

Indiana's Occupational Employment Outlook to 2012

Total Growth

Indiana's employment is expected to grow by 253,490 jobs between 2002 and 2012, according to the latest projections from Indiana's Department of Workforce Development. The increase is a little more than 8 percent for the period, well below the nearly 15 percent increase expected for the United States. However, this figure is on par with Illinois, Ohio and Michigan—our neighboring states with similarly heavy employment concentrations in manufacturing.

Major Occupational Groups

The fastest growing major occupational groups are professional and related occupations (19 percent growth), service occupations (13 percent), farming, fishing and forestry occupations (14 percent) and management, business and financial operations occupations (11 percent). Of those, 65 percent of the total growth for the state will come from professional and service occupations, growing by 95,050 jobs and 70,020 jobs, respectively.

Production occupations are expected to show a slight loss, while office and administrative occupations and sales and related occupations will grow only slightly. The remaining groups (construction and extraction, installation, maintenance and repair occupations, and transportation and material moving occupations) will all grow at about the state average (see **Table 1** and **Figure 1**).

Industry Growth Impacts Occupations

Indiana's occupational projections are created by first projecting industry employment, then applying staffing

patterns and occupational change factors (essentially accounting for changes in occupational needs due to technological advancement) to these industry projections. Therefore, occupational growth is very much a function of individual industry growth. Not surprisingly, occupations that are concentrated in fast-growing industries will grow the fastest, and occupations that are concentrated in slow-growing or declining industries will show little to no growth. Since manufacturing industries have declined over the past decade and are projected to decline through 2012, the impact is felt most

heavily in production occupations. Indiana's employment in manufacturing has nearly twice the concentration as the nation (20 percent for Indiana's 2002 employment, 10.6 percent for the United States), which in large part explains the slower growth expectation for the state compared to the nation.

In contrast, professional occupations are concentrated in fast-growing industries, such as health services. Nearly half of health services employment is composed of professional occupations. Ambulatory health services is expected to grow by more than 30 percent. The heavy

TABLE 1: PROJECTED GROWTH FOR MAJOR OCCUPATIONAL GROUPS

Major Occupational Group	2002 Employment	2012 Projection	Total Growth	Percent Change
Total, All Occupations	3,014,950	3,268,430	253,490	8%
Management, Business and Financial Operations	240,510	268,120	27,610	11%
Professional and Related Occupations	496,210	591,250	95,050	19%
Service	536,180	606,210	70,020	13%
Sales and Related Occupations	311,050	326,760	15,720	5%
Office and Administrative Support	449,330	451,900	2,580	1%
Farming, Fishing and Forestry	14,070	16,090	2,020	14%
Construction and Extraction	166,800	179,500	12,700	8%
Installation, Maintenance and Repair	143,000	153,660	10,660	7%
Production	410,620	410,090	-530	0%
Transportation and Material Moving	247,170	264,860	17,690	7%

Source: Research and Analysis Department of the Indiana Department of Workforce Development

FIGURE 1: PERCENT CHANGE IN EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP, 2002 TO 2012



Source: Research and Analysis Department of the Indiana Department of Workforce Development

concentration of professionals in this type of growing industry explains why professional occupations are projected to grow the fastest and provide the greatest number of new jobs.

Detailed Occupations

The dominant major occupational group in terms of percent change is professional and related occupations. **Table 2** lists the 10 fastest growing detailed occupations that had an employment level of at least 100 in 2002. Seven of the 10 occupations are a part of the professional group, while the others were from either the management or services group. While not on the “top 10” list, it should be noted that the detailed occupation that is expected to provide the greatest number of new jobs over the 10-year period is registered nurses—growing at 25 percent (11,740 jobs).

Education and Wages

Indiana’s presentation of occupational projections includes a display of occupations along with the most common educational attainment required and the average wages earned for each occupation. It is clear that most of the fastest growing occupations also require the greater education and are the highest paying jobs (see **Table 3**). All of the educational attainment groups requiring a degree have an average annual wage of over \$42,000, and jobs are expected to grow at double-digit rates. All jobs that require no post-secondary education are expected to grow at a rate below 10 percent. Occupations requiring only short-term on-the-job training pay an average of only \$20,904—less than half of the lowest paying group requiring at least an associate’s degree. Once again, it appears that education pays

and provides the greatest opportunities. (The exception would seem to be in occupations that require a master’s degree, as the average wage for that group of occupations is less than those requiring a bachelor’s degree. Nearly half of those occupations are in community and social services occupations, such as clergy and rehabilitation counselors—low-paying occupations despite the high level of education required. Were these occupations removed from the group, the average wage expectation for a master’s would exceed \$52,000.)

Access to the complete 2002–2012 occupational projections for Indiana can be found at www.in.gov/dwd/inews. The projections tables include data for each detailed occupation within its major group and by educational

requirements. Also included are tables with hourly and annual wages, rankings according to growth percentage, numeric growth and by total job openings due to growth and replacement needs. In addition to the projections for the state as a whole, projections are also available for each of Indiana’s economic growth regions.

Source

All projections data produced by the Research and Analysis Department, Advanced Economic and Market Analysis Group, Indiana Department of Workforce Development.

—Jon Wright, Labor Market Analyst, Research and Analysis Department, Advanced Economic and Market Analysis Group, Indiana Department of Workforce Development

TABLE 2: TOP TEN DETAILED OCCUPATIONS BY GROWTH RATE

Occupational Title	2002 Employment	2012 Projection	Total Growth	Percent Change	Rank
Medical Assistants	7,180	11,170	3,980	55.6%	1
Social and Human Service Assistants	5,400	7,910	2,510	46.5%	2
Physician Assistants	700	1,020	330	45.7%	3
Medical Records and Health Information Technicians	3,830	5,570	1,740	45.4%	4
Dental Hygienists	3,490	5,060	1,560	45.0%	5
Dental Assistants	4,430	6,370	1,950	43.8%	6
Postsecondary Teachers	17,980	24,760	6,780	37.7%	8
Network Systems and Data Communications Analysts	1,950	2,710	760	39.0%	7
Graduate Teaching Assistants	4,940	6,700	1,760	35.6%	9
Veterinary Technologists and Technicians	1,040	1,410	380	35.6%	10

Source: Research and Analysis Department of the Indiana Department of Workforce Development

TABLE 3: GROWTH IN JOBS BY EDUCATIONAL ATTAINMENT REQUIRED

Education Required	2002 Employment	2012 Projection	Total Growth	Percent Change	2004 Annual Wage
Total, All Occupations	3,014,950	3,268,430	253,490	8%	\$33,466
First Professional Degree	25,650	30,680	5,040	20%	\$109,966
Doctoral Degree	20,790	28,430	7,650	37%	\$62,533
Master’s Degree	25,880	30,920	4,990	19%	\$45,493
Bachelor’s (or Higher) Plus Work Experience	102,250	114,990	12,710	12%	\$79,607
Bachelor’s Degree	296,480	340,120	43,730	15%	\$49,954
Associate’s Degree	99,150	122,530	23,410	24%	\$42,705
Postsecondary Vocational Training	150,460	166,850	16,410	11%	\$31,992
Work Experience in a Related Occupation	223,620	235,590	11,970	5%	\$42,901
Long-term On-the-Job Training	277,280	295,690	18,400	7%	\$35,632
Moderate-term On-the-Job Training	640,350	660,990	20,550	3%	\$31,841
Short-term On-the-Job Training	1,073,270	1,153,360	80,090	7%	\$20,904

Source: Research and Analysis Department of the Indiana Department of Workforce Development