Commonwealth of Massachusetts

Executive Office of
Energy and Environmental Affairs

Cumulative Impact Analysis (CIA) Webinar

Office of Environmental Justice and Equity &

Department of Public Utilities, Siting Division

November 6, 2025

Interpretation Logistics

- **Language Interpretation is being offered in: Español, Português, Kreyòl ayisyen, Kriolu, Tiếng Việt, 普通话, ,عربي, русский, ខ្មែរ, 한국어, français, and American Sign Language (ASL).**
  - To participate in English, click the “Interpretation” icon and select English.
  - Para entrar no canal em português, clique no ícone “Interpretation” e selecione “Portuguese”.
  - Si alguien desea interpretación en español, haga clic en “Interpretation” y seleccione “Spanish”.
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  - Pa partisipa na Kriolu, klika na íkone "Intirpretason" y silisiona "Cape Verdean Kriolu".
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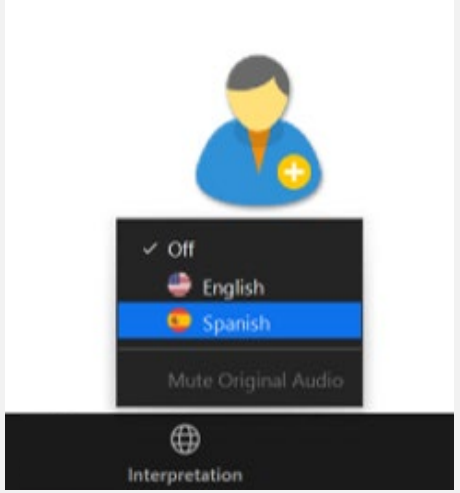
  - للمشاركة باللغة العربية اضغط على أيقونة "الترجمة الفورية" ثم اختر “Arabic“.
  - Чтобы принять участие на Русский языке, нажмите на ярлык «Устный перевод» и выберите “Russian”.
  - ដើម្បីចូលរួមជាភាសាខ្មែរ សូមចុច រូបតំណាងការបកស្រាយ ហើយជ្រើសរើសភាសា”Khmer"។
  - 한국어로 참여하려면 "통역" 아이콘을 클릭하고 “Korean"를 선택하세요.
  - Pour participer en français, cliquez sur l’icône « Interprétation » puis choisissez « French ».

- **Please speak slowly.**
- **All attendees must select a language channel, even if viewing the presentation in English.**



Agenda

- 2:00 – 2:10: Interpretation Overview
- 2:10 – 2:20: Opening Remarks
- 2:20 – 2:50: Overview of MassEnviroScreen
- 2:50 – 3:00: Short Q&A
- 3:00 – 3:40: Overview of CIA & Illustrative CIA Case Study for EFSB
- 3:40 – 3:45: Short Q&A
- 3:45 – 4:00: Break
- 4:00 – 4:55: Q&A
- 4:55 – 5:00: Closing Remarks

Opening Remarks

MassEnviroScreen

Policy Context: The 2024 Climate Act

AN ACT PROMOTING A CLEAN ENERGY GRID, ADVANCING EQUITY AND PROTECTING RATEPAYERS

- The 2024 Climate Act formally established the Office of Environmental Justice and Equity (OEJE) within EEA. The Climate Act directs OEJE to:
  - Implement environmental justice principles in the operation of each office and agency under the executive office
  - Develop guidance on cumulative impact analysis (CIA) for use in siting and permitting decisions.

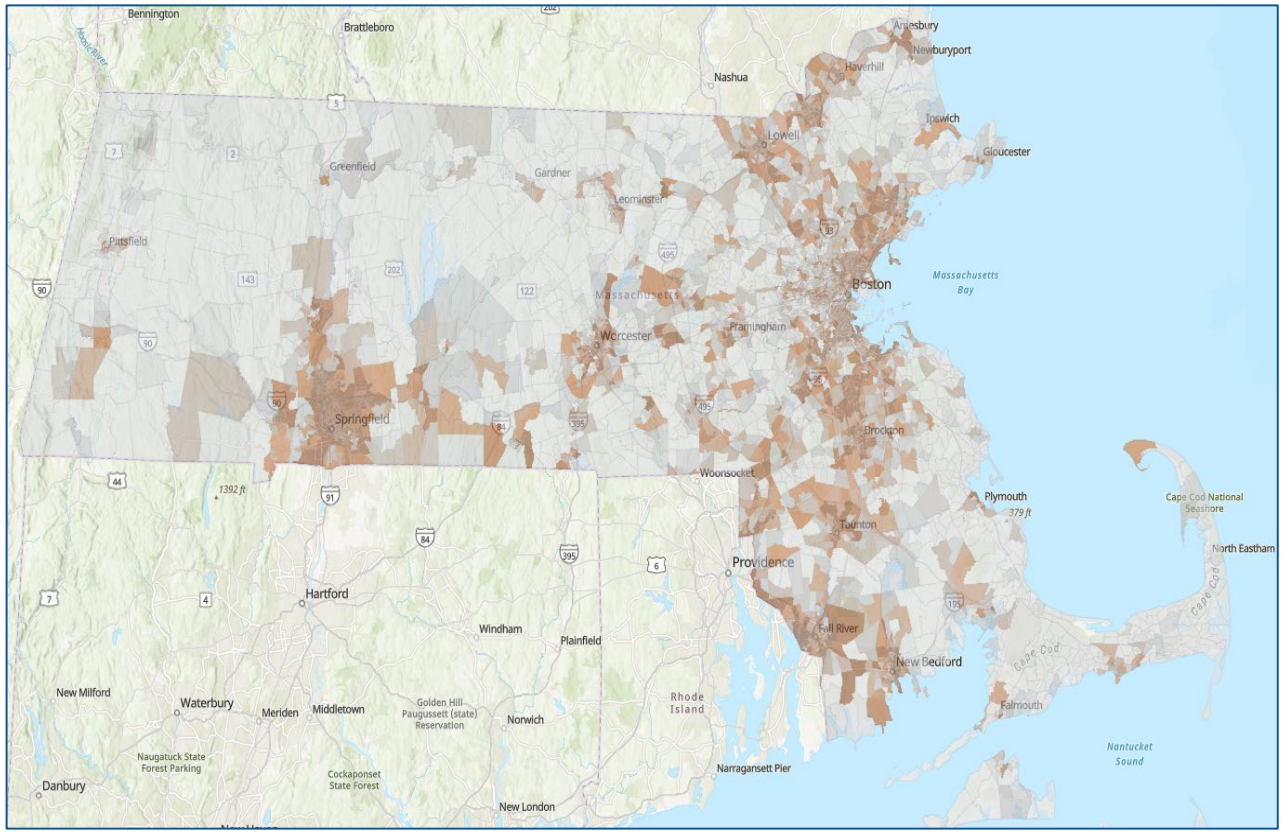
- **Environmental Justice Principles:** Principles that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief or English language proficiency, which includes:
  i. the meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies, including climate change policies; and
  ii. the equitable distribution of energy and environmental benefits and environmental burdens.

What is MassEnviroScreen?

- The MassEnviroScreen is a statewide environmental screening tool designed to identify communities facing the greatest environmental burdens and levels of social vulnerability

- It integrates **30 indicators** across five major components.

- The tool is being developed to support consistent, data-informed approaches to understanding cumulative environmental and social burdens across the state.



Development and Collaboration

- The MassEnviroScreen is modeled after other states – California's CalEnviroScreen, Michigan's MiEnviroScreen, and Colorado's EnviroScreen
- Development has been an effort led by OEJE and our consultant, working closely with:
  - State agencies and GIS teams
  - Academic and public health experts
  - Community-based organizations and environmental justice advocates
  - Tribal governments and Indigenous representatives
- The process has been iterative and collaborative
- OEJE continues to refine indicators, testing results, and gathering public feedback.
- The goal is a tool that reflects the diverse realities of Massachusetts communities.

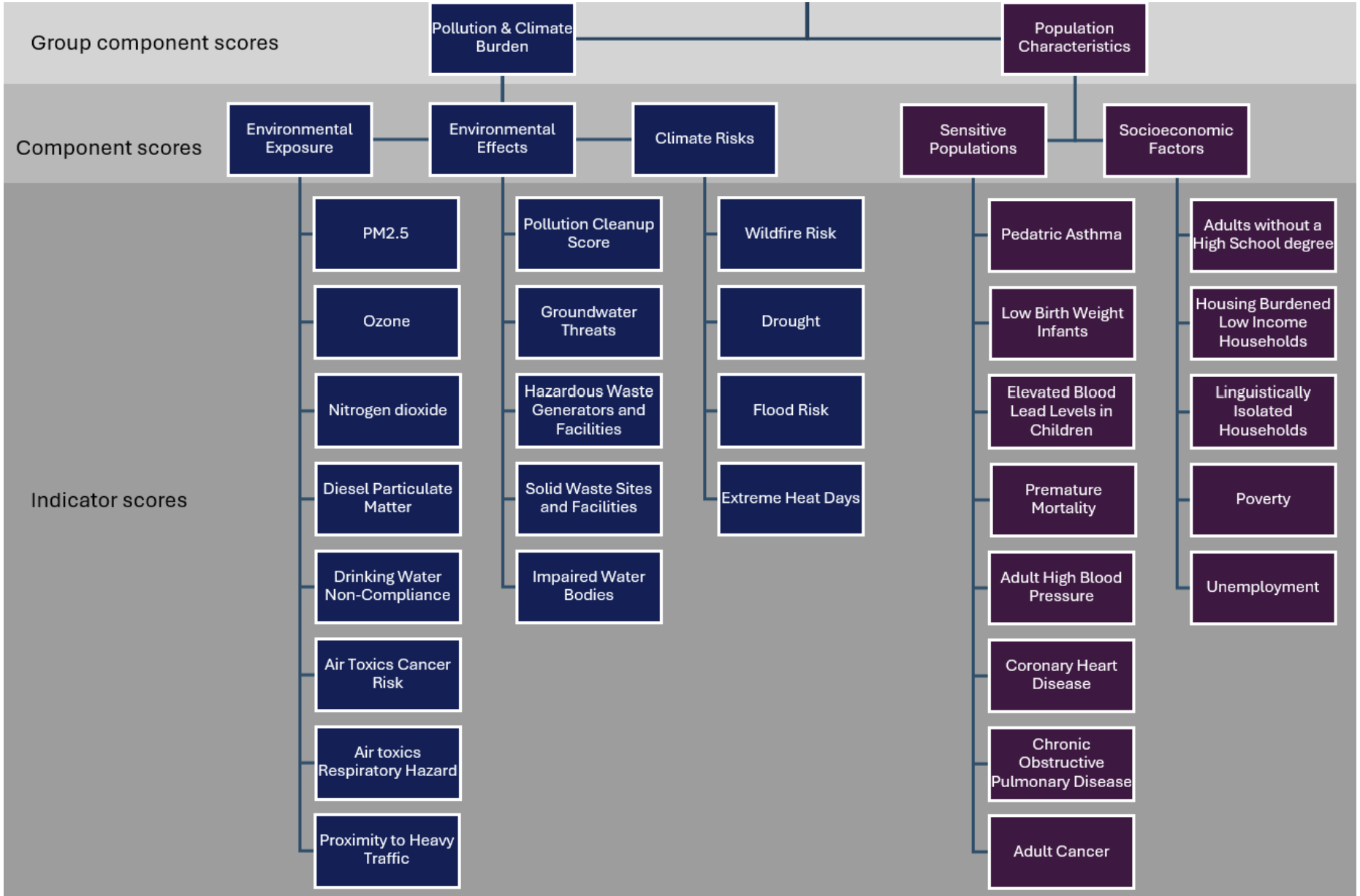
MassEnviroScreen Components

The MassEnviroScreen score reflects two main factors – **pollution and climate burden** and **population characteristics** – which together are made up of five component scores.

- Pollution and Climate Burden:
  - **Environmental exposure** indicators are based on measurements of different types of pollution that people may come into contact with.
  - **Environmental effects** indicators are based on the locations of toxic chemicals in or near communities.
  - **Climate risk** indicators are based on exposures to climate hazards.
- Population Characteristics:
  - **Sensitive populations** indicators measure the number of people in a community who may be more severely affected by pollution or climate hazards because of their health.
  - **Socioeconomic factor** indicators are conditions that may increase people's stress or make healthy living difficult and cause them to be more sensitive to pollution's effects.

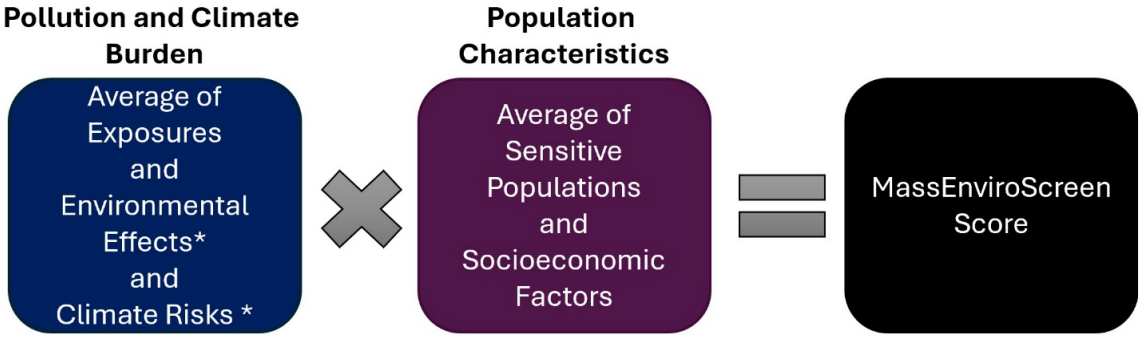
These components together provide a comprehensive picture of cumulative impact in the Commonwealth.

Draft MassEnviroScreen Indicators



MassEnviroScreen Methodology

- Indicators are standardized and combined into component scores
- There are two major components:
  - **Pollution and Climate Burden** = Exposures + Environmental Effects + Climate Risks
  - **Population Characteristics** = Sensitive Populations + Socioeconomic Factors
- The model follows this conceptual formula:



- MassEnviroScreen assigns a cumulative burden score (0 – 100) to every census block group in Massachusetts
- The MassEnviroScreen score also represent percentile ranks, which means that a community's score also indicates the percentage of scores in a group that are equal to or higher than a given score.

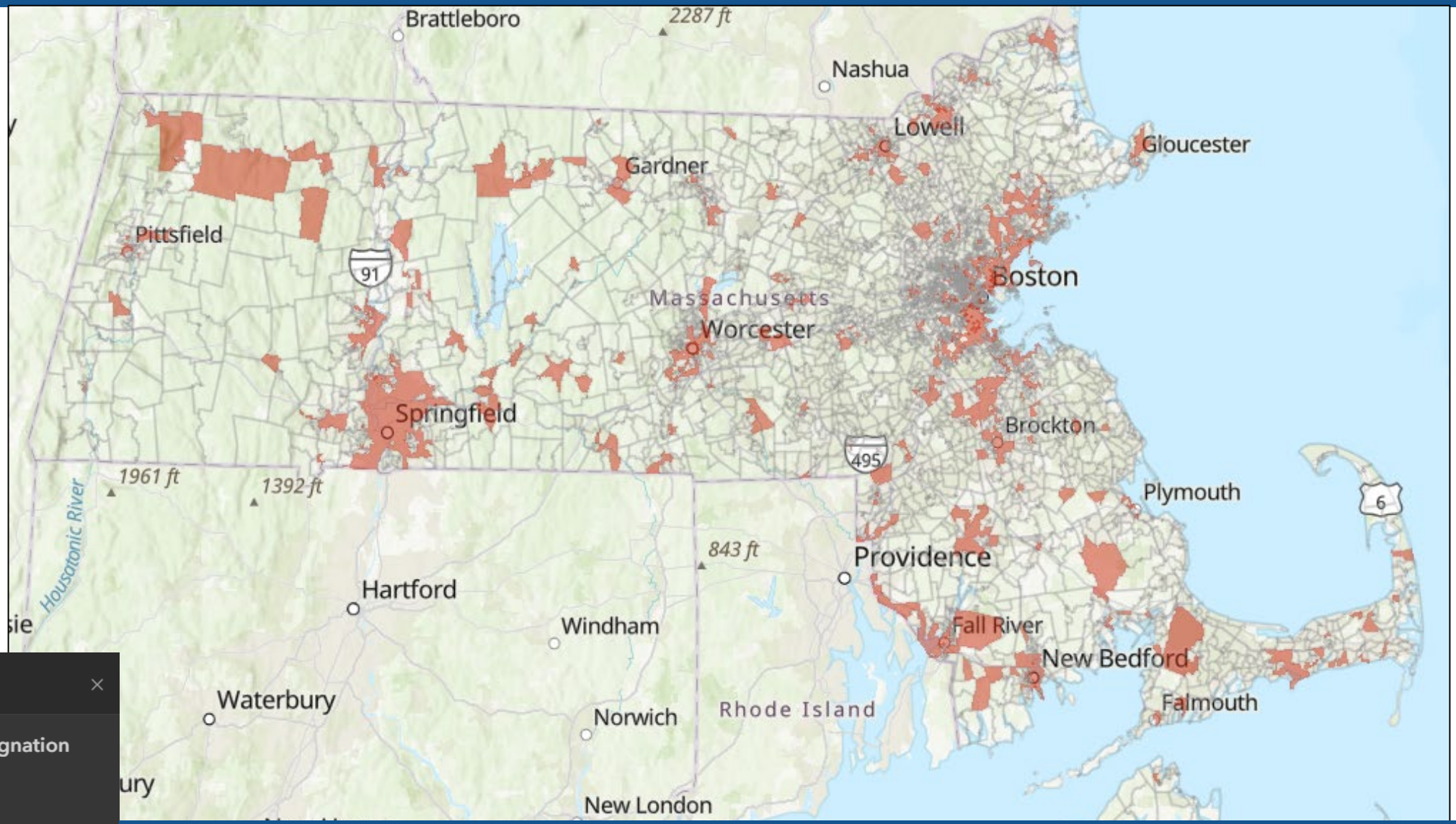
Model Output

- Higher scores = a combined greater pollution, climate burden and social vulnerability

- ***Burdened Areas*** are communities where high levels of environmental stressors intersect with high levels of social vulnerability

- Communities are designated as ***Burdened Areas*** when they meet one or both of the following criteria:
  - cumulative burden percentile score (i.e, MassEnviroScore) of 75 or greater, OR
  - annual median household income is 65 percent or less of the statewide annual median household income

MassEnviroScreen: Map of Burdened Areas



34.5% of Census Block Groups in the state meet the criteria for Burdened Area.

How MassEnviroScreen Supports CIA – and Beyond

- **The MassEnviroScreen is designed to:**
  - Support the foundation for Cumulative Impact Analyses (CIA) by identifying areas facing multiple environmental, health, and socioeconomic burdens.
  - Highlight Burdened Areas for deeper review during the siting and permitting processes
  - Improve transparency by showing how environmental and social stressors overlap across communities.
  - Inform broader environmental justice and equity discussions across agencies and programs.

- **The tool does not**:
  - Determine causation or assign liability
  - Does not replace CIA Reports which require site-specific, project-level data.
  - Define all areas affected by environmental injustice or specific environmental risks
  - Does not correlate to federal or state regulatory threshold

- MassEnviroScreen is a tool that guides deeper **analysis, community engagement, and mitigation**

Map Demo

Short Q&A

Commonwealth of Massachusetts

Executive Office of
Energy and Environmental Affairs

Cumulative Impact Analysis (CIA) and Illustrative CIA Case Study for Energy Facilities Siting

Energy Facilities Siting Board &
Department of Public Utilities, Siting Division

November 6, 2025

2024 Climate Act CIA Requirements Overview: Guidance by OEJE and Regulations by EFSB

- The 2024 Climate Act requires OEJE to develop standards and guidelines governing CIAs of energy infrastructure with input from representatives of utilities, the renewable energy industry, local government, environmental justice community-based organizations, environmental sectors, and others.

- The 2024 Climate Act requires the EFSB to promulgate regulations for CIA by March 1, 2026, as part of its review of all facilities, based on the OEJE's CIA standards and guidelines.

- Key elements of the EFSB's proposed CIA regulation (980 CMR 15.00):
  - Definitions
  - Identification of "Burdened Areas" using MassEnviroScreen and related data
  - Assessment of "Elevated Indicators" in Burdened Areas
  - Assessment of Project Impacts and any Disproportionate Adverse Effects
  - Remedial actions to avoid, minimize, or mitigate Disproportionate Adverse Effects
  - Contents of the required CIA Report (and forthcoming CIA Report Template)
  - Standards for applying EEA's Site Suitability Criteria (not addressed in this presentation)

Goals of Presentation

- Provide an overview of CIA **concepts and related terms central to energy facilities siting**
- Demonstrate the major CIA steps for energy facilities siting
- **Demonstrate how an Applicant would perform a Cumulative Impact Analysis ("CIA") for a project and how a municipal or community stakeholder can access the data**
- Discuss implementation considerations and next steps

Cumulative Impact Analysis Overview

- Cumulative Impact means the combined effects of past and present private, industrial, commercial, state, or municipal projects, operations, development, and other economic activities, in addition to the effects of the proposed Project on: (1) the environment; (2) public health; and (3) reasonably foreseeable effects of climate change.

- Cumulative Impact Analysis (CIA) means the process by which Applicants and Petitioners shall identify, consider, and address the Cumulative Impact of a Project, as articulated in 980 CMR 15.00.

- The purpose of 980 CMR 15.00 is for the EFSB to evaluate existing environmental burdens and related public health consequences in a Specific Geographical Area proximate to a proposed Project location, and to assess whether the Project would result in any Disproportionate Adverse Effects, including environmental and public health impacts, or the effects of climate change. Any Project that results in a Disproportionate Adverse Effect is required to propose remedial actions to address impacts to the environment, public health, and climate resilience of a Burdened Area.

980 CMR 15.00 CIA Key Terms

- Specific Geographical Area (SGA) means an area in which a proposed facility would be located, including the Proposed Site/Route and the Noticed Alternative Site/Route, and is determined based on facility-specific radial distances from the Facility Boundary, as established by the Board in 980 CMR 15.06(1).

- Facility Boundary means the outermost boundary of the Project site (such as a Project building or other structures, or the outermost areas of construction activity or disturbance), or the Project fence line. For linear projects, such as transmission lines or pipelines, the Facility Boundary shall be the edge of the right of way (ROW).

- Census Block Group means a statistical subdivision of a census tract used by the U.S. Census Bureau for data tabulation and presentation. It is a collection of census blocks and is the smallest geographic unit for which the U.S. Census Bureau publishes sample data from its household surveys.

980 CMR 15.00 CIA Key Terms (Continued)

- Indicator means a statistical measure, which is used to evaluate a Census Block Group's environmental exposures, environmental effects, climate effects, sensitive populations, and socioeconomic factors.

- Elevated Indicator means an Indicator that is at or above the 50th percentile statewide in Massachusetts, prior to consideration of additional Project Impacts. An Elevated Indicator is identified solely in those areas where a Project's SGA intersects one or more Burdened Areas.

- Disproportionate Adverse Effect means a Project Impact that is likely to materially exacerbate an Elevated Indicator in a Burdened Area intersecting a Project's SGA. As used in M.G.L. c. 164, §§ 69G and 69H, "disproportionate adverse impact" is the equivalent of "Disproportionate Adverse Effect." A Disproportionate Adverse Effect requires consideration of both positive and negative Project Impacts, and results in a net negative impact.

Site Suitability and CIA Roles

- Site Suitability and CIA are complementary, not duplicative.

- CIA and Site Suitability similarities:
  - Both use indicators and data to quantify environmental and other conditions in a proposed project location and provide a scored result.
  - Both systems use scoring to identify actions to avoid, minimize and mitigate adverse impacts.
  - Both use MassEnviroScreen, to varying degrees.

- The primary difference between CIA and Site Suitability is the focus of review
  - CIA focuses on "Burdened Areas" while Site Suitability focuses on the entire Project footprint
  - CIA focuses on: (1) environmental impacts (such as air, water and waste pollutants, and multiple climate change effects); (2) public health consequences; (3) socioeconomic conditions; and (4) a Project's incremental effects that may "materially exacerbate" Elevated Indicators.
  - Site Suitability focuses on the Project vis-à-vis: (1) development potential (e.g. use of brownfields vs. protected open space); (2) certain measures of climate change resilience (RMAT riverine and coastal flooding); (3) carbon storage; (4), biodiversity; and (5) agricultural resources.

Cases That Require a CIA Report or Site Suitability Scoring (Clean Energy)

Energy Facility Type (either Consolidated Permit or Consolidated State Permit)	CIA Report Required?	CIA Remedial Action Required?	Site Suitability Scoring Required?
Clean Transmission and Distribution (§§ 69T, 69U)	**Yes**	**Yes**, if Project results in a "Disproportionate Adverse Effect"	**No**, unless in a newly established public ROW and no Burdened Area (BA) overlaps the SGA
Clean Energy Generation (§§ 69T, 69V)	**Yes**	**Yes**, if Project results in a "Disproportionate Adverse Effect"	**No**, provided a BA overlaps the SGA
Clean Energy Storage (§§ 69T, 69V)	**Yes**	**Yes**, if Project results in a "Disproportionate Adverse Effect"	**No**, provided a BA overlaps the SGA

Cases That Require a CIA or Site Suitability Scoring (Fossil Fuel)

Energy Facility Type (not "Clean")	CIA Report Required?	CIA Remedial Action Required?	Site Suitability Scoring Required?
Transmission Facility (§ 69J)	**Yes**	**Yes**, if Project results in a Disproportionate Adverse Effect	**No**
Generating Facility (§ 69J ¼)	**Yes**	**Yes**, if Project results in a Disproportionate Adverse Effect	**No**
Gas Pipeline or LNG Storage Facility (§ 69J)	**Yes**	**Yes**, if Project results in a Disproportionate Adverse Effect	**No**

The CIA Process

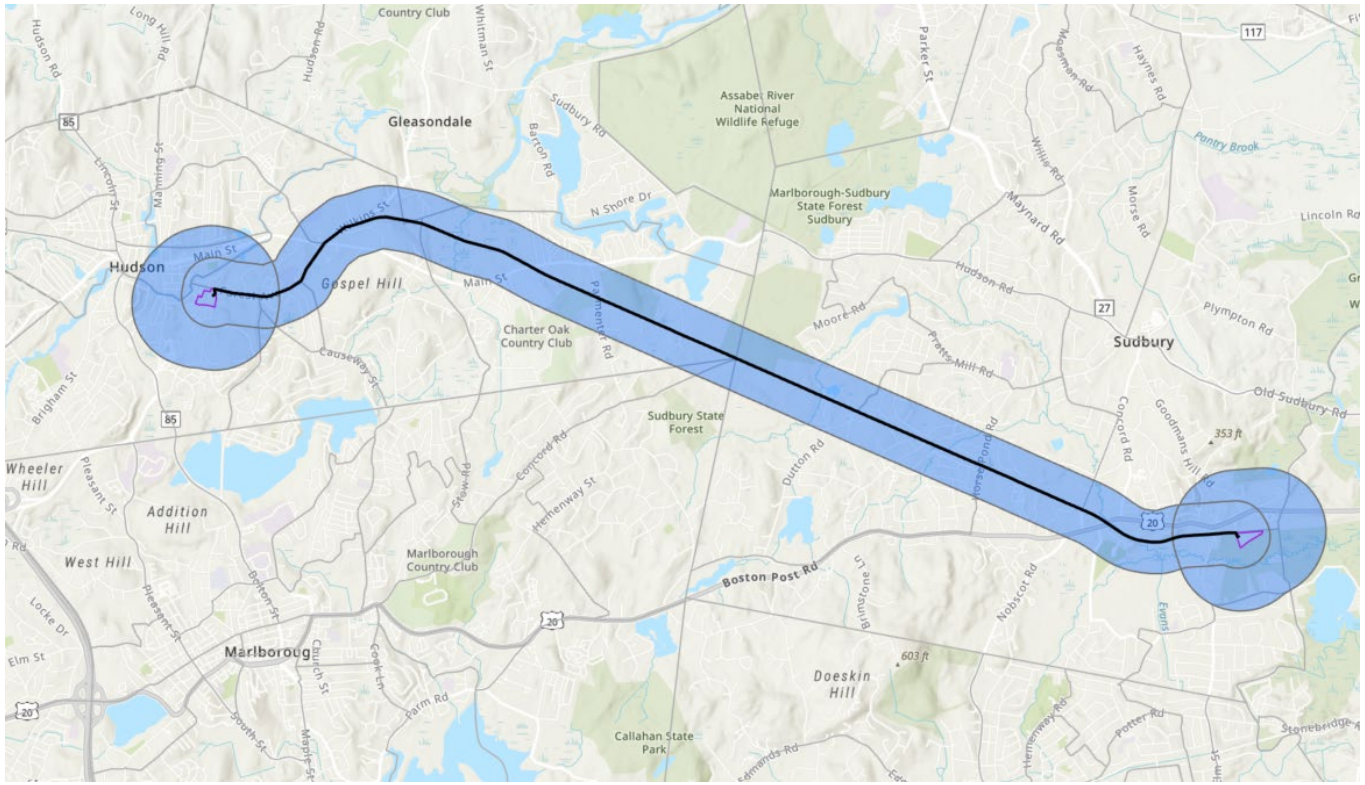
1. Identify the SGA of the Project
2. Determine if the SGA overlaps any BAs
3. Identify Indicator values and any Elevated Indicators of the BA
4. Identify Project Impacts (positive or negative), including Disproportionate Adverse Effects, in the BA related to Elevated Indicators
5. Propose remedial actions for any Disproportionate Adverse Effects

CIA Illustrative Case Study: Transmission Line and Substations

Example Transmission Line

- Several mile new transmission line with substation modifications on each end
- Two alternative routes (one in MBTA rail corridor, one in roadways)
- Proposed Route (and Rail Trail) shown; underground line in inactive MBTA rail corridor
- > 20 Census Block Groups overlap the Project and its Specific Geographical Area (SGA)
- A CIA would be conducted for both routes.

Proposed Route (Underground Transmission Line)



Step 1: Identify the SGA of the Project

Project Applicants must first identify the SGA of the proposed Project based on the **Facility Boundary** and the following facility-specific radial distances outward from the Facility Boundary.

Facility Type (or Component of a Facility)	Radial Distance from Facility Boundary*
Transmission and Distribution Lines	1/4 mile
Clean Energy Storage Facility	1 mile
Substation	1/2 mile
Ground-Mounted PV	1/2 mile
Onshore Wind Facility/ Anaerobic Digester > 25MW	1 mile
LNG Facility	1 mile (no Air permit) 2 miles (non-Major Air)
Gas Pipeline	1/2 mile
Fossil Generating Facility	2 miles (non-Major) 5 miles (Major)
Gas Compressor Stations	1 mile (no Air permit) 2 miles (non-Major Air)

*For Projects that include multiple facility types, the radial distance from the Facility Boundary shall be applicable to each element of the Project. The area bounded by the outermost radial distances from the Facility Boundary comprises the SGA of the Project.

Step 1 Example: Identify Specific Geographical Areas (SGA) for the Project

- Step 1a: Identify Facility Boundary:
  - Transmission lines: edge of the right-of-way ("ROW") of Project
  - Substations: substation fence line
- Step 1b: Use chart in 980 CMR 15.05 that shows distance from Facility Boundary to determine location of SGA:
  - Transmission Lines: ¼ mile from Facility Boundary (ROW edge)
  - Substation: ½ mile from Facility Boundary

*For Projects that include multiple facility types, the Facility Boundaries and SGAs shall be applicable to each element of the Project.

Step 2: Determine if SGA Overlaps with any BAs

- The Project Applicant must then examine whether the SGA overlaps with any BAs as identified by the MassEnviroScreen.
- The CIA must be completed for any BA that intersects the SGA.
- If the SGA does not intersect any BAs, then no further analysis is conducted (but CIA Report required).
  - Site Suitability Assessment may be required based on Project type

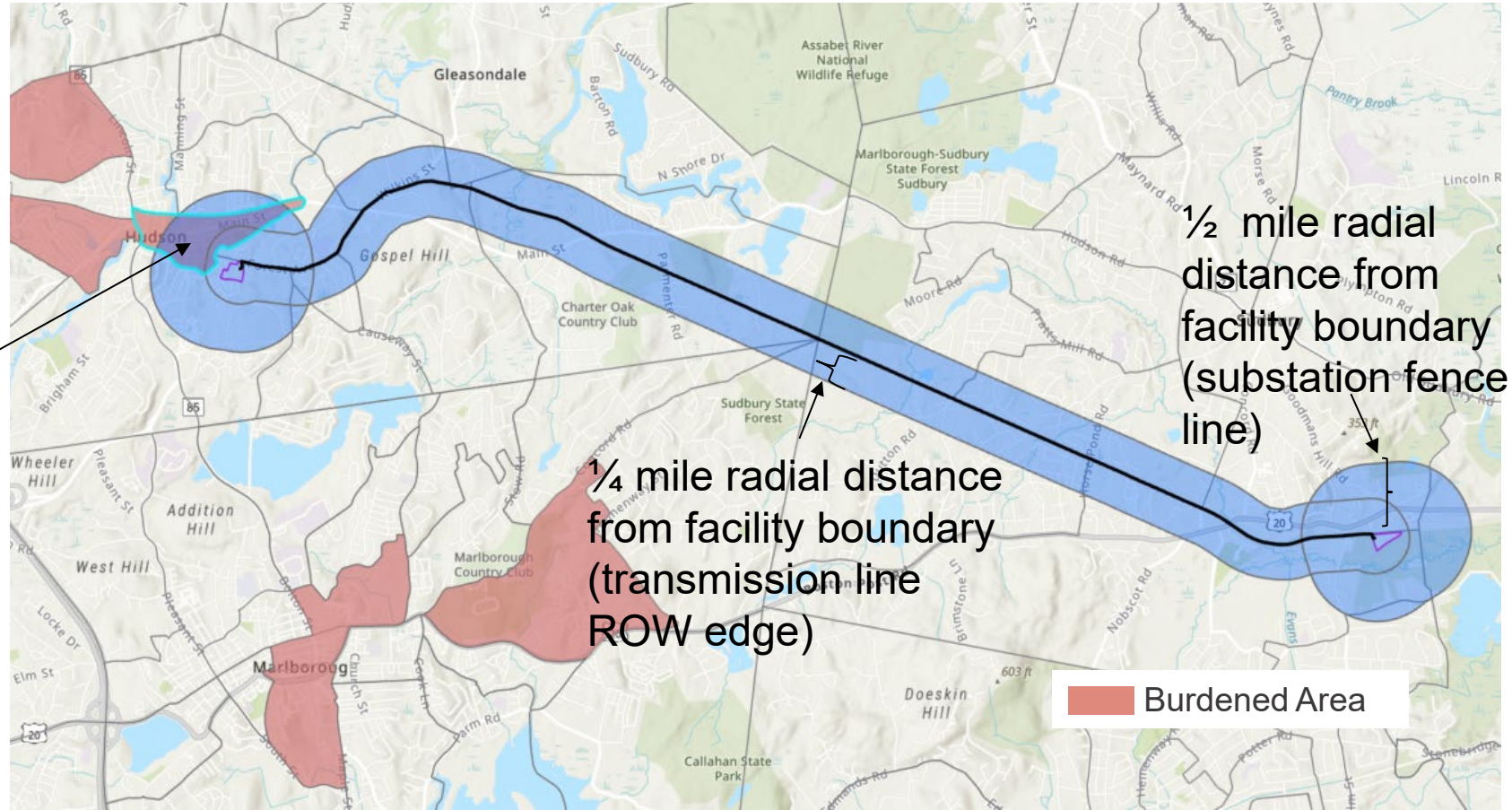
Step 2 Example: Identify any Burdened Areas that Overlap the SGA

- Step 2a: Use MassEnviroScreen ("MES") Project Draw Function (*under development*) to overlay Project footprint and SGAs on MES Burdened Areas ("BA") Map
- Step 2b: Identify any overlap between the SGAs and BAs. In this example, one BA (Census Block Group) overlaps the SGA.

This Census Block Group in Hudson **IS a Burdened Area that overlaps the SGA.**

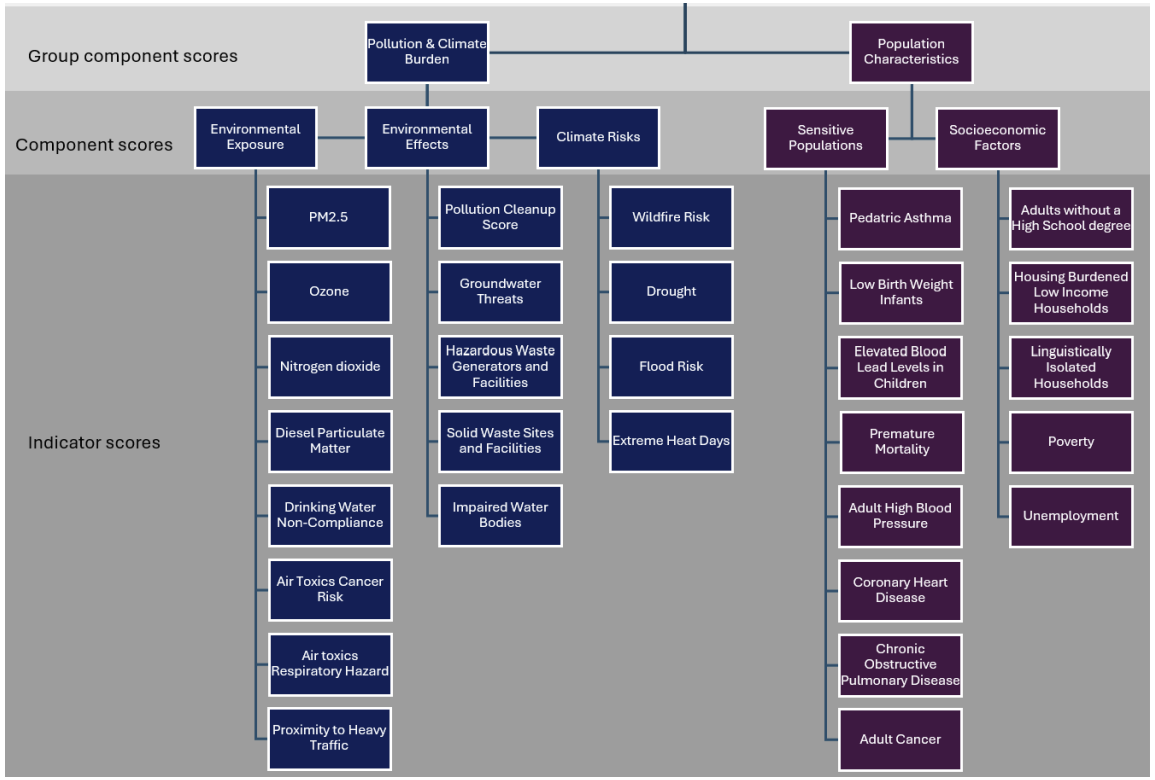
A Burdened Area is a Census Block Group that meets one or both of the following criteria:

- MassEnviroScreen percentile score of 75 or greater
  (BA Percentile Score: **85.6)**
- Median Household Income 65% or less of the state median Household Income
  (BA Median Household Income:
  ($85,170 or 84% of statewide median household income)



Step 3: Record Indicator Values and Identify Elevated Indicators

- MassEnviroScreen provides the percentile values for each Indicator in a given Census Block Group.
- The Indicator values for the BA are the baseline conditions that will be used when assessing the Project's Impact.
- For each BA within the SGA, the Project applicant must document the Elevated Indicators (i.e., those that exceed the 50th percentile for the specific Indicator).



MassEnviroScreen Indicators are used for CIA. EFSB will evaluate additional environmental and population information during its regular review of proposed Projects.

Step 3 : Identify Elevated Indicators in Burdened Areas Overlapping the SGA

- MassEnviroScreen provides the percentile values (0-100) for every Indicator in every Census Block Group in the state.

- For each BA that overlaps the SGA, the Project applicant must identify the Elevated Indicators for that BA (i.e., those that equal or exceed the 50th percentile statewide for the specific Indicator).

- MES Demonstration of Indicator Values

Step 3 Example: Elevated Indicators for Project in BA Overlapping SGA

Elevated Indicator (≥ 50th percentile)	Percentile Value (0-100)
P.M. 2.5 Concentration	70
Drinking Water Non-Compliance	71
Pollution Cleanup Sites	75
Groundwater Threats	93
Hazardous Waste Generators and Facilities	59
Impaired Water Bodies	89
Drought	69
Flood Risk	74
Extreme Heat > 85 F	77
Adult Cancer	56
Chronic Obstructive Pulmonary Disorder (COPD)	61
Pediatric Asthma	79
Adults Without a High School Degree	64
Linguistically Isolated Households	85
Unemployment	63

Step 4: Identify Project Impacts on Elevated Indicators

- For each Elevated Indicator, the Applicant provides a written description of the Project's Impact related to that Elevated Indicator in the BA for both the construction and the operations phases.
  - To the extent feasible, the Applicant shall endeavor to provide both a qualitative and a quantitative assessment of each such Project Impact
  - A Project may have negative, positive (benefits), or no Impacts on a given Indicator
  - Applicant must provide an explanation of how the Applicant assessed the projected level of such Impacts

- In assessing severity of an impact, the Applicant should consider:
  - Nature of Impacts
  - Magnitude/degree of Impacts
  - Geographic extent of Impacts
  - Impact duration

Step 4 (Continued): Identify Project Impacts on Elevated Indicators

- The Applicant assesses whether the Project results in a Disproportionate Adverse Effect related to an Elevated Indicator. The Project will result in a Disproportionate Adverse Effect if the Project causes a negative Impact that is likely to ***materially exacerbate*** the condition reflected by the Elevated Indicator.

Step 4 Example: Assess Project Impact* Relative to Elevated Indicators
(Proposed Route: Underground Transmission Line)

Indicator	Anticipated Project Impact (either construction or operational phase)	Disproportionate Adverse Effect? Yes/No	Supporting Documentation
PM 2.5	Temporary, localized emissions in immediate construction zone during construction activities only; no impacts during operations	**Yes (Construction)**	[Provided by Applicant]
Drinking Water Non-Compliance	Reduced pollution sources due to site remediation (construction); no ops impacts	**No**	[Provided by Applicant]
Pollution Cleanup Sites	Reduced pollution sources due to site remediation (construction); no ops impacts	**No**	[Provided by Applicant]
Groundwater Threats	Reduced pollution sources due to site remediation (construction); no ops impacts	**No**	[Provided by Applicant]
Hazardous Waste Generators and Facilities	No impacts to the number of hazardous waste generators and facilities from Project	**No**	[Provided by Applicant]
Impaired Water Bodies	Erosion best practices eliminate impacts to water bodies during construction. Stormwater management eliminates operational impacts	**No**	[Provided by Applicant]
Drought	No Impacts to drought conditions	**No**	[Provided by Applicant]
Flood Risk	No Impacts to flood risk due to effective stormwater management	**No**	[Provided by Applicant]

**** For CIA Illustration Only***

Step 4 Example: Assess Project Impact* Relative to Elevated Indicators
(Proposed Route: Underground Transmission Line)

Indicator	Anticipated Project Impact (either construction or operational phase)	Disproportionate Adverse Effect? Yes/No	Supporting Documentation
Extreme Heat > 85 F	Limited tree removal due to underground transmission; visual screening via tree replacement.	**No**	[Provided by Applicant]
Adult Cancer	No impacts to cancer incidence from Project	**No**	[Provided by Applicant]
COPD	Emissions/dust impact during construction (temporary, localized); no impacts during operations (modeled result based on emissions exposure effects)	**Yes (Construction)**	[Provided by Applicant]
Pediatric Asthma	Emissions/dust impact during construction (temporary, localized); no impacts during operations (Modeled result)	**Yes (Construction)**	[Provided by Applicant]
Adults w/o High School Diploma	No impacts to education status of population.	**No**	[Provided by Applicant]
Linguistically Isolated Households	No impacts to linguistic isolation status of population.	**No**	[Provided by Applicant]
Unemployment	Potential benefit to employment of local labor pool during construction; no impact during facilities operations	**No**	[Provided by Applicant]

**** For CIA Illustration Only***

Step 5: Propose Remedial Actions for Disproportionate Adverse Effects

- If a Disproportionate Adverse Effect is determined, the Applicant must propose remedial actions to address the Project's Impact to that Elevated Indicator.

- Proposed remedial actions should include a description of any actions the Applicant proposes remediation Disproportionate Adverse Impacts, using the mitigation hierarchy:
    1. Avoidance: Avoiding impacts where possible
    2. Minimization: Reducing unavoidable impacts to the greatest extent feasible, and
    3. Mitigation: Address remaining effects through appropriate mitigation measures, which may include rehabilitation, restoration, or offsets.

- Remedial actions should proportionately address the nature, degree, and spatial/temporal extent of Disproportionate Adverse Impacts resulting from a proposed Project.

Step 5 Example: Sudbury Hudson Project Illustrative Remedial Actions* for Disproportionate Adverse Effects (1 of 3)

Elevated Indicator Materially Exacerbated by Sudbury Hudson Transmission Project	Proposed Impact Avoidance	Proposed Impact Minimization	Proposed Impact Mitigation	How do Remedial Measures Address Anticipated Project Impacts?
PM 2.5 (Construction Phase Only)	Electrification of construction vehicles and equipment to extent feasible, especially equipment used near schools, recreational facilities (parks, playgrounds), daycare centers, hospitals, etc.	Off-road construction in inactive rail corridor reduces traffic and emissions that would otherwise occur with in-road route alternative	Rail trail associated with Project will reduce motor vehicle use and associated emissions	Electrification of construction vehicles and equipment significantly reduces PM 2.5 emissions during construction. Rail trail provides air quality benefits during operation. Off-road construction reduces traffic and emissions.

**** For CIA Illustration Only***

Step 5 Example: Sudbury Hudson Project Illustrative Remedial Actions* for Disproportionate Adverse Effects (2 of 3)

Elevated Indicator Materially Exacerbated by Sudbury Hudson Transmission Project	Proposed Impact Avoidance	Proposed Impact Minimization	Proposed Impact Mitigation	How do Remedial Measures Address Anticipated Project Impacts?
COPD (Construction Phase Only)	Electrification of construction vehicles and equipment, to extent feasible	Employ dust control best management practices (BMP). Off-road construction reduces traffic and emissions with that would occur with the alternative route.	Rail trail associated with Project will reduce motor vehicle use and associated emissions	Electrification of construction vehicles and equipment significantly reduces equipment emissions during construction. Dust control BMP further limits exposure to respiratory irritants. Rail trail provides air quality benefits. Off-road construction reduces traffic and related emissions.

**** For CIA Illustration Only***

Step 5 Example: Sudbury Hudson Project Illustrative Remedial Actions* for Disproportionate Adverse Effects (3 of 3)

Elevated Indicator Materially Exacerbated by Sudbury Hudson Transmission Project	Proposed Impact Avoidance	Proposed Impact Minimization	Proposed Impact Mitigation	How do Remedial Measures Address Anticipated Project Impacts?
Pediatric Asthma (Construction Phase Only)	Electrification of construction vehicles and equipment to extent feasible, especially equipment used near schools, recreational facilities (parks, playgrounds), daycare centers, hospitals, etc.	Employ dust management best practices. Off-road construction in inactive rail corridor reduces traffic and emissions that would otherwise occur with in-road route alternative	Rail trail associated with Project will reduce motor vehicle use and associated emissions.	Electrification of construction vehicles and equipment significantly reduces equipment emissions during construction. Dust Management further limits exposure to respiratory irritants. Rail trail provides air quality benefits. Off-road construction reduces traffic and related emissions.

**** For CIA Illustration Only***

CIA Report Contents (CIA Report Template In Development)

- Project overview (reference Application sections where information is found)
- Map(s) showing SGA(s) with any overlapping Burdened Area(s)*
- Project Impacts related to Elevated Indicators
- Disproportionate Adverse Effects
- Proposed Remedial Measures to address Disproportionate Adverse Effects

**if the SGA does not overlap with any BAs, the Applicant ends the CIA Report here. Depending on the Project type, Site Suitability Scoring may be required.*

Board Review of a CIA Report

- Assess whether the CIA Report meets regulatory criteria pursuant to 980 CMR 15.11 (per below)

- Board's findings:
  - Shall assess the adequacy of the CIA Report, including whether the Applicant, if required to, presented a comprehensive analysis of whether its Project Impacts will result in a Disproportionate Adverse Effect, and make findings based on that review.
  - Consider whether the Applicant has given due consideration to the Cumulative Impact of the Project, and whether the Applicant has adequately undertaken actions to avoid, minimize, or mitigate any Disproportionate Adverse Effects from the Project.
  - Consider whether an Applicant has made reasonable efforts to consider and develop a community benefits plan or community benefits agreement. See 980 CMR 15.11(2)(h).

Anticipated Procedural Next Steps

Date	Milestone
CIA Webinar	November 6, 2025
Deadline for comments on draft proposed CIA Regulations	November 17, 2025
Board Meeting to adopt Tentative Decision and vote on proposed CIA Regulations	Mid-December 2025
File proposed CIA Regulations with Secretary of State	December 19, 2025
Public comment period	January 23 - February 13, 2026
Board Meeting to deliberate on comments received on CIA	Week of February 19, 2026
Board Meeting to deliberate and vote on Tentative Decision and final CIA Regulations	Mid-April 2026
File final CIA Regulations with Secretary of State	Late April 2026
CIA Regulations in Effect	May 2026
CIA Required	July 1, 2026

Short Q&A

The meeting will resume at 4:00 p.m.

Q&A

Submitting Written Comments

- Written comments on the draft guidance submitted to ej.inquiries@mass.gov
- Written comments on the draft proposed regulations submitted to sitingboard.filing@mass.gov
- **Final written comment deadline: November 17, 2025.**
- Comments should be sent as an attachment and email should include name of person/entity submitting filing, and brief description of document. Email should also include contact info (name, title, telephone #) in case of questions.
- Comments will be publicly accessible and posted to the DPU's FileRoom.

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- Comments will be publicly accessible and posted to the DPU's FileRoom.

Contact

- Email for questions about draft guidance or draft proposed regulations: sitingboard.filing@mass.gov
- EFSB 25-10 webpage: https://www.mass.gov/info-details/efsb-25-10-proposed-rulemaking

Appendix

Example Transmission Line Project Full Indicator Data

Indicator	Percentile
PM2.5 concentration statewide percentile	70
Ozone (O3) concentration statewide percentile	21
Nitrogen dioxide (NO2) concentration statewide percentile	44
Diesel particulate matter concentration statewide percentile	35
Safe Drinking Water Act (SDWA) compliance performance score statewide percentile	71
Cumulative Lifetime Cancer Risk from Exposure to Air Toxics statewide percentile	40.21
Air Toxics Respiratory Hazard Index statewide percentile	39.9
Heavy Traffic Proximity Index statewide percentile	26
Weighted sum of cleanup sites statewide percentile	75.23
Weighted sum of groundwater threats statewide percentile	92.71

Indicator	Percentile
Weighted sum of hazardous waste facilities statewide percentile	58.73
Weighted sum of solid waste facilities statewide percentile	0
Summed number of pollutants across impaired water bodies statewide percentile	89.31
Sum of weekly total percent of an area experiencing drought statewide percentile	69.23
Wildfire Hazard Potential Risk Score statewide percentile	48.39
Percentage of area with 1% annual chance flood risk statewide percentile	73.91
Number of summer days with daily high temperature exceeding 85F statewide percentile	76.98
Age-adjusted Premature Mortality Rate statewide percentile	40.64
Cancer crude prevalence statewide percentile	56.33

Indicator	Percentile
Chronic Obstructive Pulmonary Disease crude prevalence statewide percentile	61.15
Coronary Heart Disease crude prevalence statewide percentile	46.55
High blood pressure crude prevalence statewide percentile	27.88
Pediatric Asthma Average prevalence statewide percentile	78.76
Percentage of adults without a high school diploma statewide percentile	63.59
Percentage of households below the poverty level statewide percentile	36.1
Percentage of households in which no adult speaks English well statewide percentile	84.83
Percentage of low income households that are housing burdened statewide percentile	31.78
Percentage of working age civilians who are unemployed statewide percentile	62.9

Indicator documentation and sources: MassEnviroScreenDocumentation.pdf

MES Indicator Definitions and Sources

Indicator	Description	Source
PM 2.5	Average annual 24-hour average concentration of particulate matter that is less than or equal to 2.5 micrometers in diameter (PM2.5) measured in micrograms per cubic meter (µg/m3).	U.S. EPA
Ozone	Maximum 8-hour average model predictions of concentrations of ground-level ozone in parts per billion (ppb).	U.S. EPA
Nitrogen Dioxide (NO2)	Average annual nitrogen dioxide (NO2) levels expressed as part per billion (by volume) for 2020 at 1km grid resolution, aggregated to census block groups using mean pixel values.	NASA
Diesel Particulate Matter	Diesel particulate matter (PM) level in air measured in micrograms per cubic meter (µg/m3).	EJScreen 2024.
Drinking Water Non-Compliance	Safe Drinking Water Act (SDWA) compliance performance score of a community water system (CWS) serving a census block group population.	EJScreen 2024
Air Toxics Cancer Risk	Risk of developing cancer due to inhalation exposure to air toxic compounds over a normal lifetime of 70 years, measured in incidents per million people.	U.S. EPA

MES Indicator Definitions and Sources

Indicator	Description	Source
Respiratory Hazard Index	Non-Cancer Respiratory Hazard Index; ratio of exposure concentration to a health-based reference concentration.	U.S. EPA
Proximity to Heavy Traffic	Heavy traffic proximity impact index	EJScreen 2024
Pollution Cleanup Sites	Weighted count of environmental cleanup sites requiring federal or state oversight for cleanup due to contamination.	US EPA; MassGIS
Groundwater Threats	Weighted count of groundwater threats.	U.S. EPA; MassGIS
Hazardous Waste Generators and Facilities	Weighted count of hazardous waste facilities, and hazardous waste generators within each census block group	MassGIS
Solid Waste Sites and Facilities	Weighted count of solid waste sites and facilities.	MassGIS
Impaired Water Bodies	Count of pollutants across all water bodies designated as impaired within the area.	MassGIS
Drought	Sum of weekly total percent of an area experiencing a severe, extreme, or exceptional drought (categories D2, D3, or D4), adapted from Colorado EnviroScreen.	U.S. Drought Monitor 2019-2024
Wildfire Risk	Mean wildfire hazard potential.	USDA; USFS

MES Indicator Definitions and Sources

Indicator	Description	Source
Flood Risk	Percentage of each geographic area where there is at least a one percent chance of flooding annually	FEMA; MassGIS
Extreme Heat Days	Number of days between May and September from 2015 through 2024 in which daily high temperature was 85 degrees Fahrenheit or higher	Oregon State University
Premature Mortality	Age-adjusted premature mortality rate (per 100,000).	MassDEP
Adult Cancer	Prevalence of cancer (non-skin) or melanoma among adults.	CDC PLACES Health Outcomes
Chronic Obstructive Pulmonary Disease (COPD)	Prevalence of chronic obstructive pulmonary disease among adults.	CDC PLACES Health Outcomes
Coronary Heart Disease	Prevalence of coronary heart disease among adults.	CDC PLACES Health Outcomes
Elevated Blood Lead Levels in Children	5-year average prevalence of elevated (≥5 µg/dL estimated confirmed) childhood blood lead levels in children (ages 9-47 months).	MassDEP
Adult High Blood Pressure	Prevalence of high blood pressure among adults.	CDC PLACES Health Outcomes
Pediatric Asthma	Population-weighted average asthma prevalence (percentage of K-8 enrollment).	MassDEP

MES Indicator Definitions and Sources

Indicator	Description	Source
Adults without a High School Degree	Percent of people age 25 or older whose education is less than a high school diploma.	US American Community Survey 5-year Estimates for 2019 – 2023
Poverty	Percent of households whose income is less than or equal to twice the poverty level.	US American Community Survey 5-year Estimates for 2019 – 2023
Linguistically Isolated Households	Percentage of limited English-speaking households.	US American Community Survey 5-year Estimates for 2019 – 2023
Housing Burdened Low Income Households	Percent of households that are both low income (making less than 80% of the HUD Area Median Family Income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs).	US Department of Housing and Urban Development
Unemployment	Percentage of the population over the age of 16 that who are unemployed and eligible for the labor force. Excludes retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty.	US American Community Survey 5-year Estimates for 2019 – 2023
Median Household Income	Median household income in the past 12 months (in 2023 inflation-adjusted dollars)	US American Community Survey 5-year Estimates for 2019 – 2023