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New York Lawyers for the Public Interest Statement on Draft Disadvantaged Communities Criteria

Prior to the end of the public comment period for the Draft Disadvantaged Communities Criteria, New York Lawyers for the Public Interest (NYLPI) seeks to raise significant concerns with the methodology utilized in determining which census tracts qualify as disadvantaged, due to the important implications of being selected (or not selected) to receive funding opportunities under the Climate Leadership and Community Protection Act (CLCPA). NYLPI recognizes and supports the work of the Climate Justice Working Group (CJWG) and the difficult task of developing a just process. However, in the interest of ensuring that the CLCPA works for the communities most impacted by disproportionate levels of pollution and systemic racism, NYLPI believes it is imperative to present the following concerns.

NYLPI's overarching concern is associated with the lack of transparency regarding data and methodology. Though the CJWG produced an extensive Technical Documentation that explains many aspects of the selection process, key data used to calculate the DAC map percentile rankings remains inaccessible, and parts of the calculation process that have a huge impact on which communities are designated Disadvantaged Communities (DACs), such as the calculation of indicator weights, are unexplained in the Technical Documentation.

For instance, the decision to disqualify communities with just one below-moderate component score from potential designation as a DAC, regardless of if the second component score is extremely high, could result in the exclusion of numerous communities shouldering disproportionate environmental health, or socioeconomic burdens. As described in the Frequently Asked Questions document in the Climate Act section and Disadvantaged Communities Criteria subsection of the New York State website:

“Communities covered by the draft disadvantaged communities criteria were identified through a process that considers “Environmental Burden and Climate Change Risks” as well as “Population Characteristics and Health Vulnerabilities,” to align with the Climate Act guidance. To be identified as a draft DAC, a census tract needs to have a moderate-to-high score on both components, or a high score on one component and moderate score on the other component. Therefore, some communities that may have relatively high sociodemographic, economic or health vulnerabilities, but low scores for environmental burdens and climate change risks, and vice versa, are not identified as draft disadvantaged communities.”

This decision could prove problematic—though the two component scores are theoretically highly correlated, it could still be restrictive to communities with one very high component score if the second is below "moderate" and thus they are disqualified from consideration.

Similarly, the Technical Documentation should include explanations regarding the weights assigned to indicators in the calculations: though “Section 5.5.5: Calculate Factor Scores” of the Technical Documentation mentions that each of the indicators is assigned an “indicator weight,” a breakdown of what amounts are possible or the reasoning behind weighting different indicators is not provided. It is important to be transparent regarding the range of possible weights that an indicator can be categorized as, the decided weight for each indicator, the reasoning behind these weights, and how which tracts are designated DACs would change with different weighting. This explanation is important whether or not the CJWG alters indicator weights between the draft and the final product: if community members are
rightfully upset at not being included as DACs, they are owed a transparent explanation of how these weights were determined.

Furthermore, the use of a percentile ranking system, along with the use of census tract data to classify DACs, results in a system in which tracts may have been either chosen as DACs or left off the map due to insignificant differences in data values or a lack of stable data, especially for health data. Data collected for geographic areas like census tracts often have high levels of uncertainty and measurement error. This wide margin-of-error means that communities could be falsely judged as either more or less vulnerable than their neighbors.

Additionally, the downside to using a percentile ranking system is that percentile ranks do not reveal anything about the raw values data collected, just the rank order. Therefore, for example, if citizens in almost every census tract are facing a specific social or environmental burden to a high degree, but a few are experiencing it an insignificantly small amount more than others, then the citizens in those tracts that are impacted slightly more would receive funds to deal with the issue while citizens in the other tracts would not. For example, benzene concentration is one indicator used in the “Potential Pollution Exposures” category of indicators for DAC classification. If one tract has a slightly but insignificantly higher benzene concentration than another, that will give it a boost in its chance of being classified as a DAC. But as the DAC Technical Documentation admits, the data used for benzene concentration “represents historical emissions from 2014 and may not accurately reflect current conditions” and the “EPA cautions against using census-tract level comparisons to draw conclusions about individual exposures” (pg. 27). The Technical Documentation also acknowledges that “for some indicators the magnitude of differences between tracts may not represent significant or meaningful differences. A rank-based approach essentially smooths out the magnitude of some of the differences, which has pros and cons depending on the indicator.” Despite this acknowledgement, it does not mention which or how many indicators do not represent meaningful differences between tracts. The percentile ranks would not reveal when many or all communities are suffering from an issue, only that some are more than others, and possibly to an insignificant degree. Moreover, when combined with the high uncertainty of census tract data, it is not even clear that communities with a higher ranking are truly any more vulnerable than those with a lower ranking.

On top of that, there is no discussion in the technical report of how much of the data for each indicator was missing in certain tracts. The Technical Team used a “zero” value for missing raw data in both the case that the data was missing because the exposure, burden, or risk was not present and the case that the data was never collected or calculated. There is no indication of how many indicators and tracts had “zero” values or which case the “zero” value represented, either missing data or non-relevant data. Therefore, the vulnerability scores for certain tracts could be highly miscalculated due to missing data values, but there would be no way for the public to know. Again, communities deserve a transparent explanation of how their census tracts were scored.

Additionally, the lack of a sliding scale in determining which communities are DACs could result in the exclusion of some communities from just funding opportunities. According to “Section 5.5.8: Calculate Combined Score Percentile Ranks and Designate DACs,” a tract is designated as a DAC if its combined score percentile rank is within the top 27.4% of all tracts across the state or within the tract’s region, or if it is an indigenous community or a low population area that meets different calculation requirements. Consequently, if a tract is in the top 27.4%, it is supposed to receive a portion of the forty percent of CLCPA funding promised to DACs, while a tract in the top 27.5%, separated from 27.4% by just 0.1%, is not. NYLPI believes that instituting different funding levels would be a more equitable approach to DAC funding. Under this system, communities with both a high climate change burdens percentile ranking and health vulnerabilities percentile ranking would receive the most DAC funds. Communities that have a
A high percentile ranking for only one category, climate change burdens or health vulnerabilities, would still receive funds, but a lower amount.

A second improved strategy for funding could be a sliding scale in which the totals for both the environmental burdens and health vulnerabilities categories are added together, and different levels of funding are provided depending on the total score. For example, consider three hypothetical census tracts. The first tract has an environmental burdens percentile score of 87% and a health vulnerabilities percentile score of 85%. The second has an environmental burdens score of 95% and a health vulnerabilities score of 50%. The third has an environmental burdens score of 30% and a health vulnerabilities score of 20%. The total combined scores for each tract would be 172, 145, and 50. The first census tract would receive the most funding, the second would receive some funding but a lesser amount, the third little or no funding, etc.

Under both systems, tracts that have only a high climate change burdens or health vulnerabilities percentile ranking would not be automatically eliminated from inclusion, allowing communities to benefit from the DAC funding to the degree that makes most sense with their needs. At this point, funding specificities have not been determined, but including a framework of this type in the Technical Documentation could lay the groundwork for a stronger approach to funding distribution.

This is exemplified by the figures below, which illustrate the percentile ranks of the two component scores that together represent the DAC criteria. The dark dots represent DAC census tracts, while the light dots represent non-DAC census tracts. Each tract will receive a percentile of environmental and climate burden and pollution and health vulnerability, indicated by their position in the figure. Many tracts are situated on the border between DAC designation and non-DAC designation.

An example of a census tract that is not currently designated as a DAC but is located right next to tracts designated as DACs and that contains attributes that would make it clearly important to include as a recipient of DAC funding, is Tract 36047009800, located in Sunset Park, Brooklyn (filled in red in the figure below). It has a population vulnerability score that is higher than 82% of census tracts statewide, a little higher than the tract to its left that is designated as a DAC, which has a population vulnerability score that is higher than 79% of census tracts statewide. But Tract 36047009800 is not designated as a DAC because its environmental burden score is only higher than 37% of tracts statewide. Still, as discussed in the CJWG’s meeting on December 9, 2021 and as reflected in the meeting minutes, this tract and some of the other non-DAC tracts in Sunset Park contain sweatshops, large low-income populations.
living in multi-unit buildings, and a community health profile with high levels of upper respiratory disease and cancer. There is clearly need in tracts like these, as the data and the issues brought up in the CJWG meeting show, but they will still not be designated as DACs under the current scoring system and will therefore not receive the funding they need. This exemplifies NYLPI’s concerns with the draft criteria system of DAC determination, as its methodology excludes communities that objectively warrant inclusion.

Figure 3: The census tract filled in red is Tract 36047009800, located in Sunset Park, Brooklyn. It is not classified as a DAC despite having a population vulnerability score that is higher than 82% of census tracts statewide. It was also mentioned in the Climate Justice Working Group’s December 9th, 2021 meeting as a community with clear need.

In summation, the Draft Disadvantaged Communities Criteria should be amended to address concerns of accessibility, justice, and transparency. Under the CLCPA, communities designated as DACs are set to receive forty percent of overall investments. This is an unequivocally significant amount of support that will make an enormous difference in communities; thus, it is the duty of the Climate Action Council, CJWG, and other involved actors to ensure that the selection process to identify DACs is as just, clear, and accessible as possible, even if doing so means reevaluating the methodology by which DACs are determined.