Pennsylvania Department of Labor & Industry Center for Workforce Information & Analysis

Workforce Information
Grants to States (WIGS)
Pennsylvania Annual Report
July 1, 2020 to June 30, 2021

Introduction

The Center for Workforce Information & Analysis (CWIA) is the Governor's officially designated overseer of Pennsylvania's employment statistics system.

This report provides an overview of Pennsylvania's work conducted with Employment and Training Administration's (ETA) Labor Market Information Workforce Information Grants to States or WIGS. Pennsylvania expends these monies utilizing a strategy that concentrates on upgrading and maintaining traditional products as well as introducing new products and services to help with local decision-making. It leverages CWIA's diverse funding streams and units including:

- United States Bureau of Labor Statistics (BLS) federal-state cooperative programs that funds local area unemployment statistics, non-farm payroll data, occupational employment statistics, and the quarterly census of employment and wages data;
- Workforce Performance Measures;
- PA New Hire Reporting Program;
- Unemployment Compensation Research and Reports;
- Economic Research;
- Survey of Occupational Injuries and Illnesses and Workers' Compensation; and
- Local Employment and Wage Information System software that allows generation of sub-state occupational employment and wage data for Workforce Development Areas (WDAs) and counties.

In addition, CWIA collaborates with various state agencies and local entities to assist them with program needs, data collection, service provisions and reporting requirements. These collaborations also lend themselves to enable us to conceptualize and create new products and services to better meet our customer needs.

ETA Program Year (PY) 2020 guidance via Training and Employment Guidance Letter 2-20 stresses that Pennsylvania must provide sound foundational data, information, and resources to the workforce system.

The following sections provide information on both required deliverables of the WIGS as well as other products and services that CWIA was able to create using the ETA grant to complement CWIA's other resources.

Pennsylvania's 2020 Labor Market Information Workforce Information Grants to States (WIGS)

I. Workforce Information Database (WIDb) Population

Pennsylvania continues to populate and enhance the WIDb (version 2.8) based on the common structure as set forth by ETA. The database serves as the cornerstone for information delivery, workforce research, and product development for information in CWIA. It also brings together critical workforce information from many sources and is used to promote better analysis and professional interpretation of the state's labor market information for our customers.

Pennsylvania also populated the required licensed occupation databases with PY 2020 data obtained from various state agencies and partners, including PA's Department of State, Department of Labor & Industry's Bureau of Occupational & Industrial Safety, and Department of Education as well as the State Bar Exam website. The license information is subsequently uploaded to the submission portal on the Analyst Resource Center (ARC) website. Pennsylvania's occupational licenses data are available through the Research & Historical Data module of CWIA's website, www.workstats.dli.pa.gov.

CWIA's website, www.workstats.dli.pa.gov, is the primary means of providing our customers with access to labor market information and our various products and tools. The website has two core areas - one for products (publications and tools) and another for data. The products side had 196,489 unique page views during the grant year and 65,793 users of which 63,897 were new users. These visitors included individuals from 508 different Pennsylvania cities, all 50 states and the District of Columbia and 118 other countries. The data portion of the website had 60,653 unique page views and 12,136 users of which 7,992 were new users. These visitors included individuals from 377 different Pennsylvania cities, 50 states and the District of Columbia and 28 other countries.

The following table shows select top products, by number of unique page views, requested during the grant year from the products section of CWIA's website, www.workstats.dli.pa.gov.

Product	Unique Page Views
High Priority Occupations (HPOs)	15,690
Data Dashboards	15,157
County Profiles	9,658
Occupational Wages	9,358
Monthly News Releases	7,294
Top 50 Employers & Industries	7,072
PA Unemployment Compensation Activity	6,215
Career Guide	5,948
Presentations & E-Learning	2,550
Projections, Occupational/Industries	2,024

The following table shows select data types, by number of unique page views, accessed during the grant year on the data portion of CWIA's website, https://paworkstats.geosolinc.com/vosnet/Default.aspx.

Data Type	Unique Page Views
Labor Force, Employment and Unemployment (LAUS)	4,793
Employer Search	3,632
Area Profile	3,241
Occupation Profile	2,508
Current Employment Statistics (CES)	1,846
Industry Profile	1,622
Labor Market Facts & My LMI Dashboard	1,513
Employer Profile	1,512
Quarterly Census of Employment and Wages (QCEW)	1,414
Occupational Employment and Wage Statistics (OEWS)	1,405

• PA Monthly WorkStats – A publication that contains monthly updates on jobs, labor force, unemployment compensation program statistics and Pennsylvania employer activities. Over-the-year comparisons of statewide data and multi-year labor market trends in the commonwealth are included along with accompanying analyses. Information on jobs and unemployment rates are provided for Pennsylvania's Metropolitan Statistical Areas (MSAs). Monthly press articles citing recent employer workforce news and employer activity are highlighted.

Report: http://www.workstats.dli.pa.gov/Documents/PAMW/PAMW.pdf

URL: https://www.workstats.dli.pa.gov/Products/MonthlyWorkStats/Pages/default.aspx

II. Industry and Occupational Employment Projections

Pennsylvania continues to produce and disseminate state and sub-state [Metropolitan Statistical Areas (MSA) and Workforce Development Areas (WDA)] industry and occupational employment projections, using the methodology, software tools, and guidelines developed by the Projections Workgroup and the Projections Managing Partnership (PMP) consortium of states. These data are vital to the data-driven approach that our state has implemented for economic and workforce decisions. Numerous other customers, including the Career Advisors in our PA CareerLink® offices, use our occupational projections, in conjunction with occupational wage data, to help individuals make informed career decisions.

CWIA produces a wide variety of industry and occupational products covering all geographic configurations that the data can support and that our stakeholders may require. It would be impractical to provide copies of each configuration of the products below. Our approach is to provide an example of each product as well as a URL for the landing page where all variations of the product can be found.

• <u>Long-Term Industry Employment Projections</u> – Estimates of employment levels by industry 10 years in the future by various geographical areas (statewide, MSAs, and WDAs). Statewide 2018-28 data were released in June 2020 and regional projections in December 2020. (Updated: Bi-annually)

Example: https://www.workstats.dli.pa.gov/Documents/Projections/Industrial/PA/EP_PA_LTIP.pdf
URL: https://www.workstats.dli.pa.gov/Products/employment-projections/Pages/default.aspx

• <u>Long-Term Occupational Employment Projections</u> – Estimates of employment levels by occupation 10 years in the future by various geographical areas (statewide, MSAs and WDAs). Statewide 2018-28 data were released in June 2020 and regional projections in December 2020. (Updated: Bi- annually)

Example: https://www.workstats.dli.pa.gov/Documents/Projections/Occupational/PA/EP_PA_LTOP.pdf
URL: https://www.workstats.dli.pa.gov/Products/employment-projections/Pages/default.aspx

• <u>Short-Term Industry Forecasts</u> – Estimates of statewide employment levels by industry two years in the future. The statewide 2020-22 data were submitted in February 2021. (Updated: Annually)

Example: http://www.workstats.dli.pa.gov/Documents/Forecasts/STIF.pdf

URL: https://www.workstats.dli.pa.gov/Products/ShortTermForecasts/Pages/default.aspx

• <u>Short-Term Occupational Forecasts</u> – Estimates of statewide employment levels by occupation two years in the future. The statewide 2020-22 data were submitted in February 2021. (Updated: Annually)

Example: http://www.workstats.dli.pa.gov/Documents/Forecasts/STOF.pdf

URL: https://www.workstats.dli.pa.gov/Products/ShortTermForecasts/Pages/default.aspx

• High Priority Occupations (HPOs) – Listings of occupations used by Pennsylvania's workforce development strategy to target education and training dollars. HPOs are job categories that are critical to Pennsylvania's economy, are in demand by employers, have higher skill needs and are likely to provide family-sustaining wages. The 2020 HPO lists went into effect August 1, 2020. Draft versions of the local 2021 HPO list were provided in April 2021, with an August 1, 2021 release planned. CWIA released an updated guidance document regarding the HPO process in April 2021. (Updated: Annually).

Example:

URL: http://www.workstats.dli.pa.gov/Products/HPOs/Pages/default.aspx

• Pennsylvania's In-Demand Occupation List (PA IDOL) — Catalogue of occupations in Pennsylvania that have large volumes of job openings and/or above-average growth rates while not already having an over-supply of qualified workers. To help with career exploration efforts, the occupations are presented by educational expectations under the categories of: Today, Tomorrow, and Future. The 2020 PA IDOL was released on August 1, 2020. The 2021 PA IDOL is scheduled for release on August 1, 2021. (Updated: Annually).

Example: http://www.workstats.dli.pa.gov/Documents/PA%20IDOL.pdf

URL: http://www.workstats.dli.pa.gov/Products/IDOL/Pages/default.aspx

<u>Career Posters</u> – Colorful posters aimed at spreading career awareness through high schools and middle schools, although they are also used at many PA CareerLink® offices across the state. The posters highlight occupational outlook and wage data in a 'career ladder' format for each of Pennsylvania's 12 Industry Clusters. They can be accessed online in printable PDFs for the area(s) and industry cluster(s) of interest. (Updated: Bi-annually)

Example: https://www.workstats.dli.pa.gov/Documents/Career%20Posters/AM%20Berks.pdf

URL: http://www.workstats.dli.pa.gov/Products/CareerPosters/Pages/default.aspx

• <u>Job Skills Analysis</u> – Methodology and tools developed by CWIA to better equip jobs seekers, workers, educators, and students to match employer hiring demand through an objective data solution. Job Skills go beneath occupational titles to list the specific knowledge, work activities, and tools and technologies typically required for an occupation and can aid in training, career planning, and career transitions. The fundamental principle of Job Skills Analysis is determining occupation specific skills that can be trained for in the short to moderate term utilizing local community colleges or technical schools. CWIA has developed a series of analytical tools that can be used to meet this goal. CWIA's solution can easily applied to all state LMI shops using a common methodology and nationally available core data set (O*NET).

Example: http://www.workstats.dli.pa.gov/Documents/Job%20Skills/File%20One.pdf
URL: http://www.workstats.dli.pa.gov/Products/JobSkills/Pages/default.aspx

• Top 50 Job Skills Reports – The goal of the Top 50 Job Skills Reports is to highlight the job skills most likely to be required in the workforce by geographic area over the next 10 years. Job skills are personal abilities that help workers carry out job-related tasks. They are tangible and attainable skills that someone can acquire through training and education, often at local community colleges or technical schools. Job skills go into more detail than occupational titles by listing the work activities and tools and technologies typically required to perform well in an occupation. CWIA has compiled top 50 job skills lists by area showing the projected employment requiring the skill, the number of openings needing the skill, and the percentage of all openings using the job skill.

Example:

https://www.workstats.dli.pa.gov/Documents/Top%2050%20Job%20Skills/Top%2050%20Job%20Skills% 20in%20Berks%20WDA.pdf

URL: https://www.workstats.dli.pa.gov/Products/Top-50-Job-Skills/Pages/default.aspx

III. LMI Training for Service Delivery

Consultation with other state workforce agencies, state and local WDBs, economic and workforce investment organizations, and education and training institutions has been conducted throughout the year to increase the scope and utility of workforce information. Entities that CWIA interacts with regularly include the Labor & Industry's Bureau of Workforce Development Administration, Bureau of Workforce Partnership and Operations, Office of Vocational Rehabilitation, PA CareerLink® Offices, PennSERVE, Unemployment Compensation Deputate, and the Workers' Compensation Bureau as well as the Departments of Aging, Agriculture, Community and Economic Development, Corrections, Education, Environmental Protection, Health, Human Services, and Revenue, and the Office of the Governor. Strategic partnerships were established and continue in order to identify and address customer information needs, as well as those of state and local workforce development system staff users.

Another critical component of CWIA's customer outreach is the work handled by our Customer Response Team. This group of analysts is dedicated to handling inquiries on a daily basis from a broad array of customers. They are responsible for answering questions on our products and publications, assisting with navigation through our website, and compiling data to fill requests. They also track requests and trends, which lead to the alteration of the website and creation of new products. Having a real person answer the calls from our customers helps build a good relationship and allows for a better forum for the callers to tell us about the things that are working well and provide feedback on what could be improved upon or is missing.

Every year, CWIA explores the value of current and new products and services. We adjust our plans based on our research and extensive outreach to our stakeholder base to understand what they need. This has resulted in expansion of traditional support and the infusion of new products and services. The work that we have been able to provide though the WIGS has been appreciated and, more importantly, used on a regular basis to drive workforce intelligence in Pennsylvania.

Throughout the year, via attendance at conferences and symposia, participation in webinars, and delivery of presentations by staff, we are able to interact with our customers to get their feedback on CWIA products and services. These environments allow them to express their needs openly and to discuss potential new items with CWIA directly. New product development is often based on acquisition of such knowledge. Presentations made at events (audience/stakeholder) include:

Event Name	Date	Audience	# of attendees	Description/Details
Press Briefing	monthly	L&I executive staff & CWIA	varies	Monthly discussion of PA unemployment and jobs statistics, one day prior to public release.
Local Workforce Development Board (WDB) Meetings	12/8/20 & 6/8/21	WDB members, employers, educators	30	Focused on new LMI tools and pandemic-related data, with an emphasis on how it can be used locally.
Community College of Philadelphia Board Meeting	2/4/21	Community college administrators	35	Discussed the statewide and regional labor market conditions.
Performance Metrics Training	3/24/21	WDB staff	10	Background on WIOA performance metrics and how they are calculated. Also included a Q&A session to help WDB's improve their reporting processes.
PWDA	5/6/21	WDB staff, Workforce Development professionals	50	LMI data, tools and products explaining the changes in the labor market since the start of the pandemic
Everyday Lives Conference	5/27/21	Human service professionals	100	Labor market tools and resources available from CWIA.
Educators Workgroup	6/1/21	Counselors, career development planners	25	LMI tools/products that are most useful for educators & counselors. Handled as a Q&A session driven by questions that were submitted before the session.

IV. Annual Economic Analysis or Special Reports

Based on customer, stakeholder, and partner consultations identifying workforce information needs, Pennsylvania used the WIGS to develop, publish and submit an annual state economic analysis and special studies capable of informing workforce and economic development policy and investment decisions to be made by the governor and state or local WDBs. These analyses supported the labor market information and economic development information needs of other system stakeholders such as state, regional, and local economic and workforce development organizations, education and training institutions, community colleges, and other partners.

Pennsylvania submitted in a timely manner portable document format (.pdf) copies and hyperlinks to .pdf or other electronic files of the economic analyses to ETA.

All grant-funded products, reports, and other workforce information were posted on the Internet at www.workstats.dli.pa.gov when appropriate. Dissemination of the information was also done through emails and CDs to facilitate use by the workforce and economic development systems, other partners, stakeholders, and the public. CWIA also engaged in work throughout the year to improve the current website as well as developing additional web tools.

Economic Review of Pennsylvania 2020 – An analysis of Pennsylvania's workforce composition that focuses on future trends of the commonwealth's economy, industries, and occupations. Understanding the potential obstacles, the future workforce will have to overcome is important in developing policies and strategies for Pennsylvania to remain economically competitive. Workers from the baby-boom generation will be moving into their 60's during the decade and will be retiring in large numbers. They will take with them key skills that kept industry growing and prosperous. Far fewer youth are available to enter the labor market, forcing greater efficiencies and competition for key skills. This report examines the demographic, economic, and labor market developments unfolding in Pennsylvania. (Updated: Annually) 2020 Report:

http://www.workstats.dli.pa.gov/Documents/ETA%20Reports/ETA Report.pdf

Pennsylvania Career Guide – The 26th Edition of the *Pennsylvania Career Guide* was completed and is targeted for release in July 2021. Demand for hard copies of this publication remains high.

Example: http://www.workstats.dli.pa.gov/Documents/Career%20Guides/CareerGuide.pdf

URL: http://www.workstats.dli.pa.gov/Products/CareerGuide/Pages/default.aspx

Help Wanted Online Job Postings – An analysis of Help Wanted Online (HWOL) data is provided to CWIA from The Conference Board via Burning Glass Technologies. HWOL data is collected from online job posting sites such as CareerBuilder, Monster, etc., and can be used as a tool to analyze trends in employment demand at various grouping levels. The data allows for real-time tallying of online job posting data by area, industry, occupation, skills, and employer. CWIA distributes real-time job ad reports compiled by WDA to the local WDBs via an online public dashboard. This enables the WDBs to determine where and in what industries and occupations job demand growth is occurring to help align local PA CareerLinks® and education providers with properly placing and training the unemployed. (Updated: Monthly)

URL: https://www.workstats.dli.pa.gov/dashboards/Pages/Online-Job-Postings-by-WDA.aspx

• Analysis of the Pennsylvania Minimum Wage in 2020 – Statistical information on Pennsylvanians who earn at or below the minimum wage; analyzes the demographic characteristics of hourly workers making at or near the minimum wage; details the industry characteristics of those making at or near the minimum age; discusses the issues of inflation and poverty in relation to the minimum wage; and considers other states' minimum wage data. A comparison is made between the years 2015 and 2020 to determine the impact of the minimum wage increases on Pennsylvania workers, businesses and economy. (Updated: Annually) 2020 Report:

https://www.workstats.dli.pa.gov/Documents/Minimum%20Wage%20Reports/Min

URL: http://www.workstats.dli.pa.gov/Products/MinimumWageReports/Pages/default.aspx

• Industries of Interest (IOI) — The purpose of Industries of Interest (IOI) is to identify and report on industries in the state that exhibit nontrivial growth or decline in employment. The IOI methodology narrows Pennsylvania's list of over 1,000 industries to those exhibiting marked sequential or year-over-year employment change for purposes of workforce and economic development. There are three data sources for this report: Quarterly Census of Employment and Wages (QCEW), New Hires data, and HWOL (online job postings). In addition, IOIs are used by the Pennsylvania Department of Community and Economic Development and the Steel Valley Authority to target industries for promotion and interventionist strategies. County level data are also available through an interactive dashboard.

Report:

http://www.workstats.dli.pa.gov/Documents/Industries%20of%20Interest/Industries_of_Interest.pdf URL: http://www.workstats.dli.pa.gov/Products/IndustriesOfInterest/Pages/default.aspx Dashboard: https://www.workstats.dli.pa.gov/dashboards/Pages/Industries-of-Interest.aspx

New Hires by Workforce Development Area – Dataset showing industries that are hiring by WDA. The data
are available for the most recent complete quarter and can be used to determine where and in which
industries employers are hiring as well as to find emerging or declining industries based on year-ago
comparisons. New Hires data is available sooner than comparable QCEW data, giving an advanced look at
employment hiring patterns by county. (Updated: Quarterly)

URL: http://www.workstats.dli.pa.gov/Products/NewHires/Pages/default.aspx

• Areas of Interest (AOI) — The purpose of Areas of Interest (AOI) is to identify and highlight sub-county areas in the state that exhibit nontrivial growth or decline in employment. Typically, employment analysis focuses on industry and occupation, leading workforce developers to steer job seekers toward growing industries and occupations and away from declining ones. Expanding employment analysis to areas that are gaining or declining in employment gives workforce developers an additional dataset to consider when working with job seekers. Similarly, economic developers can use AOIs to identify regions in the state experiencing employment growth to build upon such growth, or to identify regions in the state experiencing employment decline to implement intervention strategies. AOI is generated from the QCEW dataset. The data are available through both a report and an interactive dashboard.

Example: https://www.workstats.dli.pa.gov/Documents/Areas%20of%20Interest/AoI%20by%20MCD.pdf
https://www.workstats.dli.pa.gov/dashboards/Pages/Areas-of-Interest.aspx

• <u>Interactive Visual Analyses</u> – Utilizing Tableau, a software that helps people to see and better understand data, CWIA has created multiple dashboards to better communicate and visualize our labor market information. During the past year, CWIA added dashboards for online job postings, Industries of Interest, unemployment claims demographic data by area, and Pennsylvania's Economic Profile. These are in addition to CWIA's dashboards that show labor force statistics by state and county, county population, labor force counts by age and county, and Areas of Interest.

Example: https://www.workstats.dli.pa.gov/dashboards/Pages/County-Stats.aspx

URL: https://www.workstats.dli.pa.gov/dashboards/Pages/default.aspx

- <u>Regional Data Analysis Tool (RDAT)</u> Access database that is provided to local WDBs to assist them with
 local industry cluster analysis. The tool provides local WDBs the ability to produce employment, wage, and
 competitiveness statistics for defined Industry Clusters or customized industry clusters for any region. Data
 are displayed for each NAICS code included in the cluster as well as the cluster as a whole. (Updated:
 Quarterly)
- <u>PA Employer Database</u> Access database tool provided to local WDBs and their partners to assist in employer outreach activities. The file includes employer names, contact information, NAICS codes, employment size ranges, the latitude and longitude of the employer for mapping purposes, and an indicator that identifies new employers. The database can be used to assist PA CareerLink® staff in marketing one-stop services and by local WDBs to attract employers for industry partnership activities. (Updated: Quarterly).
- Area Profiles Area profiles are done for Pennsylvania, WDAs, and counties and are a compilation of select economic, geographic and demographic data. These publications contain commonly asked for information by our customers. The Pennsylvania and WDA profiles contain the following information: population (gender, race, age, and education distribution), online job postings, labor force and unemployment rate, unemployment compensation by industry, major employers, employment and wages by industry sector, and wages by major occupational group. County profiles are done for Pennsylvania's 67 counties and include the following information: map of Pennsylvania with the county highlighted, population of the county (total, projected and age distribution), online job postings, labor Force and unemployment rate, personal income (per capita, total and median household), major employers, employment and wages by industry sector, and wages by major occupational group.
- Local & Regional Plan Data Packets Collection of key LMI for local WDBs to use in the preparation of their regional and local plans. Data sets included: industry employment, labor force, employment projections, unemployment claims, commuting patterns and Census data (educational attainment and barrier populations). CWIA offered analytical support so that local WDBs understood how this data could impact and influence their local economic and workforce decisions. Once prepared and submitted, CWIA also reviewed the local plans and provided feedback to the local areas regarding use and interpretation of LMI used in their plans. (Updated: December 2020)
- <u>Survey Design & Analysis</u> Ad hoc survey design, administration, and analysis for workforce partners. Examples have included, but were not limited to, agriculture workforce needs, online training program assessments, PA's Trade Adjustment Assistance program, COVID job portal feedback and support of State WDB committees.
- Industry Movement Utilizing employee wage records, this dataset tracks the industry movement of Pennsylvania workers through time. Using the most recent quarter of data available, workers' current industry of employment is compared to their industry of employment one-year ago to see what industry they came from. In addition, an industry look back is done for the same worker cohort for three-, five-, and 10-years. The data are displayed on an internal dashboard for CWIA staff. Further expansion of the use and analysis of this dataset is planned.