



Department of  
Environmental  
Conservation

# Climate Justice Working Group DRAFT Disadvantaged Communities Criteria

December 13, 2021  
Voting meeting with discussion notes

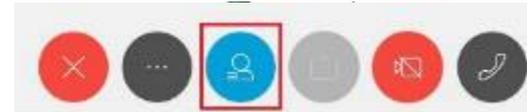
# Meeting Procedures

## Before beginning, a few reminders to ensure a smooth discussion:

- Working Group Members should be on mute if not speaking.
- If using phone for audio, please tap the phone mute button.
- If using computer for audio, please click the mute button on the computer screen (1<sup>st</sup> visual).
- Video is encouraged for Working Group members, particularly when speaking.
- In the event of a question or comment, please use the hand raise function (2<sup>nd</sup> visual). Click the participant panel button (3<sup>rd</sup> visual) for the hand raise function. Someone will call on members individually, at which time please unmute
- Please state your name before speaking



You'll see  when your microphone is muted





# Welcome and Roll Call



# Agenda for December 13

1. Review of CLCPA legislation
2. Voting rules & process
3. Proposed draft DAC criteria summary
4. Discuss each element of draft DAC criteria
5. (if needed) Outline any limitations or alternatives
6. Vote for overall draft DAC criteria
7. Next steps to prepare for public input



# DAC Criteria Legislative Review



# Purpose of DAC Criteria

ECL § 75-0111(1)(b)

“The [climate justice] working group, in consultation with the department, the departments of health and labor, the New York state energy and research development authority, and the environmental justice advisory group, will establish criteria to identify disadvantaged communities **for the purposes of co-pollutant reductions, greenhouse gas emissions reductions, regulatory impact statements, and the allocation of investments** related to this article”

# 40% Benefits Goal

## ECL § 75-0117

"State agencies, authorities and entities, in consultation with the environmental justice working group and the climate action council, shall, to the extent practicable, invest or direct available and relevant programmatic resources in a manner designed to **achieve a goal for disadvantaged communities to receive forty percent of overall benefits of spending** on clean energy and energy efficiency programs, projects or investments in the areas of housing, workforce development, pollution reduction, low income energy assistance, energy, transportation and economic development, provided however, that disadvantaged communities shall receive **no less than thirty-five percent** of the overall benefits of spending on clean energy and energy efficiency programs, projects or investments and provided further that this section shall not alter funds already contracted or committed as of the effective date of this section."

The CJWG has discussed that the 40% goal should be considered a minimum, and that non-DAC communities are still available for the remaining ~60% of funds.



# Disadvantaged Communities Description

“Disadvantaged Communities” means communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households.” (ECL § 75-0101(5))

ECL § 75-0111(1)(c)

“Disadvantaged communities shall be identified based on geographic, public health, environmental hazard, and socioeconomic criteria, which shall include but are not limited to:

- i. Areas burdened by cumulative environmental pollution and other hazards that can lead to negative public health effects;
- ii. Areas with concentrations of people that are of low income, high unemployment, high rent burden, low levels of home ownership, low levels of educational attainment, or members of groups that have historically experienced discrimination on the basis of race or ethnicity; and
- iii. Areas vulnerable to the impacts of climate change such as flooding, storm surges, and urban heat island effects.”

# CJWG vote on draft criteria begins the public input process (ECL § 75-0111(2))

“Before finalizing the criteria for identifying disadvantaged communities and identifying disadvantaged communities pursuant to subdivision one of this section, the [DEC] shall publish draft criteria and a draft list of disadvantaged communities and make such information available on its website.

a. The council shall hold at least six regional public hearings on the draft criteria and the draft list of disadvantaged communities, including three meetings in the upstate region and three meetings in the downstate region, and shall allow at least one hundred twenty days for the submission of public comment.

b. The council shall also ensure that there are meaningful opportunities for public comment for all segments of the population that will be impacted by the criteria, including persons living in areas that may be identified as disadvantaged communities under the proposed criteria.”



# Proposed Voting Process



# Outline of Voting Process

- Discuss each element of the draft DAC Criteria
  - Make live edits to each element if/as needed
  - Temperature check for each element (**not a vote**)
- **-- 10 minute break around 2:30pm --**
- Vote for the overall draft criteria
  - Make live edits per above
  - We will post the final PPT with updated language
- If needed hear proposals for alternate scenarios



# Voting Rules

- Need a quorum to be present and to vote yes (7 of 13 CJWG members)
- All members (including Agency) have equal vote
- Roll call vote starting with CJWG members

# Proposed Disadvantaged Community Draft Criteria: Summary

## Geographic DAC Definition

1. Include 45 indicators of (a) environmental exposures, burdens and climate change risks, and (b) sociodemographic and characteristics and health outcomes in the Disadvantaged Communities Definition, as listed in the “Indicator Lists”.
2. Score census tracts on relative basis using (a) percentile ranks of all indicators, (b) hierarchical scoring approach (indicators within factors; factors within component), and (c) multiplying Environmental/Climate component by Population/Health component to get overall score
3. Include 35% of New York State census tracts as Geographic DACs, considering each tracts’ relative rank (a) statewide or (b) regionally (in NYC or Rest-of-State). Automatically include tracts where at least 5% of land is federally-recognized reservation or owned by an Indian Nation.

## Individual Criteria (applicable only for investment purposes, ECL 75-0117)

4. Include low-income households located anywhere in the State in the Disadvantaged Communities criteria for the purpose of investing or directing clean energy programs, projects or investments.
5. Define low-income households as households reporting annual total income at or below 60% of State Median Income, or are otherwise categorically eligible for low-income programs.

## Annual Evaluation and Review

6. Per statute, CJWG will review DAC criteria and methods at least annually.

# Role of draft criteria summary language

The draft criteria descriptions herein are intended to summarize the draft methods that will be used to identify draft disadvantaged communities – to facilitate discussion and voting today.

The draft methodology, draft list of census tracts, and draft maps will be published as part of the public input process.

# Draft Disadvantaged Communities Criteria



# 1 Indicators: Framework

The Geographic DAC scoring approach uses data from national and state sources to create 45 indicators in the following categories. For each indicator the percentile-rank of each census tract is used in scoring.

## Environmental Burdens and Climate Change Risks

Potential  
Pollution  
Exposures

Land use assoc.  
with historical  
discrimination or  
disinvestment

Potential  
Climate  
Change Risks

20 Indicators in this component

## Population Characteristics and Health Vulnerabilities

Income,  
Education,  
Employment

Race,  
Ethnicity,  
Language

Health  
Impacts &  
Burdens

Housing,  
Energy,  
Communica-  
tions

25 Indicators in this component



## 1

# Environmental Burdens and Climate Change Risks: Draft Indicators (20)

## Potential Pollution Exposures

- Vehicle traffic density
- Diesel truck and bus traffic
- Particulate Matter (PM2.5)
- Benzene concentration
- Wastewater discharge

## Land use and facilities associated with historical discrimination or disinvestment

- Remediation Sites (e.g., NPL Superfund or State Superfund/Class II sites)
- Regulated Management Plan (chemical) sites
- Major oil storage facilities (incl. airports)
- Power generation facilities
- Active landfills
- Municipal waste combustors
- Scrap metal processors
- Industrial/manufacturing/mining land use (zoning)
- Housing vacancy rate

## Potential Climate Change Risks

- Extreme heat projections (>90° days in 2050)
- Flooding in coastal and tidally influenced areas (projected)
- Flooding in inland areas (projected)
- Low vegetative cover
- Agricultural land
- Driving time to hospitals or urgent/critical care



## 1

# Population Characteristics and Health Vulnerabilities: Draft Indicators (25)

## Income, Education & Employment

- Pct <80% Area Median Income
- Pct <100% of Federal Poverty Line
- Pct without Bachelor's Degree
- Unemployment rate
- Pct Single-parent households

Within this factor, both income metrics have 2x weight

## Race, Ethnicity & Language

- Pct Latino/a or Hispanic
- Pct Black or African American
- Pct Asian
- Pct Native American or Indigenous
- Limited English Proficiency
- Historical redlining score

Within this factor, Pct Latino/a and Pct Black have 2x weight

## Health Impacts & Sensitivities

- Asthma ED visits
- COPD ED visits
- Heart attack (MI) hospitalization
- Premature Deaths
- Low Birthweight
- Pct without Health Insurance
- Pct with Disabilities
- Pct Adults age 65+

12/13 proposal to add  
Diabetes

## Housing, Energy, Communications

- Pct Renter-Occupied Homes
- Housing cost burden (rental costs)
- Energy Poverty / Cost Burden
- Manufactured homes
- Homes built before 1960
- Pct without Internet (home or cellular)



# 1 Temperature Check #1: Indicator List

## Draft Criteria

Include the proposed draft 45 indicators of (a) environmental exposures, burdens and climate change risks, and (b) sociodemographic and housing characteristics and health vulnerabilities in the Disadvantaged Communities Definition.

The documentation will list other indicators the CJWG considered and/or wanted to include and data limitations.

## Temp Check Results

Yes: ## of ## members

No: ## of ## members

### Comments:

Potential to include additional data based on the comments received during the public process. This includes DOH data on diabetes, even if ED/hospitalization data may undercount people managing diabetes (though it may take a few months to prepare data at census tract level).



## 2 Scoring Approach: Overview

Score census tracts **relative to each other**:

- (a) Percentile ranks of all indicators (e.g., relative index from 0-100)
- (b) Multi-step scoring approach (weighted averages of (1) indicators within factors, then (2) factors within components)
- (c) Multiply Environmental/Climate component by Population/Health component to get overall score

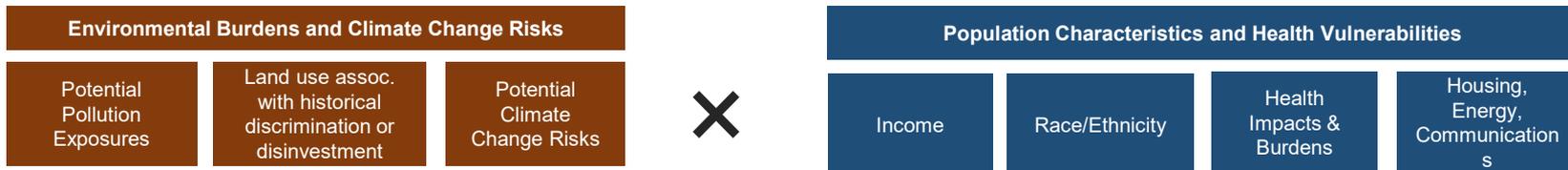
This results in an overall score that serves as a \*relative ranking\*

The overall score can be used to determine each tract's relative score statewide or regionally.



## 2 Scoring Approach: Multi-Step Process

Estimate factor scores as weighted averages of indicator percentile ranks (step 1), then estimate component scores as weighted average of percentile scores.



Factor scores are weighted and added before multiplying:

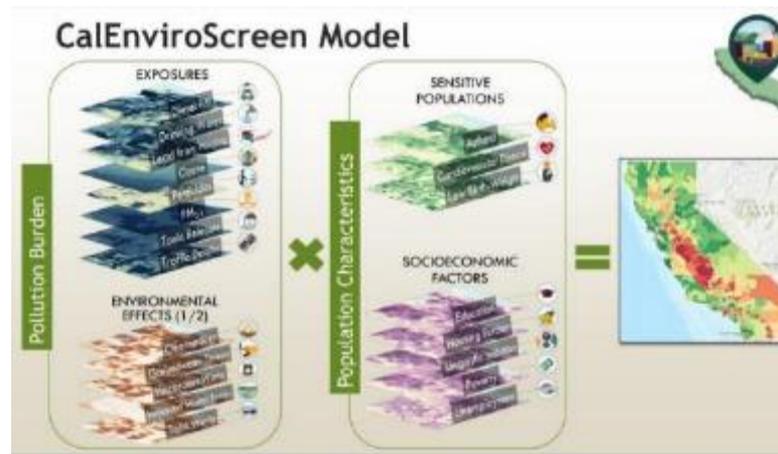


Climate Risks are given double weight within Component to equalize the combined weights of Environmental factors (Pollution Exposures + Land Use) with Climate.

## 2

## Scoring Approach: Multiplying place-based Burdens with population/health Vulnerabilities

Similar to California's CalEnviroScreen approach, we multiply Environmental/Climate Burdens by Population/Health to reflect the “effect modifier” relationship wherein sociodemographic characteristics and/or health sensitivities may exacerbate or mitigate place-based burdens/risks



Note: Since Burdens and Vulnerabilities are multiplied, they have equal weight, regardless of how indicators or factors within each are weighted.

<https://oehha.ca.gov/media/downloads/calenviroscreen/presentation/calenviroscreen40webinarslidesd12021.pdf>

## 2 Scoring Approach: Combining Data

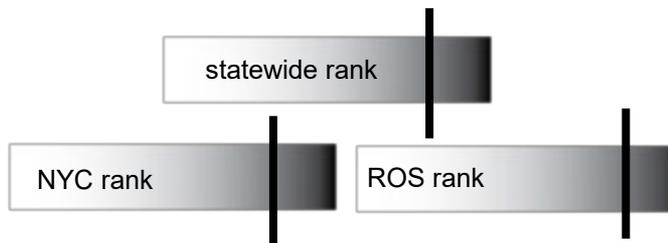
Group Indicators into **Factors** (factor scores are weighted average of indicator percentiles)



Combine Factors into **Component Scores** (also weighted averages)



Multiply components to generate an **overall score** (used to calculate a relative ranking statewide and regionally)



## 2

## Temperature Check #2: Scoring Approach

### Draft Criteria

Score census tracts on relative basis using (a) percentile ranks of all indicators, (b) multi-step scoring approach (indicators within factors; factors within component), (c) multiplying Environmental/Climate component by Population/Health component to get overall score.

### Temp Check Results

Yes: ## of ## members

No: ## of ## members

Comments:

Multiplicative approach essentially “equal weights” environment/climate with population, that doesn’t capture groundtruthed areas. Another option would be to automatically include some communities on the basis of population and health vulnerabilities alone.

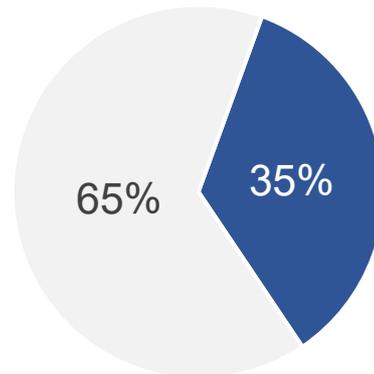


# 3 Designation: Include 35% of Tracts

CJWG considered including 35% of census tracts in New York as Geographic Disadvantaged Communities

1,721 of New York's 4,918 census tracts identified as Geographic DACs.

The CJWG recommends re-assessing included tracts after one year, considering results of Agency investment reporting.



## 3

## Designation: Rationale for including 35% of census tracts

There is no formula for the percentage of census tracts to identify as DACs. The scoring process considers 45 indicators and ranks census tracts relative to each other.

The CJWG considered the following factors in establishing this value:

- a) **CLCPA “benefits of spending” goal of 40%:** And targeting a threshold <40% may encourage greater-than-proportional share of spending to benefit DACs (though CJWG urges Agencies to spend more than 40% among geographic DACs and low-income households).
- b) **Groundtruthing:** CJWG spent considerable time looking at their communities and identified census tracts that should likely be DACs. A higher threshold (40% or more) captures more of these, but also begins to capture gentrified/gentrifying areas where not everyone needs as much support.
- c) **Potential low-income household criteria:** In “groundtruthed” DACs that aren’t in the 35%, the low-income household criteria can ensure low-income households are included (many of whom may be people of color).
- d) **Room for review/expansion:** Better to start with smaller share of DACs and add, then try to remove DACs
- e) **Benchmarks:** About 32% of NY households have incomes below 60% state median, and about 45% of people identify as BIPOC (non-white). While not exact, these numbers provide some bounds for the percentage of tracts included, and per (d), CJWG wanted to start smaller.



## 3

# Designation: Overview of Approach

Bubbles are not sized to scale.

Scored based on combined score  
Included if top-scoring in region  
(NYC, rest-of-state) or statewide

Automatically  
included

Scored based on  
Environmental/Climate alone  
**if** population >100 people  
(53 of 138 eligible for scoring)

4,780 tracts with  
sufficient census data  
to score Env/Climate  
\*and\* population/health

19  
Indigen-  
ous/  
Tribal  
Areas

138 tracts  
with  
insufficient  
population/  
health data



# 3 Designation: Detailed Approach

Overall Goal: Identify census tracts in New York State as Disadvantaged Communities, aiming to include 35% of census tracts.

Multi-Step Approach:

- (1) Automatically include 19 census tracts that are federally-designated reservation territory or state-recognized Nation-Owned Land
- (2) Use each census tracts' overall score (from multiplying the Environmental/Climate component with Population/Health component) to calculate its **percentile rank statewide and regionally** (NYC vs. Rest of State)
- (3) Select census tracts that score in the top 27.4% of their regional or statewide percentile rank to achieve the overall goal of 35% of tracts designated\*
- (4) For tracts with few census-defined households or population (<300 households or <500 people, but more than 100 people), designate as DACs if their “environmental burdens and climate change risk” is in the top 27.4% of their regional or statewide percentile rank.
- (5) Exclude census tracts with <100 people from scoring (unless they are Indigenous or Tribal Areas)

\*The percentile rank scoring threshold of 27.4% was determined to achieve the 35% designation threshold, considered all other scoring rules.



## 3

# Designation: Consider Statewide and Regional ranking to identify DACs

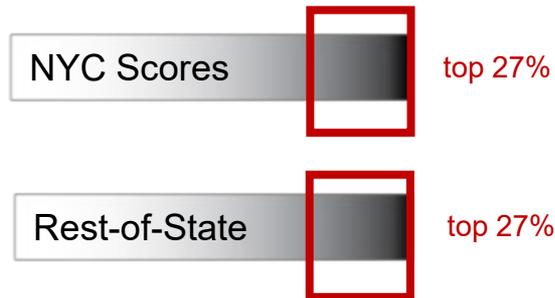
## Statewide Score

How each community ranks (on all of the data) within the **entire** state



## Regional Scores

How each community ranks (on all of the data) in NYC and Rest-of-State separately



35%  
Designated

Designate communities that score in either top 27% statewide OR regionally, to achieve the overall goal that 35% of census tracts are designated



## 3

# Scoring: Automatically including 19 Tribal and Indigenous Areas

Census Tract	County	Census Place Name	Nation	Land	Pct of Tract Land Area
36009940200	Cattaraugus		Seneca Nation	Reservation	100%
36029940100	Erie		Tonawanda Seneca	Reservation	100%
36003940200	Allegany		Seneca Nation	Reservation	100%
36033940000	Franklin	Akwesasne CDP	Saint Regis Mohawk Tribe	Reservation	100%
36067940000	Onondaga	Nedrow CDP	Onondaga Nation	Reservation	99%
36037940100	Genesee		Tonawanda Seneca	Reservation	99%
36063940001	Niagara		Tuscarora Nation	Reservation	99%
36009940300	Cattaraugus	Salamanca city	Seneca Nation	Reservation	99%
36009940000	Cattaraugus		Seneca Nation	Reservation	99%
36029940000	Erie		Seneca Nation	Reservation	99%
36063940100	Niagara		Tonawanda Seneca	Reservation	98%
36013037600	Chautauqua	Forestville CDP	Seneca Nation	Reservation	6%
36103159511	Suffolk	Mastic CDP	Unkechaug Nation	Reservation	6%
36103190705	Suffolk	Tuckahoe CDP	Shinnecock Nation	Reservation	6%
36099950300	Seneca	Seneca Falls CDP	Cayuga Nation	Owned	13%
36053030103	Madison	Oneida city	Oneida Nation	Owned	10%
36053030300	Madison	Canastota village	Oneida Nation	Owned	7%
36063021100	Niagara	Niagara Falls city	Seneca Nation	Owned	7%
36053030600	Madison	Munnsville village	Oneida Nation	Owned	6%

Tribal and Indigenous Nation Lands if:

- Tract contains >5% federally-designated reservation territory (Source: Census)
- Tract contain >5% of nation-owned land (Source: NYS parcel ownership data)



# 3 Designation: Low Household Counts

138 of 4,918 tracts (2.8%) have **household counts that are too low for reliable Census data**

- Implemented as “<300 households or <500 people”
- This includes sparsely-populated areas as well as group quarters like correctional facilities where there is no “household” data on things like household income
- Of these 138 tracts, 85 have <100 people (and 64 have zero population).

**Of the remaining 53 tracts with at least 100 people:**

- They are scored on the basis of **Environmental/Climate Burdens alone** (if their Burdens score fall in the top **27.4%** statewide or top **27.4%** for NYC or Rest-of-State, using the same designation level as overall scoring)
- This adds ~12 tracts with low household counts to the DAC definition

(This means 81 tracts are not part of scoring (4 of the 85 are Tribal/Indigenous Land))

## 3

# Designation: Regional Results

Within \*each\* region, what percentage of census tracts would be geographic DACs?

Region	% Designated DAC
New York City	45%
Long Island	12%
Mid-Hudson	45%
Western NY	32%
Finger Lakes	35%
Capital Region	22%
Central NY	36%
Southern Tier	18%
Mohawk Valley	19%
North Country	15%
<b>Total</b>	<b>35%</b>

About 45% of NYC would be designated a Geographic DAC.

In rural regions, a smaller share of tracts are designated.

On average (and overall), 35% of tracts are designated



## 3

# Designation: Regional Results

Across the state, what regions have proportionally more or fewer DACs? (relative to population)

Region	Share of Geographic DACs	Share of NY Total Population	Share of NY Low Income Population
New York City	59%	43%	51%
Long Island	5%	15%	7%
Mid-Hudson	14%	12%	9%
Western NY	6%	7%	8%
Finger Lakes	5%	6%	7%
Capital Region	3%	6%	5%
Central NY	4%	4%	4%
Southern Tier	2%	3%	4%
Mohawk Valley	1%	2%	3%
North Country	1%	2%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

NYC makes up 59% of households in Geographic DACs, compared with 51% of low-income households

## 3

# Temperature Check for #3: Designation

## Draft Criteria

Include 35% of New York State census tracts as Geographic DACs, considering each tracts' relative rank (a) statewide or (b) regionally (in NYC or Rest-of-State). Automatically include tracts where at least 5% of land is federally-recognized reservation or owned by an Indian Nation.

## Temp Check Results

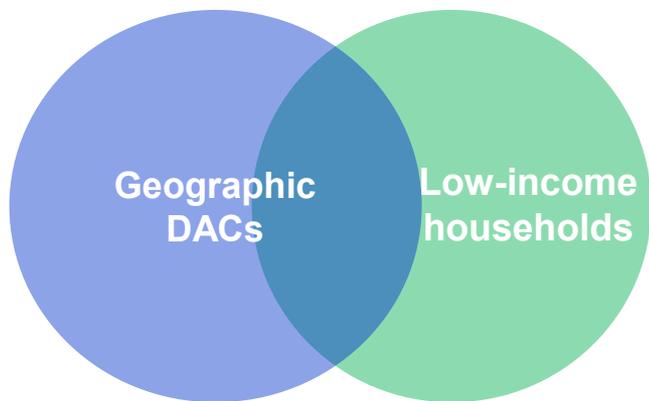
Yes: ## of ## members

No: ## of ## members

### Comments:

- CJWG wants more information on how State is engaging with Tribal Nations and has been pressing for State engagement.
- DEC had reached out to Nation Leadership during Annual Meetings regarding the work of the CJWG and CAC, inviting them to engage on the process. A letter cosigned by DEC and NYSERDA was also mailed.
- NYSERDA met with Onondaga leadership, HETF staff on 8/25/21 to discuss Climate Change issues, solar power, etc. Sameer reports that the Nation is unsure how to engage in the CLCPA process.

# 4 Individual Households: Purpose



Include low-income households located anywhere in the State in the Disadvantaged Communities criteria **for the purpose of** investing or directing clean energy programs, projects or investments (i.e., only for purposes of ECL 75-0117).

# 4 Temperature Check for #4: Include Low-Income Households

## Draft Criteria

Include low-income households located anywhere in the State in the Disadvantaged Communities criteria for the purpose of investing or directing clean energy programs, projects or investments (i.e., only for purposes of ECL 75-0117).

## Temp Check Results

Yes: ## of ## members

No: ## of ## members

Comments:



# 5 Low-Income Definition: Options

**Poverty:** Annual household income at or below 100% of Federal Poverty Level

**Low income:** Annual household income at or below 60% State Median Income (SMI), or categorical eligibility with other low-income programs

Selected to (a) align with publicly-administered programs, (b) minimize additional income documentation and screening (SNAP, SSI, Temporary Assistance), (c) and start at low-income threshold, which can be reassessed after 1 year

**Moderate income:** Annual household income above 60% of SMI, but lower than 80% of Area Median Income (and sometimes 80% state median income)



## 5

# Low-Income Definition: Income verification options

Household income below 60% State Median for household size, or...

EmPower New York Income Eligibility Guidelines 2021-2022

Household Size	Maximum Gross Monthly Income	Maximum Gross Annual Income
1	\$2,729	\$32,748
2	\$3,569	\$42,828
3	\$4,409	\$52,908
4	\$5,249	\$62,988
5	\$6,088	\$73,056
6	\$6,928	\$83,136
7	\$7,086	\$85,032
8	\$7,243	\$86,916
9	\$7,975	\$95,700
10	\$8,712	\$104,540

The current income guidelines for EmPower New York are set at 60% of the state median income.

...participate in other low-income programs with similar or lower thresholds (“categorical eligibility”)

Would include programs such as:

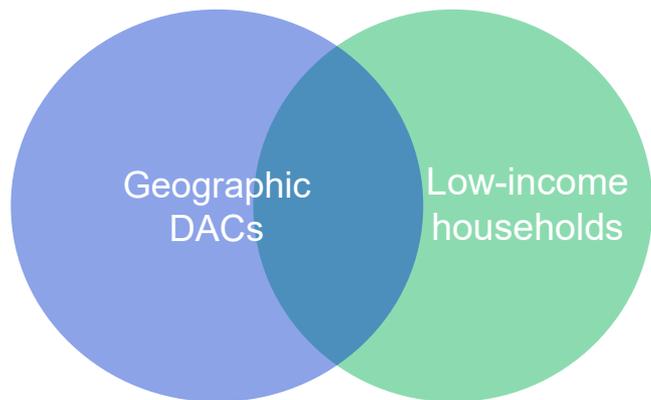
- HEAP
- EmPower
- Solar for All
- Weatherization Assistance Program
- Utility Bill Assistance
- SNAP
- Temporary Assistance

Goal: minimize additional paperwork for people who have already applied for other programs. Agencies will review and confirm the list of programs.

# 5 How many households might be included under different low-income definitions

35% of households in geographic DACs

Lower-income households outside of DACs



Income Threshold	Additional HHs outside of DACs (APPROXIMATE)	Total % of State (geographic + individual DAC)
Adding <100% FPL	+6%	41%
Adding <200% FPL (Proxy for 60% State Median)	+14%	49%
Adding <80% Area Median Income (AMI)	+23%	58%

\*Agencies would implement as <60% of State Median Income. 200% Federal Poverty Line is ~\$6,000 lower than 60% of State Median Income, so more households than shown here would be added.

## 5

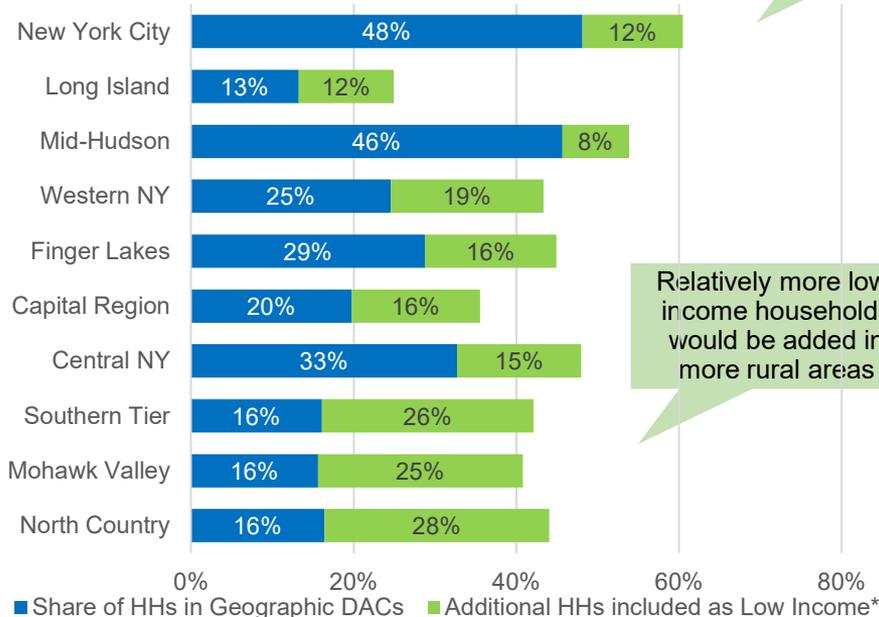
# Low-Income Definition: Implications by Regions

Using 200% of Federal Poverty Line as a proxy for a 60% SMI definition, the individual income criteria would add relatively (proportionally) more households in rural regions. New York City would still have (proportionally) the most households included.

~48% of NYC households are in Geographic DACs

Percentage of Households per Region in Expanded DAC Definition

An additional 12% would be added through low-income criteria

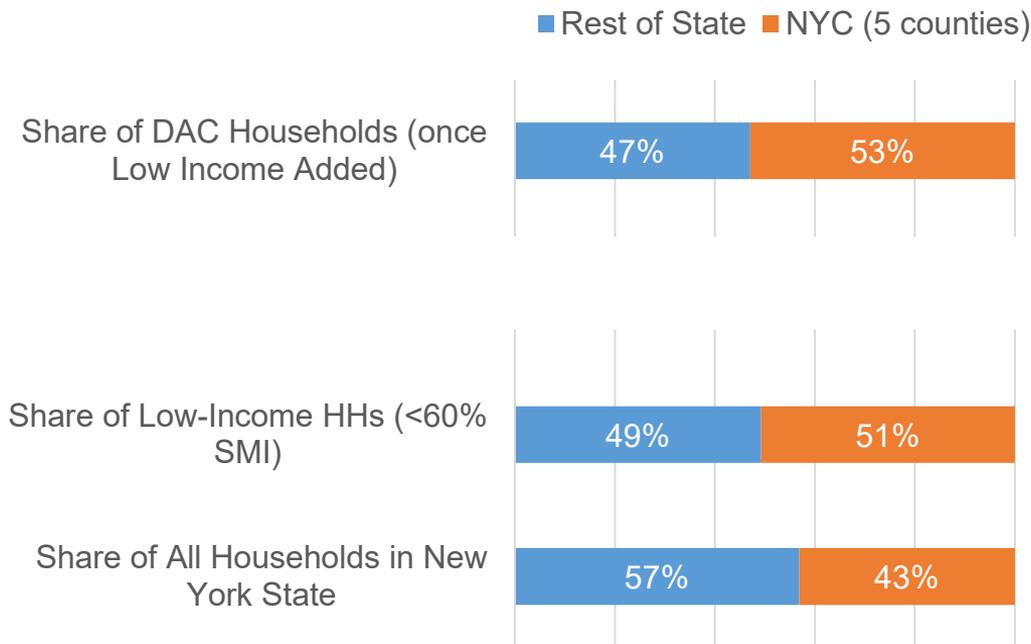


Relatively more low-income households would be added in more rural areas

\*Estimated using 200% FPL as a proxy for 60% SMI; actual counts may be slightly higher

## 5

# Low-Income Definition: Implications for NYC



Under the expanded definition, households in the five NYC counties make up 53% of all DAC households...

...compared with 51% of all low-income households, and 43% of households overall.

## 5

# Temperature Check for #5: Definition of Low-Income Households

## Draft Criteria

Align definition of low-income with current administrative practice and thresholds associated with publicly administered low-income energy programs in New York State. The threshold for establishing income eligibility for low-income energy programs is annual household income at or below 60% of State Median Income, or are otherwise categorically eligible for low-income programs.

## Temp Check Results

Yes: ## of ## members

No: ## of ## members

Comments:

**Might want to consider moving to include moderate-income households, or affordable housing buildings or residents, in the future.**



## 6 Annual Review: CLCPA Language

“The [climate justice working] group will meet no less than annually to review the criteria and methods used to identify disadvantaged communities and may modify such methods to incorporate new data and scientific findings. The climate justice working group shall review identities of disadvantaged communities and modify such identities as needed”

With the opportunity for annual review, these draft scenarios are a starting point

# 6 Annual Review: Record Ideas for Future Discussion

The ideas here are for record-keeping purposes and not necessarily for the “Annual Review” vote

The CJWG has discussed several ideas for analysis or decision-making

These are \*in addition to\* any changes to the criteria or methodology that occur after the public comment process

Would CJWG members like to record or update these ideas?

- (1) Agencies report how investments are distributed geographically, and to low-income households as part of CLCPA benefits accounting (i.e., what portion of their DAC spending is to geographic DACs vs. low-income households, and where?)
- (2) Review the proportion of state designated as a DAC (i.e., 35%)
- (3) Consider any new data available to inform DAC criteria
- (4) Review inclusion of low-income households and definition (threshold)
- (5) Consider adding affordable housing buildings



## 6

# Temperature Check for #6: Annual Review

## Temperature Check

Per statute, CJWG will review the Disadvantaged Communities criteria and methods at least annually.

What would you like to see in annual review?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

# Limitations, gaps or future improvements?

In previous meetings discussed that documentation could cover:

- Indicators/data we considered but did not pursue, and why (“considered indicators” list)
- Data limitations, such as Census (e.g., not specific enough to race/ethnicity), public health data (limited data @ sub-county level), counting undocumented residents
- Recommendations for future/additional community-level data (e.g., migration, COVID)

**DEC welcomes additional comments to consider/incorporate in documentation**

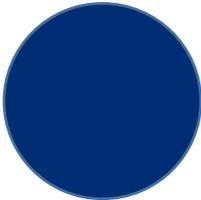
**CJWG can review this list during annual review**

Notes from 12/13 meeting:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# 10-minute break



# Overall Draft Criteria: Summary

Post for public comment draft criteria #1-#3 to identify Disadvantaged Communities for the purposes of Section 75-0111 of the Environmental Conservation Law. If approved, consistent with today's proposal, a list and map of Disadvantaged Communities census tracts (as illustrated in [draft census tract maps](#)) will be made available as part of the public comment process.

Include in draft criteria low-income households per draft criteria #4-#5 above, applicable only for investment purposes pursuant to ECL 75-0117.



# Updated Language for Draft DAC Criteria

## Geographic DAC Definition

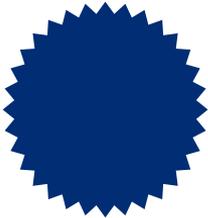
1. Include 45 indicators of (a) environmental exposures, burdens and climate change risks, and (b) sociodemographic and characteristics and health outcomes in the Disadvantaged Communities Definition. **The supporting documentation provided for public comment will list other indicators the CJWG considered and/or wanted to include and data limitations.**
2. Score census tracts on relative basis using (a) percentile ranks of all indicators, (b) hierarchical scoring approach (indicators within factors; factors within component), and (c) multiplying Environmental/Climate component by Population/Health component to get overall score
3. Include 35% of New York State census tracts as Geographic DACs, considering each tracts' relative rank (a) statewide or (b) regionally (in NYC or Rest-of-State). Automatically include tracts where at least 5% of land is federally-recognized reservation or owned by an Indian Nation.

## Individual Criteria (applicable only for investment purposes, ECL 75-0117)

4. Include low-income households located anywhere in the State in the Disadvantaged Communities criteria for the purpose of investing or directing clean energy programs, projects or investments (i.e., only for purposes of ECL 75-0117).
5. Define low-income households as households reporting annual total income at or below 60% of State Median Income, or are otherwise categorically eligible for low-income programs.

## Annual Evaluation and Review

6. Per statute, CJWG will review DAC criteria and methods at least annually.



# Overall Draft Criteria Vote

## Voting Process

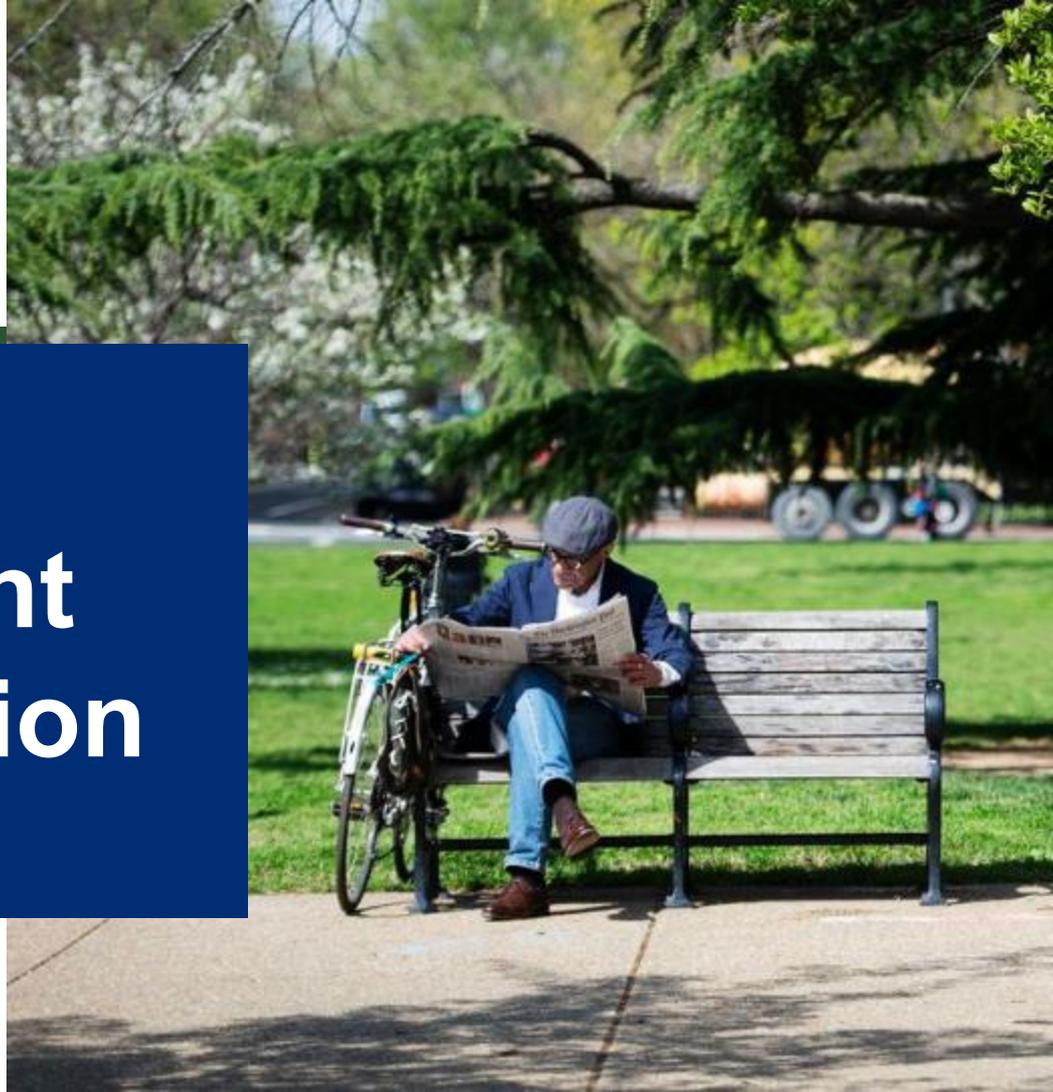
The CJWG voted unanimously to publish for public comment the Draft DAC criteria on the previous slide (Slide 49).

## Voting Results

Rahwa – Yes  
Sonal – Yes  
Abby – Yes  
Amy – Yes  
Donathan – Yes  
Eddie – Yes  
Elizabeth – Yes  
Jill – Yes  
Mary Beth – Yes  
Chris – Yes  
Joe – Yes  
Neil – Yes  
Alanah – Yes



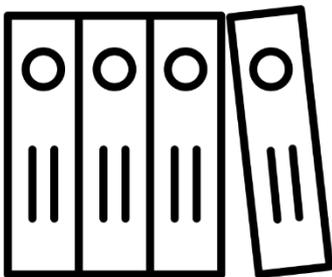
# Next Steps for Public Comment or Documentation



# DRAFT Public Comment Process

- DEC will post criteria overview, maps, and methodology online for the public
- DEC will host public educational session(s) to describe DAC criteria and public comment process (live and recorded)
- DEC will collect comments on the draft criteria and DACs for 120 days and hold 6 public hearings
- [DEC will confer with CJWG to discuss next steps.](#)

# Materials and Documentation



If desired, please provide any additional comments you would like to see reflected in public educational sessions and/or documentation within the next two weeks

# Addressing Public Comments

DEC will convene a follow-up meeting to discuss process to review, discuss, consider or address comments.

# Appendix A. Additional Analysis



# Income-based individual criteria could fill gap in low-income households included in DAC designation

35% DAC Scenario	Number of Households (Estimate) <sup>a</sup>		Percentage of Households	
	Not in DAC	In DAC	Not in DAC	In DAC
All Households in New York	4,754,000	2,589,000	65%	35%
Households with income <80% Area Median Income	1,649,000	1,584,000	51%	49%
Households with income <200% FPL (Proxy for 60% State Median <sup>b</sup> )	1,031,000	1,121,000	48%	52%
Households with income <100% Federal Poverty Line	436,000	584,000	43%	57%

<sup>a</sup> Household counts are from 5-year ACS data so may appear slightly lower than current Census counts.

<sup>b</sup> Agencies would implement as <60% of State Median Income. 200% Federal Poverty Line is ~\$6,000 lower than 60% of State Median Income, so more households than shown here would be added.

Because low-income households live throughout the state, including moderate and high income areas, **no geographic definition can capture all low-income people or households**



# Where are the additional lower-income households?

Of all HHs in DACs (~2.5M), 59% live in NYC

Of all HHs in DACs + add'l low-income (~3.5M), 53% live in NYC

43% of all households live in NY, so 53-59% is more than proportional

Region	HHs in Geographic DAC (35% scenario)	HHs added through Individual Criteria (<200% FPL)	HHs in DAC *or* added by Individual Criteria	Regional share of DACs	Regional share of Additional HHs	Regional Share of All Eligible Households	COMPARISON: All Households in NY State
New York City	1,524,548	390,957	1,915,505	59%	38%	53%	43%
Long Island	123,890	109,517	233,407	5%	11%	6%	13%
Mid-Hudson	373,756	67,070	440,826	14%	7%	12%	11%
Western NY	142,715	109,012	251,727	6%	11%	7%	8%
Finger Lakes	140,000	78,435	218,435	5%	8%	6%	7%
Capital Region	85,865	68,389	154,254	3%	7%	4%	6%
Central NY	100,249	46,689	146,938	4%	5%	4%	4%
Southern Tier	41,696	67,421	109,117	2%	7%	3%	4%
Mohawk Valley	30,041	48,456	78,497	1%	5%	2%	3%
North Country	26,600	44,849	71,449	1%	4%	2%	2%
<b>TOTAL</b>	<b>2,540,031</b>	<b>1,046,177</b>	<b>3,586,208</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>a</sup> Household counts are from 5-year ACS data so may appear slightly lower than current Census counts.

<sup>b</sup> Agencies would implement as <60% of State Median Income. 200% Federal Poverty Line is ~\$6,000 lower than 60% of State Median Income, so more households than shown here would be added.

Region contains greater-than-proportional share of households



Department of Environmental Conservation

# Rural Areas

The methodology includes several steps to represent different burdens and vulnerabilities in more rural areas, including:

- Separate percentile-rank scoring for NYC vs. Rest-of-State (allowing Rest-of-State to have a separate index)
- Several **housing and energy** indicators that index higher in rural areas: Mobile/manufactured homes, housing vacancy, energy affordability
- Several **health impacts/sensitivities** that are higher in some rural areas: Older adults, disabled population, heart attack hospitalization
- Several **facility burdens** that are higher in some rural areas: scrap metal processing, landfills, remediation sites
- Several **climate change risks** high in some rural areas: Agricultural land, inland/riverine flooding, driving to healthcare,

Proportionally more urban census tracts are designated than rural areas

	Count of All Tracts	Count of DACs	Pct of Area Type that is DAC
Rural	857	130	15%
Suburban	1479	381	26%
Urban	2570	1210	47%
<b>All Tracts</b>	<b>4,918</b>	<b>1,721</b>	<b>35%</b>

We hypothesize there are two reasons: (1) many of these indicators don't always "point in the same direction" – i.e., less cumulative burdens, and (b) Income, race and ethnicity are a significant component of scoring, and more urban/suburban areas have more BIPOC households

# Appendix B. Race and Ethnicity



# Race and Ethnicity indicators are in a separate factor

Income	Race & Ethnicity	Health Impacts & Sensitivities	Housing, Mobility, Communications
<ul style="list-style-type: none"> <li>• Pct &lt;80% Area Median Income</li> <li>• Pct &lt;100% of Federal Poverty Line</li> <li>• Pct without Bachelor's Degree</li> <li>• Unemployment rate</li> <li>• Pct Single-parent households</li> </ul>	<ul style="list-style-type: none"> <li>• Pct Latino/a or Hispanic</li> <li>• Pct Black or African American</li> <li>• Pct Asian</li> <li>• Pct Native American or Indigenous</li> <li>• Limited English Proficiency</li> <li>• Historical redlining score</li> </ul>	<ul style="list-style-type: none"> <li>• Asthma ED visits</li> <li>• COPD ED visits</li> <li>• Heart attack (MI) hospitalization</li> <li>• Premature Deaths</li> <li>• Low Birthweight</li> <li>• Pct without Health Insurance</li> <li>• Pct with Disabilities</li> <li>• Pct Adults age 65+</li> </ul>	<ul style="list-style-type: none"> <li>• Pct Renter-Occupied Homes</li> <li>• Housing cost burden (rental costs)</li> <li>• Energy Poverty / Cost Burden</li> <li>• Manufactured homes</li> <li>• Homes built before 1960</li> <li>• Pct without Internet (home or cellular)</li> </ul>

Within this factor, both income metrics have 2x weight

Within this factor, Pct Latino/a and Pct Black have 2x weight

Additionally 19 tracts that are Tribal/Indigenous Land are included



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# As designed, DACs have far more, but not all, lower-income and BIPOC New Yorkers

35%  
Scenario

Indicator	Average in Non-DACs	Average in DACs
<80% AMI	36%	61%
<100% FPL	10%	23%
Black/African-American	12%	29%
Latino/Latina	11%	31%
Asian	10%	8%
Burden Score	30	38
Vulnerability Score	40	62

As designed, DAC tracts have far more lower-income, Black/African American and Latino/Latina households.

While Pct Asian/Asian American is part of scoring, with all of the other indicators included, the geographic DACs do not have more Asian or Asian-American households.



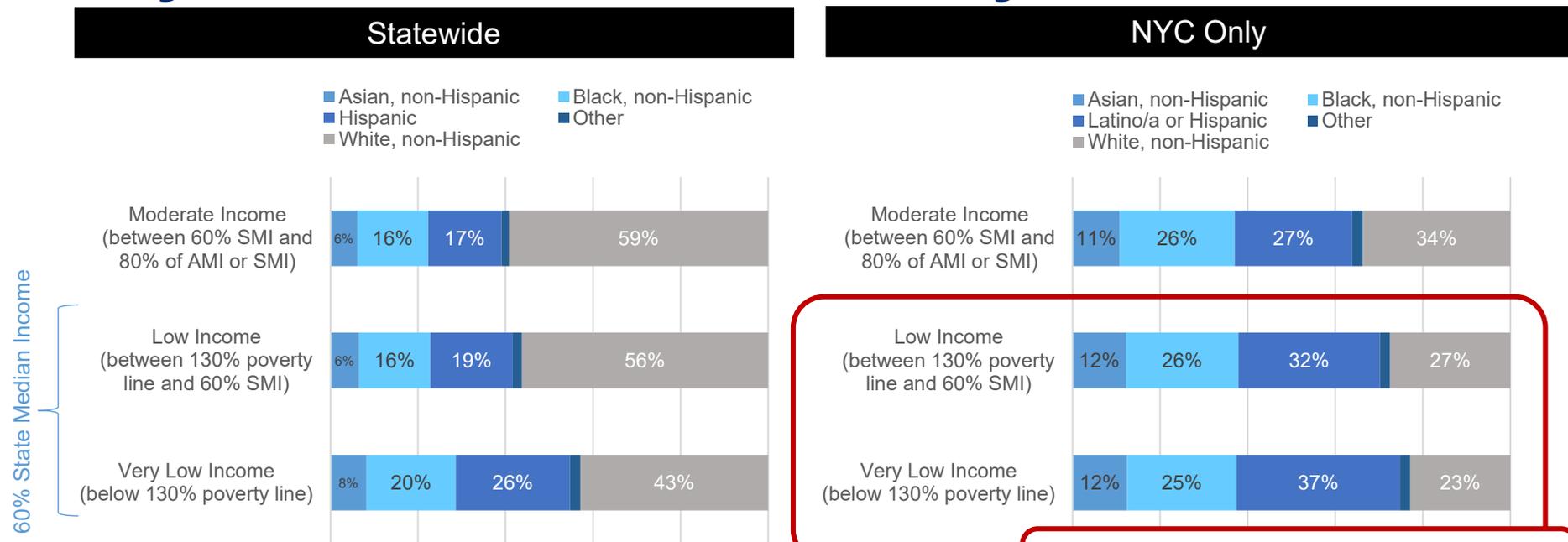
## While some BIPOC households live outside of 35% DAC scenario, Agencies cannot request/track/verify race/ethnicity data for all investments/programs (to support individual criteria)

35% DAC Scenario	Number of People (Estimate) <sup>a</sup>		Percentage of Population	
	Not in DAC	In DAC	Not in DAC	In DAC
All People in New York	12,732,000	6,841,000	65%	35%
Black or African American individuals	1,375,000	1,976,000	41%	59%
Hispanic or Latino/a individuals	1,379,000	2,326,000	37%	63%

The geographic definition captures the majority (59%-62%) of Black and Latinx individuals, though many live outside of DAC communities

<sup>a</sup> Population counts are from 5-year ACS data so may appear slightly lower than current Census counts.

# If we add low-income households, how many BIPOC households may be added?



In NYC, about 73-77% of low-income households are BIPOC, so including low-income households will bring in BIPOC households

Source: 2013-2015 ACS, from [www.nyserderda.ny.gov/lmitool](http://www.nyserderda.ny.gov/lmitool)

- 1 - Very Low Income - Household income at or below 130% of the HHS Poverty Guideline
- 2 - Low Income - Household income greater than 130% of the HHS Poverty Guideline but at or below 60% of the State Median Income
- 3 - Moderate Income - Household income above 60% of the State Median Income and below 80% of State Median Income or Area Median Income

# Appendix C. Screenshots of Select Areas



# Buffalo

35%  
Scenario

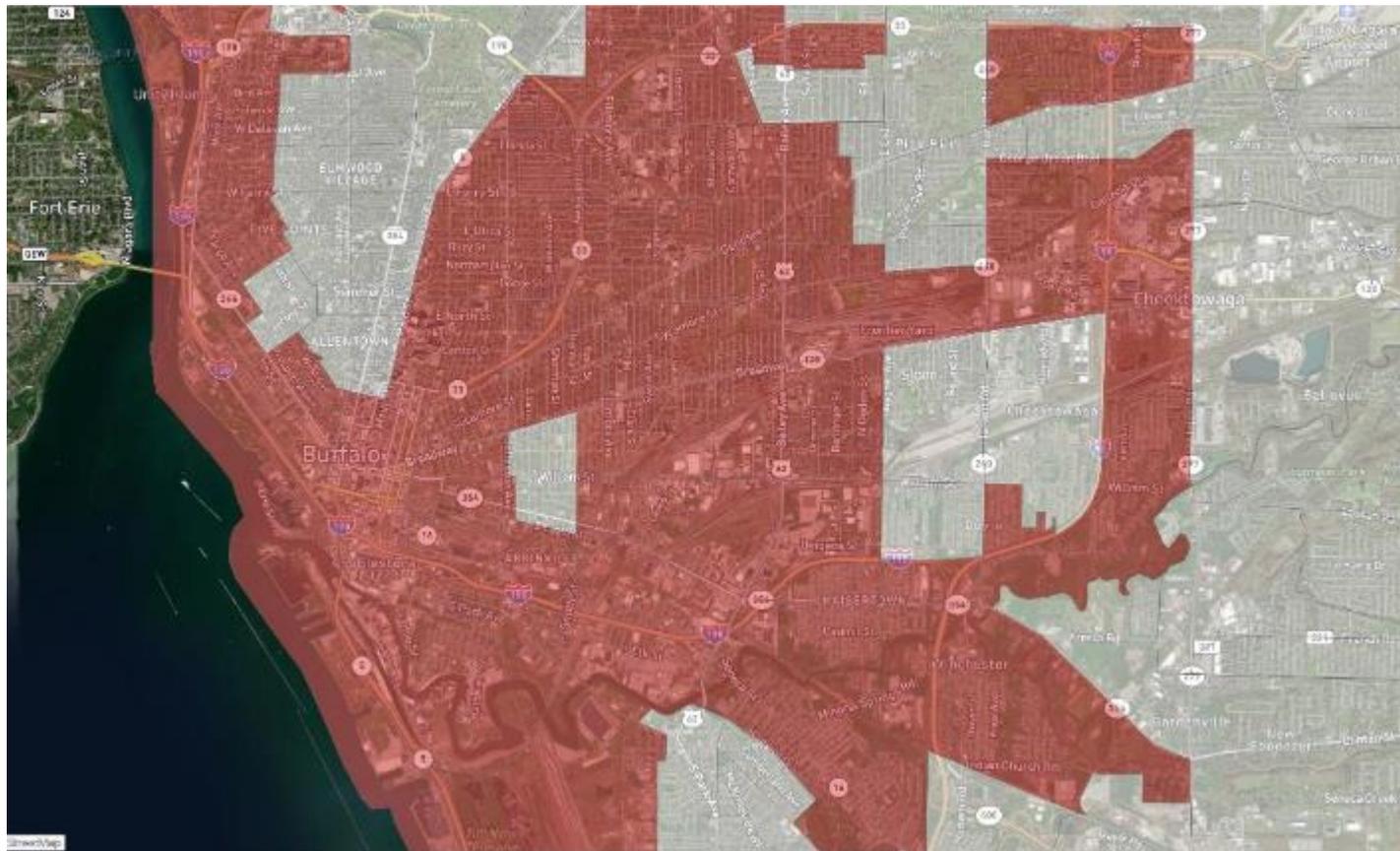
## Model

 DAC

## CJWG Response

 DAC

 Non-DAC



# Sunset Park

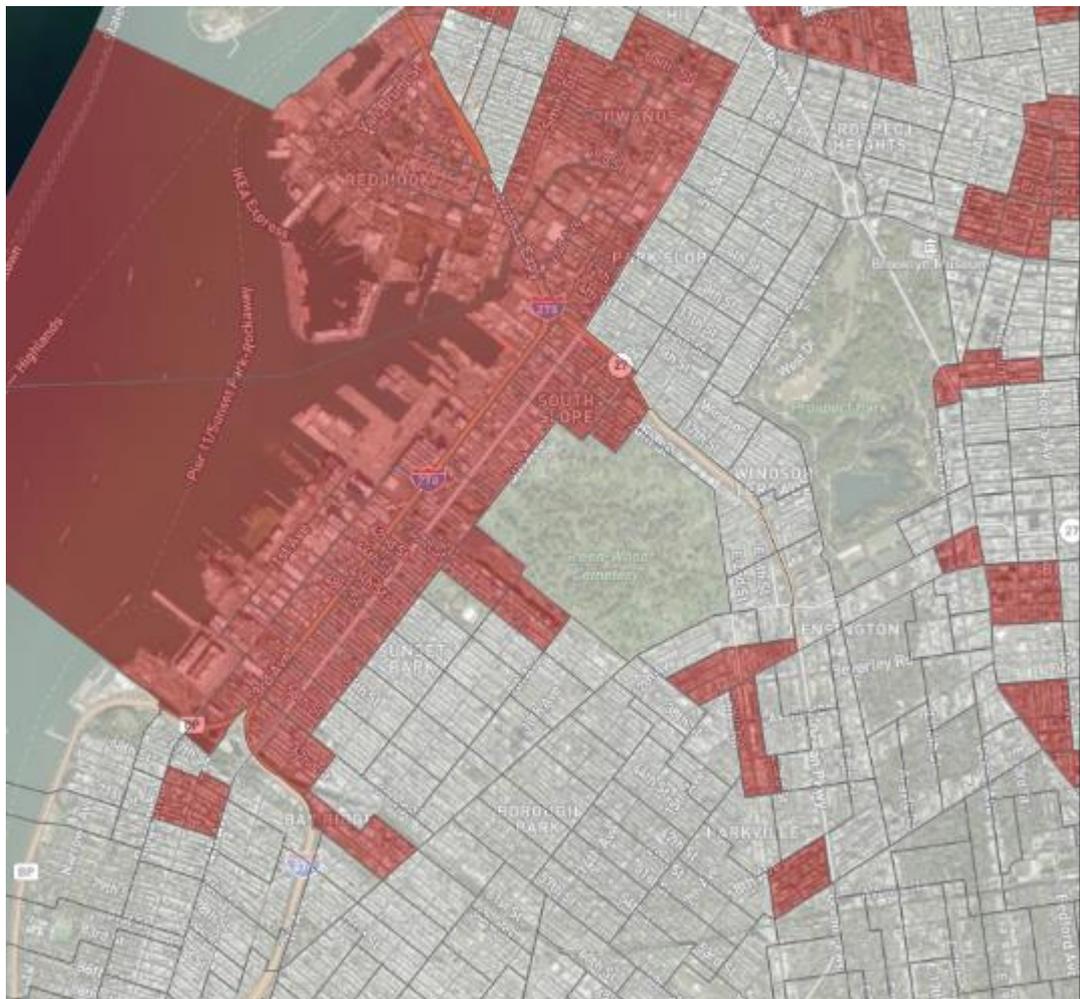
## Model

 DAC

## CJWG Response

 DAC

 Non-DAC



35%  
Scenario

# Long Island

35%  
Scenario

## Model

 DAC

## CJWG Response

 DAC

 Non-DAC





# Poughkeepsie / Newburgh

35% Scenario

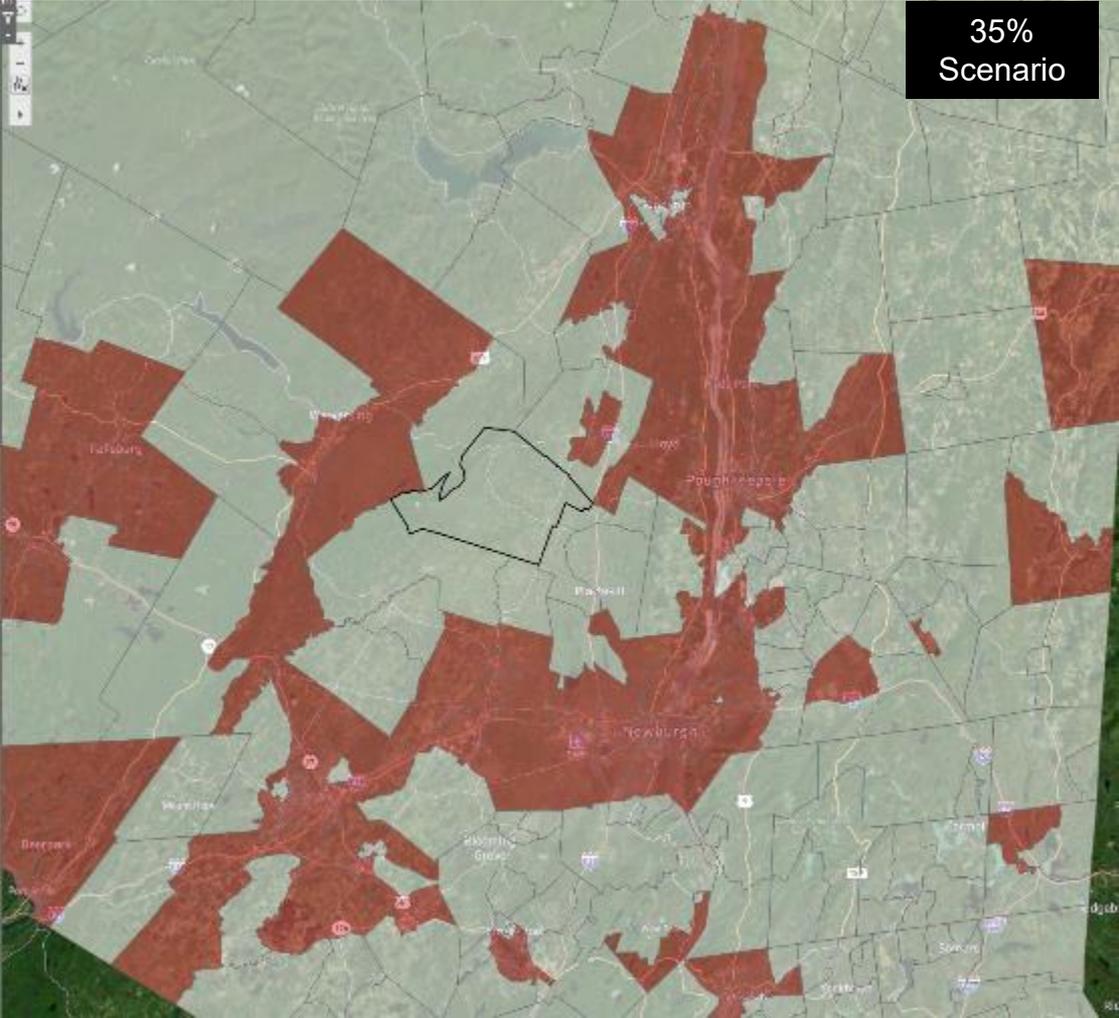
**Model**

 DAC

**CJWG Response**

 DAC

 Non-DAC



# Appendix 1: More Background on Approach

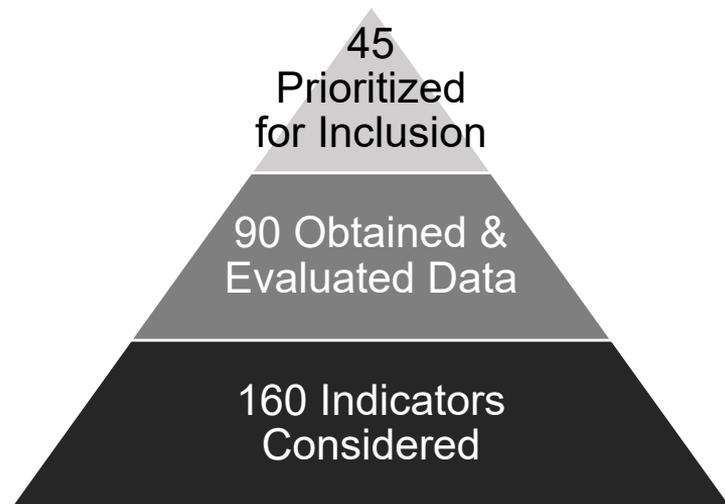


# Inclusion Considerations

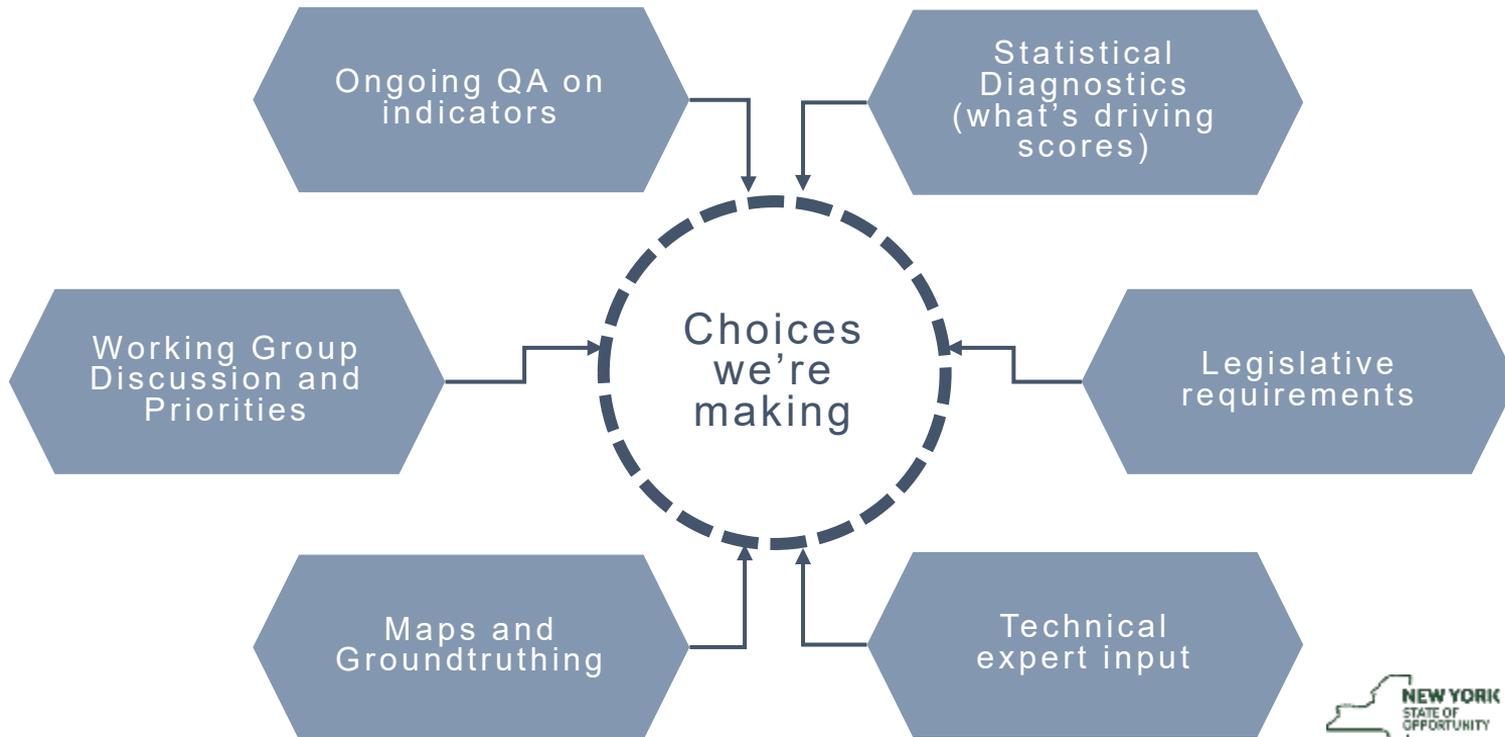
Inclusion decisions consider:

- Data coverage & granularity
- Data quality (e.g., measurement or sampling error)
- Modeled vs. directly-collected or measured data
- Correlations
- Technical guidance (e.g., DEC, DOH, DOS)

So far, we obtained & evaluated data for 90+ indicators (a) on their own, and (b) in combination



# Multiple inputs to inform approach



# Framing Principles (from 9/29 meeting)

Don't want to leave people most at risk of climate crisis behind –  
Direct funding to people & groups who are most vulnerable

Income is important indicator of ability to respond or adapt

Want agencies to design and target efforts geographically – to  
community-scale (or larger) outreach and investments

Initial investments should go to the hardest-hit communities first

Consider who is least able to participate in transition to clean  
energy and clean energy economy

Beware unintended consequences – Don't want to create  
disadvantaged communities (e.g., by re-directing funding too  
much toward some communities)

## Potential Approaches:

Start with smaller set of DACs and  
add later (would a large set dilute  
resources?)

Tiered approach – DAC plus LMI  
communities or households?

Iterative approach – Evaluate  
each year



# Why Two Income Measures?

Both included income metrics, <100% of Federal Poverty Line and <80% of Area Median Income, are indexed to household size.

**Federal Poverty Line:** Lower threshold, but the same nationally. Included to find deeper entrenched poverty.

**Area Median Income:** Higher threshold, and indexed to metropolitan areas or fair market rent areas. Included to find low-to-moderate income (LMI).

# Example income for two-person household

Location (Examples)	2-person Household:			
	100% of Federal Poverty Line*	200% of Federal Poverty Line	60% of State Median Income	80% of Area Median Income**
Albany-Schenectady-Troy, NY MSA	\$17,420	\$34,840	\$40,954	\$61,200
New York, NY HUD Metro Area	\$17,420	\$34,840	\$40,954	\$76,400
Buffalo-Cheektowaga-Niagara Falls, NY MSA	\$17,420	\$34,840	\$40,954	\$50,500
Nassau-Suffolk, NY Metro Area	\$17,420	\$34,840	\$40,954	\$75,950
Lewis County, NY	\$17,420	\$34,840	\$40,954	\$44,400
Clinton County, NY	\$17,420	\$34,840	\$40,954	\$46,000
Poughkeepsie-Newburgh-Middletown Metro	\$17,420	\$34,840	\$40,954	\$63,950

All income levels are household size. The Federal Poverty Line is lower, but the same nationally. Area Median Income is higher, and indexed to metropolitan areas or fair market rent areas.

2021 Federal Poverty Level. Source: <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>

2021 60% state median income): <https://www.nyserda.ny.gov/All-Programs/EmPower-New-York/Eligibility-Guidelines>

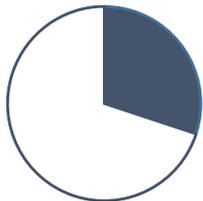
2021 AMI. Source: <https://www.huduser.gov/portal/datasets/il/il21/Section8-IncomeLimits-FY21.pdf>



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# Designate $\leq 40\%$ of state as DACs

Designate *less than 40%*



**Pros:** May encourage proportionally *more* money to go to DACs

Room to expand later

**Cons:** Leaves out some LMI and socially-vulnerable DACs

Designate *about 40%*



**Pros:** Captures more groundtruthed and LMI DACs

**Cons:** Still may not capture some LMI and socially-vulnerable DACs

Designate *more than 40%*



**Pros:** Captures more groundtruthed and LMI DACs

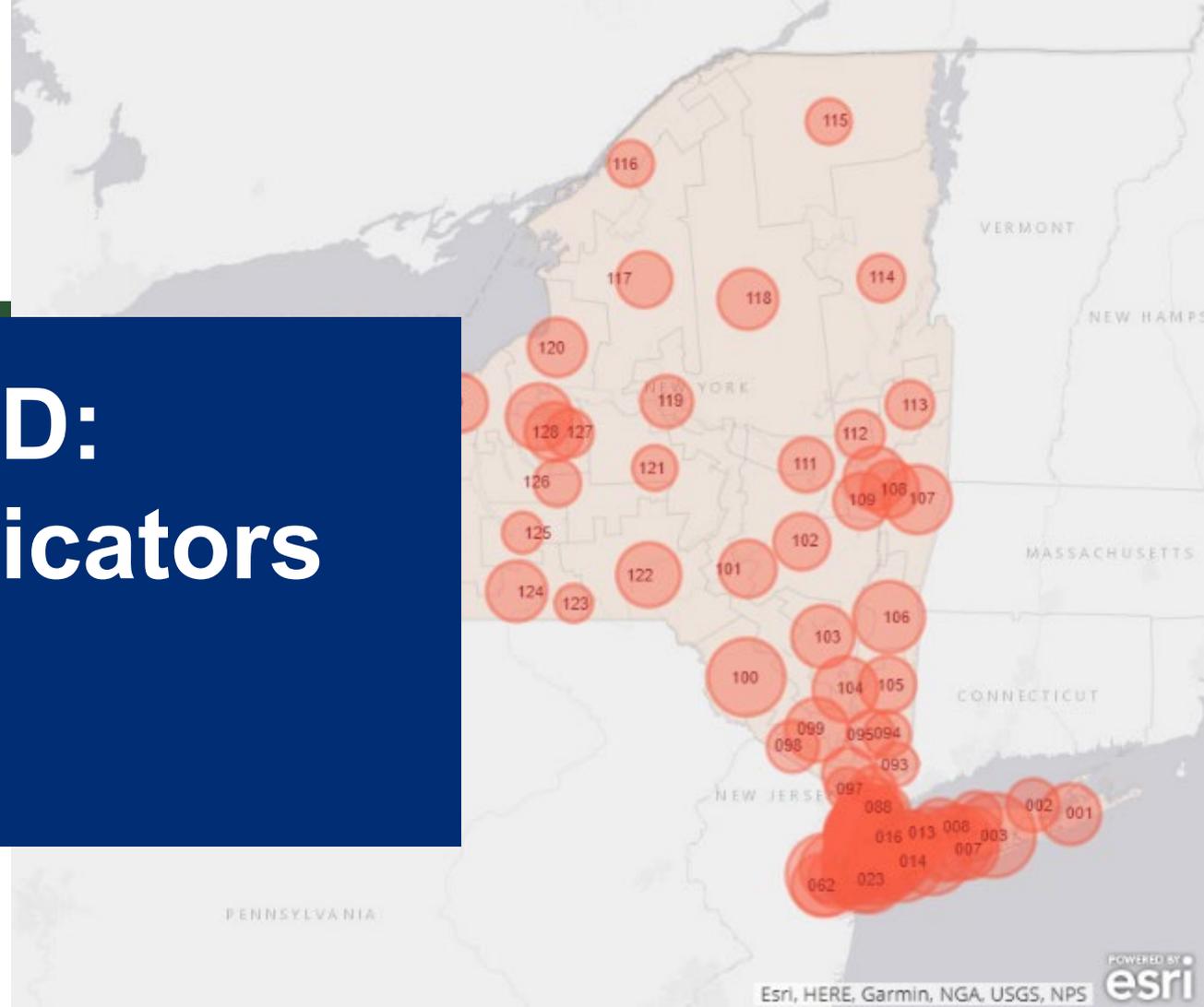
**Cons:** Proportion of DACs is less than the funding goal  
Difficult to remove DACs later

On 10/19 several people expressed interest for designating less than 40% to drive greater-than-proportional benefits



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# Appendix D: Health Indicators



# Considerations for Health Indicators

## Link to Environmental Factors

- Environmental (geographic) component of health outcomes
  - For chronic conditions, exposures may have occurred many years prior and/or in places other than where the health outcome is recorded
  - Environmental factors exacerbate or trigger acute events for some conditions more than others (e.g., asthma, MI)

## Data Availability and Granularity

- NYSDOH only “sees” a health outcome when it appears in a dataset - Births, deaths, ED visits, hospitalizations, surveys, registries
- Need higher event frequency for stable/reliable rates and ability to share data (confidentiality)
- Data availability for small geographies in time for Draft DAC Scenarios

# Potential Health Indicators

## Included Indicators

- Asthma ED visits
- COPD ED visits
- Heart attack (MI) hospitalization
- Premature Deaths
- Low Birthweight
- Pct without Health Insurance
- Pct with Disabilities
- Pct Adults age 65+
- Distance to ED/critical/urgent care

## Considered but Not Included

- COVID-19
- Heat stress
- Cancer
- Diabetes
- Pre-term births
- Mental Health
- Childhood Lead Exposure



Potential Indicator	Rationale for Inclusion
Asthma ED visits	Strong scientific literature associating asthma with environmental exposures. Managing asthma is linked with socioeconomic status and healthcare access.
COPD ED visits	COPD is considered a sub-set of respiratory disease, associated with air toxics as well as personal behaviors. We considered de-prioritizing though COPD outcomes are influenced by access to healthcare.
Heart attack (MI) hospitalization	Cardiovascular disease in general (not MI hospitalization specifically) increasingly associated with air pollution and criteria pollutants. However, MI hospitalization data is/was readily-available, though less stable at the sub-county level.
Low Birthweight	Broadly represents maternal health, which is a factor of environmental, social, and structural policies. Data is available at the sub-county level.
Premature Deaths	Broadly represents deaths due to cancer, diabetes, heart disease, lung disease, accidents, homicides, etc., to capture systemic disadvantage. Could also be indicator of avoided deaths resulting from environmental/health policy changes
Pct with Disabilities	Represents susceptibility to power outages and emergency situations due to extreme weather events
Pct without Health Insurance	Represents access to screening, ability to manage conditions, affordable car. May indicate structural and socioeconomic disadvantage.
Pct Adults age 65+	Represents susceptibility to power outages and emergency situations due to extreme weather events.

Indicator	Rationale for Exclusion	Potential Correlates (among included indicators)
COVID-19	Data not yet available; cases under active investigation; testing rates not equivalent across the state and through course of the pandemic	Socioeconomic status (SES), race/ethnicity
Heat Stress	ED visits or hospitalization either unavailable or unreliable at sub-county level. Heat deaths too small to report at sub-county level.	High temps, vegetative cover & road density (urban areas), housing quality, health vulnerabilities
Cancer	Cancers is multifactorial and represent a range of diseases. Some cancers are more vs. less environmentally or spatially-related.	Health insurance, SES (for certain types)
Diabetes	Hard to capture in NYSDOH datasets that contain ED visits & hospitalization (this data may undercount or be biased in reflecting diabetes). <b>Clinic/pharmacy data would better capture people maintaining disease.</b> Also, diabetes may have a weaker environmental component.	Premature deaths, sociodemographic correlates and health insurance
Pre-term births	Generally captured by low birthweight	Low birthweight births
Mental Health	Mental health not well-captured in DOH data because they have ED visits & hospitalization; would only see co-occurring ICD-9 codes. Clinic/pharmacy data would better capture disease.	
Childhood Lead Exposure	Exposure data is small/unreliable at sub-county level.	Age of home, renters & rental costs, income

# Other indicators may capture risk factors for health outcomes

- Environmental exposures
- Potentially (or formerly) hazardous facilities
- Housing conditions
- Socioeconomic indicators
- Health insurance
- Language barriers