3. Economic Characteristics and Vitality

In this section, historic and current economic conditions within the four counties surrounding the Tonto National Forest (TNF) are examined. A primary purpose of this analysis is to determine trends in the economic dependency of communities on certain industries and forest resources. Data on selected cities within the area of assessment are also included in order to illustrate trends that may signal linkages between forest management alternatives and economic change affecting specific populations. Indicators used to assess economic characteristics and vitality include major employers within the region, employment by industry, per capita and household income, portion of income derived from natural resources, and federal-lands related payments based on forest resource use.

Data show that the area of assessment for the TNF has experienced relatively strong economic growth over the past two decades. In fact, growth in total part- and full-time employment for the assessment area as a whole exceeded that for the state of Arizona over the same period (52.31% versus 47.62%). The region's occupational structure closely resembled that for the state of Arizona overall with management, professional, and related occupations joining sales and office occupations as the primary sectors in the regional economy. Maricopa and Pinal Counties experienced significant gains in income from wood products and processing between 1990 and 2000, leading to a net increase in this sector for the area of assessment as a whole. However, each of the counties reported significant losses in income from special forest products and processing over the same period. Despite gains in per capita and household income, as well as significant cuts in poverty, three of the four counties in the area of assessment remain economically challenged when compared to statewide figures for the same period. The exception is Maricopa County, which reported income rates above, and poverty rates below, state averages as of 2000. In terms of federal-lands related revenue, Gila County has consistently been the largest recipient of Payment in Lieu of Taxes (PILT) benefits over the last several years whereas Yavapai County has reported the greatest amount in forest receipts or "twenty-five percent monies."

3.1 Historical context and regional economic conditions

The economy of the region surrounding TNF has undergone dramatic changes over the past century. Originally a territory isolated on the borders of a cohering nation, Arizona, and the West in general, is quickly becoming more metropolitan, and economic realities have shifted to reflect this change. For the first half of the century, Arizona's economy was dominated by the mining, agricultural, and ranching industries. Following World War II and a dramatic increase in population which continues to the present, Arizona shifted away from a dependence on these earlier industries and diversified into a mix of urban and rural industries that cover nearly every sector. Industrial diversity showed some increases after 1971, but reached a peak in the mid-80s and has now fallen well below other states to between .45-.5 on the Industrial Diversity Index[1] (Sheridan 1995, Canamex 2001, ADOC 2002a).

Per capita personal income (PPI) in Arizona has, in a general sense, followed the national trends although it has often fluctuated more dramatically. Labor force growth has been in the process of slowing since the 1970s when it reached a peak of 2.7% per annum. It afterwards slowed to 1.7% in the 1980s and to 1.2% in the 1990s. The relation and impact of education on economic standing has also heightened, with the salary ratio of college-educated workers to high-school educated workers increasing dramatically since 1975, up to above 1.85:1 from 1.55 to 1. Poverty rates have shifted only slightly in the past three or four decades, remaining between 14-16% in Arizona (U.S. Census Bureau 2005, ADOC 2002a).

[1] Where 1.0 represents a state of industrial diversity equal to the U.S. as a whole. While no longer limited to agricultural and mining interests, Arizona is still restricted in its industrial array. By contrast, states like Texas and Illinois have IDIs near 0.8 which suggests a much broader industrial foundation.

Over the past thirty to thirty-five years, the primary locus of economical advancement has shifted. Mining, which represented 3% of the Arizona's per capita income in the late 1960s, had dropped to a mere fraction of a percent by 2002. Agriculture, too, remained beneath 1%. While the construction, manufacturing, and trade/utilities areas of the Arizona economy have either remained static or dropped slightly in the second half of the past century, the service industry has skyrocketed, topping 20% by 2002, up from 13% in 1969 (Morton 2003). This trend is partially due to the fact that Arizona has become an increasingly urbanized state, with 88.2% of the population living in urban areas according to the 2000 census. Recent PPI also reflects this disparity, with the 2002 metro figure being $27,285 as compared to the non-metro amount of $18,992—a differential of 30.4%, up from 23.3% in 1970.

The counties surrounding the TNF are, collectively, some of the more economically secure compared to those surrounding the other forests in the state. The 2002 PPI of the four U.S. counties abutting forest land was $22,739[2], representing a 13.6% differential from the state average at that time, a 3.8% drop from 1969. Compared to the national averages, the PPI of the counties containing the Tonto NF represents 73.8% of the national total, down nearly 7.9% over the past thirty years. Yet, despite the larger setbacks, the thirty-year average rate of income growth in this region is 9.9%, just below the average for Arizona (10.1%) (BEA 2002).

3.2 Income and employment within key industries

Table 11 presents employment by industry at both the state and county levels for the years 1990 and 2000. Economic data confirm earlier findings which suggested relatively strong growth in Maricopa and Yavapai Counties when compared to neighboring counties and state averages. In fact, the increase in total full- and part-time employment in both counties (53.12% and 65.17% respectively) significantly outpaced job growth at the state level between 1990 and 2000 (47.62%). Growth in wage and salary employment was particularly strong in Yavapai County (74.58%) while both wage and salary, as well as proprietor's employment, exhibited strong gains in Maricopa County over the same period. The greatest increase in proprietor's employment was seen in Gila County, which reported an 84% increase over the ten-year period. Despite an increase in total employment that was well below the state average, Gila County showed strong gains in agricultural services and forestry, wholesale trade, finance/real estate, and government. Yavapai County reported similar increases in these same categories as well as considerable job growth in construction and services. For Maricopa County, the strongest job growth was also seen in construction, agricultural services and forestry, finance/real estate, and the service sector. Pinal County reported the least growth in total employment between 1990 and 2000 (20.89%) and was clearly affected by job losses in the agricultural services and forestry as well as the mining sectors.

Table 12 displays the percentage of employment in each industry at the state and county levels as well as the percentage change between 1990 and 2000. Despite a decline in the percentage of proprietor's employment in Yavapai County, both it and Gila County maintained percentages of proprietor employment that were well above the average for the state. Despite declining percentages of employment in manufacturing, farming, and mining, Pinal County maintained workforces that were larger than the state average in the latter two categories. Both Gila and Yavapai Counties reported a relatively high percentage of employment in retail trade between 1990 and 2000, and Yavapai County maintained a larger-than-average construction work force over the same period. Both Gila and Pinal Counties maintained a relatively high percentage of governmental employment throughout the reporting period. Employment percentages for Maricopa County closely resembled statewide figures for most categories

[2] N.B.: Discrepancies between these figures and the PPIs listed in Table 16 stem from the latter having been adjusted for deflation in order to calculate % change. The salaries listed in this section represent current PPIs in non-adjusted dollars.

with the possible exception of the finance/real estate sector, which was higher than the statewide percentage for this sector.

Table 11. Employment by Industry, County, and State, 1990-2000 and % Change

	Gila County			Maricopa County			Pinal County		
	1990	2000	% Change	1990	2000	% Change	1990	2000	% Change
Employment by place of work									
Total full-time and part-time employment	15,108	20,655	36.72%	1,235,513	1,891,817	53.12%	41,577	50,262	20.89%
By type									
Wage and salary employment	11,932	14,810	24.12%	1,051,995	1,604,574	52.53%	34,947	41,939	20.01%
Proprietors employment	3,176	5,845	84.04%	183,518	287,243	56.52%	6,630	8,323	25.54%
Farm proprietors employment	162	198	22.22%	2,382	2,108	-11.50%	807	747	-7.43%
Non-farm proprietors employment	3,014	5,647	87.36%	181,136	285,135	57.41%	5,823	7,576	30.10%
By industry									
Farm employment	201	242	20.40%	6,953	7,588	9.13%	2,088	2,110	1.05%
Non-farm employment	14,907	20,413	36.94%	1,228,560	1,884,229	53.37%	39,489	48,152	21.94%
Private employment	11,739	15,492	31.97%	1,070,390	1,694,490	58.31%	27,667	31,997	15.65%
Ag. services, forestry, fishing and other	89	253	184.27%	13,617	24,270	78.23%	1,350	1,069	-20.81%
Mining	(D)	(D)	n/a	2,418	2,807	16.09%	4,111	1,411	-65.68%
Construction	922	(D)	n/a	70,419	140,657	99.74%	1,370	2,049	49.56%
Manufacturing	1,448	(D)	n/a	143,645	168,591	17.37%	3,681	3,416	-7.20%
Transportation and public utilities	537	664	23.65%	59,956	94,275	57.24%	1,518	1,070	-29.51%
Wholesale trade	138	348	152.17%	65,624	97,165	48.06%	848	1,347	58.84%
Retail trade	3,071	3,893	26.77%	216,499	320,027	47.82%	6,095	7,915	29.86%
Finance, insurance, and real estate	739	1,620	119.22%	127,050	215,097	69.30%	1,904	2,479	30.20%
Services	(D)	5,225	n/a	371,162	631,601	70.17%	6,790	11,241	65.55%
Government and government enterprises	3,168	4,921	55.33%	158,170	189,739	19.96%	11,822	16,155	36.65%
Federal, civilian	483	560	15.94%	19,925	19,744	-0.91%	727	901	23.93%
Military	152	119	-21.71%	16,135	13,105	-18.78%	437	415	-5.03%
State and local	2,533	4,242	67.47%	122,110	156,890	28.48%	10,658	14,839	39.23%
State government	244	454	86.07%	33,540	38,127	13.68%	4,593	4,939	7.53%
Local government	2,289	3,788	65.49%	88,570	118,763	34.09%	6,065	9,900	63.23%

Table 11 (cont.). Employment by Industry, County, and State, 1990-2000 and % Change

	Yavapai County			Arizona		
	1990	2000	% Change	1990	2000	% Change
Employment by place of work						
Total full-time and part-time employment	42,555	70,286	65.17%	1,909,879	2,819,302	47.62%
By type						
Wage and salary employment	29,717	51,881	74.58%	1,607,628	2,355,299	46.51%
Proprietors employment	12,838	18,405	43.36%	302,251	464,003	53.52%
Farm proprietors employment	509	527	3.54%	8,027	7,572	-5.67%
Non-farm proprietors employment	12,329	17,878	45.01%	294,224	456,431	55.13%
By industry						
Farm employment	598	752	25.75%	19,297	19,842	2.82%
Non-farm employment	41,957	69,534	65.73%	1,890,582	2,799,460	48.07%
Private employment	35,585	59,510	67.23%	1,583,146	2,410,566	52.26%
Ag. services, forestry, fishing and other	531	1,017	91.53%	27,817	46,873	68.50%
Mining	1,107	1,184	6.96%	15,475	12,607	-18.53%
Construction	3,877	7,302	88.34%	108,918	200,373	83.97%
Manufacturing	2,847	4,189	47.14%	194,529	225,767	16.06%
Transportation and public utilities	1,454	1,866	28.34%	84,360	124,954	48.12%
Wholesale trade	895	2,031	126.93%	82,812	122,582	48.02%
Retail trade	9,168	13,592	48.25%	344,297	484,207	40.64%
Finance, insurance, and real estate	3,431	6,216	81.17%	170,005	281,675	65.69%
Services	12,275	22,113	80.15%	544,933	911,528	67.27%
Government and government enterprises	6,372	10,024	57.31%	307,436	388,894	26.50%
Federal, civilian	1,076	1,198	11.34%	45,843	48,135	5.00%
Military	414	394	-4.83%	38,197	33,258	-12.93%
State and local	4,882	8,432	72.72%	223,396	307,501	37.65%
State government	652	(D)	n/a	61,595	81,026	31.55%
Local government	4,230	(D)	n/a	161,801	226,475	39.97%

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.
Source: Bureau of Economic Analysis
http://www.bea.doc.gov/bea/regional/reis/action.cfm

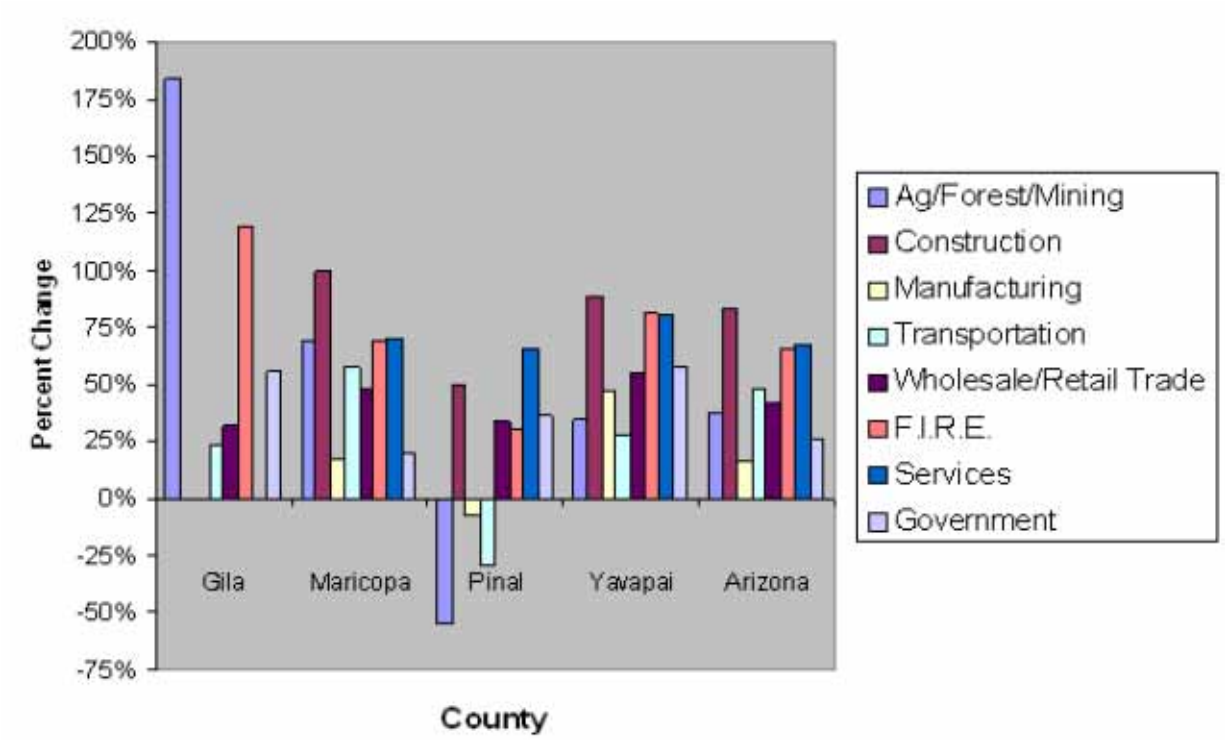
Table 12. Employment by Industry Percentages, County, and State, 1990-2000 and % Change

	Gila County			Maricopa County			Pinal County		
	1990	2000	% Change	1990	2000	% Change	1990	2000	% Change
Employment by place of work									
Total full-time and part-time employment	100.00%	100.00%	0.00%	100.00%	100.00%	0.00%	100.00%	100.00%	0.00%
By type									
Wage and salary employment	78.98%	71.70%	-9.21%	85.15%	84.82%	-0.39%	84.05%	83.44%	-0.73%
Proprietors employment	21.02%	28.30%	34.61%	14.85%	15.18%	2.22%	15.95%	16.56%	3.84%
Farm proprietors employment	1.07%	0.96%	-10.60%	0.19%	0.11%	-42.20%	1.94%	1.49%	-23.43%
Non-farm proprietors employment	19.95%	27.34%	37.04%	14.66%	15.07%	2.80%	14.01%	15.07%	7.62%
By industry									
Farm employment	1.33%	1.17%	-11.94%	0.56%	0.40%	-28.73%	5.02%	4.20%	-16.41%
Non-farm employment	98.67%	98.83%	0.16%	99.44%	99.60%	0.16%	94.98%	95.80%	0.87%
Private employment	77.70%	75.00%	-3.47%	86.64%	89.57%	3.39%	66.54%	63.66%	-4.33%
Ag. services, forestry, fishing and other	0.59%	1.22%	107.93%	1.10%	1.28%	16.40%	3.25%	2.13%	-34.50%
Mining	(D)	(D)	n/a	0.20%	0.15%	-24.19%	9.89%	2.81%	-71.61%
Construction	6.10%	(D)	n/a	5.70%	7.44%	30.45%	3.30%	4.08%	23.72%
Manufacturing	9.58%	(D)	n/a	11.63%	8.91%	-23.35%	8.85%	6.80%	-23.23%
Transportation and public utilities	3.55%	3.21%	-9.56%	4.85%	4.98%	2.69%	3.65%	2.13%	-41.69%
Wholesale trade	0.91%	1.68%	84.45%	5.31%	5.14%	-3.30%	2.04%	2.68%	31.40%
Retail trade	20.33%	18.85%	-7.28%	17.52%	16.92%	-3.46%	14.66%	15.75%	7.42%
Finance, insurance, and real estate	4.89%	7.84%	60.34%	10.28%	11.37%	10.57%	4.58%	4.93%	7.70%
Services	(D)	25.30%	n/a	30.04%	33.39%	11.13%	16.33%	22.36%	36.95%
Government and government enterprises	20.97%	23.82%	13.62%	12.80%	10.03%	-21.66%	28.43%	32.14%	13.04%
Federal, civilian	3.20%	2.71%	-15.19%	1.61%	1.04%	-35.28%	1.75%	1.79%	2.52%
Military	1.01%	0.58%	-42.74%	1.31%	0.69%	-46.96%	1.05%	0.83%	-21.44%
State and local	16.77%	20.54%	22.49%	9.88%	8.29%	-16.09%	25.63%	29.52%	15.17%
State government	1.62%	2.20%	36.10%	2.71%	2.02%	-25.76%	11.05%	9.83%	-11.05%
Local government	15.15%	18.34%	21.04%	7.17%	6.28%	-12.43%	14.59%	19.70%	35.03%

Table 12 (cont.). Employment by Industry Percentages, County, and State, 1990-2000 and % Change

	Yavapai County			Arizona		
	1990	2000	% Change	1990	2000	% Change
Employment by place of work						
Total full-time and part-time employment	100.00%	100.00%	0.00%	100.00%	100.00%	0.00%
By type						
Wage and salary employment	69.83%	73.81%	5.70%	84.17%	83.54%	-0.75%
Proprietors employment	30.17%	26.19%	-13.20%	15.83%	16.46%	4.00%
Farm proprietors employment	1.20%	0.75%	-37.31%	0.42%	0.27%	-36.10%
Non-farm proprietors employment	28.97%	25.44%	-12.20%	15.41%	16.19%	5.09%
By industry						
Farm employment	1.41%	1.07%	-23.86%	1.01%	0.70%	-30.34%
Non-farm employment	98.59%	98.93%	0.34%	98.99%	99.30%	0.31%
Private employment	83.62%	84.67%	1.25%	82.89%	85.50%	3.15%
Ag. services, forestry, fishing and other	1.25%	1.45%	15.96%	1.46%	1.66%	14.15%
Mining	2.60%	1.68%	-35.24%	0.81%	0.45%	-44.81%
Construction	9.11%	10.39%	14.03%	5.70%	7.11%	24.62%
Manufacturing	6.69%	5.96%	-10.91%	10.19%	8.01%	-21.38%
Transportation and public utilities	3.42%	2.65%	-22.30%	4.42%	4.43%	0.34%
Wholesale trade	2.10%	2.89%	37.39%	4.34%	4.35%	0.28%
Retail trade	21.54%	19.34%	-10.24%	18.03%	17.17%	-4.73%
Finance, insurance, and real estate	8.06%	8.84%	9.69%	8.90%	9.99%	12.24%
Services	28.85%	31.46%	9.07%	28.53%	32.33%	13.32%
Government and government enterprises	14.97%	14.26%	-4.75%	16.10%	13.79%	-14.31%
Federal, civilian	2.53%	1.70%	-32.59%	2.40%	1.71%	-28.87%
Military	0.97%	0.56%	-42.38%	2.00%	1.18%	-41.02%
State and local	11.47%	12.00%	4.57%	11.70%	10.91%	-6.75%
State government	1.53%	(D)	n/a	3.23%	2.87%	-10.89%
Local government	9.94%	(D)	n/a	8.47%	8.03%	-5.18%

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.
Source: Bureau of Economic Analysis
http://www.bea.doc.gov/bea/regional/reis/action.cfm



Source: Bureau of Economic Analysis

Figure 9. Percent Change in Industry by County and State, 1990-2000

Table 13 presents a list of major employers throughout the region which has been adapted from the ADOC Community Profiles. Dominant occupations, as determined by number of employees and percentage of total employment, are shown for each county in Table 14. Data show that each of the four counties within the area of assessment maintains occupational structures very similar to that of the state as a whole. Management/professional and sales/office are the two most common occupational areas in the state as well as in Gila, Yavapai, Pinal, and Maricopa Counties. For both the state of Arizona and each of the counties within the area of assessment, construction, extraction, and maintenance and production, transportation, and material moving were also among the five most dominant occupations as of 2004.

Table 15 presents annual unemployment rates for the counties, the state of Arizona, and the United States as well for selected cities within the area of assessment. The area of assessment appears evenly split with both Maricopa and Yavapai Counties reporting unemployment rates that were below the statewide average while Gila and Pinal Counties reported higher-than-average unemployment over the same period. Average annual unemployment ranged from a high of 7.4% in Gila County to a low of 4.0% in Maricopa County. Among selected cities within the area of assessment, average annual unemployment ranged from a high of 21.3% in San Carlos to a low of 2.2% in Sedona. The cities of Eloy, Miami, Coolidge, and Chino Valley each reported average annual employment rates that were higher than the statewide average over the same period. Within the area of assessment, Yavapai County appears to have made the greatest gains in employment with most cities reporting net decreases in unemployment over the period.

Table 16 provides per capita and median family incomes as well as rates of individual and family poverty. Data demonstrate that three of the four counties within the area of assessment experienced increases in per capita and median family income that were greater than increases at the state level during the same period. Pinal County, for example, saw substantial increases in both per capita and median family income between 1990 and 2000 (31.76% and 25.06% respectively). Despite these increases, however, per capita

and median family income remained lower than the state average in three of the four counties as of 2000. Maricopa County was the lone exception to this trend, maintaining per capita and median family incomes that were both above the state average despite rates of increase that were below that of the state over the ten-year period. A similar trend is evident in individual and family poverty between 1990 and 2000. Both Pinal and Yavapai Counties saw substantial declines in individual and family poverty that were greater than reductions in poverty at the state level over the same period. Here again, Pinal County saw the greatest improvement with cuts in individual and family poverty of -29.17% and -36.84% respectively. Nonetheless, as of 2000, Pinal and Gila Counties maintained rates of poverty greater than those for the state of Arizona. Among individual cities within the area of assessment, the city of Cottonwood demonstrated perhaps the most significant change with substantial increases in income and decreases in poverty over the ten-year period. Scottsdale and Chandler maintained the highest levels of per capita and median family income as of 2000. Between 1990 and 2000, the cities of Florence, Coolidge, Queen Creek, and Camp Verde made significant cuts in the rates of both individual and family poverty. As of 2000, San Carlos remained severely limited economically with 58.8% of individuals and 57.5% of families living in poverty.

Household income distribution for each county is presented in Table 17. Again, the economic status of Gila County is seen to be considerably limited with over 40% of households earning less than $25,000 per year. Median household income was greatest in Maricopa County at $45,358 in 2000. By comparison, Gila County reported the lowest median family income at $30,917. Maricopa County is clearly the most affluent of the four counties with 13.2% of households earning more than $100,000 as of 2000.

Table 13. Major Employers by County, 2004

Gila County	Maricopa County
Apache Gold, Globe	American Express
APS, Globe/Payson	America West Holdings
Asarco Inc., Hayden	Arizona State University
Asarco Ray Complex, Hayden	Bank One Corp.
Basha's, San Carlos	Banner Health System
B.J. Cecil Trucking, Claypool	Basha's Inc.
BHP Copper, Miami	Honeywell
Cobre Valley Community Hospital, Claypool	The Kroger Company
Copper Mountain Inn, Globe	Intel
Phelps Dodge Corporation, Claypool	Maricopa County
Fry's, Globe/Payson	Mesa Public Schools
Gila County	Motorola
Globe Unified School District	City of Phoenix
Heritage Healthcare Center, Globe	Qwest
Payson Regional Medical Center	Safeway Inc.
Manzanita Manor, Payson	State of Arizona
Mazatzal Casino, Tonto Apache Tribe, Payson	Tosco Marketing Co.
Miami Unified School District	U.S. Postal Service
Payson Unified School District	Wal-Mart Stores Inc.
Safeway, Globe/Payson	Wells Fargo Bank
San Carlos Unified School District	
Town of Payson	
Wal-Mart, Globe/Payson	
U.S. Forest Service, Globe/Payson	

Table 13 (cont.). Major Employers by County, 2004

Pinal County	Yavapai County
Abbott Labs/Ross Prod. Div., Casa Grande	Ace Hardware
Albertson's	APS
Apache Junction Health Center	The Arbors
Apache Junction Schools	Atria and Kachina Point Assisted Living
Arizona State Prison, Florence	Camp Verde Public Schools
Asarco, Hayden	Caradon Better Bilt, Inc.
Basha's	Chino Valley Unified School District #51
Casa Grande Regional Medical Center	Cliff Castle Casino
Casa Grande Elementary School Dist.	City of Cottonwood
Casa Grande Union H.S. Dist.	Cottonwood/Oak Creek Schools
Casa Grande Valley Newspapers	Cyprus Bagdad Copper Corporation
Central Arizona College, Coolidge	Double Tree Sedona Resort
City of Apache Junction	Embry-Riddle Aeronautical University
City of Casa Grande	Enchantment Resort
City of Eloy	Humboldt Unified School District
Coolidge Unified School District	Exsil, Inc.
Corrections Corp. of America, Eloy/Florence	Los Abrigados Resort
Eloy Schools	Mingus Union High School District
Evergreen Air Center, Marana	Phelps & Sons Trusses
Frito-Lay, Casa Grande	Phoenix Cement Co.
Fry's Food and Drug Stores	City of Prescott
Gila River Indian Community Government Farms	Prescott Resort
Harrah's Ak-Chin Casino	Prescott Unified School District
Hexcel Corp.	Price Costco Store
Hunter Douglas Wood Products	Ruger Investment Castings
K-Mart	Safeway Inc.
Pinal County	Sedona/Oak Creek Unified School District
Tanger Outlet Center	Sturm Ruger & Co.
Westile Roofing Products	Target Store
	Town of Prescott Valley
	U.S. Forest Service
	Veterans Administration Medical Center
	Wal-Mart
	West Yavapai Guidance Clinic
	Wulfsberg Electronics
	Yavapai Community College
	Yavapai County
	Yavapai Gaming Agency
	Yavapai Regional Medical Center

Source: Arizona Department of Commerce - Community Profiles
http://www.azcommerce.com/Communities/community_profiles.asp

Table 14. Dominant Occupations of State and County Populations, 2000

County/State	Number	Percent
Gila County		
Sales and office occupations	4,481	24.8%
Management, professional, and related occupations	4,386	24.3%
Service occupations	4,122	22.8%
Construction, extraction, and maintenance occupations	2,959	16.4%
Production, transportation, and material moving occupations	1,963	10.9%
Maricopa County		
Management, professional, and related occupations	483,582	33.9%
Sales and office occupations	423,504	29.7%
Service occupations	208,498	14.6%
Production, transportation, and material moving occupations	156,842	11.0%
Construction, extraction, and maintenance occupations	149,539	10.5%
Pinal County		
Sales and office occupations	14,937	24.4%
Management, professional, and related occupations	13,523	22.1%
Service occupations	13,432	21.9%
Production, transportation, and material moving occupations	8,998	14.7%
Construction, extraction, and maintenance occupations	8,727	14.2%
Yavapai County		
Management, professional, and related occupations	13,125	26.7%
Sales and office occupations	13,012	26.4%
Service occupations	8,697	17.7%
Production, transportation, and material moving occupations	5,989	12.2%
Construction, extraction, and maintenance occupations	5,289	10.7%
Arizona		
Management, professional, and related occupations	730,001	32.70%
Sales and office occupations	636,970	28.50%
Service occupations	362,547	16.20%
Construction, extraction, and maintenance occupations	245,578	11.00%
Production, transportation, and material moving occupations	244,015	10.90%

Source: U.S. Census Bureau, American Fact Finder
http://factfinder.census.gov

Table 15. Average Annual Unemployment Rates by County, State, Place, and U.S., 1980-2004

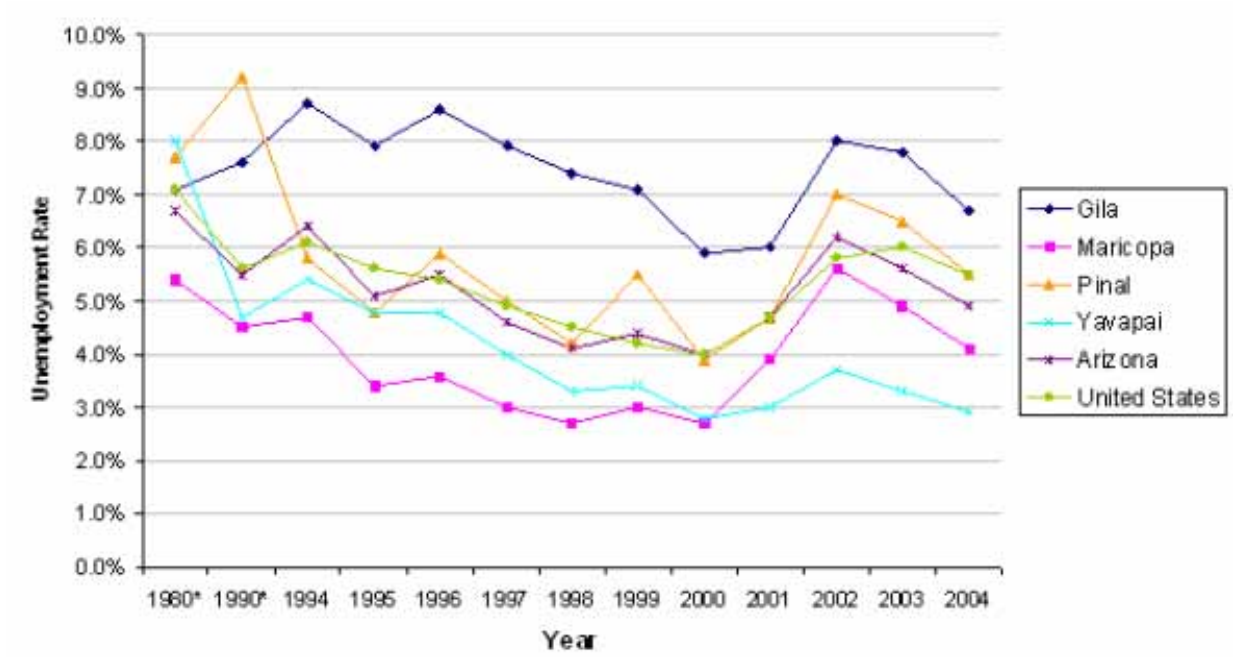
Area	1980*	1990*	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Average
Gila County	7.1%	7.6%	8.7%	7.9%	8.6%	7.9%	7.4%	7.1%	5.9%	6.0%	8.0%	7.8%	6.7%	7.4%
Payson	7.6%	3.7%	4.2%	3.9%	4.2%	3.9%	3.6%	3.5%	2.8%	2.9%	3.9%	3.8%	3.2%	3.9%
Globe	3.8%	4.7%	5.3%	4.9%	5.3%	4.9%	4.5%	4.4%	3.6%	3.6%	4.9%	4.8%	4.1%	4.5%
San Carlos	16.3%	22.2%	24.6%	22.9%	24.4%	22.9%	21.5%	20.9%	17.7%	17.9%	23.0%	22.6%	19.8%	21.3%
Miami	1.4%	7.0%	8.0%	7.3%	7.9%	7.3%	6.8%	6.6%	5.3%	5.5%	7.3%	7.2%	6.1%	6.4%
Maricopa County	5.4%	4.5%	4.7%	3.4%	3.6%	3.0%	2.7%	3.0%	2.7%	3.9%	5.6%	4.9%	4.1%	4.0%
Phoenix	5.4%	4.9%	5.2%	3.8%	4.0%	3.3%	2.9%	3.3%	3.0%	4.3%	6.2%	5.4%	4.5%	4.4%
Mesa	5.1%	3.8%	4.0%	2.9%	3.1%	2.5%	2.3%	2.5%	2.3%	3.3%	4.8%	4.2%	3.5%	3.7%
Glendale	5.4%	4.5%	4.7%	3.4%	3.7%	3.0%	2.7%	3.0%	2.7%	3.9%	5.6%	4.9%	4.1%	4.2%
Scottsdale	3.9%	3.2%	3.4%	2.5%	2.6%	2.1%	1.9%	2.1%	1.9%	2.8%	4.1%	3.6%	2.9%	3.0%
Chandler	4.8%	3.4%	3.5%	2.6%	2.7%	2.2%	2.0%	2.2%	2.0%	2.0%	4.2%	3.7%	3.1%	3.4%
Tempe	4.5%	3.8%	4.0%	2.9%	3.1%	2.5%	2.3%	2.5%	2.3%	3.4%	4.8%	4.2%	3.5%	3.5%
Pinal County	7.7%	6.5%	5.8%	4.8%	5.9%	5.0%	4.2%	5.5%	3.9%	4.7%	7.0%	6.5%	5.5%	5.6%
Apache Junction	11.2%	4.7%	4.2%	3.4%	4.3%	3.6%	3.0%	4.0%	2.8%	3.4%	5.1%	4.7%	4.0%	4.5%
Casa Grande	6.2%	5.5%	4.9%	4.1%	5.1%	4.3%	3.6%	4.7%	3.3%	4.0%	6.0%	5.6%	4.7%	4.8%
Florence	3.1%	4.7%	2.9%	2.4%	3.0%	2.5%	2.1%	2.8%	2.0%	2.4%	3.6%	3.3%	2.7%	2.9%
Eloy	12.6%	12.8%	11.5%	9.6%	11.7%	10.0%	8.4%	11.0%	7.9%	9.5%	13.8%	12.9%	10.9%	11.0%
Coolidge	13.4%	6.5%	5.8%	4.9%	6.0%	5.1%	4.2%	5.6%	3.9%	4.8%	7.1%	6.6%	5.6%	6.1%
Queen Creek	n/a	2.8%	2.9%	2.1%	2.3%	1.8%	1.7%	1.8%	1.6%	2.4%	3.5%	3.1%	2.5%	2.4%
Yavapai County	8.0%	4.7%	5.4%	4.8%	4.8%	4.0%	3.3%	3.4%	2.8%	3.0%	3.7%	3.3%	2.9%	4.2%
Prescott	7.3%	5.3%	6.0%	5.4%	5.3%	4.5%	3.7%	3.8%	3.2%	3.3%	4.1%	3.7%	3.3%	4.5%
Prescott Valley	n/a	4.1%	4.8%	4.2%	4.2%	3.5%	2.9%	3.0%	2.5%	2.6%	3.3%	2.9%	2.6%	3.4%
Cottonwood - Verde Village	n/a	4.8%	5.5%	4.9%	4.9%	4.1%	3.4%	3.5%	2.9%	3.0%	3.8%	3.4%	3.0%	3.9%
Sedona	5.3%	2.4%	2.8%	2.4%	2.4%	2.0%	1.7%	1.7%	1.4%	1.5%	1.9%	1.7%	1.5%	2.2%
Camp Verde	n/a	4.2%	4.8%	4.2%	4.2%	3.5%	2.9%	3.0%	2.5%	2.6%	3.3%	2.9%	2.6%	3.4%
Cottonwood	n/a	6.1%	7.0%	6.2%	6.2%	5.2%	4.3%	4.4%	3.7%	3.8%	4.8%	4.3%	3.7%	5.0%
Chino Valley	6.6%	6.9%	7.9%	7.0%	7.0%	5.8%	4.9%	5.0%	4.2%	4.4%	5.4%	4.8%	4.3%	5.7%
Arizona	6.7%	5.5%	6.4%	5.1%	5.5%	4.6%	4.1%	4.4%	4.0%	4.7%	6.2%	5.6%	4.9%	5.2%
United States	7.1%	5.6%	6.1%	5.6%	5.4%	4.9%	4.5%	4.2%	4.0%	4.7%	5.8%	6.0%	5.5%	5.3%

* 1980 and 1990 unemployment data unavailable for towns with a population of less than 2,500 individuals
Source: Arizona Department of Commerce, Arizona Workforce Informer
http://www.workforce.az.gov/cgi/dataanalysis/?PAGEID=94&SUBID=142
U.S. Bureau Of Labor Statistics
http://www.bls.gov/cps/prev_yrs.htm

Table 16. Per Capita and Family Income by County and State, 1990-2000 and % Change

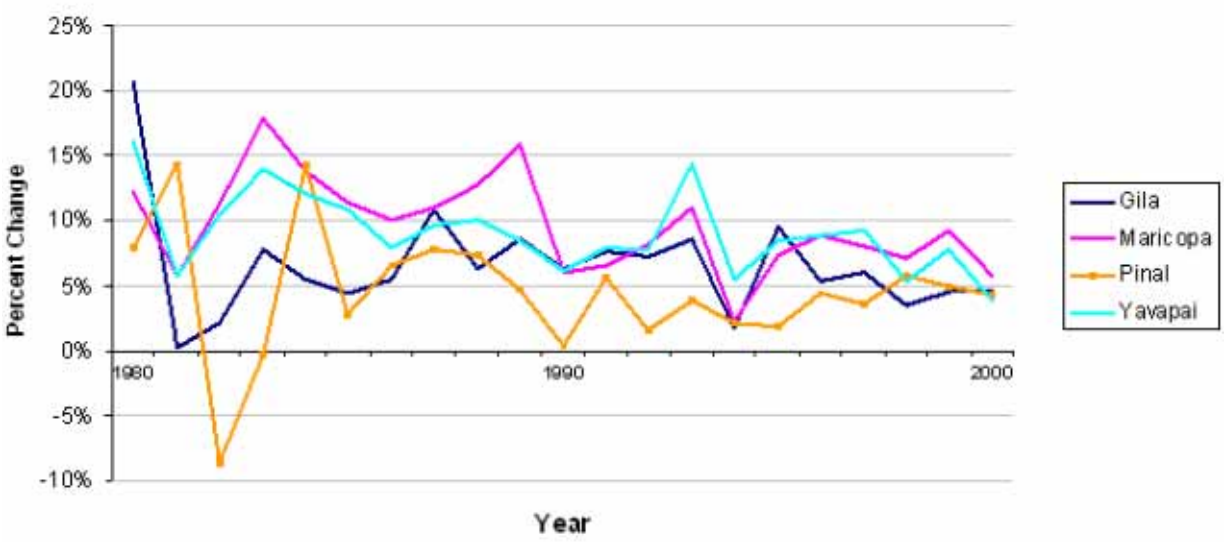
County/Place	Per Capita Income			Median Family Income			% Individuals in Poverty			% Families in Poverty		
	1990	2000*	% Change	1990	2000*	% Change	1990	2000	% Change	1990	2000	% Change
Gila County	$10,297	$12,379	20.22%	$24,877	$27,764	11.61%	18.3%	17.4%	-4.92%	13.5%	12.6%	-6.67%
Payson	$26,464	$29,373	10.99%	$11,748	$14,805	26.02%	11.9%	9.9%	-16.81%	7.8%	6.5%	-16.67%
Globe	$32,071	$32,079	0.02%	$11,493	$12,237	6.47%	11.7%	11.4%	-2.56%	8.3%	8.8%	6.02%
San Carlos	$10,678	$10,788	1.03%	$3,692	$3,502	-5.16%	58.8%	58.8%	0.00%	55.0%	57.5%	4.55%
Miami	$21,650	$23,236	7.33%	$8,115	$10,375	27.85%	21.1%	23.6%	11.85%	17.6%	20.5%	16.48%
Maricopa County	$14,970	$16,882	12.77%	$36,078	$39,322	8.99%	12.0%	12.0%	0.0%	9.0%	8.0%	-11.1%
Phoenix	$14,096	$15,048	6.75%	$34,172	$35,256	3.17%	14.2%	15.8%	11.27%	10.5%	11.5%	9.52%
Mesa	$13,506	$14,872	10.11%	$35,297	$37,354	5.83%	9.5%	8.9%	-6.32%	6.9%	6.2%	-10.14%
Glendale	$13,524	$14,510	7.29%	$37,086	$38,818	4.67%	11.5%	11.9%	3.48%	9.0%	8.8%	-2.22%
Scottsdale	$23,482	$29,710	26.52%	$48,202	$56,029	16.24%	5.9%	5.8%	-1.69%	3.5%	3.4%	-2.86%
Chandler	$14,720	$18,137	23.21%	$41,361	$47,587	15.05%	9.7%	6.6%	-31.96%	7.1%	4.6%	-35.21%
Tempe	$15,530	$17,000	9.47%	$40,512	$41,910	3.45%	13.6%	14.3%	5.15%	7.0%	7.5%	7.14%
Pinal County	$9,228	$12,159	31.76%	$23,993	$30,006	25.06%	24.0%	17.0%	-29.17%	19.0%	12.0%	-36.84%
Apache Junction	$9,946	$12,751	28.20%	$23,151	$28,624	23.64%	16.7%	11.6%	-30.54%	11.8%	7.3%	-38.14%
Casa Grande	$11,388	$12,077	6.05%	$28,639	$30,976	8.16%	17.4%	16.0%	-8.05%	16.1%	12.4%	-22.98%
Florence	$10,101	$8,557	-15.29%	$24,397	$31,835	30.49%	17.6%	7.0%	-60.23%	14.9%	6.1%	-59.06%
Eloy	$5,836	$6,976	19.53%	$19,839	$21,619	8.97%	36.7%	31.9%	-13.08%	31.2%	27.8%	-10.90%
Coolidge	$7,634	$10,366	35.79%	$18,733	$25,445	35.83%	36.2%	24.7%	-31.77%	29.5%	20.9%	-29.15%
Queen Creek	$12,057	$16,382	35.87%	$37,083	$49,832	34.38%	14.4%	9.2%	-36.11%	10.7%	6.0%	-43.93%
Yavapai County	$12,657	$14,967	18.25%	$26,238	$31,039	18.30%	13.6%	11.9%	-12.50%	9.8%	7.9%	-19.39%
Prescott	$13,851	$17,121	23.61%	$29,473	$35,266	19.66%	13.3%	13.1%	-1.50%	8.1%	7.4%	-8.64%
Prescott Valley	$9,848	$12,328	25.18%	$23,947	$28,268	18.04%	9.6%	10.9%	13.54%	7.3%	7.8%	6.85%
Cottonwood - Verde Village	$10,328	$12,697	22.93%	$25,089	$29,284	16.72%	11.3%	8.7%	-23.01%	9.1%	6.7%	-26.37%
Sedona	$19,893	$23,786	19.57%	$35,559	$39,954	12.36%	8.9%	9.7%	8.99%	6.3%	4.7%	-25.40%
Camp Verde	$19,514	$11,436	-41.40%	$21,865	$28,110	28.56%	20.3%	14.0%	-31.03%	13.2%	9.5%	-28.03%
Cottonwood	$9,235	$13,291	43.92%	$18,932	$28,675	51.46%	22.7%	13.5%	-40.53%	20.5%	8.9%	-56.59%
Chino Valley	$8,821	$11,802	33.79%	$21,972	$26,565	20.91%	17.0%	15.5%	-8.82%	13.3%	12.6%	-5.26%
Arizona	$13,461	$15,383	14.28%	$32,178	$35,450	10.17%	15.7%	14.0%	-10.83%	11.4%	10.0%	-12.28%

*2000 Income data adjusted to reflect 1990 constant dollars by applying deflation factor calculated by Consumer Price Index
Source: NRIS - Human Dimensions



Source: Arizona Department of Commerce, Arizona Workforce Informer

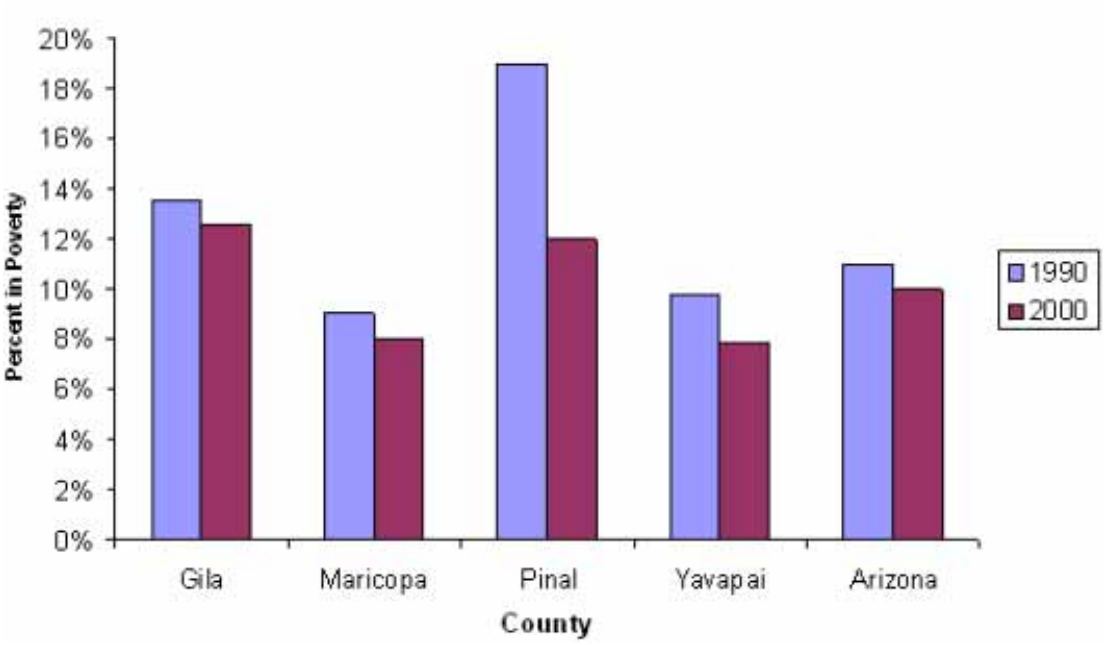
Figure 10. Unemployment Rates by County and State, 1980-2004



Source: Bureau of Economic Analysis

* Annual percent change in per capita personal income based on mid-year Census Bureau estimates of county population

Figure 11. Annual Percent Change in Per Capita Income by County, 1980-2000



Source: NRIS – Human Dimensions

Figure 12. Percent of Families in Poverty by County, 1990-2000

Table 17. Household Income Distribution by County, 2000

	Gila County		Maricopa County		Pinal County		Yavapai County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than $10,000	2,491	12.4%	77,072	6.8%	6,319	10.3%	6,298	9.0%
$10,000 to $14,999	2,025	10.0%	59,431	5.2%	4,604	7.5%	5,692	8.1%
$15,000 to $24,999	3,688	18.3%	138,318	12.2%	9,488	15.4%	12,019	17.2%
$25,000 to $34,999	3,017	15.0%	148,972	13.1%	9,380	15.3%	11,115	15.9%
$35,000 to $49,999	3,446	17.1%	197,855	17.5%	12,082	19.7%	13,098	18.7%
$50,000 to $74,999	3,254	16.1%	234,729	20.7%	11,221	18.3%	11,709	16.7%
$75,000 to $99,999	1,174	5.8%	126,525	11.2%	4,435	7.2%	4,924	7.0%
$100,000 to $149,999	639	3.2%	95,166	8.4%	2,683	4.4%	3,285	4.7%
$150,000 to $199,999	205	1.0%	26,506	2.3%	605	1.0%	762	1.1%
$200,000 or more	226	1.1%	28,474	2.5%	596	1.0%	1,167	1.7%
Median household income ($)	$30,917	(x)	$45,358	(x)	$35,856	(x)	$34,901	(x)

Source: U.S. Census Bureau, Profile of Selected Economic Characteristics: 2000
http://www.census.gov/census2000/states/az.html

3.3 Forest and natural-resource dependent economic activities

Data on natural-resource dependent economic activities are comprised of available information on income from wood products and processing, income from special forest products and processing, and tourism employment. Analysis is based on IMPLAN data provided by the USFS Planning Analysis Group and Inventory and Monitoring Institute in Fort Collins, Colorado. IMPLAN is a form of input-output analysis developed specifically for the unique needs of the Forest Service. Input-output analysis (I-O) is used to quantify linkages among the structural parts of an economy. Given a particular economic impact, for example a public lands management decision, I-O analysis generally calculates the overall effects resulting from a direct impact on the economy. This mathematical model accounts for a variety of employment, income, and output effects including both direct effects (i.e. wages) and indirect effects (i.e. the stimulation of local economy to supply inputs and processing). Some I-O analyses also model induced effects, the additional economic effects of household spending of increased wages within the community. The secondary (indirect and induced) effects are often described as “ripplelike” effects of spending throughout other sectors of a local economy (Loomis 2002). IMPLAN data are tabulated for 525 distinct industries according to the North American Industry Classification System (NAICS). A list of industries used to calculate income from wood and special forest products and processing as well as tourism employment is included in Appendix A. It should also be noted that analysis of IMPLAN data in this assessment is based solely on the direct economic impacts of selected industries and does not include indirect or induced economic impacts. Appendix B addresses some of the indirect economic effects of forest-related industries.

Total labor income from Forest Resources for the years 1990 and 2000 is shown in Table 18. Total labor income is commonly defined as the sum of employee compensation and proprietor’s income. Data show that both Pinal and Maricopa Counties reported relatively strong gains in total labor income from wood products and processing between 1990 and 2000 while Gila County reported a substantial loss of income from this category over the same period. In Maricopa County, the increase was due in part to particularly strong income gains from reconstituted wood and paper products while in Pinal County, the strongest increases were reported for wood household furniture and structural wood members. Interestingly, each of the four counties within the area of assessment reported losses in total labor income from special forest products and processing during the decade. Table 18 shows that in comparison to statewide figures, the area of assessment realized a large increase in income from wood products and processing and a relatively significant loss in income from special forest products and processing between 1990 and 2000.

Table 18. Total Labor Income from Forest Resources by County and State, 1990-2000 and % Change

County	Income from Wood Processing and Products			Income from Special Forest Products and Processing		
	1990	2000	% Change	1990	2000	% Change
Gila	$3,958,866	$534,774	-86.49%	$366,480	$202,780	-44.67%
Maricopa	$141,455,612	$273,053,463	93.03%	$63,946,522	$26,232,873	-58.98%
Pinal	$1,857,089	$3,403,790	83.29%	$14,124,030	$9,449,586	-33.10%
Yavapai	$4,044,339	$5,661,275	39.98%	$2,229,247	$975,281	-56.25%
Assessment Area Total	$151,315,906	$282,653,302	86.80%	$80,666,280	$36,860,520	-54.30%
Arizona	$263,558,989	$369,474,539	40.19%	$175,994,087	$137,825,248	-21.69%

*2000 Income data adjusted to reflect 1990 constant dollars by applying deflation factor calculated by Consumer Price Index
Source: IMPLAN 2000 data

Information on tourism employment for each of the counties within the area of assessment, as well as the state of Arizona, is provided in Table 19. Calculating the direct impact of tourism is made particularly difficult given the fact that a limited percentage of business activity in any given industry can be considered the result of tourism. For the purposes of this assessment, we have assessed tourism employment based on percentages derived from the Travel Industry Association of America Tourism Economic Impact Model (TEIM). This is the same model used in the Arizona Tourism Statistical Report issued by the Arizona Office of Tourism (AZOT).

Table 19 suggests that the most substantial gains in tourism employment between 1990 and 2000 took place in Yavapai and Maricopa Counties. The increase in tourism employment for Yavapai County far exceeded the rate of increase at the state level over the same period (104% and 32% respectively). Alternatively, Pinal County reported an increase in tourism employment that was well below increases in the same category for neighboring counties between 1990 and 2000.

Table 19. Tourism Employment by County and State, 1990-2000 and % Change

	Gila County			Maricopa County			Pinal County		
Industry Sector	**1990**	**2000**	**%Change**	**1990**	**2000**	**%Change**	**1990**	**2000**	**%Change**
Retail	187	238	27.0%	13,619	20,319	49.2%	456	535	17.4%
Restaurant/Bar	235	349	48.7%	16,715	24,457	46.3%	375	574	53.1%
Lodging	296	245	-17.2%	29,842	32,439	8.7%	665	510	-23.3%
Amusement	3	76	2,666.5%	858	2,427	183.0%	34	80	134.3%
Total	**721**	**908**	**26.0%**	**61,033**	**79,642**	**30.5%**	**1,530**	**1,700**	**11.1%**

	Yavapai County			Arizona		
Industry Sector	**1990**	**2000**	**%Change**	**1990**	**2000**	**%Change**
Retail	514	828	61.0%	21,655	30,376	40.3%
Restaurant/Bar	747	1,241	66.2%	26,393	38,395	45.5%
Lodging	839	2,157	157.1%	47,848	56,848	18.8%
Amusement	26	112	324.0%	1,442	3,462	140.1%
Total	**2,126**	**4,338**	**104.0%**	**97,338**	**129,081**	**32.6%**

Source: IMPLAN 2000 data

3.4 Government earnings from federal-lands related payments

Federal lands support the fiscal management of local governments through Payments in Lieu of Taxes (PILT) and what are commonly referred to as “Payments to States” or “Secure Schools and Roads” funding. PILT funds derive from a 1976 law (Public Law 94-565) that provides funds to local governments based on the amount of federal lands within their jurisdiction. These payments are affected by federal funding limitations, prior year “Payments to States,” and formulas derived from county populations. Based on annual congressional appropriation decisions, PILT payments may not always be fully funded. Counties may also receive monies based on a 1908 law that allocates to them ten percent of the gross revenues generated from timber harvest, grazing, mining, and all other uses from the federal lands within their jurisdictions.

The Weeks Law of 1911 increased the amount of forest receipt payments from ten to twenty-five percent. These “twenty-five percent monies” were mandated for use in schools and on roads. With recent

diminishing commercial uses of federal lands, the President, in 2000, signed the Secure Rural Schools and Community Self Determination Act (PL 106-393). The purpose of the Act was to address the diminishing amounts of the twenty-five percent monies. This new law provides counties with the option of continuing to receive the twenty-five percent amount or to elect to receive a fixed amount based on the average of the three highest years between 1986 and 1999. In rural counties, these funds can be an important source of funding to maintain roads and provide support for schools. The law was originally scheduled to sunset in 2006, but a bill to reauthorize the Act and extend it through FY 2013 was, at the time of this report, being considered by Congress (S. 267, H.R. 517).

PILT entitlement acreage is presented for each county in Table 20. Yavapai County holds the greatest entitlement acreage with over 2.5 million acres, 1.9 million of which are Forest Service lands. Gila County also holds a significant amount of Forest Service lands entitled to PILT with over 1.7 million acres. Actual PILT payments for each county are presented in Table 21. Despite holding fewer entitlement acres than either Yavapai or Maricopa County, Gila County has consistently been the largest recipient of PILT payments, averaging an annual payment of $1.55 million between 2000 and 2004. Pinal County received the least in PILT payments, averaging $616,090 over the same period.

Annual forest receipts for the years 1986-1999 are presented for each county in Table 22. Between 1986 and 1999, average annual forest receipts ranged from a high in Yavapai County of $546,200 to a low of $29,400 in Pinal County.

Table 20. Payment in Lieu of Taxes (PILT) Entitlement Acreage by County and Agency, FY 2004

County	BLM	FS	BOR	NPS	COE	ARMY	FISH	URC	TOTAL
Gila	64,368	1,704,384	13,535	1,120	0	0	0	0	1,783,407
Maricopa	1,749,429	657,695	40,112	11	2,119	0	6,896	0	2,456,262
Pinal	382,231	222,889	21,312	473	0	0	0	0	626,905
Yavapai	606,237	1,967,402	12,319	727	0	0	0	0	2,586,685
TOTAL	2,802,265	4,552,370	87,278	2,331	2,119	0	6,896	0	7,453,259

Source: U.S. Department of the Interior, Bureau of Land Management
http://www.blm.gov/pilt/search.html

Table 21. County PILT Payments, 2000-2004

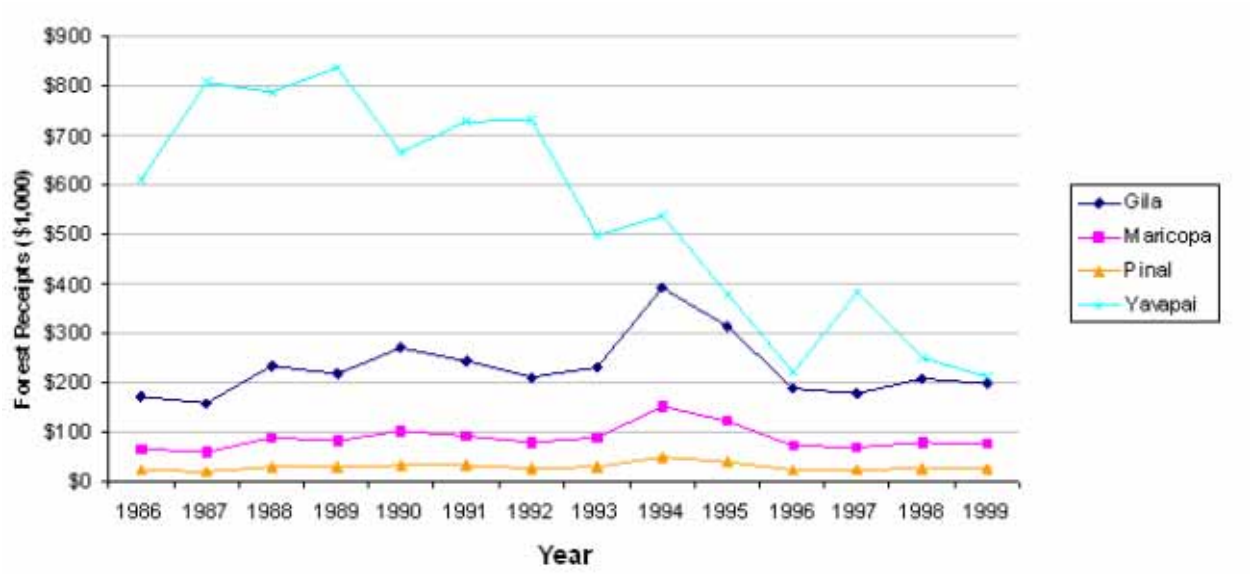
County	2000	2001	2002	2003	2004	Average
Gila	$1,046,543	$1,498,572	$1,574,039	$1,798,227	$1,849,029	$1,553,282
Maricopa	$1,019,264	$1,465,414	$1,539,003	$1,725,495	$1,775,295	$1,504,894
Pinal	$396,290	$568,264	$599,120	$673,798	$842,978	$616,090
Yavapai	$973,796	$1,417,178	$1,473,737	$1,359,624	$1,280,574	$1,300,982
TOTAL	$3,435,893	$4,949,428	$5,185,899	$5,557,144	$5,747,876	$4,975,248

Source: U.S. Department of the Interior, Bureau of Land Management
http://www.blm.gov/pilt/search.html

Table 22. Forest Receipts by County, 1986-1999 (Amounts in 1,000s)

County	1986	1987	1988	1989	1990	1991	1992	1993
Gila	$172.8	$158.3	$234.1	$216.8	$270.5	$245.6	$211.4	$231.9
Maricopa	$65.5	$59.4	$88.8	$82.0	$103.2	$93.3	$80.1	$88.7
Pinal	$21.8	$20.1	$29.0	$28.1	$34.4	$31.5	$27.5	$30.3
Yavapai	$610.9	$806.9	$787.5	$837.5	$664.5	$729.2	$732.2	$498.8
	1994	**1995**	**1996**	**1997**	**1998**	**1999**	**Average**	
Gila	$391.3	$314.5	$188.5	$178.4	$206.3	$197.6	$229.9	
Maricopa	$150.5	$121.2	$72.8	$68.8	$79.3	$76.1	$87.8	
Pinal	$48.9	$39.6	$24.5	$23.5	$26.6	$25.7	$29.4	
Yavapai	$538.7	$378.7	$219.4	$382.3	$249.5	$210.8	$546.2	

Source: NRIS - Human Dimensions



Source: NRIS – Human Dimensions

Figure 13. Forest Receipts by County, 1986-1999

3.5 Key issues for forest planning and management

In the early stages of Arizona's development, extractive industries such as mining, ranching, farming, and timber harvesting were the mainstays of local economies. For decades, these sectors provided the foundation for employment upon which the state's predominantly rural economy was based (Case and Alward 1997, Rasker 2000). In recent decades, however, Arizona has joined neighboring western states in experiencing a significant decline in extractive industries along with the employment and income traditionally provided by these sectors (Baden and Snow 1997, Booth 2002).

While these changes have undoubtedly had negative impacts on many local economies, the relative expansion of information- and service-based industries has led to a more diverse, and some say more sustainable, state economy (Baden and Snow 1997, Booth 2002). The economic data gathered for the area of assessment for TNF illustrate this trend, evincing substantial growth in the F.I.R.E. (finance, insurance

and real estate), services, and construction industries. When matched with a simultaneous decline in extractive and productive industries, these changes have made the composition of the area's economy increasingly urban in nature, following a statewide trend over the last twenty years (Booth 2002, Case and Alward 1997).

Again, these changes are emblematic of those seen in recent decades throughout the Mountain West and signal important demographic and economic trends that are likely to shape the region's future development. In light of relatively strong economic growth for the area surrounding TNF, data show expansion of certain populations and industries that are increasingly important to the local economy. In particular, the increase in retirement-aged population and seasonal housing units, when combined with increases in the service/professional, retail trade, and construction industries, mirrors a common trend in rural western economies.

These trends support the notion that growth in many western communities is partly driven by individuals and households with the wherewithal to support increasingly non-extractive economies. Despite considerable growth in per capita and median household incomes, three of the four counties within the area of assessment maintained income levels below the state average as of 2000. This trend takes on increasing relevance when combined with observed demographic trends showing an influx of retirement-age residents and seasonal homeowners. Several researchers have noted that while labor income is growing in the rural Mountain West, it is growing more slowly than transfer (social security, pensions, retirement) and dividend income. In other words, the growth of many western communities is being fueled, at least in part, by income that is not tied to local employment (Booth 2002, Rasker 2000).

The relative expansion of the service and professional industries is also facilitated by advances in transportation and information technology that increasingly allow urban populations to relocate to high-amenity, rural communities while maintaining employment and income characteristics typical of more urban settings (Booth 2002, Rasker 2000).

Together, these trends signal a convergence of rural and urban economies that carries important implications for natural resource management. Many of the communities hardest hit by the transition away from extractive industries belong to traditional constituencies associated with the FS, the BLM, and other federal and state agencies. In many cases, these agencies are caught between the necessity of responding to market forces and those powerful interests determined to protect established industries from such changes (Baden and Snow 1997). Finally, data for the area surrounding the TNF demonstrate the reciprocal cause-and-effect relationships between economic and demographic trends. Although economic growth of rural communities may be fueled by households with relatively "footloose" sources of income, potentially negative consequences include an increased demand for construction, schools, health care and other services as well as undesirable side affects such as pollution, urban sprawl, and congestion (Rasker 2000, Case and Alward 1997).