

## Population Surrounding 66,247 Open LUST Releases

Open Leaking Underground Storage Tank (LUST) releases exist in thousands of communities across the U.S. ranging from remote to large urban settings. Many of these releases are in economically distressed communities. To help describe who benefits from EPA's UST Program, the Agency used **2017-2021 American Community Survey population data and LUST Releases from states as of 2018-2019 and from Tribal lands and U.S. territories as of 2020-2021** to summarize the population living within 3, 1, and ¼ miles of open LUST facilities.

### Population within ¼ Mile of Releases:

Approximately 26 million people live within ¼ mile of an open LUST release (roughly 8% of the U.S. population) including approximately:

- 8% of all children in the U.S. under the age of 5
- 7% of all children in the U.S. under 18
- 11% of all blacks in the U.S.
- 10% of all Hispanics in the U.S.
- 10% of all minorities in the U.S.
- 11% of all households in the U.S. below the poverty level
- 10% of all people with less than a high school education in the U.S.
- 13% of the linguistically isolated people in the U.S.

### Population within 1 Mile of Releases:

Approximately 138 million people live within 1 mile of an open LUST release (roughly 41% of the U.S. population) including approximately:

- 42% of all children in the U.S. under the age of 5
- 40% of all children in the U.S. under 18
- 53% of all blacks in the U.S.
- 48% of all Hispanics in the U.S.
- 49% of all minorities in the U.S.
- 50% of all households in the U.S. below the poverty level
- 47% of all people with less than a high school education in the U.S.
- 55% of the linguistically isolated people in the U.S.

### Population within 3 Miles of Releases:

Approximately 247 million people live within 3 miles of an open LUST release (roughly 74% of the U.S. population) including approximately:

- 75% of all children in the U.S. under the age of 5
- 74% of all children in the U.S. under 18
- 84% of all blacks in the U.S.
- 80% of all Hispanics in the U.S.
- 81% of all minorities in the U.S.
- 78% of all households in the U.S. below the poverty level
- 76% of all people with less than a high school education in the U.S.
- 84% of the linguistically isolated people in the U.S.

## Demographics of Near-Release Populations:

While there is no single way to characterize communities located near our releases, this population is *more minority, low income, linguistically isolated, and less likely to have a high school education* than the U.S. population as a whole.

**TABLE 1: Proportions of Key Demographics in the Total Near Release Population and the Total U.S. Population**

	Population within ¼ mile of All Releases	Population within 1 mile of All Releases	Population within 3 miles of All Releases	U.S. Population
<b>Minority</b>	53.6%	48.5%	44.8%	41.1%
<b>Below poverty level</b>	17.1%	14.9%	13.2%	12.7%
<b>Linguistically isolated</b>	7.8%	6.2%	5.4%	4.8%
<b>Less than a High School Education</b>	14.2%	12.7%	11.5%	11.2%

## Methodology:

A 3-, 1- or ¼- mile buffer ring was placed around each release's latitude/longitude location. American Community Survey 2017-2021 population data was then identified for each block with a centroid that fell within the 3-, 1- or ¼- mile area. Population characteristic data was not available for census blocks but was available for block groups. To calculate the block population characteristics, the population percentage of the block within the block group was calculated and then that weight was applied to the respective block group characteristic of interest to estimate a value for the block.

Data used includes: (1) Open LUST information from states as of 2018-2019 and from Tribal lands and U.S. territories as of 2020-2021 and (2) American Community Survey 2017-2021 population data. Release data included 66,247 open LUST releases in the U.S. states, Tribal lands, and Puerto Rico with accurate locational data. Note that LUST data for KY was not included.

## IMPORTANT Caveats:

- Data collected represent a national look at the characteristics of the population in communities surrounding our releases. While some of the data point to possible environmental justice related characteristics of the population, this is not a full environmental justice analysis.
- Proximity to a release does not necessarily represent risk of adverse health effects. The risk of exposure to contamination varies significantly across all releases.
- Data are a snapshot in time only, the release and population information will change over time (can be updated every year when new census data comes out and compared over time in 5-year intervals).
- Used best available information, but data collected are estimates only, for the following reasons:
  - ❖ Used a single latitude/longitude location to model release boundaries based on acreage, not the actual release boundaries.
  - ❖ Used centroid points of the census blocks to determine inclusion in the estimates. This may under-estimate the population in some cases, and over-estimate in others.

Footnote to Use When Citing Data:

U.S. EPA, Office of Land and Emergency Management 2023. Data collected includes: (1) LUST information from states as of 2018-2019 and from Tribal lands and Puerto Rico as of 2020-2021 from Office of Research Development & Office of Underground Storage Tanks, UST Finder, <https://www.epa.gov/ust/ust-finder>; and (2) population data from the 2017-2021 American Community Survey.

**TABLE 2: Detailed Data on the Population within ¼, 1 and 3 miles of Open LUST Releases**

Below are data on the demographic characteristics of the population surrounding open LUST releases. The table indicates whether certain population demographics near releases are above (in bold) or below (in italics) the U.S. average.

Demographics	Population Within ¼ Mile of Releases (Approximate)		Population Within 1 Mile of Releases (Approximate)		Population Within 3 Miles of Releases (Approximate)		US Population (Approximate)	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number
<b>Race</b>								
White	57.3%	15,004,140	<i>61.4%</i>	84,752,435	<b>64.8%</b>	160,689,208	68.0%	226,482,080
Black	<b>18.3%</b>	4,790,186	<b>16.1%</b>	22,202,269	<b>14.1%</b>	34,996,830	12.5%	41,722,070
Asian	<b>6.7%</b>	1,763,013	<b>6.6%</b>	9,126,429	<b>6.4%</b>	15,788,991	5.6%	18,789,170
Native American	<i>0.7%</i>	188,915	<i>0.7%</i>	982,263	<i>0.7%</i>	1,749,169	0.8%	2,728,040
Hawaiian/Pacific Islander	0.2%	46,873	0.2%	280,770	0.2%	486,907	0.2%	615,799
Other	<b>16.7%</b>	4,380,190	<b>15.0%</b>	20,659,549	<b>13.8%</b>	34,242,071	12.8%	42,697,965
<b>Ethnicity</b>								
Hispanic (any race)	<b>25.2%</b>	6,582,941	<b>22.2%</b>	30,645,232	<b>20.7%</b>	51,306,825	19.2%	64,076,906
Non-Hispanic (any race)	<i>74.8%</i>	19,590,376	<i>77.8%</i>	107,358,484	<i>79.3%</i>	196,646,352	80.8%	268,958,218
<b>Minority</b>								
Minority	<b>53.6%</b>	14,025,196	<b>48.5%</b>	66,932,176	<b>44.8%</b>	111,073,088	41.1%	136,996,867
<b>Income</b>								
Households below the poverty level	<b>17.1%</b>	1,773,317	<b>14.9%</b>	7,951,218	<b>13.2%</b>	12,413,237	12.7%	15,909,129
Households with a ratio of income to poverty level of two and over	<i>62.6%</i>	15,917,580	<i>66.3%</i>	89,187,251	<i>69.5%</i>	168,274,116	70.4%	228,790,916
<b>Education</b>								
Less than a high school education	<b>14.2%</b>	2,552,544	<b>12.7%</b>	11,988,878	<b>11.5%</b>	19,515,650	11.2%	25,569,085
<b>Linguistically isolated</b>								
Linguistically isolated households	<b>7.8%</b>	811,709	<b>6.2%</b>	3,329,713	<b>5.4%</b>	5,087,446	4.8%	6,055,968
<b>Age</b>								
Under 5 years of age	5.9%	1,544,338	5.9%	8,174,348	5.9%	14,622,675	5.9%	19,545,536
Under 18 years of age	<i>21.0%</i>	5,492,430	<i>21.7%</i>	29,935,344	<i>22.2%</i>	55,006,971	22.5%	74,831,323
Over 64 years of age	<i>14.5%</i>	3,790,407	<i>15.4%</i>	21,308,546	<i>15.8%</i>	39,130,124	16.1%	53,592,470
<b>Total</b>		<b>26,173,317</b>		<b>138,003,715</b>		<b>247,953,177</b>		<b>333,035,124</b>

Note: This table indicates whether the percent of demographic characteristics near sites are above (bold) or below (italics) that of the US population.