



# How to Access Data for Community Economic Development

Steven Deller and Matt Kures  
Department of Agricultural and Applied Economics  
Community Development Institute  
Division of Extension  
University of Wisconsin-Madison



# Data Analysis for Community Economic Development

Two-part series:

Part I: Why perform data analysis, but more importantly, where do we get the economic data?

Part II: How do we analyze the data?



# Data Analysis for Community Economic Development

## Why do we analyze the data?

- Mechanism to Stimulate Discussion
- Challenges Local Perceptions
- Identifies Strengths
- Identifies Weaknesses
- Identifies Threats
- Identifies Opportunities
- In the end, helps you understand what is happening locally...what is the “story” of the local economy?

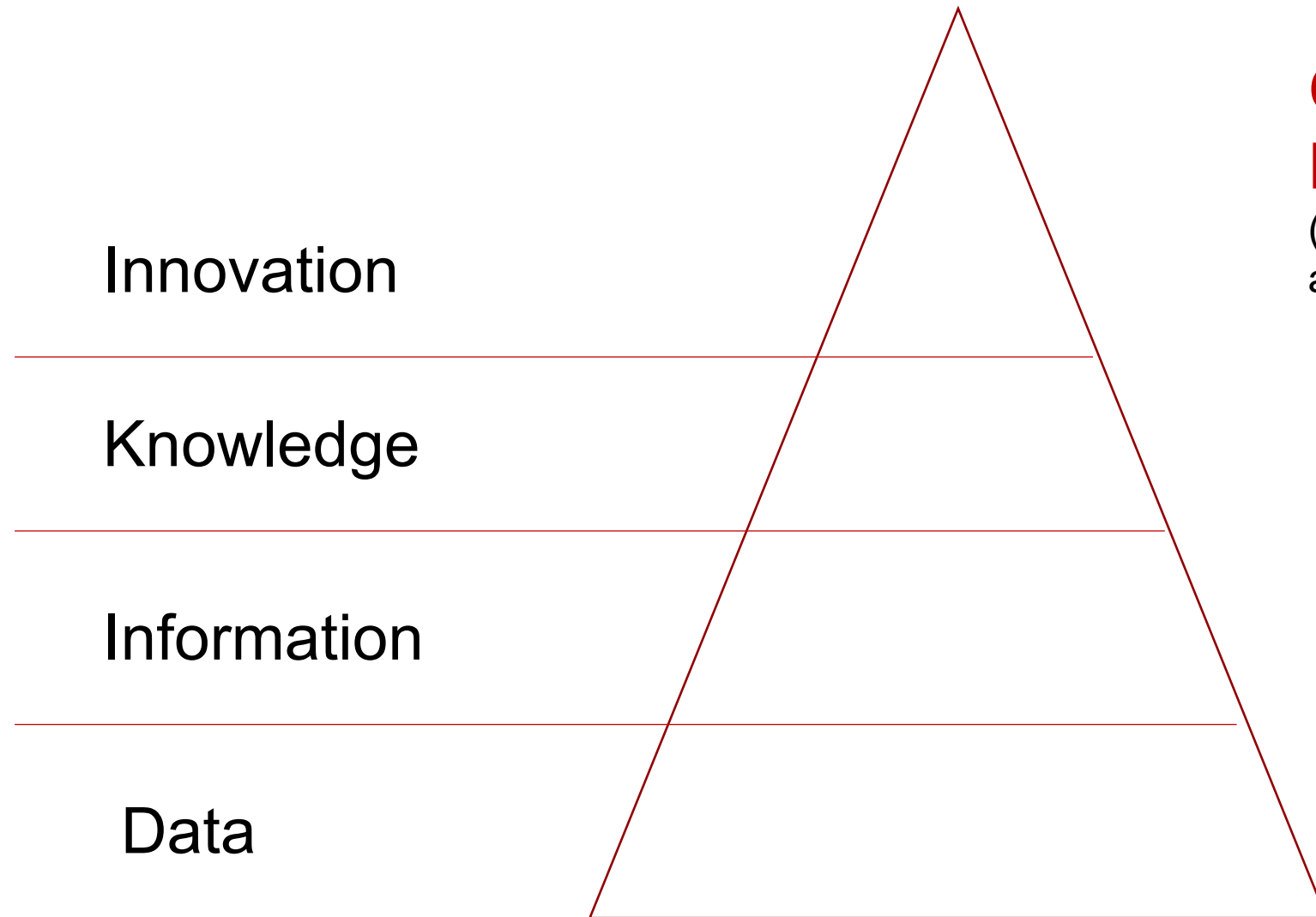


## Issues to Consider

- Looking for Patterns
- Looking for Comparisons
- Looking for Challenges – Surprises
- Looking over Time
- Looking for Insights, Not Precision
- Many Sources – Formal and Informal



# Data Analysis for Community Economic Development

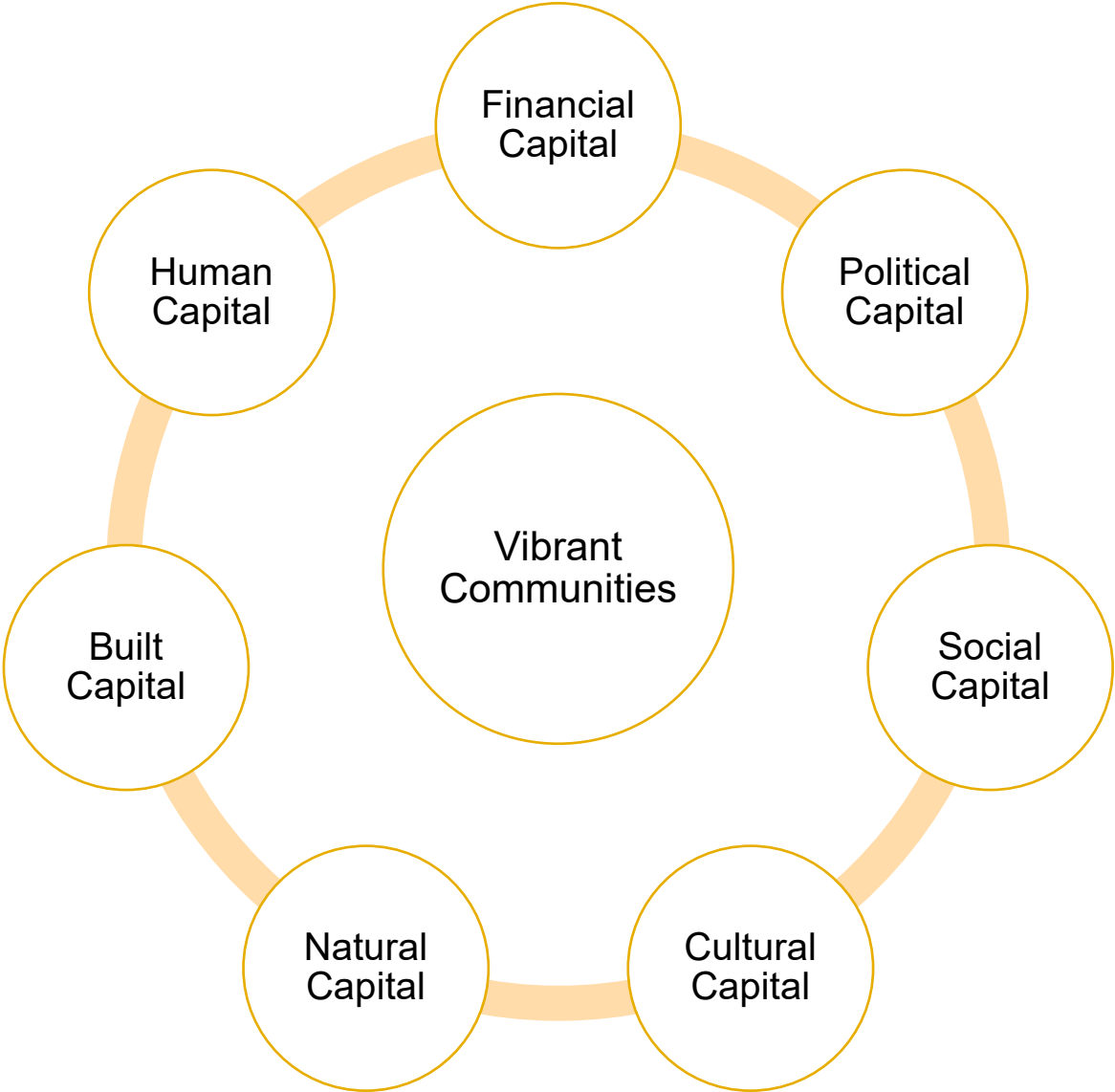


## **Creativity Pyramid**

(Fig 8.3 p.145: Shaffer, Deller and Marcouiller 2004)



# Data Analysis for Community Economic Development



## RURAL INNOVATION REPORT

Created by the Wisconsin Startup Coalition and the University of Wisconsin Agricultural & Applied Economics — powered by Alliant Energy.

 **Agricultural & Applied Economics**  
College of Agricultural & Life Sciences



## Data Analysis for Community Economic Development

- One thing to keep in mind is that we're generally trying to determine where the community is now.
- There is a “story to be told” about the local economy, we are trying to tell that story.
- Avoid the temptation to do a “data dump”.
- Who is the audience?
- Layers of an onion in layers of more detailed analysis.



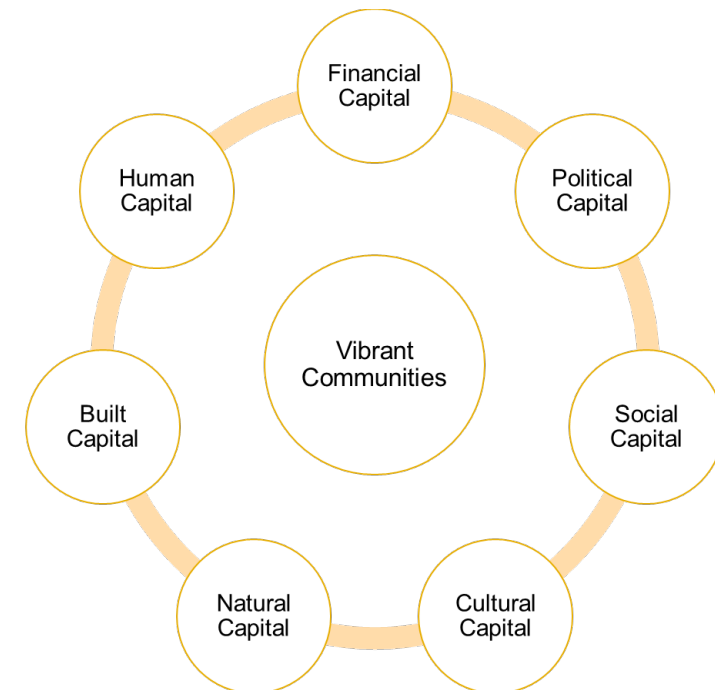
# Data Analysis for Community Economic Development

## Traditional Measures

- Employment
- Income
- Unemployment
- Population
- Number of Firms
- Migration

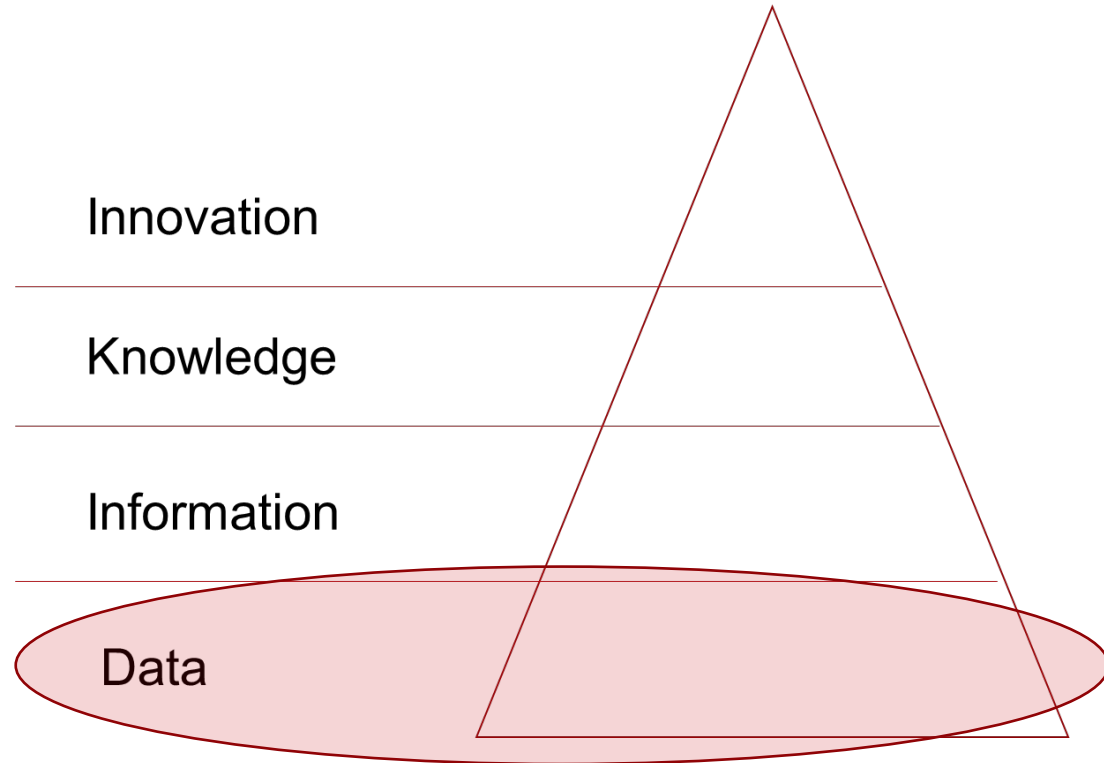
## Alternative Measures

- Retail Sales
- Property Values
- Income Distribution
- Social Indicators
  - Crime Rates
  - Drop Out Rates





# Data Analysis for Community Economic Development



**Too much data!**  
**We are drowning in data!**

For our purposes, we consider several primary sources of data:

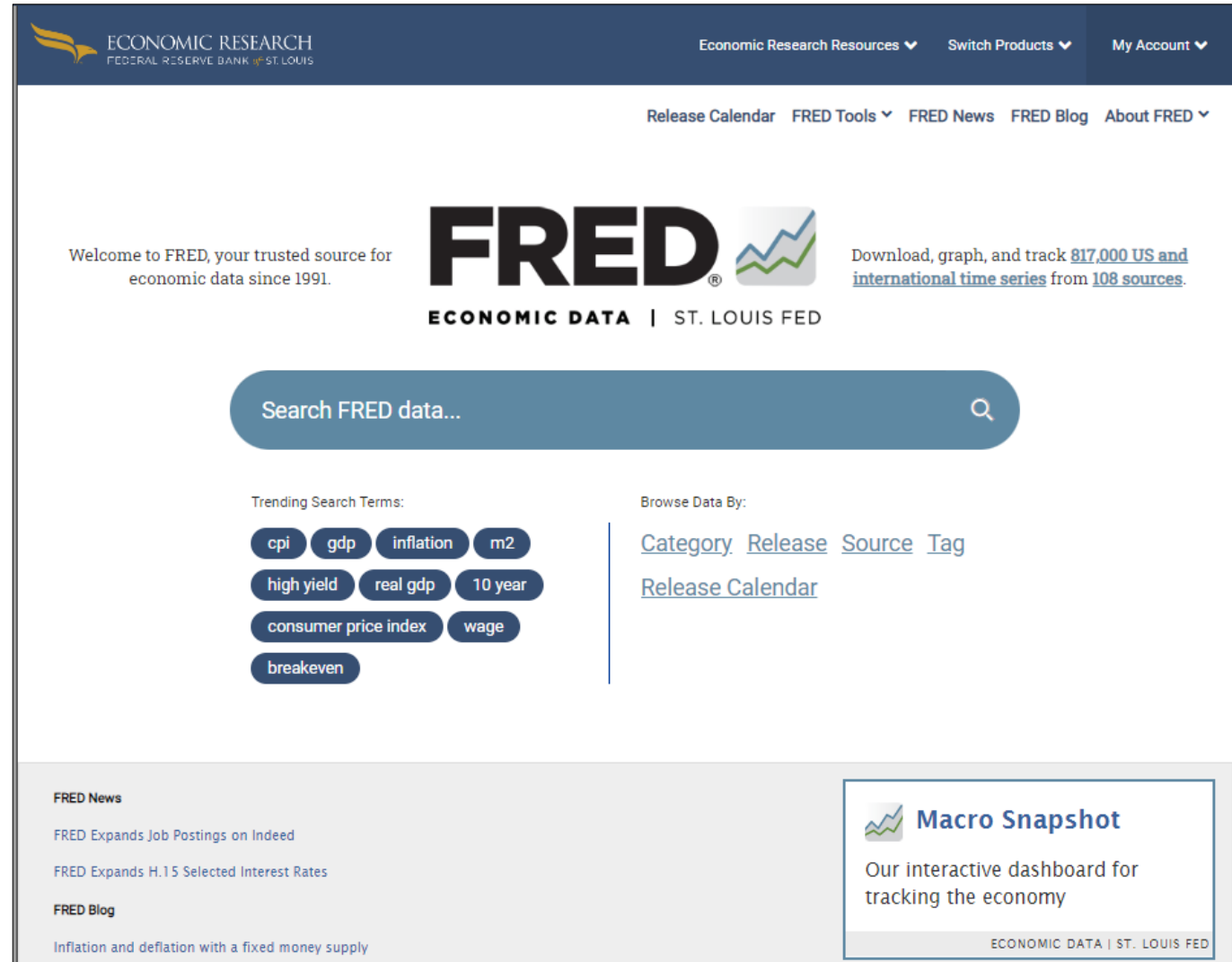
- Federal Reserve Bank of St Louis FRED
- U.S. Department of Commerce BEA-REIS
- U.S. Census Bureau: [data.census.gov](http://data.census.gov) and Longitudinal Employer-Household Dynamics (LEHD)
- Wisconsin Department of Workforce Development: WisConomy (and sometimes Bureau of Labor Statistics)



# Federal Reserve Economic Data (FRED)

<https://fred.stlouisfed.org/>

- Data on a variety of topics including housing, inflation, wages, population, unemployment etc.;
- Includes tools for charting, mapping and downloading the data;
- Allows for data to be indexed and customized in other manners;



The screenshot shows the homepage of the Federal Reserve Economic Data (FRED) website. At the top, there is a dark blue navigation bar with the logo for Economic Research at the Federal Reserve Bank of St. Louis, and links for Economic Research Resources, Switch Products, and My Account. Below this is a secondary navigation bar with links for Release Calendar, FRED Tools, FRED News, FRED Blog, and About FRED. The main content area features the FRED logo and the text "Welcome to FRED, your trusted source for economic data since 1991." To the right of the logo is a small line graph icon and a link to "Download, graph, and track 817,000 US and international time series from 108 sources." Below the logo is a large search bar with the placeholder text "Search FRED data...". Underneath the search bar are two sections: "Trending Search Terms" with buttons for cpi, gdp, inflation, m2, high yield, real gdp, 10 year, consumer price index, wage, and breakeven; and "Browse Data By" with links for Category, Release, Source, Tag, and Release Calendar. At the bottom left, there is a "FRED News" section with links to "FRED Expands Job Postings on Indeed" and "FRED Expands H.15 Selected Interest Rates", and a "FRED Blog" section with a link to "Inflation and deflation with a fixed money supply". At the bottom right, there is a "Macro Snapshot" section with a line graph icon and the text "Our interactive dashboard for tracking the economy". The footer of the page contains the text "ECONOMIC DATA | ST. LOUIS FED".

# Bureau of Economic Analysis

<https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas>

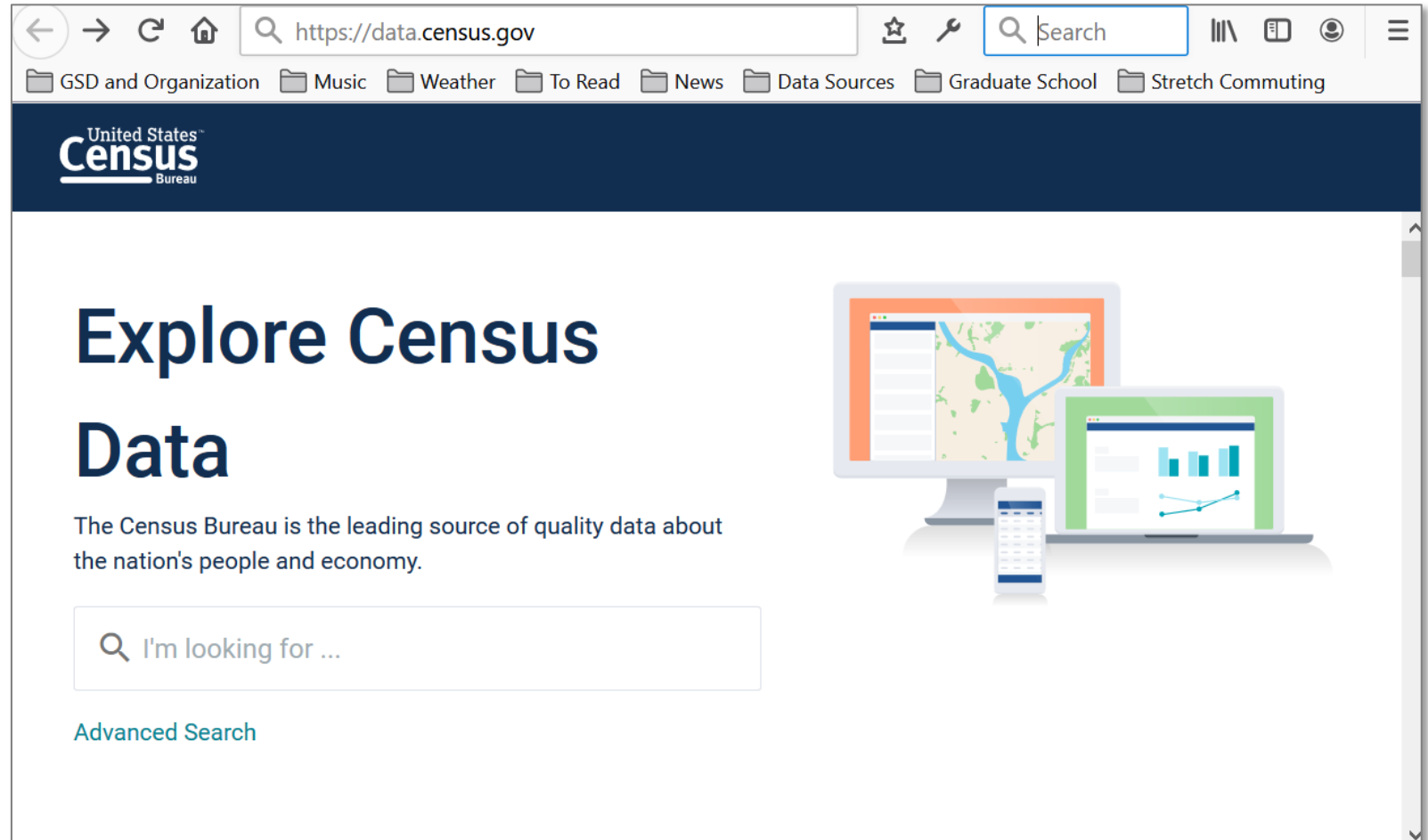
- Employment, income, population, gross domestic product, etc.;
- County data is available for the entire nation starting in 1969
- Also includes state, metro/non-metro and national level data;

The screenshot displays the BEA website's interface for personal income data. At the top, there is a navigation menu with options like 'Data', 'Tools', 'News', 'Research', 'Resources', 'About', and 'Help'. A search bar is located on the right. The main heading is 'Personal Income by County, Metro, and Other Areas'. Below this, a section titled 'Personal Income by County and Metropolitan Area, 2020' contains a text summary and a map. The text summary states that in 2020, personal income increased in 3,040 counties, decreased in 69, and was unchanged in 3. It also notes that personal income increased 6.4 percent in the metropolitan portion and 7.6 percent in the nonmetropolitan portion of the United States. The map shows the percent change for counties from 2019 to 2020, with a legend indicating five categories: 10.0% to 14.9%, 7.5% to 9.9%, 5.0% to 7.4%, 2.5% to 4.9%, and 0.0% to 2.4%. A sidebar on the right provides a definition of personal income by county, metro, and other areas, and includes contact information for Paul Medzerian, Technical, at (301) 278-9264.

# U.S. Census Bureau - data.census.gov

Platform for accessing the American Community Survey, Economic Census, Decennial Census, etc.

- Age Structure
- Household/Family Characteristics
- Occupations/Industry of Employment
- Journey to Work
- Income
- Educational Attainment;
- Labor Participation and Unemployment Rates;



# Census Bureau LEHD - Local Employment Dynamics Quarterly Workforce Indicators (QWI)

<http://ledextract.ces.census.gov/> or  
<http://qwiexplorer.ces.census.gov/>

## Quarterly Workforce Indicators -

Detailed county, state, MSA estimates of employment, earnings, gross job creation and destruction by detailed industry, gender and age of workers. (Currently through Q3 2021)

QWI avoids many of the data disclosure problems associated with other data sets. However, it does so by introducing noise (distortions) into the data.

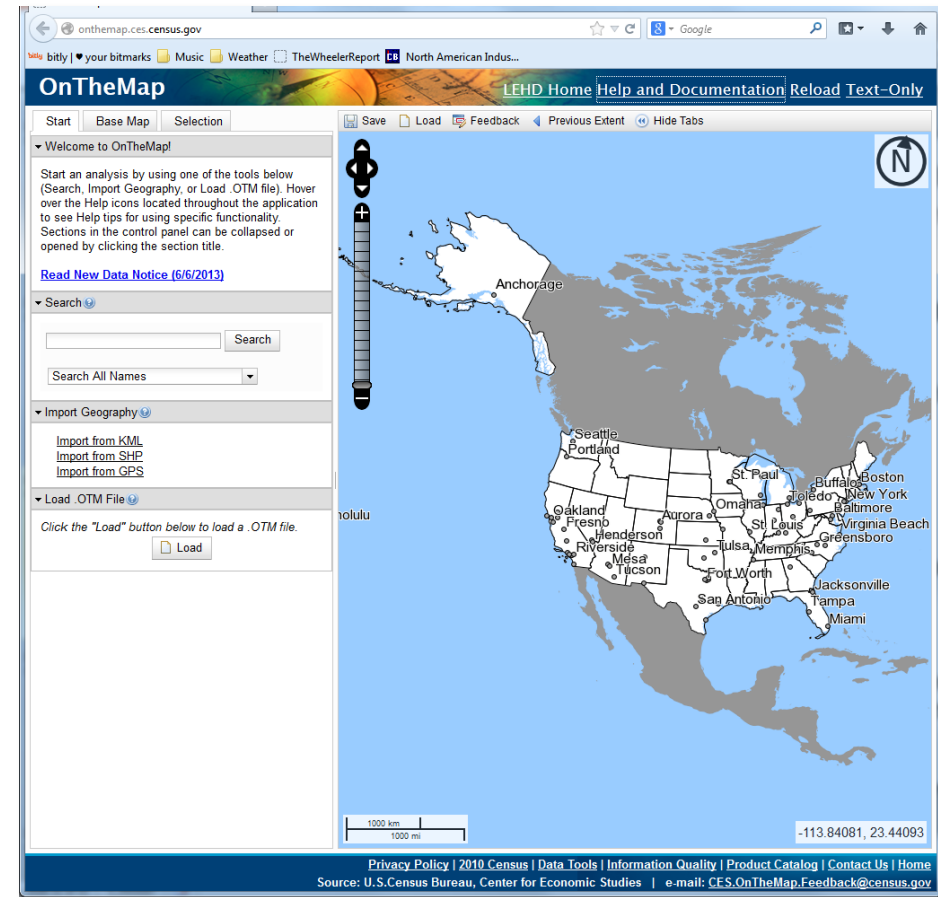
The screenshot displays the 'LED Extraction Tool (Beta)' web interface. The browser address bar shows 'ledextract.ces.census.gov'. The page has a navigation menu with tabs for '1. Geography', '2. Firm Characteristics', '3. Worker Characteristics', '4. Indicators', '5. Quarters', and '6. Summary and Export'. The 'Geography' tab is active. On the left, a 'State' dropdown menu is open, showing a list of states with 'Wisconsin' selected and highlighted in blue. Below the state list, there are sections for 'Geography Type' (States, Counties, Micro/Metropolitan Areas, Workforce Investment Areas) and 'Areas'. The 'Areas' section is expanded, showing a list of Wisconsin counties with checkboxes. The '55 Wisconsin' checkbox is checked, and the list includes counties such as Adams, Ashland, Barron, Bayfield, Brown, Buffalo, Burnett, Calumet, Chippewa, Clark, Columbia, Crawford, Dane, Dodge, Door, Douglas, Dunn, Eau Claire, Florence, Fond du Lac, Forest, Grant, Green, Green Lake, Iowa, Iron, Jackson, and Jefferson. At the bottom right, there is a 'Load S' button. The footer contains links for 'Privacy Policy | 2010 Census | Data Tools | Info' and 'Source: U.S. Census Bureau, Center for Economic Research

# U.S. Census Bureau LEHD - OnTheMap

<http://onthemap.ces.census.gov>

**OnTheMap** - Mapping and reporting application showing:

- Where workers are employed and where they live;
- Companion reports on worker characteristics;
- Filtering by age, earnings, or industry groups;
- Based on synthetic data that are statistically analogous to actual worker counts and locations but not exact.



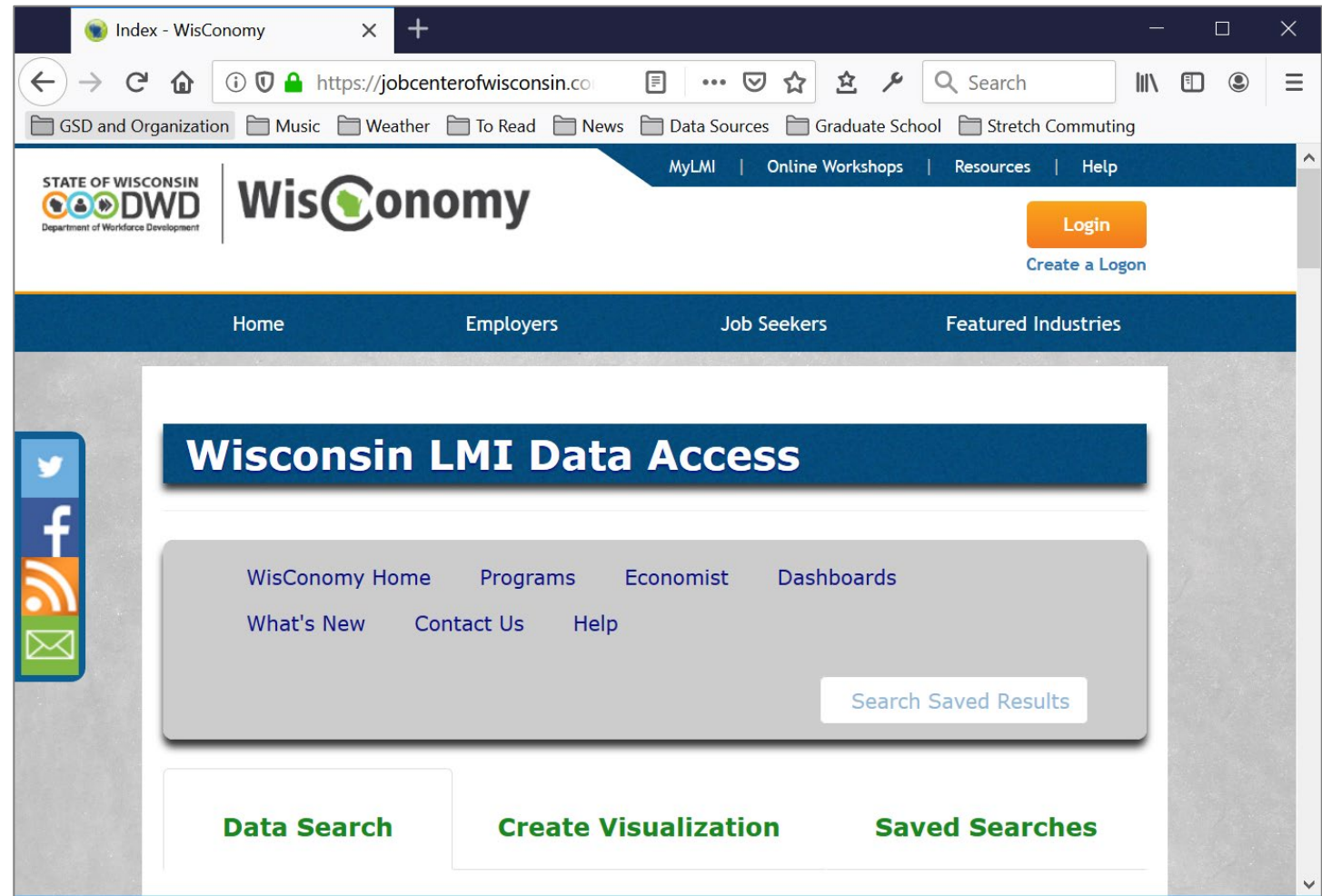
# WisConomy

<https://jobcenterofwisconsin.com/wisconomy/>

**Quarterly Census of Employment and Wages (ES-202)** – Data on employment, wages and number of establishments by industry. Quarterly/Annual data by state and county starting with 1990.

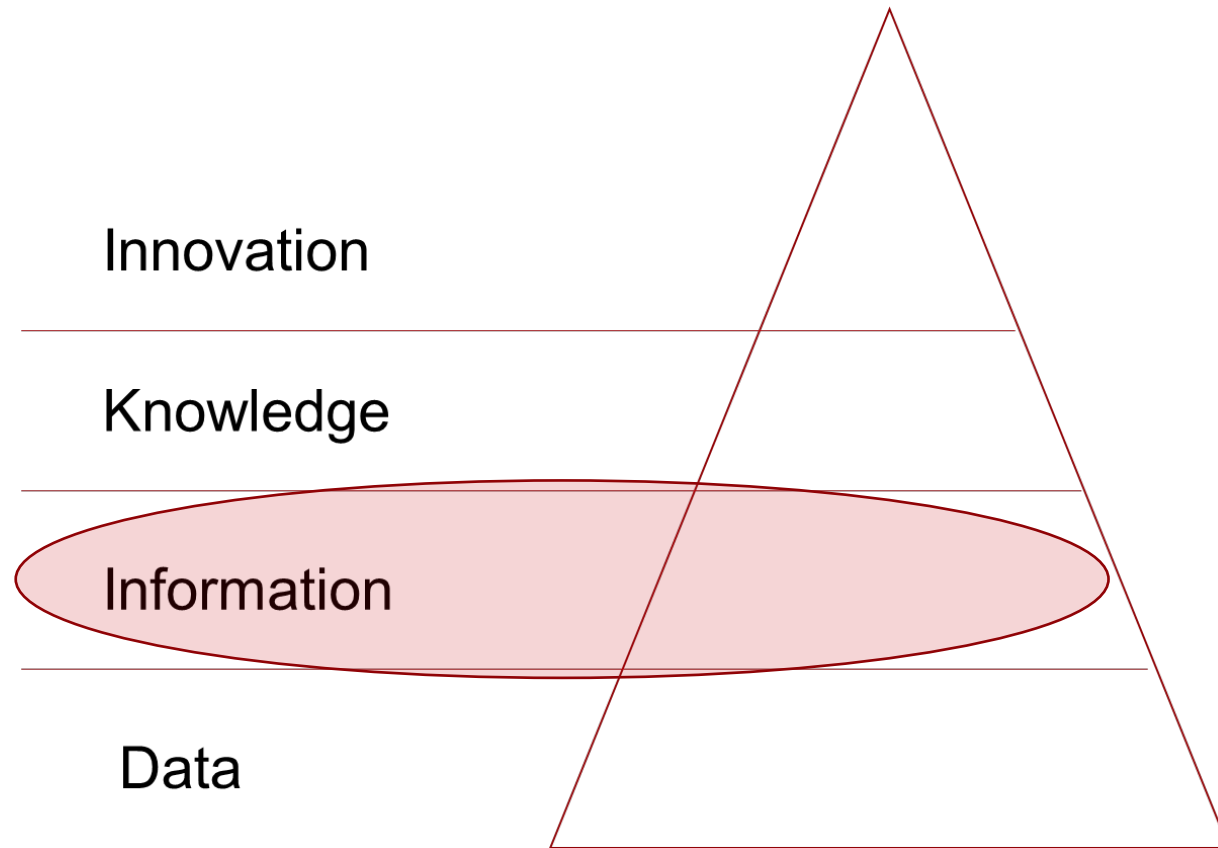
**Unemployment Statistics (LAUS)** – Monthly/Annual figures for U.S., Wisconsin, counties, metropolitan/micropolitan areas, certain cities, etc.

**Occupation Employment Statistics (OES)** – Distributions of occupations and wages.



The screenshot shows a web browser window displaying the WisConomy website. The browser's address bar shows the URL <https://jobcenterofwisconsin.com/wisconomy/>. The website header includes the logo for the State of Wisconsin Department of Workforce Development (DWD) and the WisConomy logo. Navigation links include MyLMI, Online Workshops, Resources, and Help. A search bar is located in the top right corner. The main navigation menu includes Home, Employers, Job Seekers, and Featured Industries. The central content area features a prominent blue banner for "Wisconsin LMI Data Access". Below this banner, there are links for WisConomy Home, Programs, Economist, Dashboards, What's New, Contact Us, and Help. A search bar labeled "Search Saved Results" is also present. At the bottom of the page, there are three buttons: "Data Search", "Create Visualization", and "Saved Searches".

# Data Analysis for Community Economic Development



How do we “add value” to the data and move from raw data to information?

Part II will consider how to use Growth Indices, Location Quotients and other measures to examine the local economy.







Steven Deller  
scdeller@wisc.edu

Matt Kures  
matthew.kures@wisc.edu