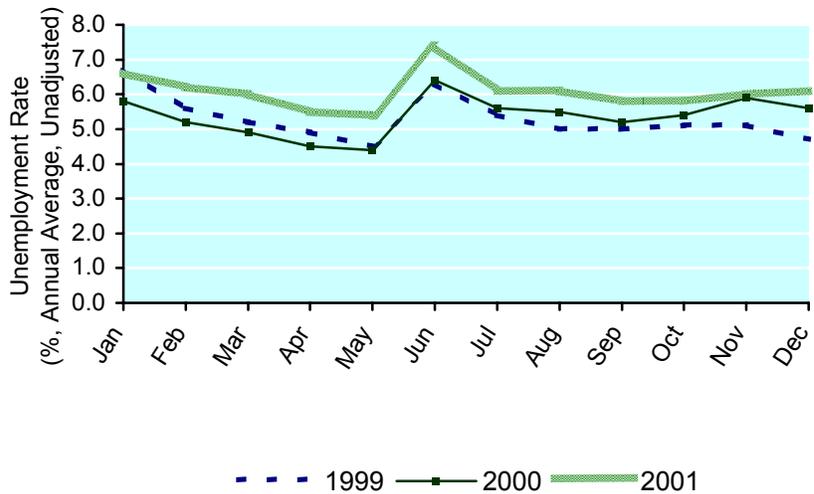
## Annual Average Unemployment Rate Comparing County to State

- In 2001, the unemployment rate in Socorro County, NM was 6.1%, compared to 4.8% for the state and 4.8% for the nation.



## Unemployment Rate Seasonality

- This graph illustrates the seasonal variation in the unemployment rate over the last three years. In 2001, the unemployment rate varied from a low of 5.4% to a high of 8.4%



## APPENDICES

### Data Sources

Data for this profile were obtained from four sources:

- Regional Economic Information System (REIS CD-ROM) of the Bureau of Economic Analysis, US Department of Commerce.
- Bureau of Labor Statistics, US Department of Labor.
- *County Business Patterns*, Bureau of the Census, US Department of Commerce.
- Bureau of Census, US Department of Commerce.

The data in this profile is organized to show long-term trends at the county level. We used this method and geographic scale for several reasons: (1) trend analysis provides a more comprehensive view of change than spot data for select years, (2) the most reliable information on long-term employment and income trends is available at the county level, and (3) communities within counties rarely function as economic units themselves. Finally, even though in many areas the most accurate geographic scale to understand economic changes may be at the multi-county or regional level, county-level data is useful in the context of existing political jurisdictions, such as county commissions and planning departments. The list below contains the World Wide Web sites and telephone numbers for the databases used in this report:

Bureau of Economic Analysis:  
<http://www.bea.doc.gov>; Tel. 202-606-9600

Bureau of Labor Statistics:  
<http://stats.bls.gov:80/blshome>; Tel. 202-606-5886

Bureau of Census:  
<http://www.census.gov>; Tel. 303-969-7750

Oregon State University, Government Information Sharing Project:  
<http://govinfo.library.orst.edu>; Tel. 541-737-4514.

University of Virginia, Geospatial and Statistical Data Center:  
<http://fisher.lib.virginia.edu>; Tel. 804-982-2630

### **Use of Federal Rather than State Data Bases**

Data from state agencies was not used for this profile. Many of the state and local sources of data do not include information on the self-employed or on the importance of non-labor income, such as retirement income and money earned from past investments. In many counties this can result in the underestimation of employment and total personal income by at least one third. The REIS disk of the Bureau of Economic Analysis contains the most robust data set and for this reason it was used as the primary source.

The only disadvantage of the REIS dataset is it's not as recent; 1999 being the latest for REIS, while state data sources provide data for as recent as 2000 and in some instances 2001. By providing long-term trends data, from 1970 to 1999, having the most recent data is less important than being able to discern where the county's economy was, and the direction in which it is headed in recent years.

### **The Standard Industrial Classification (SIC) System**

Employment and income information is organized by the US Department of Commerce according to the Standard Industrial Classification (SIC) code. Industries are classified in broad categories (e.g., Farm), sub-categories (e.g., Agricultural production - crops), and progressively finer levels of detail (e.g., Ag. Production – cash grains). For a detailed description of SIC codes consult *The Standard Industrial Classification Manual* (National Technical Information Service, order no. PB-100012, Tel. 703-487-4600).

### **Services**

Since much of the growth in labor earnings in the US economy over the last two decades has been in “services,” it should be noted that the term is defined in various ways by different researchers. Some economists define services broadly as “all output that does not come from the four goods-producing sectors: agriculture, mining, manufacturing, and construction.”<sup>1</sup> The US Department of Commerce defines services more narrowly as major groups 70-89 of the SIC code.<sup>2</sup> However, even their restricted classification includes a wide variety of sectors, ranging from hotels and lodging, and social services to business services, and engineering and management services.

---

<sup>1</sup> E. Ginzberg and G.J. Vojta. 1981. “The Service Sector in the US Economy.” *Scientific American*. 244 (3): 48-55.

<sup>2</sup> SIC codes 70-89 are: Hotels, Lodging and Other Places, Personal Services, Business Services, Auto Repair, Miscellaneous Repair Services, Motion Pictures, Amusement and Recreation Services, Health Services, Legal Services, Educational Services, Social Services, Museum Services, Museums, Botanical, and Zoological Services, Engineering and Management Services, Private Households, and Services Not Elsewhere Classified.

In this profile, we define services broadly as “Services and professional” industries, and then also into categories -- such as producer, consumer, social and government services -- to gain a clearer picture of where service growth is taking place. We use the term Services and Professional to underscore an important point: service occupations are not just “hamburger flippers and maids,” but rather consist of a combination of high-paying and low-paying professions, mixing physicians with barbers, and chambers maids with architects and financial consultants.

According to economist Lester Thurow, “Services is simply too heterogeneous to be an interesting category. The real issue is not the growth of services but whether the economy is making a successful transition from low-wage, low-skill industries ... to high-wage, high-skill industries.”<sup>1</sup> One way to gauge this is to follow the long-term trends in average earnings per job.

#### **A Transition from SIC system to NAICS:**

##### **An Important Precaution on the Interpretation of Economic Trend Data.**

Most of the historic data, from 1970 to 1999, used in this profile is based on industry data that is organized by the U.S. Department of Commerce using the Standard Industrial Classification (SIC) system. In the next few years, depending on the agency, data will be organized according to a new system, called the North American Industry Classification System (NAICS, pronounced “nakes”). In this profile, only the section called Business Establishments, which uses data from *County Business Patterns*, is organized according to the NAICS system.

The NAICS system is an improvement to the SIC system in several ways: first, businesses that use similar processes to produce goods or services are classified together. Previously, under the SIC system, some businesses were classified on the basis of their production processes while others were classified under different principles, such as class of consumer. Second, NAICS is a flexible system that will be updated every five years in order to keep pace with changes in the economy. Third, the NAICS system recognizes the uniqueness and rising importance of the “information economy,” and provides several new categories that are new, such as cable program distributors, and database and directory publishers. Finally, and perhaps the most useful, the NAICS system provides seven sectors to better reflect services-producing businesses that were previously combined into one generic SIC division (the Services division). This new system allows the data user to differentiate more clearly between what was previously often lumped under the general heading of “services,” into categories such as arts and entertainment; education; professional, scientific and technical services; health care and social assistance, among others.

Arguably the most important change of NAICS is the recognition of hundreds of new businesses in the economy. NAICS divides the economy into 20 broad sectors rather than the SIC’s 10 divisions as seen in the table below. Creating these additional sector-level groupings allows NAICS to better reflect key business activities as well as chronicle their changes.

---

<sup>1</sup> Lester Thurow, *The Future of Capitalism* (New York: William and Morrow and Company), p. 71.

SIC Divisions vs. NAICS Sectors

<i>SIC Divisions</i>	<i>NAICS Sectors</i>
<ul style="list-style-type: none"> <li>• Agriculture, Forestry, and Fishing</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture, Forestry, Fishing and Hunting</li> </ul>
<ul style="list-style-type: none"> <li>• Mining</li> </ul>	<ul style="list-style-type: none"> <li>• Mining</li> </ul>
<ul style="list-style-type: none"> <li>• Construction</li> </ul>	<ul style="list-style-type: none"> <li>• Construction</li> </ul>
<ul style="list-style-type: none"> <li>• Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturing</li> </ul>
<ul style="list-style-type: none"> <li>• Transportation, Communications, and Public Utilities</li> </ul>	<ul style="list-style-type: none"> <li>• Utilities</li> <li>• Transportation and Warehousing</li> </ul>
<ul style="list-style-type: none"> <li>• Wholesale Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Wholesale Trade</li> </ul>
<ul style="list-style-type: none"> <li>• Retail Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Retail Trade</li> <li>• Accommodation and Food Services</li> </ul>
<ul style="list-style-type: none"> <li>• Finance, Insurance, and Real Estate</li> </ul>	<ul style="list-style-type: none"> <li>• Finance and Insurance</li> <li>• Real Estate and Rental and Leasing</li> </ul>
<ul style="list-style-type: none"> <li>• Services</li> </ul>	<ul style="list-style-type: none"> <li>• Information</li> <li>• Professional, Scientific, and Technical Services</li> <li>• Administrative and Support and Waste Management and Remediation Services</li> <li>• Educational Services</li> <li>• Health Care and Social Assistance</li> <li>• Arts, Entertainment, and Recreation</li> <li>• Other Services (except Public Administration)</li> </ul>
<ul style="list-style-type: none"> <li>• Public Administration</li> </ul>	<ul style="list-style-type: none"> <li>• Public Administration</li> </ul>
<ul style="list-style-type: none"> <li>• None (previously, categories within each division)</li> </ul>	<ul style="list-style-type: none"> <li>• Management of Companies and Enterprises</li> </ul>

**Non-Labor Income**

Non-labor income is a mix of Dividends, Interest, and Rent (money earned from past investments), and Transfer Payments (government payments to individuals). Private pension funds (e.g. 401(K) plans) are not counted as part of transfer payments.

Some data sources, such as “Section 202” data available from state unemployment insurance records and reported by the Bureau of Labor Statistics, do not report non-labor income. The Bureau of Economic Analysis (BEA), on the other hand, tracks non-labor income. In order to understand the actual growth (labor and non-labor) of personal income, the REIS/BEA data set must be used, and this is what was used for this profile.

**Disclosures**

Some data, such as employment and income figures in counties with small economies, are not available because of confidentiality restrictions. In order to protect information about individual businesses, data are sometimes suppressed or, in the case of the publication *County Business Patterns*, a range of values are given instead of a specific value. Generally, the smaller the geographic level of analysis or the smaller the economy under examination the higher the chances that industry-specific information will be suppressed.

In some of the profiles a few disclosure restrictions were encountered. Sometimes *County Business Patterns* data was used to estimate data where disclosures exist in the REIS/BEA database. In other instances the missing data was left blank, particularly if doing so has little effect on the ability to discern long-term trends. In other cases, where data was missing for one or two years, a rolling average was used to estimate the data gaps. In each case where disclosures were estimated, annotations were made in the Excel files.

### **Adjustments from Current to Real Dollars**

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. The US Department of Commerce reports personal income figures in terms of current dollars. All income data in this profile were adjusted to real (or constant) 2000 dollars using the Consumer Price Index.

### **Unemployment Rate**

Unemployment is generally available as seasonally unadjusted or adjusted, and there is an advantage to using adjusted data. From the Bureau of Labor Statistics web site (<http://stats.bls.gov/laueas.htm>), an explanation of why adjusted figures should be used, whenever possible: “Over the year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to seasonal events including changes in weather, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical, long term trend, and other non-seasonal movements in the series.”

Unadjusted numbers were used in this profile in order to obtain an annual average and because county-level data are not available in adjusted format from the Bureau of Labor Statistics web site. This may introduce some error in counties where the size of the workforce fluctuates seasonally, such as tourist destination areas.

### **Farm Income Footnote:**

Note that farm income figures on pages 17 and 9 are not the same. In brief, the figures on page 17 (see table) reflect income from farming *enterprises* (farm proprietors and corporate income), while the farm figure on page 9 (see table) indicates personal income earned by *individuals* (both proprietors, and wage and salary employees) who work in farming.

Note also that the term “farm” includes farming and ranching, but not agricultural services such as supplying soil preparation services and veterinary and other animal services – see table on page 9.

#### **Farm income on page 17 is calculated as follows:**

Total cash receipts and other income  
 less: Total production expenses  
 Realized net income  
 plus: Value of inventory change  
 Total net income including corporate farms

#### **Farm income on page 9 is calculated as follows:**

Total net income including corporate farms  
 less: Net income of corporate farms  
 plus: Statistical adjustment  
 Total net farm proprietors' income  
 plus: Farm wages and perquisites  
 plus: Farm other labor income  
 Total farm labor and proprietors' income

**Income:**

Total Personal Income = private earnings, income from government and government enterprises, dividends, interest, and rent, and transfer payments plus adjustments for residence minus personal contributions for social insurance.

Wage and salary = monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401K plans.

Other labor income = payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees. The payments to private benefit plans account for more than 98 percent of other labor income

Proprietors' income = income from sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

**Transfer Payments:**

Transfer payments = payments to persons for which they do not render current services. As a component of personal income, they are payments by government and business to individuals and nonprofit institutions.

Retirement & disab. insurance benefit payments = Old-Age, Survivors, and Disability Insurance payments (Social Security), Railroad Retirement and Disability payments, Federal Civilian Employee & Disability Payments, Military Retirement, and State and Local Government Employee retirement payments.

Medical payments = Medicare, public assistance medical care and CHAMPUS payments.

Income maintenance (welfare) = Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Food Stamps, and Other Income Maintenance Payments, such as emergency assistance, foster care payments and energy assistance payments.

Unemployment insurance benefit payments = unemployment compensation for state and federal civilian employees, unemployment compensation for railroad workers, and unemployment compensation for veterans.

Veterans benefits = primarily compensation to veterans for their disabilities and payments to their survivors.

Federal education and training assistance = Job Corps payments, interest payments on Guaranteed Student Loans, federal fellowship payments, and student assistance for higher education.

Other government payments = compensation of survivors of public safety officers and compensation of victims of crime. In Alaska this item includes Alaska Permanent Fund payments.

Payments to nonprofit institutions = payments for development and research contracts. For example, it includes payments for foster home care supervised by private agencies.

Business payments to individuals = personal-injury liability payments, cash prizes, and pension benefits financed by the Pension Benefit Guarantee Corporation.

## **APPENDIX B**

### **CATRON COUNTY, NM ECONOMIC PROFILE SYSTEM**



# **Population, Employment, Earnings and Personal Income Trends**

Catron County, NM



Sonoran Institute  
Northwest Office  
201 S. Wallace  
Bozeman, Montana 59715  
Tel (406) 587-7331  
Fax (406) 587-2027

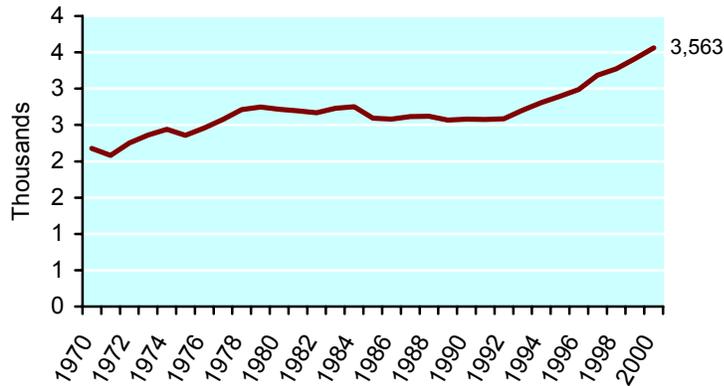
ray@sonoran.org  
ben@sonoran.org  
www.sonoran.org

December 29, 2003

<a href="#"><u>Summary Findings</u></a>	P-1
<a href="#"><u>Population Trends</u></a>	P-3
<a href="#"><u>Employment Trends</u></a>	P-5
<a href="#"><u>Personal Income</u></a>	P-9
<a href="#"><u>Trends in Earnings Per Job</u></a>	P-12
<a href="#"><u>Another Way to Look at Industry Groupings</u></a>	P-13
<a href="#"><u>Non-Labor Sources of Income</u></a>	P-15
<a href="#"><u>Agriculture</u></a>	P-17
<a href="#"><u>Commuting</u></a>	P-19
<a href="#"><u>Business Establishments by Size</u></a>	P-20
<a href="#"><u>Unemployment Trends</u></a>	P-21
<a href="#"><u>Data Sources</u></a>	P-22
<a href="#"><u>Methods</u></a>	P-23
<a href="#"><u>Glossary</u></a>	P-27

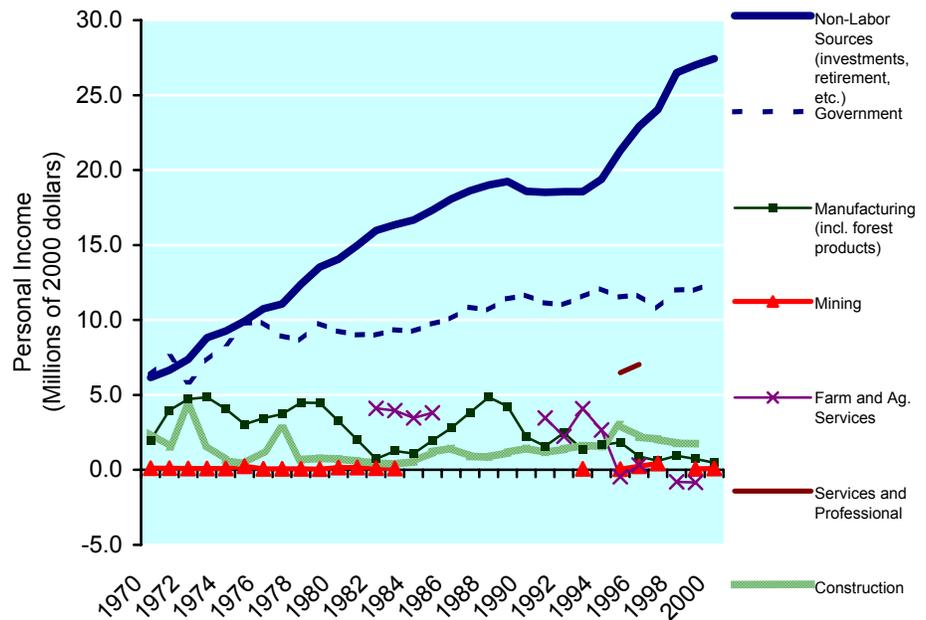
**Population**

- From 1970 to 2000 Catron County, NM grew by 1,384 people, a 64% increase in population.



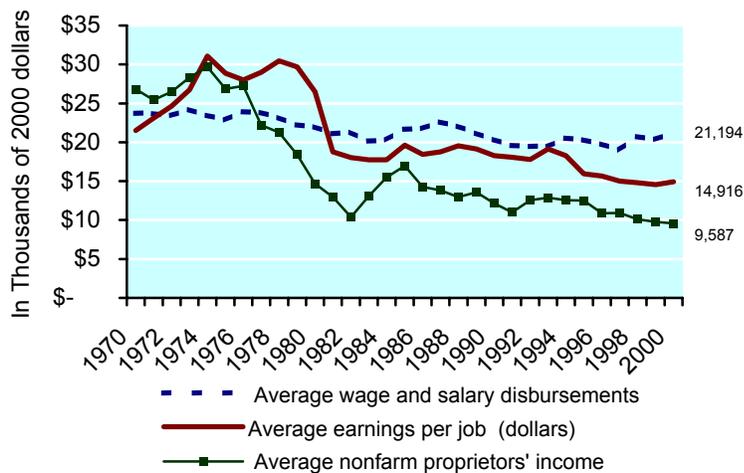
**Income Growth or Decline by Major Category**

- #N/A
- #N/A



**Average Earnings**

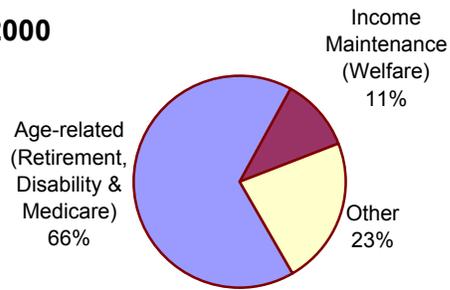
- Average earnings per job, in real terms, dropped from \$21,503 in 1970 to \$14,916 in 2000.



### Components of Transfer Payments

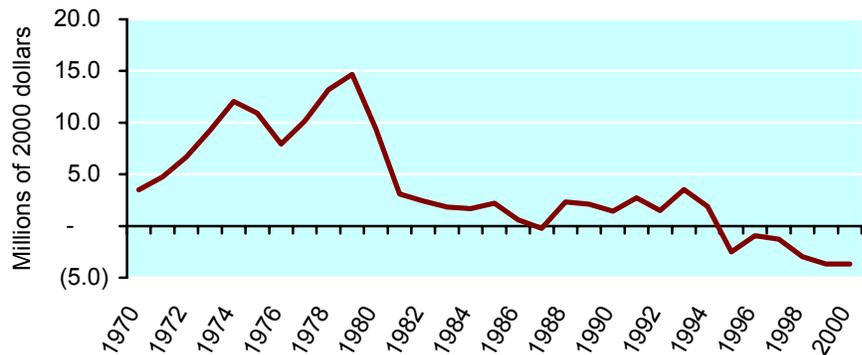
- In 2000, 66% of Transfer Payments were from age-related sources (retirement, disability, insurance payments, and Medicare). 11% was from welfare.

2000



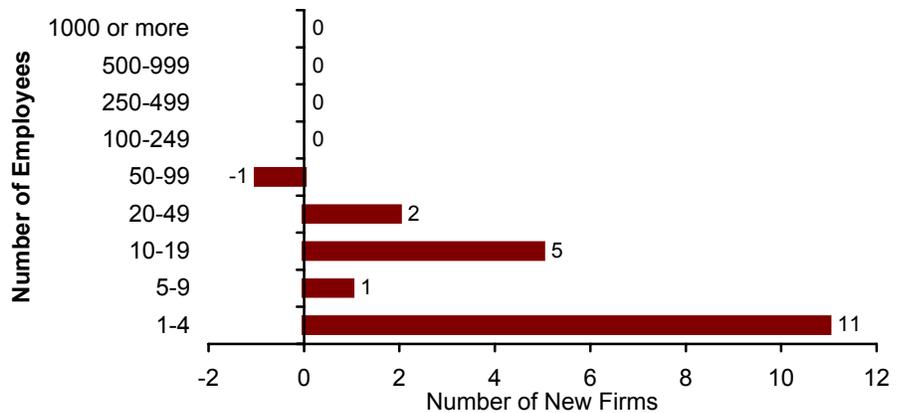
### Net Farm Income

- Net income from farming and ranching dropped from \$4 million in 1970 to -\$4 million in 2000.



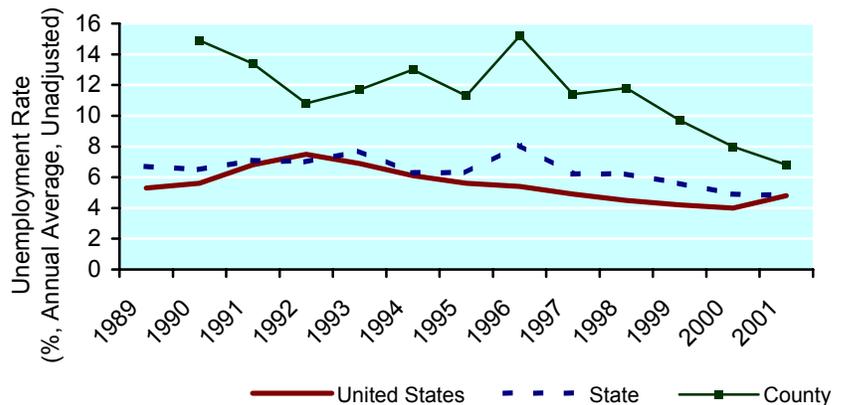
### New Firms by Employment Size 1990 to 2000

- From 1990 to 2000 the majority of new businesses established in Catron County, NM were small, with fewer than 20 employees.



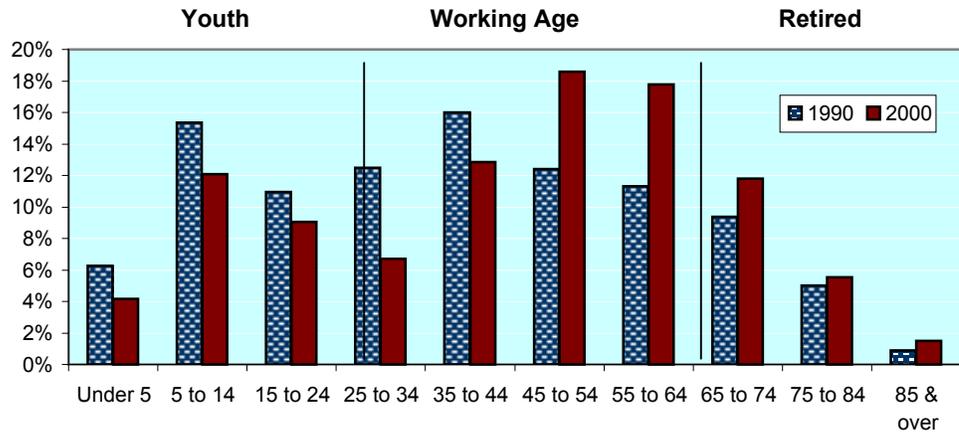
### Annual Average Unemployment Rate Comparing County to State

- In 2001, the unemployment rate in Catron County, NM was 6.8%, compared to 4.8% for the state and 4.8% for the nation.



## Age Breakout in 2000

- The median age in Catron County, NM is 47.8 years old, compared to 34.6 in the state and 35.3 in the nation.
- In 2000, the baby boom was aged 40 - 55.



## Trends

- Retirement age category has been growing.

### Population by Category, 1990 & 2000

	1990		2000		% Chg 1990 - 2000	
	Population	% of Total	Population	% of Total	% Chg 1990 - 2000	% Chg per Year 1990 - 2000
<b>Population</b>	<b>2,563</b>		<b>3,543</b>		<b>38%</b>	<b>3.8%</b>
<b>Male</b>	<b>1,349</b>	<b>53%</b>	<b>1,812</b>	<b>51%</b>	<b>34%</b>	<b>3.4%</b>
<b>Female</b>	<b>1,214</b>	<b>47%</b>	<b>1,731</b>	<b>49%</b>	<b>43%</b>	<b>4.3%</b>
<b>Under 20 years</b>	<b>742</b>	<b>29%</b>	<b>807</b>	<b>23%</b>	<b>9%</b>	<b>0.9%</b>
<b>65 years and over</b>	<b>391</b>	<b>15%</b>	<b>667</b>	<b>19%</b>	<b>71%</b>	<b>7.1%</b>
<b>Median Age</b>			<b>47.8</b>			

## Race Breakout

- Race is broken out two ways. The Hispanic breakout is separate because Hispanics can be of any race.

### Population by Race in 2000

	County	% of Total	State	% of Total
White	3,109	87.8%	1,214,253	66.8%
Black or African American	10	0.3%	34,343	1.9%
American Indian & Alaska Native	78	2.2%	173,483	9.5%
Asian	24	0.7%	19,255	1.1%
Native Hawaiian & Other Pacific Islander	2	0.1%	1,503	0.1%
Some other race	192	5.4%	309,882	17.0%
Two or more races	128	3.6%	66,327	3.6%
Hispanic or Latino (of any race)	679	19.2%	765,386	42.1%
Not Hispanic or Latino	2,864	80.8%	1,053,660	57.9%

## Household Type

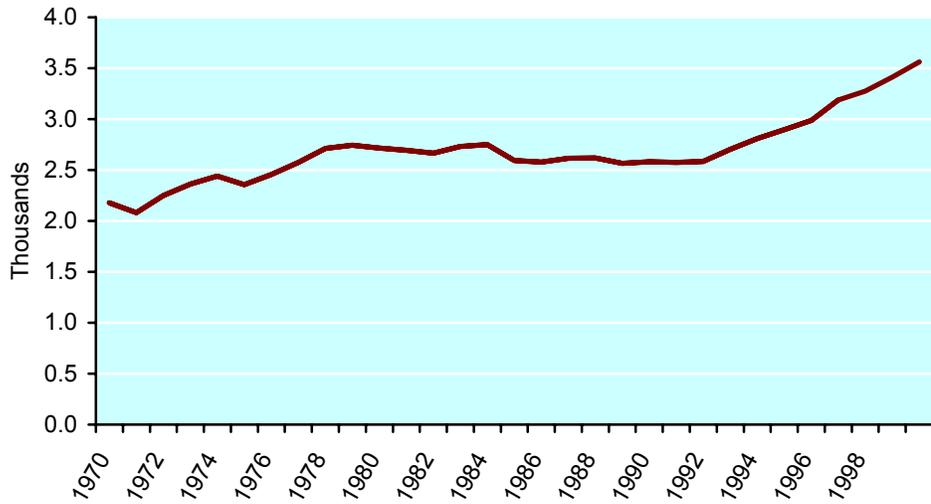
- Catron County, NM has a higher owner occupancy rate than the state.

### Population by Household Type in 2000

	County	% of Total	State	% of Total
<b>Total Housing Units</b>	<b>2,548</b>		<b>780,579</b>	
Occupied Housing Units	1,584	62.2%	677,971	86.9%
Vacant Housing Units	964	37.8%	102,608	13.1%
For Seasonal, Recreational, or Occ. Use	638	25.0%	31,990	4.1%
<b>Homeowner Vacancy Rate (%)</b>	<b>4.2%</b>		<b>2.2%</b>	
<b>Rental Vacancy Rate (%)</b>	<b>5.2%</b>		<b>11.6%</b>	
<b>Housing Tenure</b>	<b>County</b>	<b>% of Occ.</b>	<b>State</b>	<b>% of Occ.</b>
Occupied Housing Units	1,584		677,971	
Owner-occupied Housing Units	1,276	80.6%	474,445	70.0%
Renter-occupied Housing Units	308	19.4%	203,526	30.0%
<b>Avg Household Size - Owner Occupied</b>	<b>2.2</b>		<b>2.7</b>	
<b>Avg Household Size - Renter Occupied</b>	<b>2.3</b>		<b>2.4</b>	

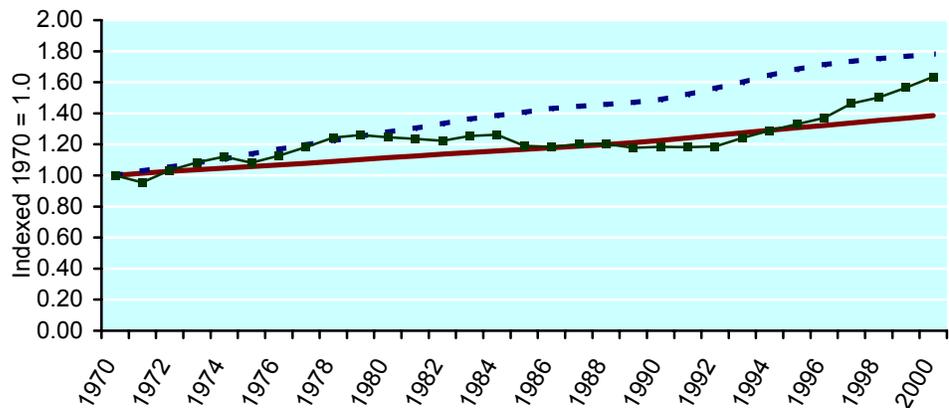
**Population**

- From 1970 to 2000 Catron County, NM grew by 1,384 people, a 64% increase in population.



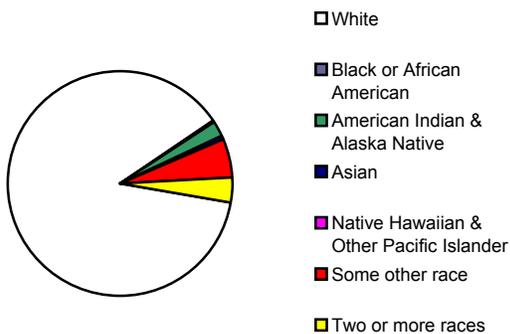
**Compared to State and the Nation**

- Since 1970, the population in Catron County, NM has grown slower than the state and faster than the nation.

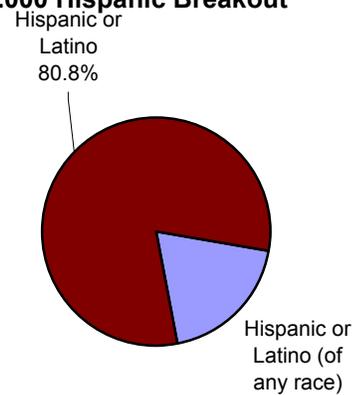


United States New Mexico Catron County, NM

**2000 Race Breakout**



**2000 Hispanic Breakout**



**Job Growth**  
(See next page)

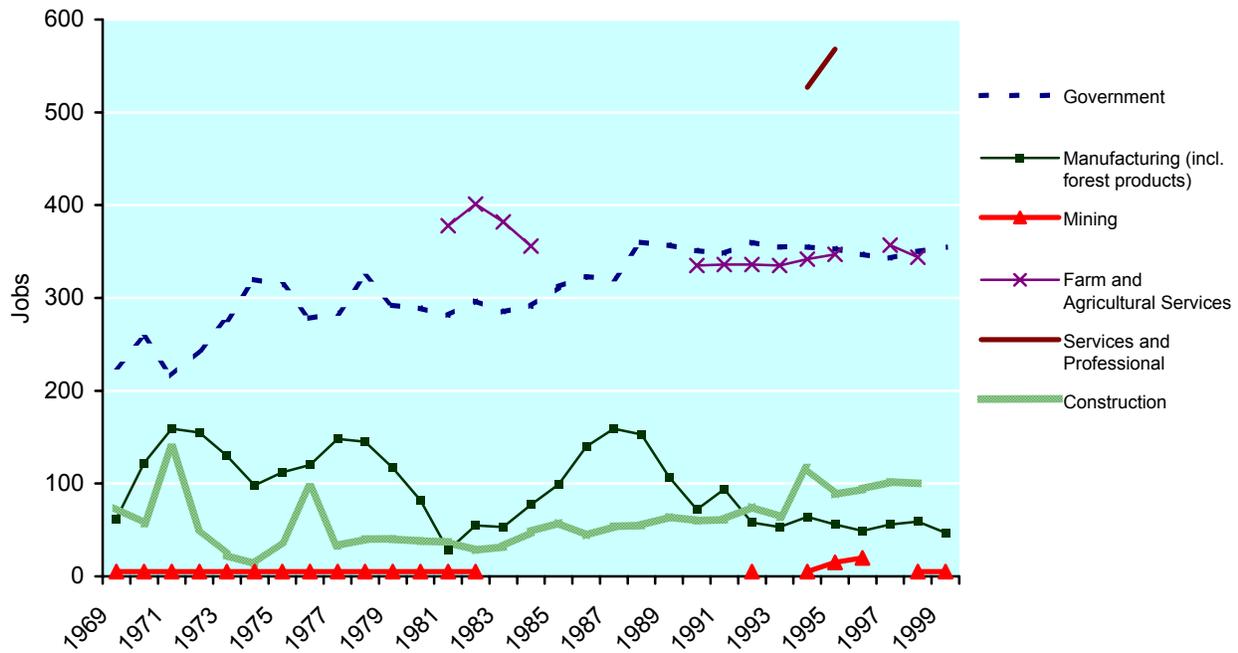
- From 1970 to 2000, 516 new jobs were created.
- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A

This graph has been hidden because the data contains data gaps.

**Jobs 1970 & 2000**

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A

This graph has been hidden because the data contains data gaps.



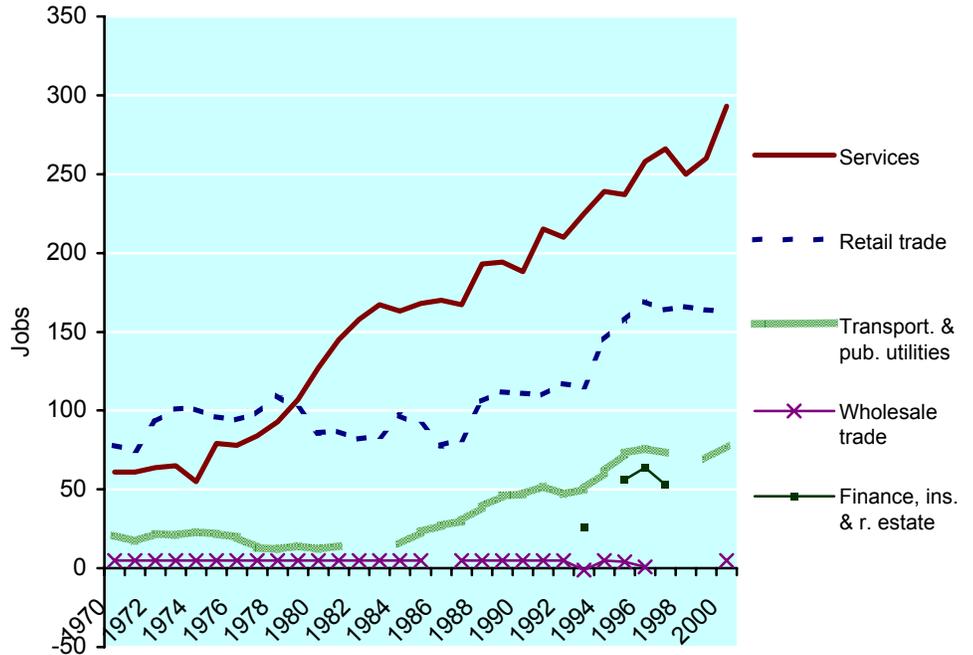
Employment by Industry Changes from 1970 to 2000						
	1970	% of Total	2000	% of Total	New Employment	% of New Employment
<b>Total Employment</b>	919		1,435		<b>516</b>	
Wage and Salary Employment	531	57.8%	711	49.5%	<b>180</b>	<b>34.9%</b>
Proprietors' Employment	388	42.2%	724	50.5%	<b>336</b>	<b>65.1%</b>
<b>Farm and Agricultural Services</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Farm	362	39.4%	271	18.9%	<b>-91</b>	<b>NA</b>
Ag. Services	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Mining</b>	5	0.5%	5	0.3%	<b>0</b>	<b>0.0%</b>
<b>Manufacturing (incl. forest products)</b>	62	6.7%	47	3.3%	<b>-15</b>	<b>NA</b>
<b>Services and Professional</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Transportation & Public Utilities	21	2.3%	78	5.4%	<b>57</b>	<b>11.0%</b>
Wholesale Trade	5	0.5%	5	0.3%	<b>0</b>	<b>0.0%</b>
Retail Trade	78	8.5%	163	11.4%	<b>85</b>	<b>16.5%</b>
Finance, Insurance & Real Estate	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Services (Health, Legal, Business, Others)	61	6.6%	293	20.4%	<b>232</b>	<b>45.0%</b>
<b>Construction</b>	74	8.1%	#N/A	#N/A	#N/A	#N/A
<b>Government</b>	226	24.6%	355	24.7%	<b>129</b>	<b>25.0%</b>

**Agricultural Services** include soil preparation services, crop services, etc. It also includes forestry services, such as reforestation services, and fishing, hunting, and trapping. **Manufacturing** includes paper, lumber and wood products manufacturing.

### Services & Professional

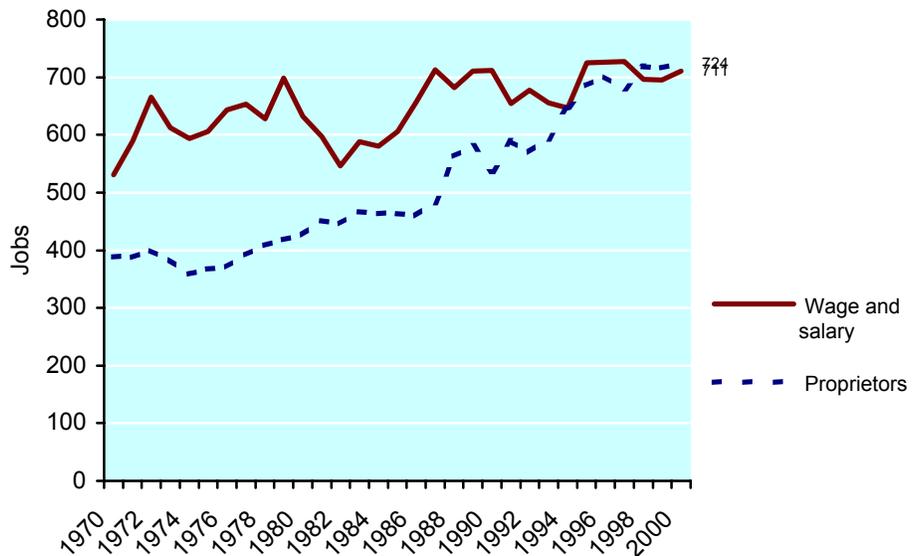
The fastest growing categories under Services and Professional are:

- Services (which includes health, business, legal, engineering and management services) represent 20% of total employment in 2000.
- Retail Trade accounts for 11% of total employment.



### Employees vs. Proprietors

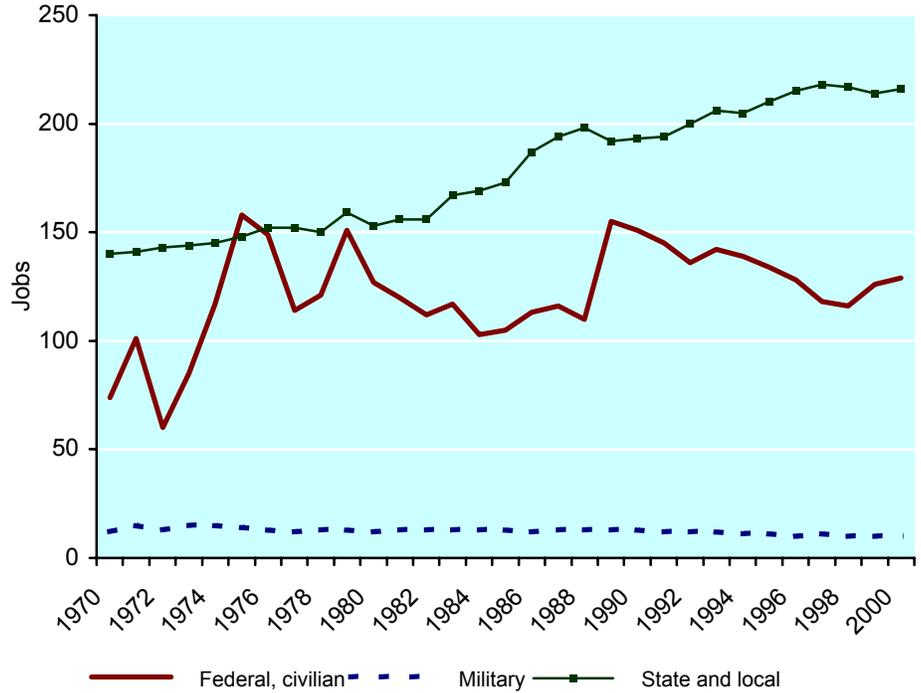
- From 1970 to 2000, the majority of job growth, 65% of new jobs, has been in proprietors.
- Employment of wage and salary employment (people who work for someone else) contributed to 35% of new employment from 1970 to 2000. In 1970, proprietors represented 58% of total employment; by 2000, they represented 50%.



**Proprietors** include sole ownerships, partnerships, and tax-exempt cooperatives.  
**Wage and salary** employment refers to employees.

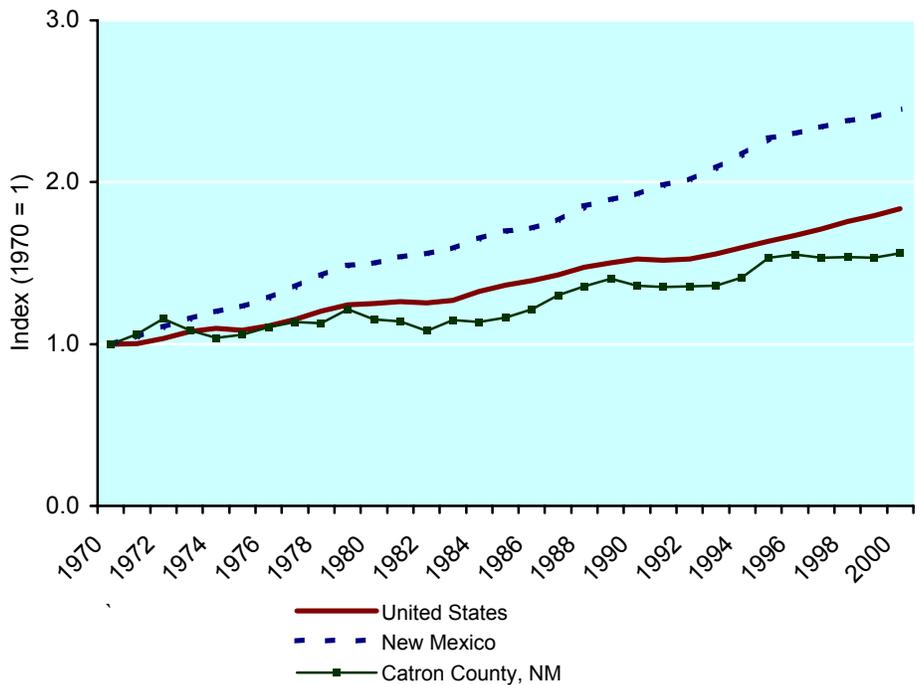
### Government Jobs

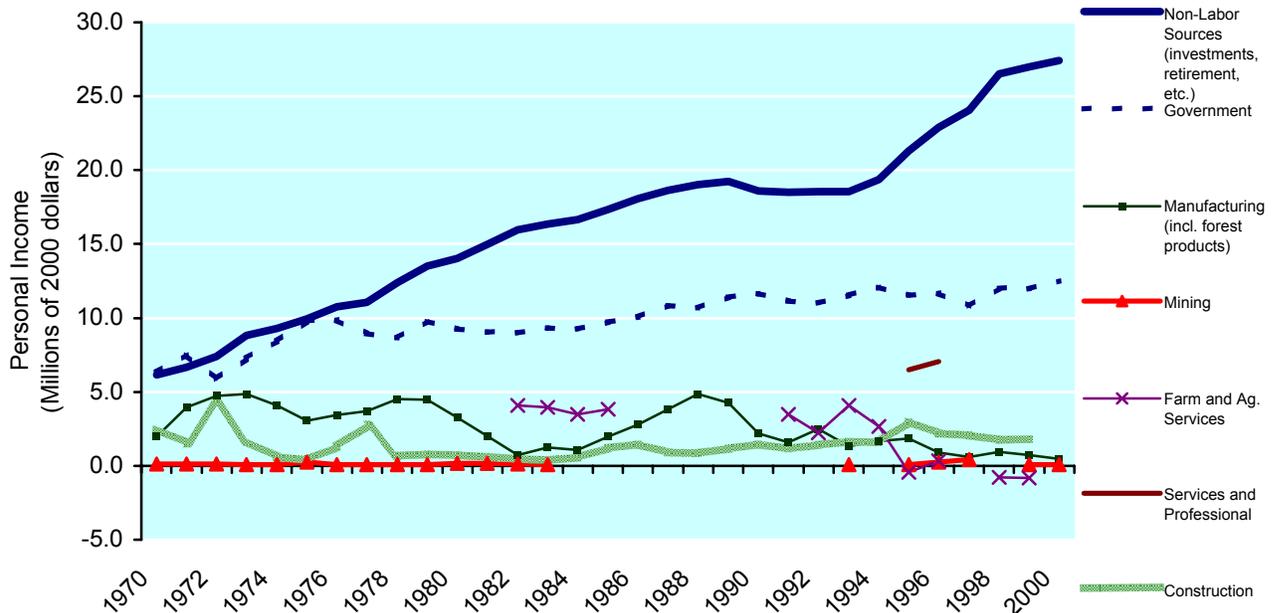
- The majority of the growth in government employment has been in state and local government.



### Job Growth Compared to the State and Nation

- Over the last 30 years job growth in Catron County, NM has been slower than the state and slower than the nation..





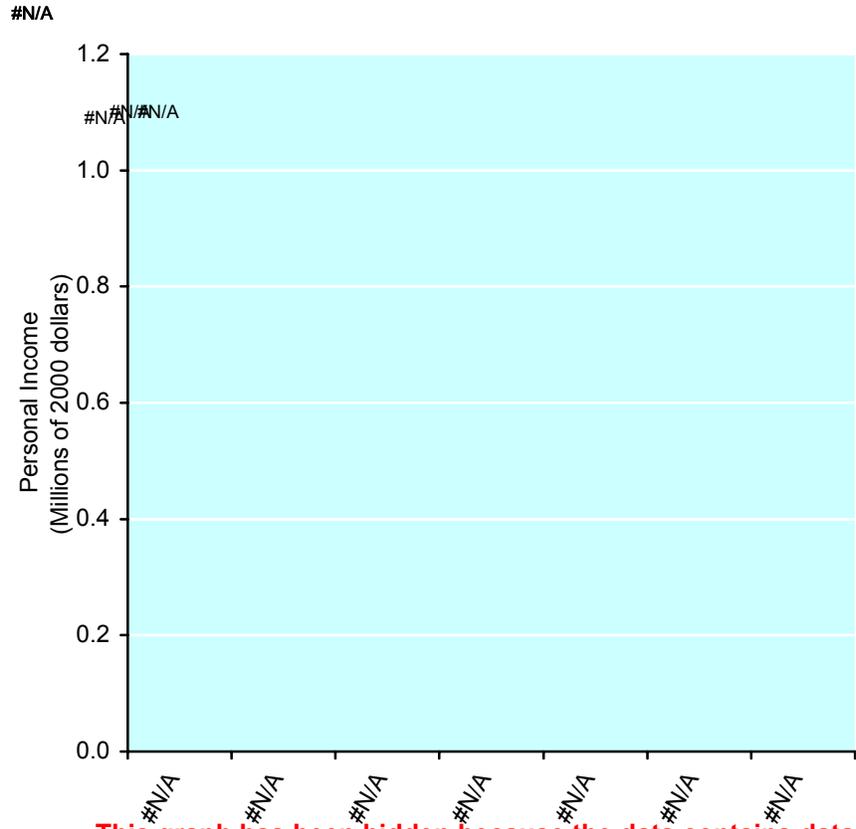
## New Income by Type

All figures in millions of 2000 dollars	% of Total in 1970		% of Total in 2000		% of New Income 1970 to 2000	% of New Income
	1970	1970	2000	2000		
<b>Total Personal Income*</b>	26		47		22	
<b>Farm and Agricultural Services</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Farm</b>	5	18.6%	-1	-2.5%	-6	NA
<b>Ag. Services</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Mining</b>	0	0.4%	0	0.2%	0	NA
<b>Manufacturing (incl. forest products)</b>	2	7.8%	0	1.0%	-2	NA
<b>Services and Professional</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Transportation &amp; Public Utilities</b>	1	2.8%	2	4.5%	1	6%
<b>Wholesale Trade</b>	0	0.4%	0	0.1%	0	NA
<b>Retail Trade</b>	2	7.5%	2	3.3%	0	NA
<b>Finance, Insurance &amp; Real Estate</b>	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Services (Health, Legal, Business, Others)</b>	1	4.0%	3	7.1%	2	11%
<b>Construction</b>	2	9.7%	#N/A	#N/A	#N/A	#N/A
<b>Government</b>	6	24.8%	13	26.4%	6	28%
<b>Non-Labor Income</b>	6	24.1%	27	58.0%	21	98%
<b>Dividends, Interest &amp; Rent</b>	3	10.8%	14	29.4%	11	51%
<b>Transfer Payments</b>	3	13.4%	14	28.6%	10	47%

\*The sum of the above categories do not add to total due to adjustments made for place of residence and personal contributions for social insurance made by the U.S. Department of Commerce.

### Net Change by Major Category

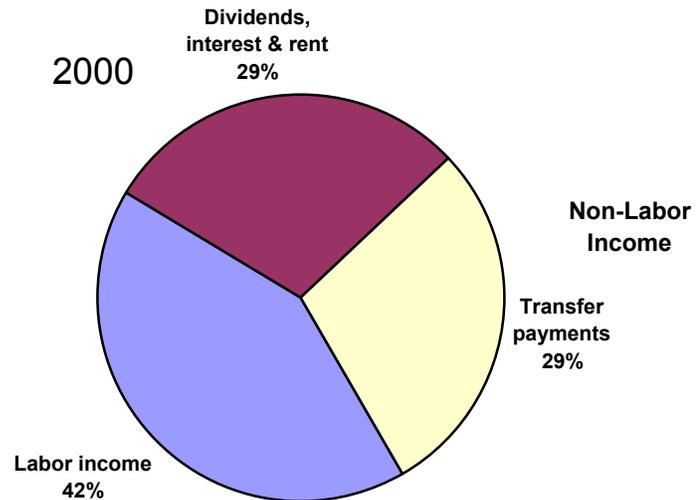
- From 1970 to 2000, Catron County, NM added \$22 million in personal income, in real terms.
- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.
- #N/A



This graph has been hidden because the data contains data g:

### Income by Type 1970 & 2000

- In 1970, Non-Labor Income sources represented 24% of total personal income. By 2000, they comprised 58%.
- In 2000, Dividends, Interest and Rent represented 29% of total personal income. Transfer Payments comprised 29%.



**Non-Labor Income** includes Transfer Payments (primarily related to retirement) and Dividends, Interest and Rent (money earned from past investments).

Per Capita Income

Per Capita Income									
All income in millions of 2000 dollars (Except Per Capita)	1970		1980		1990		2000		% Change 90-00
	1970	% of Total	1980	% of Total	1990	% of Total	2000	% of Total	
Total Personal Income	26		43		40		47		18%
Non-Farm	21	81%	32	74%	38	95%	48	102%	28%
Farm	5	19%	11	26%	2	5%	-1	-2%	-155%
Population (Thousands)	2.2		2.7		2.6		3.6		38%
Per Capita Income	11,712		15,791		15,505		13,271		-14%

- Per capita income, in real terms, decreased by 14% from 1990 to 2000.

Note: Population estimates from the Bureau of Economic Analysis vary slightly from those in the Census (Page P-3).

Sources of Labor Income

Sources of Labor Income									
All income in millions of 2000 dollars	1970		1980		1990		2000		% Change 90-00
	1970	% of Total	1980	% of Total	1990	% of Total	2000	% of Total	
Labor Sources									
Wage and Salary	13	49%	14	32%	14	36%	15	32%	4%
Other Labor Income	1	3%	2	5%	3	9%	4	8%	6%
Proprietor's	6	25%	12	28%	5	12%	3	6%	-45%
Non-Labor Sources	6	24%	14	33%	19	46%	27	58%	48%
Dividends, Interest & Rent	3	11%	8	19%	11	28%	14	29%	23%
Transfer Payments	3	13%	6	13%	7	18%	14	29%	86%

Percentages do not add to 100 because of adjustments made by BEA, such as residence, social security, and others.

- In 2000, proprietor's income accounted for 6% of total personal income, compared to 12% in 1990. From 1990 to 2000, proprietor's income shrank by 45%, in real terms. Wage and salary income during those years grew by 4%.

- From 1990 to 2000 Non-Labor income sources grew by 48%.

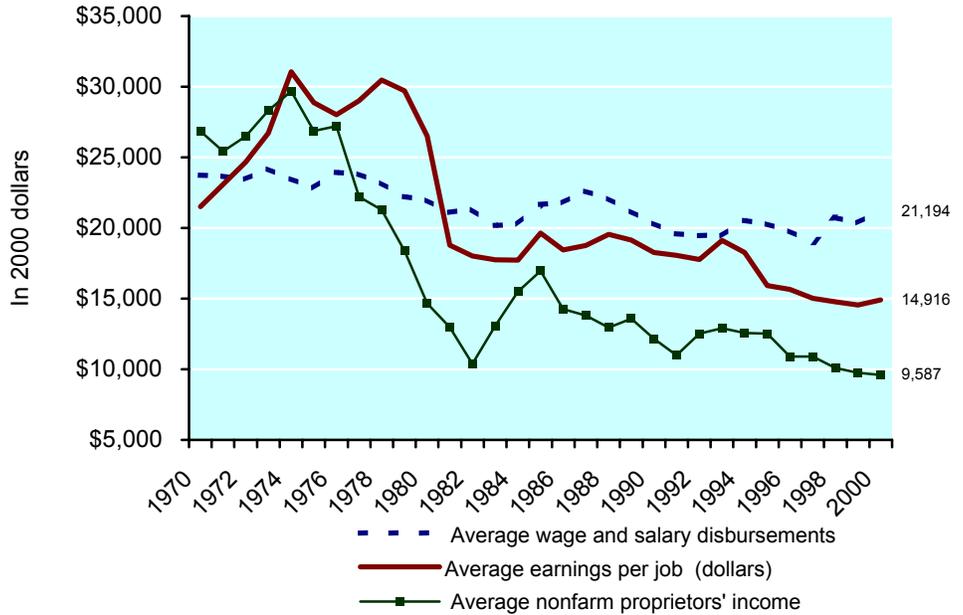
**Wage and salary** is monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401(K) plans.

**Other labor income** is payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees. The payments to private benefit plans account for more than 98 percent of other labor income.

**Proprietors** is income of sole proprietorships, partnerships and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

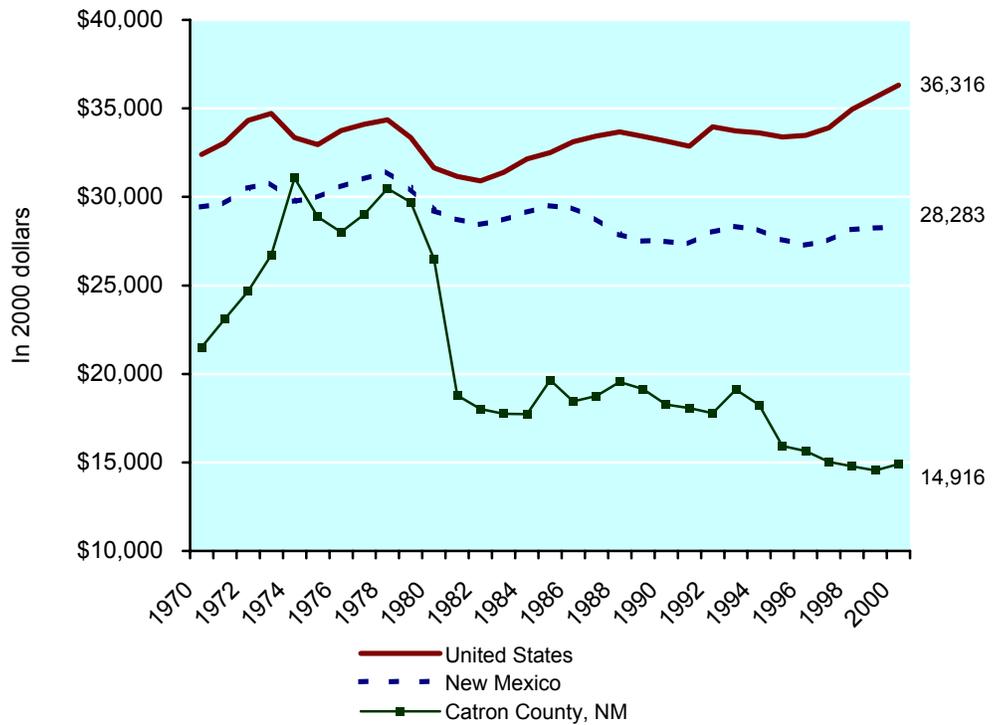
### Average Earnings Per Job

- Average earnings per job in Catron County, NM, in real terms, have fallen from \$21,503 in 1970 to \$14,916 in 2000.



### Average Earnings Compared to State and Nation

- In 1999, Average earnings per job in Catron County, NM are lower than the state and the nation.



Another way to look at industry trends is to group industries differently, as shown in the table. This grouping allows a more detailed review of "service" sectors, which can be broken down into categories such as producer, consumer, social, and government services. Consumer services are generally low-paying. They include jobs in amusement and recreation, hotel and lodging, repair shops, motion pictures, household and personal services.

Social services include education and health care. Government services include state and local government, military, as well as federal employees, and public lands agencies. Producer services are defined as those services that are part of goods production and they include some of the higher paying sectors, such as finance, insurance, real estate, legal and business services, membership organizations, and engineering and management services.

### Labor Income by Industry Grouping

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

This graph has been hidden because the data contains data gaps.

### Labor Income by Industry Grouping

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

This graph has been hidden because the data contains data gaps.

# Another Way to Look at Industry Groupings

## Personal Income Change by Category 1990 to 2000

The largest contributors to new personal income from 1990 to 2000 in real terms, were:

- ERROR: The data could not be analyzed because missing data prevented ranking the sectors.

● #N/A

● #N/A

Personal Income					
All figures in thousands of 2000 dollars.	1990	2000	New Income	% Change	% of New Income
Total Personal Income	40,001.3	47,286.0	7,284.7	18%	
<b>LABOR INCOME</b>					
<b>Transformative</b>					
Agriculture	#N/A	#N/A	#N/A		
Mining	#N/A	98.0	#N/A		
Construction	1,448.0	#N/A	#N/A		
Manufacturing	2,198.9	480.0	-1,718.9		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Distributive</b>					
Transportation & public utilities	1,050.1	2,118.0	1,067.9		
Wholesale Trade	71.1	25.0	-46.1		
Total	1,121.2	2,143.0	1,021.8	91%	14%
<b>Retail Trade</b>					
	1,266.1	1,543.0	276.9	22%	4%
<b>Consumer Services</b>					
Hotels & Other Lodging	334.7	478.0	143.3		
Personal Services	#N/A	25.0	#N/A		
Household Services	250.3	#N/A	#N/A		
Repair Services	65.9	#N/A	#N/A		
Motion Pictures	0.0	0.0	0.0		
Amusements & Recreation	32.9	#N/A	#N/A		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Producer Services</b>					
Finance, Insurance & Real Estate	#N/A	#N/A	#N/A		
Legal Services	32.9	25.0	-7.9		
Business Services	449.3	#N/A	#N/A		
Engineering & Management Service	361.0	266.0	-95.0		
Membership Organizations	171.3	256.0	84.7		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Social Services</b>					
Health Services	188.4	#N/A	#N/A		
Social Services	#N/A	412.0	#N/A		
Educational Services	0.0	#N/A	#N/A		
Total	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Government Services</b>					
Federal, Civilian	6,101.4	6,461.0	359.6		
Military	160.7	137.0	-23.7		
State and Local	5,397.9	5,907.0	509.1		
Total	11,660.1	12,505.0	844.9	7%	12%

Note: The sum of the above categories does not add to total because non-labor income is not included. See page P-9 for non-labor income data.

The term "Non-Labor Income" is also referred by some economists as "Non-Earnings Income". It consists of Dividends, Interest and Rent (collectively often referred to as money earned from investments) and Transfer Payments (payments from governments to individuals, age-related, including Medicare, disability insurance payments, and retirements).

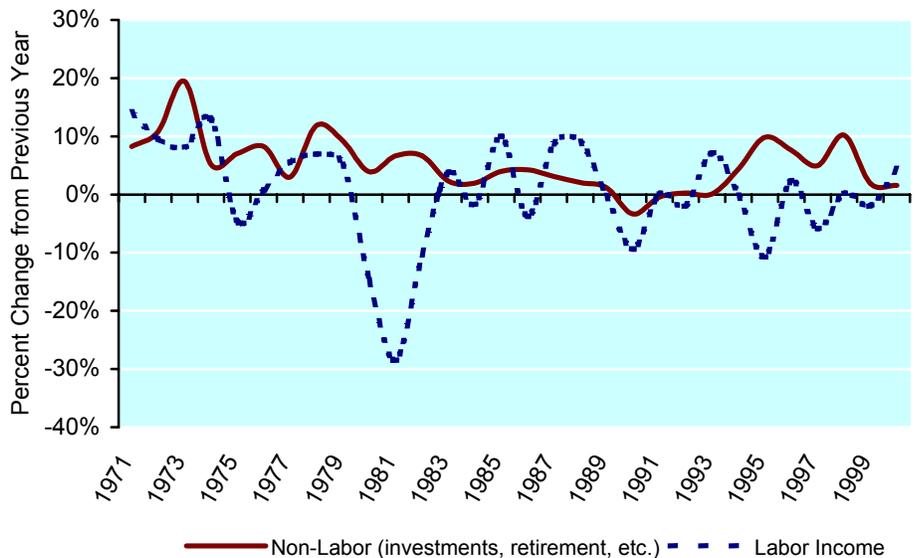
(See methods section for definitions and further explanations.)

## Components of Transfer Payments

All figures in millions of 2000 dollars	% of Total TP		% of Total TP		% of Total TP		New Payments 1970 to 2000	% of New Payments
	1970	1970	1980	1980	2000	2000		
<b>Total transfer payments</b>	3.4		5.7		13.5		<b>10.1</b>	
<b>Government payments to individuals</b>	3.2	92%	5.3	93%	12.9	96%	<b>9.8</b>	<b>97%</b>
Retirement & disab. insurance benefit payments	1.7	49%	2.9	51%	7.1	53%	<b>5.5</b>	<b>54%</b>
Medical payments	0.31	9%	0.80	14%	3.25	24%	<b>2.9</b>	<b>29%</b>
Income maintenance benefit payments ("welfare")	0.4	11%	0.6	11%	1.5	11%	<b>1.1</b>	<b>11%</b>
Unemployment insurance benefit payments	0.1	3%	0.2	4%	0.2	1%	<b>0.1</b>	<b>1%</b>
Veterans benefit payments	0.6	18%	0.7	11%	0.8	6%	<b>0.2</b>	<b>2%</b>
Federal educ. & trng. asst. pay. (excl. vets)	0.1	3.3%	0.1	0.9%	0.0	0.2%	<b>(0.1)</b>	<b>NA</b>
Other payments to individuals	-	0.0%	-	0.0%	0.0	0.2%	<b>0.0</b>	<b>0%</b>
<b>Payments to nonprofit institutions</b>	0.1	3%	0.2	4%	0.4	3%	<b>0.3</b>	<b>3%</b>
<b>Business payments to individuals</b>	0.1	3%	0.2	3%	0.2	2%	<b>0.1</b>	<b>1%</b>

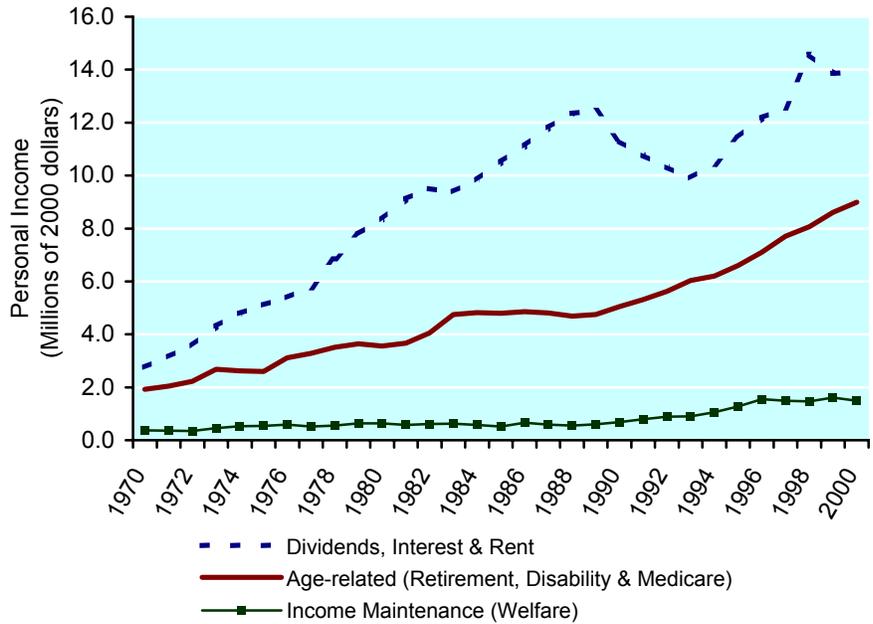
## Labor vs. Non-Labor Income Stability

- Over the last 30 years Non-Labor Income sources have had a stabilizing effect relative to the frequent fluctuations of Labor Income sources in most areas.



## Trends in Non-Labor Income by Type

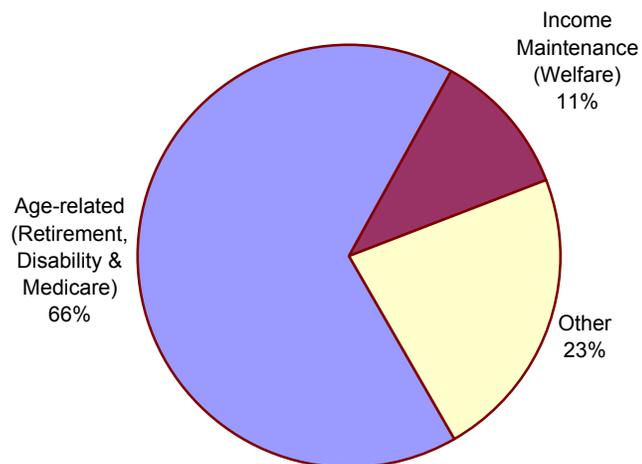
- The largest components of Non-Labor Income are from Dividends, Interest & Rent (i.e. money earned from past investments).
- In 2000 welfare represented 11 percent of transfer payments, and 3.5 percent of total personal income. This is down slightly from 1980 and down slightly from 1970.



## Components of Transfer Payments

- In 2000, 66% of Transfer Payments were from age-related sources (retirement, disability, insurance payments, and Medicare) while 11% was from welfare.

2000



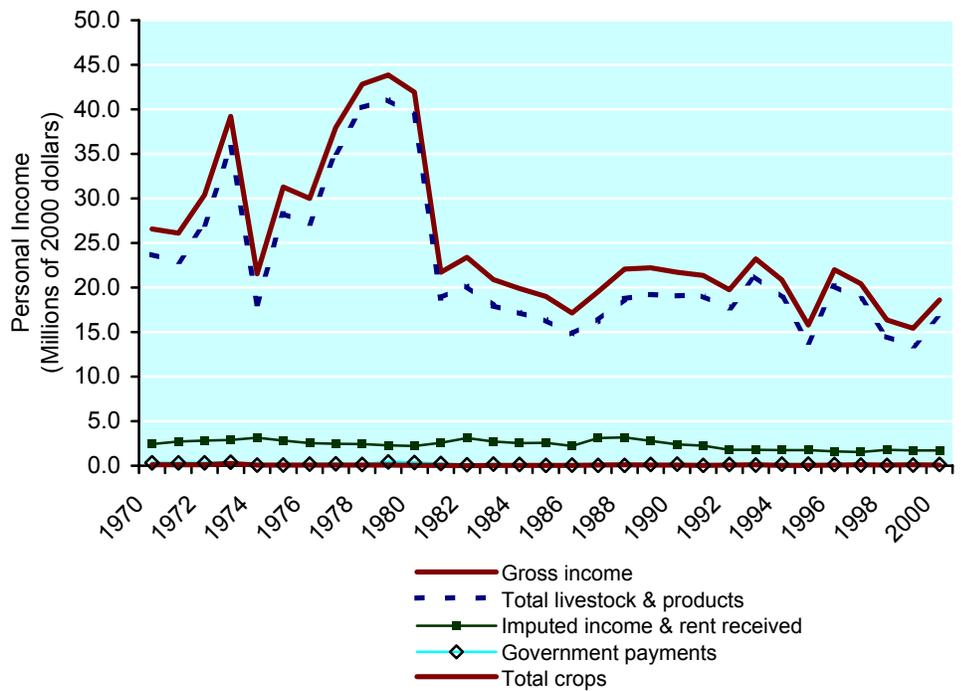
### Gross Income, Expenses, and Net Income from Farming and Ranching

All figures in thousands of 2000 dollars	1970	% of Gross Income	1985	% of Gross Income	2000	% of Gross Income
<b>Gross Income (Cash + Other)</b>	26,616		19,036		18,591	
<b>Cash Receipts from Marketings</b>	23,815	89%	16,397	86%	16,703	90%
<b>Livestock &amp; Products</b>	23,704	89%	16,357	86%	16,646	90%
<b>Crops</b>	111	0%	40	0%	57	0%
<b>Other Income</b>	2,752	10%	2,609	14%	1,888	10%
<b>Government Payments</b>	315	1%	40	0%	159	1%
<b>Imputed Rent &amp; Rent Received</b>	2,437	9%	2,569	13%	1,729	9%
<b>Production Expenses</b>	21,294		16,537		21,570	
<b>Realized Net Income (Income - Expenses)</b>	5,321		2,500		(2,979)	
<b>Value of Inventory Change</b>	(1,811)	-7%	(293)	-2%	(693)	-4%
<b>Total Net Income (Inc. corporate farms)</b>	3,511		2,207		(3,672)	

### Farm Income by Category

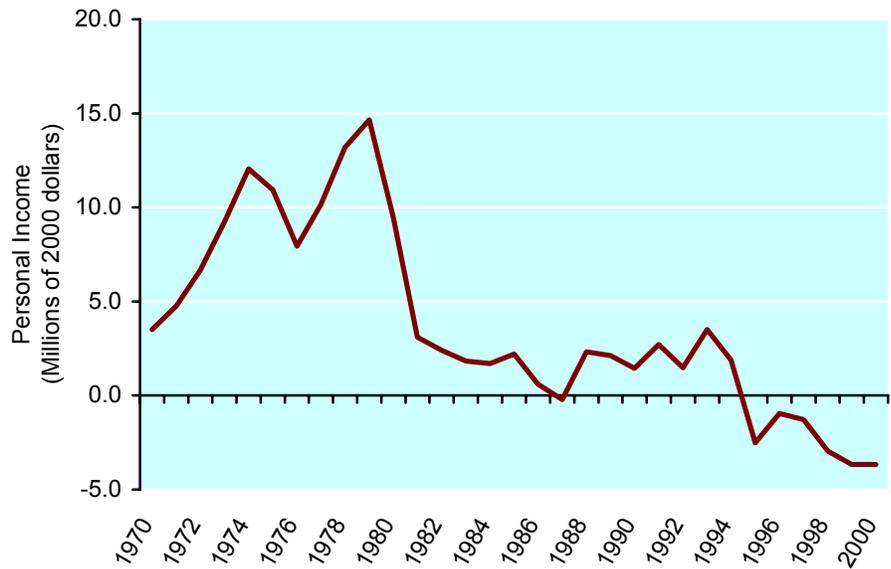
(Includes Ranching)

- In 1970, 89% of gross farm income was from livestock, while 0% was from crops. By 2000, 90% percent of gross income was from livestock, and 0% percent from crops.
- Income from government payments has remained unchanged from 1970 to 2000.



### Net Farm Income

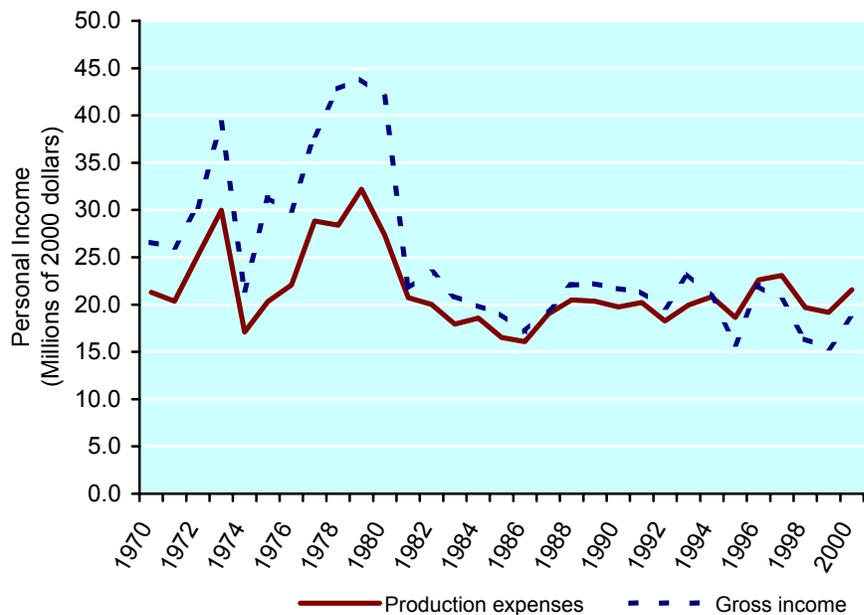
- Total net income from farming and ranching in Catron County, NM, in real terms, dropped from \$3.5 million in 1970 to \$2.2 million in 1985, and then dropped to -\$3.7 million in 2000.



Net farm income can be counted as positive by the Department of Commerce, even with slim margins, because the value of inventories may rise.

### Gross Income vs. Production Expenses

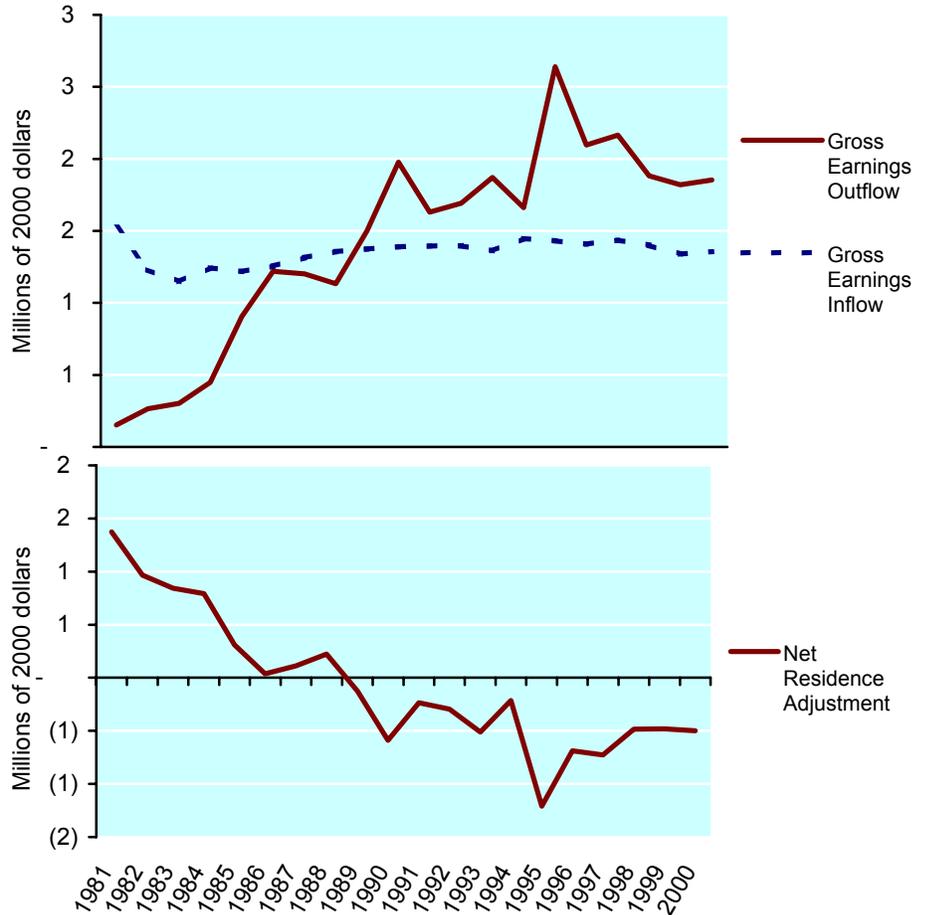
- In 1970 Gross Farm Income exceeded Production Expenses by \$5 million.
- By 2000 Gross Farm Income minus Production Expenses (realized net income) equaled -\$3.0 million.



The Bureau of Economic Analysis (BEA) reports personal income in terms of location of residence. BEA calculates how much money is earned in the county by people living outside the county (Total Gross Earnings Outflow) and it calculates how much money is brought into the county by residents who work outside of the county (Total Gross Earnings Inflow). Subtracting one from the other gives the Net Residence Adjustment. The Inflow and Outflow Trends indicate whether the county is closely tied to others in terms of commuting.

### Inflow & Outflows

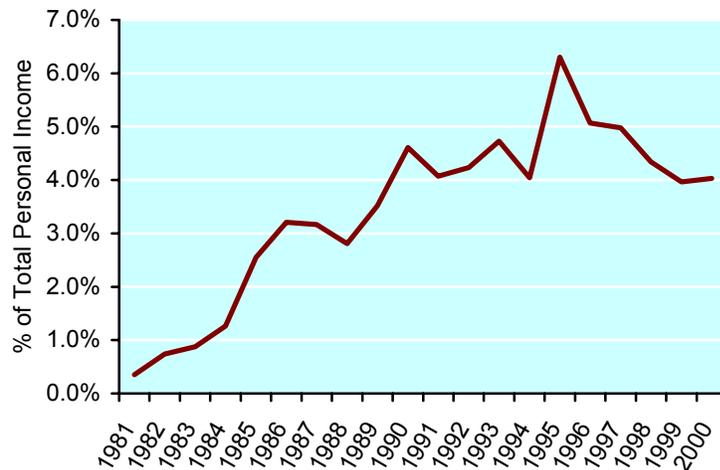
- Outflow outpaces Inflow. (See definitions above.)



- A negative Net Residential Adjustment indicates in-commuting for work from adjacent counties.

### Outflows as a Percent of Total Personal Income

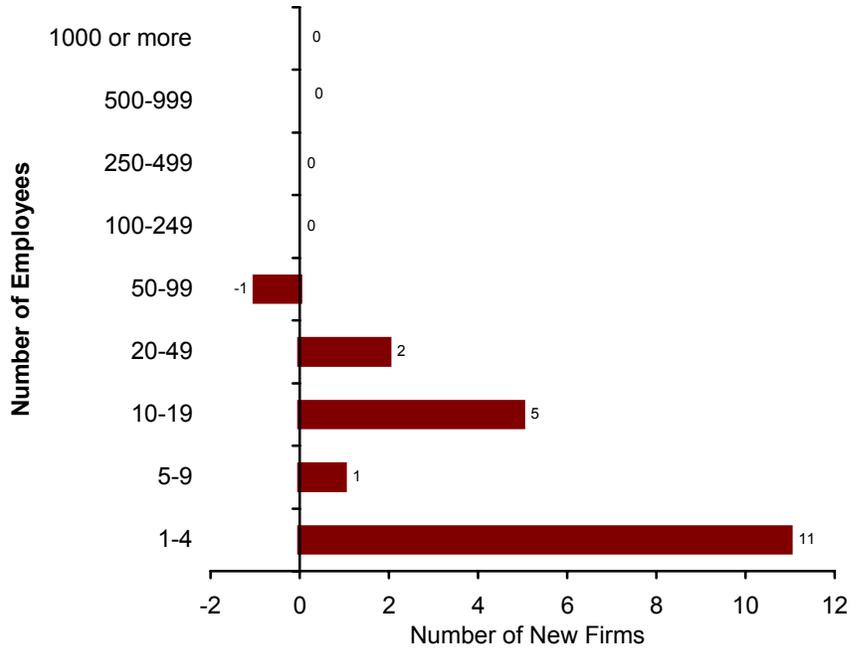
- In 2000, outflow represented 4.0% of total personal income in Catron County, NM, up from 2.6% during the 1980's.



In its annual report *County Business Patterns*, the Bureau of the Census lists employment by the size and type of employer. These statistics are useful to help determine what size of business, large or small, are adding most of the new jobs.

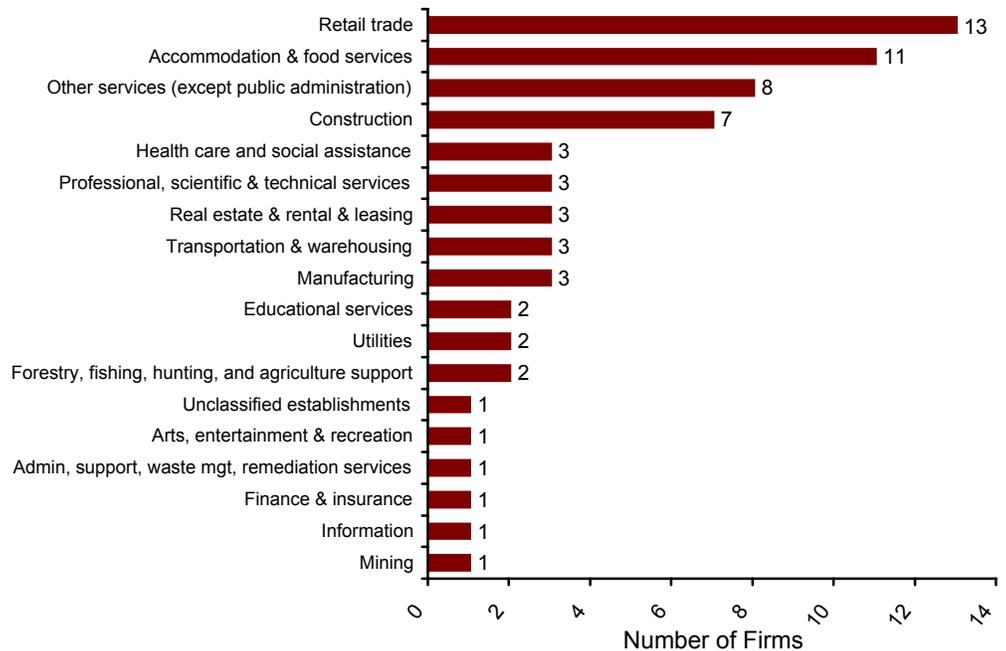
### New Firms by Employment Size 1990 to 2000

- The majority of new businesses established in Catron County, NM from 1990 to 2000 have been small, with fewer than 20 employees.
- The largest growth has been in firms of 1-4 employees, with 11 new businesses.



### Number of Firms by Major Category in 2000

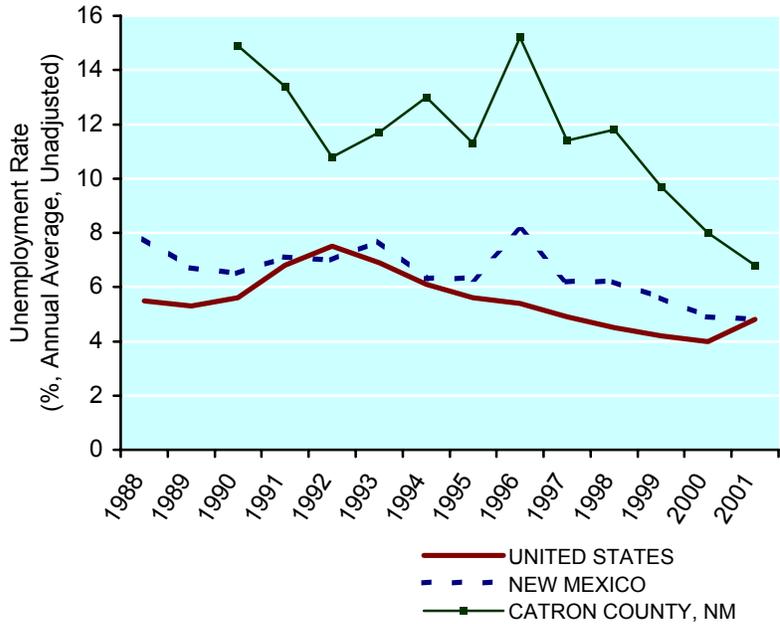
- The majority of firms are in Retail trade (13 firms) followed by Accommodation & food services (11 firms), and Other services (except public administration) (08 firms).



**Note:** Data for this page was obtained from *County Business Patterns* (CBP), which counts only wage and salary employment. Therefore the self-employed ("proprietors" in previous sections of this profile) are not counted, and therefore total employment is underestimated. Also, data on this page was reported by CBP using the NAICS system. Previous pages used data from REIS, which uses the SIC system. See Methods Section for a discussion on the transition from SIC to NAICS.

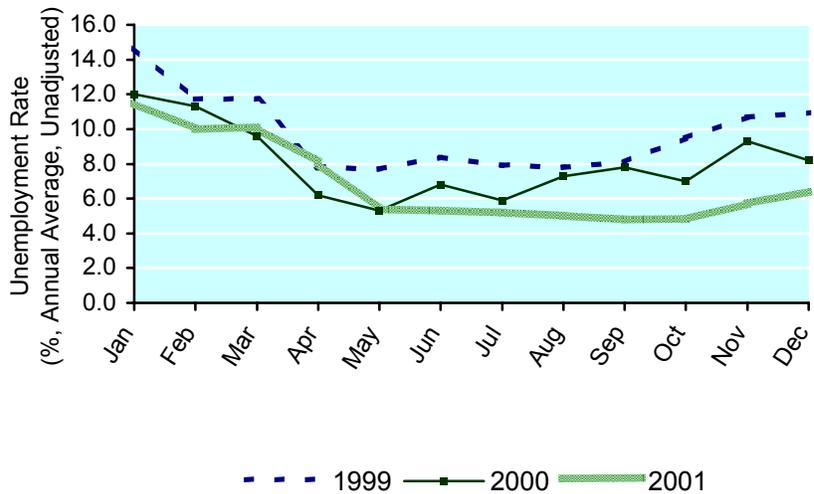
## Annual Average Unemployment Rate Comparing County to State

- In 2001, the unemployment rate in Catron County, NM was 6.8%, compared to 4.8% for the state and 4.8% for the nation.



## Unemployment Rate Seasonality

- This graph illustrates the seasonal variation in the unemployment rate over the last three years. In 2001, the unemployment rate varied from a low of 4.8% to a high of 10.0%



## APPENDICES

### Data Sources

Data for this profile were obtained from four sources:

- Regional Economic Information System (REIS CD-ROM) of the Bureau of Economic Analysis, US Department of Commerce.
- Bureau of Labor Statistics, US Department of Labor.
- *County Business Patterns*, Bureau of the Census, US Department of Commerce.
- Bureau of Census, US Department of Commerce.

The data in this profile is organized to show long-term trends at the county level. We used this method and geographic scale for several reasons: (1) trend analysis provides a more comprehensive view of change than spot data for select years, (2) the most reliable information on long-term employment and income trends is available at the county level, and (3) communities within counties rarely function as economic units themselves. Finally, even though in many areas the most accurate geographic scale to understand economic changes may be at the multi-county or regional level, county-level data is useful in the context of existing political jurisdictions, such as county commissions and planning departments. The list below contains the World Wide Web sites and telephone numbers for the databases used in this report:

Bureau of Economic Analysis:  
<http://www.bea.doc.gov>; Tel. 202-606-9600

Bureau of Labor Statistics:  
<http://stats.bls.gov:80/bls/home>; Tel. 202-606-5886

Bureau of Census:  
<http://www.census.gov>; Tel. 303-969-7750

Oregon State University, Government Information Sharing Project:  
<http://govinfo.library.orst.edu>; Tel. 541-737-4514.

University of Virginia, Geospatial and Statistical Data Center:  
<http://fisher.lib.virginia.edu>; Tel. 804-982-2630

### **Use of Federal Rather than State Data Bases**

Data from state agencies was not used for this profile. Many of the state and local sources of data do not include information on the self-employed or on the importance of non-labor income, such as retirement income and money earned from past investments. In many counties this can result in the underestimation of employment and total personal income by at least one third. The REIS disk of the Bureau of Economic Analysis contains the most robust data set and for this reason it was used as the primary source.

The only disadvantage of the REIS dataset is it's not as recent; 1999 being the latest for REIS, while state data sources provide data for as recent as 2000 and in some instances 2001. By providing long-term trends data, from 1970 to 1999, having the most recent data is less important than being able to discern where the county's economy was, and the direction in which it is headed in recent years.

### **The Standard Industrial Classification (SIC) System**

Employment and income information is organized by the US Department of Commerce according to the Standard Industrial Classification (SIC) code. Industries are classified in broad categories (e.g., Farm), sub-categories (e.g., Agricultural production - crops), and progressively finer levels of detail (e.g., Ag. Production – cash grains). For a detailed description of SIC codes consult *The Standard Industrial Classification Manual* (National Technical Information Service, order no. PB-100012, Tel. 703-487-4600).

### **Services**

Since much of the growth in labor earnings in the US economy over the last two decades has been in “services,” it should be noted that the term is defined in various ways by different researchers. Some economists define services broadly as “all output that does not come from the four goods-producing sectors: agriculture, mining, manufacturing, and construction.”<sup>1</sup> The US Department of Commerce defines services more narrowly as major groups 70-89 of the SIC code.<sup>2</sup> However, even their restricted classification includes a wide variety of sectors, ranging from hotels and lodging, and social services to business services, and engineering and management services.

---

<sup>1</sup> E. Ginzberg and G.J. Vojta. 1981. “The Service Sector in the US Economy.” *Scientific American*. 244 (3): 48-55.

<sup>2</sup> SIC codes 70-89 are: Hotels, Lodging and Other Places, Personal Services, Business Services, Auto Repair, Miscellaneous Repair Services, Motion Pictures, Amusement and Recreation Services, Health Services, Legal Services, Educational Services, Social Services, Museum Services, Museums, Botanical, and Zoological Services, Engineering and Management Services, Private Households, and Services Not Elsewhere Classified.

In this profile, we define services broadly as “Services and professional” industries, and then also into categories -- such as producer, consumer, social and government services -- to gain a clearer picture of where service growth is taking place. We use the term Services and Professional to underscore an important point: service occupations are not just “hamburger flippers and maids,” but rather consist of a combination of high-paying and low-paying professions, mixing physicians with barbers, and chambers maids with architects and financial consultants.

According to economist Lester Thurow, “Services is simply too heterogeneous to be an interesting category. The real issue is not the growth of services but whether the economy is making a successful transition from low-wage, low-skill industries ... to high-wage, high-skill industries.”<sup>1</sup> One way to gauge this is to follow the long-term trends in average earnings per job.

#### **A Transition from SIC system to NAICS:**

##### **An Important Precaution on the Interpretation of Economic Trend Data.**

Most of the historic data, from 1970 to 1999, used in this profile is based on industry data that is organized by the U.S. Department of Commerce using the Standard Industrial Classification (SIC) system. In the next few years, depending on the agency, data will be organized according to a new system, called the North American Industry Classification System (NAICS, pronounced “nakes”). In this profile, only the section called Business Establishments, which uses data from *County Business Patterns*, is organized according to the NAICS system.

The NAICS system is an improvement to the SIC system in several ways: first, businesses that use similar processes to produce goods or services are classified together. Previously, under the SIC system, some businesses were classified on the basis of their production processes while others were classified under different principles, such as class of consumer. Second, NAICS is a flexible system that will be updated every five years in order to keep pace with changes in the economy. Third, the NAICS system recognizes the uniqueness and rising importance of the “information economy,” and provides several new categories that are new, such as cable program distributors, and database and directory publishers. Finally, and perhaps the most useful, the NAICS system provides seven sectors to better reflect services-producing businesses that were previously combined into one generic SIC division (the Services division). This new system allows the data user to differentiate more clearly between what was previously often lumped under the general heading of “services,” into categories such as arts and entertainment; education; professional, scientific and technical services; health care and social assistance, among others.

Arguably the most important change of NAICS is the recognition of hundreds of new businesses in the economy. NAICS divides the economy into 20 broad sectors rather than the SIC’s 10 divisions as seen in the table below. Creating these additional sector-level groupings allows NAICS to better reflect key business activities as well as chronicle their changes.

---

<sup>1</sup> Lester Thurow, *The Future of Capitalism* (New York: William and Morrow and Company), p. 71.

SIC Divisions vs. NAICS Sectors

<i>SIC Divisions</i>	<i>NAICS Sectors</i>
<ul style="list-style-type: none"> <li>• Agriculture, Forestry, and Fishing</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture, Forestry, Fishing and Hunting</li> </ul>
<ul style="list-style-type: none"> <li>• Mining</li> </ul>	<ul style="list-style-type: none"> <li>• Mining</li> </ul>
<ul style="list-style-type: none"> <li>• Construction</li> </ul>	<ul style="list-style-type: none"> <li>• Construction</li> </ul>
<ul style="list-style-type: none"> <li>• Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturing</li> </ul>
<ul style="list-style-type: none"> <li>• Transportation, Communications, and Public Utilities</li> </ul>	<ul style="list-style-type: none"> <li>• Utilities</li> <li>• Transportation and Warehousing</li> </ul>
<ul style="list-style-type: none"> <li>• Wholesale Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Wholesale Trade</li> </ul>
<ul style="list-style-type: none"> <li>• Retail Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Retail Trade</li> <li>• Accommodation and Food Services</li> </ul>
<ul style="list-style-type: none"> <li>• Finance, Insurance, and Real Estate</li> </ul>	<ul style="list-style-type: none"> <li>• Finance and Insurance</li> <li>• Real Estate and Rental and Leasing</li> </ul>
<ul style="list-style-type: none"> <li>• Services</li> </ul>	<ul style="list-style-type: none"> <li>• Information</li> <li>• Professional, Scientific, and Technical Services</li> <li>• Administrative and Support and Waste Management and Remediation Services</li> <li>• Educational Services</li> <li>• Health Care and Social Assistance</li> <li>• Arts, Entertainment, and Recreation</li> <li>• Other Services (except Public Administration)</li> </ul>
<ul style="list-style-type: none"> <li>• Public Administration</li> </ul>	<ul style="list-style-type: none"> <li>• Public Administration</li> </ul>
<ul style="list-style-type: none"> <li>• None (previously, categories within each division)</li> </ul>	<ul style="list-style-type: none"> <li>• Management of Companies and Enterprises</li> </ul>

**Non-Labor Income**

Non-labor income is a mix of Dividends, Interest, and Rent (money earned from past investments), and Transfer Payments (government payments to individuals). Private pension funds (e.g. 401(K) plans) are not counted as part of transfer payments.

Some data sources, such as “Section 202” data available from state unemployment insurance records and reported by the Bureau of Labor Statistics, do not report non-labor income. The Bureau of Economic Analysis (BEA), on the other hand, tracks non-labor income. In order to understand the actual growth (labor and non-labor) of personal income, the REIS/BEA data set must be used, and this is what was used for this profile.

**Disclosures**

Some data, such as employment and income figures in counties with small economies, are not available because of confidentiality restrictions. In order to protect information about individual businesses, data are sometimes suppressed or, in the case of the publication *County Business Patterns*, a range of values are given instead of a specific value. Generally, the smaller the geographic level of analysis or the smaller the economy under examination the higher the chances that industry-specific information will be suppressed.

In some of the profiles a few disclosure restrictions were encountered. Sometimes *County Business Patterns* data was used to estimate data where disclosures exist in the REIS/BEA database. In other instances the missing data was left blank, particularly if doing so has little effect on the ability to discern long-term trends. In other cases, where data was missing for one or two years, a rolling average was used to estimate the data gaps. In each case where disclosures were estimated, annotations were made in the Excel files.

### **Adjustments from Current to Real Dollars**

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. The US Department of Commerce reports personal income figures in terms of current dollars. All income data in this profile were adjusted to real (or constant) 2000 dollars using the Consumer Price Index.

### **Unemployment Rate**

Unemployment is generally available as seasonally unadjusted or adjusted, and there is an advantage to using adjusted data. From the Bureau of Labor Statistics web site (<http://stats.bls.gov/laueas.htm>), an explanation of why adjusted figures should be used, whenever possible: “Over the year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to seasonal events including changes in weather, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical, long term trend, and other non-seasonal movements in the series.”

Unadjusted numbers were used in this profile in order to obtain an annual average and because county-level data are not available in adjusted format from the Bureau of Labor Statistics web site. This may introduce some error in counties where the size of the workforce fluctuates seasonally, such as tourist destination areas.

### **Farm Income Footnote:**

Note that farm income figures on pages 17 and 9 are not the same. In brief, the figures on page 17 (see table) reflect income from farming *enterprises* (farm proprietors and corporate income), while the farm figure on page 9 (see table) indicates personal income earned by *individuals* (both proprietors, and wage and salary employees) who work in farming.

Note also that the term “farm” includes farming and ranching, but not agricultural services such as supplying soil preparation services and veterinary and other animal services – see table on page 9.

#### **Farm income on page 17 is calculated as follows:**

Total cash receipts and other income  
 less: Total production expenses  
 Realized net income  
 plus: Value of inventory change  
 Total net income including corporate farms

#### **Farm income on page 9 is calculated as follows:**

Total net income including corporate farms  
 less: Net income of corporate farms  
 plus: Statistical adjustment  
 Total net farm proprietors' income  
 plus: Farm wages and perquisites  
 plus: Farm other labor income  
 Total farm labor and proprietors' income

**Income:**

Total Personal Income = private earnings, income from government and government enterprises, dividends, interest, and rent, and transfer payments plus adjustments for residence minus personal contributions for social insurance.

Wage and salary = monetary remuneration of employees, including employee contributions to certain deferred compensation programs, such as 401K plans.

Other labor income = payments by employers to privately administered benefit plans for their employees, the fees paid to corporate directors, and miscellaneous fees. The payments to private benefit plans account for more than 98 percent of other labor income

Proprietors' income = income from sole proprietorships, partnerships, and tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business association of two or more partners. A tax-exempt cooperative is a nonprofit business organization that is collectively owned by its members.

**Transfer Payments:**

Transfer payments = payments to persons for which they do not render current services. As a component of personal income, they are payments by government and business to individuals and nonprofit institutions.

Retirement & disab. insurance benefit payments = Old-Age, Survivors, and Disability Insurance payments (Social Security), Railroad Retirement and Disability payments, Federal Civilian Employee & Disability Payments, Military Retirement, and State and Local Government Employee retirement payments.

Medical payments = Medicare, public assistance medical care and CHAMPUS payments.

Income maintenance (welfare) = Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), Food Stamps, and Other Income Maintenance Payments, such as emergency assistance, foster care payments and energy assistance payments.

Unemployment insurance benefit payments = unemployment compensation for state and federal civilian employees, unemployment compensation for railroad workers, and unemployment compensation for veterans.

Veterans benefits = primarily compensation to veterans for their disabilities and payments to their survivors.

Federal education and training assistance = Job Corps payments, interest payments on Guaranteed Student Loans, federal fellowship payments, and student assistance for higher education.

Other government payments = compensation of survivors of public safety officers and compensation of victims of crime. In Alaska this item includes Alaska Permanent Fund payments.

Payments to nonprofit institutions = payments for development and research contracts. For example, it includes payments for foster home care supervised by private agencies.

Business payments to individuals = personal-injury liability payments, cash prizes, and pension benefits financed by the Pension Benefit Guarantee Corporation.