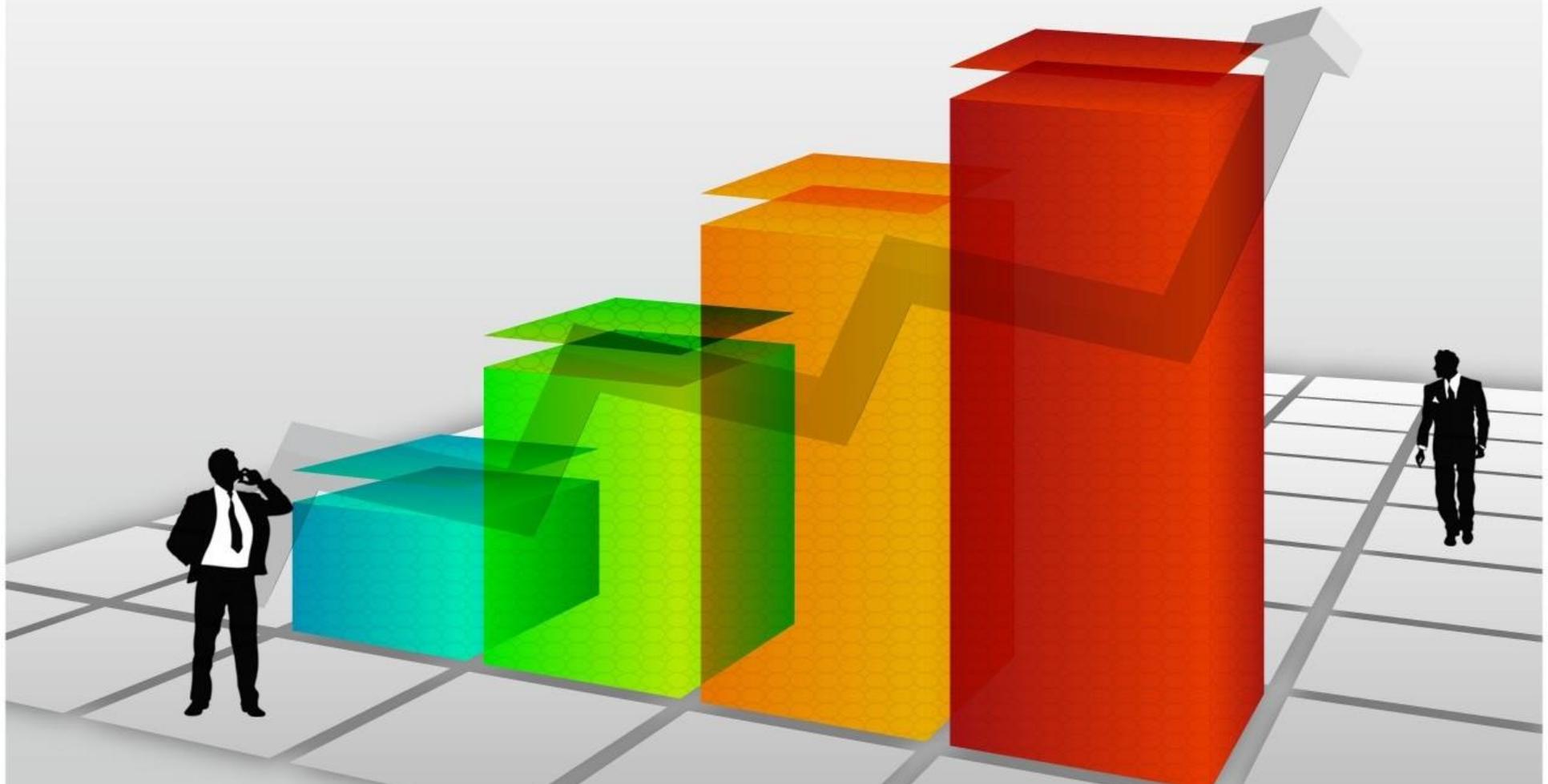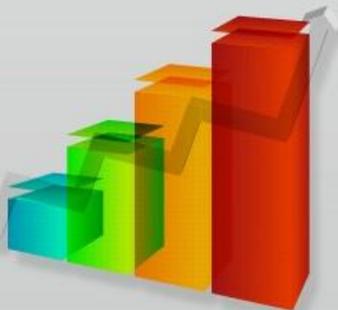# Industry & Occupational Projections Methodology

Alabama Department of Labor | Labor Market Information Division
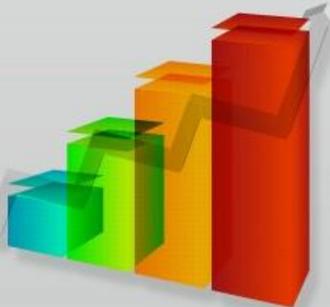
Introduction to Projections

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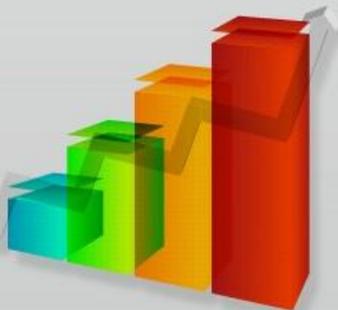
Introduction to Projections

Projections are a source of information to estimate job opportunities by occupation and can be used for:

- Career Decisions & Guidance

- Strategic Planning

- Economic Development

- Policy Making

- Training & Education
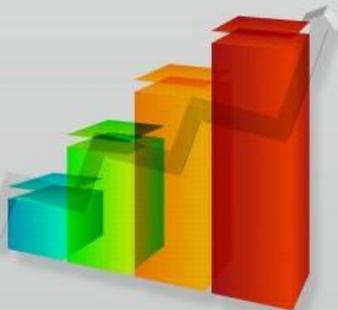
- Workforce Investment Planning

One Stop LMI Grant Requirements

- Short-Term Projections
  - Industry and Occupational
  - Produced annually
  - Statewide only
  - Covers two-year period
    - One year lag (i.e. 2011-2013 projections were due June 2012)
  - Uses the University of Alabama's Center for Business and Economic Research's Economic Model to complete short-term projection analysis
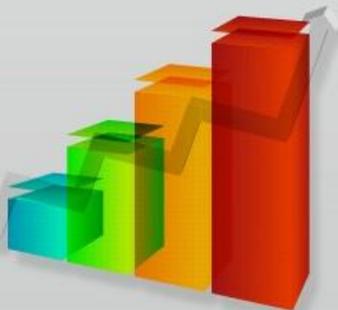
One Stop LMI Grant Requirements

- Long-Term Projections
  - Industry and Occupational
  - Produced every other year
  - Produced for the state and all seven AlabamaWorks! regions
  - Covers 10-year period
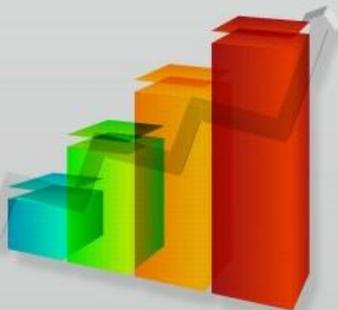   - Two year lag (i.e. 2010-2020 projections were due June 2012)

Projections Methodology

- Completed using Projections Suite Software
  - Provided by the Projections Managing Partnership (PMP) – a national consortium that partners with the Bureau of Labor Statistics (BLS) and ETA
  - Provides several types of statistical models to enable analysts to forecast industry and occupational activity as accurately as possible
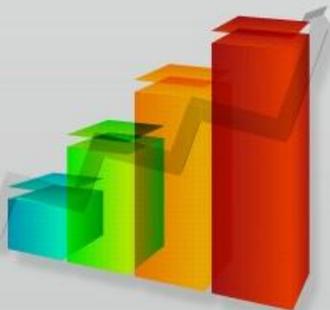
Industry Projections

- Base year employment is created by compiling a time series of the following data sources:
  - Employees covered by Unemployment Insurance
    - Quarterly Census of Employment & Wages (QCEW)
  - Agriculture
    - Current Employment Statistics (CES)
    - Bureau of Economic Analysis (BEA)
    - U.S. Department of Agriculture (USDA)
  - Railroads
    - Federal Government
  - Churches, Non-Profits, Elected Officials, Insurance Agents, & Social Assistance
    - CES
    - County Business Patterns
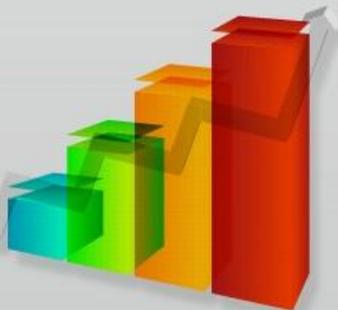 - Self-Employed
    - Census
    - BLS

Industry Projections

- To enhance the accuracy of projections, several independent variables are added to the statistical modeling process:
  - Personal Income
  - Per Capita Income
  - Population (general & over 65)
  - Unemployment Rates
  - Gross Domestic Product (GDP)
  - Consumer Price Index (CPI)
  - National Employment Projections
- These variables are included in a time series used to project each variable's number for the projected year
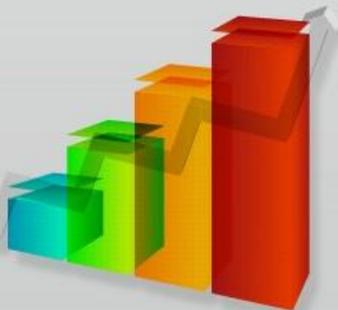
Industry Projections

- Analyst Adjustments & Review
  - Events that have occurred, or have been announced to occur, during the projection period are manually inserted
    - Mass layoffs
    - Company closures
    - Business expansions
    - New companies
  - Final data is reviewed and necessary adjustments are made
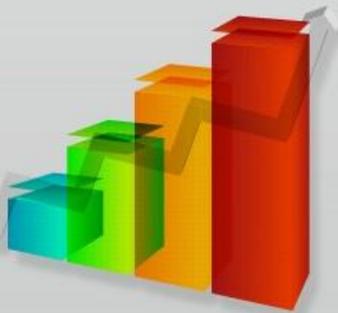- Final industry files are created

Occupational Projections

- Final industry projections file is combined with Occupational Employment Statistics (OES)
    - Statistical survey administered by ADOL's LMI division and BLS
    - Surveys Alabama employers in all industries
    - Data collected:
        - Occupations in the company
        - Number employed in each occupation
        - Wages paid to employed in each occupation
    - Final data results in occupational staffing patterns for every industry
        - Based on a three-year average – cannot be used as a time series due to this method
        - Extracted from the Local Employment and Wage Information System (LEWIS)
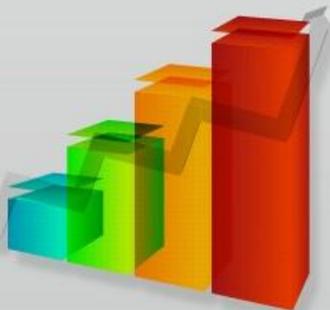
Occupational Projections

- Resulting occupational projections are exported into separate files by area (statewide & AlabamaWorks! regions)

- Analyst Adjustments & Review
    - Data is compared to OES data
    - Ensure no unusual staffing patterns are present and make adjustments if they exist

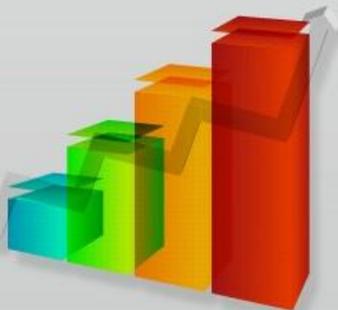- Final occupational files are created

New Separations Methodology

- Better account for the changes in the workforce and to help project what will happen within this dynamic new economy

- Provide estimates of workers who leave their occupation and need to be replaced by new workers

- Reflects workers leaving an occupation for reasons other than retirement or death, such as changing careers, being promoted to management, or completing a retraining program
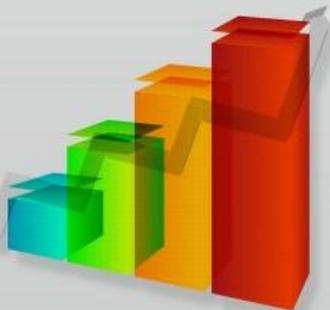
New Separations Methodology

- Transfers
  - Workers who leave an occupation to enter a different occupation
- Exits
  - Workers who leave an occupation and the labor force (permanently or temporarily)
- Growth
  - Openings created by new jobs being created

Occupational Projections: Special Tables

- Fast Growing Occupations
  - Based on highest growth rates

- Declining Occupations
  - Based on lowest growth rates, net drop in employment, and percent change drop in employment

- High Demand/Hot 40 Occupations
  - Based on growth rates, total openings, online job ads, and average annual salary
  - Also available for occupations requiring an Associate's Degree and below

For More Information:

- Projections are available on the ADOL LMI website at www2.labor.alabama.gov
  - Under the OES menu, Projections
  - Includes statewide and regional occupational and industry projections
  - Downloadable
- Hard copy publications available upon request to the ADOL LMI division