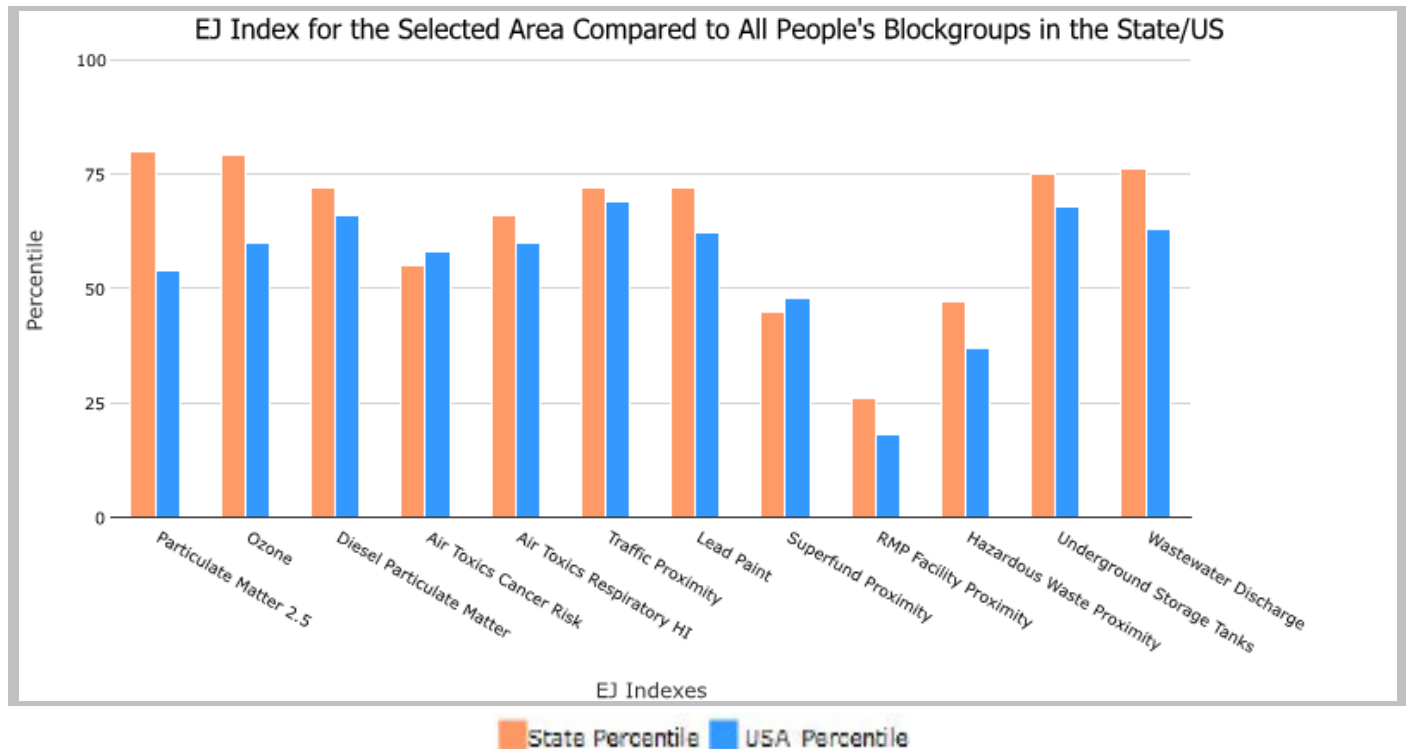# Appendix P:
Environmental Justice

EJScreen Report (Version 2.1)

Blockgroup: 516003002003, VIRGINIA, EPA Region 3

Approximate Population: 1,430

Input Area (sq. miles): 0.41

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	80	54
EJ Index for Ozone	79	60
EJ Index for Diesel Particulate Matter*	72	66
EJ Index for Air Toxics Cancer Risk*	55	58
EJ Index for Air Toxics Respiratory HI*	66	60
EJ Index for Traffic Proximity	72	69
EJ Index for Lead Paint	72	62
EJ Index for Superfund Proximity	45	48
EJ Index for RMP Facility Proximity	26	18
EJ Index for Hazardous Waste Proximity	47	37
EJ Index for Underground Storage Tanks	75	68
EJ Index for Wastewater Discharge	76	63

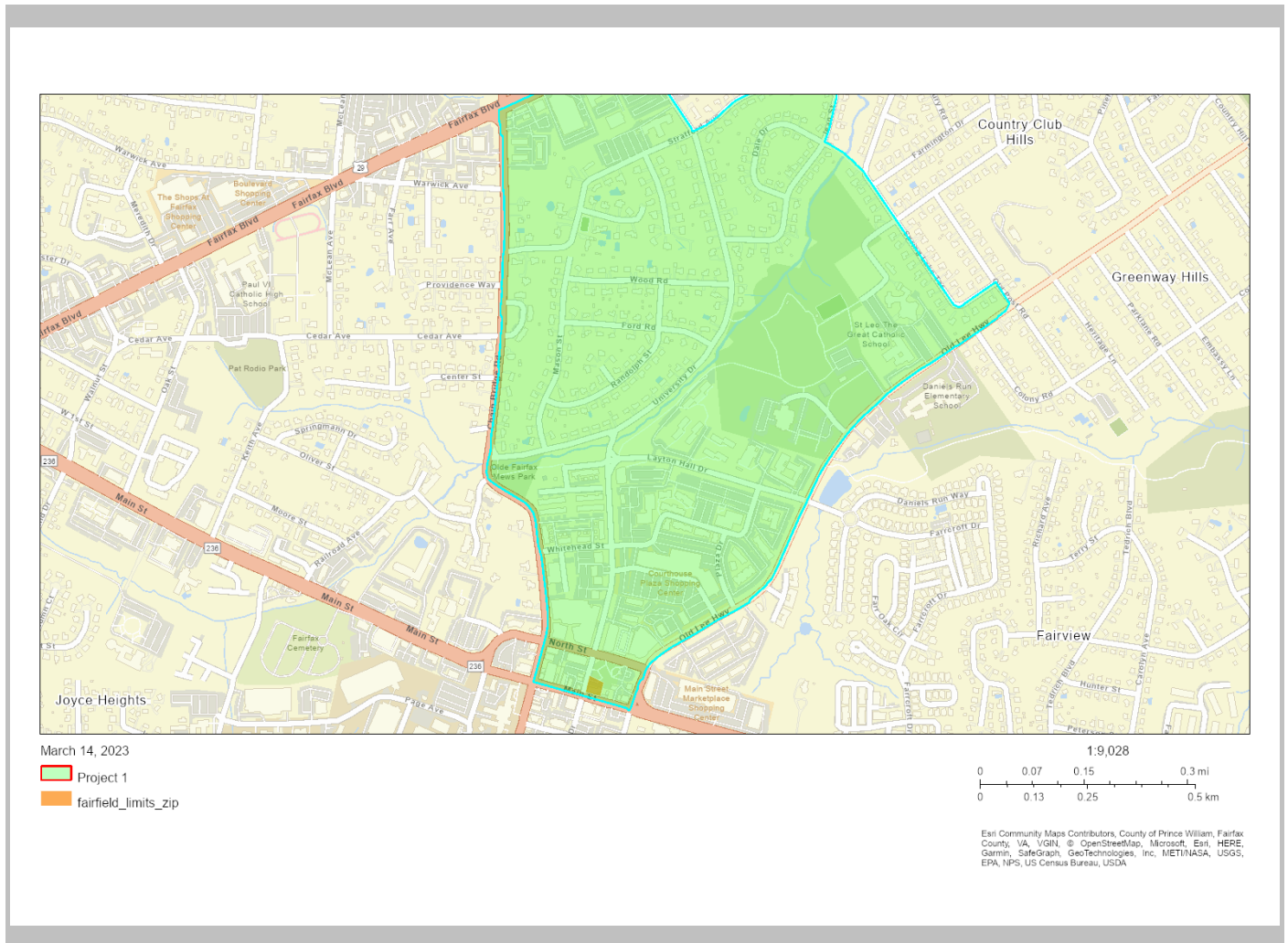EJ Index for the Selected Area Compared to All People's Blockgroups in the State/US

This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

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| 0 | 0.07 | 0.15 | 0.3 mi |
| 0 | 0.13 | 0.25 | 0.5 km |

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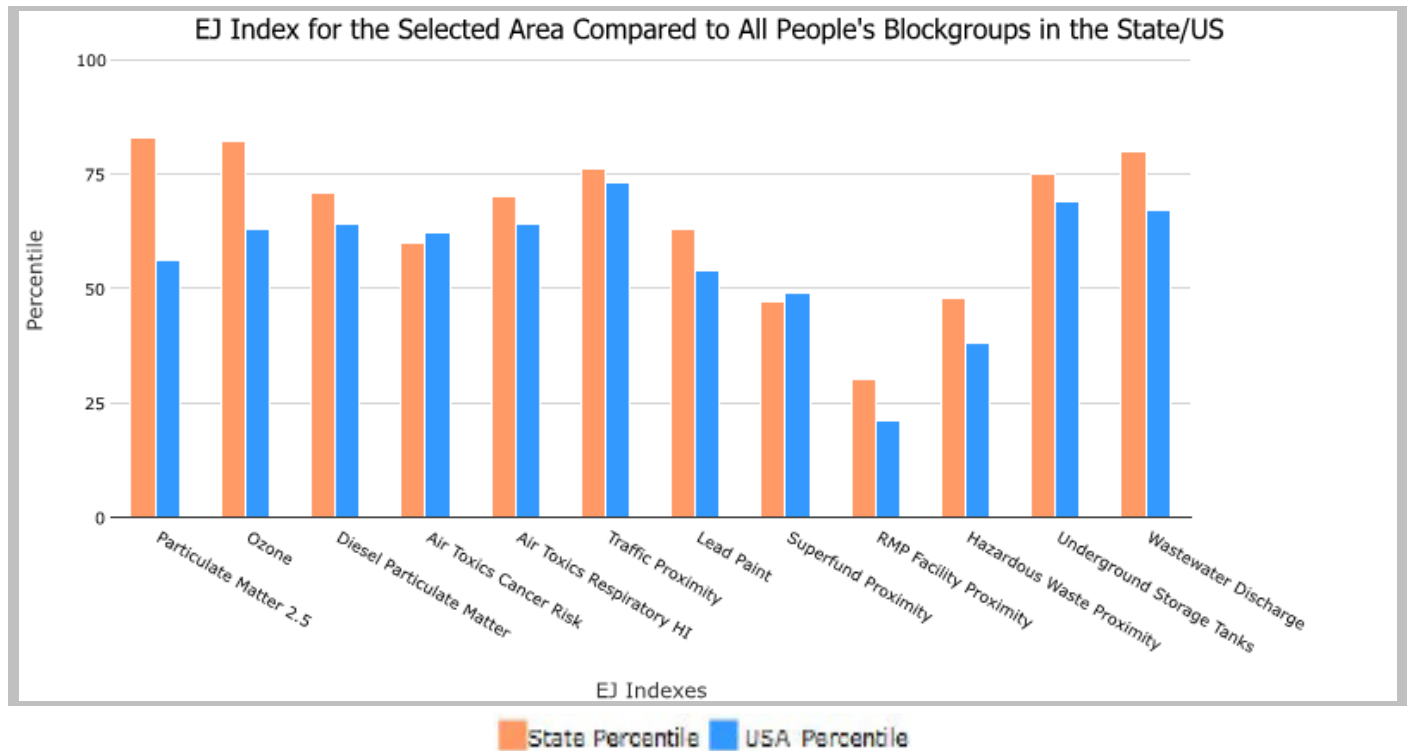| Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.1)

Blockgroup: 516003002003, VIRGINIA, EPA Region 3

Approximate Population: 1,430

Input Area (sq. miles): 0.41

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m³)	8.49	7.51	92	8.67	47
Ozone (ppb)	42.6	40.1	89	42.5	53
Diesel Particulate Matter* (µg/m³)	0.361	0.237	82	0.294	70-80th
Air Toxics Cancer Risk* (lifetime risk per million)	30	31	84	28	80-90th
Air Toxics Respiratory HI*	0.4	0.36	94	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	1200	740	83	760	84
Lead Paint (% Pre-1960 Housing)	0.31	0.2	72	0.27	59
Superfund Proximity (site count/km distance)	0.04	0.11	34	0.13	37
RMP Facility Proximity (facility count/km distance)	0.071	0.41	17	0.77	10
Hazardous Waste Proximity (facility count/km distance)	0.15	0.71	35	2.2	26
Underground Storage Tanks (count/km²)	5	1.9	89	3.9	77
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0038	7.5	85	12	61
Socioeconomic Indicators					
Demographic Index	29%	31%	53	35%	49
People of Color	44%	39%	63	40%	63
Low Income	14%	24%	34	30%	24
Unemployment Rate	4%	5%	54	5%	49
Limited English Speaking Households	9%	3%	90	5%	83
Less Than High School Education	12%	10%	67	12%	63
Under Age 5	21%	6%	98	6%	99
Over Age 64	11%	15%	34	16%	31

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	83	56
EJ Index for Ozone	82	63
EJ Index for Diesel Particulate Matter*	71	64
EJ Index for Air Toxics Cancer Risk*	60	62
EJ Index for Air Toxics Respiratory HI*	70	64
EJ Index for Traffic Proximity	76	73
EJ Index for Lead Paint	63	54
EJ Index for Superfund Proximity	47	49
EJ Index for RMP Facility Proximity	30	21
EJ Index for Hazardous Waste Proximity	48	38
EJ Index for Underground Storage Tanks	75	69
EJ Index for Wastewater Discharge	80	67

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/US

This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.
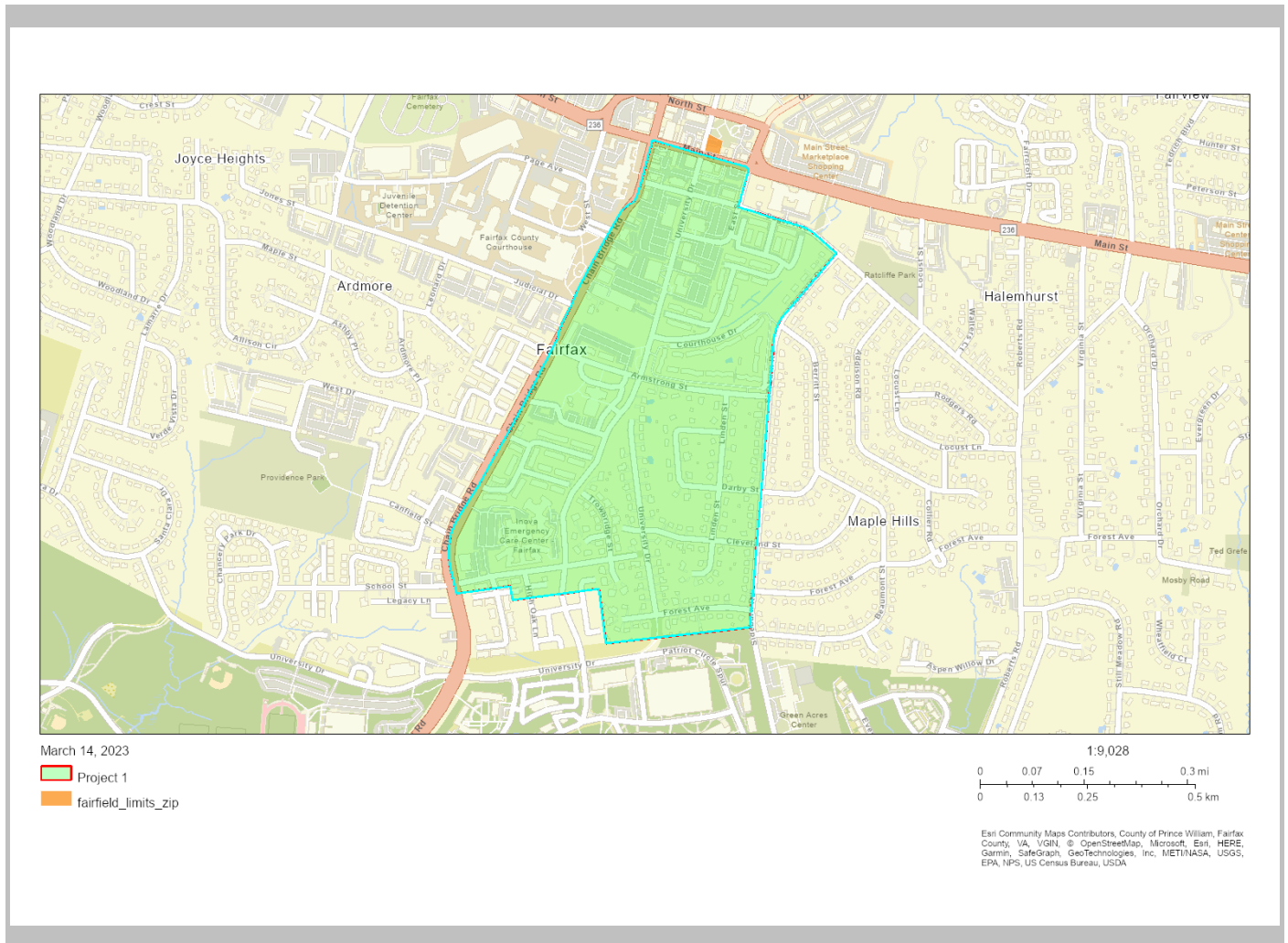
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Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu g/m^3$)	8.45	7.51	90	8.67	46
Ozone (ppb)	42.4	40.1	87	42.5	52
Diesel Particulate Matter* ($\mu g/m^3$)	0.3	0.237	71	0.294	60-70th
Air Toxics Cancer Risk* (lifetime risk per million)	30	31	84	28	80-90th
Air Toxics Respiratory HI*	0.4	0.36	94	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	1300	740	84	760	85
Lead Paint (% Pre-1960 Housing)	0.15	0.2	51	0.27	41
Superfund Proximity (site count/km distance)	0.038	0.11	32	0.13	35
RMP Facility Proximity (facility count/km distance)	0.075	0.41	18	0.77	11
Hazardous Waste Proximity (facility count/km distance)	0.14	0.71	33	2.2	24
Underground Storage Tanks (count/km²)	3.6	1.9	81	3.9	70
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0036	7.5	84	12	61
Socioeconomic Indicators					
Demographic Index	32%	31%	59	35%	54
People of Color	33%	39%	49	40%	53
Low Income	32%	24%	67	30%	57
Unemployment Rate	7%	5%	78	5%	73
Limited English Speaking Households	20%	3%	97	5%	93
Less Than High School Education	8%	10%	51	12%	48
Under Age 5	3%	6%	32	6%	31
Over Age 64	40%	15%	96	16%	96

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice