

Quarterly Census of Employment and Wages (QCEW)

David M. Talan
Bureau of Labor Statistics
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QCEW: Big Data at the Local Level

- Federal/State Cooperative Program
- Quarterly data (frequent)
- Released 6 months after reference period - timely
 - ▶ 10 million records and growing
 - ▶ 144 million in employment
- Employment, wages, establishments
- 6-digit NAICS and county, ownership
- Unemployment Insurance based, mandatory collections
 - ▶ Wages - 98% reported data
 - ▶ Employment - 97% reported data



Uses of QCEW

BLS Publications

- **QCEW:** Quarterly Releases: County by detailed NAICS - 5 month lag
- Annual Employment and Wages
- Special publications/maps

BED: Job Creation/Destruction

- Quarterly and Annual
- Size Class Dynamics
- Firm and establishment births/deaths
- Business Survival Rates
- Monthly Labor Review

Census Bureau Uses of QCEW

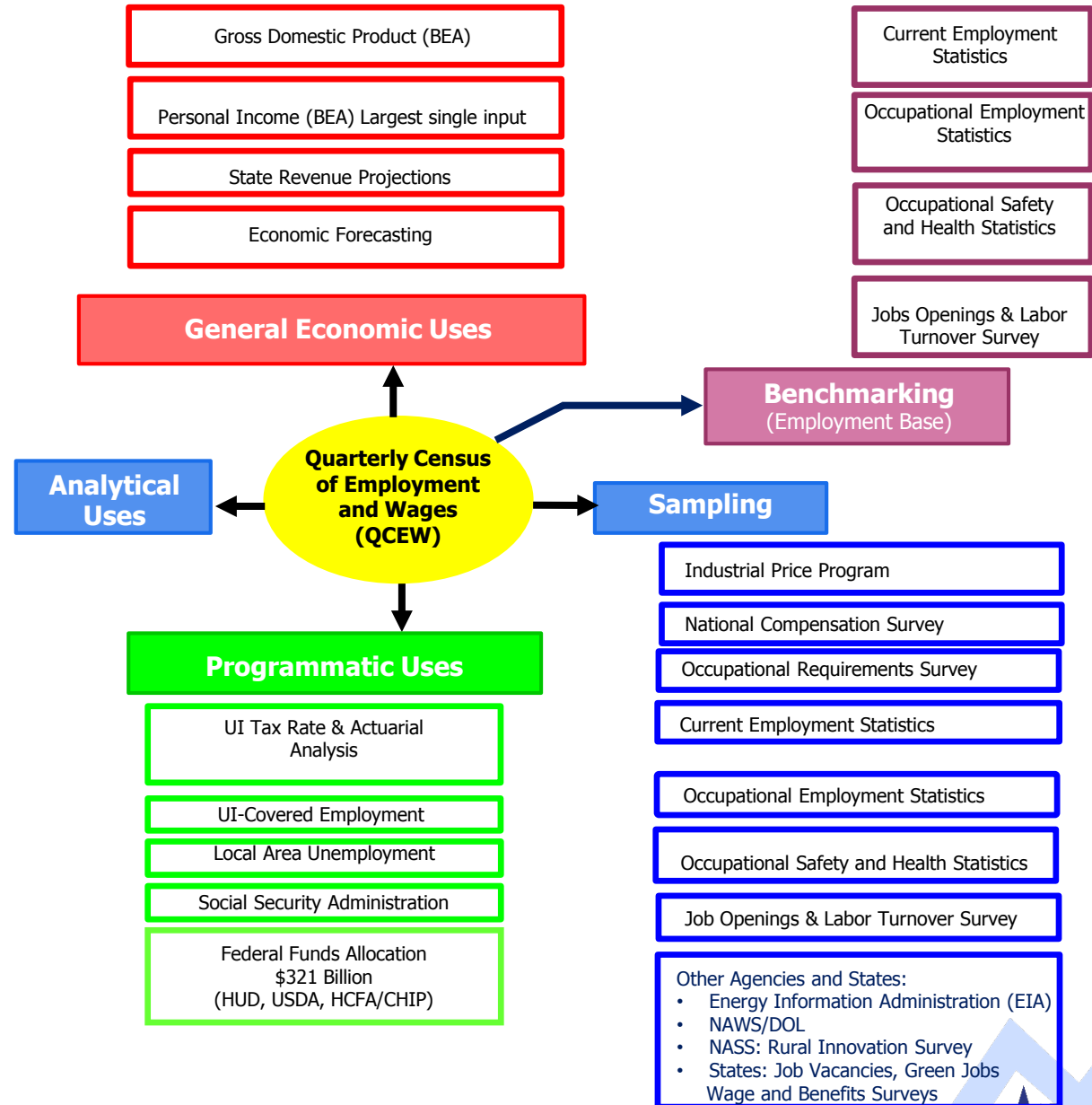
- **LEHD:** QCEW is essential matching key and source of geography and industry and link to other datasets, and employment
- **Business Register:** Sharing to reduce costs, burden and improve consistency
- **Industry Code Sharing** (3 M/year)
- **COS:** Multi-unit sharing- reduces cost and improves consistency
- **CPS Redesign:** QCEW used after decennial Census to improve sample design

State and Local Government

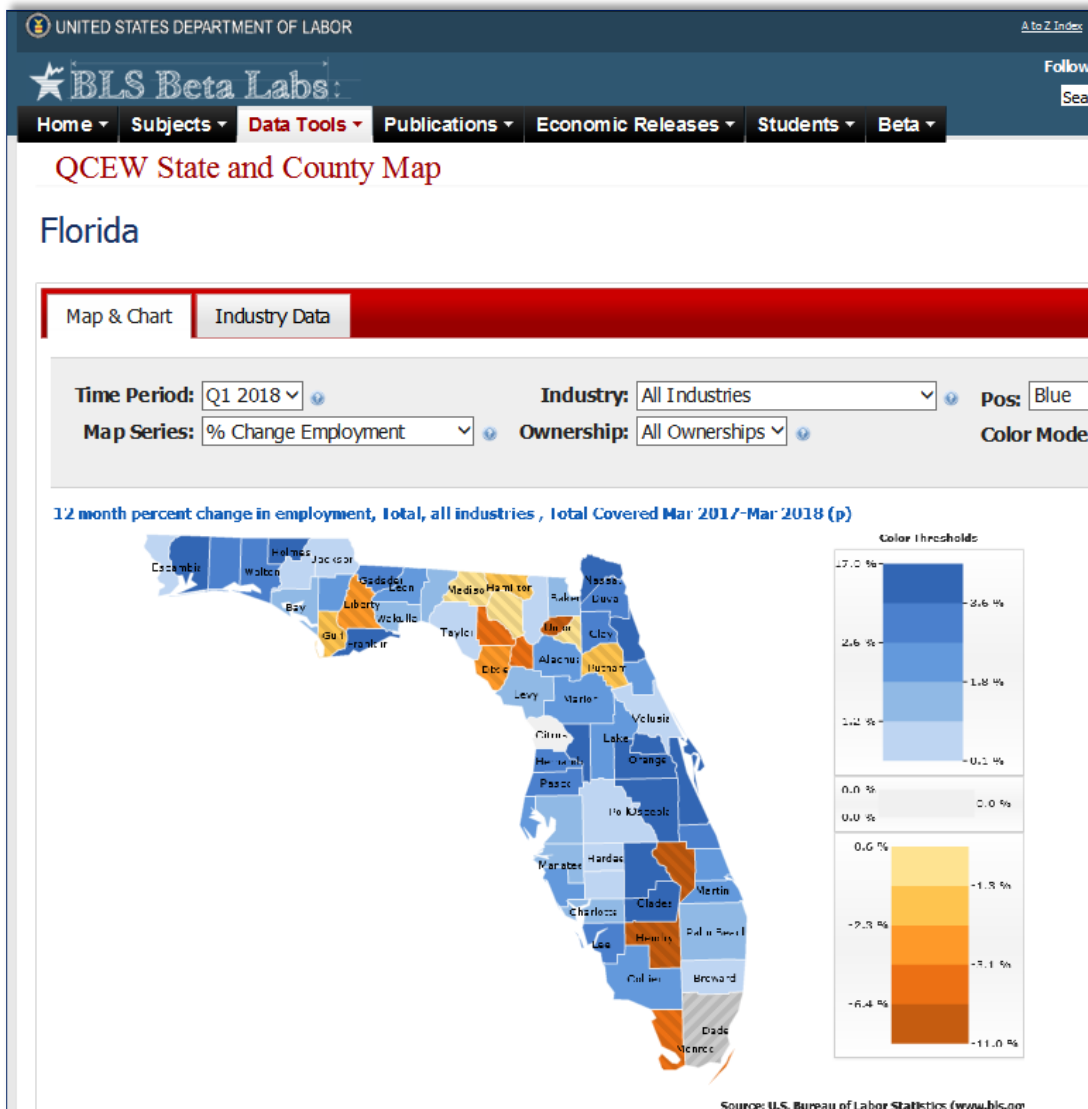
- Services Planning
- Transportation planning
- Emergency planning

Economic Development Indicators

- Cluster Analysis
- Shift Share
- Industry Diversity Indexes
- Location Quotients
- Local Impact analysis
- Site planning decisions



Data Tool: QCEW State Map



- Employment
- Wages
- Number of establishments

<https://beta.bls.gov/maps/cew/us>



Detailed Industry Data by County

- 6-Digit NAICS
- Establishment size
- County/MSA/State
- Ownership
- Location quotients

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Quarterly Census of Employment and Wages

Private, NAICS 6-Digit Industries, Bay County, Florida
 2018 First Quarter, All Establishment Sizes
 Source: Quarterly Census of Employment and Wages - Bureau of Labor Statistics

Table Filter: (Filter Value) Apply Clear Page 1 of 3
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NAICS 6-Digit Industry	Quarterly Establishments	January Employment	February Employment	March Employment	Total Quarterly Wages	Average Weekly Wage	March Employment Location Quotient	Total Quarterly Wages Location Quotient
NAICS 113310 Logging	8	114	116	118	\$1,367,754	\$907	4.53	7.35
NAICS 221310 Water supply and irrigation systems	3	5	5	5	47,401	729	0.21	0.19
NAICS 236115 New single-family general contractors	88	266	268	242	2,399,146	713	1.30	1.29
NAICS 236116 New multifamily general contractors	7	73	74	74	766,917	801	3.93	3.10
NAICS 236117 New housing for-sale builders	6	49	53	57	461,863	670	2.45	1.24
NAICS 236118 Residential remodelers	48	154	145	140	1,113,814	585	0.77	0.84
NAICS 236210 Industrial building construction	6	31	30	30	393,304	997	0.33	0.33
NAICS 236220 Commercial building construction	30	138	139	140	1,768,024	978	0.41	0.42
NAICS 237110 Water and sewer system construction	9	223	205	201	2,083,338	764	2.09	2.22
NAICS 237210 Land subdivision	7	9	9	9	113,753	972	0.43	0.34
NAICS 237310 Highway, street, and bridge construction	12	550	551	556	7,324,074	1,020	3.59	4.62
NAICS 237990 Other heavy construction	11	128	131	124	1,154,585	696	2.03	1.53

https://data.bls.gov/cew/apps/data_views/data_views.htm#tab=Tables



Hurricane Flood Zone Maps

- Detailed, descriptive maps
- Allow visualization of disaster areas
- QCEW establishment data paired with designated flood zones
- Scope: 18 states and the District of Columbia
- Counties along the Atlantic and Gulf Coasts

Preparedness

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Quarterly Census of Employment and Wages

Employment, wages, and establishment counts in hurricane flood zones

Click on state with to access statewide and county hurricane data.

Data for all states available in [XLSX](#) format.

Alabama includes the following counties for which flood zone data are available
 Data for Alabama available in [XLSX](#) format.

Employment in Hurricane Storm Surge Flood Zones, Florida

Note: Flood zones represent a conservative estimation of areas that would experience flooding in the event of a hurricane. Zone 1 is the area that would be flooded by a Category I hurricane. A Category II hurricane would cause flooding in Zones 1 and 2. The hurricane categories reference the Saffir-Simpson Hurricane Scale.

Data Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; 2017 Third Quarter
<https://www.bls.gov/cew>

Flood Zone Source: Florida Division of Emergency Management

Area	Establishments	Average Monthly Employment	Total Quarterly Wages
Zone 1	15,669	166,354	1,811,496,228
Zone 2	36,879	495,456	6,100,025,420
Zone 3	39,121	552,585	6,517,542,850
Zone 4	37,234	485,389	5,554,078,675
Total Affected	128,903	1,699,785	19,983,143,171
Unaffected	548,257	6,652,181	77,354,405,626

https://www.bls.gov/cew/hurricane_zones/maps.htm



Quarterly Census of Employment and Wages

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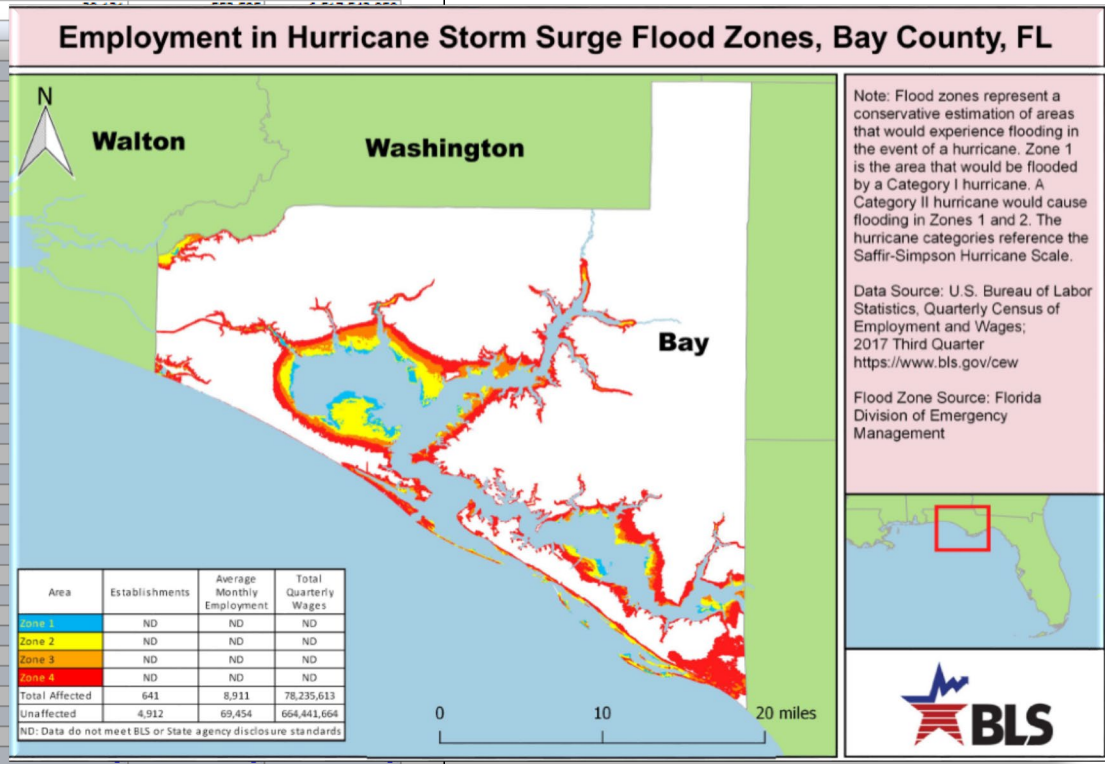
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Employment in Hurricane Storm Surge Flood Zones, Florida, Third quarter 2017

County	Area	Number of Establishments	Average Monthly Employment	Total Quarterly Wages
Statewide	Zone 1	15,669	166,354	1,811,496,226
Statewide	Zone 2	36,879	495,456	6,100,025,420
Statewide	Zone 3			
Statewide	Zone 4			
Statewide	Total Affected			
Statewide	Unaffected			
Bay	Zone 1			
Bay	Zone 2			
Bay	Zone 3			
Bay	Zone 4			
Bay	Total Affected			
Bay	Unaffected			
Brevard	Zone 1			
Brevard	Zone 2			
Brevard	Zone 3			
Brevard	Zone 4			
Brevard	Total Affected			
Brevard	Unaffected			
Broward	Zone 1			
Broward	Zone 2			
Broward	Zone 3			
Broward	Zone 4			
Broward	Total Affected			
Broward	Unaffected			
Charlotte	Zone 1			
Charlotte	Zone 2			
Charlotte	Zone 3			
Charlotte	Zone 4			
Charlotte	Total Affected			
Charlotte	Unaffected			
Citrus	Zone 1			
Citrus	Zone 2			
Citrus	Zone 3			
Citrus	Zone 4			
Citrus	Total Affected			
Citrus	Unaffected			
Clay	Zone 1			
Clay	Zone 2			
Clay	Zone 3			
Clay	Zone 4			
Clay	Total Affected	83	551	4,494,777
Clay	Unaffected	4,302	49,286	452,264,931
Collier	Zone 1	2,355	24,594	257,150,042
Collier	Zone 2	4,940	59,277	674,422,881
Collier	Zone 3	2,640	25,053	289,881,905
Collier	Zone 4	167	2,648	35,409,551
Collier	Total Affected	10,102	111,572	1,256,864,379
Collier	Unaffected	3,722	21,941	230,983,823

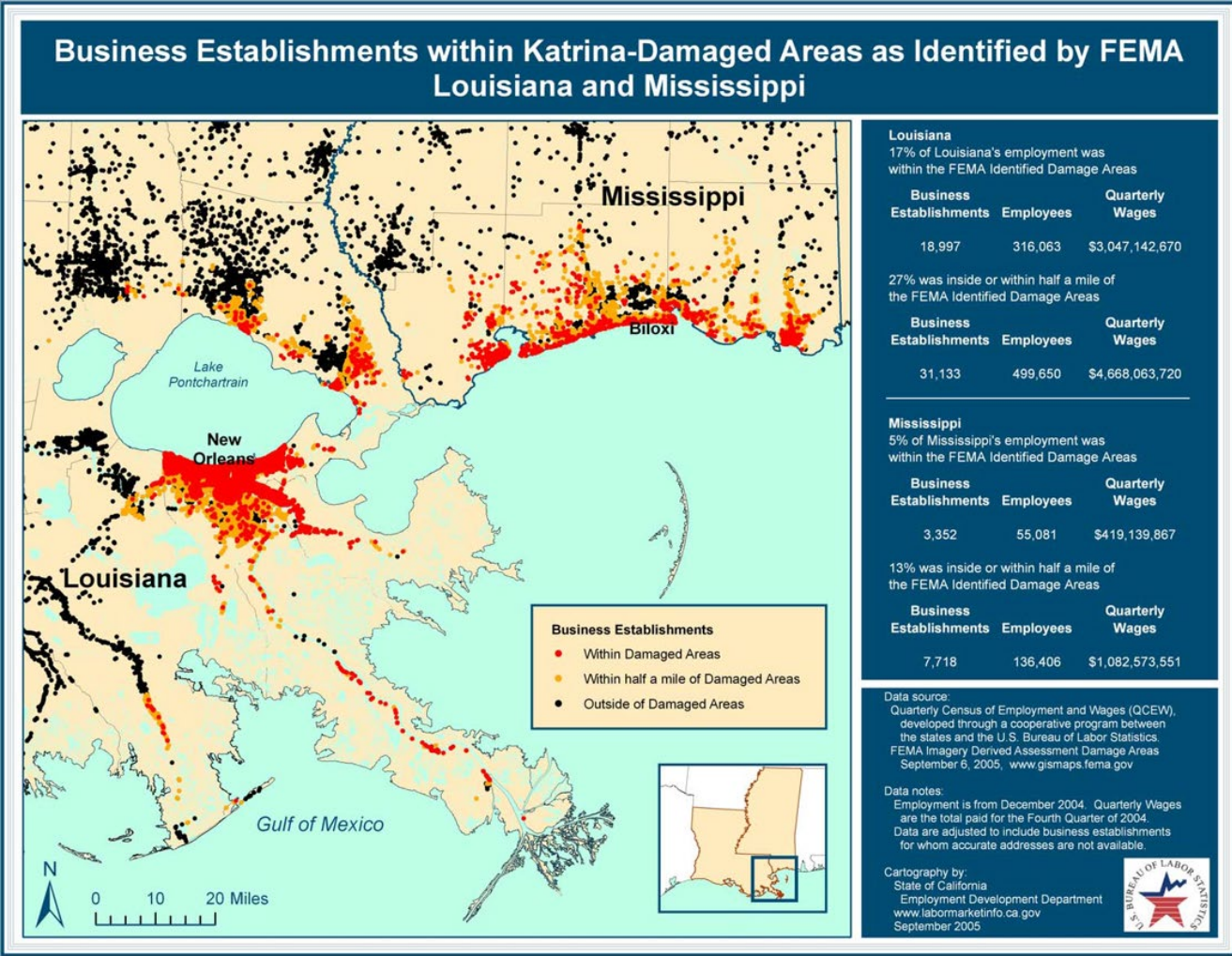


Geocoding Provides Local Detail

- Geocoded microdata
- Lower levels of aggregation
- Can be combined with any shapefiles
- Detailed data available through State/Fed partnerships



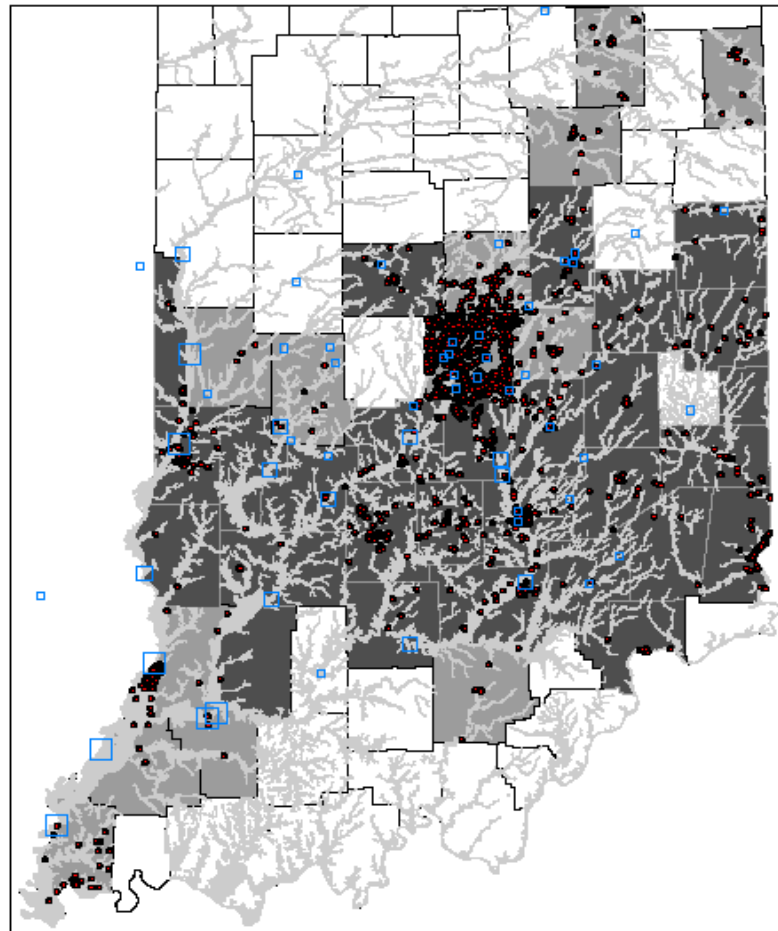
QCEW microdata can be shared for statistical purposes*



Recovery:

Flooding in Indiana

FEMA Assistance for June 2008 Flooding and Businesses within Floodplains



In the 29 counties declared federal disaster areas, there are 1,965 establishments located within a floodplain. They employed 34,545 people in the fourth quarter of 2007.

For the remaining 13 counties approved by FEMA for individual assistance, there are 5,250 establishments located within a floodplain. They employed 120,518 people in the fourth quarter of 2007.

Legend

- Businesses within Floodplains
- Counties
- Federal Disaster Areas
- Areas Approved for Individual Assistance
- Floodplains

USGS Streamgages Above Flood Stage

- 1 - 7 days
- 8 - 14 days
- 15 - 18 days

Map created by the Indiana Business Research Center.

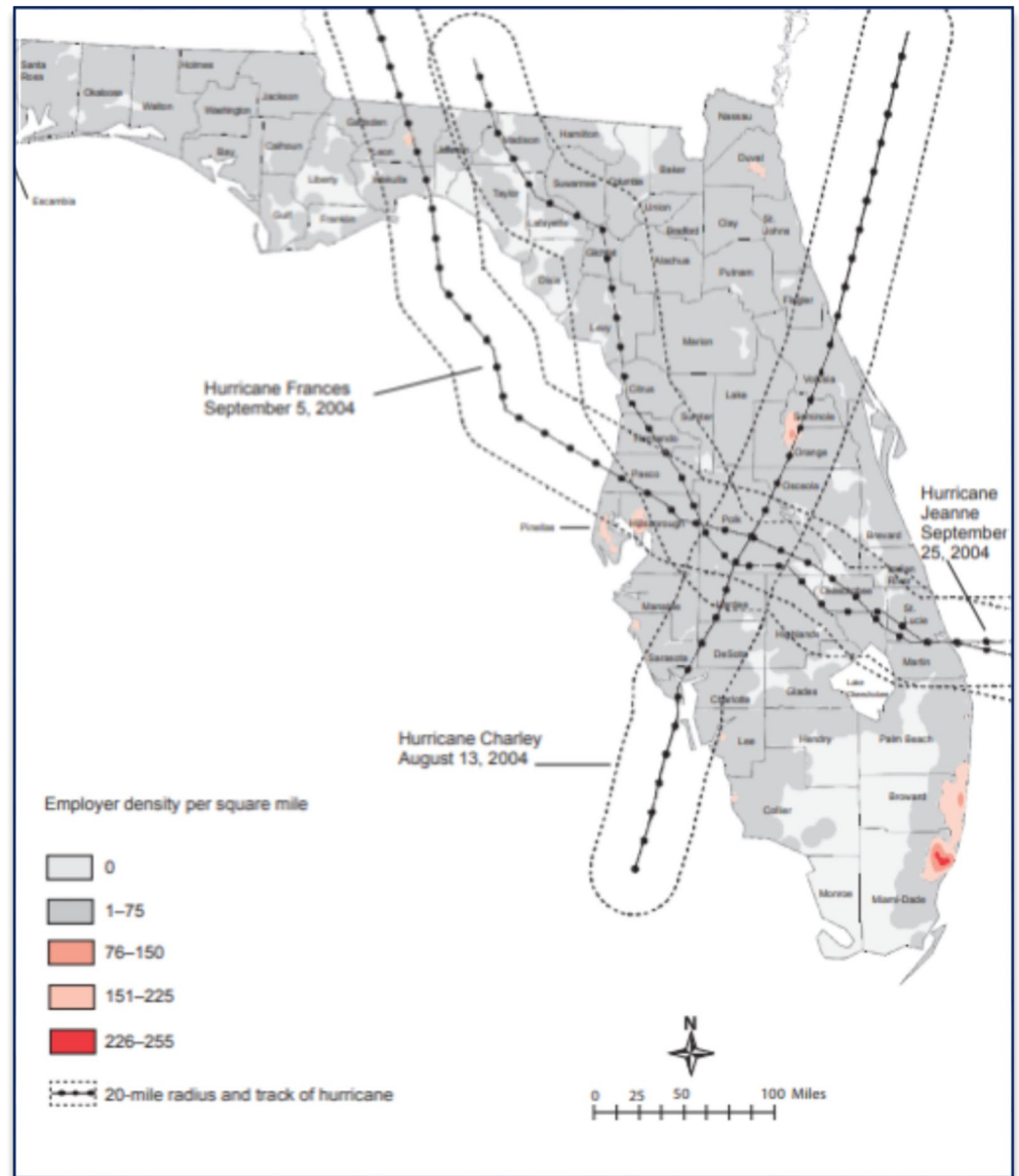
Streamgage data are from the U.S. Geological Survey at <http://water.usgs.gov/waterwatch/?m=mfr&in=in&w=flood%2Cmap> (locations above flood stage June 1-23)

Employment and establishment data are from the Department of Workforce Development (private-owned establishments only).

Floodplains are from the IndianaMap maintained by the Indiana Geological Survey. Note: the most detailed floodplains for Marion and Johnson counties were unavailable, so the generalized shapefile was used for those two counties.

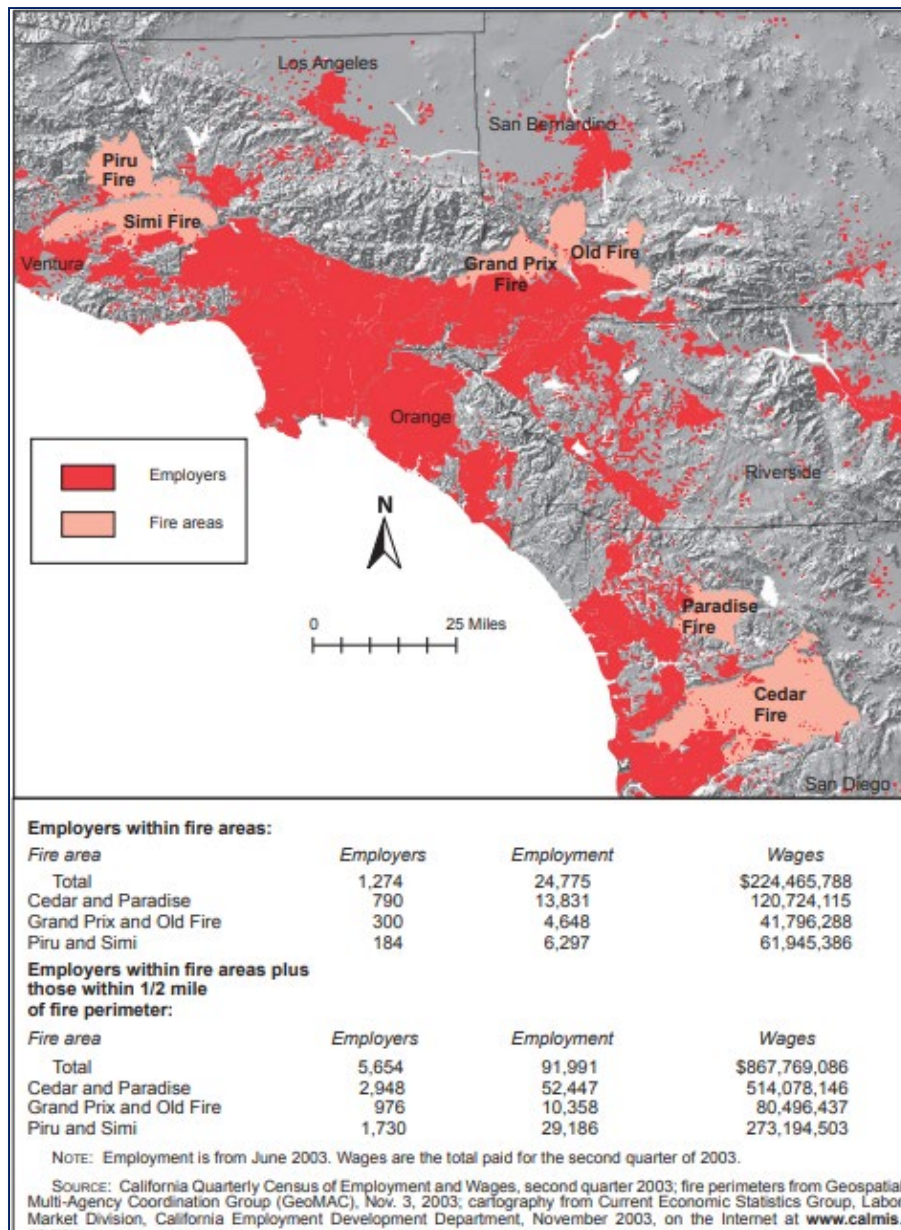
Recovery:

Employment density in the path of hurricanes



Recovery:

Employment in fire affected areas of Southern California



QCEW: Big Data at the Local Level

- Microdata is sharable*
- Matching possibilities
- Timely census provides users with accurate local data



Contact Information

David M. Talan

www.bls.gov/cew

202-691-6467

talán.david@bls.gov

