

LEVERAGING COMMUNITY & ACADEMIC EXPERTISE FOR POLICY & DECISION-MAKING: BRIEF HISTORY OF EJ LAWS & THE ROAD AHEAD



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Cumulative Impacts & the Legacy of Environmental Racism

Current environmental policy, focuses narrowly on pollutants and single sources, and does not account for the cumulative impact of exposures and vulnerabilities encountered by people who live in neighborhoods consisting largely of racial or ethnic minorities or people of low socioeconomic status. (Morello-Frosch, 2011)

Environmental justice requires addressing cumulative, disproportionate burdens faced by EJ communities

- Traditional chemical-by-chemical and source-specific assessments of potential health risks of environmental hazards do not reflect the multiple environmental and social stressors faced by EJ communities, that can act additively or synergistically to harm health.
- When defining EJ communities, analysts should consider evaluation of combined risks from exposure to multiple chemical and non-chemical stressors, and include factors that influence susceptibility (US EPA, 2013).

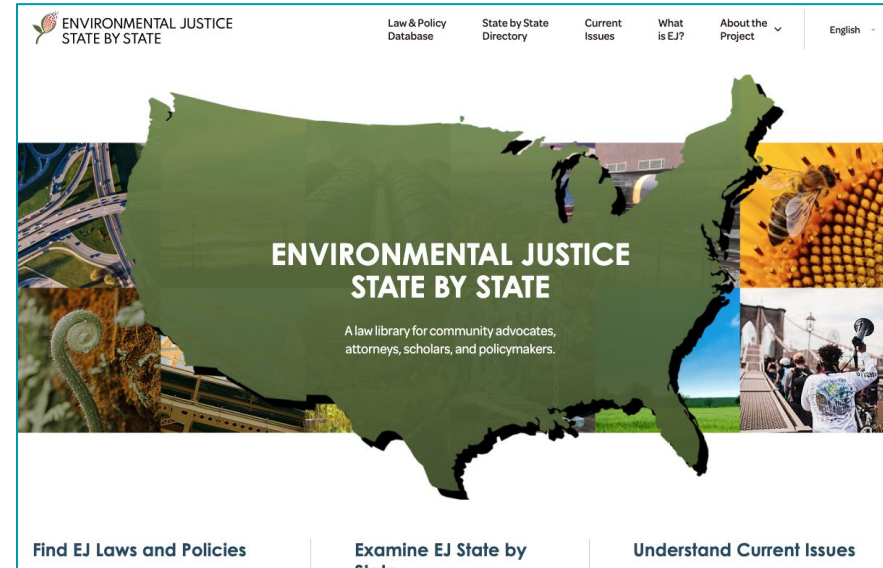
We need cumulative policies for cumulative impacts (N. Sheats)



The Evolution of State Responses to Environmental Injustice

Ultimately, these federal environmental justice initiatives have created procedural mechanisms that have cast light on and drawn attention to environmental disparities.. but they have not placed distributional outcomes or participatory control at the center of environmental decision-making. (Kaswan, 2017)

- ❖ ..what affects a state's propensity to adopt new EJ policies depends upon how the issue of EJ is defined within the state political environment. (Ringquist, 2002).
- ❖ By 2007 more than 40 states adopted an EJ policy, formal EJ statutes, executive orders, or policies, EJ officers or personnel, or have active EJ programs. (Bonorris, 2007).
- ❖ By 2023, all 50 states had some form of policy, guidance or tool related to environmental justice
- ❖ Most early state EJ policies focused on public participation and the establishment of EJ advisory bodies.



<https://ejstatebystate.org>

States Move Towards Regulation, Legislation, & Innovation

On the heels of significant policy wins in New Jersey and New York, a new slate of cumulative impacts bills has been introduced this year- 2023- in at least 12 states.

Key Takeaways

Several states have established task forces, commissions and offices to address disproportionate human health and environmental impacts of their programs and policies.

States are using a variety of tools and mechanisms to increase public participation in the regulatory, permitting and compliance processes.

Incorporating environmental justice principles into the legislative and regulatory processes may be a next step for states.

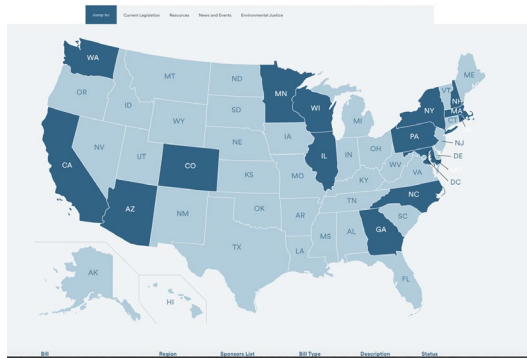
Table 1. Policy Goal Categories and Total Policies/Reports/Guidance/Tools in Each Category

Typology (Ringquist)	Goal Type	Total CI Policies/ Reports/Guidance/Tools
Redistributive	Goal is to target investments, resources (e.g. enforcement actions, funding, etc.)	10
Protective/Regulatory	Goal is to enact new or added protections through decision-making powers of agencies (e.g. enhanced public participation, regulatory permitting, siting, etc.)	36
Environmental/Analytical	Goal is to promote further studies, increase analytic understanding of EJ related issues or concerns (e.g. mapping or modeling of risk, etc.)	15

THE NEW SCHOOL Tishman Environment and Design Center

Cumulative Impacts Tool & Interactive Map. The tool is a searchable spreadsheet with definitions, methodologies, and links to CI policies at the state, federal & local level

<https://www.tishmancenter.org>



M.O.D.E.L. bills offers a comprehensive set of legislation tools specifically designed to address the issue of cumulative impacts at the local & state levels (Sabin Center + WeAct)

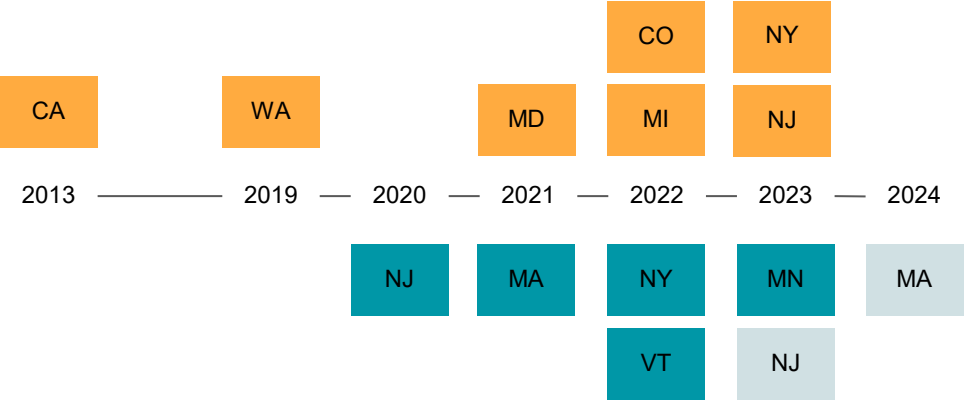
<https://dismantlinginjustice.org>



Increase in State Policies focused on EJ & CI

- CI Mapping Tools
- CI Laws
- CI Rules/Regs

CI Legislation and Tools Timeline



Will 2021 Be the Year for Environmental Justice Legislation? States Are Already Leading the Way

The new state laws address the disproportionate impact of climate change and pollution on communities of color. Joe Biden is promising to do the same in Washington.

By Kristoffer Tighe
January 15, 2021



Five states have passed Cumulative Impacts legislation:
MA, MN, NJ, NY, VT

Seven states have official Cumulative Impacts Mapping Tools:
CA, CO, MD, MI, NJ, NY, WA

More than a dozen states have codified a definition of **EJ Communities**

Environmental Justice Organizations Drive Policy Action

Efforts to assess cumulative impacts grew out decades of organizing & legal challenges by community-led EJ groups to go beyond traditional approaches to risk assessment and permitting.



LOS JARDINES INSTITUTE

New Jersey adopts long-awaited 'environmental justice' rules

Supporters said the new rules ensure people in vulnerable communities have more of a say in whether permits for pollution-generating facilities can be granted or renewed.

By Temmyson Doryla - April 18, 2023



The CPU power plant operates in Woodbridge N.J. on Feb. 22, 2023. The company's plan to a second gas-fired power plant next to the existing one is being opposed by residents of the mainly minority and low-income communities around the plant who say an environmental justice law signed over two years ago by New Jersey Gov. Phil Murphy but which has yet to take full effect should prevent the plant from being built. (AP Photo/Wayne Perry)



COMMUNITIES FOR A BETTER ENVIRONMENT

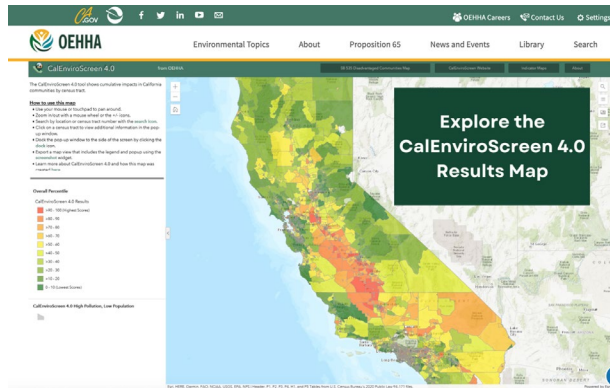
*Building Community Power to Achieve Environmental Justice,
Clean Energy and Healthy Communities*



Tools for Assessing Cumulative Impacts

CI analysis must analyze health disparities, environmental exposure disparities, intrinsic biological factors, and extrinsic social factors across different groups (Morello-Frosch et al. 2011)

Cal EnviroScreen



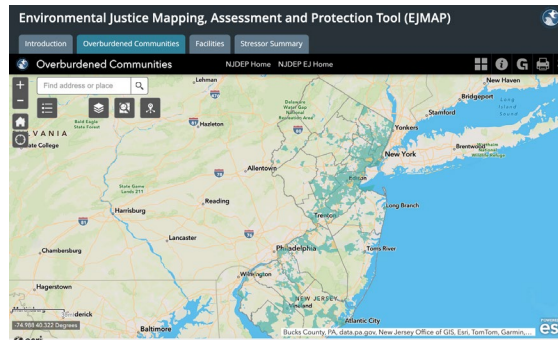
FORMULA FOR CALCULATING CALENVIROSCREEN SCORE

After the components are scored within Pollution Burden or Population Characteristics, the scores are combined as follows to calculate the overall CalEnviroScreen Score:



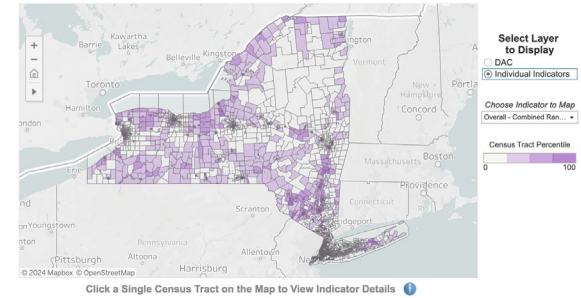
**The Environmental Effects component is weighted one-half when combined with the Exposures component.*

NJDEP EJMAP



EJMAP depicts each 50th percentile value for each individual stressors in the OBC and its point of comparison for both the State and relevant county. If the 50th percentile value for an individual stressor is higher than the lesser of the State or county point of comparison for that same stressor, the stressor is considered "adverse".

NYS DEC, DAC Tool



NYS DAC Criteria Methodology



NYS DAC Criteria Methodology: Factors and Components

COMPONENTS	FACTORS			
ENVIRONMENTAL BURDENS AND CLIMATE CHANGE RISKS	Potential Pollution Exposures	Land Use Associated with Historical Discrimination or Disinvestment	Potential Climate Change Risks	
	WEIGHT	1x	1x	2x
POPULATION CHARACTERISTICS AND HEALTH VULNERABILITIES	Income	Race, Ethnicity	Health Impacts and Burdens	Housing, Energy, Communications
	WEIGHT	1x	1x	1x

This methodology has other limitations that reflect the difficulties in capturing how environmental justice is experienced locally using quantitative data available statewide. First, environmental justice issues that are not uniformly measured at the state level are excluded from the DAC criteria. Second, there are always differences between actual experiences and the conditions that can be recorded through spatial data.

Common Steps in Developing CI Approaches

- *Identify and compile relevant stressor and burden data* for socio-demographic, environmental exposure, burden, and health data across the geographic areas under consideration
- Review robustness and coverage of stressor data
- *Determine definition of key terms*: environmental justice community, community of concern, disadvantaged community, overburdened community
- *Select geographic unit of spatial analysis*, such as census block or census tract levels & determine appropriate geographic points of comparison if necessary
- *Determine the appropriate thresholds* for indicators and comparative measures
- *Decide formula for combining, weighting and summing* indicators into a score or total
- Compare scores or totals

Topic Areas and Corresponding EJ Issues and Indicators

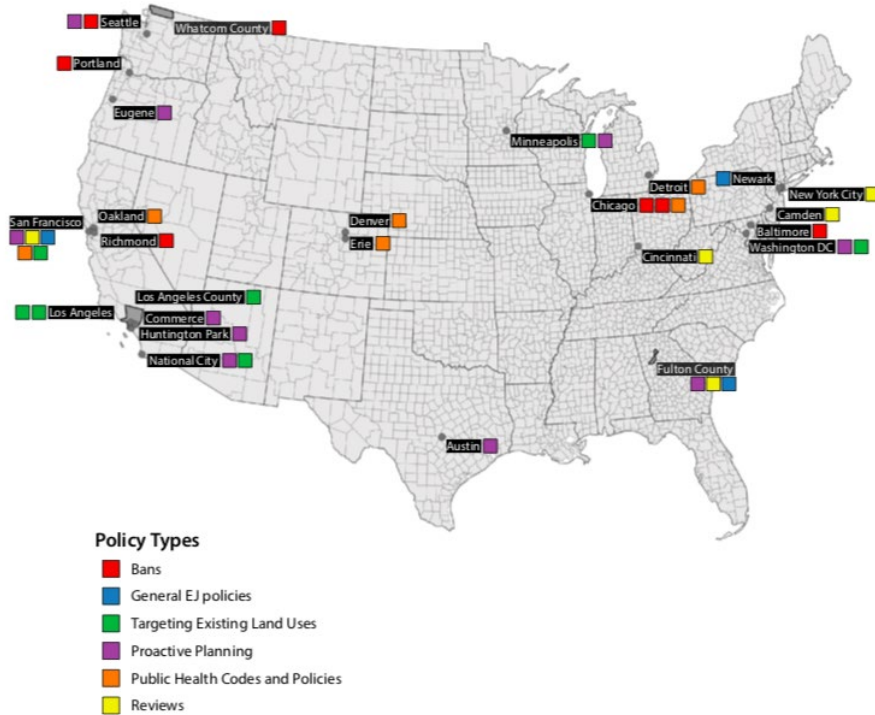
ACCESS TO RESOURCES	EXPOSURE TO POLLUTED AIR	EXPOSURE TO HAZARDOUS MATERIALS	ACCESS TO SAFE AND HEALTHY HOUSING	EXPOSURE TO POLLUTED WATER	EXPOSURE TO CLIMATE CHANGE
Redlining Capital Planning Land Use Planning and Zoning Transit and Alternative Transportation Access Open Space and Natural Resources Food and Nutrition	Outdoor Air Pollution Stationary Sources of Pollution Mobile Sources of Pollution Solid Waste Facilities Indoor Air	Hazardous Waste Generators and Storage Facilities Contaminated Land Hazardous Material Incidents	Housing Affordability Health-related Housing Maintenance Issues Public Housing Utility Access and Affordability Lead in Housing Plumbing Noise	Polluted Water Bodies Stormwater Management	Extreme Heat Coastal Storm Surge Chronic Tidal Flooding Extreme Rainfall

NYC Mayor's Office of Climate & Environmental Justice

Many of these steps require careful normative deliberations around what is fair, just and reasonable - not just empirical questions focused on methodologies

The perspective and leadership of EJ organizations is thus critical at each of these decision points

LOCAL POLICIES FOR ENVIRONMENTAL JUSTICE: A NATIONAL SCAN



Policies In Areas With:

- History Of EJ Activism
- Progressive Local Context
- Policy Entrepreneurs & Political Opportunity

- 40 policies in
- 23 cities,
- 3 counties,
- 2 utilities

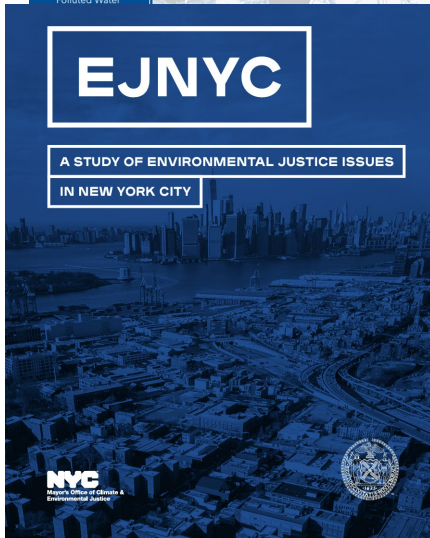
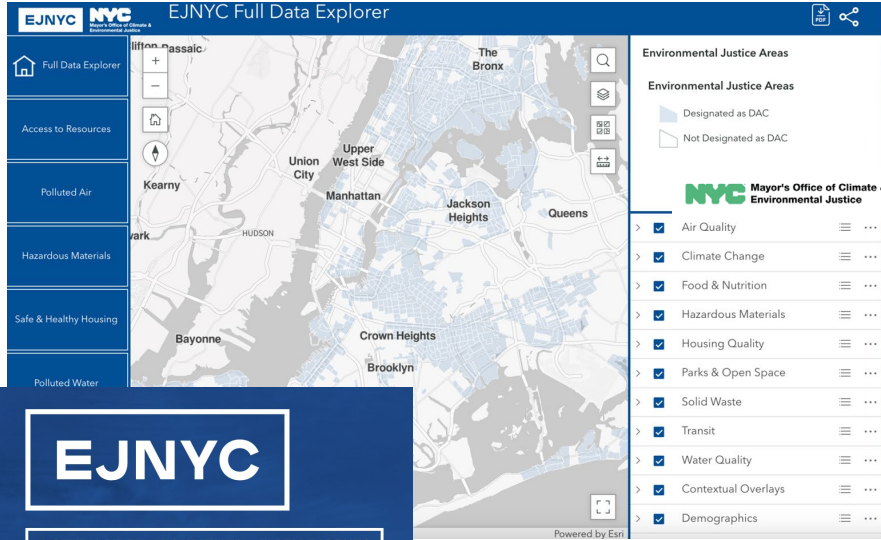
• State Enabling Laws

CATEGORIES OF LOCAL POLICIES SHAPING EJ

1. **Bans** on specific types of polluting facilities sited in environmental justice communities (7)
2. **General EJ policies** that incorporate EJ goals and considerations into a range of municipal activities (3)
3. **Environmental review** processes for new developments (7)
4. **Proactive planning** targeted at future development to address EJ via comprehensive plans, overlay zones, or green zones (12)
5. Targeted land use measures that address **existing sources of pollution**, like amortization policies (5)
6. Enhanced **public health codes** that reach both existing and new sources of pollution that impact public health (6)

Check out the report on www.tishmancenter.org

CITIES LEADING THE WAY



EJNYC, 2024

CUMULATIVE IMPACT ASSESSMENT CHICAGO INDEX METHODOLOGY

Chicago EJ Index Indicators

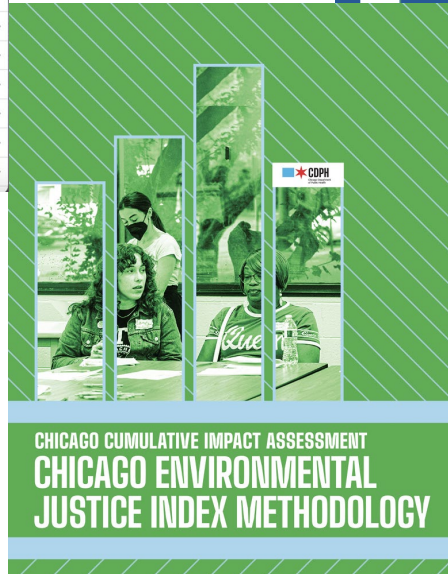
Component	Indicator
Environmental Exposures	Air Toxics All-Organ Hazard Index
	Air Toxics Cancer Risk
	Childhood Lead Poisoning
	Diesel Particulate Matter (PM)
	Ozone
Environmental Conditions	Particulate Matter 2.5 (PM2.5)
	Air Toxics All-Organ Hazard Index
	Traffic Proximity and Volume
	Proximity to Consequential Facilities
	Proximity to Freight Rail Lines
	Proximity to Hazardous Waste Facilities
	Proximity to Polluted Sites
	Proximity to Risk Management (RMP) Sites
	Proximity to TRI Facilities
	Proximity to Wastewater Discharge
Socioeconomic Factors	Asthma
	Coronary Heart Disease
	Disability
	Low Birthweight
	Old Age
	Young Age
	Housing Burdened, Low Income Households
	Less than High School Education
	Linguistic Isolation
	Low Income
No Health Insurance	
People of Color	
Unemployment	

The Chicago EJ Index is built upon Chicago's 2020 Air Quality & Health Index, which itself is based on the CalEnviroScreen model for cumulative impacts. The model is place-based and provides information for the entire City of Chicago at the geographic level of census tract, to allow comparisons between individual communities. The model includes Pollution Burden (including components for Environmental Exposures and Environmental Conditions), as well as Population Characteristics (including components for Sensitive Populations and Socioeconomic Factors).

Figure 2. Chicago EJ Index Equation



Environmental Conditions is weighted half as much as the Environmental Exposures because the Condition indicators represent risk of exposure, whereas Exposure indicator represent actual measured exposures.



Chicago EJ Index 2023

RECENT FEDERAL ACTIONS ON CUMULATIVE IMPACTS

- ❖ Executive Order 14096 (2023), Revitalizing Our Nation's Commitment to Environmental Justice for All
- ❖ US EPA, Office of the General Counsel (2023), *Cumulative Impacts Addendum to EPA Legal Tools to Advance Environmental Justice (EJ Legal Tools)*
- ❖ USEPA, ORD (2022) *Cumulative Impacts Research: Recommendations for EPA's Office of Research & Development*,
- ❖ Council on Environmental Quality, (2022) Climate and Economic Justice Screening Tool (CEJST)
- ❖ USEPA, (2023) Environmental Justice (EJ) Screening and Mapping Tool, EJScreen Version 2.2
- ❖ CDC/ATSDR EJ Index Tool

The A. Donald McEachin Environmental Justice For All Act will take the concrete action we need to help make sure the same destruction that's been perpetrated against poor communities and communities of color for decades doesn't happen again. (Rep. Grijalva)



THANK YOU

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