



Department of
Environmental
Conservation

Climate Justice Working Group Draft DAC Criteria Update


July 27, 2021

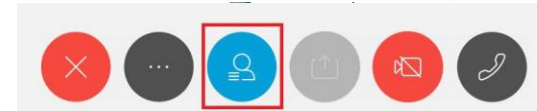
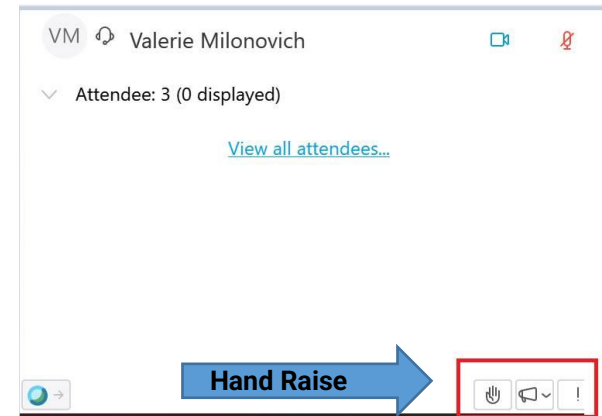
Meeting Procedures

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 (1st 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 (2nd visual). Click the participant panel button (3rd visual) for the hand raise function. Rosa or Alanah will call on members individually, at which time please unmute.



You'll see  when your microphone is muted



Welcome and Roll Call



Agenda

- Introductions
- DAC Criteria Timeline
- Considered Indicators
- Draft Scenarios
- Public Presentation & Comment Process
- Next Steps



Upcoming Meetings

Dates and topics are changing based on July 27 meeting discussion

- > Potential August 4 (10am-12pm) – Prepare for voting meetings, CAC integration analysis, outstanding questions (e.g., methodology)
- > Aug 12 (2-4pm) – Consensus-building on indicators; prioritize scoring revisions for Aug 26
- > Aug 26 (2-4pm) – Consensus-building on scoring scenarios; preview documentation
- > Potential Sept 9/10 (time TBD) – Final review before voting
- > Week of Sept 13 – In-person voting from multiple locations (indicators + draft scenarios)



Indicators for Draft Scenarios



With 45 indicators, adding or changing one doesn't shift scores much

Designation Threshold

(High-scoring tracts to designate as DACs – e.g., top third?)



https://www.clrp.cornell.edu/q-a/272-excavator_certification.html

Factor Importance

(Relative importance of exposures vs. climate, etc.)



<https://compactequip.com/excavators>

Indicators

(With ~45 indicators, changing one doesn't shift much)



Photo by Andres Siimon on [Unsplash](#)

Indicator Weights

(With highly-correlated indicators, weights don't shift results much)



Photo by Anaya Katlego on [Unsplash](#)



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Questions on Considered Indicators Document?

Indicator Framework

Community Burdens and Potential Risks

Potential
Pollution
Exposures

Land use
associated with
historical
discrimination or
disinvestment

Potential
Climate
Change Risks

*Generally place-based
characteristics or
conditions*

Population Characteristics and Vulnerabilities

Socio-
demographics

Health Impacts &
Burdens

Housing,
Mobility,
Communications

*Generally “people”
characteristics*



Community Burdens and Potential Risks: Indicators in Current Scenario

Potential Pollution Exposures

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

Land use associated with historical discrimination or disinvestment

- Historical redlining score
- 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)
- Utility/waste 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



Population Vulnerabilities: Indicators in Current Scenario

Sociodemographics

- Pct <80% Area Median Income
- Pct <100% of Federal Poverty Line
- Pct without Bachelor's Degree
- Unemployment rate
- Pct Single-parent households
- Pct Latino/a or Hispanic
- Pct Black or African American
- Limited English Proficiency

Health Impacts & Burdens

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





















Housing, Mobility, Communications

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

NOTE: Future data will include Low Birthweight births and Premature Deaths

*Proxy for lead-based paint risk. We may assess alternatives.

CalEnviroScreen 4.0 Indicators

Pollution Burden		Population Characteristics	
Exposures	Environmental Effects	Sensitive Populations	Socioeconomic Factors
 Ozone  PM2.5  Diesel Particulate Matter  Drinking Water Contaminants  Toxic Releases from Facilities  Traffic  Children's Lead Risk from Housing  Pesticide Use	 Solid Waste Sites and Facilities  Cleanup Sites  Groundwater Threats  Impaired Water Bodies  Hazardous Waste Generators and Facilities	 Asthma  Cardiovascular Disease  Low Birth Weight Infants	 Educational Attainment  Housing Burden  Linguistic Isolation  Poverty  Unemployment

- 21 indicators
- Not designed to cover climate change
- Does not include race/ethnicity for legal reasons

Data update – Still working on a few things

- > Small data updates and QA/QC (low birthweight coming soon!)
- > Adding back in the 138 tracts with very low population & scoring on Burdens alone
- > Adding 19 tracts where >5% of land is Tribal/Indigenous Reservation or owned by Indigenous Governments
- > Analytics around what's driving scores and what indicators aren't contributing much
- > Testing factor weights (e.g., relative importance of environment vs. climate or sociodemographics vs. housing)



Annual Update Process

Document what CJWG and staff team want to improve
(future data collection or advanced analysis)

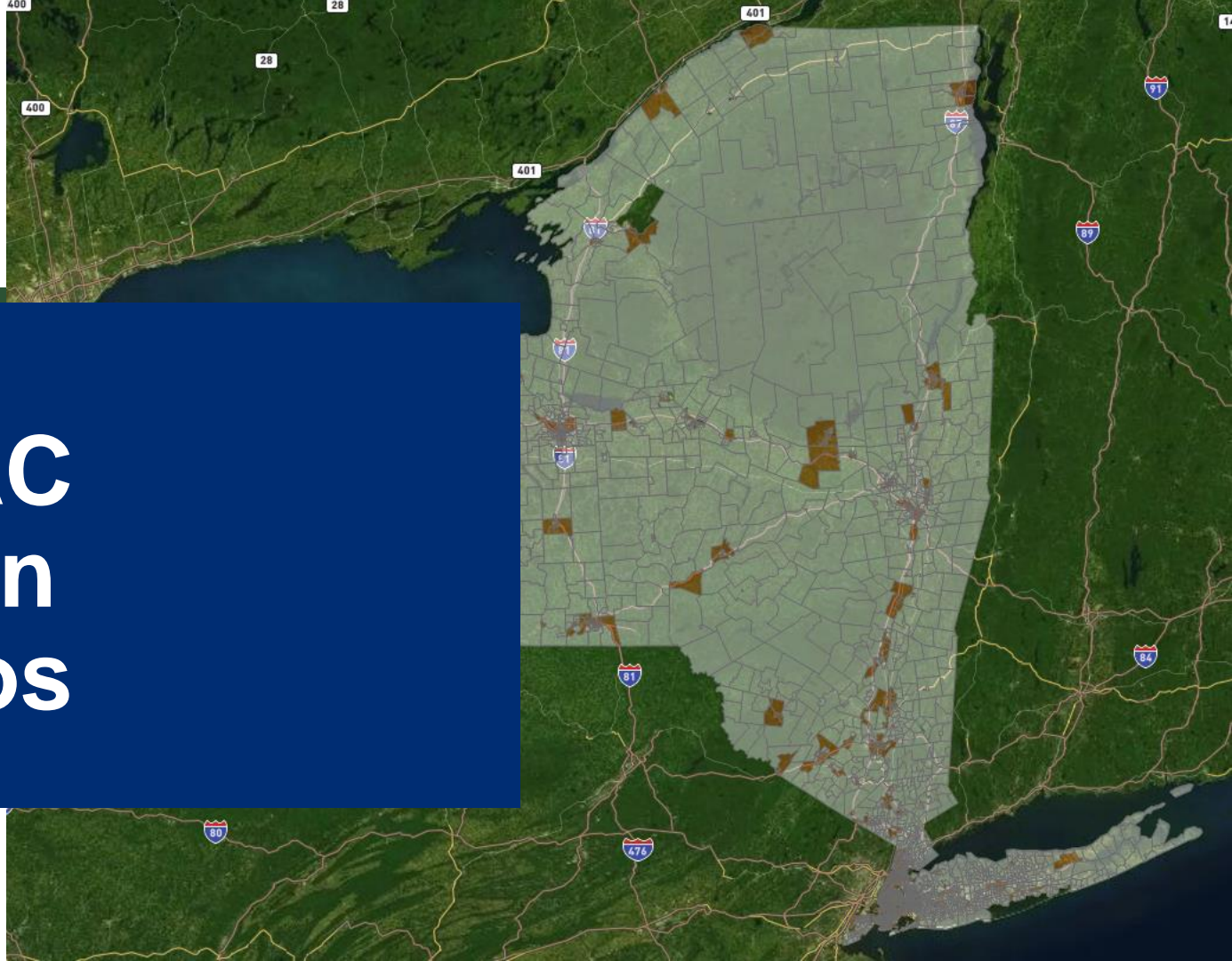
Additional data needs may emerge from public comment –
Save time/budget to address

CJWG can recommend annual process to review and improve
indicators (*← what do you recommend?*)



What will help you prepare to vote?

Draft DAC Definition Scenarios



Recap of last meeting

Discussion

- Income (e.g., DACs with higher income)

Changes we made

- Display whether designation came from Statewide, NYC or ROS score
- Show same income metrics as in score (<80% AMI; <100% FPL)

We did not make changes to
scenario *yet* pending
today's discussion



Tract Diagnostics

DAC Designation:	DAC
Classified Through:	Regional
Tract:	36001001500
Region:	Capital Region
County:	Albany
Place (if available):	Albany city
% BIPOC:	29%
<80% AMI:	74%
<100% FPL:	29%
Redline Score (if available):	2.8

Indicates whether DAC designation from Statewide or Regional calculation

Same income metrics used in DAC scoring



We learn from every comment

Example:

“This looks higher-income because it gentrified quickly, but it’s close to a train station and highway interchange and has a large neighborhood of lower-income and non-English-speaking households”

Example:

“I agree this shouldn’t be a DAC because all of the buildings are renovated, there is a park and lots of transportation options”

INSTRUCTIONS

1. Click on a tract in the map.
2. Fill out form
3. Click the “SUBMIT” button. Try clicking the button again if the website does not open.
4. Close the website window and...

Name

Tract Number

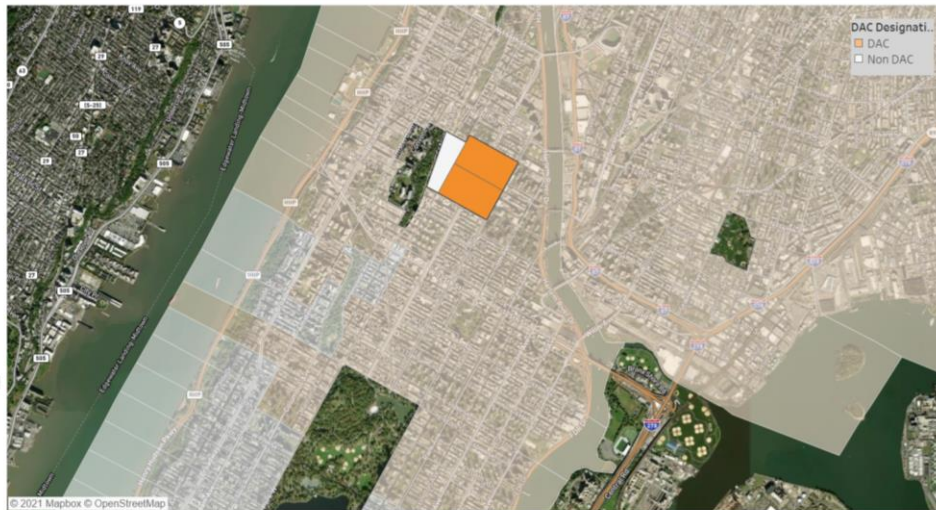
Should be a DAC?

- Yes
 No

Brief Explanation

Statewide Averages

Burden Pctl	40
Vuln Pctl	48
Median Income	\$74,317
% BIPOC	45%
Redline Score	3.0
% PEJA	47%



Selected Census Tract Details

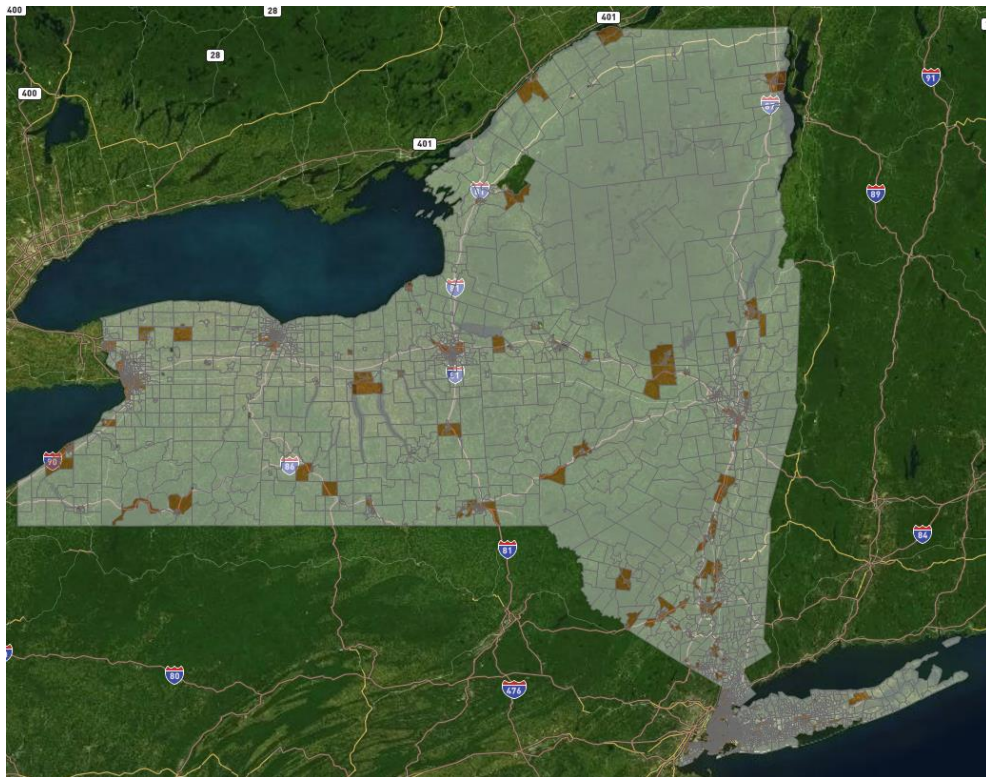
Tract	Is a DAC?	Burden Percentile	Vulnerability Percentile	Median Income	% BIPOC	Redline Score	% PEJA
36061022102	NON-DAC	73	54	\$96,154	79%	4.0	100%
36061022800	DAC	72	69	\$70,650	85%	4.0	100%
36061023000	DAC	73	79	\$36,124	92%	4.0	100%
Grand Total		73	67	\$67,643	85%	4.0	100%

Note: Draft maps exclude 138 census tracts (2.8%) with very low population because Vulnerabilities data is missing/unreliable; they will be scored separately on the basis of Burdens alone.

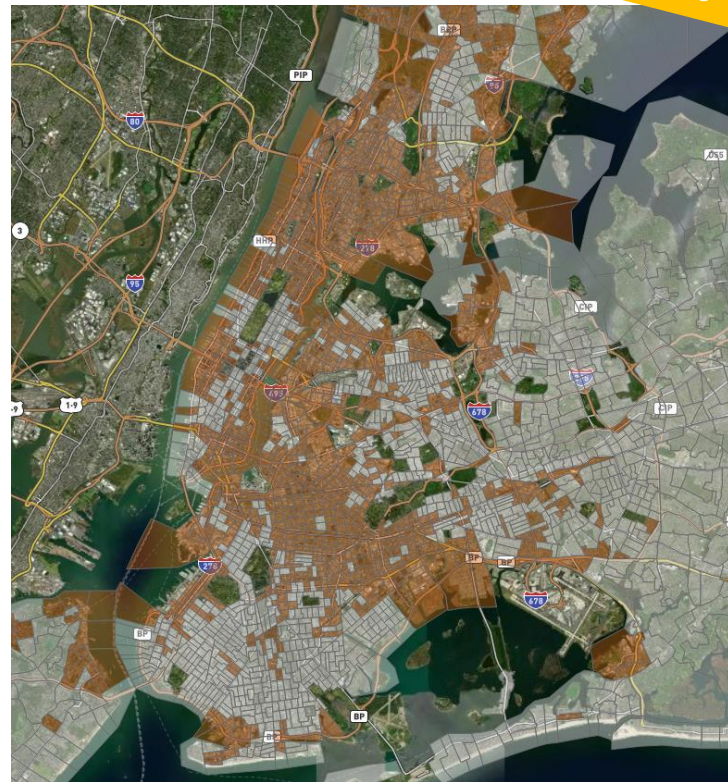


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Zooming Out



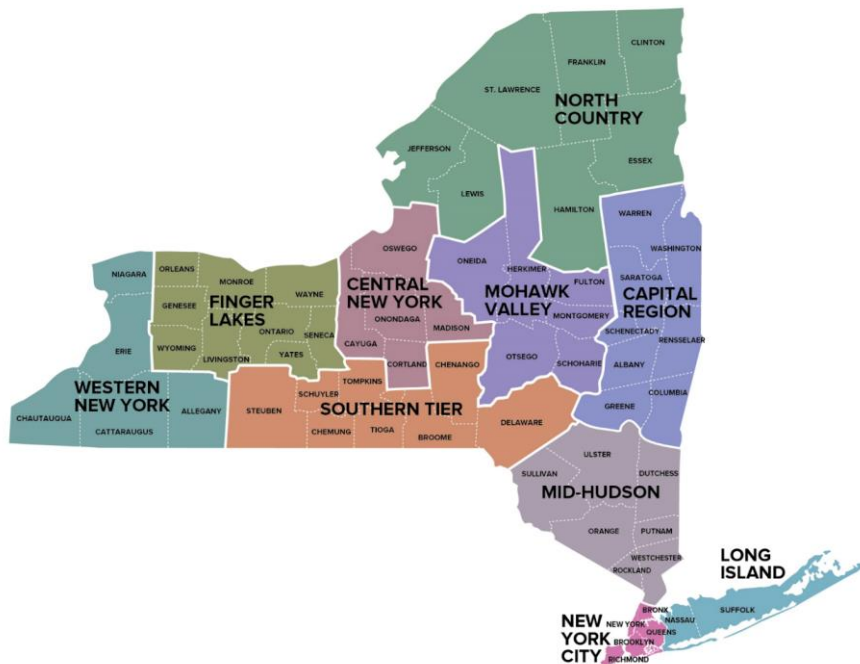
This is a draft map that will change if/when scenario changes



Regional Distribution of *DRAFT* Scenario

This is a draft distribution that will change if/when scenario changes

In this scenario, 35% of all tracts are DACs, ranging from 9% in LI to 47% in NYC



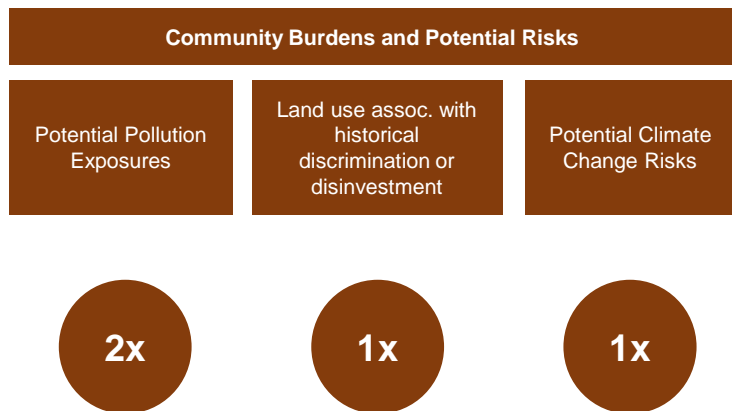
% Region Designated DAC

Region	%
New York City	47%
Long Island	9%
Mid-Hudson	29%
Western NY	39%
Finger Lakes	27%
Capital Region	27%
Central NY	31%
Southern Tier	27%
Mohawk Valley	24%
North Country	18%
Grand Total	35%

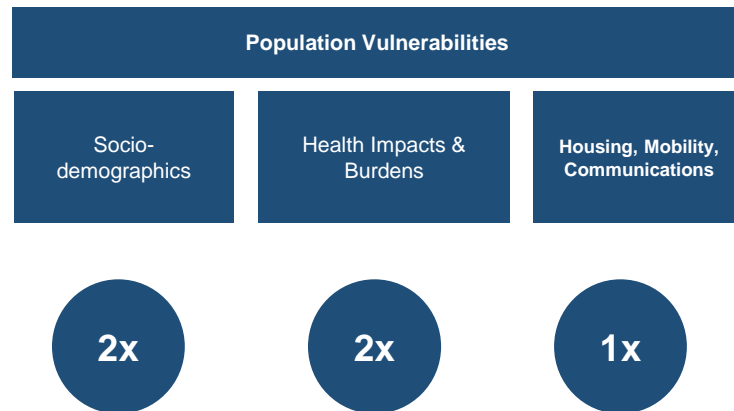


Potential lever: Factor Importance

Draft – Technical team
is conducting
sensitivity analysis



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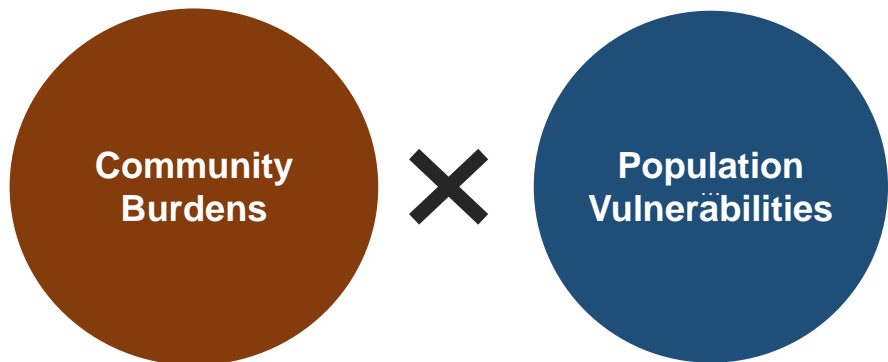


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Note: Since Burdens and Vulnerabilities are multiplied, they have equal weight, regardless of how you weight things within them.

Post-scoring criteria?

It's possible that some communities that score high on the combined index may be higher-income (or lower BIPOC)...



...Should we apply an additional criteria or filter after scoring? E.g., exclude high-income?



What haven't we looked at together

- Climate-change-vulnerable areas?
- Long Island?
- Rural areas?



Go to Tableau

Note: Draft maps exclude 138 census tracts (2.8%) with very low population because Vulnerabilities data is missing/unreliable; they can be scored separately on the basis of Burdens alone.

What will help you prepare to vote?



Public Meetings and Comment Process



Public Process

Educational
Session(s)

Pre-recorded training?
Optional “live” session?

Public
Hearings

“Following the adoption of the draft criteria and disadvantaged communities list, CJWG will hold a minimum of six public hearings.”

Comment
Period

“There will be a 120 day comment period following the release of the drafts”



Public Hearings

These hearings will be held in locations across the state and available via WebEX.

- 3 Upstate
- 3 Downstate

Next Steps



Next Steps

**Details on
Approach If
Interested**

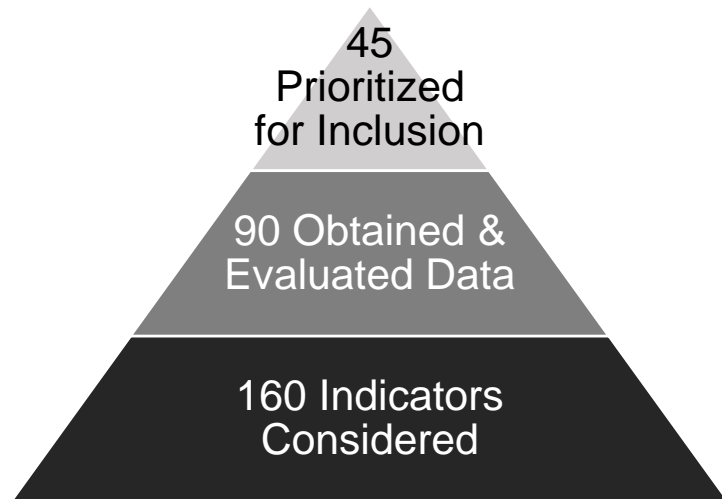


Inclusion Considerations

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



Review: Combining Data

Group Indicators into Factors



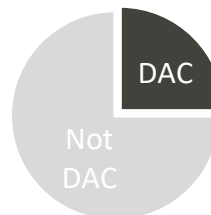
Combine Factors into Components



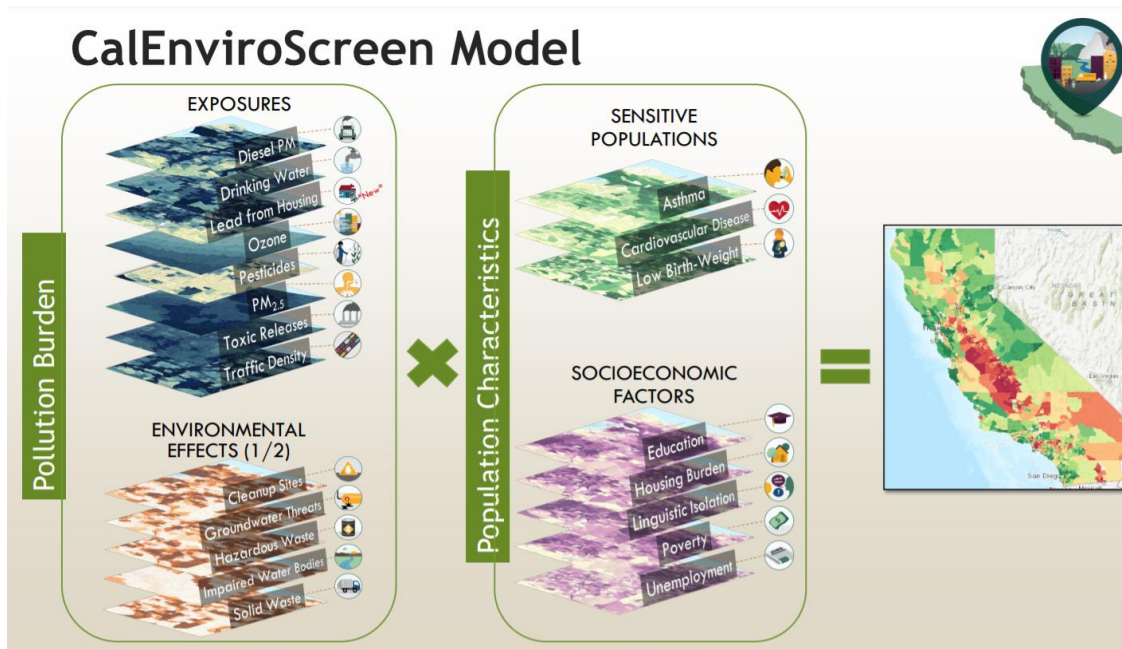
Calculate Statewide & Regional Scores



Designate DACs based on their relative score



Multiply to represent that Vulnerabilities serve as Effect Modifiers to Burdens



Some decisions move things more than others

Designation Threshold

(High-scoring tracts to designate as DACs – e.g., top third?)



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Factor Importance

(Relative importance of exposures vs. climate, etc.)



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Indicators

(With ~40 indicators, changing one doesn't shift much)



Photo by Andres Siimon on [Unsplash](#)

Indicator Weights

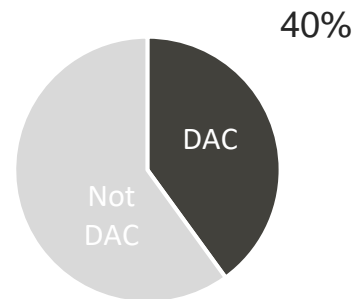
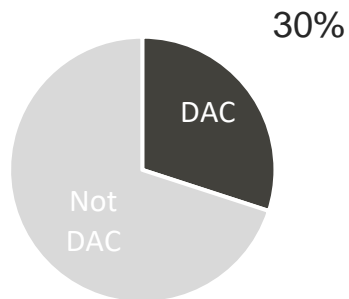
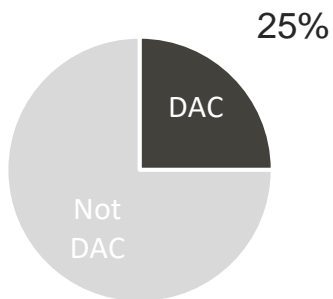
(With highly-correlated indicators, weights don't shift results much)



Photo by Anaya Katlego on [Unsplash](#)

Critical Question for CJWG: Share of DACs

In general, what share of communities (census tracts) should be designated as DACs?



We've discussed the idea of "leave no DAC behind", but we need to operationalize this as the final % will be an arbitrary number.

DRAFT Designation Approach

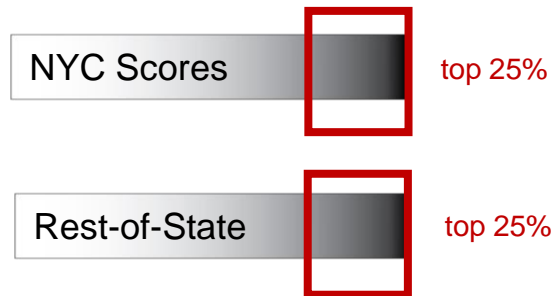
Statewide Score

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



About 1/3 designated

Designate communities that score in either top 25% **statewide** OR **regionally**



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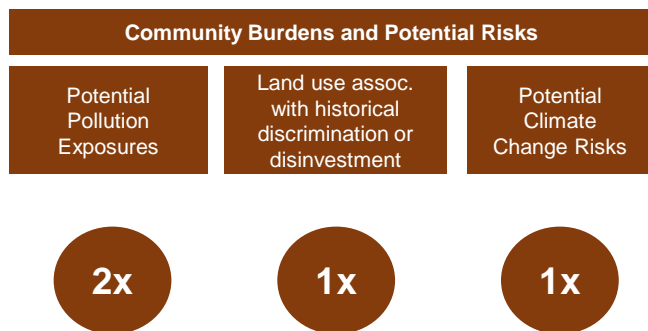
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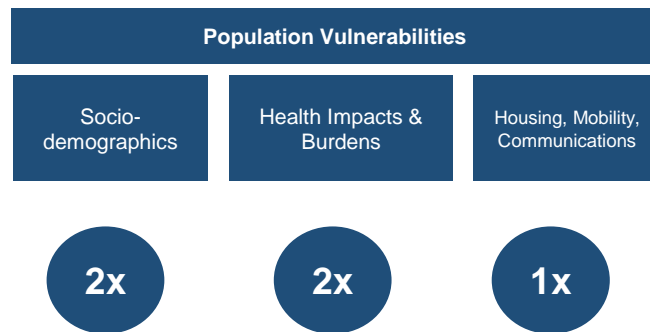
Photo by Anaya Katlego on [Unsplash](#)

Starting point for Factor Importance

Draft – Technical team is conducting sensitivity analysis



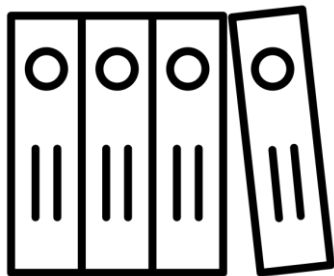
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Indicator Limitations



Documentation (for public comment) will discuss:

- Indicators/data we **considered** but did not pursue, and why
- Data limitations, including Census (e.g., not specific enough to race/ethnicity), public health data (e.g., limited data @ sub-county level), and more
- Recommendations for future/additional community-level data (e.g., migration)
- Potential for periodic indicator review/updates

Legislation allows for continuous improvement

We are cataloging recommendations for data to gather, if possible, and consider in the future.

