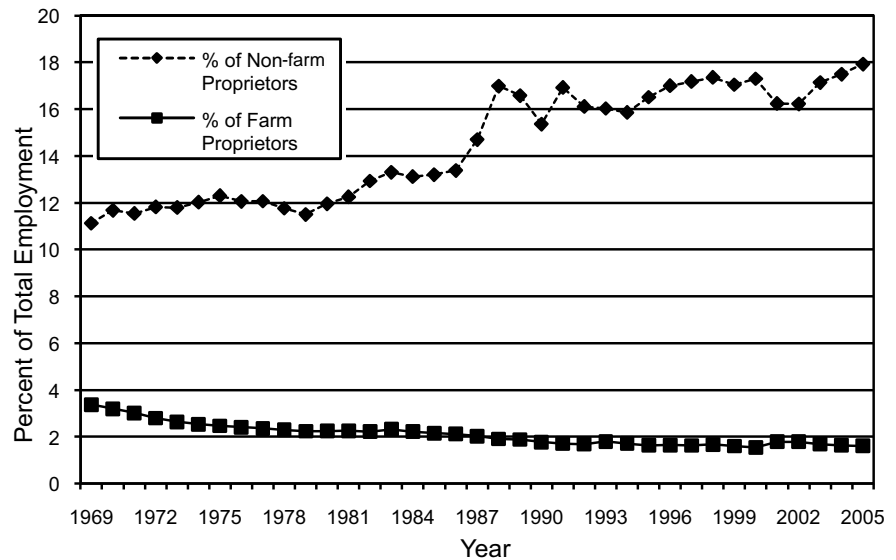


**INTRODUCTION**

One of the most notable labor market trends in recent decades in the state of New Mexico has been the increase in non-farm proprietorships (Goetz & Rupasingha, 2007). The Bureau of Economic Analysis (BEA) data show that the number of non-farm proprietors increased by 334 percent between 1969 and 2005, from 43,918 to 190,788, while the number of farm proprietors increased 29 percent, from 13,310 to 17,157. While this trend varies across counties in New Mexico, more than 20 counties recorded an over 200 percent increase in non-farm proprietorships. During this same time period, the number of full- and part-time employment grew by 170 percent (Table 1). As a share of total full- and part-time employment, non-farm proprietorships increased from 11 to 18 percent (Figure 1). Further, as a share of total non-farm employment, non-farm proprietorships increased from 12 to 18 percent (Figure 2). Data also show that some counties have a significantly higher rate of non-farm proprietorships than others, and they may therefore have a more conducive environment for non-farm proprietor businesses (Figure 3). This significant growth in non-farm proprietorships likely reflects a combination of factors, including exits from agriculture, job losses, and downsizing of workforces in manufacturing and other large firms coupled with new opportunities created by information technology and a growing preference for natural amenities.



**Figure 1. Change of farm and non-farm proprietors in New Mexico, 1969–2005.**

However, data also show that the returns or earnings per non-farm proprietor in New Mexico lag behind the returns to wage-and-salary employment (Figure 4). In 1969, the average non-farm proprietor earned \$5,940, whereas the average wage-and-salary job paid only \$4,977 (Table 2). By 2005, the average non-farm proprietor earned \$22,321, whereas the average payroll worker earned \$26,453, a more than \$4,000 difference. While this trend varies across counties, only nine counties recorded higher earnings for non-farm proprietorship than payroll employment in 2005. Non-farm proprietorship earnings as a percent of total personal income declined from 1969 until around 2000, but have shown an upward trend since then (Figure 5). Non-farm proprietors as a group received a share of total personal income in 2005 (8%) that was considerably smaller than their share of the workforce

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**Table 1. Full- and Part-Time Employment and Non-Farm and Farm Proprietor Change in New Mexico Counties, 1969–2005<sup>1</sup>**

Area Name	Total full-time and part-time employment			Non-farm proprietors			Farm proprietors		
	1969*	2005	% change	1969	2005	% change	1969	2005	% change
New Mexico	394,799	1,064,351	170	43,918	190,788	334	13,310	17,157	29
Bernalillo	134,349	419,581	212	13,994	68,326	388	193	564	192
Catron	1,016	1,606	58	156	659	322	281	253	-10
Chaves	17,107	29,137	70	2,704	5,745	112	758	677	-11
Cibola	6,185	10,527	70	1,011	1,555	54	176	208	18
Colfax	5,239	8,450	61	666	2,133	220	398	382	-4
Curry	17,590	24,763	41	1,996	3,551	78	1,110	748	-33
De Baca	1,076	1,116	4	235	239	2	280	215	-23
Doña Ana	26,608	87,493	229	2,468	13,481	446	841	1,547	84
Eddy	16,286	27,098	66	2,124	4,740	123	656	577	-12
Grant	9,095	14,302	57	820	3,111	279	275	378	37
Guadalupe	1,785	2,143	20	287	407	42	220	285	30
Harding	732	777	6	51	323	533	264	205	-22
Hidalgo	1,909	2,474	30	237	479	102	219	180	-18
Lea	21,722	33,000	52	2,612	5,164	98	747	683	-9
Lincoln	3,183	11,560	263	718	3,663	410	368	395	7
Los Alamos	8,750	21,888	150	362	2,284	531	0	0	0
Luna	4,348	10,871	150	594	1,747	194	395	239	-39
McKinley	13,617	29,325	115	1,100	5,482	398	94	253	169
Mora	1,033	2,051	99	140	544	289	157	490	212
Otero	19,648	29,377	50	1,153	5,291	359	291	525	80
Quay	4,827	4,838	0	622	729	17	959	730	-24
Rio Arriba	6,196	18,748	203	717	4,197	485	318	1,153	263
Roosevelt	6,586	9,448	43	1,102	1,450	32	1,497	927	-38
Sandoval	2,968	36,739	1,138	480	7,105	1,380	151	402	166
San Juan	17,330	62,584	261	1,953	9,567	390	343	769	124
San Miguel	6,092	13,437	121	697	2,925	320	274	801	192
Santa Fe	21,803	88,783	307	2,557	19,905	678	104	407	291
Sierra	2,174	4,799	121	452	1,412	212	160	235	47
Socorro	3,483	8,455	143	454	1,591	250	292	483	65
Taos	4,823	18,256	279	630	5,869	832	137	522	281
Torrance	2,005	5,791	189	319	1,375	331	428	576	35
Union	2,433	2,746	13	398	551	38	663	560	-16
Valencia	8,986	22,188	147	1,120	5,188	363	437	788	80

<sup>1</sup> Proprietor numbers are calculated for each county by the BEA based on federal tax Form 1040 (Schedule C) for sole proprietorships and Form 1065 for partnerships data. These estimates include individuals who may be otherwise employed but have additional income from self-employment, and they may include multiple filings by the same individual. While proprietors cannot be equated with entrepreneurs per se, they arguably have more in common with this group than with wage and salary workers, or workers who choose to remain unemployed after a lay-off. Proprietors create new jobs for themselves, and often for others.

\* 1982 Data for Cibola County, Source: BEA Regional Economic Information System

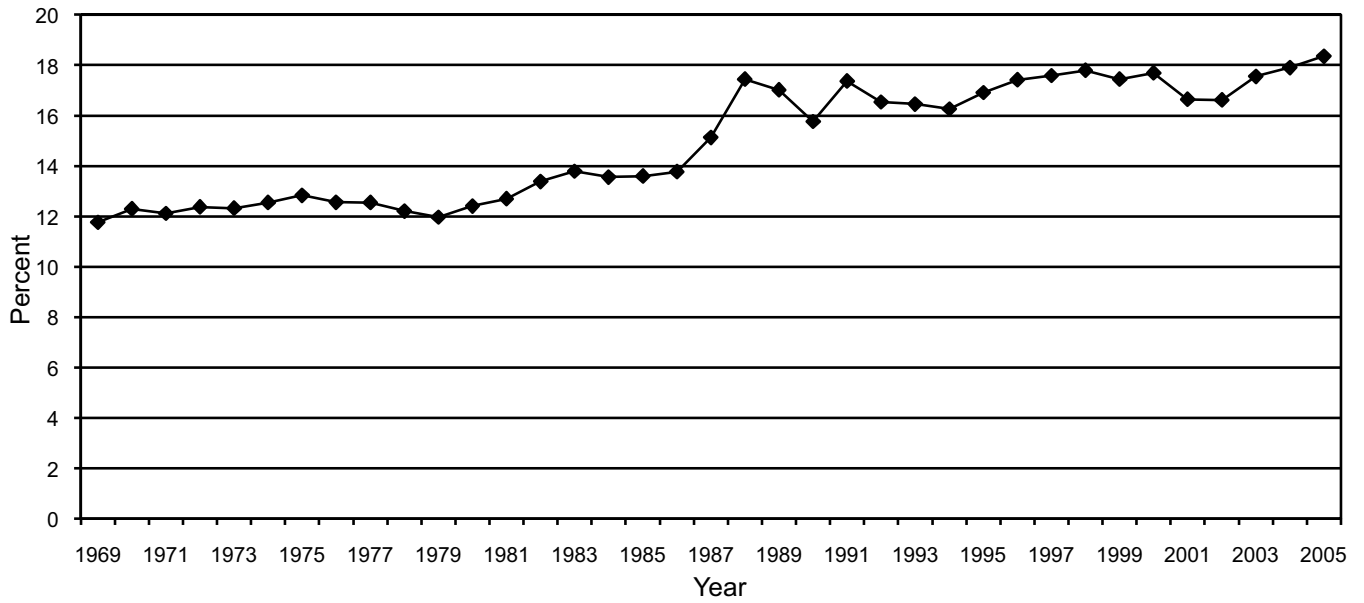


Figure 2. Non-farm proprietorships as a percent of total non-farm employment, 1969–2005.

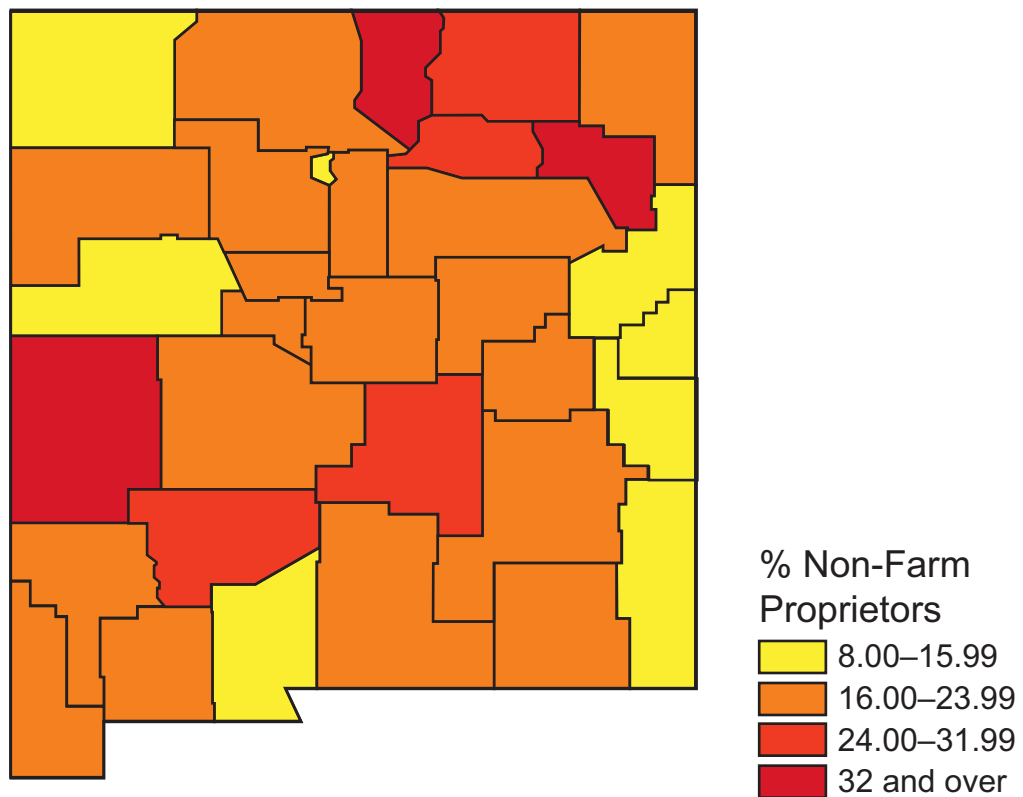


Figure 3. Non-farm proprietors as a percent of total, by county.

(18%) would suggest. However, if the alternative to creating non-farm proprietorships is unemployment, then it is important for local and state decision makers to know whether and how state- and county-level policies and socio-economic characteristics foster or impede the net formation of non-farm proprietorships. This is especially true for rural communities that have lost their manufacturing base, since they will unlikely be able to recreate this base. Thus, for many rural counties, home-grown entrepreneurship or self-employment is the only viable source of economic growth and development available.

### POLICY SIGNIFICANCE

The emergence of non-farm proprietors or self-employed workers in New Mexico counties has two important implications that have not been recognized. First, without these workers, the decline in rural population, which has been widely documented, would likely have been even greater. Second, these workers could become a crucial source of new stakeholders for land grant universities like New Mexico State University (NMSU) that were established primarily to serve the rural population.

Rural areas have traditionally been served by land grant universities and colleges of agriculture. When these universities were established in the late 19th century, the rural population primarily earned its income from farming, and maximizing returns to taxpayer investments in rural areas under the Hatch (Land Grant) Act of 1887 meant that universities needed to develop research and outreach capacity within agriculture. Today, many such institutions are faced with stagnant and (in real terms) declining core federal funding, and leaders of many land grant colleges and universities are beginning to recognize that they must expand their rural stakehold-

**Table 2. Per Capita Earnings for Full- and Part-Time Employment and Non-Farm and Farm Proprietor in New Mexico Counties, 1969 and 2005.**

Area Name	1969			2005		
	payroll	non-farm	farm	payroll	non-farm	farm
New Mexico	4,977	5,940	5,450	26,453	22,321	22,214
Bernalillo	5,567	5,250	8,637	29,951	21,430	-10,337
Catron	2,891	4,577	2,075	11,379	6,759	-13,024
Chaves	3,892	5,581	9,145	20,551	39,071	124,935
Cibola	N/A	N/A	N/A	21,612	13,891	-6,332
Colfax	3,788	8,200	1,113	17,726	16,508	-16,613
Curry	4,333	4,275	9,990	24,259	15,032	97,896
De Baca	2,089	4,043	3,982	13,100	20,623	-1,530
Doña Ana	5,186	6,293	9,713	23,159	17,993	60,993
Eddy	4,591	8,047	7,407	27,790	45,890	20,582
Grant	5,708	8,465	3,269	19,887	10,582	-11,923
Guadalupe	2,889	5,362	6,605	14,984	15,133	-19,568
Harding	2,482	6,098	2,004	7,708	9,003	-11,463
Hidalgo	3,656	3,751	4,968	18,407	9,296	1,250
Lea	5,080	7,725	5,722	26,419	28,997	33,876
Lincoln	2,956	5,326	459	15,825	12,711	-23,441
Los Alamos	8,218	8,931	N/A	57,237	13,197	N/A
Luna	3,606	4,879	7,357	20,340	17,860	27,280
McKinley	5,523	6,637	5,649	22,693	4,918	-17,652
Mora	3,458	4,457	-1,465	12,027	9,676	-11,851
Otero	5,760	7,053	1,825	23,114	11,259	4,130
Quay	2,870	4,767	660	17,479	13,110	5,445
Rio Arriba	4,186	5,929	3,362	17,195	13,340	-4,843
Roosevelt	2,651	4,005	6,768	17,860	13,871	80,529
Sandoval	3,762	7,371	2,901	28,849	14,943	-11,415
San Juan	5,353	6,442	4,994	27,744	30,630	46,524
San Miguel	3,763	5,393	5,507	17,623	11,392	-13,587
Santa Fe	4,403	7,329	10,692	25,232	40,387	-17,265
Sierra	3,214	4,175	2,500	15,340	11,620	7,881
Socorro	3,931	5,037	8,599	20,465	10,209	20,950
Taos	4,081	6,643	3,095	16,180	26,741	-2,293
Torrance	2,707	3,263	2,346	16,687	11,769	15,281
Union	2,268	4,188	4,913	13,585	12,740	53,738
Valencia	4,404	6,126	3,050	18,433	11,440	-2,376

er base beyond production agriculture if they wish to maintain program funds and continue to serve the public interest generally (as opposed to serving only a declining farm population). Some land grant systems, such as NMSU, are expanding their role beyond their original, more narrowly-conceived missions by adopting a universitywide outreach philosophy and seeking community partners to address the needs of this new and growing set of rural stakeholders.

The economic forces now affecting rural areas can be traced to the consequences of globalization, including outsourcing that has altered the spatial

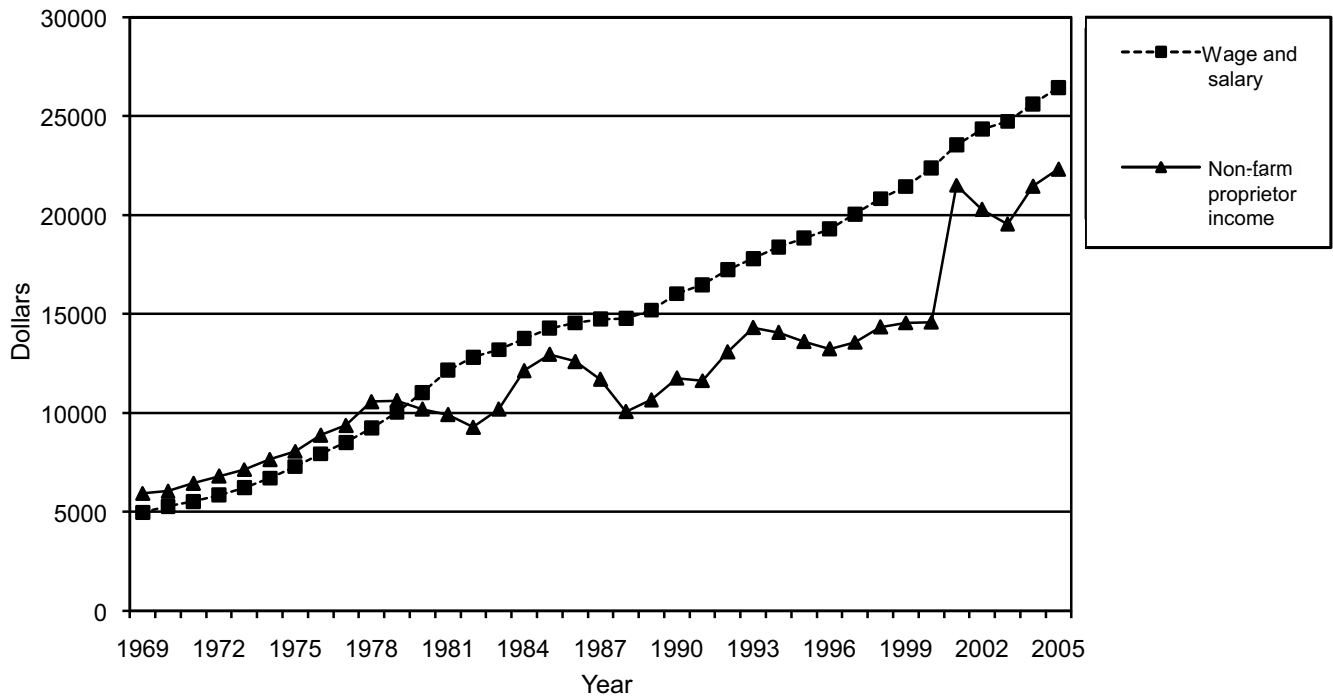


Figure 4. Average non-farm proprietor income and average wage and salary earnings, 1969–2005.

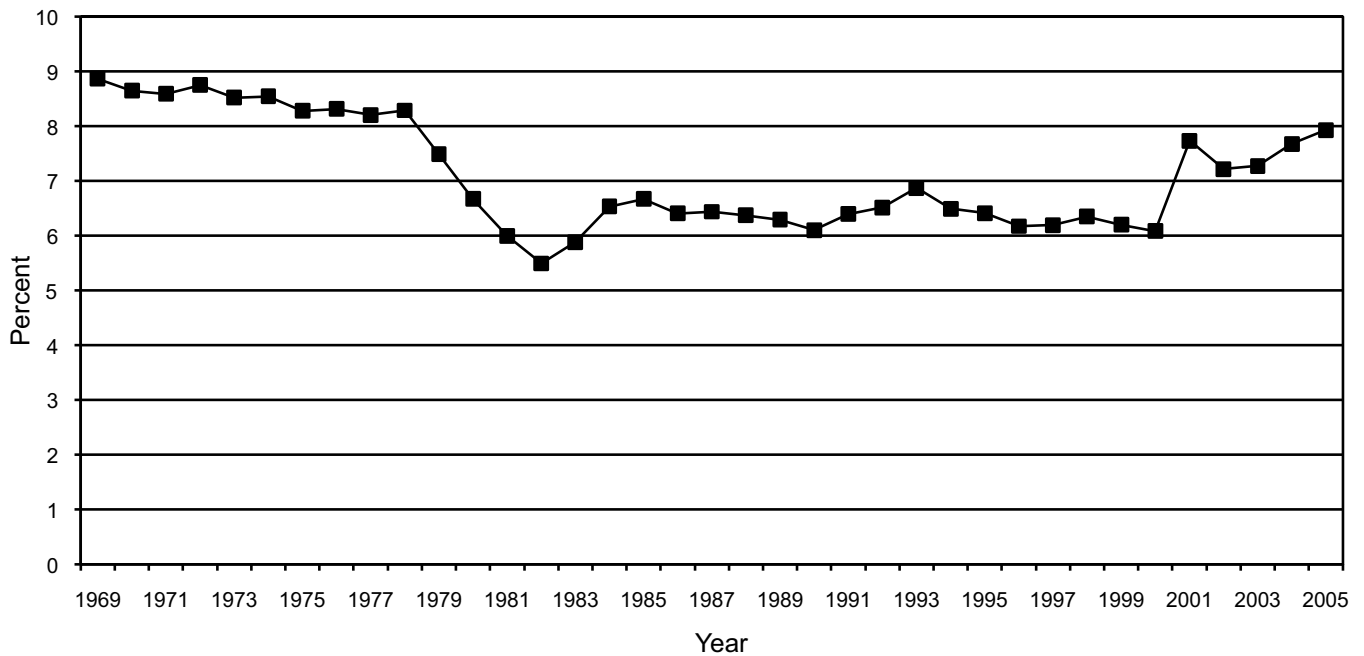


Figure 5. Non-farm proprietor employment income as a percentage of total personal income, 1969–2005.

operation of the production cycle and labor-saving technological changes in natural resource-based industries. In agriculture, much of the labor-saving technological change originated from within the land grant universities themselves, producing not only a stable, low-cost food supply but also the widespread adjustment problems associated with farm labor displacement.

Because the fundamental causes of rural economic decline are not likely to be reversed, the types of jobs that have been lost from rural areas will, for the most part, not return. Consequently, rural areas must seek new economic bases and sources of employment if they wish to stem and perhaps reverse the out-migration of workers and their families. In particular, observers agree that there will be only a few new branch plant locations, and that not all areas can draw on their natural amenities to recruit business owners who, unlike retirees, bring with them new jobs, or can attract vacationers and a second-home industry. Others may become regional retail hubs by attracting big-box retailers such as Walmart, which may entail other problems, or regional medical centers.

This brief analysis of non-farm proprietor data indicates that the economic well-being of many farm and non-farm families continues to depend on the strength of and employment opportunities offered by the local economy. It also suggests that an economic development approach that focuses on local, individual entrepreneurs may be a viable option. While we may not find very many new economy entrepreneurs among these non-farm proprietors (Goetz, 2003), there may be a host of other entrepreneurship areas that have potential for growth in rural areas. The Center for Rural Affairs (2003) in Nebraska lists the following examples of rural businesses that have been helped by its Rural Enterprise Assistance Program: “wood craft businesses, bird house makers, a pottery maker, picture framers, a Christmas tree ornament maker, a meeting planner, caterers, day care centers, a fitness center, tanning salons, carpenters, auto repair businesses, makers of wooden barrels and casks for movie sets and many, many others” (p. 4).

## **CONCLUDING COMMENT**

Growth in the U.S. agricultural sector has been primarily driven by innovation, including high-yielding

varieties, chemicals like fertilizers and pesticides, and machinery. Increases in productivity have also been achieved through improved management practices, efficient use of inputs, and marketing of products. The land grant university system has played a major role in this overall increase in agricultural productivity and improved quality of life in rural areas.

However, the role of production agriculture as an engine of rural growth and development has been diminishing over time. One goal of NMSU’s 21st century land grant mission could be to raise the productivity and incomes of non-farm proprietors. In former NMSU president Mike Martin’s (2007) words, “land-grants must embrace the commitment to fully engage beyond their campuses. This means taking research-based solutions to pressing problems in the service of all citizens. It also means engaging citizens in the process of setting long-term priorities for the ‘people’s’ universities” (p. 7). Understanding the origins of entrepreneurial or self-employment behavior and designing educational programs needed to nurture and expand this behavior are important to the future economic growth of New Mexico. Potential areas that NMSU and the Cooperative Extension Service (CES) can become involved in include helping to create new businesses, providing support to existing businesses, innovation (in collaboration with the College of Engineering), feasibility studies and cost-benefit analyses, marketing plans, profitable use of information technology, access to capital, and training of economic development professionals. A small business-centered research program would provide the basis for these and other extension and outreach activities.

Through expanded partnerships with federal and state business and economic development programs, such as the U.S. Small Business Administration’s Small Business Development Centers, the U.S. Department of Agriculture’s Office of Rural Development, the New Mexico Economic Development Department, the NMSU New Mexico Works offices, the New Mexico Rural Development Response Council, and non-profit economic development organizations such as the New Mexico Rural Development Alliance, the NMSU CES can play an important and significant role in helping the growing number of rural-based non-farm proprietors (entrepreneurs) become established and prosper, thereby contributing more jobs and income to New Mexico rural communities.

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