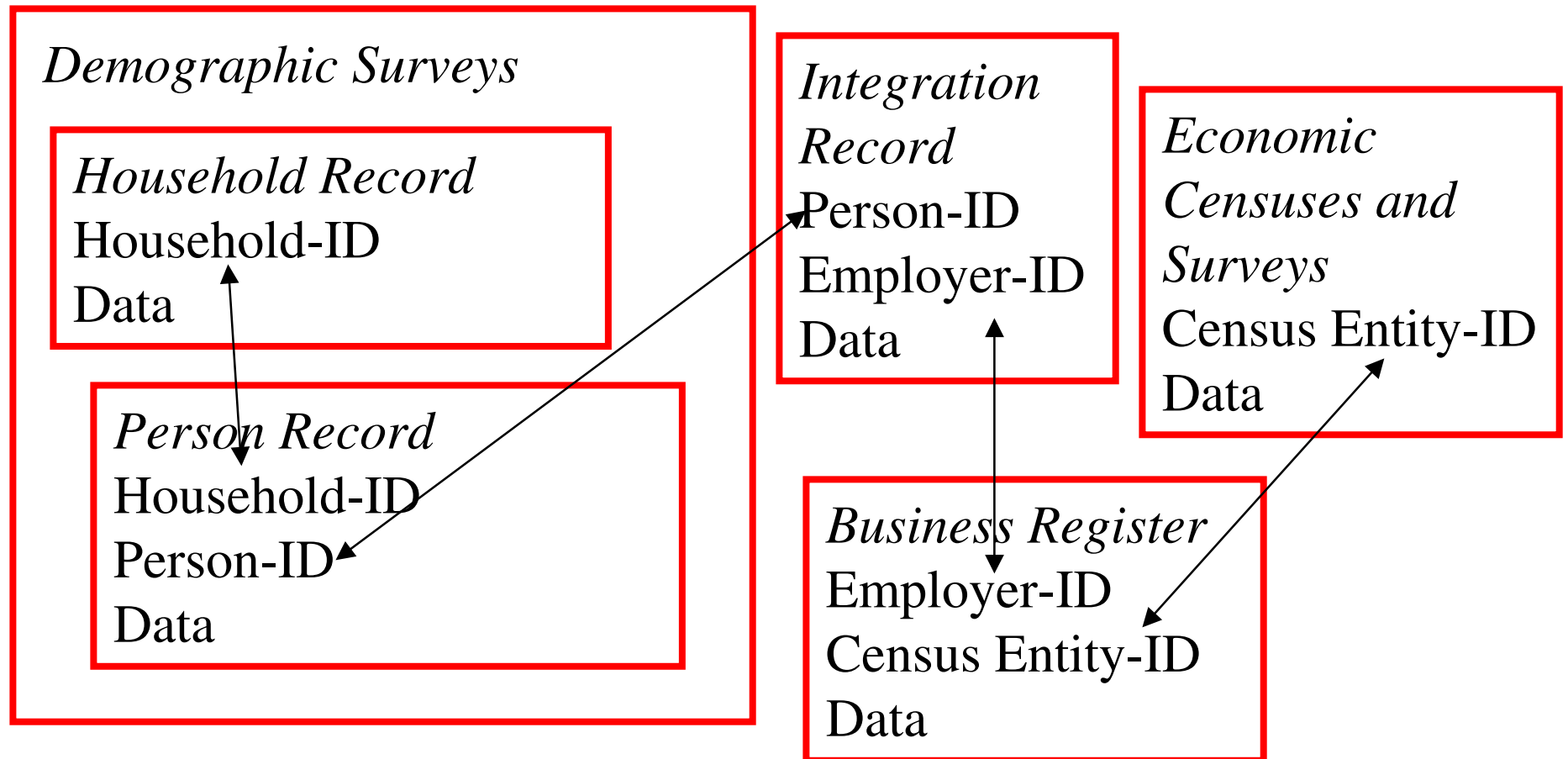# Measuring Worker and Job Flows Using the LEHD Data (and how to obtain access)

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Overview

- λ LEHD (Longitudinal Employer Household Dynamics Project)
  - λ Data infrastructure
  - λ Basic facts on worker and job flows
- λ What's Available
  - λ Public Domain datasets on worker and job flows
  - λ Micro integrated datasets on employers and employees via the Census RDC network
  - λ Simulated micro data based upon actual multivariate joint distribution
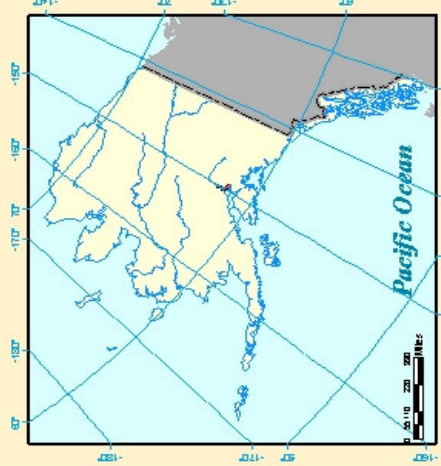
The Longitudinal Employer - Household Dynamics Program

Demographic Surveys

Household Record
Household-ID
Data

Person Record
Household-ID
Person-ID
Data

Integration Record
Person-ID
Employer-ID
Data

Economic Censuses and Surveys
Census Entity-ID
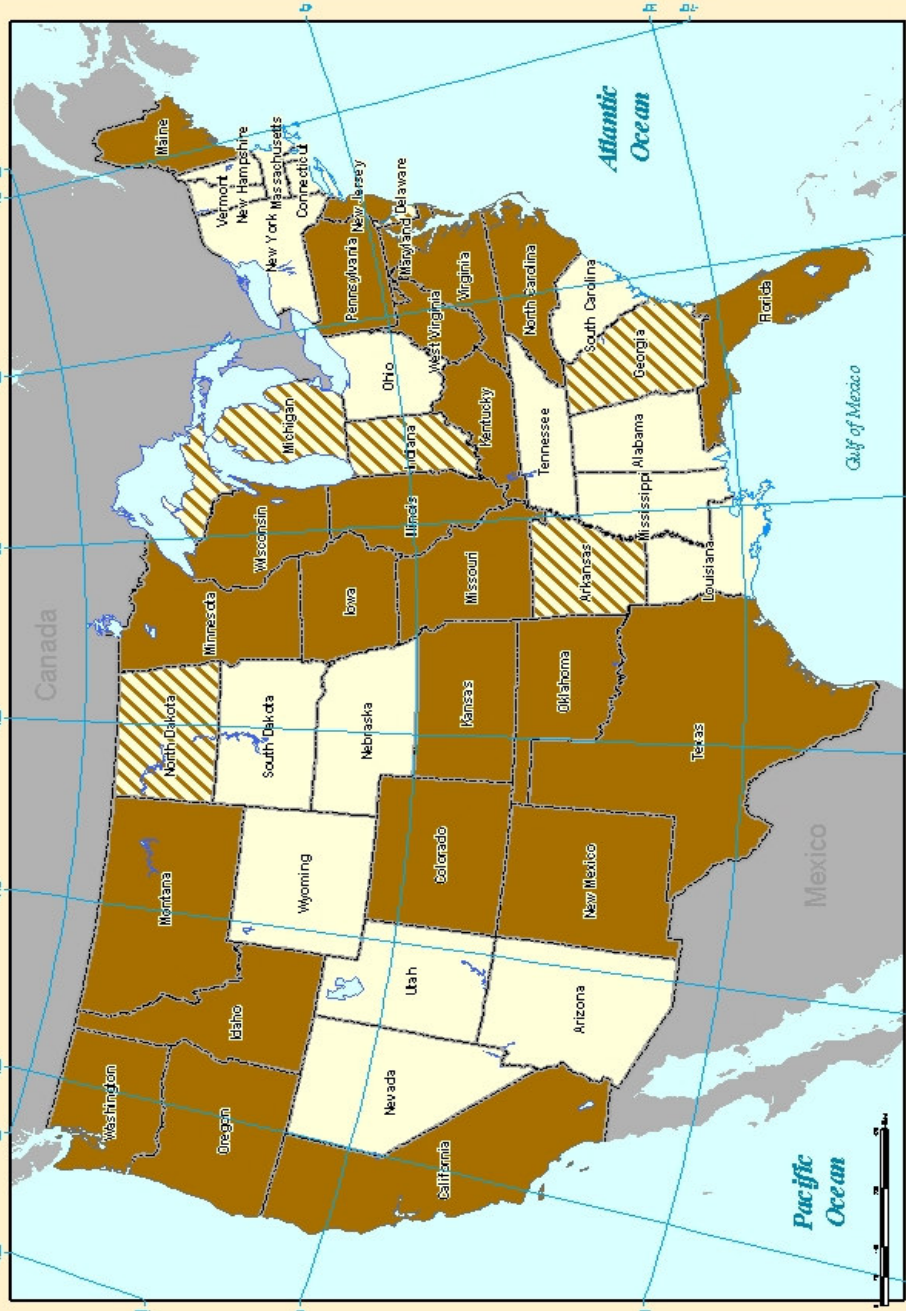Data

Business Register
Employer-ID
Census Entity-ID
Data

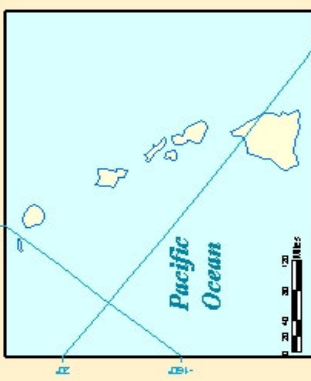# Confidentiality Protections

λ Anonymized data

λ Approved Projects only

λ Statistical Purposes only

λ Title 13 ($250,000 fine/5 years in jail if confidentiality breached)

λ Disclosure review

λ Firewall within firewall within firewall protection

LED Partner States

States in Production

States Pending Production

Alaska

Hawaii

Atlantic Ocean

Pacific Ocean

Canada

Mexico

Gulf of Mexico

Maine
Vermont
New Hampshire
New York
Massachusetts
Connecticut
New Jersey
Pennsylvania
Maryland
Delaware
West Virginia
Virginia
Ohio
Kentucky
North Carolina
South Carolina
Georgia
Florida
Michigan
Indiana
Tennessee
Alabama
Mississippi
Illinois
Wisconsin
Iowa
Missouri
Arkansas
Louisiana
Minnesota
North Dakota
South Dakota
Nebraska
Kansas
Oklahoma
Texas
Montana
Wyoming
Colorado
New Mexico
Idaho
Utah
Arizona
Washington
Oregon
Nevada
California

Data Elements: Individual

Longitudinal Employer-Household Dynamics Program File Structure		
Data type/variable	*Source*	*Method*
Individual (permanent)		
Confidentiality protection	Census internal files	Exact match
Sex	Census Numident	Exact match
Race	Census Numident	Exact match
Place of birth	Census Numident	Exact match
Date of birth	Census Numident	Exact match
Education	Decennial Census	Statistical match
Occupation	Decennial Census	Statistical match
CPS characteristics	CPS	Exact match
SIPP characteristics	SIPP	Exact match
ACS characteristics	ACS	Statistical match

Data Elements: Job

Job (quarterly)		
Confidentiality protection	Census internal files	Exact match
Earnings	UI wage records	Exact match
Employment status	UI wage records	Exact match
Employment history	UI wage records	Exact match
Full time status	CPS	Statistical match
Annualized wage rate	Linked LEHD files	Computed
Wage profile properties	Linked LEHD files	Computed

Data Elements: Employer

Employer (monthly)		
Employment	ES 202 program	Exact match
Employer (quarterly)		
Payroll	ES 202 program	Exact match
Industry	ES 202 program	Exact match
County	ES 202 program	Exact match
Wage profile properties	Linked LEHD files	Computed
Employee demographics	Linked LEHD files	Computed
Demographic job flows	Linked LEHD files	Computed
Demographic worker flows	Linked LEHD files	Computed

Data Elements: Employer II

Employer (annual)		
Sales	Business Register	Exact
Industry	Census + Business Reg	Exact
Wage profile properties	Linked LEHD files	Computed
Employer (quinquennial)		
Sales	Economic census	Exact
Employment	Economic census	Exact
Industry-specific detail	Economic census	Exact
Employer (intermittent)		
Technology measures	Business Expenditure	Exact

QWI

- λ   Primary initial public domain data are QWI (Quarterly Workforce Indicators)
- λ   Can be downloaded from:
  - λ   http://lehd.dsd.census.gov
- λ   Worker and Job Flows:
  - λ   Quarterly
  - λ   Industry
  - λ   County
  - λ   Demographics
  - λ   All files available on a state-by-state basis
- λ   Job flows are constructed at establishment level, worker flows at person-level that can be aggregated to establishment level.
  - λ   Job flows are point-in-time (end-of-quarter)
  - λ   Worker flows can be measured as all flows, consecutive quarter or full quarter workers
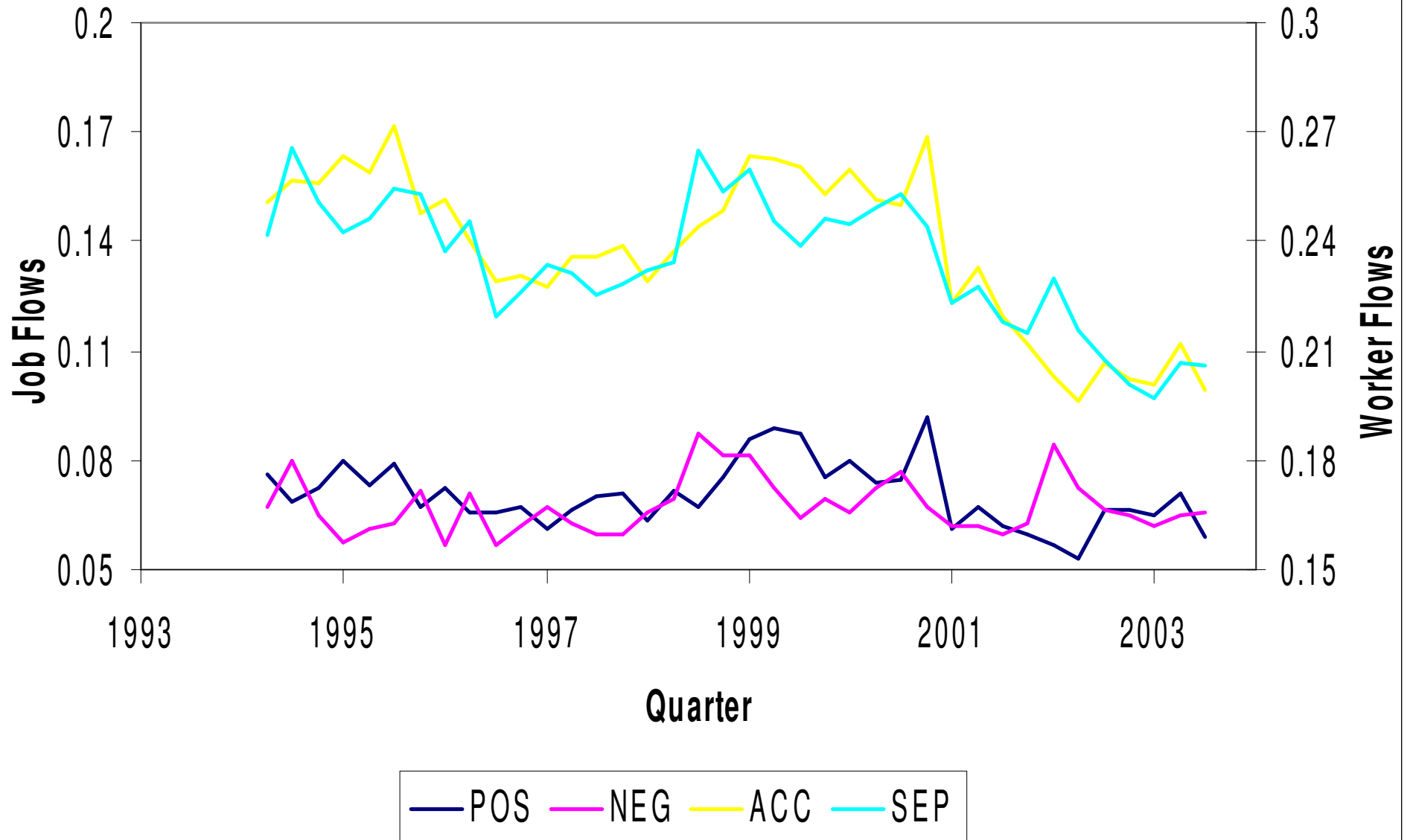 - λ   See http://www.lehd-test.net/documents/pdf/tp-2002-05-rev1.pdf for details of measurement

QWI Quick Facts	Information (Q2)	Information (Avg:previous 4 quarters)	All Naics sectors (Q2)	All Naics sectors (Avg:previous 4 quarters)
Total Employment	37,743	38,747	1,397,098	1,421,993
Net Job Flows	-586	-621	-15,285	-10,067
Job Creation	1,106	1,038	74,821	69,110
New Hires	2,313	2,318	152,951	155,721
Separations	3,335	3,430	211,792	201,965
Turnover	9.1%	7.1%	8.5%	8.0%
Avg Monthly Earnings	$4,846.00	$4,976.25	$3,882.00	$3,961.25
Avg New Hire Earnings	$4,730.00	$4,536.25	$3,234.00	$2,930.75

Worker and Job Flows (LEHD, Pooled 3 states,SA)

Establishment-level correlations					
	POS	NEG	ACC	SEP	NET
POS	1				
NEG	**-0.13**	1			
ACC	**0.15**	**0.02**	1		
SEP	**0.01**	**0.15**	**0.98**	1	
NET	**0.76**	**-0.75**	**0.09**	**-0.09**	1

Note: Based upon approximately 20 million establishment-quarter observations for 3 states, 1990:2-2003:2. Correlations in bold are statistically significant at 0.001.

Other Basic Facts:
1. Conditional on ACC>0, Mean(POS/ACC)=0.35
2. Conditional on SEP>0, Mean(NEG/SEP)=0.34
3. Fraction of observations with simultaneous ACC and SEP=0.41

LEHD micro data availability

λ Proposals can be written NOW for access to LEHD-lite (establishment-level statistics) from LEHD integrated data

    λ Go to http://www.ces.census.gov/ces.php/home

    λ Follow links to data and LEHD data:

        λ **LEHD Business Register Bridge**
          (LEHD-BRB)

        λ **LEHD Employer Characteristics File**
          (LEHD-ECF)

        λ **LEHD Employer Human Capital File**
          (LEHD-HCF)

        λ **LEHD Employer Quarterly Workforce Indicators**
          (LEHD-QWI)