

Miami-Dade County Waste to Energy Demographics Memo

To: Cheryl Propst

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Subject: Miami-Dade County Waste to Energy Demographics Memo

Introduction

An assessment was conducted to determine demographic information for areas adjacent to the Opa-locka West Airport site in Miami-Dade County, Florida. The study area for this assessment included a 3-mile buffer around the center of the proposed project site. This study area encompasses the proposed project area, as well as surrounding areas that could be impacted by the proposed project including through noise and visual impacts. Demographic information was acquired for U.S. Census Block Groups (Block Groups)¹ that were located within or interest the study area (**Attachment A**). It should be noted that three of the Block Groups (Tract 011500 Block Group 3; Tract 980000 Block Group 1; and Tract 981100 Block Group 1) did not contain any residential populations within or immediately adjacent to the study area and were therefore not included in the assessment. The Environmental Protection Agency’s (EPA’s) Environmental Justice Screening and Mapping Tool (EJScreen) (2024a) was also utilized to determine “people of color”² and “percent low income”³ demographic information. These two socioeconomic factors are explicitly named in Executive Order 12898 on Environmental Justice. The EJScreen tool limits the input selection to a maximum of five features. Given this limitation, the five Census Tract areas within or intersecting the study area were chosen.

Results

The U.S. Census Bureau American Community Survey (ACS) data (2022a) and Decennial Census data (2020) were used to determine demographic information for the Block Groups within the study area. **Table 1** and **Table 2** present the race and ethnicity percentages for each Block Group. Census Tract/Block Group 12403/1 and 12501/2 had the highest percentage of Hispanic or Latino populations at 84-percent and 92-percent, respectively. White alone comprised the largest percentage of the not Hispanic or Latino population in Census Tract/Block Group 110361/3. Black or African American alone comprised the largest percentage of the not Hispanic or Latino population in Census Tract/Block Group 110361/1. **Table 3** and **Table 4** present the poverty status percentages for each Block Group. Census Tract/Block Group 12403/1 had the highest percentage of individuals below the poverty line at 19-percent. The remaining Block Groups had percentages of individuals below the poverty line at or below 5-percent. The EJScreen indicated that the Census Tracts combined are comprised of 7-percent low-income populations and 78-percent “people of color” populations (**Attachment B**).

¹ A U.S. Census Block Group is defined as “... the smallest geographic entity for which the decennial census tabulates and publishes sample data.” (U.S. Census Bureau, 2022b)

² The EPA EJScreen (2024b) defines “people of color” as “the percent of individuals in a block group who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic white-alone individuals.”

³ The EPA EJScreen (2024b) defines “percent low-income” as the “percent of individuals whose ratio of household income to poverty level in the past 12 months was less than 2 (as a fraction of individuals for whom ratio was determined).”

Table 1: Population Percentages by Race and Ethnicity for Census Block Groups

Demographics	Census Tract/Block Group ¹						
	12403/1	12501/2	110358/1	110358/2	110358/3	110359/2	110359/3
Hispanic or Latino²	84%	92%	49%	57%	50%	60%	53%
Not Hispanic or Latino	16%	8%	51%	43%	50%	40%	47%
White alone	9%	5%	16%	14%	12%	13%	18%
Black or African American alone	4%	<1%	26%	20%	26%	12%	13%
American Indian and Alaska Native alone	0%	0%	<1%	0%	<1%	0%	0%
Asian alone	1%	2%	5%	5%	9%	10%	12%
Native Hawaiian and Other Pacific Islander alone	<1%	0%	<1%	0%	<1%	0%	0%
Some other race alone	2%	<1%	1%	2%	<1%	1%	0%
Two or more races	1%	<1%	3%	3%	2%	4%	3%

Notes: ¹ Census Block Group numbering abbreviated to Census Tract and Block Group. ² Hispanic or Latino includes respondents of any race. | Source: U.S. Census Bureau, 2020

Table 2: Population Percentages by Race and Ethnicity for Census Block Groups- Continued

Demographics	Census Tract/Block Group ¹					
	110361/1	110361/2	110361/3	110361/4	110363/1	110363/2
Hispanic or Latino²	39%	58%	47%	48%	45%	45%
Not Hispanic or Latino	61%	42%	53%	52%	55%	55%
White alone	13%	21%	22%	11%	12%	11%
Black or African American alone	31%	12%	17%	21%	25%	26%
American Indian and Alaska Native alone	0%	0%	<1%	<1%	0%	0%
Asian alone	12%	5%	8%	15%	13%	12%
Native Hawaiian and Other Pacific Islander alone	0%	<1%	0%	<1%	0%	<1%
Some other race alone	1%	1%	2%	1%	1%	2%
Two or more races	5%	3%	4%	3%	4%	4%

Notes: ¹ Census Block Group numbering abbreviated to Census Tract and Block Group. ² Hispanic or Latino includes respondents of any race. | Source: U.S. Census Bureau, 2020

Table 3: Poverty Levels for Census Block Groups

Demographics	Census Tract/Block Group ¹						
	12403/1	12501/2	110358/1	110358/2	110358/3	110359/2	110359/3
Individuals Below Poverty Level ²	19%	2%	1%	3%	1%	0%	0%

Notes: ¹ Census Block Group numbering abbreviated to Census Tract and Block Group. ² Poverty Status of Individuals in the Past 12 Months by Living Arrangement |
Source: U.S. Census Bureau, 2022a

Table 4: Poverty Levels for Census Block Groups- Continued

Demographics	Census Tract/Block Group ¹					
	110361/1	110361/2	110361/3	110361/4	110363/1	110363/2
Individuals Below Poverty Level ²	0%	5%	0%	0%	0%	1%

Notes: ¹ Census Block Group numbering abbreviated to Census Tract and Block Group. ² Poverty Status of Individuals in the Past 12 Months by Living Arrangement |
Source: U.S. Census Bureau, 2022a

References

Environmental Protection Agency (EPA). 2024a. EJScreen Community Report. Retrieved from <https://ejscreen.epa.gov/mapper/>.

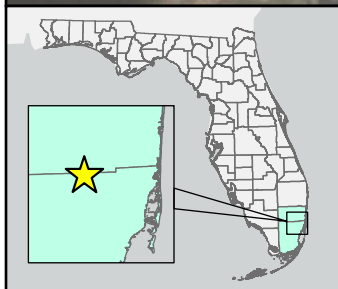
Environmental Protection Agency (EPA). 2024b. EJScreen Map Descriptions. Retrieved from <https://www.epa.gov/ejscreen/ejscreen-map-descriptions>.




U.S. Census Bureau. 2020. Decennial Census (Race and Ethnicity). Retrieved from <https://data.census.gov/>.

U.S. Census Bureau. 2022a. American Community Survey (ACS) 5-Year Estimates (Poverty Status of Individuals in the Past 12 Months by Living Arrangement). Retrieved from <https://data.census.gov/>.

U.S. Census Bureau. (2022b, April 11). Glossary (Block Group). Retrieved from <https://www.census.gov/programs-surveys/geography/about/glossary.html>.

Attachment A – Census Block Groups Figure



-  WTE West Airport Site
-  Site Buffer (3mi)
-  Census Block Group

MIAMI-DADE COUNTY
WASTE TO ENERGY FACILITY
MIAMI-DADE COUNTY, FL

CENSUS BLOCK GROUPS



Figure A-1
4/26/2024

Attachment B – EPA EJScreen Community Report

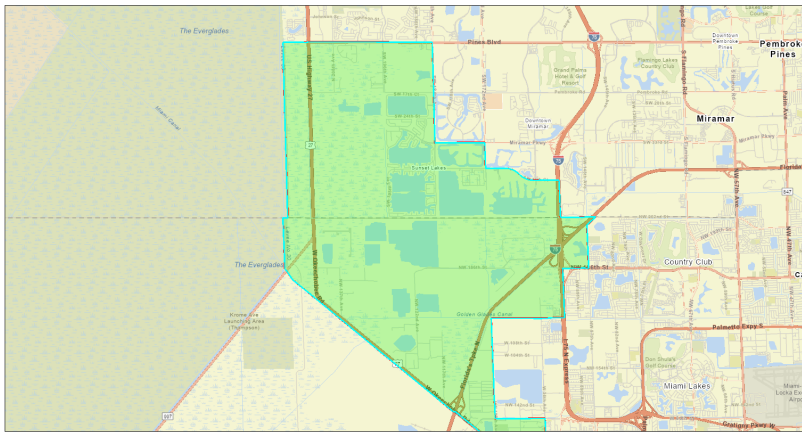
EJScreen Community Report

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

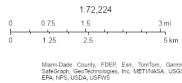
Pembroke Pines, FL

Tract: 12086012403, 12086012501, 12011110361, 12011110363, 12011110359
 Population: 23,249
 Area in square miles: 29.01

A3 Landscape

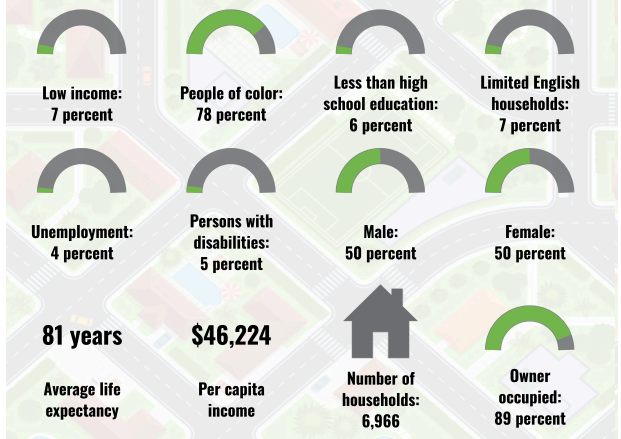


April 26, 2024
 Project 1

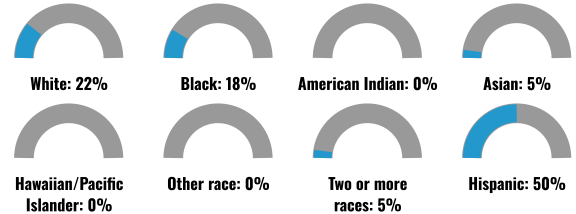


Map Data: Google, FESR, Esri, Swire, Garmin, Sphair, GeoTechnology, IN, METRISYS, USGS, EPA, NPS, USDA, USFWS

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	44%
Spanish	45%
French, Haitian, or Cajun	5%
Other Indo-European	2%
Chinese (including Mandarin, Cantonese)	1%
Tagalog (including Filipino)	1%
Other and Unspecified	1%
Total Non-English	56%

LIMITED ENGLISH SPEAKING BREAKDOWN



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.

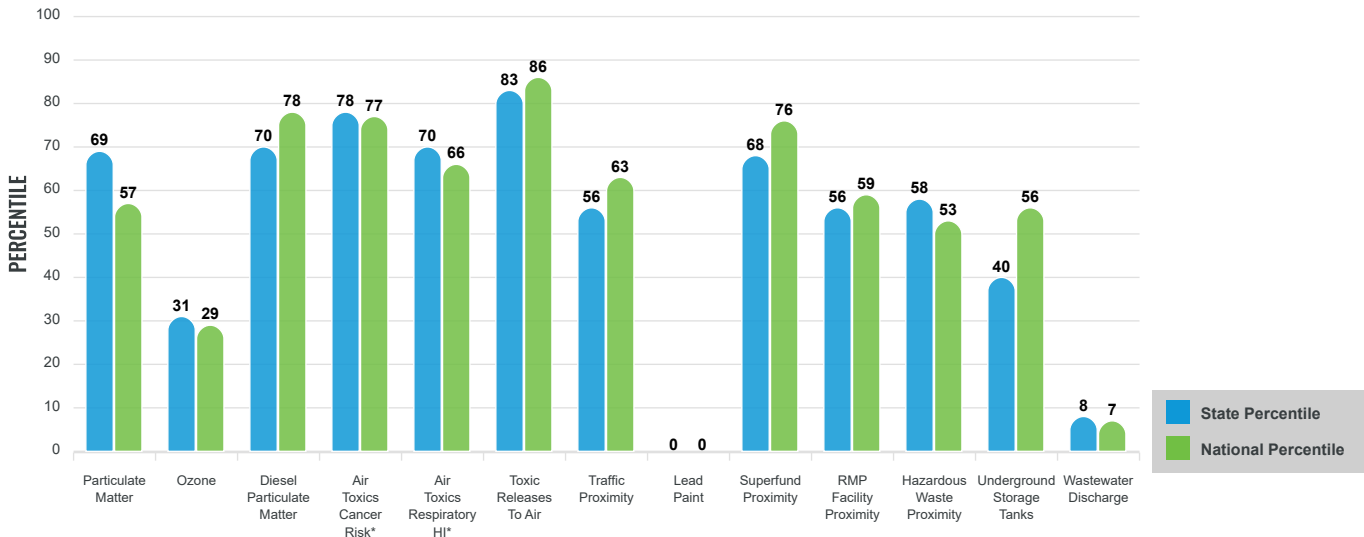
Environmental Justice & Supplemental Indexes

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.

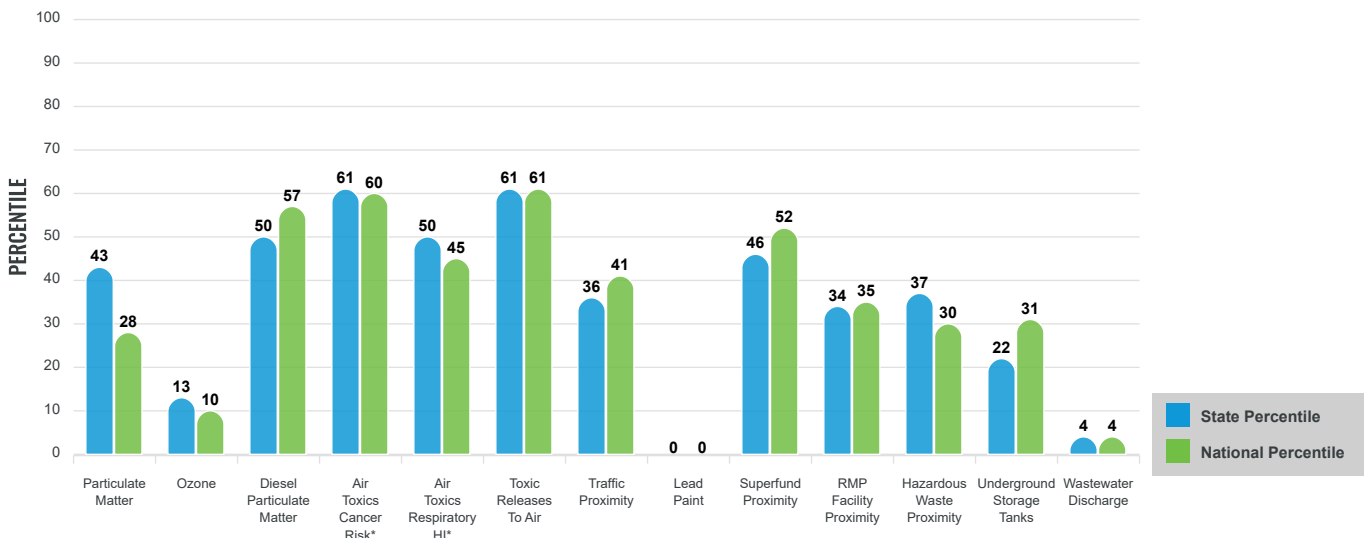
EJ INDEXES FOR THE SELECTED LOCATION



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 Tract: 12086012403,12086012501,12011110361,12011110363,12011110359

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	7.6	7.52	61	8.08	35
Ozone (ppb)	56.1	59.4	19	61.6	13
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.349	0.293	68	0.261	77
Air Toxics Cancer Risk* (lifetime risk per million)	30	25	55	25	52
Air Toxics Respiratory HI*	0.31	0.32	11	0.31	31
Toxic Releases to Air	7,300	1,900	96	4,600	90
Traffic Proximity (daily traffic count/distance to road)	130	160	63	210	64
Lead Paint (% Pre-1960 Housing)	0	0.14	0	0.3	0
Superfund Proximity (site count/km distance)	0.12	0.13	68	0.13	71
RMP Facility Proximity (facility count/km distance)	0.29	0.31	75	0.43	67
Hazardous Waste Proximity (facility count/km distance)	0.27	0.52	63	1.9	41
Underground Storage Tanks (count/km ²)	0.87	7	33	3.9	46
Wastewater Discharge (toxicity-weighted concentration/m distance)	6.1E-06	0.52	21	22	15
SOCIOECONOMIC INDICATORS					
Demographic Index	42%	39%	60	35%	67
Supplemental Demographic Index	8%	15%	18	14%	23
People of Color	78%	45%	79	39%	82
Low Income	7%	33%	7	31%	11
Unemployment Rate	4%	5%	52	6%	50
Limited English Speaking Households	7%	7%	71	5%	80
Less Than High School Education	6%	11%	38	12%	39
Under Age 5	4%	5%	47	6%	38
Over Age 64	9%	23%	17	17%	21
Low Life Expectancy	17%	19%	26	20%	25

*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	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	64
Air Pollution	8
Brownfields	0
Toxic Release Inventory	2

Other community features within defined area:

Schools	7
Hospitals	0
Places of Worship	2

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 Tract: 12086012403, 12086012501, 12011110361, 12011110363, 12011110359

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	19%	26	20%	25
Heart Disease	3.6	7.2	3	6.1	7
Asthma	7.2	8.7	5	10	0
Cancer	4.1	6.9	7	6.1	11
Persons with Disabilities	5.1%	13.9%	4	13.4%	5

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	19%	26%	60	12%	84
Wildfire Risk	72%	32%	71	14%	88

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	4%	13%	26	14%	25
Lack of Health Insurance	6%	13%	18	9%	42
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Tract: 12086012403,12086012501,12011110361,12011110363,12011110359