

LED: A New Source for Measuring Job Gains and Losses

**Henry Hyatt, Ph. D.
Stephen Tibbets
Jeremy S. Wu, Ph. D.**

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Recession hitting manufacturing workers in particular

Thu, 16 Jul 2009



Blue collar workers are suffering far more from the recession than

Recession hits male workers more

Men are getting laid off at a higher rate than women. One reason may be that male-dominated industries such as construction, manufacturing and financial services have been hardest hit.

often out

"The bloodletting has been in parts of the economy where men work," Grundvig said.

"People losing jobs are increasingly male and increasingly older."

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- <http://tinyurl.com/cltu8h>

MCCLAICHY NEWSPAPERS

WASHINGTON -- Americans have been losing their jobs in droves, yet one group has gained ground in employment during this recession: workers 55 and older.

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- By Leigh Page

Pushed by recession, millions make dramatic job changes

Thousands of high school graduates, laid-off workers and others have been flooding Detroit-area community colleges

Rated Not yet rated

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Major Federal Data Sources on Jobs/Employment

Source	Type	Frequency	Note
Local Employment Dynamics	Integrated Data	Quarterly	QCEW + UI + Admin Records + Censuses + Surveys; no feds yet; beginning of quarter employment; 46 states now; 3 to 4 quarters lag
Current Employment Statistics	Survey	Monthly	~150,000 businesses/government ~390,000 individual worksites
Current Population Survey	Survey	Monthly	~60,000 households
Quarterly Census of Earnings and Wages	Admin Records	Monthly/ Quarterly	~9 million firms; 98% non-farm employment covered under UI, including feds; 12 th day of month employment

How LED Calculates Net Job Gains and Losses

Jobs at Beginning of 2008Q4
minus Jobs at Beginning of 2007Q4

Net Job Gains (or Losses)

Note: This is defined as *year-over-year, annual* net job gains and losses

How LED Calculates Net Job Growth Rate

Net Job Gains (or Losses)

----- x 100%

[Jobs at Beginning of 2008Q4 plus
Jobs at Beginning of 2007Q4]/2

LED Current Scope

LED Partners		51
Regular production	46*	
Experimental production (DC, VI)	2	
Yet to supply data (CT, PR)	2	
Data issues (NC)	1	
Not yet partners (MA, NH)		2

National Partnership **53**

*46 states represent about 92-93% of national employment

LED: Sample Calculations for Net Job Gains/Losses 46 states, Private Sector, 2007Q4 – 2008Q4

$$103,908,614 - 105,857,657 = -1,949,043$$

$$= -1,949,000 \text{ (round to nearest 1,000)}$$

$$\text{Net Job Gains/Losses} = -1,949,000$$

LED: Sample Calculations for Net Job Growth Rate 46 states, Private Sector, 2007Q4 – 2008Q4

$$\frac{(103,908,614 - 105,857,657) * 100\%}{(103,908,614 + 105,857,657) / 2} = \frac{-1,949,043 * 100\%}{104,883,136.5}$$

$$= -1.85829971\%$$

$$= -1.9\% \quad (\text{round to nearest } 0.1\%)$$

Net Job Growth Rate = -1.9%

LED: Net Job Gains and Growth Rate

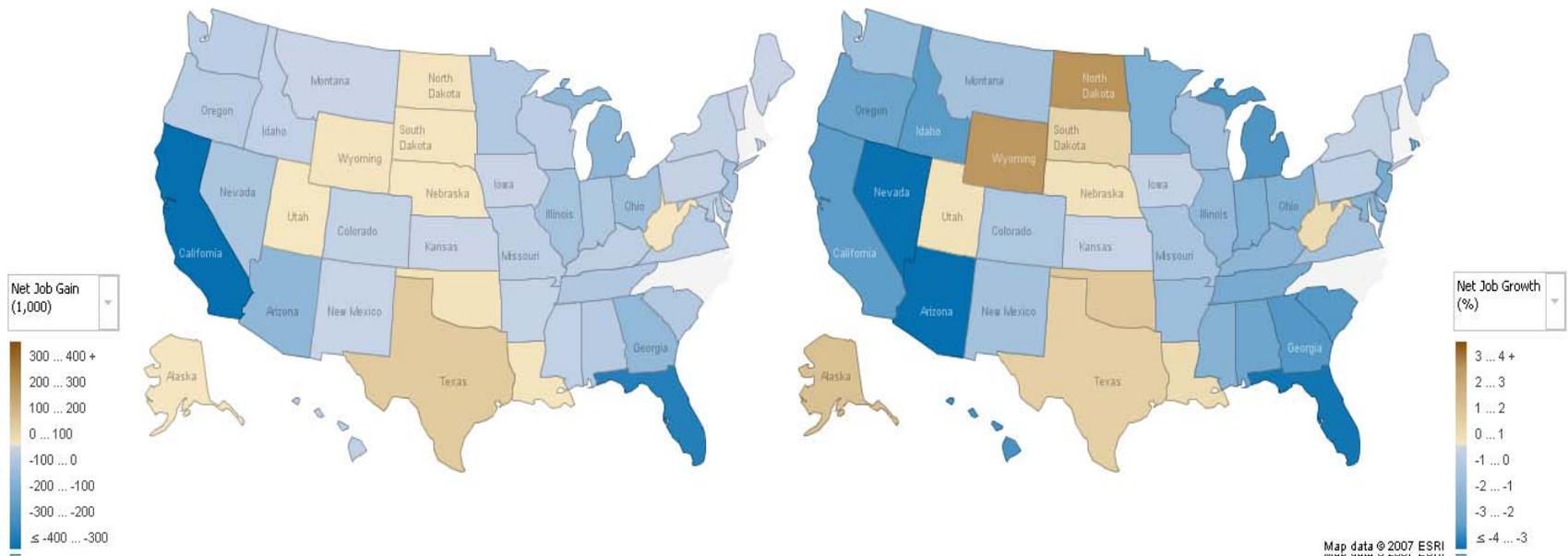
46 states, Private Sector, 2007Q4 – 2008Q4

Net Job Gains/Losses	-1,949,000
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Net Job Growth Rate	-1.9%
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LED: Net Job Gains and Job Growth Rates by State

46 states, Private Industry, All Workers, 2007Q4 vs 2008Q4



LED: Net Job Gains and Growth Rates by Gender

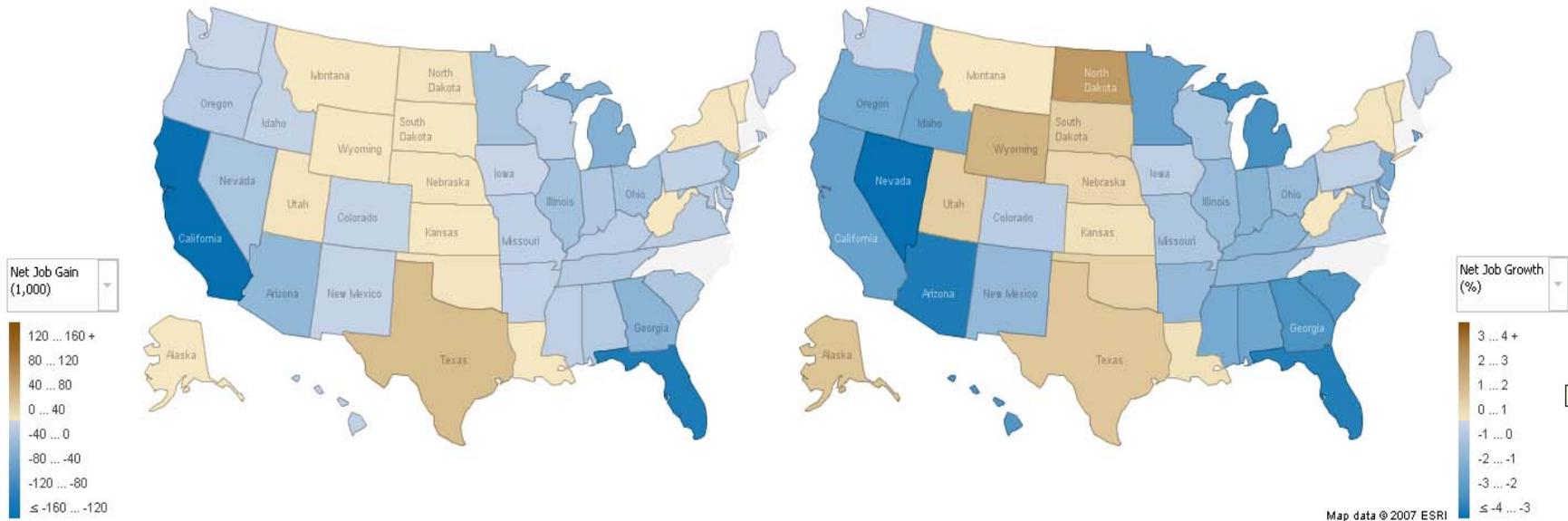
46 states, Private Sector, 2007Q4 – 2008Q4

	Total	Female	Male
Net Job Gains/Losses (1,000)	-1,949	-675	-1,274
Net Job Growth Rates (%)	-1.9%	-1.3%	-2.3%

Total may not agree due to rounding errors

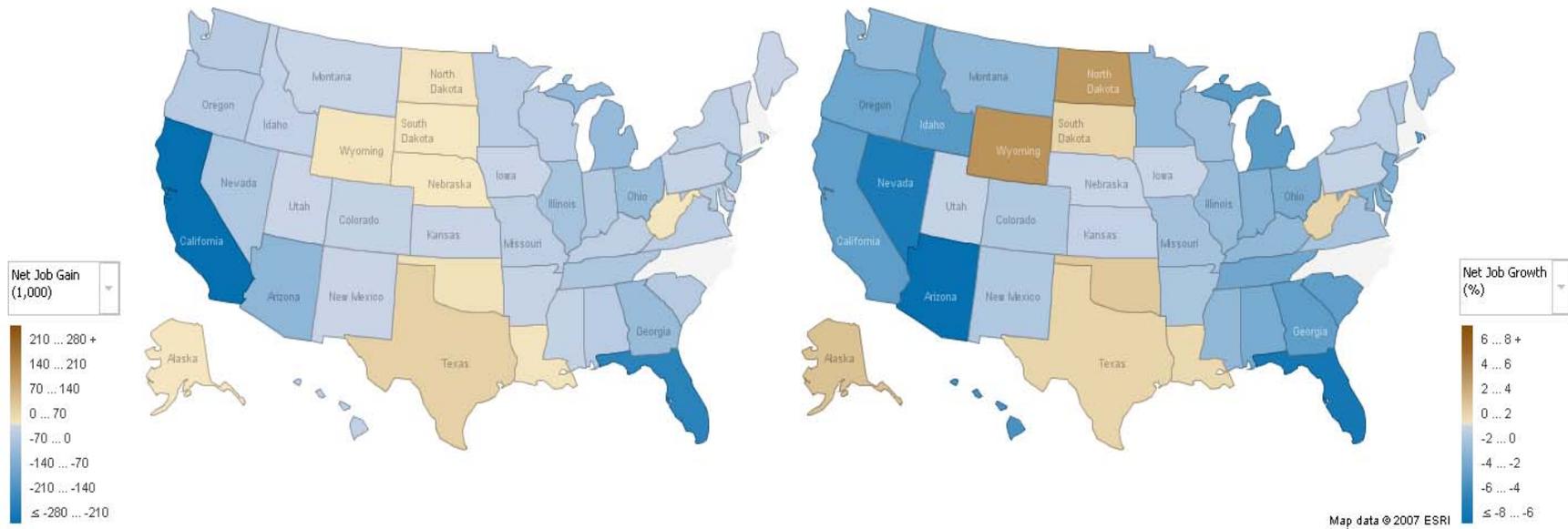
LED: Net Job Gains and Job Growth Rates by State

46 states, Private Industry, Female Workers, 2007Q4 vs 2008Q4



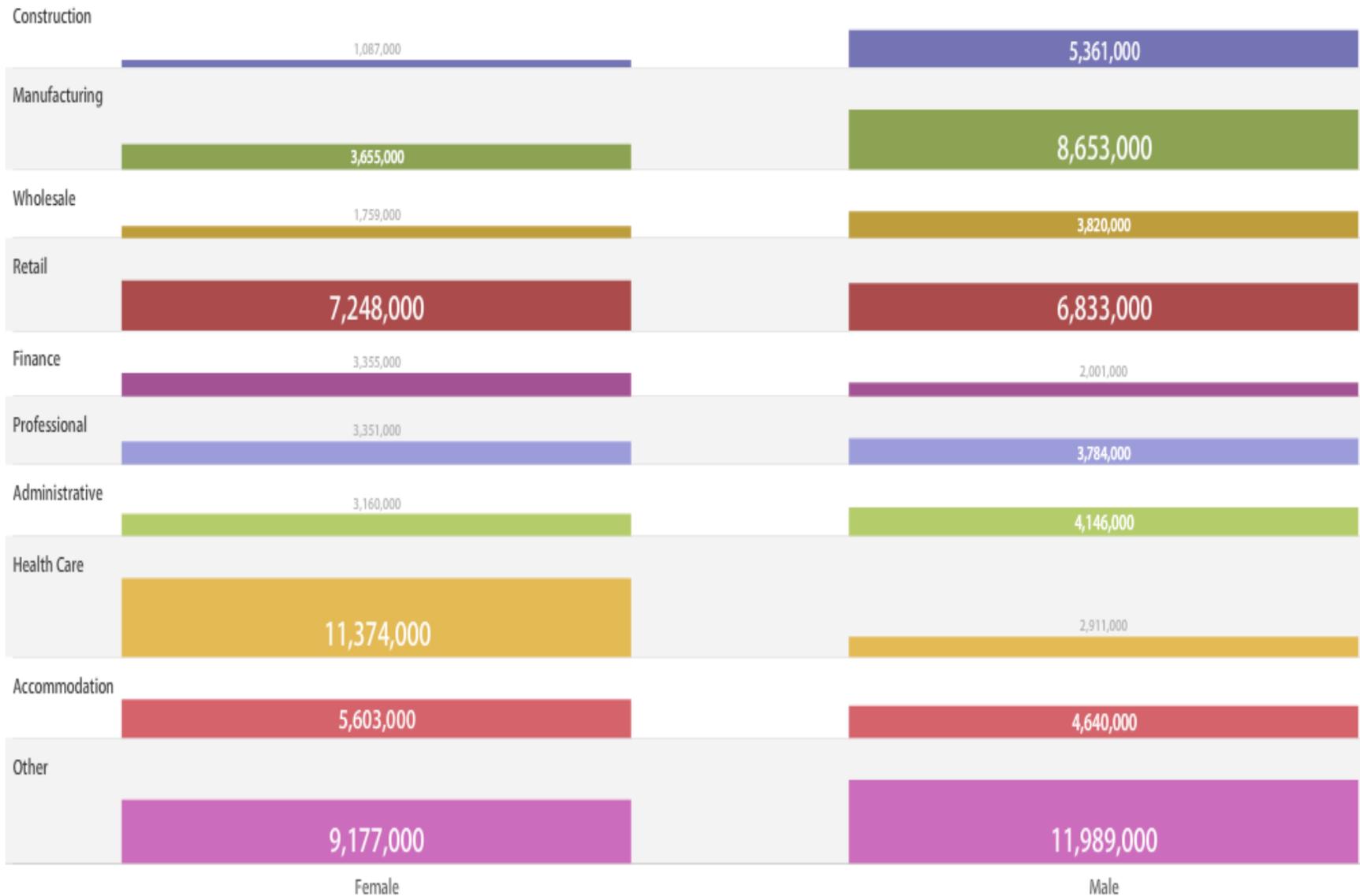
LED: Net Job Gains and Job Growth Rates by State

46 states, Private Industry, Male Workers, 2007Q4 vs 2008Q4



LED: Distribution of Workers by Gender/Industry

46 states, Private Sector, Beginning of 2008Q4



LED: Net Job Gains and Losses by Selected Industries/Gender

46 states, Private Sector, 2007Q4 – 2008Q4

	Total	Female	Male
Net Job Gains/Losses (1,000)	-1,949	-675	-1,274
23 Construction	-519	-109	-409
31-33 Manufacturing	-495	-179	-315
42 Wholesale Trade	-90	-31	-59
44-45 Retail Trade	-351	-152	-199
52 Finance and Insurance	-177	-114	-63
54 Professional, Scientific, and	+86	+41	+45
56 Administrative and support and...	-668	-314	-354
62 Health Care and Social Assist.	+313	+230	+83
72 Accommod. and Food Services	-118	-86	-32

Total may not agree due to rounding errors

LED: Net Job Growth Rates by Selected Industries/Gender

46 states, Private Sector, 2007Q4 – 2008Q4

	Total	Female	Male
Net Job Growth Rate (%)	-1.9%	-1.3%	-2.3%
23 Construction	-7.7%	-9.6%	-7.4%
31-33 Manufacturing	-3.9%	-4.8%	-3.6%
42 Wholesale Trade	-1.6%	-1.7%	-1.5%
44-45 Retail Trade	-2.5%	-2.1%	-2.9%
52 Finance and Insurance	-3.3%	-3.3%	-3.1%
54 Professional, Scientific, and Tech.	+1.2%	+1.2%	+1.2%
56 Administrative and support and...	-8.7%	-9.5%	-8.2%
62 Health Care and Social Assist.	+2.2%	+2.0%	+2.9%
72 Accommod. and Food Services	-1.1%	-1.5%	-0.7%

LED: Net Job Gains and Losses by Age/Gender

46 states, Private Sector, 2007Q4 – 2008Q4

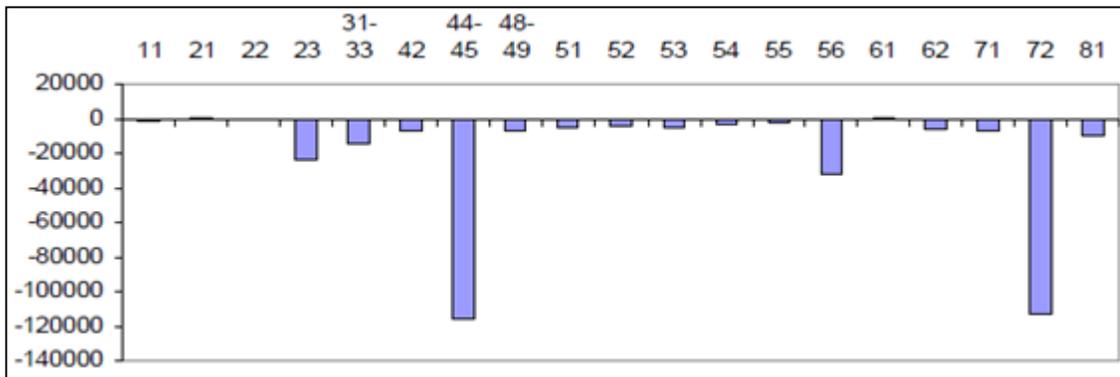
	Total	Female	Male
Net Job Gains/Losses (1,000)	-1,949	-675	-1,274
Age 14-18	-449	-228	-221
Age 19-21	-313	-132	-180
Age 22-24	-260	-108	-153
Age 25-34	-372	-107	-264
Age 35-44	-921	-363	-558
Age 45-54	-132	-19	-113
Age 55-64	+367	+211	+155
Age 65-99	+132	+71	+61

Total may not agree due to rounding errors

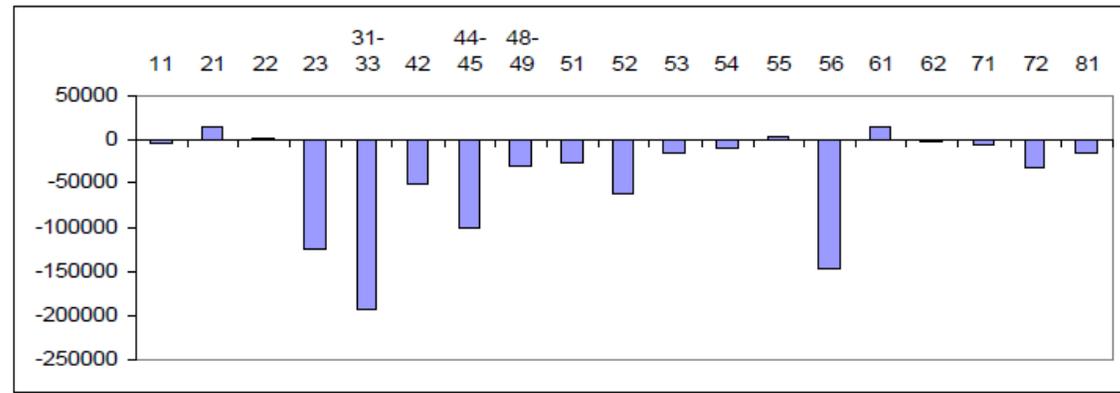
LED: Net Job Growth Rates by Age/Gender

46 states, Private Sector, 2007Q4 – 2008Q4

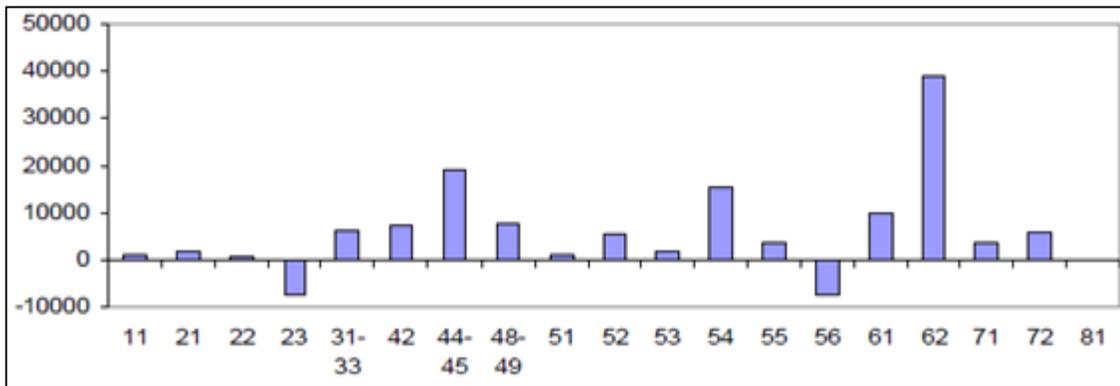
	Total	Female	Male
Net Job Growth Rates (%)	-1.9%	-1.3%	-2.3%
Age 14-18	-12.4%	-11.8%	-13.1%
Age 19-21	-5.1%	-4.2%	-6.1%
Age 22-24	-3.6%	-3.0%	-4.3%
Age 25-34	-1.6%	-1.0%	-2.2%
Age 35-44	-3.9%	-3.3%	-4.4%
Age 45-54	-0.6%	-0.2%	-0.9%
Age 55-64	+2.7%	+3.3%	2.2%
Age 65-99	+3.3%	+3.9%	2.8%



Age 14-18 Job Losses
 44-45 Retail Trade
 72 Accommodation and food services



Age 35-44 Job Losses
 31-33 Manufacturing
 56 Admin and Support ...
 23 Construction
 44-45 Retail Trade
 52 Finance and Insurance



Age 64-99 Job Gains
 62 Health Care
 44-45 Retail Trade
 54 Professional, Scientific & Technical

Quarterly Workforce Indicators (QWI)

- 30 QWIs produced routinely every quarter by combinations of
 - **Worker Demographics**
 - Gender, Age Groups
 - **Industry**
 - 2-digit, 3-digit and 4-digit NAICS
 - **Geography**
 - State, County, Workforce Investment Areas

Quarterly Workforce Indicators (QWI)

- Among the 30 QWIs:
 - ***Beginning of Quarter Employment***
 - Employed in Reference and Previous Quarters
 - ***Full Quarter Employment***
 - Employed in Reference, Previous and Subsequent Quarters

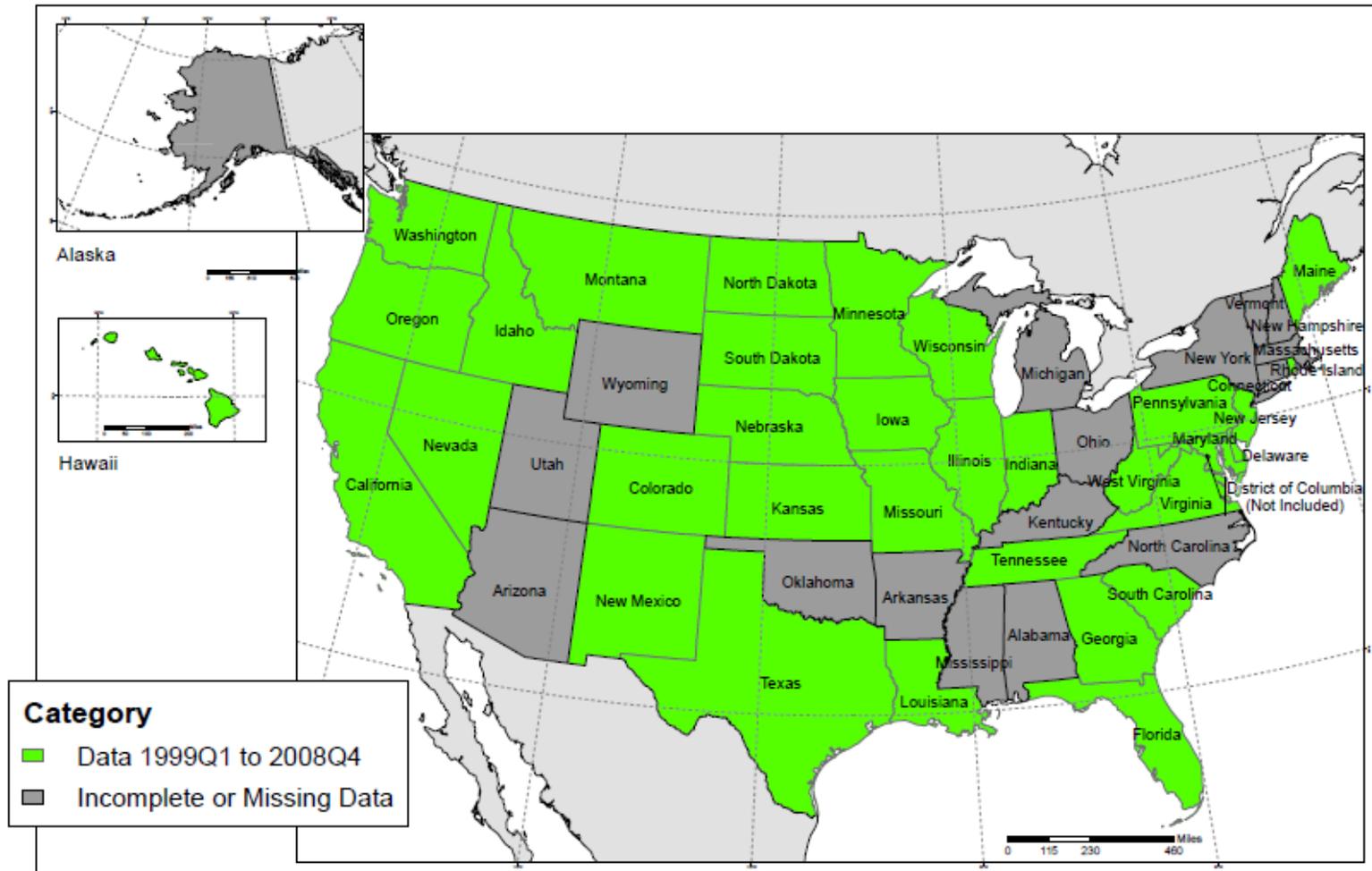
Note: Gross Job Creation, New Hires and Separations are available on a quarterly basis

Sample: Measuring Business-Cycle Employment Dynamics

- Data: 33 States (70% of US Jobs)
 - Continuous reporting 1999Q1-2008Q4
 - Beginning-of-Quarter Employment and Full-Quarter Employment
 - Net Job Growth Rate

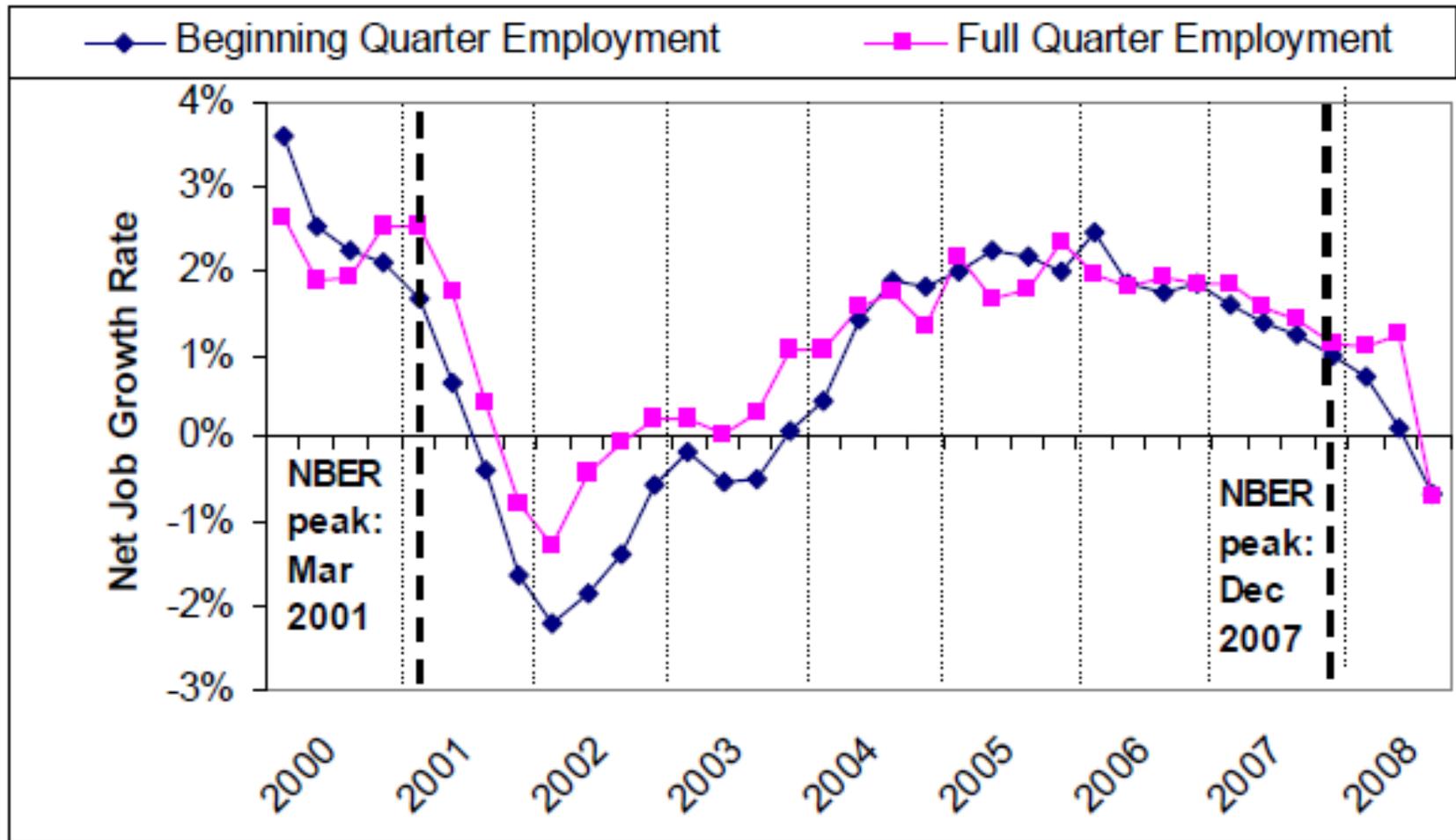
$$\frac{\text{Employment (T)} - \text{Employment (T-4)}}{[\text{Employment (T)} + \text{Employment (T-4)}]/2} \times 100\%$$

Sample: Measuring Business-Cycle Employment Dynamics



Net Job Gains and Losses

(33 states), Private Sector, 2000Q1 – 2008Q3



Note: Percent changes are calculated according to $(E_t - E_{t-4}) / ((E_t + E_{t-4}) / 2)$

Access to LED

<http://www.census.gov>

The screenshot displays the U.S. Census Bureau website interface. At the top left, the U.S. Census Bureau logo is visible. The top right corner contains links for 'FAQs', 'Subjects A to Z', 'Help', and a search bar. A left-hand navigation menu lists various site sections such as 'Income, Poverty & Health Insurance Coverage', 'New on the Site', 'Data Tools', 'American FactFinder', 'Jobs@Census', 'Catalog', 'Publications', 'Are You in a Survey?', 'About the Bureau', 'Regional Offices', 'Doing Business with Us', and 'Related Sites'. The main content area is organized into several categories: 'United States Census 2010' (with links for 2010 Census, News, American Community Survey, and Census 2000), 'People & Households' (with links for Estimates, Projections, Housing, Income, State Median Income, Poverty, Health Insurance, International, Genealogy, and More), 'Business & Industry' (with links for Economic Census, Get Help with Your Form, Economic Indicators, NAICS, Survey of Business Owners, Government, E-Stats, Foreign Trade, Export Codes, Local Employment Dynamics, and More), 'Geography' (with links for Maps, TIGER, Gazetteer, and More), 'Newsroom' (with links for Releases, Facts For Features, Minority Links, Broadcast & Photo Services, Embargo/News Release Subscription, and More), and 'Special Topics' (with links for Phishing & Email Scams, Census Bureau Data and Emergency Preparedness, Events Calendar, Training, For Teachers & Students, Statistical Abstract, FedStats, USA.gov, and Recovery Act at the Census Bureau). On the right side, the 'Data Finders' section is prominent, featuring 'Population Clocks' with the U.S. population of 307,312,472 and the world population of 6,780,931,393. Below this is a 'Population Finder' tool with input fields for city/town/county/zip, state, and a 'GO' button. Further down is a 'Find An Area Profile with QuickFacts' tool with a state selection dropdown. The 'Latest Economic Indicators' section lists 'New Home Sales' and 'Advance Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders'. At the bottom of the page, the U.S. Census Bureau logo and tagline 'Helping You Make Informed Decisions' are on the left, and links for 'Accessibility', 'Information Quality', 'FOIA', 'Data Protection & Privacy Policy', and 'U.S. Dept of Com' are on the right.

LED: Access to Data

http://lehd.did.census.gov

U.S. Census Bureau
Longitudinal Employer-Household Dynamics

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WHAT'S NEW?

► 07/28/09: [OnTheMap Version 3.4 Released](#)
 ► 05/28/09: [OnTheMap Version 3.3.1 Released](#)
 ► 05/08/09: [OnTheMap™ Version 3.3 Released](#)
 ► 05/08/09: [Server Maintenance - May 10, 8AM-Noon EDT](#)
 ► 04/29/09: [Ohio QWI Data on LED Website](#) [\[more...\]](#)

[2009 Workshop Agenda and Presentations](#)
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Net Job Gains and Losses/Net Job Growth Rates

Data Source: [QWI Online](#), Local Employment Dynamics
 Time Period: 2007Q4 to 2008Q4
 Indicator: Beginning of Quarter Employment, Private Industries Only
 Scope: 46 states; CT, DC, MA, NC, and NH not present
[Methodology](#) (PDF, ??KB); * Total may not agree due to rounding
[Net Job Gains and Losses](#) | [Net Job Growth Rates](#)

Private Sector Only	Total	Female	Male
All Industries/Ages (PDF, 300KB)	-1,949,000	-675,000	-1,274,000
Agriculture... (PDF, 132KB)	-17,000	-7,000	-10,000
Agriculture...			
Age 14-18 (PDF, 128KB)	-449,000	-228,000	-221,000
Age 14-18			

Data File Download

All industries by Worker Gender - [CSV](#), [Excel](#) (XLS, 288KB)
 Industry Sector by Worker Gender - [CSV](#), [Excel](#) (XLS, 40KB)
 Age Group by Worker Gender - [CSV](#), [Excel](#) (XLS144KB)

Q&A

► [What is LEHD?](#)
 ► [What is LED?](#)
 ► [What is the difference between LEHD and LED?](#)
 ► [What are the QWI?](#) [\[more...\]](#)

DID YOU KNOW?

Private Sector Total Employment in South Carolina

	2007Q2	2008Q3	Change
All	758,259	743,035	-2.0%
Female	758,259	743,035	-2.0%
Male	823,006	806,086	-2.1%
Professional Services...			
Female	35,186	36,523	+3.8%
Male	36,262	38,011	+4.8%

[Next](#)

For more details or local results, visit [QWI Online](#).
 U.S. Census Bureau, Local Employment Dynamics,
 09/09/2009, 16:45:53 pm

LED: Ongoing and Future Plans

- Add data elements
 - race/ethnicity; education; firm age, size, and structure; occupation
- Add data sources
 - Federal workers; self-employed
- Enhance methodology/structure
 - Synchronize QWI with OnTheMap; state-based to national infrastructure
- Build new data and products
 - Job-to-job flow statistics; national indicators; web-based tools

Contact Us

Comments/Suggestions

CES.local.employment.dynamics@census.gov

Local Employment Dynamics

<http://lehd.did.census.gov>

Join the Listservs

Lehd-qwi@lists.census.gov

Lehd-onthemap@lists.census.gov

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