

Appendix C

Flood and Heat CCVI Contributor List

Stressor	Component	Indicator	Factor	Source	Link	Citation
Flood & Heat	AC	Built	Distance to healthcare facility	COG Data		
Flood & Heat	AC	Built	Distance to shelter	COG Data		
Flood & Heat	AC	Social	High owner-occupied housing	Census ACS 2015-2019 5-year Estimates		
Flood	AC	Built	Coastal structures and flood protection systems	U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Geodetic Survey (NGS), CT Department of Energy and Environmental Protection (DEEP)	<a href="https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA">https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA</a>	
Flood	S	Ecological	Critical habitat	CT DEEP	<a href="https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA">https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA</a> <a href="http://www.cteco.uconn.edu/metadata/dep/document/CRITICAL_HABITAT_POLY_FGDC_Plus.htm">http://www.cteco.uconn.edu/metadata/dep/document/CRITICAL_HABITAT_POLY_FGDC_Plus.htm</a>	
Flood	S	Built	Critical infrastructure (facilities)	Natural Hazard Mitigation Plans		
Heat	AC	Ecological	Normalized Difference Vegetation Index	UConn		Fragomeni, MA, Miller, T, and Day, K, 2021 (In Progress). Urban Heat Island Analysis for New Haven and Fairfield Counties. Part of the Resilient Connecticut Project. Climate Design Lab, Department of Plant Science and Landscape

						Architecture, University of Connecticut. Storrs, CT.
Heat	AC	Social	Percent population with (no) health insurance	Census ACS 2015-2019 5-year Estimates		
Heat	E	Climate	Air Quality	ESRI	<a href="#">Particulate Matter 2.5 (PM 2.5) in the US between 1998 and 2016 (arctgis.com)</a>	<p>van Donkelaar, A., R. V. Martin, M. Brauer, N. C. Hsu, R. A. Kahn, R. C. Levy, A. Lyapustin, A. M. Sayer, and D. M. Winker. 2018. Global Annual PM2.5 Grids from MODIS, MISR and SeaWiFS Aerosol Optical Depth (AOD) with GWR, 1998-2016. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). <a href="https://doi.org/10.7927/H4ZK5DQS">https://doi.org/10.7927/H4ZK5DQS</a>. Accessed 1 April 2020</p> <p>van Donkelaar, A., R. V. Martin, M. Brauer, N. C. Hsu, R. A. Kahn, R. C. Levy, A. Lyapustin, A. M. Sayer, and D. M. Winker. 2016. Global Estimates of Fine Particulate Matter Using a Combined Geophysical-Statistical Method with Information from Satellites. Environmental Science &amp; Technology 50 (7): 3762-3772. <a href="https://doi.org/10.1021/acs.est.5b05833">https://doi.org/10.1021/acs.est.5b05833</a>.</p>

Flood	E	Physical	Elevation	CT ECO 2016 LIDAR	<a href="https://cteco.uconn.edu/data/lidar/index.htm">https://cteco.uconn.edu/data/lidar/index.htm</a>	
Heat	E	Physical	Emissivity	UConn		Fragomeni, MA, Miller, T, and Day, K, 2021 (In Progress). Urban Heat Island Analysis for New Haven and Fairfield Counties. Part of the Resilient Connecticut Project. Climate Design Lab, Department of Plant Science and Landscape Architecture, University of Connecticut. Storrs, CT.
Flood	E	Physical	Erosion susceptibility	CT DEEP	<a href="https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA">https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA</a> , <a href="http://www.cteco.uconn.edu/metadata/dep/document/EROSION_SUSCEPTIBILITY_FGDC_Plus.htm">http://www.cteco.uconn.edu/metadata/dep/document/EROSION_SUSCEPTIBILITY_FGDC_Plus.htm</a>	
Heat	E	Climate	Maximum Land Surface Temperature	UConn		Fragomeni, MA, Miller, T, and Day, K, 2021 (In Progress). Urban Heat Island Analysis for New Haven and Fairfield Counties. Part of the Resilient Connecticut Project. Climate Design Lab, Department of Plant Science and Landscape Architecture, University of Connecticut. Storrs, CT.
Flood	E	Physical	Impervious surfaces	Microsoft US Building Footprints		

Heat	AC	Ecological	Percent Tree Cover	UConn Clear, NOAA 1m resolution	<a href="http://clear.uconn.edu/projects/landscape/highres/index.htm">http://clear.uconn.edu/projects/landscape/highres/index.htm</a>	
Flood	AC	Physical	LID structures	UConn CLEAR, NEMO Program, National LID Atlas	<a href="https://lidmap.uconn.edu/">https://lidmap.uconn.edu/</a>	
Flood	AC	Ecological	Marsh migration	Connecticut Institute for Resilience and Climate Adaptation (CIRCA)	<a href="https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA">https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA</a> , <a href="https://portal.ct.gov/-/media/DEEP/gis/SLAMM/SLAMMIISummaryOverallProjectMetadatapdf.pdf?la=en">https://portal.ct.gov/-/media/DEEP/gis/SLAMM/SLAMMIISummaryOverallProjectMetadatapdf.pdf?la=en</a>	
Heat	S	Social	Average number of emergency visits for asthma over 10 years, per population	CT DPH	<a href="https://portal.ct.gov/DPH/Health-Education-Management--Surveillance/Asthma/Asthma-Statistics">https://portal.ct.gov/DPH/Health-Education-Management--Surveillance/Asthma/Asthma-Statistics</a>	
Flood & Heat	S	Social	Average number per household	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Built	Building density	Microsoft US Building Footprints		
Flood & Heat	S	Social	Median year structure built	Census ACS 2015-2019 5-year Estimates		
Flood	AC	Social	Disposable income	ESRI, U.S. Census Bureau	<a href="https://www.arcgis.com/home/item.html?id=239a0e9c32674d0b80290ff4cfe32ec3">https://www.arcgis.com/home/item.html?id=239a0e9c32674d0b80290ff4cfe32ec3</a>	
Flood & Heat	S	Social	Lack of vehicle	Census ACS 2015-2019 5-year Estimates		
Heat	AC	Ecological	Albedo: Land cover	UConn Clear, NOAA 1m resolution	<a href="http://clear.uconn.edu/projects/landscape/highres/index.htm">http://clear.uconn.edu/projects/landscape/highres/index.htm</a>	
Flood	AC	Built	Open space in flood risk areas	The Nature Conservancy		
Flood & Heat	S	Social	Median income	Census ACS 2015-2019 5-year Estimates		

Flood & Heat	S	Social	Older than 5 with a disability	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Percent living below federal poverty level	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Percent population over 25 without HS diploma	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Percent population over 65	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Percent population under 5	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Percent population unemployed	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Social	Population density	Census ACS 2015-2019 5-year Estimates		
Flood	AC	Built	Proximity to major roadway access	CT DOT		
Flood & Heat	S	Built	Private Wells	CT DWVARP		
Flood	S	Built	Railways	CT DEEP	<a href="https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers">https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers</a>	
Flood	AC	Social	Ratio of NFIPs in force to number of structures in flood zones	NFIP PIF November 2020	<a href="https://nfipservices.floodsmart.gov//reports-flood-insurance-data">https://nfipservices.floodsmart.gov//reports-flood-insurance-data</a>	
Flood	AC	Built	Regulatory standards	Community Websites		
Flood	AC	Ecological	Resilient landscape (eco region)	The Nature Conservancy	<a href="https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reports/data/terrestrial/resilience/resilientland/Pages/default.aspx">https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reports/data/terrestrial/resilience/resilientland/Pages/default.aspx</a>	
Flood	AC	Built	Riverine flood protection systems	USACE	<a href="https://www.nae.usace.army.mil/Missions/Civil-Works/Flood-Risk-Management/Connecticut/">https://www.nae.usace.army.mil/Missions/Civil-Works/Flood-Risk-Management/Connecticut/</a>	

Flood	E	Climate	Riverine flood zones	FEMA		
Flood	E	Climate	Sea Level Rise	CIRCA		
Flood	S	Built	Septic System Areas	SLR - Sewer service area erased from project boundary		
Flood	E	Physical	Shoreline change rate	National Oceanic and Atmospheric Administration (NOAA), National Geodetic Survey (NGS), Connecticut Department of Energy and Environmental Protection (DEEP)	<a href="http://cteco.uconn.edu/viewers/coastalhazards.htm#shorelinechange">http://cteco.uconn.edu/viewers/coastalhazards.htm#shorelinechange</a>	
Flood	E	Physical	Soil drainage	SSURGO Soil Drainage Class	<a href="https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/datasets/soil-survey-geographic-database-ssurgo-soil-drainage-class-">https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/datasets/soil-survey-geographic-database-ssurgo-soil-drainage-class-</a>	USDA, NRCS
Flood & Heat	S	Social	Race and ethnicity	Census ACS 2015-2019 5-year Estimates		
Flood	E	Climate	Storm Surge	opmgis		
Flood	S	Built	Streets	CT DESPP		
Flood	E	Climate	Tidal Range	Connecticut Institute for Resilience and Climate Adaptation (CIRCA)		Connecticut coastal vulnerability map: Tidal range 2014-2015
Flood	AC	Built	Public Water service areas	CT Water Supply Plan		
Flood	AC	Built	Sewer Service Areas	SLR sewersrv_withMMLupdates - 2		
Flood & Heat	S	Social	Speaks English less than well/not at all	Census ACS 2015-2019 5-year Estimates		
Flood & Heat	S	Built	Median Structure Age	Census ACS 2015-2019 5-year Estimates		

Flood	S	Built	Historic Resources	SHPO		
Flood	S	Built	Brownfields	CT DEEP	<a href="https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers">https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers</a>	
Flood	S	Ecological	NDDB	CT DEEP	<a href="https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers">https://ct-deep-gis-open-data-website-ctdeep.hub.arcgis.com/pages/gis-data---downloadable-feature-layers</a>	
Flood	S	Ecological	Land Cover	UConn Clear, NOAA 1m resolution	<a href="http://clear.uconn.edu/projects/landscape/highres/index.htm">http://clear.uconn.edu/projects/landscape/highres/index.htm</a>	
Flood	S	Built	Bus Terminals	Bureau of Transportation Statistics		
Flood	S	Built	Railroad Stations	CT Open Data		
Flood	S	Built	Septic Areas (outside of sewer service area)	SLR - Sewer service area erased from project boundary		
Heat	AC	Built	Distance to Cooling Shelter	UConn CIRCA		Data compiled from two methods: CT DPH/CIRCA Survey to Emergency Management Directors and Health Departments about cooling centers in use in 2019 (in addition to emergency shelters) and data collected from news services advertising cooling centers in 2019. Laura Hayes (DPH), Joanna Wozniak-Brown (UConn CIRCA), and Nicholas Elton (Yale graduate student) prepared and collected the