

**San Antonio (Bexar County) Nonattainment Area
Environmental Justice Screening Tool Analyses
Docket ID: EPA-R06-OAR-2023-0647
March 2024**

The Environmental Protection Agency (EPA) is providing environmental justice (EJ) analyses associated with the EPA’s proposal to approve revisions to the Texas SIP. The submitted revisions describe and demonstrate how CAA requirements for a Basic vehicle inspection and maintenance (I/M) program is met in the San Antonio ozone nonattainment area for the 2015 ozone National Ambient Air Quality Standard (NAAQS), provide for the removal of six DFW counties from the Regional Low Reid Vapor Pressure (RVP) Gasoline Program, and incorporates minor changes for the display of a vehicle’s registration insignia. These analyses provide information to the public but are not the basis of the proposed action.¹

Background

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, Feb. 16, 1994) directs federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. The 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.” The EPA further defines the term fair treatment to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.”²

When the EPA establishes a new or revised NAAQS, the Clean Air Act (CAA) requires the EPA to designate all areas of the United States (U.S.) as either nonattainment, attainment, or unclassifiable. Consistent with Executive Order 12898, area designations address EJ concerns by ensuring that the public is properly informed about the air quality in an area. We addressed EJ concerns related to our reclassification of the San Antonio (Bexar County) non-attainment area from Marginal to Moderate nonattainment for the 2015 standard in our October 7, 2022, final rule.³

On March 15, 2024, EPA performed EJ analyses using the EJScreen tool (Version 2.2) to provide additional information regarding the environmental and demographic indicators within the San Antonio (Bexar County) 2015 8-hour ozone nonattainment areas.⁴ EJScreen is an

¹ Throughout this document, “we” and “our” means the EPA.

² <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>

³ EPA originally designated Bexar County, Texas as a marginal nonattainment area for the 2015 eight-hour ozone NAAQS on September 24, 2018. The area had an attainment deadline of September 24, 2021, but the EPA determined that Bexar County failed to meet the standard by then. In October 2022, the EPA reclassified the area as moderate nonattainment with a new attainment date of September 24, 2024.

⁴ The EJScreen tool is available at <https://www.epa.gov/ejscreen>.

environmental justice mapping and screening tool that provides a nationally consistent dataset and approach for combining various environmental and demographic indicators.⁵ The EJScreen tool presents these indicators at a Census block group (CBG) level or a larger user-specified “buffer” area that covers multiple CBGs.⁶ An individual CBG is a cluster of contiguous blocks within the same census tract and generally contains between 600 and 3,000 people. EJScreen is not a tool for performing in-depth risk analysis but is instead a screening tool that provides an initial representation of indicators related to environmental justice and is subject to uncertainty in some underlying data (*e.g.*, some environmental indicators are based on monitoring data which are not uniformly available; others are based on self-reported data).⁷ We present EJScreen environmental indicators to help screen for locations where residents may experience a higher overall pollution burden than would be expected for a block group with the same total population statewide and nationwide.⁸ These indicators of overall pollution burden include but are not limited to estimates of ambient particulate matter (PM_{2.5}) and ozone concentration; scores for proximity to Superfund, risk management plan (RMP) sites, and traffic; percentage of pre-1960 housing units (lead paint indicator); scores for the 2017 Air Toxics Cancer Risk and Respiratory Hazard Index (HI); wastewater discharge; and underground storage tanks.⁹

We also present EJScreen demographic indicators, including an assortment of socioeconomic information, such as the itemization of a population by gender, age, ethnicity, housing, education, income, employment status, and even internet access. Demographic data can help provide a basis for understanding communities as they are now and for uncovering the needs or strengths of a community to guide planning, policy development or decision making. For example, in some communities, data on race, ethnicity and language is being used to help guide the need for translation or interpretation for non-English speakers.

A sampling of the environmental and demographic data for each area follows. The complete EJScreen reports for these areas are provided at the end of this document.

Environmental and Demographic Data

The San Antonio (Bexar County) nonattainment area for the 2015 ozone NAAQS includes all of Bexar County, whose population is about 1,990,522 people. Within Bexar County, the percent of the population that is people of color is about 73%, which is higher than the national average (39%) and the State average (58%); the percent of the population that is low income is

⁵ The technical documentation for EJScreen version 2.2 is posted at <https://www.epa.gov/system/files/documents/2023-06/ejscreen-tech-doc-version-2-2.pdf>.

⁶ See <https://www.census.gov/programs-surveys/geography/about/glossary.html>.

⁷ In addition, EJScreen relies on the five-year block group estimates from the U.S. Census American Community Survey. The advantage of using five-year over single-year estimates is increased statistical reliability of the data (*i.e.*, lower sampling error), particularly for small geographic areas and population groups. For more information, see https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_general_handbook_2020.pdf.

⁸ In this case, statewide means Texas (“the State”) and “nationwide” means the U.S.

⁹ For additional information on environmental indicators and proximity scores in EJScreen, see “EJSCREEN Environmental Justice Mapping and Screening Tool: EJSCREEN Technical Documentation,” Chapter 3 and Appendix C (September 2019) at https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen_technical_document.pdf.

about 35%, which is higher than the national average (31%) and the State average (34%); the percent of the population that are linguistically isolated¹⁰ is about 6%, which is higher than the national average (5%) and lower than the State average (8%); and the percent of the population with less than high school education is about 15%, which is higher than the national average (12%) and lower than the State average (16%).

Within the Bexar County nonattainment area, three Environmental Justice Indexes of the thirteen EJScreen indicators exceed the 80th percentile in the United States including Particulate Matter 2.5, Ozone, and Superfund Proximity; and one of the thirteen EJScreen indicators, Superfund Proximity, exceed the 80th percentile in the State of Texas.

Conclusion

This EJ analysis is associated with the EPA's proposal to approve the aforementioned revisions to the Texas SIP.

EPA's analysis found that the San Antonio Bexar County nonattainment area exceed the 80th percentile in the U.S. for ozone. As a Moderate nonattainment area for the 2015 ozone standard, the San Antonio (Bexar County) area is required to implement additional and more stringent CAA requirements (such as the implementation of a Basic vehicle I/M program) to further reduce ozone precursor emissions and assist the area in meeting the 2015 ozone NAAQS.

This proposed action addresses revisions to Texas' Basic vehicle I/M program that will be implemented in the San Antonio (Bexar County) ozone nonattainment area. The I/M program ensures that vehicles are operating according to the EPA's vehicle emissions standards and adequately protecting public health. Therefore, this proposed action is not anticipated to have a disproportionately high or adverse human health or environmental effects on communities with EJ concerns.

Additionally, this proposed action amends 30 TAC Chapter 114 to clean up the definitions provided for rules in the chapter and to update rules for the State's Low RVP Program. These proposed actions are also not anticipated to have a disproportionately high or adverse human health or environmental effects on communities with EJ concerns.

¹⁰ Refers to the EJ Screen Socioeconomic Indicator category of "Limited English-Speaking Households."



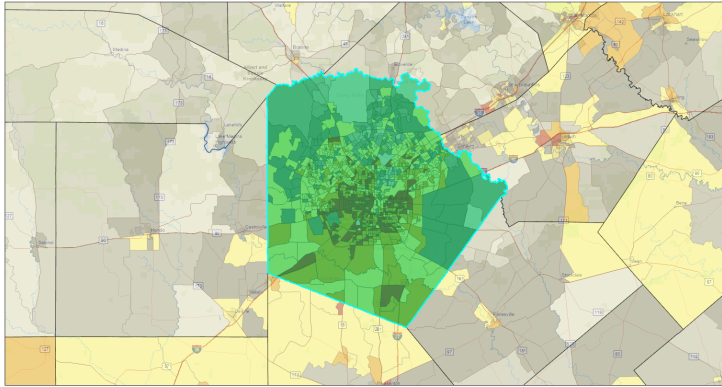
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Bexar County, TX

County: Bexar
 Population: 1,990,522
 Area in square miles: 1256.07

A3 Landscape

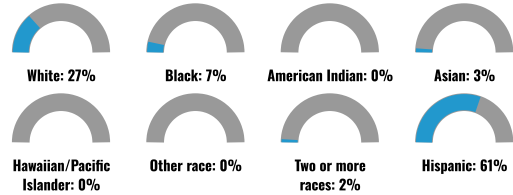


March 15, 2024
 Particulate Matter 2.5: Less than 50%ile, 50-60%ile, 60-70%ile, 70-80%ile, 80-90%ile, 90-95%ile, 95-100%ile
 Ozone 8-hr (2015 Standard): Maintenance, Nonattainment
 Counties: Bexar County EJ
 Scale: 0 5 10 20 40 km

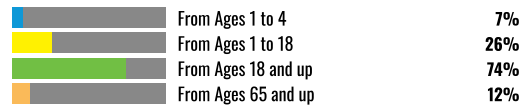
COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	62%
Spanish	34%
Other Indo-European	1%
Other Asian and Pacific Island	1%
Total Non-English	38%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

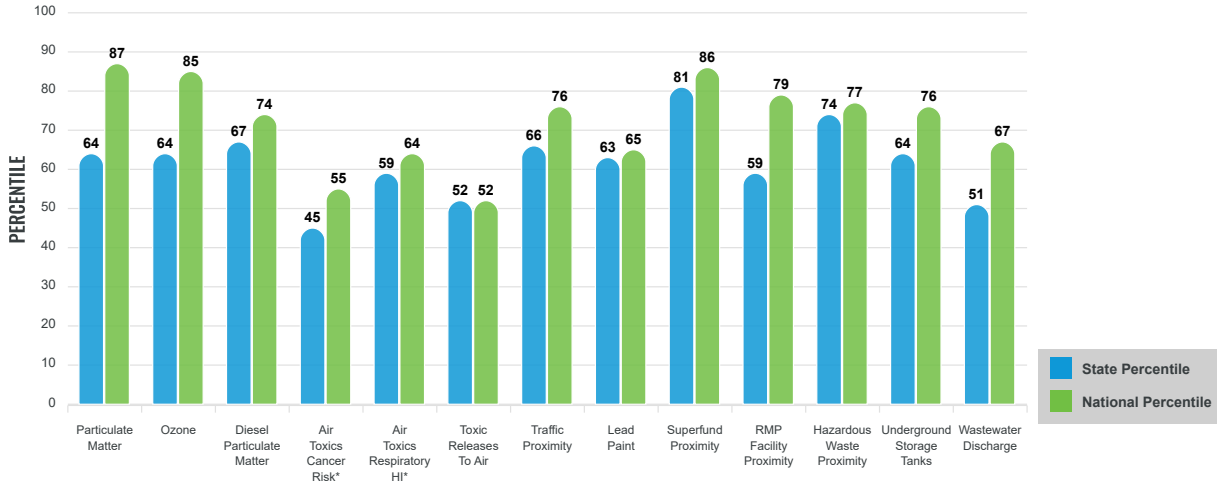
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

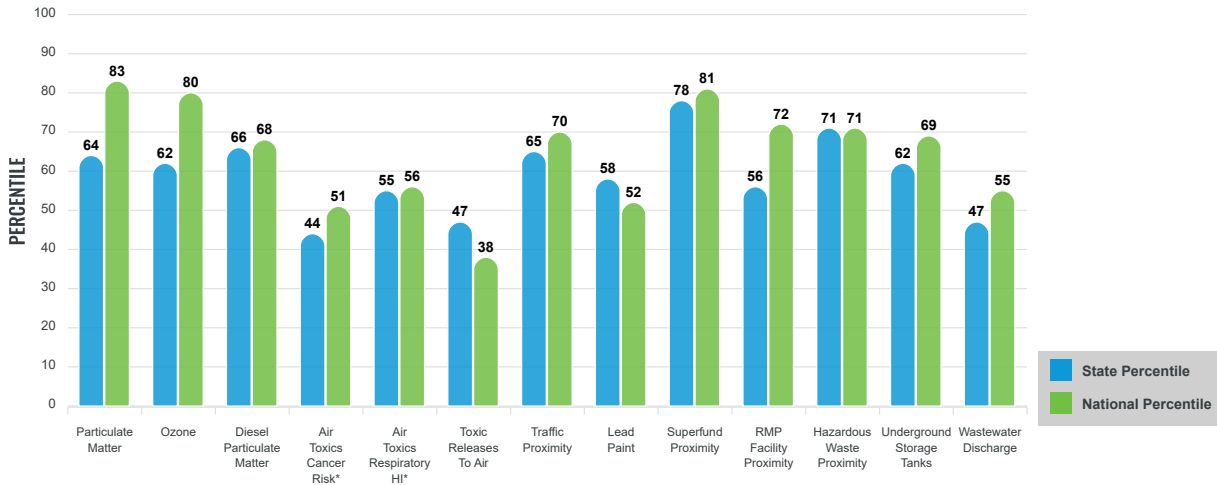
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for County: Bexar

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m ³)	9.26	9.11	46	8.08	79
Ozone (ppb)	64.4	64.6	48	61.6	72
Diesel Particulate Matter (µg/m ³)	0.218	0.218	51	0.261	50
Air Toxics Cancer Risk* (lifetime risk per million)	21	28	1	25	5
Air Toxics Respiratory HI*	0.28	0.3	1	0.31	4
Toxic Releases to Air	110	12,000	35	4,600	24
Traffic Proximity (daily traffic count/distance to road)	160	150	72	210	69
Lead Paint (% Pre-1960 Housing)	0.17	0.17	67	0.3	44
Superfund Proximity (site count/km distance)	0.17	0.085	89	0.13	82
RMP Facility Proximity (facility count/km distance)	0.46	0.63	61	0.43	75
Hazardous Waste Proximity (facility count/km distance)	1	0.75	77	1.9	62
Underground Storage Tanks (count/km ²)	2.3	2.3	61	3.9	61
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.24	0.91	93	22	86
SOCIOECONOMIC INDICATORS					
Demographic Index	54%	46%	61	35%	78
Supplemental Demographic Index	16%	17%	55	14%	66
People of Color	73%	58%	63	39%	80
Low Income	35%	34%	55	31%	62
Unemployment Rate	6%	5%	63	6%	62
Limited English Speaking Households	6%	8%	64	5%	79
Less Than High School Education	15%	16%	57	12%	71
Under Age 5	7%	6%	60	6%	68
Over Age 64	12%	14%	49	17%	35
Low Life Expectancy	17%	20%	22	20%	30

*Diesel particulate 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>.

Sites reporting to EPA within defined area:

Superfund	4
Hazardous Waste, Treatment, Storage, and Disposal Facilities	58
Water Dischargers	7790
..	
Air Pollution	205
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Brownfields	43
Toxic Release Inventory	156
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Other community features within defined area:

Schools	617
Hospitals	51
Places of Worship	1089

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for County: Bexar

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	20%	22	20%	30
Heart Disease	5.6	5.9	46	6.1	41
Asthma	9.1	9.2	43	10	25
Cancer	4.7	5.2	41	6.1	21
Persons with Disabilities	14.2%	12.3%	66	13.4%	60

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	10%	10%	75	12%	67
Wildfire Risk	17%	30%	62	14%	82

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	13%	15%	55	14%	57
Lack of Health Insurance	16%	18%	46	9%	85
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for County: Bexar