LA100 EQUITY STRATEGIES

LA100 Equity Strategies
Advisory Committee Meeting #6
October 26, 2022

LA DWP

NREL Transforming ENERGY

UCLA

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

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LA100 Equity Strategies Oversight & UCLA Contract Administrator

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Senior Assistant General Manager of
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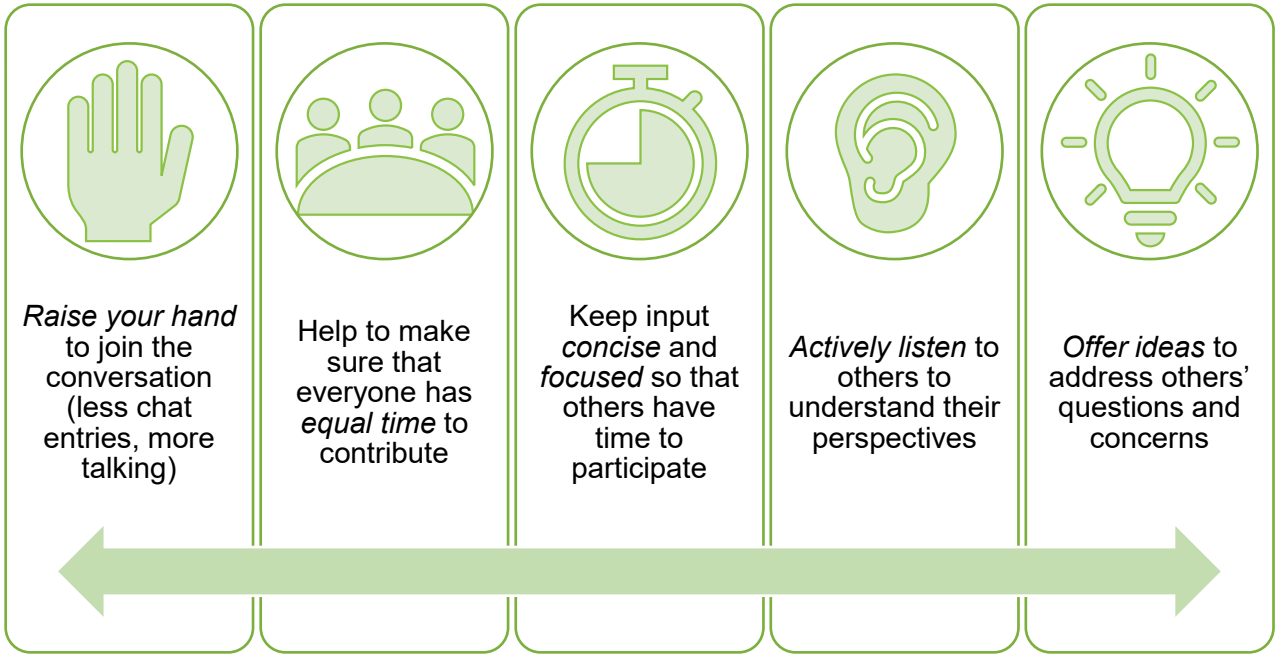
Agenda

Start Time	
10:00 a.m.	Welcome
10:05 a.m.	Meeting Purpose and Agenda Overview
10:10 a.m.	Community Listening Sessions Summary
10:20 a.m.	Air Quality and Health Modeling
10:50 a.m.	Potential Community Solar and Storage Siting Options
11:20 a.m.	Green Jobs & Workforce Development
11:55 a.m.	Wrap Up and Next Steps

Our Guide for Productive Meetings



Community Listening Sessions Update

Dr. Paty Romero-Lankao, NREL

Listening Sessions

Spaces of Collaboration with Community Participants

From the *What* to the *How*

The What

First Round :

We asked five small groups of Angelenos ***what*** **energy justice means to them**, including their:

(1) **vision** for a just energy future in their community

(2) **understandings** of factors influencing energy inequities in their community

(3) **suggested energy strategies** to redress these inequities.

The How

Second Round :

The next 10 listening sessions aim to **understand *how* to:**

(1) **rectify** the challenges shared in our last sessions

(2) **achieve the energy equity goals** community members have outlined.

Listening Sessions

Highlights

San Fernando Valley

- With Pacoima Beautiful
- 12 participants
- **Key highlights**
  - **Access & Use** | Rental conditions thwarting *access/eligibility* to LADWP benefits; financial institutions thwarting *use* of existing benefits
  - **Institutional Action** | Improve program design
  - **Collective Action** | Request for community-led program design
  - **Continuing the Loop** | Appreciated feedback loop

South LA

- With SLATE-Z
- 6 participants
- **Key highlights**
  - **Fit** | Tailor engagement strategies to different groups; i.e., social media for the youth versus door-to-door for the elderly
  - **Access** | Request for educational opportunities for youth in schools + adults
  - **Safety** | Request for public street lighting and more shade
  - **Continuing the Loop** | Requested we return

Listening Sessions

Round Two

10 In-Person Listening Sessions

- Two sessions in September 2022
  - Communities of Focus: San Fernando Valley, South LA #1
- Three sessions in October 2022
  - Communities of Focus: South LA #2, Two in Harbor
- Two Sessions in November 2022
  - Communities of Focus: South LA #1, East LA
- Three Sessions in December 2022
  - Communities of Focus: East LA, South LA #2, San Fernando Valley

Air Quality and Health

Update on medium- and heavy-duty vehicle emissions impact modeling and output metrics

Dr. Garvin Heath, NREL
Dr. Yifang Zhu, UCLA

Air Quality & Health Modeling Overview

Questions to Be Answered with NREL and UCLA collaboration:

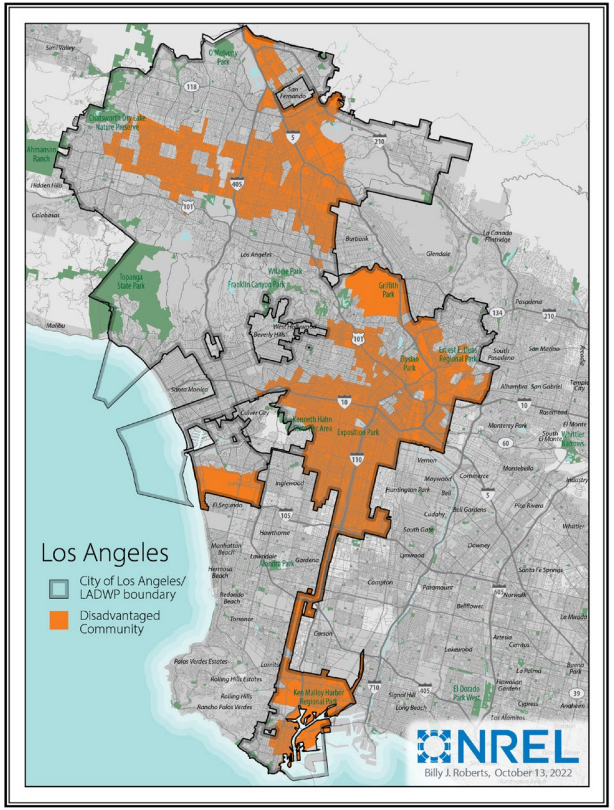
- Electrification of *which types of vehicles (light-, medium-, and heavy-duty)* and *where* would provide the greatest health benefits in disadvantaged communities?
- Will *vehicle electrification* provide greater air quality and health improvements in disadvantaged communities?

Outcomes:

- Answers will inform vehicle electrification incentives and program targeting, and infrastructure investment locations and sequencing.

Steering Committee Guidance:

- Which neighborhoods and roads should be prioritized?
  - Feedback from Steering Committee meeting #5: major freeways, Ports/LAX corridors, Wilmington, Pacoima, South LA
  - Feedback from SC meeting #11: use SB535 definition of DAC rather than CalEnviro Screen 4.0 because it better captures traffic-affected tracts nears Ports



Air Quality & Health Modeling Overview

UCLA Scenarios

- Zero-Emission Vehicle disparity scenario
- Zero-Emission Vehicle equity scenario
  - Light-duty
  - Light-, medium-, & heavy-duty

Air Quality Modeling

- Model ambient $PM_{2.5}$ and O_3 in 2035 using WRF-Chem (high resolution of about 1 km by 1 km)

NREL Scenarios

- UCLA-developed scenarios
- Medium- and heavy-duty vehicle classes at different electrification levels across a wide range
- Each scenario in many different LA neighborhoods,

Air Quality Modeling

- Near-roadway air quality model (<100 m spatial resolution)

Health Assessment

- Racial/ethnic specific baseline mortality rates
- Mortality due to $PM_{2.5}$, due to O_3
- Monetized health benefits at a community level

Goals of today's presentation

Discuss:

- Which disadvantaged community (DAC) census tracts to use for sampling and analysis
  - Some DAC tracts are affected by traffic related pollution more than others
  - Develop a "Traffic-Air Quality DAC" (TAQ-DAC) definition based on subset of CalEnviroScreen indicators and Steering Committee feedback
- NREL update
  - Air quality modeling and equity analysis data sources and methods
- UCLA update
  - Emissions projection in 2035

Traffic-Air Quality Disadvantaged Communities (TAQ-DAC)

Current set of indicators used in CalEnviroScreen 4.0 or its derivatives

Pollution Burden		Population Characteristics	
Exposure	• Ozone and particulate matter ($PM_{2.5}$) concentration • Diesel particulate matter (PM) emissions • Drinking water contamination • Children's lead risk from housing • Pesticide use • Toxic release from facilities • Traffic impacts	**Sensitive population**	• Asthma emergency department visits • Cardiovascular disease • Low birth-weight infants
Environmental effects	• Cleanup sites • Groundwater threats • Hazardous waste • Impaired water bodies • Solid waste sites and facilities	**Socioeconomic factors**	• Educational attainment • Housing-burdened low-income households • Linguistic isolation • Poverty • Unemployment

Only some indicators (marked here in red) are traffic related

Which DAC tracts are more affected by traffic-related air pollution?

Pollution Burden		Population Characteristics	
Exposure	• Ozone concentration • $PM_{2.5}$ concentration • Diesel PM emissions • Traffic impacts	Sensitive population	• Asthma emergency department visits • Cardiovascular disease • Low birth-weight infants

- How do we select which of these indicators to analyze for traffic-related air quality-specific benefits?
- Two obvious choices: “traffic impacts” and “diesel PM emissions”
- Does including other indicators provide more insight?

How do we identify tracts most affected by traffic air pollution? (1)

IDENTIFY

- Consider all traffic/air quality-related indicators in CalEnviroScreen (7)
- Fix two indicators
  - traffic impacts
  - diesel PM emissions
- Combine with other *population* and *pollution* indicators in all combinations

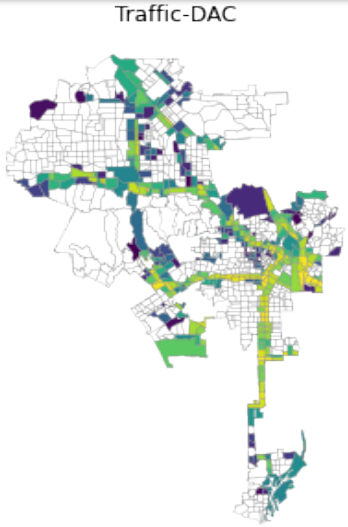
MODEL

- Using CalEnviroScreen 4.0 methodology, calculate score for each tract in California
- Derive a traffic/AQ-affected disadvantaged community classification for each combination

ANALYZE and SELECT

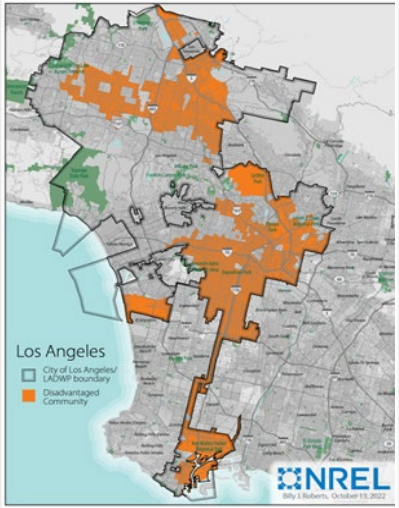
- Analyze tracts (intersecting with CalEnviroScreen 4.0) for all 32 combinations for their scores
- **Select the combination that yields highest median CalEnviroScreen percentile score**

Traffic-affected DACs for sampling and analysis



Identify traffic/AQ-affected tracts

select only from



Overlay with DAC tracts

=

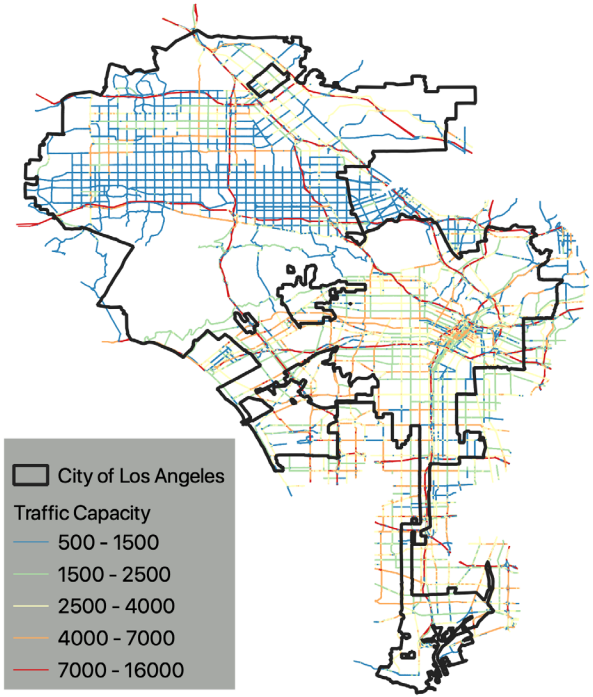
Sample from subset of TAQ-DAC tracts

Based on Steering Committee and UCLA feedback, NREL revisited the traffic-impacted disadvantaged community mapping and realized new census tracts—designated by California Senate Bill 535—were missing. These census tracts have now been added, resulting in the additional census tracts in red and greater representation of the LAX area and Wilmington neighborhood for the analysis.

NREL updates

Traffic Activity Data

- We are expecting to use vehicle activity projection data based on UCLA Mobility Lab travel demand modeling.
- Vehicle types included:
  - light heavy-duty trucks (LHDT)
  - medium heavy-duty trucks (MHDT)
  - heavy-heavy duty trucks (HHDT)
  - Light duty vehicles (LDVs)
- UCLA's dynamic model is likely better than Sothern California Association of Governments model which is static modeling
  - Can affect parameters such as speed and congestion which can affect emissions

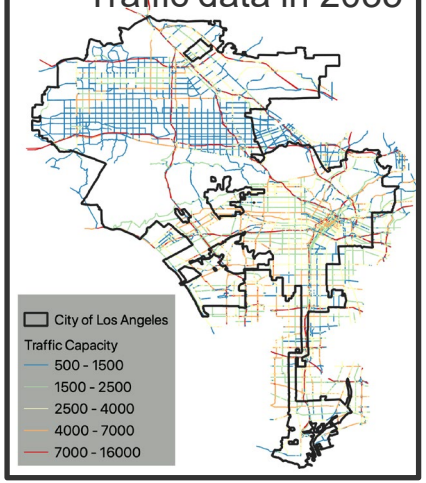


Putting it all together: strategic insights from health and EJ analysis

Test wide range of potential electrification proportions (HHDT, MHDT, LHDT)

Emission rates (EMFAC2021)

Traffic data in 2035



Near-road air quality modeling on sample of road segments in and out of TAQ-DACs

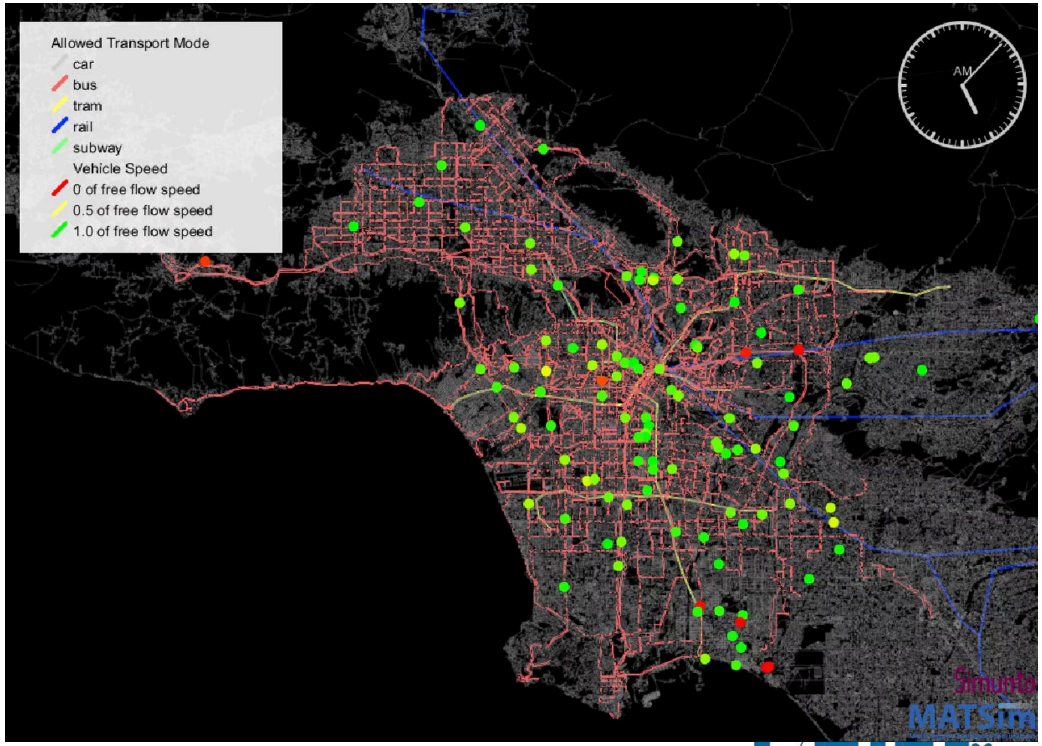
Health impacts assessment using USEPA's BenMAP

Environmental justice analysis (DAC vs. non-DAC)

UCLA Updates

Integrated Transportation Model

- Simulating explicit vehicle movement in a multimodal network with the congestion impact
- Incorporating all types of vehicle
  - Passenger cars
  - Light/Medium/Heavy duty trucks
  - Transit vehicles



Scenarios

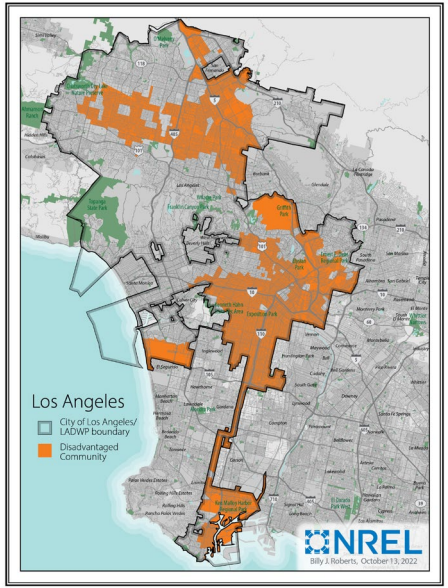
	Scenario 1	Scenario 2	Scenario 3
Name	2035 ZEV Disparity	2035 ZEV Equity	2035 ZEV Equity (more MD-HD) (MSS)
Energy Profile	LA100 Early & No Biofuel – 100% Clean Energy		
	On-road Transportation Electrification Profile		
Light-duty	50%	50%	50%
Medium-duty	19%	19%	22%
Heavy-duty	10%	10%	39%
School and urban buses	100%	100%	100%
	On-road Transportation Emission Spatial Distribution		
Passenger Vehicle Medium-duty Heavy-duty School and urban buses	Emission reduction map based on (1) ZEV ownership and (2) the MATSim simulated trips	Equally distributed	Equally distributed
	ZEV Fleet Profile (LDV / MDV / HDV)		
PHEV	25% / 0% / 0%		
BEV	67% / 100% / 100%		
FCEV	8% / 100% / 100%		
	Off-road Transportation		
	EMFAC 2035 Original	EMFAC 2035 Original	MSS
	Oil & Gas Industry		
Demand Reduction	Scale down based on ZEV population		

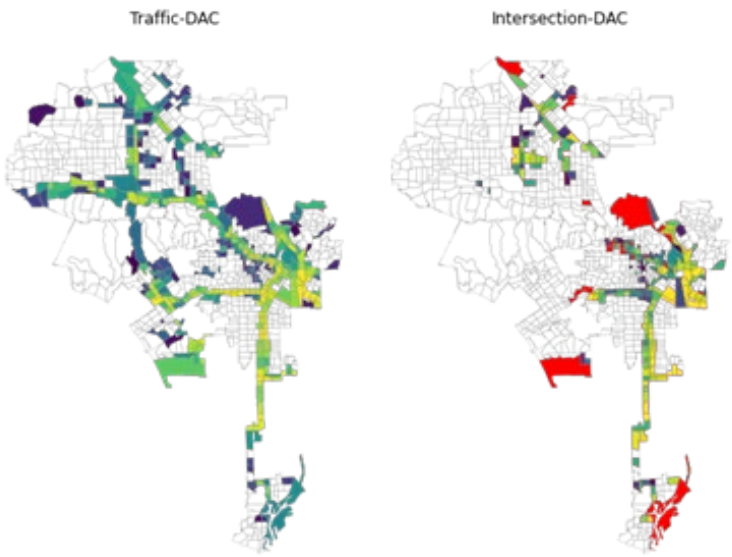
MSS: Mobile Source Strategy
PHEV: Plug-in Hybrid Electric Vehicle
BEV: Battery Electric Vehicle
FCEV: Fuel-cell Electric Vehicle
LDV: Light-duty Vehicle
MDV: Medium-duty Vehicle
HDV: Heavy-duty Vehicle

LA County Emission Inventory Change (2017 vs. 2035)

Scenarios	CO	NH_3	NOx	PM_{10}	$PM_{2.5}$	ROG	SOx
BASE - 2017 (tons / day)	1000	46	270	89	34	303	13
ZEV – 2035 (tons / day)	452	47	143	89	32	217	12
MSS - 2035 (tons / day)	431	46	101	89	31	216	12
Scenario Comparison							
(ZEV-BASE)/BASE	-55%	1.5%	-47%	0.6%	-5.7%	-28%	-4.0%
(MSS-ZEV)/ZEV	-4.5%	-1.3%	-29%	-0.3%	-1.6%	-0.4%	-0.8%

Air Quality & Health: Medium- and Heavy-Duty Vehicle Electrification Update





Based on Steering Committee and UCLA feedback, NREL revisited the traffic-impacted disadvantaged community mapping and realized new census tracts—designated by California Senate Bill 535—were missing. These census tracts have now been added, resulting in the additional census tracts in red and greater representation of the LAX area and Wilmington neighborhood for the analysis.

Q&A

Potential Community Solar and Storage Siting Options

Ashreeta Prasanna, NREL
Jane Lockshin, NREL

Project Overview

Questions to be answered:

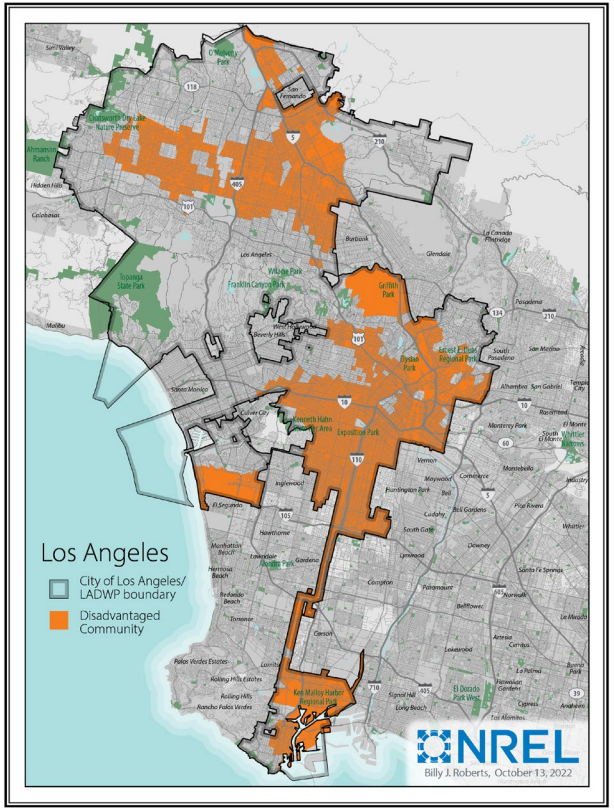
- How much community solar can be sited in the City of LA and how can it be used to provide bill reduction or resiliency benefits to underserved communities or low-income customers?
- Where should community solar be sited based on community priorities?

Outcomes:

- Answers will inform ranking of potential community solar and/or resiliency centers based on their location and potential benefits provided to underserved communities or low-income customers.

Steering Committee guidance:

- Which neighborhoods and customer types should be prioritized?
- Feedback from prior Steering Committee meetings:
- Recreation centers, other public buildings which are accessible to the public.
  - Multifamily and renters should be prioritized.
  - Age and income of customers should also be considered.



Goals of Today's Presentation

- Provide information on solar and storage siting data and methods.
- Prioritize sites and other datasets.

Importance of Local Community Solar

Community wealth-building. Solar can support jobs and local workforce development as well as create educational opportunities, build wealth, and generate investments in under-resourced communities.

Mitigating environmental impacts. Solar can be located on industrially contaminated lands that often cannot accommodate other uses and are too often located in under-resourced communities.

Community resilience. Solar can be paired with battery storage at critical facilities to offer frontline communities resiliency benefits in the event of an extended electrical outage.

Source: World Resources Institute, "How Community Solar Can Benefit Low- and Moderate-Income Customers."

Importance of Local Community Solar

Siting flexibility. Utilities can help guide projects to optimal grid locations.

Economies of scale. Potential to be more cost-effective than smaller solar arrays.

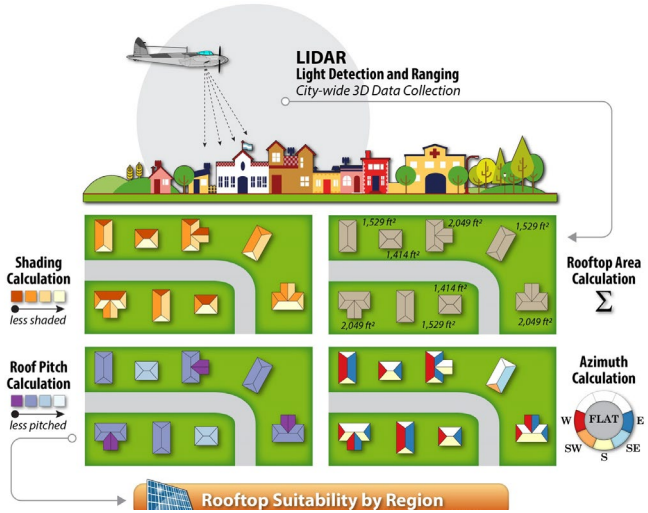
Federal incentives such as Clean Energy Coalition Prize. Starting in 2023, small community solar projects (under 1 megawatt [MW]) will qualify for a base investment tax credit (ITC) of 30% through 2033.

Additional Inflation Reduction Act (IRA) credits:

+ 10% for meeting domestic content specifications
+ 10% if at a brownfield site or in a community directly impacted by fossil fuels
+ 10% if in a low-income community or on tribal land (by application)
+ 20% if part of a Low-Income Residential Building Project or Qualified Low-Income Economic Benefit Project (by application)

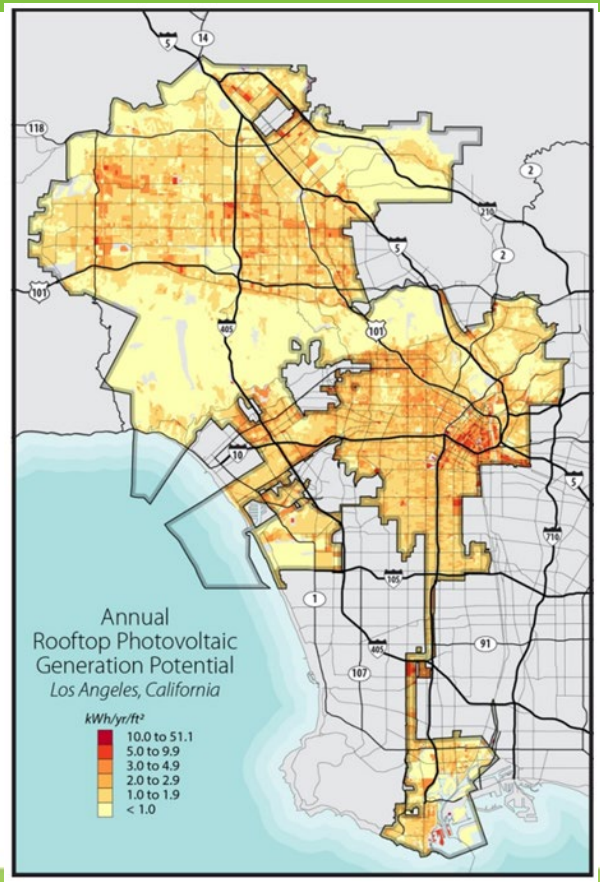
Source: World Resources Institute, "How Community Solar Can Benefit Low- and Moderate-Income Customers," and DOE's Solar Energy Technology Office, "Reaching for the Solar Future: How the Inflation Reduction Act Impacts Solar Deployment and Expands Manufacturing."

Data – Rooftop Solar



Identification of solar rooftop potential relies on lidar data sets provided by the U.S. Department of Homeland Security's Homeland Security Infrastructure program for the larger Los Angeles Metropolitan Area collected in 2007 and 2013.

Technical potential estimates are supplemented by parcel-level tax assessor data for Los Angeles County (Los Angeles County 2017).

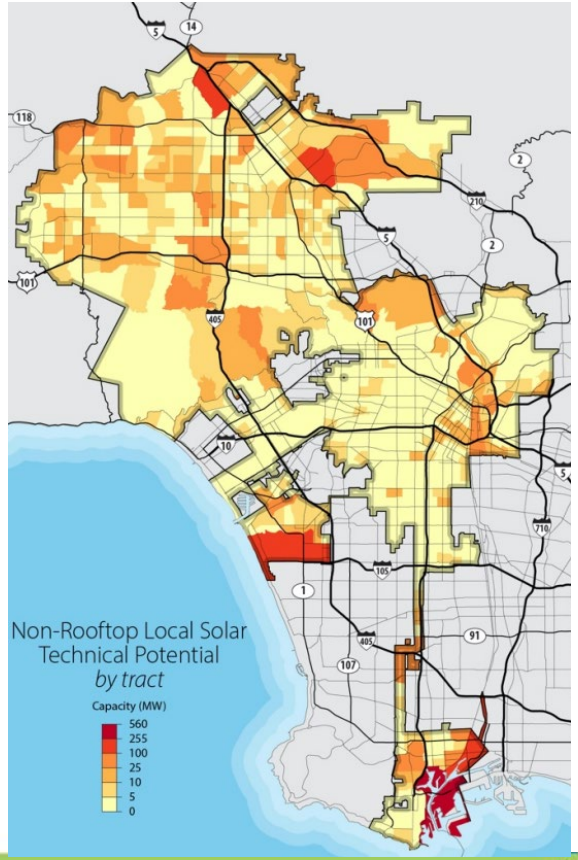


Source: Chapter 4: Customer-Adopted Rooftop Solar and Storage in *The Los Angeles 100% Renewable Energy Study.*

Data – Non-rooftop Solar

Identification of non-rooftop potential relies on County-, City-, and LADWP-provided datasets. The technical potential for non-rooftop local solar is calculated by excluding land that is unsuitable for local solar development. Some of the criteria for exclusions are listed below, and additional exclusions are described in *U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis*:

- Existing developments (buildings, streets, bike paths, airport runways)
- Land cover (water, wetlands, forests, shrubland, farmland)
- Parks and recreational sites
- Steep terrain (slope greater than 10%)
- Landmarks (schools, cemeteries, stadiums, etc.)
- Excessively shaded areas
- Non-parking-lot lands.

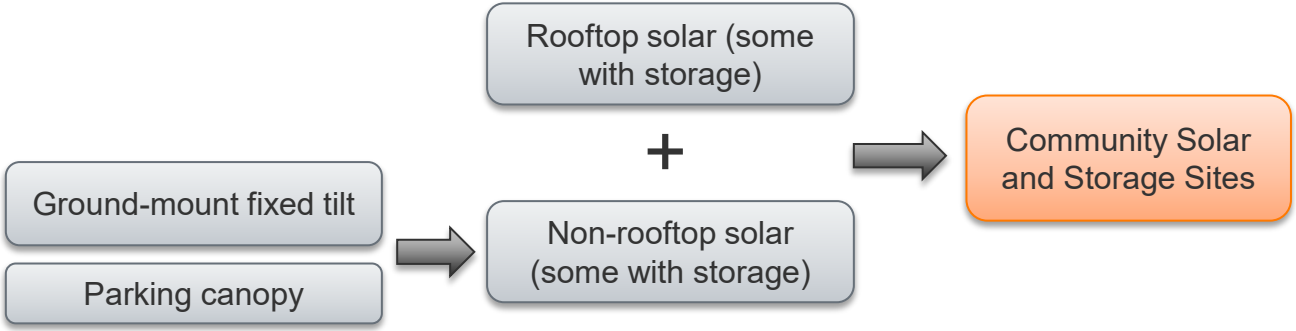


Source: Chapter 5: Utility Options for Local Solar and Storage in *The Los Angeles 100% Renewable Energy Study*.

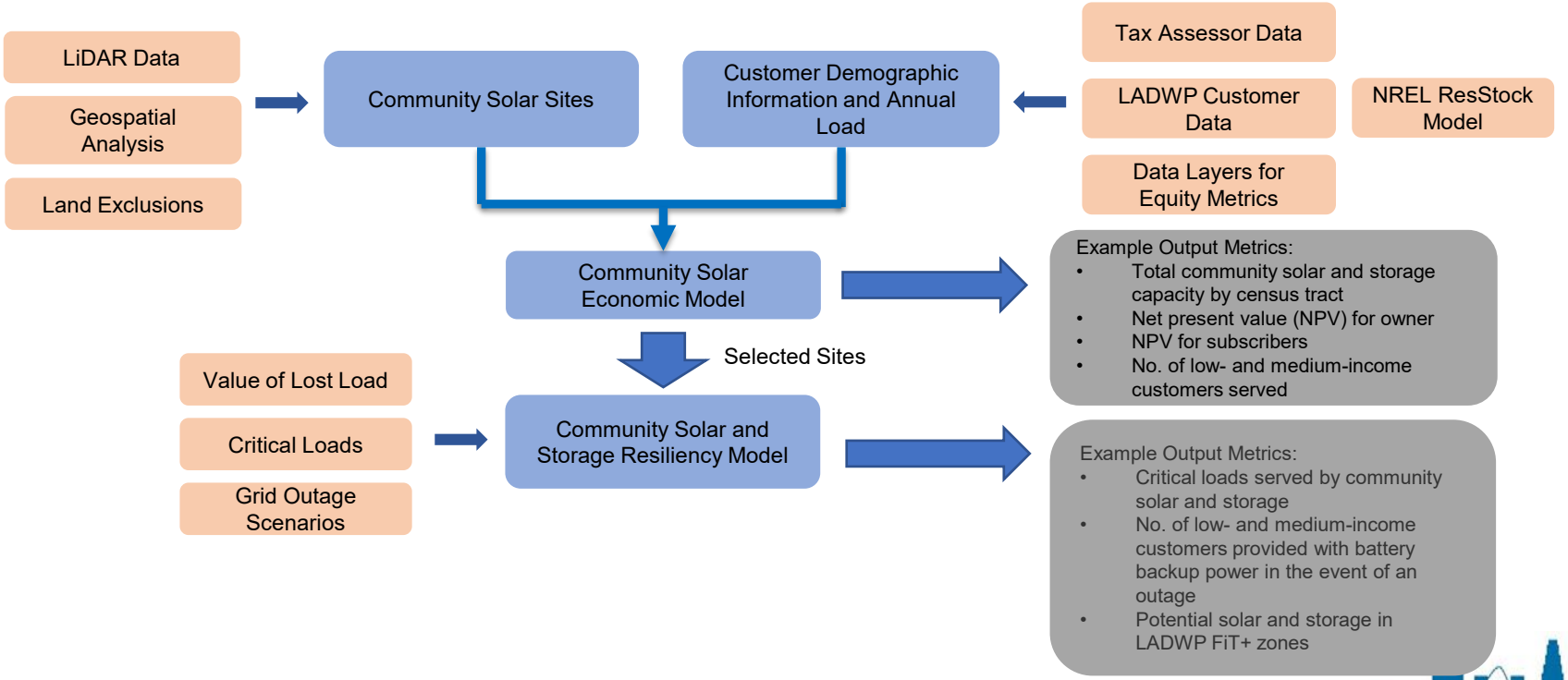
Data

All technical potential data (at potential solar sites) is obtained from the LA100 Study (described in Chapter 4 and Chapter 5). Additional processing and filtering of the data is carried out based on the following conditions:

- Sites which have the following land-use: multifamily, government-owned land, educational institutions, recreation centers, hospitals, religious institutions, other (i.e., airport, port).
- Sites with total capacity >/= 30 kilowatts (kW) (using LADWP FiT program lower limit).
- Total capacity at each site could include rooftop, carport/parking, and ground-mount.



Analysis Overview



Defining Potential

This analysis identified **technical potential** or the ***very upper limit*** of what is possible if ***every*** suitable site were developed for solar. Feasibility constraints not considered include:

- Economics
- Market realities
- Constructability
- Legal/regulatory
- Roof age
- Roof structural integrity
- Property owner interest
- Competing land uses
- Etc.

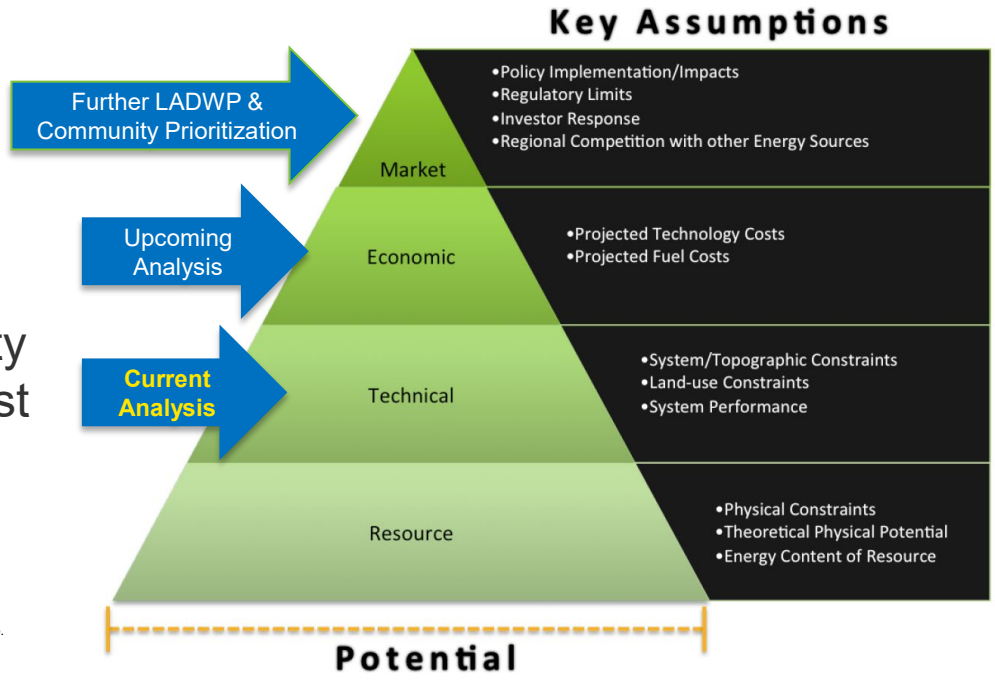


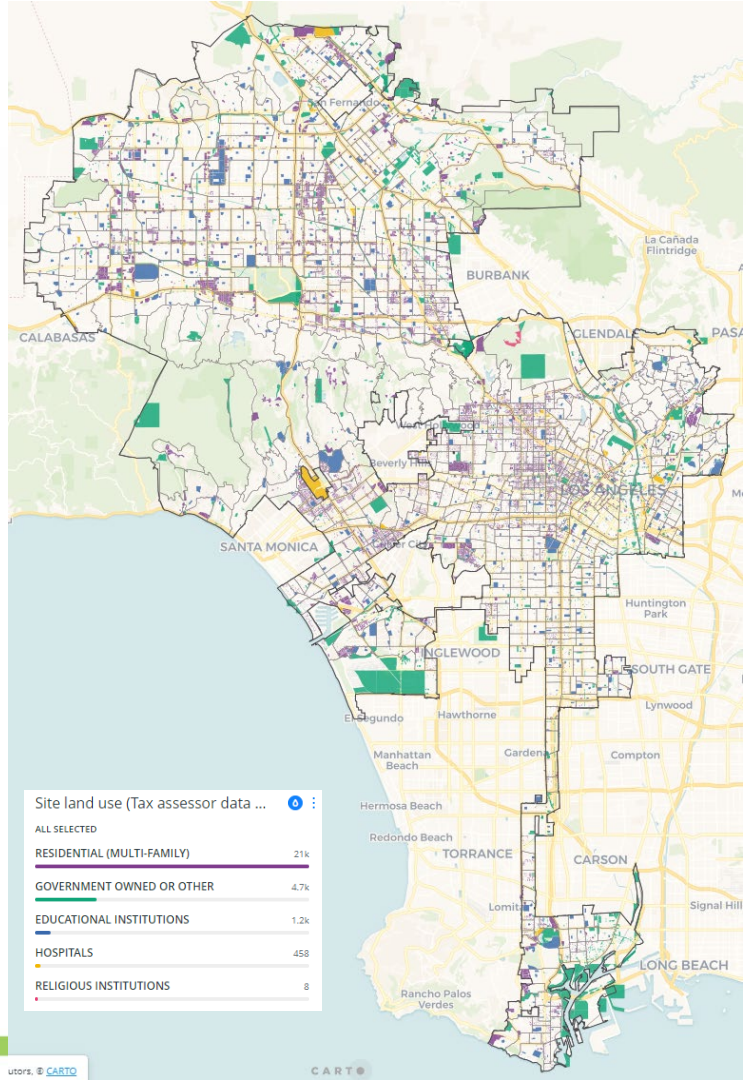
Figure source: Lopez, Anthony, Billy Roberts, Donna Heimiller, Nate Blair, and Gian Porro. 2012. NREL. "U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis." https://www.nrel.gov/docs/fy12osti/51946.pdf.

Potential Community Solar Sites

- **27,477** potential community solar sites identified
- **4,400 MW** combined solar capacity potential
- **6,400** gigawatt-hours per year generation potential

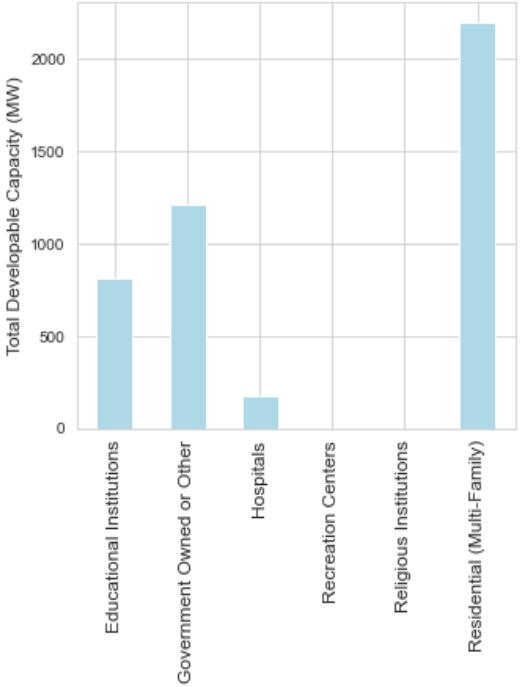
If all potential community solar sites were developed, they would produce the equivalent of 100% of annual electricity consumption of all renter occupied households in the city of LA (assuming an average consumption of 5,000 kWh per household).

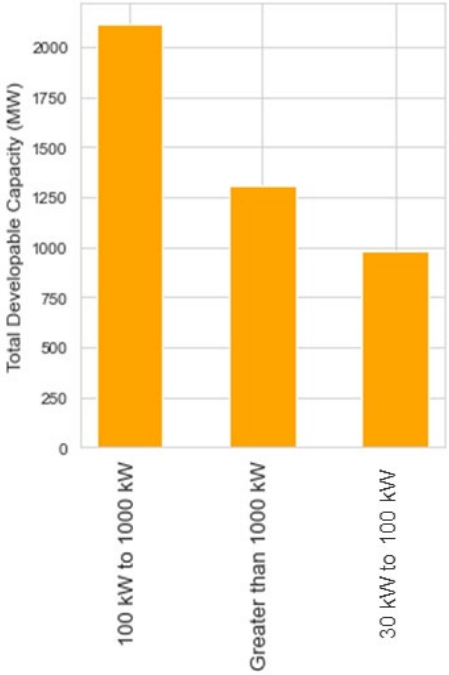
Not all potential community solar sites can be developed due to regulatory, ownership, or other issues.



Potential Community Solar Sites

- More than half of the potential solar sites are on multifamily buildings, followed by government owned or other land and educational institutions.
- 98% of the sites have capacity less than 1 MW.

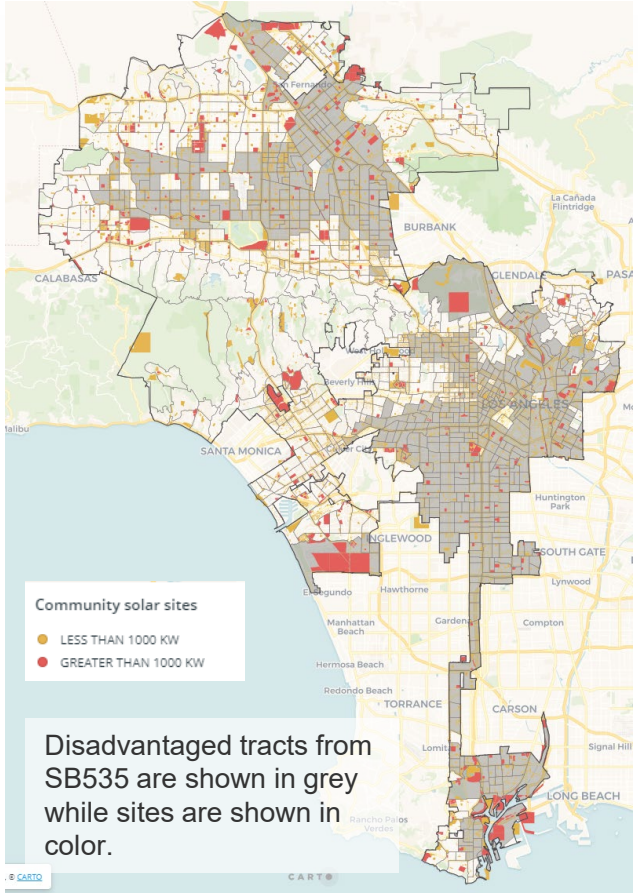




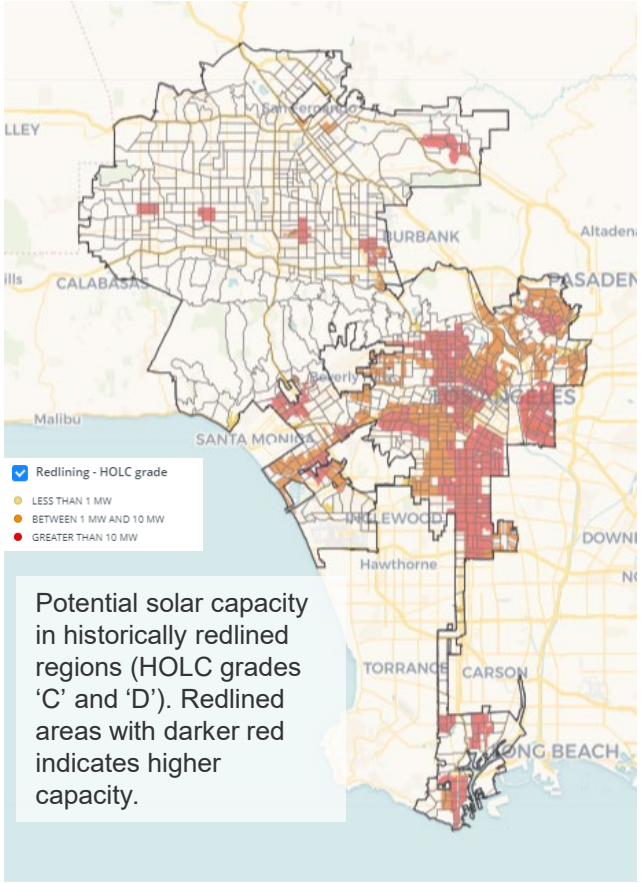
Land Use	No. of Sites	Capacity (MW)	Generation (GWh/yr)
Residential (Multi-Family)	21,077	2,195	3,329
Government Owned or Other	4,602	1,167	1,860
Educational Institutions	1,214	815	1,020
Hospitals	458	179	199
Recreation Centers	118	46	55
Religious Institutions	8	1.1	2.4
Total	27,477	4,400	6,400

Type of Installation	Capacity (MW)
Ground-mount solar	866
Carport solar	947
Rooftop solar	2,591
Storage (sited with solar)	524

Potential Solar Sites in Disadvantaged Tracts & Redlined Areas



Disadvantaged tracts from SB535 are shown in grey while sites are shown in color.



Potential solar capacity in historically redlined regions (HOLC grades ‘C’ and ‘D’). Redlined areas with darker red indicates higher capacity.

Disadvantaged tracts (SB 535)

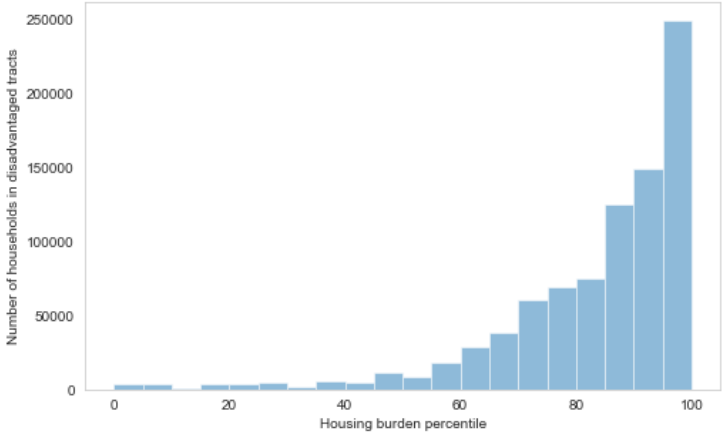
- 52% of potential sites are in disadvantaged tracts (SB 535).
- Total potential solar capacity in disadvantaged tracts is 2,100 MW (49% of total capacity in LA).

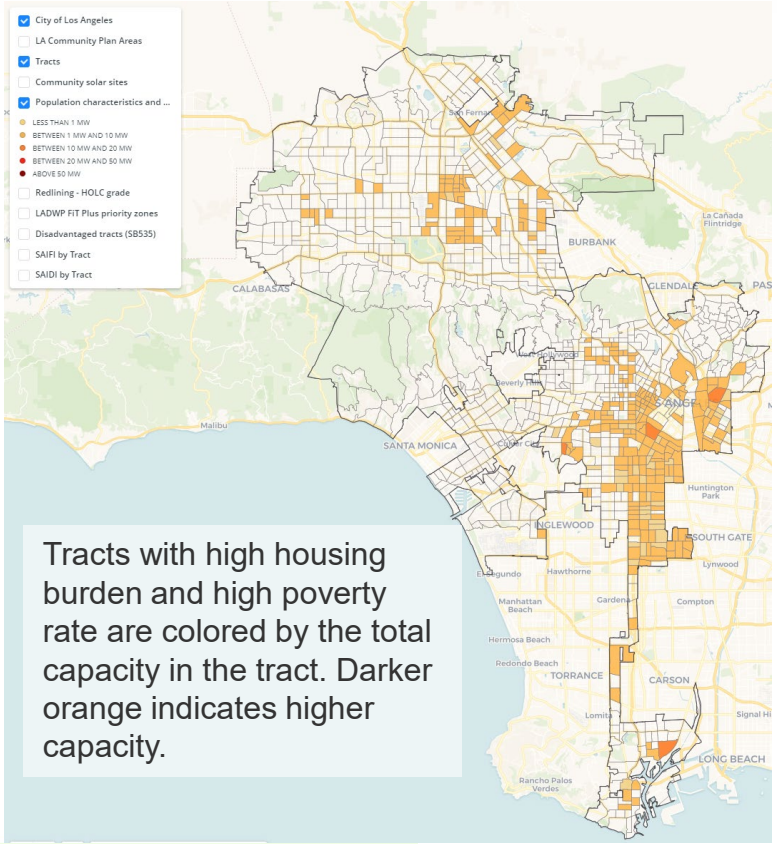
Historically redlined areas

- 57% of the sites are in historically redlined areas (areas designated C or D).
- Total potential solar capacity in historically redlined communities is 1,290 MW (29% of total capacity in LA of total capacity in LA).

Potential Solar Sites in Tracts with High Housing Burdens and High Poverty Rates

- 95% of households in disadvantaged tracts have high housing burden (>=50%). (Calculated from ACS 2019 data)
- 830 MW of potential capacity is in disadvantaged tracts with high housing burden (greater than 80%) and high poverty rate (greater than 80%).
- This corresponds to 19% of the total potential capacity.

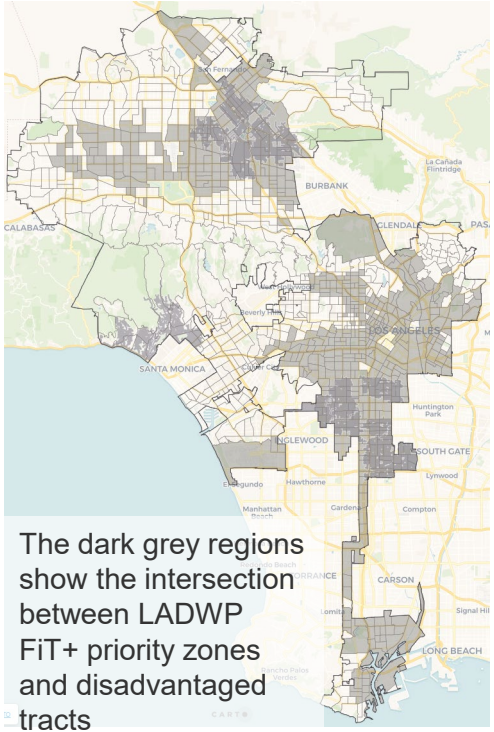




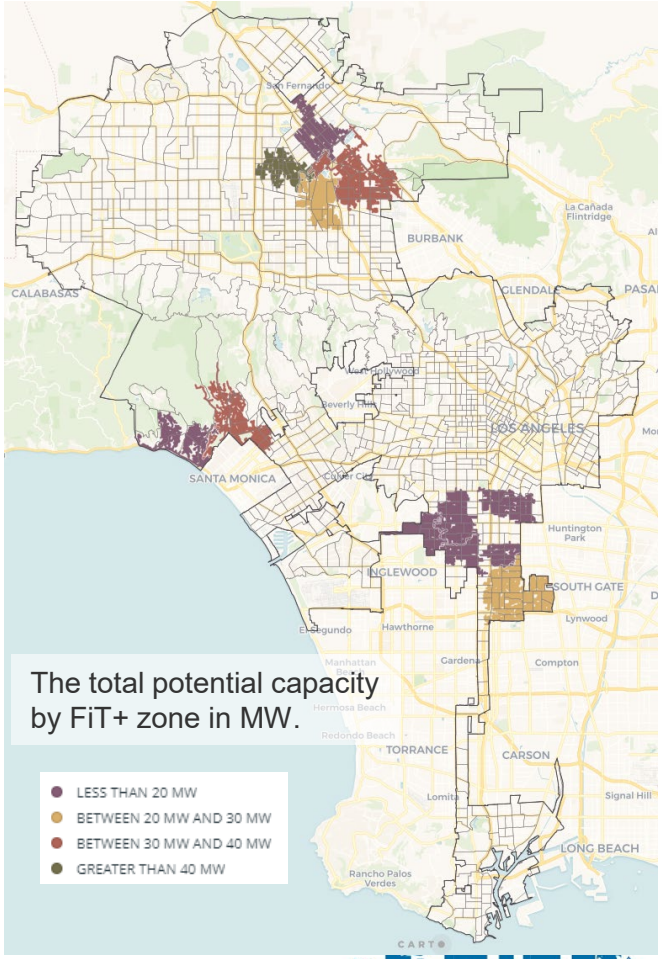
Tracts with high housing burden and high poverty rate are colored by the total capacity in the tract. Darker orange indicates higher capacity.

Potential Solar Sites in LADWP FiT+ Priority Zones

- 250 MW of potential solar capacity is in LADWP FiT+ priority zones which corresponds to 6% of the total potential capacity.



The dark grey regions show the intersection between LADWP FiT+ priority zones and disadvantaged tracts



The total potential capacity by FiT+ zone in MW.

LADWP Local Solar

Local Solar – By the Numbers

(Updated as of December 31, 2021)

Total 60,237 customer-installed solar systems connected to the grid

Net Energy Metering/Solar Incentive Program (SIP):

- $338.9 million in solar incentives for 34,601 systems since the program launch in 1999
- $288 million in incentives for 279.7 MW under state legislated program (SB1)*
- Total net-metered solar (includes SIP): 454.81 MW from 60,074 systems, generating approximately 751,000 MWh per year

*Includes incentives processed after the SIP program closed on December 31, 2018.

Feed-in Tariff (FiT) Program:

- 131 solar projects in service in the city, totaling 83.4 MW
- Two additional projects in the Owens Valley totaling 4 MW of capacity and 1 renewable landfill gas project with a capacity of 2.95 MW
- Total installed FiT program capacity: 90.35 MW.
- The energy produced from these projects is enough to supply nearly 26,700 homes

Feed-In Tariff Plus Program

- 5 projects submitted for evaluation totaling 1.78 MW

Solar Rooftops Program:

- 32 installations completed
- 116.4 kW of solar power being delivered
- 16 projects totaling 66.9 kW are expected to be installed in 2022

Shared Solar Program:

- 2,116 customers enrolled
- 177,850 kWh per month supplied

Utility Built Solar (in-basin)

- 47 installations completed totaling 6.9 MW

Source: LADWP 2021-22 Briefing Book

Interactive Map

https://nrel.carto.com/u/gds-member/builder/411ffd42-3873-42cb-8ae0-521d01f8f5b9/embed

Discussion

- Which layers in the presented map should be included in the ranking? Are communities interested in working with the data and curating the dataset—potentially identifying promising sites? Or providing rankings?
- Recreation centers have limited generation potential, while there is a much higher generation potential on multifamily buildings—how to address limitations with installing solar on multifamily buildings in low-to-moderate income (LMI) or disadvantaged neighborhoods?
- Can communities get involved in developing/initiating shared solar programs?
- Using parking canopies or solar carports for shading?
- Covered sidewalks with solar? (potential for future analysis)

Image source: Singapore sheltered walkway.

Image source: BCIT Burnaby campus' "energy oasis" solar panels. (BCIT).

Steering Committee Feedback

- Ensure community solar provides cost saving, resilience benefits to the local neighborhood
  - Concern about competing future land uses (parkland, affordable housing)
- Interest in decommissioned fossil fuel extraction/drill and processing sites for community solar
- Extensive ground truthing needed to determine viable/optimal sites in specific neighborhoods

Q&A

Green Jobs Workforce Development

Dr. Raul Hinojosa and Dr. Abel Valenzuela

Agenda

Part 1: Green Jobs Historical Calculator

Part 2: DWP Jobs and Regional Equity

Part 3: Projecting Green and DWP Jobs

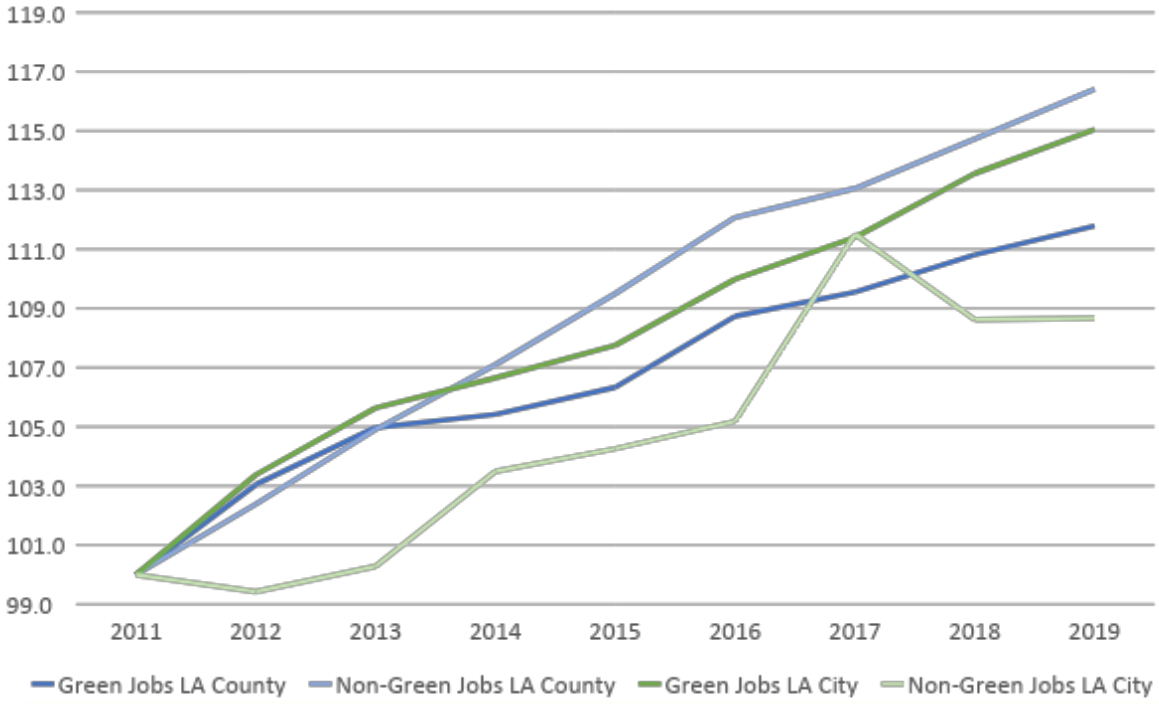
Part 4: Workforce Development and Community Engagement Challenges

Part 1: Green Jobs Historical Calculator

1. Green Job Historical Trends
2. Calculating Direct, Indirect and Induced Green Jobs
3. Regional/Racial Equity and Interdependence

Total green jobs have been growing more rapidly compared to total non-Green Jobs in LA City since 2011

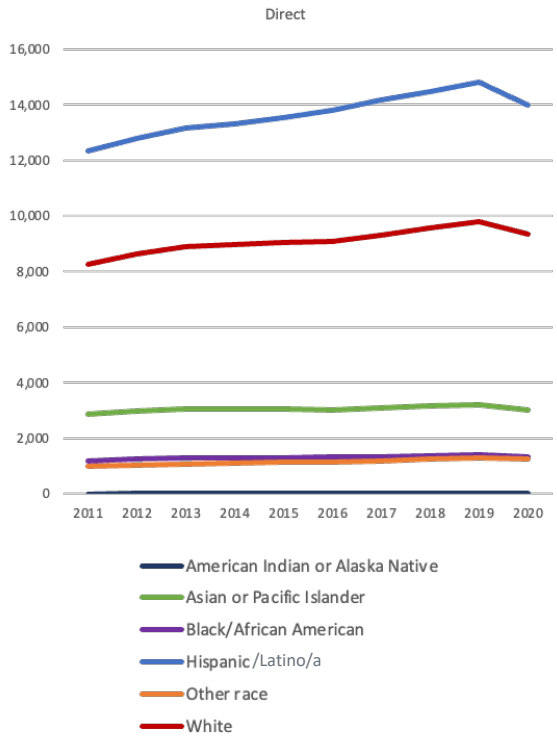
Figure 1: LA City and LA County, green and total non-green jobs growth index, 2011 = 100

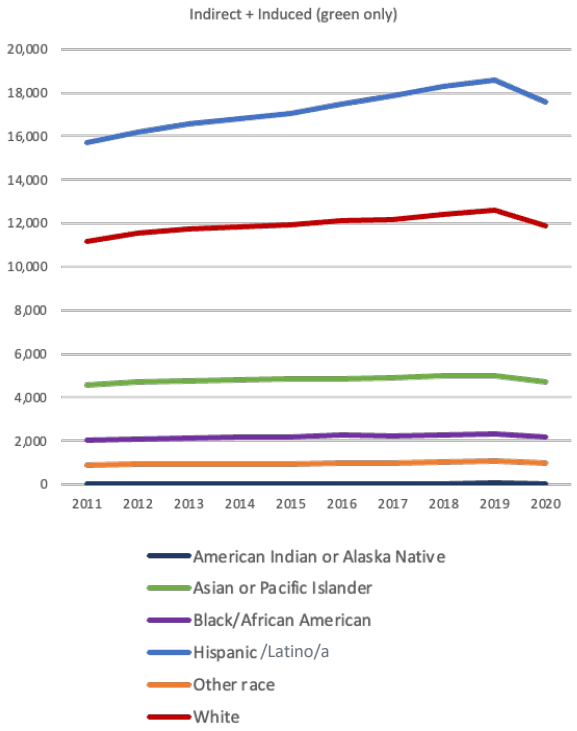


Green jobs in LA City have grown 8.2% on average from 2011 to 2019 (base year = 2011), while total non-green jobs grew 4.6%.

The Growth of Hispanic Green Jobs is very complementary and beneficial to White and Black Green and non-Green workers

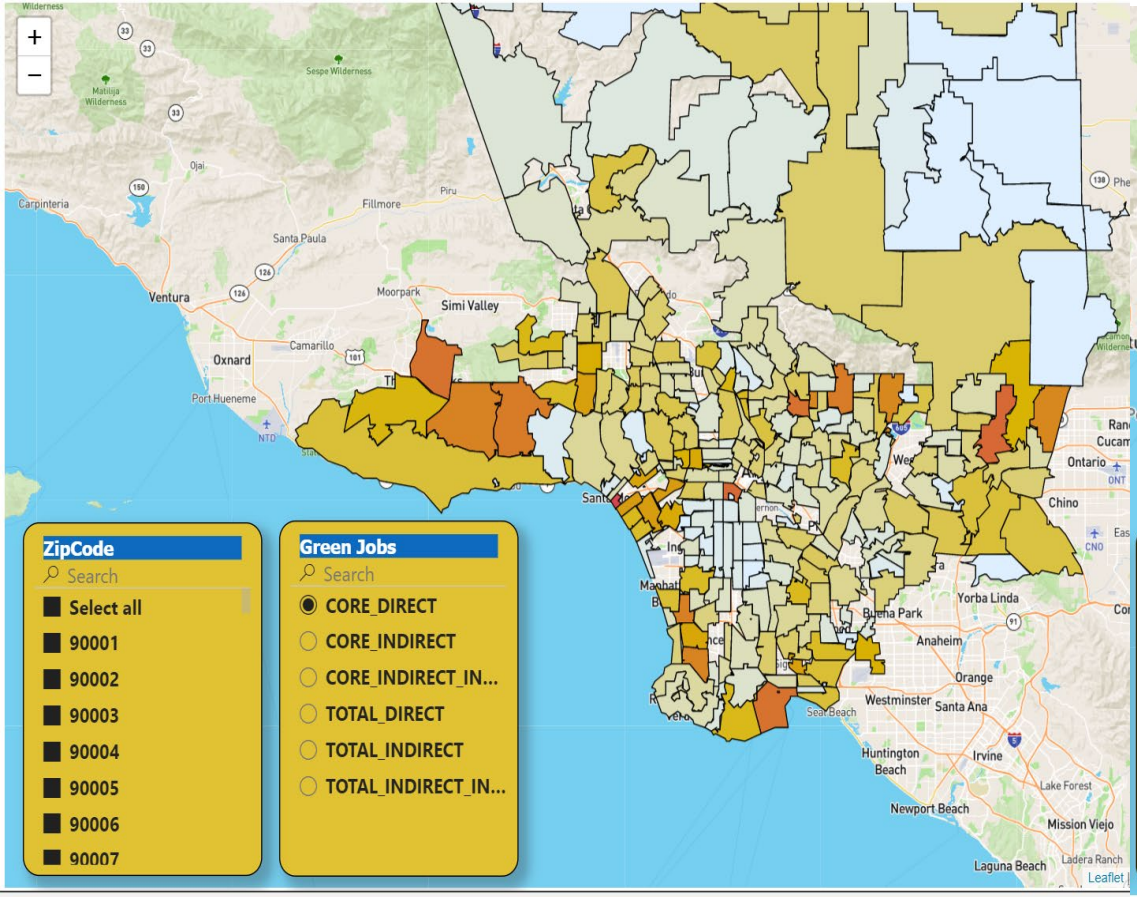
Figure 4: LA City Green Direct, Indirect and Induced Total Green Jobs by Ethnicity, Number of Jobs

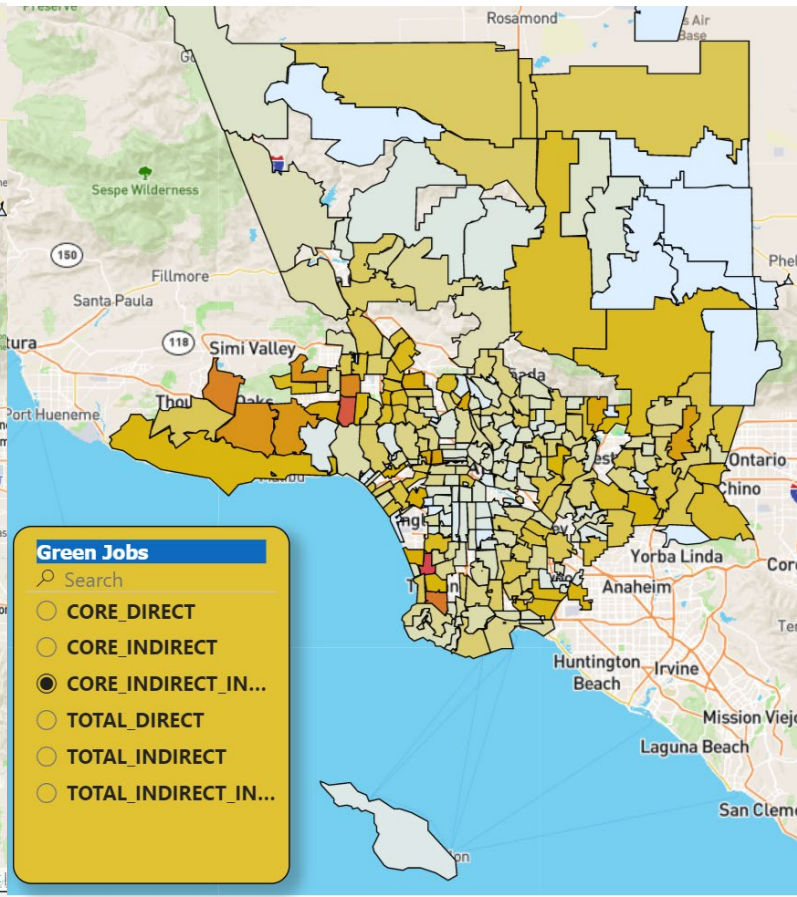




Hispanic workers are the largest group with Direct Green Jobs, yet the indirect + induced Green Jobs growth effects for all other races is higher than for Hispanic workers.

UCLA GIS MAPPING: Green Jobs by location of Work, Direct/Indirect+Induced





Part 2:
DWP Jobs and Regional Equity

Income

Occupation

Race/Ethnicity/Gender

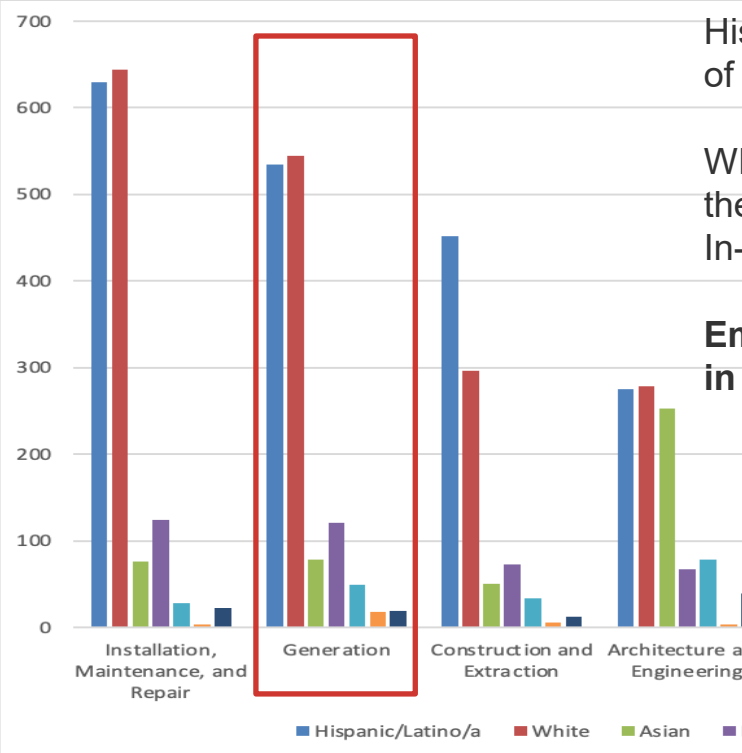
Geo-Residency DAC/non-DAC

Employment Impact of Investment

Main Takeaways from LADWP Employee Data

1. **Hispanic, White, Asian and Black workers make up the largest shares of employees in the DWP Power sector**
   - Hispanic workers are most represented in Construction, followed by White and Black workers
   - Energy Generation has White workers as the largest group, followed closely by Hispanic workers, and then Black workers
2. **Most DWP Workers, who are relatively well paid, do not live in Dis-Advantaged Communities (DACs)**
3. **However, Hispanic and Black workers make up the largest share of DWP employees living in DACs and earn the lowest wages of DWP workers living in both DACs and Non-DACs**
4. **Hispanic and Black workers are more concentrated in lower wages occupations and activities yet earn comparable wages in higher and lower paid occupations**

LADWP Total Workers in Power Sector by Occupation and Ethnicity



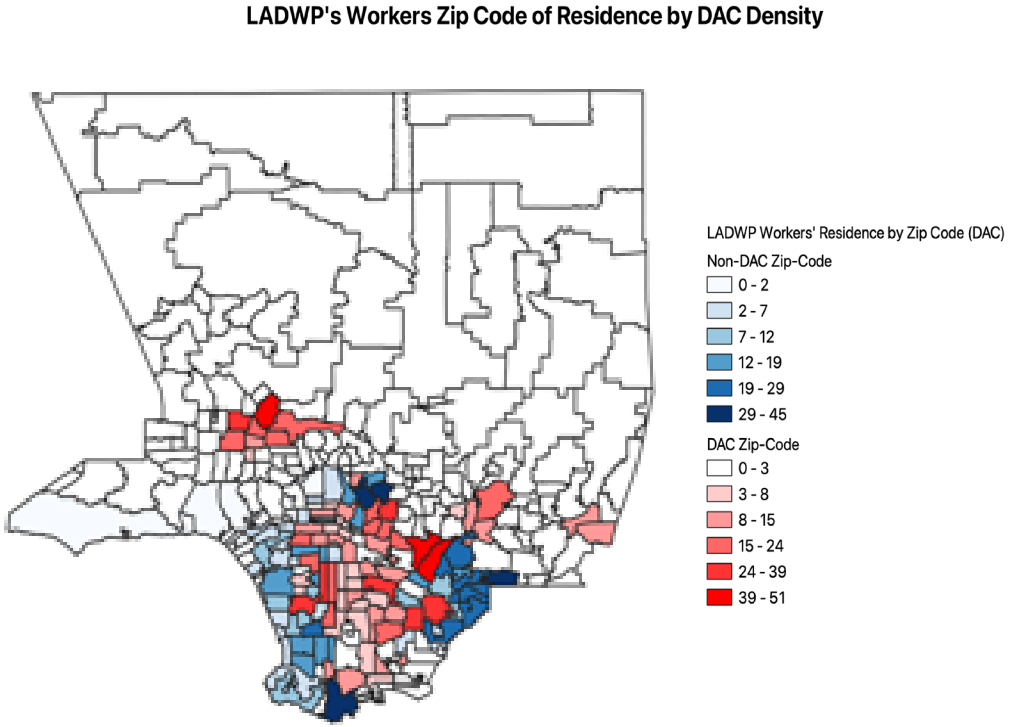
Hispanic, White and Black workers make up the largest share of employees in the DWP Construction occupations.

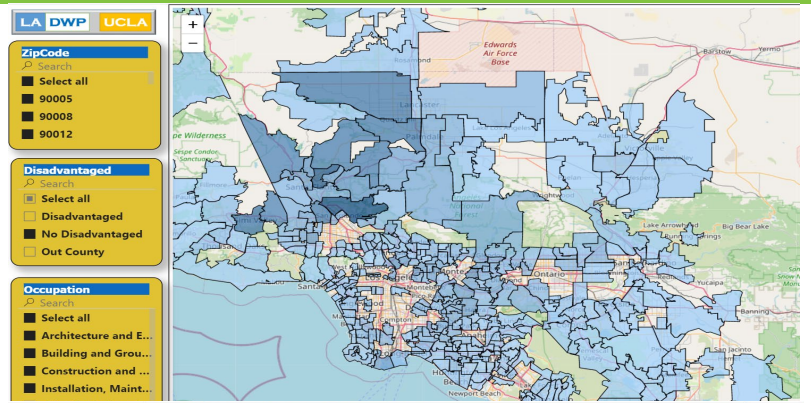
White, Hispanic and Black workers are also concentrated in the Power Generation sector projected to be transitioned from In-Basin Carbon to non-Carbon Generation.

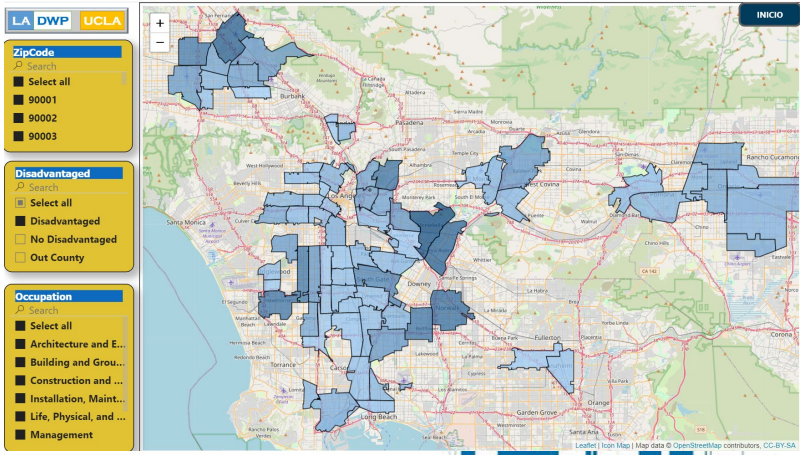
Employment Changes in Generation will be concentrated in DACs, such as Wilmington, CA.

Source: Author's elaboration based on LADWP Administrative Data

UCLA Mapping Tool: LADWP Workers Zip Code Residence by DAC / Non-DAC Density





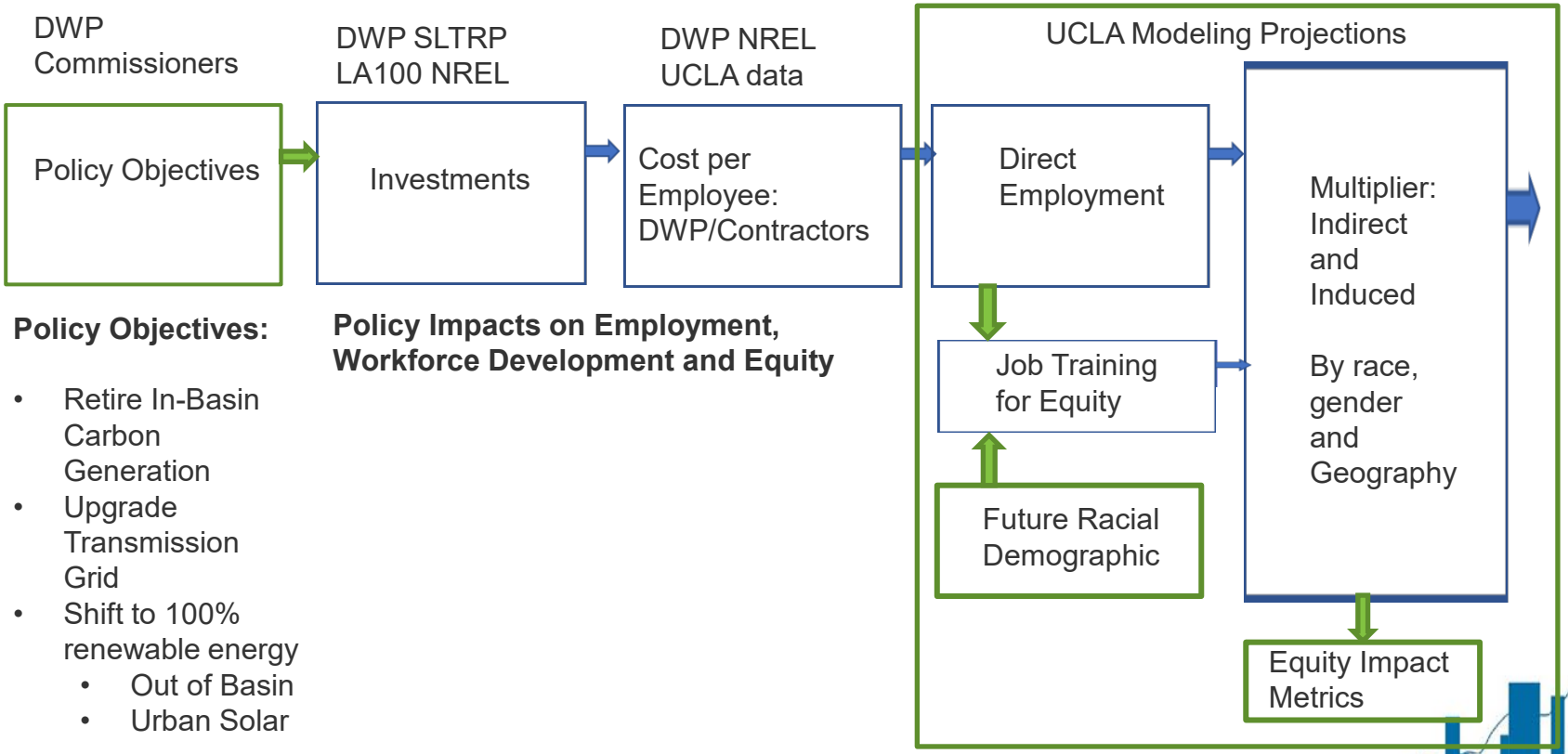


Part 3: Projecting LADWP Green Jobs

To ensure investments in DWP employment are sustainable and equitable, we must:

1) Estimate Baseline Inequality Gaps;
2) Estimate Employment Impacts of DWP;
3) Estimate Projected Demographic Change;
4) Estimate Necessary Workforce Development Investments.

Methodology for Estimating DWP Investment and Employment Impact



Policy Objectives:

- Retire In-Basin Carbon Generation
- Upgrade Transmission Grid
- Shift to 100% renewable energy
  - Out of Basin
  - Urban Solar

Policy Impacts on Employment, Workforce Development and Equity

Part 4: Community Engagement and Workforce Development Challenges

CASE STUDY: Wilmington Community

Methodology

- Historical Construction of Inequality, Projected Options
- Complementary Check to Equity Impact Modeling and Estimating Workforce Investment Requirements
- Community Resident and Organization Engagement of Data Evidence Usage for Future Strategic Investments for Workforce Training and Equitable Development
- Foundations for Equitable Workforce Trainings
- Principles of the High Road Workforce System

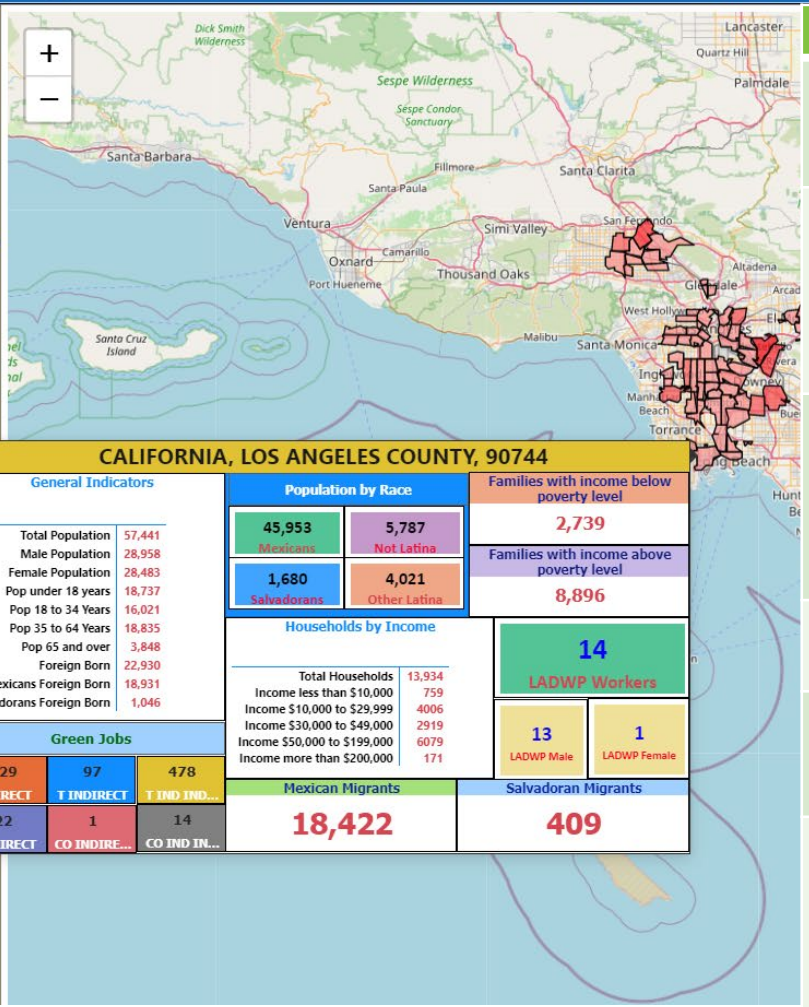
DWP Workers Residence by Zip Code Los Angeles County

INICIO

ZipCode
Search
- Select all
- 90001
- 90002
- 90003

Disadvantaged
Search
- Select all
- Disadvantaged
- No Disadvantaged
- Out County

Occupation
Search
- Select all
- Architecture and Er
- Building and Grour
- Construction and E
- Installation, Mainte
- Life, Physical, and S
- Management
- Office and Administ...
- Production
- Transportation and ...



DWP Data on Wilmington	
DAC Census Tracts in Zip Code	88%
LADWP Power Workers Residing in Wilmington	0.26%
LADWP Power Workers Reporting in Wilmington	2.4%
Green Jobs in Wilmington	807
Direct Green Jobs	329
Indirect + Induced Green Jobs	478

Legacy pollution

At or above at least one threshold?	**Yes**
Proximity to hazardous waste facilities Count of hazardous waste facilities within 5 kilometers	95th ↑ above 90th percentile
Proximity to National Priorities List (NPL) sites Proposed or listed NPL (Superfund) sites within 5 kilometers	73th ↓ below 90th percentile
Proximity to Risk Management Plan (RMP) facilities RMP facilities within 5 kilometers	99th ↑ above 90th percentile
AND	
At or above both associated thresholds?	**Yes**
Low income Household income is less than or equal to twice the federal poverty level	91st ↑ above 65th percentile
Higher education non-enrollment Percent of the census tract's population 15 or older not enrolled in college, university, or graduate school	91% ↑ above 80% percent

Wilmington Residents Community Engagement Meeting Approach

1. Community leaders have already identified the participants, all residents of Wilmington
2. Our first approach is to understand their level of knowledge on:
   - LADWP
   - Energy Consumption and Environmental Impacts
   - Wilmington Historical Background
   - Green Jobs Workforce Development
   - Justice 40 Funding Initiatives
3. Evaluate first resident's community engagement meeting to develop follow up meeting based on level of understanding.

Principles of the High Road workforce system — targeting quality jobs that provide economic security

Policy goals are to create job training and workforce pipeline to fulfill Green Economy needs, enabling upward mobility for Californians, while integrating all programs and resources into one effective community oriented strategy.

Public investment	Job quality	Equity	Environmental sustainability	Worker voice
• funds should be provided to ensure the program succeeds	• green jobs that pay well, are secure, and contribute to valuable industries	• bring green job workers to the table, enabling more voices to be heard	• work to increase green jobs that are environmentally sustainable	• address systemic inequalities, bringing people to green jobs that have excluded them

Steering Committee Feedback

- “Similar to our community solar conversation, we need to ground truth in these communities to understand what are the barriers for communities of colors to access these jobs? for ex. additional training needed or access to training programs. while also educating folx about the opportunities for good jobs at LADWP”

- “LADWP could take a look at the SEED workforce development program from LA Metro. The SEED School of Los Angeles County will be the nation’s first boarding school for grades 9-12”

Q&A

Wrap Up and Next Steps

Going Forward

Advisory Committee Meetings

Next Meeting Virtual
• Legal and Regulatory Constraints • Household energy modeling approach • Transportation EV charging infrastructure • Rate analysis/affordability modeling

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

Thank you!