To: Governor Pence
State Budget Committee
Legislative Council
Commission for Higher Education
Board of Trustees of Ivy Tech Community College
Department of Education
State Board of Education
Ivy Tech Community College Regional/Campus Advisory Committee

From: Steve Braun, Commissioner

Date: July 12, 2016

Subject: Occupational Demand Report

Per the requirements of Senate Enrolled Act 301 (SEA 301), the Indiana Department of Workforce Development (DWD) utilized the best sources of information available to date to prepare the occupational demand report summarized in the following pages. The report consists of data and figures gathered by the Bureau of Labor Statistics (BLS)[1] and the Occupational Information Network (O*NET)[2]. The information utilized is recognized as the national standard and is derived from national sources. The 10-year employer demand data is derived from the BLS, and specific to Indiana employers. The education values are derived from both the BLS and O*NET data sources, and reflect current national education attainment estimations for each occupation, as opposed to Indiana-specific information.

To better refine our understanding of Indiana's occupational demand, DWD will be operationalizing a state occupational demand projection system throughout the duration of 2016, which will enable us to regularly assess the demand of particular occupations, at statewide, regional and county levels. Additionally, recognizing that training requirements often vary by region and by employer, DWD is surveying Indiana employers to determine what education and

---

[1]The Bureau of Labor & Statistics (BLS): The principal Federal agency responsible for measuring labor market activity, working conditions, and price changes in the economy. Its mission is to collect, analyze, and disseminate essential economic information to support public and private decision-making. As an independent statistical agency, BLS serves its diverse user communities by providing products and services that are objective, timely, accurate, and relevant.

[2] Occupational Information Network (O*NET): The O*NET program is the nation's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardized and occupation-specific descriptors.

training they require for particular occupations. These two sources of information will allow DWD to assess Indiana-specific training needs at a much more granular level.

In accordance with SEA 301, DWD has prepared an occupational demand report. The report details, on a statewide and regional basis, the expected workforce needs of Indiana employers for a ten-year projection with associated education and training, as determined by the BLS and O*NET. DWD consulted with the Commission for Higher Education, Ivy Tech Community College, the Indiana Regional Works Councils and employer and labor organizations on the report.

I. Statutory Requirements, Report Details and Data Sources:

SEA 301 requires the following be included in the occupational demand report:
- The expected workforce needs of Indiana employers for a 10-year projection;
- The training and education that will be required to meet those expected workforce needs; and
- Categorize these workforce needs and training and education requirements by job classification or generally recognized labor categories on a statewide basis and also for each region designated under the Workforce Innovation and Opportunity Act (WIOA).

Employment Projections:
- Projections are organized by Standard Occupational Classification (SOC) System[3]
- Statewide projections are available for the years 2014-2024
- Regional projections are available for the years 2012-2022
- Both statewide and regional projections are broken down by:
  - Total jobs openings that will be available over the 10-year timeframe
  - Job openings that will be available due to growth in the industry
  - Job openings that will be available due to replacement of the current workforce
- Projections are also delineated by:
  - Annual total openings
  - Annual growth openings
  - Annual replacement openings
  - Percentage change in openings over the 10-year timeframe

Training and Education:
- Training and education information was gathered from two national sources, in order to provide as much information as possible to end users of the report—O*NET and BLS.
- The report details two particular education attainment values from O*NET:
  - *Most Common O*NET Education Value*: This lists the O*NET survey response given by the highest percentage of respondents with regard to the education level required for their occupation.

---

[3] The Standard Occupational Classification (SOC) System is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. All workers are classified into detailed occupations according to their occupational definition.

- o *O*NET Job Zone Education Value*: The education level commonly needed for someone to perform that occupation.
- The report details three particular education attainment values from BLS:
  - o *BLS Minimum Education Value:* The minimum educational requirement for a particular SOC Title as defined by BLS standards.
  - o *BLS Work Experience Value:* The minimum amount of time that is expected to enter the particular occupation.
  - o *BLS Job Training Value:* The minimum type of training that is expected to enter the particular occupation, including: apprenticeship, internship/residency, long-term, moderate-term or short-term on-the-job training or no training.

- **O*NET Education Data:** O*NET is a comprehensive database of worker attributes and job characteristics, including the range of education required for employment in an occupation. O*NET gathers data from a sample of workers in each occupation. For more information on O*NET Online, visit: http://online.onetcenter.org, and for more information on the O*NET data collection process, visit: https://onet.rti.org/survey.cfm.

- **BLS Education Data**: The BLS uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data. BLS economists assign occupations to categories based on analyses of qualitative and quantitative information.

  In some cases, assigning education and training categories can be straightforward. Some occupations, such as physicians and lawyers, are governed by federal and state laws and regulations that give clear guidelines regarding the education or training required for a given occupation. In other cases, the choice of categories is less clear. BLS economists determine the typical path to entry for an occupation and apply it across all three categories. Multiple paths to entry are not captured by the classification system. For occupations with multiple paths to entry, the classification system captures the typical path, and the occupational profile narrative in the 2016—17 edition of the Occupational Outlook Handbook (OOH) gives a full description of alternate paths in the "How to Become One" section. For example, the typical entry path for registered nurses is a bachelor's degree, with no work experience and no on-the-job training requirements. However, the OOH profile notes that registered nurses can also obtain an associate's degree in nursing or a diploma from an approved nursing program.

  For more information on the BLS methodology and limitations of the educational attainment data, visit: http://www.bls.gov/emp/ep_education_training_system.htm

II.   Occupational Demand Report:

The Occupational Demand Report can be accessed on the DWD Publications page at
www.in.gov/dwd/2565.htm.

DWD looks forward to continued collaboration with each of you, to continue to better align education, training and workforce demand across each region in Indiana. Please direct any questions about the report to Regina Ashley at rashley@dwd.in.gov. Media inquiries should be directed to Al Ensley at 317- 232-7358 or aensley@dwd.in.gov.