

# Using EPA EJ Screen Data in State Maps

AMY BRITTAIN  
OKLAHOMA DEQ

# Download EJScreen Data

---

<https://www.epa.gov/ejscreen/download-ejscreen-data>

---

Download data with State Percentile or US Percentile

---

Need GIS system to use the downloaded data

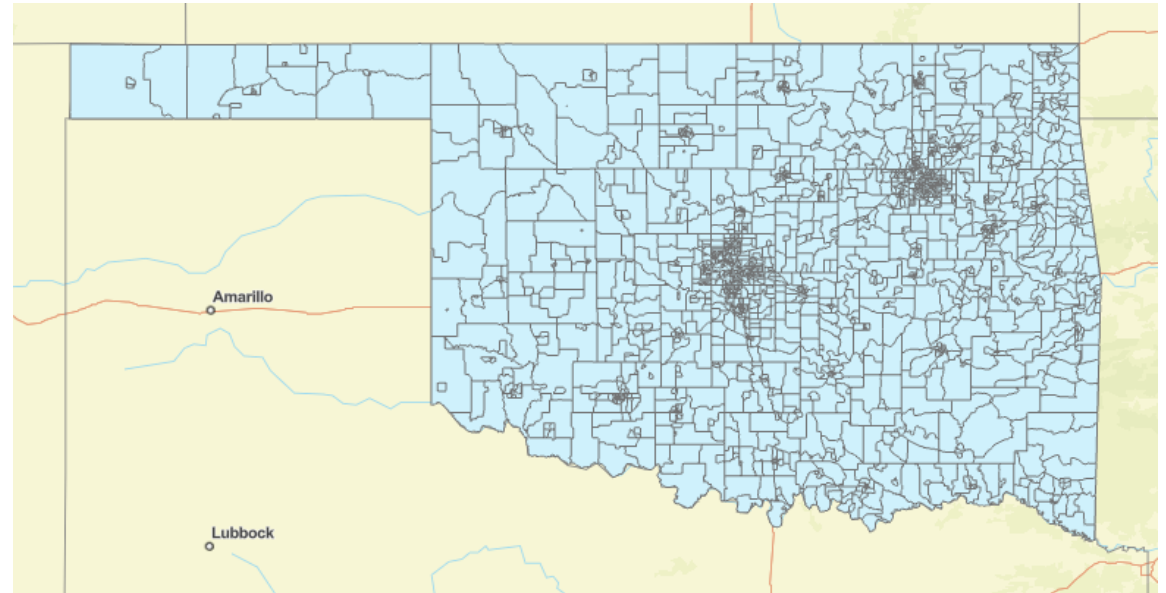
---

As new data files are released, you should re-download the data and use the current data for your maps

# State Census Tracts

Per the US Census Bureau:

- ▶ Census tracts are small, relatively permanent statistical subdivisions of a county.
  - ▶ Uniquely numbered in each county with a numeric code
- ▶ Census tracts average about 4,000 inhabitants
  - ▶ Minimum Population – 1,200
  - ▶ Maximum Population – 8,000



2022EJ - ArcGIS Pro

EJSCREEN\_StatePct

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

	OBJECTID *	Shape *	ID	STATE_NAME	ST_ABBREV	REGION	ACSTOTPOP	MINORPCT	LOWINCPCT	LESSHPCT	LINGISOPCT	UNDERS5PCT	OVER64PCT	PRE1960PCT	UNEMPPCT	VI
160982	160982	Polygon	401091085193	Oklahoma	OK	6	703	0.142248	0.173542	0.003521	0	0.019915	0.334282	0.097059	0.018349	
160983	160983	Polygon	401091085201	Oklahoma	OK	6	1125	0.134222	0.072	0.012034	0	0.070222	0.289778	0.04661	0.02037	
160984	160984	Polygon	401091085202	Oklahoma	OK	6	926	0.330454	0.234341	0.006033	0	0.044276	0.168467	0.01002	0.027726	
160985	160985	Polygon	401091085211	Oklahoma	OK	6	809	0.461063	0.253399	0.060284	0.028571	0.029666	0.121137	0.021429	0.044944	
160986	160986	Polygon	401091085212	Oklahoma	OK	6	439	0.61959	0.448747	0.065134	0.13141	0.095672	0.009112	0.019651	0	
160987	160987	Polygon	401091085231	Oklahoma	OK	6	499	0.537074	0.054108	0	0	0.038076	0.122244	0.060976	0	
160988	160988	Polygon	401091085232	Oklahoma	OK	6	2909	0.231007	0.239945	0.043246	0.020408	0.079752	0.108972	0	0.035338	
160989	160989	Polygon	401091085233	Oklahoma	OK	6	2411	0.305268	0.055246	0.046171	0.025258	0.081294	0.161344	0.040858	0.028384	
160990	160990	Polygon	401091085241	Oklahoma	OK	6	3071	0.477369	0.088896	0.036078	0.011917	0.029632	0.112667	0.005894	0.066324	
160991	160991	Polygon	401091085242	Oklahoma	OK	6	1082	0.121072	0.086876	0.010217	0	0.062847	0.231054	0	0	
160992	160992	Polygon	401091085251	Oklahoma	OK	6	1788	0.571588	0.176734	0.094783	0.029231	0.059284	0.105145	0.006024	0.030644	
160993	160993	Polygon	401091085252	Oklahoma	OK	6	478	0.357741	0.073222	0.04	0.077844	0.106695	0.156904	0.035928	0.021127	
160994	160994	Polygon	401091085261	Oklahoma	OK	6	990	0.331313	0.406061	0.099723	0	0.050505	0.108081	0.019178	0.038402	
160995	160995	Polygon	401091085262	Oklahoma	OK	6	1376	0.308866	0.295785	0.018735	0	0.069041	0.097384	0	0.039456	
160996	160996	Polygon	401091085263	Oklahoma	OK	6	2912	0.538118	0.469437	0.0729	0.037866	0.093407	0.065591	0	0.005402	
160997	160997	Polygon	401091085271	Oklahoma	OK	6	1132	0.29417	0.269435	0	0.027737	0	0.069788	0.046759	0.02148	
160998	160998	Polygon	401091085272	Oklahoma	OK	6	2271	0.422281	0.088507	0.02025	0.06487	0.022017	0.199031	0.017176	0	
160999	160999	Polygon	401091085273	Oklahoma	OK	6	2027	0.337938	0.15288	0.036517	0.039379	0.124815	0.198816	0	0	
161000	161000	Polygon	401091085281	Oklahoma	OK	6	2356	0.4618	0.254669	0.038328	0.020455	0.099745	0.095076	0.018538	0.065237	
161001	161001	Polygon	401091085291	Oklahoma	OK	6	1100	0.084545	0.101301	0.019553	0	0.062727	0.123636	0.044444	0.017628	
161002	161002	Polygon	401091085292	Oklahoma	OK	6	1618	0.163782	0.067367	0	0	0.022868	0.261434	0	0.014943	
161003	161003	Polygon	401091085301	Oklahoma	OK	6	2183	0.406322	0.229282	0.069103	0.004104	0.116354	0.20339	0	0.027607	
161004	161004	Polygon	401091085302	Oklahoma	OK	6	2030	0.395074	0.282064	0.112903	0.02069	0.023153	0.128079	0	0	
161005	161005	Polygon	401091086011	Oklahoma	OK	6	2742	0.377826	0.312179	0.135326	0.017301	0.055799	0.13202	0.035014	0.023114	
161006	161006	Polygon	401091086021	Oklahoma	OK	6	914	0.340263	0.349015	0.213946	0.027397	0.06674	0.16849	0.281481	0.010593	
161007	161007	Polygon	401091086031	Oklahoma	OK	6	4541	0.327741	0.204913	0.084867	0.007891	0.125083	0.076415	0.050493	0.020969	

0 of 220,333 selected

Filters: 100%

# EJ Screen Data Tables



### Display filters i

Enable display filters

Set active display filter: Manually

+ New display filter X



Filter 1

SQL

Where MINC is 0.8 X

Or LOWI is 0.8 X

Or LINGI is 0.8 X

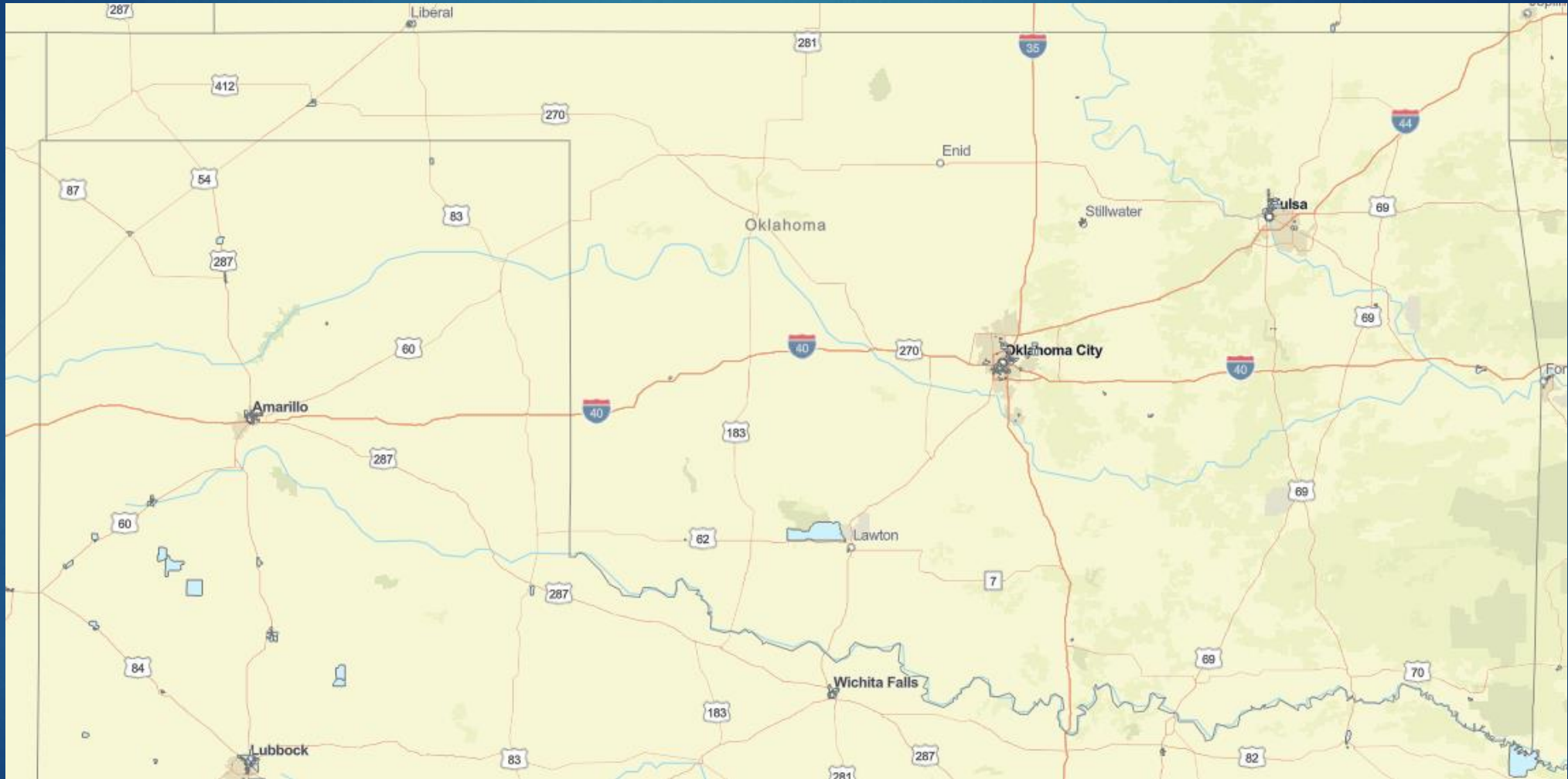
+ Add Clause

Apply Cancel

# Screen Data in GIS

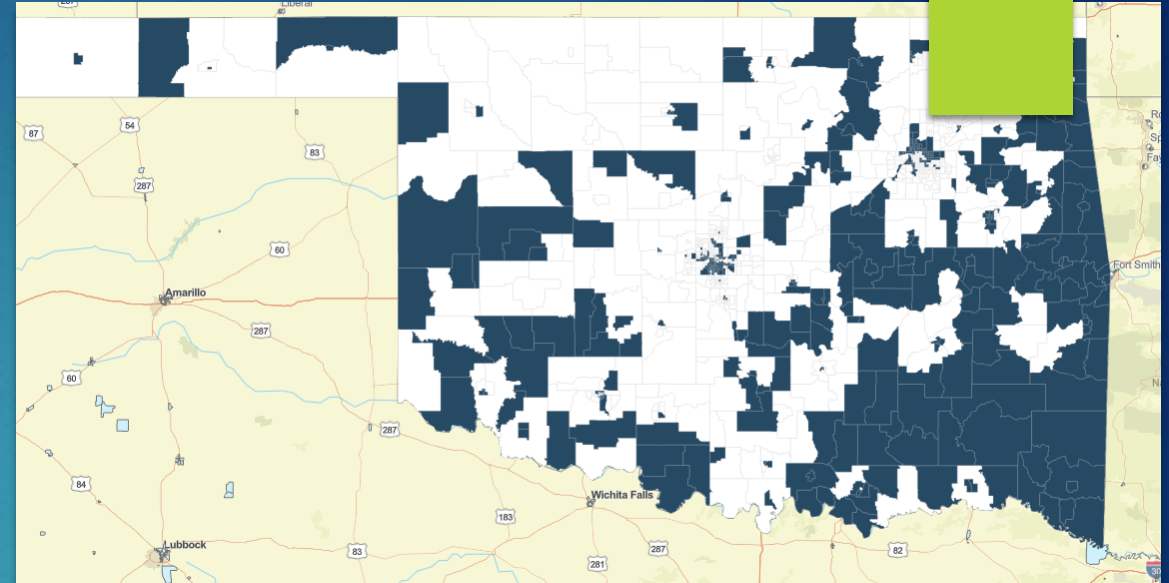
- ▶ Apply filters to highlight your states criteria
- ▶ Interim DEQ Land Protection criteria:
- ▶ Using EPA's EJ screening tool, a community is identified as an EJ community if the population of individuals within the census block are within the 80th percentile of state data of one of the specific demographic indicators:
  - ▶ People of Color;
  - ▶ Low Income Population;
  - ▶ Linguistically Isolated.

# EJ Screen Data after filtering



# Justice40 Tracts

- ▶ <https://www.whitehouse.gov/environmentaljustice/justice40/>
- ▶ Categories
  - ▶ Climate change
  - ▶ Climate change
  - ▶ Clean transit
  - ▶ Affordable and sustainable housing
  - ▶ Reduction and remediation of legacy pollution
  - ▶ Critical clean water and wastewater infrastructure
  - ▶ Health burdens
  - ▶ Training and workforce development



Pop-up

Justice40\_Tracts\_May\_2022 (1)

Oklahoma County, Oklahoma 40109108011 Population: 3,255

Justice40\_Tracts\_May\_2022 - Oklahoma County, Oklahoma 40109108011 Population: 3,255

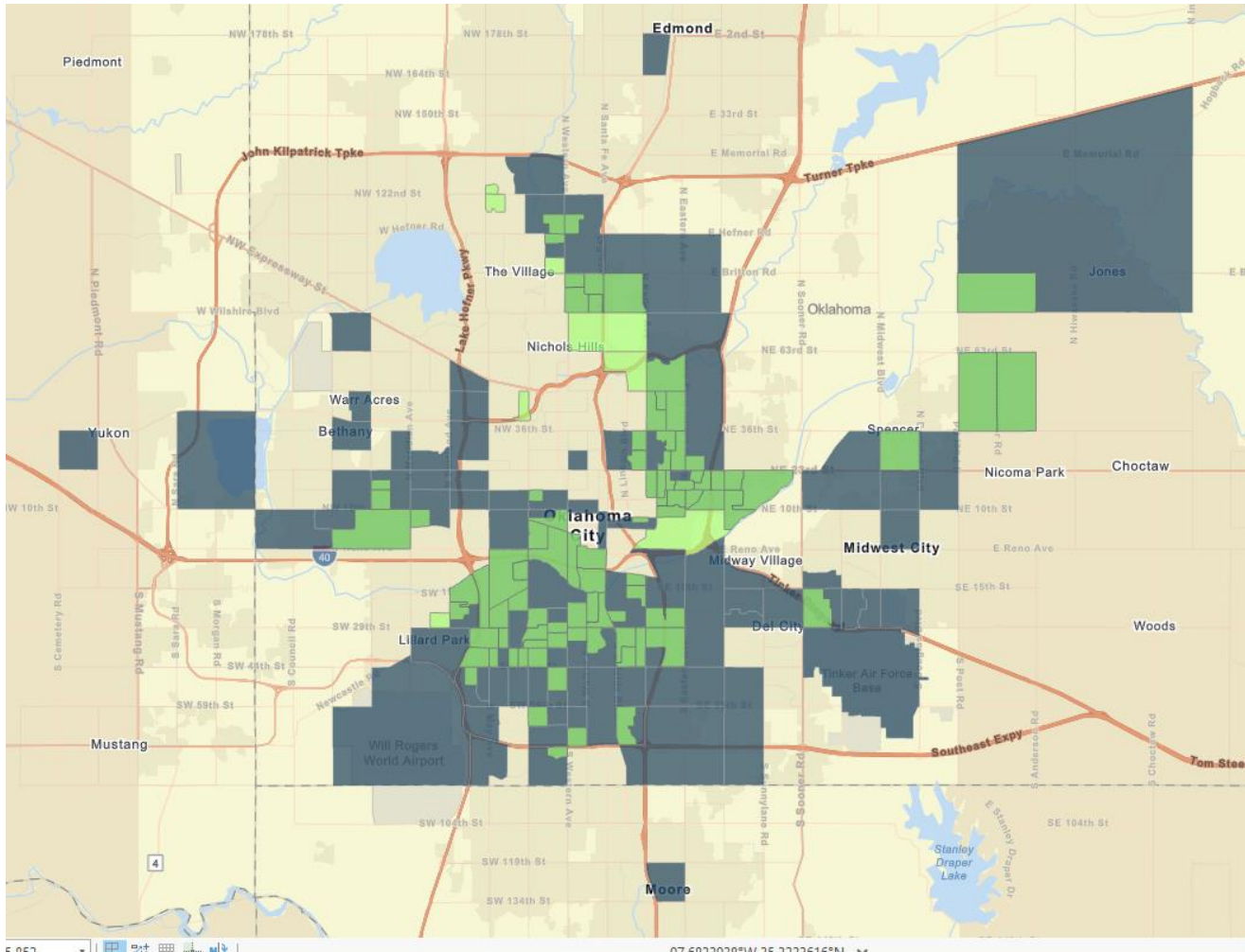
This tract is identified as disadvantaged because it has 2 categories that meet the criteria.

**Affordable and sustainable housing**

**Health burdens**

There are 99 disadvantaged tracts in Oklahoma County and 451 disadvantaged tracts in Oklahoma.

◀ 1 of 1 ▶ 97.3797380°W 35.4930937°N



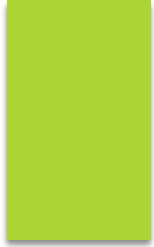
Layered EJ  
Screen data  
and  
Justice40  
data



# Best Practice Suggestions



Decide	Decide what your definition of communities with Environmental Justice Concerns is
Build	Build interactive maps so you can see small tracks
Layer	Layer with other data sources as appropriate
Ensure	Ensure you continue to use the most updated data available
Make	Make maps clear on sources of data and data use limitations



**OKLAHOMA**  
**Environmental**  
**Quality**



QUESTIONS?