

What Does Health GIS look like in San Bernardino County?

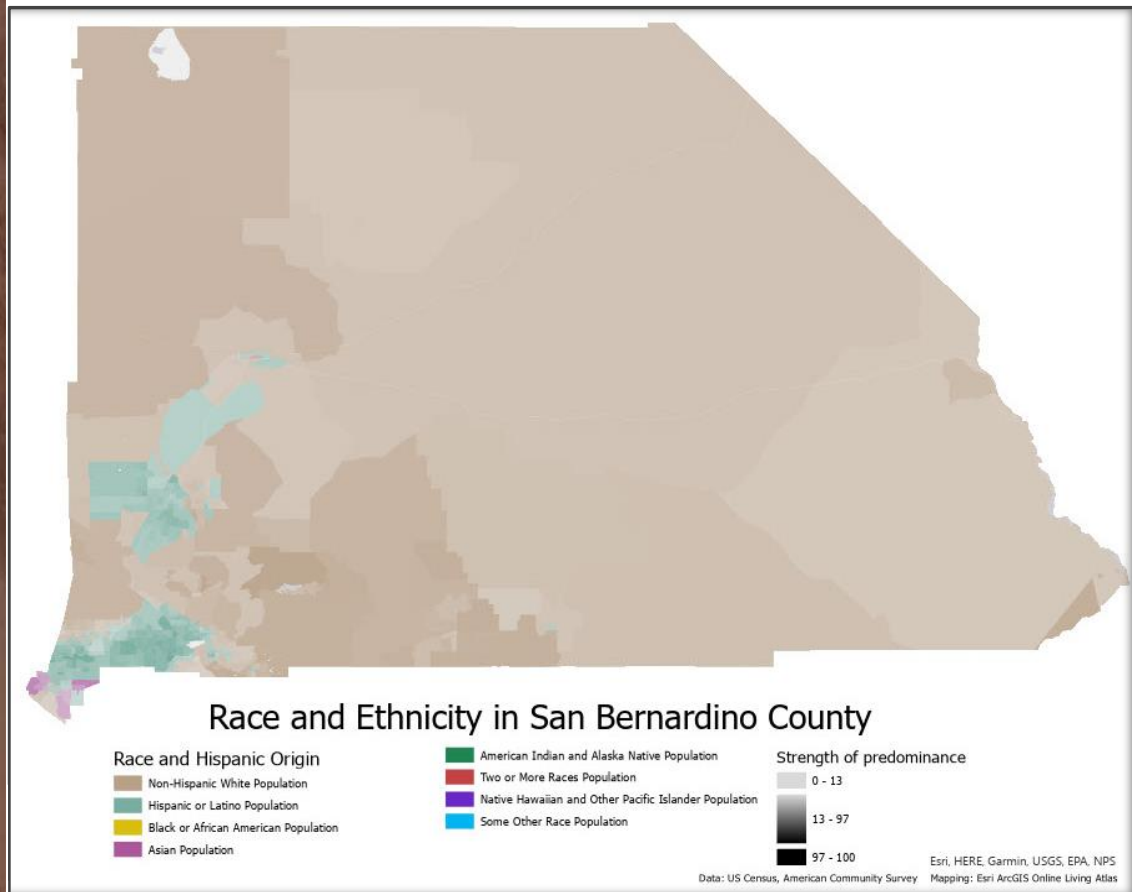
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San Bernardino County, Department of Public Health (DPH)



June 27, 2022 | AI for Good
GeoAI and Health

OVERVIEW

- ▶ San Bernardino County is the largest county in the continental U.S.
- ▶ Diverse regions, communities and populations
- ▶ Diversity is our strength, Equity our call to action
 - ▶ Blue Zones vs. areas with lower life expectancy
 - ▶ Low to high scores on Healthy Places Index (HPI)
 - ▶ Tool developed by the PH Alliance of Southern California to advance equity in the state
- ▶ RACE & PLACE



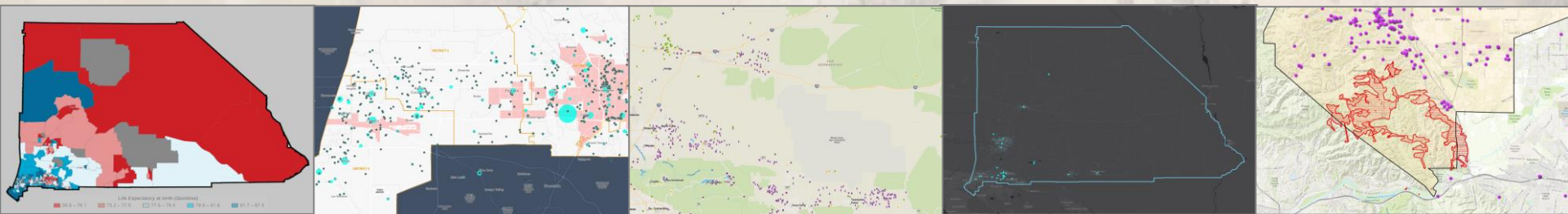
OUR MISSION & VALUES

MISSION: Working in partnership to promote and improve health, wellness, safety, and quality of life in San Bernardino County.

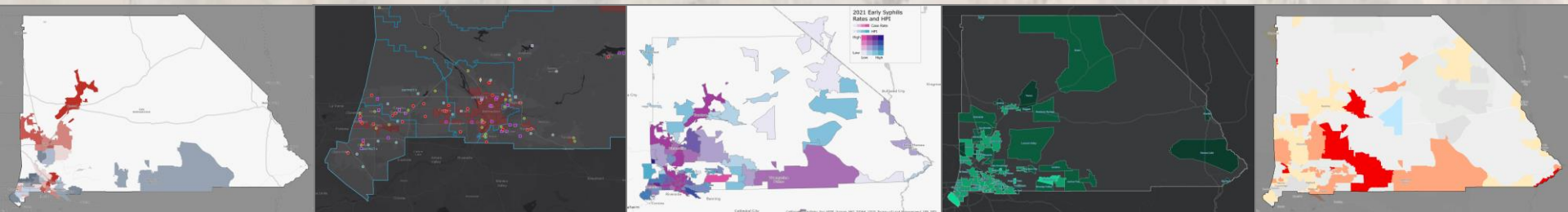
OUR VALUES

- ▶ Collaboration
- ▶ Diversity
- ▶ Equity
- ▶ Innovation
- ▶ Transparency





How has San Bernardino County DPH applied GIS?



DPH INITIAL USE CASES & WORKFLOWS



- ▶ Data collection, processing, and tracking; field applications; dashboard visualizations
- ▶ Examples of DPH programs utilizing GIS:
 - ▶ Preparedness & Response (PRP)
 - ▶ Communicable Disease Section (CDS)
 - ▶ Environmental Health Services (EHS)
 - ▶ Nutrition

Outreach to Population Experiencing Homelessness

County Collaboration

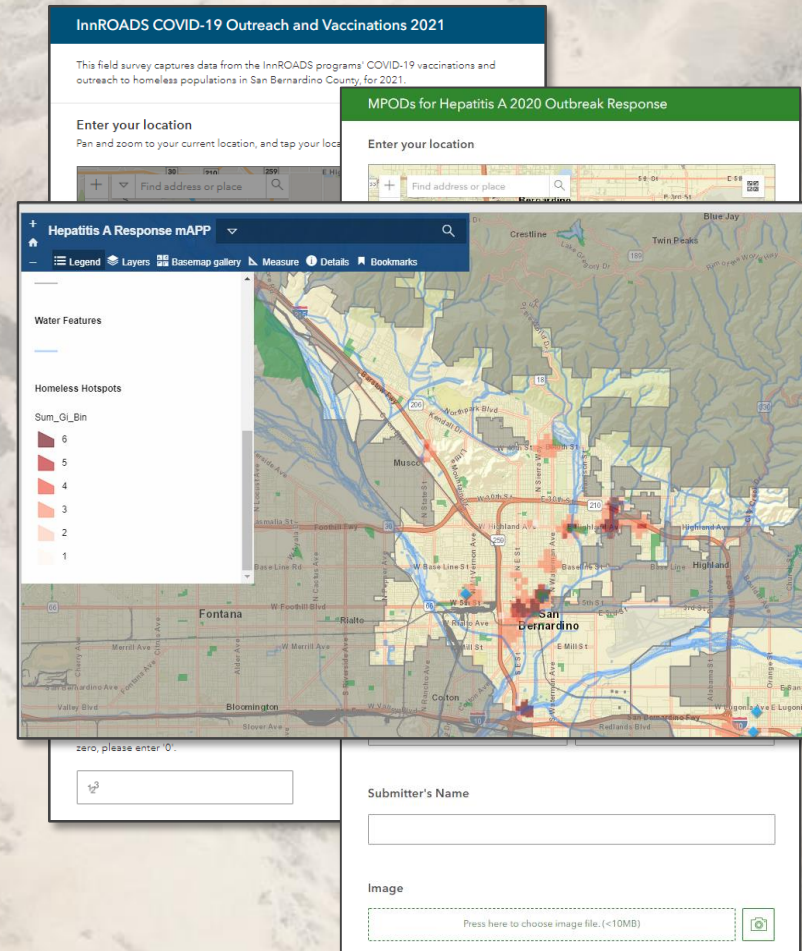
Department of Behavioral Health (DBH)

Information Services Division (ISD)

Communicable Disease Section (CDS)

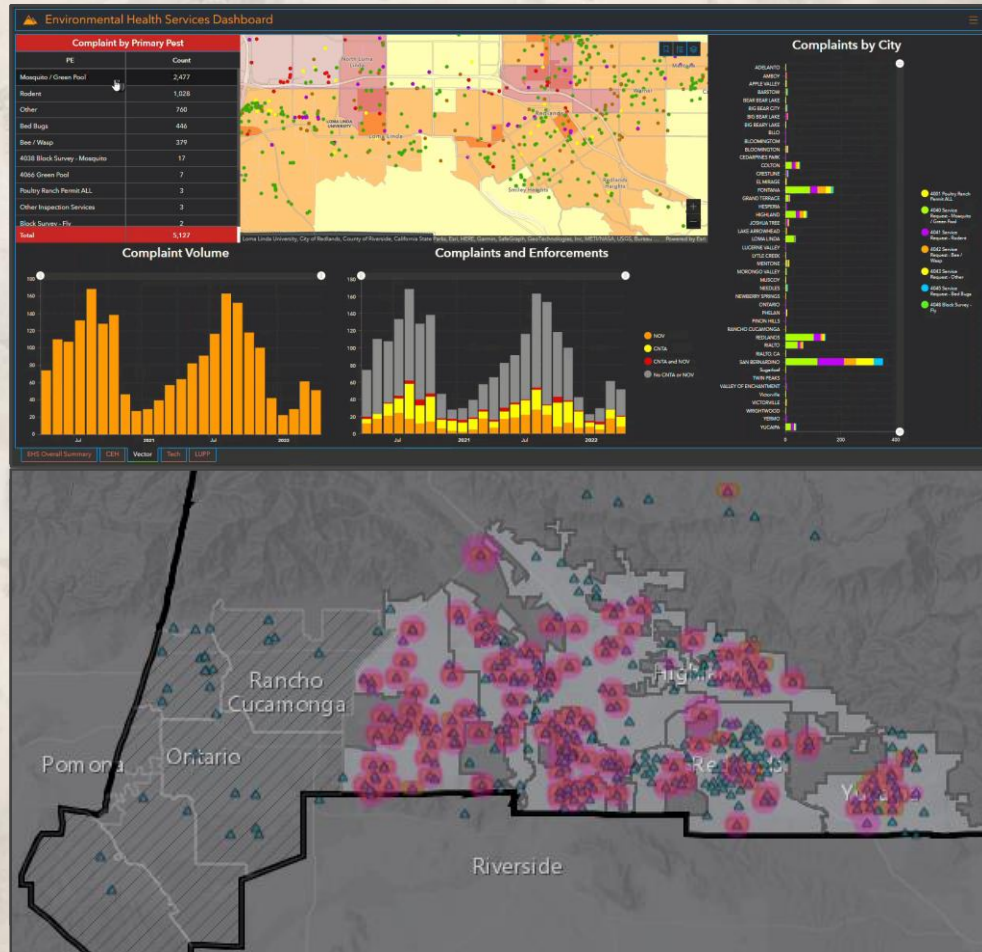
Preparedness & Response (PRP)

- ▶ Innovative Remote Onsite Assistance Delivery (InnROADs)
- ▶ Hotspots from Point-in-Time (PIT) counts to identify areas of concern
- ▶ Provide health screenings and other services
- ▶ Hepatitis A, Influenza, and COVID-19 surveillance and vaccinations
- ▶ Increased collaboration, engagement, and service rates



Environmental Health Services (EHS) Nutrition

- ▶ Permitted facilities, as well as non-permitted vending, tracking and response
- ▶ Vector surveillance
 - ▶ Increase trapping and mitigation; addressing public complaints
- ▶ Food Security & Charitable Feeding



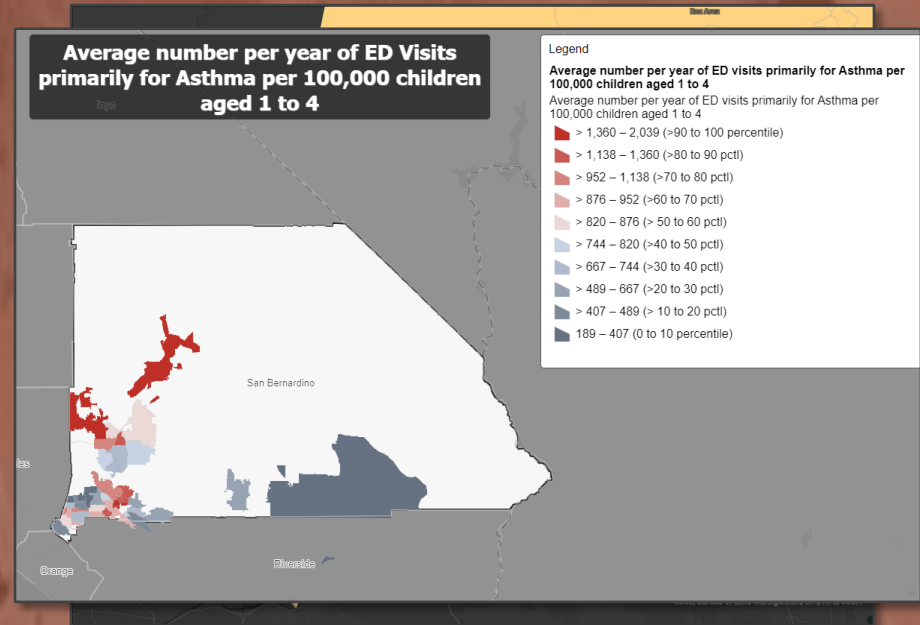


LESSONS LEARNED & THE ROAD AHEAD

Access to Health Care & Services

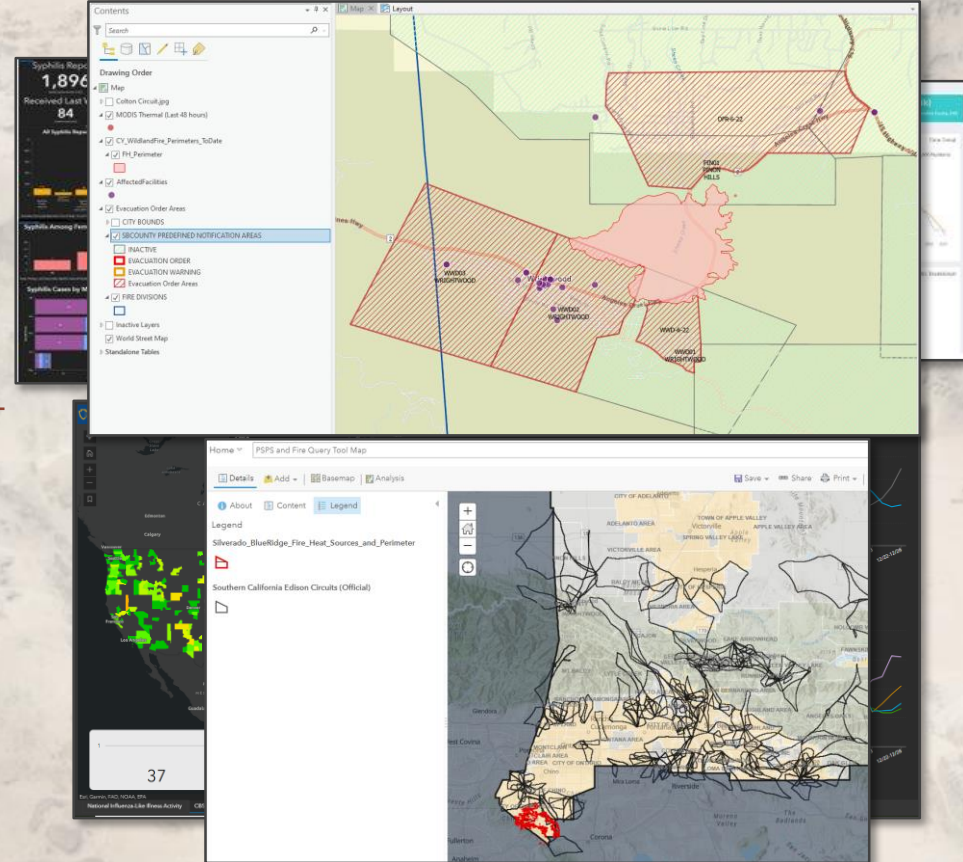
Deeper Analyses & Examining Health Equity and Barriers

- ▶ [Walking Distance of Participants to WIC Clinics: A Spatial Analysis](#)
- ▶ [Oral Health Outreach and Education map](#)
- ▶ Health Equity Mapping and Analysis for COVID Testing and Vaccinations
- ▶ [Asthma Intervention Pilot Program maps](#), in collaboration with Family Health Services and First 5



Early Detection, Anticipation & Response

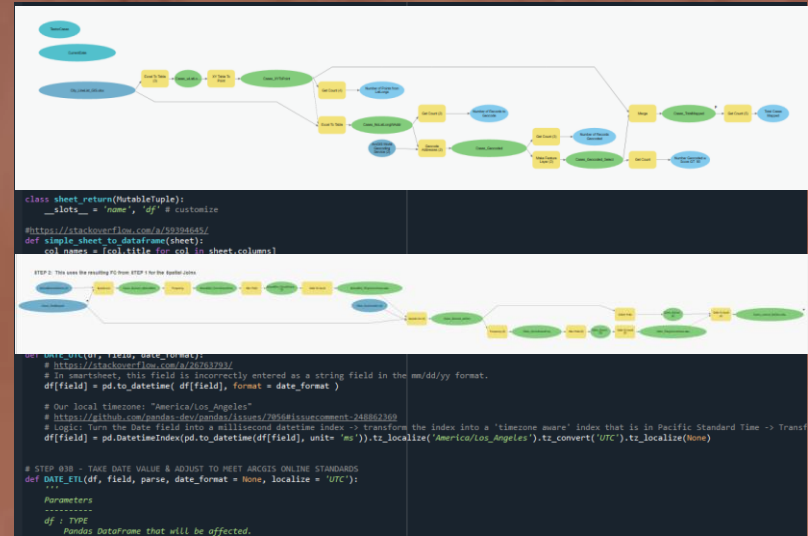
- ▶ Health Surveillance
 - ▶ Wastewater
 - ▶ Influenza-like illness (ILI), respiratory diseases, and other infections dashboards
 - ▶ Use of hospital, therapeutic, and other "non-traditional" outcome data
- ▶ Wildfire preparedness, evacuation, and response



Research, Assessment & Planning

Future work

- ▶ Data mining social media to support health interventions and inspections
- ▶ Automations; more Extract, Transformation & Load (ETL) processes
- ▶ Opportunities to further and bolster GIS work



THE BIG PICTURE

- ▶ **Geospatial Strategy**
- ▶ **Impact / Invest**
- ▶ **GeoAI**



THANK YOU



QUESTIONS AND CONTACT

For Data and GIS questions, email us at:

dph-datarequests@dph.sbcounty.gov