Wyoming

Educational Needs Index
State Report
2008

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Lumina Foundation for Education

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What is the Educational Needs Index?

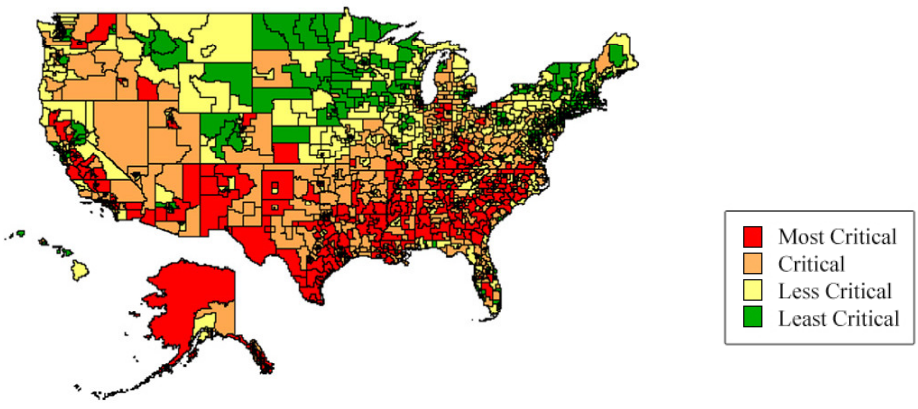
The Educational Needs Index (ENI) is a regional-level study of educational, economic, and population pressures that influence educational policy and planning at local, regional, and state levels. The index introduces an econometric model that assesses conditions and trends for all fifty states and their respective sub-regions, allowing peer comparisons across a variety of indicators. The ENI offers a fresh opportunity and innovative approach to better understanding the existing data and public policy challenges that each state faces.

As the relationships between education, training, demographic shifts, and the economy become a focus of public policy debate, states need to build and maintain a more complete demographic profile of their potential workforce. Such a profile should take into account educational, economic, and population growth factors to provide a clear picture of workforce opportunities and challenges. While elected officials often have a qualitative feel for the issues, they lack the quantitative data needed to educate and inform the decision-making process. The creation of a generalizable and evaluative tool that informs the policymaking process would provide a powerful tool in the policy toolbox. The national Educational Needs Index project answers this charge and presents a set of consistent data elements that allow policymakers to examine how their states and the sub-regions that comprise them compare regionally and nationally. Furthermore, this research addresses this shortcoming through the creation of an indicator-based model that measures the potential outcome of investments in postsecondary education.

Key Questions Asked by the ENI about Each State

- What is the current level of educational degree attainment of the state and its respective sub-regions?
- What is the current health of each of the state's regions from an economic perspective?
- Are there areas in the state that are quickly growing and have shifting demographics that skew toward youth, young adults, or at-risk minority groups?
- What regions in the state can be identified by the ENI to be undereducated, facing economic challenges, and facing robust population growth and shifting demographics in categories of youth, young adults, or at-risk minority groups?

The Educational Needs Index places an emphasis on the transition between K-12 policy concerns and postsecondary opportunities while at the same time placing those issues in a broader public policy context of economic development and government response to population growth and shifting demographics. The data assists policymakers at state, regional, and local levels as they work to reach informed decisions on issues of secondary education achievements, adult education concerns, and general postsecondary education access and attainment. Particular emphasis is placed on the role that training, certificate programs, two-year degrees, and adult literacy initiatives play in forming foundations for more promising futures and stronger economies built upon a more versatile workforce. Through in-depth analysis of these key measures of human capital, the project focuses on the most disadvantaged rural and urban areas of the U.S. and promotes regional partnerships between education, business, and government.



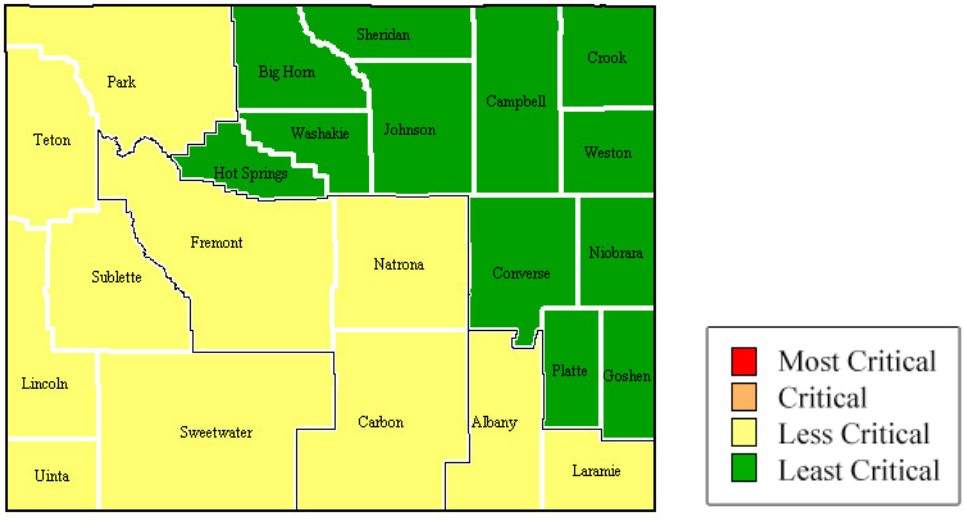
ENI Wyoming State Summary

The education, economic, and market demand factors of the ENI identify regions with low levels of educational attainment, depressed local economies, and sustained population growth. All combined, these conditions create major educational and public policy challenges. Zero of the four PUMS areas (see PUMS description towards end of report) in Wyoming are in the “critical” categories of the ENI based on overall analysis.

In Wyoming, moderate population growth (particularly among a younger demographic) and increasing diversity relative to the state average is evident in the southeastern corner of the state. The remaining regions of the state are facing conditions that could be characterized as declining and aging compared to national peers.

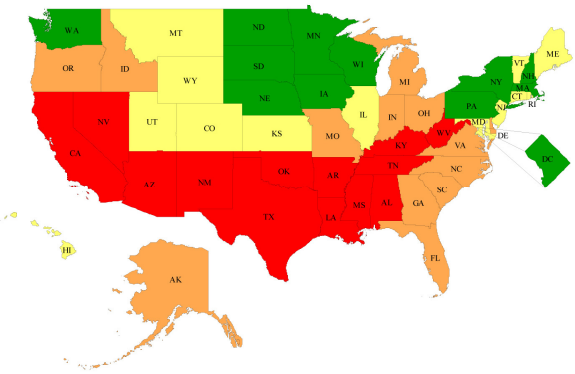
One of Wyoming’s PUMS areas is in the “critical” category of the education factor with none in the critical range in the economic factor category. The counties associated with the PUMS area facing educational attainment challenges are located in the central and southern regions of the state.

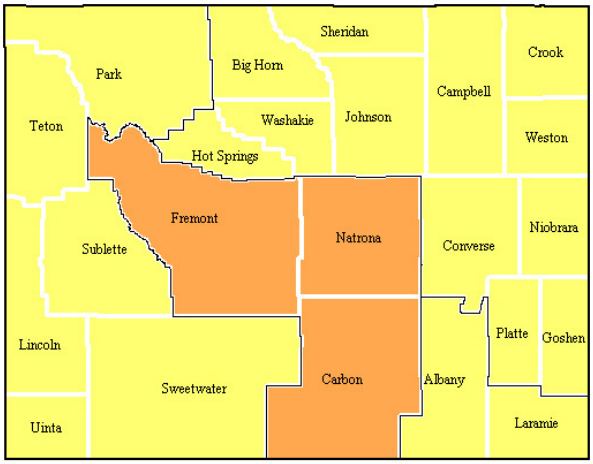
As policymakers in Wyoming struggle to balance regional disparities and deal with challenging population trends, they must remain cognizant of the inter-relations between educational conditions and future economic and population demands. Clearly, the challenge for many states such as Wyoming is how to create policy initiatives that sustain excellence in their best-performing areas while concurrently expanding access to post-secondary education across their other respective regions in the areas of greatest workforce needs. Reversing negative population trends through retention and recruitment of talent will be a major goal in the coming decade if Wyoming wants to maintain its education and economic status.



State vs National Statistics on Factor Variables

Education Factor: by State by Quartile





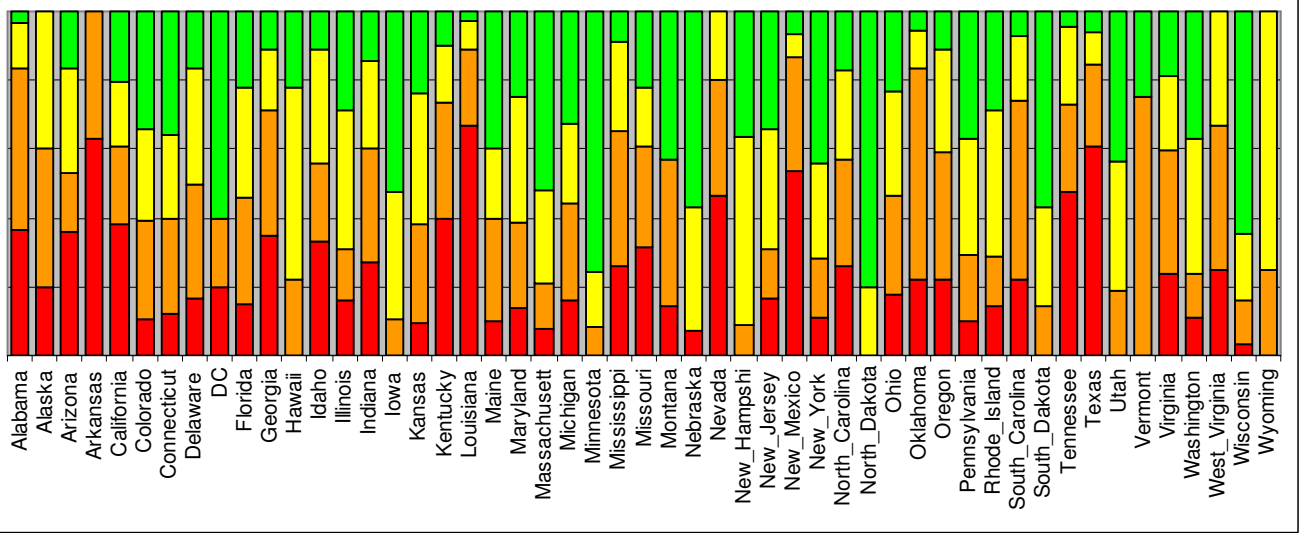
Education Factor Indicators	Wyoming	USA
Percent of 18 to 64 Year Olds With a High School Diploma (2005)	91.7	85.9
Percent of 25 to 64 Year Olds With an Associates Degree (2005)	8.9	8.3
Percent of 25 to 64 Year Olds With a Bachelor's Degree or Higher (2005)	24.9	29.2
Difference in College Attainment Between Young (25 to 35) and Older (45 to 54)	0.1	0.9

Education Factor

By PUMS Boundary within State

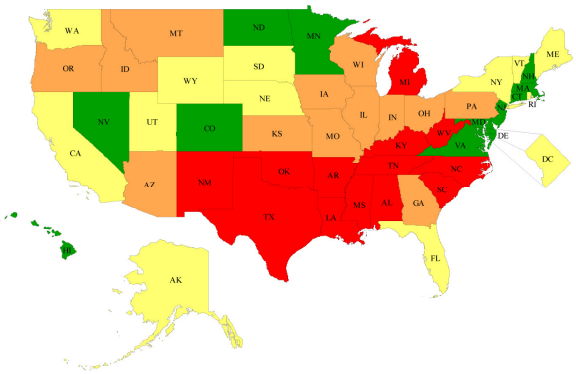
Individual PUMS Area data available at www.educationalneedsindex.com

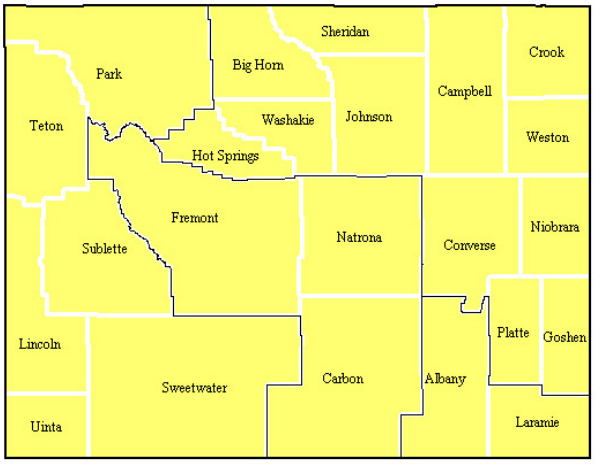
Percentage of States' PUMS Areas by Quartile - Educational Factor Only



State vs National Statistics on Factor Variables

Economic Factor: by State by Quartile



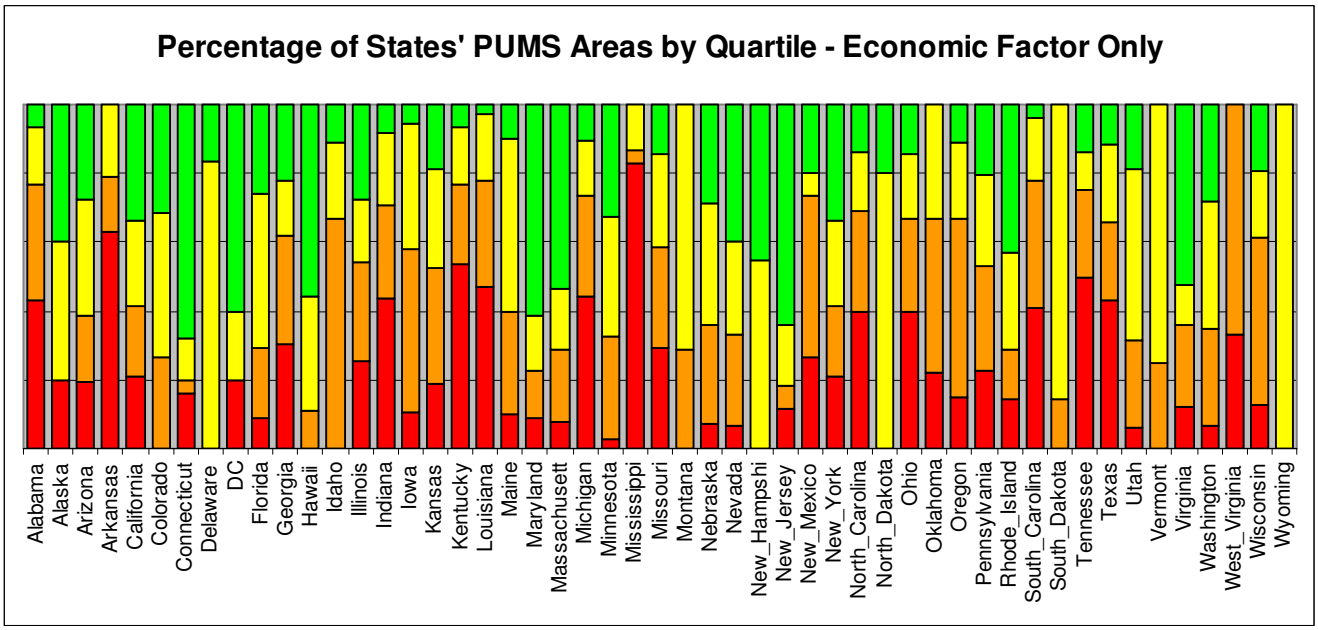


Economic Factor Indicators	Wyoming	USA
Unemployment Rate (2005)	5.6	6.8
Percent of Population Under 65 At or Below the Poverty Level (2005)	10.6	14.3
Median Family Income (2005)	55,343	55,832
Per Capita Personal Income (2005)	23,936	25,035
Percent of Employment in Manufacturing and Extraction Industries (2005)	10.0	12.0

Economic Factor

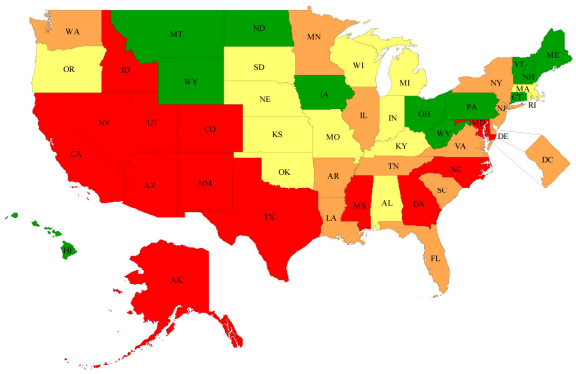
By PUMS Boundary within State

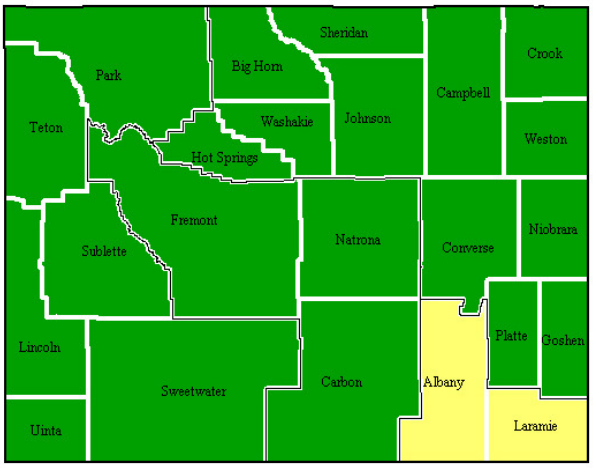
Individual PUMS Area data available at www.educationalneedsindex.com



State vs National Statistics on Factor Variables

Population Factor: by State by Quartile





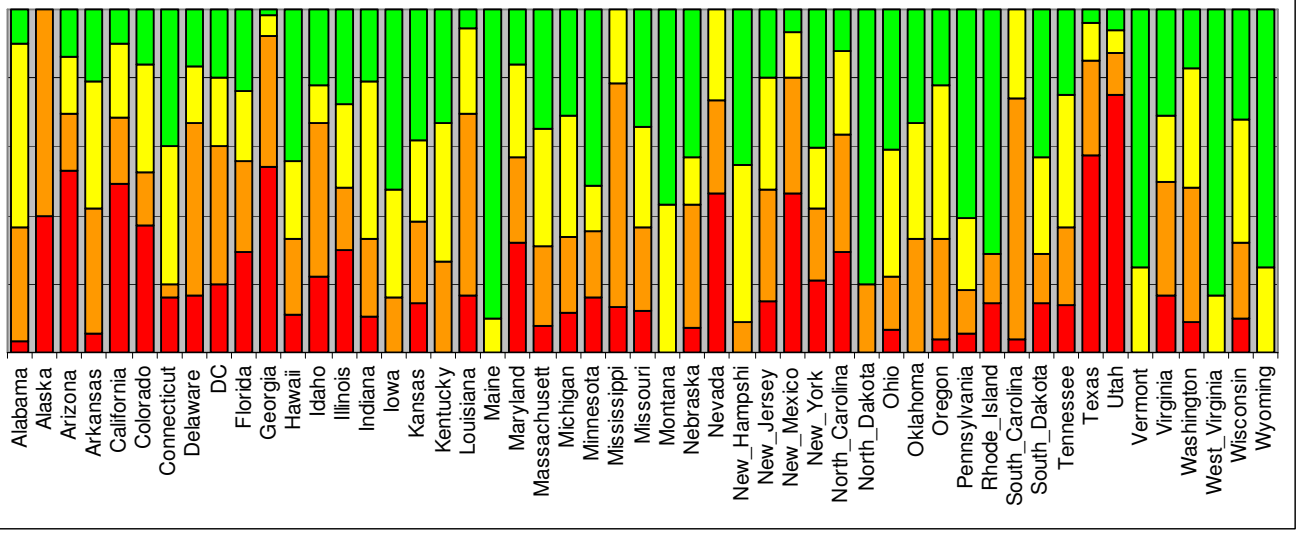
Population Factor Indicators	Wyoming	USA
Rate of Population Growth 64 and Under (2000 to 2005)	-0.6	2.9
Percent of Population Ages 0 to 19 (2005)	24.6	27.8
Percent of Population Ages 20 to 44 (2005)	33.7	35.1
Percent At-Risk Minorities 0 to 44 (2005)	12.4	32.3

Population Factor

By PUMS Boundary within State

Individual PUMS Area data available at www.educationalneedsindex.com

Percentage of States' PUMS Areas by Quartile - Population Factor Only



PUMS (Public Use Microdata Samples)

Until recently, much of the data for geographic areas smaller than states were only available every ten years from the Census Bureau. Beginning in 2005, the Census Bureau began to provide a variety of data for sub-state regions called Public Use Microdata Areas – PUMAs. Because the variables that make up the ENI change from year-to-year we use these sets of data to provide the most current picture of the education, economic, and population challenges facing regions throughout the U.S.

The data ENI analyzes comes from responses to individual Census questionnaires in the form of Public Use Microdata Samples (PUMS). These files are records containing large samples of information from individual housing units and the persons living in them within a designated PUMA. While PUMS files provide records for states and some of their geographic levels, they are not necessarily aligned with county boundary configurations. For example, there tends to be multiple PUMAs in metropolitan areas (providing data for areas smaller than counties) and, conversely, several counties are usually clustered together to create a PUMA in rural parts of states.

The ENI model evaluates the educational needs and demands of the 2,071 Public Use Microdata Areas across the nation. It combines thirteen variables that measure educational attainment levels, economic and employment strength, and population growth and diversity. Through standardization of the data, the model combines these measures and allows for comparison across all of the PUMAs in a given region and the nation as a whole. PUMAs are designated “most critical” when relatively poor conditions of under-education and economic challenges are compounded by population growth and shifting demographics toward youth or at-risk minority groups.

The three factors that drive the ENI model and the variables that make up each factor are:

- **Educational Factor** – Indicators assess the educational capacity of a region’s adult population. Indicators measure the percent of the population with a high school degree, associate’s degree, and bachelor’s degree, and a measure of the educational attainment gap between younger and older members of the workforce.

- **Economic Factor** – Indicators in this category assess the degree of economic challenges facing regions. Indicators measure the percent of population in poverty, unemployment rates, the existing earnings capacity of residents, and dependence upon manufacturing and extraction jobs.

- **Population Factor** – Indicators assess the present population growth issues facing the region and potential need for increased emphasis on human capital development to address changing demographics. Indicators measure recent and projected population growth, population aged 19 and younger as a percent of the total population, population aged 20-44, and the relative size of an area’s at-risk minority population (African-Americans, Hispanics, and Native Americans).

The ENI project, funded by Lumina Foundation for Education, is a joint initiative of the Tennessee Higher Education Commission, the Oklahoma State Regents for Higher Education, the West Virginia Higher Education Policy Commission, the National Center for Higher Education Management Systems, and Austin Peay State University. The views expressed in this publication are the authors’ and do not necessarily reflect those of Lumina Foundation for Education, its officers or employees.

Educational Needs Index Project Team

Dr. Houston Davis serves as Vice Chancellor for Academic Affairs for the Oklahoma State Regents for Higher Education. Prior to his work with OSRHE, Davis worked in system-level academic affairs for the Tennessee Board of Regents, in academic leadership for Austin Peay State University, as a fiscal and academic affairs staff member for the Tennessee Higher Education Commission, and as a regional counselor for the University of Memphis. With research interests and career involvement in public policy and higher education, Davis was one of fourteen mid-career professionals selected nationally for the 2004-05 Associates Program by the National Center for Public Policy and Higher Education. In 2005 he took on the role of Project Director and Principal Investigator for the National Educational Needs Index project. With degrees from the University of Memphis (B.A. '95) and Tennessee State University (M.Ed. '97), he received his Ph.D. from Vanderbilt University in 2001.

Dr. Brian Noland serves as the Chancellor of the West Virginia Higher Education Policy Commission. His professional career has been primarily focused in higher education and public policy. He has held several positions at the Tennessee Higher Education Commission, most recently as the Associate Executive Director for Policy, Planning, and Research. In addition to these responsibilities, he served as an adjunct faculty member at Vanderbilt University and Tennessee State University. Dr. Noland was also a 2002-03 policy associate for the National Center for Public Policy and Higher Education. His scholarly focus has been in the areas of access, accountability, and governance, with articles published in The Journal of College Orientation and Transition, The Journal of Social Indicators Research, and The Handbook of Political Science Literature on Interest Groups. Dr. Noland received his B.A. and M.A in political science from West Virginia University, and holds a Ph.D. in Political Science from the University of Tennessee, Knoxville.

Mr. Patrick Kelly is a NCHEMS Senior Associate and serves as the Director of the National Information Center for Higher Education Policymaking and Analysis. Before joining NCHEMS, Kelly served as Senior Associate for Information and Research at the Kentucky Council on Postsecondary of Education. Prior to working at the council, Kelly was a Research Associate at the National Center for Family Literacy in Louisville, Kentucky. He was a 2000-01 policy associate for the National Center for Public Policy and Higher Education. Mr. Kelly is working on his Ph.D. in Urban and Public Affairs at the University of Louisville where he also earned a Master's degree in Sociology. His undergraduate studies were completed at the University of Alabama at Birmingham. His areas of specialization and interest include research and statistical methodology, policy analysis, and program evaluation.

Project Associates

Mr. Jon Weindruch, Principal of Websults, handles the ENI project web site design and database programming. Websults focuses on one particular area of business – the Internet medium – and recommends strategy and takes responsibility for generating results for an organization. The company has worked with several educational organizations to improve their operations as it relates to the web.

Mr. John Clark has been a Data Analyst at NCHEMS since March 2000. His primary responsibilities at NCHEMS include analyzing and graphically displaying detailed national, state, and local level postsecondary and population demographics for current projects, reports, and senior-level presentations.

For more information about the Educational Needs Index Project visit

www.educationalneedsindex.com

For those interested in more state and local information beyond the data used in the ENI project visit

www.higheredinfo.com