



Equitable Climate Action: Leveraging the IRA Calculator for Sustainable Development in Underserved Communities

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PRESENTERS



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AGENDA

- SWPA HUB OVERVIEW
- IRA CONTEXT & OVERVIEW
- TOP 6 IRA INCENTIVES
- THE IRA CALCULATOR
- PROJECT CASE STUDIES
- SWPA HUB CASE STUDIES
- Q&A

SWPA HUB OVERVIEW

WHY ARE WE DOING THIS?

- **Historic federal funding (\$1 trillion +) available** through bipartisan infrastructure bills
- **SWPA has a high concentration of federally identified target areas and issues:** Justice 40, Energy, and Environmental Justice communities in our region that are more likely to be polluted or struggling economically are to be the priority of these investments.
- Nearly **no existing public regional capacity** dedicated to this potentially multi-billion-dollar opportunity across sectors **and focused explicitly on the communities most in need** and least likely to have full-time internal professional capacity to coordinate and pursue this work alone.

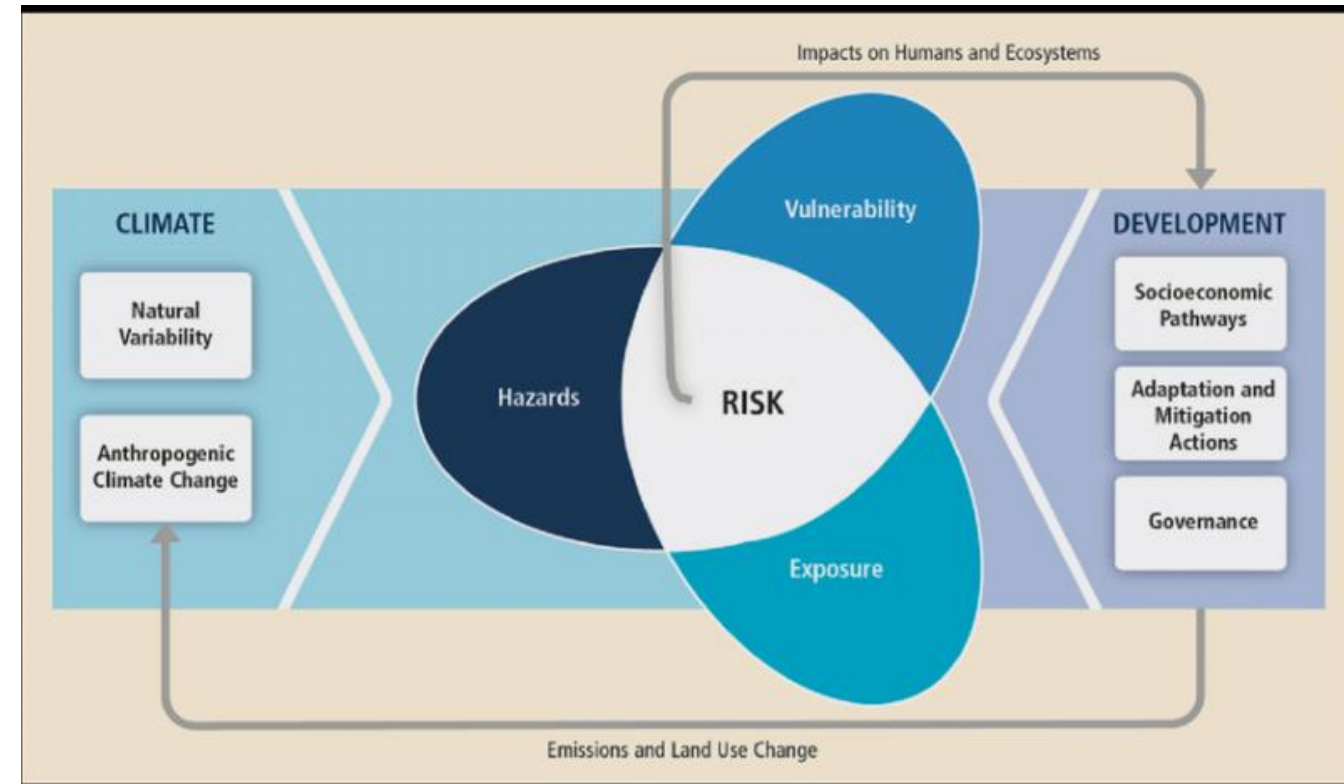
OUR MODEL

Providing **rapid-response technical assistance grants** to **bridge the capacity gaps** and **deconstruct the unnecessary barriers** standing between historic federal funding and the communities, organizations, and systems that most need that investment.

- Looking across **sectors, systems, and municipal boundaries** to equitably invest in solutions that contribute to the **short- and long-term health and economic strength of our communities.**
- **Maximizing our shared resources** by prioritizing opportunities that have the potential to **leverage exponentially larger funds** to support our shared priorities.

OUR MODEL | Adaptive, Resilient, Durable, Regenerative

Strategy, Organization Design and Effectiveness



HOW CAN SWPA PUBLIC SYSTEMS BENEFIT?

- **Pursue record grant funding** (and a variety of tax credits) newly available for energy efficiency, clean energy, and infrastructure investments.
- **Work with free technical assistance professionals and neighboring communities** to get the design, engineering, hydrological assessments, grant writing, and project management support that you need to pursue federal grants.
- **Use the opportunity to think strategically** about the ways your community and its wide variety of stakeholders are interacting with and experiencing government and quasi-governmental systems



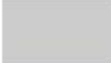





LAYER [-] [X]

Percent of all homes that are likely affordable for a 4-person family earning 50% of AMI between 2018-2022. ⓘ

Source: [PolicyMap](#), [Census](#), and [HUD](#)

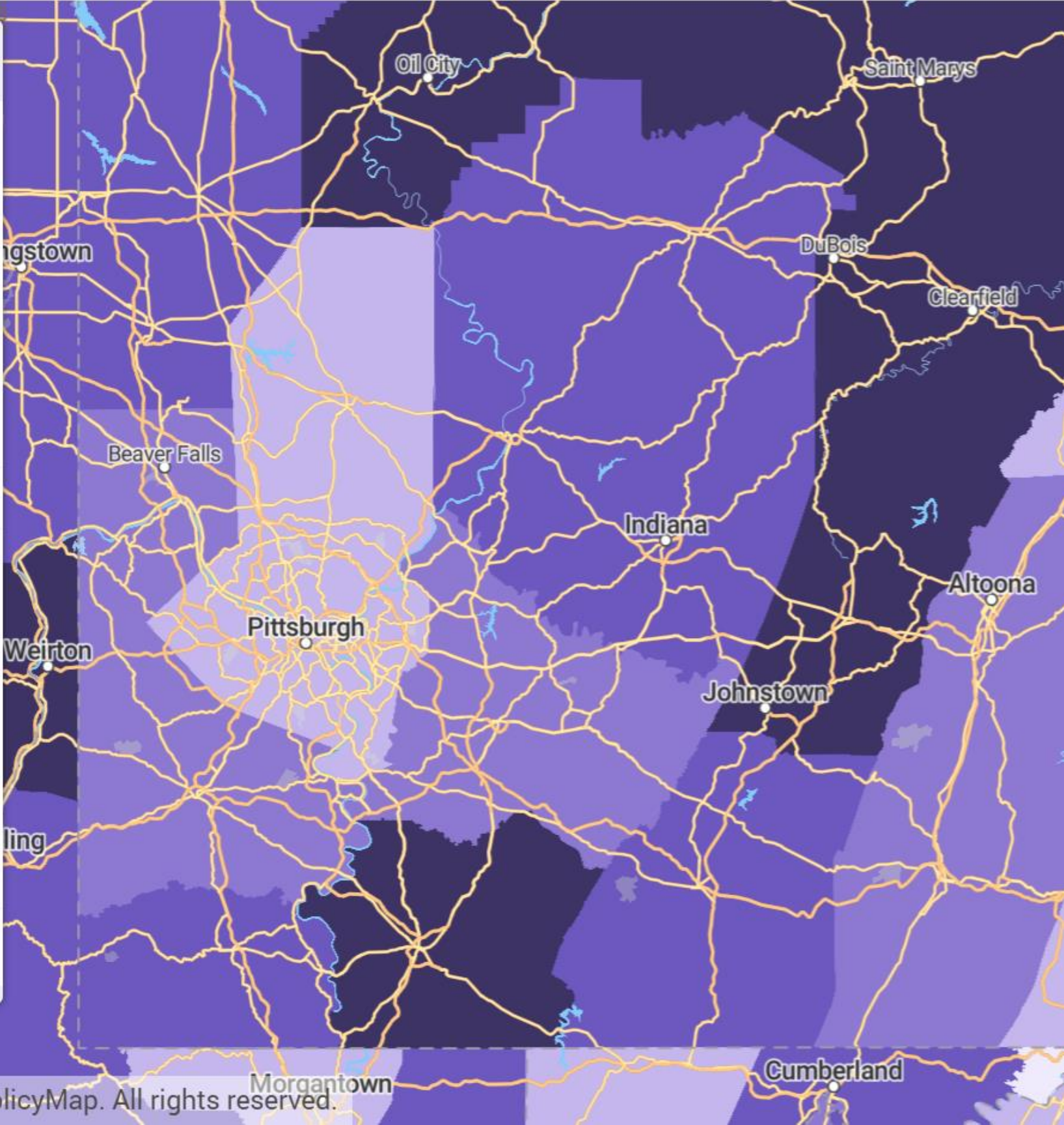
Year: Variable:

COLORS ▼ **RANGES** ▼

	Insufficient Data
	10.08% or less
	10.09% - 19.81%
	19.82% - 28.80%
	28.81% - 38.90%
	38.91% or greater

US Data Map Extent

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LAYER [-] [X]

The percentage of students that are Free and Reduced Price lunch recipients in 2016-17. [-] [i]

Source: [NCES CCD](#)

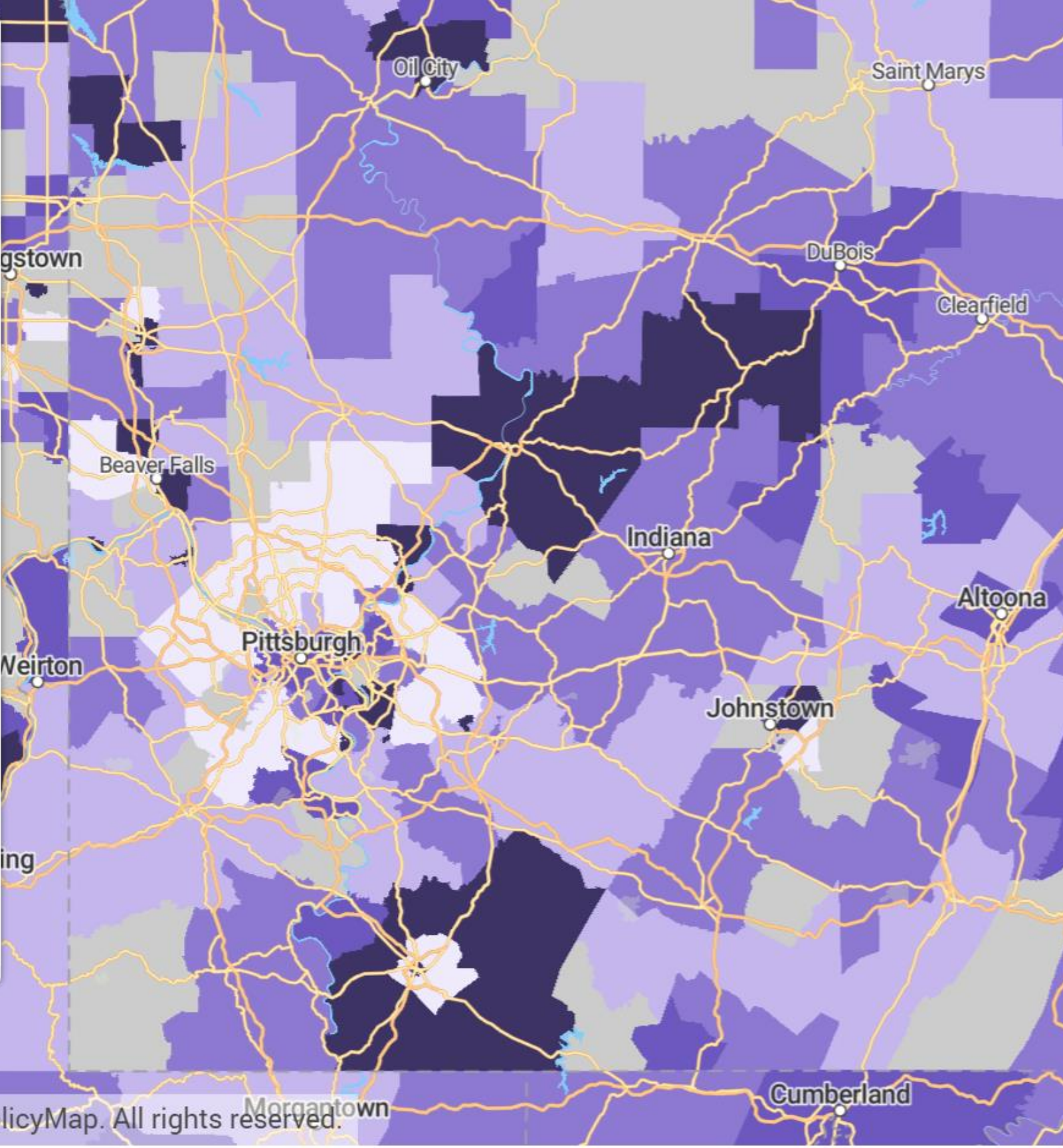
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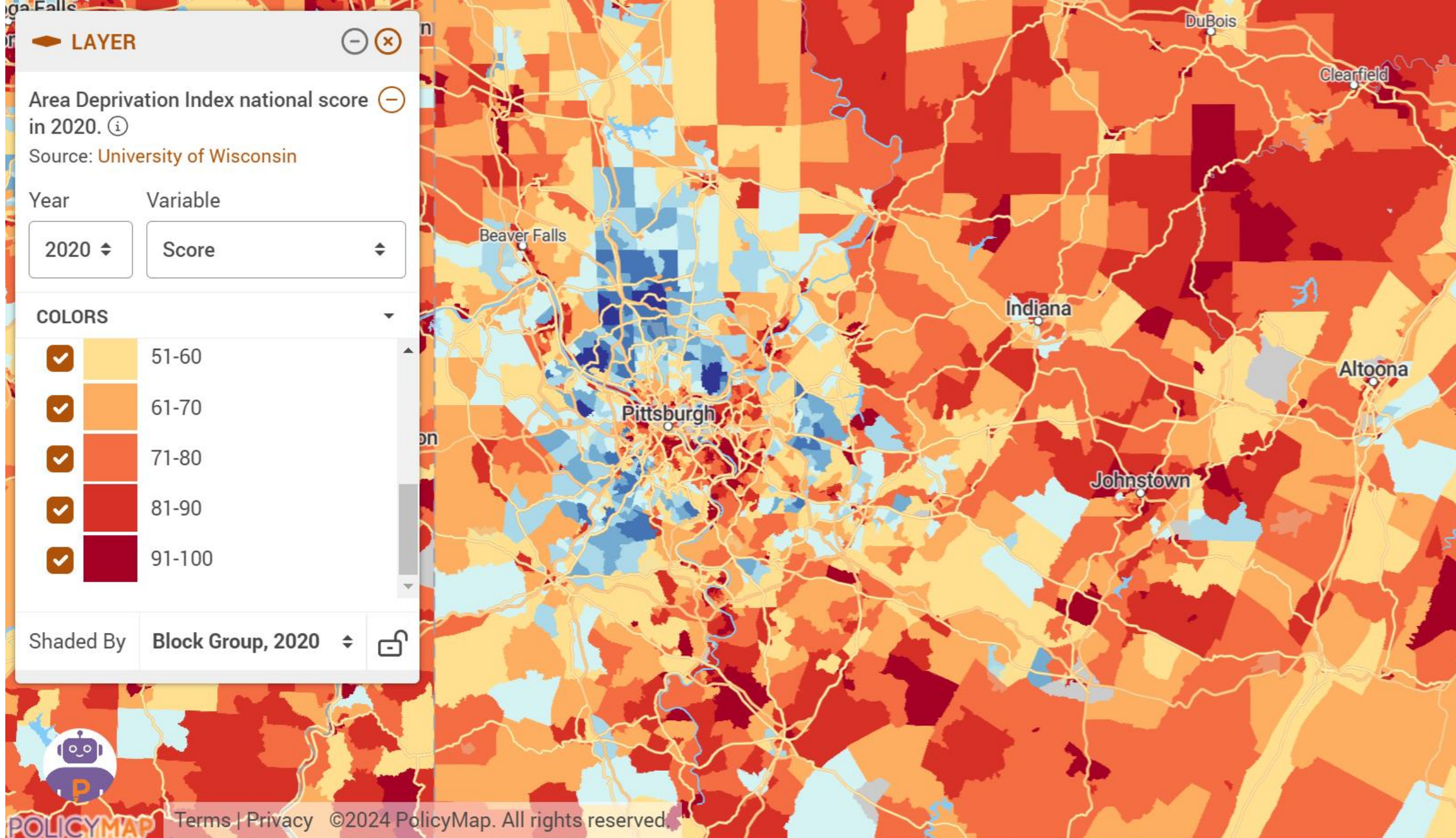
COLORS ▼ **RANGES** ▼

	Insufficient Data
	26.92% or less
	26.93% - 40.37%
	40.38% - 51.82%
	51.83% - 65.57%
	65.58% or greater

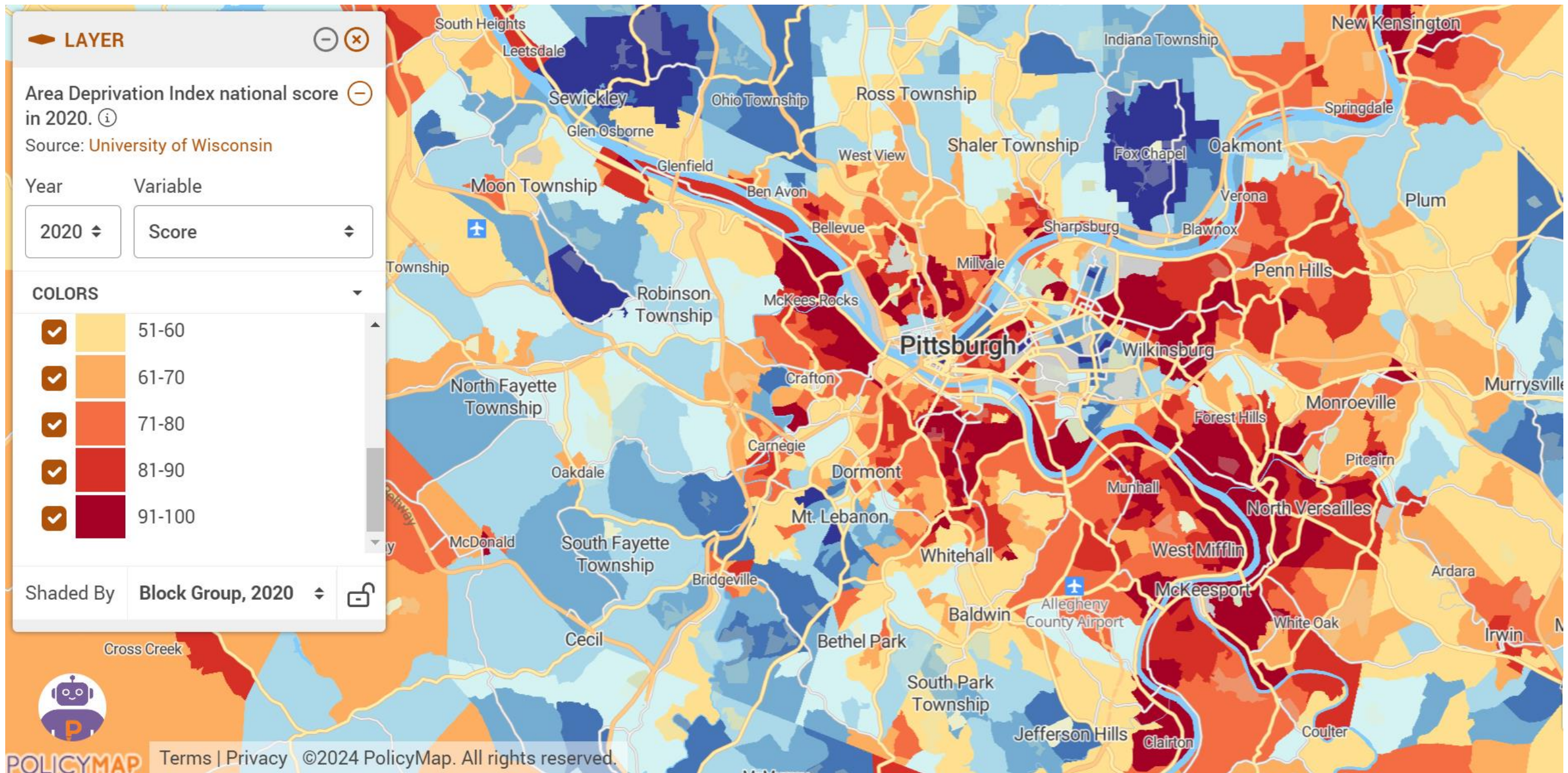
US Data Map Extent

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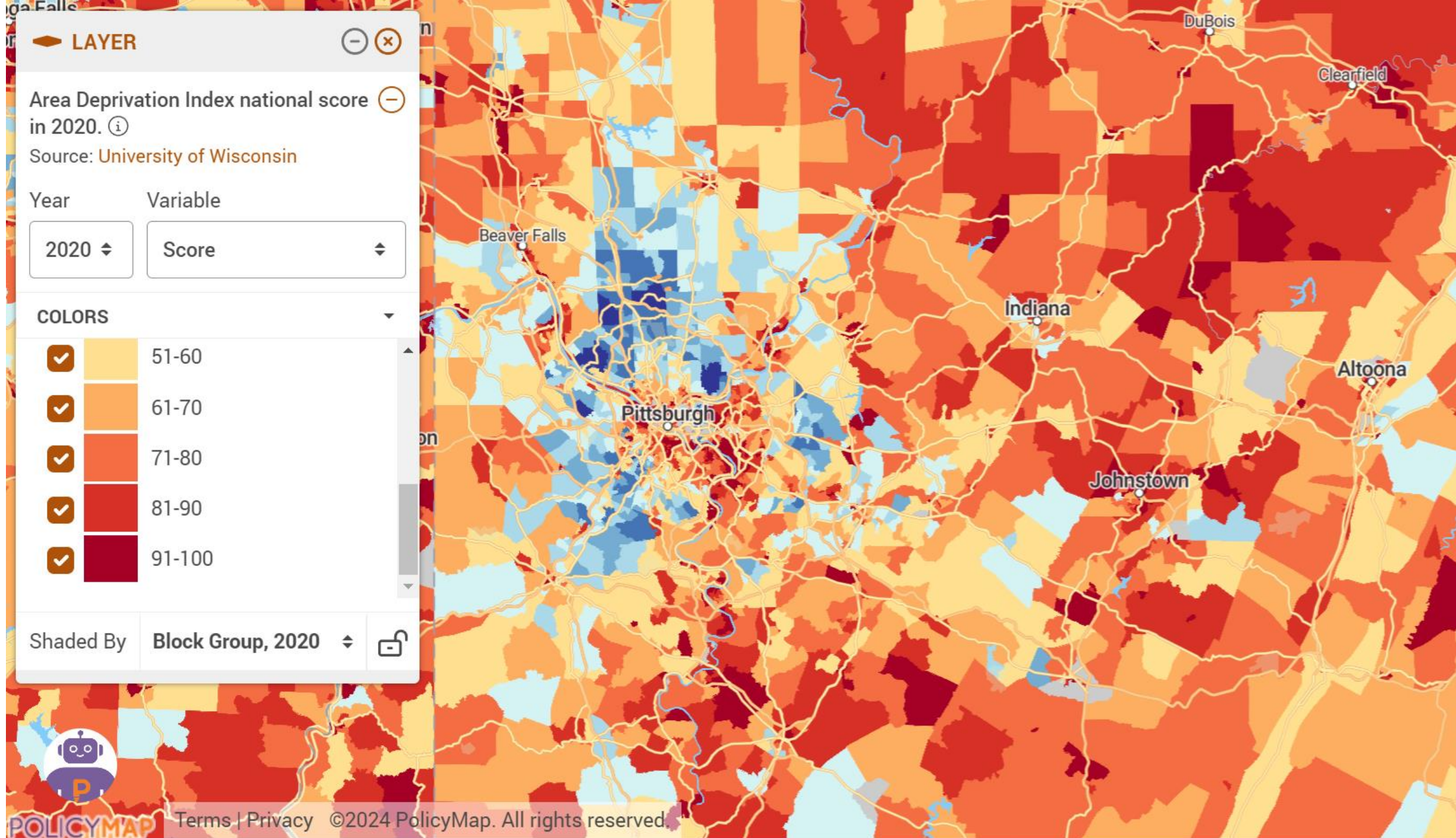




Area Deprivation Index national score in 2020. The Area Deprivation Index (ADI) ranks neighborhoods on the basis of socioeconomic disadvantage in the areas of income, education, employment, and housing quality. Areas with greater disadvantage are ranked higher.



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HOW WE CAN HELP:

- **Connecting you with our partners,** whose resources and programs are designed to focus deeply on the specific needs of public water systems, stormwater management, and long-term sustainability.
- **Understanding your needs** in order to connect you with other people across the region working on similar priorities—such as decarbonization, workforce development, and long-term business sustainability modeling—to find **opportunities to collaborate on pursuing mutually beneficial grant funding** with coordinated regional partners and hands-on, tailored technical support.
- **Connecting you with neighboring community leaders** to plan together for transformative, larger-scale, cross-sector community projects.
- **Helping to amplify your perspective** on urgent needs, overwhelming opportunities, and how government entities, nonprofit organizations, and communities can help businesses operate more sustainably and thrive economically.

**Reach out to us and let's talk
about how we can work
together for the good of
Southwestern Pennsylvania.**

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Megan Zeigler, COO: megan@swpahub.org

Eric Macadangdang, Director of Collaboration & Connectivity:

eric@swpahub.org

Sign up for email updates at

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IRA CONTEXT & OVERVIEW



Inflation Reduction Act

LOWER COSTS FOR AMERICAN FAMILIES

MAKE THE TAX CODE FAIRER



\$800 annual savings on health insurance premiums for 13 million Americans

\$1,000+ in annual savings through clean energy tax credit programs



\$2,000 annual cap on out-of-pocket prescription drug costs for seniors



1 gigaton reduction in greenhouse gas emission in 2030



1% surcharge on corporate stock buybacks

15% minimum tax on billion dollar corporations



\$0 tax increase for families earning less than \$400,000 a year



Create more than 1 million jobs making clean energy

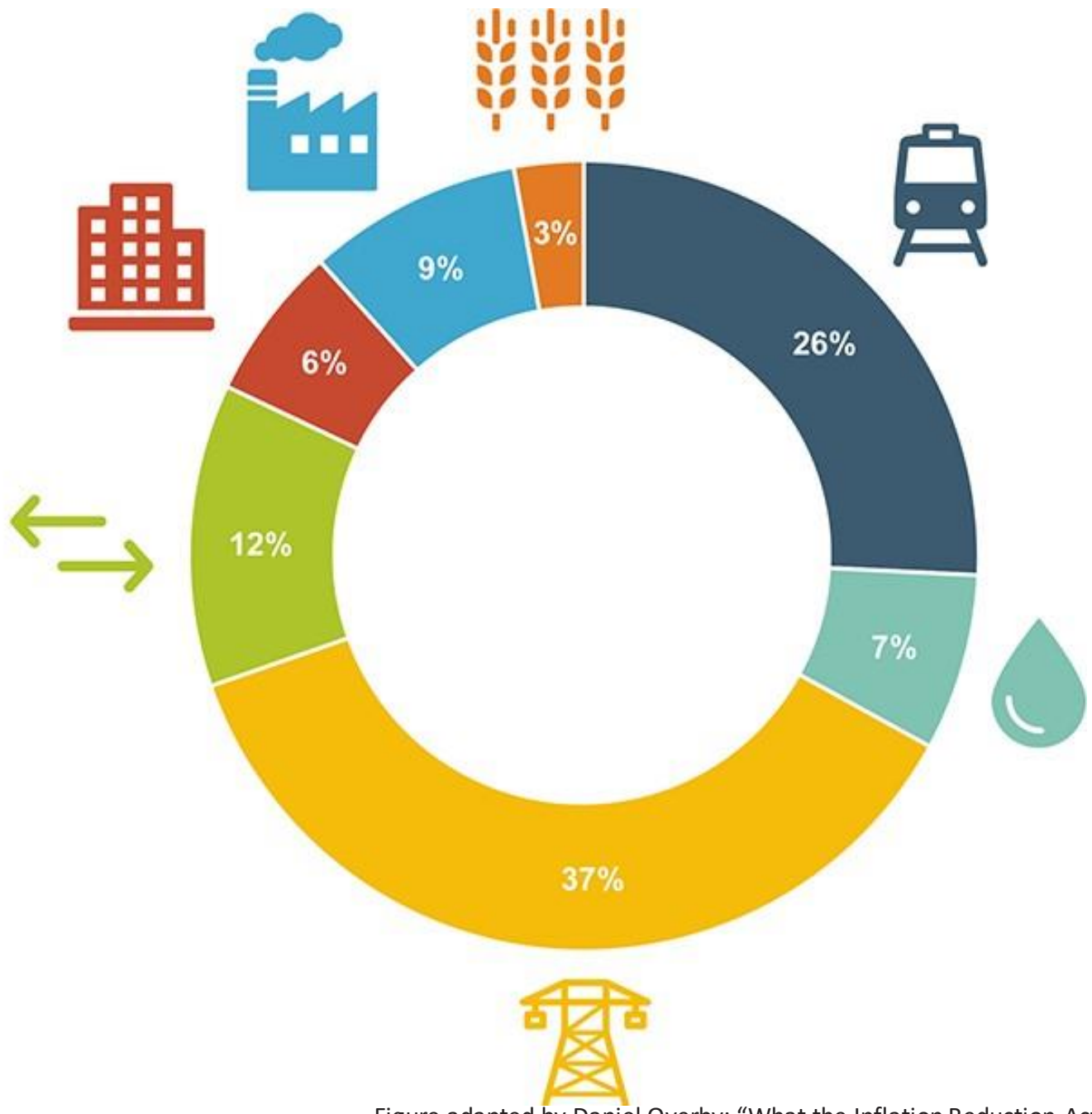
TACKLE THE CLIMATE CRISIS



Image Source: <https://www.energy.gov/investing-in-america>

FEDERAL INVESTMENT

Category	Total Investment: Inflation Reduction Act + Bipartisan Infrastructure Law
Total	\$761,121,000,000
.....	
● Transportation	\$196,186,000,000
● Water	\$55,000,000,000
● Electricity	\$279,052,000,000
● Land & Resilience	\$94,265,000,000
● Buildings	\$48,128,000,000
● Manufacturing	\$66,840,000,000
● Agriculture	\$21,650,000,000



Sources:
American Institute of Architects (AIA) and the Rocky Mountain Institute (RMI)

Figure adapted by Daniel Overby: "What the Inflation Reduction Act Means for Buildings" *Building Enclosure* June 23, 2023



CARBON REDUCTION

US greenhouse gas emissions

Net million metric tons (mmt) of CO₂-e

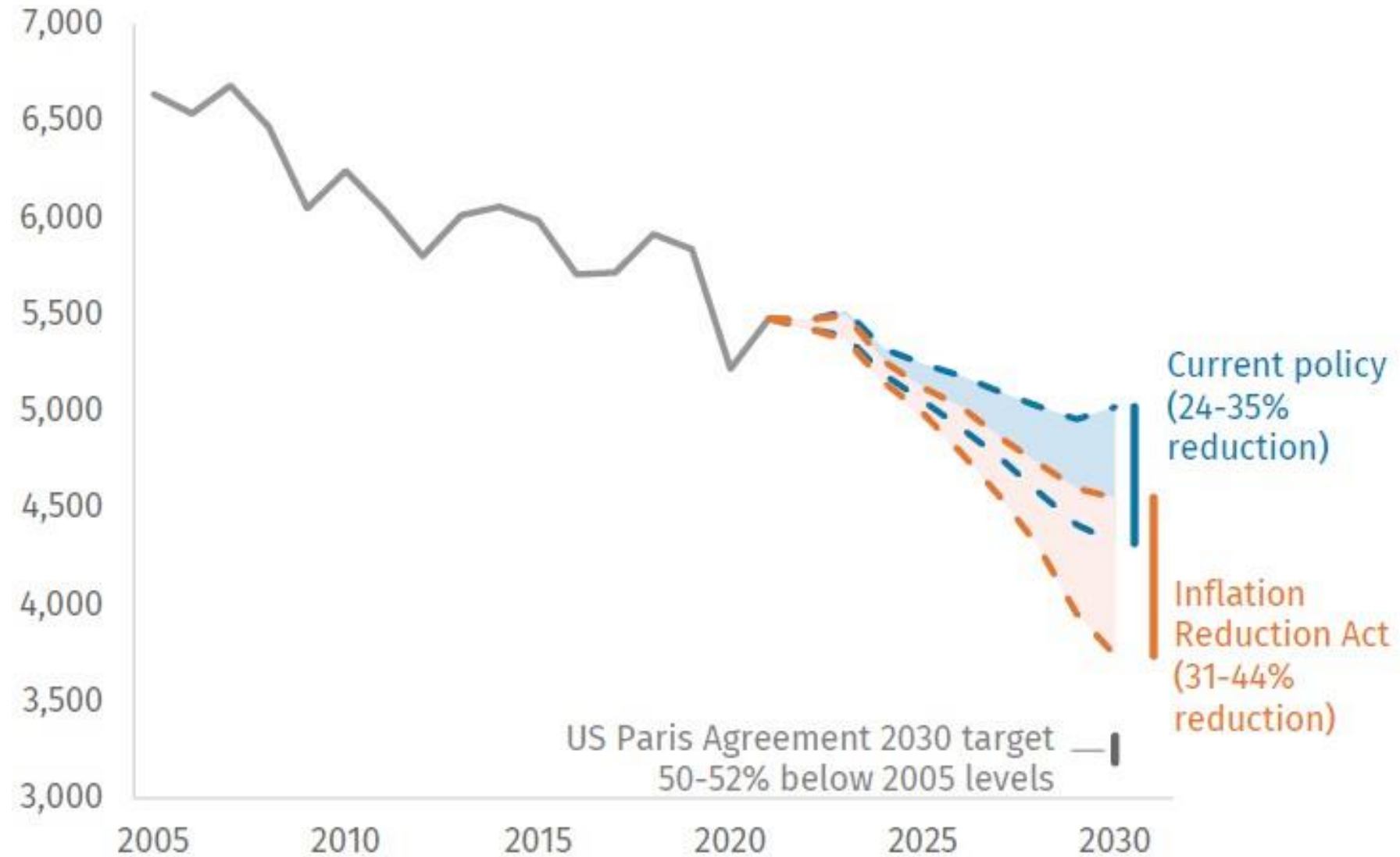


Image Source: <https://news.climate.columbia.edu/2022/08/12/what-the-inflation-reduction-act-does-and-doesnt-do-for-climate/>

ENVIRONMENTAL JUSTICE

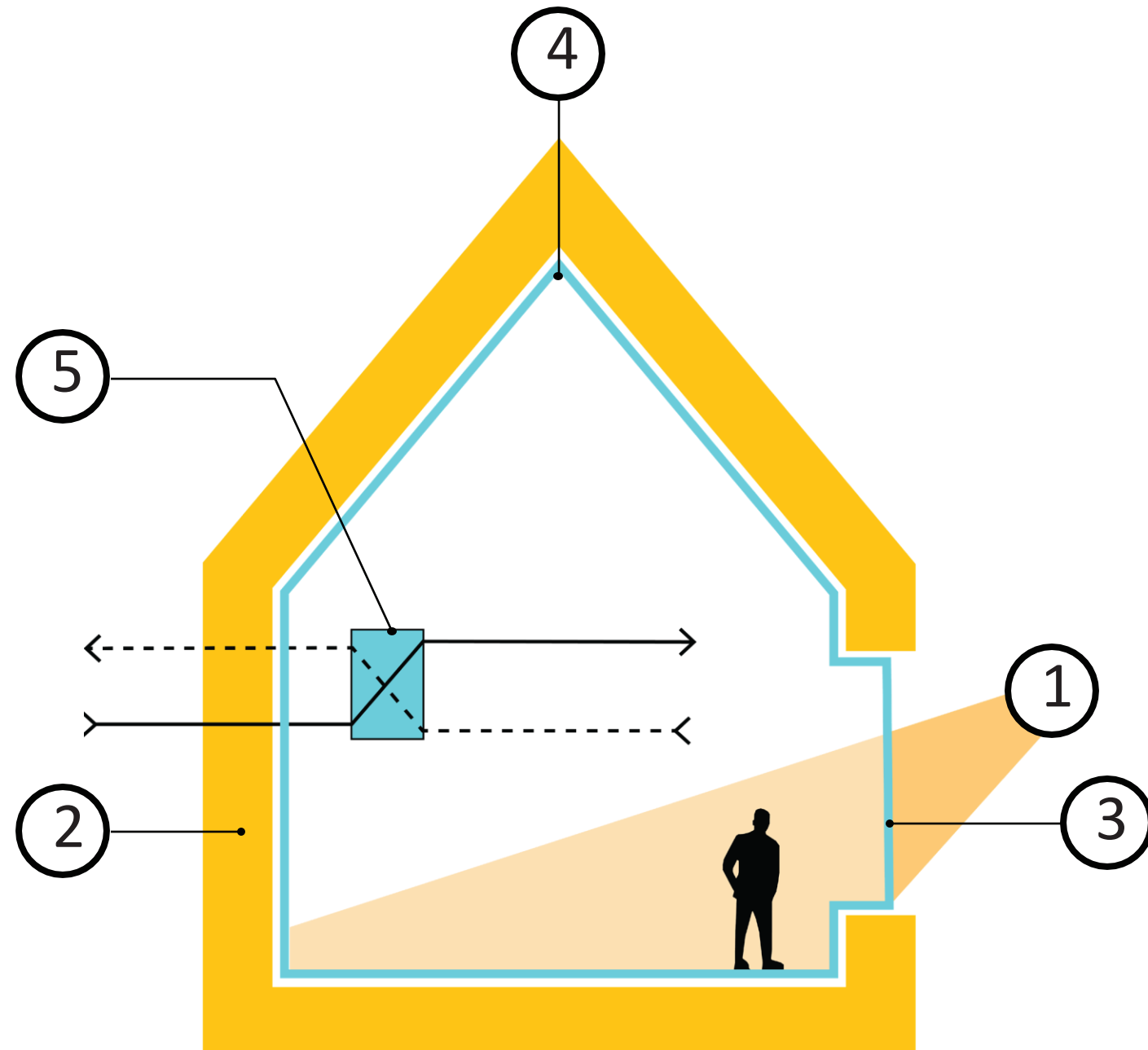


TOP 6

IRA INCENTIVES

ENERGY EFFICIENCY

- 1 HIGH PERFORMANCE WINDOWS AND DOORS
- 2 CONTINUOUS INSULATION
- 3 AIRTIGHT ENCLOSURE
- 4 THERMAL BRIDGE-FREE DETAILING
- 5 ENERGY RECOVERY VENTILATION



ELECTRIFICATION

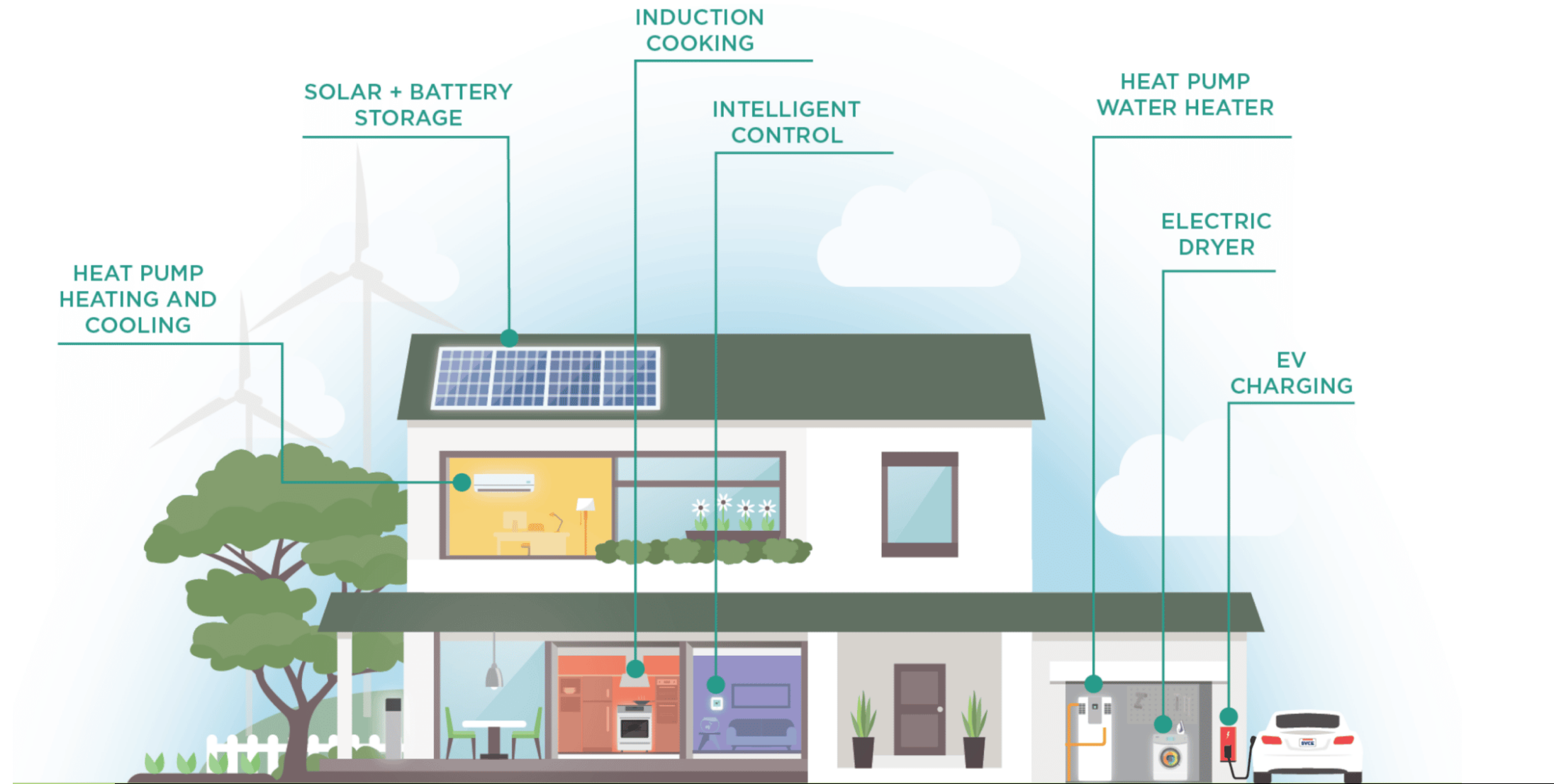


Image Source: <https://leap-va.org/leap-news/when-the-power-goes-out/>

ONSITE RENEWABLE ENERGY PRODUCTION/ STORAGE



Image Source: <https://www.greenbiz.com/article/vehicle-grid-pilots-soar->

PREVAILING WAGE + APPRENTICESHIP LABOR



Image Source: <https://www.peopleready.com/construction/>

AFFORDABLE

HOUSING

AMI (AREA MEDIAN INCOME)
DEFINED AS THE MIDPOINT OF A SPECIFIC AREA'S INCOME DISTRIBUTION

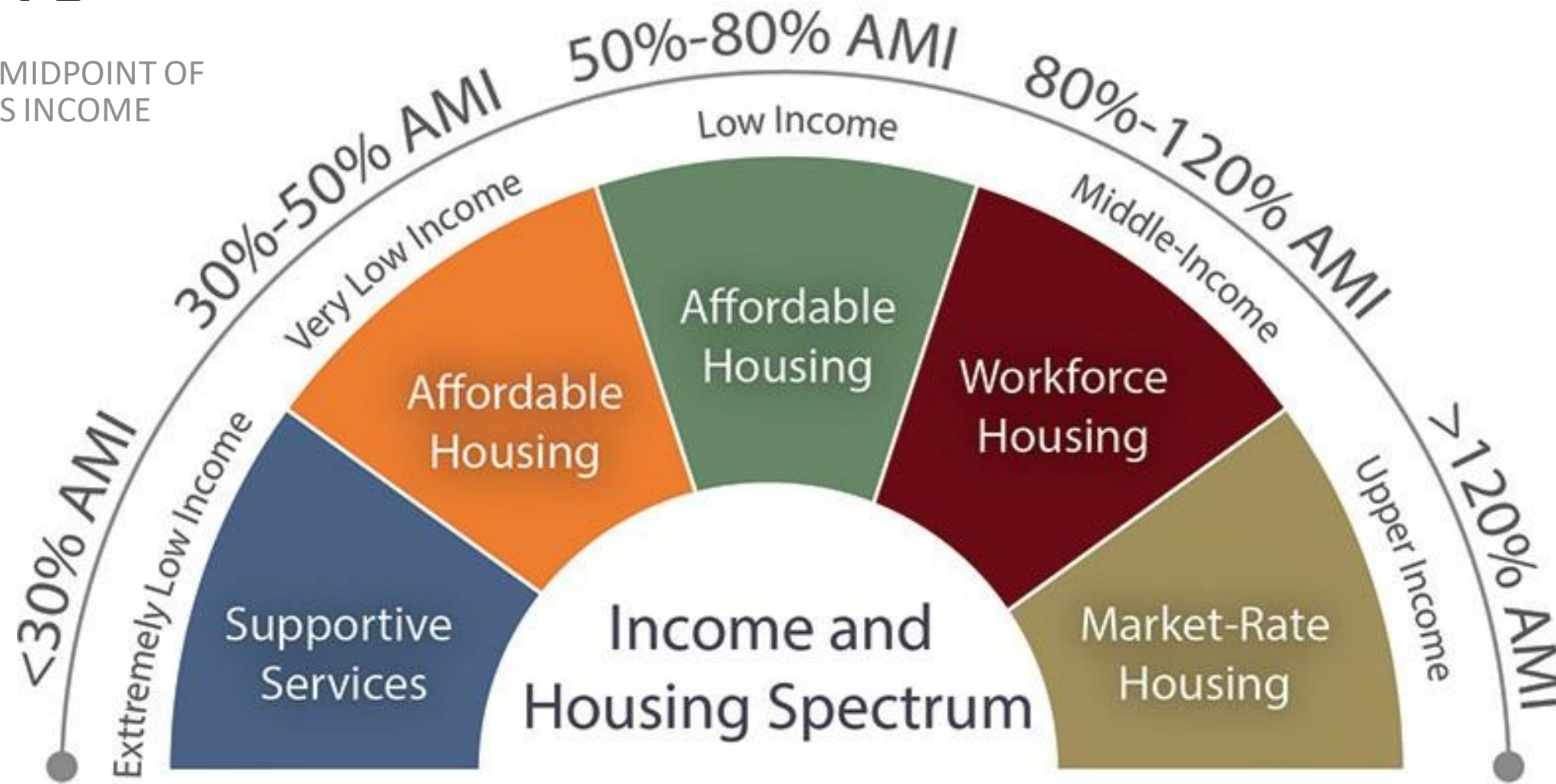


Image Source: <https://camoinassociates.com/resources/humanizing-data-area-median-income-ami-and-affordable-housing-policy/>

ENERGY + LOW INCOME COMMUNITIES

ENERGY COMMUNITY

DEFINED AS:

A. BROWNFIELDS - SMALL PARCELS OF POLLUTION-CONTAMINATED LAND THAT SUPPORTS CLEANUP AND REDEVELOPMENT

B. COAL COMMUNITIES - A CENSUS TRACT WHERE A COAL-FIRED POWER PLANT HAS CLOSED SINCE 2010

C. AN AREA WHERE 0.17% OR GREATER DIRECT EMPLOYMENT OR AT LEAST 25% OF TAX REVENUE ARE RELATED TO NATURAL GAS PRODUCTION

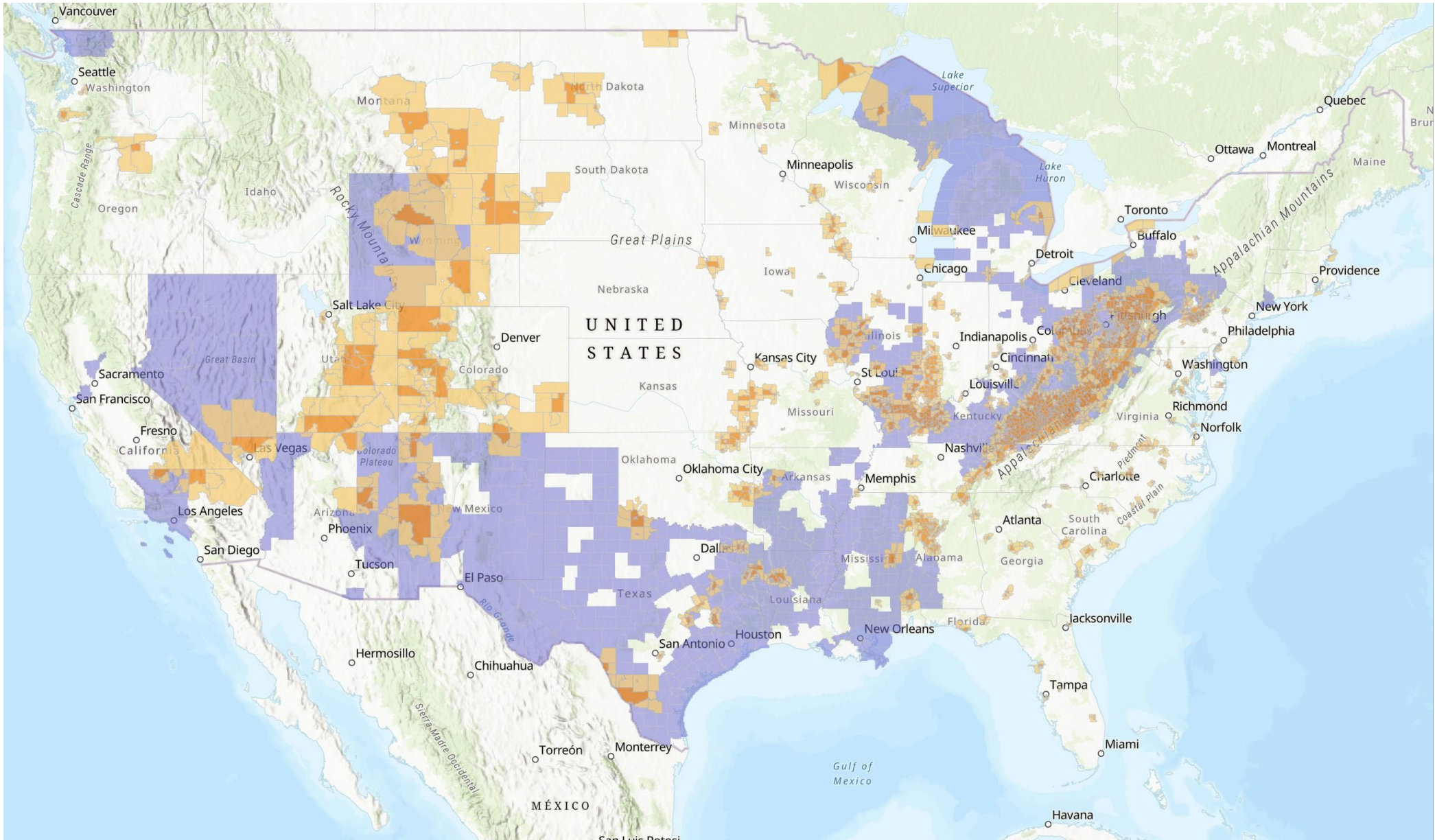


Image Source: <https://www.enlnorthamerica.com/insights/blogs/maximizing-inflation-reduction-act-of-2022-bonus-tax-credits>



ENERGY + LOW INCOME COMMUNITIES

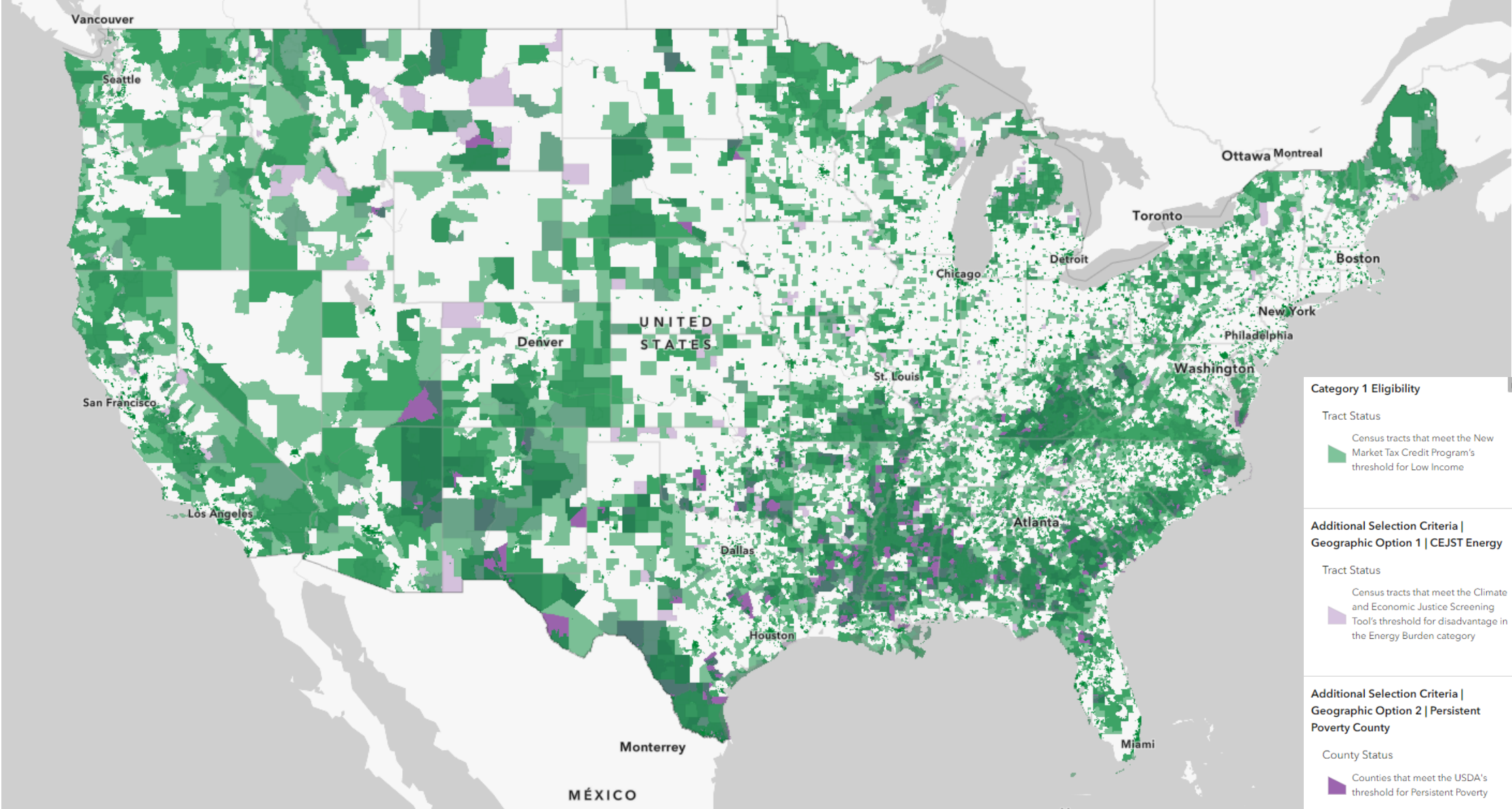
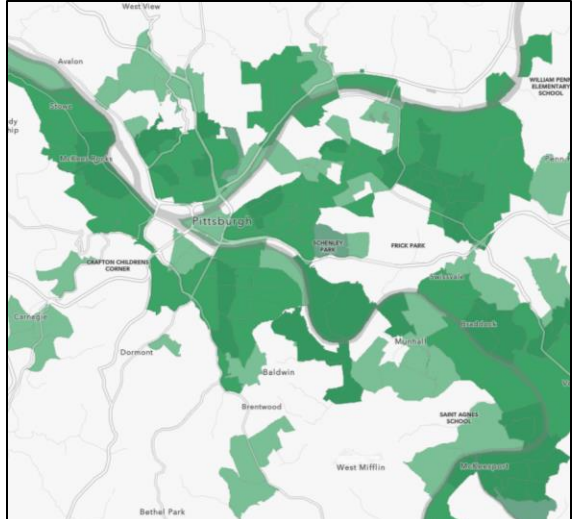
LOW INCOME

DEFINED AS:

A THE POVERTY RATE IS AT LEAST 20%

B IF THE TRACT IS NOT METROPOLITAN, THE MEDIAN FAMILY INCOME DOES NOT EXCEED 80% OF STATEWIDE MEDIAN FAMILY INCOME

Pittsburgh



Category 1 Eligibility

Tract Status

- Census tracts that meet the New Market Tax Credit Program's threshold for Low Income

Additional Selection Criteria | Geographic Option 1 | CEJST Energy

Tract Status

- Census tracts that meet the Climate and Economic Justice Screening Tool's threshold for disadvantage in the Energy Burden category

Additional Selection Criteria | Geographic Option 2 | Persistent Poverty County

County Status

- Counties that meet the USDA's threshold for Persistent Poverty

Image Source: <https://experience.arcgis.com/experience/12227d891a4d471497ac13f60fffd822/page/Page/>



TAX CODE
SECTIONS

179D: ENERGY EFFICIENT COMMERCIAL BUILDINGS (DEDUCTION)

$$\text{EUI} = \frac{\text{YEARLY ENERGY USE}}{\text{AREA (SF)}}$$

EUI % REDUCTION*	DEDUCTION/SF WITHOUT PREVAILING WAGE + APPRENTICESHIP	DEDUCTION/SF WITH PREVAILING WAGE + APPRENTICESHIP
25%	\$ 0.50	\$ 2.50
30%	\$ 0.60	\$ 3.00
35%	\$ 0.70	\$ 3.50
40%	\$ 0.80	\$ 4.00
45%	\$ 0.90	\$ 4.50
50%	\$ 1.00	\$ 5.00

*COMPARED TO ASHRAE 90.1 2007 IF PRIOR TO 01.01.2027, OR ASHRAE 90.1 2019 IF AFTER

45L: ENERGY EFFICIENT HOME (CREDIT)

HOME TYPE	TIME	REQUIRED THRESHOLD	CREDIT
SINGLE FAMILY/ MULTI FAMILY	BEFORE 2023	30% ENERGY EFFICIENT STANDARDS	\$1,000
		50% ENERGY EFFICIENT STANDARDS	\$2,000

HOME TYPE	TIME	ENERGY STAR	ZERH	CREDIT WITHOUT PREVAILING WAGE + APPRENTICES HIP	CREDIT WITH PREVAILING WAGE + APPRENTICES HIP
SINGLE FAMILY	AFTER 2022	●	○		
		○	●	\$2,500	N/A
●		○	\$5,000	N/A	
○		●	\$500	\$2,500	
MULTI FAMILY				\$1,000	\$5,000

48: RENEWABLE ENERGY INVESTMENT

(CRED

IT)

TIME	PREVAILING WAGE + APPRENTICESHIP*	BASE CREDIT	BONUS		ADDITIONAL BONUS	
			10% DOMESTIC MATERIALS	ENERGY COMMUNITY	LOW-INCOME COMMUNITY	LOW-INCOME RESIDENTIAL PROJECT
2023-2033	●	6%	2%	2%	10%	10%
		30%	10%	10%		

*SOLAR ARRAYS LESS THAN 1MW ARE ELEGIBLE FOR 30% BASE CREDIT W/O PREVAILING WAGE / APPRENTICESHIP LABOR

HEEHRA: HIGH-EFFICIENCY ELECTRIC HOME REBATE

INCOME ELIGIBILITY	COST COVERED
50% MIN MODERATE INCOME: 80-150% AMI*	50%
50% MIN LOW INCOME: <80% AMI*	100%

*AMI: AREA MEDIAN INCOME

REBATES	OVERALL INCENTIVES
ELECTRIC STOVE/ COOK-TOP	\$840
HEAT PUMP CLOTHES DRYER	\$840
WEATHERIZATION	\$1,600
HEAT PUMP WATER HEATER	\$1,750
UPGRADE ELECTRIC WIRING	\$2,500
UPGRADE BREAKER BOX	*14,000 MAX/UNIT
HEAT PUMP HVAC	\$8,000

Source of information: <https://www.rewiringamerica.org/policy/high-efficiency-electric-home-rebate-act>



GBBN IRA
CALCULATOR

IRA CALCULATOR:

Crunching the Numbers,
Finding the Opportunities



IRA Incentive Calculator

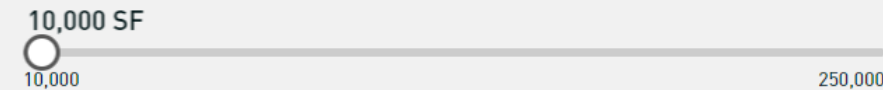
Size + Location

What is the zip code of the project? *

Will the building be open and in use before January 1, 2027? *

- Yes
 No

What's the estimated area of the building? ?



Is the project located within a Low-Income Community? [Click here to view map](#) *

- Yes
 No

Is your project located within an Energy Community? [Click here to view map](#) *

- Yes
 No

Tax Deduction

\$0.00

Tax Credit

\$0.00

Rebate

\$0.00

Any building is eligible for incentives through the IRA. Most of the incentives captured here are focused on multifamily residential projects. For more information, email tbroylesyost@gbbn.com.

Legal Disclaimer

Legal Disclaimer: This content has been prepared for informational purposes only, and is not intended to provide, and should not be relied on for, tax, legal, or accounting advice.

DESIGN

CASE STUDIES

CASE

WORKFORCE MARKET STUDY #1 RATE 92,000SF

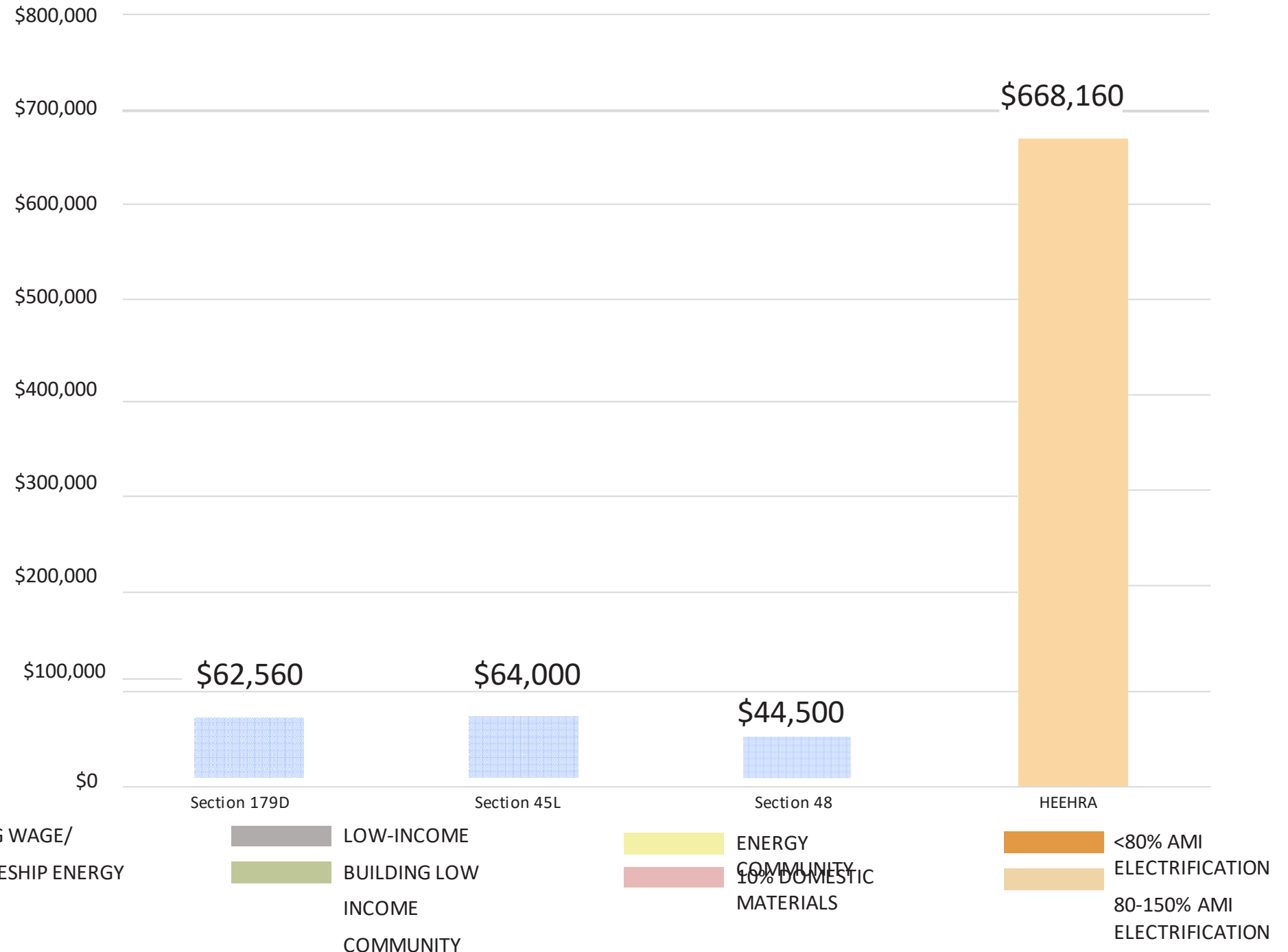
- 124 Units
 - 118 Units 80-150% AMI
- Energy Efficiency
 - High performance HVAC
 - LED lighting Heat
 - pump HVAC
 - Weatherization
 - Electric stove/cooktop
- Energy Star Certification
- No Prevailing Wage/ Apprenticeship
- Not within a Low-Income or Energy Community
- No Renewable Energy Systems



CASE

WORKFORCE MARKET RATE STUDY #1

- 124 Units
 - 118 Units 80-150% AMI
- Energy Efficiency
 - High performance HVAC
 - LED lighting Heat
 - pump HVAC
 - Weatherization
 - Electric stove/cooktop
- Energy Star Certification
- No Prevailing Wage/ Apprenticeship
- Not within a Low-Income or Energy Community
- Rooftop Solar



CASE STUDY

#2 100% AFFORDABLE

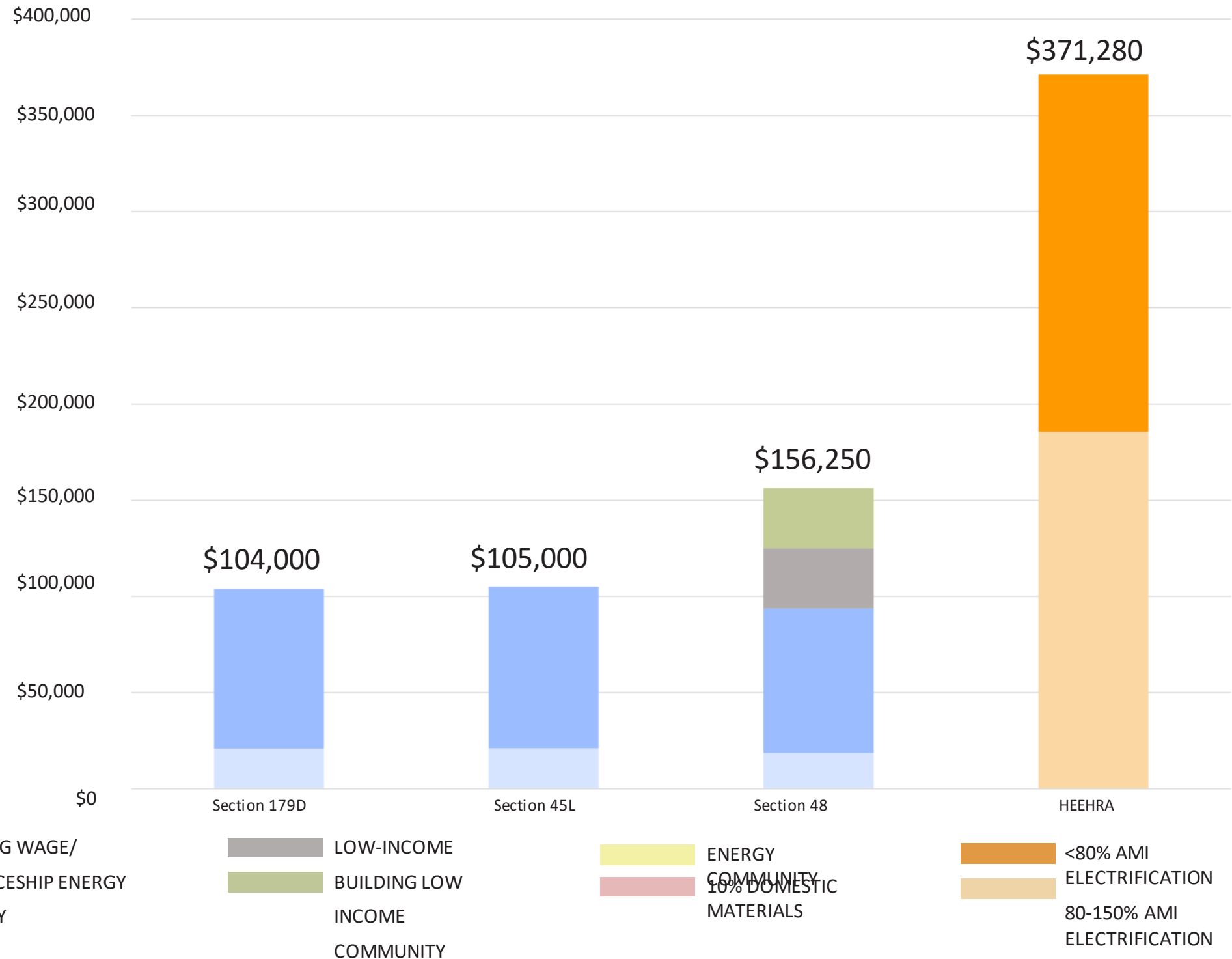
- 40,000SF
- 42 Units
 - All <80% AMI
- Energy Efficiency
 - High performance HVAC
 - LED lighting
 - Heat pump HVAC
 - Electric stove/cooktop
- Prevailing Wage/Apprenticeship
- Within a Low-Income Community



CASE STUDY

#2 100% AFFORDABLE

- 40,000SF
- 42 Units
 - All <80% AMI
- Energy Efficiency
 - High performance HVAC
 - LED lighting
 - Heat pump HVAC
 - Electric stove/cooktop
- Prevailing Wage/Apprenticeship
- Within a Low-Income Community
- *Rooftop Solar Potential*
5 EV Charging Stations



CASE STUDY

#3 MIXED INCOME

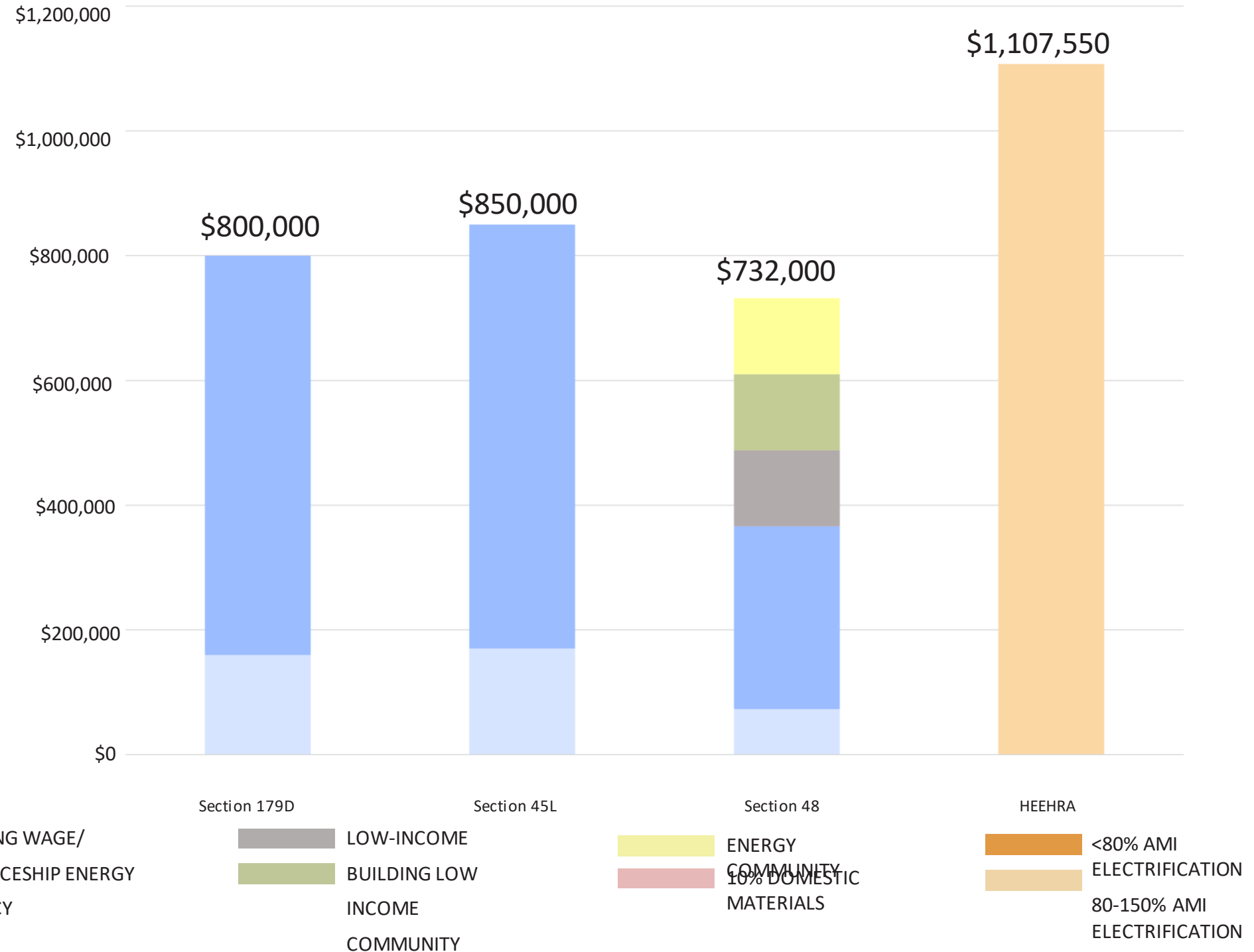
- 160,000SF
- 170 Units
 - 35 Units <80% AMI
 - 75 Units 80-150% AMI
- Passive House Certified
- 100% Electrified
- Prevailing Wage/ Apprenticeship
- 8 EV Charging Stations
- Within a Low-income + Energy Community



CASE STUDY

#3 MIXED INCOME

- 160,000SF
- 170 Units
 - 35 Units <80% AMI
 - 75 Units 80-150% AMI
- Passive House Certified
- 100% Electrified
- Prevailing Wage/ Apprenticeship
- 8 EV Charging Stations
- Within a Low-income + Energy Community
- *With Rooftop Solar*



SWPA

CASE STUDIES

QUESTIONS &
DISCUSSIONS