Los Angeles County Oil Wells

Divine Mutoni, Katie Greenler, Luis Garcia Chavez, Madalyn Bryant, Myranda Arreola

Introduction

- Oil extraction in LA County has been prevalent since 1890s
- Active oil extraction is supposed to be phased out by 2043
- Despite many wells being plugged, communities across LA County are disproportionately environmentally affected



Research Question

What is the relationship between the proximity of active oil wells and socio-economic indicators across Los Angeles County?



Data Sources

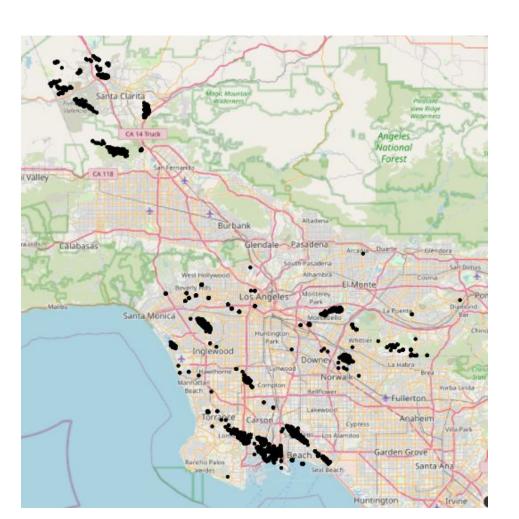
Los Angeles County Oil Wells:

- Well Status*
- Oil wells geospatial data
- Operator, and lease information

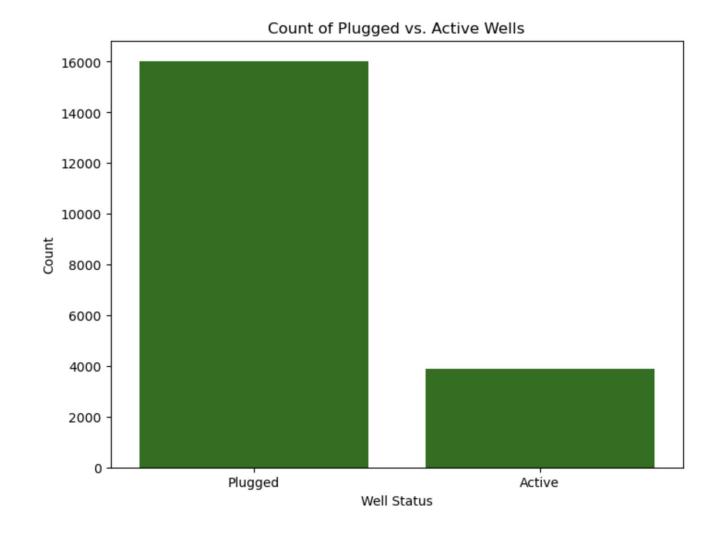
ACS 2022 Census Data:

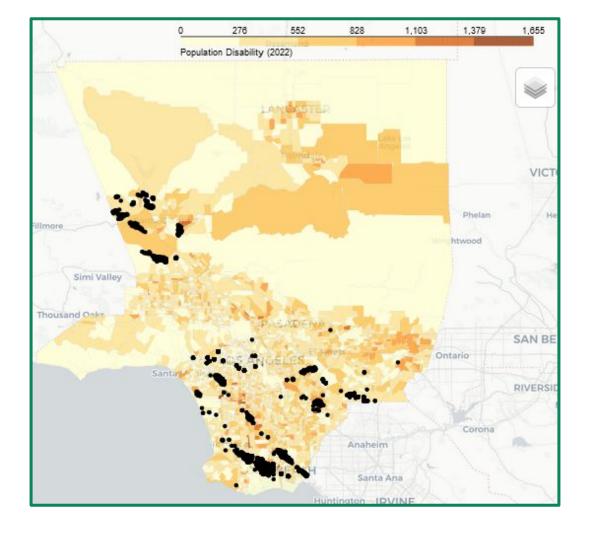
- Race/Ethnicity
- Income
- Housing Values
- Education
- Disability





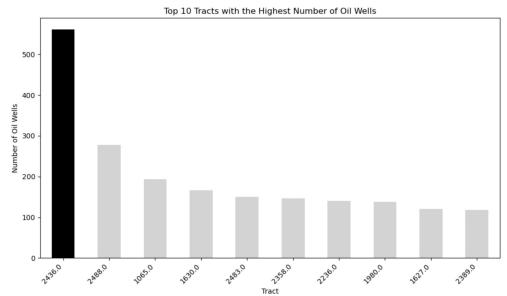
Oil Field **Concentrations:** Inglewood, Long Beach, Santa Clarita but some beyond





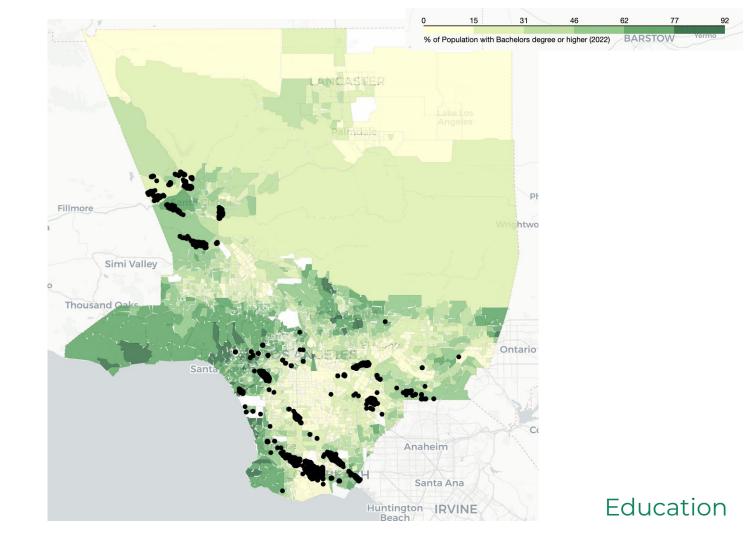
Disability

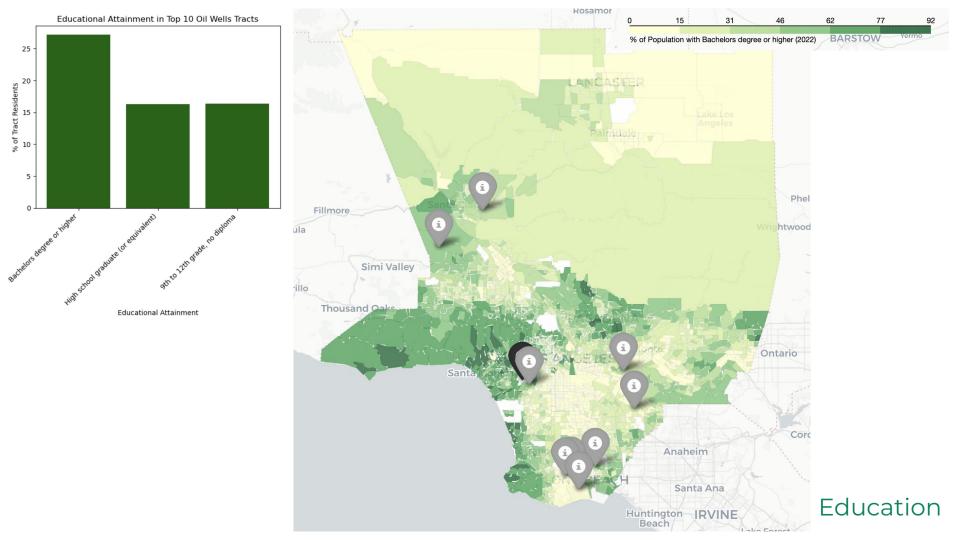


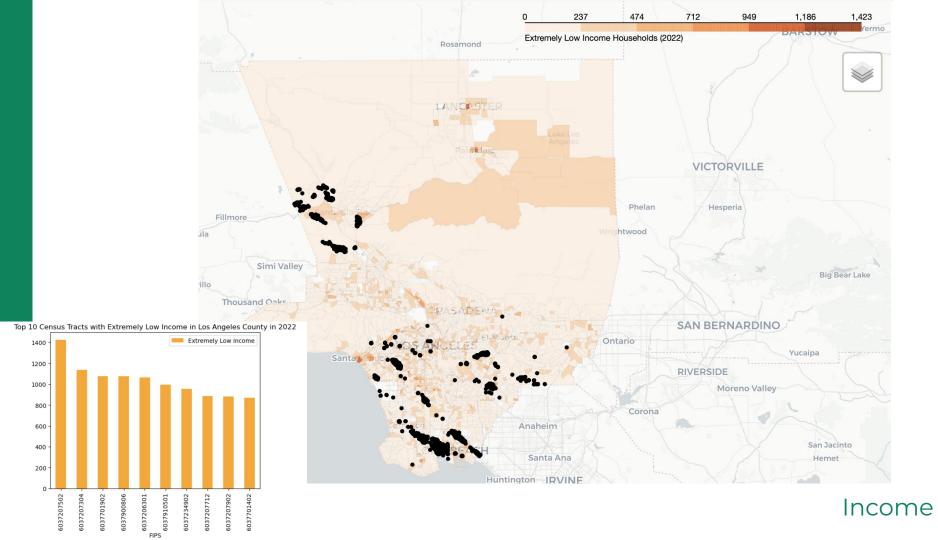


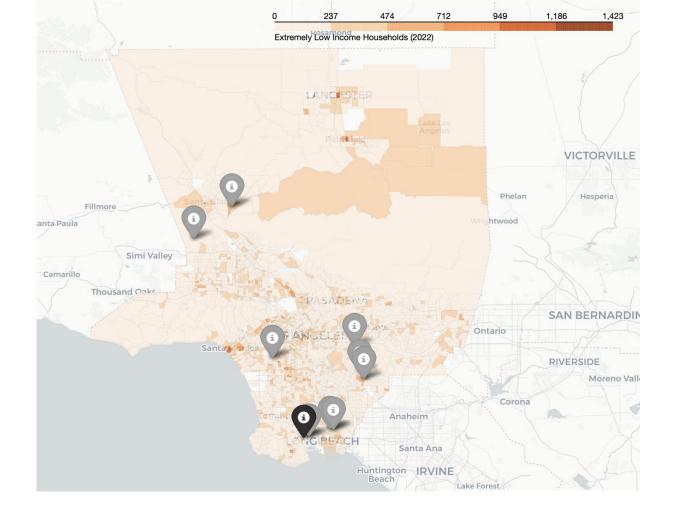


Disability

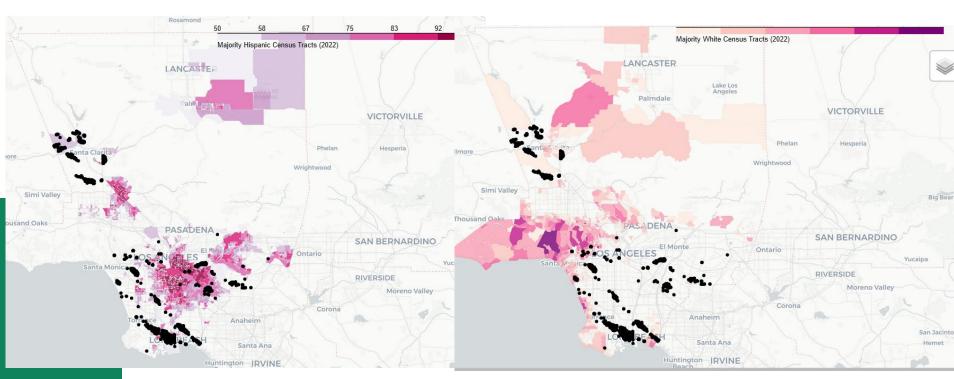








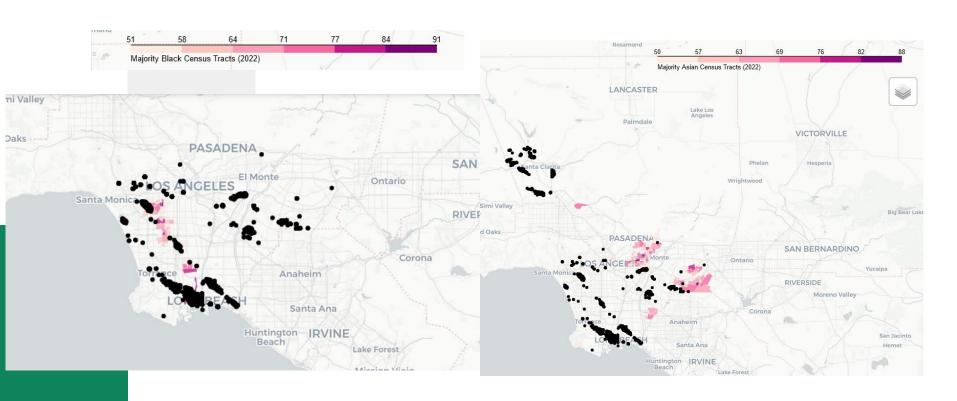
Income



Majority Hispanic Census Tracts

Majority NH-White Census Tracts

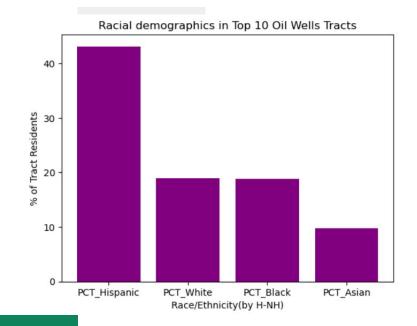
Race/Ethnicity

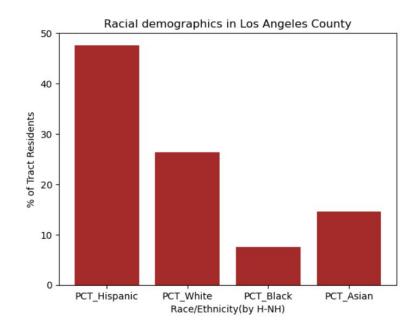


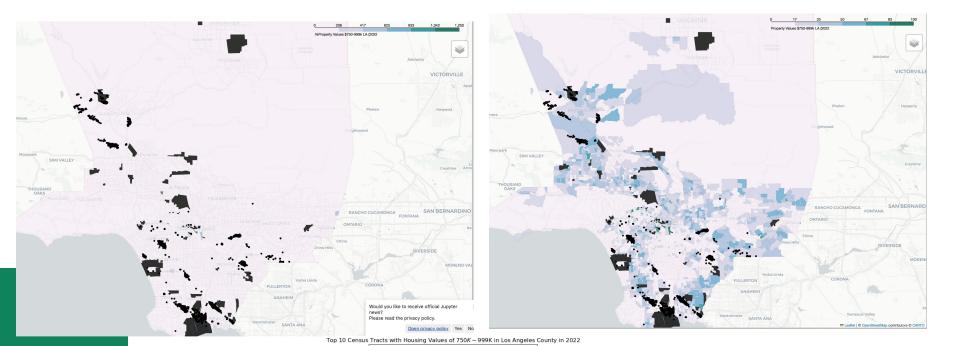
Majority NH-Black Census Tracts

Majority NH-Asian Census Tracts

Race/Ethnicity







Housing Values

Conclusion

- Variables have different observed relationships (strongly or weakly aligned) with oil well density
 - e.g., numbers of people living with disability and majority Black census tracts strongly aligned
- Top census tracts for active oil wells <u>may</u> over represent minority communities, areas with at least 250K ELI households and less than 50% college graduates
- There is a clear need to narrow down our area of study and variable selection for a more targeted in-depth analysis.
 - e.g., establish variable correlation with oil well density

Next Steps

- Explore environmental rating datasets and establish relationship with oil well density (e.g., CalEnviroScreen rating, Social Vulnerability Index)
- Narrow down to a specific area, and variables that seem to have the biggest observed alignment with oil wells density
- Complete a correlation estimation and time series exercises for prioritized areas/variables