Los Angeles 100% Renewable Energy Equity Strategies

## Advisory Committee Meeting #4
## June 22, 2022

## Summary[1]

## Schedule and Location

June 22, 2022, 10:00 a.m. to 12:00 p.m.
Conducted virtually

## Virtual Meeting #4 Attendees

### Advisory Committee Members

Center for Energy Efficiency and Renewable Technologies (CEERT), V. John White
Chief Legislative Analyst, Rafael Prieto (alternate)
Civil & Human Rights and Equity Department, Claudia Luna
Council District 01 – Councilmember Gilbert Cedillo, Mel Ilomin
Council District 02 – Councilmember Paul Krekorian, Aaron Ordower
Council District 04 – Councilmember Nithya Raman, Josh Nuni (alternate)
Council District 05 – Councilmember Paul Koretz, Andy Shrader (alternate)
Council District 15 – Councilmember Joe Buscaino, Jacob Haik
Housing Authority of the City of Los Angeles, Marisela Ocampo, Lisette Belon (alternate)
International Brotherhood of Electrical Workers (IBEW), Martin Marrufo (alternate)
Los Angeles City Planning Department (LACP), Arthi Varma, Shana Bonstin (alternate)
Los Angeles World Airport (LAWA), Carter Atkins (alternate), Laura McLennan (alternate)
Neighborhood Council Sustainability Alliance (Advisory Committee), Ernie Hidalgo
Office of Public Accountability (Rate Payer Advocate), Fred Pickel, Camden Collins (alternate)
Office of Los Angeles Mayor Eric Garcetti, Paul Lee (alternate)
Port of Los Angeles (POLA), Carlos C. Baldenegro
Sierra Club, Katherine Ramsey, Francis Yang (alternate)
Southern California Association of Non-Profit Housing, Chris Bowen (alternate)

### LADWP Board of Commissioners

Cynthia McClain Hill, President

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[1] This summary is provided as an overview of the meeting and is not meant as an official record or transcript of everything presented or discussed. The summary was prepared to the best of the ability of the notetakers.

# LA100 EQUITY STRATEGIES

## LADWP Staff

Andrew Kwok
Carol Tucker
Cathie Chavez-Morris
David Rahimian
Dawn Cotterell
Jackson Guze
Jay Lim
Pjoy Chua
Simon Zewdu
Stephanie Spicer
Steve Baule
Vanessa Gonzalez

## Project Team

Eda Giray, National Renewable Energy Laboratory (NREL)
Jane Lockshin, NREL
Kate Anderson, NREL
Megan Day, NREL
Nicole Rosner, NREL
Patricia Romero Lankao, NREL
Sonja Berdahl, NREL
Aly Scurlock, Kearns & West
Christian Mendez, Kearns & West
Jasmine King, Kearns & West
Joan Isaacson, Kearns & West
Robin Gilliam, Kearns & West
Cassie Rauser, UCLA
Eric Fournier, UCLA
Stephanie Pincetl, UCLA

## Welcome Remarks

Joan Isaacson, facilitator from Kearns & West, welcomed participants to the fourth Advisory Committee meeting for the Los Angeles 100% Renewable Energy Equity Strategies (LA100 Equity Strategies). She introduced Simon Zewdu, Director of Transmission Planning, Regulatory, and Innovation Division at LADWP and Project Manager for LA100 Equity Strategies. Simon Zewdu welcomed members to the Advisory Committee meeting. He highlighted the importance of equity, noting that many utilities are discussing equity, evaluating how to distribute resources, and are looking to Los Angeles as an example. He overviewed several agenda topics for discussion, including findings on LADWP programs and services to address recognition justice, the Strategic Long-Term Resource Plan (SLTRP), and how the SLTRP and Equity Strategies relate to one another.

## Meeting Purpose and Agenda Overview

Joan Isaacson reviewed the meeting agenda (see slide 3 in Appendix). She noted that LADWP would provide an update on the SLTRP and present an analysis of LADWP programs and services, community engagement, and the LA100 Equity Strategies scale of analysis. Joan Isaacson reviewed the guides for productive meetings and reminded participants how they can provide feedback.

## Analysis of LADWP Distribution of Investments and Benefits

Jane Lockshin, Geospatial Data Scientist and Data Manager with NREL, presented an analysis of LADWP programs and services. She noted that NREL sought to determine if certain socio-demographic groups disproportionately receive or do not receive investments and benefits from LADWP. Jane Lockshin stated that NREL aggregated the data by census tracks and merged it with socio-demographic information for the analysis. She noted that disadvantaged communities (DACs) were identified using CalEnviroScreen and the American Community Survey (see slide 7 in Appendix). Jane Lockshin described the four categories of socio-demographic indicators used in the analysis: mostly White/mostly non-White (Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Other), mostly Hispanic/mostly non-Hispanic, mostly renters/mostly owners, and mostly below/mostly above median income. She explained that NREL evaluated the distribution of incentives across communities for each LADWP program and identified communities that benefitted from programs by adjusting benefits by population and comparing dollars spent.

Jane Lockshin stated that NREL also performed an analysis to determine if programs had a statistically significant uneven distribution of benefits. Jane Lockshin overviewed several findings from the analysis. She stated that solar net energy metering and electric vehicle (EV) incentive programs disproportionately benefit non-disadvantaged communities (non-DACs), majority White, non-Hispanic, owner-occupied, affluent households. Additionally, Low-Income and Lifeline programs were found to appropriately provide benefits to DACs. Lastly, Jane Lockshin highlighted that DACs experience more power interruptions than non-DACs, but there is no statistical difference in the duration of power interruptions.

### Steering Committee Feedback

Jane Lockshin overviewed feedback from the Steering Committee on the LADWP program investment equity analysis. She stated that several members of the Steering Committee expressed interest in data on the scale of inequity, obtaining data and results for review, the need for further analysis, and aggregating the analysis by neighborhood (e.g., South Los Angeles, Northeast Valley). Jane Lockshin shared that some members were also interested in an update on the virtual solar net metering program. She explained that some Steering Committee members noted building age and deferred maintenance barriers to efficiency and

electrification upgrades and that members suggested building programming around upgrading electrical panels and roofs prior to installations.

Jane Lockshin reviewed input shared from the Steering Committee on inequities in the frequency of service interruptions. She said some members asked if service interruptions could be due to infrastructure upgrades to accommodate solar and EVs in non-DACs and that several members suggested an equity analysis of grid maintenance. Simon Zewdu emphasized that LADWP will design program structures with equity in mind.

## Major Themes from Advisory Committee Questions and Discussion

- Are there geographical hotspots that experience more power outages in Los Angeles?
  - Jane Lockshin: DACs experienced more power interruptions, but the length of power interruptions was the same as non-DACs.
  - Simon Zewdu: The numbers presented in the study are marginally higher in recent years. LADWP is looking at circuits and will maintain and upgrade them.

# Community Engagement: What We Have Learned So Far

Paty Romero-Lankao, Equity Strategies Technical Lead from NREL, introduced updates on NREL's findings from its research and community engagement (see slides 13-28 in Appendix). Nicole Rosner, Community Engagement and Energy Justice Researcher with NREL, described the three stages of community engagement: (1) envisioning a just energy future, understanding Los Angeles' energy justice problems, and analyzing determinants of energy inequities; (2) informing communication of strategy analysis and development; and (3) sharing analysis, models, and community feedback. Nicole Rosner noted that the primary social research and engagement efforts are through the Steering Committee meetings, Advisory Committee meetings, citywide community meetings, and neighborhood-specific community listening sessions.

Paty Romero-Lankao overviewed the preliminary findings about factors influencing current inequities (see slides 16-18 in Appendix). She explained that the pathways identified by NREL relate to three prioritized impact areas: Affordability and Burdens; Access (Actual Use); and Public Health, Safety, and Resilience. Paty Romero-Lankao noted that the pathways identified by NREL also relate to more than one prioritized impact area. She highlighted several key takeaways identified by community members during community meetings and listening sessions, including the importance of transparency and accountability.

Paty Romero-Lankao shared that NREL recorded quotes from community members that touch on community feedback. She said many residents noted a need for more information to understand energy burdens and plan for the future. Paty Romero-Lankao stated that transparency and accountability about technologies, programs, and services available to residents and how to make an informed choice were of importance to some Angelenos. Additionally, she highlighted that residents pointed to health and safety costs related to infrastructure and affordable and safe upgrades. Paty Romero-Lankao explained that access to technology does not necessarily mean safe use, as many homes need upgrades to ensure the safe use of new clean energy technologies.

## Affordability and Burdens

Nicole Rosner shared that NREL examined affordability and energy burdens holistically, including the percentage of income spent on energy, inequalities embedded in housing and transportation, and energy tradeoffs that some households may make. She noted that some of what residents shared focused on the affordability of the transition, such as where one East Los Angeles resident stated:

"as of right now, gas prices are so expensive, so… I'm choosing to not…go to certain places, like sometimes even skip work because I work so far away like a cost-benefit is [not going to work], it's really impacting, you know, my financial decisions" (see slide 20 in Appendix).

Nicole Rosner noted another resident's question, "Will it be affordable to everybody?"

Paty Romero-Lankao highlighted another perspective from an East Los Angeles resident on how low-income is defined and who qualifies:

"We [are] often…faced with…a cap on how much money you're supposed to make a year, and if we don't qualify for that, then you don't [gain access to assistance] …then we end up struggling and we don't qualify for anything; So, we're often living paycheck to paycheck and sometimes when we need like certain things for the family, like even last year paying…the light and gas, it was cut off because we didn't have the money to pay it right then and there (see slide 21 in Appendix).

Paty Romero-Lankao stated that affordability is also related to customer access to available programs and services. She shared that the project team is working to develop strategies that target residents in middle-income communities that struggle to afford their energy bills.

## Access (Actual Use)

Paty Romero-Lankao overviewed feedback shared on the access or actual use impact area. She shared that access typically refers to a household's actual use of a minimum level of reliable electricity and service, transition technologies, and safer and more sustainable air conditioning, heating, and mobility. One current issue that Paty Romero-Lankao noted was access to outreach materials and information. She said some residents emphasized the need to improve access to information that is culturally sensitive and uses multiple modes of communication. She shared feedback from a Pacoima resident who said:

"So, if we talk about transparency, I'd like that right now, especially in the time we're living in, where many families are going through a difficult economic situation and with very high bills when it comes to electricity and water…I wish LADWP would ... put more effort into providing help for these families who are going through this kind of difficult situation" (see slide 23 in Appendix).

In terms of access to upgrades and individual agency, Paty Romero-Lankao shared a quote from a South Los Angeles resident:

"I visualize having free solar panels installed…on all the homes…in South Central LA…those people…that are low income because we…have to help those that need help. It is not right that only those that have the money can do this. And we all benefit when everybody is treated equally and fair" (see slide 24 in Appendix).

Paty Romero-Lankao highlighted the issue of individual agency and the present barriers related to individual use.

## Public Health, Safety, and Community Resilience

Nicole Rosner presented what was heard from Los Angeles community members on Public Health, Safety, and Community Resilience. She highlighted that inequalities result from legacies of past practices and policies which then constrain access to environmental amenities and determine higher exposure to pollution and lower resilience. She stated that many residents noted the negative physical and mental health effects of local air pollution and the importance of location, particularly in the Valley and Harbor areas. One San Fernando Valley [Pacoima] resident stated:

"My daughter's godmother lives in Burbank, when I go to leave my daughter there it is totally entering a different world: it smells different, I am not sick there, even when I go to visit her for two days I feel as if I were honestly a queen because I can breathe…. My daughter takes photos. Here in Pacoima where I am, we can't even take photos because…the wind carries a lot of garbage, I'm always suffering from asthma…" (see slide 26 in Appendix).

Nicole Rosner shared that in the Harbor Area, one resident identified several programs and services they'd like to see address air pollution, stating:

"In transportation, access for people to be able to get an electric car …also [mobility] services for people who are sick with a respiratory problem; also help for those who have health problems because there are already many people affected by the refineries, and many diseases that are around here: cancer and asthma and eczema" (see slide 27 in Appendix).

Nicole Rosner noted the legacies of past programs and policies affect residents' health and that future policies need to address this head-on, adding that some residents' concerns relate to affordable and safe upgrade options. One South Los Angeles resident shared:

"Everyone's talking about "hey, you know, let's get plug-in cars."…but…looking in an area that people don't have a lot of money, you're saying, so homeowners should get this, homeowners should get new HVAC systems, you should get new appliances…those all come with new electrical panels. You can't get those safely. You can get them, you can burn down your house because your panels aren't upgraded, your house isn't upgraded, your wiring isn't there, so what are the people going to do to actually get that? … If you're talking about [all] that, you can't use them because it's going to make your house unsafe" (see slide 28 in Appendix).

Nicole Rosner continued by saying solutions must be multifaceted to address each community's unique needs and that designing the transition must also consider different needs for upgrades and programs.

## Steering Committee Feedback

Paty Romero-Lankao highlighted Steering Committee feedback on the community engagement presentation, including the need for transparency and ensuring funding for long-term maintenance of infrastructure (see slide 29 in Appendix). She reviewed some of the feedback shared in the breakout rooms on affordability and burdens; access; and health, safety, and resilience.

From the breakout room on affordability and burdens, Paty Romero-Lankao noted that several members emphasized the need to co-define what an "equitable scenario" is with Advisory Committee members and community members. Some Steering Committee members also expressed the need for transparency and collaboration, stating that actual community feedback is key and the LA100 Equity Strategies should work with the SLTRP project team to avoid working in silos.

Paty Romero-Lankao shared some of the feedback from the Steering Committee in the breakout room on access (actual use), noting the realistic scope of work for DACs, the need for upgrades due to existing conditions of homes, and how LADWP can promote existing and proposed programs to ensure greater customer participation.

From the breakout room discussion on health, safety, and resilience, Paty Romero-Lankao highlighted what was shared by several Steering Committee members. She stated that several members suggested that equity be involved to reach a level playing field, specifically noting that extreme remediation is necessary prior to electric interventions and that DACs may need to use more

energy to prioritize their health. Paty Romero-Lankao also stated that some members asked that infrastructural investments target multi-family buildings and air-conditioned community spaces.

## Major Themes from Advisory Committee Questions and Discussion

- Non-traditional mobility investments, including electric bikes, used bikes, and community rideshare are needed. Community mobility programs provide access to EVs without adding a burden on community members. Increasing mobility is important to equity.
- Infrastructure and historic disinvestment impact how to move forward with the clean energy transition.
- When talking to the affordable housing committee on buildings in South Los Angeles, because of the cost associated with increasing the power voltage triggered by the increased units, some housing developers opted not to install electric appliances. Even as the city adopts policies to electrify the city, burdens are placed on community members as affordable housing developers choose not to electrify. It is important to highlight the concrete barriers faced by communities right now and be open and direct about relevant considerations and studies.
  - o Simon Zewdu: LADWP appreciates hearing additional considerations and needs related to affordable housing. There are constraints, but LADWP will work to ensure these barriers are mitigated.
  - o Simon Zewdu: There was a city ordinance last year related to building decarbonization. LADWP's ongoing assignment is to review all building decarbonization ordinances and how LADWP can play a complementary role to assist with those efforts.
- With the development of low-income housing and in-home gas installations, there are health impacts (asthma, lung ailments, and others) due to gas installation. The costs of going electric are as expensive, if not less than installing gas. This is a study on health and gas appliances: https://pubs.acs.org/doi/10.1021/acs.est.1c04707
- Are there examples from other utilities, districts, and programs that have been helpful?
  - o Simon Zewdu: There is an important difference between LADWP and other utilities regarding low-income-centric programs. Due to Prop 26, there are barriers to legally implementing specific programs for DACs. Investor-owned utilities are able to do this and are exempt from Prop 26. In the future, LADWP will work to implement some programs that will provide incentivized programs equitably across Los Angeles.
  - o LADWP Board President Cynthia McClain-Hill: There is a gap between what customers want/need and what LADWP can do. Discount programs are lacking but without consumer-driven approval and votes, there is not much LADWP can do about this.
- This analysis will be helpful in advocating for these programs. What are we able to take on given the legal constraints? What is the goal, and how can we make a clear case for where Los Angeles needs to be?
  - o Simon Zewdu: LADWP is looking for solutions that it can implement as well as programs that can be implemented through partnerships with other city agencies.

## UCLA Scale of Analysis

Eric Fournier, California Center for Sustainable Communities (CCSC) Research Director, presented UCLA's scale of analysis (see slides 31-34 in Appendix). He noted that the scale of analysis is important for making the geographies meaningful in how results are presented to the Steering and Advisory Committees and Los Angeles communities. He noted that CalEnviroScreen uses census tract boundaries to define DACs, but many residents don't know which census tracts they live in, which makes it challenging to

make analyses meaningful and relevant to residents. Eric Fournier emphasized that the UCLA research team is interested in using different geographic options.

Eric Fournier highlighted a few alternative geographies, such as zip codes, Neighborhood Councils, and council districts. He overviewed the alternative geographies, noting several drawbacks and benefits of each. He shared that zip codes are familiar to many community members, but geographies vary widely in size and population and don't align well with LADWP's service area. Eric Fournier stated that neighborhood boundaries from an LA Times crowdsourced mapping project are available and resonate with communities but that these boundaries are imperfect. He explained that while Neighborhood Councils are well established, some areas are not represented. Lastly, Eric Fournier noted that council districts are also familiar but tend to be large by comparison and may not provide a granular understanding.

## Steering Committee Feedback

Eric Fournier reviewed Steering Committee feedback, noting that members shared that the neighborhood geographies would be useful to consider as they were familiar and identifiable to many. He stated that they also expressed concerns about the potential sensitivity of data that might be reported at the zip code level because of the large variability in the size and composition patterns of customers within those geographies. He then asked for perspectives on other geographies that would be useful for a meaningful analysis.

## Major Themes from Advisory Committee Questions and Discussion

- Because of redistricting every decade, council districts are tough to use longer-term and are difficult to get stable data on.
- Census district data can be difficult to manipulate and match with LADWP usage data.
- Zip codes are often split within census districts and are split along lines that make the zip code both a Housing and Urban Development (HUD) zone and a historical neighborhood. There may be very different communities that can be represented by one singular zip code.
- Is the goal for doing data analysis targeting incentives or communicating with customers?
  - o Eric Fournier: The UCLA research team is thinking about reconciling the pros and cons of the different geographies. The team is focused on communicating analyses that are relevant to community members.
- Communicating with customers would be best done by neighborhoods or neighborhood councils.
- The consideration of neighborhood councils as boundaries is important, and rather than an either-or proposition it is a different way to assess the data. Neighborhood council boundaries are often drawn with particular community considerations related to social-economic qualities. Boundaries were drawn up considering city council districts, so they aren't perfect.
- When looking at water and power usage in the lowest-income zip codes, all zip codes included were in South Central Los Angeles due to data aggregation. Sometimes data is not considered because of how it is aggregated. Start at the census block level and aggregate up as needed.
- People identify with neighborhoods, but they don't necessarily know what Neighborhood Council they live in (e.g., in the North Hollywood area there are three and people may not know which one they live in). Neighborhood Councils may make sense for grouping areas but if a customer wants to figure out if they're eligible for a program, basing eligibility on zip code may be more useful.

## LADWP Strategic Long-Term Resource Plan

Simon Zewdu presented the three major studies being conducted as pillars of planning: the LA100 Study, the LA100 Equity Strategies, and the 2022 SLTRP. He explained that the LA100 Study helped LADWP to identify pathways to achieve 100% renewable energy, but the study did not specify how to do this equitably. Simon Zewdu also noted that the LA100 Equity Strategies and SLTRP are working in parallel and will converge to ensure the pathways are executed equitably.

Simon Zewdu described the SLTRP, which identifies the level of energy resources needed to provide 100% carbon-free energy, including the quality, type, and sequencing of delivery. He explained that the SLTRP will develop a menu of options for programs and projects to meet energy needs while the LA100 Equity Strategies will develop equity outcomes. Simon Zewdu shared that the SLTRP will be refined on a yearly basis to integrate equity recommendations and the goal is for all projects and programs to be evaluated for equity prior to deployment. He emphasized constant engagement with community-based organizations (CBOs) to determine if LADWP's efforts are successful. Simon Zewdu then stated that LADWP will begin using an equity determination process in 2024 to assess the equitable distribution of resources in Los Angeles.

## Overview of the SLTRP

Jay Lim, LADWP Manager of Resources Planning, presented on the SLTRP, stating that it is building from the LA100 study. He noted takeaways from the LA100 Study: (1) LA100 is achievable; (2) in-basin, long-duration capacity is required in all scenarios to ensure reliability; (3) building and transportation electrification are key to the transition. Jay Lim explained that the mayor and Los Angeles City Council set accelerated targets and requirements for developing the 2022 SLTRP. He noted City Council Motion (No. 21-0352) which states the SLTRP will prioritize equity in environmental justice (EJ) communities to ensure no increase in emissions in these communities.

Jay Lim noted caveats of the LA100 study (see slide 42 in Appendix), namely that it is a study and not a plan, scenarios to achieve 100% by 2035 assume the ability to quickly scale up hydrogen infrastructure, the potential role of the customer has not been fully explored, climate change could impact LADWP's ability to maintain resource adequacy, and the study did not fully assess the feasibility of the accelerated deployment. He also shared that LADWP is updating the SLTRP to include supply chain, construction, and other impacts in recent years.

Jay Lim overviewed the SLTRP, noting that it is a resource roadmap that drives the financial priorities of the department and understanding of what resources to build and where. He noted that Los Angeles is currently at 30% renewable resources, will transition to 80% over the next few years and will be 100% carbon-free by 2035. He emphasized that the SLTRP is an iterative process where scenarios are refined based on changing regulatory goals and financial impacts. He explained that the SLTRP's framework is guided by an Advisory Group of about 50 stakeholders from the community, businesses, local government, homeowners, and customers. Jay Lim said that the number of Advisory Group meetings has increased since 2017 to improve engagement and have focused on topics ranging from customer-focused programs to energy storage (see slide 43 in Appendix).

## SLTRP Framework

Jay Lim explained that the SLTRP timeline is a one-year process with opportunities for integrating feedback and recommendations every two years, highlighting that recommendations from the LA100 Equity Strategies will be incorporated in the 2024 SLTRP. He shared several key elements for the 2022 SLTRP, which include public engagement from Advisory Group input, LA100 Equity Strategies engagement, and community and stakeholder outreach. He also shared planning considerations that include the future resource mix, rate impacts, and resiliency (see slide 44 in Appendix). Jay Lim stated the SLTRP team wants to ensure a robust power system that withstand emergencies, and that the team is looking to vet implementation challenges. He described some of

the implementation challenges related to the build-out of resources, such as how long it takes for projects to be built and how much power is needed for local neighborhoods.

Jay Lim overviewed some of the sensitivities considered in the SLTRP process, such as commodity prices and implementation risks (see slide 48 in Appendix). Jay Lim stated that the SLTRP team is creating bookend scenarios to evaluate price sensitivities by matching low and high commodity prices. Jay Lim described several clean energy target cases that are important to the development of the SLTRP (see slides 50-51 in Appendix), such as reducing the use of the Valley Generating Station from 30% to 5% thereby reducing adverse impacts on the local community. He also identified electrification as a key component to reducing emissions to improve health benefits (see slide 52 in Appendix). He said the SLTRP team is working to evaluate emissions on a source level to ensure emission trajectories decline over time. Additionally, Jay Lim highlighted distributed energy resources (DER) as a key component of the SLTRP.

To achieve 100% carbon-free energy in Los Angeles, Jay Lim emphasized that LADWP is committing to goals beyond what is presented. He shared several key takeaways, including that the SLTRP is a living document, the 2022 SLTRP will identify buckets for achieving goals and that LA100 Equity Strategies findings will be incorporated within these buckets. Jay Lim noted that LADWP has a website with all meetings and materials at LADWP.com/SLTRP.

## Major Themes from Advisory Committee Questions and Discussion

- In terms of the plan to upgrade the grid, how can LADWP upgrade district capacity for electrification? If the load needs to be upgraded across the city, how are state and federal funds being used towards this?
  - Jay Lim: SLTRP is updating all assumptions. The department would update the distribution grid before LA100 investments are needed. LADWP is considering what meters are overloaded and which will be overloaded in the future. The SLTRP is seeking an integrated power system reliability (PSRP) revamp which will cost about $60 million to get the system up to par. This power system revamp will set up the deployment of electrification across Los Angeles. In terms of funding, LADWP is actively in discussions with the Los Angeles Mayor's office and its constituents and is considering certain projects in green hydrogen and renewable energy transmissions.
  - Simon Zewdu: The department will spend $1 billion a year on the PSRP revamp and is expected to spend more to catch up with the LA100 Renewable Energy Study goals. One of the main challenges is overcoming challenges to upgrading the grid. LADWP is working on accessing funding from different sources and will share more as information is available.
- The California governor's budget proposal is looking at retiring seven to eight megawatts of gas plants in a resource replacement challenge. The governor decided to create a reliability reserve fund that will buy resources to supplement what is being brought online. There is an opportunity for funding from the governor's budget if LADWP can add capacity to help with net peak problems or provide supplemental resources to the state. The procurements are run by the California Energy Commission (CEC) and the Department of Water Resources (DWR), but they are still developing the process for payments.
- LADWP Board President Cynthia McClain-Hill: There are challenges related to distribution infrastructure and current programs in place which relate to the issue around cost and costs passed onto ratepayers. It is important to think through how to support all of this work in a way that doesn't create shock on ratepayers that results in a backlash against electrification.
- Does the SLTRP do an estimate on cost?

- o Jay Lim: The model does estimate costs on the aggregate level. The SLTRP team uses capacity expansion modeling to identify the least cost to meet its goals. The team will be connecting with financial services to evaluate rate impacts for all scenarios to balance the different pillars of planning.
- In addition to viewing data sets across different geographies, it would also be helpful to assess the data through community plans. These are updated every seven years and work in tandem with the Housing Element and other elements. Is there a way LADWP/NREL can work with the planning department? This opens other opportunities for funding sources, as well for example, initiatives to fund and obtain affordable housing.
- As part of completing community plans, programmatic environmental reports (CEQA [California Environmental Quality Act] processes and approvals) are done. This can help streamline the CEQA process.
- Limit the litigation window to streamline the CEQA process.

## Wrap Up and Next Steps

Joan Isaacson closed the meeting and shared the dates for the next meetings on August 24, 2022, and October 26, 2022. Simon Zewdu thanked the members for their participation, knowledge, and insight. He expressed that this is a community-informed process and feedback is needed on a regular basis to address constraints and barriers in the system. In the future, Simon Zewdu stated that presentations on barriers and challenges related to LA100 and the Equity Strategies may be shared with the Advisory Committee. He also noted that transparency is important to manage expectations. Simon Zewdu invited Advisory Committee members to visit the LADWP website and contact Dawn Cotterell at dawn.cotterell@ladwp.com to provide input related to equity.

# Appendix

Advisory Committee Meeting #4
June 22, 2022
Presentation Slides

LA100 Equity Strategies
Advisory Committee Meeting #4
June 22, 2022

# Agenda

| Start Time | Item |
|---|---|
| **10:00 a.m.** | Welcome |
| **10:05 a.m.** | Meeting Purpose and Agenda Overview |
| **10:10 a.m.** | Analysis of LADWP Programs and Investments (NREL) |
| **10:35 a.m.** | Community Engagement: What We Have Learned So Far (NREL) |
| **11:05 a.m.** | Scale of Analysis (Eric Fournier, UCLA) |
| **11:25 a.m.** | LADWP's Strategic Long-Term Resource Plan |
| **11:45 a.m.** | Q & A |
| **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

# Analysis of LADWP Programs and Services

Are certain socio-demographic groups disproportionately receiving (or *not receiving*) investments and benefits from LADWP?

# LADWP Programs and Services

### Solar Installation Programs
- Net-energy metering (SIP and NEM)

### Energy Efficiency Incentive Programs
- Commercial Direct Install Program
- Home Energy Improvement Program
- Consumer Rebate Program
- Refrigerator Turn In and Recycle Program
- 14 other energy efficiency incentive programs (Includes one low-income targeted program)

### Electric Vehicle Incentives
- New commercial/residential chargers/sub-meters
- Used residential vehicles
- Direct current fast charging
- Medium and heavy-duty

### Customer Discount Programs
- Low-income
- Lifeline

### Power Infrastructure Reliability Metrics
- System Average Interruption Duration Index (SAIDI)
- System Average Interruption Frequency Index (SAIFI)

# LADWP Programs and Services



**Los Angeles**
- City of Los Angeles/ LADWP boundary
- Disadvantaged Community

Billy J. Roberts, February 25, 2022
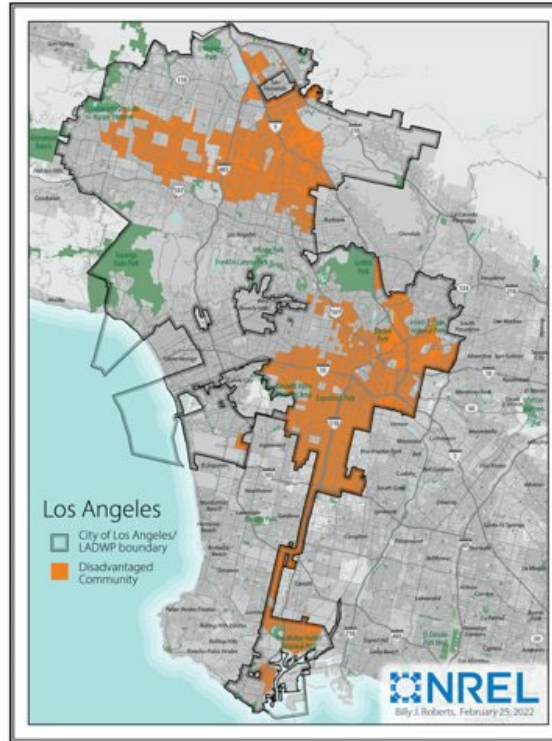
*Disadvantaged Communities (DAC):* Census tracts with the *highest 25% CalEnviroScreen 4.0 scores.*

*Socio-Demographic Indicators\**

Mostly White/Mostly Non-White**

Mostly Hispanic/Mostly Non-Hispanic

Mostly Renters/Mostly Owners

Mostly Below/Mostly Above Median Income***

*Data from the American Community Survey (2019)

**Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Other.

***$66,757.75 annual salary (2019)

# LADWP Programs and Services

NREL evaluated the distribution of incentives across communities for each program by:

- Adjusting benefits by population and comparing dollars spent
- Performing analysis to determine programs with statistically significant uneven distribution of benefits

# LADWP INVESTMENTS

| Category | Program | Number of Years | Total Amount Spent | DAC/Non-DAC | Mostly Non-White/White | Mostly Hispanic/Non-Hispanic | Mostly Renters/Owners | Below/Above Median Income |
|---|---|---|---|---|---|---|---|---|
| SOLAR INSTALLATION | Net Energy Metering Programs | 22 | $340,604,541 | Non-DAC | White | Non-Hispanic | Owners | Above |
| ENERGY EFFICIENCY | Commercial Direct Install Program | 8 | $220,352,003 | DAC | | | Renters | Below |
| ENERGY EFFICIENCY | Home Energy Improvement Program | 3 | $3,378,869 | DAC | | Hispanic | | |
| ENERGY EFFICIENCY | Refrigerator Turn-In and Recycle Program | 5 | $2,667,307 | Non-DAC | White | Non-Hispanic | Owners | Above |
| ENERGY EFFICIENCY | Consumer Rebate Program | 6 | $93,248,144 | Non-DAC | White | Non-Hispanic | Owners | Above |
| ENERGY EFFICIENCY | Other Non-Low-Income-Targeted Programs | 15 | $252,513,659 | Non-DAC | White | Non-Hispanic | Owners | Above |
| ENERGY EFFICIENCY | Low-Income-Targeted Program* | 5 | $7,897,260 | DAC | Non-White | Hispanic | Renters | Below |
| ELECTRIC VEHICLES | Incentive Programs | 8 | $71,239,371 | Non-DAC | White | Non-Hispanic | Owners | Above |
| CUSTOMER DISCOUNTS | Low-Income Program* | 15 | $173,633,204 | DAC | Non-White | Hispanic | Renters | Below |
| CUSTOMER DISCOUNTS | Lifeline Program* | 15 | $313,424,782 | DAC | Non-White | Hispanic | Renters | Below |

*WHICH COMMUNITIES DISPROPORTIONATELY BENEFITED FROM PROGRAMS?*

* Low-Income Targeted

Non-disadvantaged communities received on average 70% of the total number of incentive benefits but only make up 56% of the population.

Solar net energy metering and EV incentive programs disproportionately benefited non-disadvantaged communities, majority White, non-Hispanic, owner-occupied, affluent households.

Low-Income and Lifeline programs appropriately provide benefits to disadvantaged communities.

# LADWP Programs and Services

**LADWP**

**POWER INFRASTRUCTURE RELIABILITY**

Frequency of Interruptions *(number)*

Duration of Interruptions *(minutes)*

**NUMBER OF YEARS**

6

6

**AVERAGE PER YEAR**

0.94 DAC — 0.79 Non-DAC

158 DAC — 152 Non-DAC

**DO SOME COMMUNITIES EXPERIENCE MORE/LONGER INTERRUPTIONS?**

| DAC/Non-DAC | Mostly Non-White/White | Mostly Hispanic/Non-Hispanic | Mostly Renters/Owners | Below/Above Median Income |
|---|---|---|---|---|
| DAC | | Hispanic | | |

Disadvantaged communities (DACs) had marginally higher power interruption frequency than non-DACs, but there was no statistical difference in the duration of interruptions.

10

# Steering Committee Feedback:

# LADWP program investment equity analysis

- Interest in:
  - Data on the scale of inequity
  - Obtaining data and results for review, further analysis
  - Virtual solar net metering program update
  - Aggregating analysis by neighborhood (e.g., South LA, Northeast Valley, etc.)
- Building age/deferred maintenance noted as barrier to efficiency and electrification upgrades
  - Building programming around upgrading electrical panels and roofs prior to installations suggested
- Inequity in frequency of service interruptions
  - Related to infrastructure upgrades to accommodate solar and EVs in non-disadvantaged communities?
  - Suggested equity analysis of grid maintenance

# Research & Community Engagement

What We've Done and Learned Thus Far

# Ongoing Literature Review

**Includes over 130 sources**

## Search

- academic databases
- official documents
- policy databases

## Analyzing Secondary Data

- academic (e.g., journal articles and books)
- research reports
- policy documents
- newspaper articles
- local community-based organization (CBO) publications
- press releases
- policies
- reports
- public comments and community impact statements*

## With the goal of:

Informing our understanding of **structural factors contributing to existing inequities** and anticipating **potential barriers to equity strategies** under consideration by the project team.

*Associated with more than 20 separate Los Angeles City Council motions relevant to energy, equity, and environmental issues affecting the LADWP service territory.

# Ongoing Community Engagement

## Three Stages of Community Engagement

**1** Envisioning a just energy future, understanding LA's energy justice problems, and analyzing determinants of energy inequities

**2** Informing communication of strategy analysis and development

**3** Sharing analysis, models, and community feedback.

## Primary Social Research & Engagement Efforts

- Steering Committee meetings

- Advisory Committee meetings

- Citywide community meetings

- Neighborhood-specific community listening sessions

# Preliminary Results

Factors influencing **current inequities** based on the first stages of our research and community engagement.

# LA100 EQUITY STRATEGIES

**Legacies of Systemic Practices and Policies** → **Factors Influencing Current Inequities in:**

## Prioritized Impact Areas

**Affordability & Burdens**

**Access — Actual Use**

**Health, Safety, & Resilience**

## Prioritized NREL Equity Strategy Development Pathways

- Energy bill stability
- Energy burdens

- Universal home cooling
- Solar/storage, energy efficiency (multifamily, renter-occupied buildings)
- Community solar
- Light duty electric vehicle & charging

- Mitigation of heavier-duty vehicle health impacts
- Building weatherization and resilience
- Resilience through solar-plus-storage siting
- Support electric reliability through distribution grid upgrades

# LA100 EQUITY STRATEGIES

## Listening Session: Factors Affecting Energy Inequity (Key Take Aways)

```
Legacies of Systemic Practices and Policies  →  Factors Influencing Current Inequities
```

### Prioritized Impact Areas

**Affordability & Burdens**

- Low to moderate income (beyond very low income)
- Multimedia outreach, programs, assistance & information

**Access — Actual Use**

- Low to moderate income
- Culturally Sensitive, Multimedia, Audience-Specific Outreach & Trusted Information
- Transparency, Accountability
- Education & Training
- Affordable and Safe Upgrades
- Agency

**Health, Safety, & Resilience**

- Transparency
- Accountability, lack of enforcement across departments/agencies
- Maintenance
- Affordable and Safe Upgrades
- Illegal dumping, industrial pollution
- Health effects of local air pollution

# This is What We Have Heard on Affordability and Burdens

We examined affordability and energy burdens holistically, including:

- The percentage of income spent on energy
- Inequalities embedded in housing and transportation
- Energy tradeoffs that households may make

# Inequalities in Energy *Affordability* and *Access*

**Factor: Low to Moderate Income**

**East LA Resident**:

"I'm envisioning…a future of carbon free…and I was thinking about like, you know, *will it be cheap to buy solar panels for charging my car?*

Or like, as of *right now, gas prices are so expensive, so…I'm choosing to not…go to certain places, like sometimes even skip work because I work so far away like a cost-benefit is [not going to work]*, it's really impacting, you know, my financial decisions.

Right? Will it be affordable for everybody?"

# Inequalities in Energy *Affordability and Burdens*

**Factor: Low to Moderate Income**

**East LA Resident:**

"We [are] often…faced with…a cap on how much money you're supposed to make a year, and if we don't qualify for that, then you don't [gain access to assistance]…then we end up struggling and we don't qualify for anything;
…
So, *we're often living paycheck to paycheck* and sometimes when we need like certain things for the family, like even last year paying…the light and gas, it was cut off because we didn't have the money to pay it right then and there.

So, maybe…just really looking into what really we get every check compared to what we get annually would…in some way help."

# This is What We Have Heard on Access or Household's *Actual* Use

Access typically refers to a household's actual use of:

- A minimum level of reliable electricity and service

- Transition technologies

- Safer and more sustainable AC, heating, mobility

# Inequalities in *Access / Actual Use*

## Factor: Culturally Sensitive, Multimedia, Audience-Specific Outreach

**San Fernando Valley [Pacoima] Resident**:

"I'm…helping families to enter the LADWP low-income program…*LADWP never contacted them to let them know that they do not qualify for the program or that they were missing some document to access these programs.*

*So, if we talk about transparency*, I'd like that right now, especially in the time we're living in, where many families are going through a difficult economic situation and with very high bills when it comes to electricity and water…*I wish LADWP would .. put more effort into providing help for these families who are going through this kind of difficult situation.*"

# Inequalities in *Access / Actual Use*

**Factor: Upgrades & Individual Agency**

**South LA Resident**:

"*I visualize having free solar panels installed…on all the homes*…in South Central LA…those people…that are low income because we…have to help those that need help. It is not right that only those that have the money can do this. And we all benefit when everybody is treated equally and fair.

*I have solar panels that I installed at the very beginning, and they never worked right to begin with. They never gave me what was promised, ……*

Now Tesla took over and I'm going to try to negotiate with them to upgrade because *I didn't buy them, because I don't believe in buying something that's going to be obsolete in a few months. So, I'm leasing them, and I would like them to upgrade but I don't know how easy that's going to be.*"

# This is What We Have Heard on Public Health, Safety, and Community Resilience

Inequalities result from legacies of past practices and policies. These factors:

- Constrain access to environmental amenities

- Determine higher exposure and lower resilience

# Inequalities in *Health, Safety, and Community Resilience*

**Factor: Health Effects of Local Air Pollution**

**San Fernando Valley [Pacoima] Resident:**

"We [in Pacoima] don't get a lot of benefits, a lot of resources, a lot of opportunities, because I go to other communities and I've noticed that the parks don't look like the parks where I live, and why? …

My daughter's godmother lives in Burbank, when I go to leave my daughter there it is totally *entering a different world: it smells different, I am not sick there*, even when I go to visit her for 2 days I feel as if I were honestly a queen because *I can breathe*….

My daughter takes photos. Here in Pacoima where I am, we can't even take photos because…*the wind carries a lot of garbage, I'm always suffering from asthma*…"

# Inequalities in *Health, Safety, and Community Resilience*

**Factor: Health Effects of Local Air Pollution**

*What kinds of programs and services would help you have cleaner air in your area?*

**Harbor Area Resident**:

"In transportation, *access for people to be able to get an electric car …also [mobility] services for people who are sick with a respiratory problem*; also *help* for *those* who have *health problems* because there are already many people affected by the refineries, and many diseases that are around here: cancer and asthma and eczema"

# Inequalities in *Health, Safety, and Community Resilience*

**Factor: Affordable and Safe Upgrade Options**

**South LA Resident**:

"Everyone's talking about "hey, you know, let's get plug-in cars.""…but…*looking in an area that people don't have a lot of money, you're saying, so homeowners should get this, homeowners should get new HVAC systems, you should get new appliances…those all come with new electrical panels. You can't get those safely.* You can get them, you can burn down your house because your *panels aren't upgraded, your house isn't upgraded, your wiring isn't there*, so what are the people going to do to actually get that? … If you're talking about [all] that, you can't use them because it's going to make your house unsafe...

*It's great that you [LADWP] can give it to people and help them, but if they can't afford to actually do the upgrades that are needed to have it done safely, then there's no point.*"

# Steering Committee Feedback

—

# Breakout Groups

## SC Meeting Overall Highlights

- Need for transparency
  - Members valued hearing from the voices of community members
  - Special programs need their own follow-up teams to help applicants
  - More public information, i.e., to protect consumers from scams

- Ensure funding for long-term maintenance of infrastructure

## Breakout: Access / Actual Use

- Realistic scope of work for DACs
  - Upgrades possible given existing conditions of home/neighborhood
  - Promote existing and proposed programs to ensure greater customer participation

- Investing in public spaces in DACs
  - For municipal utilities/government to be initial investors in DACs in order to attract private investments in DACs

## Breakout: Affordability & Burdens

- From beginning, need to co-define what an "equitable scenario" is with:
  - Steering Committee members
  - Community members

- Transparency & collaboration
  - Actual community feedback is key
  - Work *with* the SLTRP, not siloed

## Breakout: Health, Safety & Resilience

- Equity involved to reach a level playing field
  - Extreme remediation must happen before certain interventions begin
  - DACs may need to use more energy rather than less

- Infrastructural Investments targeting:
  - Multi-family buildings
  - Air-conditioned community spaces

Q&A

# Scale of Analysis

# Scale of Analysis

We are all familiar with how CalEnviroScreen uses census tract boundaries to define disadvantaged communities.

But many people do not know which census tract they live in.

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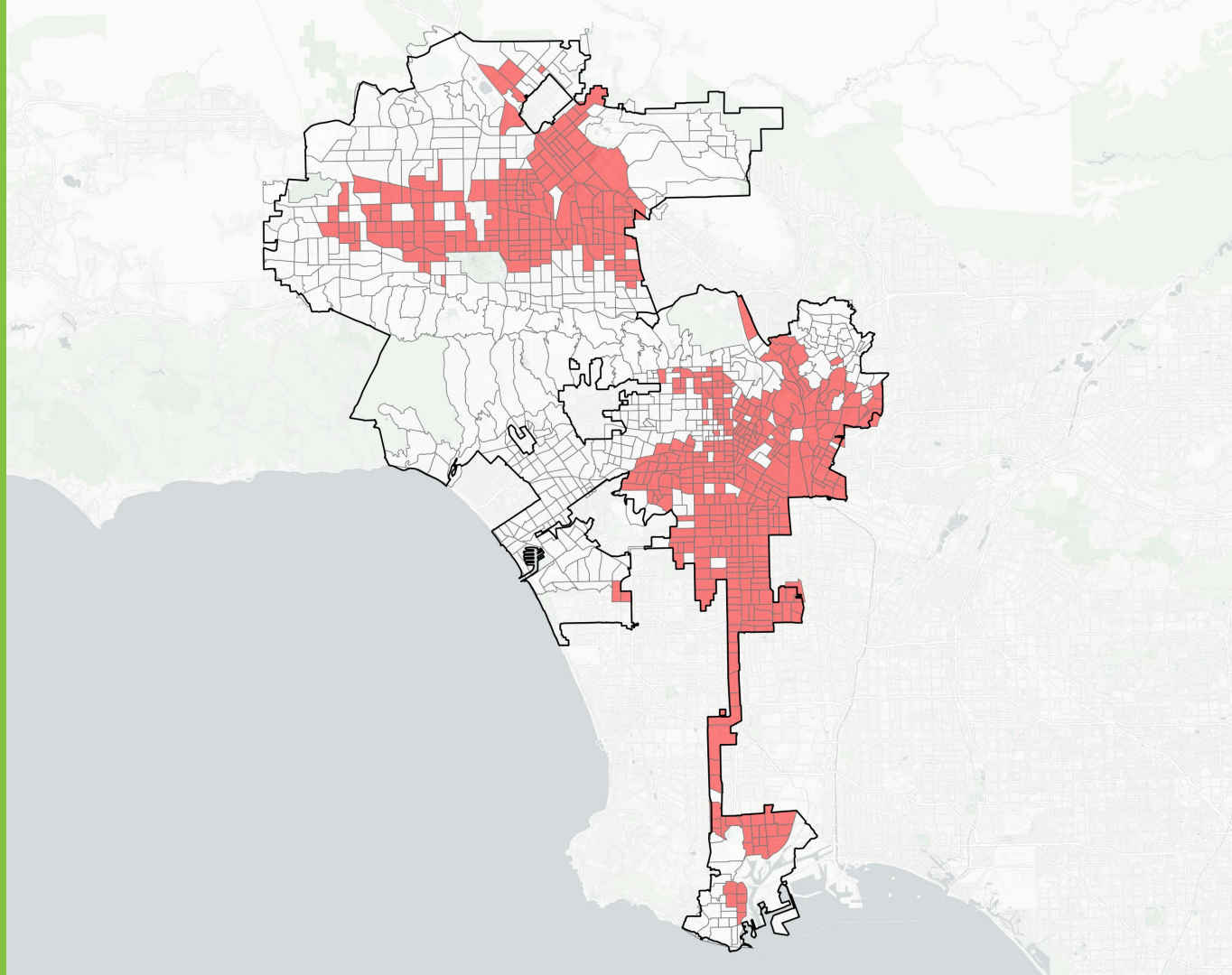
# Which geographies are the most meaningful?
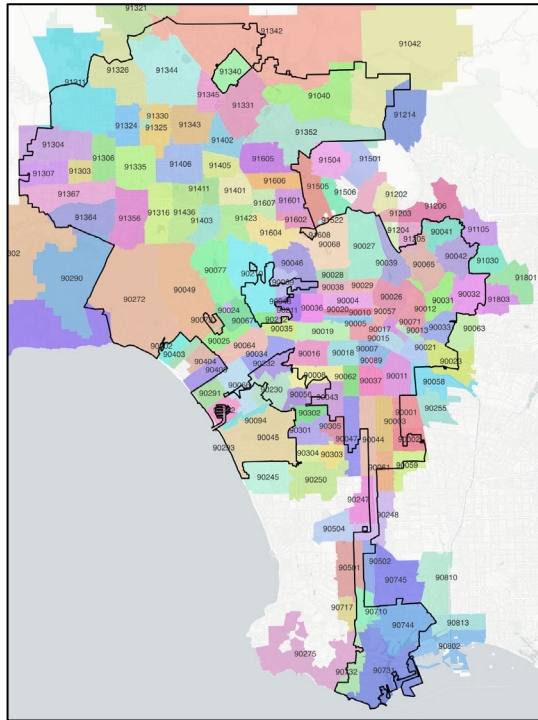


Zip Codes
158
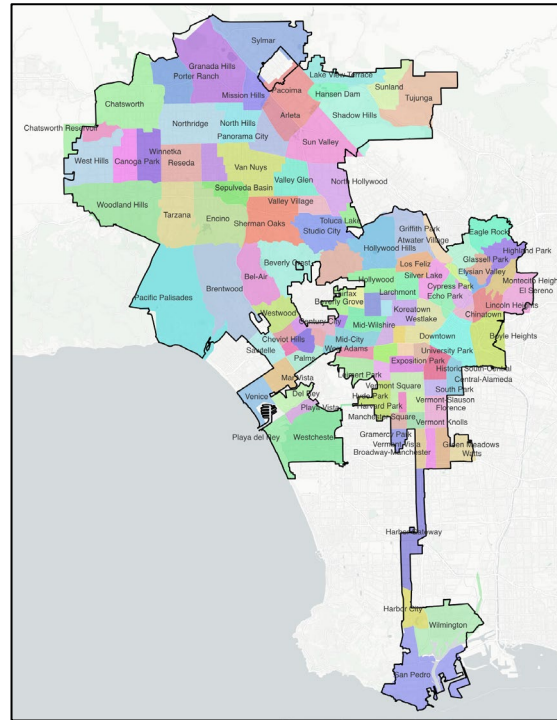


Neighborhoods
114

Zip codes are familiar to many people but vary widely in size and don't align well with LADWP's service area.

Neighborhood boundaries are available but come from an LA-Times crowd sourced mapping project.

# Which geographies are the most meaningful?
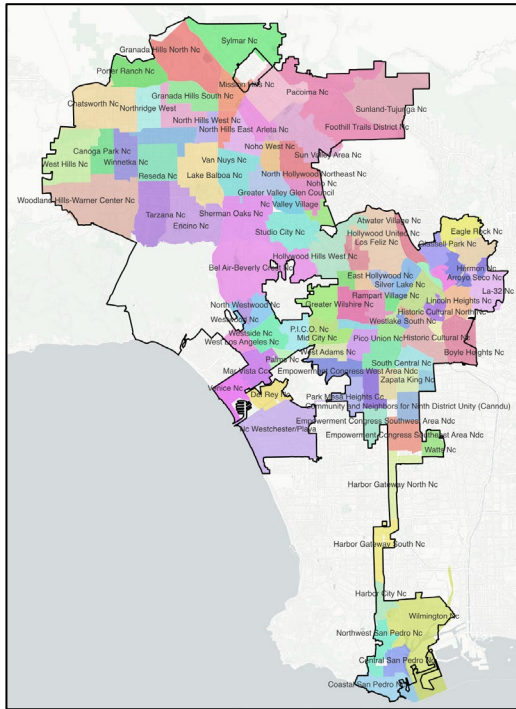


Neighborhood Councils
111
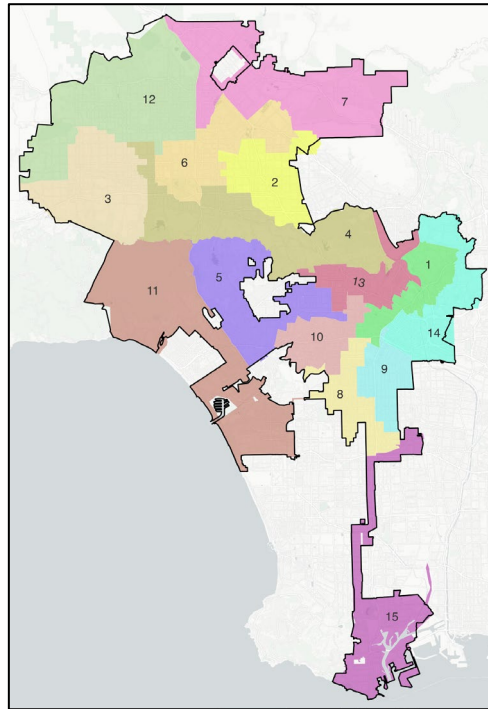
Council Districts
15

Neighborhood councils are well established, but some areas are not represented.

Council districts are also familiar and politically relevant but tend to be quite large by comparison.

# Steering Committee Feedback

- Steering Committee members indicated that the "Neighborhood" geographies would be useful to consider as these were familiar and readily identifiable to many.

- Concerns were also expressed about the potential sensitivity of data that might be reported at the Zipcode level because of the large variability in the size and composition patterns of customers within those geographies.

- What other feedback do you have?

Q&A

# LADWP's
# Strategic Long-Term Resource Plan

**Roadmap to an Equitable Carbon-Free Future**

# LA100

## ACHIEVING 100% RENEWABLE ENERGY IN LOS ANGELES

LA DWP

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### LA100 Study

**Completed**

*Unprecedented analysis ID'd multiple paths to achieve 100% target*

**Considers reliability, equity, sustainability and affordability**

- Confirmed 100% by 2035 achievable
- Community & stakeholder input

**Common Investments Across All Scenarios**

Distribution Efficiency Flexible Load | Customer Rooftop Solar | Renewable Energy | Energy Storage | Transmission, Distribution | Renewably Fueled Dispatchable Turbines

Solar: +>5,700 MW
Wind: +>4,300 MW

+>2,600 MW

+>2,600 MW (in basin)

**Much More**

Natural gas → Biofuel / Hydrogen
Today: Daily | Future: Infrequently

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### LA100 Equity Strategies

**Fall 2021-23**

*Community-driven, objective to achieve equity*

**Robust community engagement**
Areas of Focus

- Improve air quality
- Solar access
- Energy Efficiency
- Affordable rates
- Demand management
- Debt relief
- EV charging access

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### 2022 SLTRP

**Fall 2021-2022 | 2035 & 2045 Targets**

*Our comprehensive integrated power plan*

**Recommends path forward to achieve our goals**

- Integrates findings of LA100
- Community & stakeholder input
- Prioritizes reliability, resiliency, equity, affordability, sustainability

**Considerations**

- Building, Operating & Maintaining
- Workforce
- Supply Chain Risk
- Cost to customers
- Implementation and Feasibility

38

# Interdependency between SLTRP and Equity Study
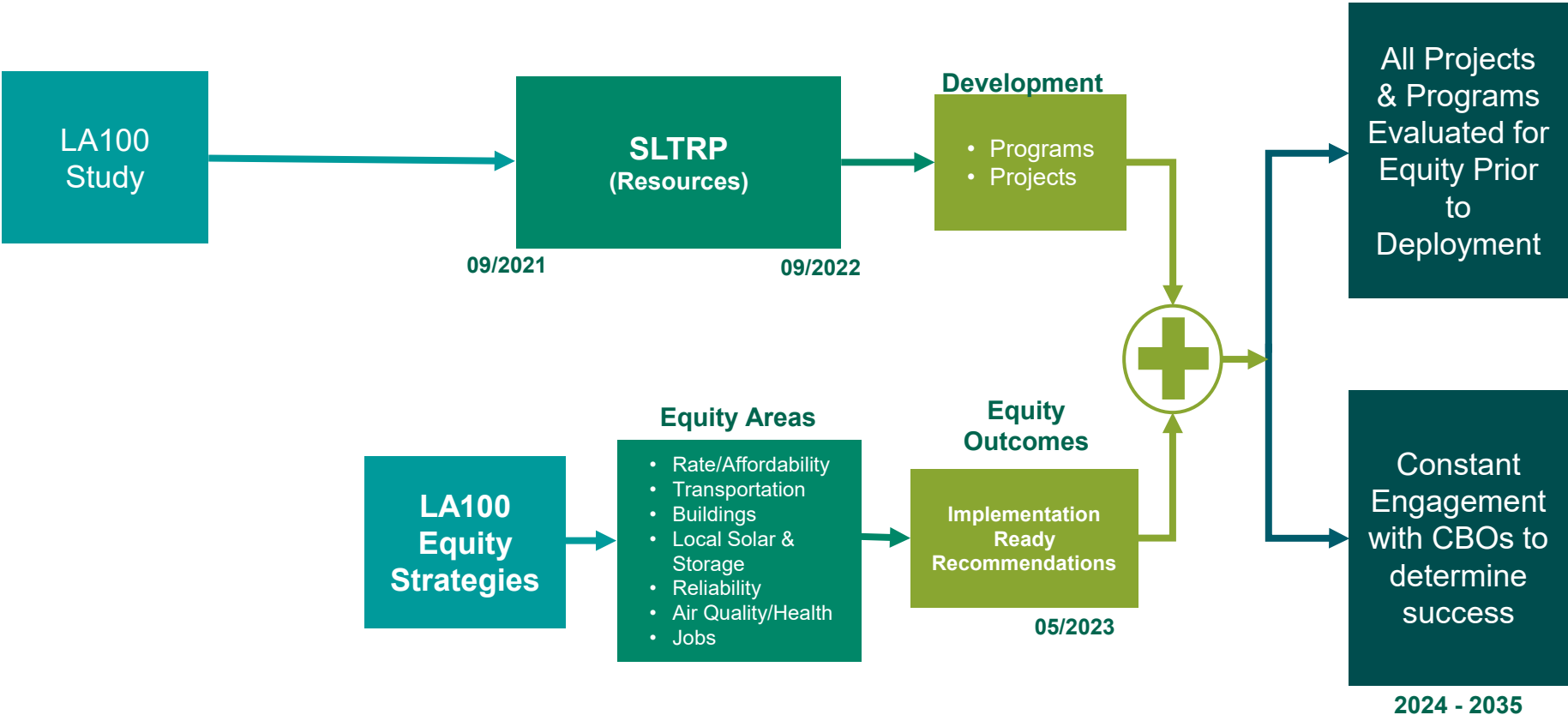
**LA100**

ACHIEVING 100% RENEWABLE ENERGY IN LOS ANGELES

Identified pathways to get to 100% renewable & carbon-free energy, along with job creation, environmental benefits, equity implications, and costs & rate impacts.

Based on LA100 findings, Mayor and City Council set accelerated targets and requirements for developing the 2022 SLTRP

**City Council Motion (No. 21-0352):**

- New target to achieve 100% carbon free by 2035 (with equitable and minimal adverse impact on ratepayers) with interim goals of 80% renewables and 97% carbon free by 2030.
- Prioritize equity in SLTRP for EJ communities. Ensure no increase in emissions at EJ communities.
- Report on "no-regrets" projects, accelerated pathway, and "shovel-ready" projects.
- Report on community engagement strategies.
- Six-month report card to ECCEJR, including challenges and barriers.

# LA100 Study Caveats for SLTRP

- Scenarios to achieve 100% by 2035 assume ability to quickly scale up hydrogen infrastructure.

- Major new and expanded transmission are among the most uncertain inputs to modeling the pathways to 100% renewable energy.

- The evolution of the power system outside of LADWP could impact LADWP's opportunities.

- The potential role of the customer has not been fully explored.

- Climate change could impact the ability of LADWP to maintain resource adequacy.

- The study did not fully assess the feasibility of the accelerated deployment; in particular, the study does not evaluate the availability of manufacturing supply chains and labor forces or detailed construction schedules for the resources identified in each scenario.

# Overview: What is LADWP's SLTRP?

The Power Strategic Long-Term Resource Plan (SLTRP) is a roadmap to meet our future energy needs, comply with regulatory mandates, meet reliability requirements, and reduce emissions in a cost-effective manner.

**Goals:**
Develop a recommended scenario that guides our near-term actions and future energy planning through 2045.
Provide a recommended path to achieve 100% carbon free by 2035.

# SLTRP Framework

Guided by an Advisory Group of stakeholders from community, businesses, local government, homeowners and customers

Updated annually with major stakeholder engagement every 2 years

Paused after 2017 while LA100 Study was underway

Resuming annual updates with the 2022 SLTRP

# 2022 SLTRP Key Elements (Planning)

**Public Engagement:**
- Advisory Group input
- Equity Strategies engagement
- Community & stakeholder outreach

**Planning Considerations:**
- Future resource mix
- Legislative and Regulatory Mandates
- Resource Adequacy
- Greenhouse Gas Emissions
- Program Revenue Requirements
- Rate Impacts
- Minimizing Usage of Valley
- Resiliency

# 2022 SLTRP Key Considerations (Implementation)

How long do projects take to build?
- California Environmental Quality Act (CEQA) timeline

How much power do we need for local neighborhoods?

Understanding emerging technologies and maturity
(e.g. green hydrogen, energy storage)

Deadlines for retiring ocean-cooled generating units
(Scattergood, Haynes & Harbor)

# 2022 Strategic Long-Term Resource Plan (SLTRP) – Core Scenarios

**SCENARIOS (100% Carbon Free by 2035)**

| | SB 100 Reference Case | Case #1 | Case #2 | Case #3 |
|---|---|---|---|---|
| **Total Renewable Portfolio Standard 2030** | 60% | 80% | 90% | 90% |
| **Total Clean Energy (Renewable, Hydro and Nuclear) Penetration Achieved 2035 vs. 2045** | 2035: 80% / 2045: 90% | 2035: 100% / 2045: 100% | 2035: 100% / 2045: 100% | 2035: 100% / 2045: 100% |
| **Distributed Energy Resource Deployments** | Reference Levels | High Levels | High Levels | Highest Levels |
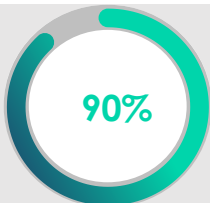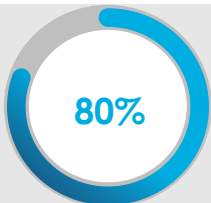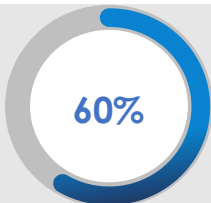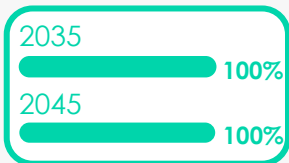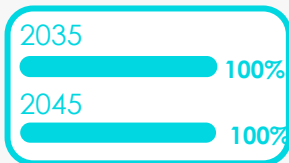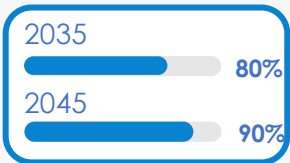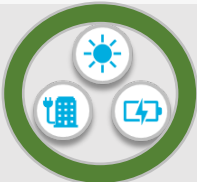
*CLEAN ENERGY TARGETS*

# 2022 SLTRP Overview - Sensitivities

| Commodity Prices | Examples | Price Sensitivity | Scenario to Apply |
|---|---|---|---|
| Fuel Prices* | Natural Gas, Green Hydrogen, etc. | High/low sensitivities | SB100, Case 2, Tentative Recommended Case |
| GHG Prices* | GHG Allowance Prices | High/low sensitivities | SB100, Case 2, Tentative Recommended Case |
| Renewables and Energy Storage Prices* | Solar, Wind, Geothermal, Li-Ion, flow, etc. | High/low sensitivities | SB100, Case 2, Tentative Recommended Case |

*bookend scenarios to evaluate price sensitivities by matching low and high commodity prices:
- **Low Bookend:** *Low natural gas prices, low hydrogen prices, low GHG prices, low renewable and energy storage prices*
- **High Bookend:** *High natural gas prices, high hydrogen prices, high GHG prices, high renewable and energy storage prices*

| Implementation Risk | Description | "What-if" Sensitivities | Scenario to Apply |
|---|---|---|---|
| Emerging Technologies | No In-Basin Combustion Alternatives | Long duration capacity (e.g. Hydrogen Fuel Cells) | Case 1, Case 2, Case 3 |
| Demand Side Resources | Demand Response | Reaching only half of the 576/633 MW of DR by 2035 | Case 1, Case 2, Case 3 |
| Transmission | Transmission Upgrades (over 10 projects by 2030) | More difficult in-basin upgrades not completed by 2030 | Tentative Recommended Case |
| Load | Transportation/Building Electrification | Low Load and High Load | Tentative Recommended Case |

# Outcomes of 2022 SLTRP

- High-level roadmap to 100% carbon free by 2035, driven by LADWP with stakeholder input

- Focus on big buckets of resources (large-scale renewables and energy storage, small-scale local solar and storage, EE and demand response, etc.)

- Modeling scenarios to determine best path to meet our mandates based on the guiding principles

- Integrates total Power System costs, infrastructure, resource planning, etc.

SLTRP Examples that relate to LA100 Equity Strategies

# Reducing Use of Valley Generating Station



LADWP to dramatically reduce utilization of Valley Generating Station:

- The combination of **80% renewables** by 2030, **Haynes recycled water cooling,** and **Scattergood capacity** reduces Valley usage

- Valley usage to be reduced from 30% to 5% thereby reducing adverse impacts on the local community

Utilize significant space at Valley Generating Station for future clean energy projects

# Electrification Drives Air Quality and Health Benefits
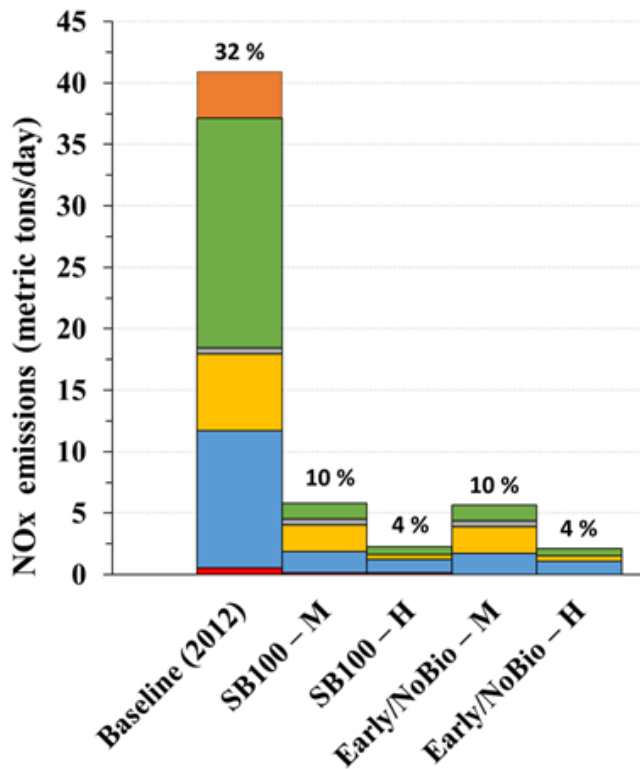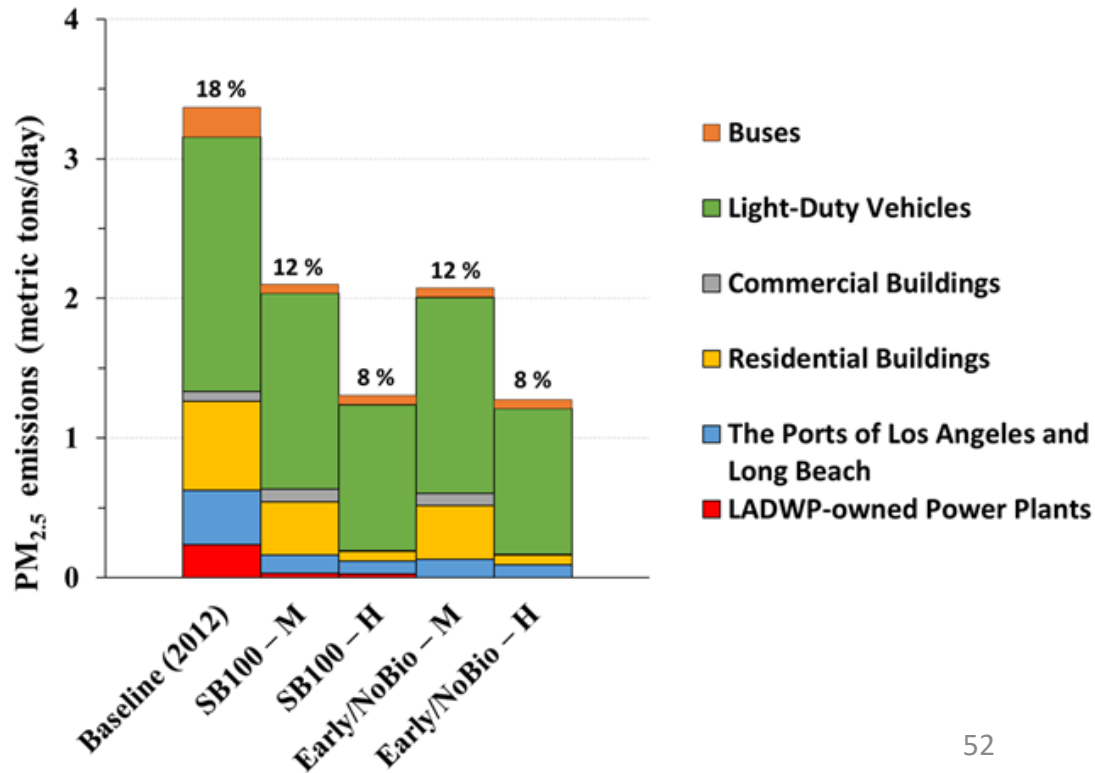
# Deploying Distributed Energy Resources Equitably

We need: 1,000 MW of local solar, 500 MW of demand response, double energy efficiency, and support 580,000 electric vehicles by 2030.

**Progress:**

- LA100 Equity Strategies study through 2023

- Expanded FiT from 150 MW to 450 MW

- Launched FiT+ allowing energy storage

- Launched VNEM Pilot Program

- Expanded Power Savers (residential DR program)

- More DER proposals under negotiations

# Key Takeaways on the 2022 SLTRP

- SLTRP is a living document; updated each year with stakeholder engagement every 2 years.

- 2022 SLTRP will identify the buckets for achieving goals. Within these buckets, LADWP will incorporate the LA100 ES findings.

- Expect to fully incorporate LA100 ES recommendations in 2024 SLTRP update.

- LA100 ES recommendations will inform future programs designs and bulk power development

# Communications & Public Affairs

Website:  *ladwp.com/sltrp*
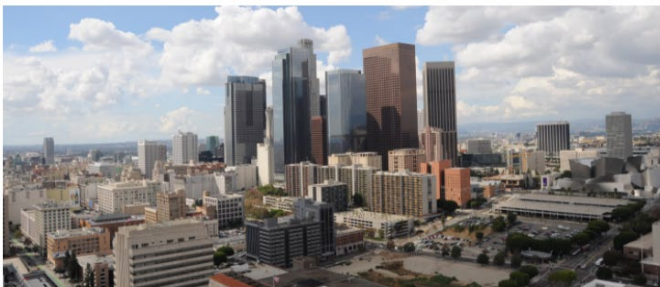
Email address:  *powerSLTRP@ladw.com*

# Recap from LA100 Equity Strategies Steering Committee

**Questions and Comments from LA100 ES Steering Committee on SLTRP:**

- Streamlining CEQA Process

- Selection of SLTRP recommended case

- Glad to hear SLTRP is evaluating air quality, environmental, and rate impacts

Q&A

# Wrap Up and Next Steps

# Going Forward

## Advisory Committee Meetings

### August 24, 2022
### Virtual

- Energy affordability modeling approach
- Equity strategies and metrics synthesis from Steering Committee feedback

### October 26, 2022
### Virtual

- Air quality and health impact/medium- and heavy-duty vehicle emissions impact modeling approach
- Workforce development
- Household energy modeling approach

### Subsequent Meetings

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

# Thank you!