# MARYLAND LEGISLATIVE ENVIRONMENTAL JUSTICE SCORECARD

### 2019 - 2021



ENGAGEMENT, ENVIRONMENTAL JUSTICE, & HEALTH

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### 1. INTRODUCTION

The United States Environmental Protection Agency (US EPA) defines environmental justice (EJ) as: "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies" (1). However, Dr. Bunyan Bryant's definition directly addresses the underlying causes of inequity: "Environmental justice is served when people can realize their highest potential, without experiencing the 'isms'" (2). Government structures and policies can institutionalize and reinforce the "isms" (racism, classism, sexism, ableism, etc) that perpetuate inequitable environmental, social, health, and economic outcomes. Additionally, the communities that bear the negative externalities of environmental decision-making are also politically disenfranchised, systematically marginalized, and excluded. To combat this, scorecard systems have been used for years by organizations such as the <u>League of Conservation Voters</u> and the <u>California</u> Environmental Justice Alliance (CEJA) to assess legislative and agency environmental actions (3,4). These analyses provide public transparency to hold legislators accountable for programs and policies.

Using these scorecards as models, the Center for Community Engagement, Environmental Justice and Health (CEEJH) developed a scorecard to track voting histories on environmental justice legislation. Our models are guided by the 17 Principles of Environmental Justice and CEJA's 8 Principles of Collaboration (5,6). We also provide recommendations on policy and agency actions to promote environmental justice in the state of Maryland. Notably, some of the timeframes we are reporting on were disrupted by the COVID-19 pandemic. For example, three weeks of the 2020 Legislative Session were scheduled for three days (7). This prompted remarkable leadership for tackling COVID-19 for the state of Maryland; however, many environmental issues were deprioritized as a result. Thus, we acknowledge limitations in organizational capacity in this context; however, overarching principles of environmental justice such as community engagement should continue to guide government actions and programs. This has increased salience throughout the COVID-19 recovery for investing in disadvantaged communities and building resilience.

# 2. LEGISLATIVE SCORECARE

### A. METHODOLOGY

We downloaded the Maryland General Assembly's legislative data from the years of 2019–2021, and used the keyword search tool to narrow down environmental justice (EJ) legislation. Keywords ranged from broader terms which included: environment, public health, and economic & community development. More narrow searches included: air pollution, clean energy, air quality control, fracking, landfills, land use (zoning & planning), and lead poisoning. Once these bills were identified, the potential EJ bills were screened for related language such as "underserved", "overburdened", "health differentials", "health disparities", "health equity", etc. In summary, we looked for terminology that suggests that there are communities within the state that are differentially burdened by environmental hazards. Some bills relating to environmental issues were not as straightforward because of lack of key terminology; however, the relevance to EJ was implied through bill context.

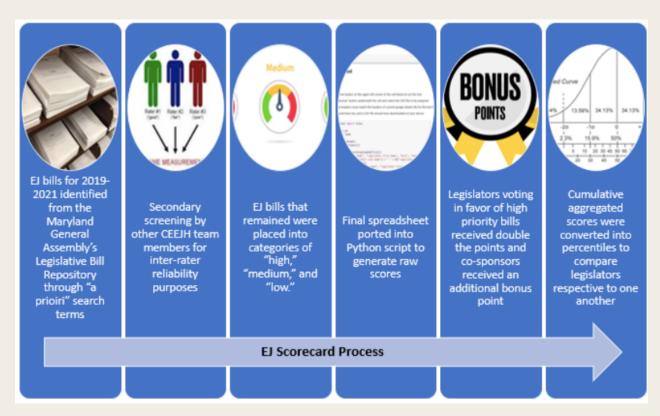


Figure 1. CEEJH's Scorecard Methodology

Once EJ bills were isolated, they were placed into an Excel spreadsheet. For "interrater" reliability purposes, the bills were screened again by other CEEJH members and removed from the list if they were deemed non-EJ related. This allowed for unanimous decision-making on EJ relevance. We then performed a tertiary screening by tiering our complete list of EJ bills into "high," "medium," and "low." priority categories. Low priority EJ bills were discarded from the analysis but retained in the master Excel spreadsheet. The final set of medium and high priority bills were ported to another spreadsheet, where their voting records were assessed. If the bills were enacted, thus going through the entire bill cycle, then the third or final hearing voting record (entire House or Senate) was assessed. If the bill died in committee, then the last voting record (House or Senate committee) was used. The final approved spreadsheet was imported into Python and a script was used to generate raw scores for each of the legislators for the 2019–2021 legislative sessions. For medium priority EJ bills, these were calculated as: (Total Votes for EJ / Total EJ Voting Opportunities). This metric was used because not every legislator received the same number of opportunities to vote on an EJ bill. This may be attributed to excused absences, or the missing legislator's presence on a committee that did not vote on a bill prior to it dying within another committee. For high priority bills, the same method as medium priority was used, except the raw score was doubled as such: [(Total Votes for EJ\*2) / (Total EJ Voting Opportunities)]. This approach was deployed to capture the legislators that advocate strongly for key EJ bills, rather than earn points for supporting bills that would not have as much impact on the environmental health of their constituents. The final data manipulation step was to add a bonus point to legislators that co-sponsored or introduced high priority EJ bills.

The weighted raw scores of medium and high priority were aggregated as such: [(Raw Score for Medium Priority Bills + Raw Score for High Priority Bills) / (Total Voting Opportunities) + (Co-sponsor Bonus If Applicable)]. Due to the weighting scheme of this approach, it was possible for legislators to receive an aggregate score > 100%. Therefore, once we received a final list of aggregate raw scores across 2019-2021, we converted them into percentiles. This way, we were able to compare legislators to one another, rather than towards a common denominator. Legislators with outliers in terms of voting opportunities were removed from the analysis due to potential skewing of data and misrepresentation of their role as EJ Champions. Based on (Leys et al., 2013), those with voting opportunities >3 standard deviations below the mean voting opportunities were excluded.

### **MD EJSCREEN Co-Analysis**

After generating the final legislative scores, we compared these scores to the MD EJSCREEN scores by legislative district. MD EJSCREEN is the byproduct of multiple domains for environmental justice. Among these domains, we have incorporated indicators from high-priority factors such as pollution burden, environmental effects, health indicators associated with sensitive populations, socioeconomic factors, and more recently rural indicators that include overlooked areas in unincorporated communities. The MD EJSCREEN scoring methodology follows the standard created by CalEnviroScreen 4.0 that combines our indicators into two weighted factors. On one end, we have pollution burden computed as the cumulative average of exposures and environmental effects. On the other end, we have population characteristics computed as the average of sensitive populations and socioeconomic factors (note: environmental effects scores are weighted half as much as the exposure scores). In summary, scores for the pollution burden and population characteristics are multiplied to form the MD EJSCREEN score used in this analysis.

### **CASE STUDY: SB0065 2021**

When considering bills that illustrate the complexities of EJ within the state, SB0065 stands out as a prime example during the 2021 session. Maryland's Renewable Energy Portfolio Standard (RPS) was created to encourage the transition into renewable sources of energy, specifying different "Tier 1" and "Tier 2" sources (9). Tier 1 status includes cleaner energy sources such as wind, solar, geothermal, ocean, and waste-to-energy, while Tier 2 below it contains only hydropower (9). However, not all the Tier I sources are as renewable in practice. In particular, the two waste-toenergy plants in Baltimore and Dickerson produce too much air pollution to justify their clean energy designations and to qualify for state tax breaks. Many environmental groups argue that sources like this which produce the most carbon emissions should be placed in Tier 2 rather than Tier 1, and this was in fact the case for waste-to-energy plants in Maryland until 2011. Some suggest this misclassification to be a result of special interest campaign cash from donors such as Covanta and/or Wheelabrator (1), which operate trash incinerators within Maryland. This conflict of interest is exemplified by residential complaints about the harmful incinerators and their negative effect on the environment and human health going ignored. Because the needs of the community are not prioritized, this issue then becomes an environmental justice concern.

Environmental racism refers to the implementation and practice of discriminatory environmental policy specifically impacting communities of color, whereby these communities are disproportionately burdened by environmental hazards and experience differential exposure to related pollutants and poor health outcomes as result (10, 11, 12). This form of systemic racism is perpetrated by the Wheelabrator Baltimore incinerator (formerly known as the BRESCO: Baltimore Refuse Energy Systems Co.) located in Westport of South Baltimore. This community is reported to be approximately 89% African–American, 6% Hispanic/Latino, and 5% White. Using the EPA EJScreen tool, data indicates that the population within 0.5 miles of the incinerator is 85% people of color and 42% low–income. The average level of fine particulate matter (PM2.5) is 8.72  $\mu$ g/m3 which is in the 84th percentile in the state, meaning the PM2.5 level within a 0.5 mile radius is higher than 84% of areas in the state of Maryland. Shrinking the radius to 0.25 miles, we see this impact magnifying. Although the average level of PM2.5 remains the same, those within 0.25 miles of the incinerator are 98% people of color and 71% low–income.



#### **EJSCREEN Report (Version 2020)**



0.25 miles Ring Centered at 39.270342,-76.629456, MARYLAND, EPA Region 3

Approximate Population: 42 Input Area (sq. miles): 0.20 BRESCO/Wheelabrator

Selected Variables		State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	8.72	8.43	84	8.63	60	8.55	55
Ozone (ppb)	45.4	44.6	81	43.2	91	42.9	73
NATA* Diesel PM (μg/m³)	0.957	0.633	90	0.477	90-95th	0.478	90-95th
NATA* Cancer Risk (lifetime risk per million)	35	32	80	31	70-80th	32	60-70th
NATA* Respiratory Hazard Index	0.51	0.44	79	0.4	80-90th	0.44	60-70th
Traffic Proximity and Volume (daily traffic count/distance to road)	2200	730	92	650	93	750	91
Lead Paint Indicator (% Pre-1960 Housing)	0.43	0.29	74	0.36	65	0.28	72
Superfund Proximity (site count/km distance)	0.11	0.13	63	0.15	62	0.13	69
RMP Proximity (facility count/km distance)	2.2	0.66	90	0.62	93	0.74	92
Hazardous Waste Proximity (facility count/km distance)	14	2.1	99	2	98	5	95
Wastewater Discharge Indicator	0.041	4.4	91	34	85	9.4	86
(toxicity-weighted concentration/m distance)							
Demographic Indicators							
Demographic Index	85%	35%	99	30%	98	36%	98
People of Color Population	98%	49%	94	33%	97	39%	97
Low Income Population	71%	22%	98	27%	96	33%	95
Linguistically Isolated Population	3%	3%	69	3%	75	4%	63
Population With Less Than High School Education	27%	10%	93	10%	93	13%	88
Population Under 5 years of age	8%	6%	72	6%	75	6%	71
Population over 64 years of age	10%	15%	32	16%	24	15%	29

<sup>\*</sup> The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

Figure 2: Environmental Indicators and demographic data of environmental factors impacting the population within 0.25 miles of the Wheelabrator Baltimore incinerator.

Wheelabrator is the largest source of pollution in Baltimore, emitting indirect greenhouse gases such as nitrogen oxide (NOx) and sulfur oxide (SOx). This can exacerbate respiratory infections and asthma, while also worsening the climate crisis in vulnerable EJ communities like Westport, via smog and acid rain formation (14). Consequently, health inequities are prevalent with disproportionate rates of asthma, respiratory diseases, and low birth weight babies, compared to other Baltimore neighborhoods. **Figure 3** shows these health differentials and the graph illustrates the cumulative impacts of environmental racism.

Although the emissions from the incinerator are not exclusively to blame, the larger system of environmental racism which deteriorates human and environmental health raises the stakes for policy decisions related to such facilities, thus making the inclusion of environmental justice in bills like SB0065-2021 pivotal and a literal matter of life or death.

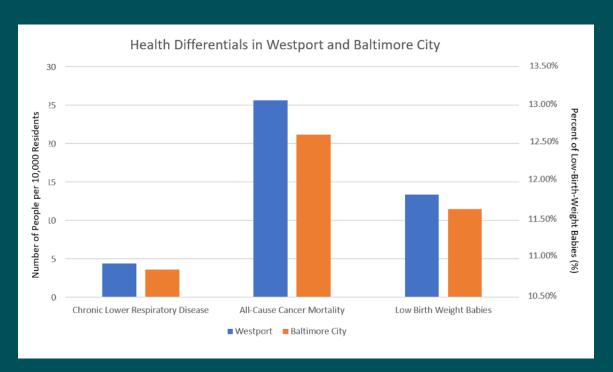


Figure 3: Death Rate of Chronic Lower Respiratory Disease and All-Cause Cancer Mortality per 10,000 residents and Percentage of Low Birth Weight Babies in Westport, South Baltimore Compared to Baltimore City.

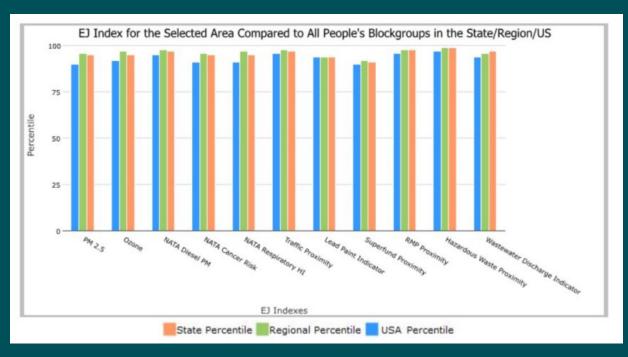


Figure 4: EPA EJ Screen output of environmental factors impacting the population within 0.25 miles of the Wheelabrator Baltimore incinerator relative to the state of Maryland, US EPA Region 3, and the United States.

### **B. RESULTS**

Table 1. Summary of High Priority EJ Bills Included in MD's 2019-21 Legislative Scorecard

BILL	TITLE AND SUMMARY
2019 MD HB0277	Regional Initiative to Limit or Reduce Greenhouse Gas Emissions in Transportation Sector - Authorization (Regional Transportation and Climate Protection Act of 2019): includes Maryland as a full participant in a regional governmental initiative to reduce greenhouse gas emissions in the transportation sector. This encourages the uptake of electric vehicles (EVs).
2019 MD HB 1233	Reduction of Lead Risk in Housing - Elevated Blood Lead Levels and Environmental Investigations (Maryland Healthy Children Act): imposes stricter regulation on blood lead levels by reducing the elevated blood lead level that initiates certain case management, notification, and lead risk reduction requirements in owner-occupied and affected properties
2019 MD HB 1235	Healthy Climate Initiative: establishes a Healthy Climate Initiative in the Department of the Environment for certain purposes; requiring the Secretary of the Environment to administer certain schedules of greenhouse gas pollution charges; requiring the Secretary to delegate certain collection and rebate functions to the Comptroller; requiring the Comptroller to carry out certain functions; requiring the collection of a certain greenhouse gas pollution charge on certain fuels and certain greenhouse gas-emitting priorities for certain purposes; etc.
2019 MD HB 1253	Drinking Water Outlets in School Buildings – Lead Testing and Reporting Requirements and Grant Programs: reduces lead in drinking water outlets to 5 ppb, and provides priority funding in the form of the Healthy School Facility Fund to schools where lead is found to be present in drinking water
2020 MD HB 1206	Clean Energy and Energy Efficiency - Investment in Disadvantaged Communities: Requiring the Department of the Environment, in consultation with the Commission on Environmental Justice and Sustainable Communities to designate certain communities as disadvantaged communities in accordance with certain criteria; requiring the Department to publish certain draft criteria and lists before finalizing criteria; requiring the Commission to develop certain policies and recommendations to achieve certain priorities in certain years for directing spending on clean energy and energy efficiency programs; etc.

BILL	TITLE AND SUMMARY
2020 MD HB 0494	Renewable Energy Portfolio Standard - Solar Energy - Municipal Electric Utilities: alters the percentage, to 2.5% in 2020 and later, of a municipal electric utility's renewable energy portfolio standard that must be derived from solar energy.
2020 MD HB1425	Climate Solutions Act of 2020 – Greenhouse Gas Emissions Reduction Act: increasing the greenhouse gas emissions reductions that the State must achieve by 2030; requiring the State to achieve net-zero statewide greenhouse gas emissions by 2045; requiring the Department of the Environment to adopt a final plan that reduces statewide greenhouse gas emissions by 60% by 2030 and sets the State on a path toward achieving net-zero statewide greenhouse gas emissions by 2045, on or before December 31, 2020; establishing the Climate Jobs Working Group; etc.
2021 MD HB 1207	Commission on Environmental Justice and Sustainable Communities - Reform: requires the Commission's membership to reflect the diversity of the State to the extent practicable, that the Commission meet at least six times a year, host at least four community listening sessions a year in different geographic locations in the State, and makes sessions accessible to promote public hearing and comment periods
2021 MD HB1239	Appraisal Gap From Historic Redlining Financial Assistance Program – Establishment: makes financial assistance available to developers in low-income census tracts to close appraisal gaps that occur in historically redlined neighborhoods.
2021 MD HB0090	State and Local Housing Programs – Affirmatively Furthering Fair Housing: requires the Department of Housing and Community Development to report to the General Assembly and the Governor by December 1, 2023, and every 5 years thereafter, on the efforts by the State, political subdivisions, and housing authorities to promote fair housing choice and racial and economic housing integration; requiring the Department to explore ways to ensure it is supporting nonprofit and governmental entities devoted to furthering fair housing; requiring certain entities to submit a fair housing assessment to the Department; etc.
2021 MD HB0097	Office of Statewide Broadband - Established (Digital Connectivity Act of 2021): ensures that all Marylanders have access to high speed, low latency broadband. This bill may help mitigate the digital divide and promote equitable educational opportunities and reduce barriers to access to health care (enabling telemedicine via secure online portals), especially during the ongoing COVID-19 pandemic.

When assessing the state legislators with the highest EJ score, the top 10 were all Democrats, with a mix of members from the House and Senate. There was a 3-way tie for 10th place so all three of those legislators were included (Table 2).

Table 2. Top 10 Overall Legislators

NAME	PERCENTILE	CHAMBER	PARTY
Rosenberg S	100.00	House	Dem
Henson S	99.50	House	Dem
Washington M	98.99	Senate	Dem
Jones D	97.99	House	Dem
Smith W	97.99	Senate	Dem
Patterson O	97.49	Senate	Dem
Lam C	96.98	Senate	Dem
Bridges T	96.48	House	Dem
Young R	95.98	Senate	Dem
Elfreth S	94.47	Senate	Dem
Guzzone G	94.47	Senate	Dem
Hester K	94.47	Senate	Dem

<sup>\*</sup>There was a 3 way tie for 10th place so all 3 legislators were included for transparency

On the flipside, when assessing the bottom 10 EJ legislators (challengers to EJ legislation), all of them were Republicans and all noticeably belonged to the House. See **Table 3** for full breakdown.

Because the Top 10 overall EJ legislators were also all Democrats, the table for the Top 10 Democrats (Table 4) was identical to Table 2.

Table 3. Bottom 10 Overall Legislators

NAME	PERCENTILE	CHAMBER	PARTY
Kittleman T	0.50	House	Rep
Boteler J	1.00	House	Rep
Novotny R	1.51	House	Rep
Grammer R	2.01	House	Rep
Fisher M	2.51	House	Rep
Mangione N	3.02	House	Rep
Rose A	3.02	House	Rep
Cox D	4.02	House	Rep
Ghrist J	4.02	House	Rep
Shoemaker H	5.03	House	Rep

Table 4. Top 10 Democrats

NAME	PERCENTILE	CHAMBER	PARTY
Rosenberg S	100.00	House	Dem
Henson S	99.50	House	Dem
Washington M	98.99	Senate	Dem
Jones D	97.99	House	Dem
Smith W	97.99	Senate	Dem
Patterson O	97.49	Senate	Dem
Lam C	96.98	Senate	Dem
Bridges T	96.48	House	Dem
Young R	95.98	Senate	Dem
Elfreth S	94.47	Senate	Dem
Guzzone G	94.47	Senate	Dem
Hester K	94.47	Senate	Dem

Table 5. Bottom 10 Democrats

NAME	PERCENTILE	CHAMBER	PARTY
Miller T	15.08	Senate	Dem
Amprey M	30.65	House	Dem
King N	31.16	Senate	Dem
Sample-Hughes S	31.66	House	Dem
Walker J	32.16	House	Dem
Fennell D	32.66	House	Dem
Anderson C	33.17	House	Dem
Nathan-Pulliam S	33.17	Senate	Dem
Lafferty S	34.17	House	Dem
Qi L	34.67	House	Dem

Table 6. Top 10 Republicans

NAME	PERCENTILE	CHAMBER	PARTY
West C	83.92	Senate	Rep
Griffith Michael	30.15	House	Rep
Hornberger K	29.65	House	Rep
Cassilly A	29.15	House	Rep
Eckardt A	27.64	Senate	Rep
Hershey S	27.64	Senate	Rep
Jennings J	27.64	Senate	Rep
Hough M	27.14	Senate	Rep
Simonaire B	26.63	Senate	Rep
Ready J	26.13	Senate	Rep

Table 7. Bottom 10 Republicans

NAME	PERCENTILE	CHAMBER	PARTY
Kittleman T	0.50	House	Rep
Boteler J	1.00	House	Rep
Novotny R	1.51	House	Rep
Grammer R	2.01	House	Rep
Fisher M	2.51	House	Rep
Mangione N	3.02	House	Rep
Rose A	3.02	House	Rep
Cox D	4.02	House	Rep
Ghrist J	4.02	House	Rep
Shoemaker H	5.03	House	Rep

For the Maryland House of Delegates, from 2019–2021, the average percentiles shifted from 44.86 to 40.02 to 40.69, in sequential order. It should be noted that Delegates had an average of 18.81 and 15.58 EJ voting opportunities (as of August 2021), in 2019 and 2021, respectively. This decreased to 1.38 EJ voting opportunities in 2020, attributed to the COVID–19 pandemic. Therefore, 2020 findings offer increased variability. For Maryland Senators, from 2019–2021, the average percentiles ranged from 50.67 to 43.62 to 71.49, in sequential order. As was the case with the House, EJ voting opportunities for the Senate decreased to 3.77 for the 2020 Legislative Session due to COVID–19.

With these voting opportunities caveats and hindrances attributed to the COVID pandemic and other factors in mind, **Table 8** presents a cross-tabular breakdown of EJ Scorecard statistics by Chamber and Party Affiliation. Overall, we observe Democrats scoring higher than their Republican counterparts (64.2% compared to 16.3%). Similarly, we see that Senators scored significantly higher than House Members (61.1% compared to 46.0%). Noticeably, House Republicans were the weakest on EJ legislation with an average percentile ranking of 12.2%. Similarly, Democratic Senators scored the highest with an average percentile ranking of 75.4%.

Table 8. Average EJ Percentile by Branch and Session

ROW LABELS	DEM	REP	GRAND TOTAL
SENATE	0.75	0.29	0.61
HOUSE	0.61	0.12	0.46
GRAND TOTAL	0.64	0.16	0.50

### Comparison to MD EJSCREEN Scores

We compared the legislator scoring breakdown to the Maryland Environmental Justice and Screening tool (MD EJSCREEN) scores. On the MD EJSCREEN mapping tool, a higher number (ranging 0 - 100) indicates more environmental burdens or more environmental injustice present in the area. **Table 9** lists the top 10 overall legislators by MD EJSCREEN score, along with their corresponding district. The scoring scale follows an inverse system where the higher the score, the higher the environmental burden at the legislative district level.

Table 9. Ten Legislators Whose Districts Have the Best MD EJSCREEN Scores

NAME	PARTY	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Eckardt A	Rep	Senate	37A	27.6	20.3
Sample-Hughes S	Dem	House	37A	31.7	20.3
Bailey J	Rep	Senate	29C/B	22.6	30.63
Clark G	Rep	House	29C	20.6	30.63
Crosby B	Dem	House	29B	44.2	32.38
Gallion J	Rep	Senate	35A	25.1	37.98
Hornberger K	Rep	House	35A	29.6	37.98
Adams C	Rep	House	37B	11.6	38.93
Mautz IV J	Rep	House	37B	10.1	38.93
Kramer B	Dem	Senate	19	69.8	41.23

As we had done with the legislative scores, we also examined the bottom 10 overall legislators by MD EJSCREEN score in **Table 10**. Interestingly, we observe that the majority of legislators who represent districts with the most environmental disparities were Democrats. This is in sharp contrast to what was observed with the legislative scoring.

Table 10. Ten Legislators Whose Districts Have the Worst MD EJSCREEN Scores

NAME	PARTY	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Ferguson IV W	Dem	Senate	46	69.8	91.06
Clippinger L	Dem	House	46	67.8	91.06
Lewis R	Dem	House	46	88.9	91.06
Lierman B	Dem	House	46	91.5	91.06
Simonaire B	Rep	Senate	31A	26.6	87.22
Carey E	Dem	House	31A	42.7	87.22
Klausmeier K	Dem	Senate	8	52.8	86.39
Bhandari H	Dem	House	8	58.8	86.39
Boteler III J	Rep	House	8	1	86.39
Jackson C	Dem	House	8	81.9	86.39

**Table 11** outlines the top 10 Democrats by legislative districts with the best MD EJSCREEN score. Notably, the majority of these Democrats resided in the House.

Table 11. Ten Democrats Whose Districts Have the Best MD EJSCREEN Scores

NAME	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Sample-Hughes S	House	37A	31.7	20.3
Crosby B	House	29B	44.2	32.38
Kramer B	House	19	69.8	41.23
Crutchfield C	House	19	58.3	41.23
Cullison B	House	19	45.7	41.23
Stewart III V	House	19	51.3	41.23
Jackson M	Senate	27C	80.9	45.43
Hester K	Senate	9В	94.5	47.31
Watson M	House	9В	37.7	47.31
Watson R	Senate	23A	48.2	49.09

Similarly, **Table 12** portrays the bottom 10 Democrats with the most environmental disparities as indicated by the corresponding MD EJSCREEN score.

Table 12. Ten Democrats Whose Districts Have the Worst MD EJSCREEN Scores

NAME	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Ferguson IV W	Senate	46	69.8	91.06
Clippinger L	House	46	67.8	91.06
Lewis R	House	46	88.9	91.06
Lierman B	House	46	91.5	91.06
Carey E	House	31A	42.7	87.22
Klausmeier K	Senate	8	52.8	86.39
Bhandari H	House	8	58.8	86.39
Jackson C	House	8	81.9	86.39
McCray C	Senate	45	83.9	82.38
Branch C	House	45	91.5	82.38
Branch T	House	45	37.7	82.38

The same info for **Tables 11–12** for Democrats was also assessed for Republicans in **Tables 13–14**.

Table 13. Ten Republicans Whose Districts Have the Best MD EJSCREEN Scores

NAME	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Eckardt A	Senate	37A	27.6	20.3
Bailey J	Senate	29C/B	22.6	30.63
Clark G	House	29C	20.6	30.63
Gallion J	Senate	35A	25.1	37.98
Hornberger K	House	35A	29.6	37.98
Adams C	House	37В	11.6	38.93
Mautz IV J	House	37В	10.1	38.93
Carozza M	Senator	38C	24.6	43.46
Hartman W	House	38C	7	43.46
Fisher M	House	29A	6	44.07

Table 14. Ten Republicans Whose Districts Have the Worst MD EJSCREEN Scores

NAME	CHAMBER	DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Simonaire B	Senate	31A	26.6	87.22
Boteler III J	House	8	1	86.39
Salling J	Senate	6	23.6	85.56
Grammer Jr. R	House	6	2	85.56
Long R	House	6	10.6	85.56
Metzgar R	House	6	12.6	85.56
Edwards G	Senate	1C	23.6	82.55
МсКау М	House	1C	19.1	82.55
Cassilly R	Senate	2A	25.6	74.67
Corderman P	Senate	47A	21.6	73.7
Simonaire B	Senate	31A	26.6	87.22

When calculating the pooled results, the average MD EJSCREEN score for **all parties together** was **59.43**. The average MD EJSCREEN score for **Democrats was 40.00**, while the average MD EJSCREEN score for **Republicans was 56.40**. This gap is much narrower than the differences observed between parties for legislative scoring. The average voting score when pooled with the top 10 MD EJSCREEN legislative districts was 29.29, compared to 58.18 for the bottom 10.

### C. SUMMARY

Overall, findings seemed to follow partisan lines as the top 10 EJ legislators were all Democrats and the party voted overwhelmingly in favor of EJ bills, compared to their Republican counterparts (Tables 2 & 8). The top performing EJ Champions, along with their brief EJ highlights are as follows:

<u>Samuel I. Rosenberg</u> (House of Delegates): Delegate Rosenberg is a long serving Member of the Maryland House (since 1983). He has been the sole sponsor for a plethora of environmental justice-related bills which has elevated his EJ rating, including 2020 HB1206, 2020 HB0457, 2020 HB 0879, and 2020 HB1425.

Shaneka T. Henson (House of Delegates): Delegate Henson's path towards an EJ Champion for the 2019–2021 time period began when she co-sponsored 2020 HB 1425. This bill required the Department of Environmental to adopt a final plan to reduce statewide emissions by 60% by 2030 and set the state of Maryland on a path to achieve net-zero greenhouse gas emissions by 2045. She has acknowledged racism as a public health barrier and is currently advocating with Congress to implement more support for her constituents and all Black Americans. Her duties in the Maryland General Assembly extend to membership on the Legislative Black Caucus of Maryland, 2019-; Women Legislators of Maryland, 2019-; and Appropriations Committee, 2019-(health & social services subcommittee, 2020-; oversight committee on pensions, 2020-)

Mary L. Washington (Senate): Delegate Washington has been instrumental in introducing and passing legislation in the House of Delegates to protect homes from acquisition based on unpaid water bills. Baltimore has been plagued with a dysfunctional water rate system in recent years, battling threats of rate hikes, water shutoffs, and looming privatization. Mary's tax sale prohibition bill prevents families from losing their homes for unaffordable or incorrect water bills. As further evidence of her dedication to environmental justice, she supports 100% clean energy in the state by 2035 that would cap energy rates for low income households at 6%. She also was an early supporter of a ban on fracking in Maryland and recognizes the problems with Big Ag and supports stricter regulations on factory farms.

### C. SUMMARY

### **Comparison to MD EJSCREEN Scores**

When comparing the legislative scoring to the MD EJSCREEN scores based on legislative district, there was little to no association observed. While the legislative scoring appeared to follow partisan lines, the MD EJSCREEN scoring did not. However, it should be noted that the Republicans still had worse MD EJSCREEN scores, albeit the difference was not as large (+14.40 points compared to -48.00 for legislative scoring). This can likely be attributed to the fact the legislators were tied to the district they represented; therefore, their MD EJSCREEN scores were clustered and identical to the other Senators and Representatives assigned to that district. On the other hand, their voting records were more individualized and better gauges their commitment to environmental justice through policymaking.

### D. RECOMMENDATIONS

Legislators should actively integrate environmental justice language in COVID-19 bills to invest in an equitable recovery. Implementation of EJ into COVID-19 recovery packages should include loans to small businesses in disadvantaged communities, investments in green workforce development, and weatherization and infrastructure improvements to increase climate

equity and resilience (15).

# INCORPORATE ENVIRONMENTAL JUSTICE SCREENING AND MAPPING (EJSM) TOOLS INTO ENVIRONMENTAL POLICY AND DECISION-MAKING THAT MICROTARGET DISTRESSED COMMUNITIES.

This enables the State to microtarget "high needs" priority communities based on EJ percentiles. EBDs should be some of those prioritized, defined as an EJ Score at or above the 75th percentile with mean EJ scores 0.7 or higher, corresponding to an elevated level of environmental risk (16). EBD designation should be codified into the Sustainable Communities Program within the Maryland Department of Housing and Community Development. Within this program, investments for EBDs should flow through community-based organizations to ensure benefits are being directed to frontline and fenceline communities. State grants through the Departments of Commerce and Housing and Community Development can redevelop brownfields in environmental benefit districts (EBDs) into green workforces.

### CREATE EJ REGIONAL HOTSPOT CRISIS TEAMS FAMILIAR WITH SPECIFIC REGIONS.

Many pieces of legislation establish councils or require racial and ethnic impact statements, among other procedures, to promote environmental justice. While its language makes the bills appear conducive to EJ, they might lack proper evaluation and surveillance components. Future scoring mechanisms should provide bonus points to legislators that introduce/co-author EJ bills or advocate for amendments to existing bills. These legislators can then be considered for the label of "EJ Champions."



### **MEASURE THE SUCCESS OF BILLS.**

Many pieces of legislation establish councils or require racial and ethnic impact statements, among other procedures, to promote environmental justice. While its language makes the bills appear conducive to EJ, they might lack proper evaluation and surveillance components. Future scoring mechanisms should provide bonus points to legislators that introduce/co-author EJ bills or advocate for amendments to existing bills. These legislators can then be considered for the label of "EJ Champions."



### DEVELOP INCLUSIVE ENVIRONMENTAL MITIGATION STRATEGIES.

Policies for infrastructure upgrades, clean energy, and revitalization must consider localized impacts on disadvantaged communities. This presents an opportunity for restorative policies such as green workforce development, air and water improvements, and community grant programs (20, 21). The Senate Democrats' Special Committee on the Climate Crisis report provides a framework for Congress to build the clean energy future that incorporates public health benefits (such as reduced respiratory disease) and creates green jobs through the COVID-19 recovery while decarbonizing our economy. This requires targeted investments to create well-paying, quality jobs that prioritize the health of workers and environmental justice communities (19).



### COLLABORATIVE GOVERNANCE WITH RESIDENTS FOR DECISION-MAKING.

This adheres to one of the main pillars of environmental justice and allows for a shift from expert-oriented to community-oriented decision-making. Community members should be actively engaged throughout the policymaking process to foster bottom up approaches and solutions. This will ensure policies are responsive to the unique needs and capacities of the communities they intend to serve.

## MANDATE ENVIRONMENTAL JUSTICE WORKSHOPS AND TRAINING FOR STATE LEGISLATORS.

These workshops should include historical information about structural racism and discrimination and how this manifests in present day policies. The workshops should also include toolkits for racial equity and social justice.

### PROGRESS WITHIN BILL LANGUAGE.

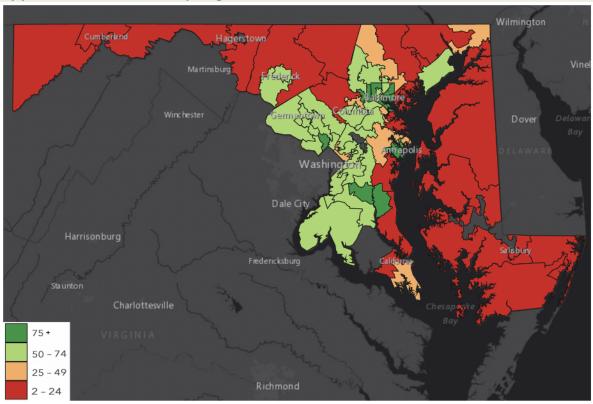
Maryland should create a list of metrics for priority areas (ex. lead, water quality, air pollution, etc) that present a tangible way to track environmental justice remediation efforts. These outcome metrics should be established for the year 2030 based on current modeling projections. Such indicators that are being measured should be assigned to the appropriate state agency with the corresponding priority area. This will ensure that proposed legislation is enforceable and translated into action.

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# 4. LEGISLATOR SCORING APPENDIX

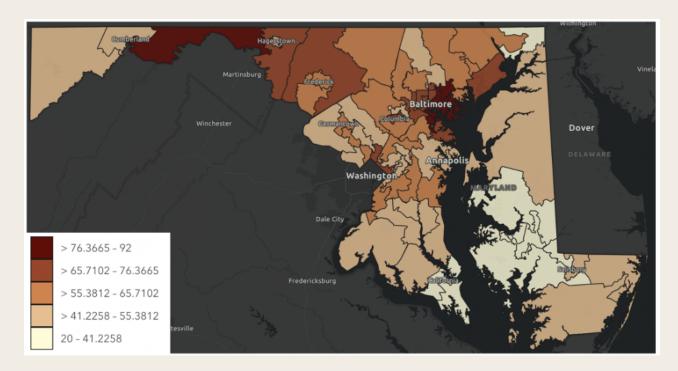




Notably, the Western and Eastern regions of Maryland, as designated by the Maryland Department of Natural Resources, predominantly rank in the bottom quartile. It should also be noted that the districts along the Chesapeake Bay coastline that share a border with Southern Maryland rank in the bottom tier. Overall, however, Southern Maryland performs in the upper half – upper quarter percentile, moreso as the legislative districts drift further from the coastline. Central Maryland presents a mixed bag, but districts in Montgomery and Howard county are depicted as EJ Champions. Lastly, the majority of the districts in Baltimore City are in the upper quartile percentile. In conclusion, this choropleth map effectively displays the regional differences by legislative district as they pertain to their representatives' corresponding EJ standing.

Spreadsheets with the full scoring breakdown for all legislators across the 2019-2021 legislative sessions are made available upon request.

### **Appendix B: MD EJSCREEN Score By Legislative District**



Contrary to the legislative scoring, ther MD EJSCREEN scores by legislative district did not appear to follow regional patterns, with the exception of Baltimore city displaying an inverse relationship between Legislative Score and MD EJSCREEN score. Essentially, the higher the MD EJSCREEN score, the higher the environmental burden, and Baltimore City was in the top quintile relative to the rest of the state. However, this same region had the best voting records pertinent to EJ.

### Appendix C: Full Breakdown of Voting Score and MD EJSCREEN Score by Legislator (2019–2021)

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Edwards G	Senate	Rep	District 1, Allegany & Garrett Counties, & parts of Washington County	23.6	53.46
Kelley D	Senate	Dem	District 10, Baltimore County	90.5	61.38
Zirkin	Senate	Dem	District 11 (Baltimore County), 2019-2020	35.2	N/A
Hettleman S	Senate	Dem	District 11, Baltimore County, 2020-Present	74.4	56.88
Lam C	Senate	Dem	District 12, Baltimore County & Howard County	97	69.16
Guzzone G	Senate	Dem	District 13, Howard County	94.5	62.48
Zucker C	Senate	Dem	District 14 (Montgomery County)	83.9	53.39
Feldman B	Senate	Dem	District 15, Montgomery County	87.4	54.47
Lee S	Senate	Dem	District 16, Montgomery County	77.4	54.05
Kagan C	Senate	Dem	District 17, Montgomery County	85.9	61.38
Kramer B	Senate	Dem	District 19, Montgomery County	69.8	41.23
Corderman P	Senate	Rep	District 2 (Washington County), 2020-Present	21.6	73.7
Serafini A	Senate	Rep	District 2 (Washington County), 2019-2020	15.1	N/A
Smith W	Senate	Dem	District 20 (Montgomery County)	98	69.99
Rosapepe J	Senate	Dem	District 21 (Prince George's and Anne Arundel Counties)	73.9	59.79

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Pinsky P	Senate	Dem	District 22 (Prince George's County)	93.5	53.1
Peters D	Senate	Dem	District 23 (Prince George's County) 2019- 2021	83.9	N/A
Benson J	Senate	Dem	District 24 (Prince George's County)	76.9	54.84
Griffith Melony	Senate	Dem	District 25, Prince George's County	38.7	58.96
Patterson O	Senate	Dem	District 26 (Prince George's County)	97.5	62.94
Jackson M	Senate	Dem	District 27 (Calvert, Charles & Prince George's Counties), 2021-Present	80.9	49.76
Miller T	Senate	Dem	District 27, (Calvert, Charles & Prince George's Counties) 2019-2021	15.1	N/A
Ellis A	Senate	Dem	District 28, Charles County	91	55.17
Bailey J	Senate	Rep	District 29 (Calvert & St. Mary's Counties)	22.6	30.63
Young R	Senate	Dem	District 3 (Frederick County)	96	64.91
Elfreth S	Senate	Dem	District 30, Anne Arundel County	94.5	58.16
Simonaire B	Senate	Rep	District 31 (Anne Arundel County)	26.6	87.22
Beidle P	Senate	Dem	District 32 (Anne Arundel County)	57.8	60
Cassilly R	Senate	Rep	District 34 (Harford County)	25.6	74.67
Gallion J	Senate	Rep	District 35, Cecil & Harford Countie	25.1	49.7

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Hershey S	Senate	Rep	District 36, Maryland's Upper Eastern Shore	27.6	49.36
Eckardt A	Senate	Rep	District 37, Caroline, Dorchester, Talbot, & Wicomico Counties	27.6	20.3
Carozza M	Senate	Rep	District 38 (Somerset, Wicomico & Worcester Counties)	24.6	43.47
King N	Senate	Dem	District 39, Montgomery County	31.2	60.15
Hough M	Senate	Rep	District 4, Carroll & Frederick Counties	27.1	66.22
Hayes A	Senate	Dem	District 40, Baltimore City	69.8	76.37
Carter J	Senate	Dem	District 41 (Baltimore City)	77.4	67.54
West C	Senate	Rep	District 42 (Baltimore County)	83.9	61.35
Washington M	Senate	Dem	District 43 (Baltimore City)	99	75
Nathan- Pulliam S	Senate	Dem	District 44 (Baltimore City and County) 2019	33.2	N/A
Syndor C	Senate	Dem	District 44 (Baltimore City) 2020-Present	74.4	N/A
McCray C	Senate	Dem	District 45, Baltimore City	83.9	82.38
Ferguson B	Senate	Dem	District 46, Baltimore City	69.8	91.06
Augustine M	Senate	Dem	District 47 (Prince George's County)	83.4	73.59
Ready J	Senate	Rep	District 5 (Carroll County)	26.1	65.71
Salling J	Senate	Rep	District 6 (Baltimore County)	23.6	85.56

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Jennings J	Senate	Rep	District 7, Baltimore County & Harford County	27.6	62.92
Klausmeier K	Senate	Dem	District 8, Baltimore County	52.8	86.39
Hester K	Senate	Dem	District 9, based in Carroll County and Howard County	94.5	59.14
Brooks B	House	Dem	District 10 (Baltimore County)	77.4	61.38
Jalisi J	House	Dem	District 10, Baltimore County	54.8	61.38
Jones A	House	Dem	District 10, Baltimore County	44.2	61.38
Belcastro L	House	Dem	District 11 (Baltimore County)	79.9	56.88
Cardin J	House	Dem	District 11 (Baltimore County)	55.3	56.88
Stein D	House	Dem	District 11 (Baltimore County)	87.4	56.88
Ebersole E	House	Dem	District 12 (Baltimore County & Howard County)	58.8	69.16
Feldmark J	House	Dem	District 12 (Baltimore County & Howard County)	75.4	69.16
Hill T	House	Dem	District 12, Baltimore County & Howard County	49.7	69.16
Atterbeary V	House	Dem	District 13 (Howard County)	54.3	62.48
Pendergrass S	House	Dem	District 13 (Howard County)	45.7	62.48
Terrasa J	House	Dem	District 13 (Howard County)	52.3	62.48

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Queen P	House	Dem	District 14 (Montgomery County)	40.2	53.39
Kaiser A	House	Dem	District 14, Montgomery County	75.4	53.39
Luedtke E	House	Dem	District 14, Montgomery County	55.3	53.39
Dumais K	House	Dem	District 15 (Montgomery County) 2019-2021	47.7	N/A
Fraser- Hidalgo D	House	Dem	District 15 (Montgomery County)	40.2	54.47
Qi L	House	Dem	District 15 (Montgomery County)	34.7	54.47
Kelly A	House	Dem	District 16, Montgomery County	48.2	54.05
Korman M	House	Dem	District 16, Montgomery County	75.4	54.05
Love S	House	Dem	District 16, Montgomery County	68.8	54.05
Barve K	House	Dem	District 17 (Montgomery County)	66.3	61.38
Gilchrist J	House	Dem	District 17 (Montgomery County)	53.8	61.38
Palakovich Carr J	House	Dem	District 17 (Montgomery County)	88.9	61.38
Carr A	House	Dem	District 18 (Montgomery County)	79.9	59.3
Shetty E	House	Dem	District 18 (Montgomery County)	82.4	59.3
Solomon J	House	Dem	District 18 (Montgomery County)	89.9	59.3
Waldstreich er J	House	Dem	District 18 (Montgomery County)	93	59.3
Crutchfield C	House	Dem	District 19 (Montgomery County)	58.3	41.23

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Cullison B	House	Dem	District 19 (Montgomery County)	45.7	41.23
Stewart V	House	Dem	District 19 (Montgomery County)	51.3	41.23
Beitzel W	House	Rep	District 1A (Garrett & Allegany Counties)	15.1	48.36
Buckel J	House	Rep	District 1B (Allegany County)	5.5	53.46
МсКау М	House	Rep	District 1C (Allegany & Washington Counties)	19.1	82.55
Charkoudian L	House	Dem	District 20 (Montgomery County)	40.2	69.99
Wilkins J	House	Dem	District 20 (Montgomery County)	58.8	69.99
Moon D	House	Dem	District 20, Montgomery County	67.3	69.99
Barnes B	House	Dem	District 21 (Anne Arundel & Prince George's Counties)	58.8	59.79
Pena- Melnyk J	House	Dem	District 21 (Anne Arundel County)	55.3	59.79
Sample- Hughes S	House	Dem	District 21 (Dorchester and Wicomico Counties)	31.7	20.3
Lehman M	House	Dem	District 21, Anne Arundel & Prince George's Counties	35.7	59.79
Washington A	House	Dem	District 22 (Prince George's County)	55.3	53.1
Williams N	House	Dem	District 22 (Prince George's County)	82.4	53.1
Gaines T	House	Dem	District 22, (Prince George's County), 2019	38.7	N/A
Healey A	House	Dem	District 22, (Prince George's County)	69.3	53.1

NAME	CHAMBER	PARTY	LEGI <del>S</del> LATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Valentino- Smith G	House	Dem	District 23 (Prince George's County)	55.3	49.09
Watson R	House	Dem	District 23 (Prince George's County)	48.2	54.93
Holmes M	House	Dem	District 23B, Prince George's County	65.8	60.77
Harrison A	House	Dem	District 24 (Prince George's County)	43.2	54.84
Barron E	House	Dem	District 24 (Prince George's County), 2019- 2021	45.7	N/A
Lewis J	House	Dem	District 24, Prince George's County	58.8	54.84
Charles N	House	Dem	District 25 (Prince George's)	42.2	58.96
Barnes D	House	Dem	District 25 (Prince George's County)	58.8	58.96
Davis D.E	House	Dem	District 25, (Prince George's County), 2019- 2021	69.8	N/A
Turner V	House	Dem	District 26 (Prince George's County)	49.2	62.94
Valderrama K	House	Dem	District 26 (Prince George's County)	36.2	62.94
Walker J	House	Dem	District 26 (Prince George's County)	32.2	62.94
Proctor E	House	Dem	District 27A (Prince George's County)	51.8	49.27
Jones R	House	Dem	District 27B, Calvert & Prince George's Counties	87.4	54.59
Fisher M	House	Rep	District 27C, Calvert County	2.5	45.43
Davis D.M	House	Dem	District 28 (Charles County)	58.8	55.17

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Patterson E	House	Dem	District 28 (Charles County)	43.2	55.17
Wilson C	House	Dem	District 28 (Charles County)	36.2	55.17
Morgan M	House	Rep	District 29 (St Mary's County)	6	44.07
Crosby B	House	Dem	District 29B (St. Mary's County)	44.2	32.38
Clark J	House	Rep	District 29C (Calvert & St. Mary's Counties)	20.6	30.63
Parrott N	House	Rep	District 2A (Washington County)	7.5	73.7
Thiam B	House	Rep	District 2A (Washington County)	20.1	53.39
Wivell W	House	Rep	District 2A (Washington County)	17.6	73.7
Cain A	House	Dem	District 30A (Anne Arundel County), 2019- 2020	38.7	N/A
Henson S	House	Dem	District 30A (Anne Arundel County)	99.5	54.67
Jones D	House	Dem	District 30A, Anne Arundel County	98	54.67
Howard S	House	Rep	District 30B Anne Arundel	19.6	61.65
Carey N	House	Dem	District 31A (Anne Arundel County)	42.7	87.22
Chisholm B	House	Rep	District 31B (Anne Arundel County)	8.5	73.21
Kipke N	House	Rep	District 31B, Anne Arundel County	23.1	73.22
Bartlett J	House	Dem	District 32 (Anne Arundel County)	58.8	60
Chang M	House	Dem	District 32 (Anne Arundel County)	58.8	60

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Rogers M	House	Dem	District 32 (Anne Arundel County)	40.2	60
Bagnall H	House	Dem	District 33 (Anne Arundel County)	49.7	55.38
Malone M	House	Rep	District 33 (Anne Arundel County), 2019- 2021	15.1	N/A
Rielly E	House	Rep	District 33 (Anne Arundel County)	21.1	55.38
Saab S	House	Rep	District 33 (Anne Arundel County)	15.1	55.38
Johnson S	House	Dem	District 34A, Harford County	49.7	74.67
Lisanti M	House	Dem	District 34A, Harford County	58.8	74.67
McComas S	House	Rep	District 34B, Harford County	13.6	58.12
Hornberger K	House	Rep	District 35A, Cecil County	29.6	37.98
Cassilly A	House	Rep	District 35B (Cecil & Harford Counties), 2019- 2020	29.1	N/A
Griffith Michael	House	Rep	District 35B (Cecil & Harford Counties)	30.2	61.42
Reilly T	House	Rep	District 35B (Cecil County)	12.1	61.42
Ghrist J	House	Rep	District 36 (Caroline, Cecil, Kent & Queen Anne's Counties)	4	49.36
Arentz S	House	Rep	District 36 (Caroline, Cecil, Kent & Queen Anne's Counties)	8	49.36
Jacobs J	House	Rep	District 36, Caroline, Cecil, Kent & Queen Anne's Counties	14.1	49.36

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Adams C	House	Rep	District 37B (Caroline, Dorchester, Talbot, & Wicomico Counties)	11.6	38.93
Mautz J	House	Rep	District 37B, Caroline, Dorchester, Talbot, & Wicomico Counties	10.1	38.93
Otto C	House	Rep	District 38A (Worcester County)	18.6	54.92
Anderton C	House	Rep	District 38B (Wicomico County)	21.6	46.06
Hartman W	House	Rep	District 38C (Wicomico & Worcester Counties)	7	43.47
Acevero G	House	Dem	District 39 (Montgomery County)	86.9	60.15
Reznik K	House	Dem	District 39 (Montgomery County)	67.8	60.15
Lopez L	House	Dem	District 39, Montgomery County	69.8	60.15
Young K	House	Dem	District 3A (Frederick County)	79.4	64.91
Krimm C	House	Dem	District 3A, Frederick County	58.8	64.91
Kerr K	House	Dem	District 3B, Frederick County	58.8	56.09
Cox D	House	Rep	District 4 (Carroll & Frederick Counties)	4	66.22
Ciliberti B	House	Rep	District 4 (Carroll & Frederick Counties)	18.1	66.22
Pippy J	House	Rep	District 4 (Frederick County)	9.5	66.22
Amprey M	House	Dem	District 40 (Baltimore City)	30.7	76.37
Conaway F	House	Dem	District 40 (Baltimore City)	58.8	76.37

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Mosby N	House	Dem	District 40 (Baltimore City), 2019-2020	44.2	N/A
Wells M	House	Dem	District 40 (Baltimore City)	69.8	76.37
Attar D	House	Dem	District 41 (Baltimore City)	77.4	67.54
Bridges T	House	Dem	District 41 (Baltimore City)	96.5	67.54
Rosenberg S	House	Dem	District 41 (Baltimore City)	100	67.54
Forbes C	House	Dem	District 42A (Baltimore County)	91.5	69.41
Lafferty S	House	Dem	District 42A, (Baltimore County), 2019	34.2	N/A
Guyton M	House	Dem	District 42B (Baltimore County)	81.4	53.29
Mangione N	House	Rep	District 42B, Baltimore County	3	53.29
Boyce R	House	Dem	District 43 (Baltimore City)	66.3	75
Anderson C	House	Dem	District 43 (Baltimore City)	33.2	75
McIntosh M	House	Dem	District 43, Baltimore City	69.8	75
Haynes K	House	Dem	District 44A, (Baltimore City), 2019-2021	58.8	N/A
Ruth S	House	Dem	District 44B (Baltimore County)	69.8	68.59
Young P	House	Dem	District 44B (Baltimore County)	86.4	68.59
Branch C	House	Dem	District 45 (Baltimore City)	91.5	82.38
Branch T	House	Dem	District 45 (Baltimore City)	37.7	82.38

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Smith S	House	Dem	District 45 (Baltimore City)	94	82.38
Clippinger L	House	Dem	District 46 (Baltimore City)	67.8	91.06
Lewis R	House	Dem	District 46, Baltimore City	88.9	91.06
Lierman B	House	Dem	District 46, Baltimore City	91.5	91.06
Fennell D	House	Dem	District 47A (Prince George's County)	32.7	73.59
Ivey J	House	Dem	District 47A, Prince George's County	53.3	73.59
Fisher W	House	Dem	District 47B (Prince George's County)	45.7	57.02
Rose A	House	Rep	District 5 (Carroll County)	3	65.71
Shoemaker H	House	Rep	District 5 (Carroll County)	5	65.71
Krebs S	House	Rep	District 5, Carroll County	8.5	65.71
Grammer R	House	Rep	District 6 (Baltimore County)	2	85.56
Long B	House	Rep	District 6, Baltimore County	10.6	85.56
Metzgar R	House	Rep	District 6, Baltimore County	12.6	85.56
Arikan L	House	Rep	District 7 (Baltimore County & Harford County)	14.6	62.92
Szeliga K	House	Rep	District 7 (Baltimore County)	13.1	62.92
Impallaria R	House	Rep	District 7, Baltimore County & Harford County	6.5	62.92

NAME	CHAMBER	PARTY	LEGISLATIVE DISTRICT	VOTING SCORE	MD EJSCREEN SCORE
Bhandari H	House	Dem	District 8 (Baltimore County)	58.8	86.39
Boteler J	House	Rep	District 8 (Baltimore County)	1	86.39
Bromwell E	House	Dem	District 8 (Baltimore County)	36.2	86.39
Jackson C	House	Dem	District 8, Baltimore County	81.9	86.39
Novotny R	House	Rep	District 9A (Howard County)	1.5	59.14
Kittleman T	House	Rep	District 9A, Carroll & Howard Counties	0.5	59.14
Miller W	House	Rep	District 9A, (Carroll & Howard Counties), 2019- 2020	11.1	N/A
Watson C	House	Dem	District 9B (Howard County)	37.7	47.31

Legislators with "N/A" under their corresponding MD EJSCREEN score consisted of those who retired, were voted out of office, or had other circumstances that prevented them from fully representing their district during the 2021 Legislative Session, the year when our MD EJSCREEN data were compiled by legislative district.

### 8. DATA AVAILABILITY

Spreadsheets with (1) the full scoring breakdown for all legislators across the 2019-2021 legislative sessions; and (2) the MD EJSCREEN scoring by legislative district will be made available upon request.

### 9. ACKNOWLEDGEMENTS

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Environmental Justice and Health (CEEJH)
Maryland Institute for Applied
Environmental Health
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