

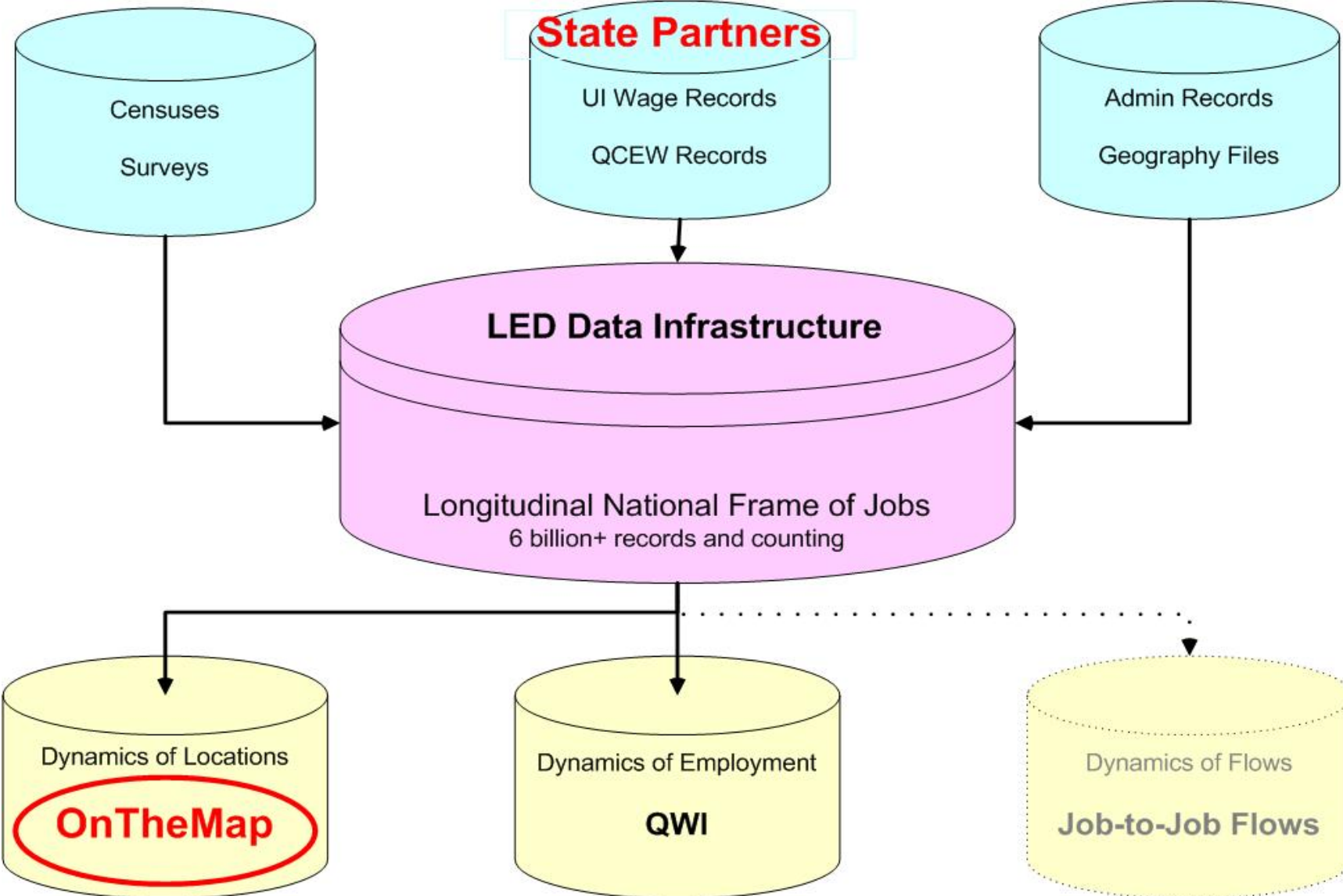
# **Local Employment Dynamics (LED)**

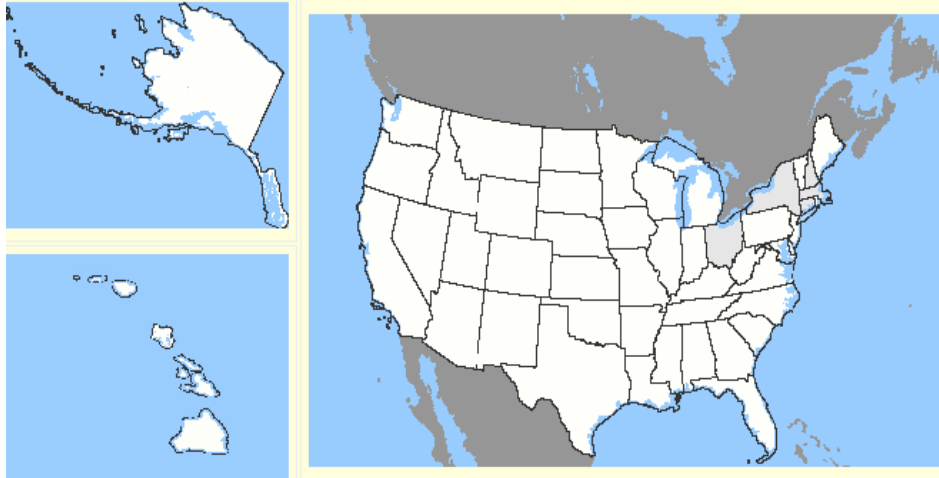
## **A 21<sup>st</sup> Century Statistical System**

**National Association of Regional Councils**  
**43<sup>rd</sup> Annual Conference and Exhibition**  
**Transportation and Evacuation Planning Workshop**  
**Denver, Colorado**

**June 1, 2009**

# Overview of LED





## OnTheMap™

LED's online dynamic mapping and reporting tool

- ✓ Where do workers live or work?
- ✓ Cross-state flows
- ✓ 46 states online
- ✓ 2002-2006 annual data
- ✓ Analyzes/Reports on age, earnings, and industry
- ✓ Defined areas or freehand
- ✓ UN recognition as a major US statistics innovation
- ✓ Census Block based
- ✓ Innovative disclosure protection
- ✓ Free and available 24/7
- ✓ Easy visualization of massive data

# What is a “region?”

## What is a “local area?”

The United States is composed of the following mutually exclusive and exhaustive hierarchy:

50 states

3,100 counties

66,000 census tracts

210,000 census block groups

**8,200,000 census blocks**

**Once it is defined, do data exist?**

Michigan &  
New York  
changed  
state laws to  
join LED;

New  
Hampshire  
is seeking  
changes

### New York Enacts Legislation to Join Local Employment Dynamics

ASSEMBLY BILL NUMBER: A11619A

September 15, 2006

...

Forty-one states have joined this LED program and are able to use this enhanced database for important governmental purposes, including:

- (1) **Economic Development** - The state's efforts to attract and assist businesses are often constrained by a lack of detailed data, particularly related to the composition of the labor force and available skills. Use of these independent data sources for analyzing the impacts of the World Trade Center attack was severely limited by the quality of the data.
- (2) **Emergency Management** - This requires up-to-date information of population and business characteristics in order to provide appropriate emergency services. An important element is knowledge of daytime worker populations in addition to resident characteristics. Currently, aging Census data (potentially 10 years old) is used for identifying daytime populations and the LED program will provide current worker flow characteristics.
- (3) **Transportation Infrastructure** - Planning of transportation infrastructure requires tracking of a dynamic population. As with emergency management, transportation officials are constrained by the use of aging Census data. The LED products will provide current worker flow data and commuting patterns to better plan infrastructure improvements.
- (4) **Older Workers** - A primary product of the LED program is a profile on older workers that provides detail on worker demographic, industry, wage, and turnover characteristics. These data do not currently exist, except through the new products developed by the Census Bureau in the LED program

# Status of Partners

## 53 eligible states and territories

50 states, DC, PR, VI

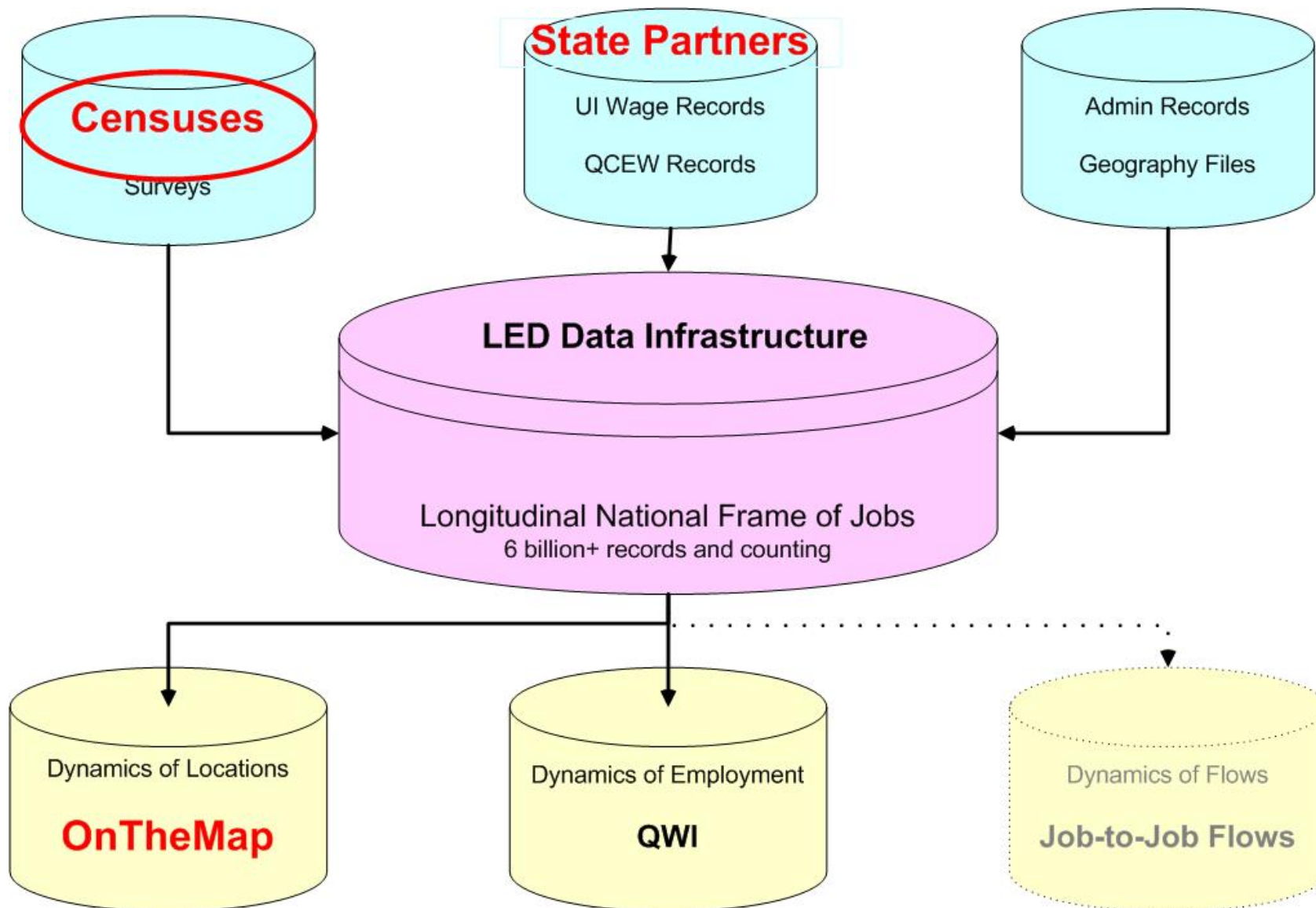
**Not in partnership:** MA, NH

**Partners yet to supply data:** CT, PR

**Experimental production:** DC, VI

**In QWI but not yet OnTheMap:** OH

# Impact of 2010 Census



USCENSUSBUREAU

When there was

...a bridge collapse in Minneapolis,

...a tornado touchdown in Missouri,

...a hurricane landed in Texas,

...wild fire in Southern California,

...a flood in Iowa,

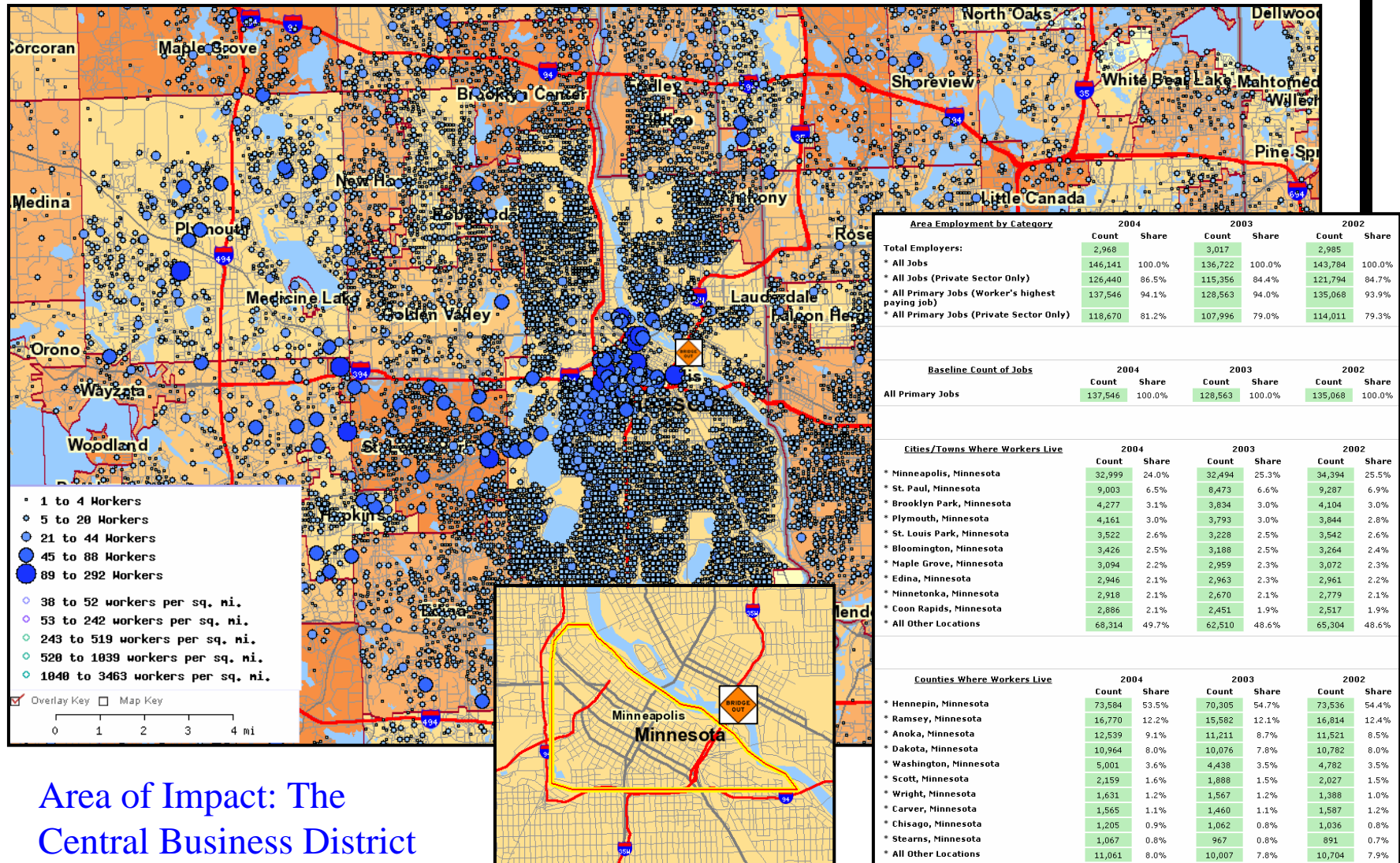
**How can LED help?**

# OnTheMap

## Emergency Response

# Minneapolis I-35W Bridge Collapse

## Where Workers in the Central Business District Live



Area of Impact: The Central Business District SW of bridge

A U

**Hurricane Hanna Work Area Profile (NWS Path Prediction Through 8AM Sat.)**

**Overlay Controls**

Points	<input type="checkbox"/>
Thermals	<input checked="" type="checkbox"/>
Selection Outline	<input checked="" type="checkbox"/>
Selection Fill	<input type="checkbox"/>
Animate	Points: <input checked="" type="checkbox"/>
	Thermals: <input checked="" type="checkbox"/> <input type="button" value="Animate"/>
<a href="#">Zoom to Selection</a>	

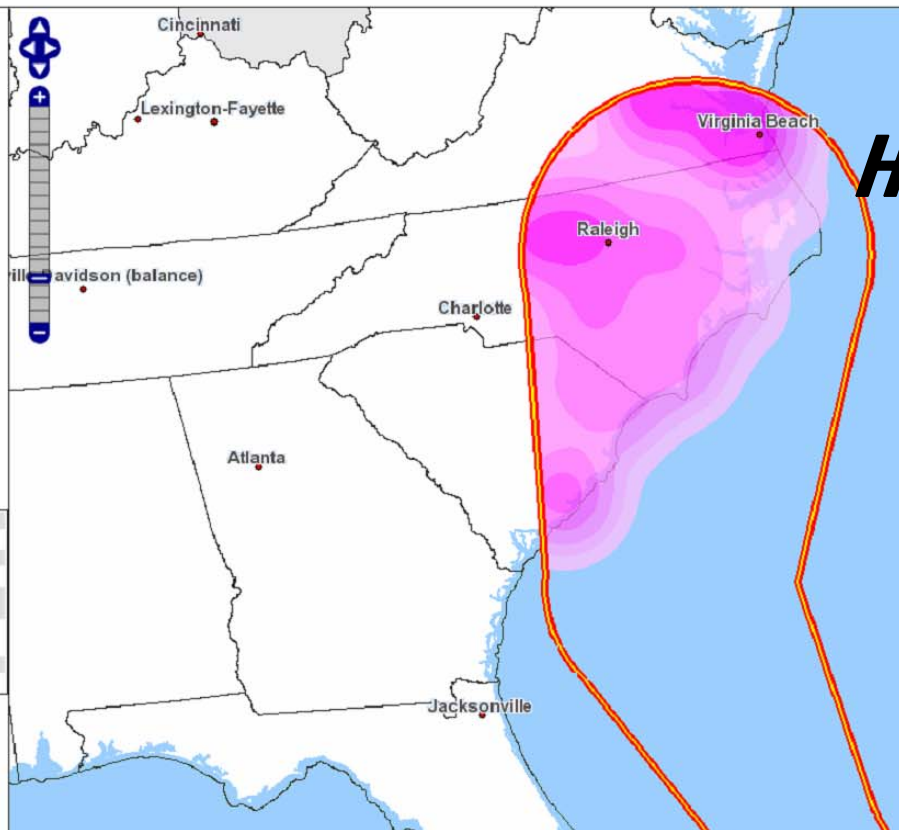
**Report Output Options:**

View Report As:

- [HTML](#)
- [Excel \(XLS\)](#)
- [View Map and Report PDF](#)
- [View Report-only PDF](#)

**Analysis Settings**

Report Year(s):	2006
Employment Type:	Jobs
Labor Market Segment:	All Workers
Primary Selection Layer:	No layer selected.
Primary Selection Features:	Only available for layer selections.
Advanced Area Selection:	Ignored.
Map Shows:	Counties
Query ID:	12205619229133



# Hurricane Hanna

Total Jobs		2006	
	Count	Share	
Total Jobs	3,851,764	100.0%	

Jobs by Worker Age		2006	
	Count	Share	
Age 30 or younger	986,540	25.6%	
Age 31 to 54	2,223,878	57.7%	
Age 55 or older	641,341	16.7%	

Jobs by Earnings Paid		2006	
	Count	Share	
\$1,200 per month or less	1,151,809	29.9%	
\$1,201 to \$3,400 per month	1,607,250	41.7%	
More than \$3,400 per month	1,092,703	28.4%	

Jobs by Industry Type (2-digit NAICS)		2006	
	Count	Share	
Agriculture, Forestry, Fishing and Hunting	27,209	0.7%	
Mining, Quarrying, and Oil and Gas Extraction	2,960	0.1%	
Utilities	20,313	0.5%	
Construction	250,366	6.5%	
Manufacturing	432,164	11.2%	
Wholesale Trade	156,254	4.1%	
Retail Trade	484,900	12.6%	
Transportation and Warehousing	112,670	2.9%	
Information	79,120	2.1%	
Finance and Insurance	124,910	3.2%	
Real Estate and Rental and Leasing	65,712	1.7%	
Professional, Scientific, and Technical Services	201,509	5.2%	
Management of Companies and Enterprises	66,222	1.7%	
Administration & Support, Waste Management and Remediation	237,477	6.2%	
Educational Services	397,620	10.3%	
Health Care and Social Assistance	461,333	12.0%	
Arts, Entertainment, and Recreation	58,201	1.5%	
Accommodation and Food Services	350,065	9.1%	
Other Services (excluding Public Administration)	118,621	3.1%	
Public Administration	204,132	5.3%	

## Work Area Profile Map

- Shows where workers employed in the selection area work.
- Projected path of Hanna based on NWS data.
- Plume selection from 20 miles to 150 miles.
- Approx. 3.9 million jobs in this selection for 2006.

# Data needs during emergency response, recovery and future development

## Lessons from New Orleans

Presented by:

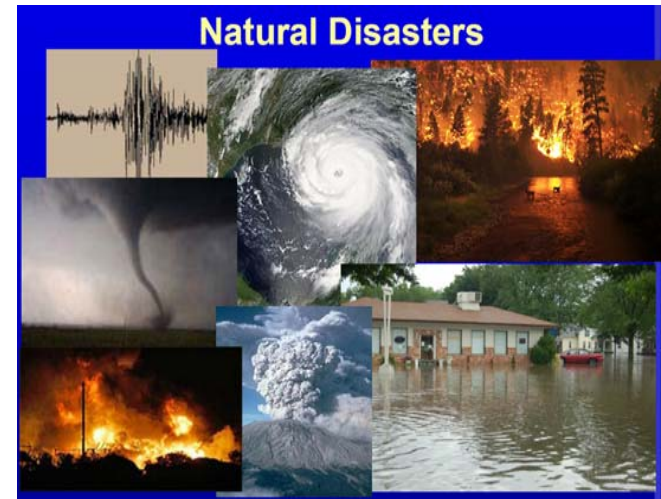
**Allison Plyer**

Deputy Director

[www.gnocdc.org](http://www.gnocdc.org)



## Use of LED data for Hurricanes and Other Natural Disasters



## Assisting the Houston Region

### In the Wake of Hurricane Ike

Dmitry Messen  
Houston-Galveston Area Council  
[www.h-gac.com/ike](http://www.h-gac.com/ike)

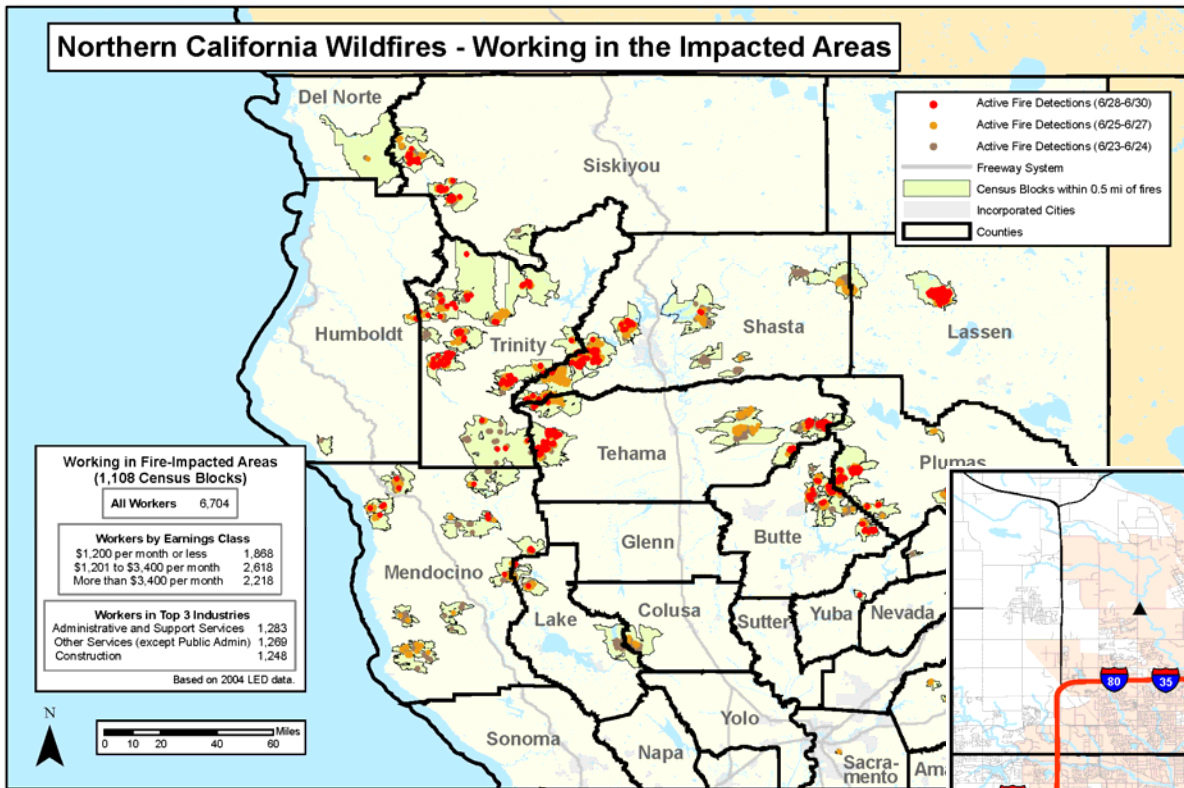


# Step-by-Step Guide for using OnTheMap for Emergencies, developed by the state of Illinois



U S C E N S U S B U R E A U

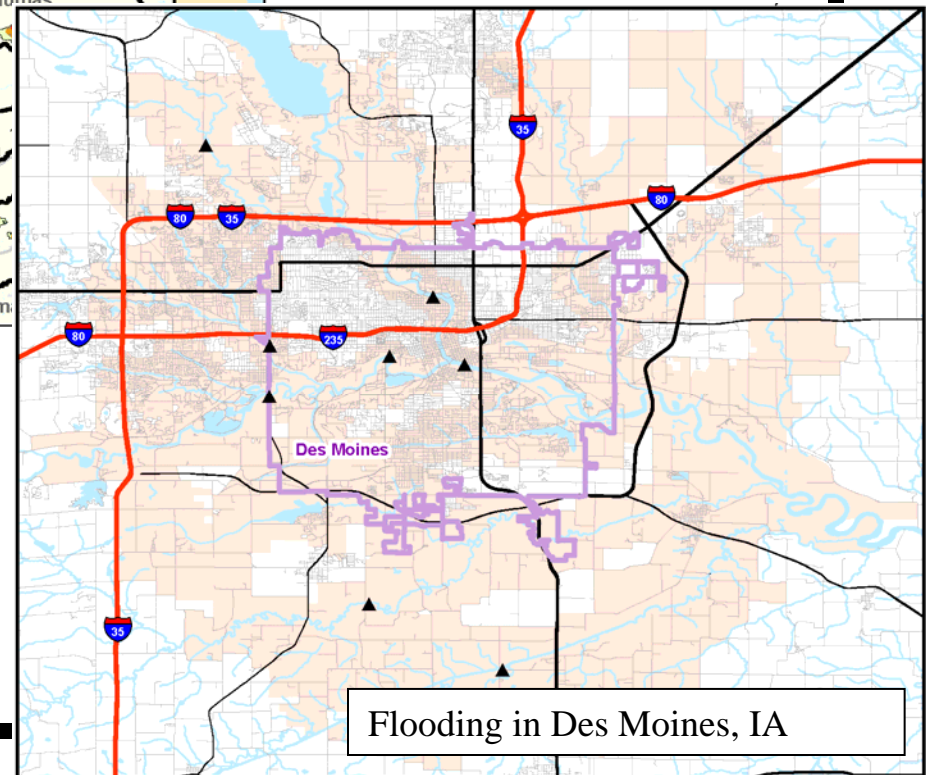
# OnTheMap: Wildfires and Floods



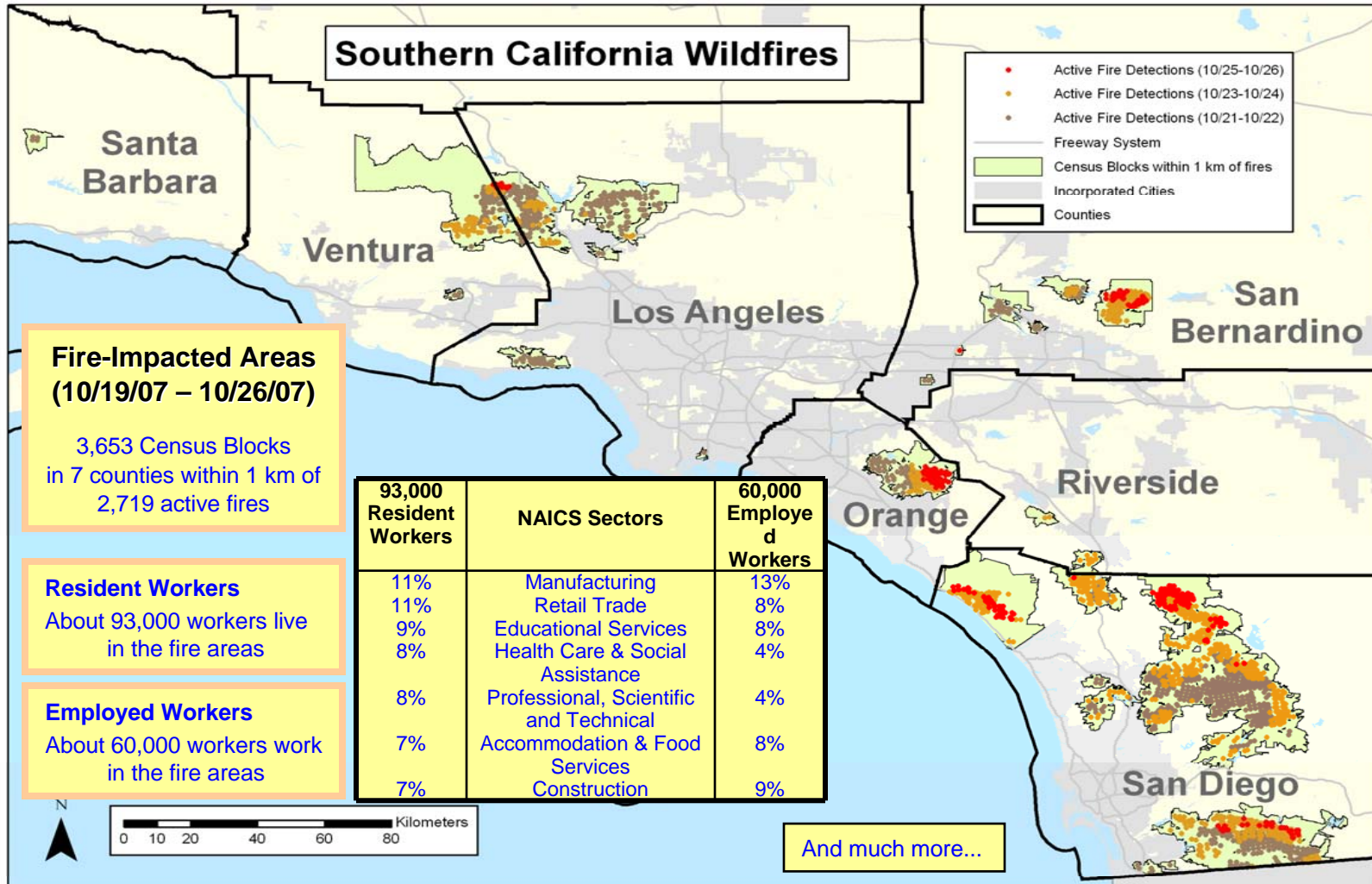
Detailed GIS Analysis Using OnTheMap's Synthetic Microdata

Analysis at the Census Block level of geographical detail

USCENSUSBUREAU



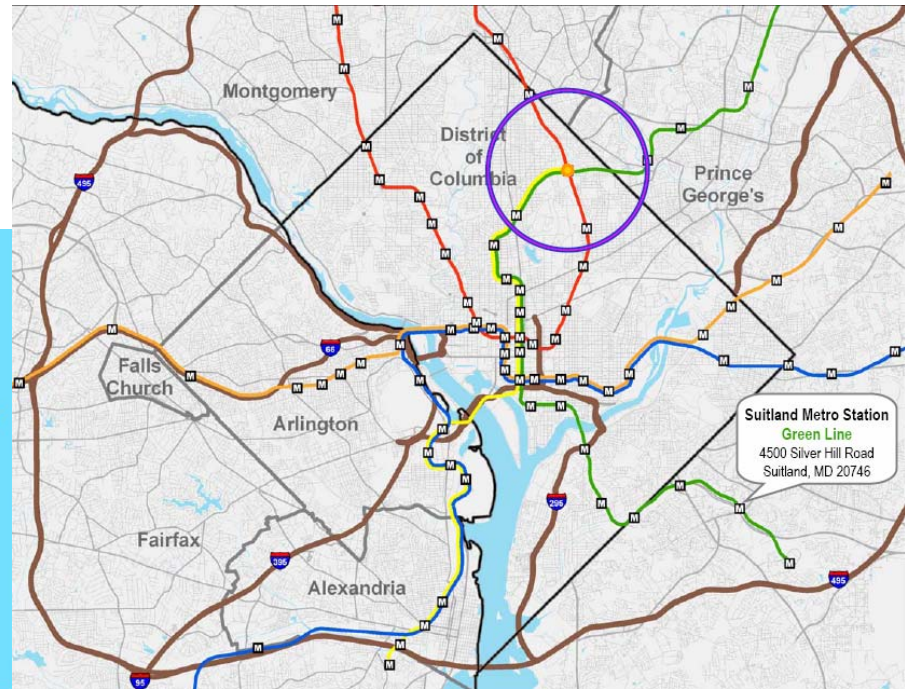
# Wildfires: Southern California



# OnTheMap Version 4

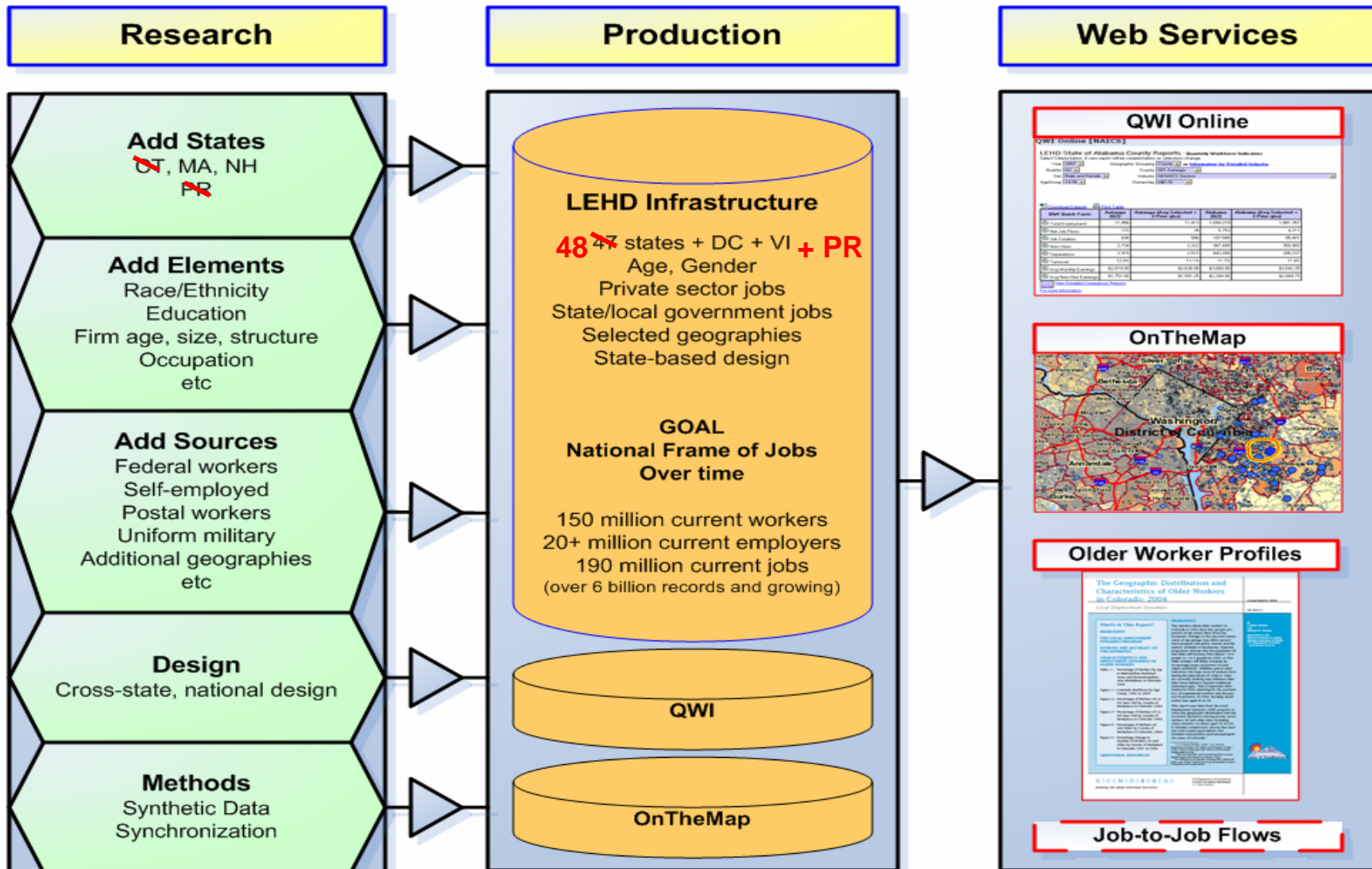
- Updates every year
- Beta in September
- Due out in December
- Add at least Ohio = 47
- Add 2007-2008 data
- Save and load
- Export and import
- Contributed layers pilot
  - Multi-year concept
  - Volunteers sought
- Spinoffs
  - States
  - Counties
  - Congressional Districts
  - Emergencies

# Samples of Contributed Layers



# Development Plans

(assuming funding in President's FY10 budget)



U S C E N S U S B U R E A U

# Contact Us

## *Comments/Suggestions*

[CES.local.employment.dynamics@census.gov](mailto:CES.local.employment.dynamics@census.gov)

[Jeremy.S.Wu@census.gov](mailto:Jeremy.S.Wu@census.gov)

## *Local Employment Dynamics*

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

## *Join the Listservs*

[Lehd-onthemap@lists.census.gov](mailto:Lehd-onthemap@lists.census.gov)

[Lehd-general@lists.census.gov](mailto:Lehd-general@lists.census.gov)