



The Energy Rights Project

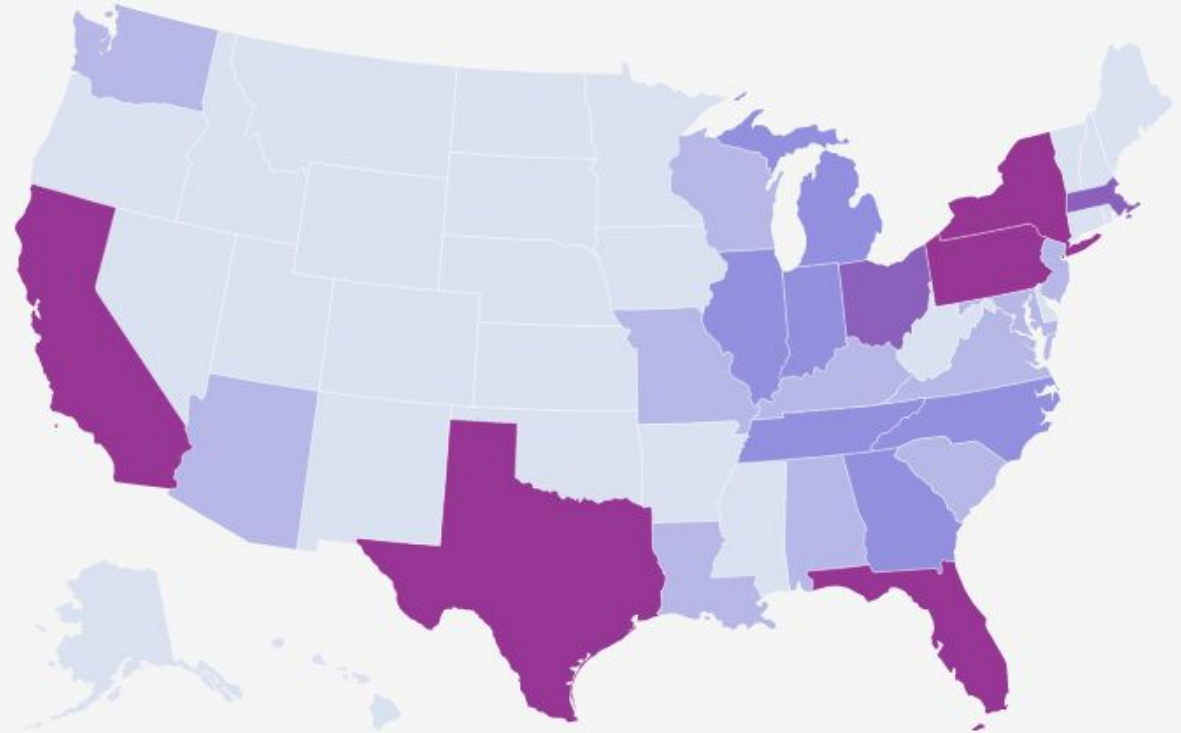
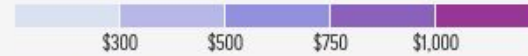
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Faculty Mentor: Ali Kenner (Department of Politics and CSTS)

COVID-19 & Energy Vulnerability

\$20B+ projected to be past due in electric bills

Projected arrears to utility companies as of March 2021, in millions

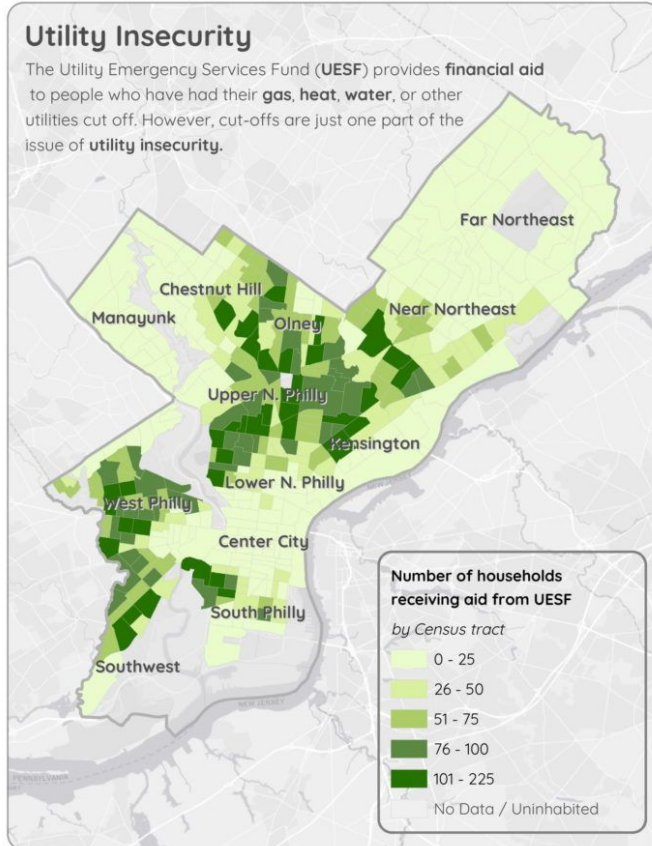


Source: neada.org

What is energy vulnerability?

Utility Insecurity

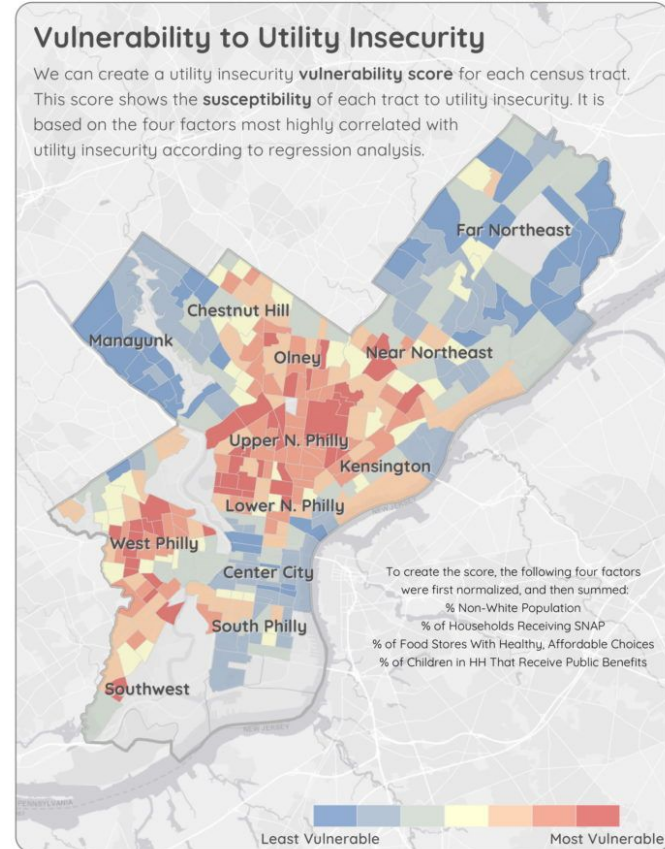
The Utility Emergency Services Fund (UESF) provides **financial aid** to people who have had their **gas, heat, water**, or other utilities cut off. However, cut-offs are just one part of the issue of **utility insecurity**.



Map created 2018 from UESF dataset.

Vulnerability to Utility Insecurity

We can create a utility insecurity **vulnerability score** for each census tract. This score shows the **susceptibility** of each tract to utility insecurity. It is based on the four factors most highly correlated with utility insecurity according to regression analysis.



Map created in 2018 from 2011-2016 ACS Census Data and Legal Clinic intake data.

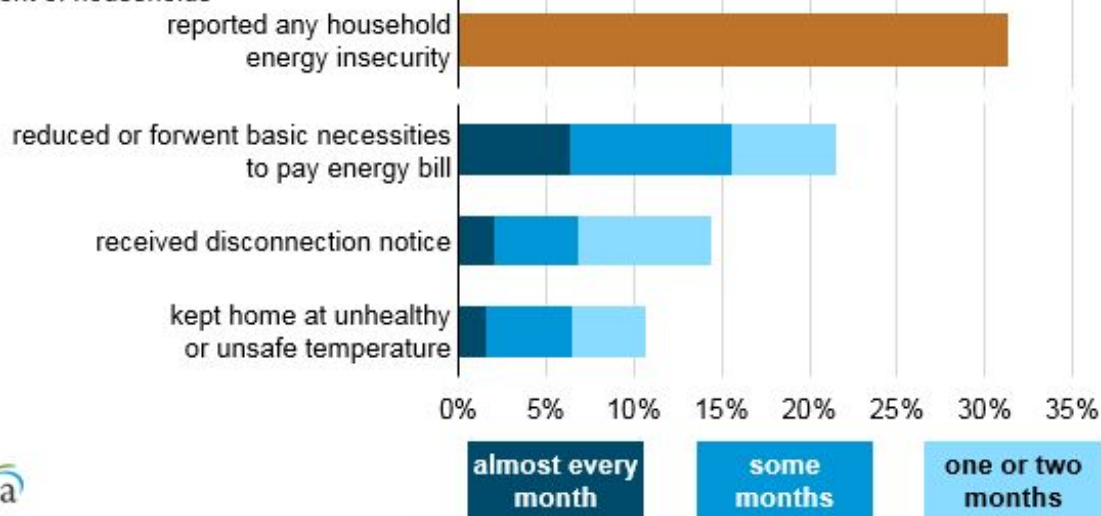
What is energy vulnerability?

SEPTEMBER 19, 2018

One in three U.S. households faces a challenge in meeting energy needs

Households that experienced energy insecure situations, 2015

percent of households

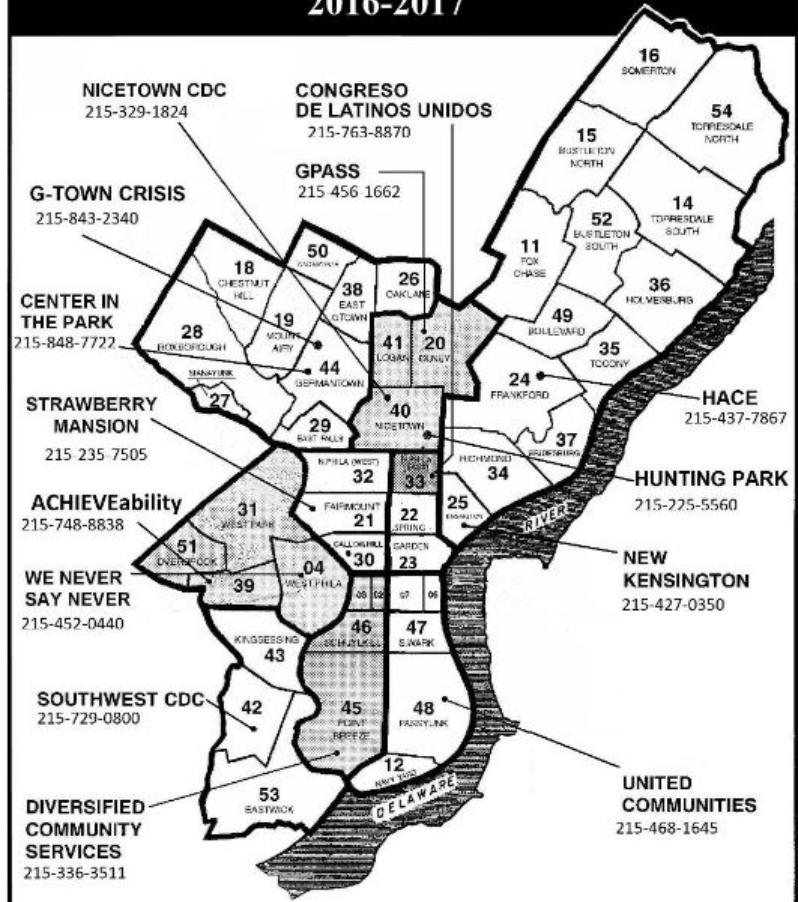


Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey 2015*

Philadelphia's Energy Assistance Network: Neighborhood Energy Centers (NECs)

NEIGHBORHOOD ENERGY CENTERS

2016-2017



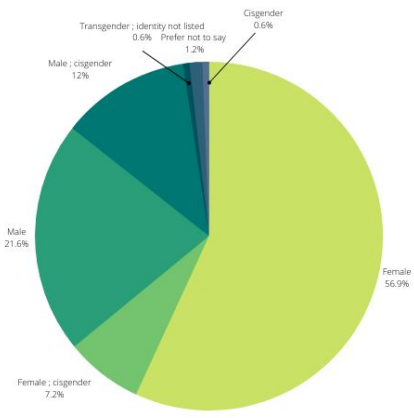
Local & Federal Energy Assistance Programs

- LIHEAP: Low Income Home Energy Assistance Program, a **federal** program that provides grants to eligible households.
- CAP: The Customer Assistance Program, offered through PECO, eligible customers are placed on a budget and payment plan (**local** program)
- WAP: Weatherization Assistance Program, a **federal** program that performs weatherization services to eligible households
- UESF: Utility Emergency Services Fund, provides grants to eligible individuals and families who are facing a termination or have had their services shut off (**local** program)
- TAP: The Tiered Assistance Program, assistance program offered by the Philadelphia Water Department (**local** program)
- CRP: Customer Responsibility Program, offered through PGW. Cuts bill amount to eligible households. (**local** program)

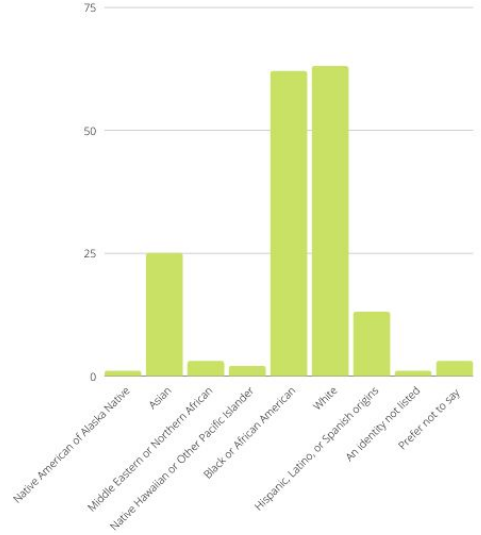
What would you do if you faced a utility shut-off?

Methods: Data & Analysis

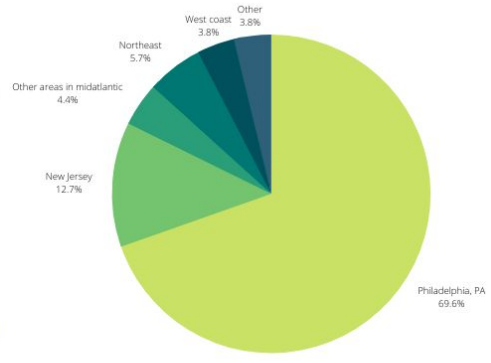
Gender Identity



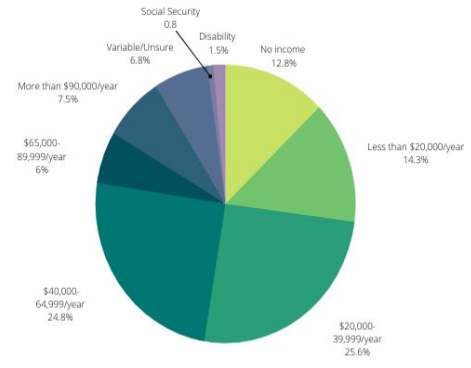
Racial/Ethnic Identity



Location



Income



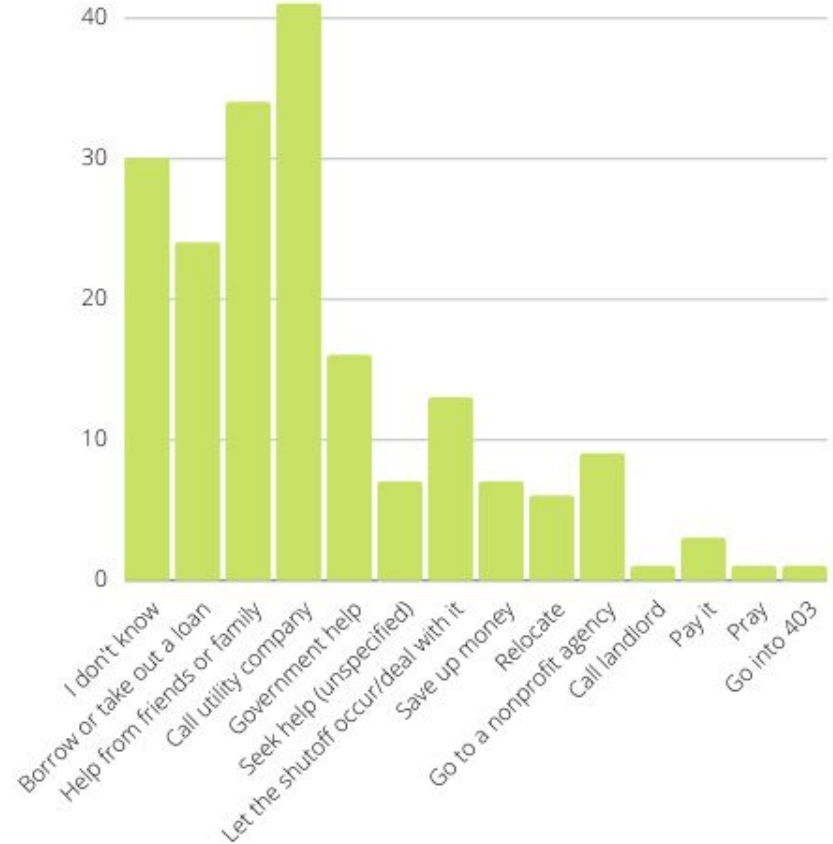
What would you do if you faced a utility shut-off?

“I don't know how to answer this. I really don't know what I'd do...I think it would depend on the whole situation. Like... because I don't see that happening to my household, I feel like there would be other things that would have to be going on that would influence what my options would be.”

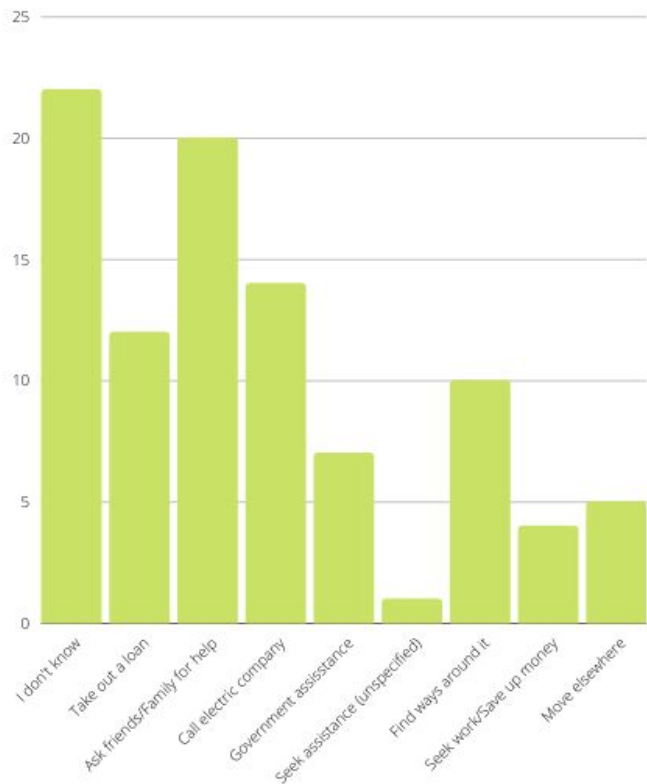
-White woman, age 18-24, who had completed some college

Out of 167 interviewees:

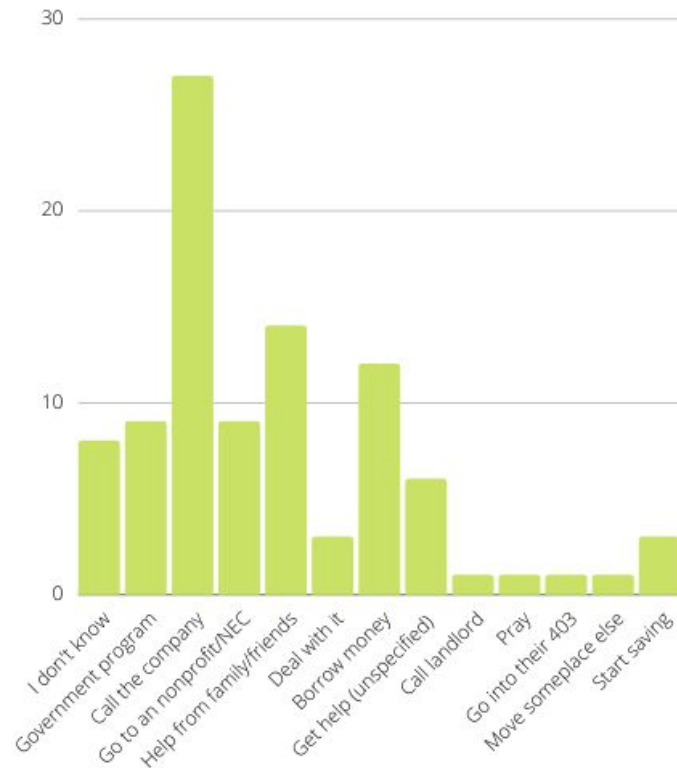
- 30/167 (18%) did not know
- 34/167 (14.4%) would borrow money/take out a loan
- 41/167 (24.6%) would contact their utility company
- 34/167 (20.4%) would go to friends and family
- 16/167 (9.6%) would seek government help
- 13/167 (7.9%) would let the shutoff occur



Spring respondents



Winter respondents



Project's Findings: Key takeaways

1. The Winter interviewees - those who attended NEC workshops - practiced more effective forms of energy conservation (i.e. DIY weatherization versus turning off lights)
2. Energy assistance literacy was much higher among Winter interviewees



Finding 1

Energy Saving Strategy	S	W	C
Use sunlight	33/84 (39.3%)	23/83 (27.7%)	56/167 (33.5%)
Lowered water heater	9/84 (10.7%)	10/83 (12.1%)	19/167 (11.7%)
Try not to use dryer	10/84 (11.9%)	4/83 (4.7%)	14/167 (8.4%)
More blankets/clothes	41/84 (48.8%)	11/83 (13.3%)	52/167 (31.1%)
Shorter showers	27/84 (32.1%)	8/83 (9.6%)	35/167 (21%)
Recycled old appliances	13/84 (15.5%)	1/83 (1.2%)	14/167 (8.4%)
Switching to LED lightbulbs	40/84 (47.6%)	10/83 (10.4%)	50/167 (29.3%)
Unplugging devices	51/84 (60.7%)	27/84 (32.5%)	78/167 (46.7%)
Consulting educational material	3/84 (3.6%)	6/84 (8.4%)	9/167 (5.4%)
None of the above	8/84 (9.5%)	21/83 (25.3%)	29/167 (17.4%)
Other	6/84 (7.1%)	37/83 (44.6%)	43/167 (25.8%)

“I reduce it through the thermostat, I lower it because I believe it saves a lot of money. I don't have a choice with the electricity, I have to put it on 8 hours a day. When it comes to the AC, during the summer, I automate it. When the room it too hot, I have to put it on, but if I dont have the money, I have to turn it off and I have to use the fan instead. “

35-44 year old African American female; completed college

Finding 1 Continued

Have you ever turned off heating or cooling to save money?	Spring	Winter
Yes in the past	43/86 (50%)	54/83 (65.1%)
Yes because of COVID-19	9/86 (10.5%)	30/83 (36.1%)
No	34/86 (41%)	21/83 (25.3%)
Do not control temp in home	2/86 (2.4%)	0/83 (0%)
Considering due to COVID	1/86 (1.2%)	0/83 (0%)
Yes, no elaboration	2/86 (2.4%)	0/83 (0%)
Turned down	1/86 (1.2%)	2/86 (2.4%)

Has your home been weatherized through WAP?	Spring	Winter
Yes	0/81 (0%)	15/81 (18.5%)
No, weatherized my own home	15/81 (18.5%)	15/81 (18.5%)
No, my home is not weatherized	37/81 (45.7%)	29/81 (35.8%)
I don't know what weatherization is	32/81 (39.5%)	8/81 (9.9%)
I don't know what WAP is	29/81 (35.8%)	14/81 (17.3%)

Finding 2

Program	% familiar in Spring	% familiar in Winter	Cumulative
LIHEAP	12/81 (14.8%)	77/83 (92.7%)	89/164 (54.3%)
CAP	6/81 (7.4%)	57/83 (68.7%)	63/164 (38.4%)
WAP	6/81 (7.4%)	56/83 (67.4%)	62/164 (37.8%)
Earned Income Tax Credit	30/81 (37%)	50/ 83 (60.2%)	80/164 (48.9%)
Supplemental Security Income	20/81 (24.1%)	47/83 (56.6%)	67/164 (40.3%)
All of the above	1/81 (1.2%)	29/83 (34.9%)	30/164 (18.3%)
None of the above	41/81 (50.6%)	1/83 (1.2%)	42/164 (25.6%)

“I apply for LIHEAP every year. I was amazed at what WAP did. It is a great program.”

85-94 year old female, completed some high school

Conclusion:

NEC energy
counselors at the
Energy Coordinating
Agency's Knight's
Training Center, 2016



References

Berry, Chip, Carolyn Hronis, and Maggie Woodward. "One in Three U.S. Households Faces a Challenge in Meeting Energy Needs." *U.S. Energy Information Administration (EIA)*. <https://www.eia.gov/todayinenergy/detail.php?id=37072#>.

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For more information visit <https://energyrights.info>

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