Farm & Rural Communities



Long-Term Trends Mixed for Agricultural & Rural Employment

ost U.S. occupational groups and industries, especially services and retail trade, are expected to post job gains through 2006, according to recently released projections by the U.S. Bureau of Labor Statistics (BLS). Although BLS does not forecast employment trends by region, the projections provide indications of the job picture for rural areas.

A large share of rural workers are employed in industries that BLS expects to grow. But the industries with projected employment losses and the occupations projected to see slow growth—notably agriculture and manufacturing-employ a larger share of rural than urban workers. Employment in agriculture, mining, and manufacturing is expected to decline. Within the agricultural industry, production agriculture is expected to experience a substantial loss of jobs, while agricultural services—including landscaping and horticultural services—continue to add jobs.

BLS projects that 18.6 million jobs will be created from 1996 to 2006, bringing the total number of U.S. jobs to 151 million. Job growth can be projected both by industry group and by occupational group. Projections by industry indicate that nearly all of the expected new jobs will be in

service industries, with large growth projected in health services; business services, including personnel supply services (temporary help services); social services, including residential care and child care; and engineering, management, and related services.

Employment in the agricultural industry is expected to be stable—only a 1-percent decline in jobs is projected. However, production agriculture is expected to decline by 253,000 jobs (11 percent) by 2006. In contrast, agricultural services are expected to add 240,000 jobs (18 percent) by 2006. Despite employment losses, production agriculture is expected to maintain an annual increase in real output of 1.6 percent as a result of improvements in agricultural techniques.

This projected change in the composition of agricultural employment continues the trend seen since 1986. Between 1986 and 1996, employment in production agriculture declined by 6 percent (147,000 jobs), while agricultural services increased by

almost 60 percent (490,000 jobs). The net result-which also included a loss of 29,000 jobs in forestry, fishing, hunting, and trapping—was about a 10-percent increase in employment in the agricultural industry.

Projections also indicate that U.S. employment in all major occupational groups is expected to increase, although employment in agricultural occupations is expected to grow by only 1 percent. BLS projects that professional specialty occupations (which have high educational attainment requirements) and service occupations (characterized as having low skill requirements) will generate half of the total job growth. Among professional specialty occupations, the largest gains are expected for teachers, librarians, and counselors; for computer, mathematical, and operations research occupations; and for health assessment and treatment occupations. Employment in service occupations is expected to be mainly in food preparation and service, cleaning and building service, protective service, and personal service (such as hairdressers, home health aides, and childcare workers).

The agriculture, forestry, and fishing occupational group is expected to grow by 37,000 jobs. Although job losses are expected for farmworkers and for farm operators and managers—especially selfemployed farmers—these losses will be more than matched by gains in gardening, nursery, and greenhouse/lawnservice occupations. The higher growth rates of other occupational groups, however, will mean that agriculture, forestry, and fishing occupations' share of total employment will decline to 2.5 percent in 2006—down from 2.9 percent in 1996 and 3.3 percent in 1986, making this occupational group the smallest in the economy.

Rural Positioning for Job Growth & Shifts

A large share of rural workers are employed in industries and occupations expected to grow by 2006. Among the projected growth industries, rural areas

More details on BLS employment growth projections are available on the Internet at http://stats.bls.gov/emphome.htm, or in the November 1997 issue of BLS's Monthly Labor Review.

Farm & Rural Communities

have about the same proportion of employment as do urban areas, except for the services industry—in 1995 (the most current data available), only 23 percent of rural jobs were in services, compared with 32 percent of urban jobs.

At the same time, however, rural areas have a larger share of workers employed in the sectors and occupational groups with projected slow or even negative growth, suggesting that rural economies are disadvantaged in their positioning for expected workforce changes during the next decade. In the manufacturing sector, for example, an important employer in rural areas (17 percent of total rural employment), productivity growth and strong demand for manufactured products are expected to support 2.4-percent annual growth in real manufacturing output. But these very productivity gains are expected to contribute to the loss of 350,000 manufacturing jobs nationwide.

Rural areas also have a larger share of workers in the occupational groups expected to have the least employment growth—agriculture, forestry, fishing, and related occupations; precision production, craft, and repair occupations; and operators, fabricators, and laborers. The only slow-growing occupational category that currently has a larger share of urban than rural workers is administrative support, including clerical, occupations. Average growth is expected to be fastest in occupations requiring at least an associate degree, and rural workers are less likely than urban workers to have such post-secondary education.

The five occupations expected to generate the most new jobs by 2006 are cashiers, systems analysts, general managers and top executives, registered nurses, and retail salespersons. These five occupations account for about 6 percent of rural employment, versus an urban share of 8 percent. The five occupations expected to lose the most jobs are sewing machine operators-garments; farmers; bookkeeping, accounting, and auditing clerks; typists and word processors; and secretaries-except for legal and medical secretaries. About 6 percent of rural workers are in these jobs, versus 5 percent of urban workers.

Classifying by Industry & Occupation

The Bureau of Labor Statistics classifies jobs in two ways. An industry classification identifies the sector that employs a worker, while occupation designates a type of job. For example, the agricultural industry includes crop production; livestock production; agricultural services (e.g., crop services, veterinary services, farm labor and management, and landscaping); forestry; and fishing, hunting, and trapping. Agricultural occupations include animal breeding and training; animal care; veterinary assistance; farm work; farm operation and management; farming and forestry supervision; forestry and logging; gardening, nursery, and greenhouse/lawnservice; gardening and groundskeeping; and fishing, hunting, and trapping.

For any given job, the industry designation does not necessarily coincide with the occupation classification. A worker in an agricultural occupation may actually work outside the agricultural industry, while a worker in a nonagricultural occupation may work in the agricultural industry. For example, an accountant—an occupation classified as executive, administrative, and managerial—who works for a farm operation would be classified in the agricultural industry. Along the same lines, a farmworker—an agricultural occupation—employed on a farm is in the agricultural industry, while a groundskeeper—also an agricultural occupation—employed by an automaker is classified as part of the manufacturing industry.

Employment To Shrink by 2006 in Agricultural Industry, but To Grow Slowly in **Agricultural Occupations**

	Share of tot Rural	al employment* Urban	Nationa 1986-96	growth/decline 1996-2006**
	Percent			
Industry				
Agriculture***	9	2	10	-1
Mining	1	1	-26	-23
Manufacturing	17	12	-3	-2
Services	23	32	50	33
Construction	6	5	12	9
Transportation,				
communications, utilities	4	5	19	14
Wholesale trade	3	5	13	12
Retail trade	17	17	21	10
Finance, insurance,				
and real estate	5	8	10	11
Government	15	13	16	9
Total Employment	100	100	19	14
Occupation				
Agricultural, forestry,				
fishing, and related	7	2	3	1
Precision production, craft,				
and repair	13	10	4	7
Operators, fabricators,				
and laborers	20	13	10	8
Service	14	13	22	18
Executive, administrative,				
and managerial	10	15	28	17
Professional specialty	11	16	34	27
Technicians and related				
support	3	3	24	20
Marketing and sales	10	13	27	16
Administrative support,				
including clerical	12	15	15	8
Total employment	100	100	19	14

*Rural/urban shares of employment based on 1995 data for industry, 1996 data for occupation. **Projected; assumes GDP annual growth of 2.1 percent. ***Includes farm, agricultural service, forestry, and fishing industries. Sources: Bureau of Economic Analysis, U.S. Department of Commerce; Bureau of Labor Statistics, U.S. Department of Labor.

Economic Research Service, USDA

Farm & Rural Communities

What's Behind the **Employment Growth Projections?**

Prospects for U.S. employment by industry and by occupation depend primarily on major economic developments. BLS projections are based on a group of assumptions about the U.S. macroeconomy that can be characterized as slightly more conservative than the October Blue Chip consensus long-range projections, the most commonly cited report of the consensus of macroeconomic forecasters. BLS expects that real gross domestic product (GDP) will increase 2.1 percent annually from 1996 to 2006, slightly less than the 2.3-percent growth rate in 1986-96.

Much of the expected slowdown in GDP growth is due to a slower-growing labor force. Over the next decade, the population distribution will shift to age groups with lower labor force participation, such as the youth labor force (age 16-24) and the labor force age 55 and older. The aging of the baby boom generation is expected to increase the median age of the labor force to 40.6 years old, the highest since 1962.

BLS expects that the foreign trade sector will be the fastest growing component of real GDP and that exports will grow faster than imports, resulting in an improved trade position. (Note, however, that the projections were done before the Asian financial crisis.) BLS assumptions include decreased Federal spending (both defense and nondefense), a balanced Federal budget by 2006, and a surplus in the combined Federal and State budgets, leading to a downward trend in long-term interest rates.

Gross private investment is expected to increase 3.3 percent annually, faster than GDP growth. Consequently, productivity is expected to grow 1.1 percent per year, an increase over the 0.9-percent annual growth rate seen in 1986-96. In turn, real per capita disposable income is expected to increase by 1.1 percent annually as well.

BLS projects that the Hispanic population will continue to grow faster than the Black population, and by 2006, the Hispanic labor force is expected to increase its share of the total civilian labor force from 10 percent to 12 percent, compared with a steady share of 11 percent for Black workers. Non-Hispanic White workers will make up 73 percent of the work force, down from 75 percent, while Asians and other groups are expected to be 5 percent of the total, up from 4 percent.

However, despite job losses, agriculture, mining, and manufacturing will still employ millions of workers. In addition to the 18.6 million new jobs expected to be created by 2006, BLS projects that 32 million jobs will become open due to replacement needs, which will be in all occupational groups and at all levels of training and education.

Rural areas have done well so far in the 1990's—rural economies weathered the recession of 1990-91 better than urban economies, and rural areas continue to

show solid economic performance by several measures, although employment growth has softened in the last 2 years. Rural areas experienced a net inflow of 1.5 million people migrating from urban areas in 1990-96. Employment growth has been strong, unemployment has been low, and real earnings have increased.

Rural areas have also increased employment in manufacturing during the 1990's, despite a nationwide decline in manufacturing jobs during the same period. The task now facing rural areas is to utilize

their economic advantages, such as lower land and labor costs, in order to manage labor market changes over the next

Karen S. Hamrick (202) 694-5426 khamrick@econ.ag.gov AO

April Releases—USDA's **Agricultural Statistics Board**

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

April

- **Broiler Hatchery**
- Dairy Products
- Cheddar Cheese Prices (8:30 a.m.) Egg Products Poultry Slaughter
- 6 Crop Progress (after 4 p.m.)
- Broiler Hatchery
- 9 Cheddar Cheese Prices (8:30 a.m.) Crop Production (8:30 a.m.) Vegetables
- Crop Progress (after 4 p.m.) 13
- 14 Potato Stocks
- 15 **Broiler Hatchery** Hatchery Production, Annual Milk Production Turkey Hatchery
- Cheddar Cheese Prices (8:30 a.m.) Cattle on Feed Sheep
- 20 Cold Storage Crop Progress (after 4 p.m.)
- Broiler Hatchery
- Catfish Processing
- 24 Cheddar Cheese Prices (8:30 a.m.) Chickens and Eggs Dairy Products, Annual Livestock Slaughter Meat Animals—Production, Disposition, and Income
- Floriculture Crops Crop Progress (after 4 p.m.)
- Broiler Hatchery Catfish Production Poultry— Production and Value
- 30 Agricultural Prices Peanut Stocks and Processing