MARCH 13, 2024

AN AFTERNOON WITH THE DISTRICTS: DATA SESSION



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NADO WASHINGTON CONFERENCE 2024







QUICK DISCLOSURE

 The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of Argonne National Laboratory nor our sponsors at the Department of Energy nor the United States Economic Development Administration.





NATIONAL ECONOMIC RESEARCH & RESILIENCE CENTER (NERRC)

About Us

We provide innovative and transparent economic data access, research, and analysis to support and strengthen economic development and resilience in communities across the nation.



Find us at: https://www.anl.gov/dis/national-economic-research-resilience-center





TOOLS AND MODELS

National Economic Resilience Data Explorer



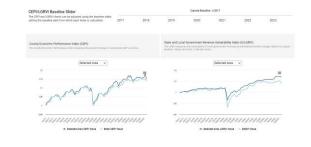
Baseline economic context

Economic Development Capacity Index



Assessment of county-level capacity, strengths, and opportunities for investment

Economic Performance and Government Revenue Indices



Near-real time measures of economic activity

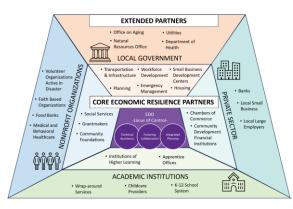


OUR RESEARCH

Quarterly Research Briefs



Equity in Economic Development



Building Resilience through Economic Development



Identifying Indicators of Economic Distress





DATA IN AN ERA OF TECHNOLOGY





DATA IN AN ERA OF TECHNOLOGY

- Why is data important?
- Dealing with data for your community
 - Geographic Constraints
 - Data accuracy
 - Asking the right questions
 - Finding the right data
- The future of figures







WHY IS DATA IMPORTANT?

- Federal Requirements
- Planning Continuation
- Accountability, Equity, Fairness





DATA FOR YOUR COMMUNITY





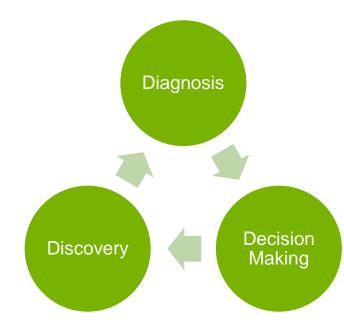
KEY COMPONENTS FOR USING DATA

- Asking the right questions
- Finding the right data
- Geographic Constraints
- Data Accuracy
- Displaying and describing data for the community





THE 3-D PRINCIPALS OF DATA



- Discovery
 - Asking questions
 - Understanding Space, Time, and Source
- Diagnosis
 - Evaluation of quality
 - Relationships between metrics
- Decision Making
 - Communication
 - Coming back to the question



THE FUTURE OF FIGURES





THE FUTURE OF FIGURES

- Place Based Policy
- Large Language Models (AI)
- Networks and Machine Learning
- Big Data





PLACE BASED POLICY

- Increased federal focus on local
- Local economic strengths
 - Business recruitment and retention
 - Workforce development
 - Economic redevelopment







LARGE LANGUAGE MODELS AND NATURAL LANGUAGE



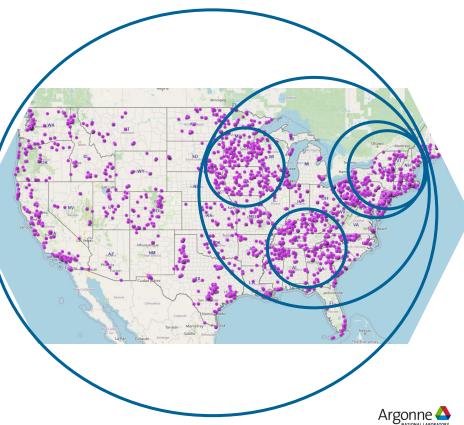
- · Use of qualitative data
- Data mining
- Leaning into stories





NETWORKS AND MACHINE LEARNING

- Network How things are connected
 - Meeting data
 - Emails
 - Community structure
- Machine Learning programs ingesting data and finding patterns
 - Requires large amounts of data
 - Requires grounding in reality





BIG DATA

- Collecting from new sources
 - Financial transactions
 - Social media



- Creating a mixed base of information
 - Supplementation
 - Validation





RECAP

- Harnessing good data can increase funding, streamline process, and improve project outcomes
- Leveraging local knowledge can increase data quality and reveal bias
- Key points when using data for local area planning:
 - Geographic description
 - Data validation (and error)
 - Data collection
 - Data storage





WHAT NEXT?

Think about the data assets in your area

National Economic Resilience Data Evolution

- Explore our data tools
- Reach out



Home to all your Economic Development Data Explore, Discover, Research







Opportunity Explorers

Tools & Applications

Resource Center

Research Hub

THANK YOU! Contact us: nerrc@anl.gov





USE CASES Alison Turner, Argonne





UPDATES TO THE NERDE

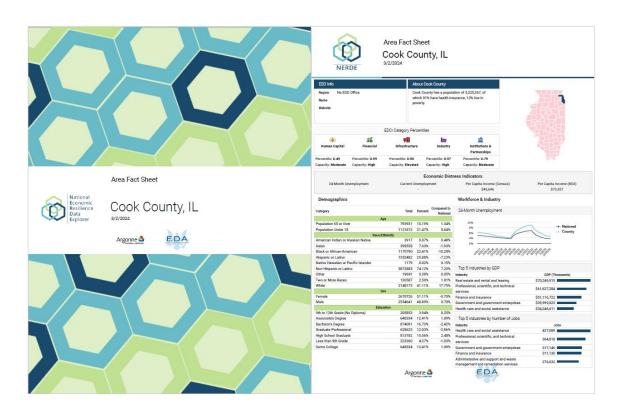






USING NERDE FOR **CEDS**

- Area Fact Sheet
 - Quick stats to help develop a CEDS
 - Get fact sheets for your EDD through the <u>Data Explorer</u>







USING NERDE FOR **DISASTER RECOVERY**

- Risk and Resilience in NERDE
 - Climate projections
 - Disaster summaries
 - Annual loss projections

Summary Demographics Housing and Infrastructure Workforce Local Economy Industry Trends



CIIMKK	Climat	ie Projec	tions		
Projected	climate	conditions	from the	ClimRR	dataset



Carroll County (IL) , Jo Daviess County (IL) , Lee County (IL) , Ogle County (IL) , Stephenson County (IL) , Whiteside County (IL)							
Annual							
Change in Days Without Precipitation	 -3.15 to -0.27 (Days) 						
Change in Maximum Average Temperature	 +2.69 to +2.90 (Degrees F) 						
Change in Minimum Average Temperature	 +3.36 to +3.62 (Degrees F) 						
Autumn							
Change in Maximum Daily Precipitation	 +0.38 to +0.55 (inches) 						
Change in Minimum Average Temperature	 +4.52 to +4.71 (Degrees F) 						
Change in Fire Weather Index	 -7.72 to -6.59 						
Winter							
Change in Maximum Daily Precipitation	 +0.05 to +0.12 (inches) 						
Change in Minimum Average Temperature	 +4.95 to +5.18 (Degrees F) 						
Change in Fire Weather Index	 -0.05 to +0.04 						
Spring							
Change in Maximum Daily Precipitation	 +0.30 to +0.49 (inches) 						
Change in Minimum Average Temperature	 +3.65 to +3.77 (Degrees F) 						
Change in Fire Weather Index	 -1.66 to -1.47 						
Summer							
Change in Days with Max Heat Index Over 105	 +3.81 to +5.53 						
Change in Days with Max Heat Index Over 115	 +2.10 to +3.12 						
Change in Days with Max Heat Index Over 125	 +1.53 to +2.17 						
Change in Days with Max Heat Index Over 95	 +8.19 to +10.51 						
Change in Daily Max Heat Index	~ +4.97 to +5.46						
Change in Seasonal Max Heat Index	 +18.16 to +19.74 						
Change in Maximum Daily Precipitation	 -0.40 to +0.13 (Inches) 						
Change in Minimum Average Temperature	 +4.66 to +4.78 (Degrees F) 						
Change in Fire Weather Index	~ -4.52 to -3.40						





USING NERDE FOR **GRANT APPLICATIONS**

Distress Statistics Generator

- Highlighted distress metrics
- County and Tract level information

Target Area Data Summary

You have selected:

- Cook County, Illinois (FIPS #17031)
- DeKalb County, Illinois (FIPS #17037)
- DuPage County, Illinois (FIPS #17043)
- Logan County, Illinois (FIPS #17107)

This selection is part of the following Economic Development Districts:

Greater Peoria EDC

Logan County, Illinois

State
Iffines (LL)
To the stars you with the file: counties for
County
Select County
Pick the county, LL (FIPS: 17031)
Code Co

Please reach out to your EDA office to see if you are eligible through a special need or other eligible criteria. Your EDA regional offices are:

Chicago
 Logan County, Illinois

Geography	24-Month Unemployment	Per-Capita Income	Disaster in the Past 5 Years	Adjacent to Tribal Boundary
National	3.64%	\$64,143		
Cook County	4.69% 128.78% of National	\$73,557 114.68% of National	Yes	No
DeKalb County	4.47% 122.67% of National	\$51,571 80,40% of National	No	No
DuPage County	3.47% 95.27% of National	\$85,498 133.29% of National	No	No
Logan County	4.44% 121.96% of National	\$47,074 73.39% of National	Yes	No

Colors in the table indicate a gradient of distress. Highlighted values in yellow indicate communities under slight distress, light orange indicates mild distress, dark orange indicates moderate distress, and red indicates severe distress. The disaster and tribal columns are highlighted in red for communities that have experienced a disaster or are adjacent to a tribal boundary





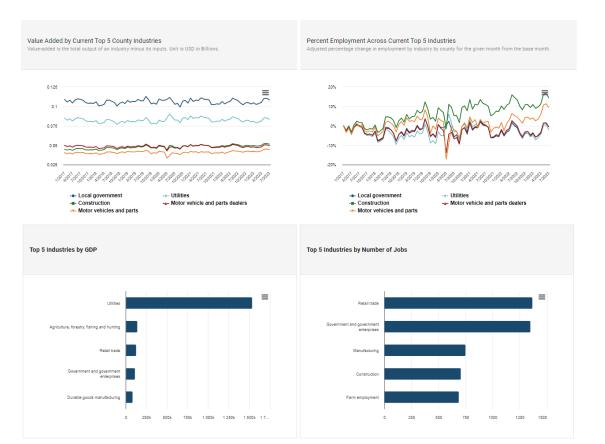
USING NERDE FOR **MARKET RESEARCH**

Local industry information

- County Economic
 Performance Indicator
- Top industry information

Workforce Information

- Labor Force Participation







RESOURCES

- National Data and Dashboards
- National Economic Resilience Data Explorer (NERDE)
- <u>Climate Risk and Resilience Portal</u>
- IRS Statistics of Income
- Minneapolis Fed Native Community Data Profiles





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