



California Center for
Sustainable Communities

Mindful Gas Decommissioning

A Gas Distribution System Screening Tool for Exploration
of Equitable Decommissioning in California

October 8, 2025

FUNDED BY



CALIFORNIA
ENERGY COMMISSION

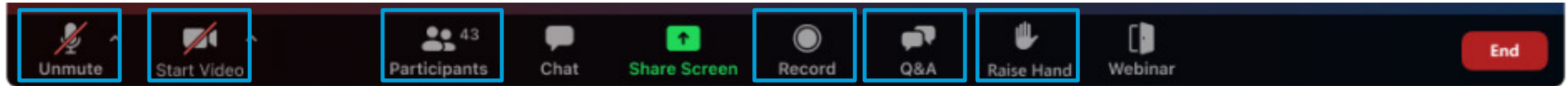
How to access Zoom interpretation?

¿Cómo utilizar la herramienta de interpretación Zoom?

The image shows a Zoom interface with a dark background. At the bottom, there is a toolbar with icons for Chat, Raise Hand, Q&A, Live Transcript, and Interpretation. The Interpretation menu is open, showing options: Off (checked), English, Spanish, Spanish 2, and Mute Original Audio. Three numbered callouts provide instructions:

- 1** ¡Interpretación en inglés y español disponible! (Interpretation in English and Spanish available!)
- 2** Seleccione el idioma preferido (Select the preferred language)
- 3** Luego, seleccione "Mute Original Audio" para escuchar solo el idioma seleccionado. (Then, select "Mute Original Audio" to hear only the selected language.)

Zoom Features Reminder



Audio & Video

Everyone will automatically be muted and off camera.

Participants

- See others
- Rename yourself (Name and Organization)

Q&A Feature

All questions or comments will be addressed using the Q&A feature.

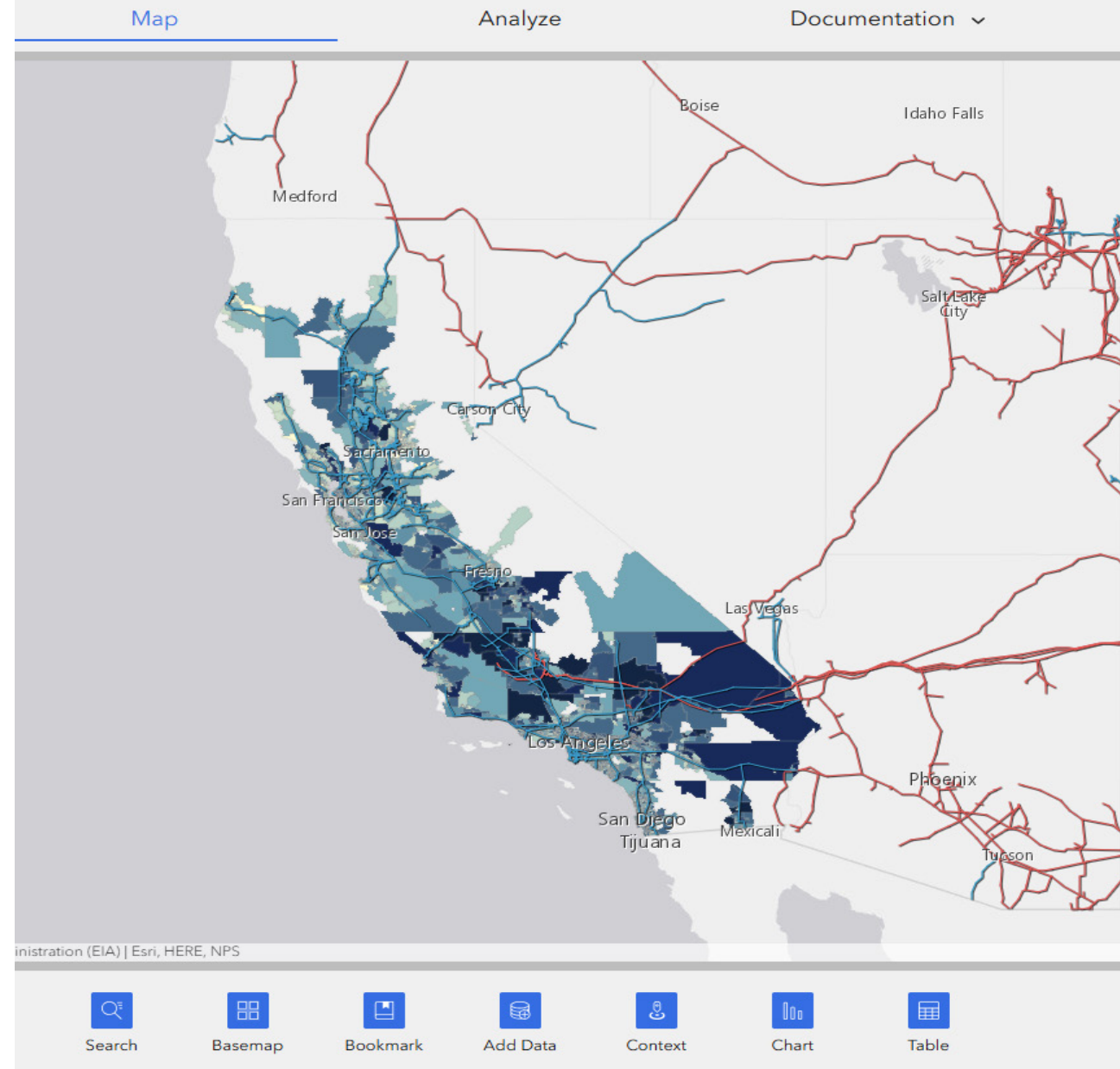
Reactions

Raise your hand is disabled, but please give reactions, e.g., thumbs up or applause.

We are recording this webinar.

Opening and Agenda

- Welcoming Remarks and Introductions
- Tool Showcase
- Screening for Change: Visalia Case Study
- Moving from Community to Statewide Insights
- Acknowledgements
- Q&A
- Request for Feedback



Welcoming Remarks and Introductions

Welcoming Remarks

- Showcase of research product Gas Distribution System Screening Tool
- Funded through competitive grant funding opportunity *
- Data driven approach to support in screening for promising sites for gas decommissioning
 - Utilizes gas asset data provided by utilities to CPUC's Long Term Gas Planning Rulemaking
 - Leverages other publicly available data sets
- Bolster ongoing efforts to collaboratively plan and develop policy

** PIR-22-002: Mindful Decommissioning: A Data-Driven Tool for Prioritizing Strategic Gas Asset Decommissioning
Funded by FY 2020-21 - Gas Research & Development Budget Plan*

Key Project Team Member Introductions



Cici Vu

Director, Energy & Climate Equity
DNV Energy Insights USA Inc.



Valerie Nibler

Director, Building Electrification
DNV Energy Insights USA Inc.



Mel Amoroso-Pohl

Senior Consultant, Energy &
Climate Equity
DNV Energy Insights USA Inc.



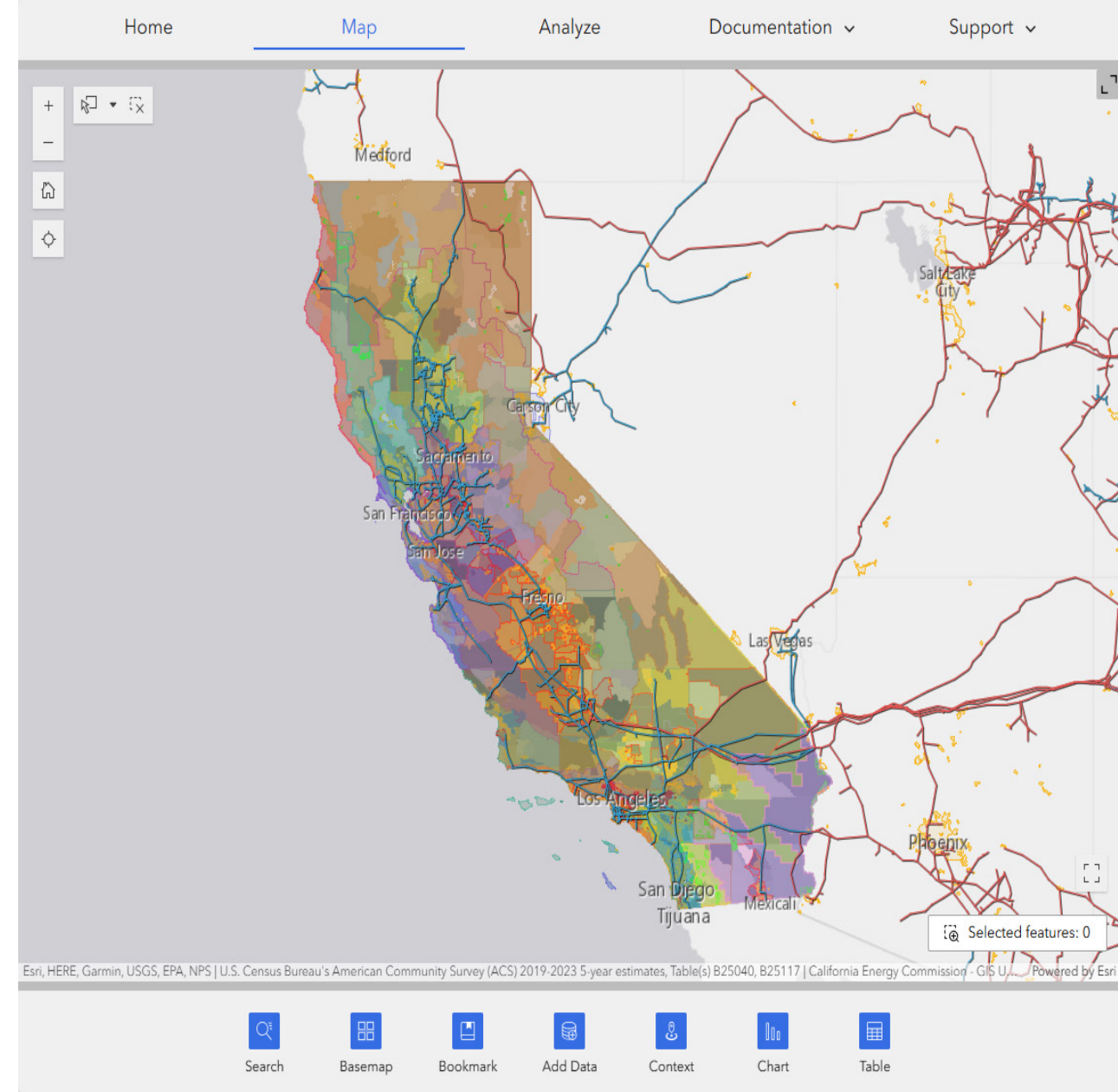
Eric Fournier

Research Director
California Center for Sustainable
Communities at UCLA

Project Objectives

Develop a data-driven tool that:

- Enables screening for promising sites for decommissioning
- Provides a **first step for prioritizing more targeted analyses** of technical feasibility of decommissioning specific segments of the gas system
- Incorporates considerations of safety, equity, readiness, and cost effectiveness



How is this Tool Important and Useful?

**Bridges State
Policy and
Practice**

**Supports
Complex
Decision-
Making**

**Enables
Transparent
Trade-Offs**

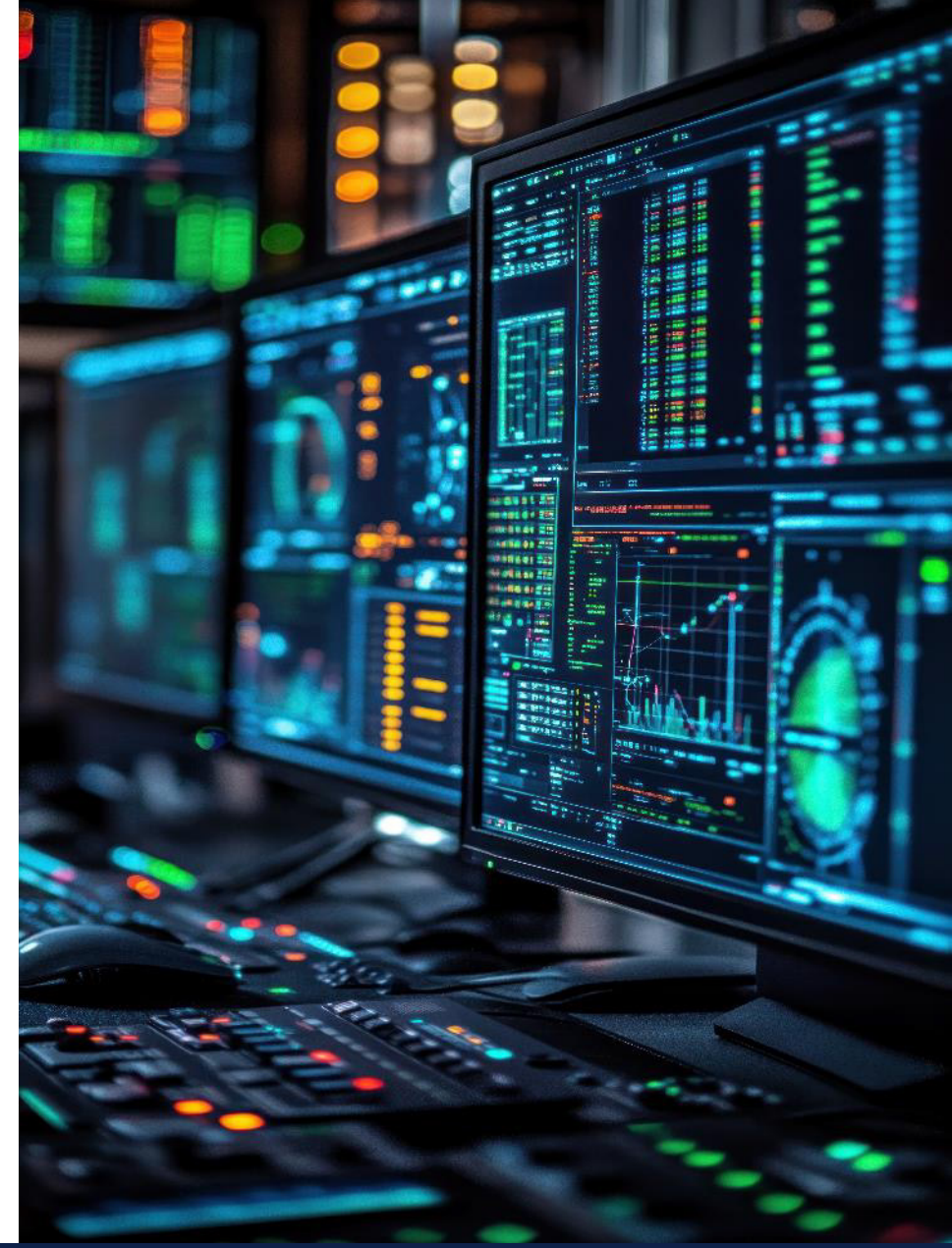
**Collaboration
Potential**

**Validated by
Communities**

Statewide Coverage | Standardized Scoring | Community Vetted

Myth:

“We need better data to get started”



The Research Shows...

Get started to discover what is needed to implement successfully

- Use Tool to screen promising candidate census tracts for further investigation
- Build on Tool's value-added data on equity and decommissioning readiness
- Collaborate with utilities and communities to layer in additional data and insights

Collaborate and Iterate

Myth:

“People just need to be educated”



The Research Shows...

Engagement is an exchange that leads to mutual benefits.

- The gas transition has social and cultural dimensions.
- Time is needed to build trusted partnerships.
- Ground solutions in each community's local context.
- No one-size-fits-all—respond and adapt to community needs.

Engage to Learn from Each Other

Tool Showcase

Four Core Indices Combine to Create Insights



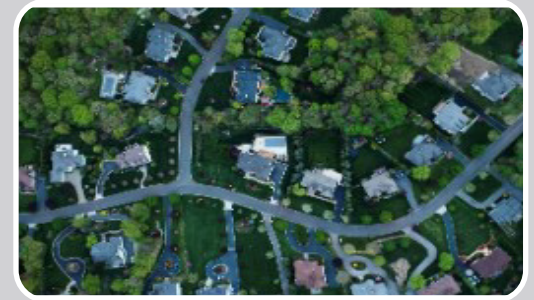
Gas Assets Index



Equity Index



**Non-Residential
Decommissioning
Readiness Index**



**Residential
Decommissioning
Readiness Index**

When layered together, the indices reveal powerful insights such as:

- *Where are the safety risks highest? Where are communities most ready to transition? What might be some challenges or benefits?*

Key Indices with their Sub-Indices



Gas Assets Index

Safety
Environment
Regulatory Drivers
Pipeline Replacement
Costs
Gas Demand



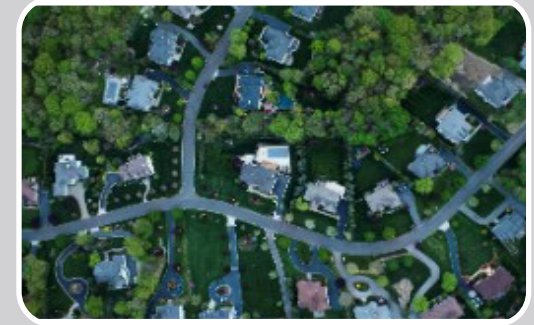
Equity Index

Socioeconomic
Vulnerability
Pollution Burden
Environmental Risk
Climate Risk
Sensitive Populations
Energy Burden
Access to Critical
Services



Non-Residential Decommissioning Readiness Index

Commercial sector
capacity for fuel
switching by NAICS
code & end-use
category



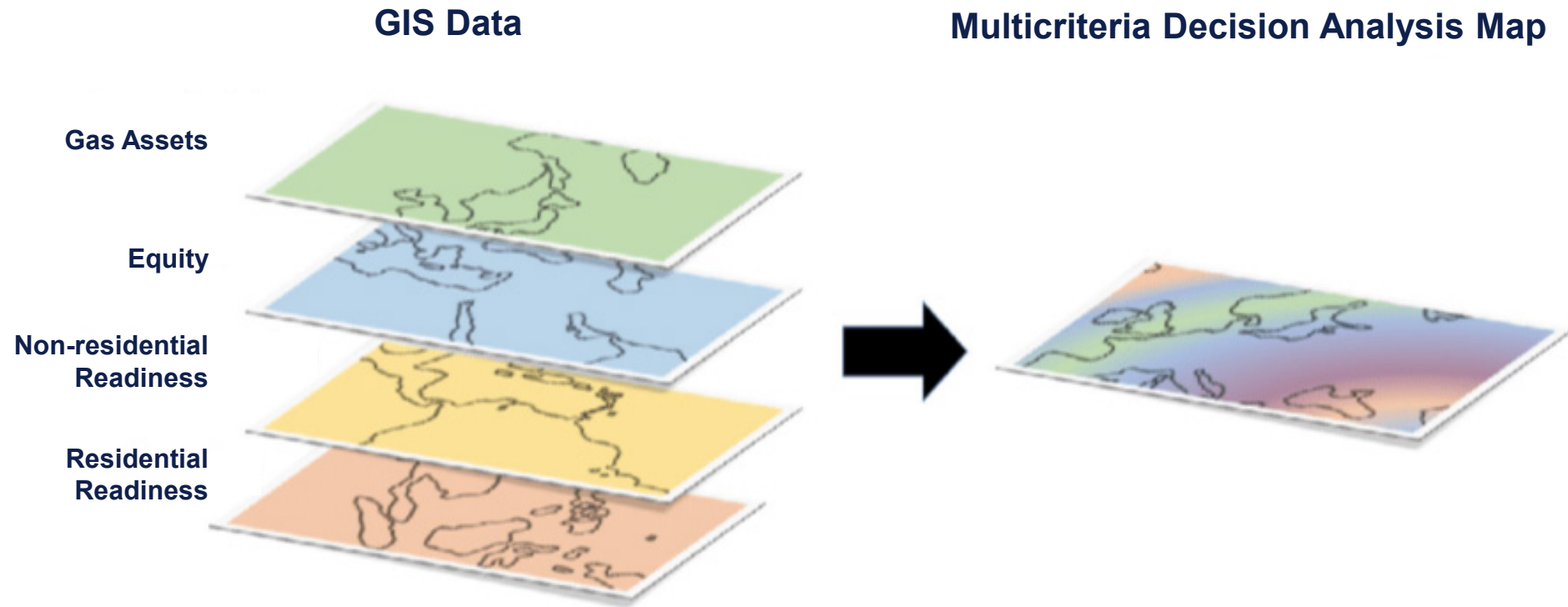
Residential Decommissioning Readiness Index

Residential sector
capacity for fuel
switching by building
type (single-family,
multi-family)

Data Sources for Index Development

Gas Assets	Equity	Non-residential Decommissioning Readiness	Residential Decommissioning Readiness
CPUC Long-Term Gas Planning Rulemaking (R.20-01-007): Gas System Data provided by Utilities to service list November 2022	- ACS (American Community Survey) - DOE LEAD Tool - CalEnviroScreen 4.0 - EPA EJ Screen - USDA - Neighborhood Data Archive - FEMA Expected Annual Loss	- CPUC Disaggregated Investor-Owned Utility Customer Gas Demand Database (UCLA Private Access, 2021) - CEC Commercial End-Use Survey (2019) - U.S. EIA Manufacturing Energy Consumption Survey (2022) - NREL US County Level Industrial Energy Use Database (2014)	- ACS (American Community Survey) - Account Level Utility Consumption Data aggregated to protect privacy (CPUC database)

Geospatial Multi-Criteria Decision Analysis (MCDA)



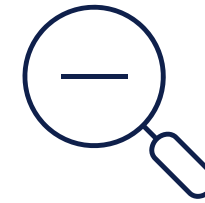
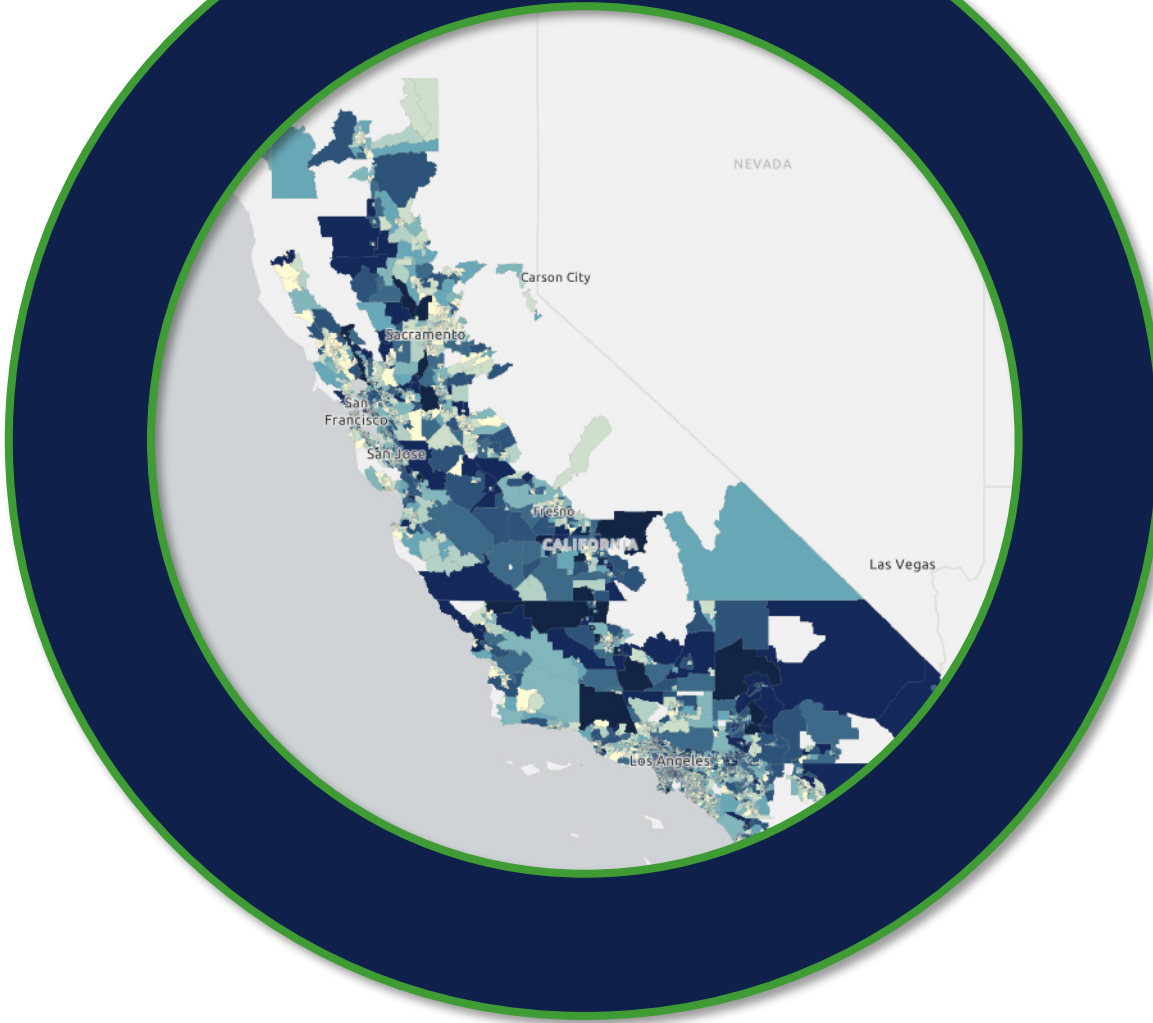
Intuitive Model to Communicate and Support Complex Decisions

Public Data

Private Data

Our
Tool

Census Tract Level Data



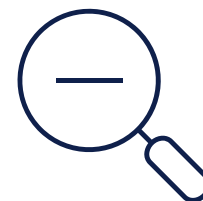
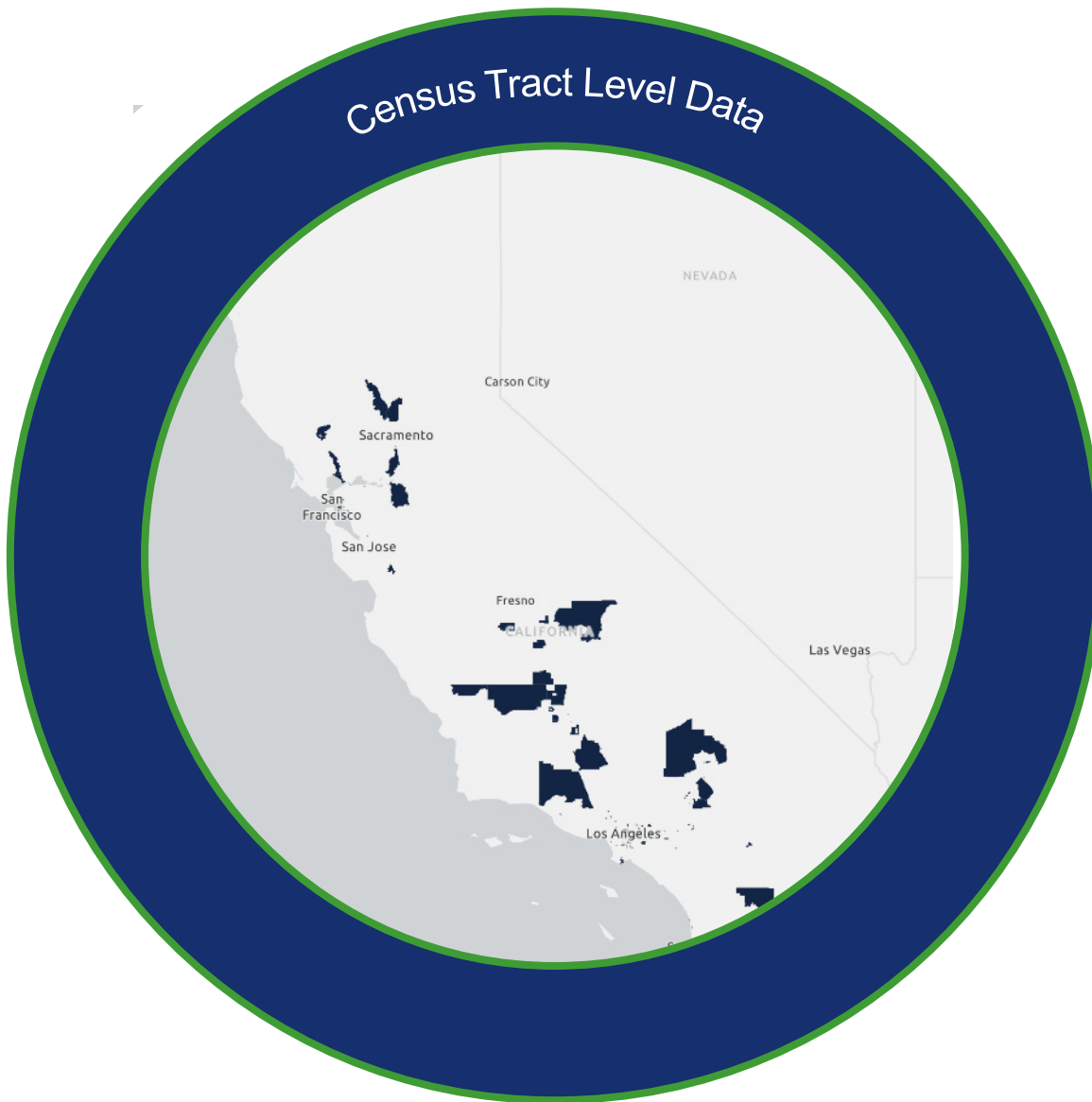
High-level, statewide
perspective



Most Promising for
Decommissioning

Least Promising for
Decommissioning

Our Tool

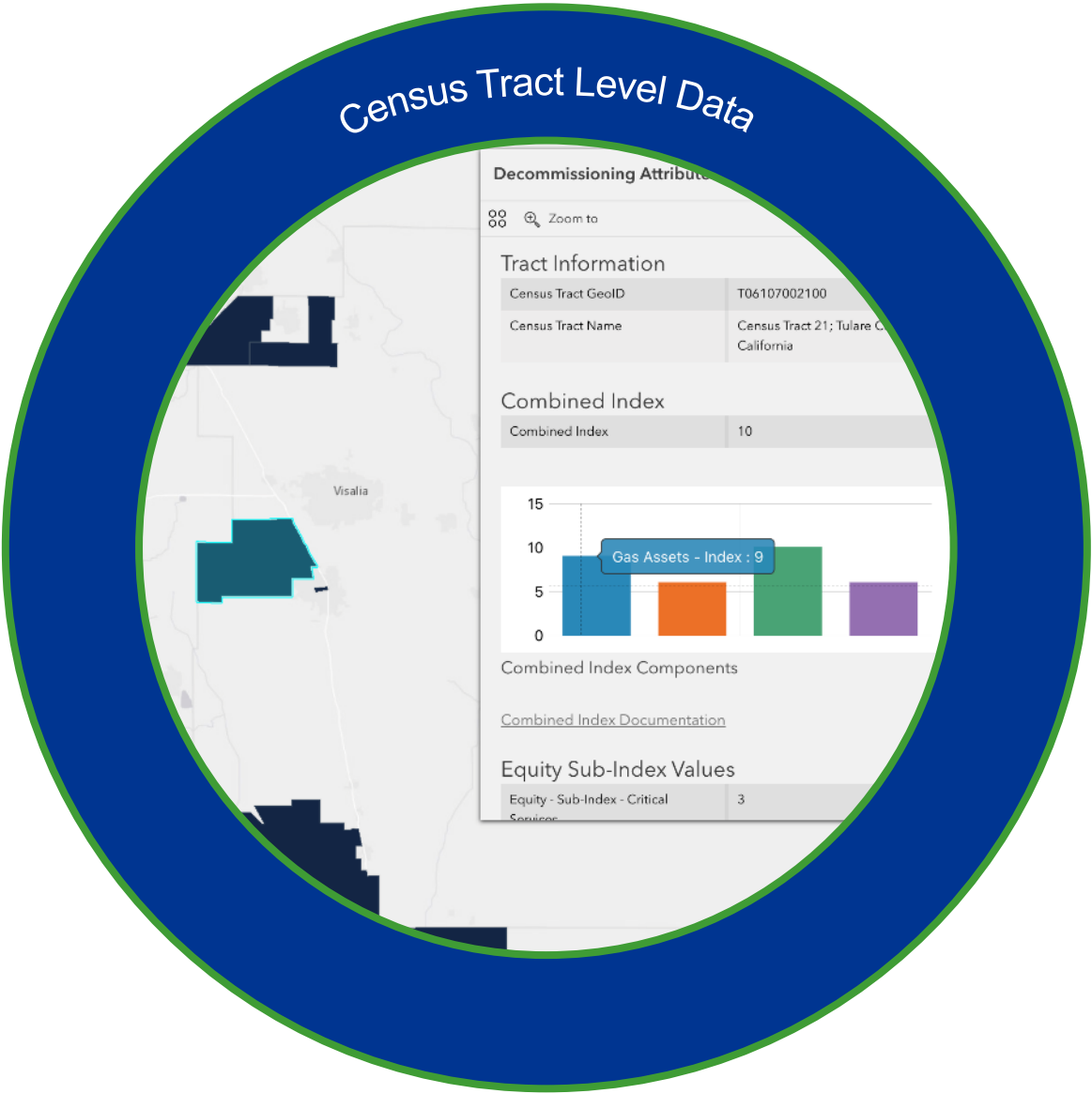


High-level, statewide perspective



Promising candidate tracts

Our Tool



- High-level, statewide perspective
- Promising candidate tracts
- Promising census tract

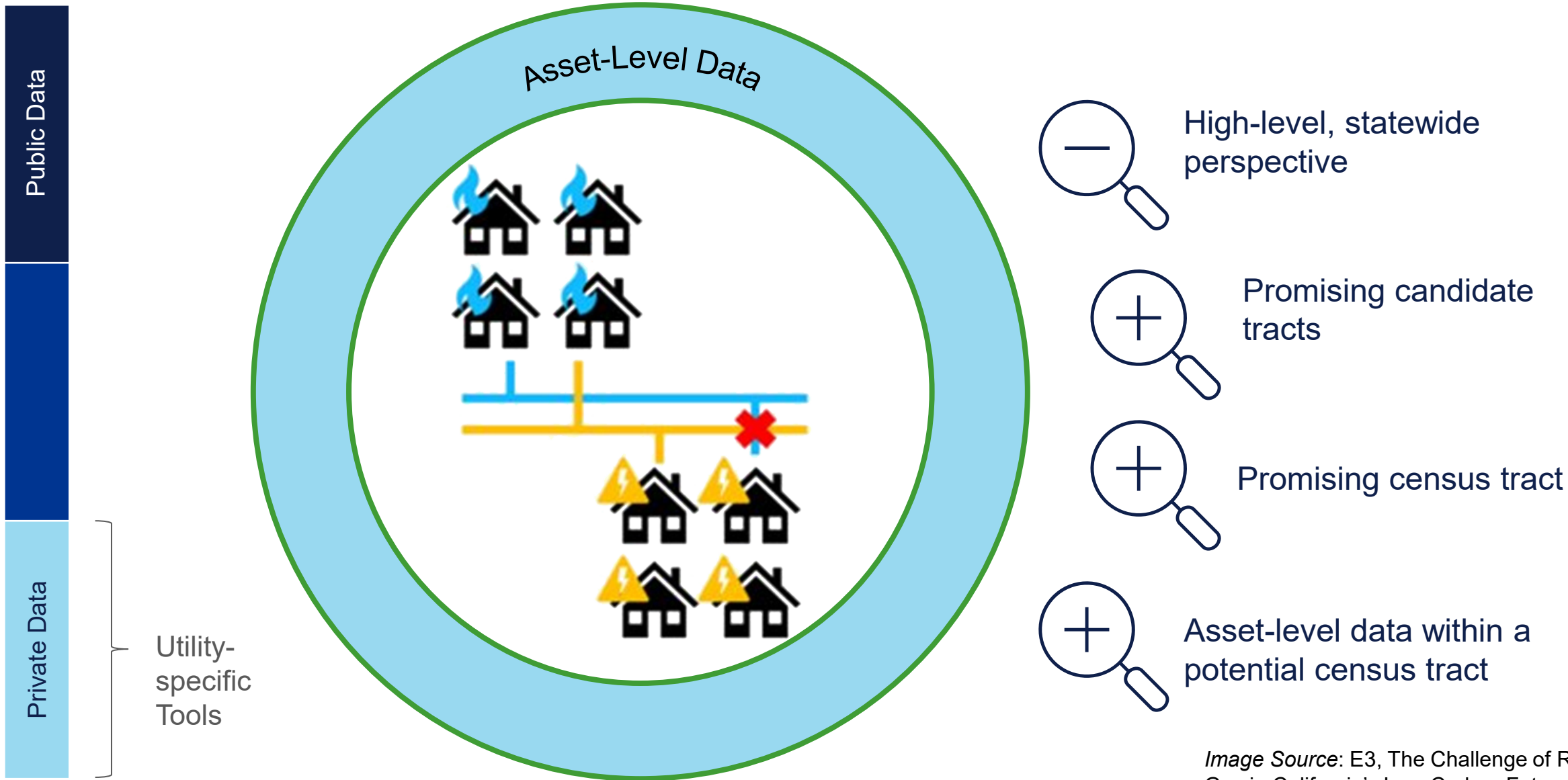


Image Source: E3, The Challenge of Retail Gas in California's Low-Carbon Future

How these Tools Complement Each Other

Added Value		Potential Limitations	
Our Statewide Tool			
• Statewide coverage including all major gas IOU service territories (PG&E, SDG&E, SCG, Southwest Gas) • Standardized scoring criteria • Minimal privacy/security concerns • Census tract aggregated customer and gas asset data		• Current customer and gas asset data are a snapshot in time – would need to develop processes to update them • Uncertain technical feasibility of implementation for specifically identified sites	
Utility Specific Tools			
• Able to view detailed, confidential data for individual customer and gas assets • Shorter turn-around time for customer and gas asset data updates • Likely higher technical feasibility of implementation for specific identified sites		• Utility territory specific coverage areas • Utility specific scoring criteria • Asset level data cannot be shared with external third parties without Non-Disclosure Agreements	

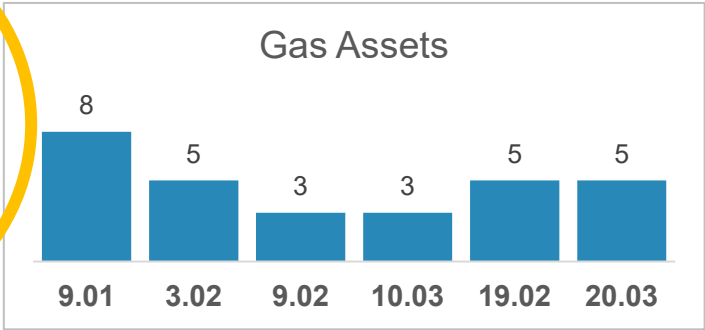
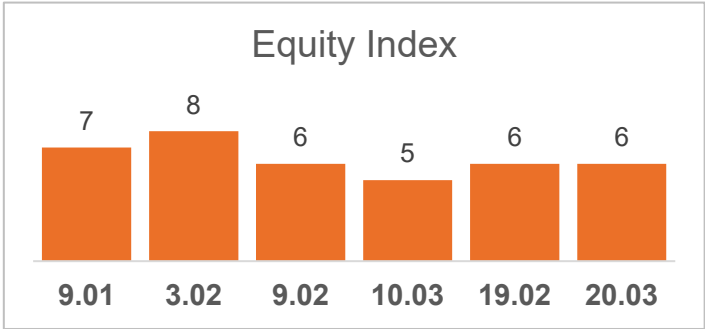
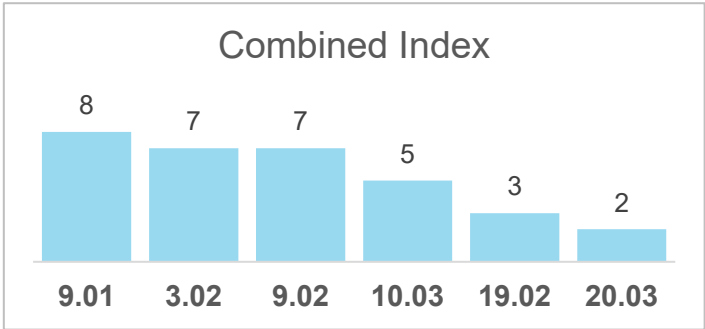
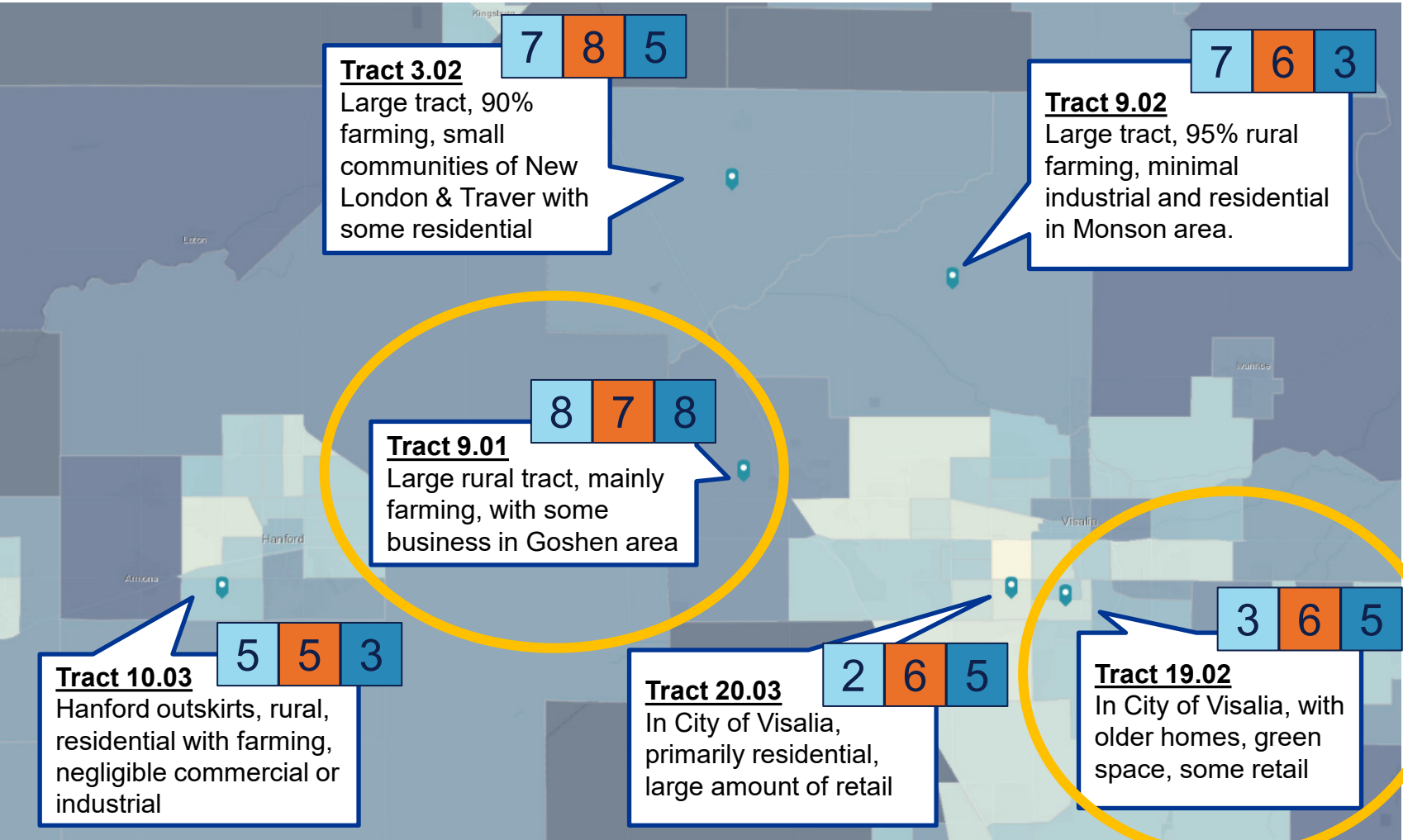
Demo for Identifying Promising Candidate Tracts



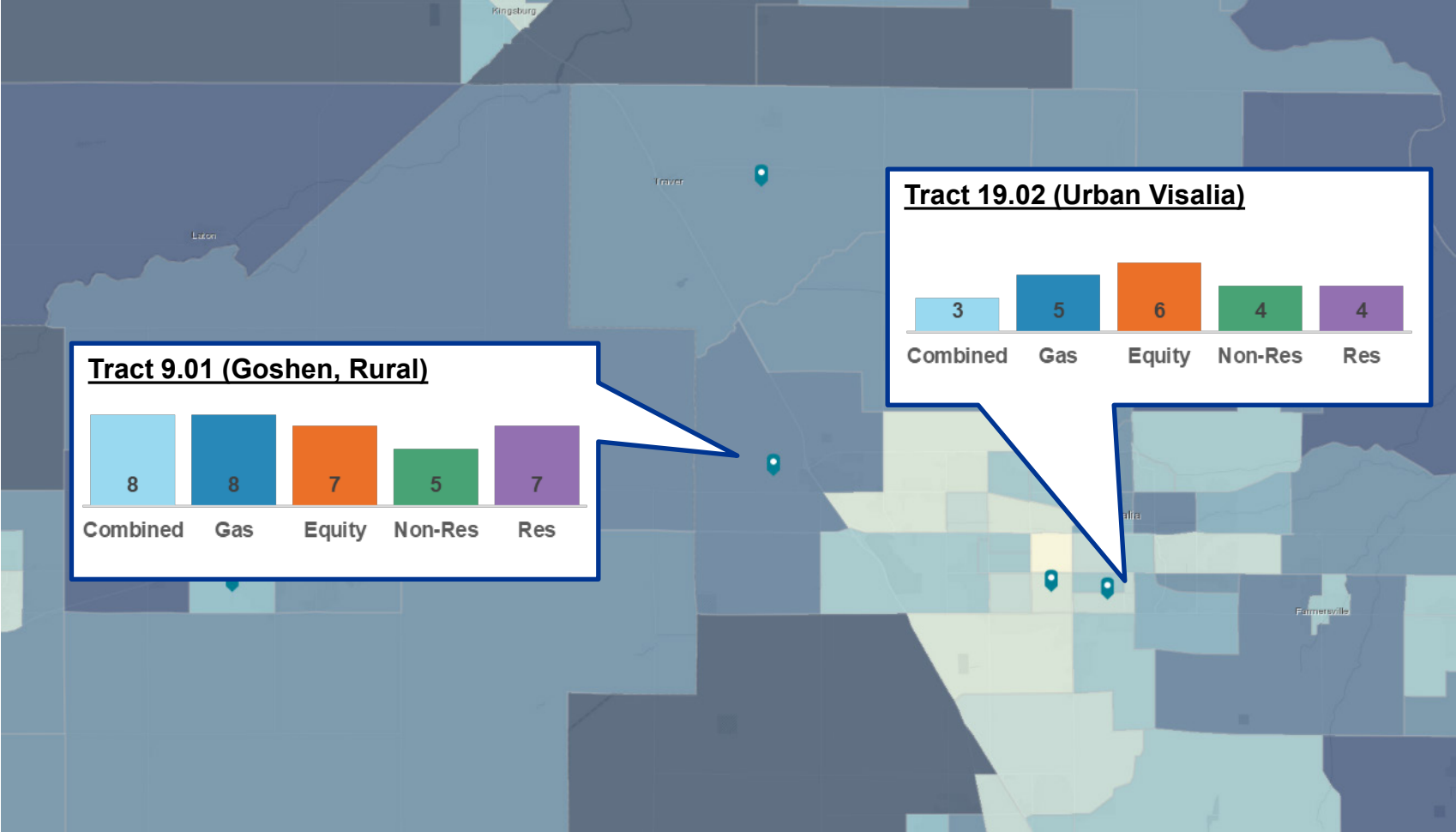
5-minute Q&A Break

Screening for Change: Visalia Case Study

Zooming In: Local Dynamics and Readiness Scores



Spotlight on Two Tracts: Key Insights



- Reveals safety–cost–equity trade-offs
- Rural tract: High risk + high vulnerability
- Urban tract: Equity and health outweigh cost
- Tool results can guide balanced, equitable decisions

Self-Help Enterprises – Key Project Team Members



Jose R. Gonzalez

Sr. Project Manager, Self-Help Enterprises

Mr. Gonzalez has been working in the field of energy, water, resource conservation and decarbonization for 35+ years. He has worked in the for-profit, non-profit and local government employment sectors supporting residential, commercial and industrial end users.



Armando Ortiz

Manager, Self-Help Enterprises

Mr. Ortiz has been at SHE since 2020. He supported outreach and engagement (O&E) for CPUC's San Joaquin Valley Affordable Energy Pilot Project. He currently supports O&E for CEC's Equitable Building Decarbonization Direct Install (EBD DI) Program and partnered with Silicon Valley Clean Energy (SVCE) on the Hanford/Kings County Energy Mitigation Program.



Self-Help Enterprises has worked together with low-income families to build and sustain healthy homes and communities since 1965. The pioneer and leading provider of mutual self-help housing in the United States, SHE's efforts today encompass a range of endeavors to build better homes and communities for farmworkers and other hard-working families.



6,662

Homeowners have built their own home



3,000

Units of rental housing have been developed



7,056

Owner-occupied homes have been repaired



2,324

First-time homeowners have been assisted with purchasing a home



18,000

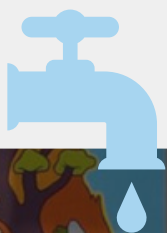
Participants have completed homeownership education

12,000+

Households have received water tanks, hauled water, well repairs, or other emergency water solutions

34,700+

Individuals in over 60 communities have been assisted with safe drinking water and sanitary sewer infrastructure



over

80,000
individuals
served

since 1965

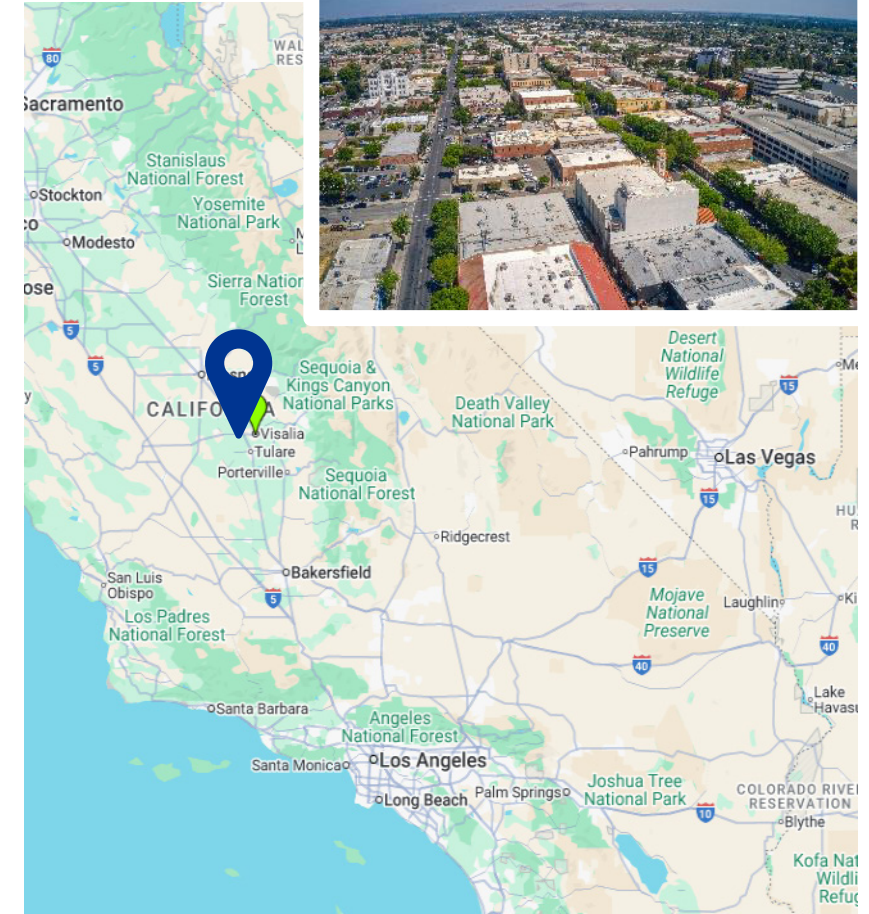
Visalia Decommissioning Profile

Profile

- Largest city in Tulare County – San Joaquin Valley, Centrality
- Served by SCE and SoCalGas
- Strong industrial, agricultural and distribution base
- ~46,500 households, 61% owner-occupied, majority single-family homes

Considerations

- 61% home ownership rates can simplify decarbonization
- Strong local ecosystem—creates opportunities for business, community, and workforce alignment in the energy transition.
- Projected 10.5% increase in cooling demand and more frequent extreme heat days highlight grid reliability risks and the need to plan for alternative fuels



SHE Case Study and Data Validation



SHE Data Validation – Equity Sub-Indices

	10.03	19.02	20.03	3.02	9.01	9.02
Equity (Index & Sub-indices)	Hanford Outskirts (Rural)	City of Visalia, Older Homes (Urban)	City of Visalia, More Retail (Urban)	New London and Traver (Rural)	Goshen Area (Rural)	Monson Area (Rural)
Equity Index (overall)	5	6	6	8	7	6
<i>Climate Risk</i>						
<i>Critical Services</i>						
<i>Energy Burden</i>						
<i>Environmental Risk</i>						
<i>Pollution Burden</i>						
<i>Sensitive Population</i>						
<i>Socioeconomic Vulnerability</i>						

HIGH: most promising for decommissioning

LOW: least promising for decommissioning

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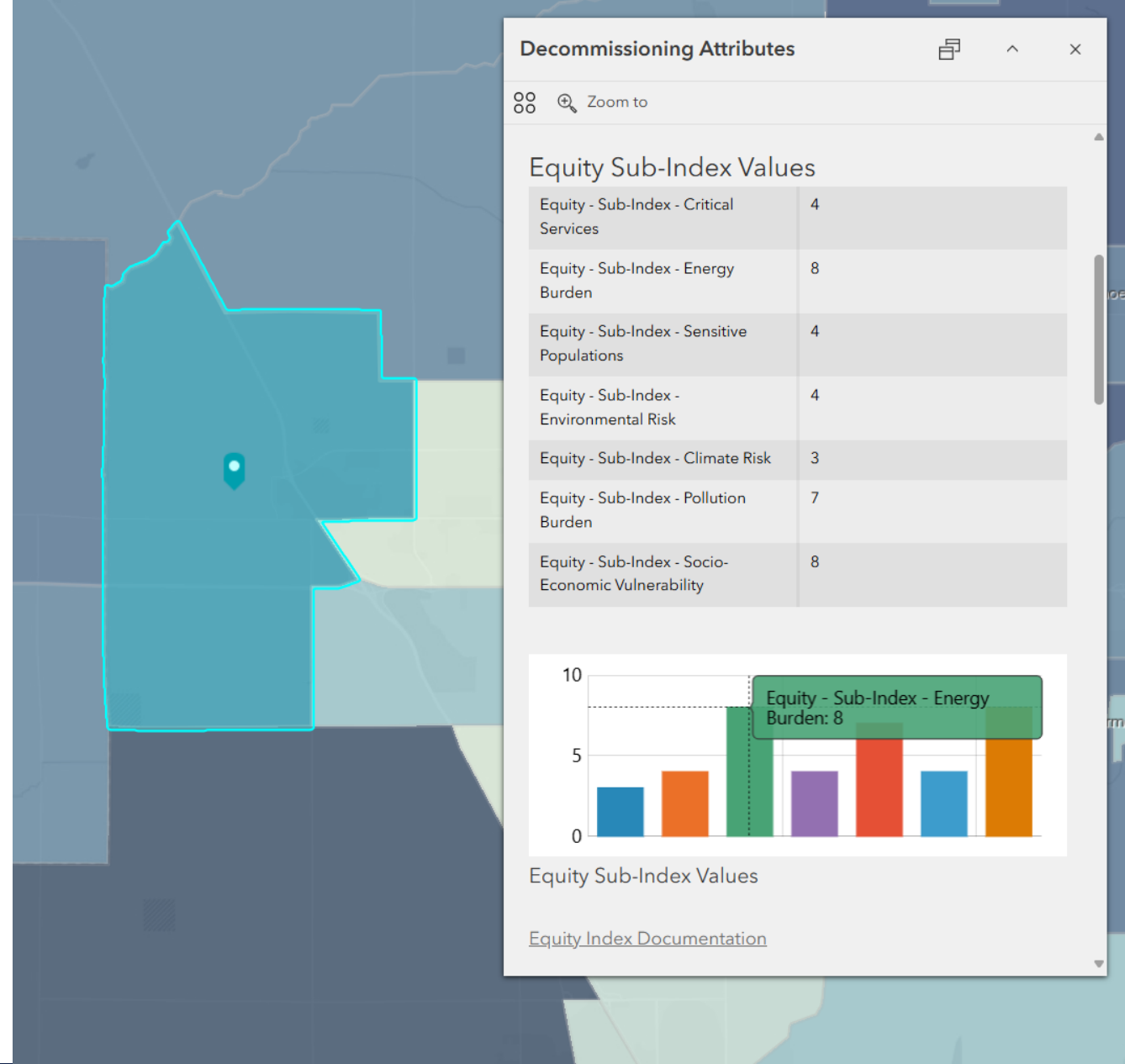
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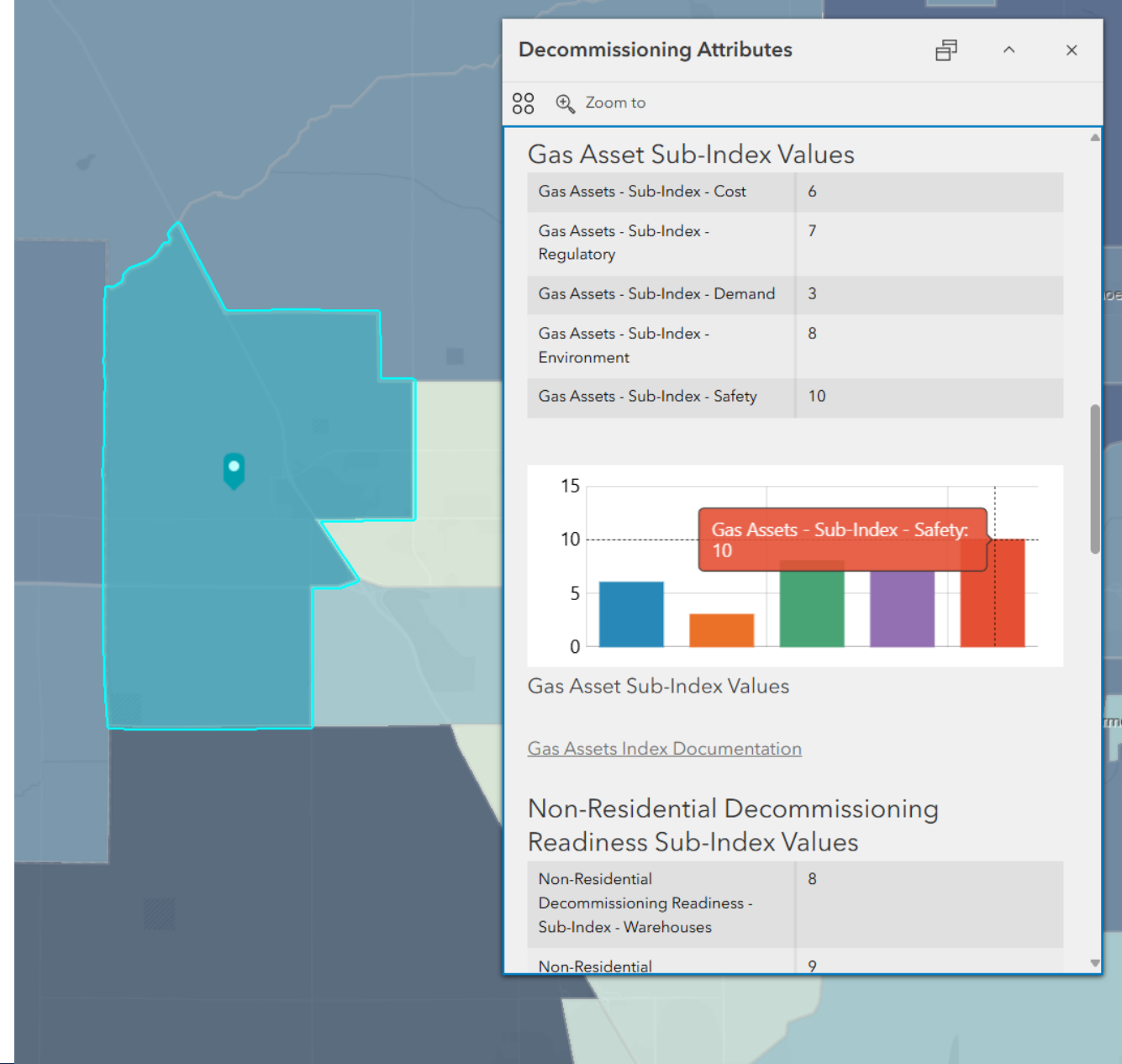
Rural Visalia – Scoring and Relevant Characteristics

- **High energy burden + socioeconomic vulnerability:** Renters + low-income households risk being left behind without protections.
- High safety risk: Older pipelines and proximity to population centers → strong case for early decommissioning.
- Moderate residential & non-residential readiness: Some decommissioning potential, but targeted support needed for older homes, rentals, and gas-reliant small businesses.



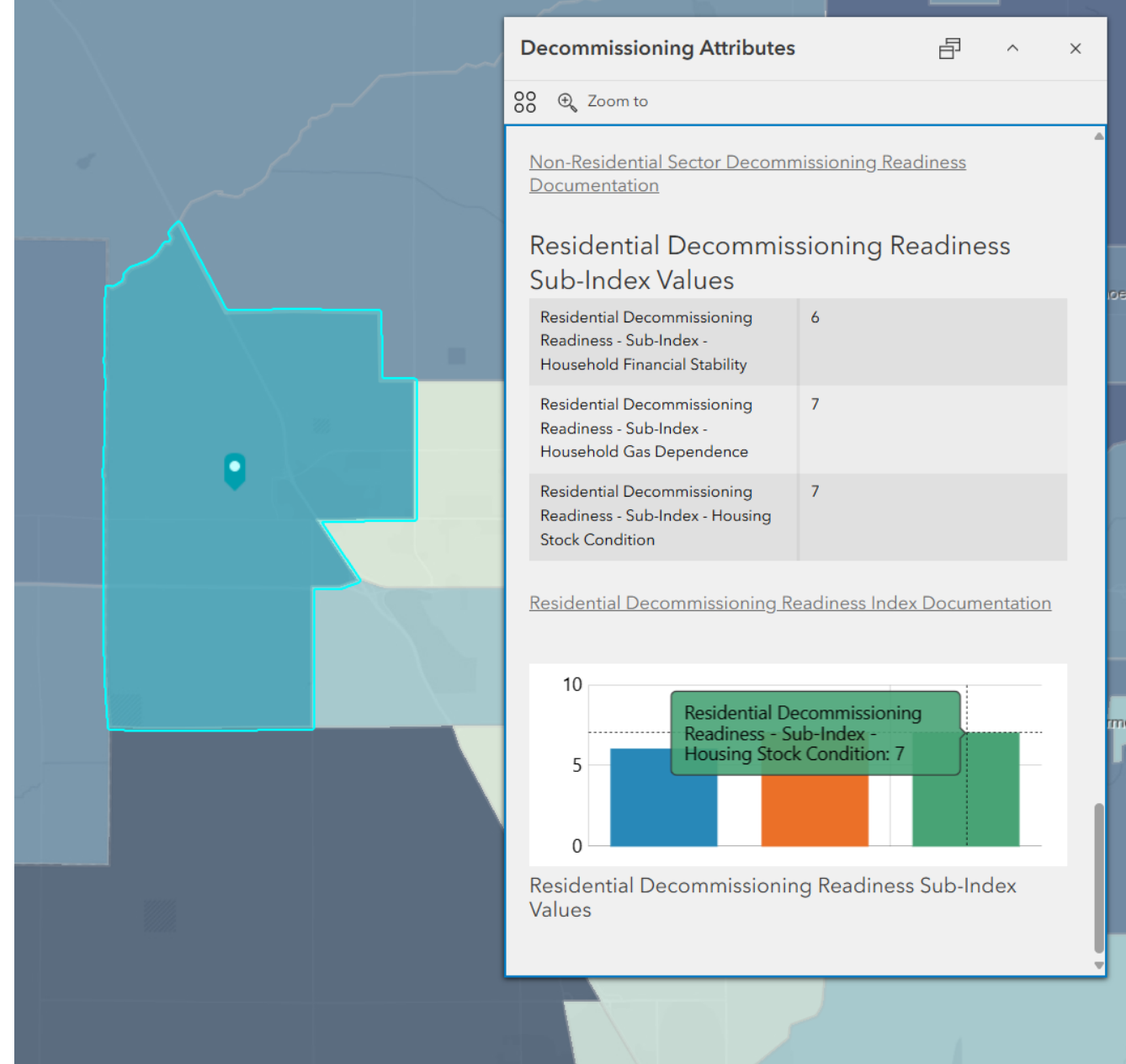
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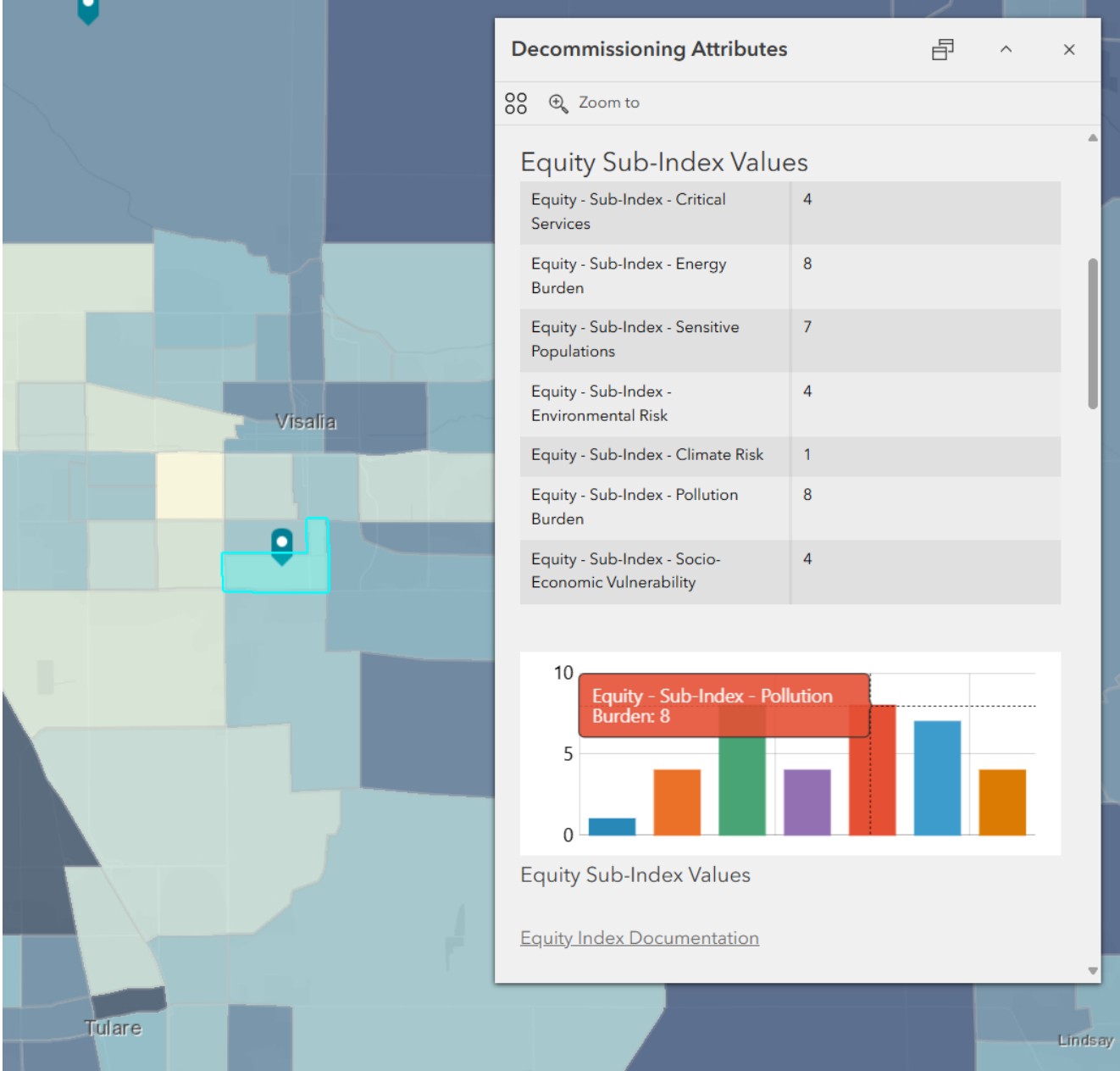


Goshen Tract – Scoring Summary

Observations	Characteristics	Implications
High energy burden + socioeconomic vulnerability	Higher bill to income rates, more at risk demographics	Higher risk of stranded assets and need for tenant protections
High demand + high safety	Large number of gas users, with significant gas infrastructure vulnerability	High benefit for being selected for early decommissioning
Moderate residential	Financial stability, newer housing stock, fewer renters	Well positioned for decommissioning, minor targeted support needed
Moderate non-residential	Mix of commercial activity	Targeted approach needed, directed support to hard to decarb sectors

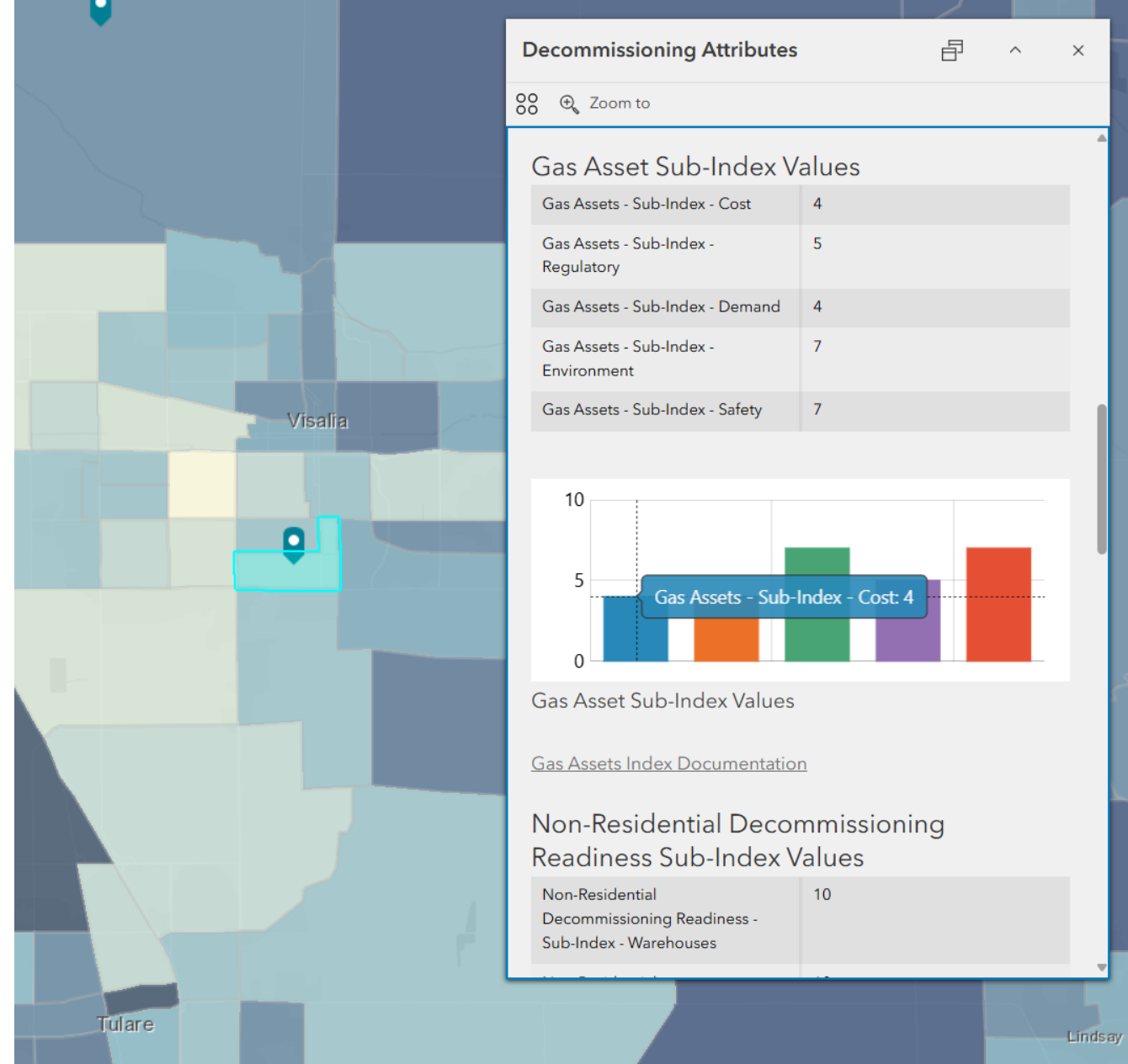
Urban Visalia – Scoring and Relevant Characteristics

- **High energy + pollution burden:** Equity case is strong—health and affordability benefits could outweigh weak cost signals.
- Moderate safety, low cost: Limited incentive for early decommissioning, but risks remain
- Low residential readiness: Older housing, renters, and upgrade barriers limit near-term transition potential.



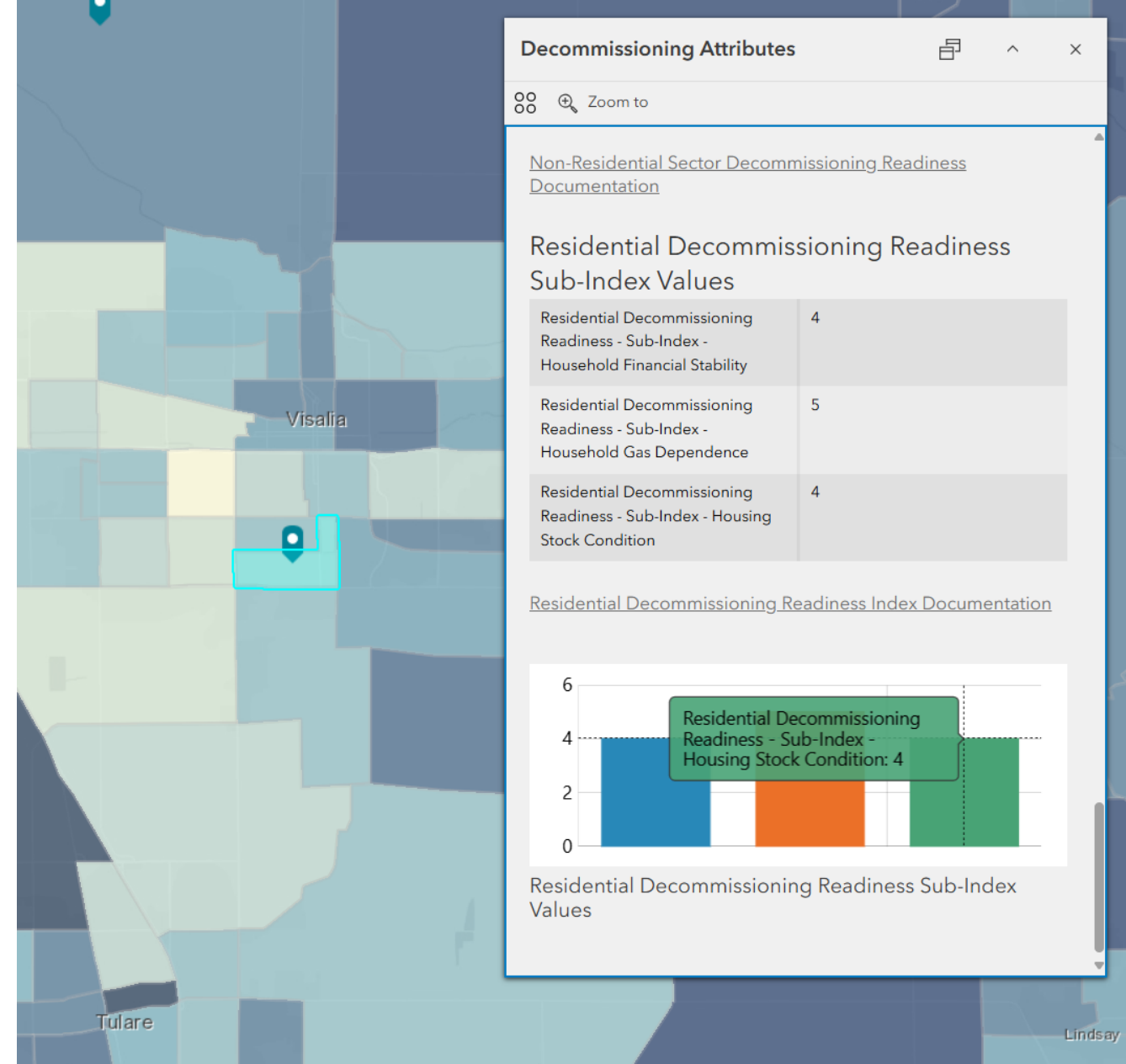
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Urban Visalia Tract– Scoring and Relevant Characteristics

Observations	Characteristics	Implications
High energy + pollution burden	High bill rates, residents experience existing air pollution	Health and affordability benefits could outweigh weaker cost signals
Moderate safety, low cost	No severe infrastructure risk, low cost to replace existing pipelines	Limited incentive for early decommissioning
Low residential readiness	Older housing, many renters, and upgrade barriers could limit near-term transition potential	Potential significant challenges to transition
Low non-residential readiness	Fewer commercial buildings or harder to electrify building types	Equity factors may justify mitigation-first strategies and targeted support.

Community Insights

- Cost effectiveness approach – concerns and considerations
- Community perspectives:
 - Health and safety might not always be seen as biggest priority
 - Cooking preferences
- Building trust:
 - Best practices – Community Navigators
 - Other examples of successful work or best practice strategies

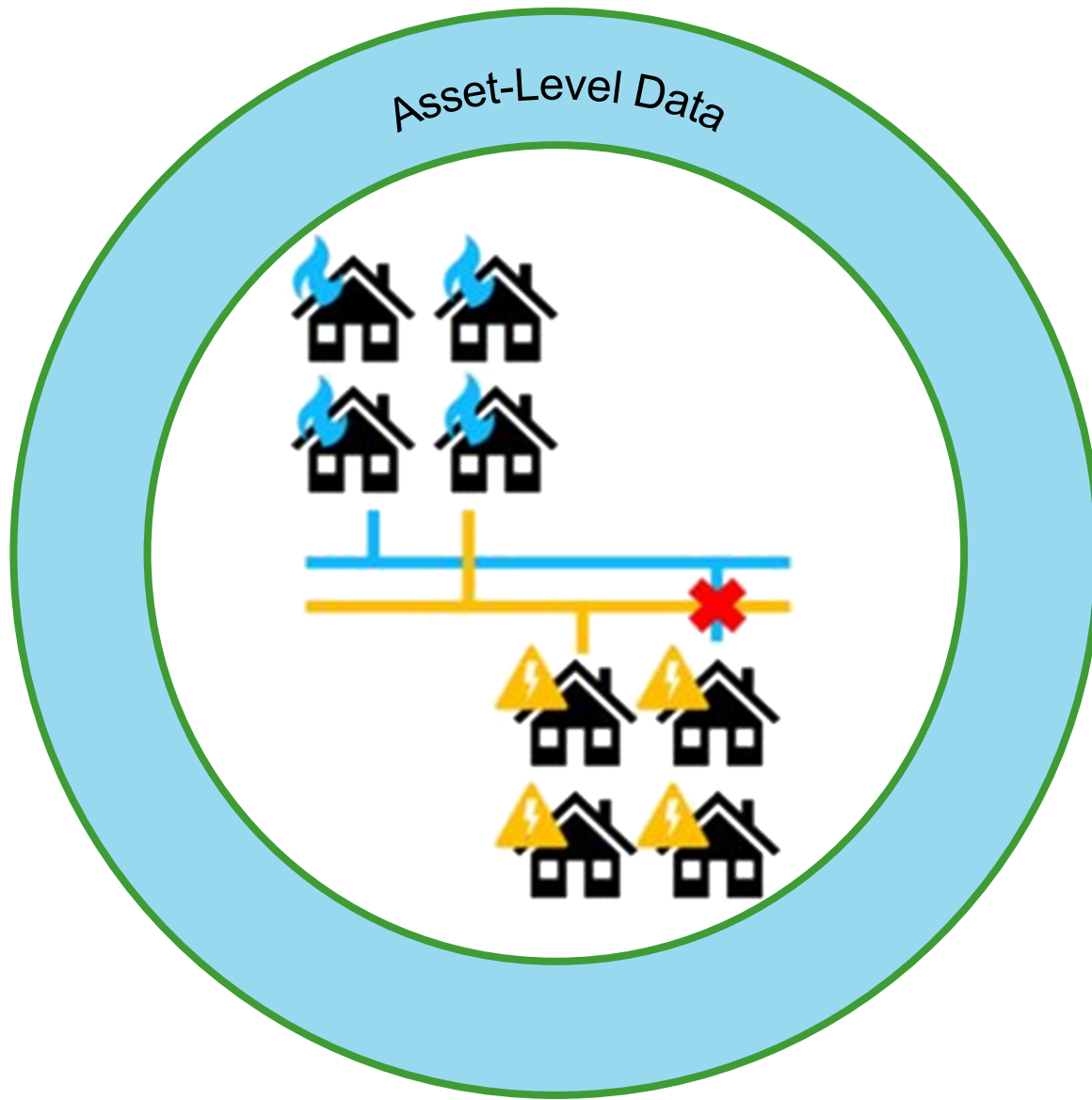


Value of the Tool

- Programs using this Tool are best positioned for successful, equitable energy transitions.
- When paired with program implementation economics, the Tool delivers actionable, data-driven insights.
- When cost-effectiveness is balanced with community readiness, programs can achieve deeper impact—building trust, ensuring equitable participation, and accelerating decarbonization goals.



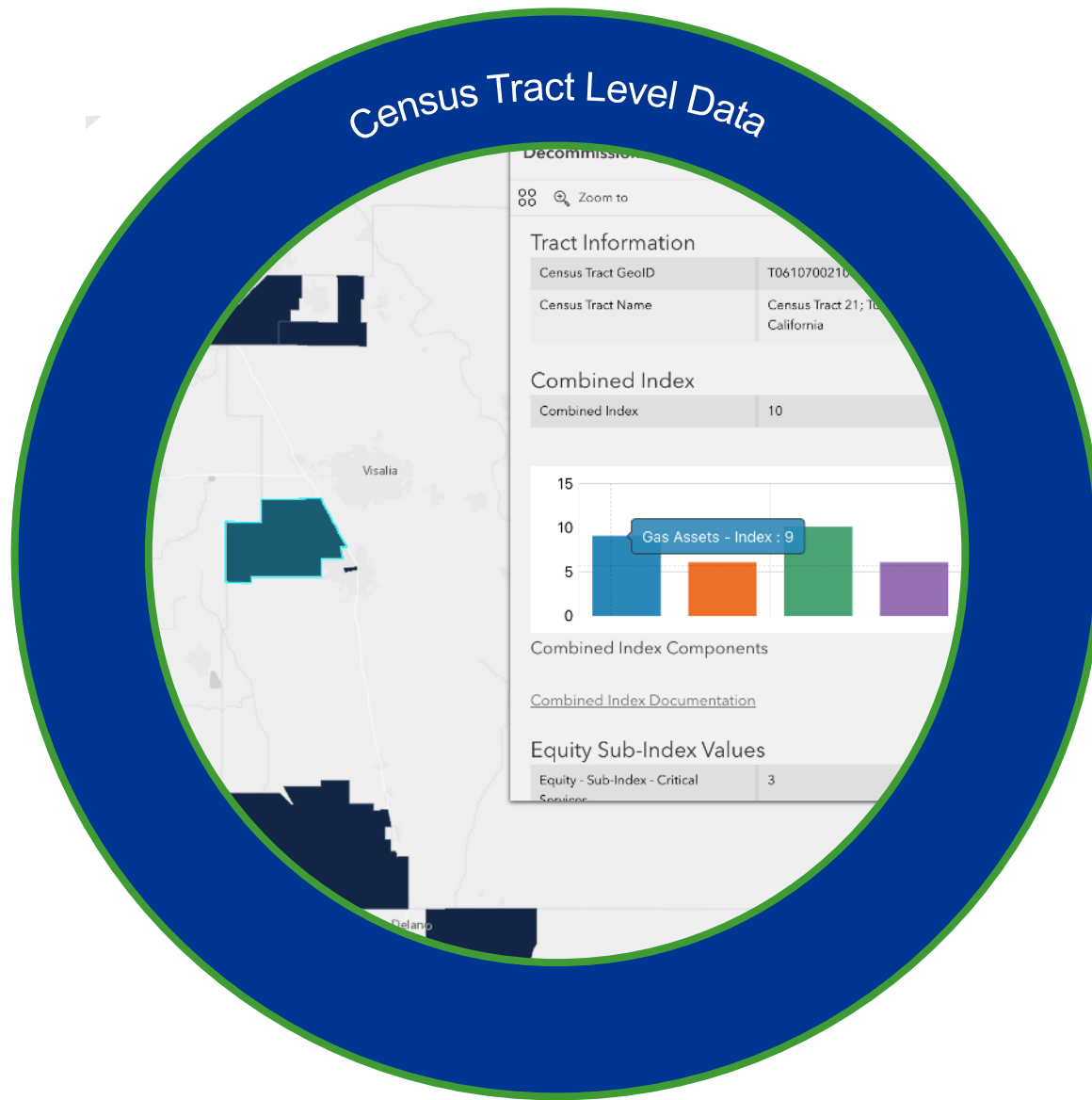
Moving from Community to Statewide Insights



Value of local level understanding

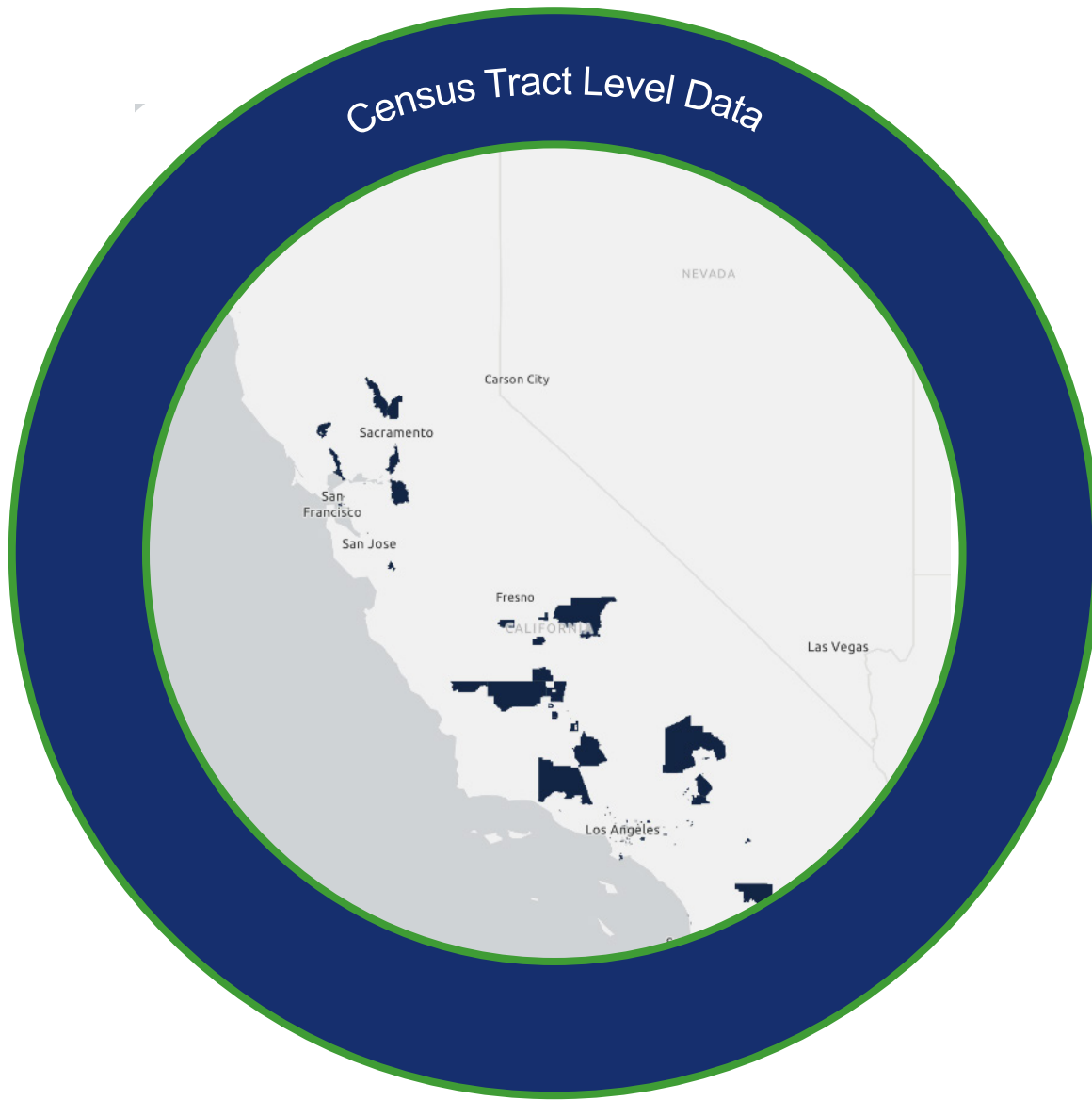
- Helps refine Tool metrics
- Builds local community trust toward informed community participation
- Supports balancing cost effectiveness with equity-driven early adoption factors

Image Source: E3, The Challenge of Retail Gas in California's Low-Carbon Future



Examples that illustrate profiles of similar California communities

- Stranded gas asset risks
- Tribal concerns on impacts
- Industrial and enabling conditions
- Housing conditions – historical neighborhoods, newer construction



Support statewide policy implementation

- Socialized decarbonization policy and decommissioning efforts
- Pre-positions implementers for policy-aligned pilot identification
- Proposes rationale and criteria for policy-aligned decommissioning prioritization

Future of the Tool

- Domain of the State
- Our Call to Action:
 - Ensure strategic and **ongoing development and application** of the Tool
 - Encourage **implementer use** in pilot identification and selection
 - Support refinement for **broader access** to the Tool
- Our Call to Action for communities and stakeholders...

We Want Your Feedback!

- Have your voice and expertise heard
- Amplify the impact of this research
- Guide the state on research and funding priorities



Feedback Survey: [Survey Link](#)

Acknowledgements

Case Study Locations and Partners

- Blue Lake Rancheria Indian Tribe, California (rural, tribal)
- Sacramento (urban, suburban)
- Richmond (urban, industrial)
- North Fair Oaks (suburban)
- Stockton (suburban, rural)
- Central Valley (suburban, rural)
- Oxnard (coastal, suburban)
- San Francisco (urban)
- Wilmington (industrial, port corridor)
- La Jolla Band of Luiseno Indians (non-grid fuel)



Acknowledgements – Community Partners

- Blue Lake Rancheria, North Coast/Humboldt
- Central California Asthma Collaborative, Central Valley
- Climate Resilient Communities, North Fair Oaks
- Climate Ready North Fair Oaks
- Staff and community leaders at Climate First: Replacing Oil & Gas (CFROG), Oxnard
- Restore the Delta, Stockton
- Self-Help Enterprises, San Joaquin Valley



Acknowledgments – Technical Advisory Committee Members

- Natural Resources Defense Council
- Energy Coalition
- Stanford University
- Energy+Environmental Economics (E3)
- RAND
- California Public Utilities Commission
- California Energy Commission



Q&A

We Want Your Feedback!

(by Friday, 10/17/25)

- Have your voice and expertise heard
- Amplify the impact of this research
- Guide the state on research and funding priorities
- Webinar materials will be posted on our Resource Hub soon...stay tuned.

[Mindful Gas Decommissioning Resource Hub](#)



Feedback Survey: [Survey Link](#)

Thank you!

Cici Vu

DNV Subject Matter Expert –
Energy + Climate Equity

cici.vu@dnv.com

Valerie Nibler

DNV Project Oversight,
Planning & Management

valerie.nibler@dnv.com

Mel Amoroso-Pohl

Senior Consultant
Energy + Climate Equity

Mel.amoroso-pohl@dnv.com

Eric Fournier

UCLA Subject Matter Expert

efournier@ioes.ucla.edu