

How do short-term projections compare with long-term projections?

Industries and occupations in the short-term will not grow at the same rate as the long term. There may be cases where an industry or occupation is projected to grow in the long-term, but the short-term trend is negative. In other cases, the reverse may be true.

A good example is a comparison of the long- and short-term projection for Registered nurses. Although the short-term forecast is below the long-term forecast line, it does not mean that the long-term projection for 2002 to 2012 is overly optimistic. A possible explanation for the difference is that as the population ages, there will be a growing need for nurses. Thus, the short-term growth rate, indicated by the slope of the line in the graph, is slightly less than in the long term.

As indicated in the graph, the line representing projected short-term growth is not as steep as the long-term trend line. Employment should “catch up” in the long-term as the population ages and requires more medical care.

Why is the short-term projection for Registered nurses below the line for long-term projections?

There are different assumptions between the two time periods. Short-term projections cannot capture a structural change in the economy because those changes generally take a longer period of time to work their way through the economy. Short-term projections are sensitive to business cycles where employment levels rise and fall along with changes in the economy as firms respond by adjusting their workforce to match demand for their product. Many industry groups in the Manufacturing sector are cyclical, some more so than others. Retail employment is cyclical to some extent as well. Other industries are less susceptible to swings in the

economy and consequently will exhibit more stable employment levels.

Long-term projections, on the other hand, focus on structural changes in the economy driven by technological change and on demographics (changes in the size and composition of the population).

Is there a seasonal effect in short-term projections?

Users should be careful in comparing long-term projections for 2002-2012 with short-term projections for second quarter 2006. Because long-term projections use an annual average, industries with a seasonal peak or trough will be overstated (or understated) when compared to the quarterly average used in short-term projections. Comparison is also made difficult because employment has either grown or declined, depending on the industry. Staffing patterns, (*see page 10*) one of the factors that drive occupational projections, may also have changed since long-term projections were developed.

Frequently asked questions on Short-term projections

Registered Nurses, short-term and long-term projections deviate as the projections are based on a different base and staffing patterns



Short-term projections in this article use the second quarter of 2004 as a base, while long-term projections use an annual average for 2002. This unavoidably creates a situation where industries and occupations that tend to have peak employment in the spring and early summer will be overstated when compared to an annual average.

How exact are these projections?

Poker players have a term for when they are certain they have an unbeatable hand and are ready to risk their entire stake - they say they are "all in." Unfortunately, we can't be "all in" on projections, but we can make some informed estimates based on historical patterns and statistical assumptions.

Employment numbers by occupation and industry are presented as unrounded, with percentage change calculated to the nearest tenth. This does not imply that a particular projection will be exactly right, so users should not be misled by the apparent level of accuracy. Instead, it is helpful to think of a projected employment level in terms of relative magnitude and direction in relation to other projections.

What other sources of information are used when making industry projections?

Before making projections, analysts try to determine current economic conditions in the state. In addition to looking at economic indicators (*see page 7*), tracking mass layoffs in the state can point out areas of weakness in certain industries. Another source of information is from the Federal Reserve Board in its "Beige Book," published eight times a year, containing information gathered from interviews with businesses and economic experts in each of its twelve districts covering the entire nation.

The Boston District report issued on March 9, 2005 noted a recovery in consumer confidence, but also reported some worries about sales of nondurable goods. Energy prices were a concern, as was the decline in the purchasing power of the dollar. Information technology companies said they were adding staff, but not hiring aggressively.

How do industry projections influence occupational projections?

After a forecast is selected for a given industry, we apply a staffing pattern to get an estimate of employment by occupation in that industry. Staffing patterns are derived from data based on the Occupational Employment Statistics (OES) survey conducted by ELMIB in November 2003. These patterns, which represent the percentage of workers in an industry by occupation are applied to the base year employment for each industry to get an estimate of the number of workers in a specific occupation in a given industry.

Staffing patterns for a known period, in this case second quarter 2004, are adjusted up or down based on industry/occupational change factors developed by the U.S. Bureau of Labor Statistics. These factors account for technological changes, relative wage rates, demographics, and other factors that influence an industry's use of a particular occupation.

Sometimes an industry will increase the count of total workers employed, but not all of the occupations in that industry will grow as fast as other occupations in the industry. Some occupations may even decline.

In the short-run, trends in staffing patterns are less evident, but if there is a change in the occupational mix, it could signal a structural change in that industry. A hypothetical example would be a

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change in the percentage of Registered nurses relative to Physicians in Hospitals that may indicate the tendency to reduce costs by substituting lower-cost nurses for higher-cost physicians.

Do projections include self-employed workers?

Yes. Growth in self-employed workers is based on the ten-year 2002-2012 self-employed factors provided by the Bureau of Labor Statistics and prorated (scaled) for the two-year period covered by the short-term projections. Each occupation thus includes a self-employed component.

ing it the fastest-growing sector in this round of short-term projections.

In the longer term, an aging population is expected to demand more health care, driving demand for more workers in the Health services sector. A shorter time frame, as used in these short-term projections, dampens some of the long-term demographic effects, while revealing trends that are evident in the short-term (labor availability, seasonal effects, budgetary constraints, for examples). Ambulatory health care services are projected to lead the sector in jobs created and percentage growth. The remaining sectors in Health care and social assistance are projected to have better than average growth.

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Unemployment Compensation Claims Activity

Total Regular Unemployment Compensation Programs:				Change from Previous			
				Month		Year	
	April-05	March-05	April-04	Net	Percent	Net	Percent
Initial Claims	4,004	3,889	4,013	115	3.0%	-9	-0.2%
Continued Weeks	29,302	37,107	33,471	-7,805	-21.0%	-4,169	-12.5%

Claims Activity

Unemployment Compensation Fund

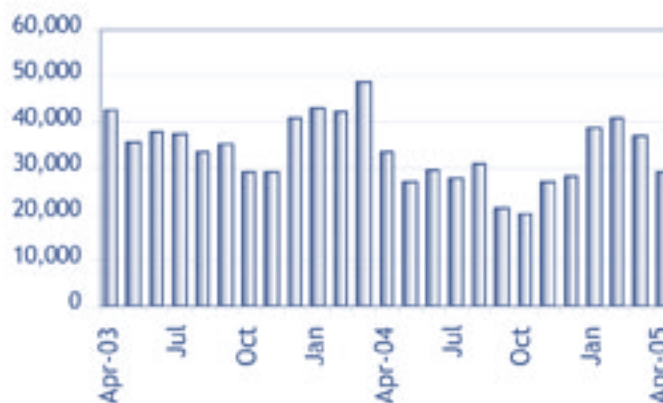
Unemployment compensation fund balance at the end of April	\$237,431,016.33
Average payment for a week of total unemployment:	\$249.55
Net benefits paid:	\$6,012,203.76
Net contributions received during the month:	\$13,362,197.79
Interest Received:	\$0.00
Reed Act Distribution:	\$0.00
Reed Act Withdrawal for Administrative Costs:	\$381.51

Trust Fund

Continued Weeks Claimed

Apr. 2003 - Apr. 2005

Although the number of Continued Weeks Claimed is down 12.5 percent in comparison to last year, the number of Initial Claims is about the same as it was in April 2004.



			Change from Previous	
Apr-05	Mar-05	Apr-04	Month	Year
194.6	193.3	188.0	0.7%	3.5%

United States
All Urban Areas (CPI-U)
(1982-1984=100)

Consumer Price Index