



## SUMMARY OF DATA & ANALYSIS TOOLS AVAILABLE THROUGH THE PENN STATE WORKFORCE EDUCATION & DEVELOPMENT INITIATIVE

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### *Information Elements Available from the Penn State Workforce Education and Development Initiative by Zip Code, County, and State*

Element	Description	Use
Economic Base	Effects of regional spending on jobs and earnings in region	Recognition of significant spending drivers of employment and earnings in region
Location Quotients	Concentration of regional employment and occupational competencies compared with Commonwealth and nation	Identification of clusters of employment and competence in the region and occupations within the clusters
Multipliers	Direct, indirect, and induced employment, value added, compensation, and property taxes in region as a result of economic activity	Specification of “ripple effects” to understand need to plan for workforce development in industries that support and are affected by region
Shift–Share Analysis	Decomposition of sources of changes in the numbers employed in region into national, industry mix, and competitive components	Estimation of the extent to which improvements in worker productivity, reduction of costs, and alignment of prices could make the region more competitive compared with the Commonwealth and the nation



Element	Description	Use
Demographics	Current and forecasted distribution of numbers of people in the region by age and gender	Understanding of how age/sex composition of the regional labor force affects recruiting and retention in the region
Industry and Occupational Employment	Current and forecasted numbers of people employed and job openings by occupation in region	Specification of recruitment and training needs created due to economic change and as a result of the need to replace people who die, retire, or otherwise leave occupations in the region
Occupational Competencies	Knowledge, abilities, and skills of workers in occupations in region	Identification of human capital assets in the region in region
Industry Unemployment	Unemployment rate by last or most recent industry employed	Estimation of the labor pool available and of the relative tightness of the local labor market in the targeted compared with the Commonwealth and the nation
Regional Supply Purchases	Percentage of regional purchases of regional products in the region	Possibilities for regional employment growth if regional industries become more active in the supply chain for the region
Occupational Compatibility	Qualifications of workers in occupations in the region who have knowledge, abilities, and skills applicable in other occupations in the region	Recognition of human capital assets in the regional economy that could be redeployed to fill vacancies



Element	Description	Use
Occupational Training	List of programs and completion rates for institutions and organizations that currently provide education and training for occupations in the region	Indication of current regional pipeline for qualified workers in occupation in region as well as needs for expansion of regional education and training opportunities to meet future job openings
Industry Labor Market Dynamics	From longitudinal ES-202 data for industries, net job flows, job creation, new hires, separations, turnover, monthly earnings of incumbent workers and new hires	Description of the nature and structure of changes in employment in a region as well as opportunities for new labor force entrants
Travel Shed	Identification of travel shed and commute shed traffic patterns for a region using origin/destination data from ES-202 records (more recent than 2000 Census travel patterns data) and with some industrial detail	Specification of the geography of labor markets for a region

*Consensus and Decision-Making Systems Used by the Penn State Workforce Education and Development Initiative*

System	Description	Use
GroupSystems (Synchronous)	Interactions among participants in focus groups assembled for GroupSystems sessions at Penn State or on-site using up to 24 work stations	Evaluation of the quality and usefulness of information provided in reports from the proposed project and feedback for revision of reports
WebIQ (Asynchronous, with synchronous possibilities)	Interactions among participants in focus groups created on line using WebIQ over time.	



*Economic Modeling, Simulation, & Forecasting Tools Used by the Penn State Workforce Education and Development Initiative*

Tool	Description	Use
Strategic Advantage to zip code level in Pennsylvania	Comprehensive economic and workforce information, with modeling of job, earnings, and sales changes	Define labor markets of a region
IMPLAN for states of New Jersey, Delaware, Maryland, and Pennsylvania and each of their counties	Static input–output model of economy	Calculate impacts of industry changes in employment, sales, and earnings in a region, with full social accounting of economic flows and stocks in a region
Pennsylvania 70–Sector Policy Insight Model from Regional Economic Models, Inc.	Dynamic structural model of the economy and demography of the Commonwealth, with historical analysis, forecasting, and simulation capabilities	Understanding of the complex economic and demographic relationships in the Pennsylvania economy, forecasts of economic activity under various economic conditions, and estimation of “what if” scenarios for policy related to the state economy

Also available are on–line worker and manager performance assessments. Example:

PENNSSTATE *The office of*  
**Economic and Workforce Development**

## Manager Performance Assessment

Pointing to and clicking on the [Start Here](#) button will take you to a different web page containing the *Manager Performance Assessment* that you will complete.

[Start Here](#)

**Questions? Comments? Suggestions?**

We want to hear from you about the *Manager Performance Assessment*. [Contact us!](#)

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