



**LA100 Equity Strategies
Steering Committee Meeting #10
August 17, 2022**



UCLA

2 Los Angeles Department of Water & Power (LADWP) Project Leads



Simon Zewdu
Director
Transmission Planning,
Regulatory, and Innovation Division



Pjoy T. Chua, P.E.
Assistant Director
Transmission Planning, Regulatory,
and Innovation Division



Steve Baule
Utility Administrator
LA100 Equity Strategies Oversight
& UCLA Contract Administrator



Stephanie Spicer
Community Affairs Manager



Agenda

Start Time	Item
10:00 a.m.	Welcome
10:05 a.m.	Meeting Purpose and Agenda Overview
10:10 a.m.	Steering Committee Check In and Spotlight
10:25 a.m.	Tools to Identify Disadvantaged Communities
11:10 a.m.	Steering Committee Feedback: <i>Key Takeaways for Modeling, Analysis, and Strategy Development</i>
11:55 a.m.	Wrap Up and Next Steps



Our Guide for Productive Meetings



Raise your hand
to join the
conversation
(less chat
entries, more
talking)



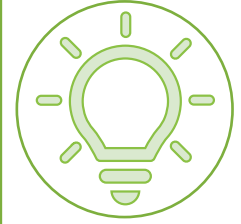
Help to make
sure that
everyone has
equal time to
contribute



Keep input
concise and
focused so that
others have
time to
participate



Actively listen to
others to
understand their
perspectives



Offer ideas to
address others'
questions and
concerns



Steering Committee Roster

Organization	Representative
Alliance of River Communities (ARC)	Vincent Montalvo
City of LA Climate Emergency Mobilization Office (CEMO)	Marta Segura, Rebecca Guerra
Climate Resolve	Jonathan Parfrey, Bryn Lindblad
Community Build, Inc.	Robert Sausedo
DWP-NC MOU Oversight Committee	Tony Wilkinson, Jack Humphreville
Enterprise Community Partners	Jimar Wilson, Michael Claproth
Esperanza Community Housing Corporation	Nancy Halpern Ibrahim
Los Angeles Alliance for a New Economy (LAANE)	Kameron Hurt, Estuardo Mazariegos
Move LA	Denny Zane, Eli Lipmen
Pacific Asian Consortium in Employment (PACE)	Celia Andrade, Susan Apeles
Pacoima Beautiful	Veronica Padilla Campos, Melisa Walk
RePower LA	Michele Hasson, Roselyn Tovar
The South Los Angeles Transit Empowerment Zone (SLATE-Z)	Zahirah Mann, April Sandifer
South LA Alliance of Neighborhood Councils	Thryeris Mason
Strategic Concepts in Organizing and Policy Education (SCOPE)	Agustín Cabrera, Tiffany Wong



Building People Power in South Los Angeles

SCOPE STRATEGIC
COMMUNITY
AGENDA



Strategic Concepts in Organizing and Policy Education (SCOPE) builds grassroots power to create social and economic justice for low-income, immigrant, woman, femme, black, and brown communities in Los Angeles.

Our vision is to create a liberated, equitable future where BIPOC folks who've been systemically left out and consistently exploited, can live long, sustainable lives. People will have access to things they need in their community, will have career opportunities, will have equitable & affordable homes, etc.



We are guided by the goal of moving toward systemic change that results in a shift in material conditions for South LA community members through **equitable public investment, community and environmental health, and long-term economic security.**



How are we building
people power in South
LA?



SCOPE LEADS GRASSROOTS EFFORTS IN SOUTH LOS ANGELES ON VOTER ENGAGEMENT, ACCESS TO HEALTH CARE, CLIMATE AND ECONOMIC JUSTICE

- Whether it's knocking on 16,000 doors to coordinate COVID-19 vaccine appointments, engaging 55,000 voters through phone banking, or securing \$2 billion for utility debt relief so families can avoid water and power shutoffs, our members work best when working in solidarity.
- For nearly three decades, our grassroots members have been organizing and mobilizing communities to improve the quality of life in South LA by lifting our voices into a strong movement for economic and racial justice by building a powerful grassroots base.
- SCOPE grassroots members are the core of the organization and continue to demonstrate that our collective resilience and solidarity is what makes our movement strong.





Our policy platform was created and molded by member leaders to achieve our long-term strategy to change the landscape and material conditions in SLA. These platforms are vehicles and strategies to achieve our goals.

Policy Platform



Just Transition from
Neighborhood Oil
Drilling



Equitable and
Community Driven
Projects

Including Future Agenda Items

Tentative Schedule

This Meeting

Project Metrics

- Metrics of vulnerability and measures of inequity
- Key takeaways from June/July Steering Committee feedback for modeling, analysis, and strategy development

September 21, 2022

- Study progress and outcomes
- LADWP diversity, equity, & inclusion overview
- Steering Committee member check-in report out

Future Meetings

- Future meeting with technical leads
 - Where is offshore wind power? Why isn't it part of the future mix?
 - Better real-time information about peak energy use rates to nudge behavior / save money on energy bills
 - Hydrogen

Tools to Identify Disadvantaged Communities (DACs): Assumptions, Limitations and Advantages

Paul Ong

UCLA Center for Neighborhood Knowledge

Eric Fournier

UCLA California Center for Sustainable Communities



EQUITY DEFINITION

- **Equity is the absence of undesirable, unacceptable & unfair disparities defined both objectively and subjectively**
- **Achieving equity requires concrete action to close an existing disparity or fairly compensate unavoidable disparity or prevent a gap from materializing**
- **Achieving equity requires identifying the patterns of inequality and disparity.**



DAC DEFINITIONS

- **Disparities are concentrated in disadvantaged communities defined by populations or neighborhoods.**
- **DACs are often character by low socioeconomic status, people of color, and other factors.**
- **The most salient grouping should be empirically determined and policy relevant.**



GUIDING PRINCIPLES

- **There is no single or simple definition for DACs**
- **Classification schemes vary (and should vary) with purpose, policy and programs**
- **Different indicators do not consistently designate the same set of neighborhoods as being disadvantaged.**
- **Next slide presents several disparity indicators used by California agencies and organizations. (CPUC is in the process of developing its own.)**



COMMON EXISTING DAC MEASURES

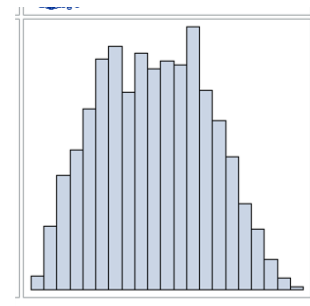
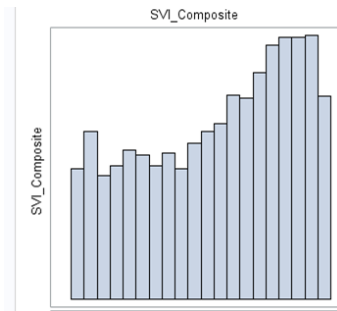
Agency	Indicator Name (Acronym)	Application
CDC	Social Vulnerability Index (SVI)	Disaster planning and response
CalEPA	CalEnviroScreen (CES)	allocating cap-and-trade funding, environmental
CA DPH	Healthy Communities Data and Indicators	social determinants of health
California Energy Commission	Energy Equity Indicators	energy investment
CA Housing & Community Development	Tax Credit Allocation Criteria	affordable housing
UC Berkeley and Urban Displacement	Renter Displacement Indicator	eviction risk and prevention
CNK/CARB	Transportation Disparity	access to clean vehicles and opportunities



19 Illustration of Differences Among Existing Indicators – Quantitative Example

SVI AND CES 4.0 COMPARISON, LA COUNTY

	SVI v. CES Ranking		
	Rank Low	Rank Middle	Rank High
Rank Low	598	150	6
Rank Middle	153	406	213
Rank High	14	210	546



**Of the tracts identified as low by either (921),
a third are inconsistent (150+153+6+14=323)**

Significant “false positives” & “false negatives”



20 Illustration of Differences Among Existing Indicators – Mapping Example

Disadvantaged Community Indicators Webmap



THE CHOICE OF DAC INDICATOR MATTERS

- *Choice has real consequences by unintentionally excluding needy neighborhoods and including less needy neighborhoods.*
- *Adopt the current “best practices” of developing a hybrid approach that utilizes an existing indicator complemented with energy-equity information (e.g., affordability and utility burden)*
- *Given the expanded scope of UCLA research, develop indicators relevant to small minority owned businesses and to place of employment.*



POTENTIAL PATHS FORWARD

- The default LADWP and this project are using is an existing pollution burden indicator (CES) to complement analysis, monitoring and policy simulations.
- Could combine or overlay this (or CEC measure) with other DAC indicators more relevant to studying specific energy disparities, but less relevant to overall project (ie, HCD or CARB).
- This hybrid approach would balance consistency and flexibility across subprojects.



Potential hybrid example: Constructing a policy-specific (Energy) disparity index

- **Challenges:**

- Cost
- data limitations,
- lagging information,
- uncertain future and/or technical barriers

- **Opportunities:**

- Identify possible causal factors, thus identifying addition points of intervention.
- Conduct distributional analysis
- Prioritize allocations to the most needy communities
- Understand cumulative impacts (additive, multiplicative, synergetic effects).
- Control for other factors in multivariate analyses and forecasting models.



CONCLUDING REMARKS

- **There is no single or simple solution to defining DACs**
- **Different indicators yield different results**
- **LADWP should aim to use indicators that are as relevant as possible to LA100 Equity Strategies analyses and EDMI policy goals and program objectives**
- **Using an existing indicator to complement analysis, monitoring and policy simulations**
- **Pick the other indicator or indicators most relevant to studying energy disparities**
- **Decision should be made sooner than later**



DISCUSSION QUESTIONS TO CONSIDER

- **How important is having neighborhood-level (census tract) data/indicators on energy/utility burden for residents?**
- **How do you, or your organization identify “disadvantaged” when it comes to communities you work with?**
- **Which tool/ metric/ indicator is most meaningful or useful in your opinion?**
- **How important is it to develop indicators of energy/utility burden for businesses? Particularly for small minority-owned businesses (MOBs) and for MOBs in minority neighborhoods?**



Thank you

Steering Committee Feedback

Highlights of feedback and takeaways for modeling, analysis, and strategy development



Buildings

Feedback

Success includes ensuring renters—particularly low-income renters—access upgrades, savings, and benefits (e.g., cooling, safe temperatures, safety).

Focus on the elderly and most vulnerable for excessive heat in homes. Frame as “thermal comfort,” not cooling.

Strategies should prioritize cooling deployment in heat island areas.

Do not penalize cooling when needed most.

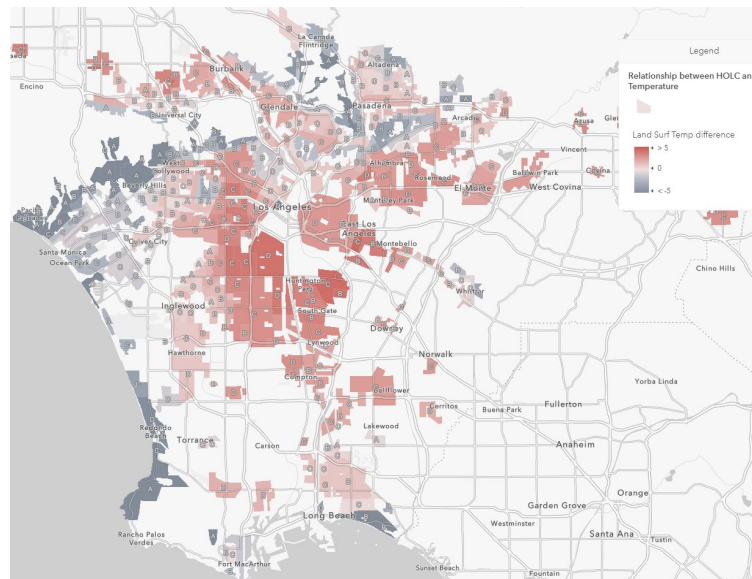
Key Takeaways for Modeling

Evaluate technology, billing, deployment strategies to increase access to home cooling, solar/storage, EV charging, energy efficiency in multifamily and renter-occupied buildings.

Focus on universal thermal health and safety by analyzing indoor temperatures under various scenarios, not just cooling system access.

Overlay thermal health and safety modeling results with heat exposure maps for program design prioritization.

Strategies will avoid penalizing lower-income households for using energy to maintain safe temperatures when it’s hot or cold



Source: *The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban*

Areas. <https://www.mdpi.com/2225-1154/8/1/12/html>
Map: <https://www.arcgis.com/apps/dashboards/73e329457b6644e7aef13ecce43c8d8>



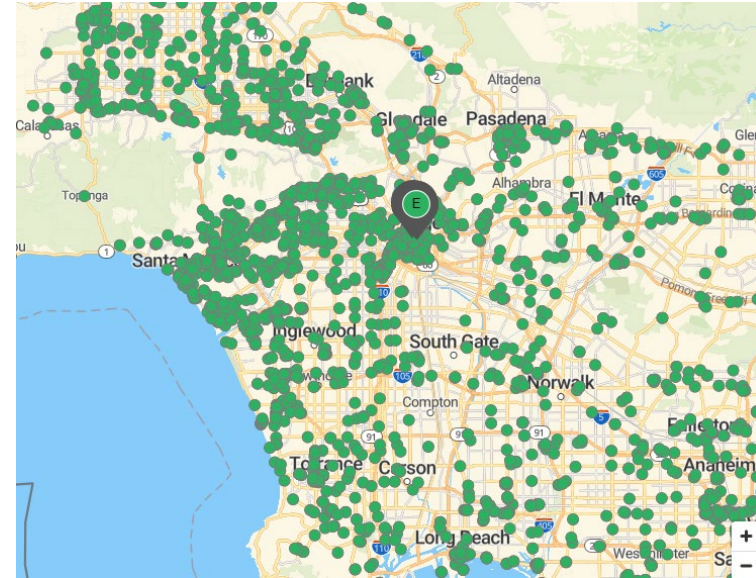
Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

Electric Vehicles

Feedback	Key Takeaways for Modeling
Address electric vehicles (EV) affordability and EV supply equipment (EVSE) access	Model new and used EV adoption, home/work charging access, home readiness
Recommend “use” metric to capture affordability, range, parking, access	Include adoption and use rates
Interest in e-bikes and micromobility infrastructure, concern about limited impact on power consumption	Quantify avoided energy use to assess mitigated demand
Consider distribution system limitations on the transition to EVs	Model grid upgrades needed to support equitable electrification



Source: Alternative Fuels Data Center – Electric vehicle charging station locations.
<https://afdc.energy.gov/stations/#/find/nearest?location=los%20angeles,%20ca&fuel=EL&EC>



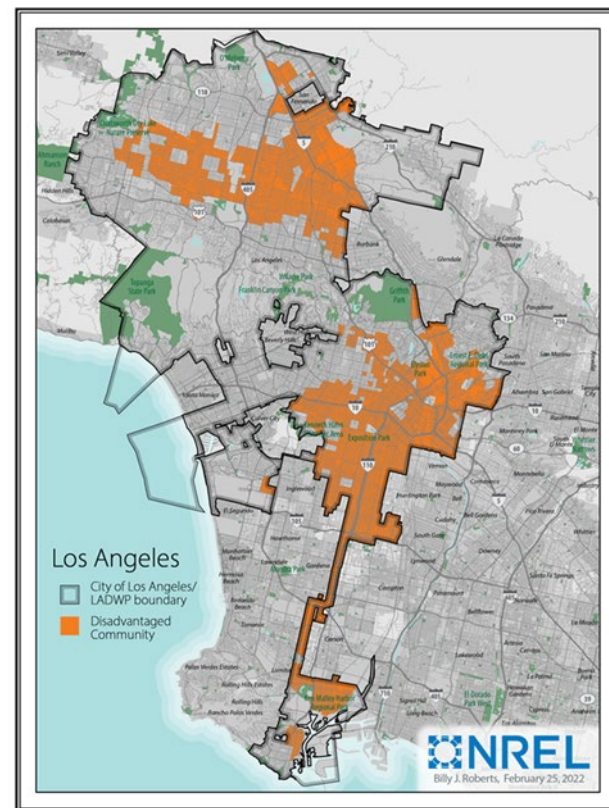
Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

32 Truck Electrification Air Quality and Health Impacts

Feedback	Key Takeaways for Modeling
Use multiple criteria (e.g., air quality related to vehicle emissions, high rates of asthma)	Study several metrics to measure impacts on disadvantaged communities (DAC) & create a traffic-affected DAC definition
Consider truck idling, freeway corridors, and port/airport air quality and health impacts	Truck electrification analysis will focus on neighborhoods most impacted by medium- and heavy-duty truck traffic



Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

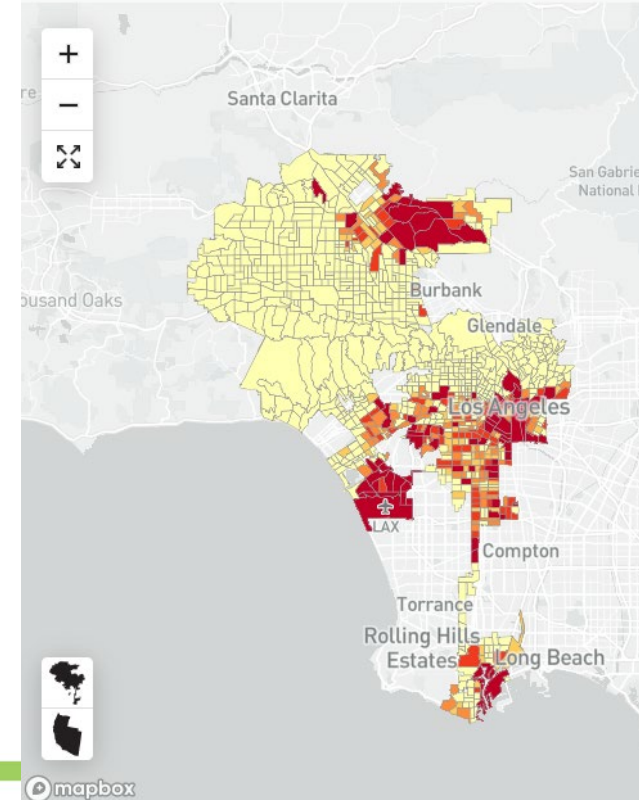
Local Solar and Storage

Feedback	Key Takeaways for Modeling
Consider DAC utility bill savings, particularly renters, as a primary measure of success.	Designate utility bill savings across status groups as a key metric.
Financing, funding to pay the utility bills, and subsidizing bills are options worth considering.	Include on-bill financing as part of the scenario analysis.
Don't use rebates; just lower the cost of installation.	Rebates will not be considered. Incentives that lower the cost of installation will be considered in scenario analysis.
Shared community solar is a good option if compensation is equitable.	NREL will analyze the economics of community solar and siting options.

Non-Rooftop Local Solar Deployment Capacity (MW)

Early & No Biofuels - High (2045)

Current Resolution: Tracts



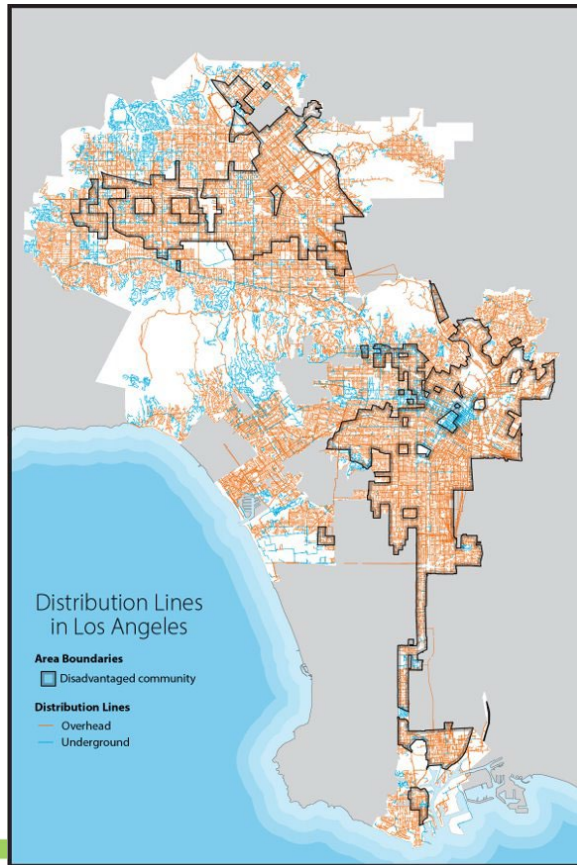
Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

36 Grid Resilience and Distribution Grid Impacts

Feedback	Key Takeaways for Modeling
Note parts of the grid, especially in DACs, already require upgrades	Incorporate today's required upgrades with upgrade schedules that prioritize DACs
Prioritize resilience hub-type opportunities (e.g., community centers) for cooling, vehicle and phone charging, potentially water purification above "cooling centers."	In-home or other close-to-the-customer solutions will be prioritized.
Older electrical panels/wiring in disadvantaged homes is a bigger challenge than grid reliability.	Include scenarios with and without electrical panel upgrades as part of the scenario sets.



Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

Affordability and Rates

Feedback

Strategies should include:

- Income-adjusted rates
- Maximum bill as share of income
- Expanding existing program participation
- Technology-install approaches

Consider whole costs to the customer (i.e., trash, water, power, housing, and gas)

Consider household size—energy use increases with multiple families in same dwelling

Anticipate administrative barriers to income-adjusted rates (i.e., collecting income data)

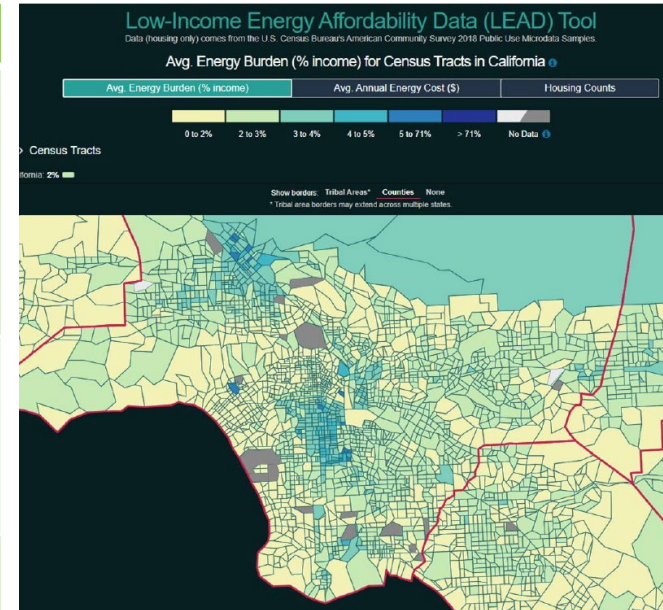
Key Takeaways for Modeling

Model suggested strategies

Include gas and water costs, explore feasibility of including trash services in final bill estimation and analysis.

Model adaptable retail tariffs that change based on number of people in the home

Model increased program costs due to administrative barriers



Source: Low-Income Energy Affordability Data Tool. Average Energy Burden (% income) for Census Tracts.

<https://www.energy.gov/eere/sls/c/maps/lead-tool>.



Lightning-Round Q&A

Anything missing from your small group discussions?

Are these the right pathways to study & model?

Metrics in 1st stage analysis

Concept	Description (potential goal)
Bill discount enrollment	30% discount on electricity portion of LADWP bill
Electricity burden/ Percentage of Income Payment Plan	Limit “in need” household expenditure on electricity to 4- 6% of pre-tax income
Household-based energy budget	Lowest rate tier set at level above necessary household consumption level
Shutoffs due to non- payment	Reduction or elimination in residential customer shutoffs
Thermal comfort	# of households reporting they can(not) keep their indoor space cool
Rating of electricity service based on cost	# of in-need households rating their service as ‘poor’ on cost basis
Electricity Insecurity	# of households reporting they need to make tradeoffs between paying electric bill and other essential services
Electricity use intensity	Unclear precedent. Helps get at equitable efficiency and use v. end service disparities

- **Analyzed by:** example goals, magnitude of impact addressed, impact ability, implementation and tracking feasibility, downsides, and precedents
- **Data:** academic literature, report review, and precedent of use by other utilities
- **Next steps:** narrow to 2-4 metric concepts for deeper analysis

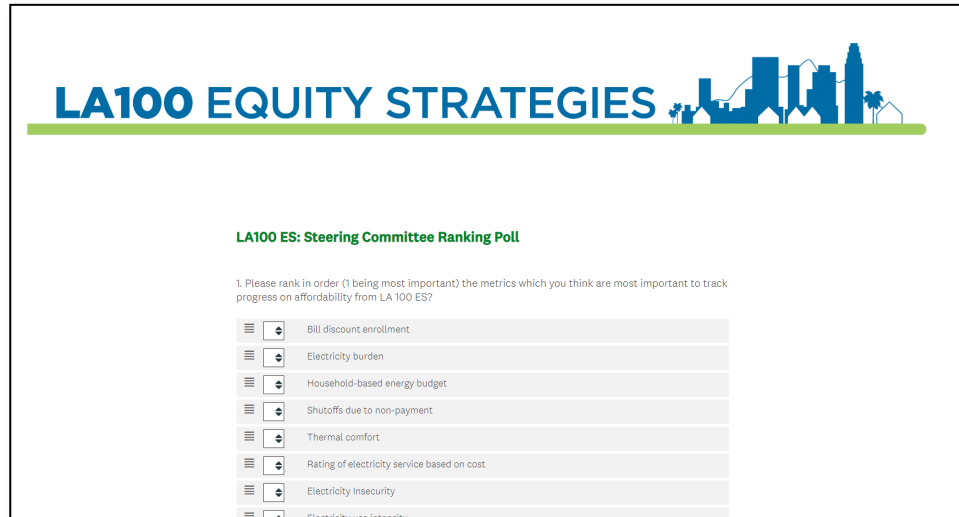


Ranking of Metrics Poll

See SurveyMonkey link in Zoom chat.
Please answer the first question only.

<https://www.surveymonkey.com/r/LA100SC9>

Scan QR code to
access poll



LA100 EQUITY STRATEGIES

LA100 ES: Steering Committee Ranking Poll

1. Please rank in order (1 being most important) the metrics which you think are most important to track progress on affordability from LA 100 ES?

☰	▾	Bill discount enrollment
☰	▾	Electricity burden
☰	▾	Household-based energy budget
☰	▾	Shutoffs due to non-payment
☰	▾	Thermal comfort
☰	▾	Rating of electricity service based on cost
☰	▾	Electricity insecurity
☰	▾	...



Affordability priorities for stage 2 analysis

(Results of UCLA polling @ July Steering Committee)

Ranking	8 Metrics (16 responses)	8 Policies (11 responses)
Most popular	<ul style="list-style-type: none"> • Shutoffs due to non payment • Bill discount enrollment 	<ul style="list-style-type: none"> • Direct assistance and crisis relief • Rate and billing design • Structural efficiency
Moderately popular	<ul style="list-style-type: none"> • Thermal comfort • Electricity insecurity 	<ul style="list-style-type: none"> • Community solar
Mixed opinion	<ul style="list-style-type: none"> • Electricity burden • Household-based energy budget 	<ul style="list-style-type: none"> • Rooftop solar • Appliance efficiency
Least popular	<ul style="list-style-type: none"> • Rating of electricity based on service cost • Electricity use intensity 	<ul style="list-style-type: none"> • Microgrids • Demand response



Wrap Up and Next Steps



Going Forward

Tentative

Steering Committee Meetings

September 21, 2022

Virtual

- Steering Committee member check-in report out
- LADWP diversity, equity, & inclusion overview
- Air quality and health medium- and heavy-duty vehicle emissions impact modeling approach
- Workforce development

Subsequent Meetings

- **Third Wednesday** of each month, 10:00 a.m. – 12:00 p.m. PT
- **Virtual** for near-term

What would you like to discuss in upcoming meetings?
Drop your agenda suggestions in the chat!



Thank you!
