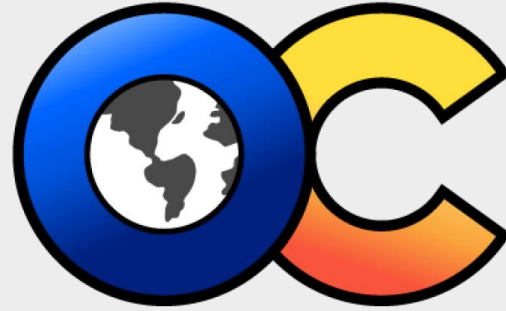


ADVANCE



OUR COMMUNITIES

Community Centered. Powered by Data.

A TALE OF TWO HORIZONS

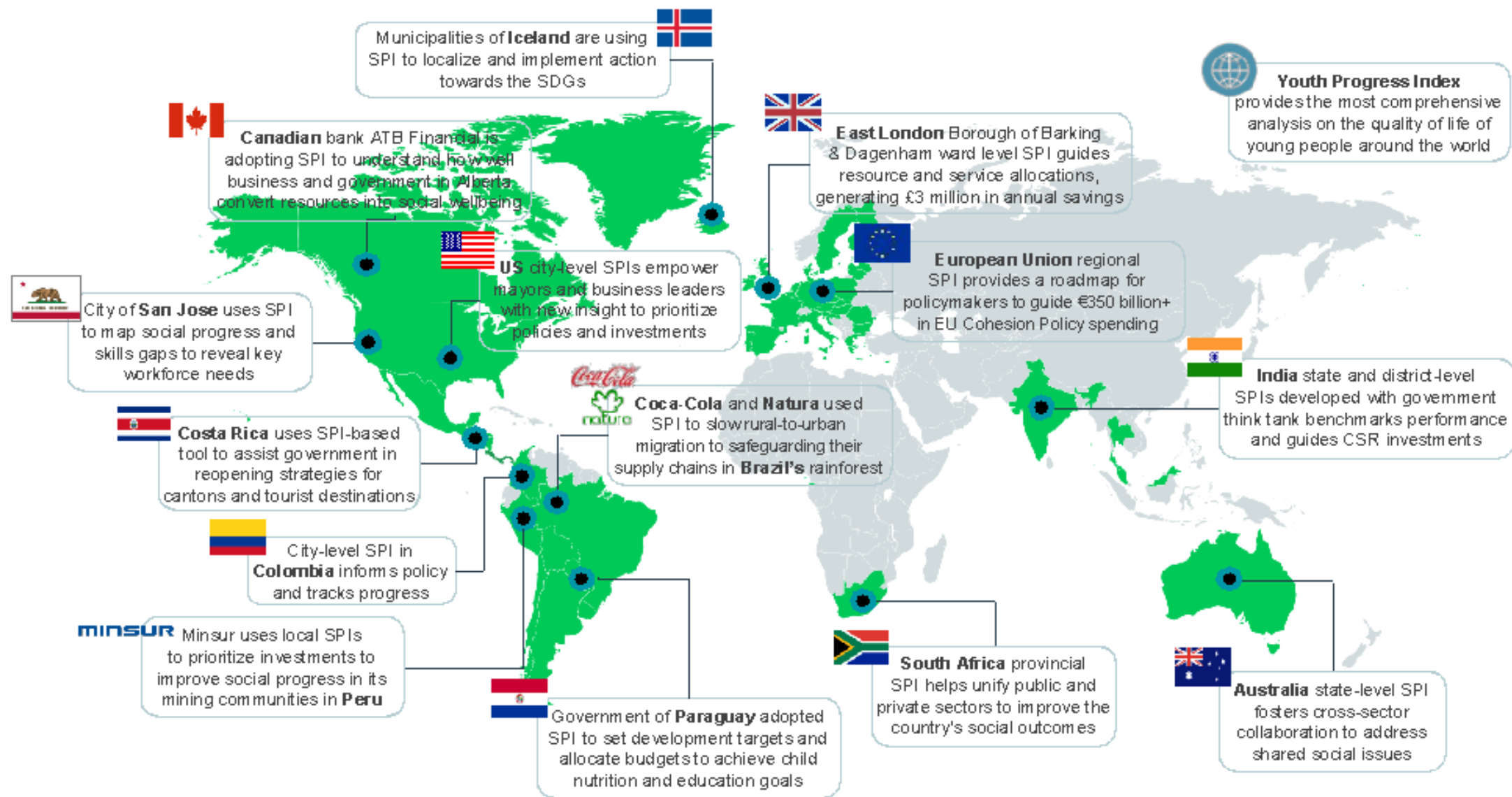
Orange County has one of the most beautiful landscapes in California. However, our community, like many others, is challenged by systemic health, housing, educational, economic and opportunity disparities.

How can we close these gaps? At Advance OC, we aim to address these disparities by bringing community stakeholders together to invest in equity focused strategies. We start by developing a **Social Progress Index**. Using 50+ indicators, we can measure, track, and map inequities in our community with neighborhood precision. Doing this enables us to identify root causes, understand social determinants, and help advance our communities.

FROM DATA TO ACTION TO IMPACT

PARTNERING WITH SPI

Delivering local data and insight that is meaningful, relevant and actionable



Social Progress Index: Orange County

[LINK](#)

BASIC HUMAN NEEDS

Nutrition and Basic Medical Care

- Supermarket access (% of pop.)
- Kindergarten vaccination rate (% of kindergarteners)
- Preventative care visits (% of adults)
- Dental care visits (% of adults)
- Households with food stamp benefits in the past 12 months (% of households)

Water and Sanitation

- Groundwater threats via leaking underground storage tanks
- Hazardous waste (proximity to waste facilities and large quantity generators)
- Businesses in compliance with health standards (% of total businesses)

Housing

- Housing cost burden (owners) (% of housing units)
- Housing cost burden (renters) (% of housing units)
- Housing overcrowding (% of households)
- Rental Assistance Priority Index

Personal Safety

- Violent crime rate (per 1,000 pop.)
- Property crime rate (per 1,000 pop.)
- Motor vehicle fatal crash rate (per 1,000 pop.)

FOUNDATIONS OF WELLBEING

Access to Basic Education

- Preschool enrollment (% of 3 & 4 year olds)
- Social-emotional vulnerable (% of children under 5)
- Communication and general knowledge (% of children under 5)
- Third grade language arts proficiency (% of 3rd graders)
- Eighth grade math proficiency (% of 8th graders)
- Population without high school diploma or equivalent (% of pop. ages 18-24)

Access to Information and Communications

- Broadband subscription (% of pop.)
- Average broadband speed (Mbps download)
- Cellular data subscription (% of pop.)
- One or more types of computing devices present (% of households)
- No Internet Access (% of pop.)

Health and Wellness

- Vulnerable or at risk physical health (% of children under 5)
- Poor mental health days
- Obesity prevalence (% of adults)
- Diabetes prevalence (% of adults)
- Cancer prevalence (% of adults)

Environmental Quality

- PM2.5 average annual concentration ($\mu\text{g}/\text{m}^3$)
- Ozone average 8-hour concentration (ppm)
- Traffic density (vehicle/kmh per road length)
- Wildfire hazard potential (burn probability)

OPPORTUNITY

Personal Rights

- Home ownership (% of households)
- Voter registration rate (% of voting eligible pop.)
- Voter turnout (% of voting eligible pop.)

Personal Freedom and Choice

- Child care deserts
- Disconnected youth (% of 16-19 year olds)
- Walkability index
- Alternative transportation usage (% of commuters)

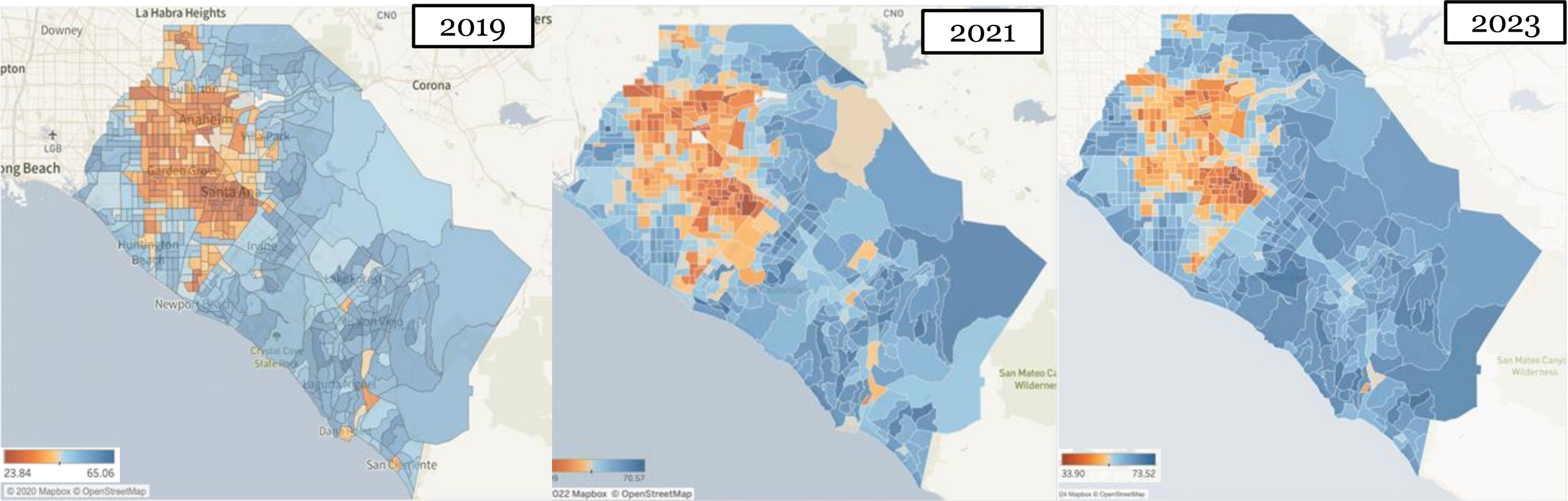
Inclusiveness

- Linguistic isolation
- Gender pay gap
- Residential segregation (non-white/white)
- Residential isolation (non-white/white)

Access to Advanced Education

- Bachelor's Degree Holders (% of pop. age 25+)
- Advanced Degree Holders (% of pop. age 25+)
- Associates Degree Holders (% of pop. age 25+)

SOCIAL PROGRESS OVER TIME



FROM DATA TO ACTION TO IMPACT



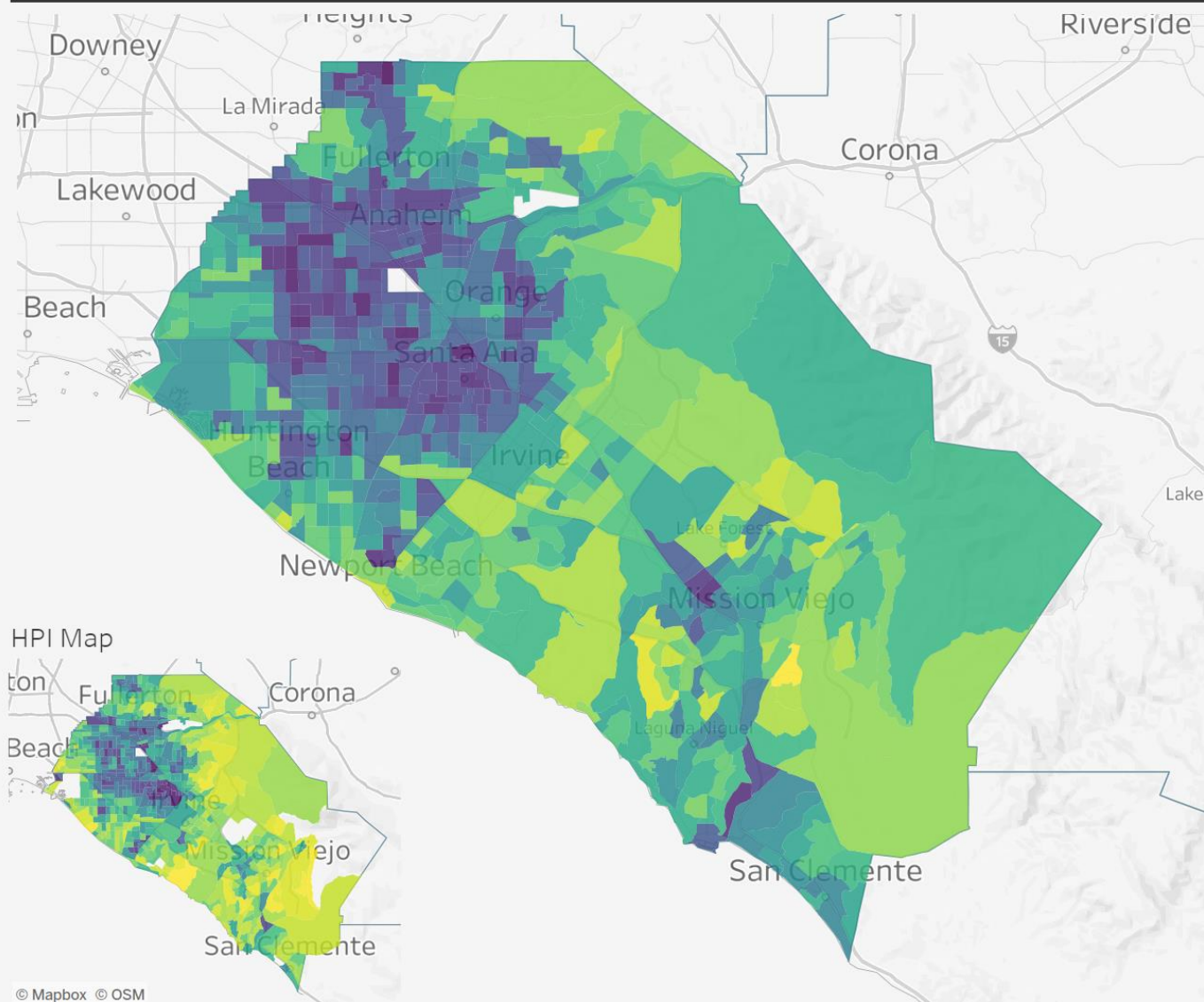
NATIONAL HEALTH EQUITY SUMMIT
JUNE 7 -10, 2021

Using
Data Science
to Deliver
Health Equity
a COVID-19 Case Study

health CARE AGENCY ADVANCE OC



ORANGE COUNTY COVID VULNERABILITY MAP



© Mapbox © OSM

City

All

District

(values are approximate)

All

Overlay Existing Community Infrastructure

(none)

Show Asset Labels

No

COVID-19 Vulnerability Composite Indicators

Health & Comorbidity Risk

Factors (CDC)

Diabetes Prevalence
Cancer Prevalence
Obesity Prevalence
High Blood Pressure
Coronary Heart Disease
Asthma Prevalence
Smoking Prevalence
COPD Prevalence
Chronic Kidney Disease

C19 Cases & Deaths (OCHCA)
% Hispanic (ACS/Census)
Age 65+ (ACS/Census)

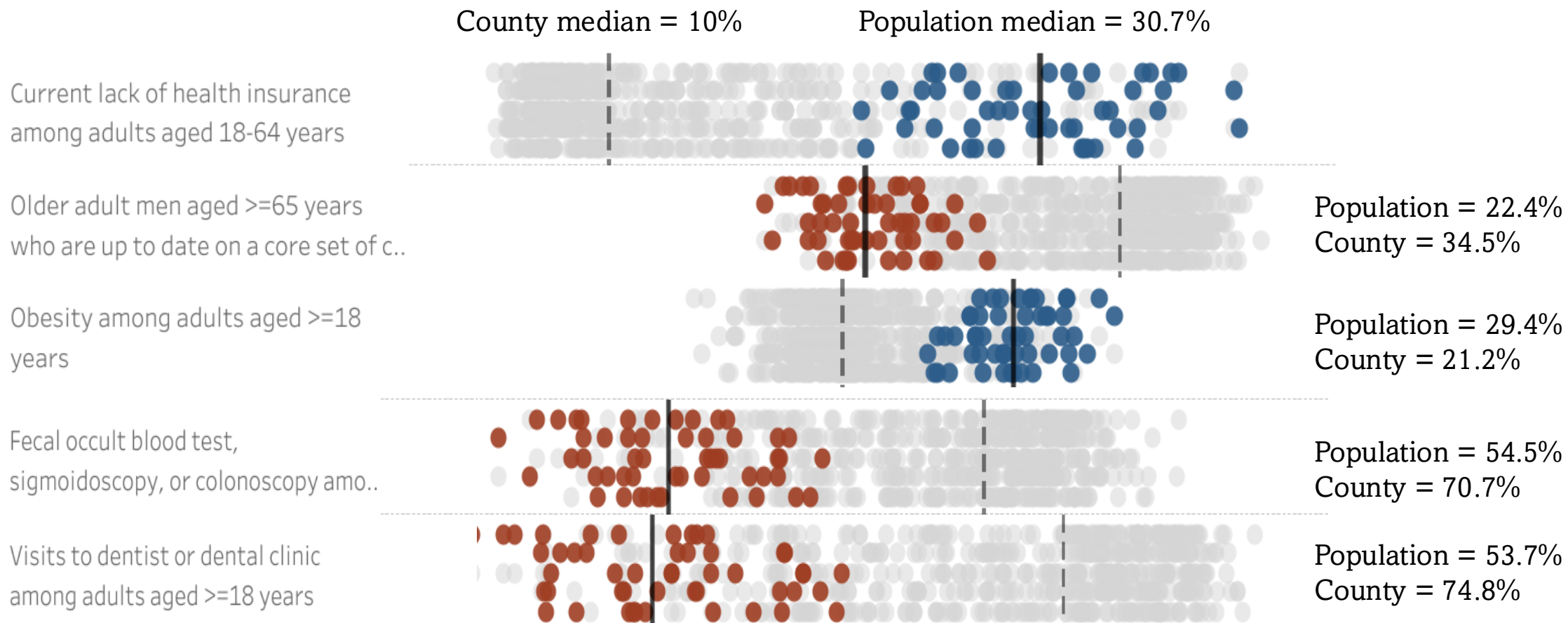
Social Progress Index Indicators

Households with food stamps
Housing cost burden (renters)
Housing overcrowding
Eviction Rate
Population Uninsured
Below 200% Poverty Rate
Population w/o HS diploma
Low access to Info & Comm
No internet access
Linguistic Isolation
Residential isolation
Physically at-risk Children
Median HH Income

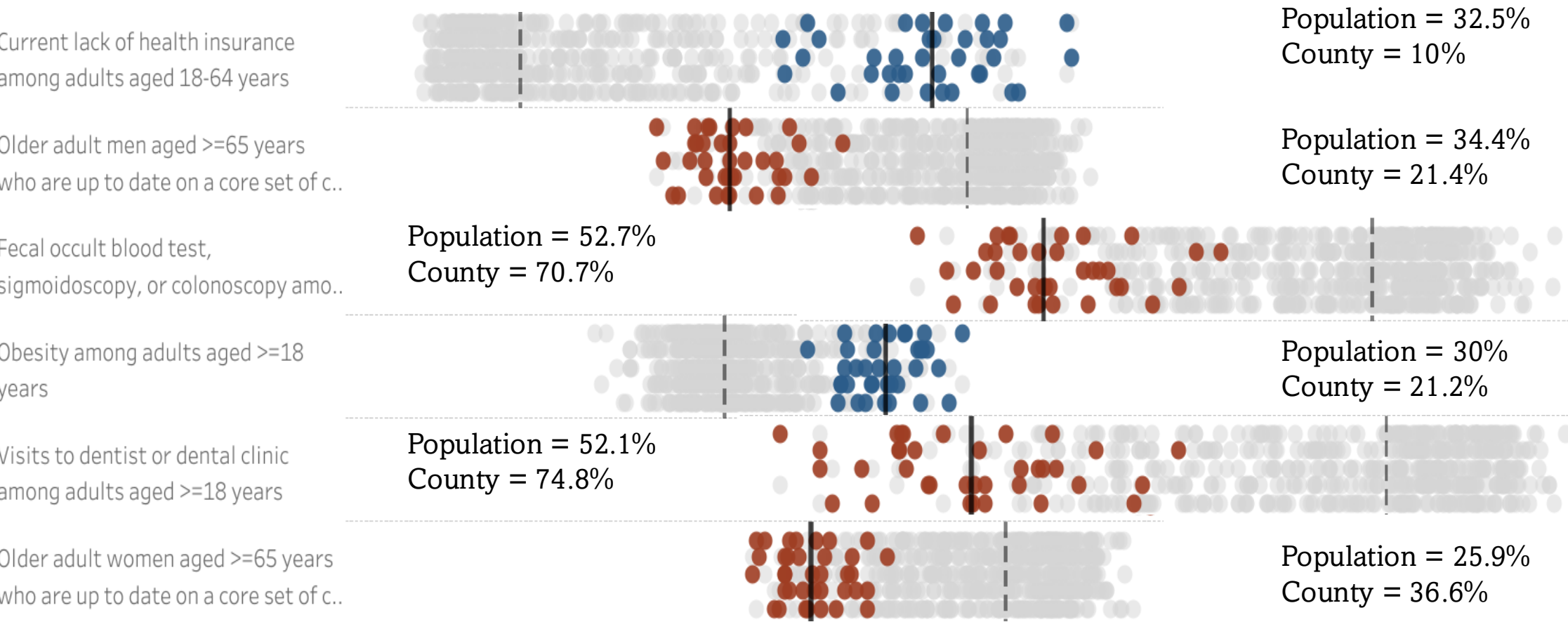
Risk Score



Query: Show me the census tracts > 75% Hispanic/Latino

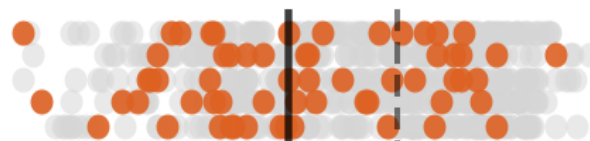


Query: Show me the census tracts > 75% Hispanic/Latino: Mexicans

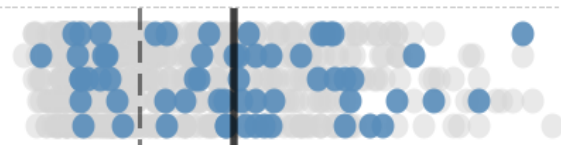


Query: Show me the census tracts with the Lowest Preschool Enrollment

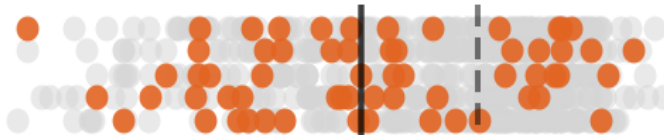
Older adult women aged ≥ 65 years
who are up to date on a core set of c..



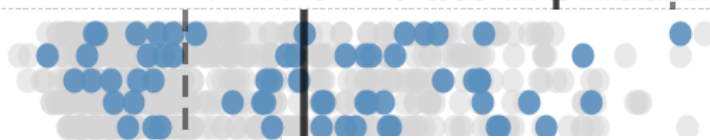
All teeth lost among adults aged
 ≥ 65 years



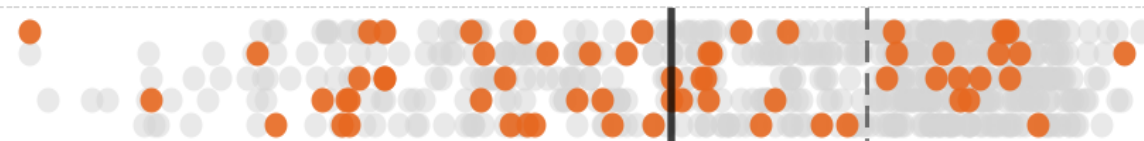
Older adult men aged ≥ 65 years
who are up to date on a core set of c..



No leisure-time physical activity
among adults aged ≥ 18 years



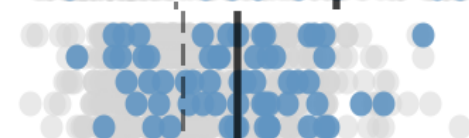
Visits to dentist or dental clinic
among adults aged ≥ 18 years



Current lack of health insurance
among adults aged 18-64 years



Current smoking among adults aged
 ≥ 18 years



Query: Show me the census tracts with the Lowest Preschool Enrollment

Older adult women aged ≥ 65 years
who are up to date on a core set of c..

All teeth lost among adults aged
≥65 years

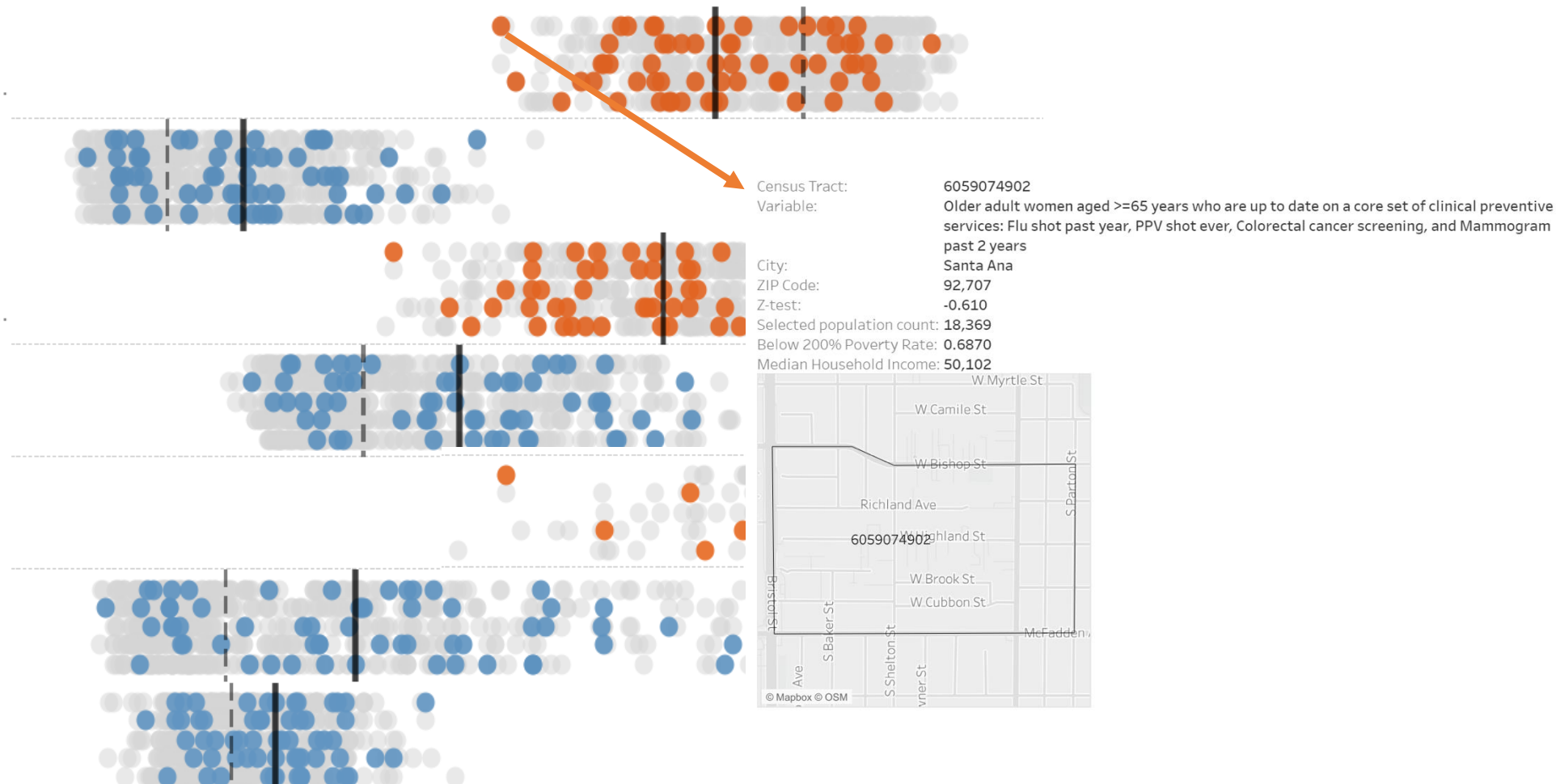
Older adult men aged ≥ 65 years
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No leisure-time physical activity
among adults aged ≥ 18 years

Visits to dentist or dental clinic
among adults aged ≥ 18 years

Current lack of health insurance among adults aged 18-64 years

Current smoking among adults aged
≥18 years



FROM DATA TO ACTION TO **IMPACT**

PARTNERING WITH COMMUNITY

Delivering local data and insight that is meaningful, relevant and actionable

PARTNERING WITH COMMUNITY #1

ADVANCE OC PARTNERS WITH HEAAL TO CONDUCT FIRST EVER HEALTH NEEDS ASSESSMENT OF BLACKS IN ORANGE COUNTY



Health Equity for African Americans League (HEAAL) was formed during the pandemic by the five largest black churches in Orange County to address health disparities and under investment in the Black community.

[Read more](#)

- ✓ Trusted messengers
- ✓ Co-creation of survey protocols
- ✓ Cultural sensitivity
- ✓ Affirmative privacy
- ✓ Continuous engagement

PARTNERING WITH COMMUNITY #2

Advance OC
Spends over 12,000
hours Surveying
Older Adults in
Orange County
Including Visits to
Jails and Shelters

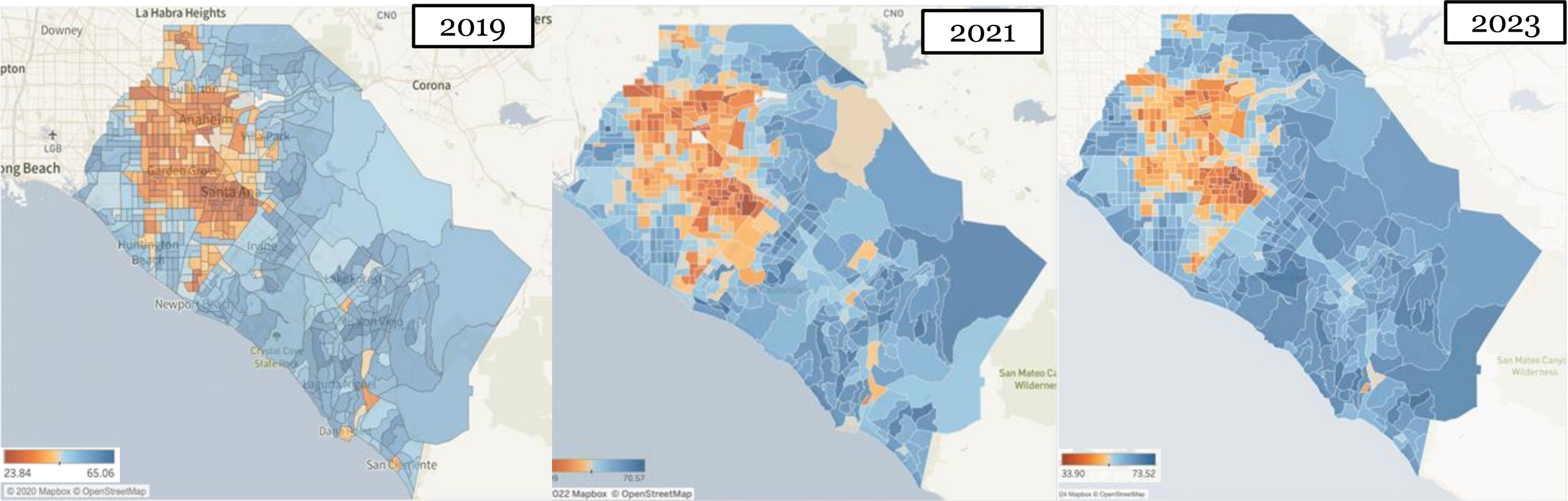


- ✓ Overcoming multiple barriers (physical and cognitive disability, digital divide, language capacity, transportation)
- ✓ Inclusive modalities (proctored surveys in person, by telephone, through a surrogate/ caregiver/ interpreter, online)
- ✓ Cultural sensitivity, proactive protections, challenges in outreach and engagement
- ✓ Literacy and comprehension
- ✓ Continuous engagement

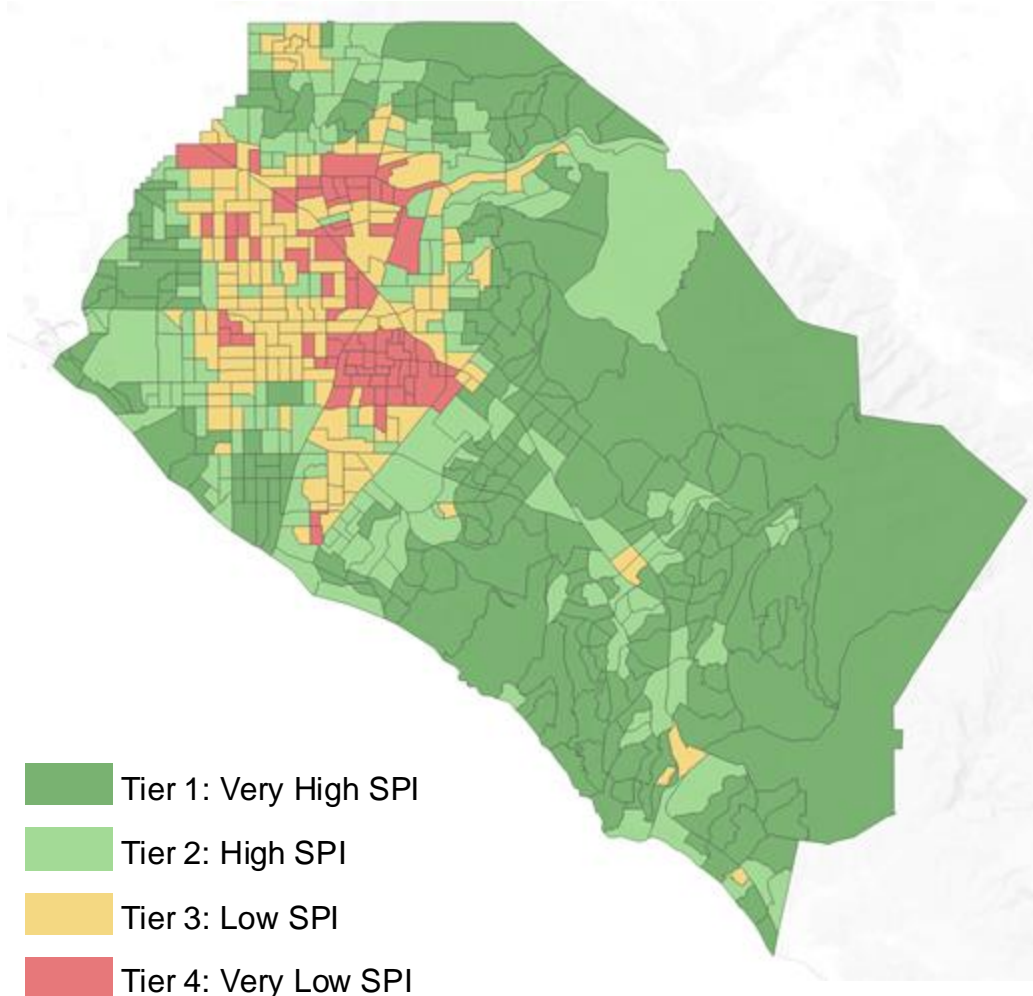
UNDERSTANDING SOCIAL DRIVERS OF HEALTH

How Socio-Economic (Dis)Advantages Manifest
in Orange County

SOCIAL PROGRESS OVER TIME



HOW ECONOMIC (DIS)ADVANTAGES MANIFEST



58% White
HH Inc:\$139,890



Tier 1
Avg. SPI
66/100

49% White
HH Inc:\$104,260



Tier 2
Avg. SPI
59/100

45% Hispanic
HH Inc:\$80,213



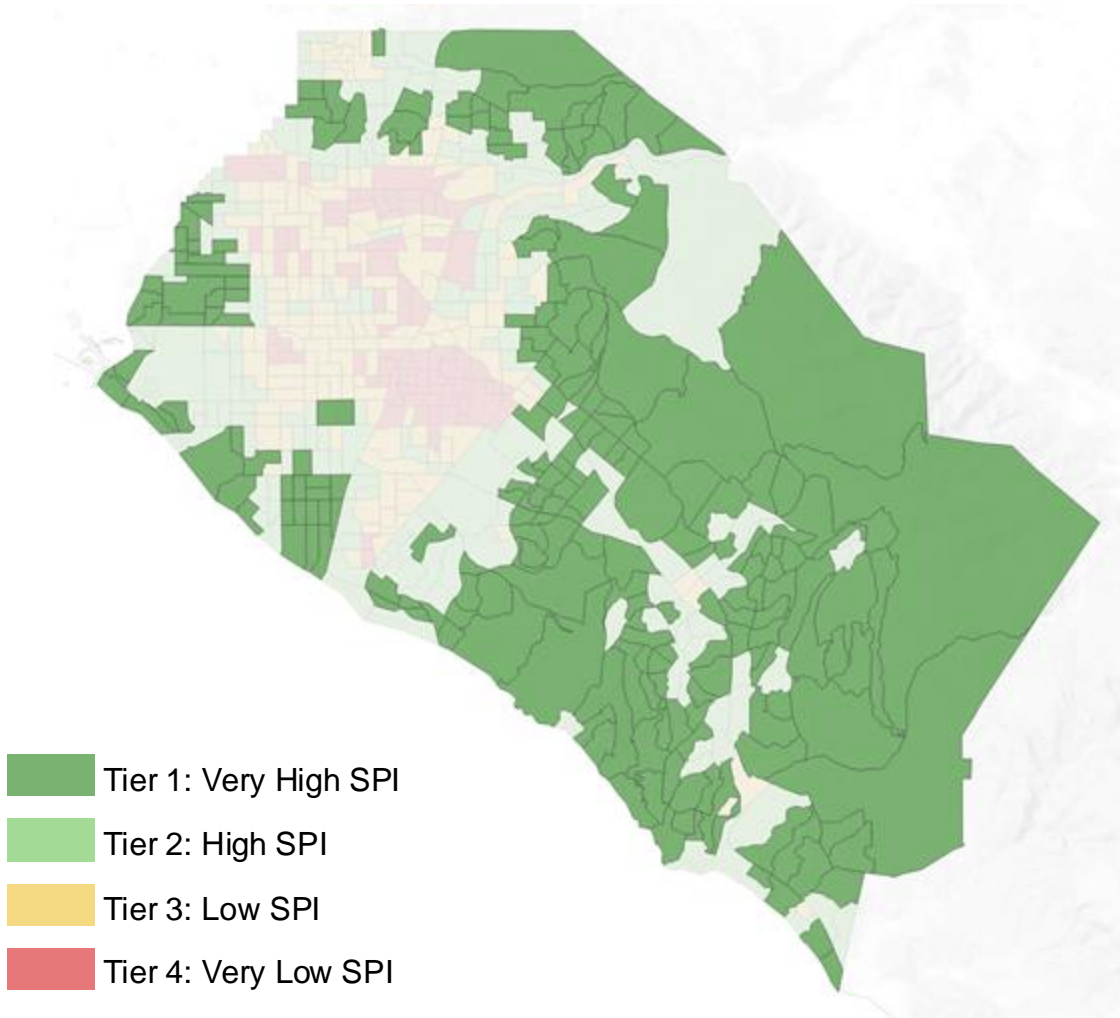
Tier 3
Avg. SPI
51/100

76% Hispanic
HH Inc:\$68,837



Tier 4
Avg. SPI
42/100

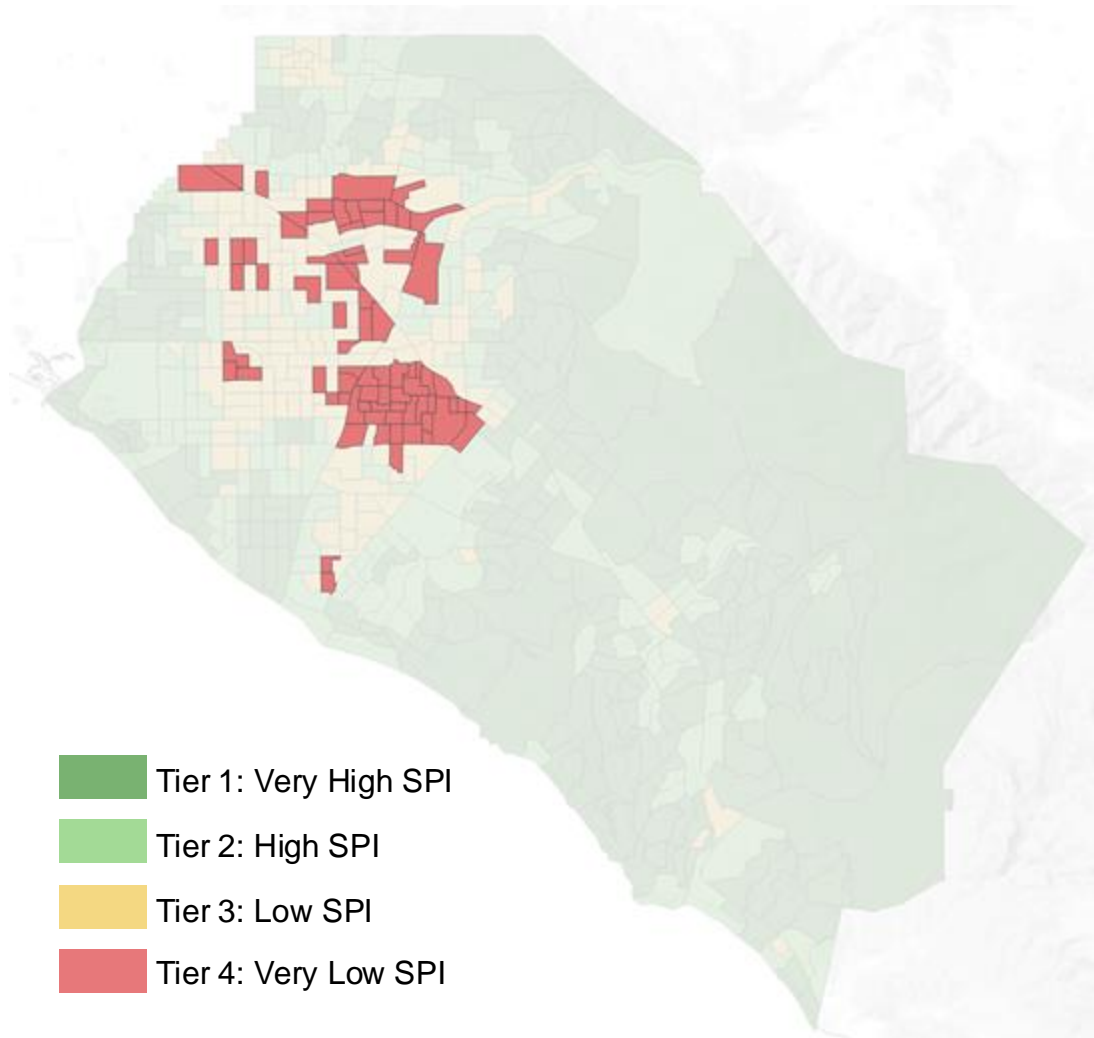
LIFE IN TIER 1: VERY HIGH SPI SCORES



My Profile: A 60% chance that I'm White

1. **8 out of 10** residents are engaged in the labor market with at least a bachelor's degree
2. **52%** chance of securing a loan as a small business owner
3. **49%** average net new business growth per annum in my neighborhood
4. **56%** likelihood of having diverse commercial activities in my neighborhood

LIFE IN TIER 4: VERY LOW SPI SCORES



My Profile: An 80% chance that I'm Hispanic

1. **3 out of 10** residents are engaged in the labor market with at least a bachelor's degree
2. **42%** chance of securing a loan as a small business owner
3. **46%** average net new business growth per annum in my neighborhood
4. **45%** likelihood of having diverse commercial activities in my neighborhood

BUILT ENVIRONMENT CONSIDERATIONS ([Link](#))

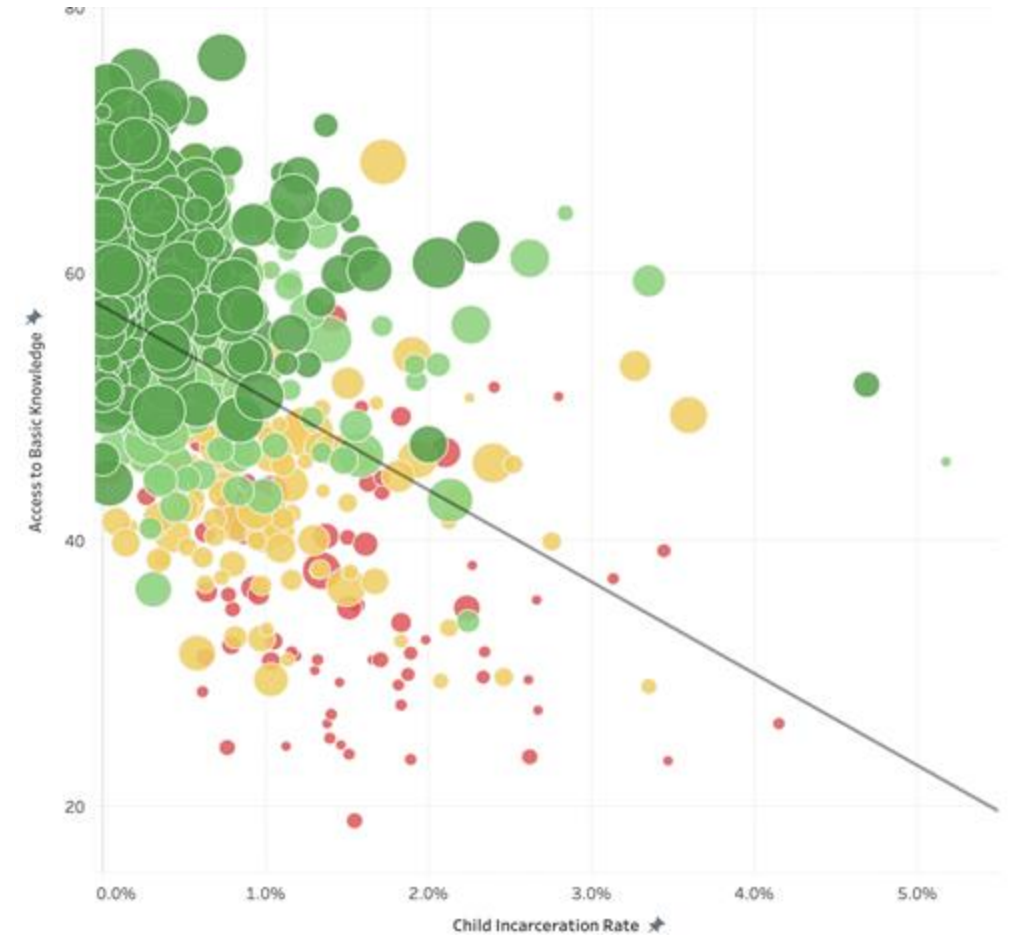
Neighborhood Diagnostics: Why Geo-Mapping Matters

SOME STRUCTURAL DRIVERS OF THESE (DIS)ADVANTAGES IN OC


CHILDHOOD INCARCERATION

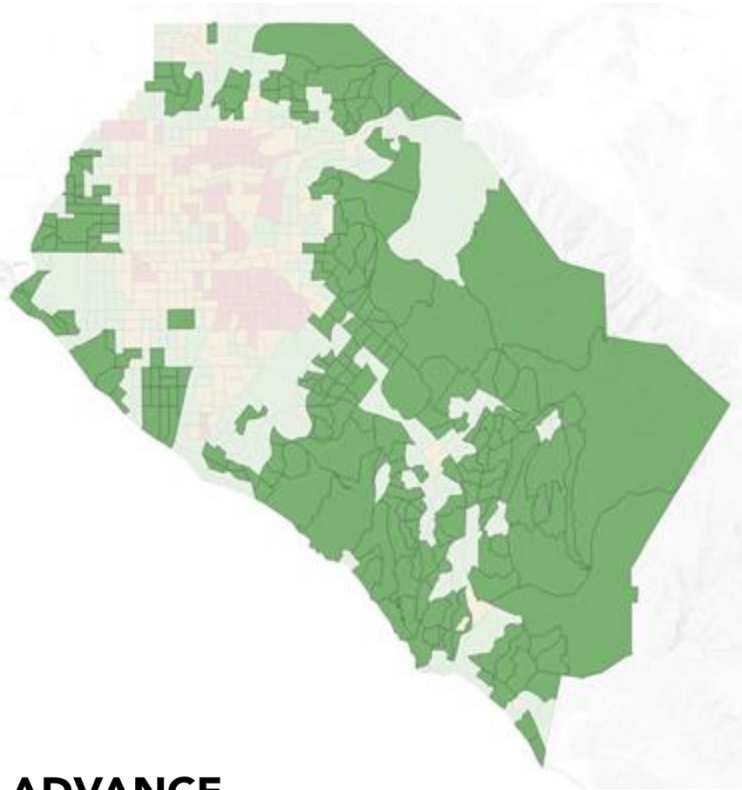



- **43% likelihood of being incarcerated** as a child growing up in Tier 4 neighborhoods compared to others
- SPI predicts a key underlying driver—low access to basic knowledge for children in Tier 4 neighborhoods

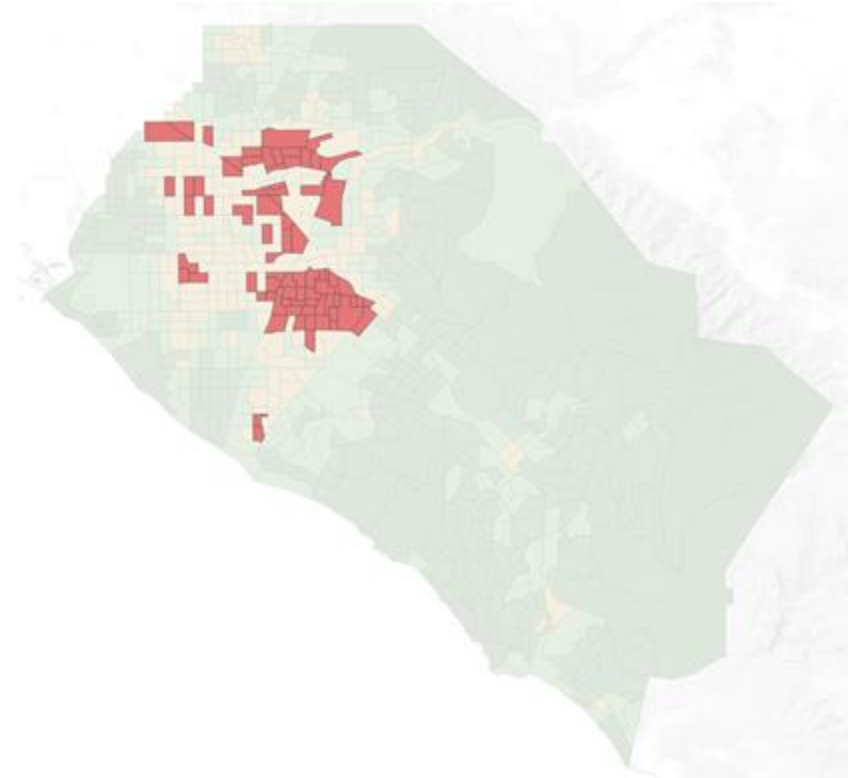


OPPORTUNITIES FOR UPWARD ECONOMIC MOBILITY

 Tier 1: Very High SPI



 Tier 4: Very Low SPI



- You'll earn **24% less at age 35** if you grew up in a poor household in Tier 4 neighborhoods compared to those in Tier 1 neighborhoods
- **19%** likelihood for a low-income person in Tier 4 neighborhood to be friends with high-income people
- **Pop Quiz:** "Which SPI Components matter most to how low and high-income people connect and integrate??"



“Where flowers
bloom, so
does hope.”

Photo credit: Wall City
Poppy flowers grow outside of San
Quentin Rehabilitation Center

THANK YOU

