Employment and Workforce Data Systems at the Federal Level:

New Developments, Challenges, and Opportunities for Community Colleges

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Real Time LMI Innovators Network

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Employment and Workforce Data Systems at the Federal Level

Trends

- Economic
- Institutional
- Technological
- Opportunities
- Challenges

Trends: Economic

- 1940s-1970s
 - Stable regional economic structures, with little competition
 - Economic expansion into less developed areas

• 1980s-2010s

- Ongoing regional restructuring—of economies, industries, and labor markets—in the face of global competition and technological change
- Each U.S. region is vulnerable to restructuring
- Increase need for postsecondary credential
- Challenge for labor markets—provide signals that allow labor supply and demand to align in volatile circumstances

Trends: Institutional (Historical)

- Federal-state cooperative labor statistics system organized to serve federal needs
 - Macroeconomic policy (from the 1940s)
 - Allocating funds to distressed regions and disadvantaged workers (from 1960s)
- Production-oriented, supply-driven
- Silo world disconnection from education statistics

Wagner-Peyser Act Section 14

There are authorized to be appropriated such sums as may be necessary to enable the Secretary to provide funds through reimbursable agreements with the States to operate statistical programs which are essential for development of estimates of the gross national product and other national statistical series, including those related to employment and unemployment.

Federal Workforce Statistical System: Vision 1995-2000

- ETA-driven \rightarrow ALMIS report 1995 \rightarrow WIA 1998
- Paradigm: improve labor market functioning in light of change
- Serve labor market participants—workers, students, educators, employers—and state/local policymakers
- Demand-driven
- Collaboration-oriented

National Employment Statistics System [Wagner-Peyser Section 15]

- Mission—address the "needs of Congress, States, localities, employers, jobseekers, and other consumers . . ." as well as local workforce investment boards and students
- Responsibility—Secretary of Labor
- Management—BLS in collaboration with state LMI agencies
- Content—"statistical data ... that ... <u>enumerate</u>, <u>estimate</u>, and project employment opportunities and conditions at national, State, and local levels in a timely manner"

National Employment Statistics System [Wagner-Peyser Section 15]

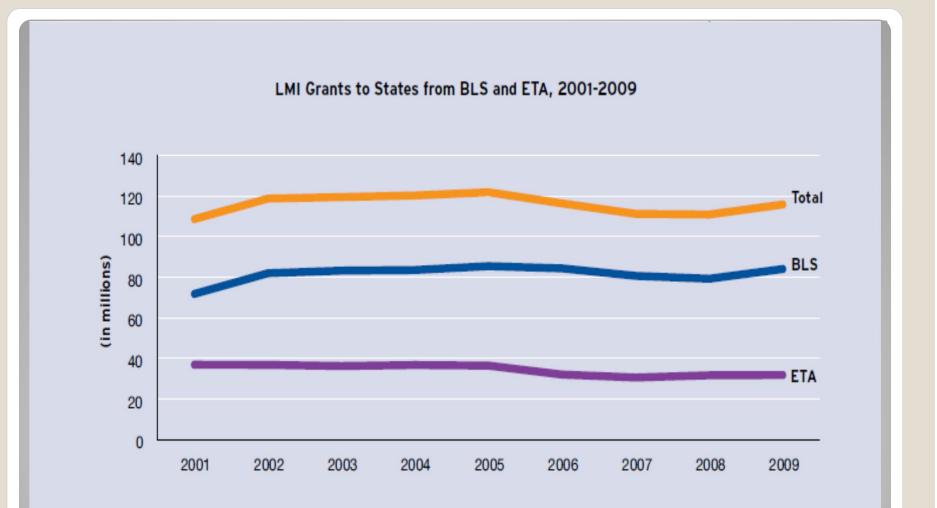
- Identification of user needs "the State agency shall
 - consult with State and local employers, participants, and local workforce investment boards . . .
 - consult with State educational agencies and local educational agencies concerning the provision of employment statistics in order to meet the needs of secondary school and postsecondary school students who seek such information"
- Data dissemination—wide, user-friendly, reliance on state systems

National Employment Statistics System: Challenges 2001-2011

- Wagner-Peyser 15 intent for collaborative, demand-driven system largely unfulfilled
 - Secretary not high priority
 - Annual Plan latest 2001
 - Workforce Information Council narrow focus on BLS programs, BLS-state LMI tension
 - State consultation with education agencies uneven

National Employment Statistics System: Challenges 2001-2011

- BLS and ETA workforce information budgets slashed
- Substantial increase in labor market participant/policymaker need for information from state LMI agencies
 - Industrial, technological restructuring
 Increased need for postsecondary credential



Note: BLS totals are for the fiscal year; ETA totals are for program year Source: Office of Management and budget

Trends: Institutional

- The Employment Act of 1946 set up organizations and processes to guide macroeconomic (cyclical) policy
- At present, the federal government lacks a well-organized capacity to assess and address issues of economic competitiveness and restructuring
- Congress does not understand the high impact, low cost of investing in workforce data

Trends: Technological

- Historically, federal employment statistics relied on surveys and UI records
 Data limited to snapshots, net change
- Budgets cuts have made reliance on surveys more difficult
 - The case of Occupational Employment Statistics
- Advances in information technology are allowing analysis of massive numbers of administrative records at low cost that allow us to see the labor markets dynamically

Federal Workforce Statistical System: Opportunities

- Local Employment Dynamics (Census)
- Statewide Longitudinal Data Systems (NCES, ETA)
- Skills-based Projections and Transferability (ETA)
- Real-time LMI (ETA)

Local Employment Dynamics

Tools

- Quarterly Workforce Indicators
- OnTheMap
- Job-to-Job Flows
- \$14 million program

LED Quarterly Workforce Indicators

- QWI allows analysts to see two important dimensions of local labor markets
 - Workforce characteristics (age, sex, education, race, ethnicity, wages), by industry
 - The dynamics of select groups of workers

 Home
 Local Employment Dynamics
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 About Us

 CED HotReports
 QWI Online
 OnTheMap
 Industry Focus
 Case Studies and Examples
 Data Visualization

Print

WI Online [NAICS]

AgeGroup/Sex Educat	tion/Sex Race/Eth	nicity			
EHD State of Illinois Metro Reports - Quarterly Workforce Indicators elect Criteria below. A new report will be created below as selections change.					
Year 2010 Geographic Grouping Metro Your Information by Detailed Industry					
Quarter Q3 -	I	Metro Chicago-Naperville-Joli	et, IL-IN-WI	(IL part) 💌	
Sex Male and Femal	e 🗾 🔤	lustry All NAICS Sectors			
AgeGroup 14-99 💌	Owne	ership All(1-5)			
Download Dataset	Print Table				
QWI Quick Facts	Chicago-Naperville- Joliet,IL-IN-WI (IL part) (Q3)	Chicago-Naperville-Joliet,IL-IN- WI (IL part) (Avg:Selected + 3 Prior qtrs)	Illinois (Q3)	Illinois (Avg:Selected + 3 Prior qtrs)	
Total Employment	3,814,204	3,795,838	5,420,927	5,398,919	
Net Job Flows	-11,473	18,053	-22,723	23,096	
Job Creation	170,397	179,772	238,425	254,051	
New Hires	528,801	447,769	757,514	641,127	
Separations	627,633	539,656	909,052	780,898	
Turnover	8.3%	7.4%	8.3%	7.4%	
Avg Monthly Earnings	\$4,333.00	\$4,503.50	\$4,042.00	\$4,152.25	
Avg New Hire Earnings	\$2,647.00	\$2,706.00	\$2,463.00	\$2,480.00	

Wiew Detailed Comparison Reports

For more information

QWI Illinois Metro Pivot Reports

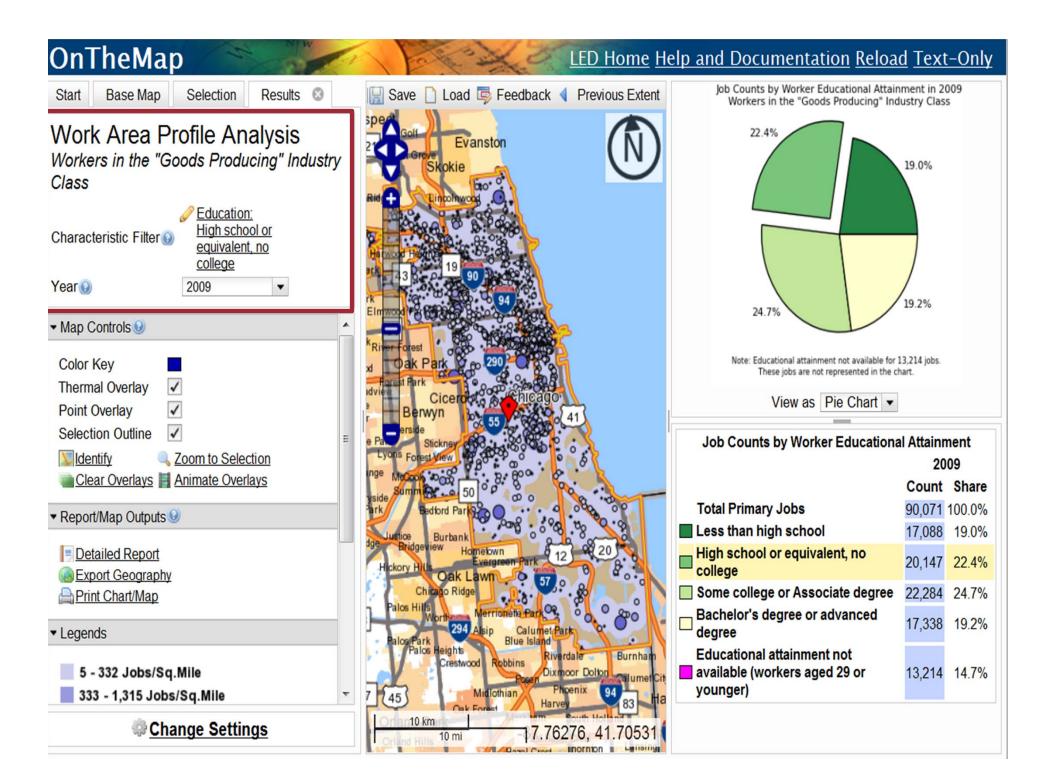
Chicago-Naperville-Joliet,IL-IN-WI (IL part) - Quarterly Workforce Indicators

Pivot Column	Data Row(s)		Year(s)	Pivot reports display the numeric values of one or more Data fields	•
Metro (All Illinois) Industry	Total Employment Net Job Flows	•	1990 A 1991 =	mapped against the textual values of a Pivot Field.	ш
Sex Education OwnerCode	Job Creation New Hires Separations	ш	1992 1993 1994	The grid below is automatically updated as you select from the lists on the left. Select individual indicators by	
Year	Turnover Avg Monthly Earnings	Ŧ	1995 1996 -	combining the ctrl key with a left click of the mouse button. Select all indicators	Ŧ

🐮 <u>Dowr</u>	nload Dataset 🕒 Print Table				
Year	QWI Quickfacts	Less than high school	High school or equivalent	Some college or associate degree	Bachelor degree or above
2010 1	📦 📄 Avg Monthly Earnings	\$2,533.00	\$3,306.00	\$4,207.00	\$7,387.00
	📦 📄 Avg New Hire Earnings	\$1,805.00	\$2,194.00	\$2,597.00	\$4,259.00
	📦 📄 Job Creation	1 6, 4 83	26,991	32,260	36,146
	谢 📄 Net Job Flows	-1,295	-2,613	-2,324	1,837
	衡 📄 New Hires	37,944	62,787	72,670	71,430
	谢 📄 Separations	46,777	78,722	91,499	88,088
	谢 📄 Total Employment	387,606	755,024	988,945	1,140,319
	衡 📄 Turnover	6.8%	6.1%	5.6%	4.8%

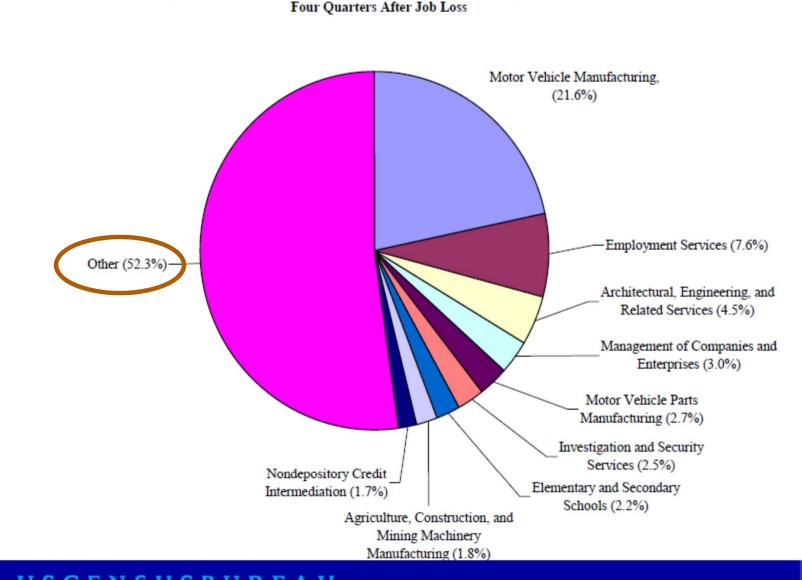
LED OnTheMap

- OnTheMap allows analysts to map, for custom-drawn regions,
 - the workplace and home locations of the workforce, by select characteristics
 - generate a detailed profile of that workforce



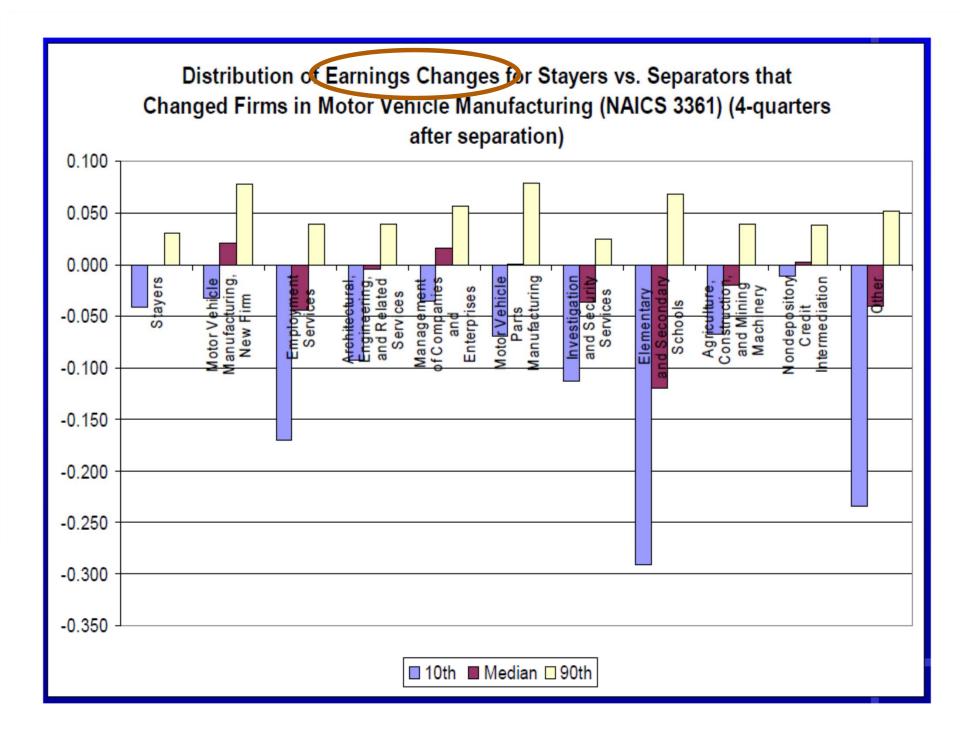
LED Job-to-Job Flows

- Job-to-Job Flows will provide the ability to track the labor market experience of select groups of workers
 - defined by geography, industry, and demographics characteristics at a particular moment in time
 - regarding if and where they work, the industry, how much they earn



Top 10 Destination NAICS for Motor Vehicle Manufacturing (NAICS 3361), Four Quarters After Job Loss

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Statewide Longitudinal Data Systems

 Will provide ability to track movement of students from P→K→12→20→Workforce

Including identify

- the experiences and characteristics of students coming to community colleges
- the relationship between individuals and the community college over time,
- the workforce outcomes of groups of individuals once they leave those colleges, by select characteristics (e.g., program, degree, age)
- Grant program managed by National Center for Education Statistics, \$500 million over time

Statewide Longitudinal Data Systems

- SLDS efforts are in the early stages of development
- SEAs are receiving assistance from NCES contractors—conference, webinars, handbooks, TA
- Common data standards are being developed, including for <u>postsecondary</u>
- ETA Workforce Data Quality Initiative grants to state LMI agencies facilitate the integration of workforce data
- Prototype tool—Career Bridge, WA State

Your search results for: <u>Biological Lab Technology</u> <u>New search</u> <u>Modify this search</u>

Program Name 🖨	Training Provider Name 🌲	Locations	Length 韋	ETP 🚺 🗘
➡ Bioengineering (BS)	University of Washington	Seattle		ETP
Biology Technician (Certificate of Proficiency)	Lower Columbia College	Longview	1 year to 18 months	ETP ✓
➡ Biomanufacturing (Certificate)	Bates Technical College	South Campus	3 months	ETP ✓
Biomedical Regulatory Affairs (Certificate)	<u>University of Washington</u> Professional and Continuing Education	Seattle	9 Months	ETP
Biotechnology Lab Specialist (AAAS)	Shoreline Community College	Shoreline	8 quarters; 2 quarters; 1-2 quarters	ETP 🖌
Biotechnology Lab Specialist (AAS-T)	Shoreline Community College	Shoreline	8 quarters; 2 quarters; 1-2 quarters	ЕТР 🖌
Biotechnology Lab Specialist (Certificate)	Shoreline Community College	Shoreline	8 quarters; 2 quarters; 1-2 quarters	ЕТР 🖌

Employment, wages and completion for all programs related to Biotechnology Lab Specialist at Shoreline Community College ①

Program Type: Biological Lab Technology For academic years: 2005-2006, 2006-2007, 2007-2008

	Students who completed the program(s)
Number of Graduates	27
Completion Rate 🕕	50%
Number with Reported Employment 📵	20
Employment Rate 📵	83%
Typical (Median) Hourly Earnings	\$16.25
Typical (Median) Annual Earnings	\$33,195.55

Industry of employment for all programs related to Biotechnology Lab Specialist at Shoreline Community College 🗊

Program Type: Biological Lab Technology For academic years: 2005-2006, 2006-2007, 2007-2008

Industry	Percent of all students who completed the program(s) and are employed	Number of all students who completed the program(s) and are employed
Professional, Scientific, Technical Services	50%	10
Education	15%	3
Healthcare and Social Services	10%	2
Manufacturing	10%	2
Retail Trade	5%	1
Administrative Support	5%	1
Government	5%	1

Skills-based Projections and Transferability

- Skills-based analyses based on the translation of occupations to skills using O*NET
- State-level skills-based projections
- ETA-funded tool—MySkillsMyFuture– identifies skills gaps in career transitions and local programs providing needed training

Real-Time LMI

- Over half of state LMI agencies subscribe to real-time LMI services
- What activities should BLS and ETA undertake regarding real-time LMI? Ideas:
 - Fund experiments, advancing state-of-art
 - Evaluate reliability, value, and impacts
 - Certify reliable vendors
 - Inform ETA Competency Model Clearinghouse
 - Explore ways to support traditional BLS data

Federal Employment and Workforce Data Systems: Challenges

- Build federal capacity to assess competitive challenges and create a meaningful economic strategy (with a workforce component)
- Obtain a federal commitment to increase the efficiency of labor markets through funding improved information and data
- Have ETA, Census, NCES, and SEAs join BLS and state LMI agencies on the Workforce Information Council

Federal Employment and Workforce Data Systems: Challenges

- Transform the approach of state LMI agencies
 - from supply-driven BLS production shops
 - to responding to the information needs of labor market participants, including community colleges
 - through providing an array of data products
 - that reflect creative application and analysis of multiple data sources

Federal Employment and Workforce Data Systems: Challenges

- Build a workable LED Job-to-Job Flows tool
- Develop productive, creative ways to integrate postsecondary and workforce data into SLDS
- Continue the SLDS grant program
- Provide adequate funding to allow O*NET to be as current and detailed as possible

Roles for Community Colleges in Addressing Challenges

- Through AACC, advocate for needed federal actions
- Experiment with and provide feedback on new federal data sources
- Become an articulate, active, demanding customer of the state LMI agency
- Support the creation of a useful SLDS, with workforce outcomes

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