Executive Summary

The Connecticut Environmental Justice Screening Tool (CT EJScreen) represents an innovative approach to identifying and addressing the state's environmental justice (EJ) challenges. Developed by the Connecticut Institute for Resilience & Climate Adaptation (CIRCA), this project was initiated in August 2021 and progressed over two years. Through continuous data collection and improvements based on feedback from the Equity and Environmental Justice Working Group (EEJ) of the Governor's Council on Climate Change, multiple advisory committees, community forums, and public comments, seven iterative versions of the tool were created, each enhancing the overall functionality and utility.

The primary purpose of the CT EJScreen tool is to provide a data-driven framework to assist policymakers, planners, and the public in understanding the environmental burdens and vulnerabilities within different communities. The tool employs a comprehensive GIS-based approach, examining various indicators related to environmental pollution exposures and potential health implications. The CT EJScreen tool uses a cumulative index score calculated by multiplying the Pollution Burden and Sensitive Population scores; these scores, in turn, are calculated from component scores representing Potential Pollution Sources, Potential Pollution Exposure, Socioeconomic Factors, and Health Sensitivity. Each of these component categories contains many individual data layers called indicators, and each component score is computed by averaging the ranks of all individual indicators within that specific component. Each indicator receives a percentile score relative to all the other census tracts within the state, thus illustrating where a particular census tract stands compared to others with regard to each indicator. These percentiles were converted into a 0 to 10 rank score from least impacted to highest impact, respectively, for easier user interpretation. All the indices and indicators have been converted into a web-based mapping tool for open access and easy application.

One of the core elements in developing the CT EJScreen tool has been the utilization of high-quality, precise, current, and comprehensive data. These rigorous data requirements ensure the tool's effectiveness and reliability. As we moved forward with this project, we worked closely with our partners, holding biweekly meetings with the DEEP-CIRCA team, regular meetings with multiple advisory committees, and community feedback forums in Bridgeport, Hartford, Groton, Waterbury, and New Haven. These engagements have been integral to the project's iterative development, providing crucial feedback and improvement suggestions.

While the CT EJScreen tool is a powerful broad-lens resource for understanding and addressing environmental justice issues, it's crucial to note that it is not designed to evaluate specific health risks, predict health outcomes, explain individual's health concerns, or identify the exact impact of specific facilities. Moreover, decisions regarding the cumulative impact of environmental health risks should incorporate additional sources of information and not rely solely on this tool.

In conclusion, the development of the Connecticut EJScreen Tool marks a significant stride in promoting environmental justice within the state. Going forward, it is important to note that this tool, like any data-driven application, requires regular updates and maintenance to ensure its ongoing

relevance and accuracy. The roadmap laid out by CIRCA, including their future recommendations, provides a strong foundation for the continual evolution of the tool, ensuring its value and usability for years to come.