

Longitudinal Employer- Household Dynamics (LEHD) Program

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“LEHD ... is the next generation
of data collection and dissemination
for the Census Bureau.”

Charles Louis Kincannon
Director
U.S. Census Bureau

Before the House Subcommittee on Federalism and the Census
May 10, 2005

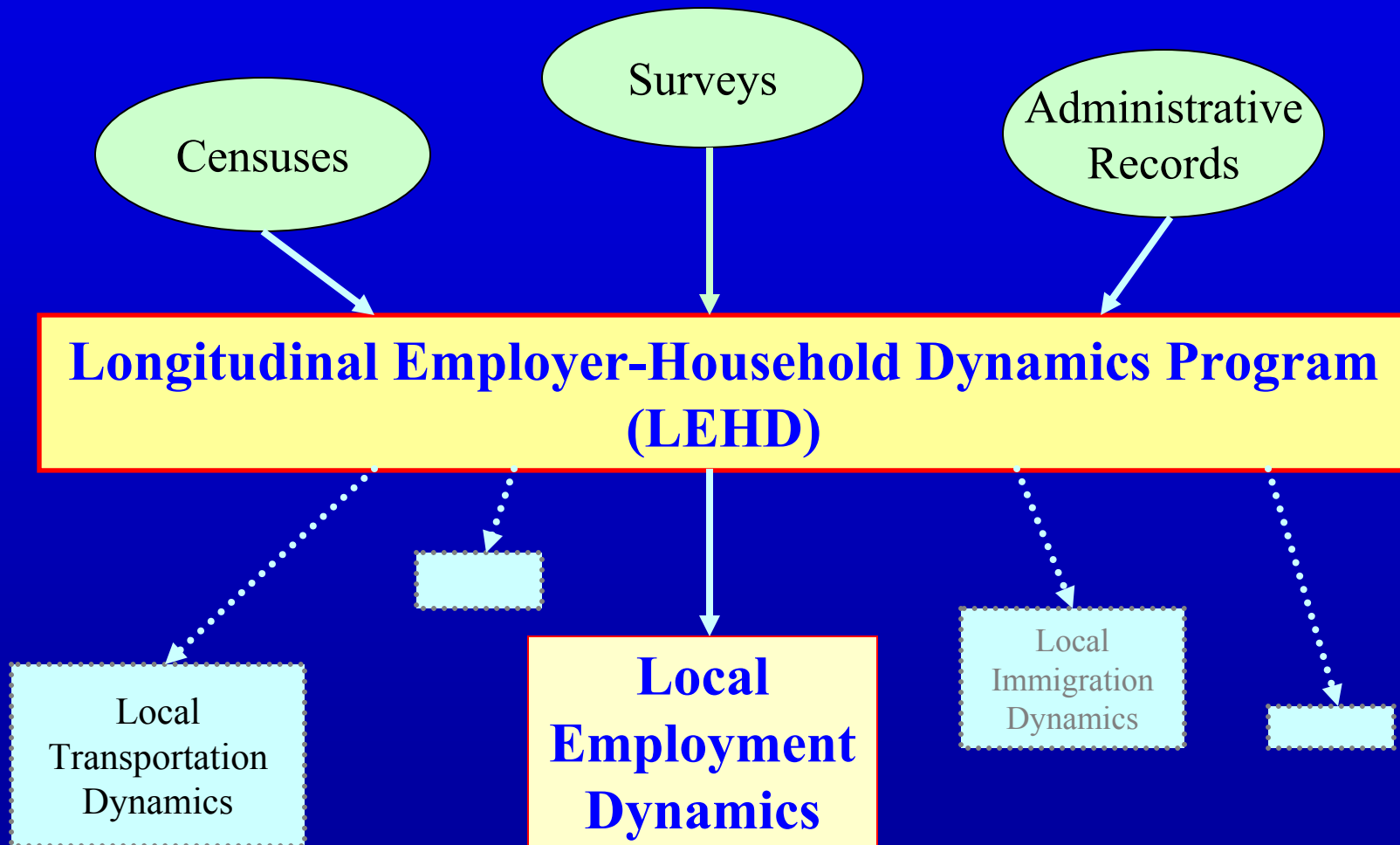
Overview

- ✓ Background
- ✓ The LEHD concept
- ✓ Where we are
 - ✓ Mapping pilot
- ✓ What LEHD offers
- ✓ How LEHD may supplement ACS

Background

- Started in 1998-1999
- Research project to maximize data availability while protecting confidentiality
- Seed funding from
 - National Science, Sloan, and other Foundations
 - the Census Bureau
 - BLS, BTS, ETA, HHS, NIA, SSA, and others

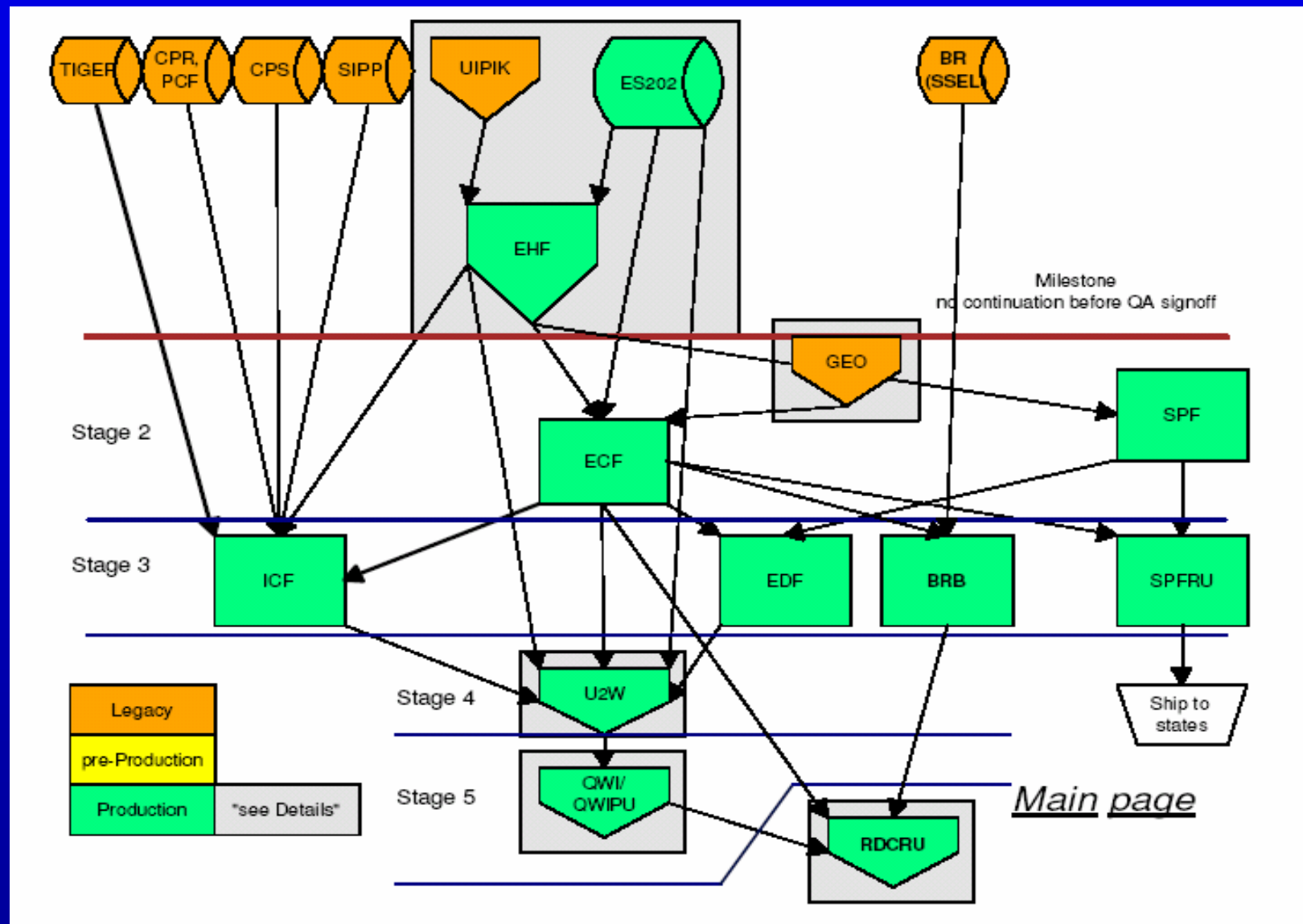
The LEHD Concept



Local Employment Dynamics (LED)

- ✓ A voluntary partnership between state Labor Market Information agencies and the Census Bureau
- ✓ States supply quarterly
 - ✓ unemployment insurance wage records
 - ✓ ES-202 business establishment records
- ✓ The Census Bureau merges quarterly
 - ✓ the records with other data to produce Quarterly Workforce Indicators (QWI)

QWI Production Flowchart



Status of LED

- ✓ 38 states and DC are partners, about 83% of population
- ✓ 32 states sending in data for processing, about 71% of population
- ✓ 27 states have data posted on the website, almost 63% of population

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LEHD Website

U.S. Census Bureau

Longitudinal Employer-Household Dynamics

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Local Employment Dynamics

Data Tools

Research

Library

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Site Map

Feedback

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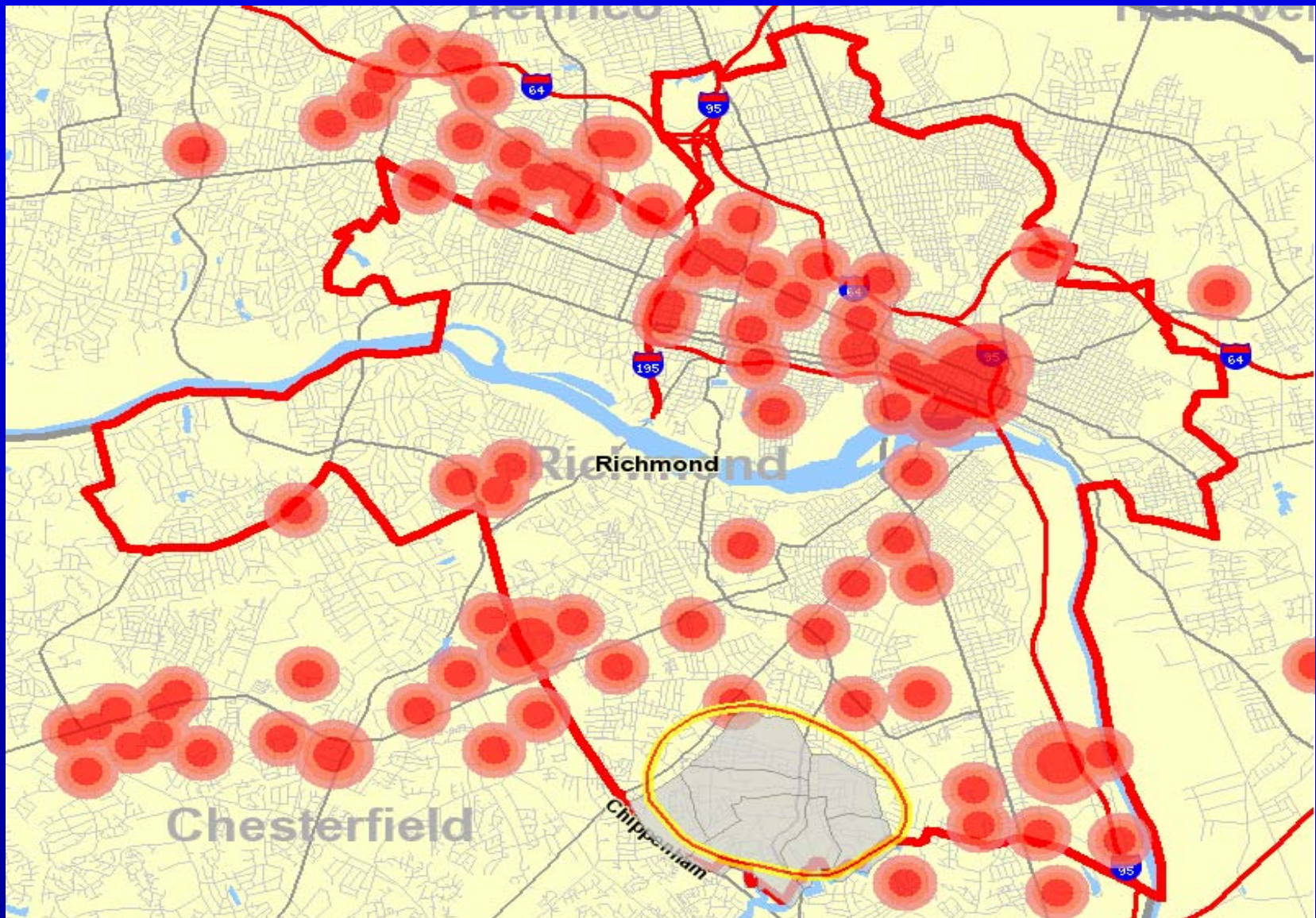
Search

QUICK LINKS	WHAT'S NEW?	Q&A
<ul style="list-style-type: none"> Satisfaction Survey QWI Online On The Map Local Workforce Top Industries 	<ul style="list-style-type: none"> 04/14/05: Customer Satisfaction Survey: LED Web Site 03/28/05: New State Representatives on LED Steering Committee 03/08/05: Alabama QWI Data on LED Website 02/18/05: Vermont QWI Data on LED Website 02/18/05: Profile of Older Workers In Colorado Released <div>[more...]</div>	<ul style="list-style-type: none"> What is LEHD? What is LED? What are the QWI? <div>[more...]</div>
<div> <div>Local Employment Dynamics</div> <div> Confidentiality, State Partners, Partnership, Workshops and Training, Partners Only </div> </div> <div> <div>Data Tools</div> <div> QWI Online, On the Map, Local Workforce, Top Industries </div> </div> <div> <div>Research</div> <div> Research Data Center, Confidentiality Research, Low Wage Work, Human Capital & Productivity, Transportation, Aging & Pension Benefits </div> </div>	<div> <div>Library</div> <div> Profiles, Workshops, Training, Technical Papers, Presentations, Newsletters, Archives </div> </div> <div> <div>About Us</div> <div> Mission, Staff, Contact, Directions </div> </div>	<div>DID YOU KNOW?</div> <div> <p>...that of the industries in Virginia that employed more than 500 workers 65 years and older in 2002, the highest paying was engineering, accounting, and research (\$4,820 a month)?</p> </div>

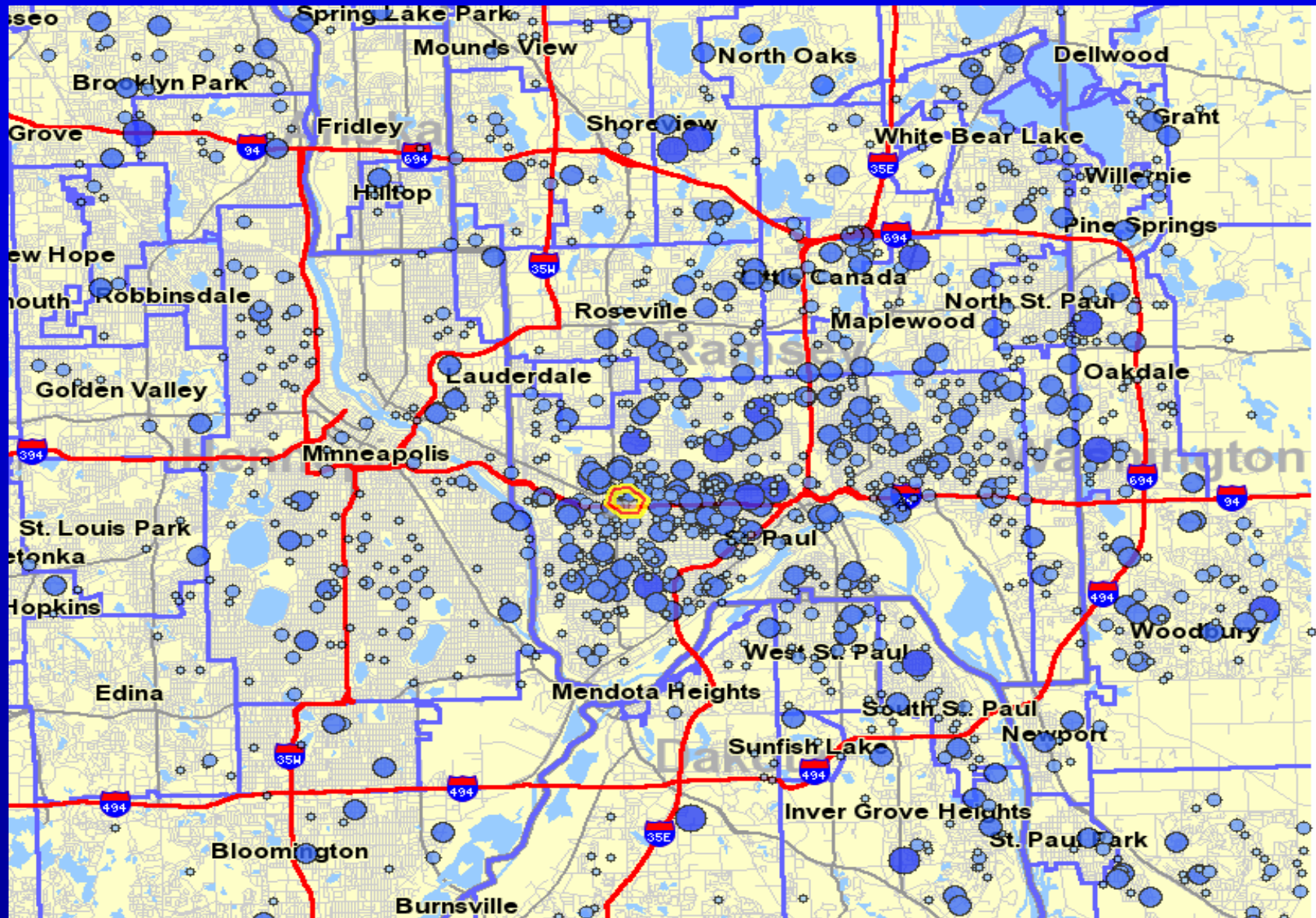
Mapping Pilot

- Funded by ETA
 - Create data infrastructure
 - Develop online application
- 12+2 pilot states
 - CA, CO, FL, ID, IL, MN, MO, NC, OR, PA, WA, VA
 - AL, TX
- Live demonstration of prototype by John Carpenter – poster session

Where do workers living in S. Richmond, VA, go to work?



Where do workers working between Minneapolis/St Paul live?



Some Additional Features

- Multiple, optional mapping layers
- Companion reports on places of work and residence
- Potential selection criteria on age, gender, earnings, industry
- Longitudinal data to show trends and patterns of worker migration and regional or business growth

What LEHD Offers

- Proven concept with track record on LED
- Potential supplier of new, timely, and low cost data for transportation planning and analysis
- Dynamics of trends and patterns
- Demographic info on age and gender
- Research to integrate with transportation-related administrative records and surveys

Small Area Estimation

- ✓ Covers private, non-agricultural workers under unemployment insurance in small and large areas
- ✓ Includes about 98% of private, non-ag workers
- ✓ Alleviates concern about small sample size or large sampling errors
 - ✓ Session 6 - R. Eash
- ✓ Is available as frequently as quarterly

State-of-the-art Confidentiality Protection

- ✓ Noise addition and synthetic data
 - ✓ Session 6 – D. Banks and J. Reiter
- ✓ Identity concealed
- ✓ Only approved projects
- ✓ Title 13 legislation (fine and prison if breached)
- ✓ Approved disclosure avoidance
- ✓ Data stay in secure computer centers

How LEHD May Supplement ACS

- ✓ More detail presentation
 - ✓ Session 8 – J. Wu and M. Roemer
- ✓ Geo-coding of addresses
- ✓ Integrating and refining data to meet requirements for transportation planning, research, and development
- ✓ Filling temporal and information gaps, such as for small areas and multiple job holders

Comparing Long Form, ACS, and LEHD

	Long Form (CTTP)	ACS	LEHD
Frame	HHs & GQs	HHs & GQs	UI Workers/Firms
Sample rate	~ 1 in 6 Per year	~ 1 in 8 Over 5 years	~ 1 in 1 4 times a year
Release Frequency	Decennial	Annual	Quarterly
Coverage	Nationwide	Nationwide	39 states ↑
Reference Period	Week	Week	Quarter
Availability	No	Yes	Yes

Supplementing ACS

Merge
multiple data
“snapshots”
into
information
“movies”
about the
U.S. society
and economy



LED Contact Information

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