Forget the Crystal Ball: Occupational Projections Give Answers

What kind of jobs will be needed in the future? How much need will there be for teachers or economists, systems analysts or telemarketers, home health aides or doctors? What types of jobs will Indiana have to offer people graduating from high school or college or a vocational program? Will the jobs of the future be in food service or health service? These are just a smattering of the questions that career counselors, students, mid-life career changers and policy-makers might ask.

It won’t take a crystal ball to find answers. The U.S. Bureau of Labor Statistics (BLS) and its Indiana partner, the Department of Workforce Development, produce short- and long-term occupational projections on a two-year cycle. The focus here is primarily the availability of statewide and regional occupational projections for Indiana and its 12 workforce investment areas.

The Short-Term Forecasts
The short-term occupational needs projections cover a two-year period. Current availability spans the third quarter of 1999 through the third quarter of 2001. According to the short-term forecast, Indiana will have approximately 126,000 job openings, 53,000 of which will be new jobs and the remainder replacement jobs (see Table 1). It is important to note that these short-term forecasts include the rise and fall of business cycles in the forecasting process.

The Long-Term Projections
A 10-year span of time, currently 1996 to 2006 (see Table 2), is covered by the long-term projections. According to this set of projections, Indiana will have roughly 115,000 job openings by 2006 (see Table 2). Again, understanding that the long-term outlook for job needs does not include the rise and fall of business cycles. Rather, the method used to project employment needs by occupation relies on the growth and contraction of industry employment and the changes of staffing patterns within industries. This difference in methodology accounts, in part, for the notable difference in total job needs between the two series.

Statewide and Regional Availability
Occupational needs for 12 Indiana regions, as well as statewide totals, are projected by the Indiana Department of Workforce Development every two years. Available on their Web site (www.state.in.us/dwd/inews), these projections can be viewed in toto or by selecting major job categories: marketing/sales; administrative support, clerical; executive, administrative, managerial; professional specialty; service; agricultural, forestry and fishing; precision production craft and repair; and operators, fabricators and laborers.

Using Occupational Projections
The number of annual average openings, as shown in Tables 1 and 2, provides insight into the overall need for a specific occupation, whether from the need to replace workers or from the creation of new jobs. The

(continued on back cover)

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Employment 1999:3</th>
<th>Employment 2001:3</th>
<th>Annual Growth Rate</th>
<th>Annual Average New Jobs</th>
<th>Annual Average Replacement Jobs</th>
<th>Annual Average Total Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, All Occupations</td>
<td>2,916,391</td>
<td>3,022,842</td>
<td>1.83%</td>
<td>53,266</td>
<td>72,865</td>
<td>126,131</td>
</tr>
</tbody>
</table>

Source: Indiana Department of Workforce Development

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Employment 1996</th>
<th>Employment 2006</th>
<th>Annual Growth Rate</th>
<th>Annual Average New Jobs</th>
<th>Annual Average Replacement Jobs</th>
<th>Annual Average Total Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, All Occupations</td>
<td>2,904,125</td>
<td>3,363,246</td>
<td>1.0%</td>
<td>45,921</td>
<td>68,518</td>
<td>114,439</td>
</tr>
</tbody>
</table>

Source: Indiana Department of Workforce Development
average annual job openings essentially estimates the number of jobs that will come about from the need to replace workers who will die, retire or permanently leave an occupation each year during the projection period. Occupations with shrinking employment can still show positive annual job openings if the average annual replacement needs for that occupation are greater than the projected average annual decline in employment.

Searching for a specific occupation can be a bit tricky. The Standard Occupational Classification (SOC) is used to define the categories and describe specific occupations (the SOC manual can be found on the web at www.bls.gov/soc/soc_home.htm). A search for doctors will yield nothing, but searching for physicians will. Some job titles are part of an aggregated group of jobs.

Other useful tips for anyone using these occupational projections either as a harbinger of change or as a way to impose reality on a teenager ambivalent about work, include skimming the national Occupational Outlook Handbook from the BLS (www.bls.gov/ocohome.htm). From that source, one learns that among the fastest-growing occupations are those in the computer and health fields: computer engineers (108% growth); systems analysts (94%), database administrators (77%); desktop publishing specialists (73%); personal care and home health aides (58%) and medical assistants (58%).