



Affordable Housing in Illinois: Opportunities for Energy Efficiency

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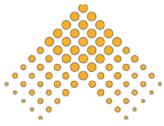


ELEVATE ENERGY
Smarter energy use for all



Agenda

- Background
- Illinois landscape for low-income households
- What do we mean by affordable housing?
- Existing barriers to energy efficiency
- The opportunity for affordable housing



Our Mission

We promote smarter energy use for all.



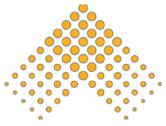
We give people the resources they need to make informed energy choices.



We design and implement efficiency programs that lower costs, and protect the environment.



We ensure the benefits of energy efficiency reach those who need them most.



Our Areas of Focus

- Smart grid benefits and hourly electricity pricing in **homes**
- Energy efficient **buildings**
- **Community**-level programs
- Research, policy and innovation

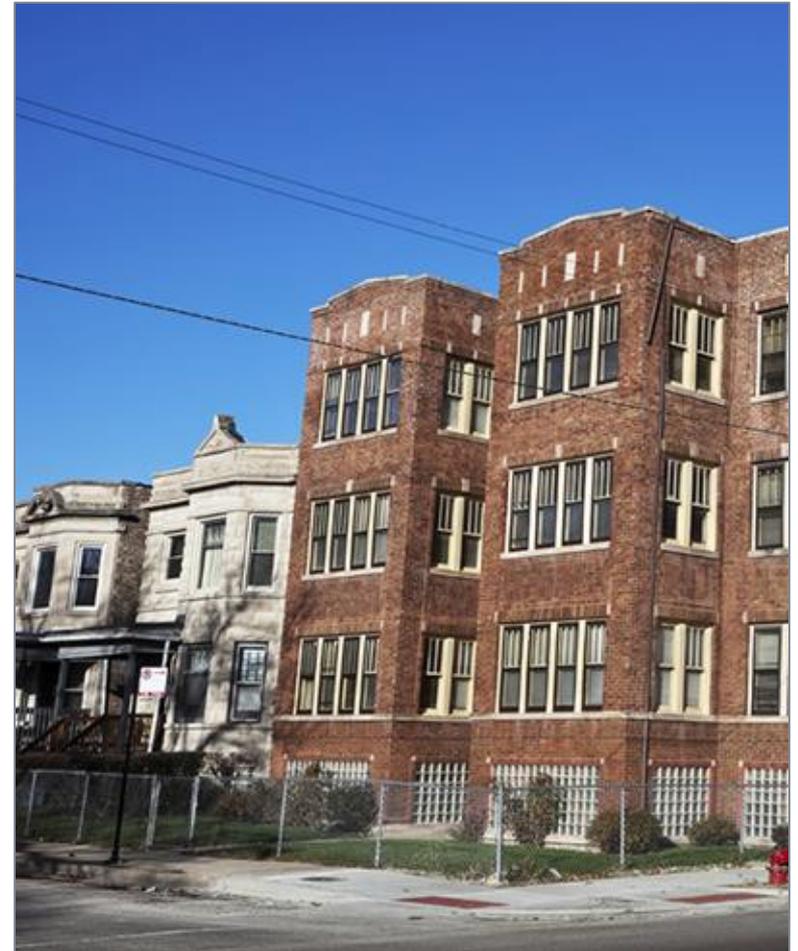


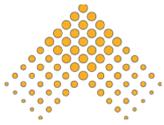


Energy Efficient Buildings

Multifamily buildings:

- More than 24,000 units retrofitted
- Almost 6 million therms and 16 million kWh saved
- Typical savings 15-30%
- Over \$14 million in CIC loans
- Created over 550 jobs





Illinois Low-Income Landscape

- Defining “low-income”

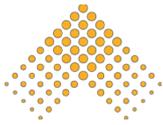
- HUD sets Area Median Income (AMI) based on rental markets
- American Community Survey (U.S. Census) estimates household incomes

- Examples:

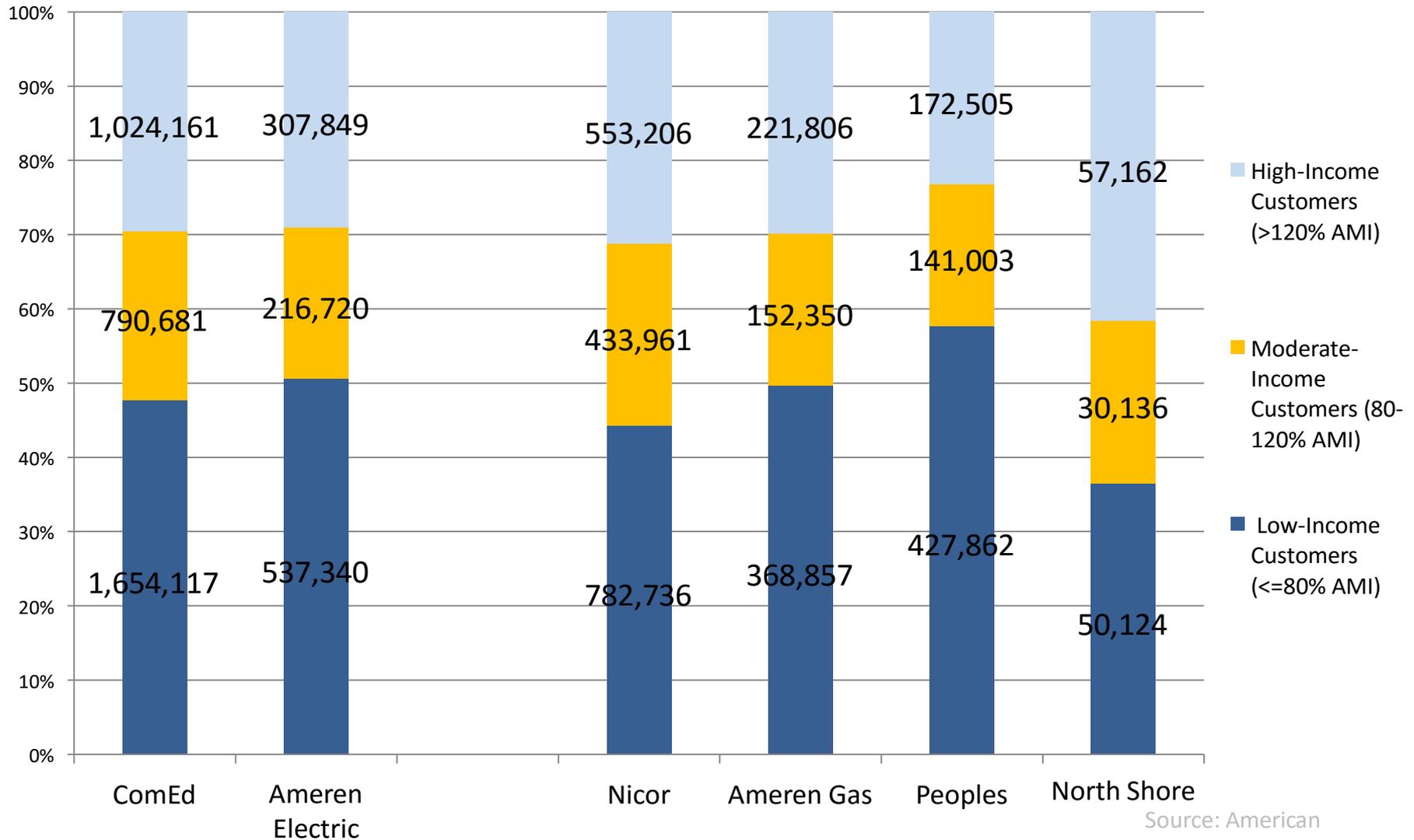
	Low-Income (<80% AMI)	Moderate- Income (81-120% AMI)	High-Income (>120% AMI)
Chicago-Joliet- Naperville, Metro Area	\$57,920	\$57,921 - \$86,879	\$86,880
Rockford, IL Metro Area	\$44,720	\$44,721- \$67,079	\$67,080

- Federal Poverty Level:

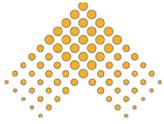
- 150% : \$35,775
- 200% : \$47,700



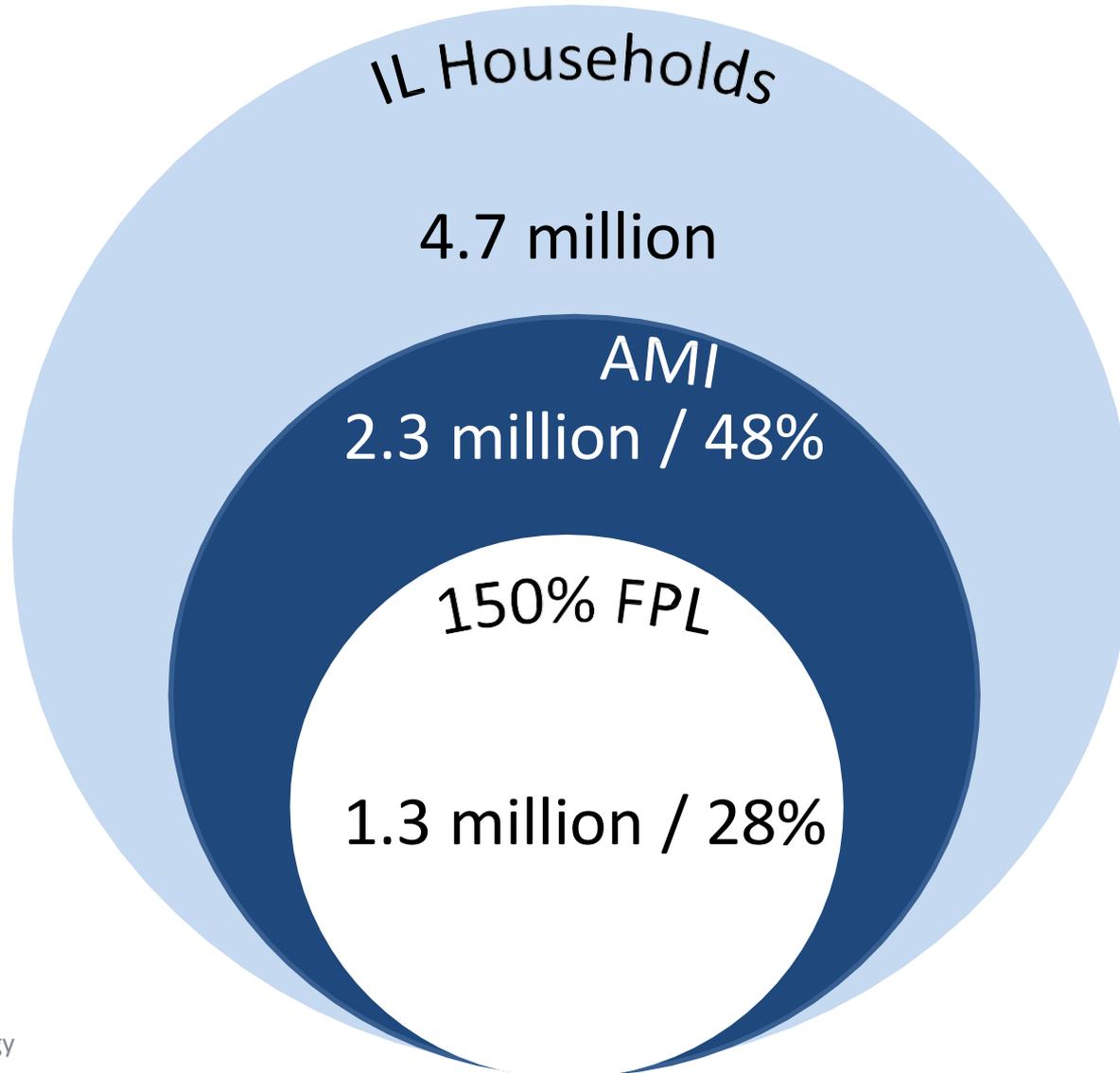
Income Distribution by Utility Area

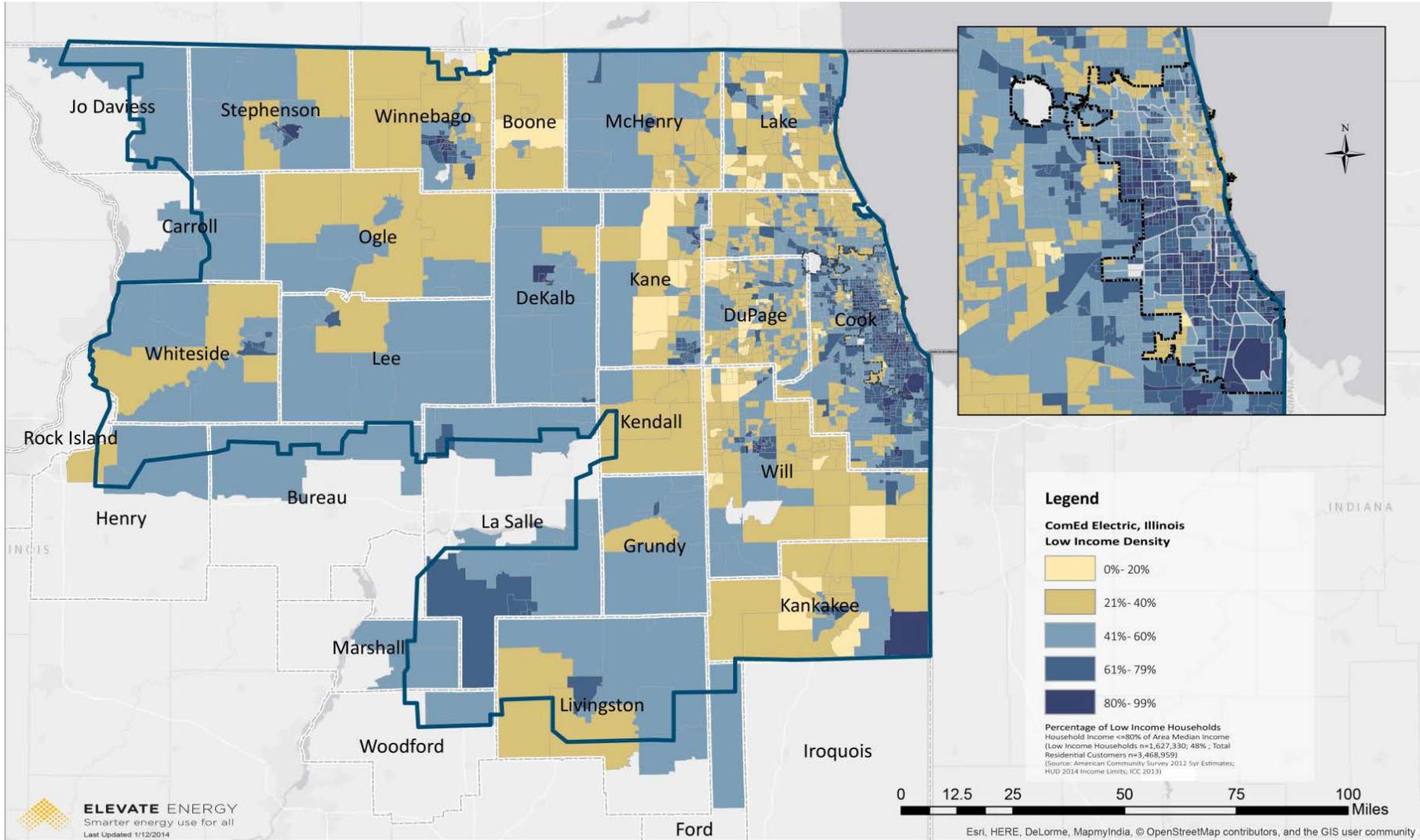
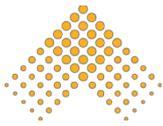


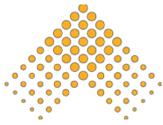
Source: American
Community Survey, 2013
5-Year Estimates



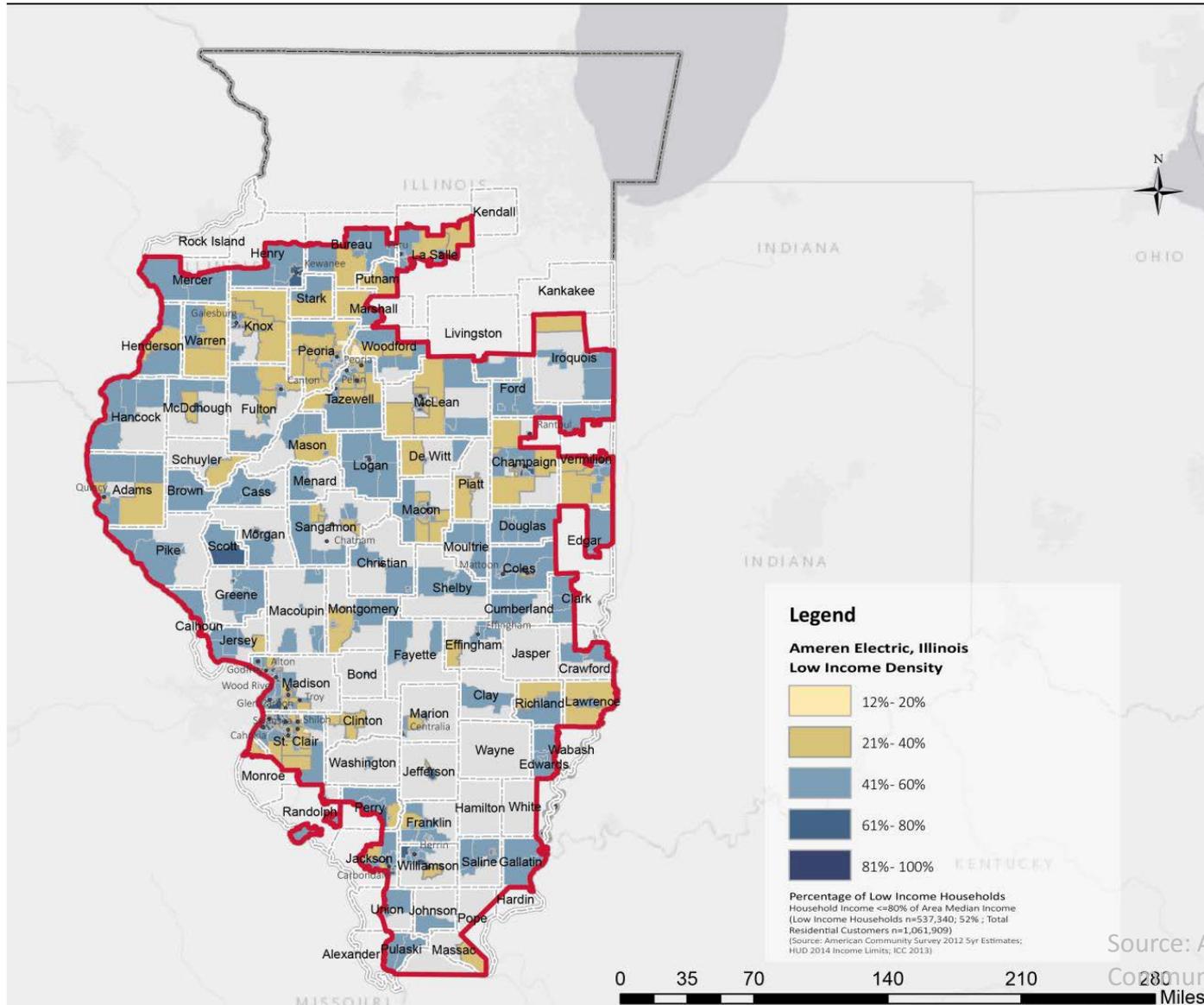
Income Distribution in IL (2013)

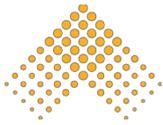




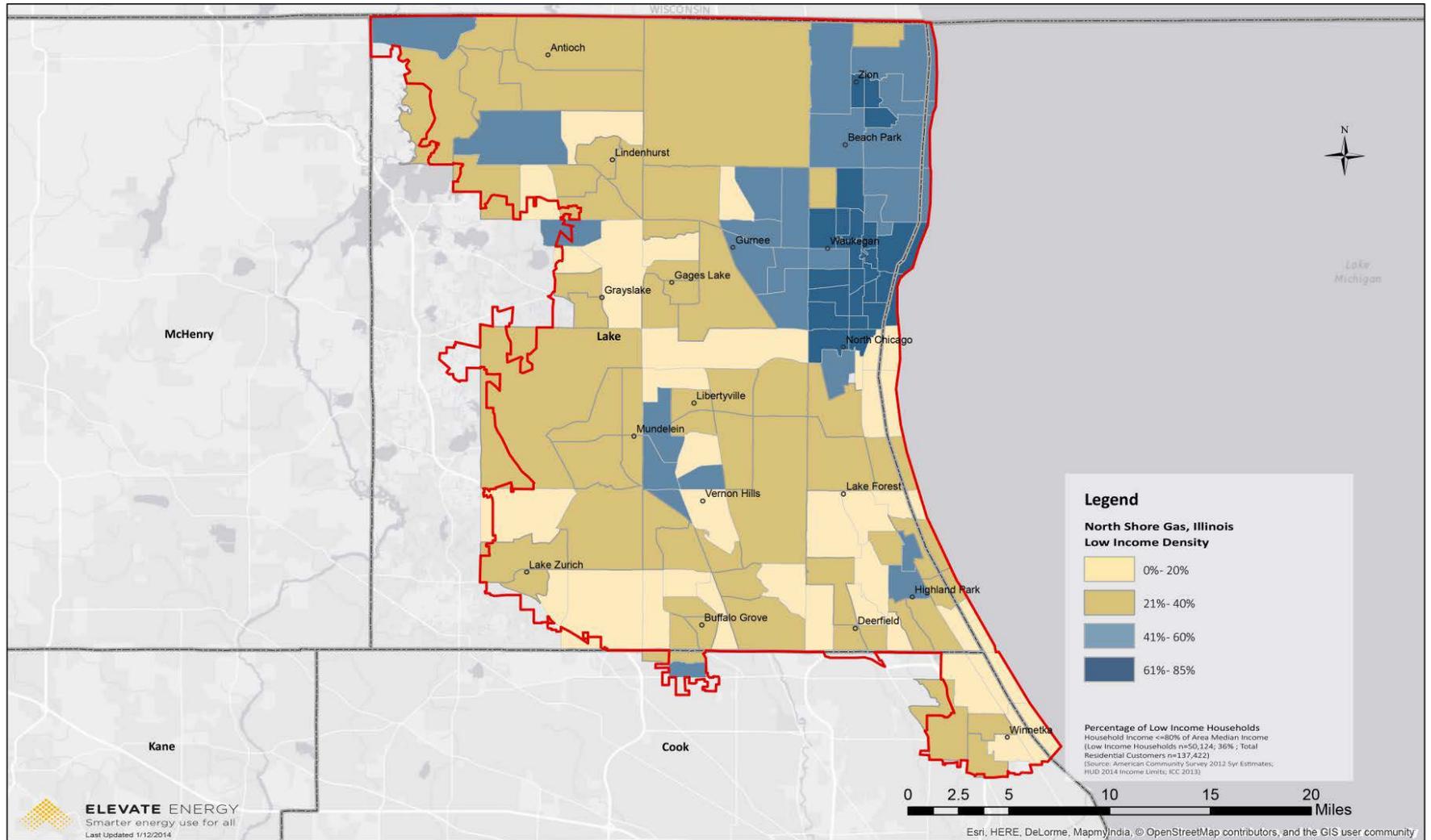


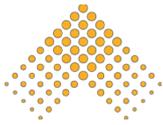
Ameren Electric



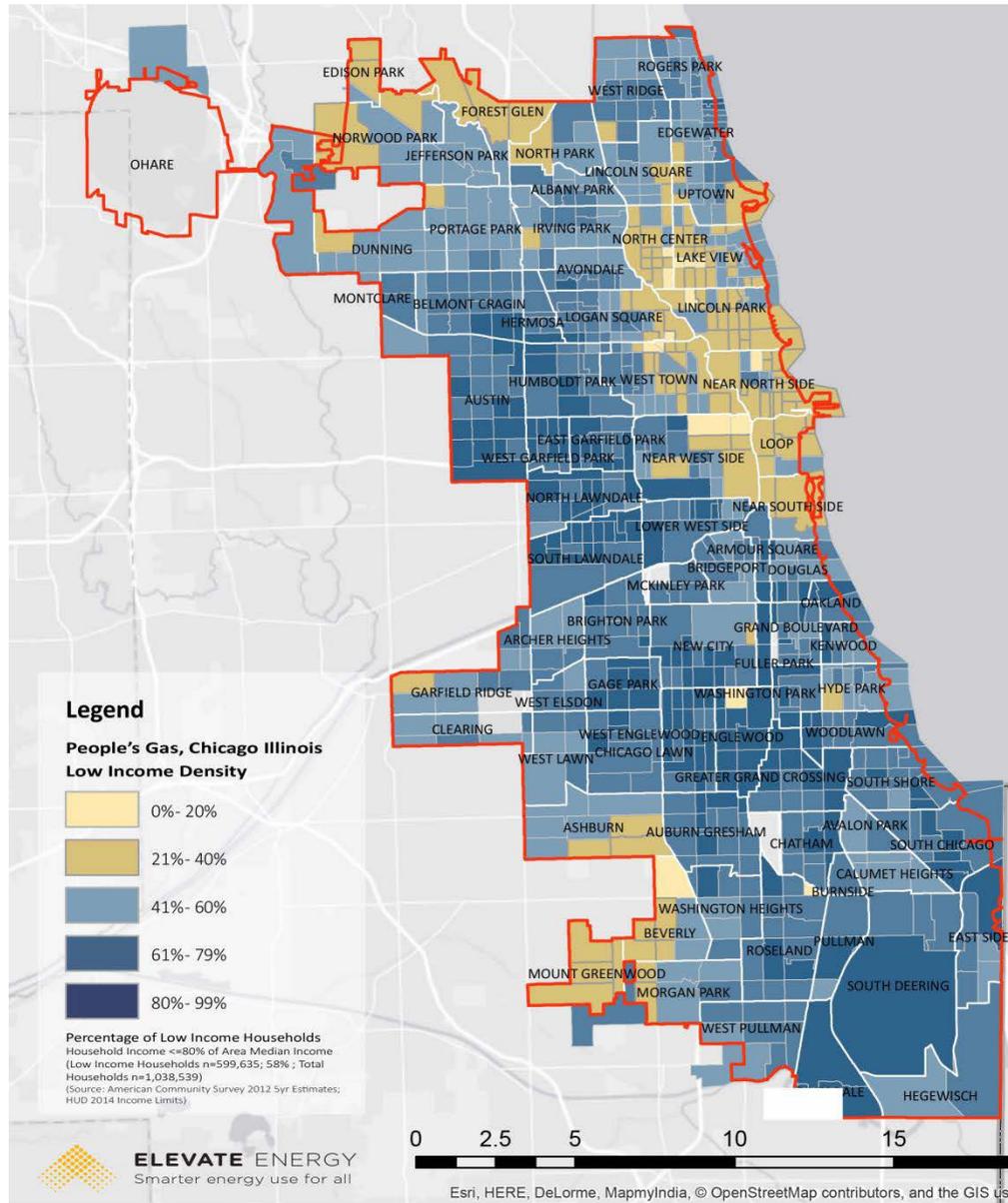


North Shore Gas

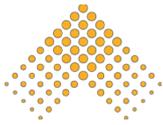




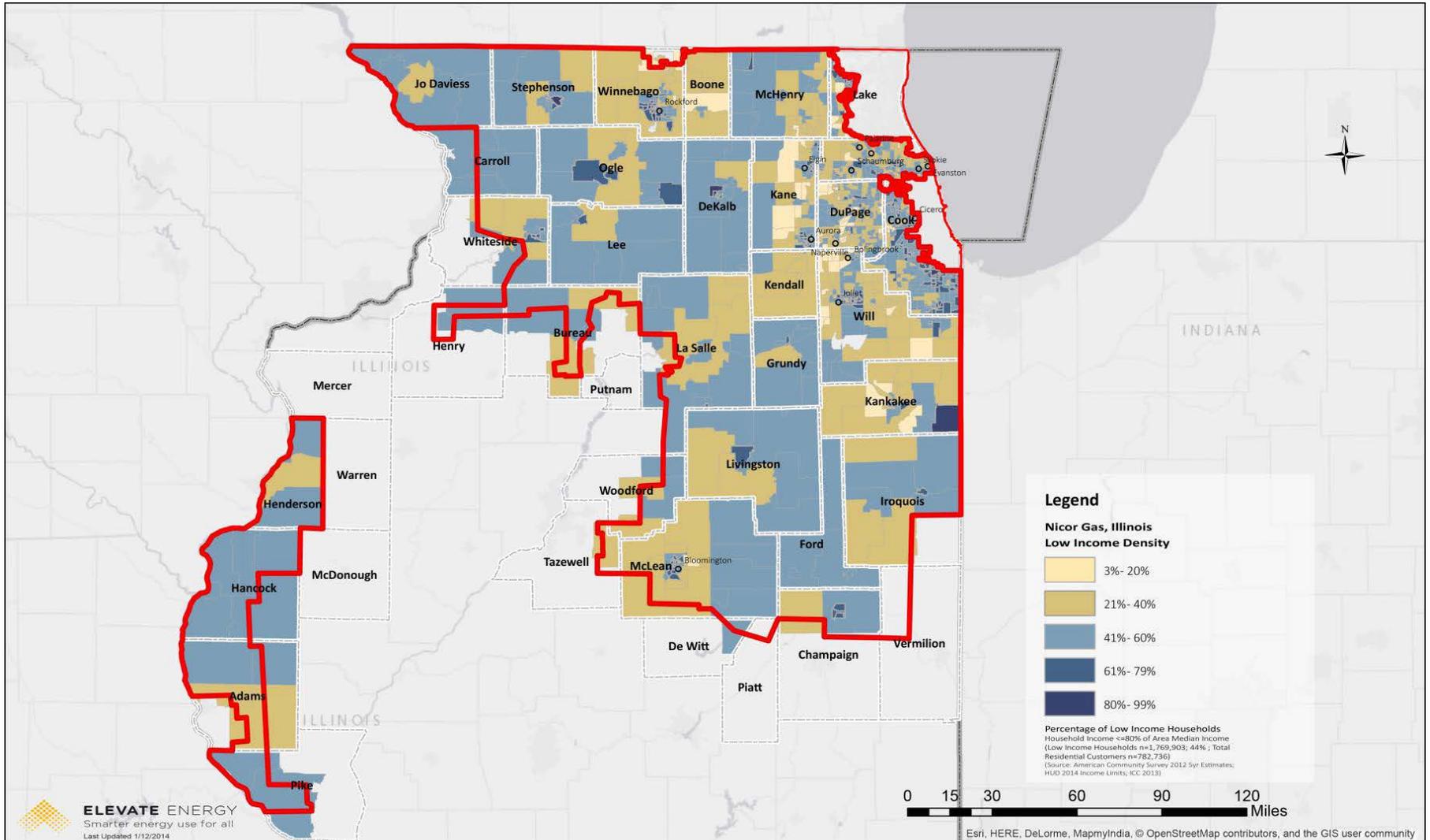
Peoples Gas

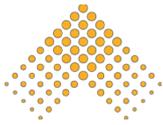


Source: American
Community Survey, 2013
5-Year Estimates

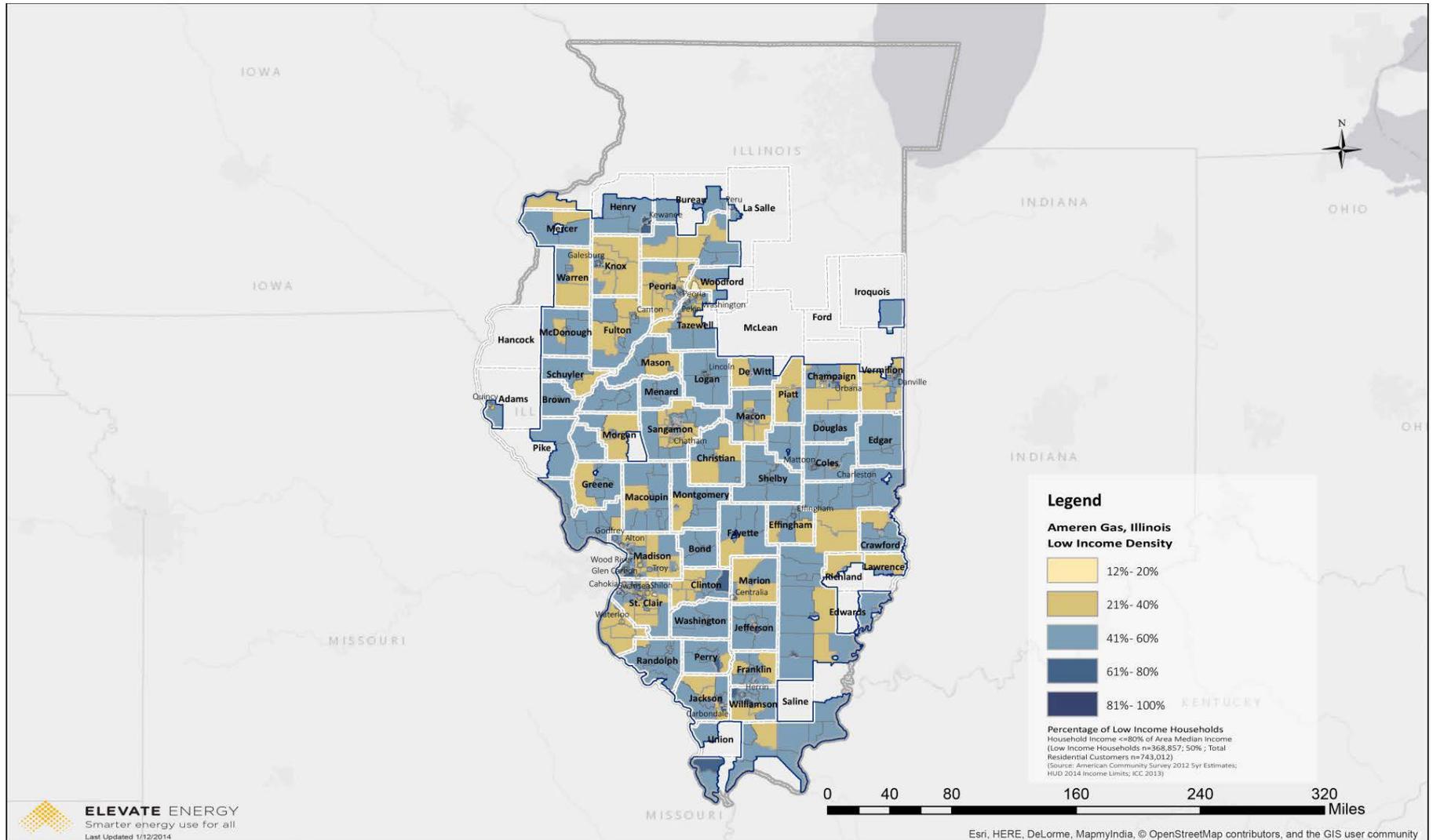


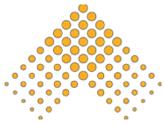
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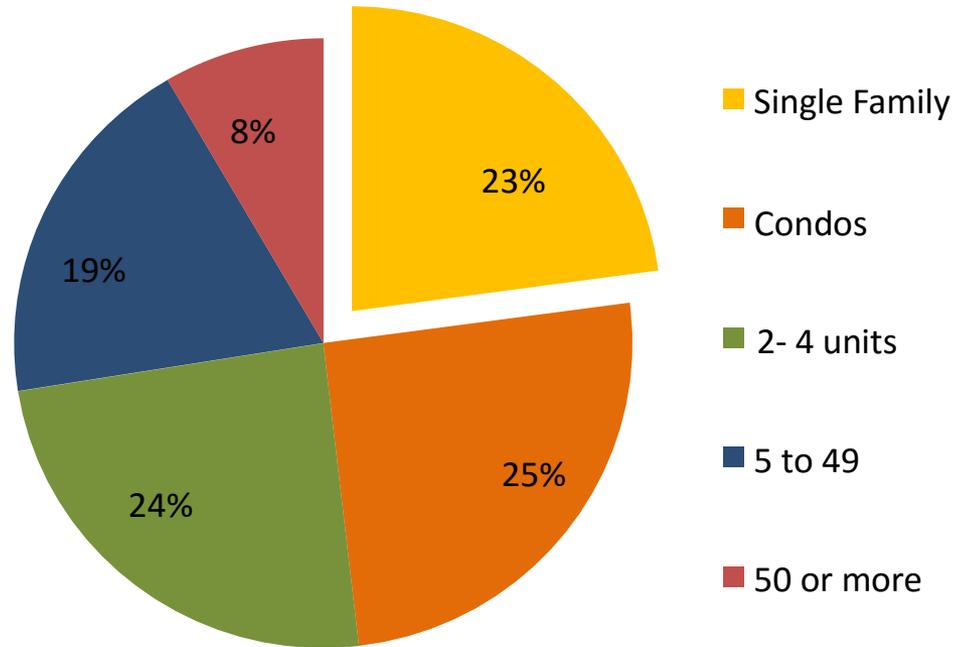
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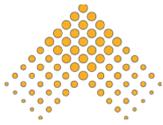
Housing in IL and Chicago

- 5.3 million housing units in IL
- Of IL housing units, 33% are in multifamily housing, and the remainder are single family homes
- In Chicago, more than 75% are multifamily:



City of Chicago Housing Units

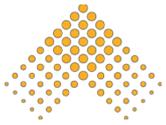
Source: American
Community Survey, 2013
5-Year Estimates



Affordable Housing

- Affordable housing defined as rent < 30% of the monthly income for low-income families
- Accounts for 40-50% of the housing stock
- Affordable housing includes:
 - Subsidized housing
 - Section 8; LIHTC, public housing, privately owned, etc
 - Unsubsidized housing Market-rate
 - Affordable, but not subsidized, aka “naturally occurring affordable”

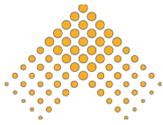
<i>All Multifamily Housing</i>	Market-Rate	Unsubsidized Affordable	Subsidized
City of Chicago	49%	34%	17%
Illinois	50%	27%	23%



Evidence of the increasing energy burden

- 24% of IL families are severely rent-burdened
- Energy costs were 15-28% of income for a family in poverty
- Limited access to financial services:
 - 8% un-banked; 20% underbanked in the US
 - Noncitizens and Spanish-speaking-only more likely to be unbanked (22% and 37%)
- Cycle of utility shutoffs and fees
- Recent UC Berkeley study: only 10% of the \$18 billion spent on federal clean energy tax credits went to the bottom 60% of incomes

Sources: Heartland Institute; Colton; CFPB; ACS 2013 5-year estimates; Vox

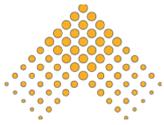


Energy use by Income and Housing Type

- Drivers of energy use
 - Building characteristics, occupancy, behavior, appliance/equipment efficiency, etc
- Energy use Single Family Homes:

	N	Median annual kWh	Median annual kWh/ft ²	Median annual therms	Median annual therms/ft ²
Single Family Homes in Higher-Income* Census Tract	371,401	8,783	6.37	1,309	0.975
Single Family Homes in Low-Income* Census Tract	58,756	8,165	7.12	1,461	1.29
Difference		-7.0%	11.8%	11.6%	32.3%

*Defined according to HUD 80% AMI Qualifications
 Source: Elevate Energy program data, Cook County Single Family Homes, 2006-2008



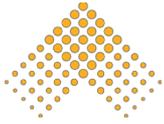
Energy use by Income and Housing Type

- Energy use in Multifamily homes:
 - Weather-normalized gas EUI is 15% higher in HUD-Qualified census tracts than in more affluent areas

	N	Median Gas EUI (weather normalized)	Mean Gas EUI (weather normalized)
Multifamily Building in Higher- Income* Census Tract	217	95.2	97.4
Multifamily Building in Low--Income* Census Tract	232	109.3	112.6
Difference		14.8%	15.6%

*Defined according to HUD 80% AMI Qualifications

Source: Elevate Energy/CIC program data, multifamily buildings with valid gas data



Barriers to Energy Efficiency

- Affordable housing has multiple barriers to wider uptake of energy efficiency:
 - Financing access
 - Deferred maintenance
 - Split incentive for landlords and tenants
 - Lower budgets and maintenance staff than larger portfolios
 - Lack of knowledge and ability to navigate multiple programs