Next Generation Demographic Tool

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Champaign County Regional Planning Commission

Ameren Illinois SAG Equity Subcommittee, May 18, 2022

Artwork by Chantell Marlow, member of the Peoria Guild of Black Artists

Agenda

- Overview of MDI & CCRPC Partnership – Ameren Illinois

- Demographic Tool Overview – CCRPC

- Leveraging CCRPC Data – Ameren Illinois

- Environmental Justice Data Overview – CCRPC

- Breakout Group - All

Partesnership

Ameren Illinois & Champaign County Regional Planning Commission (CCRPC)

- Market Development Initiative (MDI)
    - Engage customers who have not previously benefitted from energy efficiency
    - Increase number of energy efficiency jobs available to local and diverse candidates
    - Support new or growing energy efficiency businesses

- Partnership with CCRPC
    - Lead for MDI data planning and analysis

Champaign County Regional Planning Commission (CCRPC)

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- The Champaign County Regional Planning Commission is an intergovernmental membership organization that provides a variety of programming in diverse areas in East Central Illinois including:

    - Regional, environmental and transportation planning
    - Economic, community, and workforce development
    - Social services
    - Early childhood education
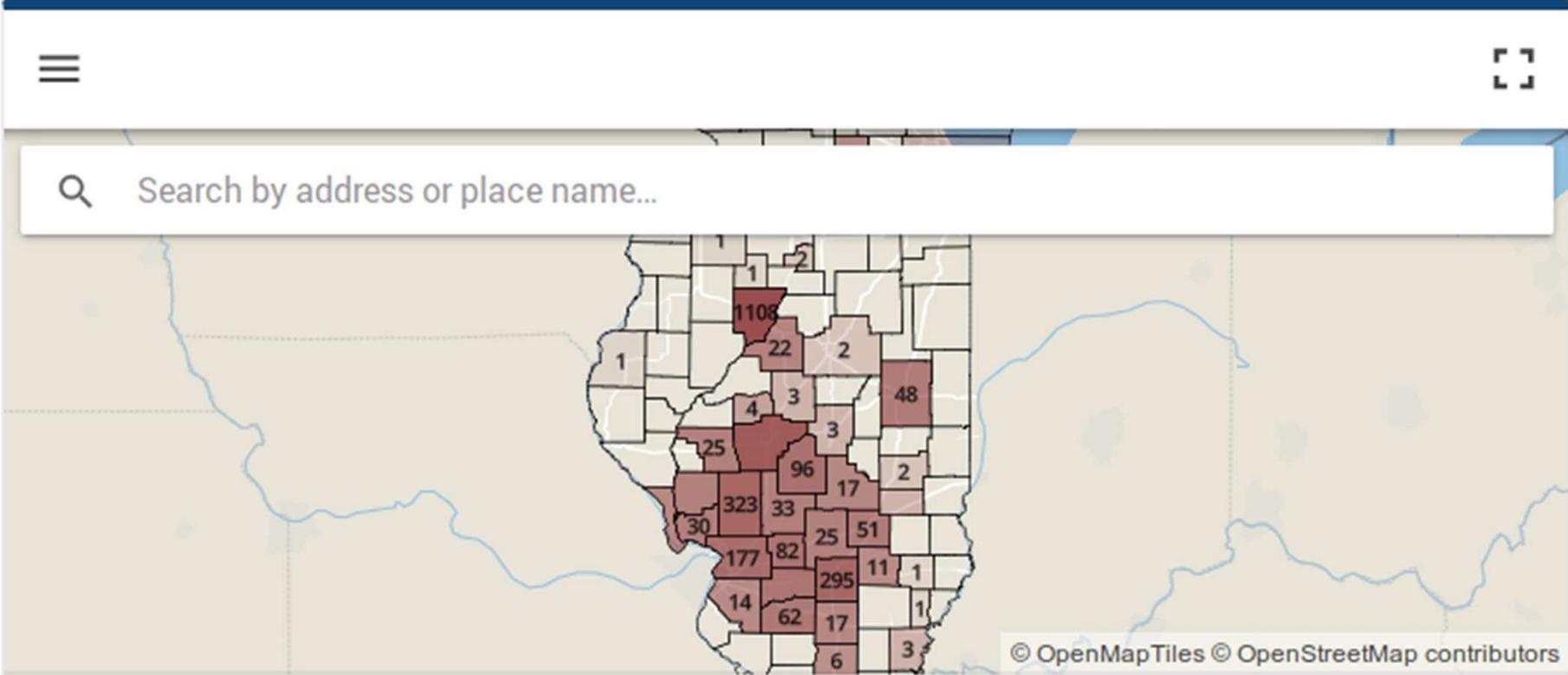   - Technical assistance

CCRPC Team

- Rita Morocoima-Black, Planning and Community Development Director

- Ethan Allgood, Software Developer

- James Sullivan, Planner II

Partnership
Ameren Illinois & CCRPC

- Benefits of Mapping Tool:

  1. User experience for community partner

  2. Help partners demonstrate their impact

  3. Real-time tracking of metrics and progress

Community Partner Data Portal

- Overview of Community Partner Data Portal
  - Customer journey
  - Project metrics
  - Outcomes dashboards

- Challenges and opportunities
  - Household demographics
  - Census demographics
  - Priority areas and target markets

Demographics Strategy

- Difficult to collect demographic data from participants
  - Partners are interacting with participants in many ways
  - Information about age, income, etc. is sensitive

- Participant addresses allow us to identify their neighborhoods
  - U.S. Census Bureau provides demographic data
  - These public data give us insight into the people living in that neighborhood

- Neighborhoods can be defined in different ways
  - Census tracts
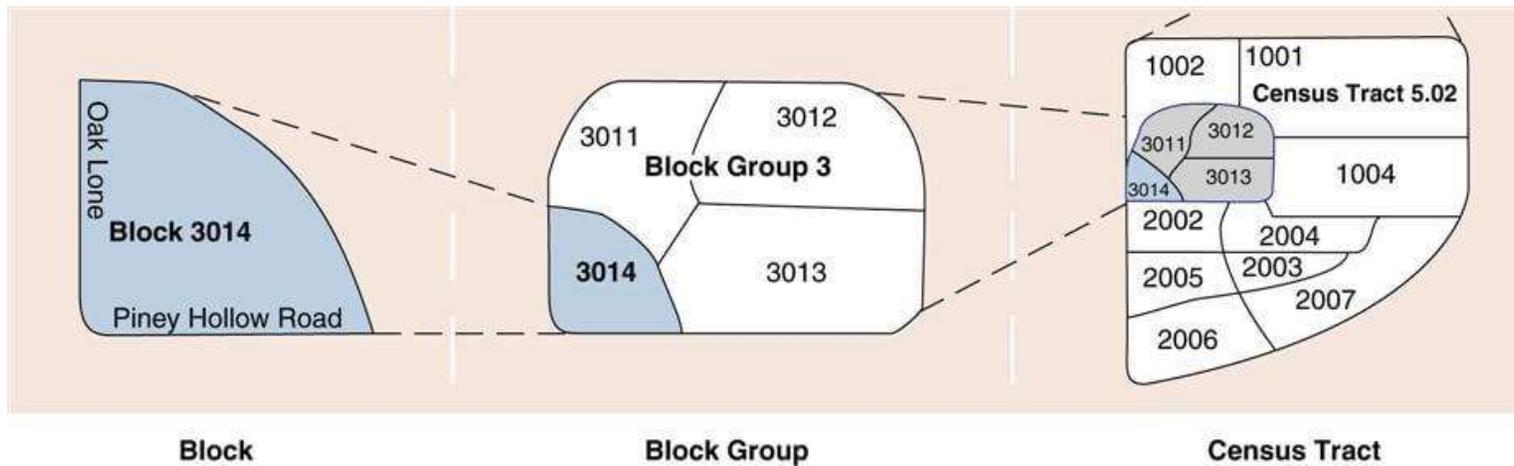 - Zip codes

U.S. Census vs American Community Survey (ACS)

2020 Census

- 100% data

- How many people live in the U.S?

- Point in time: April 1, 2020

- Characteristics: Demographic, and some Housing

ACS

- Sample data

- How do people live in the U.S?

- Period in time: 1 yr, 5 yr

- Characteristics: Demographic, Social, Economic, and Housing

Census Geography: How it Fits Together

Source: U.S. Census Bureau

Demographic Tool

- Compares ZIP Code Tabulation Areas (ZCTA's) within Ameren Illinois service area

- User composes criteria for priority by weighting demographic factors

- Priority is conveyed on a scale from Low Priority (Yellow) to High Priority (Blue)

- Basic information and demographic makeup of ZCTA is viewable when user clicks

Demographic Data

- Diverse population (Hispanic or non-white)

- Income qualified families (below 300% of federal poverty line)

- Income qualified seniors

- People with less than a high school diploma

- People with a disability

- Renters

- Seniors

- People who are unemployed

- Veterans

Demographics in Action

- Interactive map demonstration (Ethan)

Leveraging CCRPC Data

- Utilized program data and census data provided by CCRPC to identify areas in need of additional MDI partners
  - Two Rivers - Quincy
  - Decatur CAA – Decatur

- Utilized a data driven approach to select Peoria as a focus area for workforce development pilot launch
  - Overlaid census information (unemployment, IQ households) with employers, training providers, and community-based organizations

Leveraging CCRPC Data

- Portfolio Staff target high need zip codes for Program outreach utilizing the CCRPC mapping tool

- Focusing new initiative and pilot efforts
  - 100% of Small Business Energy Performance Pilot participants located in high need areas identified by CCRPC
  - Healthy Homes Pilots focusing project targeting in these areas

- Utilizing available resources within priority zip codes
  - Engaging local organizations to drive customer awareness and Program participation
  - Providing ad hoc copay grants for community-serving institutions and diverse-owned businesses to enable Program participation

Environmental Justice Overview

- EO 12898 (1994) – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
  - Identifying and addressing disproportionate effects to human and environmental health felt by minority and low-income populations

- EO 14008 (2021) - Tackling the Climate Crisis at Home and Abroad
  - Establish White House Environmental Justice Interagency Council
  - Develop strategy to address env. injustice
  - Develop clear performance metrics and publish an annual public performance scorecard.

Environmental Justice Tools

- Illinois EPA EJ Start

- EPA EJSCREEN

- IDCEO Underserved Areas

- Climate & Economic Justice Screening Tool

- Illinois Power Agency & Elevate EJ Communities

- All data used by these tools are publicly-available and additional details listed in Appendix

Climate and Economic Justice Screening Tool

- ID communities to deliver benefits of federal investments as part of Justice40 Initiative

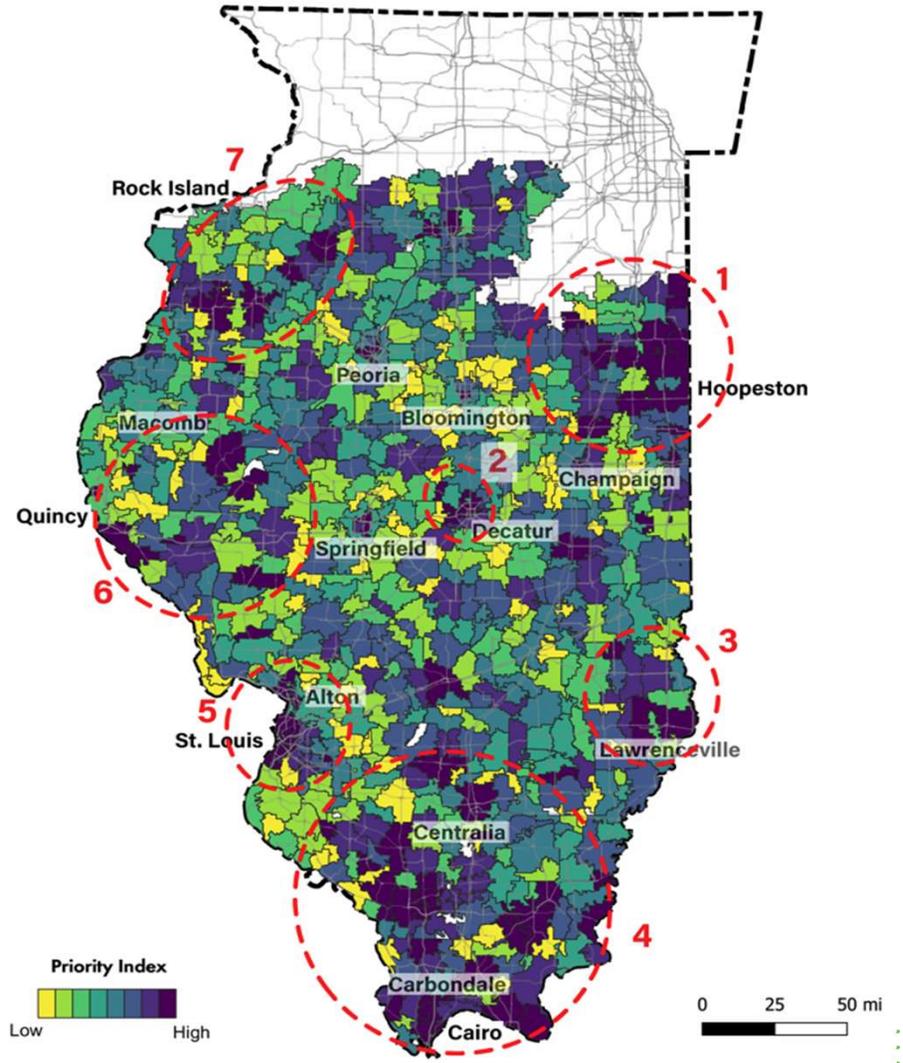| Purpose	Unit of Analysis	Demographic Indicators Used
• Identify communities that are marginalized, underserved, and overburdened by pollution • Identified as disadvantaged if: the census tract is above the threshold for one or more environmental or climate indicators AND the census tract is above the threshold for the socioeconomic indicators	Census Tract	• Low-income • Higher education non-enrollment • Median home value • Housing cost burden • Low life expectancy • Low median income • Linguistic isolation • Unemployment • Poverty • High school degree non-attainment

Climate and Economic Justice Screening Tool

- **Datasets:**
  - Low income
  - Higher education non-enrollment
  - Expected agriculture loss rate
  - Expected building loss rate
  - Expected population loss rate
  - Energy burden
  - PM2.5 in the air
  - Diesel particulate matter exposure
  - Traffic proximity and volume
  - Housing cost burden
  - Lead paint
  - Median home value
  - Proximity to hazardous waste facilities
  - Proximity to National Priorities List (NPL) sites
  - Proximity to Risk Management Plan (RMP) facilities
  - Wastewater discharge
  - Asthma
  - Diabetes
  - Heart disease
  - Low life expectancy
  - Low median income
  - Linguistic isolation
  - Unemployment
  - Poverty
  - High school degree non-attainment

Priority Index

Priority Index
Low — High

0   25   50 mi

EJT Common Indicators

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Other EJ Tools

- Linguistic Isolation
- Poverty
- Median Home value
- Housing Cost Burden
- Low life exp.
- SNAP/Free & Reduced meals
- Higher Ed non-Enrollment

(Overlap)

- Diverse Pop.
- IQ Families (low-income)
- Seniors
- Less than HS Diploma
- Unemployed

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- Renters
- Veterans
- IQ Seniors
- People w/ Disability

EJ Missing Socioeconomic Indicators

- **Linguistic Isolation**: Percent of households where no one over the age 14 speaks English well.

- **Poverty**: Percent of a census tract's population in households where the household income is at or below 100% of the Federal poverty level

- **Median home value:** Median home value of owner-occupied housing units in the census tract.

- **Housing cost burden**: Percent of households in a census tract that are both earning less than 80% of HUD Area Median Family Income by county and are spending more than 30% of their income on housing costs.

- **Low life expectancy**: Average number of years of life a person who has attained a given age can expect to live.

- **Higher Education non-enrollment:** Percent of people 15 or older who are not currently enrolled in college, university, or graduate school.

- **Supplemental Nutrition Assistance Program (SNAP) households**

- **Children eligible for free or reduced-price meal program**

Environmental Indicators of Interest

- **Expected building loss rate**: Percent of building value at risk from losses due to fourteen types of natural hazards that have some link to climate change:.
    - Energy efficient buildings are necessary as their use will increase in areas in high building loss rates, and better energy efficiency could reduce vulnerability to certain natural hazards like cold and heat waves

- **Expected population loss rate:** Rate relative to the population of fatalities and injuries due to fourteen types of natural hazards each year that have some link to climate change:
    - Energy efficient buildings can work to limit population loss by giving a respite from cold, heat.
- **Energy Burden:** Average annual energy cost per household ($) divided by average household income.
    - More energy efficiency = lower energy burden

- **PM2.5 in the air**: Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

- **Asthma**

- **Diabetes:** diabetes other than diabetes during pregnancy.

- **Heart Disease:** angina or coronary heart disease.

Breakout Group Discussion

- Assuming that data was available, what other demographic characteristics would you want Ameren Illinois to add to the demographic tool to enhance our analysis and reporting capabilities?
  - Linguistic isolation or languages spoken
  - Single parent households

- What environmental factors should we consider going forward?
  - Energy burden
  - PM2.5 in the air

Appendix

Artwork by Brenda Pagan, member of the Peoria Guild of Black Artists

Illinois EPA EJ Start

- Mapping tool designed by IEPA to ID areas of concern and meet EJ Policy strategies

Purpose	Unit of Analysis	Demographic Indicators Used
Ensure that communities are not disproportionately impacted by degradation of the environment or receive a less than equitable share of environmental protection and benefits	Census Block Group	• Minority Populations • Low-Income Populations
Develop common practices when implementing EJ concepts into Agency programs		

EPA EJSCREEN

- Mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators

Purpose	Unit of Analysis	Demographic Indicators Used
Allows users to access high-resolution environmental and demographic information for locations in the United States and compare their selected locations to the rest of the state, EPA region, or the nation.	Census Block Group & Census Tract	• People of Color • Low-income • Unemployment rate • Linguistic Isolation • Less than high school education • Under age 5 • Over age 64

Illinois Power Agency and Elevate: Environmental Justice Communities in Illinois

- Mapping tool for IPA to ID EJ communities that qualify for discounted or free solar installations

Purpose	Unit of Analysis	Demographic Indicators Used

• Promote equitable access to the solar economy through program incentives that help make solar more affordable for low-income and environmental justice communities.
• Illinois Power Agency Act sets goal of 25% of funds for projects in low-income and EJ communities
	Census Block Group	• All EJSCREEN environmental & demographic indicators except <u>Unemployed, and Proximity to UST/LUSTs.</u>
		• Sensitive Population indicators removed due to data inconsistencies
		    • Asthma Emergency Dept. Visits
		    • Low birth weight infants
		    • Drinking Water Watch
		    • SRP Sites

IL DCEO Underserved Areas

- Mapping tool by Dept. of Commerce & Economic Opportunity to ID areas eligible for enhanced tax credits

Purpose	Unit of Analysis	Demographic Indicators Used
• Identify underserved census tracts to recruit and grow businesses, build a 21st-century workforce, enhance innovation, and bring jobs and investment through enhanced tax credits.	Census Tract	• <u>Poverty rate</u> of at least 20% • 75% or more of <u>children eligible</u> to participate in the federal free lunch or reduced-price meals program • At least 20% Supplemental Nutrition Assistance Program <u>(SNAP)</u> <u>households</u> • <u>Average unemployment rate</u> higher than 120% of national average