Method of Producing Industry and Occupational Projections

Alabama Department of Labor
Labor Market Information Division
Introduction to Projections

- Industry and Occupational Projections are a requirement for the Alabama Department of Labor (ADOL), Labor Market Information Division (LMI) through the One Stop LMI Grant administered by the U.S. Department of Labor, Employment and Training Administration (ETA)
Introduction to Projections

• Requirements under One Stop LMI Grant
  • Short-Term Projections
    • Produced annually
    • Produced for Statewide Only
    • 2-year period
    • Has a 1-year lag
      • 2011-2013 Projections were due June 2012
  • Use the University of Alabama, Center for Business and Economic Research Economic Model to complete short-term projections analysis
Introduction to Projections

• Requirements under One Stop LMI Grant
  • Long-Term Projections
    • Produced every other year
    • Produced for state and all ten workforce development regions
    • Has a 2-year lag
      • 2010-2020 Projections were due in June 2012
Projections Method

Industry Projections

• Data Sources for the base year of the projected period
  • Quarterly Census of Employment and Wages (QCEW)
    • Actual data reported by employers who are covered by Unemployment Insurance
  • Agriculture Data
    • Current Employment Statistics (CES)
    • Bureau of Economic Analysis (BEA)
    • US Dept. Of Agriculture (USDA)
  • Nonprofits and Churches
    • Current Employment Statistics (CES)
    • County Business Patterns
  • Railroads
    • Federal Government
  • Data for elected officials, insurance agents, and social assistance
    • CES
    • County Business Patterns
  • Self Employed
    • Use Census Data and National Bureau of Labor Statistics (BLS) Data to estimate State and Local Data
  • Time Series of all the combined data
    • Need at least 15 years of data, preferably 20
Projections Method

*Industry Projections*

- Forecasting Industry Data 10 Years out
  - Projections Software
    - Provided by the Projections Managing Partnership (PMP) which is a National Consortium that partners with the Bureau of Labor Statistics (BLS) and ETA
    - A majority of states across the country use this software for long-term projections
    - The software provides several types of statistical models to enable the analyst to forecast industry activity as accurately as possible
Projections Method

*Industry Projections*

• Forecasting Industry Data 10 Years out

• Projections Software

• To enhance the accuracy of the projections, need several independent variables to add to the statistical modeling process
  • Personal Income
  • Per Capita Income
  • Population Data (general and population over 65)
  • Unemployment Rates
  • Gross Domestic Product (GDP)
  • Consumer Price Index (CPI)
  • National Employment Projections

• Need a time series of all these variables, with a number for the projected year in the period.
  • Each time series needs a projected number for the last year in the projections period. For example if the projected period was 2010-2020 all the variables need a projected number for 2020.
Projections Method

*Industry Projections*

- Forecasting Industry Data 10 Years out
  - Analyst Adjustments and Review
    - Analysts manually insert events that have occurred or have been announced to occur during the projection period
      - Mass Layoffs
      - Company Closures
      - Business Expansions
      - New Companies
    - Analysts review final data and make necessary adjustments
  - Create a final Industry File
Projections Method

*Occupational Projections*

- Industry Projections file is combined with Occupational Employment Statistics (OES)
  - Statistical Survey administered by the ADOL, LMI Division and BLS
  - Survey of Employers across Alabama in all industries present in the state
- Data Collected
  - Occupations in the company
  - Number of people employed in each occupation
  - Wages paid to people employed in each occupation
- Final data results in an occupational staffing pattern for every industry in the state
- Final data is based on a 3-year average
  - Cannot be used as a time series because of this method
Projections Method

*Occupational Projections*

- Industry Projections file is combined with Occupational Employment Statistics (OES)
  - The Industry files are combined with the OES files and run through the Employment Delivery System (EDS) software
  - Resulting occupational projections are exported into separate files
- Analyst adjustments and review
  - Compare data to OES data
  - Ensure there are no unusual staffing patterns and make adjustments if they exist
- Create final occupational projections files
Projections Method

**Occupational Projections**

- **Projections Special Tables**
  - Fast Growing Occupations
    - Based on two variables
      - Based on the fastest growth rates
      - Only use detailed occupations
      - Occupations classified in an all other soc code are not used
  - Declining Occupations
    - Based on three variables
      - Lowest growth rates
      - Net drop of employment
      - Percent change drop in employment
  - High Demand/Hot 40 Occupations
    - Based on three variables that are weighted
      - Growth rates
      - Total openings
      - Average annual salary
Projections Method

Final Notes

• Projections are available on the ADOL LMI website at www.labor.alabama.gov/lmi
  • Under the Workforce Development Link
  • Industry and Occupational Projections
  • Available in Statewide and all workforce development regions
  • Can download pdf files

• Hard Copy publications available upon request from LMI
  • Industry Projections Book with state and all workforce development regions
  • Statewide Occupational Book
  • Workforce Development Region Occupational Book