

## Justice40 Symposium: Energy Equity Data and Opportunities

August 3, 2023 Laredo, TX Presented by: Andrew Robison andrew@tepri.org







## TEPRI advances equitable solutions for affordable, reliable, and clean energy so all people can thrive.



Affordable

Decrease energy burdens for low-to-moderate income houses



Improve energy resilience, address energy access, and respond to energy outages

#### OUR MISSION



Increase parity in clean energy technology access and adoption.



### **Our Strategy**







#### Conduct Research

Develop Tools

to advance lasting energy solutions

#### Build a Strong Pilot Innovative Network Models

on the energy priorities of people with lower incomes

including community and energy stakeholders

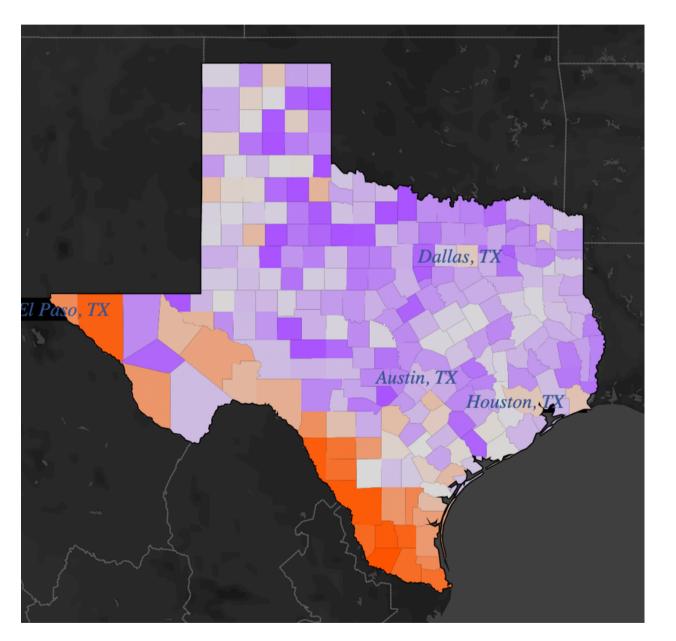


to demonstrate technological developments





### **Tools: Energy Equity Inspector**



environmental challenges

Allows users to better understand the relationships between factors like energy cost burden, greenhouse gas emissions, racial demographics, and housing stock.

some datasets.

The tool is not currently released to the public and is still in beta form.





#### Utilizes publicly available datasets to help measure the impact of energy and

#### Covers all southeastern states and Texas and can get down to the census tract level for

### Data Sources

The Energy Equity Inspector incorporates publicly available datasets, including from these sources.











# How can this data help?



Better understand key demographic, environmental, and energy figures in a selected area.

Identify disparities among income, racial, and geographic indicators.

Support grant applications and organizational publications with robust data.

Determine locations for energy efficiency, home repair, and bill assistance resource prioritization.

## Defining Key Terms and Abbreviations

#### LMI

Low-to-moderate income. Usually refers to 0-80% of Area Median Income (AMI)

#### **Energy Burden**

2

the percentage (%) of household income spent on energy costs. Anything above 6% is unaffordable. 10%+ = extreme energy burden



#### **Energy Affordability Gap (EAG)**

The amount of money a household overpays for energy above the 6% affordability threshold

4

5

#### **EJSCREEN Vulnerability Index Percentile**

an index value showing the relative risk of vulnerability to environmental hazards

#### **BIPOC**

Acronym for Black, Indigenous, and People of Color

# Webb County

#### 11.3%

Average Energy Burden LMI Households

### 6.9%

Average Energy Burden All Households

### 31,153

611 thousand

Households with High or Extreme Energy Burden (>6%)

Tons of greenhouse gas emissions emitted per year



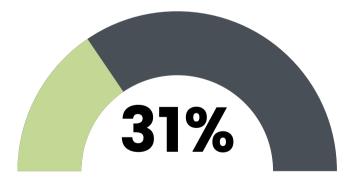
EJSCREEN Vulnerability Index Percentile



Average Annual Energy Costs LMI Households



Average Annual Energy Affordability Gap LMI Households

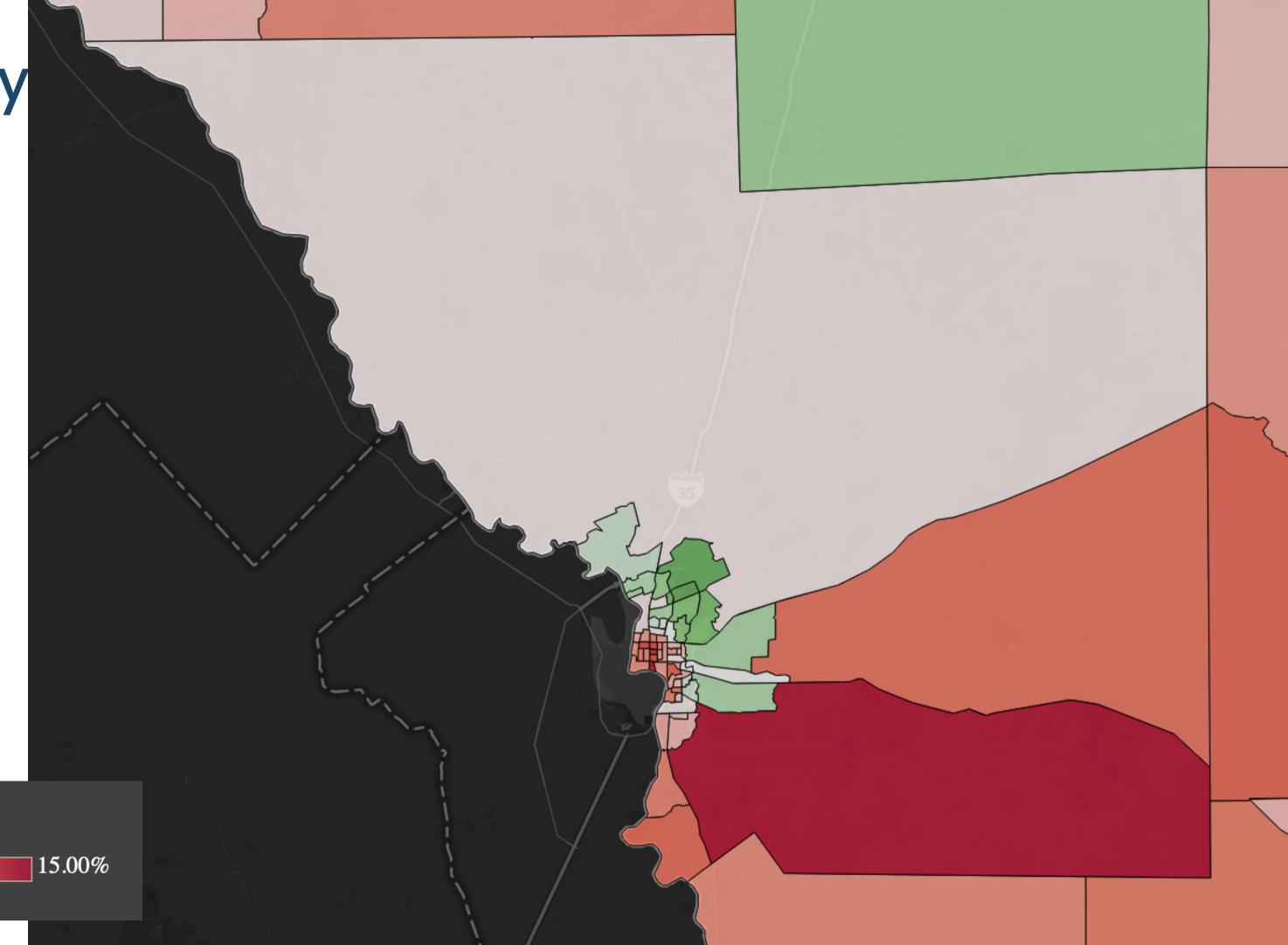


#### Residents in Poverty

Webb County and surrounding area -Energy Burden

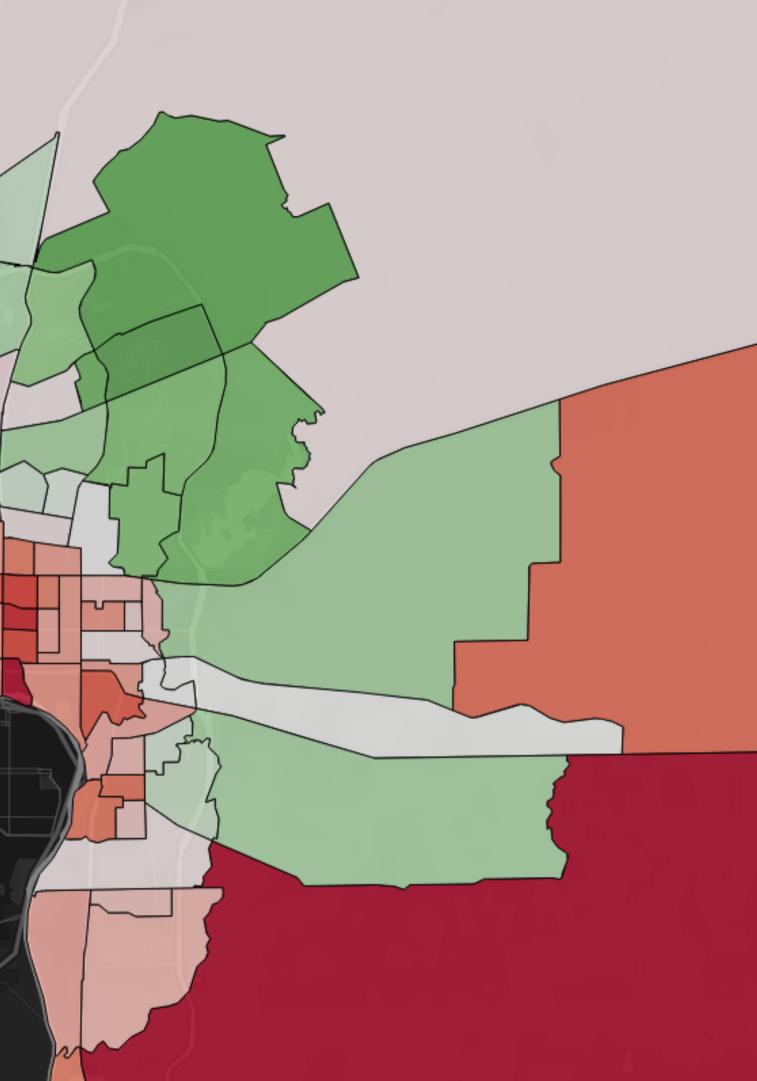
Energy Burden (%)

0.00%



### Laredo Area -Energy Burden





## Five County Region (Duval, Jim Hogg, La Salle, Starr, Zapata)



Average Energy

Burden LMI Households

#### 8.8%

Average Energy Burden All Households

16,192

### 264 thousand

Households with High or Extreme Energy Burden (>6%)

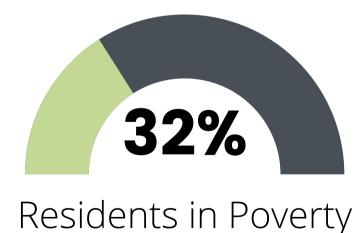
Tons of greenhouse gas emissions emitted per year

### \$2,042

Average Annual Energy Costs LMI Households

### \$329-1,270

Average Annual Energy Costs LMI Households



### 5 County Area -Energy Burden

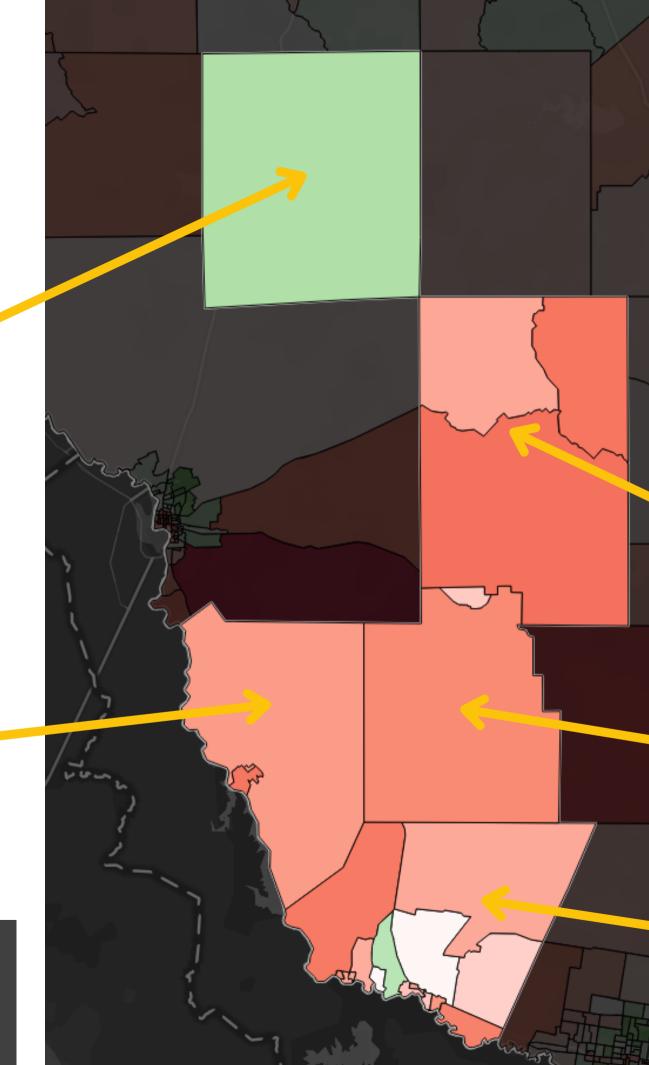
### La Salle

#### Zapata

#### Energy Burden (%)

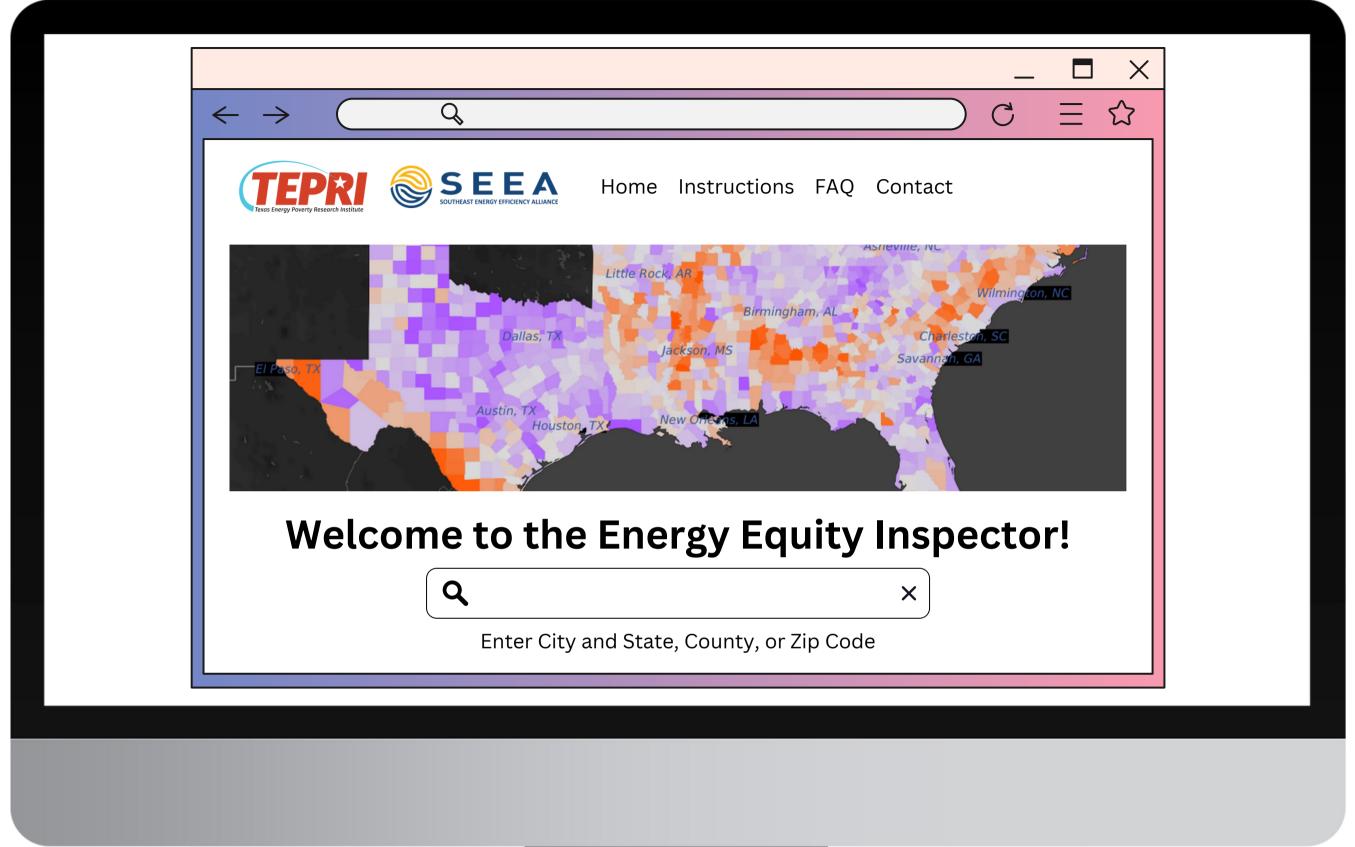
0.00%

15.00%



## Duval Jim Hogg





Mockup: Future publicly available online tool



## In the meantime, TEPRI is here to help!

## Federal Funding Opportunities

12.51



## **Solar for All**



#### \*Deadline: September 26, 2023\*

- disadvantaged communities
- disadvantaged communities)
- Minimum of 75% of grant funds for financial assistance

• Solar for All will support deployment of residential distributed solar energy to lower energy bills for low-income and • Address financial and non-financial **barriers** that limit the ability of LMI and disadvantaged communities to benefit from the rapid growth in solar (100% of program funds must used for LMI and • Up to **\$400 million** will be granted to Texas

## Solar for All - Example Fund Uses

- Provide grants, loans, and other forms of financial assistance to rooftop residential and residential-serving community solar projects:
  - Residential rooftop
  - Residential community solar
  - Storage
  - Enabling upgrades to get homes solar ready (e.g. energy) efficiency, home repairs, etc.)
- Technical assistance such as workforce development and project deployment support (e.g., siting, permitting, interfacing with utilities)
- Address policy and regulatory barriers

## **Energy Future** Grants





SCE STATE & COMMUNITY ENERGY PROGRAMS



#### \*Deadline: September 30, 2023\*

- Energy Future Grants will provide up to \$500,000 to support local, state, and tribal government-led efforts to advance energy
  - program innovation
- Must include **multi-jurisdictional teams** (at least 3-4 jurisdictions) coming together on a **planning project** to address barriers to clean energy deployment • Plans must be replicable, scalable, and
- innovative
- Topic areas (including, but not limited to): • Transportation

  - **Buildings**
  - **Power Sector**

## **TEPRI is here to help!**

- Technical assistance
- Grant writing
- Community benefits planning
- Supporting data
  - Energy Equity Inspector
  - TEPRI's Community Voices in Energy Survey







### Example: Collaboration with come dream. come build. Solar Pilot

Working with cdcb and MiCASiTA to explore solar options for affordable, modular homes at scale





## Thanks for your time!



#### Contact

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