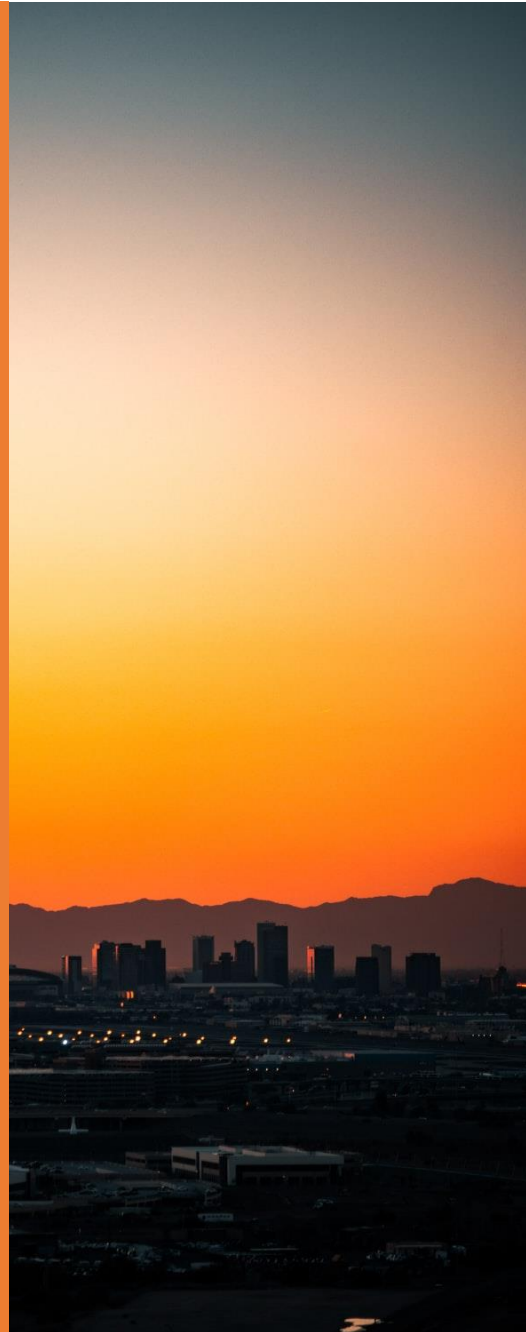


**Energy Insecurity  
in Maricopa  
County:  
Findings from  
Stakeholder  
Interviews  
(Summer-Fall 2021)**

**Report by Liv Yoon, PhD**

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**Phoenix, Maricopa County, Arizona**



## Interview Overview

- Goal: to gain insights into their professional experience and identify areas for coordination and collaboration
- 18 key informants interviewed on Zoom between August – October 2021
- Informants from:
  - City, County, & State-level Government Agencies
  - Utility Companies
  - Non-Profits
  - Community-Based Organizations (including Community Health Workers)
  - Academia
- Topics covered:
  - Understanding of energy insecurity
  - Challenging and rewarding aspects of job
  - Insights gained from job
  - What is currently working well
  - What data gaps exist
  - Funding needs
  - Impacts of COVID-19 on energy insecurity and related work
  - Visions for achieving energy security in Maricopa County
  - Visions for the Energy Insecurity Working Group

## FINDINGS

### Prominent Challenges

Community-Based Organizations (CBOs)	<ul style="list-style-type: none"> <li>• Helping those without legal status is very difficult; yet they are often most in need</li> <li>• Administrative and technological barriers (e.g., trouble navigating online applications; no access to internet) (<a href="#">Moynihan et al., 2015</a>; <a href="#">Brodkin &amp; Majmundar 2010</a>; <a href="#">Fossett &amp; Thompson 2006</a>)</li> <li>• Frustration with research that doesn't yield outcomes → would like to see more action</li> </ul>
City/County/State Officials	<ul style="list-style-type: none"> <li>• Difficult to hear directly from those impacted by energy insecurity</li> <li>• Legal boundaries leading to inability to serve some groups – e.g., tribal lands that are legally out of jurisdiction</li> <li>• Balancing politics with science – e.g., The role of politics making things more adaptation heavy than mitigation because the latter is considered political</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Need for assistance exceeds resources</li> <li>• Bureaucratic red tape – e.g., applicants having to re-qualify for different assistance programs when a data sharing agreement among agencies can eliminate this and streamline the process</li> </ul>
Academia	<ul style="list-style-type: none"> <li>• Complexity of it all – striking the balance between keeping the big picture in mind while forming specific, concrete action items is difficult</li> <li>• Not enough meaningful data; need more contextualized data – e.g., through mapping</li> </ul>

#### Need more transparency around medical data

There's just not that detail on the medical examiner... or the investigator form. *What I would love to see on a national basis with regard to especially heat deaths is like a check-the-box form for those deaths. What's the ambient temperature? What was the outdoor temperature? What are the building materials? What kind of housing is it? ...Was the power disconnected? Was it not functioning? Was the A/C not working?* Because a lot of times there's more information for some than others. So I think over the years, there's probably been way, way more [heat-related deaths]...

- Non-profit organization staff

#### Need more meaningful, contextualized data

"If someone doesn't have A/C, what's the reason for that? If they do have it but aren't running it, what's the reason for that? *Really need to drill down into more of the particulars.*"

- CBO staff

#### Need more mapping

"I think data is absolutely key and most importantly, that you have to map it. Because if you just have data statewide, it does not really tell the story. *Mapping tells you what's really happening, which neighborhoods are being most impacted.*"

- Community Health Worker

### The complexity of it all

The most challenging is really just the complexity of all of it. When we're talking about systems, approaches, you have so many different partners that... to move the needle, you have to create multilateral partnerships and convenings of them. It's so much easier to fall into the trap of like a one-off solution, because you can actually mobilize much easier when you have the smaller... But if you're really looking at community resilience, then you might have trade-offs with that you have to factor in. Or to put in a built environment solution, you need policy solutions to be put in place at the same time, or you need other kinds of financial incentives. So you have to look at these solutions wide, or you're going to miss that bigger picture. There's just a lot to manage and to continually keeping up with everybody in these big partnerships, and there's just not enough time in the day. There are so many responses. That really is the big challenge. But there is a lot of will to do that. Everybody understands that we need to break down those silos. It's just that it takes a real big, massive effort to do that.

- Academic

### **What's Working Well?**

CBOs	<ul style="list-style-type: none"><li>• Sharing resources with this working group</li><li>• Having young folks involved</li></ul>
City/County/State Officials	<ul style="list-style-type: none"><li>• Home energy retrofits, smart systems especially when targeted and with existing initiatives and devices</li><li>• Ensuring utility assistance programs do more than just address energy needs – e.g., a retrofitting project can include training and lead to a job</li></ul>
Utilities	<ul style="list-style-type: none"><li>• COVID made some paperwork processes more flexible – e.g., ability to get consent and signatures on the phone or online</li></ul>
Academia	<ul style="list-style-type: none"><li>• Working with community partners – “sometimes the community partners that know very well about the problem are not the same community members who have the power or authority to implement those kinds of solutions. So I feel like we've been doing a really good job of understanding that trajectory and bringing people along with that, in both the first mile and then capturing the talent of the community.”</li><li>• Mapping helpful to identify targeted areas for work (<a href="#">Wang et al., 2021</a>; <a href="#">Phillips et al., 2021</a>)</li></ul>

**What insights have you gained from your work?**

CBOs	<ul style="list-style-type: none"> <li>• Real impact human stories are effective</li> <li>• People need assistance, not be micromanaged – e.g., assistance should not only be for reducing bill payments; flexibility needed as other domains of life may be sacrificed in order to pay bills on time</li> </ul>
City/County/State Officials	<ul style="list-style-type: none"> <li>• Need to look at big picture – whether that’s all the partners involved, or big picture in terms of keeping climate change in mind</li> <li>• Energy assistance shouldn’t be a ‘charitable’ effort, but an empowering effort in solidarity</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Seeing hardship first-hand provides a better understanding</li> </ul>
Academia	<ul style="list-style-type: none"> <li>• Housing really matters! (see <a href="#">Hernández, 2013, 2019, 2022</a>; <a href="#">Hernández &amp; Swope, 2019</a>)</li> <li>• Income alone is not a good metric of energy insecurity</li> <li>• Need to put existing technology to use – e.g., smart temperature and humidity sensor</li> </ul>

**Importance of housing**

“A lot of the social vulnerability in that, for example, beforehand, can identify different demographic groups that are the most vulnerable. But housing was never a part of that picture, until we mapped this, and there were obvious gaps in the type of housing. And it’s kind of one those, ‘aha, duh’ moments, like - *of course, housing matters, shelters from the heat matters. But it was absolutely not on anybody’s radar, because people in inadequate housing were falling between the gaps.* They weren’t a constituent of the utilities companies, because they don’t necessarily get their utilities from the company. They aren’t eligible for LIHEAP. They don’t use tree programs because they live in housing, but they can’t plant trees there.

- Academic

**Income alone isn’t a good metric of energy insecurity**

I’m not going to be very excited to use income alone as a qualification metric. I think we need to know why this single variable of income is believed or not believed to be associated with challenges and staying cool. And I think we need to be ready to contemplate a wide range of scenarios. *And we’ve heard many examples of giving up discretionary expenses in the summer, but also heard some cases where they’re making sacrifices with respect to food, medical expenses, and other also seeming essentials in order to keep their home sufficiently cool.*

Maybe the question is more about how we think about evaluating some of these interventions rather than who should be prioritized to participate in them.

– Academic

## Vision for Energy Security in Maricopa County

CBOs	<ul style="list-style-type: none"> <li>• Have more young folks involved</li> <li>• Use what nature is providing us – e.g., solar power</li> <li>• Keep climate change (as a threat multiplier) in mind</li> </ul>
City/County/State Officials	<ul style="list-style-type: none"> <li>• Better city planning &amp; transition to clean energy in order to mitigate the accelerating heating in the first place</li> <li>• Holistic approach to address root causes – e.g., housing</li> <li>• More collaboration between public health, human services, universities, non-profits</li> <li>• Need to recognize connection to climate change</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• More affordable energy efficiency programs and retrofits</li> </ul>
Academia	<ul style="list-style-type: none"> <li>• Need tangible programs a way to see the needle move; otherwise, too defeating</li> <li>• Commitment that is accountable and has some legs</li> <li>• Communicate to federal level the holistic nature of energy insecurity – e.g., connection to housing</li> </ul>

## RECOMMENDATIONS

- Utility bills need to be better understandable
- Have people who can help with online applications (see [Holburn & Vanden Bergh, 2006](#))
- Put existing tech such as smart temp & humidity sensors to use
- Have more staff in public health
- Have community members – and young folks – directly affected more involved
- Make careers out of clean energy / Multi-pronged approach with co-benefits (not just handouts)
- Have a database of all relevant data, or at least links to them ('one-stop shop')
- Figure out a way to share applicant data to streamline processes
- Come up with solutions that unite different stakeholders around renewables
- More advocacy from healthcare professionals
- Systemic/holistic approach
- More coordination and communication among different stakeholders
- Social resilience measures > individual behavior changes
- Better multilateral and vertical alignment in interests
- More nuance around cost-benefit analyses
- Focus on mitigation in the broader context of climate change