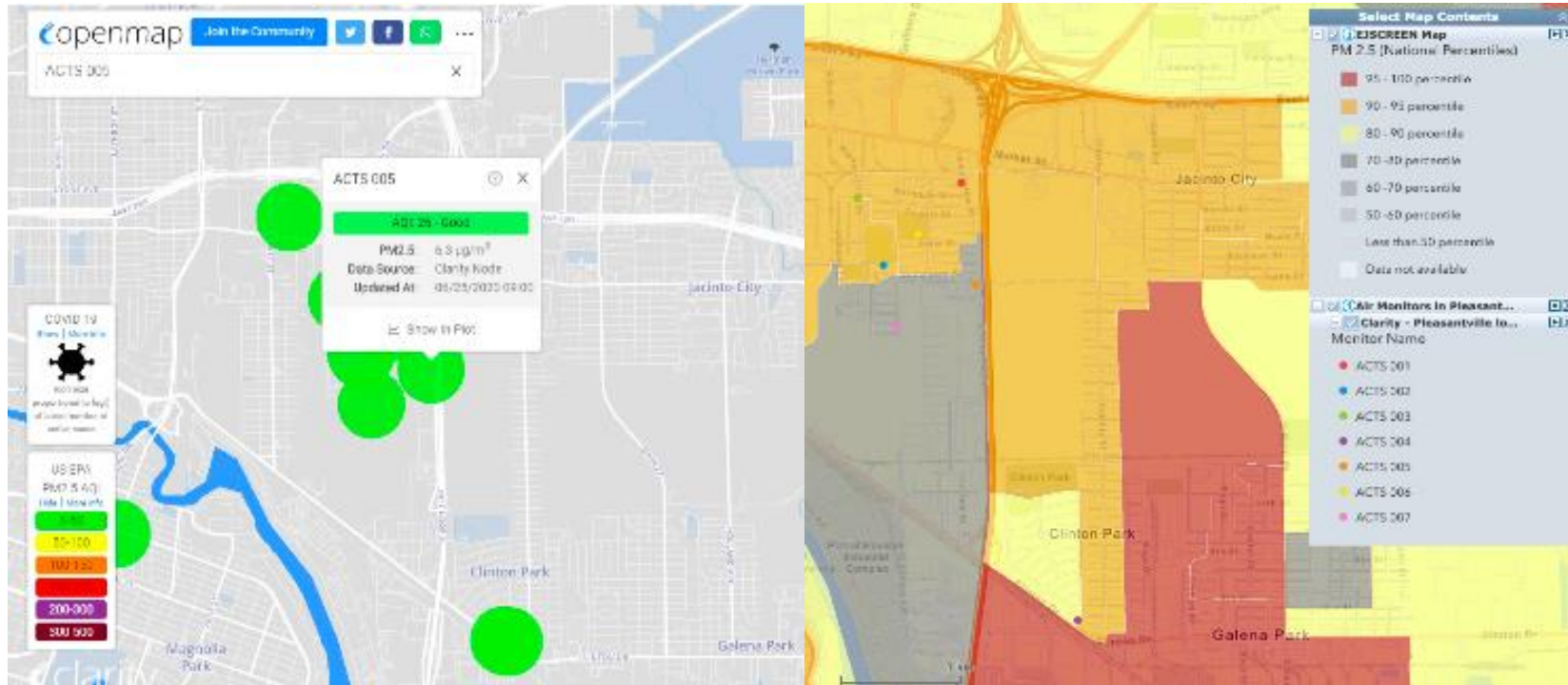




Community Led Air Quality Monitoring: Turning Victims into Advocates

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Pleasantville Community: Houston, TX



Lack of zoning laws in Houston has allowed for companies to construct buildings and factories detrimental to the air quality of this community, causing disproportionate effects on low income minority families. Using the EJSCREEN database, variables are being selected to show health risks and air toxins in the area at State and National level scales. Air monitor locations are layered onto EJSCREEN maps to assess relative exposure risks

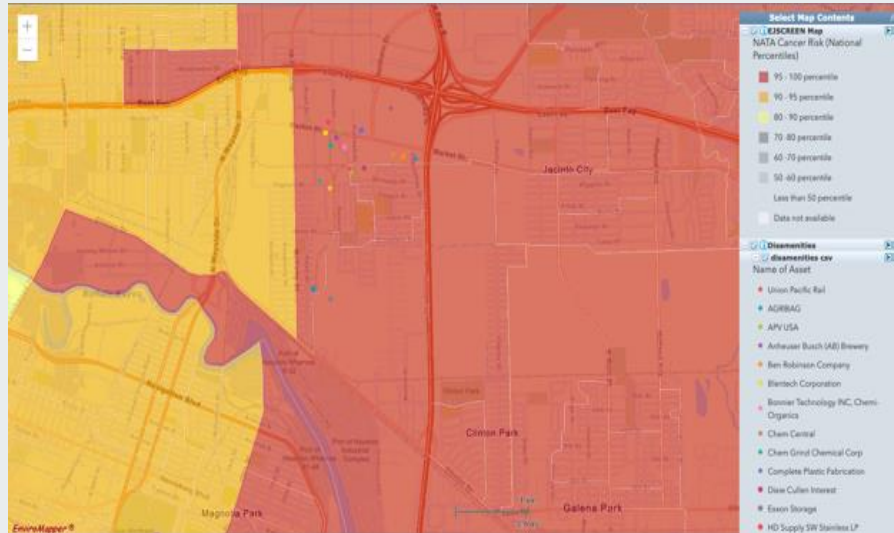


Method

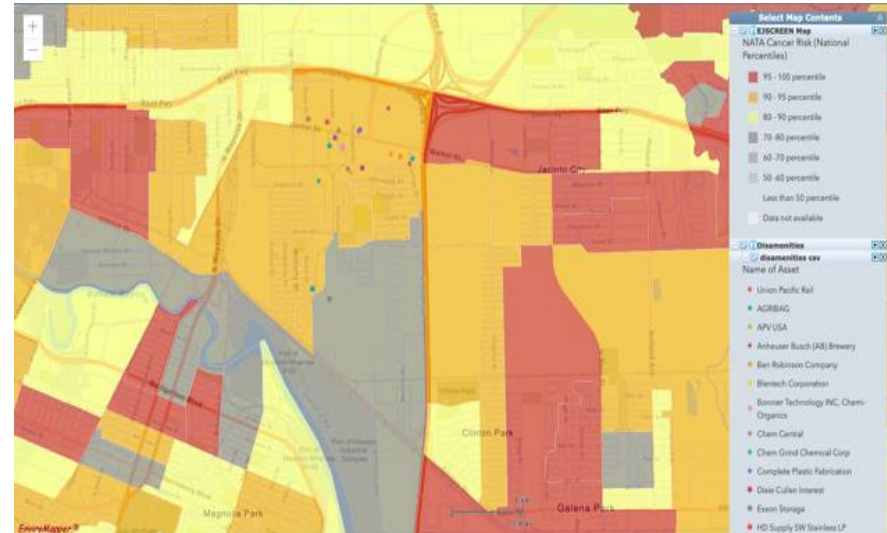
This research uses the Environmental Justice Screening Tool (EJ SCREEN), to determine what the level of risk is from a community's surrounding area. Through the use of EJ SCREEN national, environmental and demographic indicators were able to be combined for a most accurate reading and interpretation of data.

Method cont..

EJ SCREEN: Environmental justice mapping and screening tool. Below is a representative image of both EJ index indicators and Environmental Indicators regarding NATA Cancer risk in Pleasantville.



Representative Image of EJ Screen data using Environmental Indicators laid on top of disamenity points. Displays National Percentile NATA Cancer Risk in Pleasantville area.

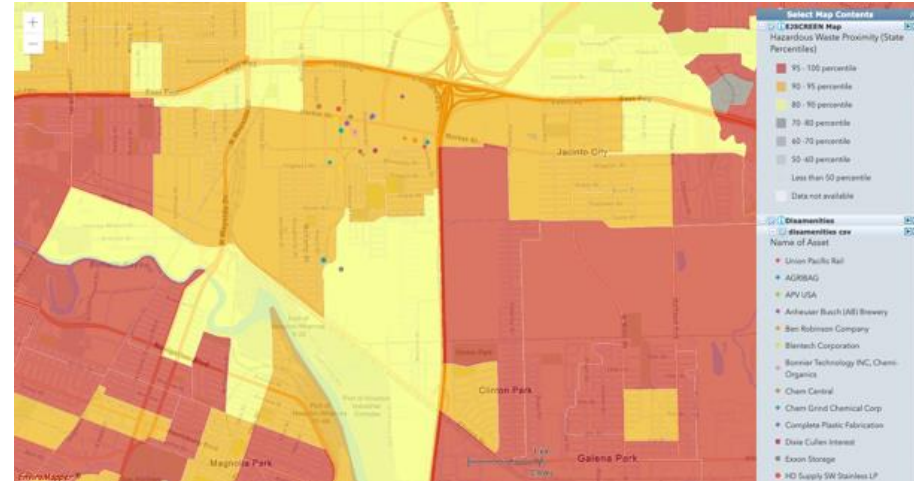


Representative Image of EJ Screen data using EJ Index laid on top of disamenity points. Displays National Percentile NATA Cancer Risk in Pleasantville area.

Representative Images

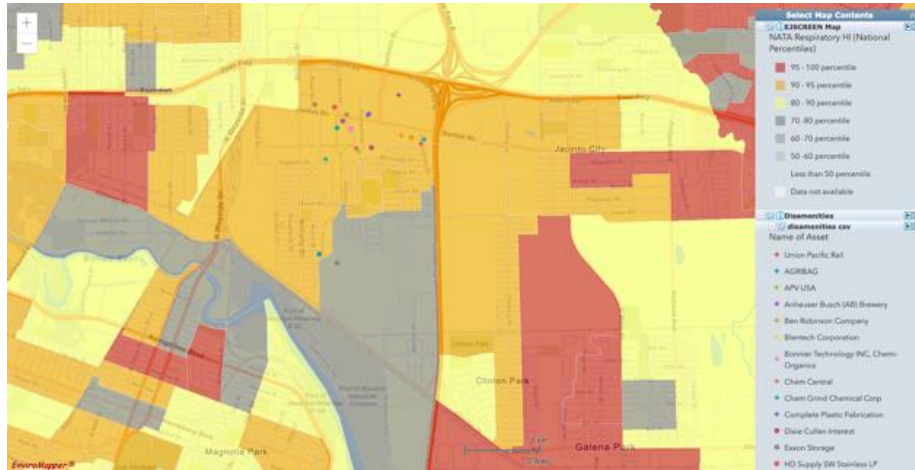


Representative Image of EJ Screen data using EJ Index laid on top of disamenity points. Displays National Percentile Particulate Matter at 2.5 microns (PM 2.5) in Pleasantville area.

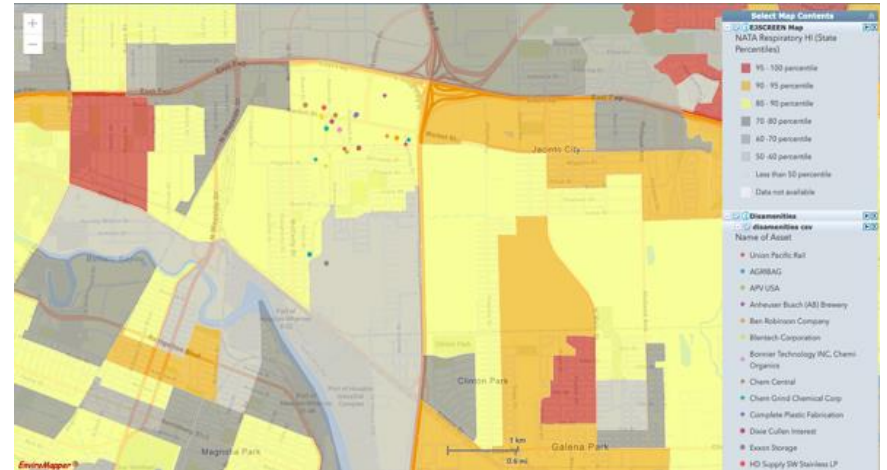


Representative Image of EJ Screen data using EJ Index laid on top of disamenity points. Displays National Percentile Particulate Matter at 2.5 microns (PM 2.5) in Pleasantville area.

Representative Images Cont..



Representative Image of EJ Screen data using EJ Index laid on top of disamenity points. Displays National Percentile NATA Respiratory HI in Pleasantville area.



Representative Image of EJ Screen data using EJ Index laid on top of disamenity points. Displays State Percentile NATA Respiratory HI in Pleasantville area.



Conclusion

Preliminary results project higher concentrations of particulate matter in the air relating to Cancer, Diesel, Hazardous Waste, Respiratory Hazard Index and (Particulate Matter at 2.5 microns (PM 2.5)). All of these matters being in the 80th percentile or above.